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APPENDIX A – TRAFFIC ANALYSIS SUMMARY

SUMMARY OF ANALYSIS

An operational analysis was conducted along the State Route 126 corridor from Center Street (L.M. 3.72) to the I-81 interchange (L.M. 12.12) for the existing conditions (No Build), the two (2) Build alternatives (Alternative A and Alternative B) described in the State Route 126 Corridor Improvement Project Draft Environmental Impact Statement (DEIS), and a modified version of Alternative B (Preferred Alternative) for the Design Year 2037.

The operational analysis utilized traffic projections provided by TDOT on 11/5/12. The analysis for all segments was conducted using the Highway Capacity Software (HCS) 2010 software. Each alternative was subdivided in smaller segments and analyzed using the assumptions and methodologies presented in the **Analysis Methodology** section. The resulting Level of Service (LOS) for all segments analyzed for each alternative is presented in **Table 1**. A more detailed breakdown of the analysis results and calculations for each alternative can be found in the **Appendix**.

TABLE 1: LEVEL OF SERVICE (LOS) SUMMARY

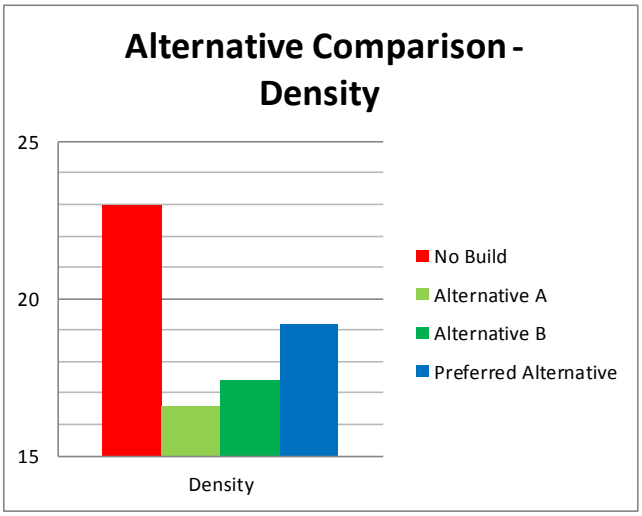
Segment	Alternative				Range
	No Build	Alt A	Alt B	Preferred Alt	
	LOS	LOS	LOS	LOS	
1a	B	B	B	B	Center to SR 93
1b	C	B	B	B	SR 93 to Hawthorne
2a	B/B[1]	B	B	B	Hawthorn to Harbor Chapel
2b	A/B[1]	A	A	A	Harbor Chapel to Past Harbor Chapel
3	B	A	A	A/A[1]	Past Harbor Chapel to Past Old Stage
4	E	A	A	E	Past Old Stage to Lemay
5	E	A	E	E	Lemay to Cooks Valley
6	E	E	E	E	Cooks Valley to Island
7	E	E	E	E	Island to Fall Creek
8	E	E	E	E	Fall Creek to Hill
9	E	E	E	E	Hill to Harrtown
10	E	D	D	D	Harrtown to Carolina Pottery
11	A	A	A	A	Carolina Pottery to I-81

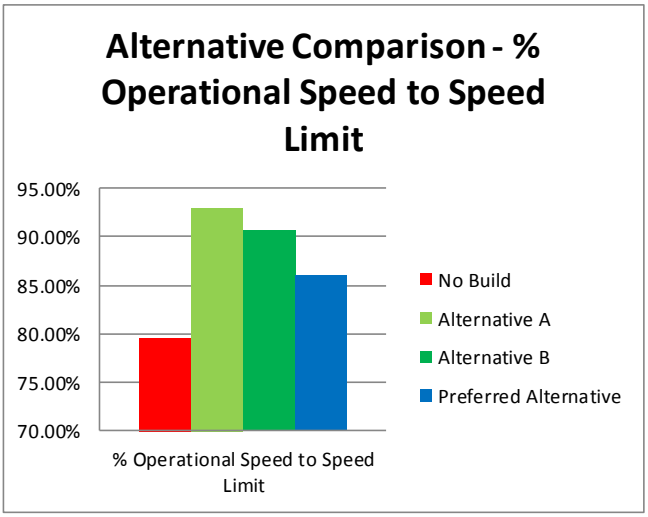
[1]Analysis segment geometry is asymmetrical. LOS given for both eastbound and westbound lanes, respectively.

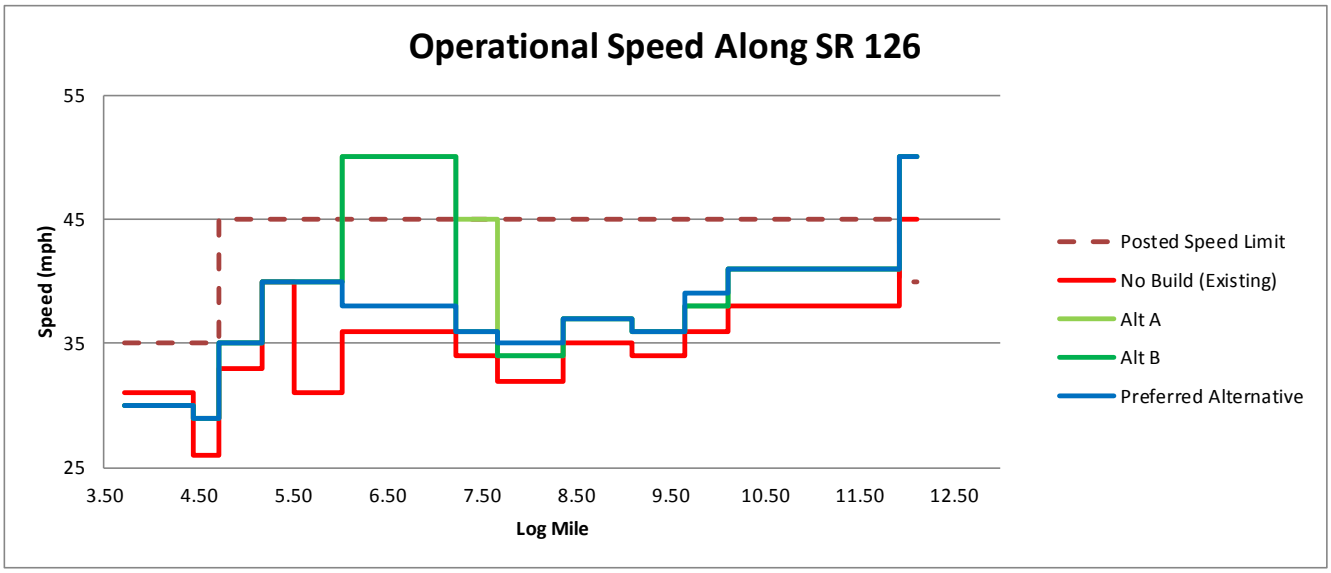
Aside from LOS, the density and operational speed of the analysis segments were used to further compare the alternatives. A side by side comparison of the analysis results can be found in **Figure 1**. The graphs depicting the density and percent operational speed to the speed limit represent overall values and were developed using a weighted average with respect to segment length versus total length of the study corridor. As shown by the comparison, all build alternatives analyzed showed an improvement in both the operational speed and density over that of the No Build during the Design Year.

FIGURE 1: COMPARISON OF ALTERNATIVES

Comparison of Alternatives







ANALYSIS METHODOLOGY

SEGMENT SELECTION

The division between the analysis segments was based on the following:

- Change in roadway typical section
- Change in traffic volume

In some cases, there existed a traffic change where a small portion of the analysis segment would have different volumes. In this instance, the segment was not broken up into smaller pieces and the highest traffic volume along the subject segment was used in the analysis.

TRAFFIC VOLUMES

Projected Average Daily Traffic (ADT) and Percent Trucks along State Route 126 for 2017 and 2037 were provided by TDOT's Project Planning Division. The Design Hourly Volume (DHV) and directional splits for the analysis were calculated using a K factor and Directional Distribution Factor taken from the Tennessee Roadway Information Management System (TRIMS) and confirmed by TDOT.

MODULE SELECTION

The operational analysis along the State Route 126 corridor was conducted using HCS 2010 software. The software uses methodologies set forth by the 2010 Highway Capacity Manual (HCM). The three (3) modules used in the development of the analysis are the following: Streets, Two Lane, and Multilane.

STREETS ANALYSIS

The Streets module was used with segments identified as having interrupted flow conditions. According to the 2010 HCM (page 17-6), a roadway segment with boundary points within two (2) miles of an existing signalized intersection is considered to operate under interrupted flow conditions. Using this criterion, the Streets Module was applied from the beginning of the project through Old Stage Road, which coincides with the current Kingsport City Limits.

Existing lane widths were utilized for the No Build analysis. Lane widths as proposed are used for all Build alternatives. The numbers of access points were estimated by an actual count taken from aerial photography and GIS property information.

Streets Analysis Assumptions:

- The delay due to turning vehicles was developed using HCM 2010 Exhibit 17-13. This exhibit provides a through vehicle delay due to turning vehicles in seconds per vehicle and is dependent on the midsegment traffic volume and number of lanes. A fifty (50) percent adjustment was applied to the delay times due to the presence of a turn lane as recommended in the 2010 HCM page 17-35, paragraph 3.

- As intersection turning movement data was not available, the volume distribution for access point intersections was developed using the suggested proportions of the major roadway's directional volume, as shown in HCM 2010 Exhibit 17-25. The use of actual turning movement counts at minor roadway intersections, if they were available, would have an insignificant effect on the existing level of service and would not be applicable to the design year analysis. Minor roadways through movements were not estimated as they are not needed for the HCM 2010 Streets' automobile analysis.

TWO LANE/MULTILANE ANALYSIS

Segments not meeting the interrupted flow criteria were analyzed with either the Two Lane or Multilane module depending on the typical section of the segment. All segments from Old Stage Road to the end of the project at I-81 were analyzed as uninterrupted flow.

Existing lane widths were utilized for the No Build analysis. Lane widths as proposed in the DEIS were used for all Build alternatives. The numbers of access points were estimated by an actual count taken from aerial photography and GIS property information.

Two Lane Analysis Assumptions:

- Rolling terrain was assumed for all segments.
- The analysis utilized an estimated Base Free Flow Speed (BFFS) for each segment of the build alternatives. For the two lane analysis, the estimated BFFS was calculated using guidance given in the 2010 HCM. As shown in the HCM 2010 Exhibit 15-5, the estimated BFFS of a two lane analysis segment was calculated by adding ten (10) mph to the speed limit of the segment.
    - For the build alternatives, the design speed of the analysis segment was assumed to be the future speed limit for analysis.
    - For the No Build Alternative, the current posted speed was used to develop a BFFS with one exception. The BFFS for the analysis of State Route 126 from Old Stage Road to Carolina Pottery Road was based on a reduction in speed limit request by the Department of Safety in July 2012.
- One hundred (100) percent no passing zone was assumed for all two (2) lane segments with a two way left turn lane based on guidance given in the 2010 HCM page 15-63, paragraph 2.
- The percent no passing zone for two lane segments with no two way left turn lane was determined based on the existing conditions, which is one hundred (100) percent no passing.
- All segments analyzed were classified as Class I and use percent time spent following (PTSF) and operational speed as the MOE for LOS determination. (Class III was considered as an alternative analysis. Further discussion on using Class III Highway in the analysis is provided in the **Two Lane Segments Analyzed as a Class III Highway** section.)

Multilane Analysis Assumptions:

- Rolling terrain was assumed for all segments.
- For the multilane analysis segments, the estimated BFFS was calculated using guidance given in the 2010 HCM. For multilane analysis segments, the estimated BFFS was estimated by adding seven (7) mph to the speed limit of the segment as suggested in 2010 HCM page 14-11, paragraph 2. For the build alternatives, the design speed of the analysis segment was assumed to be the future speed limit for analysis.

TRAFFIC ANALYSIS

Each alternative was analyzed for the base year (2017) and design year (2037) traffic volumes provided by TDOT using the 2010 Highway Capacity Software and the methodologies discussed in this report. The details of each analysis and its results are tabulated in the following pages as summarized below.

- No-Build Analysis Summary
- No-Build 2017 Analysis Details
- No-Build 2037 Analysis Details
- Preferred Alternative Analysis Summary
- Preferred Alternative 2017 Analysis Details
- Preferred Alternative 2037 Analysis Details
- Build Alternative A Analysis Summary
- Build Alternative A 2017 Analysis Details
- Build Alternative A 2037 Analysis Details
- Build Alternative B Analysis Summary
- Build Alternative B 2017 Analysis Details
- Build Alternative B 2037 Analysis Details

No-Build LOS

ID	From		To		Dist.	Cross Section	Speed Limit	2017				2037			
	L.M.	Desc.	L.M.	Desc.				AADT	LOS	Speed	Density	AADT	LOS	Speed	Density
1a	3.72	Center St.	4.44	SR 93	0.72	4-Lanes with No Median and Narrow Shoulders	35	14,680	B	32	16.5	18,580	B	31	21.2
1b	4.44	SR 93	4.71	Hawthorne St.	0.27	4-Lanes with a Raised Grass Median and Wide Shoulders	35	16,100	C	25	22.6	20,380	C	26	28.5
2a	4.71	Hawthorne St.	5.18	Harbor Chapel Rd.	0.47	2-Lanes Eastbound, 1-Lane Westbound with No Median and Narrow	45	15,630	B	34	32.9	20,190	B	33	43.4
2b	5.18	Harbor Chapel Rd.	5.52	Past Harbor Chapel	0.34	2-Lanes Eastbound, 1-Lane Westbound with No Median and Narrow	45	10,030	A	41	17.7	12,980	A	41	22.7
3	5.52	Past Harbor Chapel	6.02	Past Old Stage Rd.	0.5	2-Lanes with TWLTL and Narrow Shoulders	45	10,030	B	32	22.2	12,980	B	31	30.2
4	6.02	Past Old Stage Rd.	7.22	Lemay Rd.	1.2	2-Lanes with No Median and Narrow Shoulders	45	7,680	E	38	17.4	10,370	E	36	23.7
5	7.22	Lemay Rd.	7.66	Cooks Valley Rd.	0.44	2-Lanes with No Median and Narrow Shoulders	45	7,680	E	36	18.5	10,370	E	34	25.3
6	7.66	Cooks Valley Rd.	8.37	Island Rd.	0.71	2-Lanes with No Median and Narrow Shoulders	45	9,570	E	34	23.0	12,350	E	32	30.9
7	8.37	Island Rd.	9.10	Fall Creek Rd.	0.73	2-Lanes with No Median and Narrow Shoulders	45	7,510	E	36	18.1	8,410	E	35	20.1
8	9.10	Fall Creek Rd.	9.65	Hill Rd.	0.55	2-Lanes with No Median and Narrow Shoulders	45	8,440	E	35	20.1	9,960	E	34	24.4
9	9.65	Hill Rd.	10.12	Harrtown Rd.	0.47	2-Lanes with No Median and Narrow Shoulders	45	6,370	E	36	15.5	7,010	E	36	16.8
10	10.12	Harrtown Rd.	11.92	Carolina Pottery Rd.	1.8	2-Lanes with No Median and Narrow Shoulders	45	6,870	E	39	15.4	6,980	E	38	15.7
11	11.92	Carolina Pottery Rd.	12.12	I-81	0.2	4-Lanes with a Raised Grass Median and Wide Shoulders	40	6,870	A	45	6.6	6,980	A	45	6.7
				Σ =	**8.4**	**Weighted Average =**	**44**			**36**	**18.6**			**35**	**23.0**

2017 No-Build LOS Calculation Data

										For Streets Analysis				For Multi-Lane Analysis				For Two-Lane Analysis			
ID	AADT	K	D	2-Way DHV	DDHV	Truck %	Shoulder Width	% No Passing	Access Points	Rate	Speed	PFFS	Density	Flow Rate	Diff Speed	Speed	Density	Flow Rate	Speed	PTSF	Density
1a	14680	0.11	0.65	1610	1050	3%	1	n/a	6/6	1050	31.9	77.3	16.5	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
1b	16100	0.11	0.65	1770	1150	3%	8	n/a	4/5	1150	25.4	62.2	22.6	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2a	15630	0.11	0.65	1720	1120	3%	2	n/a	6/6	1120	34	74.23	32.9	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2b	10030	0.11	0.65	1100	720	4%	2	n/a	0/0	720	40.73	87.12	17.7	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
3	10030	0.11	0.65	1100	720	4%	2	n/a	3/2	720	32.48	71.41	22.2	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
4	7680	0.11	0.65	840	550	6%	2	n/a	6/4	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	656	37.7	78.2	17.4
5	7680	0.11	0.65	840	550	6%	2	100	24	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	656	35.5	78.2	18.5
6	9570	0.11	0.65	1050	680	6%	2	100	24	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	786	34.2	81.7	23.0
7	7510	0.11	0.65	830	540	6%	2	100	24	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	644	35.6	78.2	18.1
8	8440	0.11	0.65	930	600	6%	2	100	24	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	705	35.0	80.1	20.1
9	6370	0.11	0.65	700	460	6%	2	100	24	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	564	36.3	72.6	15.5
10	6870	0.11	0.65	760	490	6%	2	100	14	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	594	38.5	75.7	15.4
11	6870	0.11	0.65	760	490	6%	12	n/a	5/15	n/a	n/a	n/a	n/a	296	2	45	6.6	n/a	n/a	n/a	n/a

2037 No-Build LOS Calculation Data

										For Streets Analysis				For Multi-Lane Analysis				For Two-Lane Analysis			
ID	AADT	K	D	2-Way DHV	DDHV	Truck %	Shoulder Width	% No Passing	Access Points	Rate	Speed	PFFS	Density	Flow Rate (Calc)	Diff Speed	Speed	Density	Flow Rate (Calc)	Speed	PTSF	Density
1a	18,580	0.11	0.65	2040	1330	3%	1	n/a	6/6	1330	31.4	75.9	21.2	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
1b	20,380	0.11	0.65	2240	1460	3%	8	n/a	4/5	1460	25.65	63	28.5	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2a	20,190	0.11	0.65	2220	1440	3%	2	n/a	6/6	1440	33.2	72.6	43.4	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2b	12,980	0.11	0.65	1430	930	4%	2	n/a	0/0	930	41	87.7	22.7	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
3	12,980	0.11	0.65	1430	930	4%	2	n/a	3/2	930	30.8	67.8	30.2	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
4	10,370	0.11	0.65	1140	740	6%	2	n/a	6/4	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	850	35.9	84.5	23.7
5	10,370	0.11	0.65	1140	740	6%	2	100	24	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	850	33.6	84.5	25.3
6	12,350	0.11	0.65	1360	880	6%	2	100	24	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	996	32.2	88.0	30.9
7	8,410	0.11	0.65	930	600	6%	2	100	24	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	705	35.0	80.1	20.1
8	9,960	0.11	0.65	1100	720	6%	2	100	24	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	827	33.9	83.5	24.4
9	7,010	0.11	0.65	770	500	6%	2	100	24	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	603	35.9	75.9	16.8
10	6,980	0.11	0.65	770	500	6%	2	100	14	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	603	38.4	75.9	15.7
11	6,980	0.11	0.65	770	500	6%	12	n/a	5/15	n/a	n/a	n/a	n/a	302	2	45	6.7	n/a	n/a	n/a	n/a

Preferred Alternative LOS

ID	From		To		Dist.	Cross Section	Speed Limit	2017				2037			
	L.M.	Desc.	L.M.	Desc.				AADT	LOS	Speed	Density	AADT	LOS	Speed	Density
1a	3.72	Center St.	4.44	SR 93	0.72	4-Lanes with a Raised Grass Median and 4 Ft. Shoulders	35	14,680	B	31	17.2	18,580	B	30	22.4
1b	4.44	SR 93	4.71	Haw-thorne St.	0.27	4-Lanes with a Raised Grass Median and 4 Ft. Shoulders	35	16,100	B	30	19.4	20,380	B	29	25.3
2	4.71	Haw-thorne St.	5.18	Harbor Chapel Rd.	0.47	4-Lanes with a TWLTL and 4 Ft. Shoulders	35	15,630	A	35	15.8	20,190	B	35	20.6
3	5.18	Harbor Chapel Rd.	6.02	Past Old Stage Rd.	0.84	2-Lanes w/ EB Truck Climbing Lane and 10 Ft. Shoulders	45	10,030	A	40	9.0	12,980	A	40	11.7
4	6.02	Past Old Stage Rd.	7.22	Past Lemay Rd.	1.2	2-Lanes with a TWLTL and 6 Ft. Shoulders	45	7,680	D	40	16.3	10,370	E	38	22.1
5	7.22	Past Lemay Rd.	7.66	Cooks Valley Rd.	0.44	2-Lanes with a TWLTL and 6 Ft. Shoulders	45	7,680	E	38	17.2	10,370	E	36	23.5
6	7.66	Cooks Valley Rd.	8.37	Island Rd.	0.71	2-Lanes with a TWLTL and 6 Ft. Shoulders	45	9,570	E	37	21.4	12,350	E	35	28.6
7	8.37	Island Rd.	9.10	Fall Creek Rd.	0.73	2-Lanes with a TWLTL and 6 Ft. Shoulders	45	7,510	E	38	17.0	8,410	E	37	19.0
8	9.10	Fall Creek Rd.	9.65	Hill Rd.	0.55	2-Lanes with a TWLTL and 6 Ft. Shoulders	45	8,440	E	38	18.8	9,960	E	36	22.7
9	9.65	Hill Rd.	10.12	Harrtown Rd.	0.47	2-Lanes with a TWLTL and 6 Ft. Shoulders	45	6,370	E	39	14.5	7,010	E	39	15.7
10	10.12	Harrtown Rd.	11.92	Carolina Pottery Rd.	1.8	2-Lanes with No Median and 10 Ft. Shoulders	45	6,870	D	41	14.5	6,980	D	41	14.7
11	11.92	Carolina Pottery Rd.	12.12	I-81	0.2	4-Lanes with a Raised Grass Median and 12 Ft. Shoulders	45	6,870	A	50	5.9	6,980	A	50	6.0
				Σ =	**8.40**	**Weighted Average =**	**43**			**38**	**15.7**			**37**	**19.2**

2017 Preferred Alternative Calculation Data

										For Streets Analysis				For Multi-Lane Analysis				For Two-Lane Analysis			
ID	AADT	K	D	2-Way DHV	DDHV	Truck %	Shoulder Width	% No Passing	Access Points	Rate	Speed	PFFS	Density	Flow Rate	Diff Speed	Speed	Density	Flow Rate	Speed	PTSF	Density
1a	14,680	0.11	0.65	1610	1050	3%	4	n/a	8/8	1050	30.5	78.4	17.2	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
1b	16,100	0.11	0.65	1770	1150	3%	4	n/a	4/3	1150	29.6	78.5	19.4	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2	15,630	0.11	0.65	1720	1120	3%	4	n/a	2/1	1120	35.4	85.9	15.8	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
3	10,030	0.11	0.65	1100	720	4%	10	n/a	1/0	720	39.9	86.4	9.0	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
4	7,680	0.11	0.65	840	550	6%	6	n/a	15	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	656	40.3	78.2	16.3
5	7,680	0.11	0.65	840	550	6%	6	100	24	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	656	38.1	78.2	17.2
6	9,570	0.11	0.65	1050	680	6%	6	100	24	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	786	36.8	81.7	21.4
7	7,510	0.11	0.65	830	540	6%	6	100	24	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	644	37.8	78.2	17.0
8	8,440	0.11	0.65	930	600	6%	6	100	24	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	705	37.6	80.1	18.8
9	6,370	0.11	0.65	700	460	6%	6	100	24	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	564	38.9	72.6	14.5
10	6,870	0.11	0.65	760	490	6%	10	100	14	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	594	41.1	75.7	14.5
11	6,870	0.11	0.65	760	490	6%	12	n/a	5/15	n/a	n/a	n/a	n/a	296	2	50	5.9	n/a	n/a	n/a	n/a

2037 Preferred Alternative LOS Calculation Data

										For Streets Analysis				For Multi-Lane Analysis				For Two-Lane Analysis			
ID	AADT	K	D	2-Way DHV	DDHV	Truck %	Shoulder Width	% No Passing	Access Points	Rate	Speed	PFFS	Density	Flow Rate (Calc)	Diff Speed	Speed	Density	Flow Rate (Calc)	Speed	PTSF	Density
1a	18,580	0.11	0.65	2040	1330	3%	4	n/a	8/8	1330	29.7	76.5	22.4	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
1b	20,380	0.11	0.65	2240	1460	3%	4	n/a	4/3	1460	28.8	76.4	25.3	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2	20,190	0.11	0.65	2220	1440	3%	4	n/a	2/1	1440	34.9	84.8	20.6	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
3	12,980	0.11	0.65	1430	930	4%	10	n/a	1/0	930	39.6	85.6	11.7	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
4	10,370	0.11	0.65	1140	740	6%	6	n/a	15	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	850	38.4	84.5	22.1
5	10,370	0.11	0.65	1140	740	6%	6	100	24	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	850	36.2	84.5	23.5
6	12,350	0.11	0.65	1360	880	6%	6	100	24	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	996	34.8	88.0	28.6
7	8,410	0.11	0.65	930	600	6%	6	100	24	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	705	37.2	80.1	19.0
8	9,960	0.11	0.65	1100	720	6%	6	100	24	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	827	36.4	83.5	22.7
9	7,010	0.11	0.65	770	500	6%	6	100	24	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	603	38.5	75.9	15.7
10	6,980	0.11	0.65	770	500	6%	10	100	14	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	603	41.0	75.9	14.7
11	6,980	0.11	0.65	770	500	6%	12	n/a	5/15	n/a	n/a	n/a	n/a	302	2	50	6.0	n/a	n/a	n/a	n/a

Build Alternative A LOS

ID	From		To		Dist.	Cross Section	Speed Limit	2017				2037			
	L.M.	Desc.	L.M.	Desc.				AADT	LOS	Speed	Density	AADT	LOS	Speed	Density
1a	3.72	Center St.	4.44	SR 93	0.72	4-Lanes with a Raised Grass Median and 4 Ft. Shoulders	35	14,680	B	31	17.2	18,580	B	30	22.4
1b	4.44	SR 93	4.71	Haw-thorne St.	0.27	4-Lanes with a Raised Grass Median and 4 Ft. Shoulders	35	16,100	B	30	19.4	20,380	B	29	25.3
2	4.71	Haw-thorne St.	5.18	Harbor Chapel Rd.	0.47	4-Lanes with a TWLTL and 4 Ft. Shoulders	35	15,630	A	35	15.8	20,190	B	35	20.6
3	5.18	Harbor Chapel Rd.	6.02	Past Old Stage Rd.	0.84	4-Lanes with a Raised Grass Median and 4 Ft. Shoulders	45	10,030	A	41	8.8	12,980	A	40	11.6
4	6.02	Past Old Stage Rd.	7.22	Past Lemay Rd.	1.2	4-Lanes with a Raised Grass Median and 8 Ft. Shoulders	45	7,680	A	50	6.7	10,370	A	50	9.0
5	7.22	Past Lemay Rd.	7.66	Cooks Valley Rd.	0.44	4-Lanes with a Raised Grass Median and 8 Ft. Shoulders	45	7,680	A	45	7.4	10,370	A	45	10.0
6	7.66	Cooks Valley Rd.	8.37	Island Rd.	0.71	2-Lanes with a TWLTL and 6 Ft. Shoulders	45	9,570	E	37	21.4	12,350	E	34	29.0
7	8.37	Island Rd.	9.10	Fall Creek Rd.	0.73	2-Lanes with a TWLTL and 6 Ft. Shoulders	45	7,510	E	38	17.0	8,410	E	37	19.0
8	9.10	Fall Creek Rd.	9.65	Hill Rd.	0.55	2-Lanes with a TWLTL and 6 Ft. Shoulders	45	8,440	E	38	18.8	9,960	E	36	23.0
9	9.65	Hill Rd.	10.12	Harrtown Rd.	0.47	2-Lanes with a TWLTL and 6 Ft. Shoulders	45	6,370	E	39	14.5	7,010	E	38	15.8
10	10.12	Harrtown Rd.	11.92	Carolina Pottery Rd.	1.8	2-Lanes with No Median and 10 Ft. Shoulders	45	6,870	D	41	14.5	6,980	D	41	14.7
11	11.92	Carolina Pottery Rd.	12.12	I-81	0.2	4-Lanes with a Raised Grass Median and 12 Ft. Shoulders	45	6,870	A	50	5.9	6,980	A	50	6.0
				Σ =	**8.4**	**Weighted Average =**	**43**			**40**	**13.77**			**40**	**16.6**

2017 Build Alternative A LOS Calculation Data

ID	AADT	K	D	2-Way DHV	DDHV	Truck %	Shoulder Width	% No Passing	Access Points	For Streets Analysis				For Multi-Lane Analysis				For Two-Lane Analysis			
										Rate	Speed	PFFS	Density	Flow Rate	Diff Speed	Speed	Density	Flow Rate	Speed	PTSF	Density
1a	14680	0.11	0.65	1610	1050	3%	4	n/a	8/8	1050	30.5	78.4	17.2	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
1b	16100	0.11	0.65	1770	1150	3%	4	n/a	4/3	1150	29.6	78.5	19.4	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2	15630	0.11	0.65	1720	1120	3%	4	n/a	2/1	1120	35.4	85.9	15.8	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
3	10030	0.11	0.65	1100	720	4%	4	n/a	1/0	720	41.1	86.9	8.8	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
4	7680	0.11	0.65	840	550	6%	8	n/a	4/1	n/a	n/a	n/a	n/a	333	2	50	6.7	n/a	n/a	n/a	n/a
5	7680	0.11	0.65	840	550	6%	8	n/a	12/12	n/a	n/a	n/a	n/a	333	7	45	7.4	n/a	n/a	n/a	n/a
6	9570	0.11	0.65	1050	680	6%	6	100	24	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	786	36.8	81.7	21.4
7	7510	0.11	0.65	830	540	6%	6	100	24	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	644	37.8	78.2	17.0
8	8440	0.11	0.65	930	600	6%	6	100	24	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	705	37.6	80.1	18.8
9	6370	0.11	0.65	700	460	6%	6	100	24	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	564	38.9	72.6	14.5
10	6870	0.11	0.65	760	490	6%	10	100	14	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	594	41.1	75.7	14.5
11	6870	0.11	0.65	760	490	6%	12	n/a	5/15	n/a	n/a	n/a	n/a	296	2	50	5.9	n/a	n/a	n/a	n/a

2037 Build Alternative A LOS Calculation Data

ID	AADT	K	D	2-Way DHV	DDHV	Truck %	Shoulder Width	% No Passing	Access Points	For Streets Analysis				For Multi-Lane Analysis				For Two-Lane Analysis			
										Rate	Speed	PFFS	Density	Flow Rate (Calc)	Diff Speed	Speed	Density	Flow Rate (Calc)	Speed	PTSF	Density
1a	18,580	0.11	0.65	2040	1330	3%	4	n/a	8/8	1330	29.7	76.5	22.4	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
1b	20,380	0.11	0.65	2240	1460	3%	4	n/a	4/3	1460	28.8	76.4	25.3	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2	20,190	0.11	0.65	2220	1440	3%	4	n/a	2/1	1440	34.9	84.8	20.6	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
3	12,980	0.11	0.65	1430	930	4%	4	n/a	1/0	930	40.2	85.2	11.6	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
4	10,370	0.11	0.65	1140	740	6%	8	n/a	4/1	n/a	n/a	n/a	n/a	448	2	50	9	n/a	n/a	n/a	n/a
5	10,370	0.11	0.65	1140	740	6%	8	n/a	12/12	n/a	n/a	n/a	n/a	448	7	45	10	n/a	n/a	n/a	n/a
6	12,350	0.11	0.65	1360	880	6%	6	100	24	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	996	34.4	88.0	29.0
7	8,410	0.11	0.65	930	600	6%	6	100	24	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	705	37.2	80.1	19.0
8	9,960	0.11	0.65	1100	720	6%	6	100	24	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	827	36.0	83.5	23.0
9	7,010	0.11	0.65	770	500	6%	6	100	24	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	603	38.1	75.9	15.8
10	6,980	0.11	0.65	770	500	6%	10	100	14	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	603	41.0	75.9	14.7
11	6,980	0.11	0.65	770	500	6%	12	n/a	5/15	n/a	n/a	n/a	n/a	302	2	50	6.0	n/a	n/a	n/a	n/a

Build Alternative B LOS

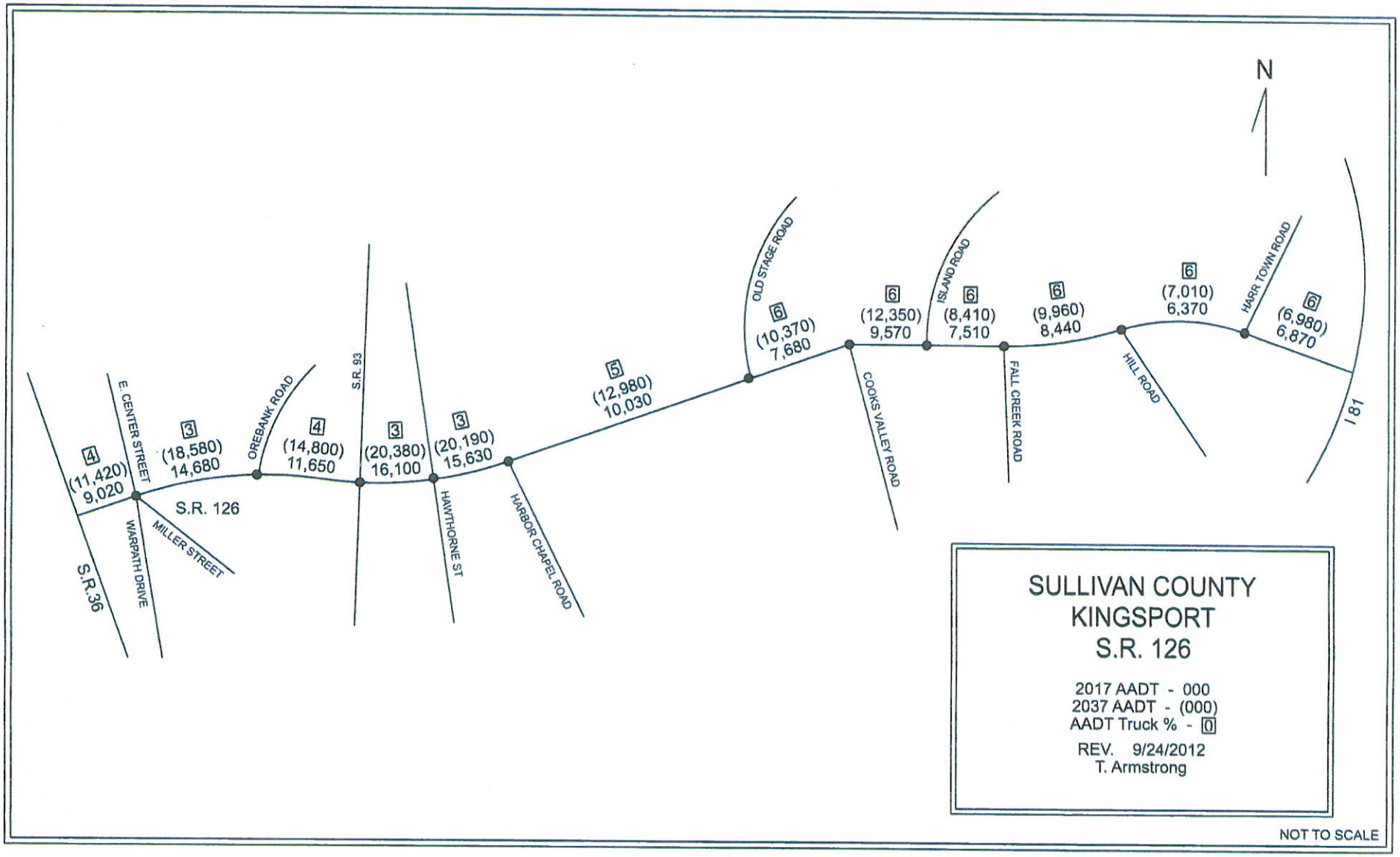
ID	From		To		Dist.	Cross Section	Speed Limit	2017				2037			
	L.M.	Desc.	L.M.	Desc.				AADT	LOS	Speed	Density	AADT	LOS	Speed	Density
1a	3.72	Center St.	4.44	SR 93	0.72	4-Lanes with a Raised Grass Median and 4 Ft. Shoulders	35	14,680	B	31	17.2	18,580	B	30	22.4
1b	4.44	SR 93	4.71	Haw-thorne St.	0.27	4-Lanes with a Raised Grass Median and 4 Ft. Shoulders	35	16,100	B	30	19.4	20,380	B	29	25.3
2	4.71	Haw-thorne St.	5.18	Harbor Chapel Rd.	0.47	4-Lanes with a TWLTL and 4 Ft. Shoulders	35	15,630	A	35	15.8	20,190	B	35	20.6
3	5.18	Harbor Chapel Rd.	6.02	Past Old Stage Rd.	0.84	4-Lanes with a Raised Grass Median and 4 Ft. Shoulders	45	10,030	A	41	8.8	12,980	A	40	11.6
4	6.02	Past Old Stage Rd.	7.22	Past Lemay Rd.	1.2	4-Lanes with a Raised Grass Median and 8 Ft. Shoulders	45	7,680	A	50	6.7	10,370	A	50	9.0
5	7.22	Past Lemay Rd.	7.66	Cooks Valley Rd.	0.44	2-Lanes with a TWLTL and 6 Ft. Shoulders	45	7,680	E	38	17.2	10,370	E	36	23.7
6	7.66	Cooks Valley Rd.	8.37	Island Rd.	0.71	2-Lanes with a TWLTL and 6 Ft. Shoulders	45	9,570	E	37	21.4	12,350	E	34	29.0
7	8.37	Island Rd.	9.10	Fall Creek Rd.	0.73	2-Lanes with a TWLTL and 6 Ft. Shoulders	45	7,510	E	38	17.0	8,410	E	37	19.0
8	9.10	Fall Creek Rd.	9.65	Hill Rd.	0.55	2-Lanes with a TWLTL and 6 Ft. Shoulders	45	8,440	E	38	18.8	9,960	E	36	23.0
9	9.65	Hill Rd.	10.12	Harrtown Rd.	0.47	2-Lanes with a TWLTL and 6 Ft. Shoulders	45	6,370	E	39	14.5	7,010	E	38	15.8
10	10.12	Harrtown Rd.	11.92	Carolina Pottery Rd.	1.8	2-Lanes with No Median and 10 Ft. Shoulders	45	6,870	D	41	14.5	6,980	D	41	14.7
11	11.92	Carolina Pottery Rd.	12.12	I-81	0.2	4-Lanes with a Raised Grass Median and 12 Ft. Shoulders	45	6,870	A	50	5.9	6,980	A	50	6.0
				Σ =	**8.4**	**Weighted Average =**	**43**			**40**	**14.3**			**39**	**17.4**

2017 Build Alternative B LOS Calculation Data

										For Streets Analysis				For Multi-Lane Analysis				For Two-Lane Analysis			
ID	AADT	K	D	2-Way DHV	DDHV	Truck %	Shoulder Width	% No Passing	Access Points	Rate	Speed	PFFS	Density	Flow Rate	Diff Speed	Speed	Density	Flow Rate	Speed	PTSF	Density
1a	14,680	0.11	0.65	1610	1050	3%	4	n/a	25	1050	30.5	78.4	17.2	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
1b	16,100	0.11	0.65	1770	1150	3%	4	n/a	25	1150	29.6	78.5	19.4	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2	15,630	0.11	0.65	1720	1120	3%	4	n/a	16	1120	35.4	85.9	15.8	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
3	10,030	0.11	0.65	1100	720	4%	8	n/a	16	720	41.1	86.9	8.8	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
4	7,680	0.11	0.65	840	550	6%	6	100	8	n/a	n/a	n/a	n/a	333	2	50	6.7	n/a	n/a	n/a	n/a
5	7,680	0.11	0.65	840	550	6%	10	40	8	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	656	38.1	78.2	17.2
6						6%				n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	786	36.8	81.7	21.4
7						6%				n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	644	37.8	78.2	17.0
8						6%				n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	705	37.6	80.1	18.8
9						6%				n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	564	38.9	72.6	14.5
10						6%				n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	594	41.1	75.7	14.5
11	6,870	0.11	0.65	760	490	6%	12	n/a	8	n/a	n/a	n/a	n/a	296	2	50	5.9	n/a	n/a	n/a	n/a

2037 Build Alternative B LOS Calculation Data

										For Streets Analysis				For Multi-Lane Analysis				For Two-Lane Analysis			
ID	AADT	K	D	2-Way DHV	DDHV	Truck %	Shoulder Width	% No Passing	Access Points	Rate	Speed	PFFS	Density	Flow Rate (Calc)	Diff Speed	Speed	Density	Flow Rate (Calc)	Speed	PTSF	Density
1a	18,580	0.11	0.65	2040	1330	3%	4	n/a	8/8	1330	29.7	76.5	22.4	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
1b	20,380	0.11	0.65	2240	1460	3%	4	n/a	4/3	1460	28.8	76.4	25.3	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2	20,190	0.11	0.65	2220	1440	3%	4	n/a	2/1	1440	34.9	84.8	20.6	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
3	12,980	0.11	0.65	1430	930	4%	4	n/a	1/0	930	40.2	85.2	11.6	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
4	10,370	0.11	0.65	1140	740	6%	8	n/a	4/1	n/a	n/a	n/a	n/a	448	2	50	9	n/a	n/a	n/a	n/a
5	10,370	0.11	0.65	1140	740	6%	6	100	24	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	850	35.8	84.5	23.7
6	12,350	0.11	0.65	1360	880	6%	6	100	24	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	996	34.4	88.0	29.0
7	8,410	0.11	0.65	930	600	6%	6	100	24	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	705	37.2	80.1	19.0
8	9,960	0.11	0.65	1100	720	6%	6	100	24	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	827	36.0	83.5	23.0
9	7,010	0.11	0.65	770	500	6%	6	100	24	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	603	38.1	75.9	15.8
10	6,980	0.11	0.65	770	500	6%	10	100	14	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	603	41.0	75.9	14.7
11	6,980	0.11	0.65	770	500	6%	12	n/a	5/15	n/a	n/a	n/a	n/a	302	2	50	6.0	n/a	n/a	n/a	n/a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3
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14,680
OREBANK ROAD
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(14,800)
11,650
S.R. 93
3
(20,380)
16,100
3
(20,190)
15,630
5
(12,980)
10,030
OLD STAGE ROAD
6
(10,370)
7,680
6
(12,350)
9,570
ISLAND ROAD
6
(8,410)
7,510
6
(9,960)
8,440
6
(7,010)
6,370
HARR TOWN ROAD
6
(6,980)
6,870
I 81
S.R. 126
S.R.36
WARPATH DRIVE
MILLER STREET
HAWTHORNE ST
HARBOR CHAPEL ROAD
COOKS VALLEY ROAD
FALL CREEK ROAD
HILL ROAD
SULLIVAN COUNTY
KINGSPORT
S.R. 126
2017 AADT - 000
2037 AADT - (000)
AADT Truck % - 0
REV. 9/24/2012
T. Armstrong
NOT TO SCALE

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APPENDIX A – TRAFFIC ANALYSIS SUMMARY

SUMMARY OF ANALYSIS

An operational analysis was conducted along the State Route 126 corridor from Center Street (L.M. 3.72) to the I-81 interchange (L.M. 12.12) for the existing conditions (No Build), the two (2) Build alternatives (Alternative A and Alternative B) described in the State Route 126 Corridor Improvement Project Draft Environmental Impact Statement (DEIS), and a modified version of Alternative B (Preferred Alternative) for the Design Year 2037.

The operational analysis utilized traffic projections provided by TDOT on 11/5/12. The analysis for all segments was conducted using the Highway Capacity Software (HCS) 2010 software. Each alternative was subdivided in smaller segments and analyzed using the assumptions and methodologies presented in the **Analysis Methodology** section. The resulting Level of Service (LOS) for all segments analyzed for each alternative is presented in **Table 1**. A more detailed breakdown of the analysis results and calculations for each alternative can be found in the **Appendix**.

TABLE 1: LEVEL OF SERVICE (LOS) SUMMARY

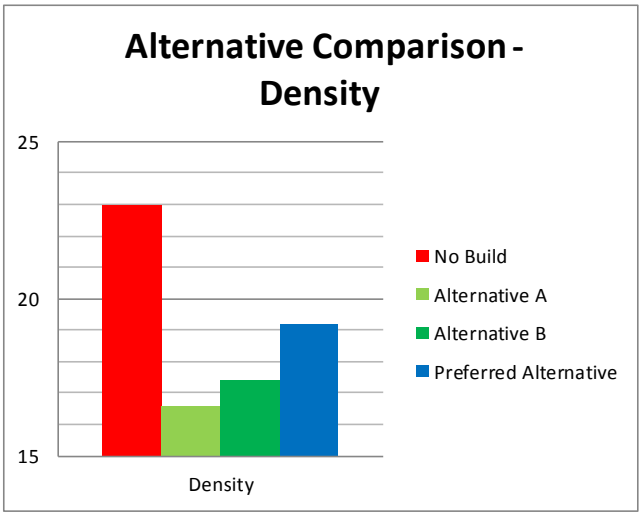
Segment	Alternative				Range
	No Build	Alt A	Alt B	Preferred Alt	
	LOS	LOS	LOS	LOS	
1a	B	B	B	B	Center to SR 93
1b	C	B	B	B	SR 93 to Hawthorne
2a	B/B[1]	B	B	B	Hawthorn to Harbor Chapel
2b	A/B[1]	A	A	A	Harbor Chapel to Past Harbor Chapel
3	B	A	A	A/A[1]	Past Harbor Chapel to Past Old Stage
4	E	A	A	E	Past Old Stage to Lemay
5	E	A	E	E	Lemay to Cooks Valley
6	E	E	E	E	Cooks Valley to Island
7	E	E	E	E	Island to Fall Creek
8	E	E	E	E	Fall Creek to Hill
9	E	E	E	E	Hill to Harrtown
10	E	D	D	D	Harrtown to Carolina Pottery
11	A	A	A	A	Carolina Pottery to I-81

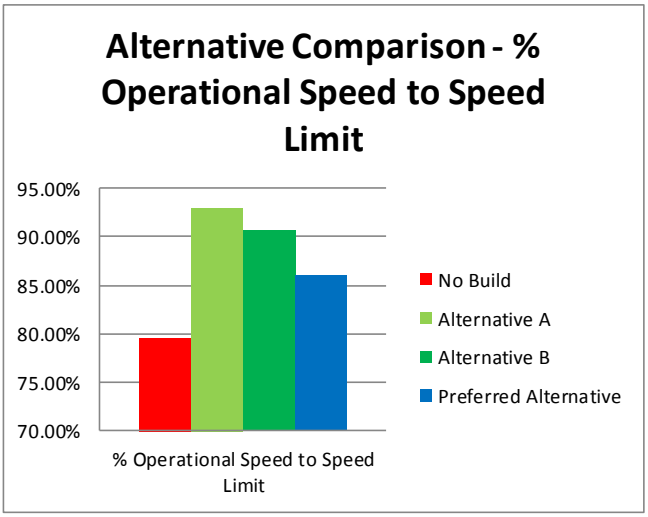
[1]Analysis segment geometry is asymmetrical. LOS given for both eastbound and westbound lanes, respectively.

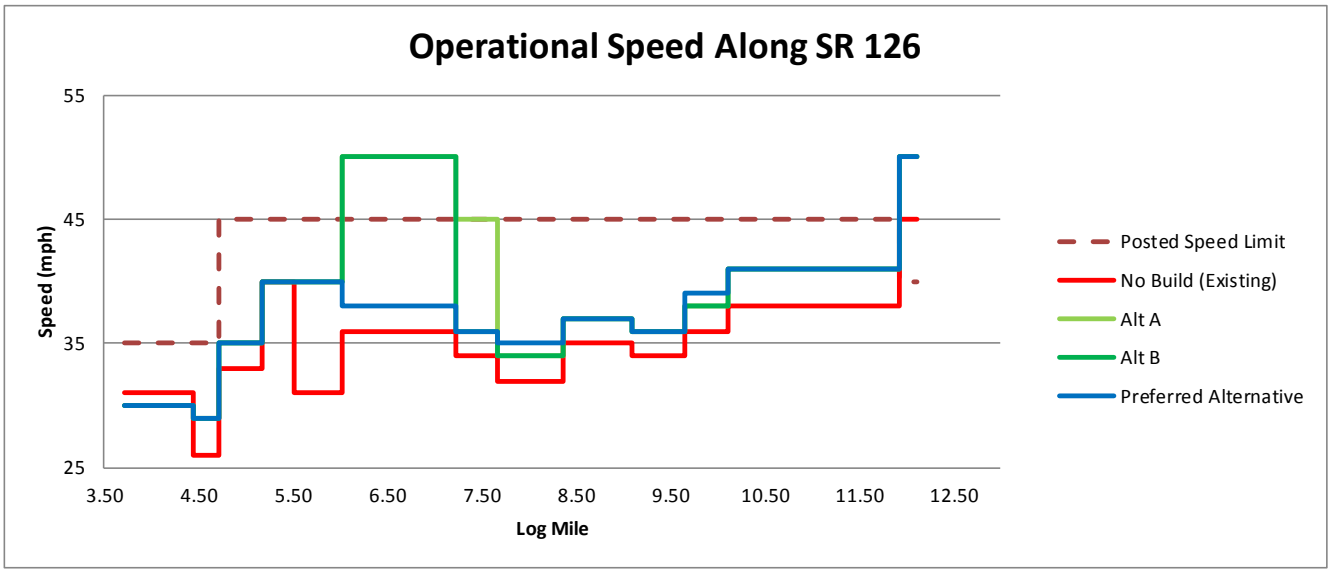
Aside from LOS, the density and operational speed of the analysis segments were used to further compare the alternatives. A side by side comparison of the analysis results can be found in **Figure 1**. The graphs depicting the density and percent operational speed to the speed limit represent overall values and were developed using a weighted average with respect to segment length versus total length of the study corridor. As shown by the comparison, all build alternatives analyzed showed an improvement in both the operational speed and density over that of the No Build during the Design Year.

FIGURE 1: COMPARISON OF ALTERNATIVES

Comparison of Alternatives







ANALYSIS METHODOLOGY

SEGMENT SELECTION

The division between the analysis segments was based on the following:

- Change in roadway typical section
- Change in traffic volume

In some cases, there existed a traffic change where a small portion of the analysis segment would have different volumes. In this instance, the segment was not broken up into smaller pieces and the highest traffic volume along the subject segment was used in the analysis.

TRAFFIC VOLUMES

Projected Average Daily Traffic (ADT) and Percent Trucks along State Route 126 for 2017 and 2037 were provided by TDOT's Project Planning Division. The Design Hourly Volume (DHV) and directional splits for the analysis were calculated using a K factor and Directional Distribution Factor taken from the Tennessee Roadway Information Management System (TRIMS) and confirmed by TDOT.

MODULE SELECTION

The operational analysis along the State Route 126 corridor was conducted using HCS 2010 software. The software uses methodologies set forth by the 2010 Highway Capacity Manual (HCM). The three (3) modules used in the development of the analysis are the following: Streets, Two Lane, and Multilane.

STREETS ANALYSIS

The Streets module was used with segments identified as having interrupted flow conditions. According to the 2010 HCM (page 17-6), a roadway segment with boundary points within two (2) miles of an existing signalized intersection is considered to operate under interrupted flow conditions. Using this criterion, the Streets Module was applied from the beginning of the project through Old Stage Road, which coincides with the current Kingsport City Limits.

Existing lane widths were utilized for the No Build analysis. Lane widths as proposed are used for all Build alternatives. The numbers of access points were estimated by an actual count taken from aerial photography and GIS property information.

Streets Analysis Assumptions:

- The delay due to turning vehicles was developed using HCM 2010 Exhibit 17-13. This exhibit provides a through vehicle delay due to turning vehicles in seconds per vehicle and is dependent on the midsegment traffic volume and number of lanes. A fifty (50) percent adjustment was applied to the delay times due to the presence of a turn lane as recommended in the 2010 HCM page 17-35, paragraph 3.

- As intersection turning movement data was not available, the volume distribution for access point intersections was developed using the suggested proportions of the major roadway's directional volume, as shown in HCM 2010 Exhibit 17-25. The use of actual turning movement counts at minor roadway intersections, if they were available, would have an insignificant effect on the existing level of service and would not be applicable to the design year analysis. Minor roadways through movements were not estimated as they are not needed for the HCM 2010 Streets' automobile analysis.

TWO LANE/MULTILANE ANALYSIS

Segments not meeting the interrupted flow criteria were analyzed with either the Two Lane or Multilane module depending on the typical section of the segment. All segments from Old Stage Road to the end of the project at I-81 were analyzed as uninterrupted flow.

Existing lane widths were utilized for the No Build analysis. Lane widths as proposed in the DEIS were used for all Build alternatives. The numbers of access points were estimated by an actual count taken from aerial photography and GIS property information.

Two Lane Analysis Assumptions:

- Rolling terrain was assumed for all segments.
- The analysis utilized an estimated Base Free Flow Speed (BFFS) for each segment of the build alternatives. For the two lane analysis, the estimated BFFS was calculated using guidance given in the 2010 HCM. As shown in the HCM 2010 Exhibit 15-5, the estimated BFFS of a two lane analysis segment was calculated by adding ten (10) mph to the speed limit of the segment.
    - For the build alternatives, the design speed of the analysis segment was assumed to be the future speed limit for analysis.
    - For the No Build Alternative, the current posted speed was used to develop a BFFS with one exception. The BFFS for the analysis of State Route 126 from Old Stage Road to Carolina Pottery Road was based on a reduction in speed limit request by the Department of Safety in July 2012.
- One hundred (100) percent no passing zone was assumed for all two (2) lane segments with a two way left turn lane based on guidance given in the 2010 HCM page 15-63, paragraph 2.
- The percent no passing zone for two lane segments with no two way left turn lane was determined based on the existing conditions, which is one hundred (100) percent no passing.
- All segments analyzed were classified as Class I and use percent time spent following (PTSF) and operational speed as the MOE for LOS determination. (Class III was considered as an alternative analysis. Further discussion on using Class III Highway in the analysis is provided in the **Two Lane Segments Analyzed as a Class III Highway** section.)

Multilane Analysis Assumptions:

- Rolling terrain was assumed for all segments.
- For the multilane analysis segments, the estimated BFFS was calculated using guidance given in the 2010 HCM. For multilane analysis segments, the estimated BFFS was estimated by adding seven (7) mph to the speed limit of the segment as suggested in 2010 HCM page 14-11, paragraph 2. For the build alternatives, the design speed of the analysis segment was assumed to be the future speed limit for analysis.

TRAFFIC ANALYSIS

Each alternative was analyzed for the base year (2017) and design year (2037) traffic volumes provided by TDOT using the 2010 Highway Capacity Software and the methodologies discussed in this report. The details of each analysis and its results are tabulated in the following pages as summarized below.

- No-Build Analysis Summary
- No-Build 2017 Analysis Details
- No-Build 2037 Analysis Details
- Preferred Alternative Analysis Summary
- Preferred Alternative 2017 Analysis Details
- Preferred Alternative 2037 Analysis Details
- Build Alternative A Analysis Summary
- Build Alternative A 2017 Analysis Details
- Build Alternative A 2037 Analysis Details
- Build Alternative B Analysis Summary
- Build Alternative B 2017 Analysis Details
- Build Alternative B 2037 Analysis Details

No-Build LOS

ID	From		To		Dist.	Cross Section	Speed Limit	2017				2037			
	L.M.	Desc.	L.M.	Desc.				AADT	LOS	Speed	Density	AADT	LOS	Speed	Density
1a	3.72	Center St.	4.44	SR 93	0.72	4-Lanes with No Median and Narrow Shoulders	35	14,680	B	32	16.5	18,580	B	31	21.2
1b	4.44	SR 93	4.71	Hawthorne St.	0.27	4-Lanes with a Raised Grass Median and Wide Shoulders	35	16,100	C	25	22.6	20,380	C	26	28.5
2a	4.71	Hawthorne St.	5.18	Harbor Chapel Rd.	0.47	2-Lanes Eastbound, 1-Lane Westbound with No Median and Narrow	45	15,630	B	34	32.9	20,190	B	33	43.4
2b	5.18	Harbor Chapel Rd.	5.52	Past Harbor Chapel	0.34	2-Lanes Eastbound, 1-Lane Westbound with No Median and Narrow	45	10,030	A	41	17.7	12,980	A	41	22.7
3	5.52	Past Harbor Chapel	6.02	Past Old Stage Rd.	0.5	2-Lanes with TWLTL and Narrow Shoulders	45	10,030	B	32	22.2	12,980	B	31	30.2
4	6.02	Past Old Stage Rd.	7.22	Lemay Rd.	1.2	2-Lanes with No Median and Narrow Shoulders	45	7,680	E	38	17.4	10,370	E	36	23.7
5	7.22	Lemay Rd.	7.66	Cooks Valley Rd.	0.44	2-Lanes with No Median and Narrow Shoulders	45	7,680	E	36	18.5	10,370	E	34	25.3
6	7.66	Cooks Valley Rd.	8.37	Island Rd.	0.71	2-Lanes with No Median and Narrow Shoulders	45	9,570	E	34	23.0	12,350	E	32	30.9
7	8.37	Island Rd.	9.10	Fall Creek Rd.	0.73	2-Lanes with No Median and Narrow Shoulders	45	7,510	E	36	18.1	8,410	E	35	20.1
8	9.10	Fall Creek Rd.	9.65	Hill Rd.	0.55	2-Lanes with No Median and Narrow Shoulders	45	8,440	E	35	20.1	9,960	E	34	24.4
9	9.65	Hill Rd.	10.12	Harrtown Rd.	0.47	2-Lanes with No Median and Narrow Shoulders	45	6,370	E	36	15.5	7,010	E	36	16.8
10	10.12	Harrtown Rd.	11.92	Carolina Pottery Rd.	1.8	2-Lanes with No Median and Narrow Shoulders	45	6,870	E	39	15.4	6,980	E	38	15.7
11	11.92	Carolina Pottery Rd.	12.12	I-81	0.2	4-Lanes with a Raised Grass Median and Wide Shoulders	40	6,870	A	45	6.6	6,980	A	45	6.7
				Σ =	**8.4**	**Weighted Average =**	**44**			**36**	**18.6**			**35**	**23.0**

2017 No-Build LOS Calculation Data

										For Streets Analysis				For Multi-Lane Analysis				For Two-Lane Analysis			
ID	AADT	K	D	2-Way DHV	DDHV	Truck %	Shoulder Width	% No Passing	Access Points	Rate	Speed	PFFS	Density	Flow Rate	Diff Speed	Speed	Density	Flow Rate	Speed	PTSF	Density
1a	14680	0.11	0.65	1610	1050	3%	1	n/a	6/6	1050	31.9	77.3	16.5	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
1b	16100	0.11	0.65	1770	1150	3%	8	n/a	4/5	1150	25.4	62.2	22.6	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2a	15630	0.11	0.65	1720	1120	3%	2	n/a	6/6	1120	34	74.23	32.9	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2b	10030	0.11	0.65	1100	720	4%	2	n/a	0/0	720	40.73	87.12	17.7	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
3	10030	0.11	0.65	1100	720	4%	2	n/a	3/2	720	32.48	71.41	22.2	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
4	7680	0.11	0.65	840	550	6%	2	n/a	6/4	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	656	37.7	78.2	17.4
5	7680	0.11	0.65	840	550	6%	2	100	24	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	656	35.5	78.2	18.5
6	9570	0.11	0.65	1050	680	6%	2	100	24	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	786	34.2	81.7	23.0
7	7510	0.11	0.65	830	540	6%	2	100	24	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	644	35.6	78.2	18.1
8	8440	0.11	0.65	930	600	6%	2	100	24	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	705	35.0	80.1	20.1
9	6370	0.11	0.65	700	460	6%	2	100	24	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	564	36.3	72.6	15.5
10	6870	0.11	0.65	760	490	6%	2	100	14	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	594	38.5	75.7	15.4
11	6870	0.11	0.65	760	490	6%	12	n/a	5/15	n/a	n/a	n/a	n/a	296	2	45	6.6	n/a	n/a	n/a	n/a

2037 No-Build LOS Calculation Data

										For Streets Analysis				For Multi-Lane Analysis				For Two-Lane Analysis			
ID	AADT	K	D	2-Way DHV	DDHV	Truck %	Shoulder Width	% No Passing	Access Points	Rate	Speed	PFFS	Density	Flow Rate (Calc)	Diff Speed	Speed	Density	Flow Rate (Calc)	Speed	PTSF	Density
1a	18,580	0.11	0.65	2040	1330	3%	1	n/a	6/6	1330	31.4	75.9	21.2	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
1b	20,380	0.11	0.65	2240	1460	3%	8	n/a	4/5	1460	25.65	63	28.5	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2a	20,190	0.11	0.65	2220	1440	3%	2	n/a	6/6	1440	33.2	72.6	43.4	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2b	12,980	0.11	0.65	1430	930	4%	2	n/a	0/0	930	41	87.7	22.7	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
3	12,980	0.11	0.65	1430	930	4%	2	n/a	3/2	930	30.8	67.8	30.2	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
4	10,370	0.11	0.65	1140	740	6%	2	n/a	6/4	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	850	35.9	84.5	23.7
5	10,370	0.11	0.65	1140	740	6%	2	100	24	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	850	33.6	84.5	25.3
6	12,350	0.11	0.65	1360	880	6%	2	100	24	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	996	32.2	88.0	30.9
7	8,410	0.11	0.65	930	600	6%	2	100	24	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	705	35.0	80.1	20.1
8	9,960	0.11	0.65	1100	720	6%	2	100	24	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	827	33.9	83.5	24.4
9	7,010	0.11	0.65	770	500	6%	2	100	24	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	603	35.9	75.9	16.8
10	6,980	0.11	0.65	770	500	6%	2	100	14	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	603	38.4	75.9	15.7
11	6,980	0.11	0.65	770	500	6%	12	n/a	5/15	n/a	n/a	n/a	n/a	302	2	45	6.7	n/a	n/a	n/a	n/a

Preferred Alternative LOS

ID	From		To		Dist.	Cross Section	Speed Limit	2017				2037			
	L.M.	Desc.	L.M.	Desc.				AADT	LOS	Speed	Density	AADT	LOS	Speed	Density
1a	3.72	Center St.	4.44	SR 93	0.72	4-Lanes with a Raised Grass Median and 4 Ft. Shoulders	35	14,680	B	31	17.2	18,580	B	30	22.4
1b	4.44	SR 93	4.71	Haw-thorne St.	0.27	4-Lanes with a Raised Grass Median and 4 Ft. Shoulders	35	16,100	B	30	19.4	20,380	B	29	25.3
2	4.71	Haw-thorne St.	5.18	Harbor Chapel Rd.	0.47	4-Lanes with a TWLTL and 4 Ft. Shoulders	35	15,630	A	35	15.8	20,190	B	35	20.6
3	5.18	Harbor Chapel Rd.	6.02	Past Old Stage Rd.	0.84	2-Lanes w/ EB Truck Climbing Lane and 10 Ft. Shoulders	45	10,030	A	40	9.0	12,980	A	40	11.7
4	6.02	Past Old Stage Rd.	7.22	Past Lemay Rd.	1.2	2-Lanes with a TWLTL and 6 Ft. Shoulders	45	7,680	D	40	16.3	10,370	E	38	22.1
5	7.22	Past Lemay Rd.	7.66	Cooks Valley Rd.	0.44	2-Lanes with a TWLTL and 6 Ft. Shoulders	45	7,680	E	38	17.2	10,370	E	36	23.5
6	7.66	Cooks Valley Rd.	8.37	Island Rd.	0.71	2-Lanes with a TWLTL and 6 Ft. Shoulders	45	9,570	E	37	21.4	12,350	E	35	28.6
7	8.37	Island Rd.	9.10	Fall Creek Rd.	0.73	2-Lanes with a TWLTL and 6 Ft. Shoulders	45	7,510	E	38	17.0	8,410	E	37	19.0
8	9.10	Fall Creek Rd.	9.65	Hill Rd.	0.55	2-Lanes with a TWLTL and 6 Ft. Shoulders	45	8,440	E	38	18.8	9,960	E	36	22.7
9	9.65	Hill Rd.	10.12	Harrtown Rd.	0.47	2-Lanes with a TWLTL and 6 Ft. Shoulders	45	6,370	E	39	14.5	7,010	E	39	15.7
10	10.12	Harrtown Rd.	11.92	Carolina Pottery Rd.	1.8	2-Lanes with No Median and 10 Ft. Shoulders	45	6,870	D	41	14.5	6,980	D	41	14.7
11	11.92	Carolina Pottery Rd.	12.12	I-81	0.2	4-Lanes with a Raised Grass Median and 12 Ft. Shoulders	45	6,870	A	50	5.9	6,980	A	50	6.0
				Σ =	**8.40**	**Weighted Average =**	**43**			**38**	**15.7**			**37**	**19.2**

2017 Preferred Alternative Calculation Data

										For Streets Analysis				For Multi-Lane Analysis				For Two-Lane Analysis			
ID	AADT	K	D	2-Way DHV	DDHV	Truck %	Shoulder Width	% No Passing	Access Points	Rate	Speed	PFFS	Density	Flow Rate	Diff Speed	Speed	Density	Flow Rate	Speed	PTSF	Density
1a	14,680	0.11	0.65	1610	1050	3%	4	n/a	8/8	1050	30.5	78.4	17.2	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
1b	16,100	0.11	0.65	1770	1150	3%	4	n/a	4/3	1150	29.6	78.5	19.4	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2	15,630	0.11	0.65	1720	1120	3%	4	n/a	2/1	1120	35.4	85.9	15.8	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
3	10,030	0.11	0.65	1100	720	4%	10	n/a	1/0	720	39.9	86.4	9.0	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
4	7,680	0.11	0.65	840	550	6%	6	n/a	15	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	656	40.3	78.2	16.3
5	7,680	0.11	0.65	840	550	6%	6	100	24	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	656	38.1	78.2	17.2
6	9,570	0.11	0.65	1050	680	6%	6	100	24	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	786	36.8	81.7	21.4
7	7,510	0.11	0.65	830	540	6%	6	100	24	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	644	37.8	78.2	17.0
8	8,440	0.11	0.65	930	600	6%	6	100	24	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	705	37.6	80.1	18.8
9	6,370	0.11	0.65	700	460	6%	6	100	24	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	564	38.9	72.6	14.5
10	6,870	0.11	0.65	760	490	6%	10	100	14	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	594	41.1	75.7	14.5
11	6,870	0.11	0.65	760	490	6%	12	n/a	5/15	n/a	n/a	n/a	n/a	296	2	50	5.9	n/a	n/a	n/a	n/a

2037 Preferred Alternative LOS Calculation Data

										For Streets Analysis				For Multi-Lane Analysis				For Two-Lane Analysis			
ID	AADT	K	D	2-Way DHV	DDHV	Truck %	Shoulder Width	% No Passing	Access Points	Rate	Speed	PFFS	Density	Flow Rate (Calc)	Diff Speed	Speed	Density	Flow Rate (Calc)	Speed	PTSF	Density
1a	18,580	0.11	0.65	2040	1330	3%	4	n/a	8/8	1330	29.7	76.5	22.4	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
1b	20,380	0.11	0.65	2240	1460	3%	4	n/a	4/3	1460	28.8	76.4	25.3	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2	20,190	0.11	0.65	2220	1440	3%	4	n/a	2/1	1440	34.9	84.8	20.6	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
3	12,980	0.11	0.65	1430	930	4%	10	n/a	1/0	930	39.6	85.6	11.7	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
4	10,370	0.11	0.65	1140	740	6%	6	n/a	15	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	850	38.4	84.5	22.1
5	10,370	0.11	0.65	1140	740	6%	6	100	24	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	850	36.2	84.5	23.5
6	12,350	0.11	0.65	1360	880	6%	6	100	24	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	996	34.8	88.0	28.6
7	8,410	0.11	0.65	930	600	6%	6	100	24	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	705	37.2	80.1	19.0
8	9,960	0.11	0.65	1100	720	6%	6	100	24	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	827	36.4	83.5	22.7
9	7,010	0.11	0.65	770	500	6%	6	100	24	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	603	38.5	75.9	15.7
10	6,980	0.11	0.65	770	500	6%	10	100	14	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	603	41.0	75.9	14.7
11	6,980	0.11	0.65	770	500	6%	12	n/a	5/15	n/a	n/a	n/a	n/a	302	2	50	6.0	n/a	n/a	n/a	n/a

Build Alternative A LOS

ID	From		To		Dist.	Cross Section	Speed Limit	2017				2037			
	L.M.	Desc.	L.M.	Desc.				AADT	LOS	Speed	Density	AADT	LOS	Speed	Density
1a	3.72	Center St.	4.44	SR 93	0.72	4-Lanes with a Raised Grass Median and 4 Ft. Shoulders	35	14,680	B	31	17.2	18,580	B	30	22.4
1b	4.44	SR 93	4.71	Haw-thorne St.	0.27	4-Lanes with a Raised Grass Median and 4 Ft. Shoulders	35	16,100	B	30	19.4	20,380	B	29	25.3
2	4.71	Haw-thorne St.	5.18	Harbor Chapel Rd.	0.47	4-Lanes with a TWLTL and 4 Ft. Shoulders	35	15,630	A	35	15.8	20,190	B	35	20.6
3	5.18	Harbor Chapel Rd.	6.02	Past Old Stage Rd.	0.84	4-Lanes with a Raised Grass Median and 4 Ft. Shoulders	45	10,030	A	41	8.8	12,980	A	40	11.6
4	6.02	Past Old Stage Rd.	7.22	Past Lemay Rd.	1.2	4-Lanes with a Raised Grass Median and 8 Ft. Shoulders	45	7,680	A	50	6.7	10,370	A	50	9.0
5	7.22	Past Lemay Rd.	7.66	Cooks Valley Rd.	0.44	4-Lanes with a Raised Grass Median and 8 Ft. Shoulders	45	7,680	A	45	7.4	10,370	A	45	10.0
6	7.66	Cooks Valley Rd.	8.37	Island Rd.	0.71	2-Lanes with a TWLTL and 6 Ft. Shoulders	45	9,570	E	37	21.4	12,350	E	34	29.0
7	8.37	Island Rd.	9.10	Fall Creek Rd.	0.73	2-Lanes with a TWLTL and 6 Ft. Shoulders	45	7,510	E	38	17.0	8,410	E	37	19.0
8	9.10	Fall Creek Rd.	9.65	Hill Rd.	0.55	2-Lanes with a TWLTL and 6 Ft. Shoulders	45	8,440	E	38	18.8	9,960	E	36	23.0
9	9.65	Hill Rd.	10.12	Harrtown Rd.	0.47	2-Lanes with a TWLTL and 6 Ft. Shoulders	45	6,370	E	39	14.5	7,010	E	38	15.8
10	10.12	Harrtown Rd.	11.92	Carolina Pottery Rd.	1.8	2-Lanes with No Median and 10 Ft. Shoulders	45	6,870	D	41	14.5	6,980	D	41	14.7
11	11.92	Carolina Pottery Rd.	12.12	I-81	0.2	4-Lanes with a Raised Grass Median and 12 Ft. Shoulders	45	6,870	A	50	5.9	6,980	A	50	6.0
				Σ =	**8.4**	**Weighted Average =**	**43**			**40**	**13.77**			**40**	**16.6**

2017 Build Alternative A LOS Calculation Data

ID	AADT	K	D	2-Way DHV	DDHV	Truck %	Shoulder Width	% No Passing	Access Points	For Streets Analysis				For Multi-Lane Analysis				For Two-Lane Analysis			
										Rate	Speed	PFFS	Density	Flow Rate	Diff Speed	Speed	Density	Flow Rate	Speed	PTSF	Density
1a	14680	0.11	0.65	1610	1050	3%	4	n/a	8/8	1050	30.5	78.4	17.2	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
1b	16100	0.11	0.65	1770	1150	3%	4	n/a	4/3	1150	29.6	78.5	19.4	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2	15630	0.11	0.65	1720	1120	3%	4	n/a	2/1	1120	35.4	85.9	15.8	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
3	10030	0.11	0.65	1100	720	4%	4	n/a	1/0	720	41.1	86.9	8.8	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
4	7680	0.11	0.65	840	550	6%	8	n/a	4/1	n/a	n/a	n/a	n/a	333	2	50	6.7	n/a	n/a	n/a	n/a
5	7680	0.11	0.65	840	550	6%	8	n/a	12/12	n/a	n/a	n/a	n/a	333	7	45	7.4	n/a	n/a	n/a	n/a
6	9570	0.11	0.65	1050	680	6%	6	100	24	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	786	36.8	81.7	21.4
7	7510	0.11	0.65	830	540	6%	6	100	24	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	644	37.8	78.2	17.0
8	8440	0.11	0.65	930	600	6%	6	100	24	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	705	37.6	80.1	18.8
9	6370	0.11	0.65	700	460	6%	6	100	24	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	564	38.9	72.6	14.5
10	6870	0.11	0.65	760	490	6%	10	100	14	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	594	41.1	75.7	14.5
11	6870	0.11	0.65	760	490	6%	12	n/a	5/15	n/a	n/a	n/a	n/a	296	2	50	5.9	n/a	n/a	n/a	n/a

2037 Build Alternative A LOS Calculation Data

ID	AADT	K	D	2-Way DHV	DDHV	Truck %	Shoulder Width	% No Passing	Access Points	For Streets Analysis				For Multi-Lane Analysis				For Two-Lane Analysis			
										Rate	Speed	PFFS	Density	Flow Rate (Calc)	Diff Speed	Speed	Density	Flow Rate (Calc)	Speed	PTSF	Density
1a	18,580	0.11	0.65	2040	1330	3%	4	n/a	8/8	1330	29.7	76.5	22.4	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
1b	20,380	0.11	0.65	2240	1460	3%	4	n/a	4/3	1460	28.8	76.4	25.3	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2	20,190	0.11	0.65	2220	1440	3%	4	n/a	2/1	1440	34.9	84.8	20.6	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
3	12,980	0.11	0.65	1430	930	4%	4	n/a	1/0	930	40.2	85.2	11.6	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
4	10,370	0.11	0.65	1140	740	6%	8	n/a	4/1	n/a	n/a	n/a	n/a	448	2	50	9	n/a	n/a	n/a	n/a
5	10,370	0.11	0.65	1140	740	6%	8	n/a	12/12	n/a	n/a	n/a	n/a	448	7	45	10	n/a	n/a	n/a	n/a
6	12,350	0.11	0.65	1360	880	6%	6	100	24	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	996	34.4	88.0	29.0
7	8,410	0.11	0.65	930	600	6%	6	100	24	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	705	37.2	80.1	19.0
8	9,960	0.11	0.65	1100	720	6%	6	100	24	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	827	36.0	83.5	23.0
9	7,010	0.11	0.65	770	500	6%	6	100	24	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	603	38.1	75.9	15.8
10	6,980	0.11	0.65	770	500	6%	10	100	14	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	603	41.0	75.9	14.7
11	6,980	0.11	0.65	770	500	6%	12	n/a	5/15	n/a	n/a	n/a	n/a	302	2	50	6.0	n/a	n/a	n/a	n/a

Build Alternative B LOS

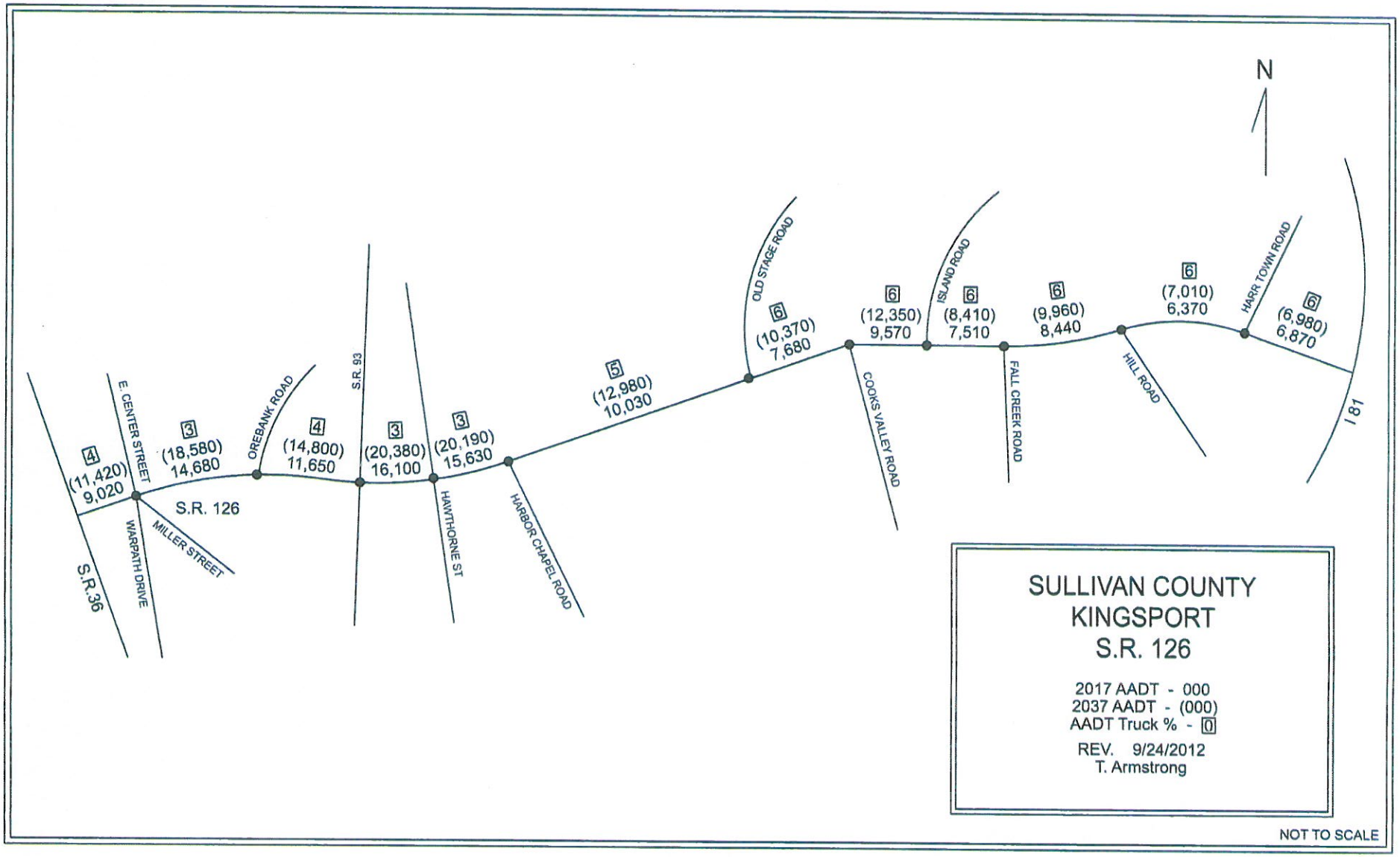
ID	From		To		Dist.	Cross Section	Speed Limit	2017				2037			
	L.M.	Desc.	L.M.	Desc.				AADT	LOS	Speed	Density	AADT	LOS	Speed	Density
1a	3.72	Center St.	4.44	SR 93	0.72	4-Lanes with a Raised Grass Median and 4 Ft. Shoulders	35	14,680	B	31	17.2	18,580	B	30	22.4
1b	4.44	SR 93	4.71	Haw-thorne St.	0.27	4-Lanes with a Raised Grass Median and 4 Ft. Shoulders	35	16,100	B	30	19.4	20,380	B	29	25.3
2	4.71	Haw-thorne St.	5.18	Harbor Chapel Rd.	0.47	4-Lanes with a TWLTL and 4 Ft. Shoulders	35	15,630	A	35	15.8	20,190	B	35	20.6
3	5.18	Harbor Chapel Rd.	6.02	Past Old Stage Rd.	0.84	4-Lanes with a Raised Grass Median and 4 Ft. Shoulders	45	10,030	A	41	8.8	12,980	A	40	11.6
4	6.02	Past Old Stage Rd.	7.22	Past Lemay Rd.	1.2	4-Lanes with a Raised Grass Median and 8 Ft. Shoulders	45	7,680	A	50	6.7	10,370	A	50	9.0
5	7.22	Past Lemay Rd.	7.66	Cooks Valley Rd.	0.44	2-Lanes with a TWLTL and 6 Ft. Shoulders	45	7,680	E	38	17.2	10,370	E	36	23.7
6	7.66	Cooks Valley Rd.	8.37	Island Rd.	0.71	2-Lanes with a TWLTL and 6 Ft. Shoulders	45	9,570	E	37	21.4	12,350	E	34	29.0
7	8.37	Island Rd.	9.10	Fall Creek Rd.	0.73	2-Lanes with a TWLTL and 6 Ft. Shoulders	45	7,510	E	38	17.0	8,410	E	37	19.0
8	9.10	Fall Creek Rd.	9.65	Hill Rd.	0.55	2-Lanes with a TWLTL and 6 Ft. Shoulders	45	8,440	E	38	18.8	9,960	E	36	23.0
9	9.65	Hill Rd.	10.12	Harrtown Rd.	0.47	2-Lanes with a TWLTL and 6 Ft. Shoulders	45	6,370	E	39	14.5	7,010	E	38	15.8
10	10.12	Harrtown Rd.	11.92	Carolina Pottery Rd.	1.8	2-Lanes with No Median and 10 Ft. Shoulders	45	6,870	D	41	14.5	6,980	D	41	14.7
11	11.92	Carolina Pottery Rd.	12.12	I-81	0.2	4-Lanes with a Raised Grass Median and 12 Ft. Shoulders	45	6,870	A	50	5.9	6,980	A	50	6.0
				Σ =	**8.4**	**Weighted Average =**	**43**			**40**	**14.3**			**39**	**17.4**

2017 Build Alternative B LOS Calculation Data

										For Streets Analysis				For Multi-Lane Analysis				For Two-Lane Analysis			
ID	AADT	K	D	2-Way DHV	DDHV	Truck %	Shoulder Width	% No Passing	Access Points	Rate	Speed	PFFS	Density	Flow Rate	Diff Speed	Speed	Density	Flow Rate	Speed	PTSF	Density
1a	14,680	0.11	0.65	1610	1050	3%	4	n/a	25	1050	30.5	78.4	17.2	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
1b	16,100	0.11	0.65	1770	1150	3%	4	n/a	25	1150	29.6	78.5	19.4	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2	15,630	0.11	0.65	1720	1120	3%	4	n/a	16	1120	35.4	85.9	15.8	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
3	10,030	0.11	0.65	1100	720	4%	8	n/a	16	720	41.1	86.9	8.8	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
4	7,680	0.11	0.65	840	550	6%	6	100	8	n/a	n/a	n/a	n/a	333	2	50	6.7	n/a	n/a	n/a	n/a
5	7,680	0.11	0.65	840	550	6%	10	40	8	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	656	38.1	78.2	17.2
6						6%				n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	786	36.8	81.7	21.4
7						6%				n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	644	37.8	78.2	17.0
8						6%				n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	705	37.6	80.1	18.8
9						6%				n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	564	38.9	72.6	14.5
10						6%				n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	594	41.1	75.7	14.5
11	6,870	0.11	0.65	760	490	6%	12	n/a	8	n/a	n/a	n/a	n/a	296	2	50	5.9	n/a	n/a	n/a	n/a

2037 Build Alternative B LOS Calculation Data

										For Streets Analysis				For Multi-Lane Analysis				For Two-Lane Analysis			
ID	AADT	K	D	2-Way DHV	DDHV	Truck %	Shoulder Width	% No Passing	Access Points	Rate	Speed	PFFS	Density	Flow Rate (Calc)	Diff Speed	Speed	Density	Flow Rate (Calc)	Speed	PTSF	Density
1a	18,580	0.11	0.65	2040	1330	3%	4	n/a	8/8	1330	29.7	76.5	22.4	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
1b	20,380	0.11	0.65	2240	1460	3%	4	n/a	4/3	1460	28.8	76.4	25.3	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2	20,190	0.11	0.65	2220	1440	3%	4	n/a	2/1	1440	34.9	84.8	20.6	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
3	12,980	0.11	0.65	1430	930	4%	4	n/a	1/0	930	40.2	85.2	11.6	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
4	10,370	0.11	0.65	1140	740	6%	8	n/a	4/1	n/a	n/a	n/a	n/a	448	2	50	9	n/a	n/a	n/a	n/a
5	10,370	0.11	0.65	1140	740	6%	6	100	24	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	850	35.8	84.5	23.7
6	12,350	0.11	0.65	1360	880	6%	6	100	24	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	996	34.4	88.0	29.0
7	8,410	0.11	0.65	930	600	6%	6	100	24	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	705	37.2	80.1	19.0
8	9,960	0.11	0.65	1100	720	6%	6	100	24	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	827	36.0	83.5	23.0
9	7,010	0.11	0.65	770	500	6%	6	100	24	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	603	38.1	75.9	15.8
10	6,980	0.11	0.65	770	500	6%	10	100	14	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	603	41.0	75.9	14.7
11	6,980	0.11	0.65	770	500	6%	12	n/a	5/15	n/a	n/a	n/a	n/a	302	2	50	6.0	n/a	n/a	n/a	n/a


N
4
(11,420)
9,020
E. CENTER STREET
3
(18,580)
14,680
OREBANK ROAD
4
(14,800)
11,650
S.R. 93
3
(20,380)
16,100
3
(20,190)
15,630
5
(12,980)
10,030
OLD STAGE ROAD
6
(10,370)
7,680
6
(12,350)
9,570
ISLAND ROAD
6
(8,410)
7,510
6
(9,960)
8,440
6
(7,010)
6,370
HARR TOWN ROAD
6
(6,980)
6,870
I 81
S.R. 126
S.R.36
WARPATH DRIVE
MILLER STREET
HAWTHORNE ST
HARBOR CHAPEL ROAD
COOKS VALLEY ROAD
FALL CREEK ROAD
HILL ROAD
SULLIVAN COUNTY
KINGSPORT
S.R. 126
2017 AADT - 000
2037 AADT - (000)
AADT Truck % - 0
REV. 9/24/2012
T. Armstrong
NOT TO SCALE

APPENDIX B – AIR QUALITY REPORT

Air Quality Technical Report

for

State Route 126 from East Center Street to Interstate 81 Sullivan County

PIN: 105467.00
Project: 82085-1225-14

Completed By:



January 2014

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2.0 Air Quality Evaluation 1
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Appendix A: MSATs Background Information

LIST OF FIGURES

Figure 1: Project Area 2

EXECUTIVE SUMMARY

The air quality evaluation was conducted in accordance with Section 5.3.5 (Air Quality) of the *Tennessee Environmental Procedures Manual*. The study concluded that the project is located in an area that is in attainment of the National Ambient Air Quality Standards (NAAQS) for all regulated criteria pollutants. Therefore, the project is not subject to conformity. The evaluation also concluded that the project will have no adverse Mobile Source Air Toxics (MSATs) effects.

1.0 INTRODUCTION

This report summarizes the results of an analysis of the potential air quality effects of the project. The purposes of this analysis are to address the transportation conformity requirements for the project, the potential Mobile Source Air Toxics (MSATs) effects, the relationship of this project to global climate change, and construction air quality.

The Preferred Alternative involves the widening and reconstruction of Memorial Boulevard (SR 126) from East Center Street to Interstate 81 (I-81) for a distance of approximately 8.4 miles. The project area is shown in Figure 1.

Specifically, the Preferred Alternative includes four travel lanes (two in each direction) from East Center Street to Harbor Chapel Road. From Harbor Chapel to I-81, the Preferred Alternative includes two travel lanes (one in each direction). There is an additional eastbound travel lane from Harbor Chapel Road to Old Stage Road to accommodate trucks ascending the steep grade. There will be a continuous left-turn lane separating the two travel lanes from Old Stage Road to Harr Town Road.

2.0 AIR QUALITY EVALUATION

This study was conducted in accordance with Section 5.3.5 (Air Quality) of the *Tennessee Environmental Procedures Manual* [1].

2.1 National Ambient Air Quality Standards (NAAQS)

The United States Environmental Protection Agency (EPA) has established allowable concentrations and exposure limits called the National Ambient Air Quality Standards (NAAQS) for various "criteria" pollutants. These pollutants include carbon monoxide (CO), nitrogen oxides (NO_x), ozone (O_3), particulate matter (PM_{10} and $PM_{2.5}$), sulfur oxides (SO_x), and lead (Pb).

In accordance with the Clean Air Act Amendments of 1990 (CAAA of 1990), EPA identified areas that did not meet the NAAQS for the criteria pollutants and designated them as "nonattainment" areas. Once a nonattainment area meets the NAAQS, it is redesignated as a "maintenance" area.

Sullivan County is in attainment for all transportation-related criteria pollutants.

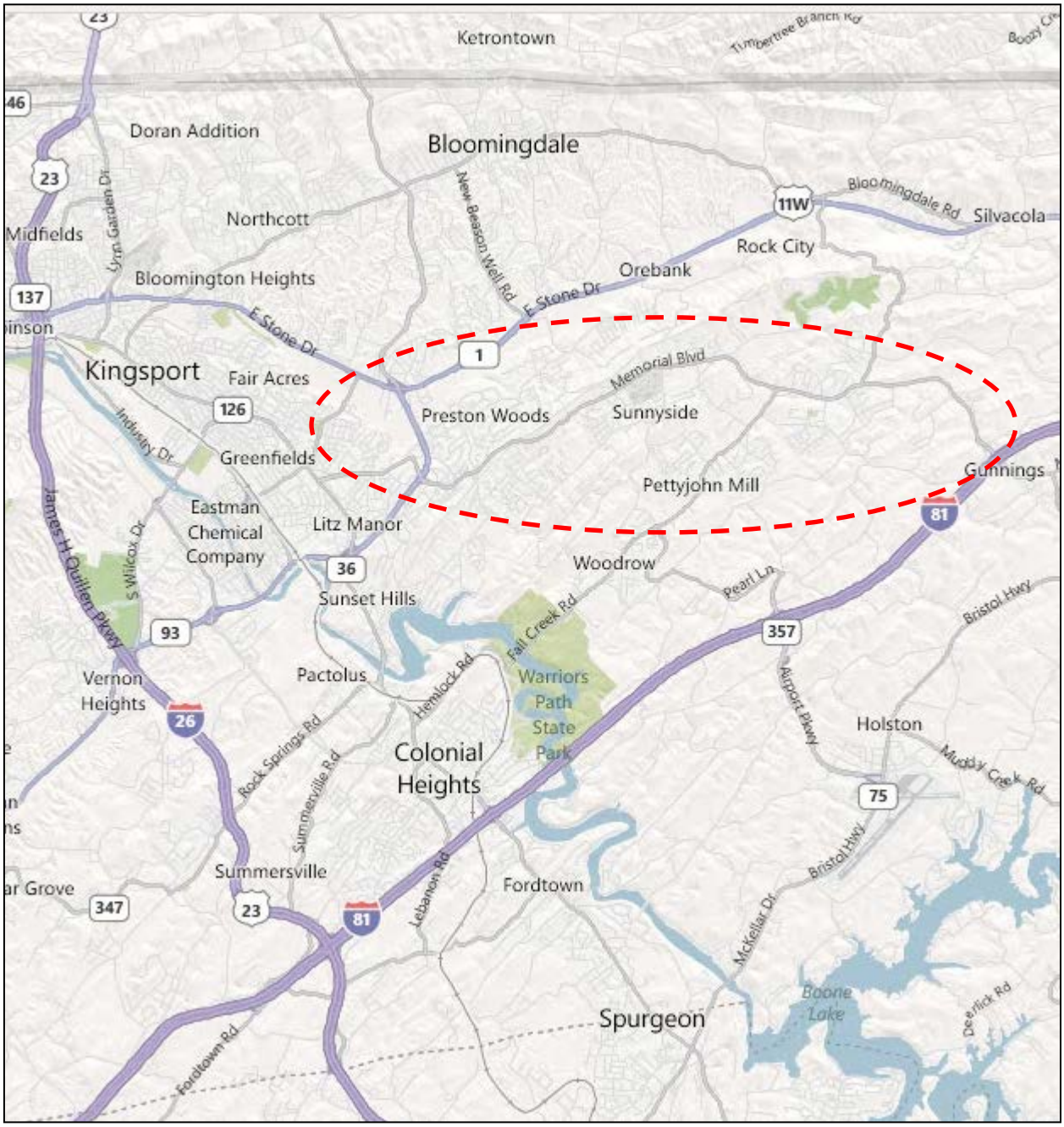


Figure 1: Project Area

2.2 Transportation Conformity

Transportation conformity is a process required of Metropolitan Planning Organizations (MPOs) pursuant to the Clean Air Act Amendments (CAAA) of 1990. CAAA require that transportation plans, programs, and projects in nonattainment or maintenance areas that are funded or approved by the Federal Highway Administration (FHWA) be in conformity with the State Implementation Plan (SIP), which represents the State's plan to either achieve or maintain the National Ambient Air Quality Standard (NAAQS) for a particular pollutant.

Projects conform to the SIP if they are included in a fiscally constrained and conforming Long Range Transportation Plan (LRTP) or Transportation Improvement Program (TIP).

This project is located in Sullivan County which is in attainment for all transportation-related criteria pollutants. Therefore, conformity does not apply to this project.

2.3 Mobile Source Air Toxics (MSATs)

On February 3, 2006, the FHWA released "*Interim Guidance on Air Toxic Analysis in NEPA Documents."* This guidance was superseded on September 30, 2009 and most recently on December 6, 2012 by FHWA's "*Interim Guidance Update on Air Toxic Analysis in NEPA Documents."* [2] The purpose FHWA's guidance is to advise on when and how to analyze Mobile Source Air Toxics (MSATs) in the NEPA process for highways. This guidance is interim, because MSAT science is still evolving. As the science progresses, FHWA will update the guidance.

The qualitative analysis presented below provides a basis for identifying and comparing the potential differences among MSAT emissions, if any, for the various alternatives. The assessment is derived in part from a study conducted by the FHWA entitled *"A Methodology for Evaluating Mobile Source Air Toxic Emissions Among Transportation Project Alternatives."* [3] Additional information regarding MSATs is provided in Appendix A.

FHWA's Interim Guidance groups projects into the following categories:

- Exempt Projects and Projects with no Meaningful Potential MSAT Effects;
- Projects with Low Potential MSAT Effects; and,
- Projects with Higher Potential MSAT Effects.

FHWA's Interim Guidance provides examples of "Projects with Low Potential MSAT Effects." These projects include minor widening projects and new interchanges, such as those that replace a signalized intersection on a surface street or where design year traffic projections are less than 140,000 to 150,000 AADT (Annual Average Daily Traffic).

The Preferred Alternative includes the widening of SR 126 in some locations and the improvement of SR 126 in other locations. The highest projected design year 2037 AADT on SR 126 is 20,380 and substantially lower than the FHWA criterion. Therefore, the project meets the criteria for a "Project with Low Potential MSAT Effects."

For both the No-Build and Preferred Alternatives, the amount of MSATs emitted would be proportional to the vehicle miles traveled, or VMT, assuming that other variables such as fleet mix are the same for each alternative. The estimated VMT for the Preferred Alternative is essentially the same as the VMT for the No-Build Alternative. Therefore, it is expected that there would be no appreciable difference in overall MSAT emissions between the No-Build and Preferred Alternatives.

Any emissions increases would also be offset somewhat by lower MSAT emission rates due to increased speeds; according to EPA's MOVES2010b model, emissions of all of the priority MSAT decrease as speed increases. Travel speeds for the Preferred Alternative are expected to be higher than for the No-Build Alternative.

Also, regardless of the alternative chosen, emissions will likely be lower than present levels in the design year as a result of EPA's national control programs that are projected to reduce annual MSAT emissions by over 80 percent between 2010 and 2050. Local conditions may differ from these national projections in terms of fleet mix and turnover, VMT growth rates, and local control measures. However, the magnitude of the EPA-projected reductions is so great (even after accounting for VMT growth) that MSAT emissions in the study area are likely to be lower in the future in nearly all cases.

The additional travel lanes contemplated for the Preferred Alternative will have the effect of moving some traffic closer to nearby sensitive land uses; therefore, under the Preferred Alternative there may be localized areas where ambient concentrations of MSATs could be higher than under the No-Build Alternative.

However, the magnitude and the duration of these potential increases compared to the No-Build Alternative cannot be reliably quantified due to incomplete or unavailable information in forecasting project-specific MSAT health impacts.

In sum, when a highway is widened, the localized level of MSAT emissions for the Preferred Alternative could be higher relative to the No-Build Alternative, but this could be offset due to increases in speeds and reductions in congestion (which are associated with lower MSAT emissions). Also, MSATs will be lower in other locations when traffic shifts away from them. However, on a regional basis, EPA's vehicle and fuel regulations, coupled with fleet turnover, will cause substantial reductions over time that, in almost all cases, will cause region-wide MSAT levels to be significantly lower than today.

Substantial construction-related MSAT emissions are not anticipated for this project as construction is not planned to occur over an extended building period. However, construction activity may generate temporary increases in MSAT emissions in the project area.

2.4 Greenhouse Gas Emissions (Climate Change)

Climate change is an important national and global concern. While the earth has gone through many natural changes in climate in its history, there is general agreement that the earth's climate is currently changing at an accelerated rate and will continue to do so for the foreseeable future. Anthropogenic (human-caused) greenhouse gas (GHG) emissions contribute to this rapid

change. Carbon dioxide (CO_2) makes up the largest component of these GHG emissions. Other prominent transportation GHGs include methane (CH_4) and nitrous oxide (N_2O).

Many GHGs occur naturally. Water vapor is the most abundant GHG and makes up approximately two-thirds of the natural greenhouse effect. However, the burning of fossil fuels and other human activities are adding to the concentration of GHGs in the atmosphere. Many GHGs remain in the atmosphere for time periods ranging from decades to centuries. GHGs trap heat in the earth's atmosphere. Because atmospheric concentration of GHGs continues to climb, our planet will continue to experience climate-related phenomena. For example, warmer global temperatures can cause changes in precipitation and sea levels.

To date, no national standards have been established regarding GHGs, nor has EPA established criteria or thresholds for ambient GHG emissions pursuant to its authority to establish motor vehicle emission standards for CO_2 under the Clean Air Act. However, there is a considerable body of scientific literature addressing the sources of GHG emissions and their adverse effects on climate, including reports from the Intergovernmental Panel on Climate Change, the US National Academy of Sciences, and the EPA and other Federal agencies. GHGs are different from other air pollutants evaluated in Federal environmental reviews because their impacts are not localized or regional due to their rapid dispersion into the global atmosphere, which is characteristic of these gases. The *affected environment* for CO_2 and other GHG emissions is the entire planet. In addition, from a quantitative perspective, global climate change is the cumulative result of numerous and varied emissions sources (in terms of both absolute numbers and types), each of which makes a relatively small addition to global atmospheric GHG concentrations. In contrast to broad scale actions such as actions involving an entire industry sector or very large geographic areas, it is difficult to isolate and understand the GHG emissions impacts for a particular transportation project. Furthermore, presently there is no scientific methodology for attributing specific climatological changes to a particular transportation project's emissions.

Under NEPA, detailed environmental analysis should be focused on issues that are significant and meaningful to decision-making.[1] FHWA has concluded, based on the nature of GHG emissions and the exceedingly small potential GHG impacts of the proposed action, that the GHG emissions from the proposed action will not result in "reasonably foreseeable significant adverse impacts on the human environment" (40 CFR 1502.22(b)). The GHG emissions from the project build alternatives will be insignificant, and will not play a meaningful role in a determination of the environmentally preferable alternative or the selection of the preferred alternative. More detailed information on GHG emissions "is not essential to a reasoned choice among reasonable alternatives" (40 CFR 1502.22(a)) or to making a decision in the best overall public interest based on a balanced consideration of transportation, economic, social, and environmental needs and impacts (23 CFR 771.105(b)). For these reasons, no alternatives-level GHG analysis has been performed for this project.

The context in which the emissions from the proposed project will occur, together with the expected GHG emissions contribution from the project, illustrate why the project's GHG emissions will not be significant and will not be a substantial factor in the decision-making. The transportation sector is the second largest source of total GHG emissions in the U.S., behind electricity generation. The transportation sector was responsible for approximately 27 percent of all

1 *See* 40 CFR 1500.1(b), 1500.2(b), 1500.4(g), and 1501.7

anthropogenic GHG emissions in the U.S. in 2009.[2] The majority of transportation GHG emissions are the result of fossil fuel combustion. U.S. CO_2 emissions from the consumption of energy accounted for about 18 percent of worldwide energy consumption CO_2 emissions in 2010.[3] U.S. transportation CO_2 emissions accounted for about 6 percent of worldwide CO_2 emissions.[4] However, while the contribution of GHGs from transportation in the U.S. as a whole is a large component of U.S. GHG emissions, as the scale of analysis is reduced the GHG contributions become quite small.

2.4.1 Mitigation for Global GHG Emissions

To help address the global issue of climate change, USDOT is committed to reducing GHG emissions from vehicles traveling on our nation's highways. USDOT and EPA are working together to reduce these emissions by substantially improving vehicle efficiency and shifting toward lower carbon intensive fuels. The agencies have jointly established new, more stringent fuel economy and first ever GHG emissions standards for model year 2012-2025 cars and light trucks, with an ultimate fuel economy standard of 54.5 miles per gallon for cars and light trucks by model year 2025. Further, on September 15, 2011, the agencies jointly published the first ever fuel economy and GHG emissions standards for heavy-duty trucks and buses.[5] Increasing use of technological innovations that can improve fuel economy, such as gasoline- and diesel-electric hybrid vehicles, will improve air quality and reduce CO_2 emissions in future years.

Consistent with its view that broad-scale efforts hold the greatest promise for meaningfully addressing the global climate change problem, FHWA is engaged in developing strategies to reduce transportation's contribution to GHGs—particularly CO_2 emissions—and to assess the risks to transportation systems and services from climate change. In an effort to assist States and MPOs in performing GHG analyses, FHWA has developed a *Handbook for Estimating Transportation GHG Emissions for Integration into the Planning Process.* The Handbook presents methodologies reflecting good practices for the evaluation of GHG emissions at the transportation program level, and will demonstrate how such evaluation may be integrated into the transportation planning process. FHWA has also developed a tool for use at the statewide level to model a large number of GHG reduction scenarios and alternatives for use in transportation planning, climate action plans, scenario planning exercises, and in meeting state GHG reduction targets and goals. To assist states and MPOs in assessing climate change vulnerabilities to their transportation networks, FHWA has developed a draft vulnerability and risk assessment conceptual model and has piloted it in several locations.

2 Calculated from data in U.S. Environmental Protection Agency, Inventory of Greenhouse Gas Emissions and Sinks, 1990-2009.
3 Calculated from data in U.S. Energy Information Administration International Energy Statistics, Total Carbon Dioxide Emissions from the Consumption of Energy, http://www.eia.gov/cfapps/ipdbproject/IEDIndex3.cfm?tid=90&pid=44&aid=8, accessed 9/12/11.
4 Calculated from data in EIA figure 104: http://205.254.135.24/oiaf/ieo/graphic_data_emissions.html: http://epa.gov/climatechange/emissions/downloads11/US-GHG-Inventory-2011-Executive-Summary.pdf
5 For more information on fuel economy proposals and standards, see the National Highway Traffic Safety Administration's Corporate Average Fuel Economy website: http://www.nhtsa.gov/fuel-economy/.

2.4.2 Summary

This document does not incorporate an analysis of the GHG emissions or climate change effects of each of the alternatives because the potential change in GHG emissions is very small in the context of the affected environment. Because of the insignificance of the GHG impacts, those impacts will not be meaningful to a decision on the environmentally preferable alternative or to a choice among alternatives. As outlined above, FHWA is working to develop strategies to reduce transportation's contribution to GHGs—particularly CO_2 emissions—and to assess the risks to transportation systems and services from climate change. FHWA will continue to pursue these efforts as productive steps to address this important issue. Finally, the construction best practices described above represent practicable project-level measures that, while not substantially reducing global GHG emissions, may help reduce GHG emissions on an incremental basis and could contribute in the long term to meaningful cumulative reduction when considered across the Federal-aid highway program.

2.5 Construction Air Quality

This project will result in the temporary generation of construction-related pollutant emissions and dust that could result in short-term air quality impacts. These construction-related impacts will be mitigated through the implementation of Best Management Practices, which are included in *TDOT's Standard Specifications for Road and Bridge Construction*. All construction equipment shall be maintained, repaired, and adjusted to keep it in full satisfactory condition to minimize pollutant emissions.

2.6 Indirect and Cumulative Effects

The forecasted traffic volumes for most projects typically account for any redistribution of traffic that would occur as a result of the project. Therefore, the air quality analysis addresses any indirect traffic-related air quality impacts that might occur.

Additionally, the forecasted traffic volumes include expected traffic growth and other planned and programmed projects in the area. As a result, the air quality analysis addresses the traffic-related cumulative air quality impacts of the project.

3.0 REFERENCES

[1] *Tennessee Environmental Procedures Manual*, Tennessee Department of Transportation. http://www.tdot.state.tn.us/epm/

[2] *Interim Guidance Update on Air Toxic Analysis in NEPA Documents*, FHWA, December 6, 2012. http://www.fhwa.dot.gov/environment/air_quality/air_toxics/policy_and_guidance/agintguidmem.cfm

[3] Claggett, M., et. al., "*A Methodology for Evaluating Mobile Source Air Toxic Emissions Among Transportation Project Alternatives,"* Federal Highway Administration, Resource Center.

Appendix A
MSATs Background Information

MOBILE SOURCE AIR TOXICS (MSATS)

Background

Controlling air toxic emissions became a national priority with the passage of the Clean Air Act Amendments (CAAA) of 1990, whereby Congress mandated that the U.S. Environmental Protection Agency (EPA) regulate 188 air toxics, also known as hazardous air pollutants. The EPA has assessed this expansive list in their latest rule on the Control of Hazardous Air Pollutants from Mobile Sources (Federal Register, Vol. 72, No. 37, page 8430, February 26, 2007), and identified a group of 93 compounds emitted from mobile sources that are listed in their Integrated Risk Information System (IRIS) (http://www.epa.gov/iris/). In addition, EPA identified seven compounds with significant contributions from mobile sources that are among the national and regional-scale cancer risk drivers from their 1999 National Air Toxics Assessment (NATA) (http://www.epa.gov/ttn/atw/nata1999/). These are acrolein, benzene, 1,3-butidiene, diesel particulate matter plus diesel exhaust organic gases (diesel PM), formaldehyde, naphthalene, and polycyclic organic matter. While FHWA considers these the priority mobile source air toxics, the list is subject to change and may be adjusted in consideration of future EPA rules. The 2007 EPA rule mentioned above requires controls that will dramatically decrease MSAT emissions through cleaner fuels and cleaner engines. According to an FHWA analysis using EPA's MOBILE6.2 model, even if vehicle activity (vehicle-miles travelled, VMT) increases by 145 percent as assumed, a combined reduction of 72 percent in the total annual emission rate for the priority MSAT is projected from 1999 to 2050, as shown in Figure 1.

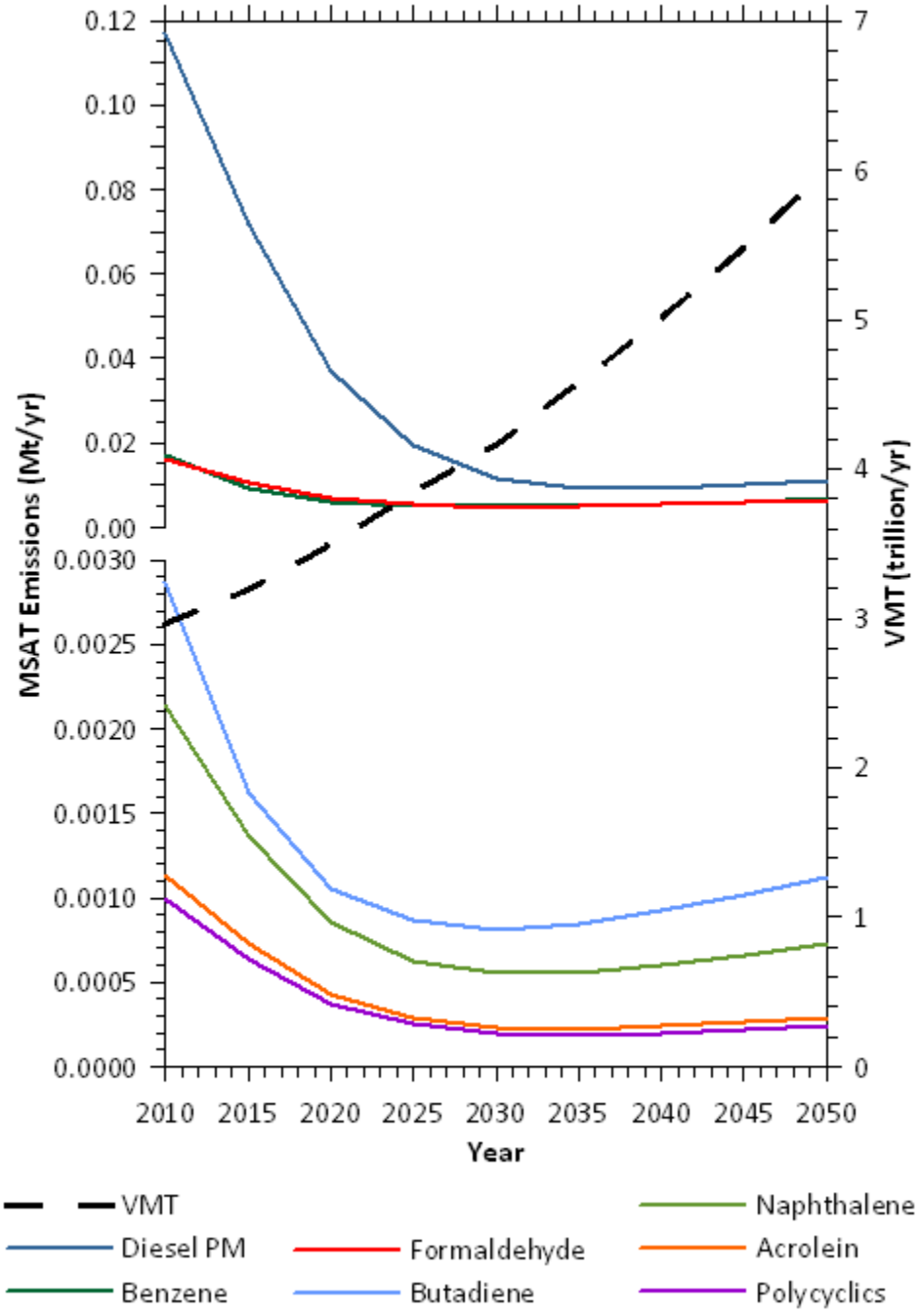
Motor Vehicle Emissions Simulator (MOVES)

According to EPA, MOVES improves upon the previous MOBILE model in several key aspects: MOVES is based on a vast amount of in-use vehicle data collected and analyzed since the latest release of MOBILE, including millions of emissions measurements from light-duty vehicles. Analysis of this data enhanced EPA's understanding of how mobile sources contribute to emissions inventories and the relative effectiveness of various control strategies. In addition, MOVES accounts for the significant effects that vehicle speed and temperature have on PM emissions estimates, whereas MOBILE did not. MOVES2010b includes all air toxic pollutants in NATA that are emitted by mobile sources. EPA has incorporated more recent data into MOVES2010b to update and enhance the quality of MSAT emission estimates. These data reflect advanced emission control technology and modern fuels, plus additional data for older technology vehicles.

Based on an FHWA analysis using EPA's MOVES2010b model, as shown in Figure 1, even if vehicle-miles travelled (VMT) increases by 102 percent as assumed from 2010 to 2050, a combined reduction of 83 percent in the total annual emissions for the priority MSAT is projected for the same time period.

The implications of MOVES on MSAT emissions estimates compared to MOBILE are: lower estimates of total MSAT emissions; significantly lower benzene emissions; significantly higher diesel PM emissions, especially for lower speeds. Consequently, diesel PM is projected to be the dominant component of the emissions total.

Figure 1: NATIONAL MSAT EMISSION TRENDS 1999 - 2050 FOR VEHICLES OPERATING ON ROADWAYS USING EPA's MOVES2010b MODEL



Note: Trends for specific locations may be different, depending on locally derived information representing vehicle-miles travelled, vehicle speeds, vehicle mix, fuels, emission control programs, meteorology, and other factors
Source: EPA MOVES2010b model runs conducted during May - June 2012 by FHWA.

MSAT Research

Air toxics analysis is a continuing area of research. While much work has been done to assess the overall health risk of air toxics, many questions remain unanswered. In particular, the tools and techniques for assessing project-specific health outcomes as a result of lifetime MSAT exposure remain limited. These limitations impede the ability to evaluate how potential public health risks posed by MSAT exposure should be factored into project-level decision-making

within the context of NEPA.

Nonetheless, air toxics concerns continue to be raised on highway projects during the NEPA process. Even as the science emerges, we are duly expected by the public and other agencies to address MSAT impacts in our environmental documents. The FHWA, EPA, the Health Effects Institute, and others have funded and conducted research studies to try to more clearly define potential risks from MSAT emissions associated with highway projects. The FHWA will continue to monitor the developing research in this field.

NEPA Context

The NEPA requires, to the fullest extent possible, that the policies, regulations, and laws of the Federal Government be interpreted and administered in accordance with its environmental protection goals. The NEPA also requires Federal agencies to use an interdisciplinary approach in planning and decision-making for any action that adversely impacts the environment. The NEPA requires and FHWA is committed to the examination and avoidance of potential impacts to the natural and human environment when considering approval of proposed transportation projects. In addition to evaluating the potential environmental effects, we must also take into account the need for safe and efficient transportation in reaching a decision that is in the best overall public interest. The FHWA policies and procedures for implementing NEPA are contained in regulation at 23 CFR Part 771.

Incomplete or Unavailable Information for Project-Specific MSAT Health Impacts Analysis

In FHWA's view, information is incomplete or unavailable to credibly predict the project-specific health impacts due to changes in MSAT emissions associated with a proposed set of highway alternatives. The outcome of such an assessment, adverse or not, would be influenced more by the uncertainty introduced into the process through assumption and speculation rather than any genuine insight into the actual health impacts directly attributable to MSAT exposure associated with a proposed action.

The U.S. Environmental Protection Agency (EPA) is responsible for protecting the public health and welfare from any known or anticipated effect of an air pollutant. They are the lead authority for administering the Clean Air Act and its amendments and have specific statutory obligations with respect to hazardous air pollutants and MSAT. The EPA is in the continual process of assessing human health effects, exposures, and risks posed by air pollutants. They maintain the Integrated Risk Information System (IRIS), which is "a compilation of electronic reports on specific substances found in the environment and their potential to cause human health effects" (EPA, http://www.epa.gov/iris/). Each report contains assessments of non-cancerous and cancerous effects for individual compounds and quantitative estimates of risk levels from lifetime oral and inhalation exposures with uncertainty spanning perhaps an order of magnitude.

Other organizations are also active in the research and analyses of the human health effects of MSAT, including the Health Effects Institute (HEI). Two HEI studies are summarized in Appendix D of FHWA's Interim Guidance Update on Mobile source Air Toxic Analysis in NEPA Documents. Among the adverse health effects linked to MSAT compounds at high exposures are; cancer in humans in occupational settings; cancer in animals; and irritation to the respiratory tract, including the exacerbation of asthma. Less obvious is the adverse human health effects of MSAT compounds at current environmental concentrations (HEI, http://pubs.healtheffects.org/view.php?id=282) or in the future as vehicle emissions substantially decrease (HEI, http://pubs.healtheffects.org/view.php?id=306).

The methodologies for forecasting health impacts include emissions modeling; dispersion

modeling; exposure modeling; and then final determination of health impacts - each step in the process building on the model predictions obtained in the previous step. All are encumbered by technical shortcomings or uncertain science that prevents a more complete differentiation of the MSAT health impacts among a set of project alternatives. These difficulties are magnified for lifetime (i.e., 70 year) assessments, particularly because unsupportable assumptions would have to be made regarding changes in travel patterns and vehicle technology (which affects emissions rates) over that time frame, since such information is unavailable.
It is particularly difficult to reliably forecast 70-year lifetime MSAT concentrations and exposure near roadways; to determine the portion of time that people are actually exposed at a specific location; and to establish the extent attributable to a proposed action, especially given that some of the information needed is unavailable.

There are considerable uncertainties associated with the existing estimates of toxicity of the various MSAT, because of factors such as low-dose extrapolation and translation of occupational exposure data to the general population, a concern expressed by HEI (http://pubs.healtheffects.org/view.php?id=282). As a result, there is no national consensus on air dose-response values assumed to protect the public health and welfare for MSAT compounds, and in particular for diesel PM. The EPA (http://www.epa.gov/risk/basicinformation.htm#g) and the HEI (http://pubs.healtheffects.org/getfile.php?u=395) have not established a basis for quantitative risk assessment of diesel PM in ambient settings.

There is also the lack of a national consensus on an acceptable level of risk. The current context is the process used by the EPA as provided by the Clean Air Act to determine whether more stringent controls are required in order to provide an ample margin of safety to protect public health or to prevent an adverse environmental effect for industrial sources subject to the maximum achievable control technology standards, such as benzene emissions from refineries. The decision framework is a two-step process. The first step requires EPA to determine an "acceptable" level of risk due to emissions from a source, which is generally no greater than approximately 100 in a million. Additional factors are considered in the second step, the goal of which is to maximize the number of people with risks less than 1 in a million due to emissions from a source. The results of this statutory two-step process do not guarantee that cancer risks from exposure to air toxics are less than 1 in a million; in some cases, the residual risk determination could result in maximum individual cancer risks that are as high as approximately 100 in a million. In a June 2008 decision, the U.S. Court of Appeals for the District of Columbia Circuit upheld EPA's approach to addressing risk in its two step decision framework. Information is incomplete or unavailable to establish that even the largest of highway projects would result in levels of risk greater than deemed acceptable.

Because of the limitations in the methodologies for forecasting health impacts described, any predicted difference in health impacts between alternatives is likely to be much smaller than the uncertainties associated with predicting the impacts. Consequently, the results of such assessments would not be useful to decision makers, who would need to weigh this information against project benefits, such as reducing traffic congestion, accident rates, and fatalities plus improved access for emergency response, that are better suited for quantitative analysis.

Due to the limitations cited, a discussion such as the example provided in this Appendix (reflecting any local and project-specific circumstances), should be included regarding incomplete or unavailable information in accordance with Council on Environmental Quality (CEQ) regulations [40 CFR 1502.22(b)]. The FHWA Headquarters and Resource Center staff Victoria Martinez (787) 766-5600 X231, Bruce Bender (202) 366-2851, and Michael Claggett (505) 820-2047, are available to provide guidance and technical assistance and support.

APPENDIX C – NOISE EVALUATION UPDATE

Noise Evaluation Update
for
State Route 126 from East Center Street to Interstate 81
Sullivan County

PIN: 105467.00
Project: 82085-1225-14

Submitted to:



Prepared by:

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January 2014

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EXECUTIVE SUMMARY

The noise evaluation for the Preferred Alternative was conducted in accordance with FHWA noise standards, *Procedures for Abatement of Highway Traffic and Construction Noise*, *23 CFR 772* and the Tennessee Department of Transportation's *Policy on Highway Traffic Noise Abatement* effective July 13, 2011.

The study determined that the Preferred Alternative will create traffic noise impacts at 18 residences. Noise barriers were evaluated to mitigate the predicted noise impacts in accordance with TDOT's Noise Policy. In order for noise barriers to be included in a project, they must be determined to be both feasible and reasonable in accordance with TDOT's Noise Policy.

SR 126 is not a limited access facility. In fact, all of the impacted residences have direct driveway access to SR 126. Noise barriers are not feasible to mitigate impacts at these residences because a noise barrier would limit access from these properties and adjacent properties.

Many impacted residences are also isolated from other impacted residences. Noise barriers would not be reasonable since the required area per benefited residence will greatly exceed the allowable area for benefited residence. As a result, noise abatement is not proposed for this project.

1.0 INTRODUCTION

This report updates a previous noise report completed by HMB in October 2010 [1]. The previous study evaluated Alternatives A and B and the results were included in the Draft Environmental Impact Statement (DEIS) for the project. The HMB report is provided in Appendix A.

The previous noise study had to be updated for several reasons. First, a Preferred Alternative has been selected that differs from the previously studied Alternatives A and B. Second, the traffic forecasts for the project were also updated in 2012. Finally, TDOT updated its noise policy in July 2011.

The Preferred Alternative involves the widening and reconstruction of Memorial Boulevard (SR 126) from East Center Street to Interstate 81 (I-81) for a distance of approximately 8.4 miles. The project area is shown in Figure 1.

Specifically, the Preferred Alternative includes four travel lanes (two in each direction) from East Center Street to Harbor Chapel Road. From Harbor Chapel to I-81, the Preferred Alternative includes two travel lanes (one in each direction). There is an additional eastbound travel lane from Harbor Chapel Road to Old Stage Road to accommodate trucks ascending the steep grade. There will be a continuous left-turn lane separating the two travel lanes from Old Stage Road to Harr Town Road.

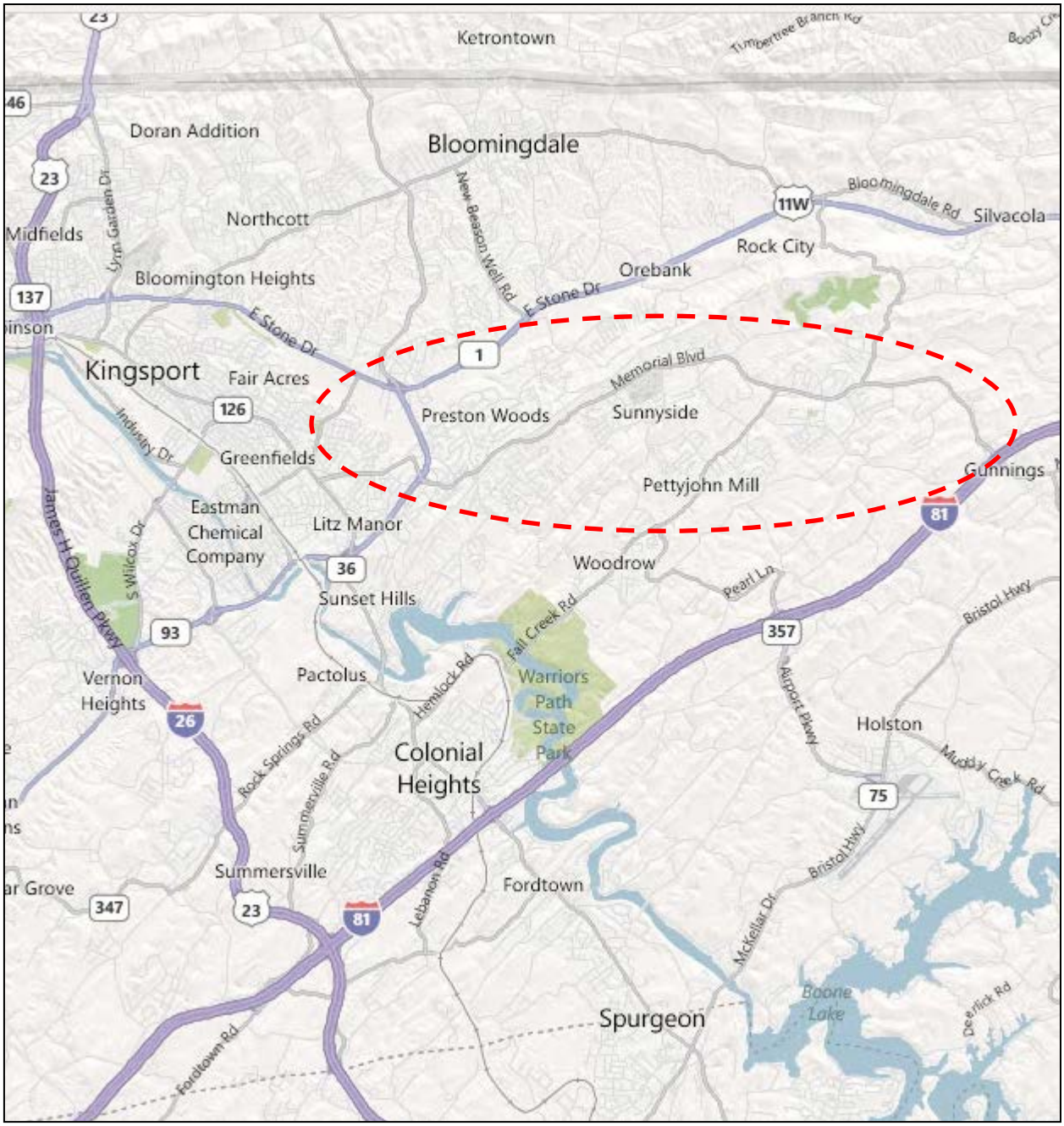

Figure 1: Project Area

2.0 NOISE EVALUATION

This study has been prepared in accordance with the FHWA noise standards, *Procedures for Abatement of Highway Traffic and Construction Noise*, *23 CFR 772* [1], and the Tennessee Department of Transportation's *Policy on Highway Traffic Noise Abatement* [2] and includes the following tasks:

- Identification of noise-sensitive land uses: Identification of existing land uses in the project area that are sensitive to highway traffic noise;
- Determination of existing sound levels: Measurement of existing sound levels at sensitive land uses to characterize the existing noise environment in the project area;
- Determination of future sound levels: Prediction of future, design year, worst-hour sound levels for the No-Build and Build Alternatives;
- Determination of traffic noise impacts: Determination of noise impacts based on the increase in existing sound levels, as well as design year sound levels;
- Noise abatement evaluation: Evaluation of noise abatement for land uses determined to be impacted by the project;
- Discussion of construction noise; and,
- Coordination with local officials.

Each of these analysis steps is discussed below following a discussion of TDOT's criteria for determining noise impacts.

2.1 Criteria for Determining Impacts

2.1.1 Traffic Noise Terminology

Traffic noise levels are expressed in terms of the hourly, A-weighted equivalent sound level in decibels (dBA). A sound level represents the level of the rapid air pressure fluctuations caused by sources such as traffic that are heard as noise. A decibel is a unit that relates the sound pressure of a noise to the faintest sound the young human ear can hear.

The A-weighting refers to the amplification or attenuation of the different frequencies of the sound (subjectively, the pitch) to correspond to the way the human ear "hears" these frequencies. Generally, when the sound level exceeds the mid-60 dBA range, outdoor conversation in normal tones at a distance of three feet becomes difficult. Figure 2 shows some typical indoor and outdoor sound levels.

A 9-10 dB increase in sound level is typically judged by the listener to be twice as loud as the original sound while a 9-10 dB reduction is judged to be half as loud. Doubling the number of sources (i.e. vehicles) will increase the hourly equivalent sound level by approximately 3 dB, which is usually the smallest change in hourly equivalent A-weighted traffic noise levels that people can detect without specifically listening for the change.

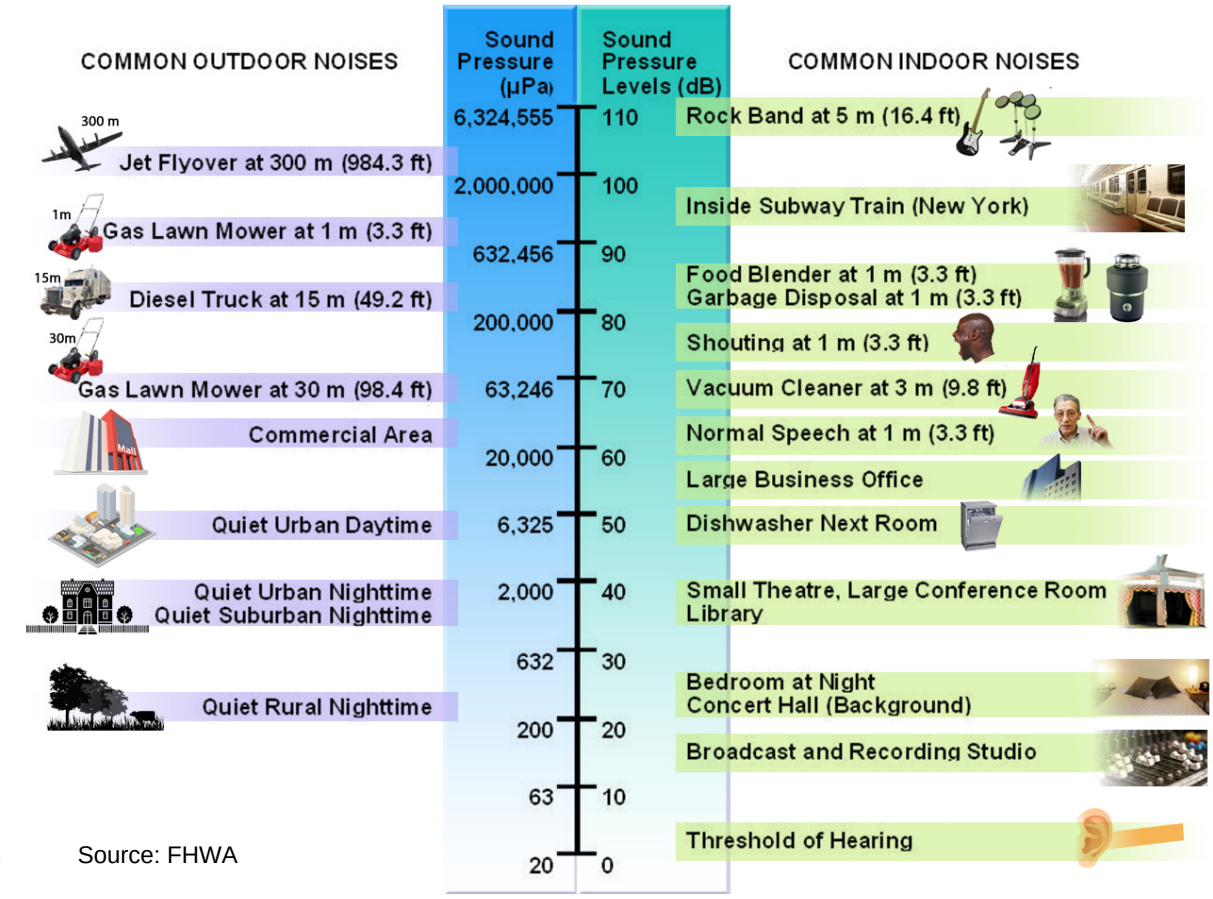

Figure 2: Typical Sound Levels

Because most environmental noise fluctuates from moment to moment, it is standard practice to condense data into a single level called the equivalent sound level (L_{eq}). The L_{eq} is a steady sound level that would contain the same amount of sound energy as the actual time-varying sound evaluated over the same time-period. The L_{eq} averages the louder and quieter moments, but gives much more weight to the louder moments in the averaging. For traffic noise assessment purposes, L_{eq} is typically evaluated over the worst one-hour period and is defined as L_{eq} (1h).

The term insertion loss (IL) is generally used to describe the reduction in L_{eq} (1h) at a location after a noise barrier is constructed. For example, if the L_{eq} (1h) at a residence before a barrier is constructed is 75 dBA and the L_{eq} (1h) after a barrier constructed is 65 dBA, then the insertion loss would be 10 dB.

2.1.2 Noise Abatement Criteria (NAC)

Noise impact is determined by comparing future project sound levels: (1) to a set of Noise Abatement Criteria (NAC) for a particular land use category, and (2) to existing sound levels.

The FHWA noise standards (contained in 23 CFR 772) and TDOT's Noise Policy state that traffic noise impacts require consideration of abatement when worst-hour sound levels approach or exceed the NAC listed in Table 1.

The FHWA noise standards and TDOT's Noise Policy also define impacts to occur if there is a substantial increase in design year sound levels. Table 2 presents TDOT's criteria to define substantial noise increase.

2.2 Identification of Noise-Sensitive Land Uses

Review of available electronic mapping revealed over 200 Category B residences adjacent to SR 126 that might be impacted by the project. These uses include both single-family homes and apartments.

The Holston Manor nursing home and the East Lawn Memorial Park cemetery are also located near SR 126 within the project limits. The exterior of the nursing home and cemetery are classified as Category C land uses. For cemeteries, frequent human use areas include exterior areas where services are held on a regular basis but do not include individual grave sites. Therefore, only the exterior of the cemetery building used for services was assessed for impacts.

Noise impacts at the residences, nursing home, and cemetery will be identified and noise abatement will be considered if design year sound levels are 66 dBA or higher or if there is a substantial increase in existing sound levels.

There are some Category F industrial and retail properties located within the project limits. As indicated in Table 1, these land uses are not noise-sensitive and do not have an NAC. Therefore, they have not been included in the noise study.

Finally, there are some tracts of Activity Category G undeveloped lands that exist along the project. These undeveloped lands are not noise-sensitive and have not been included in the noise analysis. However, noise impacts could occur in the future if noise-sensitive land uses are constructed near SR 126. A discussion of future sound levels and the need for noise-compatible land use planning is provided later in this report.

It is important to note that several properties or portions of properties will be taken for the Preferred Alternative. Properties that are shown in the current plans to be taken have not been included in the noise analysis.

2.3 Determination of Existing Sound Levels

Noise measurements were conducted by HMB during peak travel times at several noise-sensitive land uses in the project area on April 30, March 20 and 21, and May 11, 2008. Table 3 summarizes the sound levels at the measurement locations.

Table 1: Noise Abatement Criteria in 23 CFR 772

Activity Category	***L_{Aeq}(1h) dBA***	***Evaluation Location***	***Activity Description***
A	57	Exterior	Lands on which serenity and quiet are of extraordinary significance and serve an important public need and where the preservation of those qualities is essential if the area is to continue to serve its intended purpose.
B(1)	67	Exterior	Residential.
C(1)	67	Exterior	Active sport areas, amphitheaters, auditoriums, campgrounds, cemeteries, day care centers, hospitals, libraries, medical facilities, parks, picnic areas, places of worship, playgrounds, public meeting rooms, public or nonprofit institutional structure, radio stations, recording studios, recreation areas, Section 4(f) sites, schools, television studios, trails, and trail crossings.
D	52	Interior	Auditoriums, day care centers, hospitals, libraries, medical facilities, places of worship, public meeting rooms, public or nonprofit institutional structure, radio studios, recording studios, schools, and television studios.
E(1)	72	Exterior	Hotels, motels, offices, restaurants/bars, and other developed lands, properties or activities not included in A-D, or F.
F	–––	–––	Agriculture, airports, bus yards, emergency services, industrial, logging, maintenance facilities, manufacturing, mining, rail yards, retail facilities, shipyards, utilities (water resources, water treatment, electrical), and warehousing.
G	–––	–––	Undeveloped lands that are not permitted.

(1) Includes undeveloped lands permitted for this activity category.

Table 2: Substantial Noise Level Increase

Existing Noise Level (dBA) (1)	***Predicted Design Year Noise Level Increase (dB)*** (2)
42 or less	15 or more
43	14 or more
44	13 or more
45	12 or more
46	11 or more
47 or more	10 or more

(1) Worst hour noise level from the combination of natural and mechanical sources and human activity.
(2) Predicted design year noise level minus existing noise level.

Table 3: Existing Sound Levels at Measurement Locations

Location (Receiver in HMB Report)	*Distance to SR 126 (feet)(1)*	*Date*	*Period*	*Peak Hour L_{eq}(1h) (dBA)(2)*
3213 Memorial Blvd (Rec 01)	35	3/21/2008	7:20-7:39 AM	63
3701 Memorial Blvd (Rec 03)	90	3/21/2008	8:10-8:29 AM	63
3996 Memorial Blvd (Rec 24)	60	5/11/2008	2:50-3:09 PM	66
4216 Skyland Lane (Rec 06)	180	3/20/2008	11:22-11:42 AM	59
4321 Trinity Lane (Rec 23)	150	5/11/2008	2:23-2:42 PM	60
4500 Old Stage Road (Rec 22)	100	5/11/2008	1:55-2:14 PM	62
4541 Old Stage Road (Rec 07)	375	3/20/2008	11:52-12:12 PM	44
4609 Old Stage Road (Rec 08)	420	3/20/2008	12:22-12:41 PM	44
4701 Memorial Blvd (Rec 21)	230	5/11/2008	1:28-1:49 PM	55
105 Hobbes Street (Rec 20)	285	5/11/2008	10:58-11:17 PM	49
6290 Chestnut Ridge (Rec 10)	150	3/20/2008	12:48-1:07 PM	58
143 Island Road (Rec 11)	290	3/20/2008	1:16-1:35 PM	58
5340 Memorial Blvd (Rec 17)	105	5/11/2008	8:55-9:14 AM	55
210 Old Fall Creek Road (Rec 12)	280	3/20/2008	1:42-2:01 PM	56
104 Natchez Lane (Rec 05)	205	4/30/2008	4:00-4:19 PM	57

(1) From proposed edge-of-pavement.
(2) Based on sound levels at reference microphone.

A review of historic traffic data for SR 126 in the project area indicates that the year 2008 AADT on SR 126 east of State Route 93 (SR 93) was 9,559 vehicles per day (vpd) while the year 2012 AADT was slightly lower at 9,340 vpd. This small decrease in traffic would have a negligible effect on sound levels. As a result, the sound levels measured in 2008 are considered to be representative of existing sound levels. As shown, existing peak hour sound levels at the measurement locations range from 44 to 66 dBA.

2.4 Determination of Future Sound Levels

TDOT developed traffic projections for the project for the design year 2037. These projections include traffic volumes for the "design hour" which represents a theoretical worst traffic condition. These design hour traffic projections were used for the noise analysis since they represent the highest number of vehicles expected to travel on SR 126 in a given hour and would, therefore, represent the worst noise hour. The design year traffic projections are summarized in Appendix B.

2.4.1 No-Build Alternative

Sound levels for the No-Build Alternative can be reasonably estimated by evaluating existing and future traffic volumes on SR 126. As noted previously, doubling the traffic on a roadway would result in a 3 dB increase in the sound level at a given receiver assuming all other conditions remain the same. Design year 2037 traffic volumes on SR 126 are predicted to increase between 2% and 35% depending on location as summarized in Table 4.

Table 4: Year 2017 and 2037 Traffic Projections, SR 126

From	*To*	*Percent Increase in AADT*	*Sound Level Increase (dB)*
East Center Street	Island Road	26% - 35%	1
Island Road	Hill Road	12% – 18%	1
Hill Road	I-81	2% - 10%	0

These traffic increases would increase sound levels by 0 to 1 dB at nearby land uses. As a result, existing sound levels were increased by 0 to 1 dB (depending on location) to arrive at design year 2037 sound levels for the No-Build Alternative at the measurement locations shown in Figure 3.

2.4.2 Build Alternative

Noise modeling of the Preferred Alternative was completed using the FHWA Traffic Noise Model (TNM 2.5) computer program in accordance with *TDOT Guidelines for Noise Modeling Using FHWA's Traffic Noise Model* [3]. The program calculated design hour equivalent sound levels in year 2037 for the noise-sensitive land uses in the project area including the measurement locations.

Microstation design files for the conceptual plan were used to develop the TNM runs. In developing the TNM files, the points of TNM objects, including roadways, receivers, barriers, terrain lines, and building rows, were first digitized into Microstation. Microstation's coordinate export features were then used to write these points to comma separated variable text files. The points from the text files were pasted into TNM. Finally, a DXF file was created with background text to ease the input of receiver name and elevation data into the TNM files.

As stated above, design year traffic projections provided by TDOT were used for the noise analysis. These projections indicated that 2% to 4% of the design hour volumes on SR 126 are trucks, as shown in Appendix B. The proposed design speeds of 35 to 45 mph on each section of SR 126 were modeled.

The predicted design year sound levels for the modeled receivers are summarized in Table 5 and are discussed in the following section. TNM plan views showing all modeled TNM objects, including the locations of the modeled roadways and receivers, are provided in Appendix C. Tables showing the predicted sound levels at each modeled receiver are provided in Appendix D.

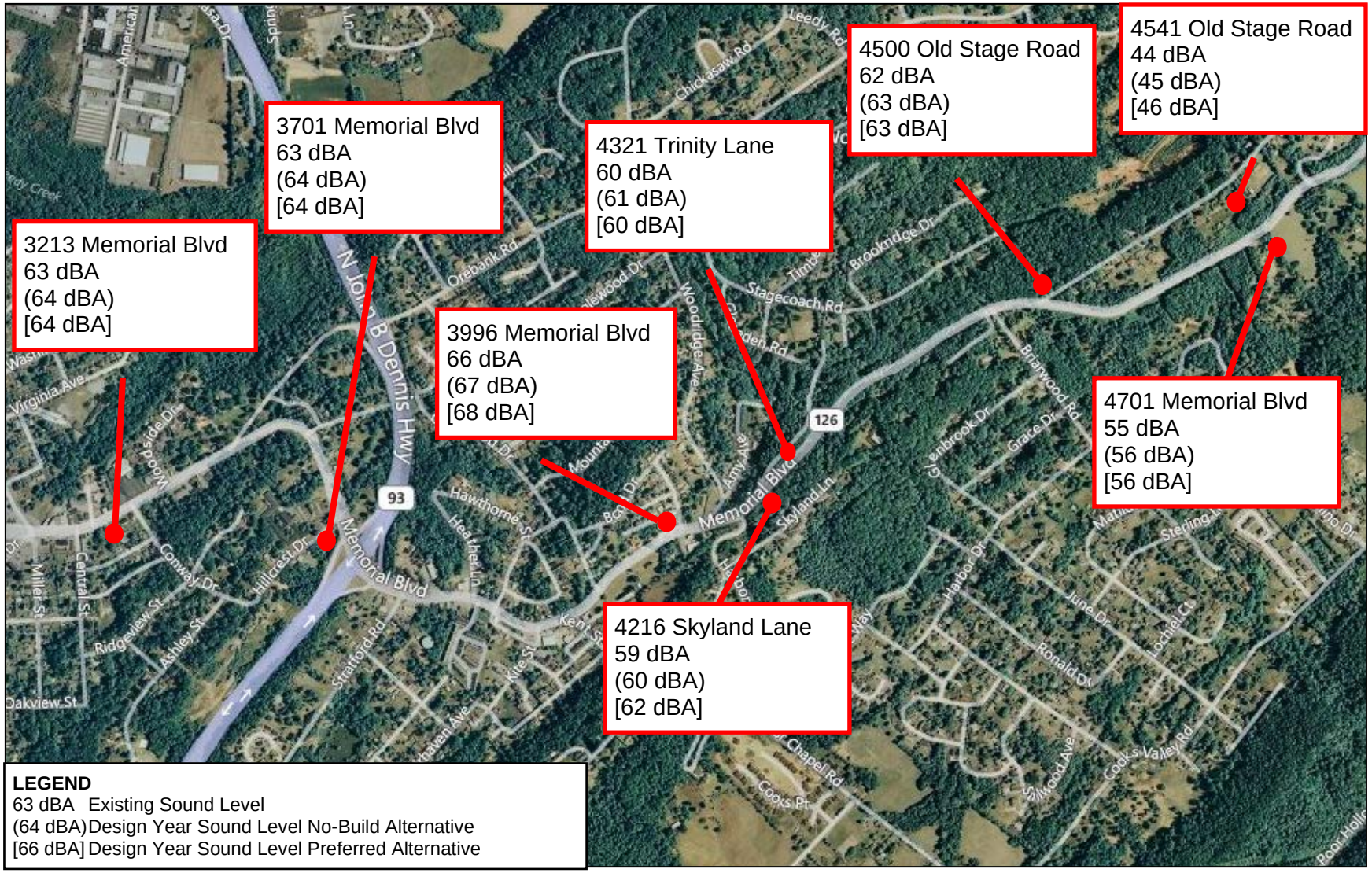

Figure 3: Existing and Design Year 2037 Sound Levels



Figure 3: Existing and Design Year 2037 Sound Levels



Figure 3: Existing and Design Year 2037 Sound Levels

Table 5: Impact Determination Analysis, Design Year 2037

Alternative	*Design Year Sound Levels (dBA)*	*Impacted based on NAC?*	*Number of Impacts*
Preferred	44 – 68	Yes	18

2.5 Impact Determination Analysis

As noted previously, a location is impacted if 1) the predicted worst hour noise level approaches or exceeds the NAC or 2) there is a substantial increase in design year noise levels above existing noise levels.

Design year sound levels for the Preferred Alternative are predicted to between 0 and 4 dB higher than existing sound levels. These increases are not substantial according to TDOT's Noise Policy. Therefore, none of the receivers are predicted to be impacted by a substantial increase in sound level. Additionally, sound levels at some residences will be reduced with the project due to the SR 126 alignment being shifted farther away.

As shown in the tables in Appendix D, design year sound levels at most receivers are predicted to be below the NAC. However, 18 residences are predicted to be impacted with design year sound levels of 66 dBA or higher.

The nursing home and cemetery are not predicted to be impacted.

2.6 Noise Abatement Evaluation

Abatement is generally evaluated when impacts are predicted to occur. Noise barriers were evaluated to reduce sound levels for impacted land uses. In order for noise barriers to be included in a project, they must be determined to be both feasible and reasonable in accordance with TDOT's Noise Policy as discussed below.

Feasibility means that: (1) the construction of a barrier would not be anticipated to pose any major design, construction, maintenance, or safety problems; and, (2) the noise barriers will provide a noise reduction (or insertion loss) of 5 dB reduction in design year highway traffic noise levels for the majority of the impacted first-row receptors.

SR 126 is not a limited access facility. In fact, all of the impacted residences have direct driveway access to SR 126. Noise barriers are not feasible to mitigate impacts at these residences because a noise barrier would limit access from these properties and adjacent properties.

Some of the impacted residences are also isolated from other impacted residences. Noise barriers for isolated residences are not reasonable since the required area per benefited residence will greatly exceed the allowable area for benefited residence. As a result, noise barriers were determined not to be feasible or reasonable for this project.

2.6.1 Statement of Likelihood

Noise abatement is not proposed for this project.

2.7 Construction Noise

It is expected that TDOT's construction specifications will apply to this project. As a result, construction procedures shall be governed by the *Standard Specifications for Road and Bridge Construction* as issued by TDOT and as amended by the most recent applicable supplements. The contractor will be bound by Section 107.01 of the Standard Specifications to observe any noise ordinance in effect within the project limits. Detoured traffic shall be routed during construction so as to cause the least practicable noise impact on noise-sensitive areas.

2.8 Information for Local Officials

There are tracts of undeveloped land adjacent to SR 126. TDOT encourages the local governments with jurisdiction over these lands, as well as potential developers of these lands, to practice noise compatibility planning in order to avoid future noise impacts. The following language is included in TDOT's Noise Policy:

> *"Highway traffic noise should be reduced through a program of shared responsibility. Local governments should use their power to regulate land development in such a way that noise-sensitive land uses are either prohibited from being located adjacent to a highway or that the developments are planned, designed and constructed in such a way that noise impacts are minimized."*

Two guidance documents on noise compatible land use planning are available from FHWA. [4, 5]

Table 6 presents design year sound levels for areas along SR 126 where vacant and possibly developable lands exist. Noise predictions were made at distances between 50 and 300 feet from the centerline of the near lane for the design year 2037. As indicated, sound levels within approximately 100 feet of the centerline of the near lane of SR 126 will approach or exceed the NAC of 66 dBA. Noise-sensitive land uses should generally not be constructed in these areas unless noise mitigation measures are provided.

Table 6: Design Year 2037 Sound Levels for Undeveloped Lands

Distance from SR 126[(1)]	***L_{eq} (1h) (dBA)[(2)]***
50 feet	67
100 feet	64
200 feet	59
300 feet	55

(1) Perpendicular distance to the center of near lane.
(2) At-grade situation.

The values in Table 6 do not represent predicted levels at every location at a particular distance back from the roadway. Sound levels will vary with changes in terrain and will be affected by the shielding of objects, such as buildings. This information is being included to make local officials and planners aware of anticipated highway noise levels so that future development will be compatible with these levels.

Finally, TDOT currently has an active Type II Noise Barrier Program to facilitate the construction of "retrofit" noise barriers along existing highways. To be eligible for a Type II noise barrier, an area must meet the following criteria:

- The neighborhood must be located along a limited-access roadway;
- The neighborhood must be primarily residential;
- The majority (more than 50%) of residences in the neighborhood near the highway pre-dated the initial highway construction;
- A noise barrier for the neighborhood must not have been previously determined to be not reasonable or not feasible as part of a new highway construction or through-lane widening study (Type I project);
- Existing noise levels measured in the neighborhood must be above the Noise Abatement Criteria (NAC) of 66 dBA;
- A barrier must be feasible to construct and will provide substantial noise reduction; and,
- A barrier must be reasonable (barrier cost per benefitted residence) in accordance with TDOT's Noise Policy. A residence is considered "benefitted" if the noise barrier will reduce the traffic noise by at least 5 dB.

3.0 REFERENCES

[1] *Highway Traffic Noise and Air Quality Analysis, State Route 126 (Memorial Boulevard) from East Center Street in Kingsport to Interstate 81*, October 2008, Revised October 2010.

[2] *Policy on Highway Traffic Noise Abatement*, Tennessee Department of Transportation, July 13, 2011.

[3] *TDOT Guidelines for Noise Modeling Using FHWA's Traffic Noise Model,* Tennessee Department of Transportation, April 2010.

[4] *The Audible Landscape: A Manual for Highway Noise and Land Use*, FHWA, November, 1974. http://www.fhwa.dot.gov/environment/audible/index.htm

[5] *Entering the Quiet Zone: Noise Compatibility Land Use Planning*, FHWA, May, 2002. http://www.fhwa.dot.gov/environment/noise/quietzon

Appendix A
HMB SR 126 Noise Report

STATE ROUTE 126 (Memorial Boulevard)
FROM EAST CENTER STREET IN KINGSPORT,
TO INTERSTATE 81, SULLIVAN COUNTY, TN

HIGHWAY TRAFFIC NOISE AND
AIR QUALITY ANALYSES

OCTOBER, 2008
REVISED OCTOBER, 2010



This document identifies and assesses the potential highway traffic noise and air quality impacts associated with the project to improve the existing State Route 126 (Memorial Boulevard) Roadway, beginning at East Center Street in Kingsport, east to Interstate 81 in Sullivan County. The project's total length for the proposed improvements is approximately 8.4 miles.

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1. Introduction

The highway generated noise impacts of this project have been analyzed in accordance with the "Highway Traffic Noise Analysis & Abatement, Policy and Guidelines," and Federal Register Regulation 23 CFR Part 772, "Procedures for Abatement of Highway Traffic Noise and Construction Noise."

These regulations set forth a five-step highway project noise analysis as follows: (1) Identify existing or planned land use activities that may be affected by highway noise; (2) Determine existing noise levels; (3) Predict future highway noise levels; (4) Determine impacts by comparing existing levels with predicted levels and criteria contained in 23 CFR Part 772; and (5) Consider and examine noise abatement measures for those impacts that have been identified. The following is a description of the noise analysis for the project.

2. Project Description

The proposed project is the widening and reconstruction of Memorial Boulevard (SR 126). The project is approximately 8.3 miles in length and is located east of Kingsport, TN. The project begins approximately 1500 feet from Fort Henry Drive and proceeds east, terminating in an interchange with Interstate 81. The location of the project corridor and the alternatives are shown in Figure 2.1 on pages 5-8.

3. Project Alternatives

3.1 The No-Build Alternative

The No-Build Alternative would involve no re-design and re-construction of SR 126, and it would leave the existing roadway in place as it now exists. Some minor improvements as recommended in the Road and Safety Audit Report (RSAR) have been completed. Only normal maintenance activities would occur.

This alternative does not meet the project's Purpose and Need. It would not provide improvements to provide traffic relief or improved safety conditions in eastern Kingsport and Sullivan County. Positive benefits associated with the No-Build Alternative include no relocations of residences, businesses and utilities. Temporary effects associated with construction, including construction noise, dust, and traffic delays would not be experienced with the No-Build Alternative. Negative impacts related to the No-Build Alternative would include continued safety problems; i.e., delayed response for emergency vehicles, lack of passing opportunities, crash rates that exceed state crash rate averages, and substandard LOS's.

3.2 Build Alternatives

3.2.1 Alternative A

Alternative A's western terminus would be located at the junction of SR 126 with East Center Street. This terminus would feature either a signalized intersection or a *roundabout* to facilitate safe, efficient movement of traffic without the need for traffic signals. A roundabout is a type of road intersection at which traffic enters a one-way stream around a central island.

From the western terminus, Alternative A would proceed to a point at Orebank Road. It would include four 11-foot travel lanes. A raised, landscaped median and a 4-foot paved shoulder for bicycles would be included. Sidewalks would be featured on both sides of the road. A curb and gutter would be included, and a roundabout with flared right turns at East Center Street is the preferred option. A second option, which would maintain the existing traffic signal at East Center Street, is still under consideration. This four-lane, raised median section would continue to the Orebank Road area of the project. The design speed is 35 mph.

From Orebank Road to West of Hawthorne Street, Alternative A would continue as four 11-foot lanes with a raised, landscaped median. The 4-foot shoulder for bikes would remain, as would sidewalks on both sides. Curb and gutter features would continue. A median opening would be included for the Sun Bridge Hillside Care and Rehabilitation Facility. Additional features in this section include closing Edens Ridge Road intersections, and improving northbound John B. Dennis exit ramp to eastbound SR 126 to reduce vehicle conflicts. Right turns would use a traffic signal. This configuration would continue to a point west of Hawthorne Street. The design speed remains at 35 mph.

From a point west of Hawthorne Street to Harbor Chapel Road, Alternative A's four 11-foot lanes would continue, but the median would change to a center turn lane in place of the raised, landscaped median. The 4-foot shoulder, sidewalks on both sides, and the urban curb and gutter would remain on this section of the proposed improvements to SR 126. The design speed would remain at 35 mph. This section proposes to close Milton Court at SR 126. Milton Court traffic would be provided alternate access via Stratford and Kite Streets. Hawthorne Street's intersection with the south side of SR 126 would be closed. In addition, the Kent Street intersection with SR 126 would be closed with access being provided via Kite Street. The Amy Avenue/Woodridge Avenue intersection would be closed and tied in to Glenwood Street. Trinity Lane would be closed and alternate access would be provided via a new connection near the cemetery (access to SR 126 via Orebank Road). The design speed would remain at 35 mph.

From Harbor Chapel Road to a point east of Old Stage Road, Alternative A would continue as four 11-foot lanes, featuring a raised landscaped median, two 4-foot shoulders, two sidewalks, curbs and gutters. The design speed in this section would increase to 45 mph. The intersection of Tanglewood with existing SR 126 would be closed, with Tanglewood now tying into Briarwood Road. Old Stage Road would be

realigned to create a 90 degree intersection, effectively decreasing the steepness of the existing Old State Road.

Alternative A would proceed from the point east of Old Stage Road to Cooks Valley Road as four 11-foot lanes with a raised, landscaped median, two 8-foot stabilized shoulders (6 feet of paved shoulder on each side), no sidewalks, curbs or gutters, and a design speed of 45 mph. Pedestrians and bicyclists would be allowed to use the 6-foot shoulders. This section would connect Holiday Hills Road to Shuler Drive via Parker Street. It is proposed to close the Shuler Drive intersection with existing SR 126, and redirect the traffic to Lemay Drive. In addition, Chestnut Ridge Road and Eaton Station Road would be realigned, with left turn lanes onto Cooks Valley Road and Eaton Station Road.

From Cooks Valley Road to Harrtown Road, Alternative A would feature two 11-foot travel lanes with a center turn lane. The design speed would remain at 45 mph. The 6-foot shoulders on both sides would remain, but would not include gutter pans. Bicyclists could still use the 6-foot shoulders, but pedestrians would be provided with sidewalks on both sides of the proposed improvement. A curb and gutter would also be featured in this section. Red Robin Lane would be closed with access being provided via Bridwell Heights Road. Woodsway Drive, Island Road and Natchez Lane would be realigned.

From Harrtown Road to Cochise Trail, the project would continue as two lanes, but each would be expanded to 12 feet in width. No median would be included in this section. The shoulders would be expanded to 10 feet in width allowing pedestrians and bicyclists access. No sidewalks, curbs or gutters are included in this section. An 18-inch center line crossover deterrent using a rumble strip and striping would be included to deter drivers from crossing into the opposing lane. Rumble strips would also be included between each of the two travel lanes and their shoulders to deter drivers from drifting out of the travel lanes. The design speed would remain at 45 mph.

From Cochise Trail to I-81, the project would include two 12-foot travel lanes, but no median, sidewalks, curbs or gutters. The center line crossover deterrent would continue, and an improved transition area from the four-lane SR 126 area at I-81 will be featured. The 10-foot shoulders would continue through this section allowing pedestrians and bicyclists access. The design speed would remain at 45 mph. The project would require turn lane construction by future developers throughout this section. Gravel Top Road would be realigned on the western intersection with SR 126 and it would be closed east of the intersection.

3.2.2 Alternative B

Alternative B begins at East Center Street at the same point as Alternative A. Alternative B is a refinement of Alternative A, with changes made to minimize impacts to Yancey's Tavern and the East Lawn Cemetery. It utilizes the same cross-sections as Alternative A, but the two-lane section begins further west of Yancey's Tavern and the cemetery, and minimizes visual impacts to the Yancey's Tavern and relocation of gravesites in the East Lawn Cemetery. The elevations of the proposed centerline of Alternative B were

changed to minimize excavation and fill impacts during the construction of the roadway. Portions of the alignment feature slight changes to provide an efficient maintenance-of-traffic plan.

Alternative B in the western area of the project is slightly widened, and a roundabout is proposed for the intersection with East Center Street. The proposed design speed for the urban portion of this project is 35 mph from East Center Street to Hawthorne Street. As Alternative B leaves the Hawthorne Street area, it would transition to a four-lane highway with a 45 mph design speed. As it approaches the Chestnut Ridge area, it would feature two driving lanes and a center turn lane. This would avoid acquisition of the Yancey's Tavern area. Alternative B would require no relocation of gravesites within the East Lawn Cemetery. The 45 mph design speed would be continued through this section.

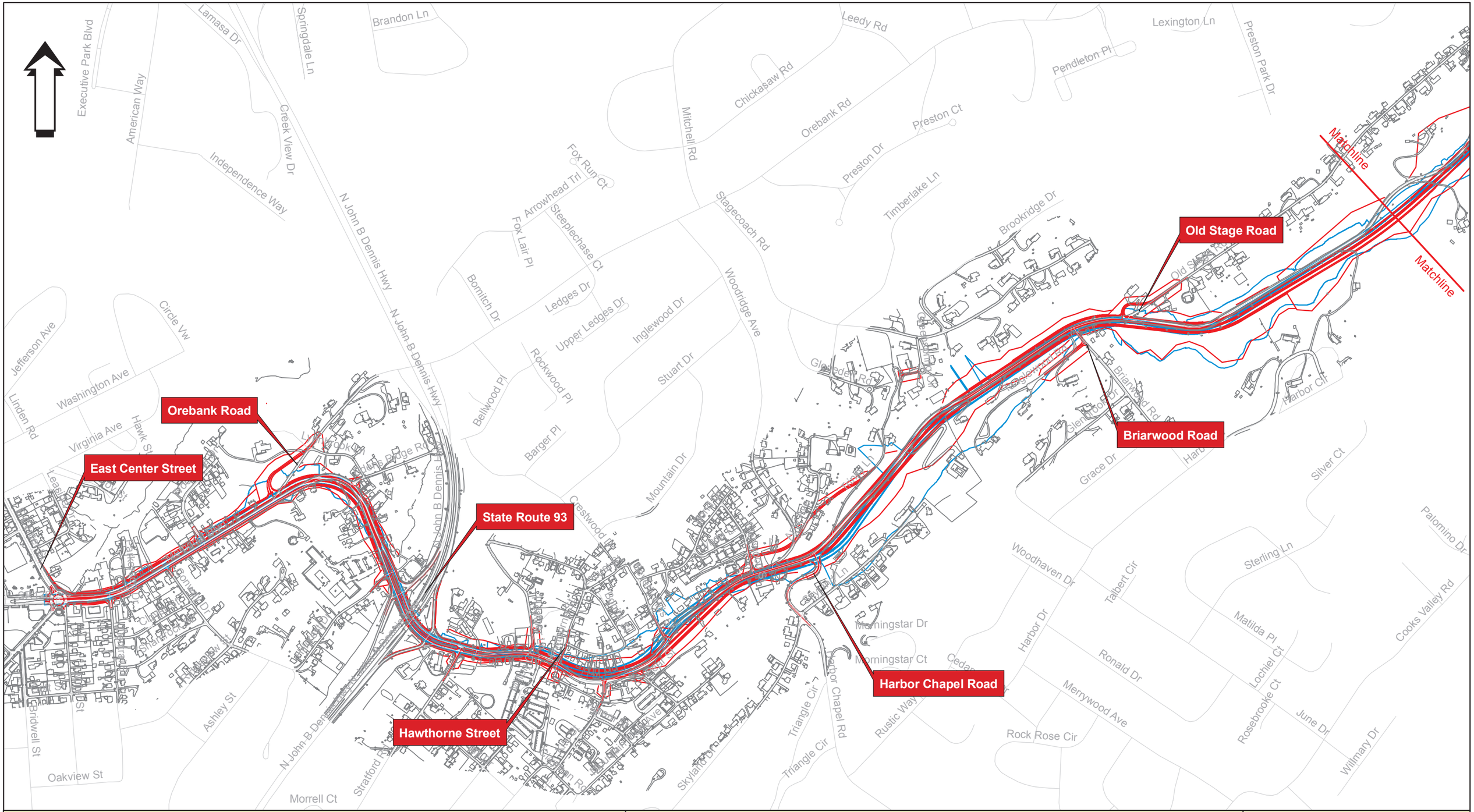
Alternative B would remain a three lane facility with a 45 mph design speed until it approaches Harrtown Road. At this point it would become a two-lane roadway until approaching a junction with Carolina Pottery Road and its intersection with I-81. In this area, it joins the existing four-lane configuration. The 45 miles-per-hour design speed is maintained until the project ends at I-81.

3.3 Design Features

The project would feature sections of four-, three- and two-lanes for traffic. It would also include sections that are urban roadways featuring sidewalks, curbs, and gutters. Other sections include rural features including wider lanes and paved shoulders. Table 3.3.1 compares the design features of the urban and rural sections of the proposed project.

Table 3.3.1 - Design Features

Design Feature	Urban Section	Rural Section
Roundabout	Yes	No
Driving Lanes	Varies 2 to 4 lanes @ 11 feet each	Varies at 2 to 4 lanes @ 11 to 12 feet each.
Shoulders	4 foot shoulders	Varies from 8 feet to 10 feet combined.
Curbs and Gutters	Yes	No
Median	Alternates between raised landscape median and 11 foot center turn lane	Only featured at area between Yancey's Tavern and East Lawn Cemetery
Retaining Walls	No	Only featured at area between Yancey's Tavern and East Lawn Cemetery
Maximum Grade	5%	7%
Access to Facility	Median openings as appropriate to various roads	Full Control
Design Speed	35 miles per hour	45 miles per hour



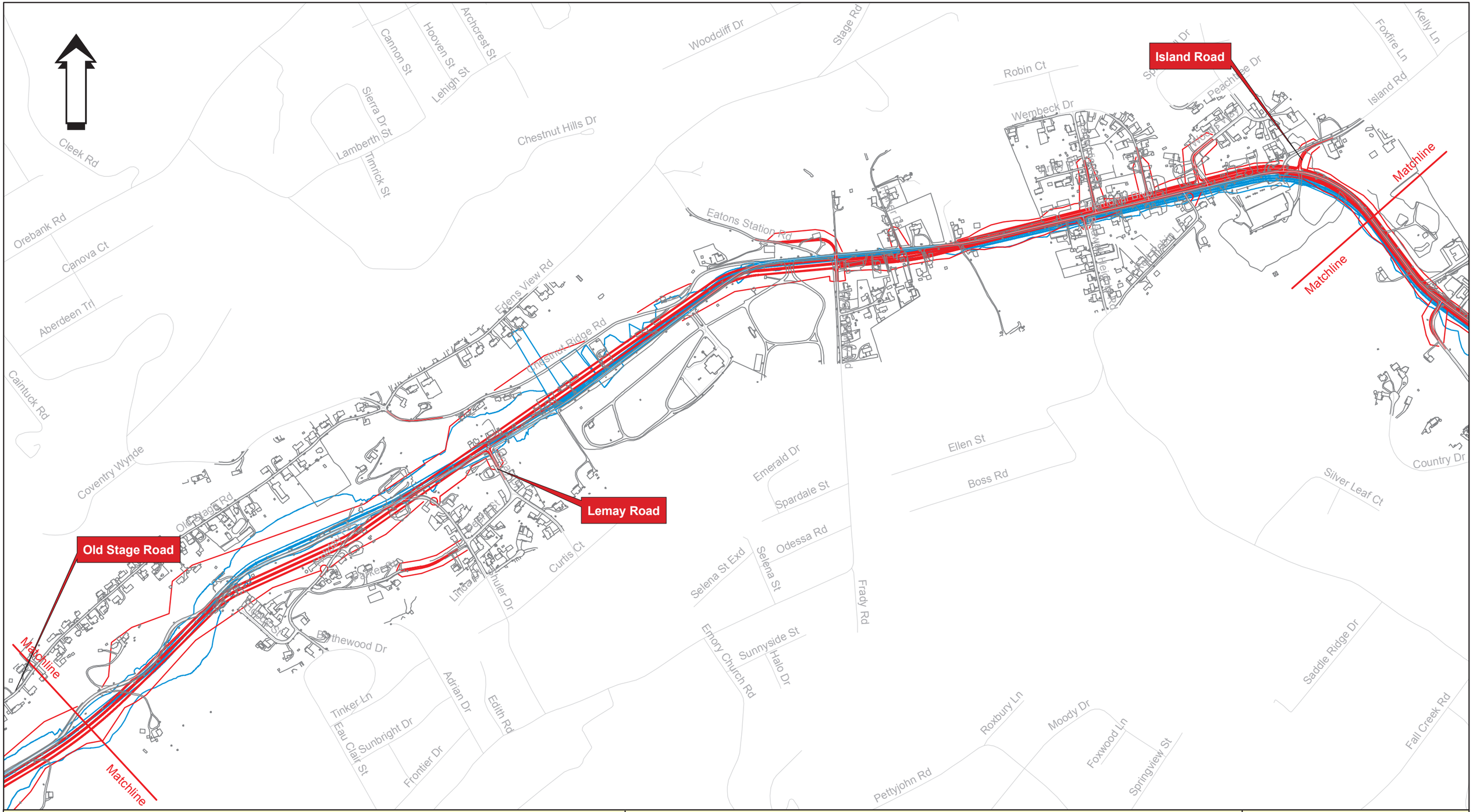
Legend

- Alternative A
- Alternative B

Figure 2.1
Project Overview
State Route 126
Sullivan County, Tennessee

0 500 1,000 2,000 3,000 4,000 Feet

Alternatives A & B with Road Segments



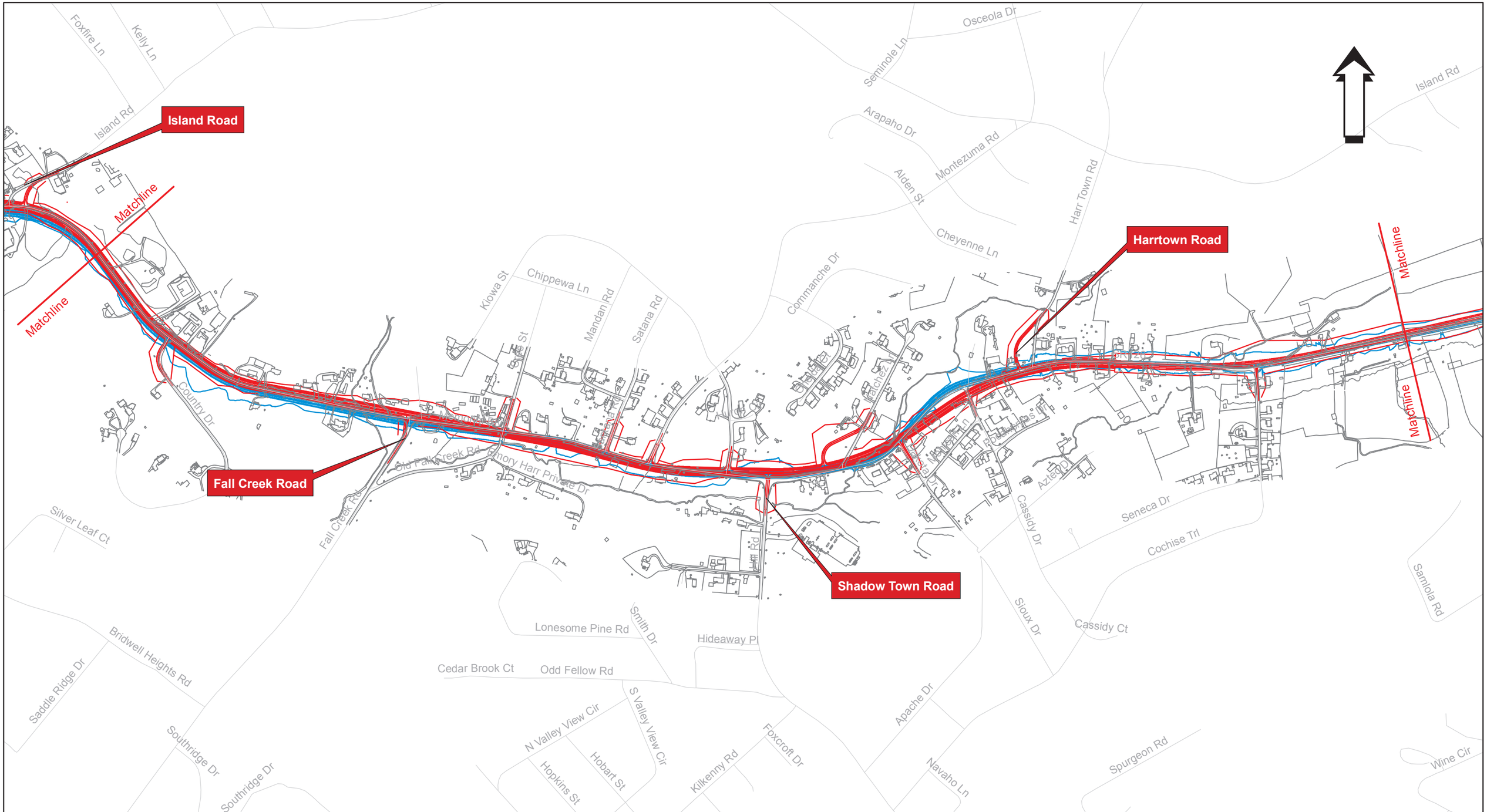
Legend

- Alternative A
- Alternative B

Figure 2.1
Project Overview
State Route 126
Sullivan County, Tennessee

0 500 1,000 2,000 3,000 4,000 Feet

Alternatives A & B with Road Segments



Legend

- Alternative A
- Alternative B

Figure 2.1
Project Overview
State Route 126
Sullivan County, Tennessee

0 500 1,000 2,000 3,000 4,000 Feet

Alternatives A & B with Road Segments



Legend

- Alternative A
- Alternative B

Figure 2.1
Project Overview
State Route 126
Sullivan County, Tennessee

0 500 1,000 2,000 3,000 4,000 Feet

Alternatives A & B with Road Segments

4. Highway Traffic Noise Analysis

4.1. Identification of Noise Receiver Sites

In selecting the noise receiver sites, an effort was made to develop an accurate appraisal of the entire project corridor with respect to the noise receivers. Measured (2008) noise levels were compared to modeled noise levels that utilized projected 2033 build and 2033 no-build traffic for 24 receivers, representing 159 additional receivers. The number of receivers represented at each site was determined by counting the receivers that were approximately the same distance from the ROW boundary as the analyzed receiver. The analyzed receiver was always the one nearest the proposed alternative. The number of represented receivers for each receiver is given in Table 4.2.1 on page 11.

Federal guidance for handling noise impacts and abatement are contained in 23 Code of Federal Regulations (CFR) Part 772, "Procedures for Abatement of Highway Traffic Noise and Construction Noise." Activity Category B (picnic areas, recreation areas, playgrounds, active sports areas, parks, residences, motels, hotels, schools, churches, libraries, and hospitals) is applicable to the receptors on this project. For Category B, the Noise Abatement Criteria (NAC) is 67 dBA. Table 4.1.1 provides description of the land use categories.

Table 4.1.1 - FHWA Noise Abatement Criteria Hourly A-Weighted Sound Levels*

Land Use Category	L_{eq}	Description
A	57 (Exterior)	Lands on which serenity and quiet are of extraordinary significance and serve an important public need and where the preservation of those qualities is essential if the area is to continue to serve its intended purpose.
B	67 (Exterior)	Picnic areas, recreation areas, playgrounds, active sports areas, parks, residences, motels, hotels, schools, churches, libraries, and hospitals.
C	72 (Exterior)	Developed lands, properties, or activities not included in categories A and B above.
D	---	Undeveloped lands.
E	52 (Interior)	Residences, motels, hotels, public meeting rooms, schools, churches, libraries, hospitals, and auditoriums.

***Source:FHWA, 23 CFR 772, Procedures for Abatement of Highway Traffic Noise and Construction Noise, FHWA, USDOT, April 1992**

4.2. Existing and Predicted Noise Levels

Field measurements were taken at representative sites throughout the SR 126 project area, located at or near existing areas of human use. These measurements were made at varying times. In accordance with TDOT's Noise Policy and Federal Regulations contained in 23 CFR 772, existing noise levels were taken at times that represented "worst hour" noise levels. Based on observations of traffic patterns in the project area, worst hour levels were determined to be from 7:30am – 10:30am, 3:00pm – 6:00pm (commuting times) and from 11:30am – 1:30pm (traditional lunch hour traffic).

Receptors where the predominant existing noise source was not SR 126 were considered "ambient" receivers and may have had existing readings taken outside these peak travel times. Field measurements were conducted for all of the sites during clear, dry weather conditions. The existing (ambient) noise levels were documented to establish baseline conditions to compare with the future build and no build conditions.

Ambient Noise levels for the receivers were measured on April 30, March 20 and 21, and May 11, 2008 during meteorologically acceptable periods. Measurements were conducted utilizing a Rion Model NL-20 Type II sound level meter that was set to update Leq (in dBA) ten times per second. Readings were taken for two, ten-minute periods and averaged.

Traffic noise level predictions for the build alternatives were made for the year 2033 using the FHWA Traffic Noise Model version 2.5 (TNM 2.5) computer model (FHWA Highway Traffic Noise Prediction Model, Report No. FHWA-PD-96-010). The model incorporates the design alternatives, as well as existing area roads that were determined to contribute appreciably to the existing and future noise levels. The 2033 No Build Alternative noise levels will increase from the existing noise levels due to additional traffic volumes in future years. The future No Build levels were estimated based on future traffic projections. East of Old Stage Road, future traffic volumes are approximately 20% higher than existing volumes. This would increase No Build levels 1 dBA over existing levels at receivers in this area (receivers 1-6, 23 and 24). West of Old Stage road, traffic volumes are predicted to approximately double, increasing No-Build levels by 3 dBA over existing levels (receivers 7-22). Noise Receiver Locations, and Existing and Predicted Noise Levels are indicated in Table 4.2.1, on the following page. The receivers exhibiting a highway traffic noise impact from one, or both, alternatives are highlighted in red. Figure 4.2.1, on page 12, provides location and existing and future noise levels of the noise receivers in the project area.

Table 4.2.1 - Noise Receivers with Existing and Predicted Noise Levels (dBA) [a]

Site ID	NAC Category	Number of Represented Receivers	2008 Existing	2033 Alternative A	2033 Alternative B	2033 No Build	Difference Between Existing and Build A|B		Distance to EOP* Existing (ft)	Distance to Nearest EOP* Build (ft)
1	B	6	63.2	65	65	64	2	2	34	36
2	B	10	60.1	65	65	61	5	5	77	30
3	B	7	63.0	66	66	64	3	3	92	90
4	B	10	73.1	70	69	74	-3	-4	40	23
5	B	5	57.2	66	64	60	9	7	205	140
6	B	12	58.9	64	67	60	5	8	181	78
7	B	14	43.8	57	57	47	13	13	375	380
8	B	14	43.6	55	55	47	11	11	420	421
9	B	8	61.2	64	62	64	3	1	96	79
10	B	4	57.8	64	64	61	6	6	152	124
11	B	5	58.2	62	61	61	4	3	289	286
12	B	6	54.9	60	60	58	5	5	280	256
13	B	9	60.2	66	66	63	6	6	94	68
14	B	4	69.9	66	68	73	-4	-2	44	35
15	B	2	65.2	66	67	68	1	2	43	51
16	B	6	62.4	68	66	65	6	4	67	35
17	B	7	55.3	69	65	58	14	10	103	64
18	B	8	67.1	68	65	70	1	-2	58	72
19	B	15	65.2	68	67	68	3	2	43	50
20	B	6	48.9	62	59	52	13	10	285	168
21	B	3	52.4	61	60	55	9	8	270	192
22	B	8	60.1	64	63	63	4	3	98	97
23	B	6	60.3	63	63	61	3	3	150	170
24	B	8	65.9	65	64	67	-1	-2	61	51

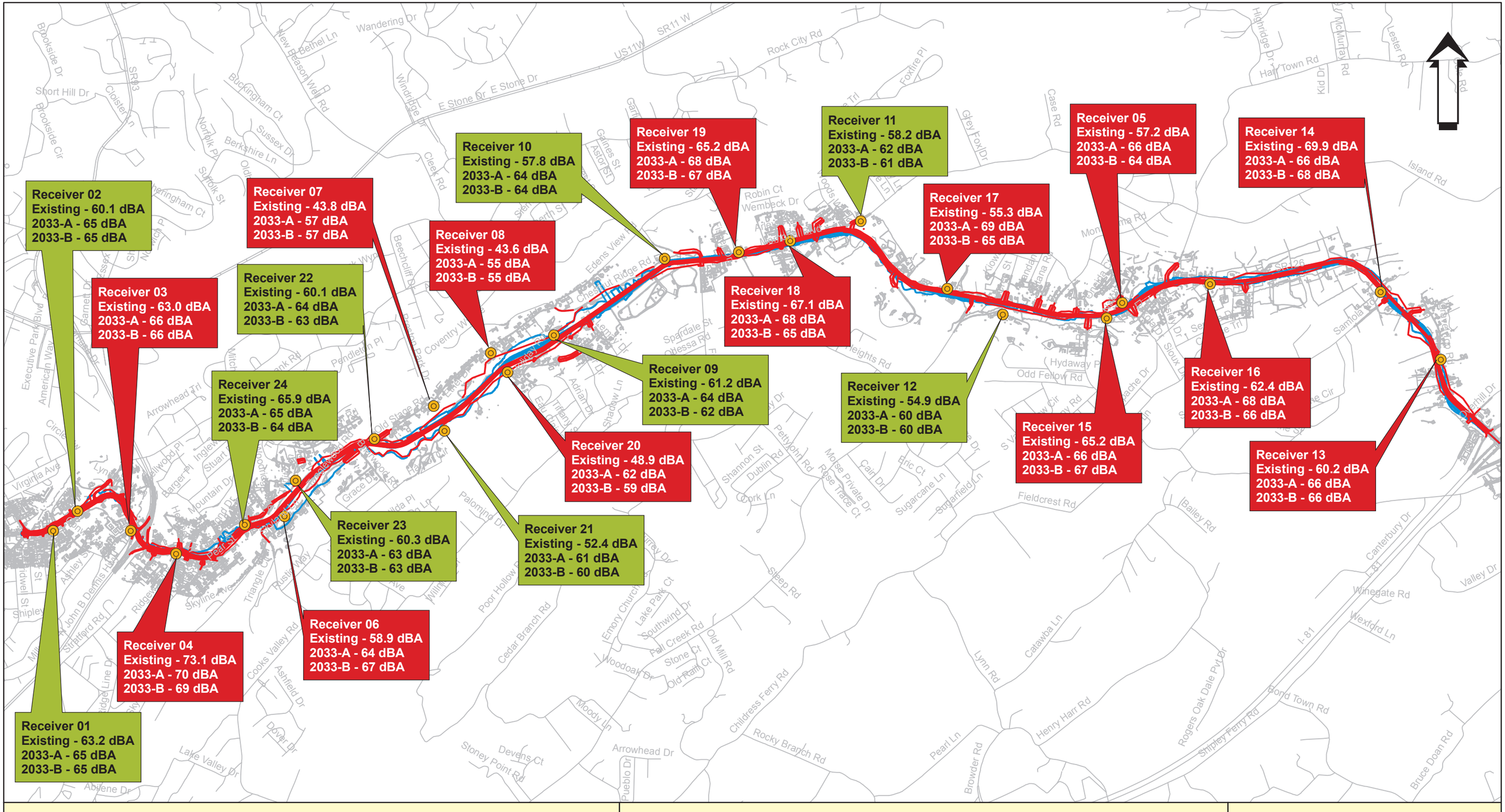
[a] The noise abatement criterion is 67 for all receivers.

4.3. Noise Impacts

In accordance with 23 CFR Part 772, the Federal Highway Administration (FHWA) Noise Abatement Criteria and the Tennessee Department of Transportation Traffic Noise Analysis and Abatement Policy and Guidance manual, the following criteria are utilized in determining the occurrence of traffic noise impacts:

1. When the predicted design year noise levels approach (defined as within one dBA) or exceed those values shown for the appropriate activity category of the NAC.

2. When the predicted design year noise levels "substantially exceed existing noise levels" (as defined), by 10 dBA or more.



Legend

- Alternative A
- Alternative B
- Noise Receivers
- No Noise Impact
- Noise Impact

Figure 4.2.1
Highway Traffic Noise Analysis
Noise Receiver Locations and
Existing and Predicted Noise Levels

0 1,600 3,200 6,400 9,600 12,800 Feet

Sullivan County
SR 126
Alternatives A and B

4.3.1 Alternatives Impact Summary

Alternative A would impact 13 receivers, representing 107 residential properties. Alternative B would impact 12 receivers, representing 106 residential properties.

No Build levels will increase due to increased traffic volumes in 2033. West of Old Stage Road the future traffic volumes are predicted to be approximately 20% higher than existing levels. Due to this traffic increase, receivers west of Old Stage Road will see a future noise level increase of 1 dBA for the No Build Alternative. East of Old Stage Road the future traffic volumes are predicted to approximately double the existing levels. Receivers east of Old Stage Road will see a future noise level increase of 3 dBA for the No Build Alternative.

Receivers 4, 14, 18 and 24 already have existing levels that are above the NAC. Receivers 15 and 19 would have future No Build levels that would be above the NAC.

Due to build alternative shifts from the existing, the new road will be further away from some noise receivers. These receivers have future levels that are predicted to be lower than the existing or No Build noise levels.

4.4. Noise Abatement Measures

4.4.1 Reasonableness/Feasibility for Barrier Abatement

The construction of noise barriers for the impacted receivers along SR 126 is not feasible due to the numerous access points along the existing and proposed facility. These points provide access to residences and businesses along SR 126. Any constructed noise barrier would require gaps to maintain access, greatly reducing the noise reduction and cost-effectiveness of the noise barrier. For this reason, it is generally considered infeasible to construct a noise barrier on a portion of a roadway where access is necessary.

4.4.2 Alternative Abatement Measures

Alternatives to noise barrier construction were considered at the impacted receivers for Build Alternatives A and B, including:

- Traffic management measures (primarily restrictions on truck use) – The project is designed to be an urban minor arterial. Prohibiting or restricting usage of this facility by trucks or other vehicles was not considered to be practical and, therefore, was determined to be not reasonable as a method for mitigating highway traffic noise impacts.
- Alteration of horizontal and vertical alignments – The horizontal and vertical alignments of the build alternatives have been optimized to the extent practicable to minimize environmental impacts, while utilizing the existing facility location. Altering the horizontal and vertical alignment of the build alternatives to mitigate noise impacts was determined to be not reasonable.
- Acquisition of property (buffer zone) – Acquisition of property adjacent to the project for a buffer zone would result in acquisition of the residences receiving noise impacts, and would provide a buffer only for future development that would not be allowed within the buffer zone. Acquisition of property as a method for mitigating highway traffic noise impacts was determined to be not reasonable.
- Insulation of public buildings to meet interior standards – There were no public buildings identified as receiving noise impacts.

5. Construction Noise

Noise levels in the project area will be increased during construction. The sound levels resulting from construction activities at nearby noise-sensitive receivers will be a function of the types of equipment utilized, the duration of the activities, and the distances between construction activities and nearby land uses.

It is expected that TDOT's construction specifications will apply to this project. As a result, construction procedures shall be governed by the Standard Specifications for Road and Bridge Construction as issued by TDOT and as amended by the most recent applicable supplements. The contractor will be bound by Section 107.01 of the Standard Specifications to observe any noise ordinance in effect within the project limits. Detoured traffic shall be routed during construction so as to cause the least practicable noise impact upon noise-sensitive areas.

6. Noise Compatible Land Use Planning

TDOT encourages local communities and developers to practice noise compatible land use planning in order to avoid future noise impacts. The following language is included in TDOT's noise policy:

"Highway traffic noise should be reduced through a program of shared responsibility. Local governments should use their power to regulate land development in such a way that noise-sensitive land uses are either prohibited from being located adjacent to a highway or that the developments are planned, designed and constructed in such a way that noise impacts are minimized."

Two guidance documents on noise compatible land use planning are available from FHWA.[a, b]

Table 6.1 presents predicted design year 2033 sound levels for areas near the project where vacant and possibly developable lands exist. These values do not represent predicted levels at every location at a particular distance back from the roadway. Sound levels will vary by location and will be affected by the shielding of terrain features such as hills and the shielding by objects such as buildings.

Table 6.1 - Sound Levels for Undeveloped Lands

Distance (in feet)(1)	Leq (1h) (dBA)(2)
50	69
100	66
250	61
500	60

(1) Perpendicular distance to the center of near lane.
(2) At-grade situation.

This information is being included to make local officials and planners aware of anticipated highway noise levels so that future development will be compatible with these levels.

As mentioned previously, TDOT's noise policy states that "noise abatement will also not be considered reasonable for land uses constructed after the date of adoption of this noise policy (based upon local Assessor's records), except for projects involving construction of a roadway on a new alignment."

TDOT's noise policy was adopted in April, 2005. Development constructed after this date will not be eligible for noise abatement for future projects.

Finally, TDOT currently has an active Type II Noise Barrier Program to facilitate the construction of "retrofit" noise barriers along existing highways. To be eligible for a Type II noise barrier, an area must meet the following criteria:

- The neighborhood must be located along a limited-access roadway;
- The neighborhood must be primarily residential;
- The majority (more than 50%) of residences in the neighborhood near the highway pre-dated the initial highway construction;
- A noise barrier for the neighborhood must not have been previously determined to be not reasonable or not feasible as part of a new highway construction or through-lane widening study (Type I project);
- Existing noise levels measured in the neighborhood must be above the Noise Abatement Criteria (NAC) of 66 dBA;
- A barrier must be feasible to construct and will provide substantial noise reduction; and,
- A barrier must be reasonable (barrier cost per benefitted residence) in accordance with TDOT's noise policy. A residence is considered "benefitted" if the noise barrier will reduce the traffic noise by at least 5 dB.

a. The Audible Landscape: A Manual for Highway Noise and Land Use, FHWA, November, 1974. http://www.fhwa.dot.gov/environment/audible/index.htm
b. Entering the Quiet Zone: Noise Compatibility Land Use Planning, FHWA, May, 2002. http://www.fhwa.dot.gov/environment/noise/quietzone

7. Noise Abatement Conclusions

Based on the above considerations and analysis, noise abatement measures are not considered reasonable at the sites studied and are not recommended for this project.

8. Mobile Source Air Quality Analysis

8.1. Air Quality Impacts

SR 126 in Sullivan County is an attainment area according to EPA levels set for criteria mobile source air pollutants. The project is in the Kingsport Metropolitan Planning Organization's (MPO) planned projects, and is included in the conforming 2008-2011 Transportation Improvement Program (TIP). The project is also included in Kingsport MPO Draft 2011-2014 TIP, in Section A, which lists projects included in the previous TIP.

8.1.1. Carbon Monoxide

Based upon the analysis of highway projects with similar meteorological conditions and traffic volumes, the carbon monoxide levels of the subject project will be well below the National Ambient Air Quality Standard (35ppm one-hour and 9ppm eight-hour). Since the project will have levels below this standard and is located in a region of air quality conformity, it was determined that there will be no CO impact on the air quality of the area from the proposed project.

8.1.2. Mobile Source Air Toxics (MSAT)

Mobile Source Air Toxics are fully addressed in Appendix D. Air quality conformity status is not projected to be altered by the proposed SR 126 project. This project qualifies as a "project with low potential MSAT effects" in accordance with FHWA's guidance.

The purpose of the project is to improve safety, emergency response times, system linkage, traffic conditions, and efficiency between Kingsport at East Center Street and I-81 by constructing new lanes, widening existing lanes, and providing shoulders, as appropriate, between East Center Street and I-81. This project has been determined to generate minimal air quality impacts for CAAA criteria pollutants and has not been linked with any special MSAT concerns.

A review of potential mobile source air toxics (MSAT) impact from this project indicate that under the build alternatives in the design year (2033), the amount of MSAT emitted will be proportional to the Annual Average Daily Traffic (AADT) and vehicle miles traveled, or VMT, assuming that other variables such as fleet mix are the same for each alternative. The VMT for the build alternatives will be slightly higher than the no-build alternative in the build and design years because the additional capacity increases the efficiency of the roadway and attracts rerouted trips from elsewhere in the transportation network. This increase in VMT will lead to higher MSAT emissions for the alternatives along the highway corridor, along with a corresponding decrease in MSAT emissions along the parallel routes. The emissions increase is offset somewhat by lower MSAT emission rates due to increased speeds; according to EPA's MOBILE6.2 model, emissions of all of the priority MSAT except for diesel particulate matter decrease as speed increases. The extent to which these speed-related emissions decreases will offset VMT-related emissions increases cannot be reliably projected due to the inherent deficiencies of technical models. Because the estimated VMT under each of the

Alternatives are nearly the same it is expected there will be no appreciable difference in overall MSAT emissions among the various alternatives. Also, regardless of the alternative chosen, emissions will likely be lower than present levels in the design year as a result of EPA's national control programs that are projected to reduce annual MSAT emissions by 72 percent between 1999 and 2050. Local conditions may differ from these national projections in terms of fleet mix and turnover, VMT growth rates, and local control measures. However, the magnitude of the EPA-projected reductions is so great (even after accounting for VMT growth) that MSAT emissions in the study area are likely to be lower in the future in nearly all cases. The SR 126 project will not add substantial new capacity and therefore the facility will not generate meaningful increases in emissions of MSAT. See the MSAT discussion in Appendix D for more details, including the current state of MSAT research.

8.2. Climate Change

Climate change, also referred to as global warming, is an increase in the overall average atmospheric temperature of the earth due to the trapping of heat in the atmosphere by greenhouse gases. The primary greenhouse gas emitted by human activities in the US is carbon dioxide (CO_2), which represents approximately 85 percent of total greenhouse gas emissions.

Transportation sources contribute to global warming through the burning of petroleum-based fuel. According to the FHWA, transportation sources are responsible for approximately one-quarter of the greenhouse gas emissions in the US. Automobiles and light-duty trucks account for almost two-thirds of emissions from the transportation sector and emissions have steadily grown since 1990.

Emissions from transportation sources depend on the number of trips or miles traveled by each type of vehicle per year, which are, in turn, influenced by larger economic trends and consumer behavior. Over the long term, changes in vehicle fuel efficiency, driving behavior, and fuel type will influence the level of emissions.

Under the Clean Air Act, the EPA has the authority to establish motor vehicle emissions standards for CO_2 and other greenhouse gases although such standards have not yet been established.

FHWA is actively involved in efforts to initiate, contact, and disseminate climate-change-related research and to provide technical assistance to stakeholders. The FHWA is also involved in climate change initiatives with the USDOT Center for Climate Change and Environmental Forecasting.

Climate change and related effects are complex and global in nature. As a result, the impacts of any single transportation project cannot be effectively estimated in terms of global warming effect. However, the emissions changes due to individual projects are very small compared to global emissions.

Once standards are established and guidance for assessing the potential greenhouse gas effects of transportation projects becomes available, a more in-depth assessment rate may be possible.

9. Summary

Of the 24 identified noise receiver sites, 13 are predicted to be impacted by Alternative A and 12 are predicted to be impacted by Alternative B. Abatement considerations and mitigation for noise are not reasonable and/or feasible for the proposed project. Air quality conformity status it not projected to be altered by the proposed SR 126 project.

Appendix A
Noise Sampling Field Monitoring Data Sheets

Noise Sampling Field Monitoring Data

Rec# 01

Location (Street Address) 3213 Memorial Blvd. Time: 7:20 (AM)/PM Duration: 10 min. x2

Date: 3/21/08 Temperature/Wind Speed: 9.1°C/.4mph Speed Limit 35 mph Noise Level: 63.3 dBA Leq

7:30 PM

= 63.1 dBA Leq

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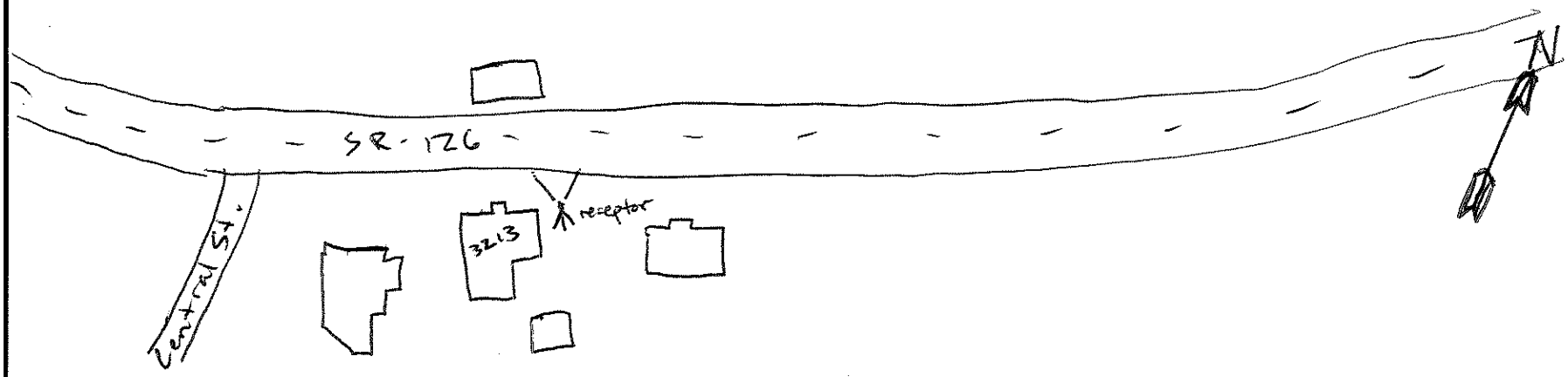
Sketch Site Location (Include: street names, precise receptor locations and North arrow)



Segment	Direction	Cars/Light Trucks	Medium Trucks	Heavy Trucks
1				
2				
3				
4				

#2Date: _____ Temperature/Wind Speed: _____ Speed Limit _____ Noise Level: _____ dBA Leq

Segment	Direction	Cars/Light Trucks	Medium Trucks	Heavy Trucks
1				
2				
3				
4				

Additional Comments (e.g. Major intrusive events): _____

Noise Sampling Field Monitoring Data

Re # 2

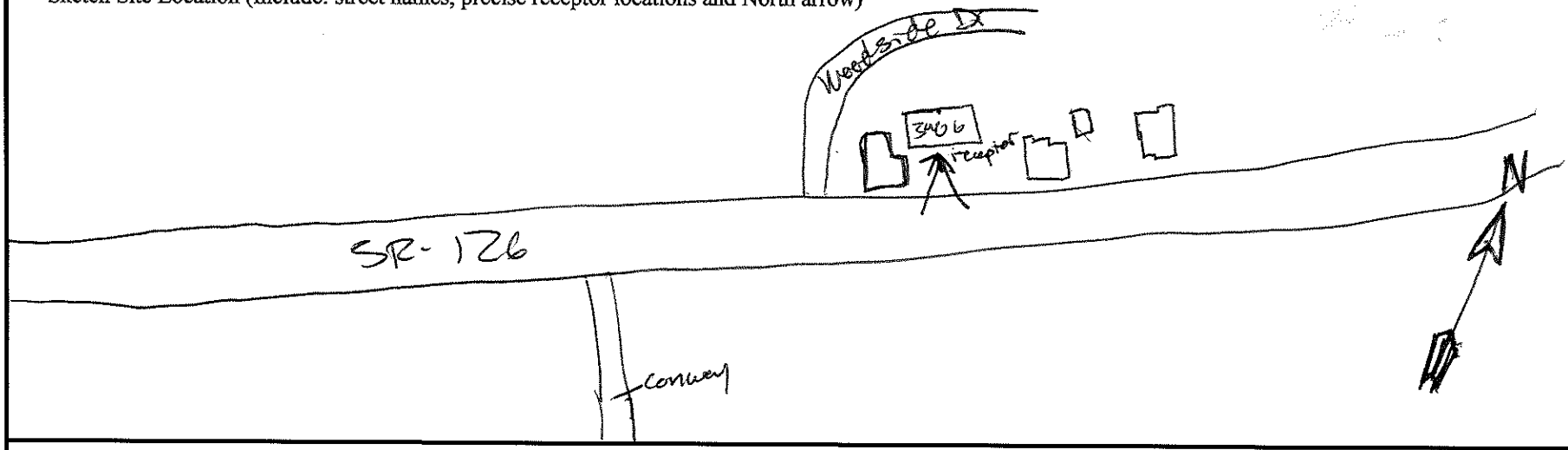
Location (Street Address) 3406 Memorial Blvd (SR-126) Time: 7:45 AM/PM Duration: 10 x 2 min. _____

Date: 3/21/08 Temperature/Wind Speed: 10.1°C/0 mph Speed Limit 35 mph Noise Level: 61.6 dBA Leq

7:55 AM

58.5 dBA Leq

Sketch Site Location (Include: street names, precise receptor locations and North arrow)



Segment	Direction	Cars/Light Trucks	Medium Trucks	Heavy Trucks
1				
2				
3				
4				

#2Date: _____ Temperature/Wind Speed: _____ Speed Limit _____ Noise Level: _____ dBA Leq

Segment	Direction	Cars/Light Trucks	Medium Trucks	Heavy Trucks
1				
2				
3				
4				

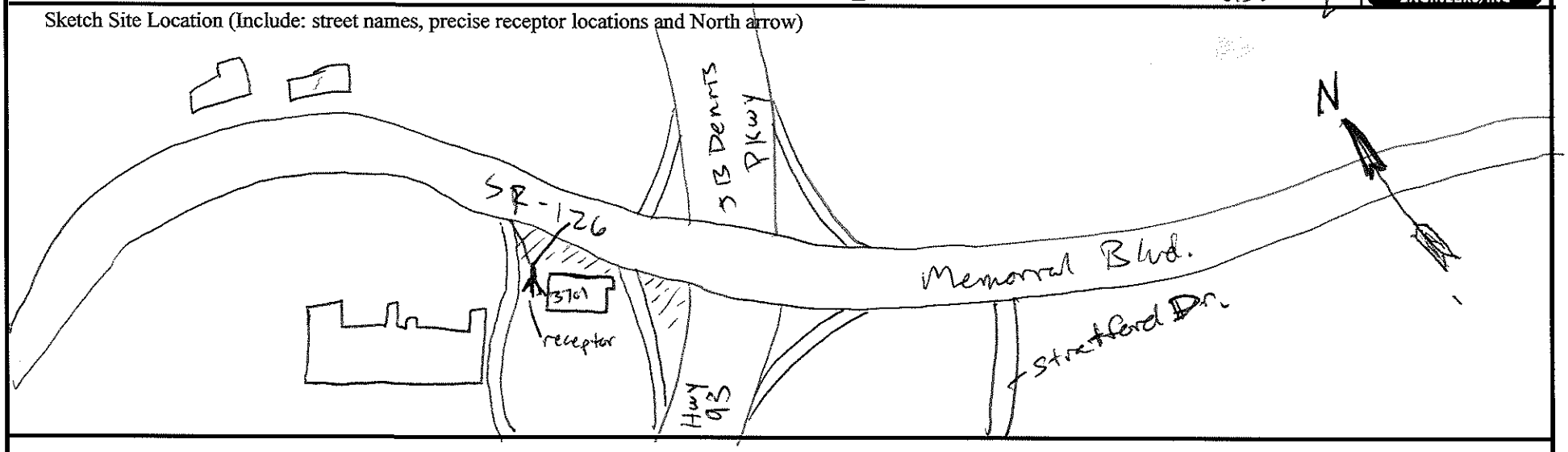
Additional Comments (e.g. Major intrusive events): _____

Noise Sampling Field Monitoring Data

REC 03

Location (Street Address) 3701 Memorial Blvd. Time: 8:10 ~~AM~~/PM (8:20 AM) Duration: 10 min. X2

Date: 3/21/08 Temperature/Wind Speed: 9.9°C/0 mph Speed Limit ~~35~~ 35 mph Noise Level: 62.8 (63.2) dBA Leq



Segment	Direction	Cars/Light Trucks	Medium Trucks	Heavy Trucks
1				
2				
3				
4				

#2Date: _____ Temperature/Wind Speed: _____ Speed Limit _____ Noise Level: _____ dBA Leq

Segment	Direction	Cars/Light Trucks	Medium Trucks	Heavy Trucks
1				
2				
3				
4				

Additional Comments (e.g. Major intrusive events): Dashed lines represent slope

Noise Sampling Field Monitoring Data

Pg 1 of 4

Location (Street Address) 3821 Memorial Blvd. Time: 8:35 (AM)/PM Duration: 10 min. X7

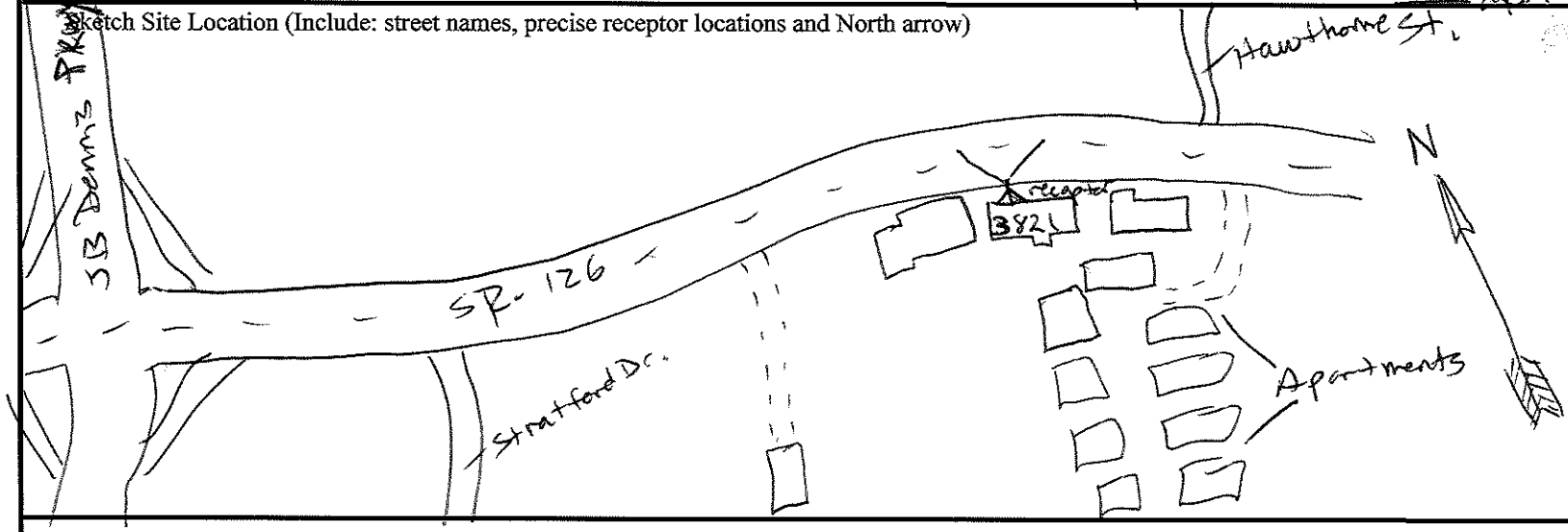
8:45 AM

Date: 3/21/08 Temperature/Wind Speed: 9.8°C/0 mph Speed Limit ~~45~~ 35 mph Noise Level: 72.7 dBA Leq

73.5 dBA Leq

PROFESSIONAL ENGINEERS, INC

Sketch Site Location (Include: street names, precise receptor locations and North arrow)



Segment	Direction	Cars/Light Trucks	Medium Trucks	Heavy Trucks
1				
2				
3				
4				

#2Date: _____ Temperature/Wind Speed: _____ Speed Limit _____ Noise Level: _____ dBA Leq

Segment	Direction	Cars/Light Trucks	Medium Trucks	Heavy Trucks
1				
2				
3				
4				

Additional Comments (e.g. Major intrusive events): _____

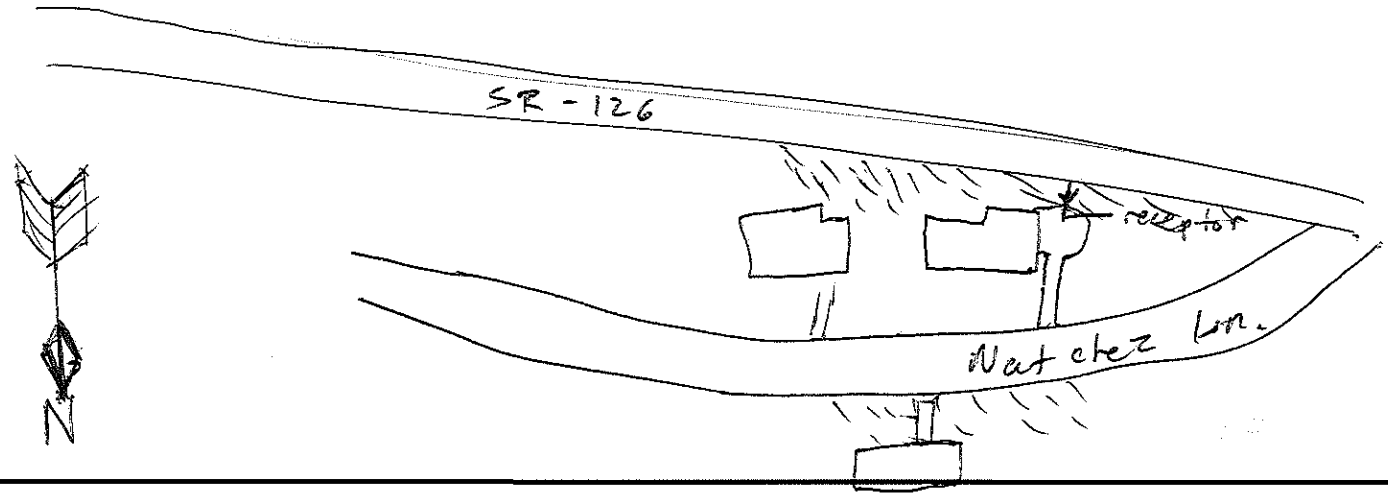
Noise Sampling Field Monitoring Data

Rec 05

Location (Street Address) 104 Natchez Cn. Time: 4:00 AM/PM 4:10 PM Duration: 10 min. x 2

Date: 4/30/08 Temperature/Wind Speed: 72°/2mph Speed Limit 50 mph Noise Level: 57.1 dBA Leq 57.3 dBA Leq

Sketch Site Location (Include: street names, precise receptor locations and North arrow)



Segment	Direction	Cars/Light Trucks	Medium Trucks	Heavy Trucks
1				
2				
3				
4				

#2Date: _____ Temperature/Wind Speed: _____ Speed Limit _____ Noise Level: _____ dBA Leq

Segment	Direction	Cars/Light Trucks	Medium Trucks	Heavy Trucks
1				
2				
3				
4				

Additional Comments (e.g. Major intrusive events): Dashed Lines represent slope

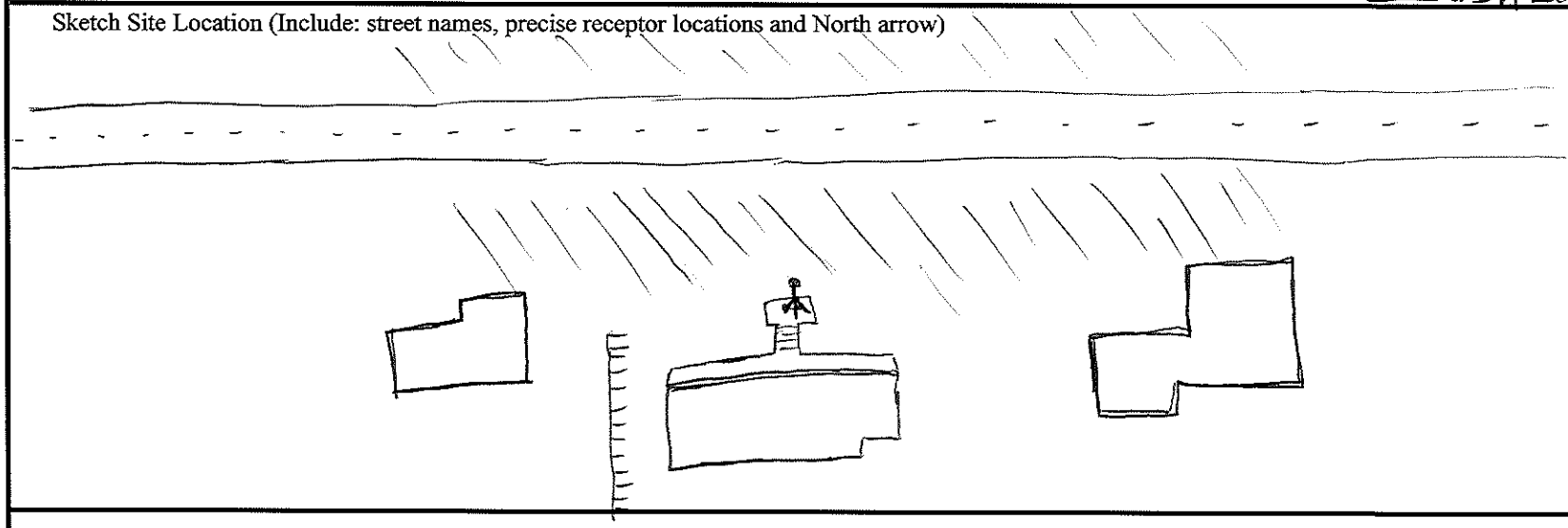
Noise Sampling Field Monitoring Data

Ex 06

Location (Street Address) 4216 SKYLAND LN. Time: 1 11:22 AM/PM Duration: 10 min. x2

Date: 3/20/08 Temperature/Wind Speed: 8.8°C/2mph 2 11:33 AM Speed Limit 45 mph Noise Level: 1 59.3 dBA Leq 2 58.5 dBA Leq

Sketch Site Location (Include: street names, precise receptor locations and North arrow)



Segment	Direction	Cars/Light Trucks	Medium Trucks	Heavy Trucks
1				
2				
3				
4				

#2Date: _____ Temperature/Wind Speed: _____ Speed Limit _____ Noise Level: _____ dBA Leq

Segment	Direction	Cars/Light Trucks	Medium Trucks	Heavy Trucks
1				
2				
3				
4				

Additional Comments (e.g. Major intrusive events): Dash marks represent slope.

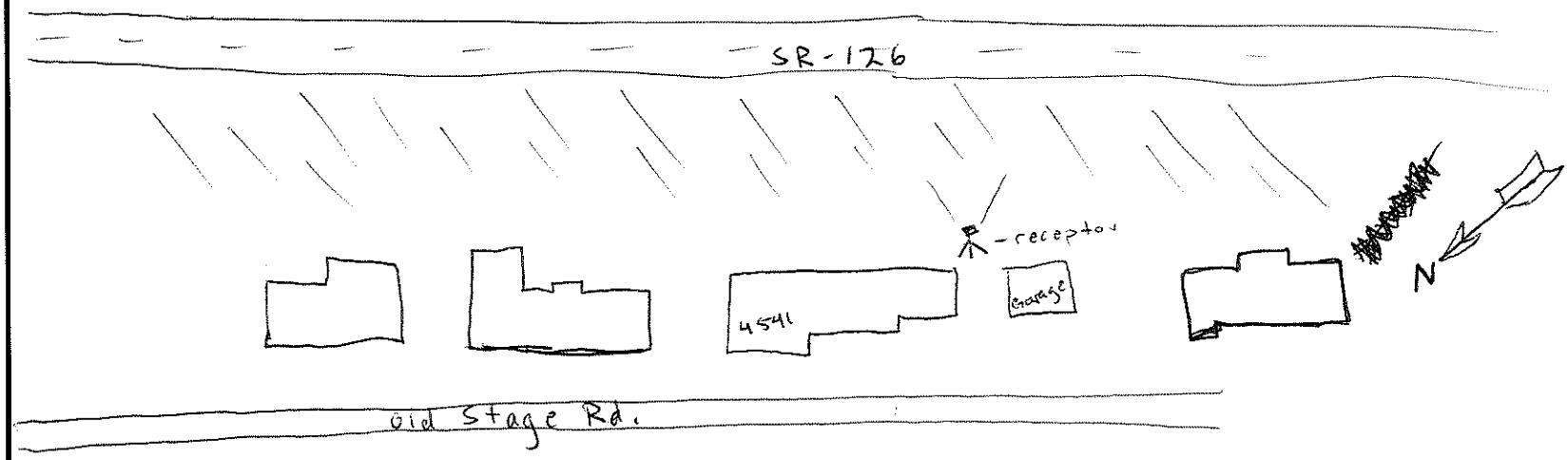
Noise Sampling Field Monitoring Data

Rz #7

Location (Street Address) 4541 Old Stage Rd. Time: 1 11:52 (AM)/PM 2 12:03 PM Duration: 10 min. x2

Date: 3/20/08 Temperature/Wind Speed: 12.8°C/1 mph Speed Limit 35 mph Noise Level: 1 43.4 dBA Leq 2 44.1 dBA Leq

Sketch Site Location (Include: street names, precise receptor locations and North arrow)



Segment	Direction	Cars/Light Trucks	Medium Trucks	Heavy Trucks
1				
2				
3				
4				

#2Date: _____ Temperature/Wind Speed: _____ Speed Limit _____ Noise Level: _____ dBA Leq

Segment	Direction	Cars/Light Trucks	Medium Trucks	Heavy Trucks
1				
2				
3				
4				

Additional Comments (e.g. Major intrusive events): Dash lines represent slope.

Noise Sampling Field Monitoring Data

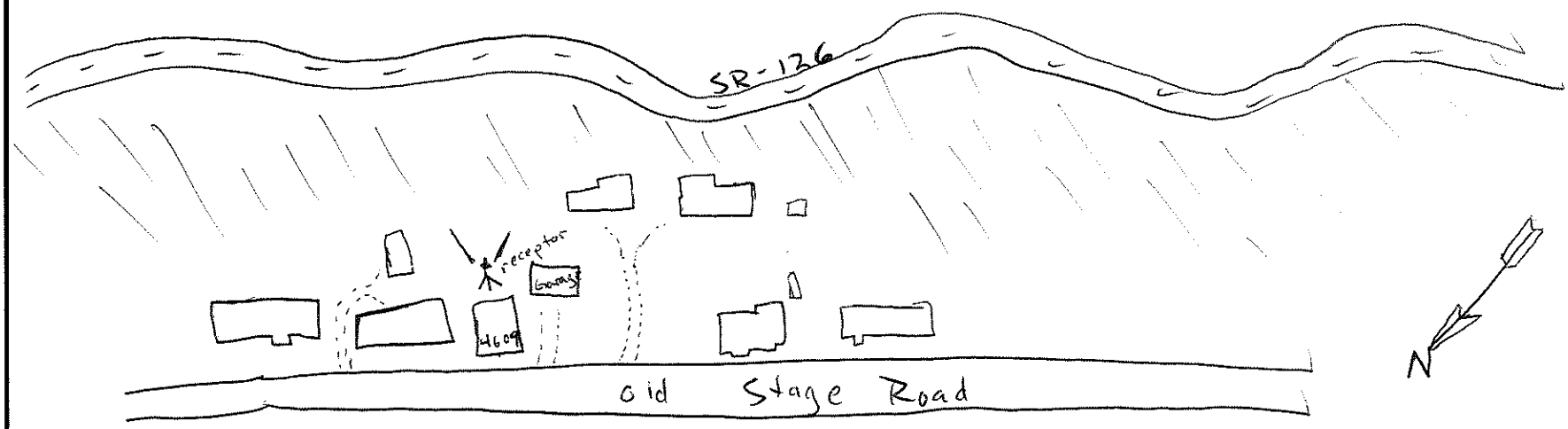
Rec 08

Location (Street Address) 4609 Old Stage Rd. Time: 12:22 AM/PM Duration: 10 min. x2

Date: 3/20/08 Temperature/Wind Speed: 16.1°C/1 mph Speed Limit 35 mph Noise Level: 44.1 dBA Leq

[2] 12:33 PM [2] 43.0 dBA Leq

Sketch Site Location (Include: street names, precise receptor locations and North arrow)



Segment	Direction	Cars/Light Trucks	Medium Trucks	Heavy Trucks
1				
2				
3				
4				

#2Date: _____ Temperature/Wind Speed: _____ Speed Limit _____ Noise Level: _____ dBA Leq

Segment	Direction	Cars/Light Trucks	Medium Trucks	Heavy Trucks
1				
2				
3				
4				

Additional Comments (e.g. Major intrusive events): Dash lines represent slope.

Noise Sampling Field Monitoring Data

Rec #9

Location (Street Address) 4828 Memorial Blvd (126) Time: 4:35 4:45 PM AM/PM Duration: 10 min. x2

Date: 4/30/08 Temperature/Wind Speed: 72°/2mph Speed Limit 55 mph Noise Level: 61.9 dBA Leq 60.4 dBA Leq

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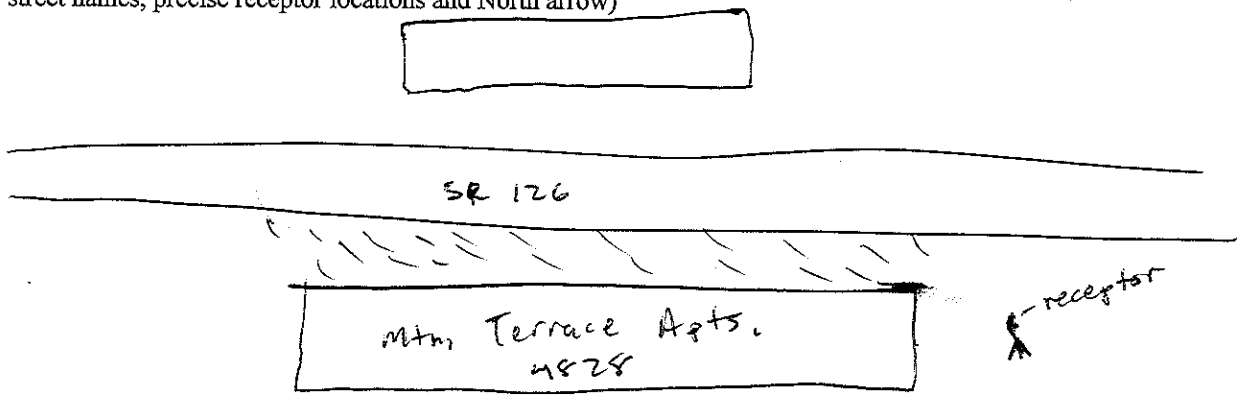
Sketch Site Location (Include: street names, precise receptor locations and North arrow)



Segment	Direction	Cars/Light Trucks	Medium Trucks	Heavy Trucks
1				
2				
3				
4				

#2Date: _____ Temperature/Wind Speed: _____ Speed Limit _____ Noise Level: _____ dBA Leq

Segment	Direction	Cars/Light Trucks	Medium Trucks	Heavy Trucks
1				
2				
3				
4				

Additional Comments (e.g. Major intrusive events): Dashed Lines rep. slope

Noise Sampling Field Monitoring Data

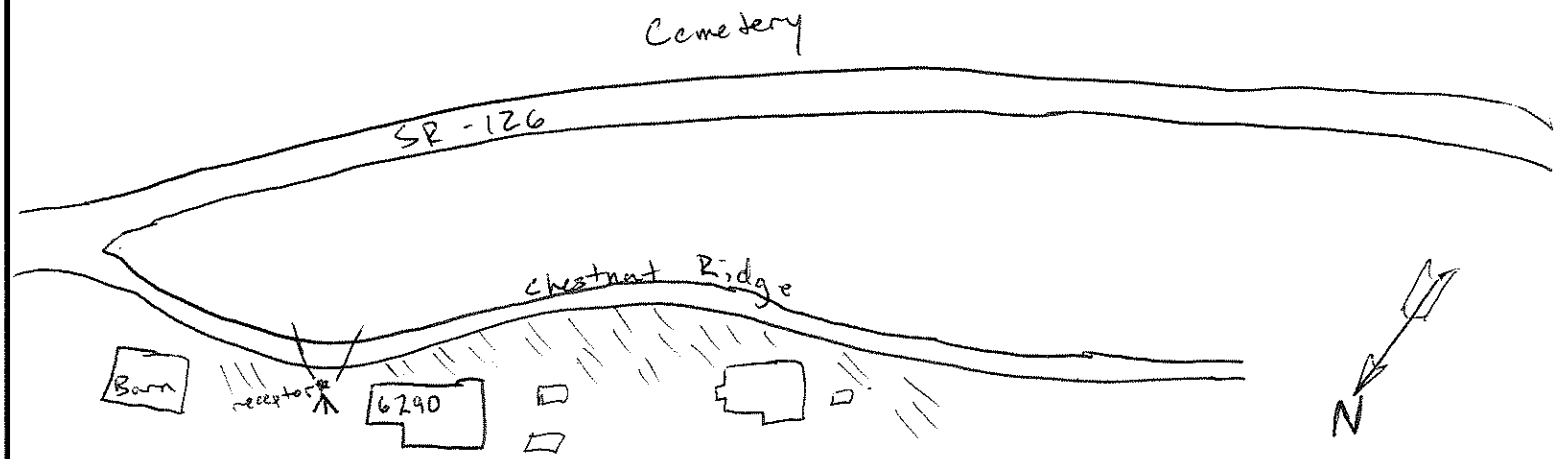
Rec 10

Location (Street Address) 6290 Chestnut Ridge Time: 12:48 AM/PM Duration: 10 min. x2

Date: 3/20/08 Temperature/Wind Speed: 16.5°C/.9 mph Speed Limit 50 mph Noise Level: 56.8 dBA Leq

[2] 12:58 PM [2] 58.7 dBA Leq

Sketch Site Location (Include: street names, precise receptor locations and North arrow)



Segment	Direction	Cars/Light Trucks	Medium Trucks	Heavy Trucks
1				
2				
3				
4				

#2Date: _____ Temperature/Wind Speed: _____ Speed Limit _____ Noise Level: _____ dBA Leq

Segment	Direction	Cars/Light Trucks	Medium Trucks	Heavy Trucks
1				
2				
3				
4				

Additional Comments (e.g. Major intrusive events): Dash lines represent Slope.

Noise Sampling Field Monitoring Data

RGC # 11

Location (Street Address) 143 Island Dr. Time: 1:16 AM/PM Duration: 10 min. x 2

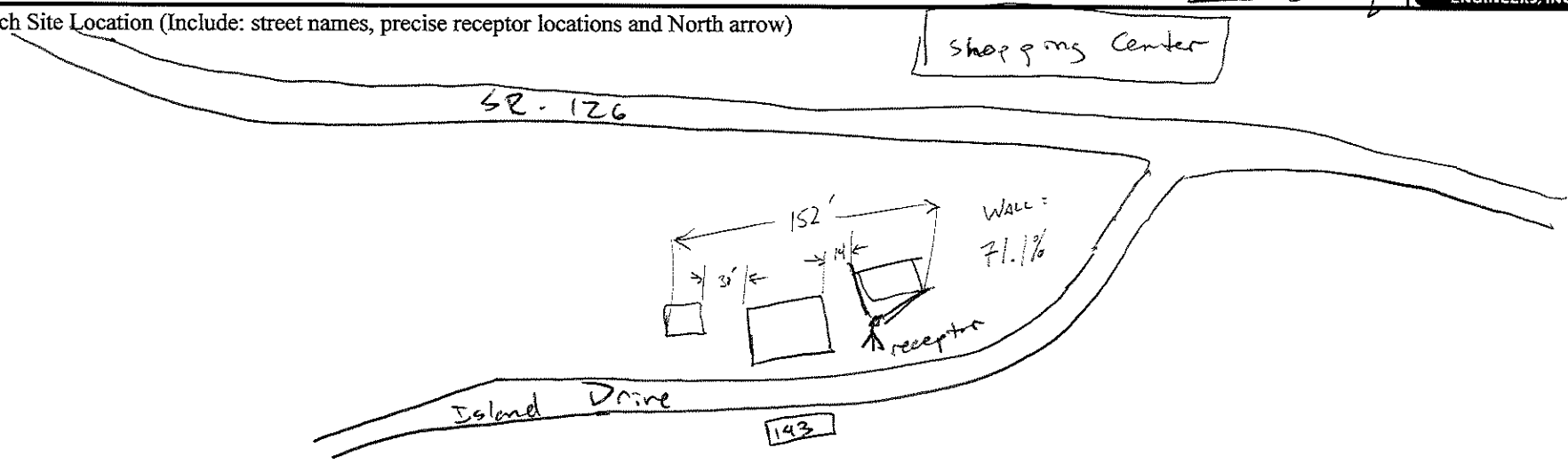
Date: 3/20/08 Temperature/Wind Speed: 13.8°C / 1.2 mph Speed Limit 50 mph Noise Level: 1 58.0 dBA Leq

2:26 PM

2 58.3 dBA Leq

PROFESSIONAL ENGINEERS, INC

Sketch Site Location (Include: street names, precise receptor locations and North arrow)



Segment	Direction	Cars/Light Trucks	Medium Trucks	Heavy Trucks
1				
2				
3				
4				

#2Date: _____ Temperature/Wind Speed: _____ Speed Limit _____ Noise Level: _____ dBA Leq

Segment	Direction	Cars/Light Trucks	Medium Trucks	Heavy Trucks
1				
2				
3				
4				

Additional Comments (e.g. Major intrusive events): _____

Noise Sampling Field Monitoring Data

REC# 12

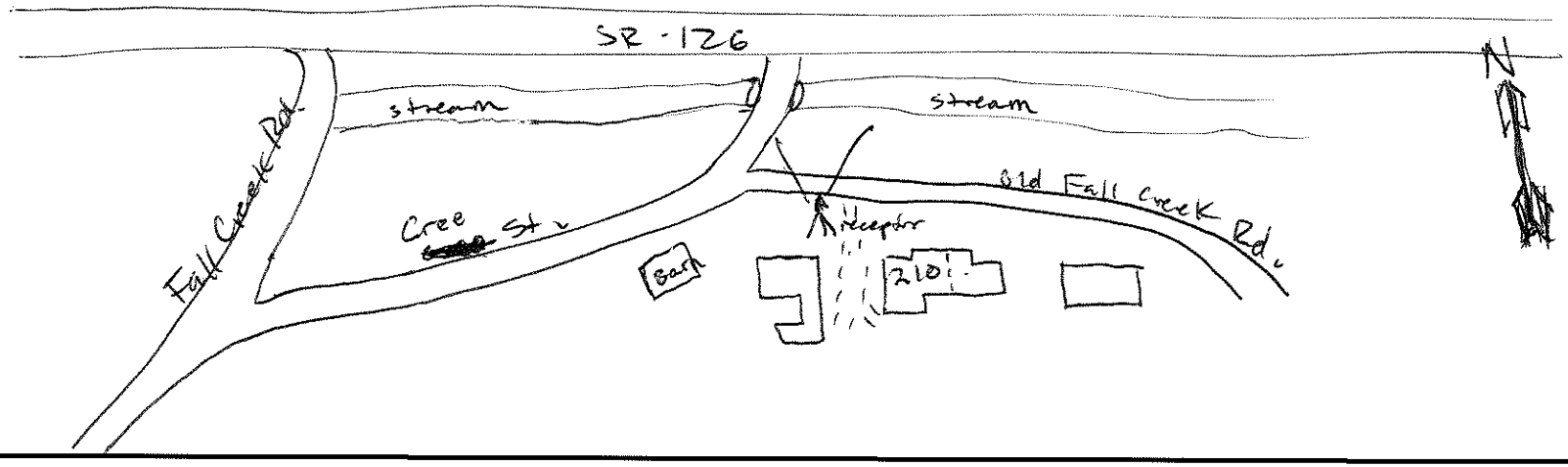
Location (Street Address) 210 Old Fall Creek Rd Time: 1:42 AM/PM Duration: 10 min. x2

Date: 3/20/08 Temperature/Wind Speed: 17.5°C / .8 mph Speed Limit 50 mph Noise Level: 54.1 dBA Leq

2:52 PM

255.7 dBA Leq

Sketch Site Location (Include: street names, precise receptor locations and North arrow)



Segment	Direction	Cars/Light Trucks	Medium Trucks	Heavy Trucks
1				
2				
3				
4				

#2Date: _____ Temperature/Wind Speed: _____ Speed Limit _____ Noise Level: _____ dBA Leq

Segment	Direction	Cars/Light Trucks	Medium Trucks	Heavy Trucks
1				
2				
3				
4				

Additional Comments (e.g. Major intrusive events): _____

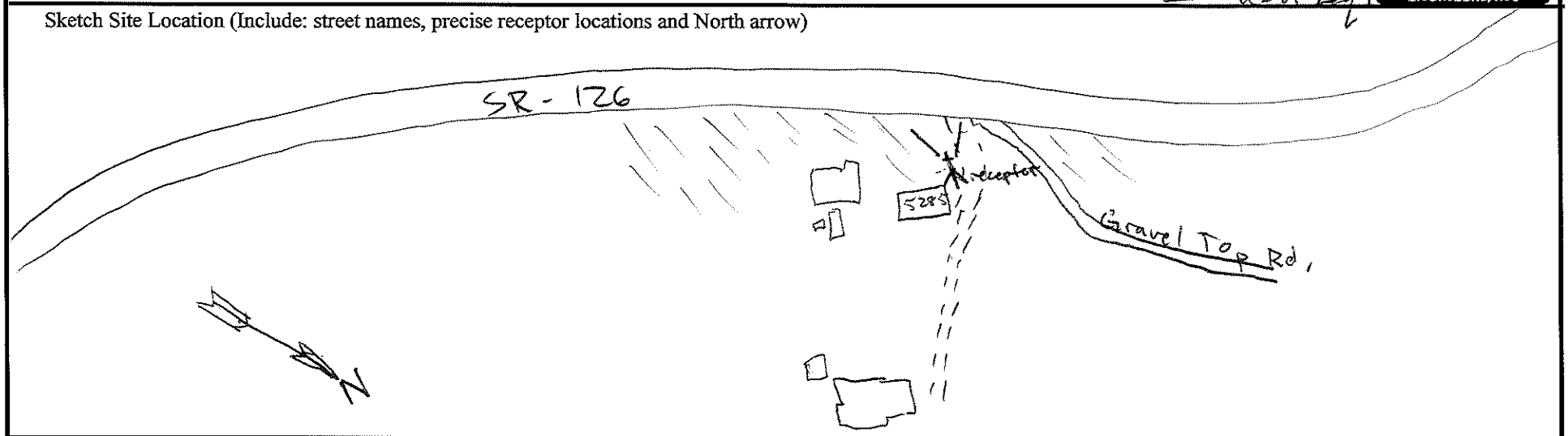
Noise Sampling Field Monitoring Data

Rec 13

Location (Street Address) 5285 Memorial (SR-126) Time: 4:14 / 24:25 AM/PM Duration: 10 min. x2

Date: 3/20/08 Temperature/Wind Speed: 7.4°C / 2 mph Speed Limit 50 mph Noise Level: 59.8 dBA Leq / 60.5 dBA Leq

Sketch Site Location (Include: street names, precise receptor locations and North arrow)



Segment	Direction	Cars/Light Trucks	Medium Trucks	Heavy Trucks
1				
2				
3				
4				

#2Date: _____ Temperature/Wind Speed: _____ Speed Limit _____ Noise Level: _____ dBA Leq

Segment	Direction	Cars/Light Trucks	Medium Trucks	Heavy Trucks
1				
2				
3				
4				

Additional Comments (e.g. Major intrusive events): Dashed lines represent slope

Noise Sampling Field Monitoring Data

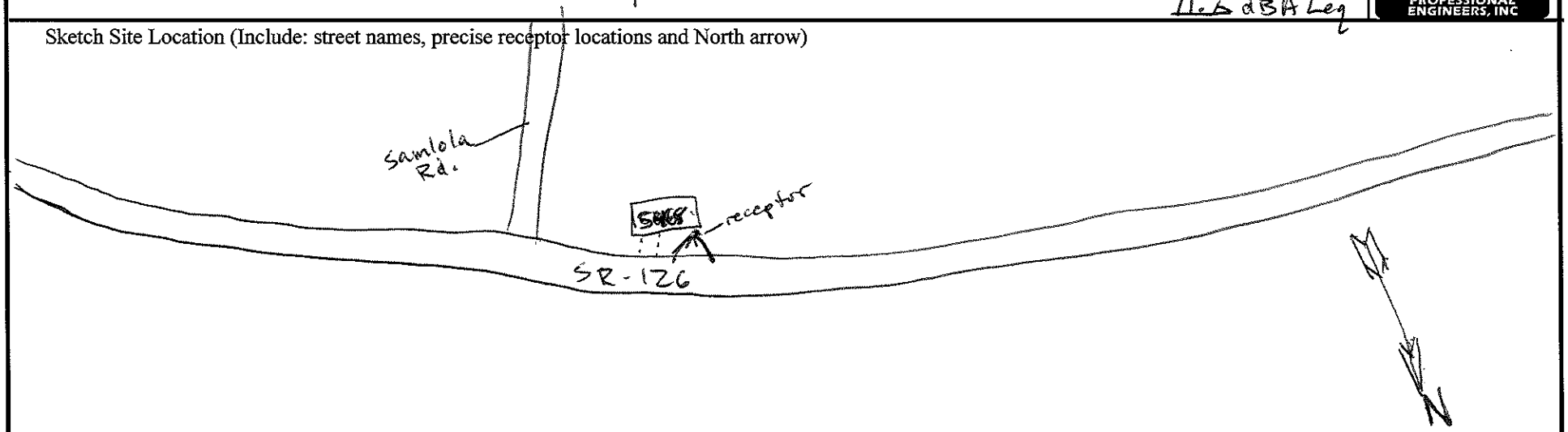
Rec 14

Location (Street Address) 5468 Memorial (SR-126) Time: 4:37 AM/PM 4:48 PM Duration: 10 min. x2

Date: 3/20/08 Temperature/Wind Speed: 15°C/1.9 mph Speed Limit 50 mph Noise Level: 68.5 dBA Leq 71.3 dBA Leq

HMB PROFESSIONAL ENGINEERS, INC

Sketch Site Location (Include: street names, precise receptor locations and North arrow)



Segment	Direction	Cars/Light Trucks	Medium Trucks	Heavy Trucks
1				
2				
3				
4				

#2Date: _____ Temperature/Wind Speed: _____ Speed Limit _____ Noise Level: _____ dBA Leq

Segment	Direction	Cars/Light Trucks	Medium Trucks	Heavy Trucks
1				
2				
3				
4				

Additional Comments (e.g. Major intrusive events): _____

Noise Sampling Field Monitoring Data

Rec 15

Location (Street Address) 5680 Memorial (SR-126) Time: 5:05 AM/PM Duration: 10 min. x2

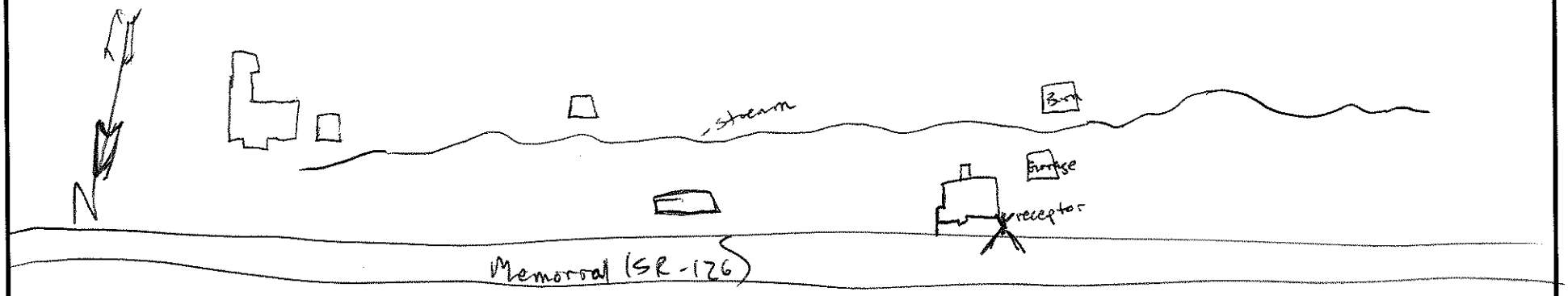
Date: 3/20/08 Temperature/Wind Speed: 16.1°C/.9 mph Speed Limit 50 mph Noise Level: 65.3 dBA Leq

2 5:15 PM

2 65.1 dBA Leq

HMB PROFESSIONAL ENGINEERS, INC

Sketch Site Location (Include: street names, precise receptor locations and North arrow)



Segment	Direction	Cars/Light Trucks	Medium Trucks	Heavy Trucks
1				
2				
3				
4				

#2Date: _____ Temperature/Wind Speed: _____ Speed Limit _____ Noise Level: _____ dBA Leq

Segment	Direction	Cars/Light Trucks	Medium Trucks	Heavy Trucks
1				
2				
3				
4				

Additional Comments (e.g. Major intrusive events): _____

Noise Sampling Field Monitoring Data

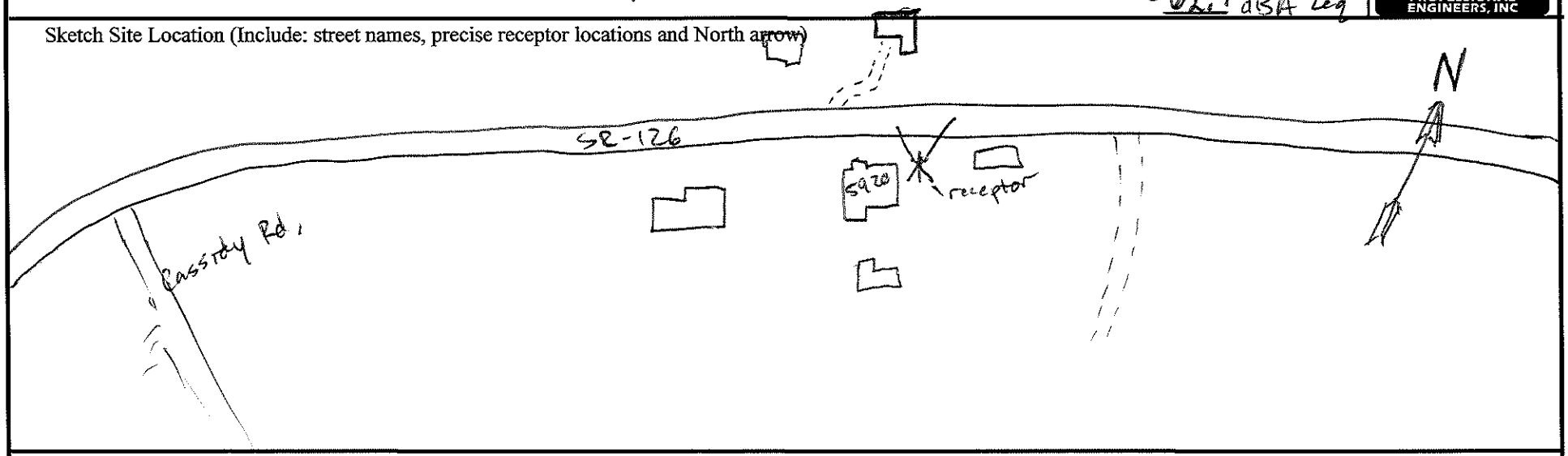
Rx 16

Location (Street Address) 5920 Memorial (SR-126) Time: [1] 5:26 AM/PM [2] 5:36 PM Duration: 10 min. x2

Date: 3/28/08 Temperature/Wind Speed: 15°C/2.0 mph Speed Limit 50 mph Noise Level: [1] 62.1 dBA Leq [2] 62.7 dBA Leq

HMB PROFESSIONAL ENGINEERS, INC

Sketch Site Location (Include: street names, precise receptor locations and North arrow)



Segment	Direction	Cars/Light Trucks	Medium Trucks	Heavy Trucks
1				
2				
3				
4				

#2Date: _____ Temperature/Wind Speed: _____ Speed Limit _____ Noise Level: _____ dBA Leq

Segment	Direction	Cars/Light Trucks	Medium Trucks	Heavy Trucks
1				
2				
3				
4				

Additional Comments (e.g. Major intrusive events): _____

Noise Sampling Field Monitoring Data

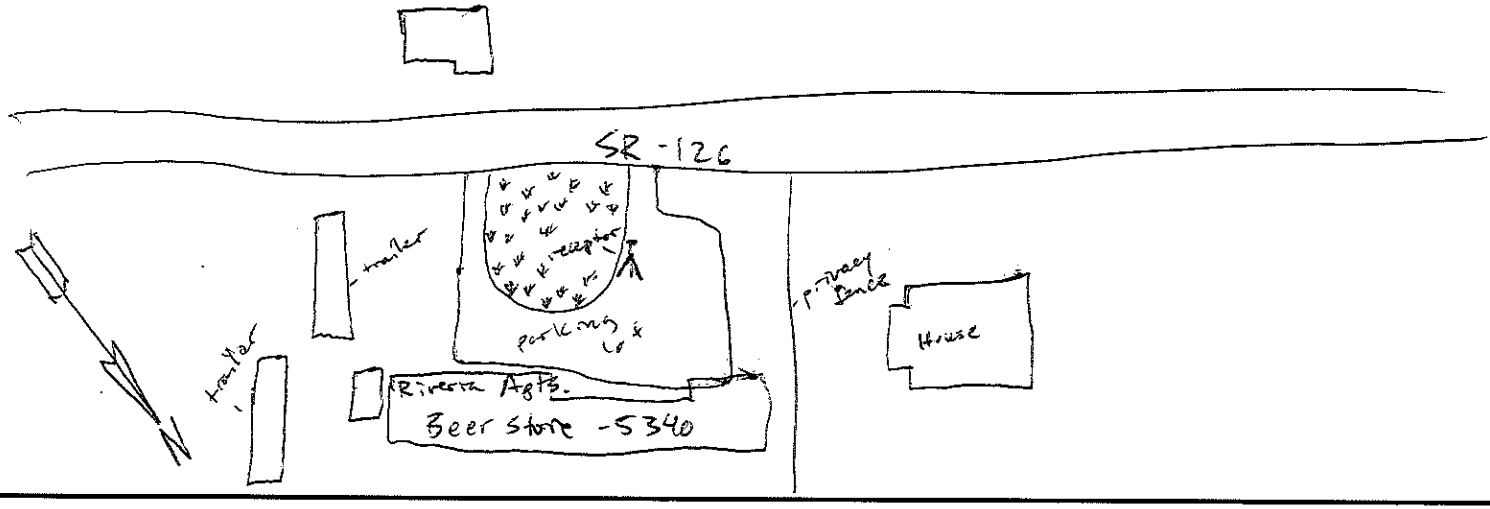
REC 17

Location (Street Address) 5340 Memorial (SR-126) Time: 8:55 (AM)/PM Duration: 10 min. x 2

Date: 5/1/08 Temperature/Wind Speed: 62°/0mph Speed Limit 55 mph Noise Level: 54.9 dBA Leq
55.6 dBA Leq

PROFESSIONAL ENGINEERS, INC

Sketch Site Location (Include: street names, precise receptor locations and North arrow)



Segment	Direction	Cars/Light Trucks	Medium Trucks	Heavy Trucks
1				
2				
3				
4				

#2Date: _____ Temperature/Wind Speed: _____ Speed Limit _____ Noise Level: _____ dBA Leq

Segment	Direction	Cars/Light Trucks	Medium Trucks	Heavy Trucks
1				
2				
3				
4				

Additional Comments (e.g. Major intrusive events): _____

Noise Sampling Field Monitoring Data

Rec 18

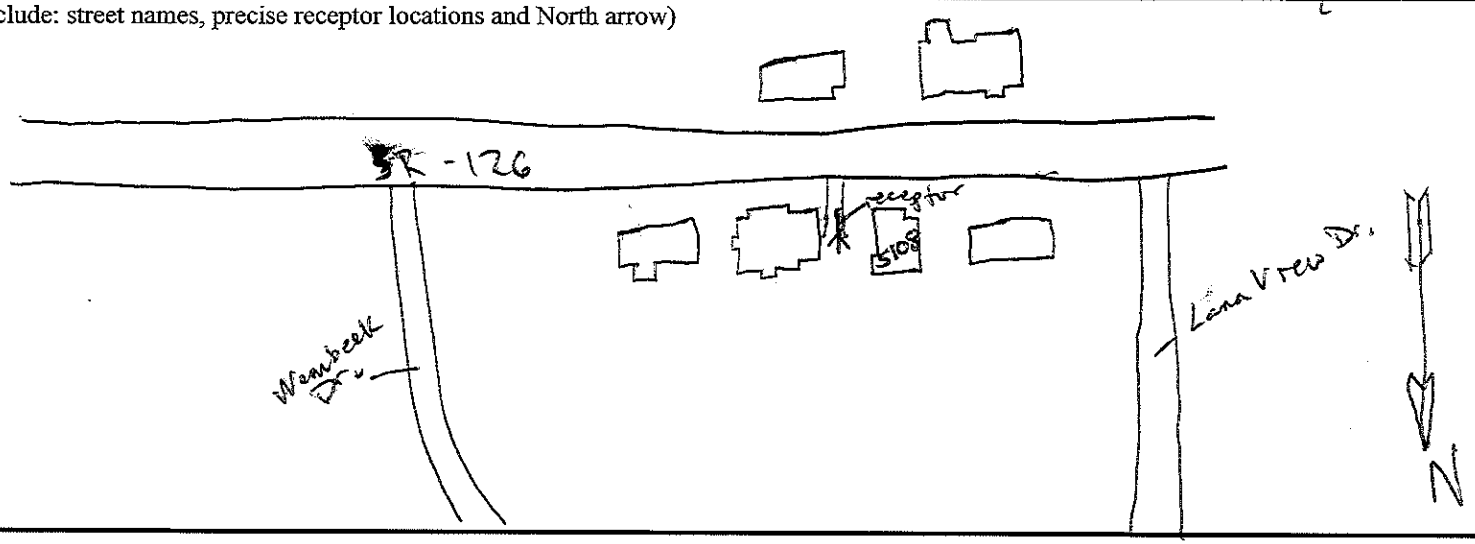
Location (Street Address) 5108 Memorial Blvd. (SR-126) Time: 9:56 (AM)/PM Duration: 10 min. x 2

Date: 5/1/08 Temperature/Wind Speed: 66/ mph Speed Limit 50 mph Noise Level: 67.5 dBA Leq

66.7 dBA Leq

PROFESSIONAL ENGINEERS, INC

Sketch Site Location (Include: street names, precise receptor locations and North arrow)



Segment	Direction	Cars/Light Trucks	Medium Trucks	Heavy Trucks
1				
2				
3				
4				

#2Date: _____ Temperature/Wind Speed: _____ Speed Limit _____ Noise Level: _____ dBA Leq

Segment	Direction	Cars/Light Trucks	Medium Trucks	Heavy Trucks
1				
2				
3				
4				

Additional Comments (e.g. Major intrusive events): _____

Noise Sampling Field Monitoring Data

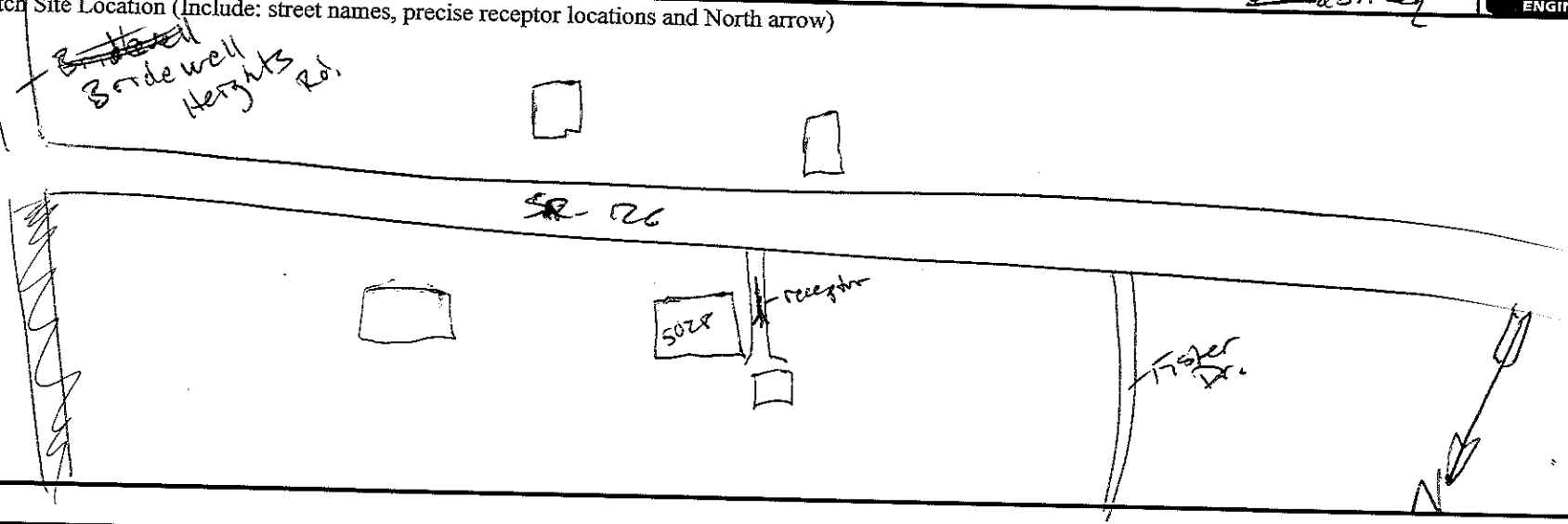
Dec 19

Location (Street Address) 5828 Memorial Blvd. (SR 126) Time: 10:30 AM/PM Duration: 10 min. x2

Date: 5/1/08 Temperature/Wind Speed: 66/ mph Speed Limit 55 mph Noise Level: 65.0 dBA Leq
65.3 dBA Leq

HMB PROFESSIONAL ENGINEERS, INC

Sketch Site Location (Include: street names, precise receptor locations and North arrow)



Segment	Direction	Cars/Light Trucks	Medium Trucks	Heavy Trucks
1				
2				
3				
4				

#2Date: _____ Temperature/Wind Speed: _____ Speed Limit _____ Noise Level: _____ dBA Leq

Segment	Direction	Cars/Light Trucks	Medium Trucks	Heavy Trucks
1				
2				
3				
4				

Additional Comments (e.g. Major intrusive events): _____

Noise Sampling Field Monitoring Data

Rec 20

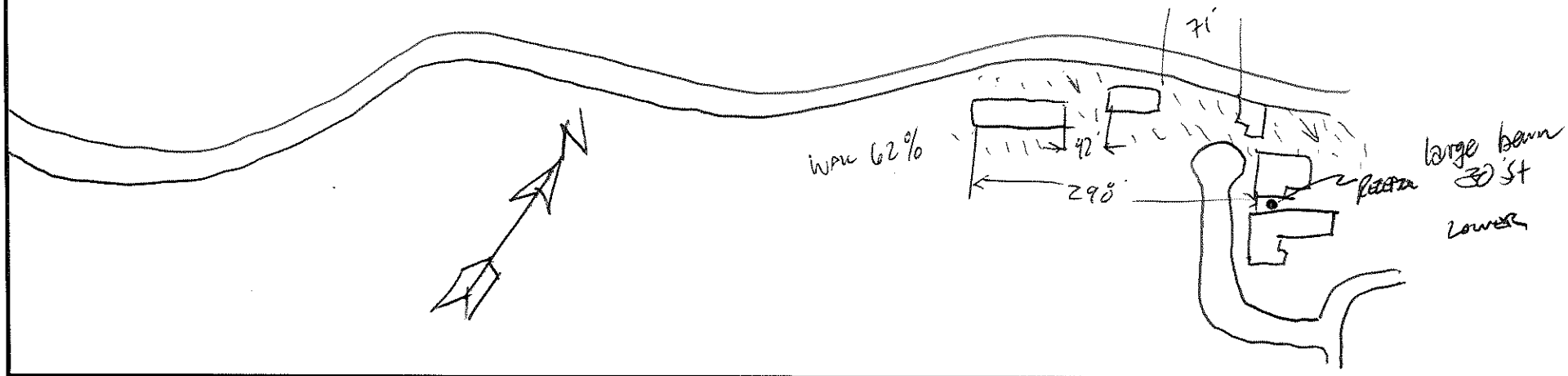
Location (Street Address) 105 Time: 10:58 AM/PM Duration: 10 min. x2

Date: 5/11/08 Temperature/Wind Speed: 68/1mph Speed Limit 50 mph Noise Level: 50.0 dBA Leq

47.8 " "

HMB PROFESSIONAL ENGINEERS, INC

Sketch Site Location (Include: street names, precise receptor locations and North arrow)



Segment	Direction	Cars/Light Trucks	Medium Trucks	Heavy Trucks
1				
2				
3				
4				

#2Date: _____ Temperature/Wind Speed: _____ Speed Limit _____ Noise Level: _____ dBA Leq

Segment	Direction	Cars/Light Trucks	Medium Trucks	Heavy Trucks
1				
2				
3				
4				

Additional Comments (e.g. Major intrusive events): _____

Noise Sampling Field Monitoring Data

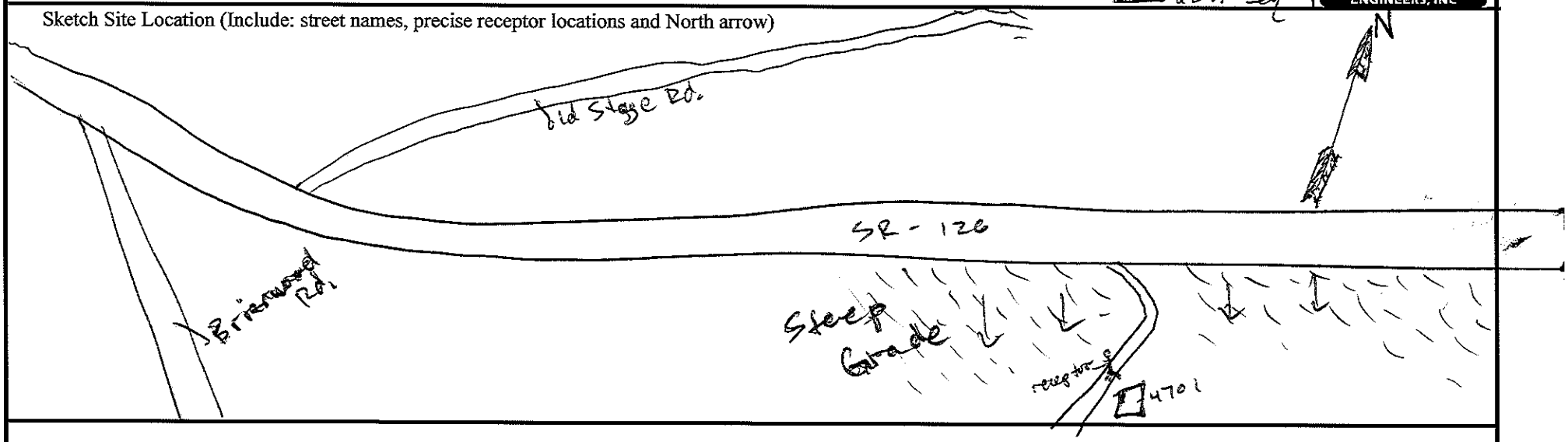
Rec 21

Location (Street Address) 4701 Memorial Blvd. (SR-126) Time: 1:28 AM/PM 1:40 PM Duration: 10 min. x2

Date: 5/1/08 Temperature/Wind Speed: 73/ mph Speed Limit 40 mph Noise Level: 49.9 dBA Leq 54.9 dBA Leq

HMB PROFESSIONAL ENGINEERS, INC

Sketch Site Location (Include: street names, precise receptor locations and North arrow)



Segment	Direction	Cars/Light Trucks	Medium Trucks	Heavy Trucks
1				
2				
3				
4				

#2Date: _____ Temperature/Wind Speed: _____ Speed Limit _____ Noise Level: _____ dBA Leq

Segment	Direction	Cars/Light Trucks	Medium Trucks	Heavy Trucks
1				
2				
3				
4				

Additional Comments (e.g. Major intrusive events): _____

Noise Sampling Field Monitoring Data

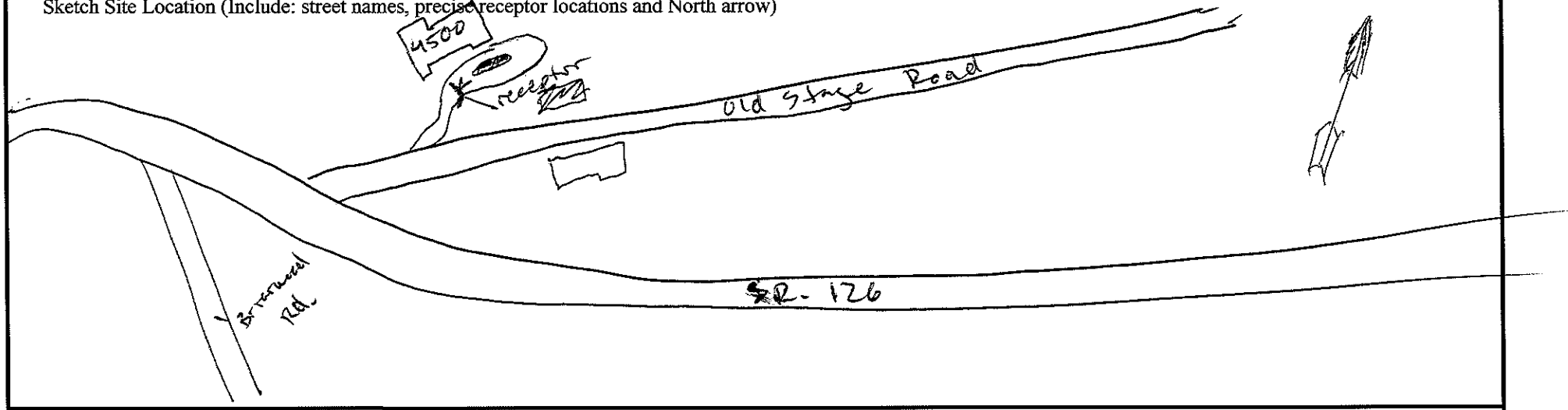
Rez 22

Location (Street Address) 4500 Old Stage Rd. Time: 1:55 AM/PM Duration: 10 min. x 2

Date: 5/1/08 Temperature/Wind Speed: 73/1 mph Speed Limit 50 mph Noise Level: 58.2dBA Leq
62.0 dBA Leq

HMB PROFESSIONAL ENGINEERS, INC

Sketch Site Location (Include: street names, precise receptor locations and North arrow)



Segment	Direction	Cars/Light Trucks	Medium Trucks	Heavy Trucks
1				
2				
3				
4				

#2Date: _____ Temperature/Wind Speed: _____ Speed Limit _____ Noise Level: _____ dBA Leq

Segment	Direction	Cars/Light Trucks	Medium Trucks	Heavy Trucks
1				
2				
3				
4				

Additional Comments (e.g. Major intrusive events): _____

Noise Sampling Field Monitoring Data

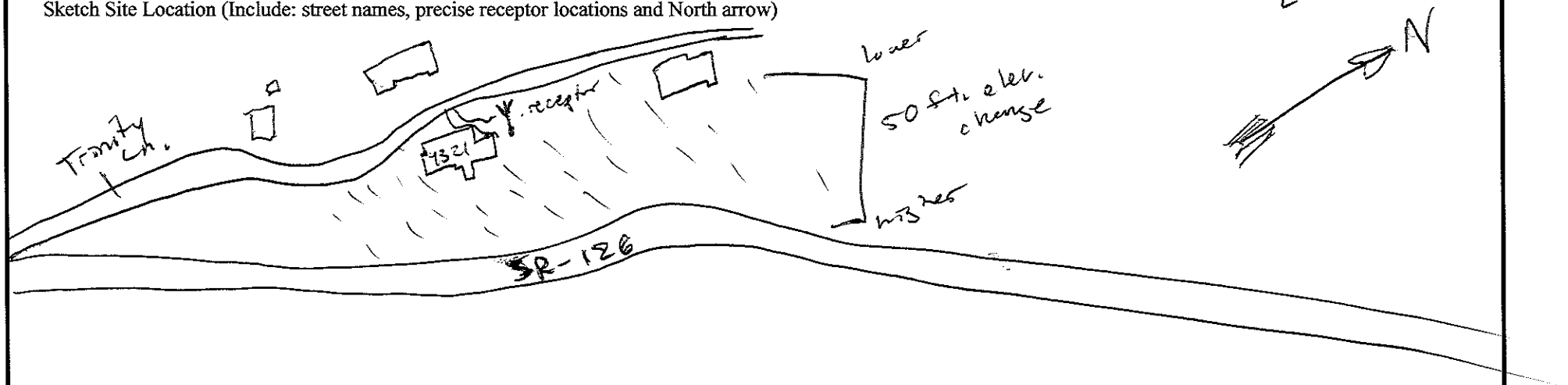
lot 23

Location (Street Address) 4321 Trinity Ln. Time: 2:23 AM/PM Duration: 10 min. x2

Date: 5/1/08 Temperature/Wind Speed: 74/1mph Speed Limit 40 mph Noise Level: 60.3 dBA Leq
56.7 dBA Leq

PROFESSIONAL ENGINEERS, INC

Sketch Site Location (Include: street names, precise receptor locations and North arrow)



Segment	Direction	Cars/Light Trucks	Medium Trucks	Heavy Trucks
1				
2				
3				
4				

#2Date: _____ Temperature/Wind Speed: _____ Speed Limit _____ Noise Level: _____ dBA Leq

Segment	Direction	Cars/Light Trucks	Medium Trucks	Heavy Trucks
1				
2				
3				
4				

Additional Comments (e.g. Major intrusive events): _____

Noise Sampling Field Monitoring Data

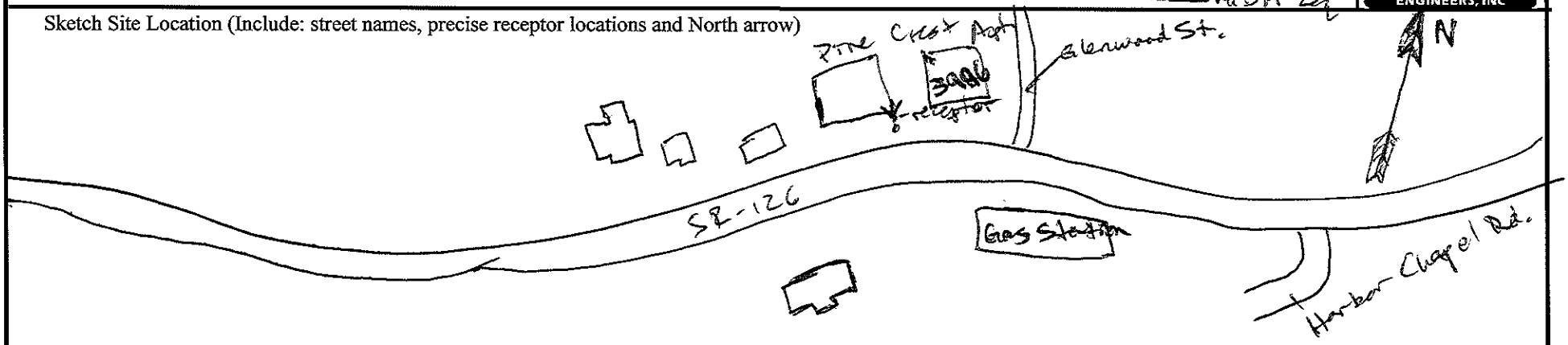
Loc 24

Location (Street Address) 3996 Memorial Blvd (126) Time: 2:50 AM/PM Duration: 10 min. x2

Date: 5/1/08 Temperature/Wind Speed: 74/1mph Speed Limit 40 mph Noise Level: 65.6 dBA Leq

62.7 dBA Leq

Sketch Site Location (Include: street names, precise receptor locations and North arrow)



Segment	Direction	Cars/Light Trucks	Medium Trucks	Heavy Trucks
1				
2				
3				
4				

#2Date: _____ Temperature/Wind Speed: _____ Speed Limit _____ Noise Level: _____ dBA Leq

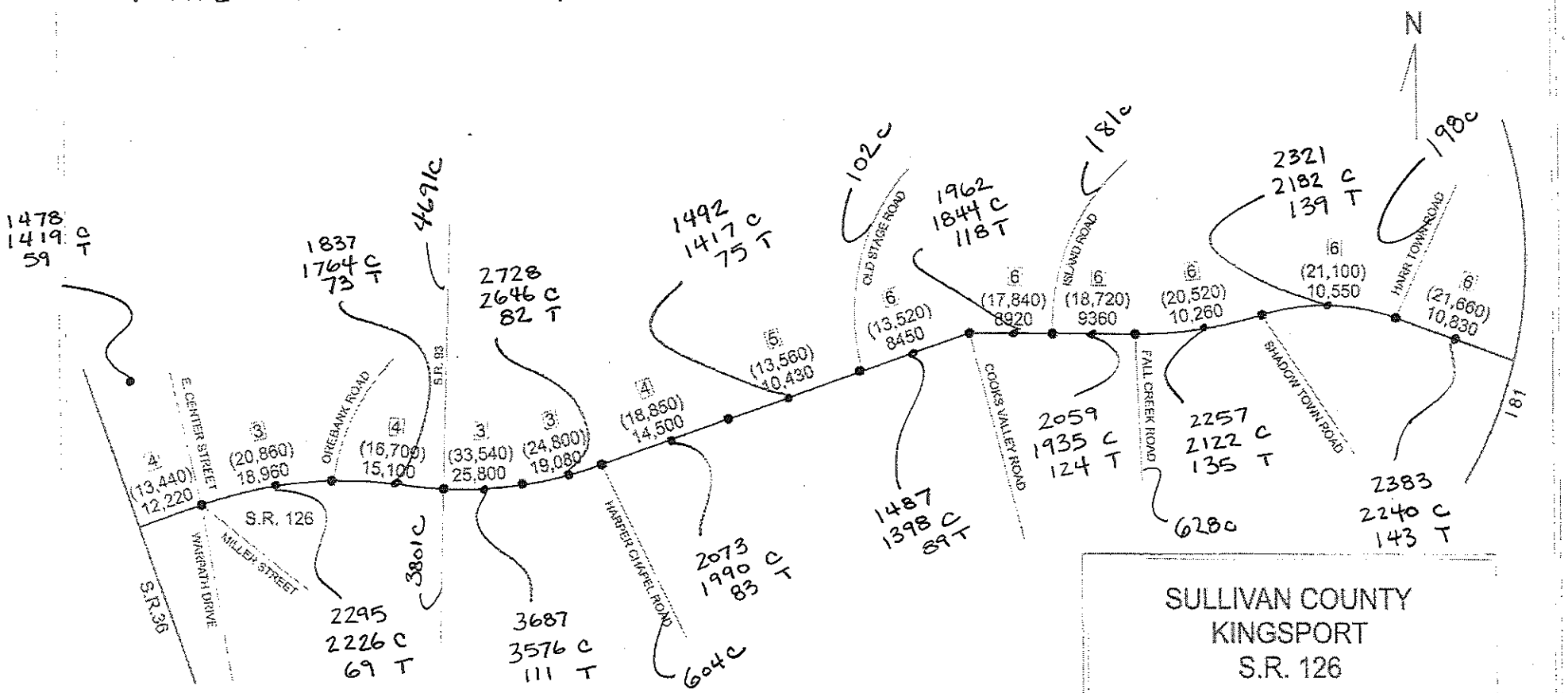
Segment	Direction	Cars/Light Trucks	Medium Trucks	Heavy Trucks
1				
2				
3				
4				

Additional Comments (e.g. Major intrusive events): _____

Appendix B
Traffic

HIGHWAY TRAFFIC NOISE

FUTURE FOR ALTERNATIVES A & B



SULLIVAN COUNTY
KINGSPORT
S.R. 126

2033 AADT - (000)
2013 AADT - 000
AADT Truck % - [0]

9/16/2009
G. Dyer / B. Darks

NOT TO SCALE

K factor = 0.11

AADT * K = DHV

DHV * [0] = # HT (T)

DHV - HT = CARS (C)

Appendix C
TNM 2.5 Data Output

HMB 31 August 2010
mdg TNM 2.5
Calculated with TNM 2.5

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: 1135
RUN: SR 126 Memorial Blvd. Alternative A
BARRIER DESIGN: INPUT HEIGHTS
ATMOSPHERICS: 68 deg F, 50% RH

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

Receiver Name	No.	#DUs	Existing LAeq1h	No Barrier LAeq1h Calculated	Crit'n	Increase over existing Calculated	Crit'n Sub'l Inc	With Barrier Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Noise Reduction Goal	Noise Reduction Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
Receiver1	1	1	63.2	64.7	66	1.5	10	----	64.7	0.0	8	-8.0
Receiver2	2	1	60.1	64.9	66	4.8	10	----	64.9	0.0	8	-8.0
Receiver3	3	1	63.0	66.0	66	3.0	10	Snd Lvl	66.0	0.0	8	-8.0
Receiver4	4	1	73.1	69.7	66	-3.4	10	Snd Lvl	69.7	0.0	8	-8.0
Receiver5	5	1	57.2	65.9	66	8.7	10	----	65.9	0.0	8	-8.0
Receiver6	6	1	58.9	63.8	66	4.9	10	----	63.8	0.0	8	-8.0
Receiver7	7	1	43.8	56.7	66	12.9	10	Sub'l Inc	56.7	0.0	8	-8.0
Receiver8	8	1	43.6	54.8	66	11.2	10	Sub'l Inc	54.8	0.0	8	-8.0
Receiver9	9	1	61.2	63.5	66	2.3	10	----	63.5	0.0	8	-8.0
Receiver10	10	1	57.8	63.9	66	6.1	10	----	63.9	0.0	8	-8.0
Receiver11	11	1	58.2	61.6	66	3.4	10	----	61.6	0.0	8	-8.0
Receiver12	12	1	54.9	59.5	66	4.6	10	----	59.5	0.0	8	-8.0
Receiver13	13	1	60.2	65.5	66	5.3	10	----	65.5	0.0	8	-8.0
Receiver14	14	1	69.9	65.8	66	-4.1	10	----	65.8	0.0	8	-8.0
Receiver15	15	1	65.2	66.1	66	0.9	10	Snd Lvl	66.1	0.0	8	-8.0
Receiver16	16	1	62.4	67.6	66	5.2	10	Snd Lvl	67.6	0.0	8	-8.0
Receiver17	17	1	55.3	68.6	66	13.3	10	Both	68.6	0.0	8	-8.0
Receiver18	18	1	67.1	68.3	66	1.2	10	Snd Lvl	68.3	0.0	8	-8.0
Receiver19	19	1	65.2	68.0	66	2.8	10	Snd Lvl	68.0	0.0	8	-8.0
Receiver20	20	1	48.9	62.0	66	13.1	10	Sub'l Inc	62.0	0.0	8	-8.0
Receiver21	21	1	52.4	61.3	66	8.9	10	----	61.3	0.0	8	-8.0
Receiver22	22	1	60.1	64.3	66	4.2	10	----	64.3	0.0	8	-8.0
Receiver23	23	1	60.3	63.4	66	3.1	10	----	63.4	0.0	8	-8.0
Receiver24	24	1	65.9	64.8	66	-1.1	10	----	64.8	0.0	8	-8.0

Dwelling Units	# DUs	Noise Reduction		
		Min	Avg	Max
		dB	dB	dB
All Selected	24	0.0	0.0	0.0
All Impacted	10	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

HMB 31 August 2010
mdg TNM 2.5
Calculated with TNM 2.5

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: 1135
RUN: SR 126 Memorial Blvd. Alternative B
BARRIER DESIGN: INPUT HEIGHTS
ATMOSPHERICS: 68 deg F, 50% RH

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

Receiver Name	No.	#DUs	Existing LAeq1h	No Barrier LAeq1h Calculated	Crit'n	Increase over existing Calculated	Crit'n Sub'l Inc	With Barrier Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Noise Reduction Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
Receiver1	1	1	63.2	64.6	66	1.4	10	----	64.6	0.0	8	-8.0
Receiver2	2	1	60.1	65.0	66	4.9	10	----	65.0	0.0	8	-8.0
Receiver3	3	1	63.0	66.0	66	3.0	10	Snd Lvl	66.0	0.0	8	-8.0
Receiver4	4	1	73.1	68.7	66	-4.4	10	Snd Lvl	68.7	0.0	8	-8.0
Receiver5	5	1	57.2	64.1	66	6.9	10	----	64.1	0.0	8	-8.0
Receiver6	6	1	58.9	67.1	66	8.2	10	Snd Lvl	67.1	0.0	8	-8.0
Receiver7	7	1	43.8	56.5	66	12.7	10	Sub'l Inc	56.5	0.0	8	-8.0
Receiver8	8	1	43.6	55.2	66	11.6	10	Sub'l Inc	55.2	0.0	8	-8.0
Receiver9	9	1	61.2	61.8	66	0.6	10	----	61.8	0.0	8	-8.0
Receiver10	10	1	57.8	64.1	66	6.3	10	----	64.1	0.0	8	-8.0
Receiver11	11	1	58.2	60.7	66	2.5	10	----	60.7	0.0	8	-8.0
Receiver12	12	1	54.9	59.9	66	5.0	10	----	59.9	0.0	8	-8.0
Receiver13	13	1	60.2	65.7	66	5.5	10	----	65.7	0.0	8	-8.0
Receiver14	14	1	69.9	68.1	66	-1.8	10	Snd Lvl	68.1	0.0	8	-8.0
Receiver15	15	1	65.2	66.9	66	1.7	10	Snd Lvl	66.9	0.0	8	-8.0
Receiver16	16	1	62.4	66.4	66	4.0	10	Snd Lvl	66.4	0.0	8	-8.0
Receiver17	17	1	55.3	65.3	66	10.0	10	Sub'l Inc	65.3	0.0	8	-8.0
Receiver18	18	1	67.1	65.2	66	-1.9	10	----	65.2	0.0	8	-8.0
Receiver19	19	1	65.2	67.0	66	1.8	10	Snd Lvl	67.0	0.0	8	-8.0
Receiver20	20	1	48.9	59.4	66	10.5	10	Sub'l Inc	59.4	0.0	8	-8.0
Receiver21	21	1	52.4	59.8	66	7.4	10	----	59.8	0.0	8	-8.0
Receiver22	22	1	60.1	63.1	66	3.0	10	----	63.1	0.0	8	-8.0
Receiver23	23	1	60.3	62.9	66	2.6	10	----	62.9	0.0	8	-8.0
Receiver24	24	1	65.9	64.3	66	-1.6	10	----	64.3	0.0	8	-8.0

Dwelling Units	# DUs	Noise Reduction		
		Min	Avg	Max
		dB	dB	dB
All Selected	24	0.0	0.0	0.0
All Impacted	11	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

HMB 24 September 2010
mdg TNM 2.5
Calculated with TNM 2.5
RESULTS: SOUND LEVELS
PROJECT/CONTRACT: 1135
RUN: SR 126 Memorial Blvd. Alternative A
BARRIER DESIGN: INPUT HEIGHTS
ATMOSPHERICS: 68 deg F, 50% RH

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

Receiver Name	No.	#DUs	Existing LAeq1h	No Barrier LAeq1h Calculated	Crit'n	Increase over existing Calculated	Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Noise Reduction Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
50 feet	26	1	0.0	69.2	66	69.2	10	Snd Lvl	69.2	0.0	8	-8.0
100 feet	27	1	0.0	66.2	66	66.2	10	Snd Lvl	66.2	0.0	8	-8.0
250 feet	28	1	0.0	60.8	66	60.8	10	----	60.8	0.0	8	-8.0
500 feet	29	1	0.0	60.0	66	60.0	10	----	60.0	0.0	8	-8.0

Dwelling Units	# DUs	Noise Reduction Min	Avg	Max
		dB	dB	dB
All Selected	4	0.0	0.0	0.0
All Impacted	2	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

Appendix D
Mobile Source Air Toxics (MSAT) Analysis

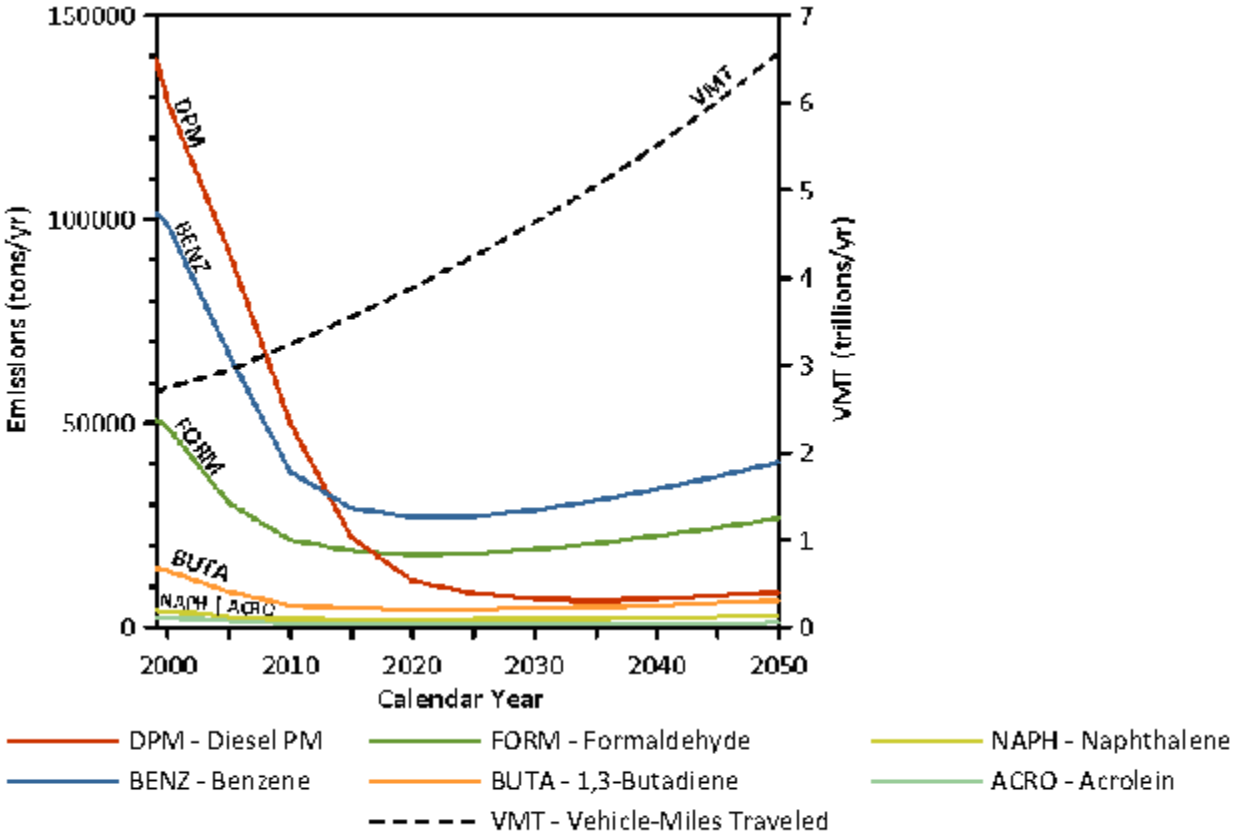
Mobile Source Air Toxics Discussion

Background

Controlling air toxic emissions became a national priority with the passage of the Clean Air Act Amendments (CAAA) of 1990, whereby Congress mandated that the U.S. Environmental Protection Agency (EPA) regulate 188 air toxics, also known as hazardous air pollutants. The EPA has assessed this expansive list in their latest rule on the Control of Hazardous Air Pollutants from Mobile Sources (Federal Register, Vol. 72, No. 37, page 8430, February 26, 2007) and identified a group of 93 compounds emitted from mobile sources that are listed in their Integrated Risk Information System (IRIS) (http://www.epa.gov/ncea/iris/index.html). In addition, EPA identified seven compounds with significant contributions from mobile sources that are among the national and regional-scale cancer risk drivers from their 1999 National Air Toxics Assessment (NATA) (http://www.epa.gov/ttn/atw/nata1999/). These are acrolein, benzene, 1,3-butadiene, diesel particulate matter plus diesel exhaust organic gases (diesel PM), formaldehyde, naphthalene, and polycyclic organic matter. While FHWA considers these the priority mobile source air toxics, the list is subject to change and may be adjusted in consideration of future EPA rules.

The 2007 EPA rule mentioned above requires controls that will dramatically decrease MSAT emissions through cleaner fuels and cleaner engines. According to an FHWA analysis using EPA's MOBILE6.2 model, even if vehicle activity (vehicle-miles traveled, VMT) increases by 145 percent as assumed, a combined reduction of 72 percent in the total annual emission rate for the priority MSAT is projected from 1999 to 2050, as shown in Figure 1.

Figure 1 National MSAT Emission Trends, 1999 – 2050, for Vehicles Operating on Roadways, Using EPA's MOBILE6.2 Model



Note: (1) Annual emissions of polycyclic organic matter are projected to be 561 tons/yr for 1999, decreasing to 373 tons/yr for 2050.

(2) Trends for specific locations may be different, depending on locally derived information representing vehicle-miles travelled, vehicle speeds, vehicle mix, fuels, emission control programs, meteorology, and other factors

Source: U.S. Environmental Protection Agency. MOBILE6.2 Model run 20 August 2009.

Air toxics analysis is a continuing area of research. While much work has been done to assess the overall health risk of air toxics, many questions remain unanswered. In particular, the tools and techniques for assessing project-specific health outcomes as a result of lifetime MSAT exposure remain limited. These limitations impede the ability to evaluate how the potential health risks posed by MSAT exposure should be factored into project-level decision-making within the context of the National Environmental Policy Act (NEPA).

Nonetheless, air toxics concerns continue to be raised on highway projects during the NEPA process. Even as the science emerges, we are duly expected by the public and other agencies to address MSAT impacts in our environmental documents. The FHWA, EPA, the Health Effects Institute, and others have funded and conducted research studies to try to more clearly define potential risks from MSAT emissions associated with highway projects. The FHWA will continue to monitor the developing research in this emerging field.

NEPA Context
The NEPA requires, to the fullest extent possible, that the policies, regulations, and laws of the Federal Government be interpreted and administered in accordance with its environmental protection goals. The NEPA also requires Federal agencies to use an interdisciplinary approach in planning and decision-making for any action that adversely impacts the environment. The NEPA requires and FHWA is committed to the examination and avoidance of potential impacts to the natural and human environment when considering approval of proposed transportation projects. In addition to evaluating the potential environmental effects, we must also take into account the need for safe and efficient transportation in reaching a decision that is in the best overall public interest. The FHWA policies and procedures for implementing NEPA is prescribed by regulation in 23 CFR § 771.

ANALYSIS of MSAT in NEPA Documents
The FHWA developed a tiered approach for analyzing MSAT in NEPA documents, depending on specific project circumstances. The FHWA has identified three levels of analysis:

1. No analysis for projects with no potential for meaningful MSAT effects;
2. Qualitative analysis for projects with low potential MSAT effects; or
3. Quantitative analysis to differentiate alternatives for projects with higher potential MSAT effects.

For projects warranting MSAT analysis, the seven priority MSAT should be analyzed.

(1) Projects with No Meaningful Potential MSAT Effects or Exempt Projects.
The types of projects included in this category are:

- Projects qualifying as a categorical exclusion under 23 CFR 771.117(c);
- Projects exempt under the Clean Air Act conformity rule under 40 CFR 93.126; or
- Other projects with no meaningful impacts on traffic volumes or vehicle mix.

For projects that are categorically excluded under 23 CFR 771.117(c), or are exempt from conformity requirements under the Clean Air Act pursuant to 40 CFR 93.126, no analysis or discussion of MSAT is necessary. Documentation sufficient to demonstrate that the project qualifies as a categorical exclusion and/or exempt project will suffice. For other projects with no or negligible traffic impacts, regardless of the class of NEPA environmental document, no MSAT analysis is required[1]. However, the project record should document the basis for the determination of "no meaningful potential impacts" with a brief description of the factors considered.

(2) Projects with Low Potential MSAT Effects
The types of projects included in this category are those that serve to improve operations of highway, transit or freight without adding substantial new capacity or without creating a facility that is likely to meaningfully increase MSAT emissions. This category covers a broad range of projects.

We anticipate that most highway projects that need an MSAT assessment will fall into this category. Any projects not meeting the criteria in subsection (1) or subsection (3) as follows should be included in this category. Examples of these types of projects are

minor widening projects; new interchanges, such as those that replace a signalized intersection on a surface street; or projects where design year traffic is projected to be less than 140,000 to 150,000 annual average daily traffic (AADT).

For these projects, a qualitative assessment of emissions projections should be conducted. This qualitative assessment would compare, in narrative form, the expected effect of the project on traffic volumes, vehicle mix, or routing of traffic and the associated changes in MSAT for the project alternatives, based on VMT, vehicle mix, and speed. It would also discuss national trend data projecting substantial overall reductions in emissions due to stricter engine and fuel regulations issued by EPA. Because the emission effects of these projects are low, we expect there would be no appreciable difference in overall MSAT emissions among the various alternatives. In addition, quantitative analysis of these types of projects will not yield credible results that are useful to project-level decision-making due to the limited capabilities of the transportation and emissions forecasting tools.

Appendix B includes example language for a qualitative assessment, with specific examples for four types of projects: (1) a minor widening project; (2) a new interchange connecting an existing roadway with a new roadway; (3) a new interchange connecting new roadways; and (4) minor improvements or expansions to intermodal centers or other projects that affect truck traffic. The information provided in Appendix B must be modified to reflect the local and project-specific situation.

(3) Projects with Higher Potential MSAT Effects

This category includes projects that have the potential for meaningful differences in MSAT emissions among project alternatives. We expect a limited number of projects to meet this two-pronged test. To fall into this category, a project must:

- Create or significantly alter a major intermodal freight facility that has the potential to concentrate high levels of diesel particulate matter in a single location; or
- Create new or add significant capacity to urban highways such as interstates, urban arterials, or urban collector-distributor routes with traffic volumes where the AADT is projected to be in the range of 140,000 to 150,000 [2] or greater by the design year;

And also

- Proposed to be located in proximity to populated areas.

Projects falling within this category should be more rigorously assessed for impacts. If a project falls within this category, you should contact the Office of Natural and Human Environment (HEPN) and the Office of Project Development and Environmental Review (HEPE) in FHWA Headquarters for assistance in developing a specific approach for assessing impacts. This approach would include a quantitative analysis to forecast local-specific emission trends of the priority MSAT for both Build Alternatives, to use as a basis of comparison. This analysis also may address the potential for cumulative impacts, where appropriate, based on local conditions. How and when cumulative impacts should be considered would be addressed as part of the assistance outlined above.

If the analysis for a project in this category indicates meaningful differences in levels of MSAT emissions, mitigation options should be identified and considered. You should also consult with HEPN and HEPE if you have a project that does not fall within any of the types of projects listed above, but you think has the potential to substantially increase future MSAT emissions. Although not required, projects with high potential for litigation on air toxics issues may also benefit from a more rigorous quantitative analysis to enhance their defensibility in court.

Qualitative Assessment of SR 126 MSAT

For Alternatives A and B in this analysis, the amount of MSAT emitted would be proportional to the vehicle miles traveled, or VMT, assuming that other variables such as fleet mix are the same for both alternatives. The VMT estimated for each of the Build Alternatives is slightly higher than that for the No Build Alternative, because the additional capacity increases the efficiency of the roadway and attracts rerouted trips from elsewhere in the transportation network. Refer to Table 1 on the following page. This increase in VMT would lead to higher MSAT emissions for the preferred action alternative along the highway corridor, along with a corresponding decrease in MSAT emissions along the parallel routes. The emissions increase is offset somewhat by lower MSAT emission rates due to increased speeds; according to EPA's MOBILE6.2 model, emissions of all of the priority MSAT except for diesel particulate matter decrease as speed increases. The extent to which these speed-related emissions decreases will offset VMT-related emissions increases cannot be reliably projected due to the inherent deficiencies of technical models. Because the estimated VMT under each of the Alternatives are the same, it is expected there would be no appreciable difference in overall MSAT emissions among the various alternatives. Also, regardless of the alternative chosen, emissions will likely be lower than present levels in the design year as a result of EPA's national control programs that are projected to reduce annual MSAT emissions by 72 percent between 1999 and 2050. Local conditions may differ from these national projections in terms of fleet mix and turnover, VMT growth rates, and local control measures. However, the magnitude of the EPA-projected reductions is so great (even after accounting for VMT growth) that MSAT emissions in the study area are likely to be lower in the future in nearly all cases.

The additional travel lanes contemplated as part of the project alternatives will have the effect of moving some traffic closer to nearby homes, schools, and businesses; therefore, under both alternatives there may be localized areas where ambient concentrations of MSAT could be higher under certain Build Alternatives than the No Build Alternative. The localized increases in MSAT concentrations would likely be most pronounced along the expanded roadway sections that would be built between SR 93 and Harbor Chapel Road, under Alternatives A and B. However, the magnitude and the duration of these potential increases compared to the No-Build alternative cannot be reliably quantified due to incomplete or unavailable information in forecasting project-specific MSAT health impacts. In sum, when a highway is widened, the localized level of MSAT emissions for the Build Alternative could be higher relative to the No Build Alternative, but this could be offset due to increases in speeds and reductions in congestion (which are associated with lower MSAT emissions). Also, MSAT will be lower in other locations when traffic shifts away from them. However, on a regional basis, EPA's vehicle and fuel regulations, coupled with fleet turnover, will over time cause substantial reductions that, in almost all cases, will cause region-wide MSAT levels to be significantly lower than today.

Table 1 - Estimated ADT and VMT for Current and Future Years

Roadway	Existing ADT/VMT	2033 Build ADT/VMT
Section II (8.4 miles)	18,060/151,704	33,540/281,736

As shown above, the proposed project has relatively low traffic volumes and VMT. Project level analyses are for MSAT effects are not required for projects with negligible traffic impacts. The proposed facility is designed as an upgrade to the existing SR 126 facility with lane and shoulder widening and, as such, would not generate additional capacity on the roadway. Without adding substantial new capacity the facility would not generate meaningful increases in emissions of MSAT.

Incomplete or Unavailable Information

When an agency is evaluating reasonably foreseeable significant adverse effects on the human environment in an environmental impact statement and there is incomplete or unavailable information, the agency shall always make clear that such information is lacking.

a. If the incomplete information relevant to reasonably foreseeable significant adverse impacts is essential to a reasoned choice among alternatives and the overall costs of obtaining it are not exorbitant, the agency shall include the information in the environmental impact statement.
b. If the information relevant to reasonably foreseeable significant adverse impacts cannot be obtained because the overall costs of obtaining it are exorbitant or the means to obtain it are not known, the agency shall include within the environmental impact statement:
    1. a statement that such information is incomplete or unavailable;
    2. a statement of the relevance of the incomplete or unavailable information to evaluating reasonably foreseeable significant adverse impacts on the human environment;
    3. a summary of existing credible scientific evidence which is relevant to evaluating the reasonably foreseeable significant adverse impacts on the human environment; and
    4. the agency's evaluation of such impacts based upon theoretical approaches or research methods generally accepted in the scientific community. For the purposes of this section, "reasonably foreseeable" includes impacts that have catastrophic consequences, even if their probability of occurrence is low, provided that the analysis of the impacts is supported by credible scientific evidence, is not based on pure conjecture, and is within the rule of reason.
c. The amended regulation will be applicable to all environmental impact statements for which a Notice to Intent (40 CFR 1508.22) is published in the Federal Register on or after May 27, 1986. For environmental impact statements in progress, agencies may choose to comply with the requirements of either the original or amended regulation.

Incomplete or Unavailable Information for Project Specific MSAT Health Impacts Analysis

In FHWA's view, information is incomplete or unavailable to credibly predict the project-specific health impacts due to changes in MSAT emissions associated with a proposed set of highway alternatives. The outcome of such an assessment, adverse or not, would be influenced more by the uncertainty introduced into the process through assumption and speculation rather than any genuine insight into the actual health impacts directly attributable to MSAT exposure associated with a proposed action.

The U.S. Environmental Protection Agency (EPA) is responsible for protecting the public health and welfare from any known or anticipated effect of an air pollutant. They are the lead authority for administering the Clean Air Act and its amendments and have specific statutory obligations with respect to hazardous air pollutants and MSAT. The EPA is in the continual process of assessing human health effects, exposures, and risks posed by air pollutants. They maintain the Integrated Risk Information System (IRIS), which is "a compilation of electronic reports on specific substances found in the environment and their potential to cause human health effects" (EPA, http://www.epa.gov/ncea/iris/index.html). Each report contains assessments of non-cancerous and cancerous effects for individual compounds and quantitative estimates of risk levels from lifetime oral and inhalation exposures with uncertainty spanning perhaps an order of magnitude.

Other organizations are also active in the research and analyses of the human health effects of MSAT, including the Health Effects Institute (HEI). Two HEI studies are summarized in Appendix D of FHWA's Interim Guidance Update on Mobile source Air Toxic Analysis in NEPA Documents. Among the adverse health effects linked to MSAT compounds at high exposures are cancer in humans in occupational settings; cancer in animals; and irritation to the respiratory tract, including the exacerbation of asthma. Less obvious is the adverse human health effects of MSAT compounds at current environmental concentrations (HEI, http://pubs.healtheffects.org/view.php?id=282) or in the future as vehicle emissions substantially decrease (HEI, http://pubs.healtheffects.org/view.php?id=306).

The methodologies for forecasting health impacts include emissions modeling; dispersion modeling; exposure modeling; and then final determination of health impacts - each step in the process building on the model predictions obtained in the previous step. All are encumbered by technical shortcomings or uncertain science that prevents a more complete differentiation of the MSAT health impacts among a set of project alternatives. These difficulties are magnified for lifetime (i.e., 70 year) assessments, particularly because unsupportable assumptions would have to be made regarding changes in travel patterns and vehicle technology (which affects emissions rates) over that time frame, since such information is unavailable. The results produced by the EPA's MOBILE6.2 model, the California EPA's Emfac2007 model, and the EPA's DraftMOVES2009 model in forecasting MSAT emissions are highly inconsistent. Indications from the development of the MOVES model are that MOBILE6.2 significantly underestimates diesel particulate matter (PM) emissions and significantly overestimates benzene emissions.

Regarding air dispersion modeling, an extensive evaluation of EPA's guideline CAL3QHC model was conducted in an NCHRP study (http://www.epa.gov/scram001/dispersion_alt.htm#hyroad), which documents poor model performance at ten sites across the country - three where intensive monitoring

was conducted plus an additional seven with less intensive monitoring. The study indicates a bias of the CAL3QHC model to overestimate concentrations near highly congested intersections and underestimate concentrations near uncongested intersections. The consequence of this is a tendency to overstate the air quality benefits of mitigating congestion at intersections. Such poor model performance is less difficult to manage for demonstrating compliance with National Ambient Air Quality Standards for relatively short time frames than it is for forecasting individual exposure over an entire lifetime, especially given that some information needed for estimating 70-year lifetime exposure is unavailable. It is particularly difficult to reliably forecast MSAT exposure near roadways, and to determine the portion of time that people are actually exposed at a specific location.

There are considerable uncertainties associated with the existing estimates of toxicity of the various MSAT, because of factors such as low-dose extrapolation and translation of occupational exposure data to the general population, a concern expressed by HEI (http://pubs.healtheffects.org/view.php?id=282). As a result, there is no national consensus on air dose-response values assumed to protect the public health and welfare for MSAT compounds, and in particular for diesel PM. The EPA (http://www.epa.gov/risk/basicinformation.htm#g) and the HEI (http://pubs.healtheffects.org/getfile.php?u=395) have not established a basis for quantitative risk assessment of diesel PM in ambient settings.

There is also the lack of a national consensus on an acceptable level of risk. The current context is the process used by the EPA as provided by the Clean Air Act to determine whether more stringent controls are required in order to provide an ample margin of safety to protect public health or to prevent an adverse environmental effect for industrial sources subject to the maximum achievable control technology standards, such as benzene emissions from refineries. The decision framework is a two-step process. The first step requires EPA to determine a "safe" or "acceptable" level of risk due to emissions from a source, which is generally no greater than approximately 100 in a million. Additional factors are considered in the second step, the goal of which is to maximize the number of people with risks less than 1 in a million due to emissions from a source. The results of this statutory two-step process do not guarantee that cancer risks from exposure to air toxics are less than 1 in a million;in some cases, the residual risk determination could result in maximum individual cancer risks that are as high as approximately 100 in a million. In a June 2008 decision, the U.S. Court of Appeals for the District of Columbia Circuit upheld EPA's approach to addressing risk in its two step decision framework. Information is incomplete or unavailable to establish that even the largest of highway projects would result in levels of risk greater than safe or acceptable.

Because of the limitations in the methodologies for forecasting health impacts described, any predicted difference in health impacts between alternatives is likely to be much smaller than the uncertainties associated with predicting the impacts. Consequently, the results of such assessments would not be useful to decision makers, who would need to weigh this information against project benefits, such as reducing traffic congestion, accident rates, and fatalities plus improved access for emergency response, that are better suited for quantitative analysis.

Due to the limitations cited, a discussion such as the example provided in this Appendix (reflecting any local and project-specific circumstances), should be included regarding

incomplete or unavailable information in accordance with Council on Environmental Quality (CEQ) regulations [40 CFR 1502.22(b)]. The FHWA Headquarters and Resource Center staff Victoria Martinez (787) 766-5600 X231, Shari Schaftlein (202) 366-5570, and Michael Claggett (505) 820-2047, are available to provide guidance and technical assistance and support.

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[1]The types of projects categorically excluded under 23 CFR 771.117(d) or exempt from certain conformity requirements under 40 CFR 93.127 does not warrant an automatic exemption from an MSAT analysis, but they usually will have no meaningful impact.

[2]Using EPA's MOBILE6.2 emissions model, FHWA staff determined that this range of AADT would be roughly equivalent to the Clean Air Act definition of a major hazardous air pollutant (HAP) source, i.e., 25 tons/yr for all HAPs or 10 tons/yr for any single HAP. Significant variations in conditions such as congestion or vehicle mix could warrant a different range for AADT; if this range does not seem appropriate for your project please consult with the contacts from HEPN and HEPE identified in this memorandum.

Appendix E
Glossary

23 CFR 772 (Title 23, Code of Federal Regulations, Part 772) "Procedures for Abatement of Highway Traffic Noise and Construction Noise": FHWA regulations for highway traffic noise analysis and abatement during the planning and design of federally aided highway projects.

Abatement: any positive action taken to reduce the impact of highway traffic noise.

Abatement Measures: measures that must be considered in a traffic noise analysis when a highway project will result in a noise impact. These measures include:
- Traffic management
- Alteration of horizontal and vertical alignments
- Acquisition of real property to serve as a buffer zone
- Insulation of public use or nonprofit institutional structures
- Construction of noise barriers

Average Daily Traffic (ADT): the average 24-hour traffic count (vehicles per day). Typically, the total amount of traffic during a stated period (normally one year) divided by the number of days in that period. The ADT is only used as the basis for determining the "Design Hourly Volume" (DHV). The DHV is used to model noise levels.

A-Weighting (dBA): an adjustment in sound meters and traffic noise modeling software to ensure sound levels are measured/calculated in a manner that approximates the sounds that can be heard by the human ear. This is accomplished by suppressing the low and very high frequencies that cannot be heard by the human ear.

Benefitted Receiver: a receiver is "benefitted" if an abatement measure reduces the noise level at the receiver by at least 5 dBA, regardless of whether or not the receiver was "impacted." The total number of benefitted receivers is used to evaluate the cost effectiveness of an abatement measure (see "Reasonable").

Cost Effectiveness: see "Reasonable."

Decibel (dB): the basic unit for measuring sound pressure levels.

Design Hourly Volume (DHV): the traffic count (vehicles per hour) determined by applying the "K-factor" to the "Average Daily Traffic." The DHV is used to model noise levels.

Feasible: one of two criteria (see "Reasonable") used to evaluate a noise abatement measure. Generally, pertains to the ability of a noise abatement measure to provide a "substantial reduction" (at least 5 dBA) in noise levels, and deals primarily with engineering considerations.

Impact: when predicted traffic noise reaches a level that requires a consideration of noise abatement.

L_{eq} (Equivalent Noise Level): the equivalent steady-state sound level that, in a given time period, contains the same acoustic energy as a time-varying sound level during the same period.

Noise Abatement Criteria (NAC): absolute sound levels, provided by FHWA, that are used to determine when a noise impact occurs. They are not used as a design goal for a noise abatement measure.

Noise Barrier: typically, a solid wall-like structure located between the noise source (traffic) and the impacted receiver (human activity area) to reduce noise levels. The construction of a noise barrier is one of the abatement measures that must be considered when a traffic noise analysis indicates that a highway project will result in a noise impact.

Reasonable: one of two criteria (see "Feasible") used to evaluate a noise abatement measure. Generally, pertains to the cost effectiveness of a noise abatement measure and the views/desires of the public.

Receiver: the specific location of an outdoor area where frequent human activity occurs that might be impacted by highway traffic noise and may benefit from reduced noise levels. If no outdoor location can be identified, an interior location may be used.

Appendix B
Design Year Traffic Data

KINGSPORT METROPOLITAN PLANNING ORGANIZATION
TENNESSEE: KINGSPORT, SULLIVAN COUNTY, HAWKINS COUNTY, MOUNT CARMEL, CHURCH HILL
VIRGINIA: SCOTT COUNTY, WEBER CITY, GATE CITY

October 19, 2012

Steve Allen, Director
TDOT – Project Management
Suite 900, James K. Polk Bldg.
505 Deaderick Street
Nashville, Tn. 37243

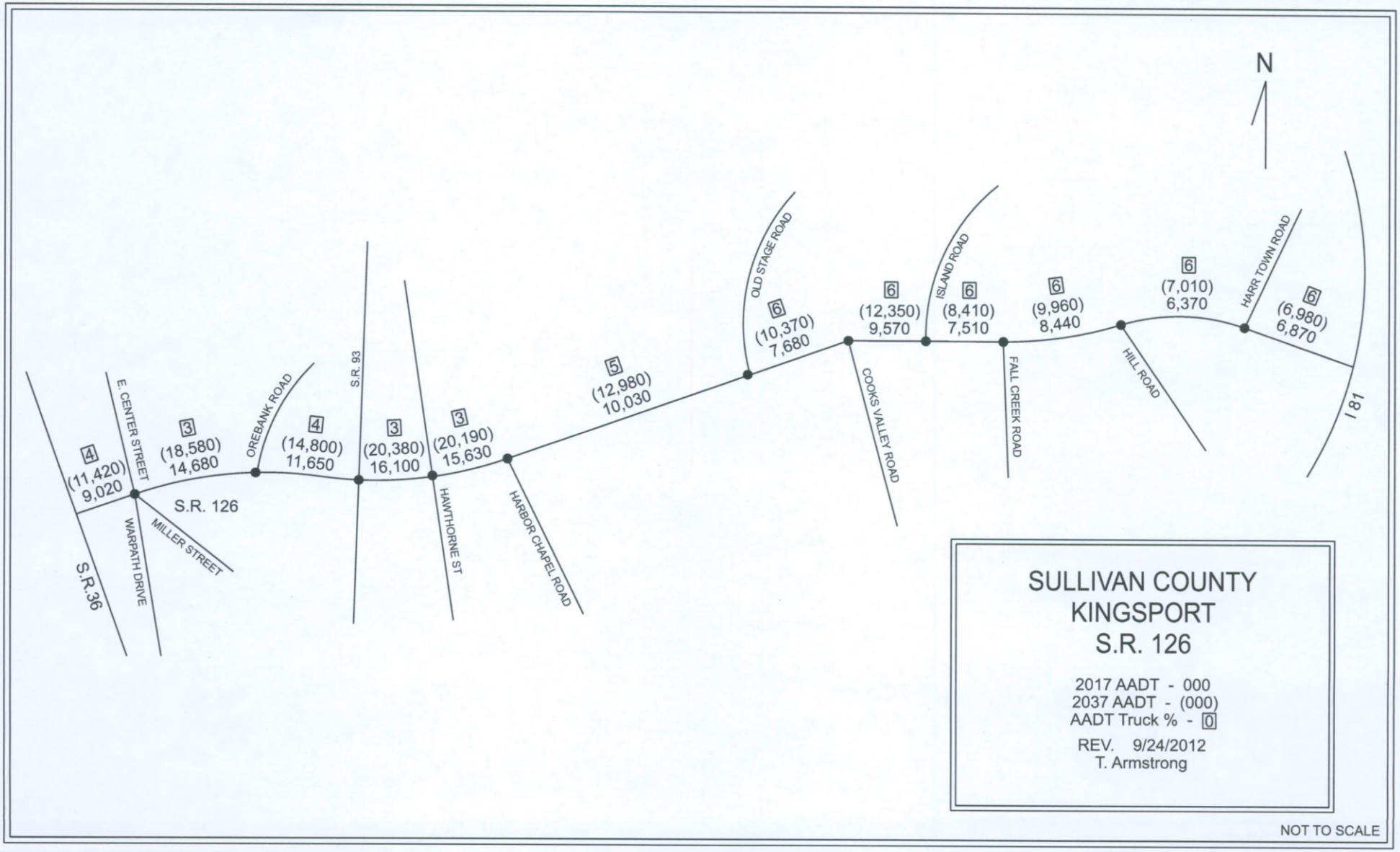
Dear Steve:

We have reviewed the most recent traffic numbers for the State Route 126 project. As we understand it, new traffic counts for all sections of the roadway were conducted by TDOT and subsequently programmed in to our newly completed travel demand model. The model was developed for the recently adopted Kingsport MPO Area Long-Range (Year 2035) Plan. It is our estimation that new counts and projections incorporate recent traffic trends that are a result of recessionary conditions in our areas, which has created stagnate development in and around the traffic analysis zones that generate traffic on State Route 126. We expect this to change moderately once economic conditions improve (this supports the land use element in the long-range plan). We know TDOT's process looks at long-term trends in traffic counts and thus the recent counts are blended or "averaged" in. With this is mind, we hereby concur with the traffic projections that TDOT has developed in the latest model run and report submitted to us a few days ago. Thanks for good work on this important project. In addition, if you need further information please feel free to call us (423) 224-2677.

Sincerely,

William A. Albright, Transportation Planning Manager
Kingsport Tn/Va MPO

225 West Center Street – Kingsport, Tennessee 37660-4237 – Phone (423) 229-9400 Fax (423) 224-2590
www.ci.kingsport.tn.us

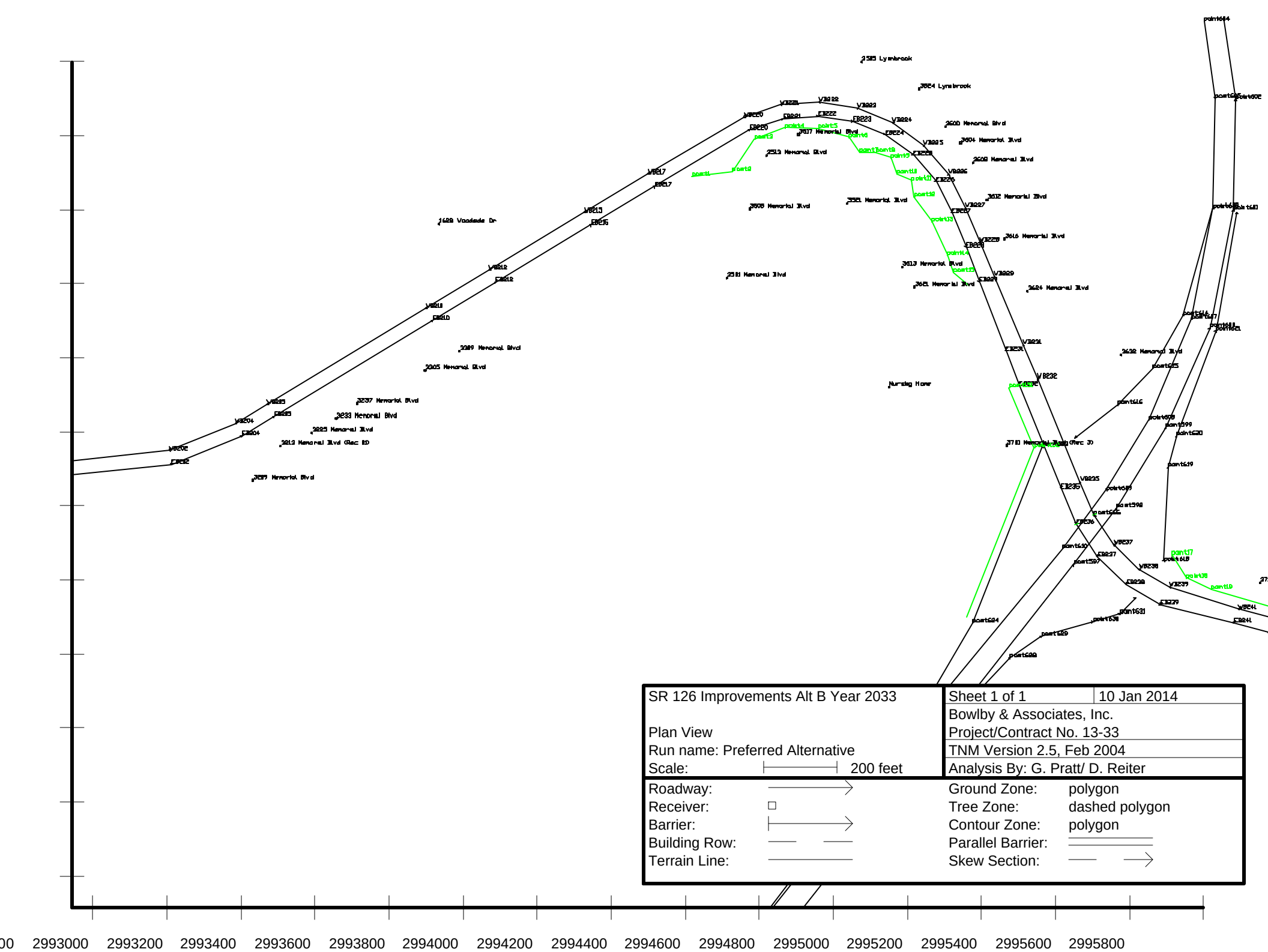

N
4
(11,420)
9,020
E. CENTER STREET
3
(18,580)
14,680
OREBANK ROAD
4
(14,800)
11,650
S.R. 93
3
(20,380)
16,100
3
(20,190)
15,630
5
(12,980)
10,030
OLD STAGE ROAD
6
(10,370)
7,680
6
(12,350)
9,570
ISLAND ROAD
6
(8,410)
7,510
6
(9,960)
8,440
6
(7,010)
6,370
HARR TOWN ROAD
6
(6,980)
6,870
I 81
S.R. 126
S.R.36
WARPATH DRIVE
MILLER STREET
HAWTHORNE ST
HARBOR CHAPEL ROAD
COOKS VALLEY ROAD
FALL CREEK ROAD
HILL ROAD
SULLIVAN COUNTY
KINGSPORT
S.R. 126
2017 AADT - 000
2037 AADT - (000)
AADT Truck % - 0
REV. 9/24/2012
T. Armstrong
NOT TO SCALE

SR 126 Improvements, Sullivan County

Design Year 2037 Traffic Volumes

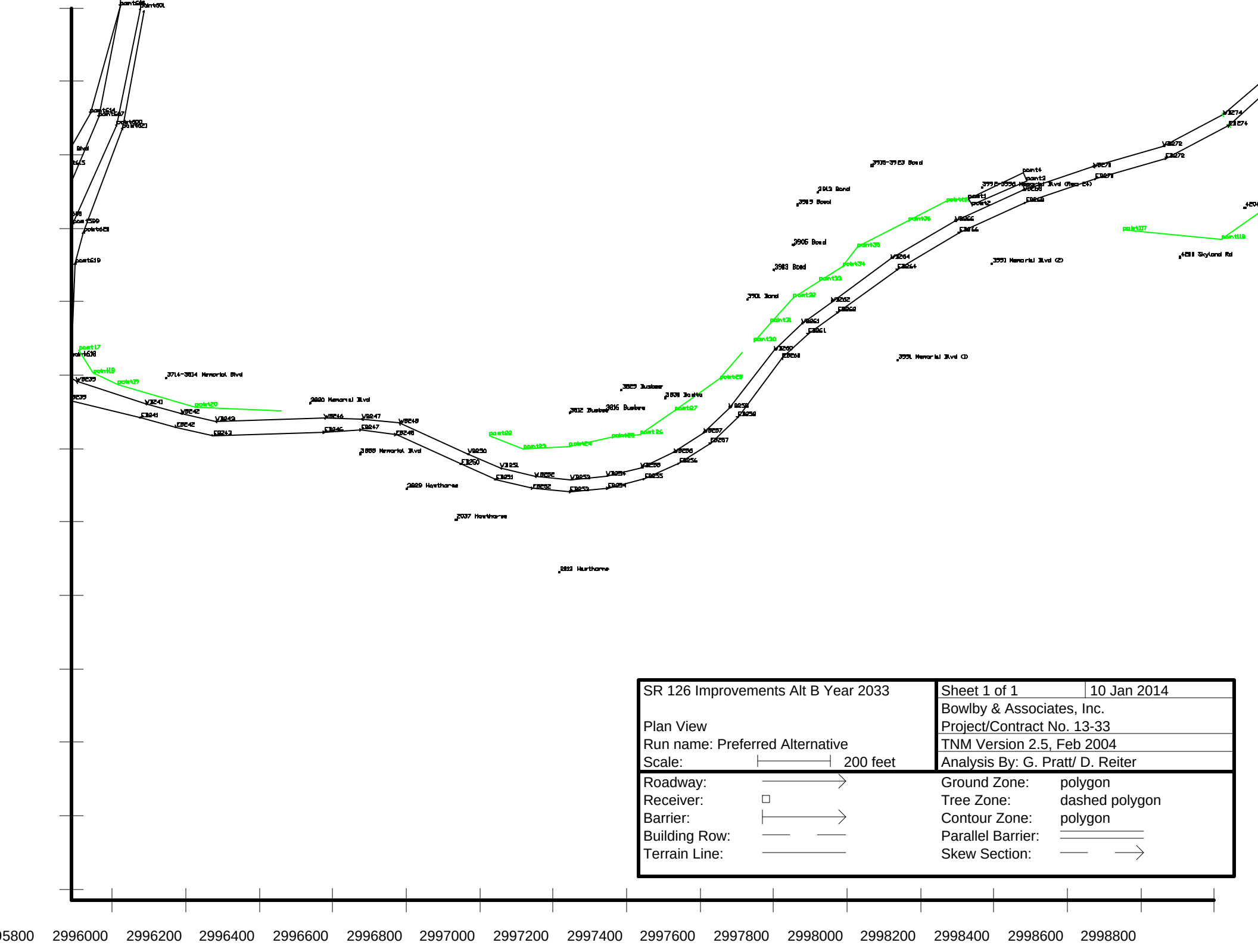
From	*To*	*AADT*	*AADT Trucks*	*DHV Trucks*	*Speed*	*Directional*			
						Total	*Autos*	*MTs*	*HTs*
East Center Street	Orebank Road	18,580	3.0%	2.0%	35	836	819	4	13
Orebank Road	SR 93	14,800	4.0%	2.7%	35	666	648	4	13
SR 93	Hawthorne Street	20,380	3.0%	2.0%	35	917	899	5	14
Hawthorne Street	Harbor Chapel Road	20,190	3.0%	2.0%	35	909	890	5	14
Harbor Chapel Road	Old Stage Road	12,980	5.0%	3.3%	45	584	565	5	15
Old Stage Road	Cooks Valley Road	10,370	6.0%	4.0%	45	467	448	5	14
Cooks Valley Road	Island Road	12,350	6.0%	4.0%	45	556	534	6	17
Island Road	Fall Creek Road	8,410	6.0%	4.0%	45	378	363	4	11
Fall Creek Road	Hill Road	9,960	6.0%	4.0%	45	448	430	4	13
Hill Road	Harr Town Road	7,010	6.0%	4.0%	45	315	303	3	9
Harr Town Road	I-81	6,980	6.0%	4.0%	45	314	302	3	9
Interchange Ramps (One-Lane) [(1)]		7,400	6.0%	4.0%	---	---	---	---	---
Interchange Ramps (Two-Lanes) [(1)]		14,900	6.0%	4.0%	---	---	---	---	---

Appendix C
TNM Plan Views



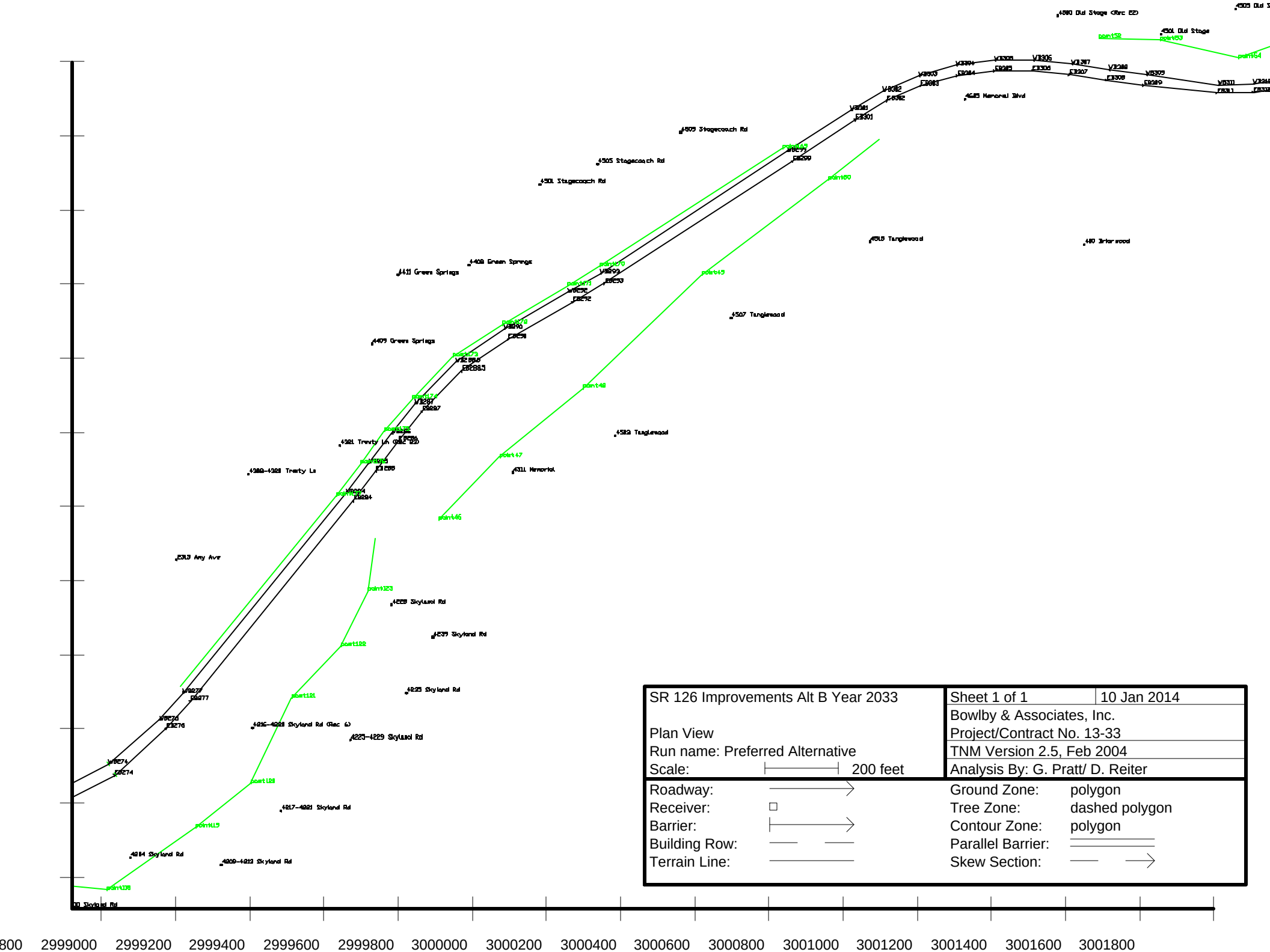
SR 126 Improvements Alt B Year 2033	Sheet 1 of 1 | 10 Jan 2014
	Bowlby & Associates, Inc.
Plan View	Project/Contract No. 13-33
Run name: Preferred Alternative	TNM Version 2.5, Feb 2004
Scale: 200 feet	Analysis By: G. Pratt/ D. Reiter

Roadway:		Ground Zone:	polygon
Receiver:	□	Tree Zone:	dashed polygon
Barrier:		Contour Zone:	polygon
Building Row:		Parallel Barrier:	
Terrain Line:		Skew Section:	



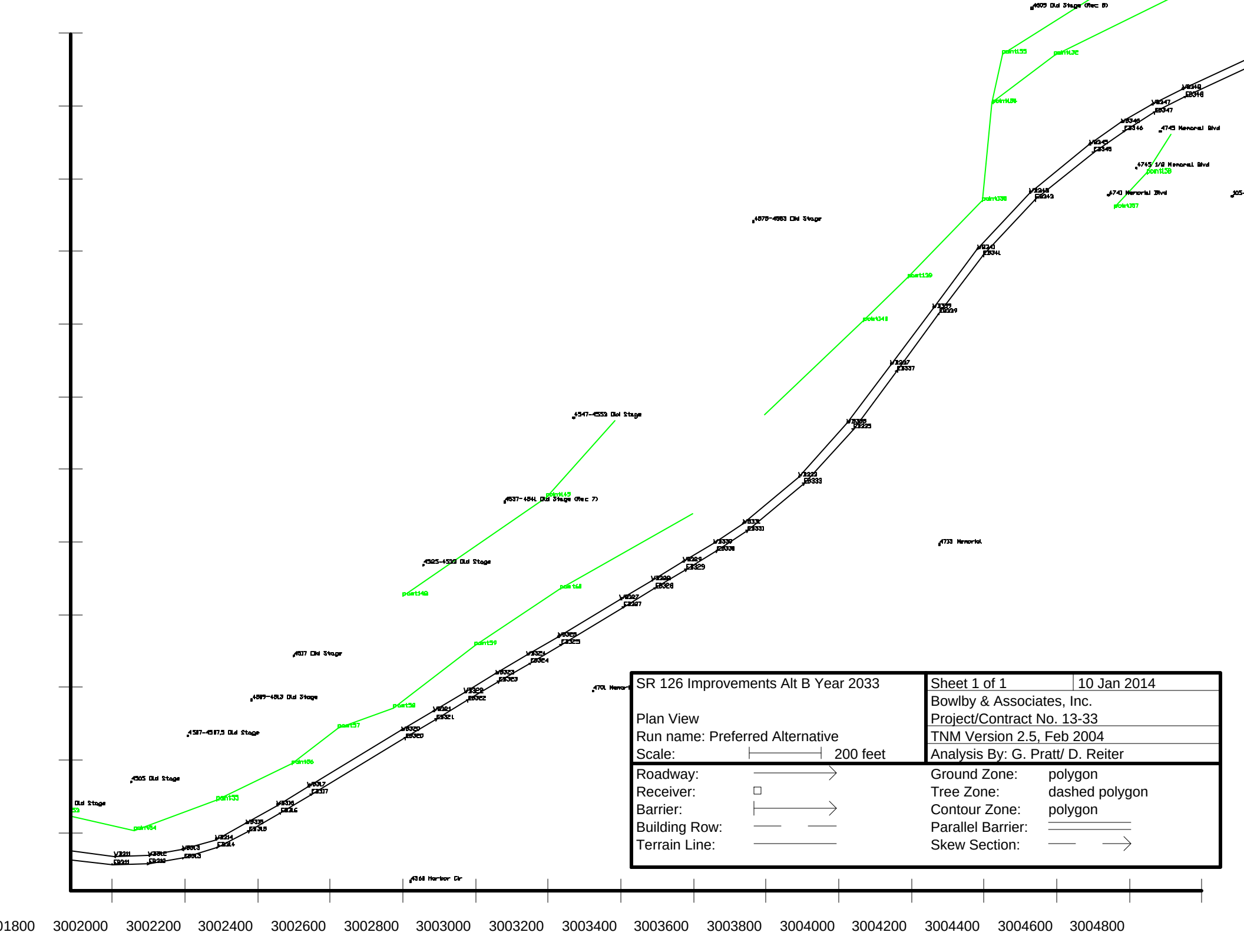
SR 126 Improvements Alt B Year 2033	Sheet 1 of 1 | 10 Jan 2014
	Bowlby & Associates, Inc.
Plan View	Project/Contract No. 13-33
Run name: Preferred Alternative	TNM Version 2.5, Feb 2004
Scale: 200 feet	Analysis By: G. Pratt/ D. Reiter

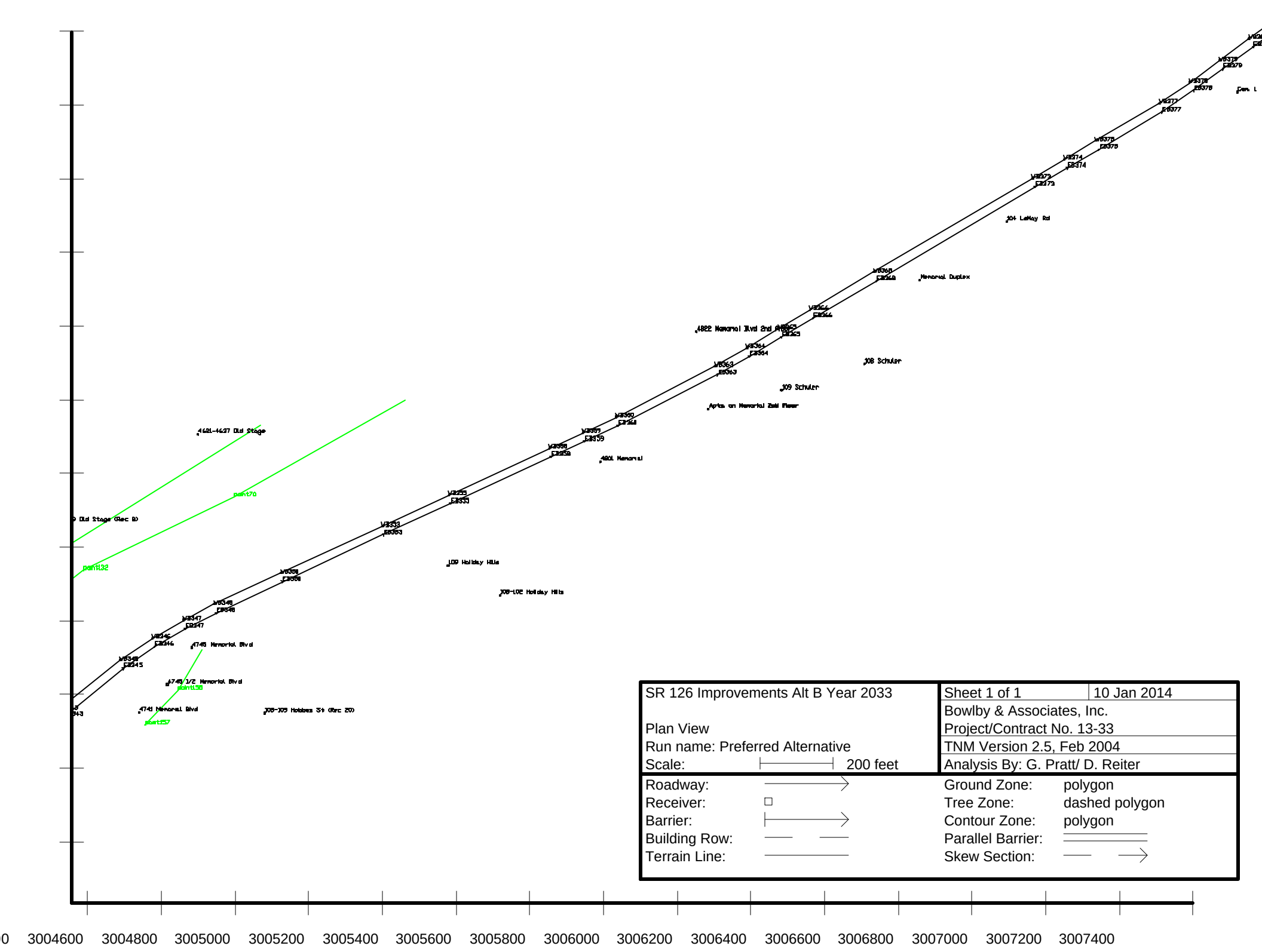
Roadway:		Ground Zone:	polygon
Receiver:	□	Tree Zone:	dashed polygon
Barrier:		Contour Zone:	polygon
Building Row:		Parallel Barrier:	
Terrain Line:		Skew Section:	



SR 126 Improvements Alt B Year 2033	Sheet 1 of 1 | 10 Jan 2014
	Bowlby & Associates, Inc.
Plan View	Project/Contract No. 13-33
Run name: Preferred Alternative	TNM Version 2.5, Feb 2004
Scale: 200 feet	Analysis By: G. Pratt/ D. Reiter

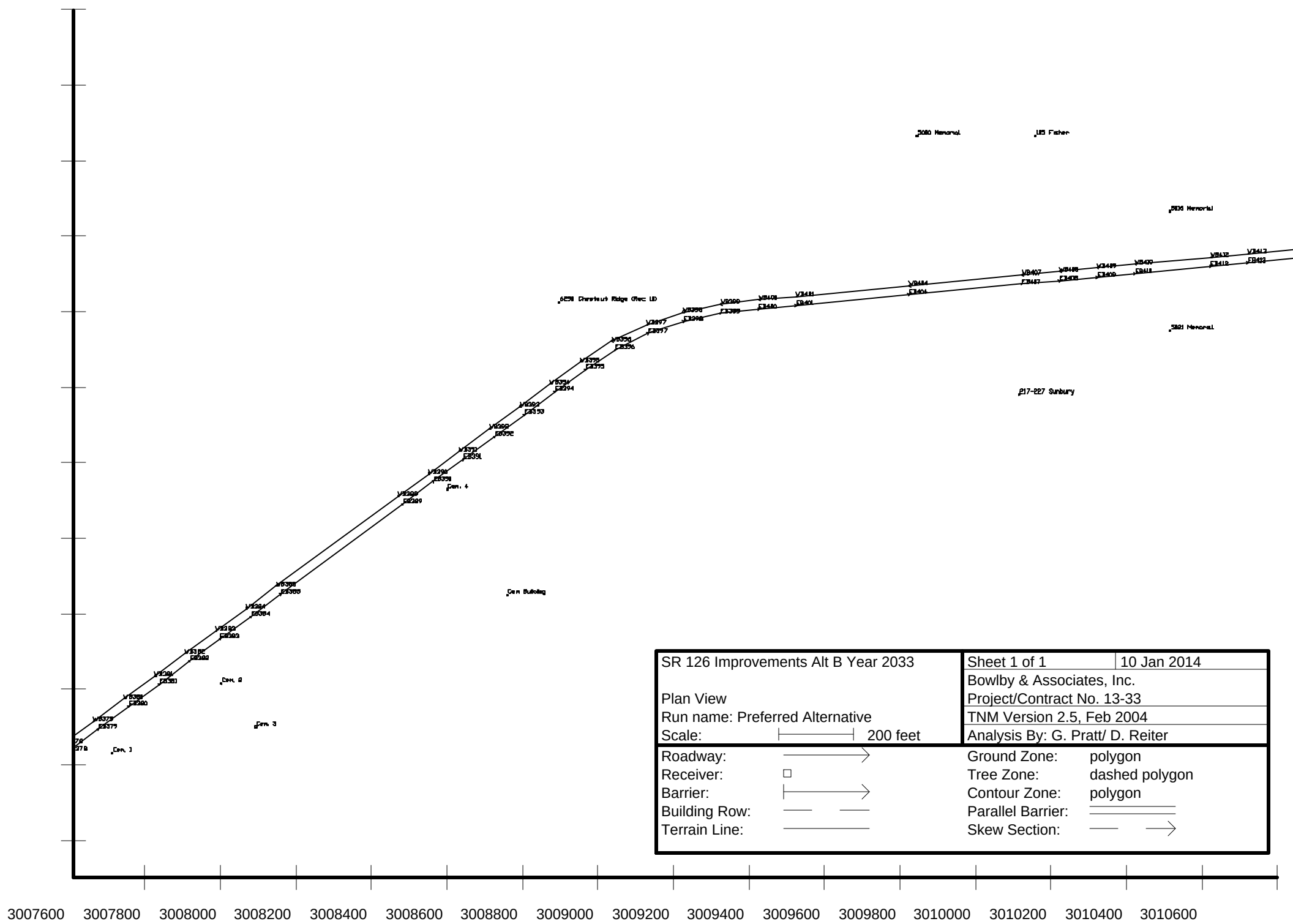
Roadway:		Ground Zone:	polygon
Receiver:	□	Tree Zone:	dashed polygon
Barrier:		Contour Zone:	polygon
Building Row:		Parallel Barrier:	
Terrain Line:		Skew Section:	

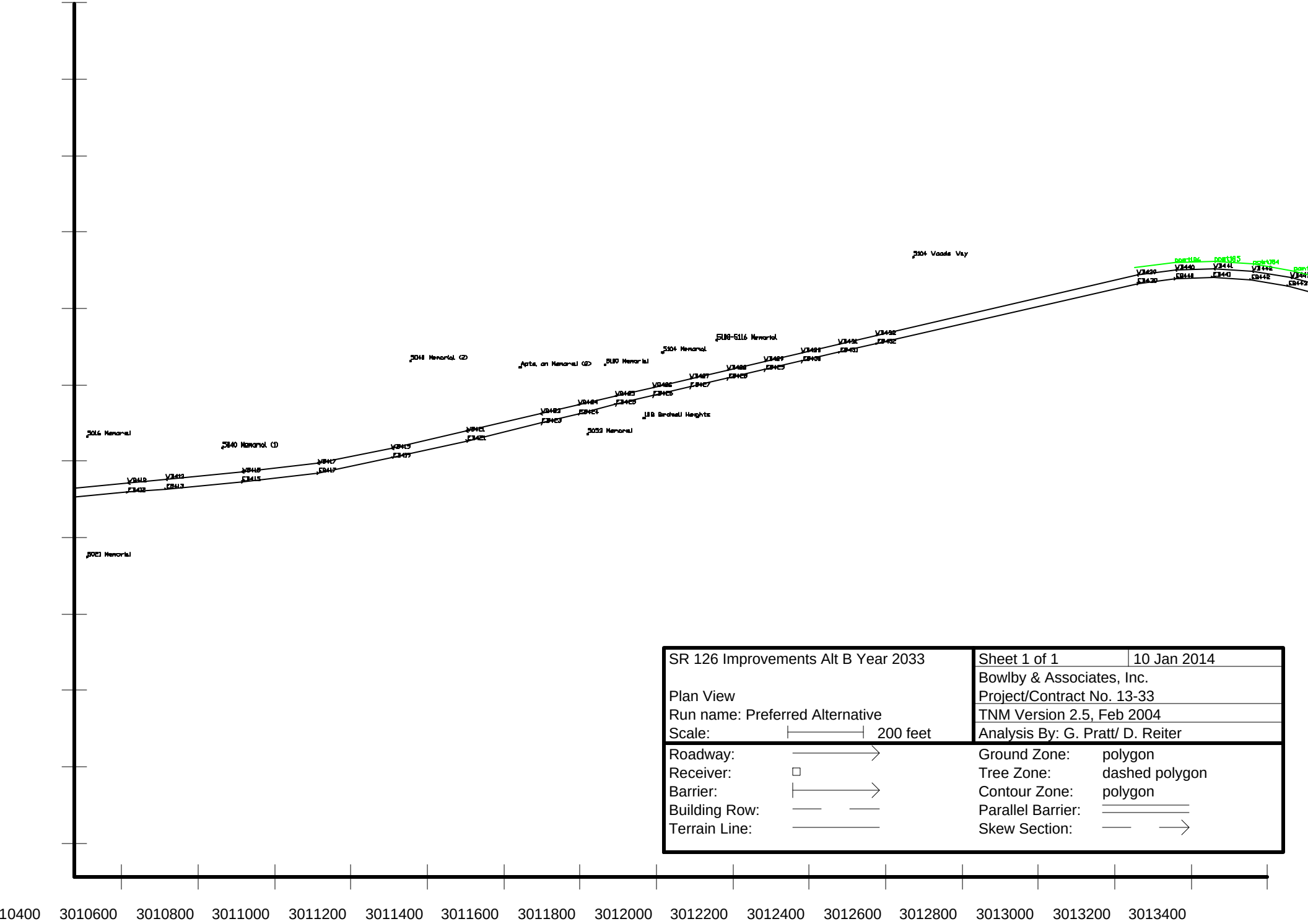

SR 126 Improvements Alt B Year 2033
Plan View
Run name: Preferred Alternative
Scale: 200 feet
Sheet 1 of 1
10 Jan 2014
Bowlby & Associates, Inc.
Project/Contract No. 13-33
TNM Version 2.5, Feb 2004
Analysis By: G. Pratt/ D. Reiter
Roadway:
Receiver:
Barrier:
Building Row:
Terrain Line:
Ground Zone: polygon
Tree Zone: dashed polygon
Contour Zone: polygon
Parallel Barrier:
Skew Section:
4745 Memorial Blvd
4741 Memorial Blvd
4733 Memorial
4368 Harbor Dr
3001800
3002000
3002200
3002400
3002600
3002800
3003000
3003200
3003400
3003600
3003800
3004000
3004200
3004400
3004600
3004800



SR 126 Improvements Alt B Year 2033	Sheet 1 of 1 | 10 Jan 2014
	Bowlby & Associates, Inc.
Plan View	Project/Contract No. 13-33
Run name: Preferred Alternative	TNM Version 2.5, Feb 2004
Scale: 200 feet	Analysis By: G. Pratt/ D. Reiter

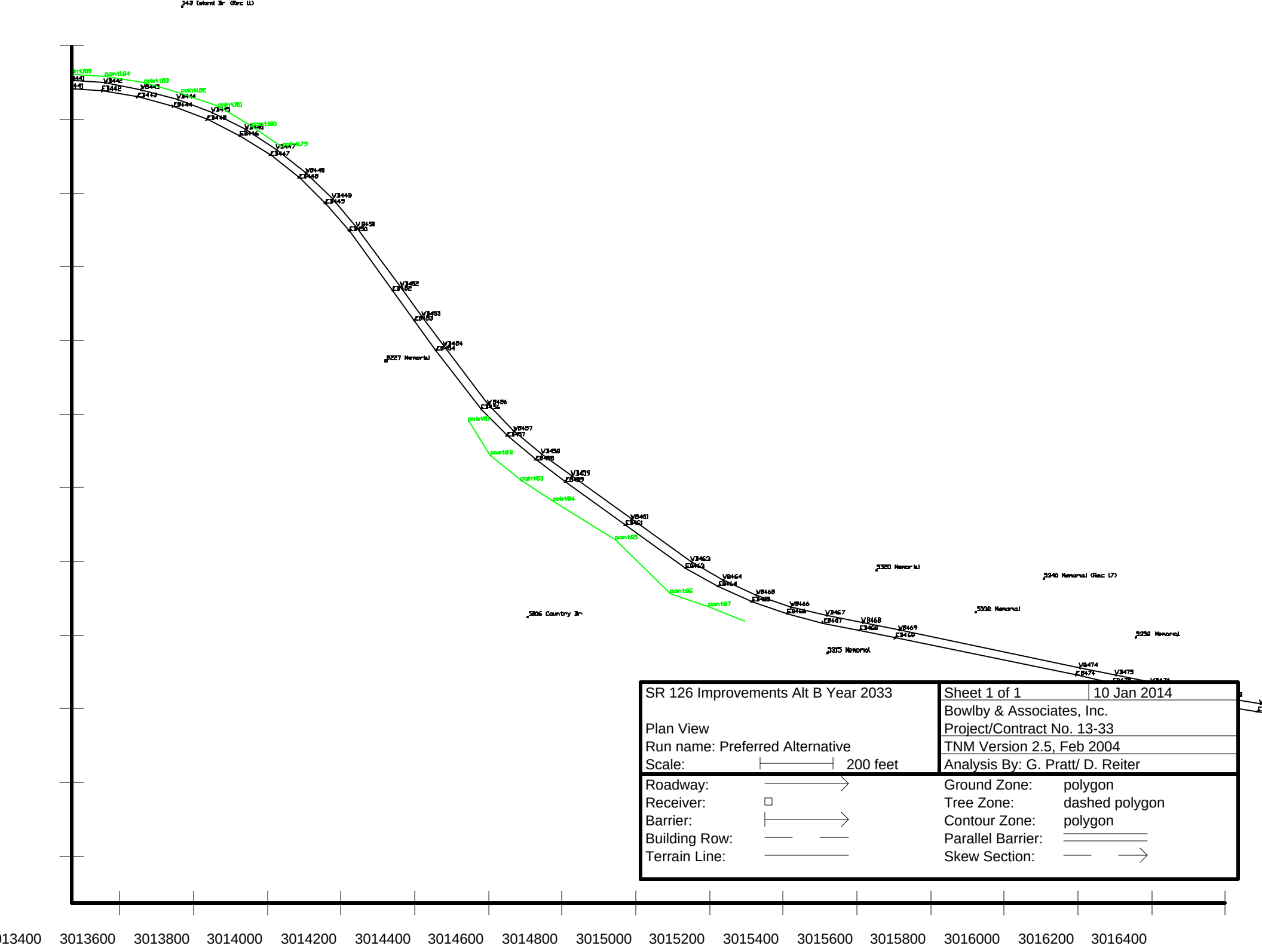
Roadway:		Ground Zone:	polygon
Receiver:	□	Tree Zone:	dashed polygon
Barrier:		Contour Zone:	polygon
Building Row:		Parallel Barrier:	
Terrain Line:		Skew Section:	


5080 Memorial
185 Fisher
5036 Memorial
6258 Chestnut Ridge (Rec LD)
5301 Memorial
217-227 Sunbury
Cen Building
Cen. 1
Cen. 2
Cen. 3
Cen. 4
SR 126 Improvements Alt B Year 2033
Plan View
Run name: Preferred Alternative
Scale: 200 feet
Sheet 1 of 1
10 Jan 2014
Bowlby & Associates, Inc.
Project/Contract No. 13-33
TNM Version 2.5, Feb 2004
Analysis By: G. Pratt/ D. Reiter
Roadway:
Receiver:
Barrier:
Building Row:
Terrain Line:
Ground Zone: polygon
Tree Zone: dashed polygon
Contour Zone: polygon
Parallel Barrier:
Skew Section:
3007600
3007800
3008000
3008200
3008400
3008600
3008800
3009000
3009200
3009400
3009600
3009800
3010000
3010200
3010400
3010600



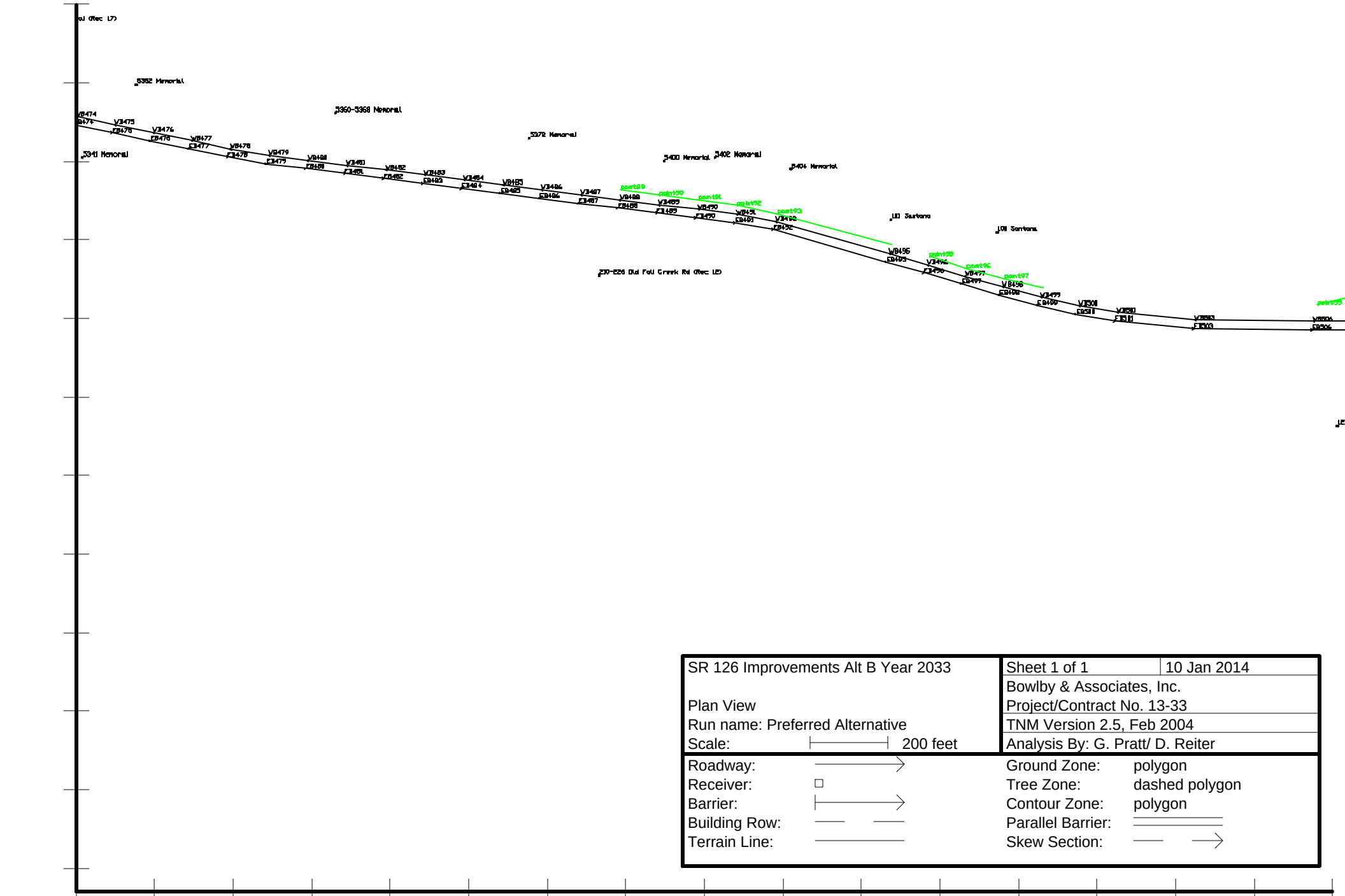
SR 126 Improvements Alt B Year 2033	Sheet 1 of 1 | 10 Jan 2014
	Bowlby & Associates, Inc.
Plan View	Project/Contract No. 13-33
Run name: Preferred Alternative	TNM Version 2.5, Feb 2004
Scale: 200 feet	Analysis By: G. Pratt/ D. Reiter

Roadway:		Ground Zone:	polygon
Receiver:		Tree Zone:	dashed polygon
Barrier:		Contour Zone:	polygon
Building Row:		Parallel Barrier:	
Terrain Line:		Skew Section:	



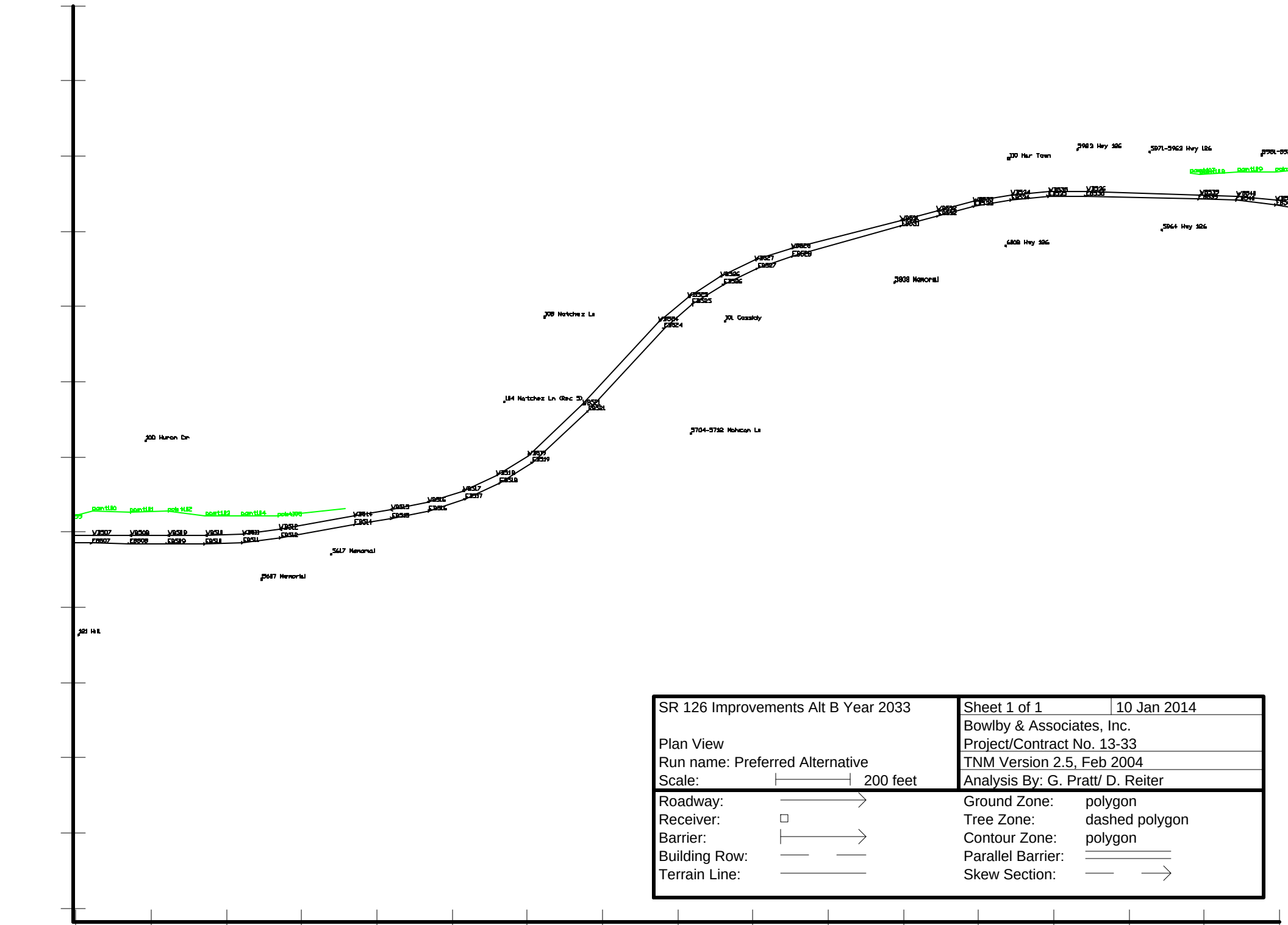
SR 126 Improvements Alt B Year 2033	Sheet 1 of 1 | 10 Jan 2014
	Bowlby & Associates, Inc.
Plan View	Project/Contract No. 13-33
Run name: Preferred Alternative	TNM Version 2.5, Feb 2004
Scale: 200 feet	Analysis By: G. Pratt/ D. Reiter

Roadway:		Ground Zone:	polygon
Receiver:	□	Tree Zone:	dashed polygon
Barrier:		Contour Zone:	polygon
Building Row:		Parallel Barrier:	
Terrain Line:		Skew Section:	



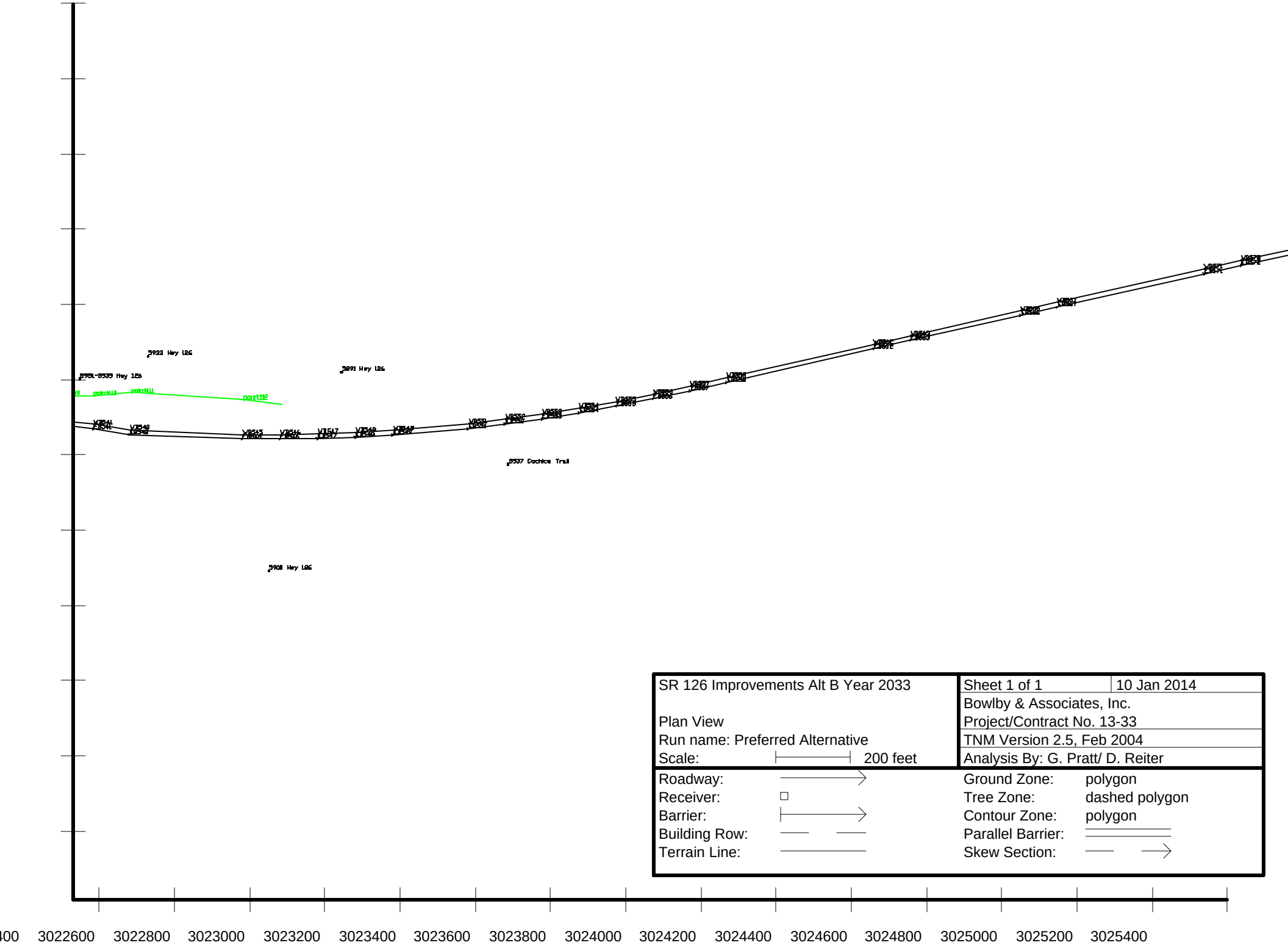
SR 126 Improvements Alt B Year 2033	Sheet 1 of 1 | 10 Jan 2014
	Bowlby & Associates, Inc.
Plan View	Project/Contract No. 13-33
Run name: Preferred Alternative	TNM Version 2.5, Feb 2004
Scale: 200 feet	Analysis By: G. Pratt/ D. Reiter

Roadway:		Ground Zone:	polygon
Receiver:		Tree Zone:	dashed polygon
Barrier:		Contour Zone:	polygon
Building Row:		Parallel Barrier:	
Terrain Line:		Skew Section:	



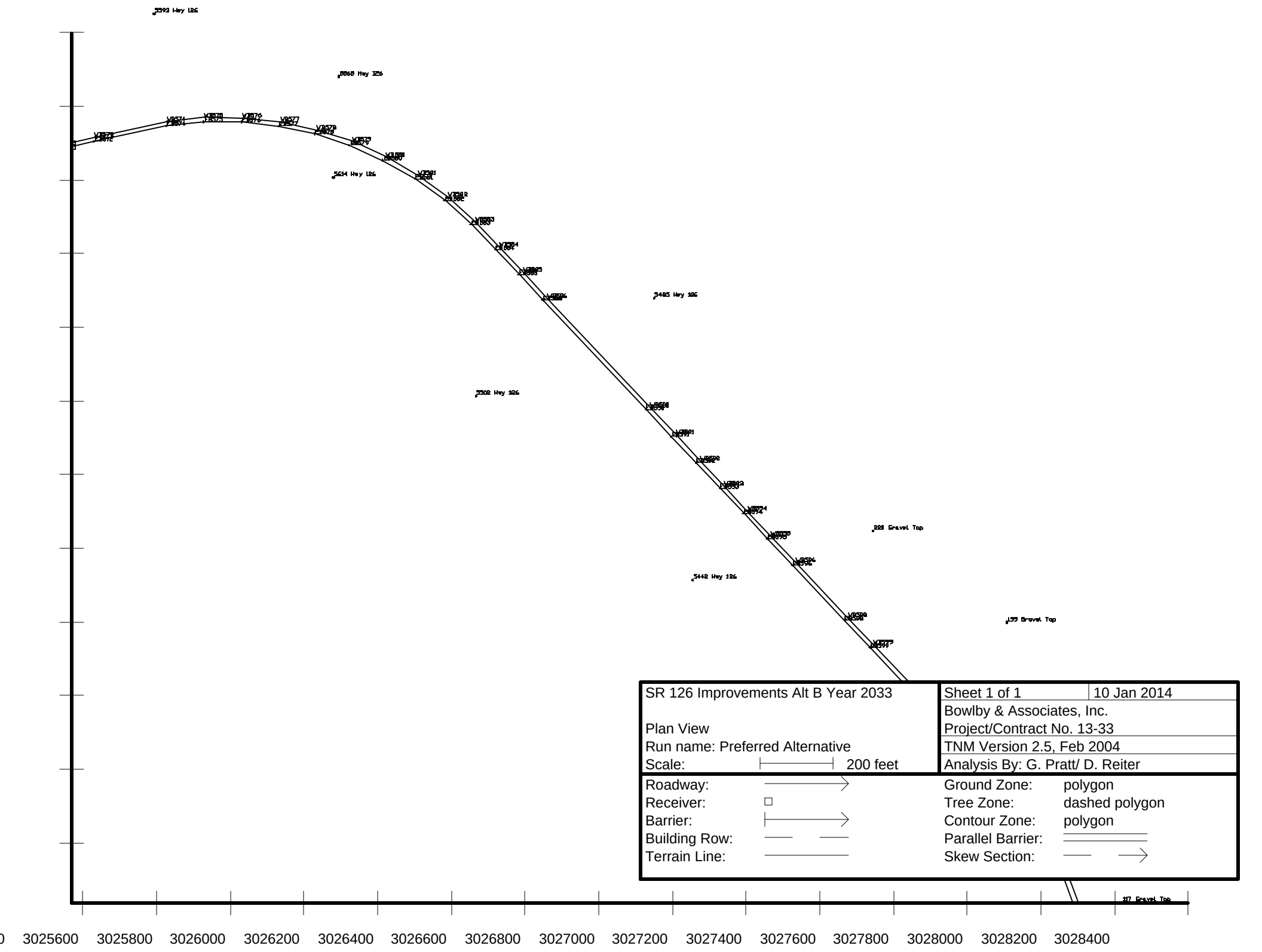
SR 126 Improvements Alt B Year 2033	Sheet 1 of 1 | 10 Jan 2014
	Bowlby & Associates, Inc.
Plan View	Project/Contract No. 13-33
Run name: Preferred Alternative	TNM Version 2.5, Feb 2004
Scale: 200 feet	Analysis By: G. Pratt/ D. Reiter

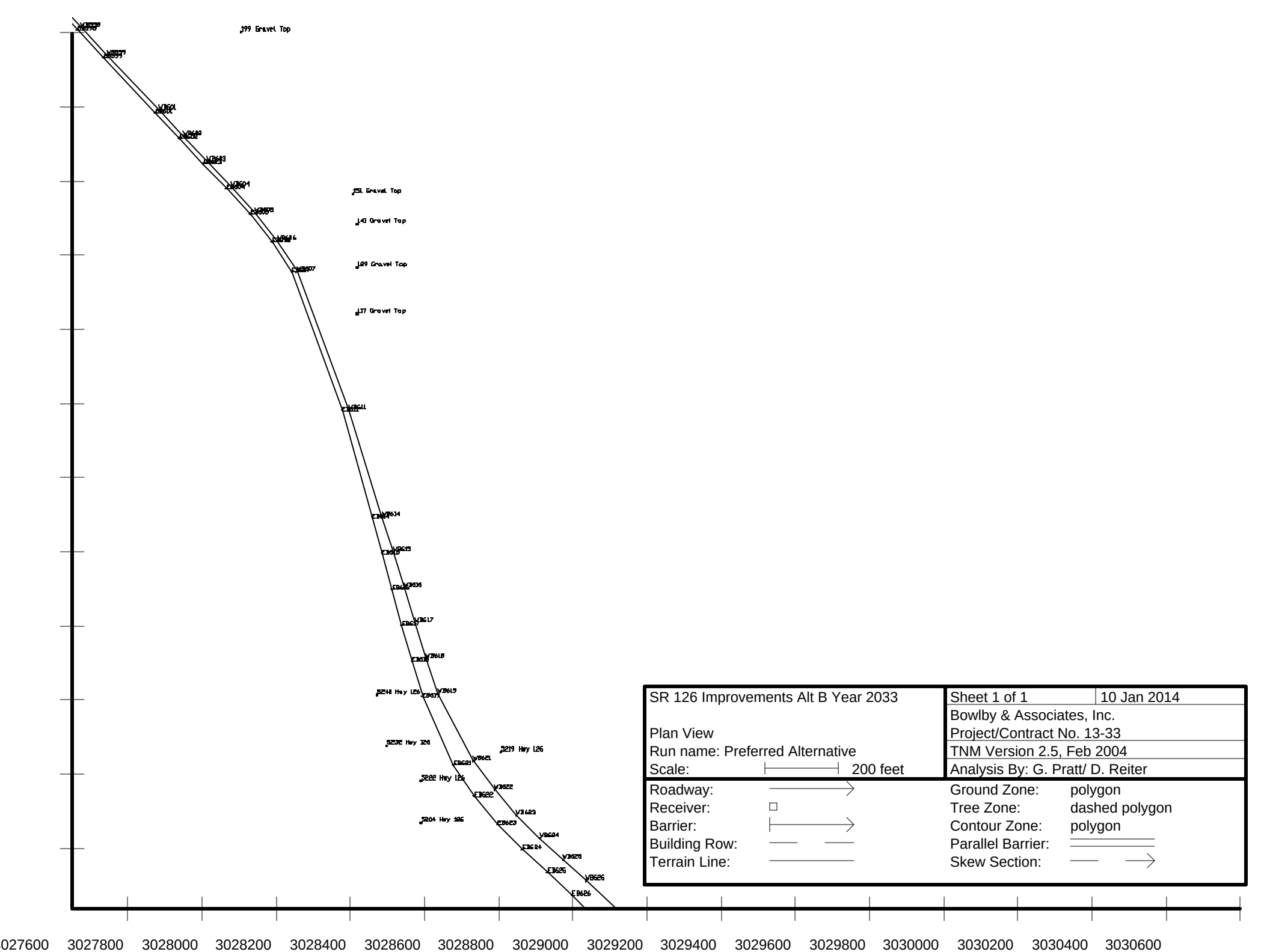
Roadway:		Ground Zone:	polygon
Receiver:		Tree Zone:	dashed polygon
Barrier:		Contour Zone:	polygon
Building Row:		Parallel Barrier:	
Terrain Line:		Skew Section:	



SR 126 Improvements Alt B Year 2033	Sheet 1 of 1 | 10 Jan 2014
	Bowlby & Associates, Inc.
Plan View	Project/Contract No. 13-33
Run name: Preferred Alternative	TNM Version 2.5, Feb 2004
Scale: 200 feet	Analysis By: G. Pratt/ D. Reiter

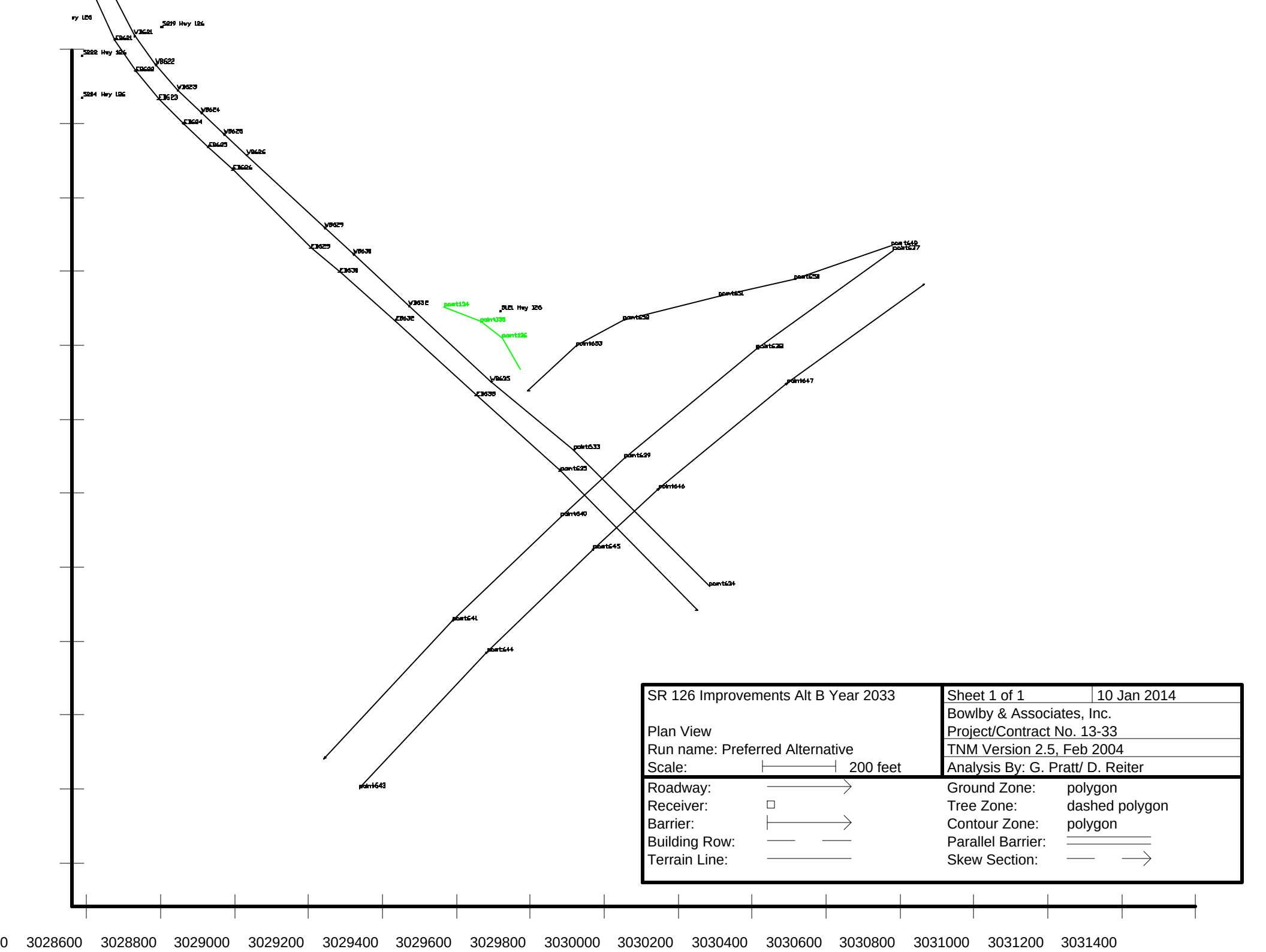
Roadway:		Ground Zone:	polygon
Receiver:		Tree Zone:	dashed polygon
Barrier:		Contour Zone:	polygon
Building Row:		Parallel Barrier:	
Terrain Line:		Skew Section:	


5393 Hwy 126
5568 Hwy 126
5614 Hwy 126
5485 Hwy 126
5502 Hwy 126
228 Gravel Top
5442 Hwy 126
159 Gravel Top
117 Gravel Top
SR 126 Improvements Alt B Year 2033
Plan View
Run name: Preferred Alternative
Scale: 200 feet
Sheet 1 of 1
10 Jan 2014
Bowlby & Associates, Inc.
Project/Contract No. 13-33
TNM Version 2.5, Feb 2004
Analysis By: G. Pratt/ D. Reiter
Roadway:
Receiver:
Barrier:
Building Row:
Terrain Line:
Ground Zone: polygon
Tree Zone: dashed polygon
Contour Zone: polygon
Parallel Barrier:
Skew Section:
3025600
3025800
3026000
3026200
3026400
3026600
3026800
3027000
3027200
3027400
3027600
3027800
3028000
3028200
3028400



SR 126 Improvements Alt B Year 2033	Sheet 1 of 1 | 10 Jan 2014
	Bowlby & Associates, Inc.
Plan View	Project/Contract No. 13-33
Run name: Preferred Alternative	TNM Version 2.5, Feb 2004
Scale: 200 feet	Analysis By: G. Pratt/ D. Reiter

Roadway:		Ground Zone:	polygon
Receiver:	□	Tree Zone:	dashed polygon
Barrier:		Contour Zone:	polygon
Building Row:		Parallel Barrier:	
Terrain Line:		Skew Section:	


SR 126 Improvements Alt B Year 2033
Plan View
Run name: Preferred Alternative
Scale: 200 feet
Sheet 1 of 1
10 Jan 2014
Bowlby & Associates, Inc.
Project/Contract No. 13-33
TNM Version 2.5, Feb 2004
Analysis By: G. Pratt/ D. Reiter
Roadway:
Receiver:
Barrier:
Building Row:
Terrain Line:
Ground Zone: polygon
Tree Zone: dashed polygon
Contour Zone: polygon
Parallel Barrier:
Skew Section:
3028600
3028800
3029000
3029200
3029400
3029600
3029800
3030000
3030200
3030400
3030600
3030800
3031000
3031200
3031400

Appendix D
Design Year Sound Levels and Impacts

Project: SR 126 Improvements, Sullivan County
Scenario: Design Year 2037 Build Preferred Alternative (B Modified)
Background Sound Level (dBA): 40

Receiver	Number of Residences	Design Hour L_{eq} (dBA)		Impacted?	Impacted Residences	Access to SR 126?	Isolated Impact?
		Without Background	With Background				
3209 Memorial Blvd	1	61	61	No	0		
3213 Memorial Blvd (Rec 01)	1	64	64	No	0		
3225 Memorial Blvd	1	63	63	No	0		
3233 Memorial Blvd	1	63	63	No	0		
3237 Memorial Blvd	1	63	63	No	0		
3305 Memorial Blvd	1	62	62	No	0		
3309 Memorial Blvd	1	62	62	No	0		
1628 Woodside Dr	1	56	56	No	0		
3501 Memorial Blvd	1	56	56	No	0		
3505 Memorial Blvd	1	58	58	No	0		
3513 Memorial Blvd	1	63	63	No	0		
3517 Memorial Blvd	***1***	***66***	***66***	***Yes***	***1***	***Yes***	***Yes***
3521 Memorial Blvd	1	57	57	No	0		
3505 Lynnbrook	1	59	59	No	0		
3524 Lynnbrook	1	58	58	No	0		
3600 Memorial Blvd	1	63	63	No	0		
3604 Memorial Blvd	1	63	63	No	0		
3608 Memorial Blvd	1	63	63	No	0		
3612 Memorial Blvd	1	64	64	No	0		
3613 Memorial Blvd	1	59	59	No	0		
3616 Memorial Blvd	1	64	64	No	0		
3621 Memorial Blvd	1	60	60	No	0		
3624 Memorial Blvd	1	62	62	No	0		
3632 Memorial Blvd	1	63	63	No	0		
Nursing Home	1	57	57	No	0		
3701 Memorial Blvd (Rec 3)	1	64	64	No	0		
3714-3814 Memorial Blvd	1	63	63	No	0		
3855 Memorial Blvd	***1***	***66***	***66***	***Yes***	***1***	***Yes***	***Yes***
3829 Hawthorne	1	63	63	No	0		
2037 Hawthorne	1	62	62	No	0		
2013 Hawthorne	1	55	55	No	0		
3812 Busbee	1	57	57	No	0		
3816 Busbee	1	56	56	No	0		
3829 Busbee	1	56	56	No	0		
3830 Bonita	1	61	61	No	0		
3901 Bond	1	62	62	No	0		
3903 Bond	1	59	59	No	0		
3905 Bond	1	60	60	No	0		
3909 Bond	1	57	57	No	0		
3913 Bond	1	57	57	No	0		
3915-3923 Bond	5	58	58	No	0		
3991 Memorial Blvd (1)	1	57	57	No	0		
3991 Memorial Blvd (2)	1	60	60	No	0		
3992-3996 Memorial Blvd (Rec 24)	***4***	***68***	***68***	***Yes***	***4***	***Yes***	***No***
4200 Skyland Rd	1	55	55	No	0		
4204 Skyland Rd	1	60	60	No	0		
4209-4213 Skyland Rd	2	53	53	No	0		
4217-4221 Skyland Rd	2	48	49	No	0		
4225-4229 Skyland Rd	2	51	51	No	0		
4228 Skyland Rd	1	57	57	No	0		
4235 Skyland Rd	1	46	47	No	0		
4239 Skyland Rd	1	48	49	No	0		
2313 Amy Ave	1	52	53	No	0		
4308-4320 Trinity Ln	2	53	53	No	0		
4321 Trinity Ln (Rec 23)	1	60	60	No	0		
4311 Memorial	1	56	56	No	0		
4503 Tanglewood	1	49	50	No	0		
4507 Tanglewood	1	60	60	No	0		
4515 Tanglewood	1	55	56	No	0		
4408 Green Springs	1	51	51	No	0		
4409 Green Springs	1	53	53	No	0		
4411 Green Springs	1	50	50	No	0		
4501 Stagecoach Rd	1	51	51	No	0		
4505 Stagecoach Rd	1	53	53	No	0		
4509 Stagecoach Rd	1	54	54	No	0		
400 Briarwood	1	49	50	No	0		
4500 Old Stage (Rec 22)	1	63	63	No	0		
4501 Old Stage	1	60	60	No	0		
4505 Old Stage	1	55	55	No	0		
4507-4507.5 Old Stage	2	53	53	No	0		
4509-4513 Old Stage	2	54	54	No	0		
4517 Old Stage	1	52	52	No	0		
4525-4533 Old Stage	2	45	46	No	0		
4537-4541 Old Stage (Rec 7)	2	46.4	47	No	0		
4547-4553 Old Stage	2	44	45	No	0		
4575-4583 Old Stage	3	42	44	No	0		

Project: SR 126 Improvements, Sullivan County
Scenario: Design Year 2037 Build Preferred Alternative (B Modified)
Background Sound Level (dBA): 40

Receiver	Number of Residences	Design Hour L_{eq} (dBA) Without Background	With Background	Impacted?	Impacted Residences	Access to SR 126?	Isolated Impact?
4609 Old Stage (Rec 8)	1	45	46	No	0		
4621-4637 Old Stage	4	46	47	No	0		
4360 Harbor Cir	1	48	48	No	0		
4701 Memorial (Rec 21)	1	55.6	56	No	0		
4713 Memorial	1	50	50	No	0		
105-109 Hobbes St (Rec 20)	1	52	53	No	0		
108-102 Holiday Hills	3	52	52	No	0		
109 Schuler	1	56	56	No	0		
108 Schuler	1	54	54	No	0		
Cem. 1	0	61	61	No	0		
Cem. 2	0	59	59	No	0		
Cem. 3	0	54	54	No	0		
Cem. 4	0	68	68	Yes	0		
Cem Building	0	52	52	No	0		
6290 Chestnut Ridge (Rec 10)	1	60	60	No	0		
5000 Memorial	1	51	52	No	0		
5016 Memorial	1	62	62	No	0		
5021 Memorial	1	60	60	No	0		
5040 Memorial (1)	***1***	***67***	***67***	***Yes***	***1***	***Yes***	***Yes***
5040 Memorial (2)	1	58	58	No	0		
5053 Memorial	***1***	***68***	***68***	***Yes***	***1***	***Yes***	***Yes***
217-227 Sunbury	2	53	53	No	0		
105 Fisher	1	52	53	No	0		
108 Birdwell Heights	***1***	***68***	***68***	***Yes***	***1***	***Yes***	***No***
5104 Woods Way	1	60	60	No	0		
143 Island Dr (Rec 11)	1	57	57	No	0		
5227 Memorial	1	61	61	No	0		
5006 Country Dr	1	50	50	No	0		
5315 Memorial	1	64	64	No	0		
5320 Memorial	1	60	60	No	0		
5352 Memorial	1	62	62	No	0		
5340 Memorial (Rec 17)	6	55	55	No	0		
5341 Memorial	1	65	65	No	0		
5372 Memorial	1	62	62	No	0		
210-226 Old Fall Creek Rd (Rec 12)	3	58	58	No	0		
5400 Memorial	1	61	61	No	0		
5402 Memorial	1	60	60	No	0		
5404 Memorial	1	60	60	No	0		
100 Santana	1	62	62	No	0		
121 Hill	1	53	54	No	0		
100 Huron Cir	1	52	52	No	0		
5607 Memorial	1	60	60	No	0		
5617 Memorial	1	64	64	No	0		
104 Natchez Ln (Rec 5)	1	58	58	No	0		
108 Natchez Ln	1	52	52	No	0		
5704-5712 Mohican Ln	3	54	54	No	0		
5808 Memorial	1	59	59	No	0		
110 Har Town	1	56	56	No	0		
6008 Hwy 126	1	61	61	No	0		
5983 Hwy 126	1	58	58	No	0		
5971-5963 Hwy 126	2	62	62	No	0		
5964 Hwy 126	1	63	63	No	0		
5951-5939 Hwy 126	2	60	60	No	0		
5933 Hwy 126	1	55	55	No	0		
5900 Hwy 126	1	50	50	No	0		
5891 Hwy 126	1	58	58	No	0		
5937 Cochice Trail	1	61	61	No	0		
5614 Hwy 126	1	62	62	No	0		
5593 Hwy 126	1	53	53	No	0		
5565 Hwy 126	1	59	59	No	0		
5502 Hwy 126	1	51	52	No	0		
5485 Hwy 126	1	55	56	No	0		
5442 Hwy 126	1	54	55	No	0		
220 Gravel Top	1	56	56	No	0		
199 Gravel Top	1	52	52	No	0		
151 Gravel Top	1	54	54	No	0		
141 Gravel Top	1	55	55	No	0		
129 Gravel Top	1	58	58	No	0		
117 Gravel Top	1	61	61	No	0		
5240 Hwy 126	1	61	61	No	0		
5232 Hwy 126	1	59	59	No	0		
5222 Hwy 126	1	62	62	No	0		
5204 Hwy 126	1	58	58	No	0		
5121 Hwy 126	***1***	***66***	***66***	***Yes***	***1***	***Yes***	***Yes***
3820 Memorial Blvd.	***3***	***67***	***67***	***Yes***	***3***	***Yes***	***No***
109 Holiday Hills	1	54	55	No	0		

Project:	**SR 126 Improvements, Sullivan County**
Scenario:	**Design Year 2037 Build Preferred Alternative (B Modified)**
Background Sound Level (dBA):	**40**

Receiver	Number of Residences	Design Hour L_{eq} (dBA)		Impacted?	Impacted Residences	Access to SR 126?	Isolated Impact?
		Without Background	With Background				
4801 Memorial	1	60	60	No	0		
Apts. on Memorial 1st floor	4	64	64	No	0		
Memorial Duplex	2	62	62	No	0		
Apts. on Memorial (2)	6	63	63	No	0		
5100 Memorial	***1***	***66***	***66***	***Yes***	***1***	***Yes***	***No***
5104 Memorial	***1***	***66***	***66***	***Yes***	***1***	***Yes***	***No***
5108-5116 Memorial	***3***	***66***	***66***	***Yes***	***3***	***Yes***	***No***
5332 Memorial	1	63	63	No	0		
5360-5368 Memorial	3	62	62	No	0		
101 Santana	1	64	64	No	0		
101 Cassidy	1	63	63	No	0		
5219 Hwy 126	1	63	63	No	0		
4216-4220 Skyland Rd (Rec 6)	2	62	62	No	0		
4605 Memorial Blvd	***1***	***66***	***66***	***Yes***	***1***	***Yes***	***Yes***
4741 Memorial Blvd	1	57	57	No	0		
4745 1/2 Memorial Blvd	1	58	58	No	0		
4745 Memorial Blvd	1	61	61	No	0		
Apts. on Memorial 2nd floor	4	65	65	No	0		
4822 Memorial Blvd 2nd floor	8	64	64	No	0		
4822 Memorial Blvd 2nd floor	8	64	64	No	0		
104 LeMay Rd	2	62	62	No	0		
				Impacted Residences	***18***		
				Impacted Residences with Direct Access to SR 126	***18***		

APPENDIX D – SECTION 106 HISTORIC ARCHITECTURAL COORDINATION AND ADDENDUM DOCUMENTATION OF EFFECTS

ADDENDUM DOCUMENTATION OF EFFECTS – REPORT CORRESPONDENCE

ADDENDUM DOCUMENTATION OF EFFECTS - REPORT

ADDENDUM DOCUMENTATION OF EFFECTS – 2008 PUBLIC CORRESPONDENCE

ADDENDUM DOCUMENATION OF EFFECTS – AGENCY CORRESPONDENCE

ADDENDUM DOCUMENTATION OF EFFECTS – CONCEPTUAL LAYOUT

ADDENDUM DOCUMENTATION OF EFFECTS – AERIAL MAP OF YANCEY'S TAVERN AND CEMETERY

ADDENDUM DOCUMENTATION OF EFFECTS – CEMETERY CONCEPTUAL LAYOUT

SR-126

TENNESSEE HISTORICAL COMMISSION
DEPARTMENT OF ENVIRONMENT AND CONSERVATION
2941 LEBANON ROAD
NASHVILLE, TN 37243-0442
(615) 532-1550

June 11, 2013

Ms. Martha Carver
Tennessee Department of Transportation
505 Deaderick St/900
Nashville, Tennessee, 37243-0349

RE: FHWA, EFFECT DETERMINATION, ALTERNATIVE B MODIFIED/SR-126 IMPVTS./PIN# 105467.00, KINGSPORT, SULLIVAN COUNTY

Dear Ms. Carver:

Pursuant to your request, received on Wednesday, June 5, 2013, this office has reviewed documentation concerning the above-referenced undertaking. This review is a requirement of Section 106 of the National Historic Preservation Act for compliance by the participating federal agency or applicant for federal assistance. Procedures for implementing Section 106 of the Act are codified at 36 CFR 800 (Federal Register, December 12, 2000, 77698-77739)

Based on the information provided, we find that the project area contains a cultural resource eligible for listing in the National Register of Historic Places: Yancey's Tavern. We further find that the project as currently proposed will not adversely affect this resource. Unless project plans change, this office has no objection to the implementation of this project. Should project plans change, please contact this office to determine what additional action, if any, is necessary.

I wish to take this opportunity to commend your on-going good work and that of Ms. Tammy Sellers in bringing this case to successful completion of Section 106 review. You both deserve great credit in melding the mission of your agency with that of historic preservation. Often, this is a difficult task, and you both accomplished it with remarkable diligence and fortitude. As Tennessee SHPO, I want you both to know how much I appreciate it.

Sincerely,

E. Patrick McIntyre, Jr.
Executive Director and
State Historic Preservation Officer

EPM/jyg

B - MODIFIED

HISTORICAL

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
ENVIRONMENTAL DIVISION
SUITE 900, JAMES K. POLK BUILDING
505 DEADERICK STREET
NASHVILLE, TENNESSEE 37243-1402
(615) 741-3655

JOHN C. SCHROER
COMMISSIONER

BILL HASLAM
GOVERNOR

June 3, 2013

Mr. E. Patrick McIntyre
State Historic Preservation Officer
Tennessee Historical Commission
2941 Lebanon Road
Nashville, TN 37243

SUBJECT: Addendum Documentation of Effects Pursuant to 36 CFR 800 and Section 4(f) Documentation At Yancey's Tavern for Proposed Improvements to *State Route 126 from East Center Street To Interstate 81 in Kingsport, Sullivan County* PIN 105467.00

Dear Mr. McIntyre:

Enclosed you will find an addendum report for the above referenced project. The addendum discusses the effects to one National Register listed property: Yancey's Tavern. In 2004, TDOT historians surveyed the Area of Potential Effects (APE) and inventoried 96 properties. In a 2005 report, it was the opinion of TDOT that one property, Yancey's Tavern, was listed in the National Register of Historic Places and one additional property, the Shipley-Jarvis House, was eligible for listing in the National Register of Historic Places. In a letter dated March 22, 2005, the Tennessee State Historic Preservation Officer (TN-SHPO) concurred with these findings.

In 2008, TDOT historians sent a Documentation of Effects report to your office and in that document stated that it was TDOT's opinion that the proposed project would not adversely affect the Shipley-Jarvis House and would adversely affect Yancey's Tavern. Your office agreed with TDOT's findings in a November 3, 2008 letter. In the 2008 report, the proposed project design adjacent to Yancey's Tavern indicated that a substantial number of graves in the East Lawn Funeral Home and Memorial Garden would be relocated. Due to the initial public response to the removal of graves and reburials, TDOT re-designed a segment of the roadway adjacent to Yancey's Tavern in June 2012, entitle Alternative B1. In June 2012, a TDOT historian wrote an addendum effects assessment to evaluate potential effects at Yancey's Tavern. In that addendum document, it was TDOT's opinion that the proposed Alternative B1 would still adversely affect Yancey's Tavern. In a letter dated June 13, 2012, the TN-SHPO agreed with TDOT's assessment.

In an effort to minimize harm to the historic property, TDOT is currently proposing Alternative B Modified and the enclosed document discusses the effects to the National Register listed Yancey's Tavern. It is the opinion of TDOT that the proposed Alternative B Modified would have an effect that is not adverse to the National Register listed property. Please review the addendum effects assessment pursuant to regulations set forth in 36 CFR 800 of the National Historic Preservation Act of 1966. We look forward to your comments. Thank you for your help in this matter.

Sincerely,

Martha Carver

Martha Carver
Historic Preservation Manager

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
ENVIRONMENTAL DIVISION
SUITE 900, JAMES K. POLK BUILDING
505 DEADERICK STREET
NASHVILLE, TENNESSEE 37243-1402
(615) 741-3655

JOHN C. SCHROER
COMMISSIONER

BILL HASLAM
GOVERNOR

June 3, 2013

SUBJECT: Addendum Documentation of Effects Pursuant to 36 CFR 800 and Section 4(f) Documentation At Yancey's Tavern for Proposed Improvements to *State Route 126 from East Center Street To Interstate 81 in Kingsport, Sullivan County* PIN 105467.00

To Whom It May Concern:

The Tennessee Department of Transportation is proposing to improve State Route 126 from East Cedar Street to Interstate 81 in Kingsport. The enclosed document addresses the effects of Alternative B Modified to the National Register listed Yancey's Tavern. The proposed Alternative B Modified is being proposed by TDOT in an effort to minimize impacts to both Yancey's Tavern and the East Lawn Memorial Garden.

A federal law, the National Historic Preservation Act of 1966, requires that for road projects with federal funds, TDOT should identify and work to protect properties that are considered historic. Under this law, "historic" is defined as those properties that are listed in or eligible for listing in the National Register of Historic Places. Because of these laws, TDOT has staff historians that review all projects that have federal funding. Since this project includes federal money, a staff historian for TDOT surveyed the general project area in an attempt to identify historic properties which could be impacted by the proposed project.

The enclosed report discusses the survey findings. You are receiving this report because TDOT has identified you as a Sullivan County party or individual with historic preservation interests. The Advisory Council on Historic Preservation Regulations specify that members of the public with interests in an undertaking and its effects on historic properties should be given reasonable opportunity to have an active role in the Section 106 process. As such, TDOT would like to give you the opportunity to participate in that process. If you would like to learn more about the historic review process go to http://www.achp.gov for additional information.

If you have any comments on historic issues related to this project, please write me. Federal regulations provide that you have thirty days to respond from the receipt of this letter.

Sincerely,

Tammy Sellers

Tammy Sellers
Historic Preservation Supervisor

Enclosure
cc: Mr. Patrick McIntyre, TN-SHPO

TENNESSEE DEPARTMENT OF TRANSPORTATION

Addendum Documentation of Effects Pursuant to 36 CFR 800 And Section 4(f) Documentation

For Proposed Improvements to:

State Route 126 from East Center Street
To Interstate 81 in Kingsport

Sullivan County

PIN 105467.00

May 2013

Tammy Sellers
Tennessee Department of Transportation
Environmental Division
Suite 900 James K. Polk Building
Nashville, TN 37243-0334
Phone: (615) 741-5367

Addendum Documentation of Effects Pursuant to 36 CFR 800 and Section 4(f) Documentation

For Proposed Improvements to:

State Route 126 from East Center Street To Interstate 81 in Kingsport

Sullivan County

MANAGEMENT SUMMARY

The Tennessee Department of Transportation with funding made available through the Federal Highway Administration is proposing to improve State Route 126 from East Center Street to I-81 in Kingsport.

This addendum report discusses the effects to the National Register listed property: Yancey's Tavern located on State Route 126 outside of Kingsport. In 2004, TDOT historians surveyed the Area of Potential Effects (APE) and inventoried 96 properties. In a 2005 report, it was the opinion of TDOT that one property, Yancey's Tavern, was listed in the National Register of Historic Places and one additional property, the Shipley-Jarvis House, was eligible for listing in the National Register of Historic Places. In a letter dated March 22, 2005, the Tennessee State Historic Preservation Officer (TN-SHPO) concurred with these findings.

In 2008, TDOT historians sent a Documentation of Effects report to the TN-SHPO and in that document stated that it was TDOT's opinion that the proposed project would not adversely affect the Shipley-Jarvis House and would adversely affect Yancey's Tavern. The TN-SHPO agreed with TDOT's findings in a November 3, 2008 letter. In the 2008 report, the proposed project design adjacent to Yancey's Tavern indicated that a substantial number of graves in the East Lawn Funeral Home and Memorial Garden would be relocated. Due to the initial public response to the removal of graves and reburials, TDOT re-designed a segment of the roadway adjacent to Yancey's Tavern in June 2012, entitle Alternative B1. In June 2012, a TDOT historian wrote an addendum effects assessment to evaluate potential effects at Yancey's Tavern. In that addendum document, it was TDOT's opinion that the proposed Alternative B1 would still adversely affect Yancey's Tavern. In a letter dated June 13, 2012, the TN-SHPO agreed with TDOT's assessment.

In an effort to minimize harm to the historic property, TDOT is currently proposing ***Alternative B Modified*** and this document will discuss the effects to the National Register listed Yancey's Tavern.

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Addendum Documentation of Effects Pursuant to 36 CFR 800
For Proposed Improvements to:

State Route 126 from East Center Street
To Interstate 81 in Kingsport

Sullivan County

Statement of Determination
The Tennessee Department of Transportation with funding made available through the Federal Highway Administration is proposing to improve State Route 126 from East Center Street to I-81 in Kingsport.

This addendum report discusses the effects to the National Register listed property: Yancey's Tavern, located on State Route 126 outside of Kingsport. In 2004, TDOT historians surveyed the Area of Potential Effects (APE) and inventoried 96 properties. In a 2005 report, it was the opinion of TDOT that one property, Yancey's Tavern, was listed in the National Register of Historic Places and one additional property, the Shipley-Jarvis House, was eligible for listing in the National Register of Historic Places. In a letter dated March 22, 2005, the Tennessee State Historic Preservation Officer (TN-SHPO) concurred with these findings.

In 2008, TDOT historians sent a Documentation of Effects report to the TN-SHPO and in that document stated that it was TDOT's opinion that the proposed project would not adversely affect the Shipley-Jarvis House and would adversely affect Yancey's Tavern. The TN-SHPO agreed with TDOT's findings in a November 3, 2008 letter. In the 2008 report, the cross section for the alignment included four travel lanes adjacent to Yancey's Tavern and the preliminary plans indicated that a substantial number of graves in the East Lawn Funeral Home and Memorial Garden would be removed in order to keep from taking right-of-way from the National Register boundary of the historic tavern.

As the project evolved and more detailed information became available, two build alternatives were proposed in the draft Environmental Impact Statement (EIS) that meet the purpose and need as defined in the EIS (a copy of the draft EIS is available at http://www.tdot.state.tn.us/sr126/docs/SR126MemorialBoulevardDEIS010912.pdf. or is on file with the TDOT Environmental Division). Build Alternative A would improve State Route 126 largely on the existing alignment and includes a typical cross section of four-lane roadway (two travel lanes in each direction) within the commercial and residential areas of the western half of the study corridor. The eastern half of the corridor, which is rural in nature, would remain a two-travel lane facility. Build Alternative B is a variation of Alternative A. The key variations for this document is the reduction of the four-travel lane section for a length of approximately 0.5 miles and the use of retaining walls through the section of road between Yancey's Tavern and the East Lawn Funeral Home and Memorial Garden. These alternatives will be discussed in greater detail in the Project Background and Description Section of this document.

In 2012, the negative public response to the removal of graves and reburials caused TDOT to consider redesigning a segment of the roadway adjacent to Yancey's Tavern. The design of the project at the Shipley-Jarvis House did not change so the effects remain the same as described in the 2008 document. In an effort to avoid the removal of graves from the East Lawn Memorial Garden, TDOT re-designed the proposed project between Yancey's Tavern and the East Lawn Memorial Garden in June 2012.

In June 2012, Alternative B1 was proposed that did not require any additional right-of-way from the memorial garden but would have required right-of-way from the northern side of the State Route 126, and resulted in taking approximately one acre of right-of-way and 0.1 acre of permanent slope easements from Yancey's Tavern. Shifting the roadway alignment to the north would have also removed the majority of mature trees that currently shield the historic property from State Route 126. With this alternative, a required retaining wall—seven feet tall at its highest point—was proposed on the northern side of the roadway in front of the tavern. A cul-de-sac was also proposed for the existing Chestnut Ridge Road to the west of Yancey's Tavern, cutting Yancey's Tavern off from the two-lane road that it had been historically associated with. In a June 2012 report, it was the opinion of TDOT that the proposed Alternative B1 would have an adverse effect to the historic property based on the right-of-way take, height of the retaining wall, the introduction of a modern, urban roadway, and the removal of screening vegetation. On June 13, 2012, the TN-SHPO concurred with TDOT's adverse effect finding. Detailed documentation of this alternative is on file with the TDOT Historic Preservation Section and can be provided upon request.

Due to the potential adverse effect of Alternative B1, TDOT historians worked with the designers to minimize harm to the historic property, Yancey's Tavern. This design, entitled ***Alternative B Modified***, will be studied in depth within this document to determine the effects it would have on Yancey's Tavern. According to the plans for Alternative B Modified, the proposed project would shift the right-of-way from Yancey's Tavern to the south onto the East Lawn Memorial Garden and Cemetery but would not be shifted so far to the south that occupied graves would need to be relocated. This would allow for only a small, temporary, construction easement within the National Register boundary of Yancey's Tavern and that construction easement would be returned to the current grade and appearance after construction is completed. A retaining wall would be required on both the north and south side of the proposed State Route 126; however, given the existing grade and elevation of the historic Yancey's Tavern only a short section of the wall would be visible from the house itself. Although little of the retaining wall will be visible from Yancey's Tavern, TDOT is proposing an aesthetic treatment to the wall that will be compatible with the historic landscape but will be minimalist in its design. TDOT will consult with the TN-SHPO and consulting parties in designing the retaining wall in order to get their review and comments on the proposed design feature. The cross-section in Alternative B Modified would also be reduced by the removal of the sidewalks on the northern side of State Route 126. Utilities will be relocated with this revised alternative and according to representatives from TDOT's Right-of-Way and Utilities Divisions there is sufficient space within that cross-section to relocate all utilities.

Federal laws require TDOT and FHWA to comply with Section 106 of the National Historic Preservation Act of 1966, as amended. Appendix A contains a fact sheet about Section 106. Regulations detailing the implementation of this act are codified at 36 CFR 800. This legislation requires TDOT and FHWA to identify any properties (either above-ground buildings, structures, objects, or historic sites or below ground archaeological sites) of historic significance. For the purposes of this legislation, historic significance is defined as those properties which are included in the National Register of Historic Places or which are eligible for inclusion in the National Register. Appendix B contains a copy of the National Register criteria, which are codified at 36 CFR 60.4. Once historic resources are identified, legislation requires these agencies to determine if the proposed project would affect the historic resource. Appendix C contains a copy of the Criteria of Effect as defined in 36 CFR 800.5. If the proposed project would have an adverse effect to a historic property, the legislation requires FHWA to provide the Advisory Council on Historic Preservation (an independent federal agency) an opportunity to

comment on the effect. Appendix D contains information on Section 4(f) of the U.S. DOT Act, as amended. This law prohibits the Secretary of Transportation from approving any project which requires the "use" of a historic property unless there is no prudent and feasible alternative to that use and unless the project includes all possible planning to minimize harm to the historic resources.

This document has been prepared in consultation with the TN-SHPO and will be circulated to the TN-SHPO, FHWA, and local individuals, agencies, or organizations with interests in historic and cultural resources.

The archaeology is contained in a separate document.

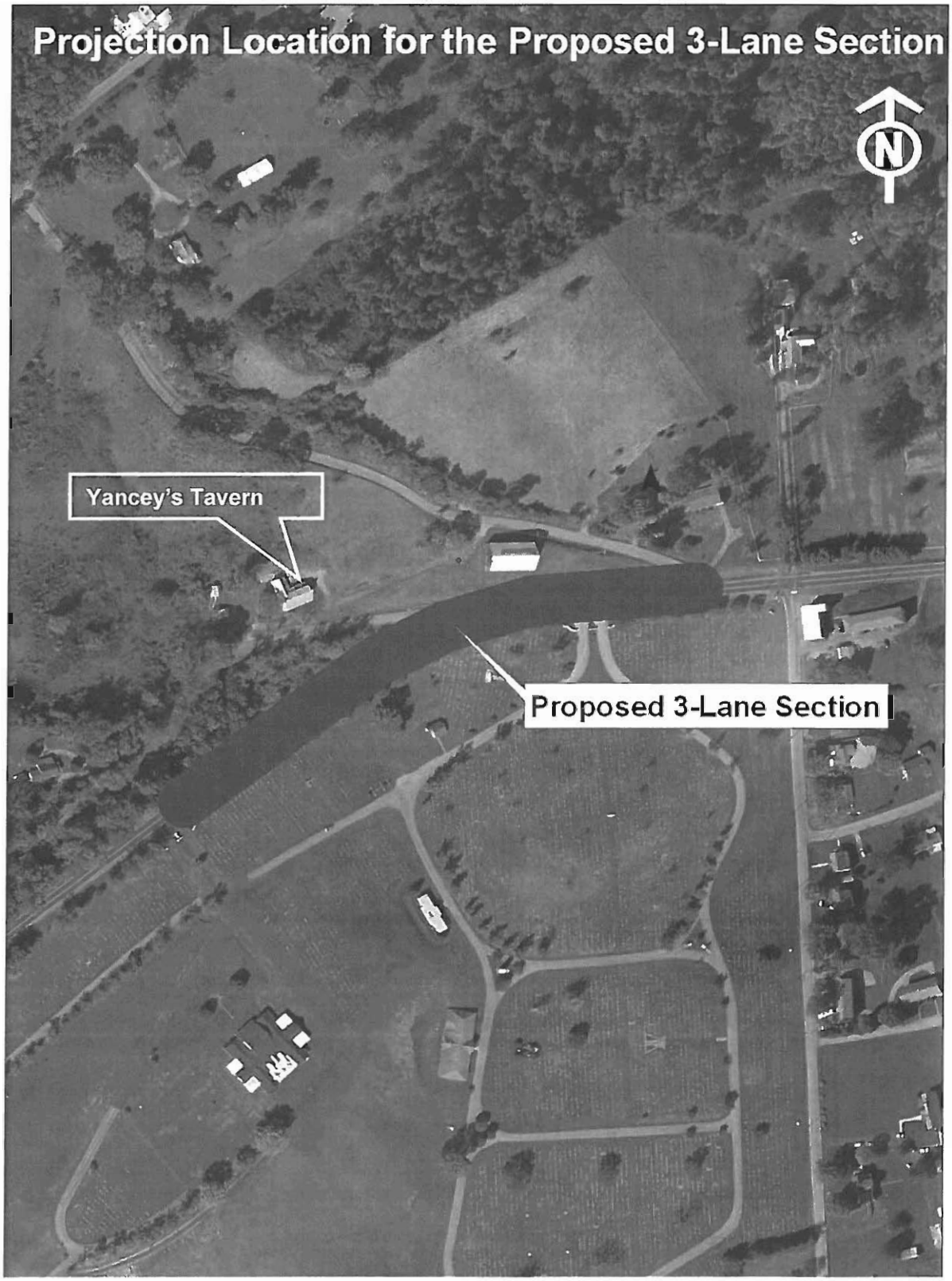


Figure 1: *Project Location Map at Yancey's Tavern*

Project Background and Description

The Tennessee Department of Transportation with funding made available through the Federal Highway Administration is proposing to improve State Route 126 from East Center Street to I-81 in Kingsport.

This project served as a Context Sensitive Solutions (CSS) pilot project with TDOT, and the CSS team recommended a four-lane, urban roadway with curb and gutter between the memorial garden and Yancey's Tavern. In 2008, the TDOT consultant provided functional plans indicating that the four-lane facility could be built between the memorial garden and the historic property without taking right-of-way from Yancey's Tavern. Since that time, it has been determined that right-of-way will be required in order to build the proposed project.

The following build alternative information was taken from the 2012 Draft EIS.

Build Alternative A

Build Alternative A improves SR 126 (Memorial Boulevard) to a four-lane facility (two travel lanes in each direction) within the commercial and residential areas of the western half of the study corridor. The eastern half of the study corridor, which is rural in nature, will remain a two-travel lane facility. Either a raised median or two way left turn lane (TWLTL) will be provided along the majority of the route. Improved shoulders will be provided along the entire corridor and sidewalks will be extended to the majority of the commercial and residential areas.

Several different typical cross sections are proposed along the SR126 (Memorial Boulevard) corridor. Additional right-of-way will be required along the entire corridor to accommodate the proposed improvements. . .

The proposed alignment of Alternative A generally follows the existing alignment. The proposed alignment shifts from side to side to minimize impacts, reduce earthwork volumes, simplify constructability, and improve the curvature of the roadway. Despite the effort to minimize impacts, considerable additional Right of Way will be required and many residences and businesses will need to be relocated. . .

In addition to the SR126 (Memorial Boulevard) roadway typical cross section and alignment improvements, several side road intersection approaches to SR126 (Memorial Boulevard) are improved. Many of these minor connections intersect SR 126 (Memorial Boulevard) at skewed angles. Realigning side road approaches to intersect to as close to 90 degrees as possible has proven visibility and safety benefits. . . Side Road approaches to SR 126 (Memorial Boulevard) to be realigned include:

Warpath Drive	Heather Lane	Natchez Lane
Miller Street	Old Stage Road	Harr Town Road
Orebank Road	Eaton Station Road	Adams Street
John B. Dennis Exit Ramp	Woods Way	Island Road

Several intersections are proposed to be closed along SR126 (Memorial Boulevard). These minor connections to SR 126 (Memorial Boulevard) will be rerouted to connect via improved intersections on neighboring roads. Closing these intersections will improve

access control and safety along the route due to the reduction of conflict points. . . Intersections to be closed along SR 126 (Memorial Boulevard) include:

Edens Ridge Road	Trinity Lane	Red Robin Lane
Hawthorne Street	Tanglewood Road	Gravel Top Road
Kent Street	Holiday Road	Amy Avenue
Shuler Drive		

The draft EIS continues to discuss each cross section that is being proposed under Build Alternative A. The following information discusses the proposed cross section for this build alternative in relation to Yancey's Tavern and the East Lawn Funeral Home and Cemetery and was taken directly from the draft EIS.

3. Harbor Chapel Road (L.M. 5.18) to Cooks Valley Road (L.M. 7.66)

The proposed cross section of this 2.5 mile long segment of SR 126 (Memorial Boulevard) from Harbor Chapel Road to Cooks Valley Road includes four travel lanes (two in each direction) and a raised grass median. The first 0.6 miles of this segment from Harbor Chapel Road to east of Old Stage Road includes four-foot wide paved shoulders, curb and gutter, and sidewalks on both sides of the roadway. The next 1.9 miles of this segment from east of Old Stage Road to Cooks Valley Road will not have curb and gutter, and instead will have roadside ditches for drainage. The shoulders will be eight feet wide, six feet of which will be paved. No sidewalks will be provided along this 1.9 mile segment between Old Stage Road and Cooks Valley Road due to the lack of properties fronting SR 126 (Memorial Boulevard). The travel lanes throughout the entire 2.5 mile long segment will be eleven feet wide. The four to six-foot wide paved shoulders will accommodate bicyclists. The design speed of this segment is 45 miles per hour.

Additional features in this section include intersection realignments and closings. Trinity Lane's intersection with SR 126 (Memorial Boulevard) will be closed. Access to SR 126 (Memorial Boulevard) will be provided via a new connection to Amy Avenue and Glenwood Street. Tanglewood's intersection with SR 126 (Memorial Boulevard) will be closed. Access to SR 126 (Memorial Boulevard) will be provided via a new connection to Briarwood Road. Old Stage road's approach to SR 126 (Memorial Boulevard) will be realigned to improve the skew of the intersection. Holiday Road's intersection with SR 126 (Memorial Boulevard) will be closed. Access to SR 126 (Memorial Boulevard) will be provided via a new connection between Parker Street and Old Parker Drive. The new connection will provide access to Peers Street and Lemay Drive. Shuler Drive's intersection with SR 126 (Memorial Boulevard) will also be closed. Access to SR 126 (Memorial Boulevard) will be provided via Peers Street and Lemay Drive. Eaton Station Road's approach to SR 126 (Memorial Boulevard) will be realigned to improve the skew of the intersection. These features will improve the safety and access control along SR 126 (Memorial Boulevard).

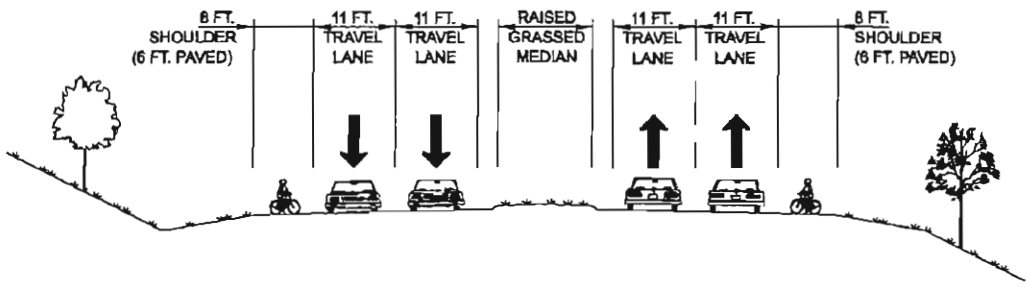


FIGURE 2.3.9: SEGMENT 3B PROPOSED TYPICAL SECTION

Figure 2: Proposed Typical Cross Section for Section 3 of Build Alternative A

The draft EIS describes Build Alternative B as follows:

> **Build Alternative B**
> Alternative B is a refinement of Alternative A. Alternative B utilizes the same proposed typical roadway cross sections as Alternative A but the length of the four-travel lane section of Segment 3 is reduced. As a result, the two-travel lane section of Segment 4 begins further west, near Lemay Drive, and is longer than in Alternative A. Retaining walls will also be utilized in the vicinity of historic Yancey's tavern and East Lawn Memorial Gardens Cemetery. These modification were made to minimize impacts to Yancey's Tavern and the East Lawn Memorial Gardens Cemetery located on the opposing sides of SR 126 (Memorial Boulevard) in Segment 4. It should be noted that numerous gravesites will still need to be relocated with Alternative B. Additional changes incorporated into Alternative B include minor modifications of the proposed centerline to minimize excavation and fill impacts and improve maintenance of traffic during construction. Alternative B subsequently requires less additional right-of-way and impacts fewer residences and businesses than Alternative A. . . .
>
> In addition to the SR 126 (Memorial Boulevard) roadway typical cross section and alignment improvements, several side road intersection approaches to SR 126 (Memorial Boulevard) are improved or closed. These side road modifications improve the safety and access control along SR126 (Memorial Boulevard). The side road approaches modified in Alternative B are the same as those in Alternative A [see above].

The section of the roadway that is adjacent to the National Register Listed Yancey's Tavern is described as the following in the draft EIS.

> East of Lemay Drive (L.M. 7.20) to Harr Town Road (L.M. 10.11)
>
> The proposed cross section of this 2.9 mile long segment of SR 126 (Memorial Boulevard) from east of Lemay Drive to Harr Town Road includes two travel lanes (one in each direction), six-foot wide paved shoulders, and curb and gutter. The median in this section will consist of a two-way left turn lane. The six-foot wide shoulders would

accommodate bicyclists. The design speed of this segment is 45 miles per hour. This section is 0.5 miles longer than in Alternative A.

Additional features in this section include intersection realignments and closings. Ted Robin Lane's intersection with SR 126 (Memorial Boulevard) will be closed. Access to SR 126 (Memorial Boulevard) will be provided via Bridwell Heights Road. The side road approaches of Eaton Station Road, Woods Way, Island Road, Natchez Lane, and Harr Town Road to SR 126 (Memorial Boulevard) will be realigned to improve the skews of the intersections. These features will improve the safety and access control along SR 126 (Memorial Boulevard).

Two community resources are located on either side of SR 126 (Memorial Boulevard) in this segment: Yancey's Tavern and East Lawn Memorial Gardens Cemetery. Yancey's Tavern is listed on the National Register of Historic Places. To avoid direct impacts to the Yancey's Tavern property, it is proposed to widen SR 126 (Memorial Boulevard) to the south. The roadway improvements will impact the East Lawn Memorial Gardens Cemetery. In order to minimize the impacts, the roadway cross section is reduced to two travel lanes in this section of Alternative B, compared to four travel lanes in Alternative A. This will minimize the visual impacts to Yancey's Tavern and reduce the number of gravesites which must be relocated in the East Lawn Memorial Gardens Cemetery. Retaining walls will also be utilized in this area to further reduce impacts to the cemetery.

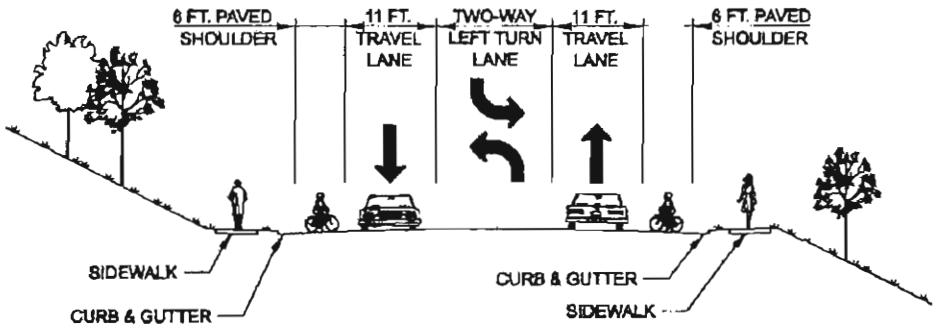


FIGURE 2.4.6: SEGMENT 4 PROPOSED TYPICAL SECTION

Figure 3: Proposed Typical Cross-Section Between Yancey's Tavern and the East Lawn Memorial Gardens Cemetery

2012 Alternatives

Build Alternative B1

The draft EIS estimated that approximately 350 occupied gravesites would be impacted with Alternative A and Alternative B would impact about 50 gravesites that are currently occupied. However, the large memorial garden would have sufficient room to relocate impacted gravesites. In an effort to reduce impacts to the East Lawn Memorial Gardens and Cemetery, TDOT proposed a three-lane, urban roadway with curb-and-gutter on the existing State Route

126 alignment. This three-lane alternative, as proposed in June 2012, would not have taken any right-of-way from the memorial garden and would have required approximately 1 acre from Yancey's Tavern with 0.1 acres of permanent slope easements. This proposed alternative required a retaining wall on both sides of the roadway, with the northern side being 7-feet tall at its highest point and on the southern side being 4.5 feet tall at its highest point. In addition, this Alternative B1 required a cul-de-sac of Chestnut Ridge Road to the west of Yancey's Tavern and would have cut off the historic property from the road.

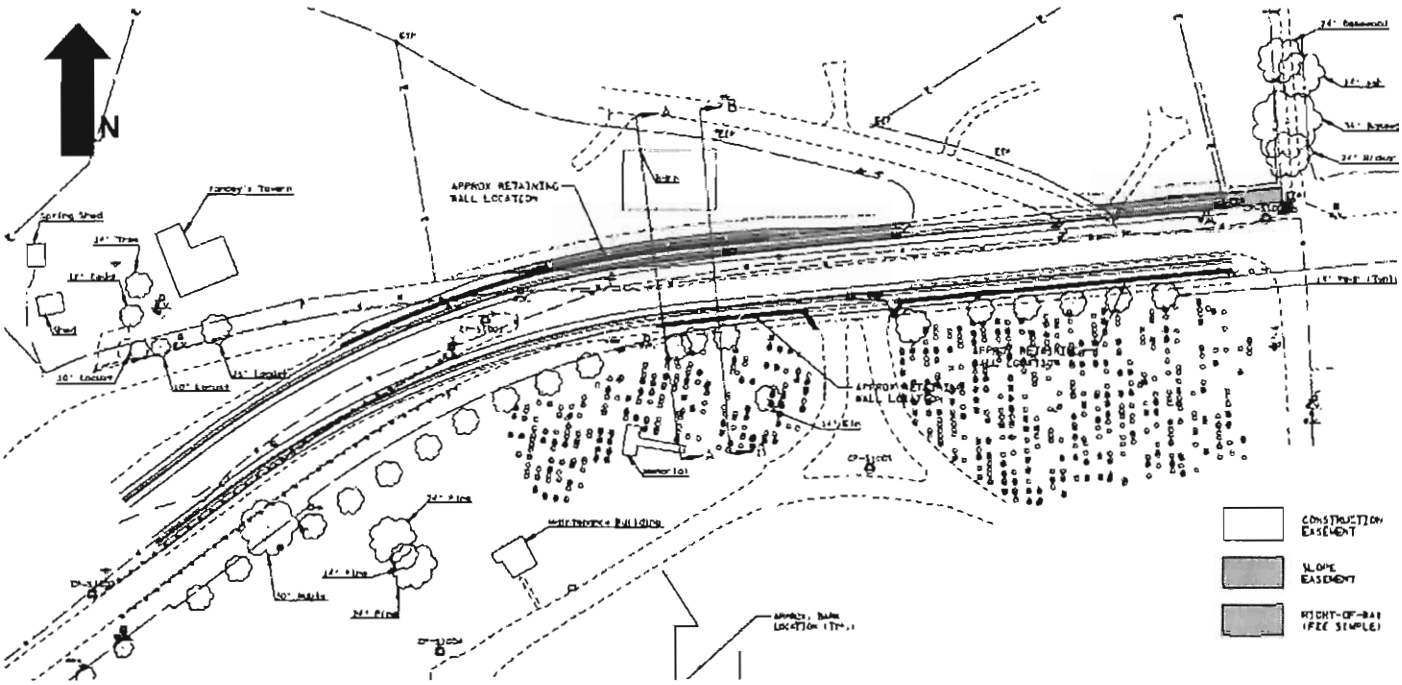


Figure 4: *Conceptual Layout between Yancey's Tavern and the East Lawn Memorial Garden*

Modified Alternative B

Given the potential impacts to the East Lawn Memorial Garden Cemetery if the alignment shifts to the south and the impacts to the National Register listed Yancey's Tavern if the alignment is shifted to the north, TDOT is currently proposing a compromise alternative that would take some land from the cemetery without taking graves. This revised alternative would eliminate the right-of-way take from Yancey's Tavern and eliminate the proposed slope easement. An approximately twelve-foot wide temporary construction easement will be needed on the Yancey's Tavern side. However, after construction the land will be returned to its pre-construction grade and appearance.

In addition, the revised alternative would keep the existing Chestnut Ridge Road open to traffic in front of the tavern rather than have a cul-de-sac to the west. However, Chestnut Ridge Road would no longer tie into SR 126 but would end with a branch turn-around just beyond the tavern. The branch turn-around will provide travelers on Chestnut Ridge Road with a safe way to turn around without having to use Yancey's Tavern's driveway. Landscaping will be added around the turn-around to provide further screening at the historic property. A retaining wall will still be needed on both sides of the road but the height would be approximately six-feet tall. Only a short segment of the retaining wall on the northern side of SR 126 will be visible from Yancey's Tavern.

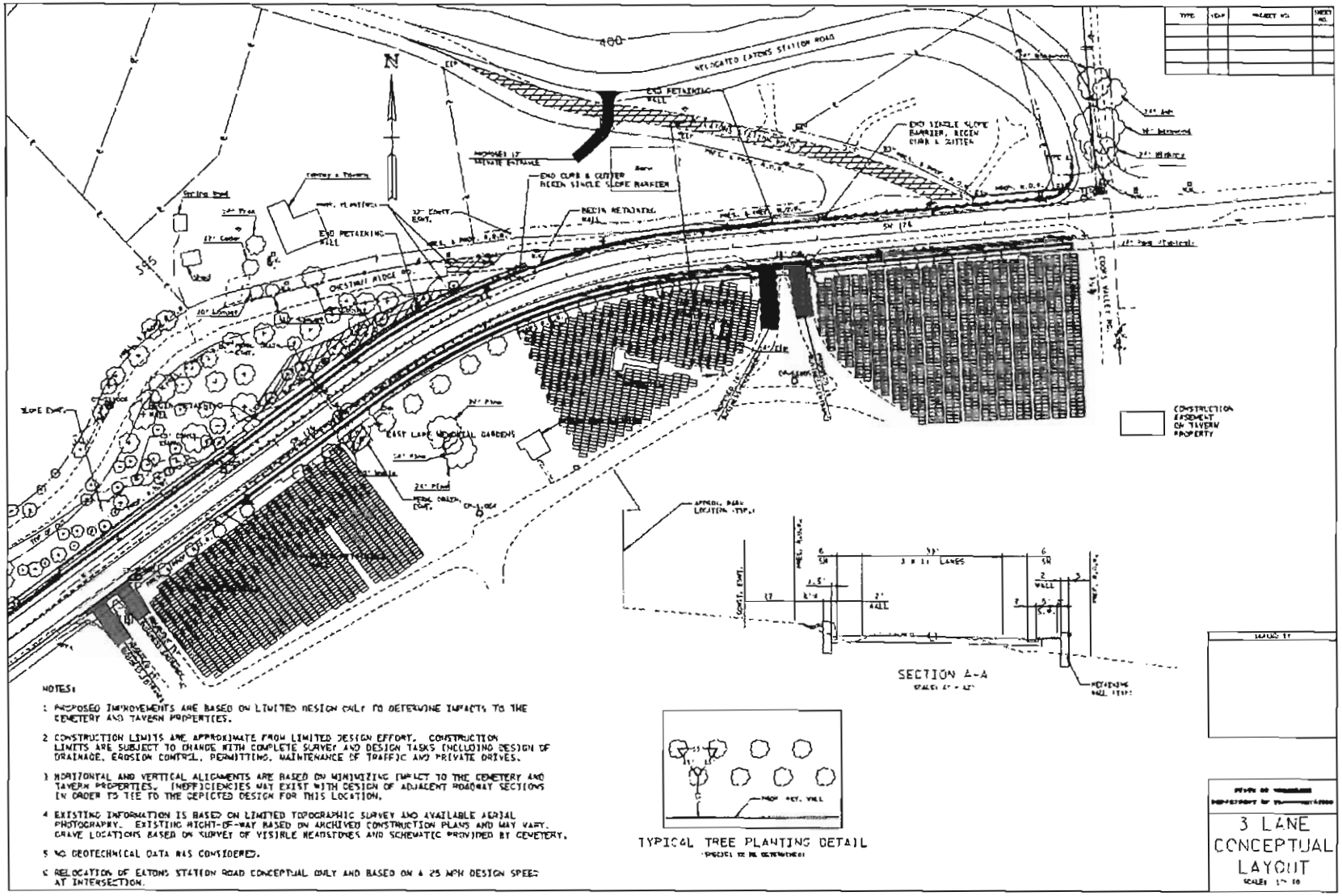


Figure 5: Functional Design for *Alternative B Modified*

Public Involvement

On November 19, 2003, TDOT mailed letters to nine groups or tribes representing Native American interests and asked them if they wished to participate in the historic review process as consulting parties (list below). To date, TDOT has not received any responses related to architectural resources. Appendix F contains a copy of the letter.

Mr. James Bird-THPO
Eastern Band of Cherokee Indians

Dr. Richard Allen
Research and Policy Analyst

Ms. Rena Duncan
Cultural Resources Director
Chickasaw Nation

Mr. Gregory E. Pyle
Choctaw Nation of Oklahoma

Mr. Tim Thompson
Muscogee (Creek) Nation

Mr. Emman Spain
Historic Preservation Specialist
Seminole Nation of Oklahoma

Mr. Archie Mouse, Chief
United Keetoowah Band of Cherokee

Mr. Charles D. Enyart
Eastern Shawnee Tribe Oklahoma

Ms. Carrie Wilson
Quapaw Tribe of Oklahoma

On October 17, 2008, the Documentation of Effect Report was circulated to the following historic groups. A copy of this addendum will be circulated to these historic groups and those that commented on the 2008 document.

Sullivan County Historical Society
P.O. Box 60
Blountville, TN 37617

Ken Weems
CLG/Historic Commission
City of Kingsport
225 W. Center Street
Kingsport, TN 37660-4237

Tennessee Valley Authority
Cultural Resources
400 West Summit Hill Drive
Knoxville, TN 37902

Dr. Dale Royalty
East Tennessee State University
Department of History
Box 70672
Johnson City, TN 37614-0672

Ambre Torbett,
Director of Planning and Codes
Sullivan County
3411 Highway 26, Suite 30
Blountville TN 37617,

Mayor of Kingsport
225 West Center Street
Kingsport, TN 37660

Claudia Moody
Northeast Heritage Tourism Area
P. O. Box 375
Jonesborough, TN 37659

Sullivan County Mayor
3411 Highway 126, Suite 206
Blountville, TN 37617

Deborah Montanti
The Heritage Alliance of Northeast TN
& Southeast Virginia
212 East Sabin Drive
Jonesborough, TN 37659

Sheila Hunt
Sullivan County Historian
Dept of Archives & History
3425 Highway 126, Suite 100
Blountville, TN 37617

Justin Sanders
The Heritage Alliance, NE TN
212 Sabin Drive
Jonesborough, TN 37659

Sullivan County Historical and
Genealogical Society
P.O. Box 568
Blountville, TN 37617

Gray Stothart
Historian First TN Development District
3211 North Roan Street
Johnson City, TN 37601

Downtown Kingsport Association
Attn: Calvin Wright
140 West Main Street
Kingsport, TN 37660

Property Owners

Rann Vaulx
Yancey's Tavern Owner
405 Wine Circle
Blountville, TN 37617

Jack and Shirley Jarvis
Shipley-Jarvis House
3309 Memorial Blvd.
Kingsport, TN 37664

Previous Commenters on the 2008 Documentation of Effect Report

Mary Fanslow
Netherland Inn/Exchange Place
P.O. Box 293
Kingsport, TN 37662

Robert J. Nolestine, III
Association for the Preservation of
Tennessee Antiquities
110 Leake Avenue
Nashville, TN 37205

Judith B. Murray
804 Rock City Road
Kingsport, TN 37664

The 2008 Documentation of Effect Report was also provided to the property owners of the National Register listed and eligible properties within the project corridor. The document was then passed on to other regional and statewide organization with a historic preservation

interest. After the public commenting period ended, TDOT forwarded copies of the comment letters and TDOT response letters to the TN-SHPO on January 26, 2009. The following is a summary of the historic comment letters (Copies of the letters can be found in Appendix E).

- November 14, 2008: Mr. Rann Vaulx, owner of Yancey's Tavern, requested that TDOT send a copy of the Documentation of Effect Report to several historic groups (The report was mailed to these groups in December 2008). Mr. Vaulx agreed that the proposed improvements would be an adverse visual impact to the historic property but further commented that the removal of Chestnut Ridge Road would destroy "the paved continuation of the 1761 Island Road." In a letter dated November 24, 2008, TDOT responded to Mr. Vaulx and forwarded a copy of both letters to the TN-SHPO.

- November 19, 2008: Ms. Judith Murray, a member of the Citizens Resource Team (CRT) for the CSS process, wrote at Mr. Vaulx's request, regarding the project. She pointed out the nuances of the CSS process and agreed that the project would adversely impact the historic property. She further requested that TDOT look at additional alignments. Since the majority of her comments dealt with CSS items, the project manager, Ray Henson, responded to her letter on December 23, 2008. A copy of this letter is attached.

- December 18, 2008: A representative of the Association for the Preservation of Tennessee Antiquities (APTA) wrote a letter agreeing with TDOT's position that the proposed project would adversely impact the historic Yancey's Tavern property.

- April 1, 2009: The Netherland Inn/Exchange Place commented on the significance of Yancey's Tavern in the early settlement of Sullivan County. The organization also agreed that the project would have an adverse effect on Yancey's Tavern.

Although each of the public comment letters agreed with TDOT's assessment that the project would adversely affect Yancey's Tavern, the letter writers disagreed with the overall design of the project. Since these letters were written and responded to, TDOT is currently working to resolve the historic issues and this document carefully lays out the ways TDOT is addressing citizen concerns. Each person or organization that responded to the 2008 Documentation of Effects Report will receive a copy of this addendum document.

Inventoried Properties

TDOT historians surveyed the APE for the proposed project and determined that two properties were either listed in or eligible for listing in the National Register of Historic Places.

- The Shipley-Jarvis House is eligible for listing in the National Register of Historic Places. The proposed project adjacent to the Shipley-Jarvis house remains the same as it was described in the 2008 Documentation of Effects Report and, at that time, it was TDOT's opinion that the project would not adversely affect the historic property. Since the design of the project at the Shipley-Jarvis House has not changed it will not be discussed further in this addendum.

- Yancey's Tavern was listed in the National Register of Historic Places in 1972. The design of the proposed project has been changed and the following is the documentation of effect to Yancey's Tavern.

Yancey's Tavern: *Chestnut Ridge Road*

Listed in the National Register of Historic Places under Criterion A for its association in the early settlement of Sullivan County, Yancey's Tavern is situated on Chestnut Ridge Road located to the northwest of the existing State Route 126. In the 2008 report, the design of the proposed project adjacent to Yancey's Tavern included a four-lane cross-section; however, no right-of-way was being taken from the historic property with all of the proposed right-of-way at the property coming off of the East Lawn Memorial Garden on the southern side of State Route 126. In the 2008 report, it was the opinion of TDOT that the project would have an adverse effect to the National Register listed property.

The following information is from the 1972 National Register Nomination:

> Yancey's Tavern, built by 1782, was at one time, and remains so beneath its present covering, a double log house with a dogtrot. Handfired brick replaced the original stone chimneys and part of the stone foundation, probably sometime in the nineteenth century. More recently, brick was used to completely enclose the cellar area, although the framing of the door and window openings leading into the cellar are much earlier. Both front and back porches are later. The one-story back wing is not original to the house, although the fireplace with its simple mantel and crane suggests an early date. The placement of the back chimney also suggests the possibility that this area was once a small distance from the main structure and served as a kitchen. Window and door openings in the structure are not entirely original, but their location would pre-date the twentieth century.
>
> The interior of Yancey's Tavern is simple, with three plain but well-executed mantels on the first floor. Two second-story rooms are reached by separate stairways. On the upper floor, construction of the dogtrot is visible because this section of the house has not been finished for use.
>
> Miscellaneous frame outbuildings of varying dates surround the dwelling house. Most of the structures, including a barn, wash house, spring house, chicken house, and corncrib, date from the late nineteenth or early twentieth centuries. The frame granary with its shingle roof and stone foundation is considerably earlier.[1]

The nomination further states:

> Yancey's Tavern was an important stop along the Island Road, the major artery in upper East Tennessee. As such, it figured prominently in the development of the area, attracting as its visitors such men as John Sevier and William Blount, and serving as headquarters for local business such as meetings of the Sullivan County court.
>
> The Island Road predates Yancey's Tavern. Completed in September 1761, it was the first organized road to be built not only in Tennessee but also to the southwest, connecting Chilhowie, Virginia, to the Long Island of the Holston River. Although built for

[1] Ellen Beasley, "Yancey's Tavern," *National Register of Historic Places Nomination*, 10 November 1972, On file with the Tennessee Historical Commission, Nashville, Tennessee.

military purposes, it served as a route for settlers. Part of the Island Road later became known as the Great Stage Road.

Along the road in the Tennessee section were three forts, including Eaton's Fort. This fort was located on property which, by the early 1770s, was part of Amos Eaton's 'corn rights' lands. In 1779, Eaton sold a portion of his land near the fort to James Hollis, who, in turn, sold 900 acres to John Yancey Sr. in 1782. It is not known if Yancey's purchase included a dwelling or if Yancey built the structure; however, within a short period, the tavern was in operation. Yancey's heirs maintained the property until the last half of the nineteenth century, when it changed ownership several times prior to being purchased in 1889 by John R. Spahr, whose descendants still own the place today.[2]



Figure 6: Front elevation of the National Register listed Yancey's Tavern located on the Old Stage Road near the intersection with State Route 126. This photograph was taken in 2003. In September 2004, the area surrounding the historic property was broken into 16 tracts of land and sold at auction.



Figure 7: Side elevation showing the exterior brick chimney that, according to the National Register nomination, replaced an earlier stone chimney.



Figure 8: Side elevation showing the Other brick chimney

[2] Ibid.



Figure 9: Current Photograph of the setting at Yancey's Tavern. The proposed project would shift the three-lane, urban roadway to the north removing the mature trees that are currently between Yancey's Tavern and State Route 126 and a retaining wall would cross over part Chestnut Ridge Road. Landscaping is planned that will help shield Yancey's Tavern from the new alignment.

National Register Boundary Information

In the early 1970s, the National Register program rarely required defined boundaries for historic properties. The National Register nomination for Yancey's Tavern was completed in 1972. The boundaries are defined as five acres. The following map shows the approximate 5 acre-National Register boundary recommended by the TN-SHPO.

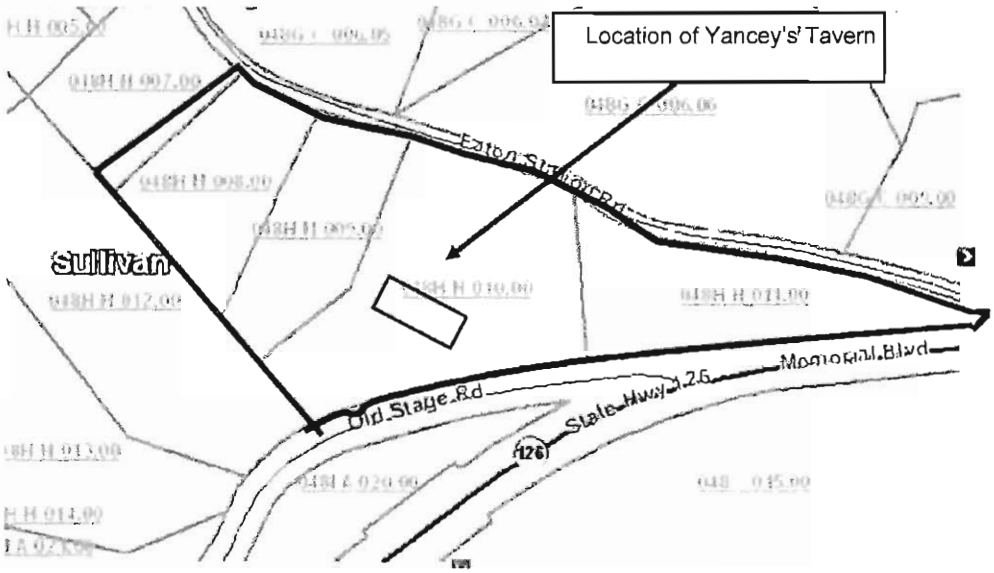


Figure 10: Approximate National Register Boundary for Yancey's Tavern as outlined in the 1972 National Register nomination.

DOCUMENTATION OF EFFECTS—Alternative B Modified at Yancey's Tavern

TDOT applied the Criteria of Effect as found in 36 CFR 800.5 to the proposed design, entitled *Alternative B Modified*, adjacent to the historic property. In 2008, the proposed design included a four-lane urban cross-section with no right-of-way coming from within the National Register boundary of the historic property. However, it was the opinion of TDOT that the proposed project would introduce a road that is out-of-scale and character with the historic property and would be an adverse visual effect to the historic property.

In June of 2012, TDOT proposed design changes to *Alternative B1* that reduced the cross-section from a four-lane urban roadway to a three-lane urban roadway. Although the width of the road was reduced, the roadway would still have been almost double the pavement width of the existing two-lane road with this alternative. This proposed design would not take any land from the East Lawn Funeral Home and Cemetery on the southern side of the road but required approximately one acre of right-of-way and about 0.1 acres of permanent easements from within the boundary of the historic property. Additionally, this proposed design would have required a retaining wall on both sides of State Route 126, the existing alignment of Chestnut Ridge Road would have been cut off from State Route 126 with a cul-de-sac that would have been to the west of Yancey's Tavern that cut the historic property off from Chestnut Ridge Road and would have required a new driveway. Additionally, the three-lane urban roadway with approximately 45-feet of pavement would have been shifted to the north closer to the historic property. Due to these design features, it was the opinion of TDOT that the proposed *Alternative B1* from June 2012 would adversely affect Yancey's Tavern. In a letter dated June 13, 2012, the TN-SHPO agreed with TDOT's findings. Figure 4 (on page 8) contains the functional plan sheet showing the proposed Alternative B1 at Yancey's Tavern.

Due to the potential adverse effect of Alternative B1, TDOT historians worked with the designers to minimize harm to the historic property, Yancey's Tavern. According to the plans for Alternative B Modified, the proposed project would shift the right-of-way from Yancey's Tavern to the south onto the East Lawn Memorial Garden and Cemetery but would not be shifted so far to the south that occupied graves would need to be relocated. This would allow for only a small temporary construction easement within the National Register boundary of Yancey's Tavern and that construction easement would be returned to the current grade and appearance after construction is completed. A retaining wall would be required on both the north and south sides of the proposed State Route 126; however, given the existing grade and elevation of the historic Yancey's Tavern building only a short section of the wall would be visible from the house itself. Although little of the retaining wall will be visible from Yancey's Tavern, TDOT is proposing an aesthetic treatment to the wall that will be compatible with the historic landscape but will be minimalist in its design. TDOT will consult with the TN-SHPO and consulting parties in designing the retaining wall in order to get their review and comments on the proposed design feature. The cross-section in Alternative B Modified would also be reduced by the removal of the sidewalks on the northern side of State Route 126. Utilities will be relocated with this revised alternative and according to representatives from TDOT's Right-of-Way and Utilities Divisions there is sufficient space within that cross-section to relocate all utilities.

Additionally, mature trees currently shield Yancey's Tavern from State Route 126, and the shift to the south would allow more of those trees to remain than previous alternatives. Although these revisions would allow for more of the existing trees to remain, some of the trees would be removed. In order to re-screen the area in front of Yancey's Tavern, TDOT is proposing a detailed landscaping plan that will be created in consultation with TDOT, the TN-SHPO and

consulting parties to provide appropriate plantings for the area. As the proposed project continues to be designed, landscaping and aesthetic details will be presented to the TN-SHPO and consulting parties for review and comment.

Alternative B Modified would also keep Chestnut Ridge Road open in front of Yancey's Tavern, allowing the historic property to keep its entrance off the existing Chestnut Ridge Road. Although Yancey's Tavern will continue to stay connected to Chestnut Ridge Road, the road itself will no longer intersect with State Route 126 to the east of Yancey's Tavern. Chestnut Ridge Road will end slightly to the southeast of the tavern itself and a branch turn-around will be provided at the dead end to give travelers the opportunity to turn around. The turn-around has been provided in order to keep drivers from using Yancey's Tavern's driveway as a turn-around and to continue to allow Yancey's Tavern to have access from Chestnut Ridge Road. Having a branch turn-around rather than a cul-de-sac will give the dead end a more rural feel rather than the suburban feel of a bulb-out cul-de-sac. The branch turn-around will require some of the mature trees to the southwest of Yancey's Tavern to be removed; however, TDOT will develop a detailed landscaping plan, in conjunction with the TN-SHPO and consulting parties, that will replace the vegetation that will need to be removed with the branch, turn-around design.

A drawing of the branch turn-around can be found in Figure 11. Figure 12 shows the existing setting from the porch at Yancey's Tavern. Figure 13 is a computer generated rendering from Yancey's Tavern toward State Route 126 after the proposed project is complete. Figure 14 shows the existing view of Yancey's Tavern from the cemetery. Figure 15 is a computer generated rendering showing the roadway and the tavern after construction is completed. Figure 16 shows the functional design plans for the *Alternative B Modified* with the location of the proposed landscaping shown in a general format. The detailed landscaping plan will be developed by TDOT and will be designed in consultation with the TN-SHPO and consulting parties.

Alternative B Modified includes numerous design revisions to minimize harm to the historic property. *Alternative B Modified* will reduce the pavement width of the proposed State Route 126 with the removal of the sidewalk on the northern side of the road and will shift the roadway alignment as far south as possible without taking graves from the East Lawn Memorial Garden. Additionally, the need for right-of-way from Yancey's Tavern has been eliminated with this alternative, taking only a temporary construction easement at the tavern. Yancey's Tavern will also stay connected to Chestnut Ridge Road as it was historically; however Chestnut Ridge Road will have a branch turn-around at the dead end just southeast of the tavern. TDOT will design a detailed landscaping plan that is compatible with the existing landscape and an aesthetic treatment for the retaining wall will be developed with the TN-SHPO and consulting parties in order to provide additional screening at the tavern.

For the reasons stated above, it is the opinion of TDOT that the proposed ***Alternative B Modified*** will have **No Adverse Effect** on the National Register listed Yancey's Tavern.

36CFR 800.5 (a) Apply Criteria of Adverse Effect

> In consultation with the SHPO/THPO and any Indian tribe or Native Hawaiian organization that attaches religious and cultural significance to identified historic properties, the Agency Official shall apply the criteria of adverse effect to historic properties within the area of potential effects. The Agency Official shall consider any views concerning such effects, which have been provided by consulting parties and the public.

(a) (1) Criteria of Adverse Effect

An adverse effect is found when an undertaking may alter, directly or indirectly, any of the characteristics of a historic property that qualify the property for inclusion in the National Register in a manner that would diminish the integrity of the property's location, design, setting, materials, workmanship, feeling, or association. Consideration shall be given to all qualifying characteristics of a historic property, including those that may have been identified subsequent to the original evaluation of the property's eligibility for the National Register. Adverse effects may include reasonably foreseeable effects caused by the undertaking that may occur later in time, be farther removed in distance or be cumulative.

(b) (2) Examples of Adverse Effects

An undertaking is considered to have an Adverse Effect when the effect on a historic property may diminish the integrity of the property's location, design, setting, materials, workmanship, feeling, or association. Adverse effects on historic properties include, but are not limited to:

(i) Physical destruction of or damage to all or part of the property;

The proposed *Alternative B Modified* shifts the proposed right-of-way to the south of the historic property onto the East Lawn Memorial Garden, eliminating the need for right-of-way from within the National Register Boundary of Yancey's Tavern. Only a temporary construction easement that is approximately twelve feet wide will be needed and after construction the area will be returned to its pre-construction slope and appearance. Therefore, it is the opinion of TDOT that the proposed *Alternative B Modified* would not physically damage or destroy all or part of the historic property.

(ii) Removal of the property from its historic location

The proposed *Alternative B Modified* would not result in the removal of a contributing structure from its historic location.

(iii) Change of the character of the property's use or physical features within the property's setting that contribute to its historic significance;

Yancey's Tavern was listed in the National Register of Historic Places under Criterion A for its significance in the early settlement of Sullivan County. *Alternative B Modified* shifts the proposed three-lane roadway further to the south than previous alternatives. The overall amount of pavement is also reduced by the removal of the sidewalk on the northern side of State Route 126. Since the roadway is shifted to the south, more mature trees located directly in front of Yancey's Tavern will remain in place. The trees that are removed for the new roadway will be replanted on the slope with a detailed landscaping plan that will be coordinated with the TN-SHPO and consulting parties. Additionally, Chestnut Ridge Road will remain open and provide access to the historic tavern and will remain a small, two-lane road that has historically provided access to structure. This keeps the historic road pattern in place. A branch turn-around with landscaping will end Chestnut Ridge Road to the southeast of the historic tavern rather than a suburban cul-de-sac. This design feature will provide travelers with the opportunity to turn around at the dead end without using the Yancey's Tavern property as a

turn around. Figure 11 shows the proposed branch design. This design will provide a more natural ending to the road while providing additional screening from State Route 126.

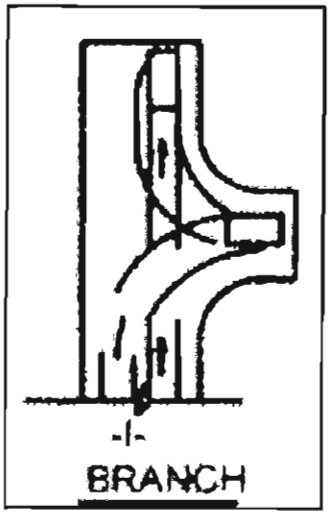


Figure 11: This drawing, from the American Association of State Highway and Transportation Officials (AASHTO) Handbook, shows the standard for the proposed branch turn-around at the dead end on Chestnut Ridge Road adjacent to Yancey's Tavern. It shows the reduced pavement and rural feel of the turn-around. The branch will be located away from the historic property and TDOT is proposing to provide a detailed landscaping plan developed in coordination with the TN-SHPO and consulting parties, at the branch.

A retaining wall will be required on both the northern and southern sides of State Route 126; however it will be shorter than in previous alternatives. Due to the slope and terrain at Yancey's Tavern, only a small section of the retaining wall will be visible from the porch of the historic tavern. TDOT will use an aesthetic treatment on the wall to improve the overall aesthetic design of the project from State Route 126 itself. The aesthetic features of the retaining wall will be coordinated with the TN-SHPO and consulting parties in order to design a wall that fits the character of the environment surrounding the historic property. Figure 12 is a 2012 photograph that shows the view from the second-story porch at Yancey's Tavern as State Route 126 currently looks. Figure 13 is a computer generated rendering from the same spot on the Yancey's Tavern porch as it will look after the completion of the proposed State Route 126 improvements. Note that in Figure 13 the landscaping around the branch turn-around is conceptual and a detailed landscaping plan will be designed in consultation with the TN-SHPO and consulting parties. Figure 14 shows the view from State Route 126 to the northeast toward Yancey's Tavern as it currently looks. Figure 15 is a computer generated that shows the view of the landscape from State Route 126 after the project is complete. Since the rendering is a conceptual plan, design details of the retaining wall and the landscaping plan will be determined in more detail in consultation with the TN-SHPO and consulting parties. Figure 16 shows the area where trees will be removed and the general area for tree plantings; however a detailed landscaping plan will be developed in consultation with the TN-SHPO and consulting parties.

Due to the design of Alternative B Modified, it is the opinion of TDOT that the proposed project would not change the character of the property's use or physical features that contribute to its historic significance.



Figure 12: Existing setting from the Yancey's Tavern porch



Figure 13: A computer rendering showing the setting from the porch at Yancey's Tavern. Note that the branch turnaround is beyond the tavern itself which will allow the tavern to remain on the road it has historically been associated with. As part of the project, TDOT will create a landscaping plan that may include trees other than the ones show in the rendering. The landscaping plan will be developed in consultation with the TN-SHPO and consulting parties.

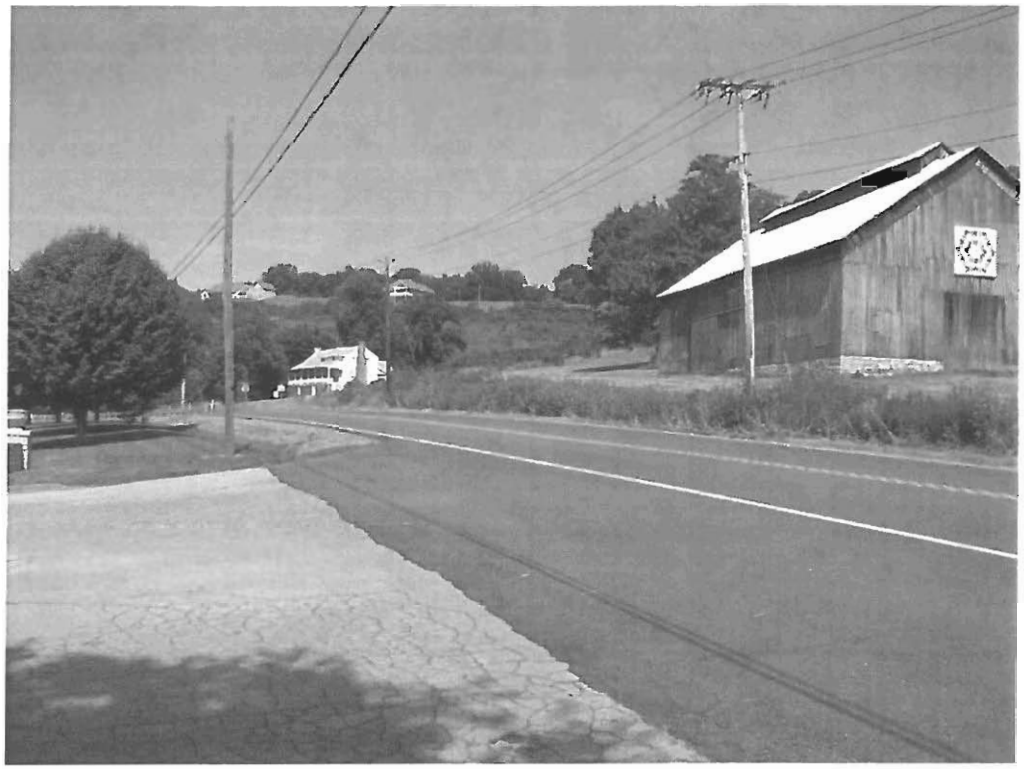


Figure 14: Existing view of Yancey's Tavern from State Route 126

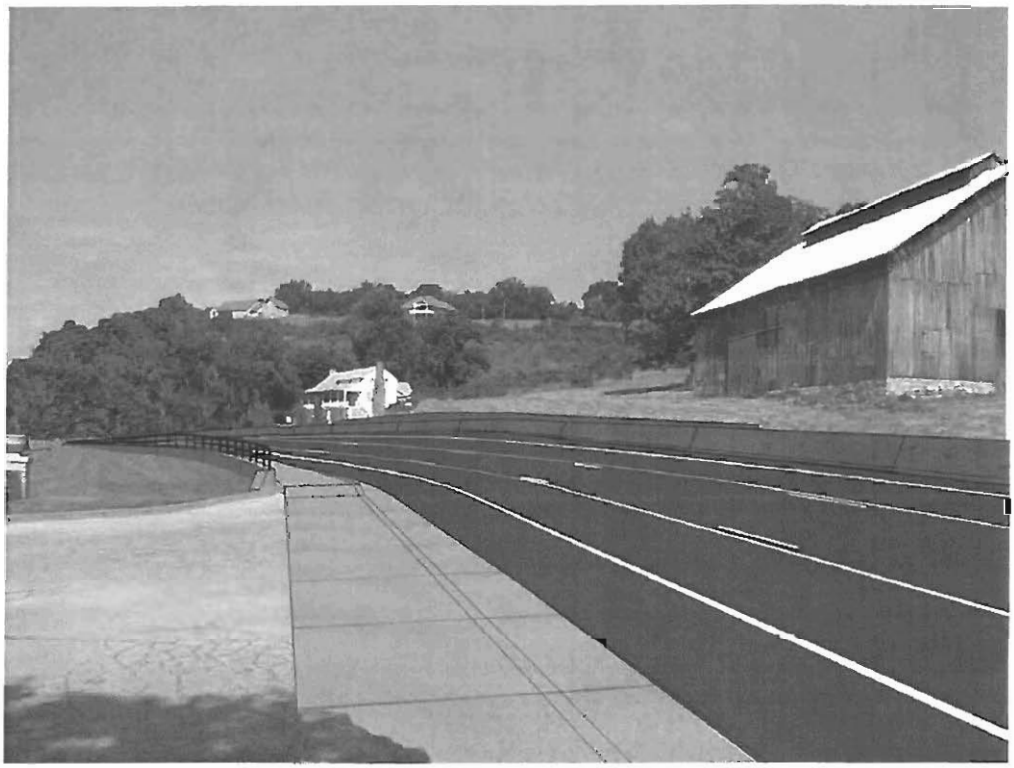


Figure 15: Computer generated rendering from the cemetery toward Yancey's Tavern showing the view of the property from the road. The colors depicted in the rendering are due to the nature of the technology and it appears darker that it should be when constructed.

(iv) Introduction of visual, atmospheric, or audible elements that diminish the integrity of the property's significant historic features;

Yancey's Tavern is eligible for listing in the National Register under Criterion A for its significance in the early settlement of Sullivan County and was historically used as a hotel and restaurant for travelers in the late eighteenth and nineteenth centuries. Historically associated with the road, the tavern currently sits on a two-lane road with vegetation between the historic property and the existing State Route 126. *Alternative B Modified* would build a three-lane roadway that has been shifted further to the south than previous alternatives and the cross-section has been reduced by the removal of the sidewalk on the northern side of State Route 126. These design changes would allow for more of the mature trees that currently separate Yancey's Tavern from State Route 126 to remain in place and provisions have been made to landscape the northern slope of the proposed three-lane roadway in order to provide additional vegetative screening for the tavern.

Since its historical association is with the road itself, *Alternative B Modified* proposes to keep Chestnut Ridge Road open in front of Yancey's Tavern which will allow for continued access at its historic entrance. Chestnut Ridge Road will be closed just beyond the tavern itself and a branch turnaround with landscaping will mark the end of Chestnut Ridge Road. This branch turn-around will provide drivers with the opportunity to safely turn around without using the driveway at Yancey's Tavern. TDOT will also provide landscaping around the turn-around for additional screening from the proposed three-lane facility. The Alternative B Modified has proposed right-of-way that has been shifted to the south and the height of the retaining wall on the northern side of State Route 126 at Yancey's Tavern has been reduced. Additionally, keeping the mature trees, the historic road configuration, and ending Chestnut Ridge with a branch turn-around and landscaping will provide historically appropriate screening. Therefore, it is the opinion of TDOT that the proposed Alternative B Modified would not introduce any visual, atmospheric, or audible elements that diminish the integrity of Yancey's Tavern.

(v) Neglect of a property which causes its deterioration, except where such neglect or deterioration are recognized qualities or a property of religious and cultural significance to an Indian tribe or Native Hawaiian organization; and

The proposed improvements will not result in the neglect or associated deterioration of Yancey's Tavern.

Based on the proposed design of *Alternative B Modified*, it is the opinion of TDOT that the proposed project would have **no adverse effect** on Yancey's Tavern.

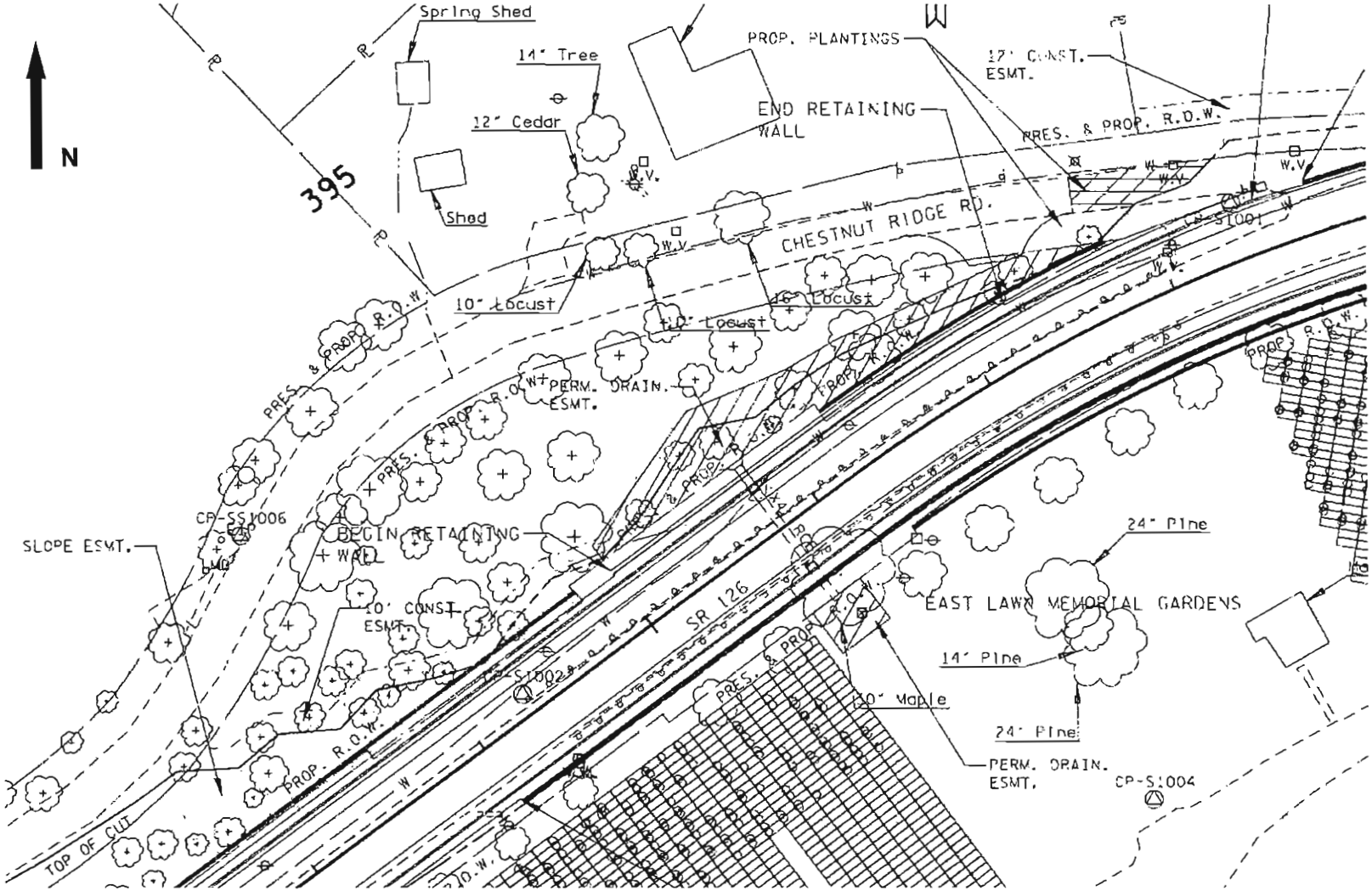


Figure 16: ***Alternative B Modified Detail***, the proposed right-of way is shown with a heavy black line and the cross-hatching indicates proposed construction easements and the removal of existing vegetation. As part of the project, TDOT will develop a detailed landscaping plan to replace trees that have been removed for the proposed project. The green trees are only a representation and a more detailed plan will be designed in consultation with the TN-SHPO and consulting parties.

Section 4(f) Involvement—Alternative B Modified at Yancey's Tavern

Codified at 49 CFR 303, "Section 4(f)" refers to a section of the U.S. Department of Transportation Act (1966, as amended) that gives special consideration to the use of park and recreational lands, wildlife and waterfowl refuges, and historic sites by federally assisted transportation projects. To be considered "historic," a property must be either listed in the National Register of Historic Places or is determined eligible for such listing by the Keeper of the Register of the State Historic Preservation Officer, Section 4(f) applies only to those projects using federal funds from the U.S. Department of Transportation.

Federal laws state that the Secretary of the Department of Transportation may approve the use of land from a historic site only if:

(1.) there is no prudent or feasible alternative to using that land, and

(2.) the program or project includes all possible planning to minimize harm to the historic site resulting from the use (see Appendix D).

The Federal Highway Administration (FHWA) determines if the requirements of the Section 4(f) stature are met. The FHWA will approve the use of the Section 4(f) property only if the requirements are satisfied.

The proposed project would not incorporate any land from the historic boundary into a transportation facility nor would it adversely affect it while temporarily occupying land within the boundaries of the historic property. The proposed project would not substantially impair any activities, features, or attributes that qualify the historic property as eligible for listing in the National Register. Under the Section 106 process, the proposed project would have an effect that is not adverse to the historic property. For these reasons, it is the opinion of TDOT that the proposed project would not have a Section 4(f) use of the historic property.

Conclusions

The Tennessee Department of Transportation with funding made available through the Federal Highway Administration is proposing to improve State Route 126 from East Center Street to I-81 in Kingsport.

This addendum report discusses the effects to the National Register listed property: Yancey's Tavern located on State Route 126 outside of Kingsport. In 2004, TDOT historians surveyed the Area of Potential Effects (APE) and inventoried 96 properties. In a 2005 report, it was the opinion of TDOT that one property, Yancey's Tavern, was listed in the National Register of Historic Places and one additional property, the Shipley-Jarvis House, was eligible for listing in the National Register of Historic Places. In a letter, dated March 22, 2005, the Tennessee State Historic Preservation Officer (TN-SHPO) concurred with these findings.

In 2008, TDOT historians sent a Documentation of Effects report to the TN-SHPO and in that document stated that it was TDOT's opinion that the proposed project would not adversely affect the Shipley-Jarvis House and would adversely affect Yancey's Tavern. The TN-SHPO agreed with TDOT's findings in a November 3, 2008 letter. In the 2008 report, the alignment adjacent to Yancey's Tavern indicated that a substantial number of graves in the East Lawn Funeral Home and Memorial Garden would be relocated as part of both of the proposed alternatives.

In 2012, the negative public response to the removal of graves and reburials caused TDOT to re-design a segment of the roadway adjacent to Yancey's Tavern. The design of the project at the Shipley-Jarvis House has not changed so the effects remain the same as described in the 2008 document. In an effort to avoid the removal of graves from the East Lawn Memorial Garden, TDOT redesigned the proposed project between Yancey's Tavern and the East Lawn Memorial Garden in June 2012.

In June 2012, Alternative B1 was proposed and would not have required any additional right-of-way from the memorial garden but would have required right-of-way from the northern side of the State Route 126, and would have resulted in taking approximately one acre of right-of-way and about 0.1 acres of permanent slope easements from the historic property. With this alternative, a retaining wall that would have been seven feet tall at its highest point was proposed on the northern side of the roadway in front of the tavern and a cul-de-sac was proposed for the existing Chestnut Ridge Road to the west of the historic property, disconnecting it from the road with which it has been historically associated. Based on the right-of-way take, height of the retaining wall, and the introduction of a modern, urban roadway, it was the opinion of TDOT that Alternative B1 would have an adverse effect to the historic property. In a letter, dated June 13, 2012, the TN-SHPO agreed with TDOT's findings.

In an effort to minimize harm to Yancey's Tavern, the proposed project has been redesigned in the area between Yancey's Tavern and the East Lawn Memorial Garden. According to the plans for ***Alternative B Modified***, the proposed project would shift the right-of-way from Yancey's Tavern to the south onto the East Lawn Memorial Garden and Cemetery but would not be shifted so far to the south that occupied graves would need to be relocated. This would allow for only a small construction easement of approximately twelve-feet within the National Register boundary of Yancey's Tavern. After construction, the easement area will be returned to the current grade and appearance. A retaining wall will be required on both the north and south side of the proposed State Route 126; however, given the existing grade and elevation of the historic Yancey's Tavern building the wall would not be visible from the house itself.

Additionally with *Alternative B Modified*, the shift to the south would allow more mature trees that currently shield Yancey's Tavern from the road to stay in place and TDOT is proposing additional landscaping with this alternative. *Alternative B Modified* would keep Chestnut Ridge Road open in front of Yancey's Tavern, allowing the historic property to keep its entrance off the existing road and the historic connection to that road. Chestnut Ridge Road would dead end to the southeast of Yancey's Tavern with a branch turn-around that will provide motorists with a safe turn-around location at the dead end without using the driveway at Yancey's Tavern. The branch turn-around will be located away from the historic property and a landscaping plan is proposed at the end of the road to make a more natural ending rather than a suburban cul-de-sac.

Alternative B Modified includes numerous design revisions to minimize harm to the historic property. *Alternative B Modified* will reduce the pavement width of the proposed State Route 126 with the removal of the sidewalk on the northern side of the road and will shift the roadway alignment as far south as possible without taking graves from the East Lawn Memorial Garden. Additionally, the need for right-of-way from Yancey's Tavern has been eliminated with this alternative, taking only a temporary construction easement at the tavern. Yancey's Tavern will also stay connected to Chestnut Ridge Road as it was historically; however Chestnut Ridge Road will have a branch turn-around at the dead end just southeast of the tavern. A landscaping plan and an aesthetic treatment for the retaining wall will be developed with the TN-SHPO and consulting parties in order to continually have vegetative screening at the tavern.

For the reasons stated above, it is the opinion of TDOT that the proposed ***Alternative B Modified*** will have **No Adverse Effect** on the National Register listed Yancey's Tavern. Pursuant to Section 4(f) of the U.S. Department of Transportation Act of 1966, the proposed project would not constitute a Section 4(f) use of a historic property.

Bibliography

Beasley, Ellen. "Yancey's Tavern," *National Register of Historic Places Nomination*, 10 November 1972, On file with the Tennessee Historical Commission, Nashville, Tennessee.

SECTION 106 REVIEW,
NATIONAL HISTORIC PRESERVATION ACT OF 1966

Section 106 of the ***National Historic Preservation Act*** requires that Federal agencies consider what effects their actions and/or actions they may assist, permit, or license, may have on historic properties, and that they give ***the Advisory Council on Historic Preservation (Council)*** a "reasonable opportunity to comment" on such actions. The Council is an independent Federal agency. Its role in the review of actions under Section 106 is to encourage agencies to consider, and where feasible, adopt measures that will preserve historic properties that would otherwise be damaged or destroyed. The Council's regulations, entitled "Protection of Historic Properties" (36 CFR Part 800) govern the Section 106 process. The Council does not have the authority to require agencies to halt or abandon projects that will affect historic properties.

Section 106 applies to properties that have been listed in the ***National Register of Historic Places (NRHP)***, properties that have been determined to be eligible for inclusion in the NRHP, and properties that may be eligible but have not yet been evaluated. If a property has not yet been nominated to the NRHP or determined eligible for inclusion, it is the responsibility of the Federal agency involved to ascertain its eligibility.

The Council's regulations are set forth in a process consisting of four basic steps which are as follows:

1. Initiate Section 106 Process: The Federal agency responsible for the action establishes the undertaking, determines whether the undertaking has the potential to affect historic properties (i.e., properties listed in or eligible for listing in the National Register of Historic Places), and identifies the appropriate State Historic Preservation Officer (SHPO) or Tribal Historic Preservation Officer (THPO). At this time, the agency plans to involve the public and identify other consulting parties.

2. Identify Historic Properties: If the agency's undertaking has the potential to affect historic properties, the agency determines the scope of appropriate identification efforts and proceeds to identify historic properties within the area of potential effects. Identification involves assessing the adequacy of existing survey data, inventories, and other information on the area's historic properties. This process may also include conducting further studies as necessary and consulting with the SHPO/THPO, consulting parties, local governments, and other interested parties. If properties are discovered that may be eligible for the National Register, but have not been listed or determined eligible for listing, the agency consults with the SHPO/THPO and, if needed, the Keeper of the National Register to determine the eligibility status of the property.

3. Assess Adverse Effects: The agency, in consultation with the SHPO/THPO, assesses the potential effects to historic properties affected by the undertaking. The agency at this time will determine that the action will have "no adverse effect" or an "adverse effect" on historic properties. Consulting parties and interested members of the public are informed of these findings.

   The regulations provide specific criteria for determining whether an action will have an effect, and whether that effect will be adverse. Generally, if the action may alter the characteristics that make a property eligible for the National Register, it is recognized that the undertaking will have an effect. If those alterations may be detrimental to the property's characteristics, including relevant qualities of the property's environment or use, the effects are recognized as "adverse."

4. Resolve Adverse Effects: The agency consults with the SHPO/THPO and others, including consulting parties and members of the public. The Council may choose to participate in consultation, particularly under circumstances where there are substantial impacts to historic properties, when a case presents important questions about interpretation, or if there is the potential for procedural problems. Consultation usually results in a Memorandum of Agreement (MOA).

If agreement cannot be reached, the agency, SHPO/THPO, or Council may terminate consultation. If the SHPO/THPO terminates consultation, the agency and the Council may conclude the MOA without SHPO/THPO involvement. If the SHPO/THPO terminates consultation and the undertaking is on or affecting historic properties on tribal lands, the Council must provide formal comments. The agency must request Council comments if no agreement can be reached.

ELIGIBILITY CRITERIA OF THE NATIONAL REGISTER OF HISTORIC PLACES AS SET FORTH AT 36 CFR 60.4

The quality of significance in American history, architecture, archaeology, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and:

- **CRITERION A.** that are associated with events that have made a significant contribution to the broad patterns of our history (history); or
- **CRITERION B.** that are associated with the lives of persons significant in our past (person); or
- **CRITERION C.** that embody the distinctive characteristic of a type, period, or method of construction or that represent the work of a master, or that possess high artistic values, or that components may lack individual distinction (architecture); or
- **CRITERION D.** that have yielded, or may be likely to yield, information important in prehistory or history (archaeology).

Ordinarily, cemeteries; birthplaces or graves of historical figures; properties owned by religious institutions or used for religious purposes; structures that have been moved from their original locations; reconstructed historic buildings; properties primarily commemorative in nature; and properties that have achieved significance within the past 50 years are not considered eligible for the National Register of Historic Places; however, such properties will qualify if they are integral parts of historic districts that do meet the criteria or if they fall within the following categories:

- **EXCEPTION A.** a religious property deriving primary significance from architectural or artistic distinction or historical importance; or
- **EXCEPTION B.** a building or structure removed from its original location but which is significant primarily for architectural value, or which is the surviving structure most importantly associated with a historic person or event; or
- **EXCEPTION C.** a birthplace or grave of a historical figure of outstanding importance if there is no other appropriate site or building directly associated with his productive life; or
- **EXCEPTION D.** a cemetery which derives its primary significance from graves or persons of transcendent importance, from age, from distinctive design features, or from association with historic events; or
- **EXCEPTION E.** a reconstructed building when accurately executed in a suitable environment and presented in a dignified manner as part of a restoration master plan, and when no other building or structure with the same association has survived; or
- **EXCEPTION F.** a property primarily commemorative in intent if design, age, tradition, or symbolic value has invested it with its own historical significance; or
- **EXCEPTION G.** a property achieving significance within the past 50 years if it is of exceptional importance.

NATIONAL REGISTER OF HISTORIC PLACES

Summary Sheet Prepared by TDOT

What is the National Register of Historic Places? The National Register, maintained by the Keeper of the Register within the National Park Service, Department of Interior, is the nation's official list of districts, buildings, sites, structures, and objects significant in American history, architecture, archeology, engineering, and culture.

What are the benefits and restrictions of listing? In addition to honorific recognition, listing in the National Register results in the following benefits for historic properties:

- Section 106 provides for consideration of National Register listed or eligible properties in planning for Federal, federally licensed, and federally assisted projects;
- Eligibility for certain tax provisions for the certified rehabilitation of income-producing National Register structures such as commercial, industrial, or rental residential buildings;
- Consideration of historic values in the decision to issue a surface mining permit where coal is located in accordance with the Surface Mining Control Act of 1977; and
- Qualification of Federal grants for historic preservation, when funds are available.

Does National Register designation place any additional burdens or obligations on the property owner? Owners of private property listed in the National Register are free to maintain, manage, or dispose of their property as they choose, provided that no Federal moneys are involved.

How is a property nominated to the National Register? The first step is for the owner to contact the Tennessee State Historic Preservation Office (TN-SHPO), Clover Bottom Mansion, 2941 Lebanon Road, Nashville, TN 37243-0442; 615-532-1558. Ordinarily, private individuals (or paid consultants) prepare nomination forms. The TN-SHPO submits these nominations to a State Review Board, which meets three times a year. This body reviews the nominations and votes to recommend or deny National Register listing. If approved, the TN-SHPO submits the nomination to the Keeper of the Register in Washington, D.C. for consideration for listing. The Keeper's Office has 45 days to review the nomination, and its decision regarding National Register listing is final.

How long does the nomination process take? The process varies but typically takes between eight and twelve months.

CRITERIA OF ADVERSE EFFECT

Regulations codified at 36 CFR 800 require Federal agencies to assess their impacts to historic resources. The regulations provide specific criteria for determining whether an action will have an effect, and whether that effect will be adverse. These criteria are given below.

36 CFR 800.5 Assessment of Adverse Effects

(a) *Apply Criteria of Adverse Effect.* In consultation with the SHPO/THPO and any Indian tribe or Native Hawaiian organization that attaches religious and cultural significance to identified historic properties, the Agency Official shall apply the criteria of adverse effect to historic properties within the area of potential effects. The Agency Official shall consider any views concerning such effects which have been provided by consulting parties and the public.

(1) Criteria of adverse effect. An adverse effect is found when an undertaking may alter, directly or indirectly, any of the characteristics of a historic property that qualify the property for inclusion in the National Register in a manner that would diminish the integrity of the property's location, design, setting, materials, workmanship, feeling, or association. Consideration shall be given to all qualifying characteristics of a historic property, including those that may have been identified subsequent to the original evaluation of the property's eligibility for the National Register. Adverse effects may include reasonably foreseeable effects caused by the undertaking that may occur later in time, be farther removed in distance or be cumulative.

(2) *Examples of adverse effects.* Adverse effects on historic properties include, but are not limited to:

(i) Physical destruction of or damage to all or part of the property;

(ii) Alteration of a property, including restoration, rehabilitation, repair, maintenance, stabilization, hazardous material remediation and provision of handicapped access that is not consistent with the Secretary's Standards for the Treatment of Historic Properties and applicable guidelines;

(iii) Removal of the property from its historic location;

(iv) Change of the character of the property's use or of physical features within the property's setting that contribute to its historic significance;

(v) Introduction of visual, atmospheric or audible elements that diminish the integrity of the property's significant historic features;

(vi) Neglect of a property which causes its deterioration, except where such neglect and deterioration are recognized qualities of a property of religious and cultural significance to an Indian tribe or Native Hawaiian organization; and

(vii) Transfer, lease or sale of property out of Federal ownership or control without adequate and legally enforceable restrictions or conditions to ensure long-term preservation of the property's historic significance.

SECTION 4(f), TDOT SUMMARY SHEET

WHAT IS SECTION 4 (f)? Codified at 49 CFR 303, "Section 4 (f)" refers to a section of the U.S. Department of Transportation Act which gives special consideration to the use of park and recreation lands, wildlife and waterfowl refuges, and historic sites by Federally assisted transportation projects. Section 4 (f) applies only to those projects using funds from the U.S. Department of Transportation. The law states:

(c) The Secretary may approve a transportation program or project (other than any project for a park road or parkway under section 204 of title 23) requiring the use of publicly owned land of a public park, recreation area, or wildlife and waterfowl refuge of national, State, or local significance, or land of an historic site of national, State, or local significance (as determined by the Federal, State, or local officials having jurisdiction over the park, area, refuge, or site) only if -

(1) there is no prudent or feasible alternative to using that land; and

(2) the program or project includes all possible planning to minimize harm to the park, recreation area, wildlife and waterfowl refuge, or historic site resulting from the use.

WHAT IS THE SECTION 4 (f) PROCESS FOR HISTORIC PROPERTIES? To be considered "historic," a property must either be listed in the National Register of Historic Places or be determined eligible for such listing by the Keeper of the Register or the State Historic Preservation Officer (SHPO).

On any project, the primary objective is to develop a design that does not have Section 4(f) involvement. If such a design is not possible, then the Section 4 (f) documentation is prepared and circulated. Such documentation is circulated to all appropriate agencies or groups (consistent with the Section 106 process and the National Environmental Policy Act), and as applicable, to the U.S. Department of the Interior, Housing and Urban Development, and Agriculture. It is also circulated to the agency having authority over the Section 4 (f) property. For historic properties, such agencies are the SHPO and the Advisory Council on Historic Preservation (ACHP). After review of any comments received, the final Section 4(f) documentation is sent to the Federal Highway Administration (FHWA) which determines if the requirements of the Section 4(f) statute are met. If the requirements are satisfied, then the FHWA will approve the use of the Section 4 (f) property.

HOW ARE SECTION 4 (f) AND SECTION 106 RELATED? Section 106 is a provision of the National Historic Preservation Act of 1966, which requires all federal agencies to consider the effects of their projects on historic properties and to provide the Advisory Council on Historic Preservation (ACHP) an opportunity to comment on those effects. The ACHP has promulgated regulations at 36 CFR 800 that describe the procedures that agencies must follow in order to comply with Section 106. Many of the Section 106 documentation requirements overlap the Section 4 (f) documentation requirements for historic properties. For this reason, for projects having a 4(f) use of a historic site, the documentation for Section 106 and Section 4 (f) is usually combined into one document and circulated to the appropriate groups described above. The consent of neither the SHPO nor the ACHP is necessary for FHWA to approve a Section 4 (f) use, but FHWA gives great consideration to comments from these agencies.

APPENDIX E
2008 PUBLIC PARTICIPATION LETTERS

405 Wine Circle
Blountville, TN 37617
November 14, 2008

Ms Tammy Sellers, TDOT Environmental Division
505 Deaderick St. Suite 900
Nashville, TN 37243

Reference: Documentation of Effect of proposed improvements to State Route 126 (Memorial Boulevard) from East Center Street to Interstate 81

Dear Ms. Sellers:

Thank you for including me in the distribution of the referenced report. As the owner and restorer (some say savior) of Yancey's Tavern I definitely want to follow the plans for Hwy 126.

First some suggestions and requests for your distribution list as given on Page 6 of the referenced report. For the Sullivan County Historical Society, Dennis Houser (471 Camp Placid Road, Blountville, TN 37617) should replace Sam Stuffle, who is deceased. In addition the following will be interested in the adverse impact of this project on Yancey's Tavern: President of Netherland Inn/Exchange Place Association (P.O. Box 293, Kingsport, TN 37662) and President of Association for the Preservation of Tennessee Antiquities (APTA 110 Leake Avenue, Nashville, TN 37205). Please send them copies of the referenced report.

The referenced report states correctly that the National Register site Yancey's Tavern was sold at auction September 11, 2004. So that your readers know the status of this local historic treasure the Hwy 126 project could adversely impact, be advised I bought the house to prevent its demolition by hewn log buyers who were active bidders at the auction. I bore the cost of its restoration and furnishing with good older reproductions of 18th century furniture. I maintain it at an annual cost of about $4000. As it is not a house museum, I have allowed a broad cross section of groups to hold meetings and other events in the house at no charge. These groups include historic, patriotic, genealogy, garden, and social clubs, church Sunday school classes (covered dish suppers), Kingsport Chamber of Commerce (tourism and historic preservation teams), and joint legislative/judicial socials.

The referenced report admits there will be an adverse visual impact on Yancey's Tavern from the conversion of the present two lane Hwy 126 to a divided four lane with curbs,

gutters and sidewalks as recommended by the resource team. Trying to excuse this by saying the Tavern has always been on a main road starting with the Island Road, which was built in 1761, is laughable. Fronting direct on an urban four-lane would alter the Tavern's context in the history of our community and state! Taking no right-of-way from the Yancey's Tavern National Register boundary is commendable and should be an absolute if avoidance of delay of the project is a factor.

One of the most distressing and unacceptable adverse impacts revealed by the referenced report is the destruction of Chestnut Ridge Road west of Yancey's Tavern (see map showing right-of-way requirements, Figure 10, page 18). This road is the paved continuation of the 1761 Island Road which runs in front of the Tavern and on up Chestnut Ridge. Our patriot ancestors traversed this route via the present Old Stage Road down the ridge to the important triumph over the Indians at the 1776 Battle of Island Flats. After the Island road was rerouted about 1830 the settlers followed it over Chestnut Ridge to Exchange Place, Kingsport's popular living history farm. Destruction of the eastern section of Chestnut Ridge Road (paved Island Road) will destroy the ability of heritage tourists and our own public to follow the actual historic route. If we are serious about developing heritage tourism and our officials certainly make a lot of nose about it, we need to preserve assets as significant as Chestnut Ridge/Island Road.

No one denies Highway 126 is overdue for a safety upgrade. It needs shoulders with rumble strips, turn lanes at its four major intersections, and sight distance improvements where passing could be safe. Section 3 East of Highway 126 has never had current or projected traffic counts to justify a four-lane configuration. The resource team's recommendation for this section destroys historic heritage, community graves and homes, and much of scenic Chestnut Ridge at a staggering cost that is completely unjustified. The two-lane Concept A is the prudent, feasible, cost effective, and context sensitive alternative for Section 3 East.

Sincerely,

Rann Vaulx

Rann Vaulx
Owner of Yancey's Tavern

cc: Patrick McIntyre, TN-SHPO, Dennis Houser (Sullivan County Historic Preservation Association), Robert Notestine (APTA), Mary Fanslow (Netherland Inn/Exchange Place Association)

November 19, 2008

Tammy Sellers,
Historic Preservation Supervisor
State of Tennessee Department of Transportation
Environmental Division
505 Deadrick Street
Suite 900, James K. Polk Building
Nashville, TN 37243-0349

SUBJECT: Documentation of Effect for the Proposed Improvements to State Route 126 (Memorial Boulevard) from East Center Street to Interstate 81 in Kingsport, Sullivan County, Tennessee

Dear Ms. Sellers:

Rann Vaulx, owner of Yancey' Tavern, shared his copy of TDOT's "Documentation of Effect Report Pursuant to 36 CFR 800 for Proposed Improvements to State Route 126 (Memorial Boulevard) from East Center Street to Interstate 81, Sullivan County," September 2008, with me. As a citizen representative on the SR 126 Community Resource Team (CRT) with a keen interest in our community's historic resources, I appreciated the opportunity to review the report. I would like to submit the following comments and questions for inclusion in the review and evaluation of alternatives for Section 3 East.

Context Sensitive Solutions

As I'm sure you are aware, the improvement of the 8.8-mile segment of SR 126 is Tennessee's pilot project for the Context Sensitive Solutions (CSS) process. As such, it would be relevant to include an overview of the Core Principles of CSS in this report. In brief:

- The project is a safe facility for both the user and the community.
- The project is in harmony with the community, and it preserves environmental, scenic, aesthetic, historic, and natural resource values of the area, i.e., exhibits context sensitive design.
- The project exceeds the expectations of both designers and stakeholders and achieves a level of excellence in people's minds.
- The project involves efficient and effective use of the resources (time, budget, community) of all involved parties.
- The project is designed and built with minimal disruption to the community.
- The project is seen as having added lasting value to the community

From the Community Resource Team's June 22, 2005, Recommendation, *"The CRT wants to minimize impacts to and protect the integrity of community treasures in the SR 126 study area. Sites that are considered community treasures include:*

- *Cherry Point Animal Hospital* (Barger house)
- *White house at the corner of Santana Road and SR 126* (Testerman house)
- *East Lawn Cemetery*
- *Chestnut Ridge view shed*
- *Anything within the historic boundary of Yancey's Tavern, including the tavern, barn, and trace of Old Island Road*
- *Shipley Mansion"*

CSS principles are particularly germane to the discussion of Section 3 East that includes the Yancey's Tavern National Register Site (including Island Road), East Lawn Cemetery, and a significant portion of Chestnut Ridge. This should be a high priority driver in selection of the appropriate alternative.

Alternatives

Three major concepts or alternatives were developed by the Resource Team and were examined for each of the eight sections of the road project. Given the sensitive nature of the community treasures located in Section 3 East, all three alternatives need to be evaluated with regard to impacts to Yancey's Tavern, as well as East Lawn Cemetery and Chestnut Ridge.

- Concept A – generally a two-lane roadway
- Concept B – so-called "three-lane." Two travel lanes and a center turn lane
- Concept C – a four-lane roadway with either a raised median or center turn lane

All concepts have bicycle and pedestrian accommodations, shoulders, improved curvature, improved line of sight and other modern safety features. Of note, traffic counts drop dramatically east of Harbor Chapel Road and do not justify four-laning.

Report Comments

Page 14. Just a point of clarification--please note that while on p.10 the report correctly identifies the road immediately south of the Yancey's Tavern property as Chestnut Ridge Road, on p. 14 it incorrectly identifies it on the map as "Old Stage Road." This is an important clarification, since it is a paved portion of Island Road which merits further consideration. (See comments re p. 16)

Page 14 states, under Effects to Yancey's Tavern, *"... the cross-section adjacent to the historic Yancey's Tavern will be a four-lane roadway with a median, curb, gutter, and sidewalks."* Issue must be taken with the words, "will be." That is yet to be determined.

While Concept C was the recommendation of a majority of the Resource Team, there were dissenting opinions on the team. (See Minority Report attachment.) In an October press release, "TDOT Announces Decision on State Route 126/Memorial Boulevard," posted on the TDOT SR 126 website, are the following remarks by Commissioner Nicely:

> *"There is concern over the use of a 4 lane section from East of Old Stage Road to Cooks Valley Road and the impact this would have on the ridge, Yancey's Tavern and East Lawn Cemetery," said Commissioner Gerald Nicely. "These concerns must and will be addressed during the preparation of the EIS for this truly to be a Context Sensitive Solutions process."*
> [http://www.tdot.state.tn.us/news/2005/102705a.htm]

When and how will these concerns be addressed?

Page 16. It is reassuring that the alternative (Concept C) with the greatest impact on Section 3 East *"would not cause physical damage to all or part of the historic Yancey's Tavern property or result in the removal of the property from its historic location."* There is sincere disagreement, however, with the opinion that, *"Although the proposed State Route 126 is (a) four-lane median divided roadway, the location adjacent to Yancey's Tavern is a continuation of the property's historic past that so closely liked its use to the road itself. Therefore in the opinion of TDOT, the proposed project would not change the character of the property's use that contributes to its historic significance."* Yancey's Tavern is immediately linked with Island Road, the trace of which remains on the property and on Chestnut Ridge Road which is the paved section of the historic Island Road on which the Tavern fronts. It is retention of that road, yet existent, that provides the true and actual historic context for the Tavern and its property, not SR 126.

While, unfortunately, Chestnut Ridge Road was not identified as a historic resource of concern for the purposes of this study, nevertheless, it is of concern to the community and the state. It is certainly an element for CSS consideration. It yet provides the historic travel corridor to the Battle of Long Island Flats, and its reroute ca. 1830 to Exchange Place. Disruption of this road for today's heritage travelers would be a great loss. While not a legal requirement, it within the purview of TDOT to be sensitive to the protection of this pre-Revolutionary historic road. *Historic Roads* (www.historicroads.org) recognizes the importance that roads have played in our nation's history, "enhancing our understanding of the American experience...." TDOT has a great opportunity to help protect—at least to do no harm—to what was the state's first road and played such a prominent role in our country's history.

Page 17. I completely concur with TDOT's conclusion that Concept C "would introduce an adverse visual impact and therefore have an adverse effect to the National Register Property." Fortunately there is an alternative!

Summary

Given 1) the inherent devastating impacts of Concept C to the community's significant historic and environmental attributes on Section 3 East, 2) the low level of use--current and projected, and 3) the exceedingly high costs of four-lane median divided construction on Chestnut Ridge, what is the justification for its selection?

An evaluation of Concepts A and B by TDOT is in order, not only for the purpose of upholding the principles of Context Sensitive Solutions, but also for minimizing the impacts to a National Register listed property by selecting the most prudent and feasible alternative.

Thank you for the opportunity to speak to community concerns. Please add me to your circulation list on this project. I am enclosing several supporting documents with my letter.

Sincerely,

Judith B. Murray

Judith B. Murray
804 Rock City Road
Kingsport, TN 37664

cc: Rann Vaulx
State Historic Preservation Office
Claudia Moody, Northeast Heritage Tourism Area
Shelia Hunt, Sullivan County Historian
Ray Henson, TDOT 126 Project Manager

Enclosures

For Immediate Release:
October 27, 2005

TDOT Announces Decision on State Route 126/Memorial Boulevard

Nashville, Tenn. – Governor Phil Bredesen and the Tennessee Department of Transportation (TDOT) announced today that the state will accept the State Route 126 Community Resource Team (CRT) recommendation. This recommendation will now move forward as an alternative that will be studied further during the Environmental phase of work. During this phase an Environmental Impact Statement (EIS) will be prepared according to NEPA (National Environmental Protection Act) standards. This phase is currently not in the Department's transportation budget, but will be considered when next year's budget is developed. Funding, however, is available to begin technical studies including, ecological, archeological, geological and historical. This information will be included in the final EIS.

"This milestone represents a lot of hard work and commitment by the volunteers on the Citizens Resource Team and I would like to thank them for their efforts," said Bredesen.

The Community Resource Team (CRT) for the State Route 126 (Memorial Boulevard) Context Sensitive Solution (CSS) project has worked together since October 2003 to study and prepare a concept plan recommendation for improving SR 126 in Kingsport and Sullivan County. The project is considered by TDOT to be its' "pilot" CSS project. Documentation of the process and lessons learned will be part of the project report.

The project study area extends from East Center Street to Interstate 81, a distance of approximately 8 miles. During the 21-month CRT study process, the team gathered thirteen times for meetings, training, and workshops and conducted three Public Involvement Sessions in Kingsport. Public opinion was surveyed at each session and the results of those surveys were reviewed and discussed by the CRT and used to guide their decision making.

- CRT unanimously agreed upon:
  - 11 Enhancement features in the Design Plan.
  - 10 Safety Improvements, with safety stated as the number one priority for SR 126.
  - 7 Points of interest to the community.
  - 4 Other special Issues.

Working together the CRT developed recommendations for roadway cross sections.
The recommendations are divided into eight sections, identified by intersecting cross streets.

- Five of the eight sections, the CRT developed consensus design recommendations.
- Three of the eight sections, the CRT developed design recommendations that were supported by a majority of team members.
- The attached map shows a graphic depiction of the CRT's team recommendation for number of travel lanes on SR 126.

Consensus design recommendations include:

- Improve these sections to a four-lane median divided facility with curb, gutter and sidewalks:
  - Section 1 West – East Center Street to Orebank Road.
  - Section 1 East – Orebank Road to West of Hawthorne Street.
  - Section 3 West – Harbor Chapel Road to east of Old Stage Road.
- Improve this section to four travel lanes and a center turn lane with curb and gutter and sidewalks:
  - Section 2 – West of Hawthorne Street to Harbor Chapel Road.

- Provide an improved two-lane roadway with paved shoulders, wide centerline, and rumble strips:
    - Section 4 East – Harrtown Road to Cochise Trail.

Majority design recommendations with minority objection statements include:

- Improve this section to a four-lane median divided facility with shoulders:
    - Section 3 East – East of Old Stage Road to Cooks Valley Road.
- Improve this section to provide two travel lanes and a center turn lane with curb, gutter and sidewalks:
    - Section 4 West – Cooks Valley Road to Harrtown Road.
- Provide an upgraded two-lane roadway with paved shoulders, wide centerline, and rumble strips:
    - Section 5 – Cochise Trail to Interstate 81.

"There is concern over the use of a 4 lane section from East of Old Stage Road to Cooks Valley Road and the impact this would have on the ridge, Yancey's Tavern and East Lawn Cemetery," said TDOT Commissioner Gerald Nicely. "These concerns must and will be addressed during the preparation of the EIS for this to truly be a Context Sensitive Solutions process."

"Context Sensitive Solutions (CSS) is a new way transportation planning approach being used by TDOT which provides solutions that are not only safe and effective, but are also designed in harmony with the community and environment", said Senator Ron Ramsey. "This process benefits us all."

"It took extensive community effort and commitment to get to this point and the results will be a better overall product," added Representative Nathan Vaughn. "I'd like to thank everyone involved in the process."

"US126 will be a vital transportation corridor for Sullivan County and is a much needed improvement for the region," said Representative Jason Mumpower. "The resource team's safety suggestions are important too."

For a map depicting some of the State Route 126 CRT's recommendations go or for more information about CSS, go to www.tennessee.gov/tdot.

Minority Report for Section 3 East
Of State Route 126 in Sullivan County

Basic concept for this segment:

Old Stage Road to Cooks Valley Road: Concept A with a right turn lane onto Lemay Drive.

Statement of Purpose:

We find ourselves in fundamental opposition to the exhumation of human remains or the destruction of an historical treasure (Yancey's Tavern property) while a viable alternative is available that fulfills the agreed upon requirements for the project. Further, with respect to the preservation of Chestnut Ridge, we also are unable to accept a solution or concept that is more destructive with respect to the original contours and appearance of the ridge than is required, while a viable alternative exists that, again fulfills the agreed upon requirements for the project.

Rationale:

- Safety
  - Has eight foot shoulders, guard rails, improved sight distances and improved horizontal and vertical curves
  - Has centerline & shoulder rumble strips to minimize lane departure (as recommended in State of Tennessee Strategic Highway Safety Plan, p. 8, 11/17/04)
  - Designated right turn lane into Lemay Drive provides greater safety for new traffic by adjacent road closures. Also allows eastbound traffic to continue while vehicles make right turn.

- Community Impacts
  - Concept A has the least impact to Chestnut Ridge both environmentally and visually.
  - Concept A has the smallest number of impacts to residences.
  - Best preserves the community wishes of maintaining the scenic beauty of Chestnut Ridge.

- Cost Justification
  - B & C are not justified by actual and projected traffic counts through 2028.
  - B & C are not justified by turning needs (few driveways & minimal left turns to side roads since most traffic is westbound in the morning and eastbound in the evening)

- There is a lack of consideration of cost in this section in light of the lack of potential benefit that might be realized by the community.

- Public Response
  - 58% of those surveyed in Public Session III chose an option other than a 4-lane, i.e. Concept C, in the section.
  - Additionally, a petition with 1100+ names expressed a preference for a two lane road in this section.
  - Eleven foot travel lanes minimize the road footprint.
  - Concept A impacts East Lawn Cemetery the least of all concepts
  - Concept A protects the historic Yancey tavern and barn, as well as remnants of Old Island Road and the surrounding site. The history of this area predates the American Revolution

- Mobility
  - Right turn lane increases capacity in Concept A.
  - Traffic counts have drastically fallen east of Old Stage Road.

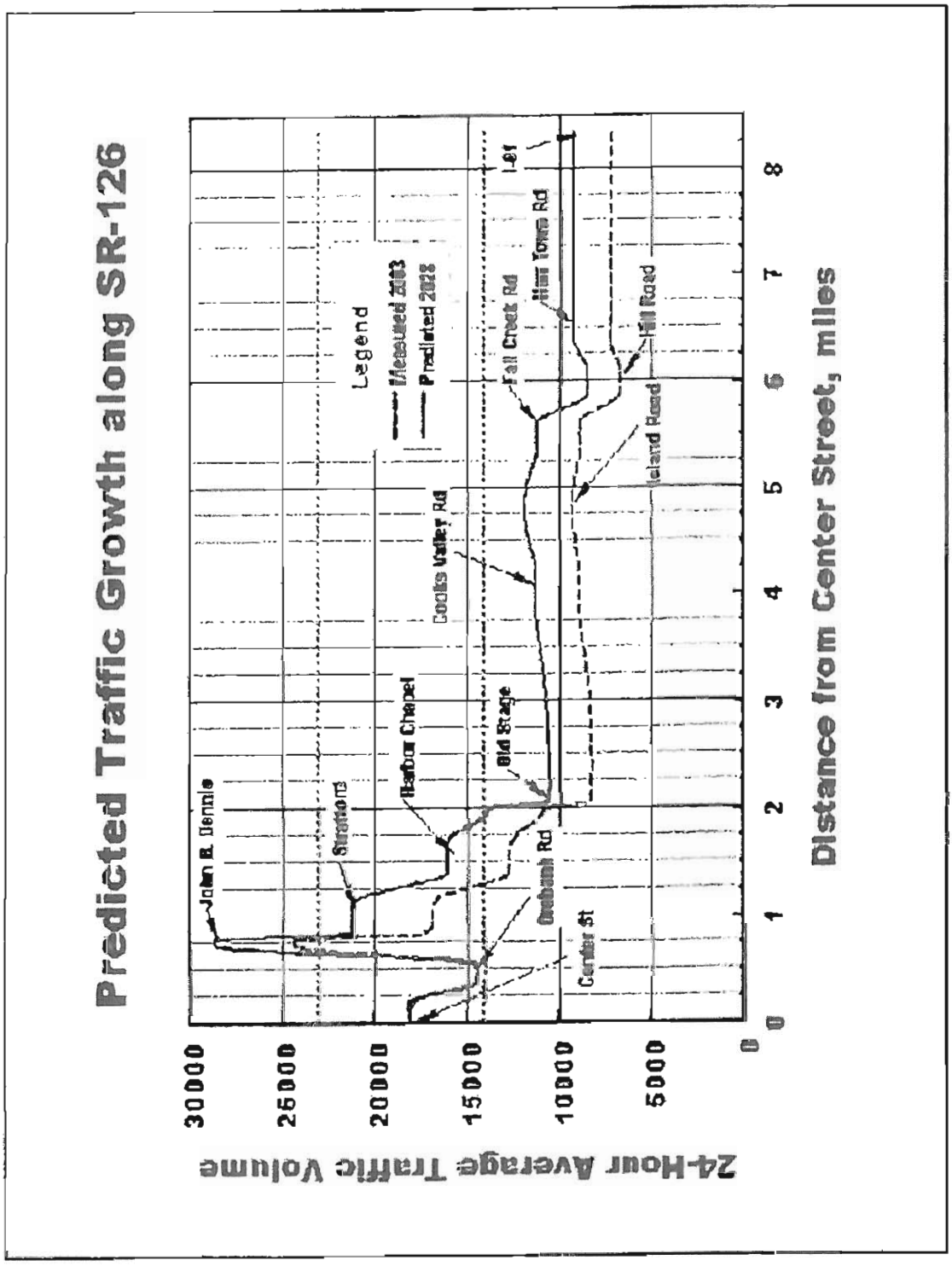
State Representative Nathan Vaughn

,2005

Larry Hall, Member of the Sullivan County Board of Commissioners, District 6

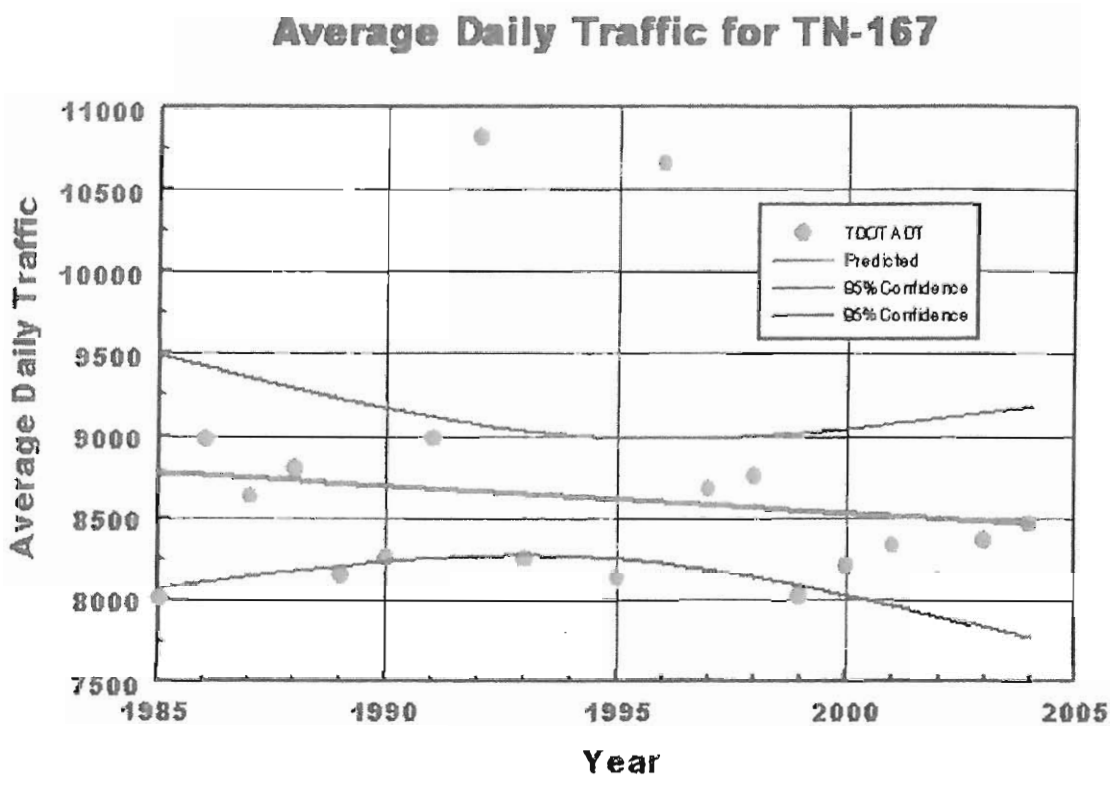
Judith Murray, Citizen Representative

Dan Cheek, Citizen Representative


Predicted Traffic Growth along SR-126
24-Hour Average Traffic Volume
Distance from Center Street, miles
Legend
Measured 2003
Predicted 2028
John B. Dennis
Stratford
Harbor Chapel
Old Stage
Cooks Valley Rd
Fall Creek Rd
New Town Rd
Hill Road
Island Road
Orebank Rd
Center St
I-81
0
5000
10000
15000
20000
25000
30000
0
1
2
3
4
5
6
7
8

Station #	County	Location	Route #
000167	Sullivan	MEMORIAL - KINGSPORT	SR126

Record	Year	AADT
1	2007	7773
2	2005	8718
3	2004	8465
4	2003	8358
5	2002	8117
6	2001	8335
7	2000	8206
8	1999	8015
9	1997	8675
10	1996	10655
11	1995	8130
12	1994	7846
13	1993	8250
14	1992	10816
15	1991	8988
16	1990	8253
17	1989	8150
18	1988	8800
19	1987	8625
20	1986	8980
21	1985	8001
22	2006	8057
23	1998	8753



Not reflected on this graph

Year	ADT
2005	8710
2006	8757
2007	1775

APTA

ASSOCIATION
FOR THE
PRESERVATION
OF TENNESSEE
ANTIQUITIES

December 18, 2008

Ms. Tammy Sellers
Historic Preservation Supervisor
State of Tennessee
Department of Transportation
Environmental Division
505 Deaderick Street
Suite 900, James W. Polk Building
Nashville, TN 37243-0349

Re: Comments regarding proposed improvements to State Route 126 in Sullivan County - Adverse Impact on Yancey's Tavern.

Dear Mr. Sellers:

I am in receipt of your letter dated November 24, 2008 and I have reviewed the Documentation of Effect Report pursuant to 36 CFR 800. Thank you for providing this information which I found to be very informative. I also concur that the proposed project has potential negative effect on Yancey's Tavern. The APTA is not in favor of any negative impact of the project on this unique historic site.

Yancey's Tavern has been selected by our Board as a significant historic site due both to its 18th century architecture, its continued presence and recognition in the Kingsport area, and its role as a gathering place and government center in the 18th and 19th centuries. Any act that would minimize the view of this structure from the public would be a disservice to historic preservation in this state. The construction of the proposed State Route 126 in such a manner as to cause the four lane road to be immediately adjacent to Yancy's Tavern as stated in page 16 of your document package cannot be supported by this organization.

In this light we urge TDOT to modify the proposed plan to minimize any negative aspects of this project upon Yancey's Tavern. It is a truly unique structure. Upon entering Yancey's Tavern

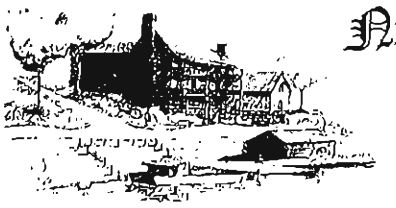
one truly has an immediate sense of being in the past. Constructing a modern four lane highway upon to the front boundary of the Tavern will frankly greatly diminish this sense of history.

I certainly don't wish to unduly interfere in this project but I am hereby requesting that you consider the position of the APTA in your planning process for this project. I will be glad to discuss this matter further with you at your convenience.

Sincerely,

Robert J. Notestine III

cc: Ms. Ron Vaulx
E. Patrick McIntyre, Jr., THC
Martha Sloan, Executive Director, APTA



Netherland Inn

Netherland Inn/Exchange Place Association, Inc.

P. O. Box 293
KINGSPORT, TENNESSEE 37662



Exchange Place

April 1, 2009

Ms. Tammy Sellers
Historic Preservation Supervisor
State of Tennessee
Department of Transportation
Environmental Division
505 Deaderick Street
Suite 900, James W. Polk Building
Nashville, TN 37243-0349

Dear Ms. Sellers:

I am responding on behalf of the Netherland Inn / Exchange Place Association (NIA) to the Documentation of Effect Report pursuant to 36 CFR 800. The NIA believes that the project proposed by TDOT has potential adverse impact on Yancey's Tavern and the adjacent Chestnut Ridge Road and Chestnut Ridge view shed.

Yancey's Tavern and its environs constitute an important part of the history of Sullivan County and, in fact, our nation's history. Yancey's Tavern, built 209 years ago, served as the meeting place for the second meeting of the Sullivan County Commissioners. The road that connected it to Abingdon and up Chestnut Ridge is the Island Road. The Island Road is the second oldest military road (after Braddock's Road) in the country and the first wagon road in Tennessee. It was built in 1761 to bring the militia from Chilhowie to Long Island of the Holston where, as in the Watauga and Nolichucky River Valleys, significant settlements had developed. It is the oldest still in-use road in the state.

The critical importance of Island Road became apparent in the summer of 1776 when Cherokee, incited by the British to rise up against colonists in the west, approached the Long Island of the Holston. In response, colonists gathered at Eaton's Fort (near Yancey's Tavern). Using Island Road, the militia arrived at Eaton's Fort before the Indians. It was decided that the best strategy would be to march out and engage the Cherokee before being penned up in the fort. The settlers readily agreed, and together the militia and settlers marched along the Island Road to near the current intersection of Memorial Boulevard (Hwy 126) and Center Street where they engaged in a brief, but violent, skirmish with the Cherokee, known as the Battle of Island Flats. This battle figures prominently in Theodore Roosevelt's 1889 work, *The Winning of the West*.

The TDOT proposal for modifying Hwy 126 would render an adverse impact on this route and the ridge itself and potentially destroy a significant aspect of our history. The NIA requests that TDOT reconsider its proposal and consider alternatives that would

minimize any negative aspects of its project upon Yancey's Tavern and the Chestnut Ridge Road and its view shed.

Thank you for sending the NIA the proposal documentation and for allowing us to comment.

I am enclosing a copy of a new brochure, "Pioneer Pathways." This brochure is the first of a series of planned brochures on historic pathways. The next one to be produced in the next year or so will cover the Island Road. We envision that these brochures will give area residents and tourists an appreciation for historic pathways in Sullivan County.

Sincerely,

Mary Fanslow

Mary Fanslow
President, NIA

cc: Dr. Rann Vaulx
Dr. E. Patrick McIntyre, Jr., THC
Rep. Tony Shipley
Mr. Bill Albright, City of Kingsport
Honorable Steve Godsey, Mayor of Sullivan County
Lt. Governor Ron Ramsey
Ms. Sheila Steele Hunt, Director, Sullivan County Dept. of Archives and Tourism
Commissioner Gerald Nicely, TDOT
Mr. Ray Henson, SR 126 Project Leader, TDOT

APPENDIX F
PUBLIC PARTICIPATION

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
ENVIRONMENTAL PLANNING AND PERMITS DIVISION
SUITE 900, JAMES K. POLK BUILDING
505 DEADERICK STREET
NASHVILLE, TENNESSEE 37243-0334
(615) 741-3653

GERALD F. NICELY
COMMISSIONER

PHIL BREDESEN
GOVERNOR

November 19, 2003

Mr. James Bird
Tribal Historic Preservation Officer
Eastern Band of Cherokee Indians
Qualla Boundary
P.O. Box 455
Cherokee, NC 28719

Sample Letter to Native Americans

SUBJECT: Section 106 Initial Coordination for Proposed Improvements to State Route 126 (Memorial Blvd) From E. Center St. in Kingsport to I-81, Sullivan County, Tennessee

Dear Mr. Bird:

The Tennessee Department of Transportation (TDOT) in cooperation with the Federal Highway Administration is in the planning stages of evaluating the above-referenced project for possible implementation. The location of the proposed project is shown on the enclosed map.

The 2001 Advisory Council on Historic Preservation regulations, 36 CFR 800, stipulate that Indian tribes that attach religious and cultural significance to properties that may be affected by an undertaking be invited to participate in the project review process as consulting parties. TDOT would like to invite you to participate as a consulting party for the proposed project. This letter is also TDOT's request for comments on the identification of properties in the project's area of potential effect that may be of religious and cultural significance to your tribe.

If you choose to participate as a consulting party on the above-referenced project, you will receive copies of cultural assessment reports that identify Native American related properties. You will also be invited to attend project-related meetings with FHWA, TDOT and the Tennessee State Historic Preservation Office (TN-SHPO), if any are held. We respectfully request written responses to project reports and other materials within thirty (30) days of receipt.

If you would like to participate as a consulting party, please respond to me via letter, telephone (615-741-5257), fax (615-741-1098) or E-mail (Gerald.Kline@state.tn.us). To facilitate our planning process, please respond within 30 days of receipt of this letter. If you do not respond, you will not receive reports related to this project unless you specifically request them at a later date. Thank you for your assistance.

Sincerely,

Gerald Kline

Gerald Kline
Transportation Specialist I
Archaeology Program Manager

Enclosure

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
OFFICE OF ENVIRONMENTAL PLANNING AND PERMITS
SUITE 900, JAMES K. POLK BUILDING
505 DEADERICK STREET
NASHVILLE, TENNESSEE 37243-0334
(615) 741-3653

GERALD F. NICELY
COMMISSIONER

PHIL BREDESEN
GOVERNOR

November 19, 2003

Richard Venable, County Mayor
3411 Hwy 126, Ste 206
Blountville, TN 37617

Letter to Local Government Official

RE: Section 106 Initial Coordination for Proposed Improvements to State Route 126 (Memorial Blvd) From E. Center St. in Kingsport to I-81, Sullivan County, Tennessee

Dear Mr. Venable:

The Tennessee Department of Transportation (TDOT) in cooperation with the Federal Highway Administration is proposing to improve the above referenced project. Its location is shown on the enclosed map.

The 2001 Advisory Council on Historic Preservation regulations stipulate that TDOT invite local government representatives to participate in the historic review process as a consulting party. TDOT would like to invite you, as the local government official, to participate as a consulting party for the proposed project.

If you choose to participate as a consulting party, you will receive copies of TDOT's environmental reports and will be invited to attend project-related meetings between TDOT and the Tennessee State Historic Preservation Office (TN-SHPO), if any are held. As a consulting party, you should be prepared to attend any such meetings between TDOT and the TN-SHPO and provide a response to TDOT's reports in written form within 30 days upon receipt of the report. TDOT also wishes to seek your comments on the identification and evaluation of historic properties that the proposed project might impact.

If you would like to participate as a consulting party, please write to me at the above address. To facilitate our planning process, please respond within 30 days of receipt of this letter. Thank you for your assistance.

Sincerely,

Martha Carver

Martha Carver
Historic Preservation Program Manager

Enclosure
cc: Mr. Herbert Harper, TN-SHPO

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
OFFICE OF ENVIRONMENTAL PLANNING AND PERMITS
SUITE 900, JAMES K. POLK BUILDING
505 DEADERICK STREET
NASHVILLE, TENNESSEE 37243-0334
(615) 741-3653

GERALD F. NICELY
COMMISSIONER

PHIL BREDESEN
GOVERNOR

November 19, 2003

Letter to Local Government Official

Jeanette Blazier, Mayor
City of Kingsport
225 West Center Street
Kingsport, TN 37660

RE: Section 106 Initial Coordination for Proposed Improvements to State Route 126 (Memorial Blvd) From E. Center St. in Kingsport to I-81, Sullivan County, Tennessee

Dear Ms. Blazier:

The Tennessee Department of Transportation (TDOT) in cooperation with the Federal Highway Administration is proposing to improve the above referenced project. Its location is shown on the enclosed map.

The 2001 Advisory Council on Historic Preservation regulations stipulate that TDOT invite local government representatives to participate in the historic review process as a consulting party. TDOT would like to invite you, as the local government official, to participate as a consulting party for the proposed project.

If you choose to participate as a consulting party, you will receive copies of TDOT's environmental reports and will be invited to attend project-related meetings between TDOT and the Tennessee State Historic Preservation Office (TN-SHPO), if any are held. As a consulting party, you should be prepared to attend any such meetings between TDOT and the TN-SHPO and provide a response to TDOT's reports in written form within 30 days upon receipt of the report. TDOT also wishes to seek your comments on the identification and evaluation of historic properties that the proposed project might impact.

If you would like to participate as a consulting party, please write to me at the above address. To facilitate our planning process, please respond within 30 days of receipt of this letter. Thank you for your assistance.

Sincerely,

Martha Carver

Martha Carver
Historic Preservation Program Manager

Enclosure
cc: Mr. Herbert Harper, TN-SHPO

Sullivan County
Office of the County Executive

Richard S. Venable
County Executive

December 10, 2003

Ms. Martha Carver
T.D.O.T.
Environmental Planning & Permits
Suite 900. James Polk Bldg
505 Deaderick Street
Nashville, TN 37243-0334

RE: Improvements to S.R. 126, Sullivan County, Tennessee

Dear Ms. Carver:

Please include me on your list of consulting party contacts for the above referenced project.

Warmest regards,

Richard S. Venable

Richard S. Venable
Mayor of Sullivan County

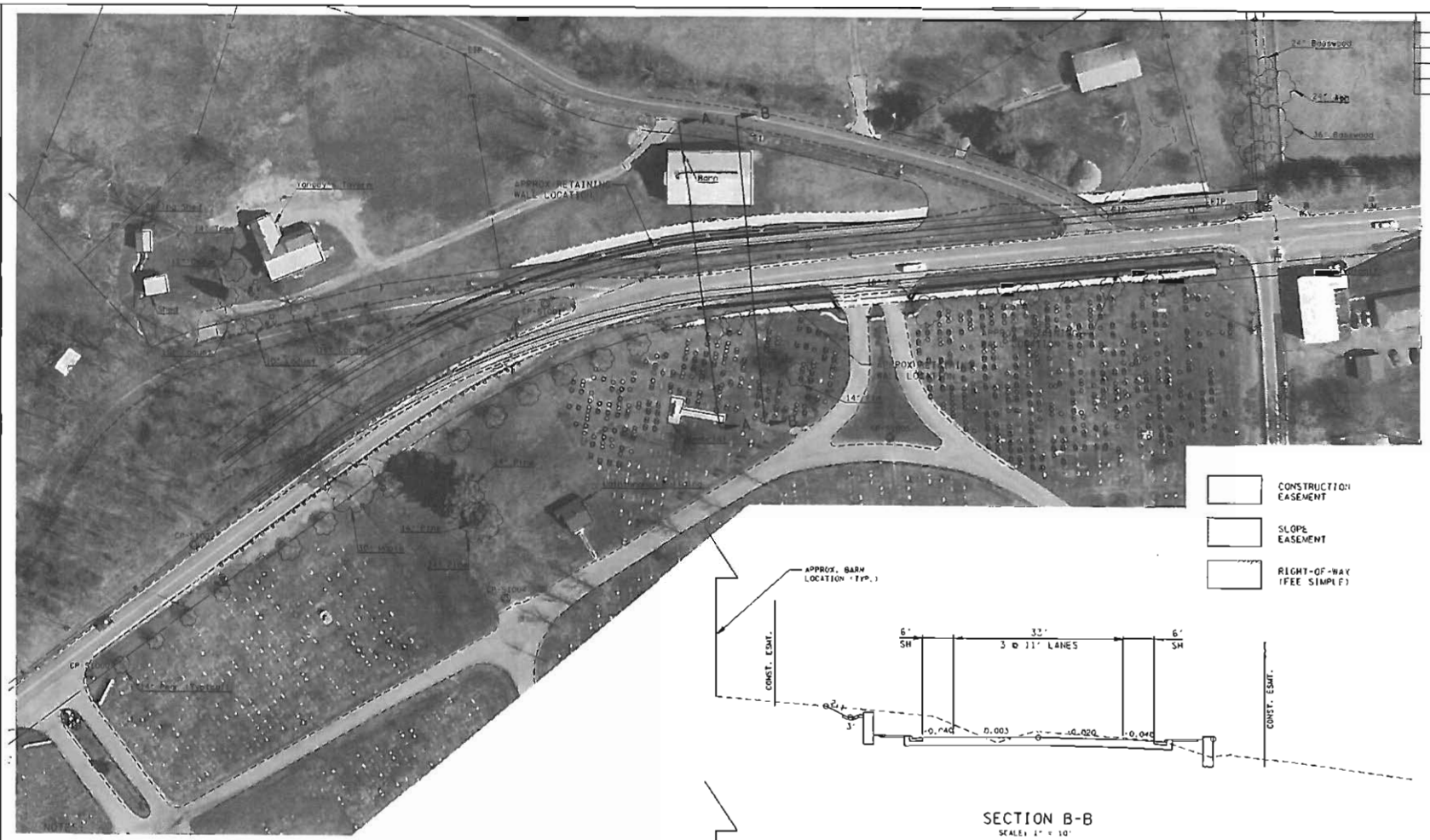
RSV/alt

Sullivan County Courthouse • 3411 Highway 126, Suite 206 • Blountville, Tennessee 37617
423-323-6417 • Fax 423-279-2897 • sullcoex@sullivancounty.org

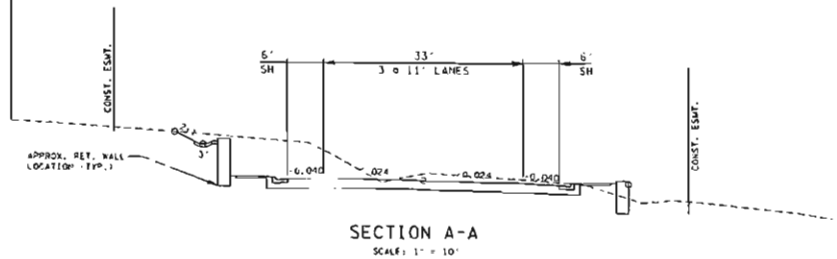
TENNESSEE D.O.T.
DESIGN DIVISION

FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.



SECTION B-B
SCALE: 1" = 10'



SECTION A-A
SCALE: 1" = 10'

1 PROPOSED IMPROVEMENTS ARE BASED ON CONCEPTUAL DESIGN ONLY TO IDENTIFY DESIGN OPTIONS FOR MINIMIZING IMPACTS TO THE CEMETERY AND TAVERN PROPERTIES.

2 CONSTRUCTION LIMITS ARE APPROXIMATE FORM MINIMAL DESIGN EFFORT. ACTUAL CONSTRUCTION LIMITS MUST BE DETERMINED WITH COMPLETE SURVEY AND DESIGN TASKS INCLUDING DESIGN OF DRAINAGE, EROSION CONTROL, PERMITTING, MAINTENANCE OF TRAFFIC AND PRIVATE DRIVES.

3 HORIZONTAL AND VERTICAL ALIGNMENTS ARE BASED ON MINIMIZING IMPACT TO THE CEMETERY AND TAVERN PROPERTIES. INEFFICIENCIES MAY EXIST WITH DESIGN OF ADJACENT ROADWAY SECTIONS IN ORDER TO TIE TO THE DEPICTED DESIGN FOR THIS LOCATION.

4 EXISTING INFORMATION IS BASED ON LIMITED TOPOGRAPHIC SURVEY AND AVAILABLE AERIAL PHOTOGRAPHY. EXISTING RIGHT-OF-WAY BASED ON ARCHIVED CONSTRUCTION PLANS AND MAY VARY. GRAVE LOCATIONS BASED ON SURVEY OF VISIBLE HEADSTONES ONLY.

5 NO GEOTECHNICAL DATA OR STRUCTURAL DESIGN CRITERIA WAS CONSIDERED FOR THE DEVELOPMENT OF THIS CONCEPTUAL DESIGN AND ITS APPROXIMATE CONSTRUCTION LIMITS.

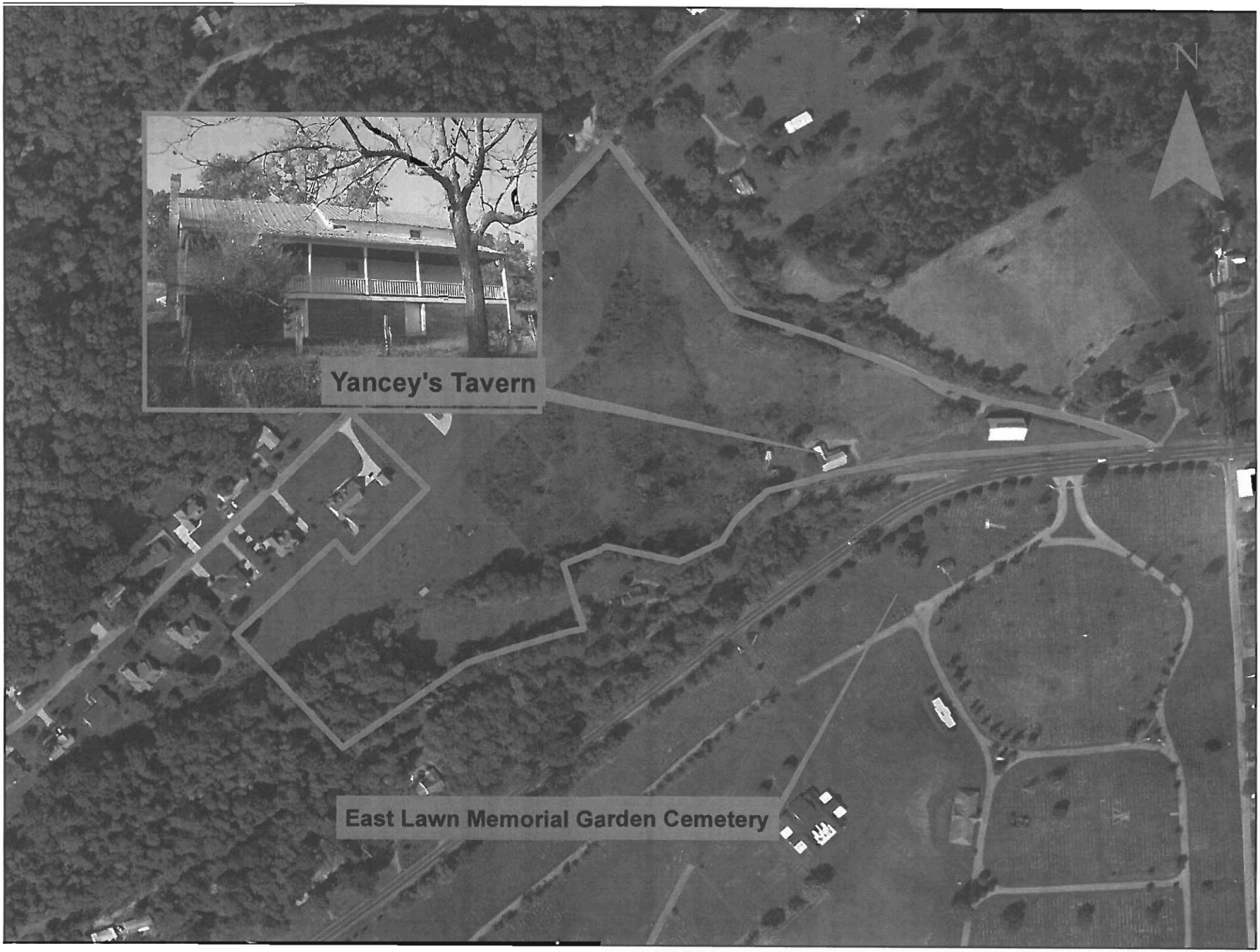
6 CONSTRUCTION EASEMENT WIDTHS BASED ON AN ASSUMED 10 FOOT.

SEALED BY

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

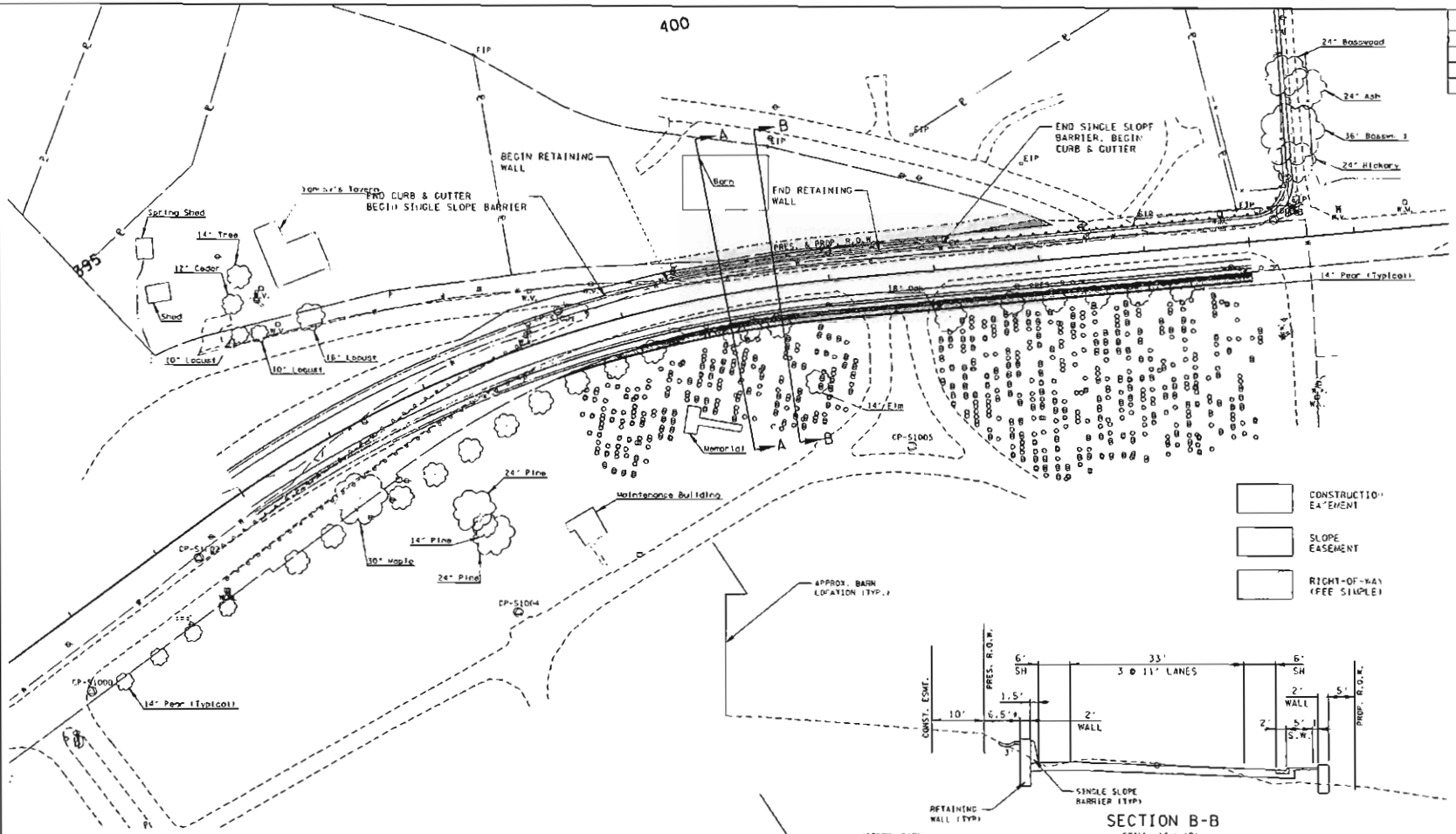
3 LANE CONCEPTUAL LAYOUT

SCALE: 1" = 50'

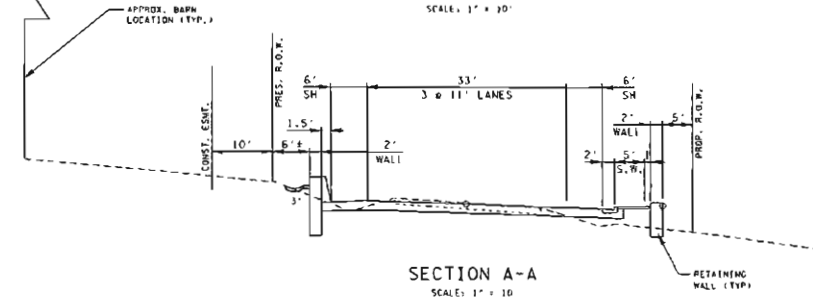

N
Yancey's Tavern
East Lawn Memorial Garden Cemetery

TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.



SECTION B-B
SCALE: 1" = 10'



SECTION A-A
SCALE: 1" = 10'

NOTES:

1 PROPOSED IMPROVEMENTS ARE BASED ON CONCEPTUAL DESIGN ONLY TO IDENTIFY DESIGN OPTIONS FOR MINIMIZING IMPACTS TO THE CEMETERY AND TAVERN PROPERTIES.

2 CONSTRUCTION LIMITS ARE APPROXIMATE FROM MINIMAL DESIGN EFFORT. ACTUAL CONSTRUCTION LIMITS MUST BE DETERMINED WITH COMPLETE SURVEY AND DESIGN TASKS INCLUDING DESIGN OF DRAINAGE, EROSION CONTROL, PERMITTING, MAINTENANCE OF TRAFFIC AND PRIVATE DRIVES.

3 HORIZONTAL AND VERTICAL ALIGNMENTS ARE BASED ON MINIMIZING IMPACT TO THE CEMETERY AND TAVERN PROPERTIES. INEFFICIENCIES MAY EXIST WITH DESIGN OF ADJACENT ROADWAY SECTIONS IN ORDER TO TIE TO THE DEPICTED DESIGN FOR THIS LOCATION.

4 EXISTING INFORMATION IS BASED ON LIMITED TOPOGRAPHIC SURVEY AND AVAILABLE AERIAL PHOTOGRAPHY. EXISTING RIGHT-OF-WAY BASED ON ARCHIVED CONSTRUCTION PLANS AND MAY VARY. GRAVE LOCATIONS BASED ON SURVEY OF VISIBLE HEADSTONES ONLY.

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6 CONSTRUCTION EASEMENT WIDTHS BASED ON AN ASSUMED 10 FOOT.

SEALED BY

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

3 LANE CONCEPTUAL LAYOUT

SCALE: 1" = 50'

APPENDIX E – SECTION 106 ARCHAEOLOGICAL COORDINATION

ARCHAEOLOGICAL AVOIDANCE PLAN LETTER

ARCHAEOLOGICAL SURVEY (Redacted)

ARCHAEOLOGICAL CORRESPONDENCE

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
ENVIRONMENTAL DIVISION
SUITE 900 - JAMES K. POLK BUILDING
505 DEADERICK STREET
NASHVILLE, TENNESSEE 37243-0334
(615) 741-3653
Fax (615) 741-1098

July 1, 2010

Mr. E. Patrick McIntyre, Jr.
Executive Director and
State Historic Preservation Officer
Tennessee Historical Commission
Clover Bottom Mansion
2941 Lebanon Road
Nashville, TN 37214

RE: Avoidance Alternates for SR 126 (memorial Boulevard) from East Center Street to I-81 in Kingsport, Sullivan County,
PIN 105467.00; PE# 82085-1225-14

Dear Mr. McIntyre:

Enclosed is documentation concerning the above captioned TDOT Project in Sullivan County. Avoidance measures were taken based on information from the original archaeological survey submitted to you in May 2009. Sites 40SV412, 40SV413, 40SV419, and 40SV421 will be completely avoided by the new alternate. Thus, no potentially eligible or determined eligible sites will be affected by this project. On the attached maps, the first two sheets labeled "Alternate B" show how sites 40SV412, 413, and 421 will be avoided versus the original plans shown on the last two pages. The planners have also redesigned the alignment at site 40SV419, the already NR-listed Yancey's Tavern, to completely avoid encroaching on the NR boundary.

In compliance with Section 106 of the National Historic Preservation Act (as amended) and 36 CFR 800, regulations implementing compliance with Section 106, please review this material and provide me with your comments. If any additional information is needed contact Alan Longmire (423) 282-0651, or me (615) 741-5257. I appreciate your assistance.

Sincerely,

Gerald Kline
Archaeology Program Manager

GWK:AL

Enclosure

cc: Ms. Jennifer Barnett/TDOA

PHASE I ARCHAEOLOGICAL SURVEY, SR 126 FROM NORTH CENTER STREET TO I-81, SULLIVAN COUNTY, TENNESSEE

TDOT PROJECT #82085-0225-14, PIN 105467.00
CONTRACT #E1239; WORK ORDER #001

By Michael G. Angst

with contributions by:
Bradley A. Creswell
Gail L. Guymon
James J. Kocis

Report Prepared for:

Alan Longmire
TDOT Archaeologist II
3518 CRS
Johnson City, TN 37602-3518

Lead Agency:
Tennessee Department of Transportation
Archaeological Permit No. 000649

Elizabeth Kellar DeCorse, Archaeologist in General Charge
Michael G. Angst, Archaeologist in Direct Charge

Archaeological Research Laboratory
University of Tennessee
Department of Anthropology
Room 237 Middlebrook Building
Knoxville, Tennessee 37996-0220
(865) 974-6525

September 2009

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The University does not discriminate on the basis of race, sex or disability in its education programs and activities pursuant to the requirements of Title VI of the Civil Rights Act of 1964, Title IX of the Education Amendments of 1972, Section 504 of the Rehabilitation Act of 1973, and the Americans with Disabilities Act (ADA) of 1990.

Inquiries and charges of violation concerning Title VI, Title IX, Section 504, ADA or the Age Discrimination in Employment Act (ADEA) or any of the other above referenced policies should be directed to the Office of Equity and Diversity (OED), 1840 Melrose Avenue, Knoxville, TN 37996 3560, telephone (865) 974 2498 (V/TTY available) or 974-2440. Requests for accommodation of a disability should be directed to the ADA Coordinator at the UTK Office of Human Resources, 600 Henley Street, Knoxville, TN 37996 4125.

Project # 2009-001.

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INTRODUCTION

Between January 22 and February 17, 2009, personnel from the Archaeological Research Laboratory (ARL) at The University of Tennessee (UT) conducted a Phase I archaeological survey of proposed new right-of-way (ROW) along State Road 126 between North Center Street and I-81 in Sullivan County, Tennessee (Figures 1 to 5). The survey was conducted at the request of Alan Longmire, Archaeologist with the Tennessee Department of Transportation (TDOT). The area was investigated prior to proposed road improvements along SR 126. The archaeological investigation was conducted to fulfill obligations outlined in Section 106 of the National Historic Preservation Act. Dr. Elizabeth Kellar DeCorse served as archaeologist in general charge and Michael Angst was archaeologist in direct charge. The field and laboratory crew consisted of Charlie Susano, Nick Dunn, Howard Haygood, Desiree Ketteringham, and Stacey Savidant. All materials associated with this project will be temporarily and permanently curated at the University's Department of Anthropology curation facility.

MANAGEMENT SUMMARY

Between January 22 and February 17, 2009, personnel from the Archaeological Research Laboratory (ARL) at The University of Tennessee (UT) conducted a Phase I archaeological survey of proposed new Area of Potential Effect (APE) along State Route 126 between North Center Street and I-81 in Sullivan County, Tennessee. The survey corridor is approximately 13.4 km (8.3 miles) long; width varies significantly throughout the corridor, ranging from 30 to 150 m (100 to 500 feet). Total new ROW is estimated to be approximately 107 ha (265 acres/0.41 miles). The new ROW is being investigated prior to road improvements of SR 126. This archaeological investigation was conducted to fulfill obligations outlined in Section 106 of the National Historic Preservation Act.

The majority of the study area is upland terrain, dissected by small streams. Field methodology consisted of pedestrian survey and shovel testing. The investigation identified 13 previously unrecorded archaeological sites [redacted] – [redacted] and numerous low density artifact scatters that will not be assigned state site numbers. The majority of the sites are historic, originating in the late-nineteenth century. One primarily prehistoric site of unknown age was also recorded and numerous sites were multicomponent, being primarily historic with minor prehistoric components. One exception to the date range for historic sites is site [redacted], known locally as Yancey's Tavern. The Tavern was apparently built sometime in the 1770s or 1780s along the Old Island Road/Great Stage Road.

The majority of the sites investigated during this survey are considered ineligible for the National Register of Historic Places (NRHP). Three sites, however, are considered potentially eligible, based on the identification of and potential for intact deposits. Sites [redacted] and [redacted] are both farmstead sites near the eastern end of the study corridor. Artifacts recovered from [redacted] suggest at least a late-nineteenth century occupation. Shovel testing and visual inspection documented at least two features, including a burned surface/floor as well as a possible concrete-lined privy pit. A coal/cinder midden was documented adjacent to the possible privy pit. Visual inspection also recorded a brick concentration at and just below the sod. Discussion with local informants and review of topographic maps indicate that the brick concentration marks the location of the house. Extant structures, outside of the current ROW, include a large barn and a concrete-block spring house. Site [redacted] also appears to be at least a late-nineteenth century farmstead site. Features include a stone-lined cellar depression, partially filled, and a collapsed cistern; the house site is surrounded by a light scatter of artifacts. Site [redacted] is a small prehistoric scatter situated on a low rise above two small, spring-fed streams. Eight of twelve (67%) STPs were positive for prehistoric artifacts, recovering 16 pieces of mostly late-stage debitage. Although not a large site, artifact density is relatively high (14.8 artifacts/meter^2) and plow-truncated features may still exist at the site.

Site [redacted] (Yancey's Tavern) was placed on the NRHP in 1973, based on its early architecture and significant role it played in the development of the region and the state of Tennessee. It is surprising that the tavern was never issued an archaeological site number. Regardless, shovel testing did recover artifacts that date to at least the nineteenth and twentieth centuries and two apparent outbuildings were identified.

Based on the results of this study, ARL recommends that sites [redacted] and [redacted] be avoided. If they cannot be avoided, [redacted] and [redacted] should be evaluated to determine their eligibility for the NRHP. If [redacted] cannot be avoided, limited excavations should be conducted in order to guide the creation of a mitigation plan prior to construction. ARL recommends that the remainder of the study area should be cleared for construction.

METHODOLOGY

By Michael G. Angst

BACKGROUND REVIEW

Prior to the initiation of field work, background research was conducted to compile information about previous research and about what types of archaeological sites might be expected within the study area. A total of 55 reports are listed for Sullivan County in the National Archeological Database (NADB). An additional 20 different reports are on file at ARL and the McClung Museum at The University of Tennessee-Knoxville. These reports are overwhelmingly the results of compliance projects and none appear to cross the study area. Most are associated with road improvement and bridge replacement surveys (e.g., Alvey 1994; Creswell et al. 1996); others include significant regional reports (e.g., Fowke 1922; Myer 1924; Thomas 1894) and still others reflect focused research on the early history of the region (e.g., DeCorse 2006; South 1973a, 1973b; Wentworth 1973).

In addition to the literature review, the state site files housed at the Tennessee Division of Archaeology were inspected to search for sites within and near the study area. No sites have been recorded in the study area, but nine have been recorded within 1.6 km (1 mile) of the study corridor. Several of these sites [redacted] and [redacted] were investigated in 1973 [redacted] Creek by TVA. These sites are primarily Archaic in age and midden and intact pits are known or anticipated. Additionally, one area not designated as a site may contain the remnants of a small mound. Additional work was recommended for the majority of these sites, but none appears to have occurred (McCullough 1974).

Sites [redacted] and [redacted] represent some of the earliest Euro-American settlements in Sullivan County. With the exception of [redacted], all of these sites were built during the last third to quarter of the eighteenth century and all four were on or very near [redacted] was apparently built in the early nineteenth century only after the owner, John S. Gaines, rerouted the stage road to cross his property (Spoden 1977:78-80).

Background research has documented a variety of sites in the region. The Reedy Creek study (McCullough 1974) provides some information, but is not considered to be particularly relevant to the current study area since it was conducted in a much different environmental setting. Regardless, the potential for significant prehistoric sites exists in the study area. Early historic sites occur throughout the region, including in the study area (Yancey's Tavern) and others may be expected.

Finally, since the study was conducted on state property for a state agency, ARL applied for a State Archaeological permit from the Tennessee Division of Archaeology. This work was carried out under permit number 000649.

CONCLUSIONS AND RECOMMENDATIONS

Between January 22 and February 17, 2009, personnel from the Archaeological Research Laboratory (ARL) at The University of Tennessee, Knoxville conducted a Phase I archaeological survey of proposed new right-of-way (ROW) along State Route 126 between North Center Street and I-81 in Sullivan County, Tennessee. The study identified [redacted] previously unrecorded archaeological sites and numerous small artifact scatters not issued site numbers. The majority of the sites date to the late-nineteenth and/or early-and mid-twentieth centuries and are not considered to be eligible for the NRHP. Three sites, [redacted] and [redacted] are considered potentially eligible and ARL has recommended that the sites should be avoided by construction. If they cannot be avoided, Phase II archaeological investigations should be conducted to determine their NRHP eligibility. A fourth site, [redacted] has already been listed on the NRHP. Again, ARL has recommended that the site be avoided. If it cannot be avoided, limited additional archaeological work should be conducted in order to better prepare a data recovery plan to mitigate any adverse effect. With the exception of the above recommendations, ARL recommends that the project be allowed to proceed. However, should any unanticipated artifacts, features or burials be encountered, the project must be halted and a qualified archaeologist should be contacted for an evaluation before work resumes.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
ENVIRONMENTAL DIVISION
SUITE 900, JAMES K. POLK BUILDING
505 DEADERICK STREET
NASHVILLE, TENNESSEE 37243-1402
(615) 741-3655

JOHN C. SCHROER
COMMISSIONER

BILL HASLAM
GOVERNOR

February 27, 2014

Muscogee (Creek) Nation
P.O. Box 589
Okmulgee, OK 74447
Attn: Mr. Emman Spain, THPO

SUBJECT: Section 106 Initial Coordination for the Proposed SR-126 (Memorial Blvd) Project, from East Center Street to I-81, Kingsport, Sullivan County, Tennessee

Dear Mr. Spain:

The City of Kingsport in cooperation with the Tennessee Department of Transportation (TDOT) is proposing to implement the SR-126 (Memorial Boulevard) project in Sullivan County (maps attached). The widened roadway would vary from two-lanes to four-lanes with a landscaped raised median between the eastern city limits of Kingsport and I-81. The approximate project length is 8.4 miles. Additional right-of-way is required.

Native American Coordination was originally distributed for this project on January 9, 2012. Since then, your tribe added Sullivan County to its list of counties of interest for transportation projects in Tennessee.

The National Historic Preservation Act (NHPA) recognizes that federally funded undertakings, like the subject project, can affect historic properties to which your tribe attaches religious, cultural, and historic significance. In accordance with 36 CFR 800 regulations implementing compliance with Section 106 of the NHPA, I would like to know if you have information you could share with me about tribal concerns in the project area and if you wish to be a consulting party on the project? Early awareness of your concerns can serve to protect historic properties valued by your tribe.

If you act as a consulting party you will receive archaeological assessment reports and related documentation, be invited to attend project meetings with FHWA, TDOT, and the Tennessee State Historic Preservation Office (TN-SHPO), if any are held, and be asked to provide input throughout the process. If you choose to not act as a consulting party at this time, you can do so at a later date simply by notifying me.

Please respond to me via letter, telephone (615-741-5257), fax (615-741-1098), or E-mail (Gerald.Kline@tn.gov). I respectfully request responses (email is preferred) to project reports and other materials within thirty (30) days of receipt if at all possible. Thank you for your assistance.

Sincerely,

Gerald Kline

Gerald Kline
Transportation Specialist I
Archaeology Program Manager

Enclosure

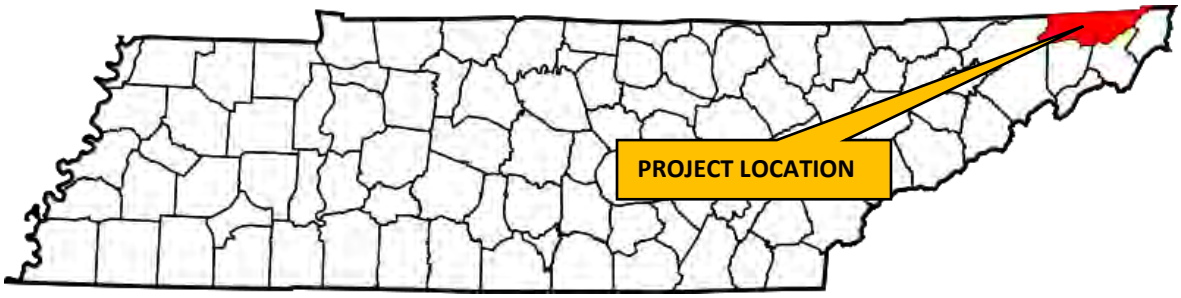
cc Robin Dushane, Eastern Shawnee Tribe of Oklahoma
Kim Jumper, Shawnee Tribe
Lisa C. Baker, United Keetowah Band of Cherokee Indians
Tyler Howe, Eastern Band of Cherokee Indians
Richard Allen, Cherokee Nation

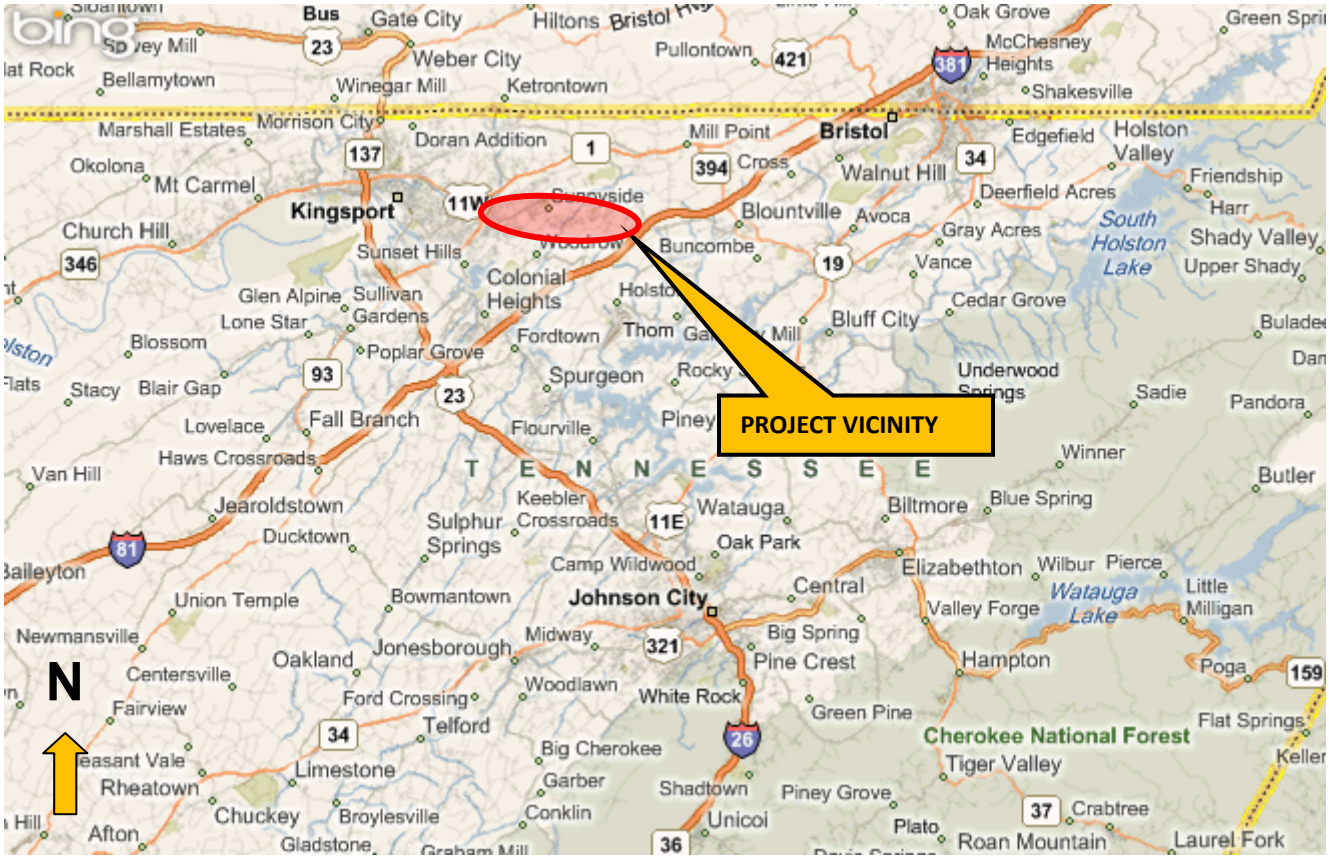
TDOT PIN# 105467.00 – Region 1

SR-126 (MEMORIAL BOULEVARD) PROJECT

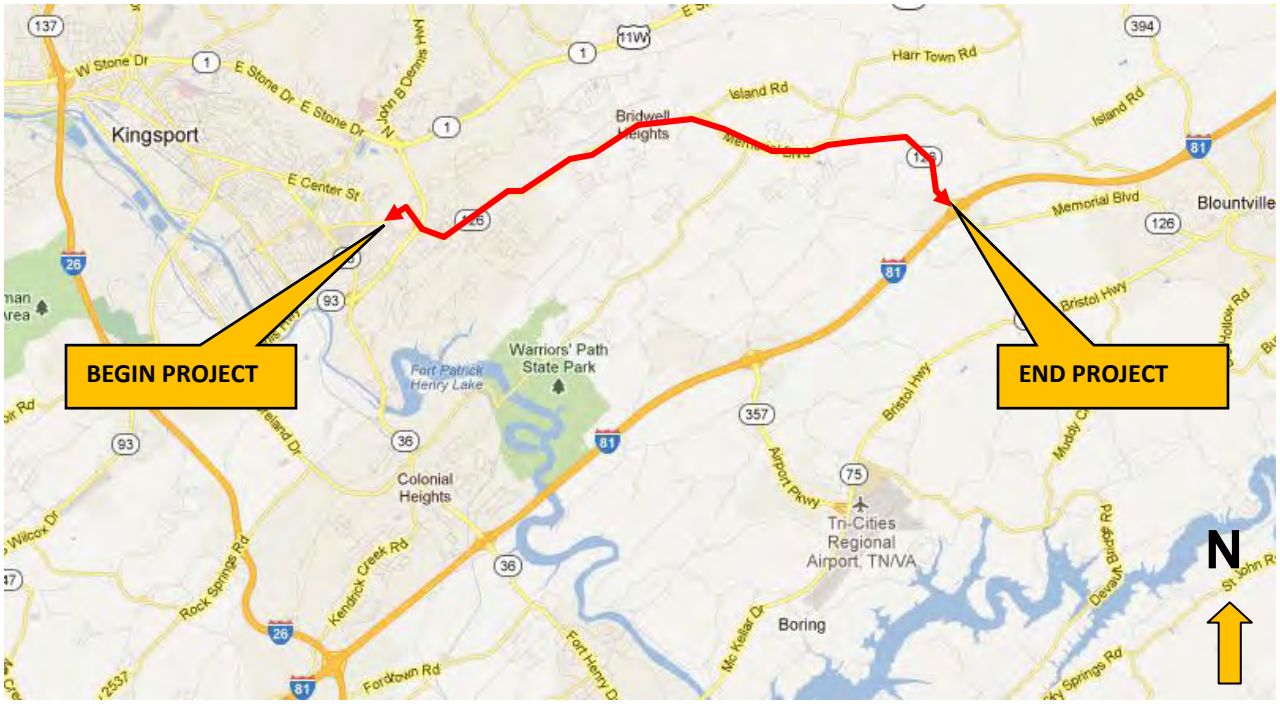
FROM EAST CENTER STREET TO I-81

KINGSPORT, SULLIVAN COUNTY, TENNESSEE

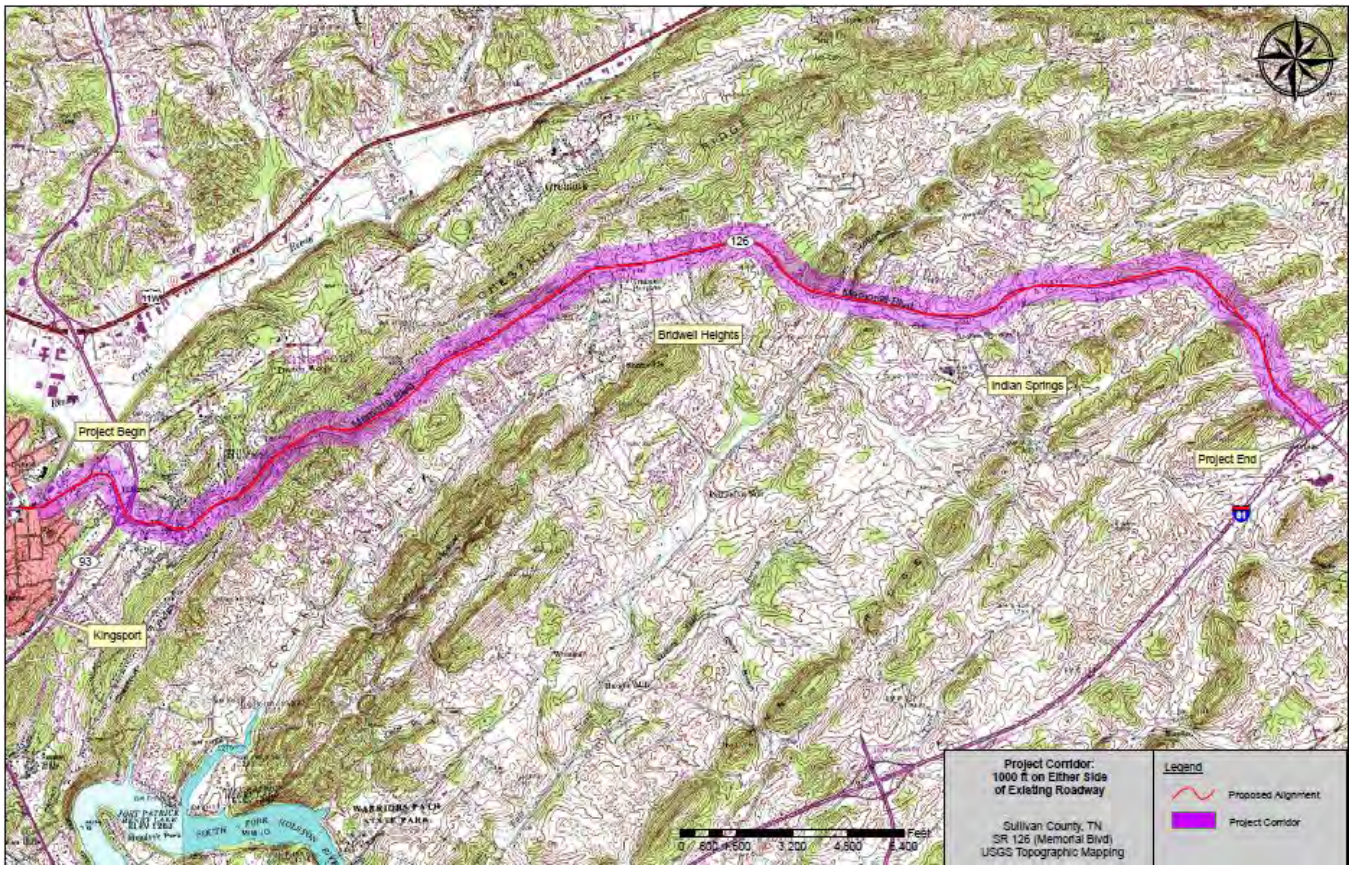




PROJECT VICINITY MAP



PROJECT LOCATION MAP



PROJECT LOCATION MAPS – USGS QUAD Kingsport (188 SE) and Indian Springs (197 SW)

Robbie D. Jones

From: Richard Allen <Richard-Allen@cherokee.org>
Sent: Friday, March 02, 2012 12:37 PM
To: Robbie D. Jones
Subject: RE: Section 106 Coordination, Sullivan Co., TN #105467

The Cherokee Nation has no knowledge of any historic, cultural or sacred sites within the affected area. Should any ground disturbance reveal an archaeological site or human remains, we ask that the all activity cease immediately and the Cherokee Nation and other appropriate agencies be contacted immediately.

Thank you,

Dr. Richard L. Allen

Policy Analyst

NAGPRA/Section 106 Contact

Cherokee Nation

P.O. Box 948

Tahlequah, Oklahoma 74465

(918) 453-5466 (office)

(918) 822-2707 (cell)

(918) 458-5898 (fax)

From: Robbie.D Jones [mailto:Robbie.D.Jones@tn.gov]
Sent: Monday, January 09, 2012 3:46 PM
To: Richard Allen
Cc: Gerald Kline; Robbie.D Jones
Subject: Section 106 Coordination, Sullivan Co., TN #105467

Dear Dr. Allen:

I'm sending this email communication on behalf of Gerald Kline, Archaeology Program Manager for the Tennessee Department of Transportation. Please see the attached letters and maps for the following project:

- **SR-126, Kingsport, Sullivan County, Tennessee (PIN# 105467.00)**

If you have any questions or need additional information, please contact Gerald Kline at (615) 741-5257 or Gerald.Kline@tn.gov.

Thank you for your assistance in this matter.

Robbie

Robbie D. Jones
Native American Coordinator
TDOT Environmental Division
Director's Office
Suite 900, J K Polk Bldg.
Nashville, TN 37243-0334
Telephone: 615-741-3655
Fax: 615-741-1098
Robbie.D.Jones@tn.gov

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
ENVIRONMENTAL DIVISION
SUITE 900 - JAMES K. POLK BUILDING
505 DEADERICK STREET
NASHVILLE, TENNESSEE 37243-0334
(615) 741-3655

January 9, 2012

The Cherokee Nation
17675 South Muscogee
Tahlequah, OK 74464
Attn: Dr. Richard Allen, Research and Policy Analyst

SUBJECT: Section 106 Initial Coordination for the Proposed SR-126 (Memorial Blvd) Project, from East Center Street to I-81, Kingsport, Sullivan County, Tennessee

Dear Dr. Allen:

The City of Kingsport in cooperation with the Tennessee Department of Transportation (TDOT) is proposing to implement the SR-126 (Memorial Boulevard) project in Sullivan County (maps attached). The widened roadway would vary from two-lanes to four-lanes with a landscaped raised median between the eastern city limits of Kingsport and I-81. The approximate project length is 8.4 miles. Additional right-of-way is required.

The National Historic Preservation Act (NHPA) recognizes that federally funded undertakings, like the subject project, can affect historic properties to which your tribe attaches religious, cultural, and historic significance. In accordance with 36 CFR 800 regulations implementing compliance with Section 106 of the NHPA, I would like to know if you have information you could share with me about tribal concerns in the project area and if you wish to be a consulting party on the project? Early awareness of your concerns can serve to protect historic properties valued by your tribe.

If you act as a consulting party you will receive archaeological assessment reports and related documentation, be invited to attend project meetings with FHWA, TDOT, and the Tennessee State Historic Preservation Office (TN-SHPO), if any are held, and be asked to provide input throughout the process. If you choose to not act as a consulting party at this time, you can do so at a later date simply by notifying me.

Please respond to me via letter, telephone (615-741-5257), fax (615-741-1098), or E-mail (Gerald.Kline@tn.gov). I respectfully request responses (email is preferred) to project reports and other materials within thirty (30) days of receipt if at all possible. Thank you for your assistance.

Sincerely,

Gerald Kline

Gerald Kline
Transportation Specialist I
Archaeology Program Manager

Enclosure

cc Kim Jumper, Shawnee Tribe
Tyler Howe, Eastern Band of Cherokee Indians
Lisa LaRue, United Keetoowah Band of Cherokee Indians
Robin Dushane, Eastern Shawnee Tribe of Oklahoma

TDOT PIN# 105467.00 – Region 1

Robbie D. Jones

From: Lisa Larue <llarue@unitedkeetoowahband.org>
Sent: Wednesday, January 11, 2012 8:07 PM
To: Robbie D. Jones
Cc: Laverna Stapleton
Subject: RE: Section 106 Coordination, Sullivan Co., TN # 105467

The United Keetoowah Band of Cherokee Indians in Oklahoma has reviewed your project, and has no comment or objections at this time. However, if any inadvertent discoveries of human remains or funerary items are encountered, please cease all work and contact us immediately.

Thank you,

Lisa LaRue

Acting Tribal Historic Preservation Officer

United Keetoowah Band of Cherokee Indians in Oklahoma

CELL: 918-822-1952 FAX: 918-458-6889

NOTE!!!!! As of DECEMBER 15, 2011, PLEASE ADDRESS CORRESPONDENCE TO: UKBTHPO-LARUE@YAHOO.COM

PLEASE MAKE CHANGES TO YOUR ADDRESS BOOK, THANK YOU!!!

-----Original Message-----
From: Robbie.D Jones [mailto:Robbie.D.Jones@tn.gov]
Sent: Mon 1/9/2012 3:49 PM
To: Lisa Larue
Cc: Robbie.D Jones
Subject: Section 106 Coordination, Sullivan Co., TN # 105467

Dear Ms. LaRue:

I'm sending this email communication on behalf of Gerald Kline, Archaeology Program Manager for the Tennessee Department of Transportation. Please see the attached letters and maps for the following project:
SR-126, Kingsport, Sullivan County, Tennessee (PIN# 105467.00)
If you have any questions or need additional information, please contact Gerald Kline at (615) 741-5257 or Gerald.Kline@tn.gov.

Thank you for your assistance in this matter.

Robbie

Robbie D. Jones
Native American Coordinator
TDOT Environmental Division
Director's Office
Suite 900, J K Polk Bldg.
Nashville, TN 37243-0334
Telephone: 615-741-3655
Fax: 615-741-1098
Robbie.D.Jones@tn.gov

TENNESSEE HISTORICAL COMMISSION
DEPARTMENT OF ENVIRONMENT AND CONSERVATION
2941 LEBANON ROAD
NASHVILLE, TN 37243-0442
(615) 532-1550

July 14, 2010

Mr. Gerald Kline
Tennessee Department of Transportation
Environmental Division
Suite 900, James K. Polk Building
505 Deaderick Street
Nashville, Tennessee 37243-0334

RE: FHWA, ARCHAEOLOGICAL AVOIDANCE PLAN, SR-126/NORTH CENTER ST. TO I-81, UNINCORPORATED, SULLIVAN COUNTY, TN

Dear Mr. Kline:

At your request, our office has reviewed the above-referenced archaeological avoidance plan in accordance with regulations codified at 36 CFR 800 (Federal Register, December 12, 2000, 77698-77739). Based on the information provided, we find that the revised project area contains no archaeological resources eligible for listing in the National Register of Historic Places.

If project plans are changed or archaeological remains are discovered during construction, please contact this office to determine what further action, if any, will be necessary to comply with Section 106 of the National Historic Preservation Act.

Your cooperation is appreciated.

Sincerely,

E. Patrick McIntyre, Jr.
Executive Director and
State Historic Preservation Officer

EPM/jmb

The Eastern Band of Cherokee Indians
Tribal Historic Preservation Office
P.O. Box 455, Cherokee, NC 28719
(828) 488-0237 / Fax (828) 497-1590

3/19/04

RE: PFH-306(7)-Polk Co
Petty Lane (A571) over Carter Creek, LM 2.32, Maury Co 2003207.
Fitzgerald Rd (A088) over Snow Creek, LM 2.98, Maury Co 2005205
Cane Creek Church Rd (A130) over Cane Creek, LM 0.06, Perry Co 2003207.
State Route 141 (N) at State Route 10/25, Trousdale Co 2003207.
State Route 245 (Campbellsville Pike) and Indian Camp Springs Rd, Maury C
Roaring Fork Creek (A845) over Roaring Fork Creek, LM 0.01, Sevier C
Bridge Improvements to SR 56 over Piney Creek, LM 20.56, Grundy C
Bridge Improvements to SR 56 over Barren Fork, LM. 77, Warren Co,
" " " SR 286 " " " LM. 2.54, " "
Bridg Improvements to Trentham Hollow Rd over Clear Creek LM 2.95, Cock

The Eastern Band of Cherokee Indians appreciates the invitation to participate as a consulting party in compliance with 36CFR800 on the above referenced project(s). According to the information you provided, the EBCI THPO is unaware of any known cultural resources or archaeological sites in the project area significant to our Tribe. However, should any cultural resources or human remains be encountered during the proposed project's activities, work should cease and this office should be contacted immediately.

As a consulting party we request that you send all information pertaining to cultural resources within the above-referenced project(s) area of potential effect (APE) for our review and comment. If you have any questions, please direct them to me at (828) 488-0237.

Sincerely,

Michelle Hamilton
Tribal Historic Preservation Specialist
Eastern Band of Cherokee Indians
(828) 488-0237
michhami@nc-cherokee.com

PS: Sorry for the delay - working through a backlog

- Bridge Improvements to Earl Townsend Rd (A372) over West Fork Shoal Creek, LM 0.07, Giles Co 2003191

- Bridge Improvements to MLK Dr. (A584) over Branch LM 0.08, Madison Co 2003[illegible]
- Bridge Improvements to Binkley Acres Rd (E488) over Brushy Fork Creek LM 0.06 2003[illegible] Anderson Co

- Bridge Imp. to Beech Rd (A045) over Morgan's Creek LM 2.79, Overton Co 2003[illegible]
- Bridge Imp. to Beech Rd (A045) over Bryan's Fork Creek, LM 0.93, Overton Co 2003[illegible]
- Bridge Imp. to Ella West Rd (A042) over East Fork Lynn Creek LM 2.42, Giles 2003[illegible]
- Bridge Imp. to Yarnell Rd (E516) over Little Dismal Creek, LM 0.96, Anderson Co 2003[illegible]
- Bridge Imp. to SR 70 over Nolichucky R, LM 8.51, Greene Co 980[illegible]
- Imp. to SR 126 (Memorial Blvd) from E. Center St in Kingsport to I-81, Sull[illegible]
- Imp in Roane Co 1) Culvert Imp over westbound ramp of I-40 @ LM 12.23, 2) Bridge repair at I-40 Bridge over SR 58 @ LM 12.34 2003[illegible]
- Imp in Marion Co 1) Rehab drainage on SR 2 @ LM 26.93, 2) Rehab drainage on SR 2 @ LM 27.78, 3) Replace drainage on SR 283 @ LM 5.40
- Imp SR 96 (Murfreesboro Rd) and Royal Oaks Blvd, Williamson Co 2003[illegible]
- Bridge Imp to West 9th St Bridge over CSX Railroad LM 0.01, Maury Co 2003[illegible]
- Bridge Imp to Kennys Bend Rd (A230) over Lost Creek LM 1.23, Smith Co 200301
- Bridge Imp to Harris Hollow Rd (A047) over Defeated Creek, LM 0.19, Smith Co 2003[illegible]
- Bridge Imp to SR 247 over Carters Creek LM 15.78, Maury Co 200120
- Bridge Imp to SR 1 (Kingston Pike) over Norfolk Southern Railroad, LM 15.17, Knox
- Bridge Imp to SR 33 (E. Broadway) over Bown Creek, LM 12.51, Blount Co 200001
- Bridge Imp to Rock Branch Rd over Hanging Rock Creek, LM 0.78, Macon Co 2003[illegible]
- Bridge Imp to Carr Branch Rd over Carr Creek LM 0.89, Macon Co 2003[illegible]
- Bridge Imp to W. Wixtown Rd over West Fork Long Creek, LM 1.00, Macon Co 2003[illegible]
- Bridge Imp to Trammel Creek Rd over Bx3 Trammel Creek, LM 0.81, Macon Co 2003[illegible]
- Bridge Imp to SR 15 (US 64) at SR 117, McNairy Co > NOT IN TERRITORY! 200318
- Imp to SR 15 (US 64) at SR 117, McNairy Co 200107[illegible]
- Bridge Imp to SR 269 over Knobs Creek, LM 11.10, Bedford Co 2003164
- Imp to SR 416-A, Two segments of Birds Creek Rd, Sevier Co 2003[illegible]
- Imp to Bg-Pass Rd from SR 16 to Georgia Crossing Rd, Georgia Crossing Rd from Bg-pass Road to East of Greenview Dr in Franklin Co 2003168

- Bridge Imp to SR 127 over I-24, LM 3.74, Coffee Co 2002015
- Imp at SR 336 and Blackhouse Rd, Blount Co 2003185
- Imp to SR 400 Bridge over Brush Creek @ LM 4.99, Washington Co 200261
- Imp to SR1 over Southern Railroad @ LM 19.47, Knox Co 2002009
- Bridge Imp to SR2 over Duck River, LM 12.72, Coffee Co 2002016
- Bridge Imp to Hawkins Rd over Big Trammel Creek, LM 0.82, Macon Co 200115
- Bridge Imp to SR 107 over Indian Creek, LM 8.69, Unicoi Co 2000154
- Bridge Imp to SR 37 (US 19E) over Doe River, LM 6.65, Carter Co 2002008
- Bridge Imp to Sycamore Rd over Sycamore Creek, LM 7.32, Cannon Co 2001
- Imp to SR 30 (White St) to near Davidson Rd, McMinn Co 2004005
- Bridge Imp to I-24 over Elk River @ LM 1.25 and over Patta ~~Branch~~ Creek @ LM 1.57, Grundy Co 2003200

Creek Nation of Oklahoma

Cultural and Historic Preservation

December 11, 2003

Gerald Kline
State of Tennessee-Department of Transportation
Environmental Planning and Permits Division
Suite 900, James K. Polk Building
505 Deaderick Street
Nashville, Tennessee 37243-0334

Subjects: SEE ATTACHED

Dear Mr. Kline:

In keeping with a government-to-government relationship and in compliance with 36CFR800, the Muscogee (Creek) Nation appreciates the invitation to participate as a consulting party.

At this time, we are unaware of any cultural or archaeological sites in the above project area that would be eligible for inclusion in the National Register.

In the event that human remains or culturally significant artifacts are inadvertently discovered during construction, please contact me at (918) 732-7732.

Respectfully,

Tim Thompson
Research Specialist
Muscogee Creek Nation

jj

Creek Nation Tribal Complex · Highway 75 & Loop 56 · P.O. Box 580 · Okmulgee, Oklahoma 74447 · 918/756-8700 · Fax 918/756-291

SUBJECTS:

Section 106 Initial Coordination for Proposed Bridge Improvements to Ella West Road (A092) over East Fork Lynn Creek, LM 2.42, Giles County, Tennessee 2003192

Section 106 Initial Coordination for Proposed Bridge Improvements to Earl Townsend Road (A372) over West Fork Shoal Creek, LM 0.07, Giles County, Tennessee 2003191

Section 106 Initial Coordination for Proposed Bridge Improvements to Martin Luther King Drive (A584) over Branch, LM 0.08, Madison County, Tennessee 2003193

Section 106 Initial Coordination for Proposed Bridge Improvements to Binkley Acres Road (E488) over Brushy Fork Creek, LM 0.06, Anderson County, Tennessee 2003195

Section 106 Initial Coordination for Proposed Bridge Improvements to Beach Road (A045) over Morgan's Creek, LM 2.79, Overton County, Tennessee 2003197

Section 106 Initial Coordination for Proposed Bridge Improvements to Beech Road (A045) over Bryan's Fork Creek, LM 0.93, Overton County, Tennessee 2003196

Section 106 Initial Coordination for Proposed Bridge Improvements to Trentham Hollow Road over Clear Creek, LM 2.95, Cocke County, Tennessee 2001124

X Section 106 Initial Coordination for Proposed Bridge Improvements to State Route 126 (Memorial Blvd) from E. Center St. in Kingsport to I-81, Sullivan County, Tennessee 2003190

Section 106 Initial Coordination for Proposed Bridge Improvements to Yarnell Road (E516) over Little Dismal Creek, LM 0.96, Anderson County, Tennessee 2003194

Section 106 Initial Coordination for Proposed Bridge Improvements to State Route 70 over Nolichucky River, LM 8.51, Green County, Tennessee 980579

EASTERN SHAWNEE TRIBE
OF OKLAHOMA

P.O. Box 350 · Seneca, MO 64865 · (918) 666-2435 · FAX (918) 666-3325

November 24, 2003

Department of Transportation
Environmental Planning & Permitting Division
Suite 900, James K. Polk Building
505 Deaderick Street
Nashville, Tennessee 37243-0334

Re: See Attached

To Whom It May Concern:

Thank you for notice of the referenced project(s). The Eastern Shawnee Tribe of Oklahoma is currently unaware of any documentation directly linking Indian Religious Sites to the proposed construction. In the event any items falling under the Native American Graves Protection and Repatriation Act (NAGPRA) are discovered during construction, the Eastern Shawnee Tribe request notification and further consultation.

The Eastern Shawnee Tribe has no objection to the proposed construction. However, if any human skeletal remains and/or any objects falling under NAGPRA are uncovered during construction, the construction should stop immediately, and the appropriate persons, including state and tribal NAGPRA representatives contacted.

Sincerely,

Charles Enyart

Charles Enyart, Chief
Eastern Shawnee Tribe of Oklahoma

1. 7 Site 1: Culvert Improvements over westbound ramp of I-40 at Log Mile 12.23
   Site 2: Bridge repair at the I-40 bridge over State Route 58 at Log Mile 12.34

2. Section 106 initial coordination for proposed improvements to State Route 126 (Memorial Blvd.) from E. Center St. in Kingsport to I-81, Sullivan County, Tennessee 2003190

3. Section 106 initial coordination for proposed bridge improvements to Yarnell Road (E516) over Little Dismal Creek, LM 0.96, Anderson County, Tennessee 2003194

4. Section 106 initial coordination for proposed bridge improvements to Ella West Road (A092) over East Fork Lynn Creek, LM 2.42, Giles County, Tennessee 2003192

5. Section 106 initial coordination for proposed bridge improvements to Earl Townsend Road (A372) over West Fork Shoal Creek, LM 0.07, Giles County Tennessee 2003191

6. Section 106 initial coordination for proposed bridge improvements to Martin Luther King Drive (A584) over Branch, LM 0.08, Madison County, Tennessee 2003193

7. Section 106 initial coordination for proposed bridge improvements to Binkley Acres Road (E488) over Brushy Fork Creek, LM 0.06, Anderson County, Tennessee 2003195

8. Section 106 initial coordination for proposed bridge improvements to Beech Road (A045) over Morgan's Creek, LM 2.79, Overton County, Tennessee 2003197

9. Section 106 initial coordination for proposed bridge improvements to Beech Road (A045) over Bryan's Fork Creek, LM 0.93, Overton County, Tennessee 2003194

10. Section 106 initial coordination for proposed bridge improvements to Trentham Hollow Road over Clear Creek, LM 2.95, Cocke County, Tennessee 2001120

APPENDIX F – HAZARDOUS MATERIALS STUDIES

CORRESPONDENCE

PHASE I PRELIMINARY SITE ASSESSMENT – ENGLISH CABINET SHOP, INC.

PHASE I PRELIMINARY SITE ASSESSMENT – RIVERIA APARTMENT COMPLEX

PHASE I PRELIMINARY SITE ASSESSMENT – PEOPLE'S FOOD STORE (SHELL)

NOTE - 2008 Phase I Study is in the DEIS Appendix

Farmer, John

From: Jeffrey Ballard <Jeffrey.Ballard@tn.gov>
Sent: Wednesday, November 27, 2013 11:49 AM
To: Farmer, John
Subject: SR-126 East Center Street in Kingsport to I-81
Attachments: E2137131_T1.English Cabinets.pdf

John,

Attached is copy of one of the Phase I reports that were conducted on the three properties that were mentioned in the Environmental Commitments for this project. One was completed for each site. The other two will be sent under separate e-mails due to size.

The report for the English Cabinet Shop recommends that this property and two near it have a follow up Phase II conducted. According to the Stripmap for Alt B MOD, no ROW will be acquired for these properties. Unless the ROW changes, it doesn't look like further study is warranted.

The report for the Riviera Apartment Complex at 5340 Memorial Boulevard indicated that no further investigation was warranted on this property or the properties adjacent to it are warranted at this time.

The report for People's Food Store indicated that a Phase II should be conducted on this property as well as Garden Basket Convenience Store #4; 3109 Memorial Boulevard, Amoco Service Station; 3101 Memorial Boulevard, and B&W Cleaners; 3200 Memorial Boulevard. B&W Cleaners was previously identified in the E Environmental Commitments as requiring a Phase II.

It appears that three site should be added to the Environmental Commitments to have a Phase II performed on them. The Phase II would probably be performed after ROW is set.

Please review the reports and let me know if you agree with my assessment.

Jeffrey Ballard, P.E.
K.S. Ware & Associates

Hazmat Coordinator
Social and Cultural Resources Office
Environmental Division
Tennessee Department of Transportation
505 Deaderick Street – Suite 900
Nashville, TN 37243

615.532.8684
jeffrey.ballard@tn.gov

For Jim Ozment

Farmer, John

From: Jeffrey Ballard <Jeffrey.Ballard@tn.gov>
Sent: Friday, January 03, 2014 11:43 AM
To: Farmer, John
Cc: JonnaLeigh Stack
Subject: HazMat Update for PIN 105467.00 - SR-126 East Center Street in Kingsport to I-81, Sullivan Co.

John,

Upon review of the Functional plans for SR 126 Sullivan County DEIS – Alternate B Modified, there do not appear to be any hazardous substance sites that will affect this project as it is currently located. There do not appear to be any significant changes within the proposed corridor. The findings in the Baseline Study Phase I Site Assessment of Underground Storage Tanks and Hazardous Material Sites State Route 126 Memorial Boulevard from Center Street to I-81 dated March 2008 are still valid. Available environmental databases were reviewed, including the TDEC Superfund Database, TDEC Registered UST database, and EPA's Enviromapper.

The previous DEIS listed three properties that would be evaluated as potential hazardous waste sites prior to submittal of the Final EIS. These properties were the English Cabinet Shop at 5236 Memorial Boulevard, Kingsport, TN, People's Food Court at 3104 Memorial Boulevard, Kingsport, TN, and Richard Chadbourne Property at 5340 Memorial Boulevard, Kingsport, TN. A Phase I Preliminary Assessment Study was conducted on these properties and the properties adjacent to them.

The Phase I report for the English Cabinet Shop recommends that this property and two near it have a follow up Phase II conducted. According to the Functional plans for SR 126 Sullivan County DEIS – Alternate B Modified, no ROW will be acquired from these properties. Unless the ROW changes, no further investigation is warranted.

The Phase I report for the Richard Chadbourne Property, currently identified as the Riviera Apartment Complex, indicated that no further investigation was warranted on this property or the properties adjacent to it.

The Phase I report for People's Food Store indicated that a Phase II Preliminary Site Investigation should be conducted on this property as well as the Garden Basket Convenience Store #4 at 3109 Memorial Boulevard, the Amoco Service Station at 3101 Memorial Boulevard, and B&W Cleaners at 3200 Memorial Boulevard. B&W Cleaners was identified in the previous DEIS as requiring a Phase II.

A Phase II Preliminary Site Investigation will be performed on the following properties during final design to ascertain the presence of possible contamination:

- Garden Basket Convenience Store #4 at 3109 Memorial Boulevard, Kingsport, TN
- Amoco Service Station at 3101 Memorial Boulevard, Kingsport, TN
- B&W Cleaners at 3200 Memorial Boulevard, Kingsport, TN
- Roadrunner Market at 4001 Memorial Boulevard, Kingsport, TN
- Greenwood Market at 5121 Memorial Boulevard, Kingsport, TN

In the event hazardous substances/wastes are encountered within the proposed right-of-way, their disposition shall be subject to all applicable regulations, including the applicable sections of the Federal Resource Conservation and Recovery Act, as amended; and the Comprehensive Environmental Response, Compensation, and Liability Act, as amended; and the Tennessee Hazardous Waste Management Act of 1983, as amended.

Jeffrey Ballard, P.E.

K.S. Ware & Associates

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For Jim Ozment

Phase I Preliminary Assessment Study

English Cabinet Shop, Inc.

5236 Memorial Boulevard

Kingsport, Sullivan County, Tennessee

TDOT Project No. PE 82085-0225-14

TDOT PIN No. 105467.00

November 26, 2013

Terracon Project No. E2137131; Task 1



Prepared for:

Tennessee Department of Transportation
Nashville, Tennessee

Prepared by:

Terracon Consultants, Inc.
Chattanooga, Tennessee

Offices Nationwide Established in 1965
Employee-Owned terracon.com

Terracon

Geotechnical Environmental Construction Materials Facilities

Terracon

November 26, 2013

Tennessee Department of Transportation
505 Deadrick Street, Suite 900
JK Polk Building
Nashville, Tennessee 37243

Attn: Mr. Jim Ozment

Re: Phase I Preliminary Assessment Study
English Cabinet Shop, Inc.
5236 Memorial Boulevard
Kingsport, Sullivan County, Tennessee
TDOT Project No. PE 82085-0225-14
TDOT PIN No. 105467.00
Terracon Project No. E2137131, Task 1

Dear Mr. Ozment:

Terracon Consultants, Inc. (Terracon) is pleased to submit the enclosed Phase I Preliminary Assessment Study for the above-referenced site. This study was performed in accordance with our Proposal, dated October 23, 2013.

We appreciate the opportunity to perform these services for you. Please contact us if you have questions regarding this information or if we can provide any other services.

Sincerely,
Terracon Consultants, Inc.

11/26/13

Marie A. Maher, P.G.
Professional Geologist

Travis Stamper
Senior Environmental Scientist

Attachments

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COMMON ACRONYMS [1]

ACM ..... Asbestos containing material
AST ..... Aboveground storage tank
ASTM ..... American Society for Testing and Materials
AUL ..... Activity and use limitation
BGS..... Below ground surface
BTEX..... Benzene, toluene, ethylbenzene, and xylenes
CERCLA..... Comprehensive Environmental Response, Compensation, and Liability Act
CFR..... Code of Federal Regulations
DOT..... United States Department of Transportation
EPA..... United States Environmental Protection Agency
HREC..... Historical recognized environmental condition
LUST..... Leaking underground storage tank
MCL..... Maximum contaminant level
MSDS..... Material safety data sheet
NGVD..... National Geodetic Vertical Datum
NOV ..... Notice of violation
NPL ..... National Priority List
NRCS..... USDA Natural Resource Conservation Service
OSHA..... Occupational Safety and Health Administration
PCB..... Poly-chlorinated biphenyl
RCRA..... Resource Conservation and Recovery Act
REC..... Recognized environmental condition
SPCC ..... Spill Prevention, Control and Countermeasure
SWPPP ..... Stormwater pollution prevention plan
TEPH..... Total extractable petroleum hydrocarbons
TPH..... Total petroleum hydrocarbons
TVPH..... Total volatile petroleum hydrocarbons
TRI ..... Toxic release inventory
TSCA..... Toxic Substances Control Act
USGS..... United States Geological Survey
UST ..... Underground storage tank
VCP..... Voluntary cleanup program
VOC ..... Volatile organic compound

Units of measure

sq ft or ft^2..... square feet
mg/kg ..... milligrams per kilogram
mg/l ..... milligrams per liter
ug/l ..... micrograms per liter
ppb ..... parts per billion
ppm……..parts per million

[1] An additional list of acronyms and definitions is included in Appendix B.

PHASE I PRELIMINARY ASSESSMENT STUDY

ENGLISH CABINET SHOP, INC.
5236 MEMORIAL BOULEVARD
TDOT PROJECT NO. PE 82085-0225-14
TDOT PIN NO. 105467.00
KINGSPORT, SULLIVAN COUNTY, TENNESSEE

Terracon Project No. E2137131, Task 1
Report Date: November 26, 2013

EXECUTIVE SUMMARY

This Phase I Preliminary Assessment Study (PAS) was performed in general accordance with the TDOT Environmental Procedures Manual, dated April 2007, our Proposal dated October 23, 2013 and consistent with the procedures included in ASTM E 1527-13, Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process. The PAS was conducted under the supervision or responsible charge of Travis Stamper, Environmental Professional. Marie A. Maher, P.G. performed the site reconnaissance on November 5, 2013.

A cursory summary of findings is provided below. It should be recognized that details were not included or fully developed in this section, and the report must be read in its entirety for a comprehensive understanding of the items contained herein.

- The project includes the widening of lanes along U.S. Highway 126 (Memorial Boulevard) resulting in the expansion of the associated TDOT R.O.W. in Kingsport, Sullivan County, Tennessee. The site assessed during this investigation consists of the 2.25-acre parcel located at 5236 Memorial Boulevard, which was occupied by the English Cabinet Shop, Inc. facility at the time of our site reconnaissance. The purpose of this study was to identify RECs within the site limits, specifically the proposed R.O.W. expansion area which is along the west boundary of this parcel.

- Based on historical information reviewed as part of this assessment, the site appears to have been undeveloped land until the1980s, at which time the site was developed with the English Cabinet Shop, Inc. facility. The parcels surrounding the site appear to have historically been comprised of predominantly residential and undeveloped, agricultural lands until the mid-1980s, at which time the sparse commercial development that was observed during our site reconnaissance began.

- At the time of our site reconnaissance, the site was improved with three separate onsite structures, gravel parking and drive areas, and two unnamed tributaries to Slougan Branch. One structure was located on the southwestern portion of the site and operates as office areas. A larger structure was located on the northern portion

of the site and currently operates as a cabinet assembly area. The third structure was located on the eastern portion of the site and currently operates as a solid-surface assembly area. The two unnamed tributaries to Slougan Branch are located on the southeastern and southwestern portions of the site. During our site and area reconnaissance, several 55-gallon capacity drums were observed throughout the site. Based on our observations, the drums were not labeled or identifiable. Based on our interview with Ms. English, chemicals associated with wood fabrication were historically stored and used on site; therefore, the containers of unknown material are considered RECs in connection with the site at this time.

- Surrounding properties were not identified during our database search report; however, the site was identified on the RCRA-Non-Gen and the FINDS databases. According to the database search report, the site (English Cabinet Shop, Inc.) does not currently generate hazardous waste. RECs associated with the site were not identified during our database search report; however, information obtained during our onsite interviews indicated hazardous materials may have been used and stored onsite. The historical use of potentially hazardous chemicals associated with wood fabrication processes is considered a REC associated with the site.

- The property located directly west of the site, adjacent to U.S. Highway 126 (Memorial Boulevard) has operated as Clymens Automotive Repair Company since the 1980s. During our site and area reconnaissance, the Clymens Automotive Repair Company facility appeared to store 55-gallon capacity drums of used automotive fluids. The Clymens Automotive Repair Company facility is located directly west of the site and directly east of Memorial Boulevard. Based on the unknown status of operations and the proximity to the site, the Clymens Automotive Repair Company facility is considered a REC in connection with the site at this time.

- According to the *2008 Baseline Phase I Report*, provided to Terracon by TDOT, an unnamed construction site was observed directly adjacent to 5234 Memorial Boulevard. According to the *2008 Baseline Phase I Report,* tires, vehicles, junk, and construction equipment where observed on the unnamed construction site. According to interviews conducted during the *2008 Baseline Phase I Report*, the unnamed construction site may have been used as a landfill possibly including automotive fluids including fuel and oil. Based on our area and site reconnaissance, this unnamed construction site was located approximately 300 feet northwest of the site along U.S. Highway 126 (Memorial Boulevard). Based on our review of the *2008 Baseline Phase I Report,* potential discarded automotive fluids and associated construction debris are considered RECs in connection with the site.

- A hazardous materials rating system was used to rate facilities that were identified as being potential RECs to the site. Three facilities, the onsite facility (English Cabinet Shop, Inc.), the adjacent Clymens Automotive Repair Company facility, and the nearby unidentified construction site facility, were identified as having the potential for contamination. The onsite facility (English Cabinet Shop, Inc.) and the adjacent Clymens Automotive Repair Company facility were assigned risk ratings of LOW. The nearby unidentified construction site facility was assigned risk ratings HIGH.

- Based on the authorized scope of services, no additional services (e.g., asbestos sampling, lead-based paint sampling, wetlands evaluation, radon testing, etc.) were conducted.

The onsite facility (English Cabinet Shop, Inc.) and the adjacent Clymens Automotive Repair Company facility were assigned risk ratings of LOW. Due to the potential acquisition of the site parcel (048-69.30), Terracon recommends that the site be further analyzed through a Level 2 Contamination Assessment, which would include soil and groundwater sampling, to further clarify potential contamination concerns. Based on the findings of the Level 2 Contamination Assessment, the rating of the site may or may not be revised.

In addition, an unidentified construction site was identified as having HIGH potential for contamination. Due to the close proximity and upgradient location of this facility with respect to the site, Terracon recommends that potential impact from the unidentified construction site facility be further analyzed through a Level 2 Contamination Assessment, which would include soil and groundwater sampling, to further clarify potential contamination concerns. Based on the findings of the Level 2 Contamination Assessment, the rating of this facility may be revised.

PHASE I PRELIMINARY ASSESSMENT STUDY

ENGLISH CABINET SHOP, INC.
TDOT PROJECT NO. PE 82085-0225-14
TDOT PIN NO. 105467.00
KINGSPORT, SULLIVAN COUNTY, TENNESSEE

Terracon Project No. E2137131, Task 1
Report Date: November 26, 2013

1.0 INTRODUCTION

1.1 Site Description

Site Description

Site Name	English Cabinet Shop, Inc.
Site Location/Address	5236 Memorial Boulevard in Kingsport, Sullivan County, Tennessee
Site Improvements	The site is currently improved with three separate onsite structures, gravel parking and drive areas, and two unnamed tributaries to Slougan Branch. One structure is located on the southwestern portion of the site and operates as office areas. A larger structure is located on the northern portion of the site and currently operates as a cabinet assembly area. The third structure is located on the eastern portion of the site and currently operates as a solid-surface assembly area. The two unnamed tributaries to Slougan Branch are located on the southeastern and southwestern portions of the site. The site currently operates as English Cabinet Shop, Inc.

The project includes the widening of lanes along U.S. Highway 126 (Memorial Boulevard) resulting in the expansion of the associated Tennessee Department of Transportation (TDOT) right-of-way (R.O.W.) in Kingsport, Sullivan County, Tennessee. The purpose of this Phase I Preliminary Assessment Study (PAS) is to present the preliminary findings of a literature search and a field review of the potential for finding hazardous materials or petroleum contamination on parcels included in, or adjacent to the proposed project that may impact the construction of the proposed project. The site location is depicted on Figure 1 of Appendix A, which was reproduced from a portion of applicable USGS 7.5-minute series topographic maps. A Site Diagram of the site and adjoining properties is included as Figure 2 of Appendix A. Acronyms and terms used in this report are described in Appendix B.

1.2 Scope of Services

This Phase I PAS was performed in general accordance with the TDOT Environmental Procedures Manual, dated April 2007, our Proposal dated October 23, 2013 and consistent with the procedures included in ASTM E 1527-13, Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process. The purpose of this PAS was

to assist the client in developing information to identify RECs in connection with the site as reflected by the scope of this report. This purpose was undertaken through user-provided information, a regulatory database review, historical and physical records review, interviews, including local government inquiries, as applicable, user-provided information, and a visual noninvasive reconnaissance of the site and adjoining properties. Limitations, ASTM deviations, and significant data gaps (if identified) are evident from reviewing the applicable scope of services and the report text. Per the agreed scope of services specified in the proposal, no additional services (e.g., asbestos sampling, lead-based paint sampling, wetlands evaluation, radon testing, etc.) were conducted.

1.3 Standard of Care

This PAS was performed in accordance with generally accepted practices of this profession, undertaken in similar studies at the same time and in the same geographical area. We have endeavored to meet this standard of care, but may be limited by conditions encountered during performance, a client-driven scope of work, or inability to review information not received by the report date. Where appropriate, these limitations are discussed in the text of the report, and an evaluation of their significance with respect to our findings has been conducted.

Phase I PASs, such as the one performed at this site, are of limited scope, are noninvasive, and cannot eliminate the potential that hazardous, toxic, or petroleum substances are present or have been released at the site beyond what is identified by the limited scope of this PAS. In conducting the limited scope of services described herein, certain sources of information and public records were not reviewed. It should be recognized that environmental concerns may be documented in public records that were not reviewed. No PAS can wholly eliminate uncertainty regarding the potential for RECs in connection with a property. Performance of this practice is intended to reduce, but not eliminate, uncertainty regarding the potential for RECs. No warranties, express or implied, are intended or made. The limitations herein must be considered when the user of this report formulates opinions as to risks associated with the site or otherwise uses the report for any other purpose. These risks may be further evaluated – but not eliminated – through additional research or assessment. We will, upon request, advise you of additional research or assessment options that may be available and associated costs.

1.4 Additional Scope Limitations, ASTM Deviations and Significant Data Gaps

Based upon the agreed-on scope of services, this PAS did not include subsurface or other invasive assessments, business environmental risk evaluations, or other services not particularly identified and discussed herein. Reasonable attempts were made to obtain information within the scope and time constraints set forth by the client; however, in some instances, information requested is not, or was not, received by the issuance date of the report. Information obtained for this PAS was received from several sources that we believe to be

reliable; nonetheless, the authenticity or reliability of these sources cannot and is not warranted hereunder. This PAS was further limited by the following:

- Pertinent documents are referred in the text of this report, and a separate reference section has not been included;
- Credentials of the company (Statement of Qualifications) have not been included in this report, but are available upon request;
- Requests were submitted to local government agencies regarding documented environmental conditions on the site. Responses from one or more agencies were not received as of the issuance of this report. Lack of these responses does not pose a significant data gap; and
- Interior portions of the assembly structures were not observed due to current activity.

An evaluation of the significance of these limitations and missing information with respect to our findings has been conducted, and where appropriate, significant data gaps are identified and discussed in the text of the report. However, it should be recognized that an evaluation of significant data gaps is based on the information available at the time of report issuance, and an evaluation of information received after the report issuance date may result in an alteration of our conclusions, recommendations, or opinions. We have no obligation to provide information obtained or discovered by us after the issuance date of the report, or to perform any additional services, regardless of whether the information would affect any conclusions, recommendations, or opinions in the report. This disclaimer specifically applies to any information that has not been provided by the client.

This report represents our service to you as of the report date and constitutes our final document; its text may not be altered after final issuance. Findings in this report are based upon the site's current utilization, information derived from the most recent reconnaissance and from other activities described herein; such information is subject to change. Certain indicators of the presence of hazardous substances or petroleum products may have been latent, inaccessible, unobservable, or not present during the most recent reconnaissance and may subsequently become observable (such as after site renovation or development). Further, these services are not to be construed as legal interpretation or advice.

1.5 Reliance

This Phase I PAS is prepared for the exclusive use and reliance of TDOT. Use or reliance by any other party is prohibited without the written authorization of TDOT and Terracon.

Reliance on the PAS by the client and all authorized parties will be subject to the terms, conditions and limitations stated in the PAS report and our Proposal, dated October 23, 2013,

with the Tennessee Department of Transportation. The limitation of liability defined in the MSA is the aggregate limit of Terracon's liability to the client and all relying parties. Continued viability of this report is subject to ASTM E 1527-13 Sections 4.6 and 4.8. If the PAS will be used by a different user (third party) than the user for whom the PAS was originally prepared, the third party must also satisfy the user's responsibilities in Section 6 of ASTM E 1527-13.

1.6 Client Provided Information

TDOT provided a Baseline Study Phase I Site Assessment of Underground Storage Tanks and Hazardous Material Sites, State Route 126, Memorial Boulevard from Center Street to Interstate 81, prepared by HMB Professional Engineers, Inc., dated March 2008. Information obtained from the *2008 Baseline Phase I Report* is included throughout this PAS.

1.6.1 Knowledge of Environmental Liens or Activity and Use Limitations (AULs)

Actual knowledge of any environmental liens or AULs encumbering the site or in connection with the site was requested from the client. This information has not been received as of the issuance date of the report, and unless notified otherwise, we assume the client is evaluating this information outside the context of this report.

1.6.2 Specialized Knowledge or Experience

Specialized knowledge or experience material to RECs in connection with the site was requested from the client. This information has not been received as of the issuance date of the report, and unless notified otherwise, we assume the client is evaluating this information outside the context of this report.

1.6.3 Significantly Lower Purchase Price

Actual knowledge of a significantly lower purchase price due to the presence of hazardous substances or petroleum products in connection with the site was requested from the client. This information has not been received as of the issuance date of the report, and unless notified otherwise, we assume the client is evaluating this information outside the context of this report.

1.6.4 Commonly Known or Reasonably Ascertainable Information

Commonly known or reasonably ascertainable information within the local community about the site that is material to RECs in connection with the site was requested from the client. This information has not been received as of the issuance date of the report, and unless notified otherwise, we assume the client is evaluating this information outside the context of this report.

1.6.5 Obvious Indicators

Information about any obvious indicators that point to the presence or likely presence of contamination at the site was requested from the client. This information has not been received as of the issuance date of the report, and unless notified otherwise, we assume the client is evaluating this information outside the context of this report.

1.6.6 Proceedings Involving the Site

Information about any proceedings involving the site was requested from the client. This information has not been received as of the issuance date of the report, and unless notified otherwise, we assume the client is evaluating this information outside the context of this report.

2.0 REGIONAL GEOLOGY/HYDROGEOLOGY

Geology/Hydrogeology		
Formation	Sevier Shale Formation	Geologic Map of Tennessee, East Sheet, dated 1966
Description	A review of published geologic information indicates that the site is underlain primarily by the Sevier Shale Formation, which is characterized by calcareous bluish-grey shale with thin limestone layers.	
Primary Aquifer	There are no defined aquifers in the Ordovician-carbonate bedrock that underlies Sullivan County. The primary pathways along which groundwater can migrate and accumulate include secondary features such as fractures and dissolution cavities within the predominately carbonate rock. The occurrence of water is typically restricted to fractures that have been enlarged by dissolution, and the quantity of water obtainable by a well is dependent upon the size and number of fractures encountered. Due to the intense faulting and folding of rocks in the region, the number of fractures can vary significantly from location to location. Domestic supplies are usually obtained from wells at depths of 50 feet or less in shale, and 100 feet or more in carbonate rock. Perched water may occur on top of the bedrock at the soil/bedrock interface. The depth to the soil/bedrock interface varies significantly in carbonate bedrock formations.	Groundwater Atlas of the United States issued by the USGS, dated 1990-1999
**Hydrogeologic Gradient*	Not verified, but based on our site observations, groundwater flow is to south.	

* The groundwater flow direction and the depth to shallow, unconfined groundwater, if present, would likely vary depending upon seasonal variations in rainfall and other hydrogeological features. Without the benefit of on-site groundwater monitoring wells surveyed to a datum, groundwater depth and flow direction beneath the site cannot be directly ascertained.

3.0 HISTORICAL USE INFORMATION

Terracon reviewed the following historical sources for indications of RECs. Copies of selected historical documents are included in Appendix C.

3.1 Historical Topographic Maps

Readily available historical USGS topographic maps from Environmental Data Resources, Inc. (EDR), an information services company, were reviewed to identify land development in connection with the site. Reviewed historical topographic maps are summarized below:

- Bristol, Tennessee, published 1902, scale: 1:125,000
- Mages, Tennessee, published 1935, scale: 1:48,000
- Indian Springs, Tennessee, published 1935, 1940, 1959, 1968, 1978, 1991, scale: 1:24,000

The scale of the Bristol, Tennessee, 1902 map is small; therefore, detailed information regarding the site and surrounding properties is not depicted. The site is depicted as undeveloped land with unnamed tributaries traversing the southwestern and eastern property boundaries in the 1935 historical topographic maps, and the 1940, 1959, and 1968 historical topographic maps. Surrounding property is depicted as undeveloped land with scattered residential dwellings along Memorial Boulevard in the 1935 historical topographic maps, and the 1940, 1959, 1968, 1978 and 1991 historical topographic maps. The site appears to be developed with one structure in the central portion of the site on the 1978 historical topographic map. Several additional commercial-type structures appear to be depicted on the 1991 historical topographic map. Topographic maps indicating the site are included in Appendix C.

3.2 Historical Aerial Photographs

Selected historical aerial photographs from EDR were reviewed at approximately 10 to 15 year intervals, if readily available, to obtain information concerning the history of development on and near the site. Evaluation of these aerials may be limited by a photo's quality and scale. Selected photographs are included in Appendix C and summarized on the following page:

- EDR, dated 1988, scale: 1" = 1,000'
- EDR, dated 1992, scale: 1" = 750'
- EDR, dated 1997, scale: 1" = 500'
- EDR, dated 2000, scale: 1" = 750'
- EDR, dated 2006, scale: 1" = 500'
- EDR, dated 2007, scale: 1" = 500'

- EDR, dated 2008, scale: 1" = 500'
- EDR, dated 2010, scale: 1" = 500'
- EDR, dated 2012, scale: 1" = 500'

The quality of the 1988 and 1992 aerial photographs do not allow details of the site and surrounding properties to be visible; however, the site does appear to be developed. Several structures appear to be located on the site on the 1997, 2000, 2006, 2007, 2008, 2010, and 2012 aerial photographs. Surrounding properties appear to consist of undeveloped land with scattered residential dwellings along Memorial Boulevard in the 1988, 1992, 1997, and 2000 aerial photographs. Several commercial-type structures appear to be developed directly north of the site in the 2006, 2007, 2008, 2010, and 2012 aerial photographs. Indications of RECs were not identified based on a review of the available aerial photographs.

3.3 Historical City Directories

The Polk's City Directory and Johnson's City Directory listings of residences, businesses and professional entities organized both alphabetically by name and alphanumerically by street address. The directories used in this study were requested and compiled through EDR. The street address for the site was identified as 5236 Memorial Boulevard. City directories were available for review for the years 1989, 1996, 2002, 2007, and 2013.

Historical City Directories

Direction	Address/Listings from Historical City Directories
Site	**5236 Memorial Boulevard** – English Cabinets Shop, Inc. (1989, 1996, 2002, 2007, 2013).
North	No listings.
East	**5238 Memorial Boulevard** – Pine Productions (1989); No Listing (1996); Art-Tech Surfacing (2002, 2007); No Listing (2013). **5240 Memorial Boulevard** – Timber Steel Construction (1989, 1996); Pipe Line Supply (pipe whole) (2002); No Listing (2007, 2013). **5242 Memorial Boulevard** – Clymens Automotive Repair Company(2013). **5248 Memorial Boulevard** – Residential Listing (1989); No Listing (1996, 2002, 2007, 2013). **5251 Memorial Boulevard** – Residential Listing (1989); No Listing (1996, 2002, 2007, 2013). **5300 Memorial Boulevard** – Sun Satellite Systems of Tennessee (1989); No Listing (1996); Craftmatic America Beds (2002, 2007); No Listing (2013). **5332 Memorial Boulevard** – Residential Listing (1989, 1996, 2002, 2007, 2013).
South	No listings.
West	**5232 Memorial Boulevard** – Residential Listing (1989); No Listing (1996, 2002, 2007, 2013). **5227 Memorial Boulevard** – Residential Listing (1989, 1996); No Listing (2002); Residential Listing (2007, 2013). **5205 Memorial Boulevard** – Roberts Music (1989); Double M Auto Sales (1996); Nooks and Crannies (2002); No Listing (2007); Boulevard Hair Salon (2013).

According to reviewed city directory listings, the site has operated as English Cabinet Shop, Inc. since at least the late 1980s. The property directly adjacent to the site is identified as Clymens Automotive Repair Company, which is discussed in further detail in Section 3.8.

3.4 Historical Fire Insurance Maps

Historical fire insurance maps produced by the Sanborn Map Company were requested from EDR to evaluate past uses and relevant characteristics of the site and surrounding properties. Based on information from EDR, Sanborn mapping for the site is not available.

3.5 Property Tax File Information

Based on a review of the State of Tennessee Property Assessment Data website, the site at 5236 Memorial Boulevard consists of one parcel of land identified as parcel 69.30 on control map 048. The site consists of 2.35 acres of land currently owned by English Enterprise Company.

3.6 Title Search

At the direction of the client, a title search was not included in the scope of services for this assessment. Unless notified otherwise, we assume that the client is evaluating this information outside the scope of this report.

3.7 Environmental Liens

Environmental lien records recorded against the site were not provided by the client. At the direction of the client, performance of a review of these records was not included as part of the scope of services and unless notified otherwise, we assume that the client is evaluating this information outside the scope of this report.

3.8 Historical Interviews

The following individuals were interviewed regarding historical use of the site.

Interviewee(s)

Interviewer	Interviewee	Title	Date/Time
Marie Maher	Mr. Alan Hayes	Field Office Manager/ Johnson City TDEC Field Office	November 1, 2013 8:00 am
Marie Maher	Ms. Gena English	Owner of English Cabinet Shop	November 11, 2013 12:00 pm

Mr. Alan Hayes, P.G., Field Office Manager of the Tennessee Department of Environment and Conservation (TDEC) Johnson City Field Office was interviewed regarding his knowledge of the site and surrounding properties. Mr. Hayes, P.G. was not aware of any pending, threatened or past environmental litigation, proceedings or notices of possible violations of environmental laws or liability in connection with the site or immediately surrounding properties.

Ms. Gena English, owner of English Cabinet Shop, Inc., was interviewed in person during our site reconnaissance. Ms. English noted that the site has operated as English Cabinet Shop, Inc. since the 1980s. Ms. English noted that the site historically fabricated wood cabinets and chemicals associated with the wood fabrication process were used and stored onsite; however, the site currently does not utilize fabrication chemicals. Based on information obtained during our interview with Ms. English, the historical use of potentially hazardous chemicals associated with wood fabrication processes is considered a REC associated with the site.

Ms. English noted that the property located directly west of the site, adjacent to U.S. Highway 126 (Memorial Boulevard) has operated as Clymens Automotive Repair Company since the 1980s; however, she was unaware of any environmental issues associated with the neighboring properties. During our site and area reconnaissance, the Clymens Automotive Repair Company facility appeared to store 55-gallon capacity drums of used automotive fluids. The Clymens Automotive Repair Company facility is located directly west of the site and directly east of Memorial Boulevard. Based on the unknown status of operations and the proximity to the site, the Clymens Automotive Repair Company facility is considered a REC in connection with the site at this time.

3.9 Prior Report Review

TDOT provided a Baseline Study Phase I Site Assessment of Underground Storage Tanks and Hazardous Material Sites, State Route 126, Memorial Boulevard from Center Street to Interstate 81, prepared by HMB Professional Engineers, Inc., dated March 2008. The *2008 Baseline Phase I Report* was conducted for an approximate 8.8 mile corridor of State Route 126 (Memorial Boulevard). According to the *2008 Baseline Phase I Report*, an unnamed construction site was observed directly adjacent to 5234 Memorial Boulevard. According to the *2008 Baseline Phase I Report,* tires, vehicles, junk, and construction equipment where observed on the unnamed construction site. According to interviews conducted during the *2008 Baseline Phase I Report*, the unnamed construction site may have been used as a landfill possibly including automotive fluids including fuel and oil.

Based on our area and site reconnaissance, this unnamed construction site was located approximately 300 feet northwest of the site along U.S. Highway 126 (Memorial Boulevard). Based on our review of the *2008 Baseline Phase I Report,* potential discarded automotive fluids

and associated construction debris are considered RECs in connection with the site. Additional information is provided in Section 5.0.

4.0 RECORDS REVIEW

Regulatory database information was provided by EDR, a contract information services company. The purpose of the records review was to identify RECs in connection with the site. Evaluating identified regulatory facilities for potential vapor intrusion conditions was outside the scope of this assessment. Information in this section is subject to the accuracy of the data provided by the information services company and the date at which the information is updated, and the scope herein did not include confirmation of facilities listed as "unmappable" by regulatory databases.

In some of the following subsections, the words up gradient, cross gradient and down gradient refer to the topographic gradient in relation to the site. As stated previously, the groundwater flow direction and the depth to shallow groundwater, if present, would likely vary depending upon seasonal variations in rainfall and the depth to the soil/bedrock interface. Without the benefit of on-site groundwater monitoring wells surveyed to a datum, groundwater depth and flow direction beneath the site cannot be directly ascertained.

4.1 Federal and State/Tribal Databases

Listed below are the facility listings identified on federal and state/tribal databases within the ASTM-required search distances from the approximate site boundaries. Database definition, descriptions, and the database search report are included in Appendix D.

Federal and State Databases

Database	Description	Radius (Miles)	Listings
	Federal		
NPL	The NPL is the EPA's database of uncontrolled or abandoned hazardous waste facilities that have been listed for priority remedial actions under the Superfund Program.	1.0	0
NPL (Delisted)	The NPL (Delisted) refers to facilities that have been removed from the NPL.	1.0	0
CERCLIS	The CERCLIS database is a compilation of facilities which the EPA has investigated or is currently investigating for a release or threatened release of hazardous substances pursuant to the CERCLA of 1980.	0.5	0
CERCLIS/ NFRAP	CERCLIS/NFRAP refers to facilities that have been removed and archived from EPA's inventory of CERCLA sites.	0.5	0

Database	Description	Radius (Miles)	Listings
RCRA CORRACTS/ TSD	The EPA maintains a database of RCRA facilities associated with treatment, storage, and disposal (TSD) of hazardous waste that are undergoing "corrective action." A "corrective action" order is issued when there has been a release of hazardous waste or constituents into the environment from a RCRA facility.	1.0	0
RCRA Non-CORRACTS/ TSD	The RCRA Non-CORRACTS/TSD Database is a compilation by the USEPA of facilities which report storage, transportation, treatment, or disposal of hazardous waste. Unlike the RCRA CORRACTS/TSD database, the RCRA Non-CORRACTS/TSD database does not include RCRA facilities where corrective action is required.	0.5	0
RCRA Generators	The RCRA Generators database, maintained by the EPA, lists facilities that generate hazardous waste as part of their normal business practices. Generators are listed as either large (LQG), small (SQG), or conditionally exempt (CESQG). LQG produce at least 1000 kg/month of non-acutely hazardous waste or 1 kg/month of acutely hazardous waste. SQG produce 100-1000 kg/month of non-acutely hazardous waste. CESQG are those that generate less than 100 kg/month of non-acutely hazardous waste.	0.25	0
IC / EC	A listing of sites with institutional and/or engineering controls in place. IC include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls. EC include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.	0.5	0
ERNS	The Emergency Response Notification System (ERNS) is a listing compiled by the EPA on reported releases of petroleum and hazardous substances to the air, soil and/or water.	Site	0
RCRA NonGen	A listing of site that historically generated, transported, stored, treated and/or disposed of hazardous waste as defined by RCRA; however, the sites do not presently generate hazardous waste.	0.25	1
	State/Tribal		
SHWS	State-equivalent and/or Tribal-equivalent database of NPL sites.	1.0	0
SWF / LF	State and/or Tribal database of solid waste facilities located within Tennessee. The database information may include the facility name, class, operation type, area, estimated operational life, and owner.	0.5	0
LUST	State and/or Tribal database of leaking underground storage tanks in state of Tennessee.	0.5	0
LUST TRUST	State and/or Tribal database of leaking underground storage tanks in state of Tennessee that had accidental petroleum releases.	1.0	0
UST	State and/or Tribal database of registered storage tanks in the State of Tennessee which may include the owner and location of the tanks.	0.25	0

Database	Description	Radius (Miles)	Listings
HIST UST	State and/or Tribal database of historical registered storage tanks in the State of Tennessee which may include the owner and location of the tanks.	0.25	0
IC/EC	State and/or Tribal equivalent to the Federal IC / EC database list.	0.5	0
VCP	State and/or Tribal facilities included as Voluntary Cleanup Program sites.	0.5	0
Brownfields	State and/or tribal listing of Brownfield properties addressed by Cooperative Agreement Recipients or Targeted Brownfields Assessments.	0.5	0

In addition to the above ASTM-required listings, Terracon reviewed other federal, state, local, and proprietary databases provided by the database firm. A list of the additional reviewed databases is included in the regulatory database report included in Appendix D.

Surrounding properties were not identified during our database search report; however, the site was identified on the Resource Conservation and Recovery Act (RCRA) Non-Generator (Non-Gen) and the Facility Index System (FINDS) databases. According to the database search report, the site (English Cabinet Shop, Inc.) does not currently generate hazardous waste. RECs associated with the site were not identified during our database search report.

Unmapped facilities are those that do not contain sufficient address or location information to evaluate the facility listing locations relative to the site. The report listed 31 facilities in the unmapped section. Determining the location of unmapped facilities is beyond the scope of this assessment; however, none of these facilities appeared to be present on the site at the time of our site reconnaissance. These facilities are listed in the database report in Appendix D.

4.2 Local Agency Inquiries

4.2.1 Health Department/Environmental Division

The Sullivan County Health Department (SCHD), Environmental Health Division was contacted by telephone regarding environmental records or information indicating environmental concerns for the site. The SCHD representative contacted indicated that she was not aware of any environmental concerns associated with the site.

4.2.2 Fire Department

The Kingsport Fire Department was contacted by telephone regarding environmental records or information indicating environmental concerns for the site. At the issuance of this report a response had not been received from the Kingsport Fire Department.

4.2.3 Local/Regional Pollution Control Agency

See Section 4.2.1.

4.2.4 Local/Regional Water Quality Agency

According to the database search report, two unnamed tributaries to Slougan Branch are located on the southwestern and southeastern portions of the site. The Kingsport Public Works office was contacted by phone regarding environmental records for the site. Mr. Ryan Reynolds of the Kingsport Public Works, is unaware of any significant surface or groundwater water quality issues on or near the site.

5.0 SITE RECONNAISSANCE

5.1 General Site Information

Information contained in this section is based on a visual reconnaissance conducted while walking through the site and the accessible interior areas of structures, if any, located on the site. Figure 2 in Appendix A depicts the site. Photo documentation of the site at the time of the visual reconnaissance is provided in Appendix E. Credentials of the individuals planning and conducting the site visit are included in Appendix F.

General Site Information

Site Reconnaissance	
Field Personnel	Marie Maher, P.G.
Reconnaissance Date	November 5, 2013
Weather Conditions	Partly cloudy, approximately 65° F
Site Contact/Title	Unaccompanied
Site Description	
Site Name	English Cabinet Shop, Inc.
Site Location/Address	5236 Memorial Boulevard in Kingsport, Sullivan County, Tennessee
Land Area	Approximately 2.25 acres
Site Improvements	The site is currently improved with three separate onsite structures, gravel parking and drive areas, and two unnamed tributaries to Slougan Branch. One structure is located on the southwestern portion of the site and operates as office areas. A larger structure is located on the northern portion of the site and currently operates as a cabinet assembly area. The third structure is located on the eastern portion of the site and currently operates as a solid-surface assembly area. The two unnamed

	tributaries to Slougan Branch are located on the southeastern and southwestern portions of the site. The site currently operates as English Cabinet Shop, Inc.
Zoning	Not specified
Site Topographic Relief	Varies, but in general to the south-southwest.
Site Utilities	
Electricity	Kingsport Utility Services
Drinking Water	City of Kingsport
Natural Gas	East Tennessee Natural Gas Co.

5.2 General Description of Site, Occupants and Operations

The project includes the widening of lanes along Memorial Boulevard (U.S. Highway 126) resulting in the expansion of the associated TDOT R.O.W. in Kingsport, Sullivan County, Tennessee. The site assessed during this investigation consists of the 2.25-acre parcel of land located at 5236 Memorial Highway, which was occupied by the English Cabinet Shop, Inc. facility at the time of our site reconnaissance. During our reconnaissance, the site was improved with three separate onsite structures, gravel parking and drive areas, and two unnamed tributaries to Slougan Branch. One structure was located on the southwestern portion of the site and operates as office areas. A larger structure was located on the northern portion of the site and currently operates as a cabinet assembly area. The third structure was located on the eastern portion of the site and currently operates as a solid-surface assembly area. The two unnamed tributaries to Slougan Branch are located on the southeastern and southwestern portions of the site. The purpose of this study was to identify RECs within the site limits, specifically the proposed R.O.W. expansion area which is along the west boundary of this parcel.

5.3 Site Observations

The following table summarizes site observations and interviews. Affirmative responses (designated by an “X”) are discussed in more detail following the table.

Site Characteristics

Category	Item or Feature	Response
Site Operations, Processes, and Equipment	Emergency generators	
	Elevators	
	Air compressors	X
	Hydraulic lifts	

Site Characteristics (cont.)

Category	Item or Feature	Response
Site Operations, Processes, and Equipment	Dry cleaning	
	Photo processing	
	Laboratory hoods and/or incinerators	
	Waste treatment systems and/or water treatment systems	
	Heating and/or cooling systems	X
	Other processes or equipment	
Aboveground Chemical or Waste Storage	Aboveground storage tanks	
	Drums, barrels and/or containers ≥ 5 gallons	X
	MSDS	
Underground Chemical or Waste Storage, Drainage or Collection Systems	Underground storage tanks or ancillary UST equipment	
	Sumps, cisterns, catch basins and/or dry wells	
	Grease traps	
	Septic tanks and/or leach fields	
	Oil/water separators	
	Pipeline markers	
	Interior floor drains	
Electrical Transformers/ PCBs	Pad or pole mounted transformers and/or capacitors	X
	Other equipment	
Releases or Potential Releases	Stained soil	
	Stained pavement or similar surface	X
	Leachate and/or waste seeps	
	Trash, debris and/or other waste materials	X
	Dumping or disposal areas	
	Construction/demolition debris and/or dumped fill dirt	
	Surface water discoloration, odor, sheen, and/or free floating product	
	Strong, pungent or noxious odors	
	Exterior pipe discharges and/or other effluent discharges	

Site Characteristics (cont.)

Category	Item or Feature	Response
Other Notable Site Features	Surface water bodies	X
	Quarries or pits	
	Wells	

The features checked in the above table are adjacent to TDOT's planned R.O.W. acquisition.

Site Operations, Processes, and Equipment

Air Compressors

During our site and area reconnaissance, a commercial-grade air compressor was observed adjacent to the exterior of the cabinet assembly structure on the northern portion of the site. Based on our observations, the air compressor is not considered a REC in connection with the site at this time.

Heating and/or Cooling Systems

The office structure located on the western portion of the site appeared to utilize a package heating, ventilation, and air conditioning (HVAC) system located on the eastern exterior wall of the structure with interior and exterior components. Based on our observations during our site reconnaissance, the HVAC equipment is not considered a REC at this time.

Above Ground Chemical Waste or Storage

Drums, Barrels and/or Containers ≥ 5 Gallons

During our site and area reconnaissance, several 55-gallon capacity drums were observed throughout the site. Based on our observations, the drums were not labeled or identifiable. Based on out interview with Ms. English, chemicals associated with wood fabrication were historically stored and used on site; therefore, the containers of unknown material are considered RECs in connection with the site at this time.

Electrical Transformers/PCBs

Transformers and/or capacitors

Six pole-mounted transformers, owned and serviced by the Kingsport Utility Services were observed throughout the site; however, no information with regard to PCB content of the transformer fluids was observed. Transformers contain mineral oil which may contain minor amounts of PCB and could be considered "PCB contaminated" (PCB content of 50-500 ppm).

The Kingsport Utility Services maintains responsibility for the transformers, and if the transformers were "PCB contaminated," the utility company is not required to replace the transformer fluids until a release is identified. However, no evidence of a current or prior release was observed in the vicinity of the electrical equipment during our site reconnaissance. The pole-mounted transformers are not considered RECs at this time.

Releases or Potential Releases

Stained Pavement or Similar Surfaces
The observed stained pavement is located in the parking and drive areas on the central portion of the site and appeared to be a *de minimis* condition. Based on our observations during our site reconnaissance, the stained pavement is not considered a REC at this time.

Trash, debris and/or other waste materials
Three waste dumpsters were observed on the site. The dumpsters are owned and serviced by Allied Waste Services. Evidence of staining, noxious odors or hazardous waste disposal was not observed in the vicinity of the on-site dumpsters. The waste dumpsters are not considered RECs at this time.

Other Notable Site Features

Surface Water Bodies
Two unnamed tributaries to Slougan Branch were observed along the southwestern and southeastern portions of the site. Mr. Reynolds, of the Kingsport Public Works, is unaware of any significant surface or groundwater water quality issues on or near the site. No discoloration or odors were observed in the vicinity of the tributaries at the time of our site and area reconnaissance. Based on our site observations, the unnamed tributaries to Slougan Branch are not considered RECs in connection with the site at this time.

5.4 Interviews Conducted

The following individuals were interviewed regarding the presence or absence of the features listed in the table above.

Interviewee(s)

Interviewer	Interviewee	Title	Date/Time
Marie Maher, P.G.	Mr. Ryan Reynolds	Kingsport Public Works	November 6, 2013 9:30 am

Information obtained from the above-listed interviewees is discussed in Sections 3.8 and 5.3.

6.0 PROJECT IMPACTS

6.1 Site Rankings

A hazardous materials rating system was used to rate the facilities that were identified as being RECs to the site. The ratings include: NO, LOW, MEDIUM and HIGH, and are generally defined as follows:

NO: A review of all available information finds there is nothing to indicate that the facility is a REC to the site. It is possible that contaminants were handled on the property; however, based on a review of available information, the facility does not appear to constitute a REC to the site.

LOW: The former or current facility has a hazardous waste generator identification number, or deals with hazardous materials; however, based on all available information, there is no reason to believe that there would be any involvement with contamination in relation to the site. This is the lowest possible rating a gasoline station operating within current regulations can receive. Some facilities designated with a LOW rating should be reevaluated during the design phase.

MEDIUM: After a review of all available information, indications are found (visual observations, reports, violation notices, consent orders, etc.) that identify known soil and/or groundwater contamination and that the problem does not need remediation, is currently being remediated, or that continued monitoring is required. The complete details of remediation requirements are important to determine what the TDOT must do if the property were to be acquired. A recommendation should be made on each property falling into this category to its acceptability for use within the proposed project, what actions might be required if the property is acquired, and the possible alternatives if there is a need to avoid the property.

HIGH: After a review of all available information, there is a potential for contamination problems. Further assessment will be required after alignment selection to determine the actual presence and/or levels of contamination and the need for remedial action. A recommendation must be included for what further assessment is required. Conducting the actual Contamination Assessment is not expected to begin until alignment is defined; however, circumstances may require additional screening assessments (i.e., collecting soil or water samples for laboratory analysis necessary to determine the presence and/or levels of contaminants) to begin earlier. Properties previously used as gasoline station and which have not been evaluated or assessed would probably receive this rating.

6.2 Potential Contamination Sites

The site and the adjacent Clymens Automotive Repair Company facility were identified and evaluated for potential hazardous materials and petroleum involvement. The site and adjacent property were identified based on visual observations and/or other resources available for review. The site and adjacent facility are listed and described in the table below, and information regarding the site and adjacent facility is provided on Figure 2. Additional discussion regarding the facilities listed below is provided after the table.

Potential Contamination Sites

Site No.	Site Name, Location, and Identification Numbers	Tax Map No., Parcel ID	Database Listings	Storage Tank(s) Currently In Service	Potential Contaminant Parameters	Proposed Alignment		
						Right-of-way Required for Expansion	Distance from Proposed Right-of-way	Risk Evaluation Rating
1	English Cabinet Shop, Inc.	Map 048; Parcel 069.30	RCRA-NonGen	None Identified	Possible historical presence of hazardous chemicals	Unknown	Approx.100 feet from R.O.W.	LOW
2	Clymens Automotive Repair Company	Map 048; Parcel 070.00	None	None Identified	Possible presence of hazardous and/or petroleum chemicals	Unknown	Approx.10 feet from R.O.W.	LOW
3	Unidentified Construction Site	Map 048; Parcel 071.00	None	None Identified	Potential presence of hazardous and/or petroleum chemicals	Unknown	Approx.10 feet from R.O.W.	HIGH

Site No. 1 – English Cabinet Shop, Inc., 5236 Memorial Boulevard

The site was identified on the RCRA-Non-Gen and the FINDS databases. According to the database search report, the site (English Cabinet Shop, Inc.) does not currently generate hazardous waste. Ms. Gena English, owner of English Cabinet Shop, Inc., was interviewed in person during our site reconnaissance. Ms. English noted that the site has operated as English Cabinet Shop, Inc. since the 1980s. Ms. English noted that the site historically fabricated wood cabinets and chemicals associated with the wood fabrication process were used and stored onsite; however, the site currently does not utilize fabrication chemicals. Based on information

obtained during our interview with Ms. English, the historical use of potentially hazardous chemicals associated with wood fabrication processes and the observed containers of unknown material are considered RECs in connection with the site at this time; therefore, the facility was assigned a risk rating of LOW.

Site No. 2 – Clymens Automotive Repair Company, 5242 Memorial Boulevard

Ms. English noted that the property located directly west of the site, adjacent to U.S. Highway 126 (Memorial Boulevard) has operated as Clymens Automotive Repair Company since the 1980s; however, she was unaware of any environmental issues associated with the neighboring properties. During our site and area reconnaissance, the Clymens Automotive Repair Company facility appeared to store 55-gallon capacity drums of used automotive fluids. The Clymens Automotive Repair Company facility is located directly west of the site and directly east of Memorial Boulevard. Based on the unknown status of operations and the proximity to the site, the Clymens Automotive Repair Company facility is considered a REC in connection with the site at this time; therefore, the facility was assigned a risk rating of LOW.

Site No. 3 – Unidentified Construction Site, 5232 Memorial Boulevard

According to the *2008 Baseline Phase I Report*, provided to TEerracon by TDOT, an unnamed construction site was observed directly adjacent to 5234 Memorial Boulevard. According to the *2008 Baseline Phase I Report,* tires, vehicles, junk, and construction equipment where observed on the unnamed construction site. According to interviews conducted during the *2008 Baseline Phase I Report*, the unnamed construction site may have been used as a landfill possibly including automotive fluids including fuel and oil. Based on our area and site reconnaissance, this unnamed construction site was located approximately 300 feet northwest of the site along U.S. Highway 126 (Memorial Boulevard). Based on our review of the *2008 Baseline Phase I Report,* potential discarded automotive fluids and associated construction debris are considered RECs in connection with the site; therefore, the facility was assigned a risk rating of HIGH.

7.0 ADDITIONAL SERVICES

Per the agreed scope of services specified in the proposal, no additional services (e.g., asbestos sampling, lead-based paint sampling, wetlands evaluation, radon testing, vapor intrusion, etc.) were conducted.

8.0 FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS

8.1 Findings

This Phase I Preliminary Assessment Study (PAS) was performed in general accordance with the TDOT Environmental Procedures Manual, dated April 2007, our Proposal, dated October 23, 2013, and consistent with the procedures included in ASTM E 1527-13, Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process. The PAS was conducted under the supervision or responsible charge of Travis Stamper, Environmental Professional. Marie A. Maher, P.G. performed the site reconnaissance on November 5, 2013.

A cursory summary of findings is provided below. It should be recognized that details were not included or fully developed in this section, and the report must be read in its entirety for a comprehensive understanding of the items contained herein.

- The project includes the widening of lanes along U.S. Highway 126 (Memorial Boulevard) resulting in the expansion of the associated TDOT R.O.W. in Kingsport, Sullivan County, Tennessee. The site assessed during this investigation consists of the 2.25-acre parcel located at 5236 Memorial Boulevard, which was occupied by the English Cabinet Shop, Inc. facility at the time of our site reconnaissance. The purpose of this study was to identify RECs within the site limits, specifically the proposed R.O.W. expansion area which is along the west boundary of this parcel.

- Based on historical information reviewed as part of this assessment, the site appears to have been undeveloped land until the1980s, at which time the site was developed with the English Cabinet Shop, Inc. facility. The parcels surrounding the site appear to have historically been comprised of predominantly residential and undeveloped, agricultural lands until the mid-1980s, at which time the sparse commercial development that was observed during our site reconnaissance began.

- At the time of our site reconnaissance, the site was improved with three separate onsite structures, gravel parking and drive areas, and two unnamed tributaries to Slougan Branch. One structure was located on the southwestern portion of the site and operates as office areas. A larger structure was located on the northern portion of the site and currently operates as a cabinet assembly area. The third structure was located on the eastern portion of the site and currently operates as a solid-surface assembly area. The two unnamed tributaries to Slougan Branch are located on the southeastern and southwestern portions of the site. During our site and area reconnaissance, several 55-gallon capacity drums were observed throughout the site. Based on our observations,

the drums were not labeled or identifiable. Based on our interview with Ms. English, chemicals associated with wood fabrication were historically stored and used on site; therefore, the containers of unknown material are considered RECs in connection with the site at this time.

- Surrounding properties were not identified during our database search report; however, the site was identified on the RCRA-Non-Gen and the FINDS databases. According to the database search report, the site (English Cabinet Shop, Inc.) does not currently generate hazardous waste. RECs associated with the site were not identified during our database search report; however, information obtained during our onsite interviews indicated hazardous materials may have been used and stored onsite. The historical use of potentially hazardous chemicals associated with wood fabrication processes is considered a REC associated with the site.

- The property located directly west of the site, adjacent to U.S. Highway 126 (Memorial Boulevard) has operated as Clymens Automotive Repair Company since the 1980s. During our site and area reconnaissance, the Clymens Automotive Repair Company facility appeared to store 55-gallon capacity drums of used automotive fluids. The Clymens Automotive Repair Company facility is located directly west of the site and directly east of Memorial Boulevard. Based on the unknown status of operations and the proximity to the site, the Clymens Automotive Repair Company facility is considered a REC in connection with the site at this time.

- According to the *2008 Baseline Phase I Report*, provided to Terracon by TDOT, an unnamed construction site was observed directly adjacent to 5234 Memorial Boulevard. According to the *2008 Baseline Phase I Report,* tires, vehicles, junk, and construction equipment where observed on the unnamed construction site. According to interviews conducted during the *2008 Baseline Phase I Report*, the unnamed construction site may have been used as a landfill possibly including automotive fluids including fuel and oil. Based on our area and site reconnaissance, this unnamed construction site was located approximately 300 feet northwest of the site along U.S. Highway 126 (Memorial Boulevard). Based on our review of the *2008 Baseline Phase I Report,* potential discarded automotive fluids and associated construction debris are considered RECs in connection with the site.

- A hazardous materials rating system was used to rate facilities that were identified as being potential RECs to the site. Three facilities, the onsite facility (English Cabinet Shop, Inc.), the adjacent Clymens Automotive Repair Company facility, and the nearby unidentified construction site facility, were identified as having the potential for contamination. The onsite facility (English Cabinet Shop, Inc.) and the adjacent Clymens Automotive Repair Company facility were assigned risk ratings of LOW. The nearby unidentified construction site facility was assigned risk ratings HIGH.

- Based on the authorized scope of services, no additional services (e.g., asbestos sampling, lead-based paint sampling, wetlands evaluation, radon testing, etc.) were conducted.

8.2 Conclusions and Recommendations

The onsite facility (English Cabinet Shop, Inc.) and the adjacent Clymens Automotive Repair Company facility were assigned risk ratings of LOW. Due to the potential acquisition of the site parcel (048-69.30), Terracon recommends that the site be further analyzed through a Level 2 Contamination Assessment, which would include soil and groundwater sampling, to further clarify potential contamination concerns. Based on the findings of the Level 2 Contamination Assessment, the rating of the site may or may not be revised.

In addition, an unidentified construction site was identified as having HIGH potential for contamination. Due to the close proximity and upgradient location of this facility with respect to the site, Terracon recommends that potential impact from the unidentified construction site facility be further analyzed through a Level 2 Contamination Assessment, which would include soil and groundwater sampling, to further clarify potential contamination concerns. Based on the findings of the Level 2 Contamination Assessment, the rating of this facility may be revised.

9.0 DECLARATION

I, Travis Stamper, declare that to the best of my professional knowledge and belief, I meet the definition of Environmental Professional as defined in Section 312.10 of 40 CFR 312; and I have the specific qualifications based on education, training, and experience to assess a site of the nature, history, and setting of the subject site. I have developed and performed the All Appropriate Inquiries in conformance with the standards and practice set forth in 40 CFR Part 312.

APPENDIX A

Figure 1 – Topographic Map, Figure 2 – Site Map

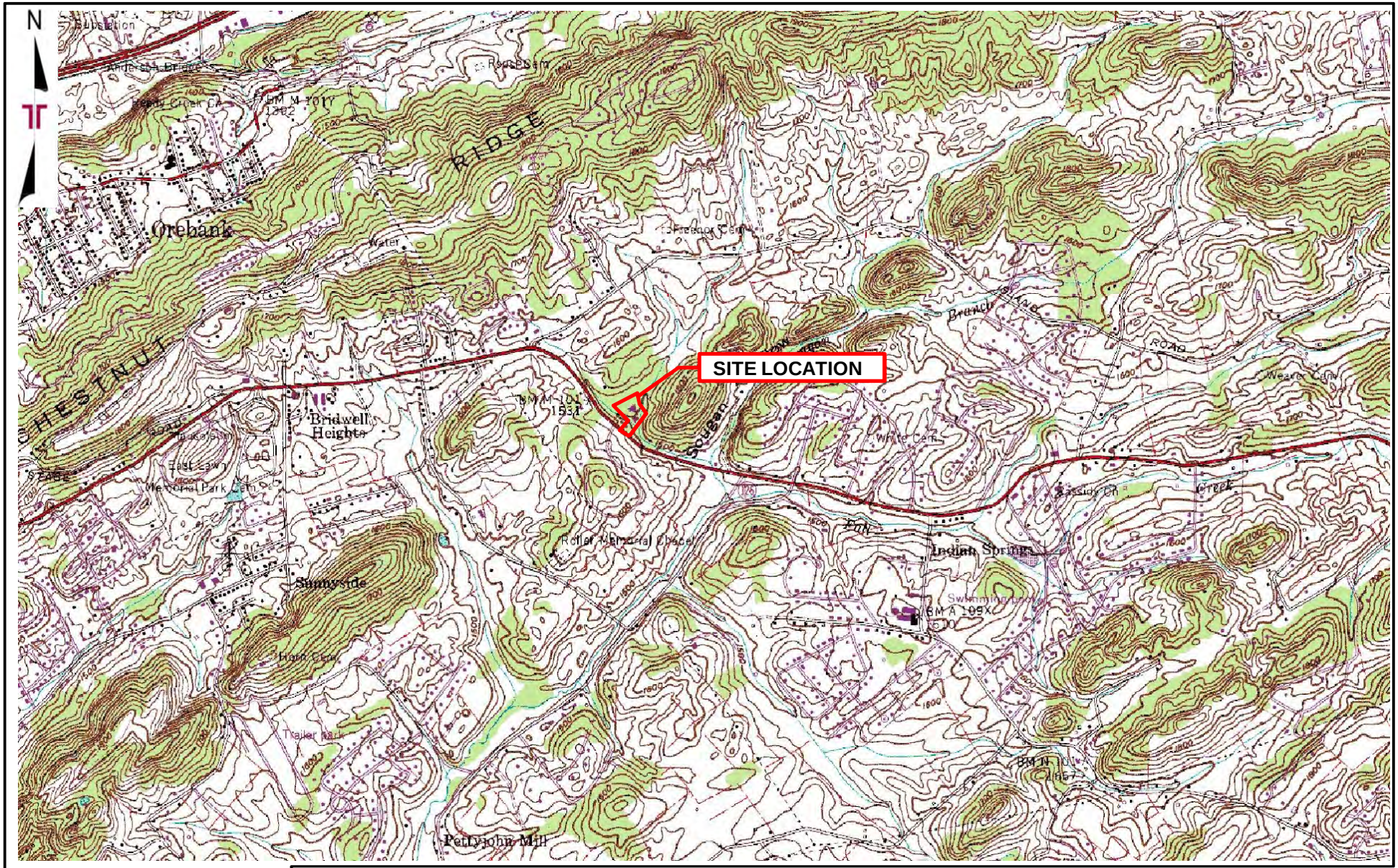


DIAGRAM IS FOR GENERAL LOCATION ONLY, AND IS NOT INTENDED FOR CONSTRUCTION PURPOSES

TOPOGRAPHIC MAP IMAGE COURTESY OF THE U.S. GEOLOGICAL SURVEY QUADRANGLES INCLUDE: INDIAN SPRINGS, TN (1/1/1991).

Project Manager:	MAM
Drawn by:	MAM
Checked by:	MAM
Approved by:	DEW

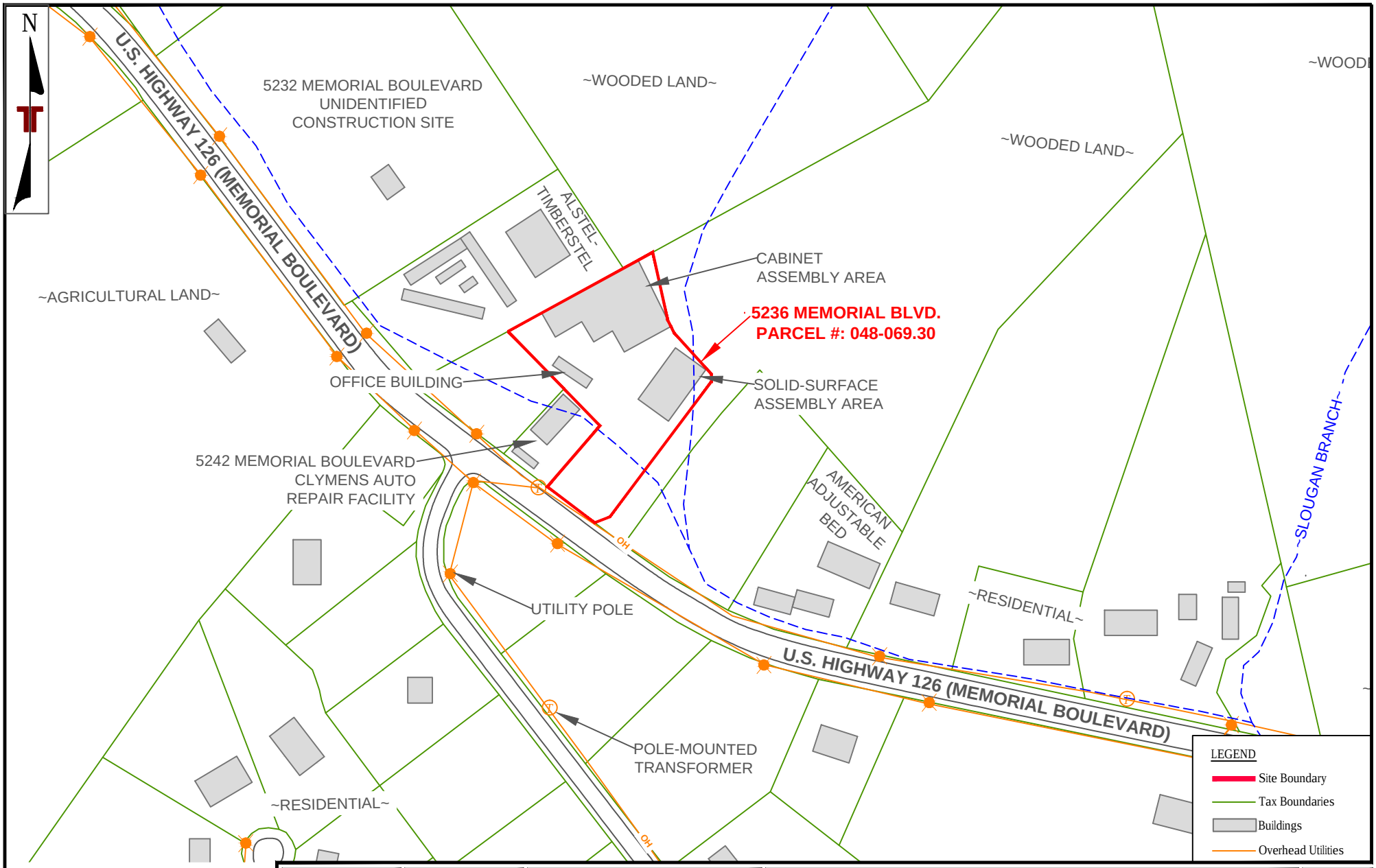
Project No.	E2137131.T1
Scale:	1" = ~24,000'
File Name:	E2137131.T1
Date:	11/11/2013

Terracon
Consulting Engineers & Scientists
51 Lost Mound Drive Chattanooga, Tennessee 37406
PH. (423) 499-6111 FAX. (423) 499-8099

Topographic Map

Phase I Preliminary Assessment Study
English Cabinet Shop, Inc.
5236 Memorial Boulevard
Kingsport, Sullivan County, Tennessee

Figure
1



Note:

Site Map image derived from Sullivan County Tax Map Information.

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1" = 400'

Project Mngr:	MAM
Drawn By:	MAM
Checked By:	MAM
Approved By:	DEW

Project No.	E2137131
Scale:	AS SHOWN
File No.	E2137131
Date:	11/11/13

Terracon
Consulting Engineers and Scientists
51 Lost Mound Dr. Suite 135 Chattanooga, TN 37406
PH. (423) 499-6111 FAX. (423) 499-8099

Site Diagram

Phase I Preliminary Assessment Study

English Cabinet Shop, Inc.

5236 Memorial Boulevard

Kingsport, Sullivan County, Tennessee

Figure

2

APPENDIX B

Description of Terms and Acronyms

Description of Selected General Terms and Acronyms

Term/Acronym	*Description*
ACM	Asbestos Containing Material. Asbestos is a naturally occurring mineral, three varieties of which (chrysotile, amosite, crocidolite) have been commonly used as fireproofing or binding agents in construction materials. Exposure to asbestos, as well as ACM, has been documented to cause lung diseases including asbestosis (scarring of the lung), lung cancer and mesothelioma (a cancer of the lung lining). Regulatory agencies have generally defined ACM as a material containing greater that one (1) percent asbestos, however some states (e.g. California) define ACM as materials having 0.1% asbestos. In order to define a homogenous material as non-ACM, a minimum number of samples must be collected from the material dependent upon its type and quantity. Homogenous materials defined as non-ACM must either have 1) no asbestos identified in all of its samples or 2) an identified asbestos concentration below the appropriate regulatory threshold. Asbestos concentrations are generally determined using polarized light microscopy or transmission electron microscopy. Point counting is an analytical method to statistically quantify the percentage of asbestos in a sample. The asbestos component of ACM may either be friable or non-friable. Friable materials, when dry, can be crumbled, pulverized, or reduced to powder by hand pressure and have a higher potential for a fiber release than non-friable ACM. Non-friable ACM are materials that are firmly bound in a matrix by plastic, cement, etc. and, if handled carefully, will not become friable. Federal and state regulations require that either all suspect building materials be presumed ACM or that an asbestos survey be performed prior to renovation, dismantling, demolition, or other activities that may disturb potential ACM. Notifications are required prior to demolition and/or renovation activities that may impact the condition of ACM in a building. ACM removal may be required if the ACM is likely to be disturbed or damaged during the demolition or renovation. Abatement of friable or potentially friable ACM must be performed by a licensed abatement contractor in accordance with state rules and NESHAP. Additionally, OSHA regulations for work classification, worker training and worker protection will apply.
AHERA	Asbestos Hazard Emergency Response Act
AST	Above Ground Storage Tanks. ASTs are generally described as storage tanks less than 10% of which are below ground (i.e., buried). Tanks located in a basement, but not buried, are also considered ASTs. Whether, and the extent to which, an AST is regulated, is determined on a case-by-case basis and depends upon tank size, its contents and the jurisdiction of its location.
BGS	Below Ground Surface
BTEX	Benzene, Toluene, Ethylbenzene, and Xylenes. BTEX are VOC components found in gasoline and commonly used as analytical indicators of a petroleum hydrocarbon release.
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act (a.k.a. Superfund). CERCLA is the federal act that regulates abandoned or uncontrolled hazardous waste sites. Under this Act, joint and several liability may be imposed on potentially responsible parties for cleanup-related costs.
CERCLIS	Comprehensive Environmental Response, Compensation and Liability Information System. An EPA compilation of sites having suspected or actual releases of hazardous substances to the environment. CERCLIS also contains information on site inspections, preliminary assessments and remediation of hazardous waste sites. These sites are typically reported to EPA by states and municipalities or by third parties pursuant to CERCLA Section 103.
CESQG	Conditionally exempt small quantity generators.
CFR	Code of Federal Regulations
DOT	U.S. Department of Transportation
EPA	U.S. Environmental Protection Agency
ERNS	Emergency Response Notification System. An EPA-maintained federal database which stores information on notifications of oil discharges and hazardous substance releases in quantities greater than the applicable reportable quantity under CERCLA. ERNS is a cooperative data-sharing effort between EPA, DOT, and the National Response Center.
PAS	Environmental Site Assessment

Description of Terms and Acronyms (cont.)

FRP	Fiberglass Reinforced Plastic
Hazardous Substance	As defined under CERCLA, this is (A) any substance designated pursuant to section 1321(b)(2)(A) of Title 33, (B) any element, compound, mixture, solution, or substance designated pursuant to section 9602 of this title; (C) any hazardous waste having characteristics identified under or listed pursuant to section 3001 of the Solid Waste Disposal Act (with some exclusions); (D) any toxic pollutant listed under section 1317(a) of Title 33; (E) any hazardous air pollutant listed under section 112 of the Clear Air Act; and (F) any imminently hazardous chemical substance or mixture with respect to which the EPA Administrator has taken action under section 2606 of Title 15. This term does not include petroleum, including crude oil or any fraction thereof which is not otherwise listed as a hazardous substance under subparagraphs (A) through (F) above, and the term include natural gas, or synthetic gas usable for fuel (or mixtures of natural gas and such synthetic gas).
Hazardous Waste	This is defined as having characteristics identified or listed under section 3001 of the Solid Waste Disposal Act (with some exceptions). RCRA, as amended by the Solid Waste Disposal Act of 1980, defines this term as a "solid waste, or combination of solid wastes, which because of its quantity, concentration, or physical, chemical, or infectious characteristics may (A) cause, or significantly contribute to an increase in mortality or an increase in serious irreversible, or incapacitating reversible illness; or (B) pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, or disposed of, or otherwise managed."
ILP	Innocent Landowner/Operator Program
LQG	Large quantity generators.
LUST	Leaking Underground Storage Tank. This is a federal term set forth under RCRA for leaking USTs. Some states also utilize this term.
MCL	Maximum Contaminant Level. This Safe Drinking Water concept (and also used by many states as a ground water cleanup criteria) refers to the limit on drinking water contamination that determines whether a supplier can deliver water from a specific source without treatment.
MSDS	Material Safety Data Sheets. Written/printed forms prepared by chemical manufacturers, importers and employers which identify the physical and chemical traits of hazardous chemicals under OSHA's Hazard Communication Standard.
NESHAP	National Emissions Standard for Hazardous Air Pollutants (Federal Clean Air Act). This part of the Clean Air Act regulates emissions of hazardous air pollutants.
NFRAP	Facilities where there is "No Further Remedial Action Planned," as more particularly described under the Records Review section of this report.
NOV	Notice of Violation. A notice of violation or similar citation issued to an entity, company or individual by a state or federal regulatory body indicating a violation of applicable rule or regulations has been identified.
NPDES	National Pollutant Discharge Elimination System (Clean Water Act). The federal permit system for discharges of polluted water.
NPL	National Priorities List, as more particularly described under the Records Review section of this report.
OSHA	Occupational Safety and Health Administration or Occupational Safety and Health Act
PACM	Presumed Asbestos-Containing Material. A material that is suspected of containing or presumed to contain asbestos but which has not been analyzed to confirm the presence or absence of asbestos.
PCB	Polychlorinated Biphenyl. A halogenated organic compound commonly in the form of a viscous liquid or resin, a flowing yellow oil, or a waxy solid. This compound was historically used as dielectric fluid in electrical equipment (such as electrical transformers and capacitors, electrical ballasts, hydraulic and heat transfer fluids), and for numerous heat and fire sensitive applications. PCB was preferred due to its durability, stability (even at high temperatures), good chemical resistance, low volatility, flammability, and conductivity. PCBs, however, do not break down in the environment and are classified by the EPA as a suspected carcinogen. 1978 regulations, under the Toxic Substances Control Act, prohibit manufacturing of PCB-containing equipment; however, some of this equipment may still be in use today.
pCi/l	Pico Curies per Liter of Air. Unit of measurement for Radon and similar radioactive materials.
PLM	Polarized Light Microscopy (see ACM section of the report, if included in the scope of services)
PST	Petroleum Storage Tank. An AST or UST that contains a petroleum product.

Description of Terms and Acronyms (cont.)

Radon	A radioactive gas resulting from radioactive decay of naturally-occurring radioactive materials in rocks and soils containing uranium, granite, shale, phosphate, and pitchblende. Radon concentrations are measured in Pico Curies per Liter of Air. Exposure to elevated levels of radon creates a risk of lung cancer; this risk generally increases as the level of radon and the duration of exposure increases. Outdoors, radon is diluted to such low concentrations that it usually does not present a health concern. However, radon can accumulate in building basements or similar enclosed spaces to levels that can pose a risk to human health. Indoor radon concentrations depend primarily upon the building's construction, design and the concentration of radon in the underlying soil and ground water. The EPA recommended annual average indoor "action level" concentration for residential structures is 4.0 pCi/l.
RCRA	Resource Conservation and Recovery Act. Federal act regulating solid and hazardous wastes from point of generation to time of disposal ('cradle to grave"). 42 U.S.C. 6901 et seq.
RCRA Generators	The RCRA generators list is part of the RCRIS database maintained by EPA and lists facilities that generate hazardous waste as part of their normal business operations, as more particularly defined under Section 5.0 of this report.
RCRA CORRACTS/TSDs	The USEPA maintains a database of RCRA facilities associated with treatment, storage, and disposal (TSD) of hazardous materials which are undergoing "corrective action". A "corrective action" order is issued when there is a release of hazardous waste or constituents into the environment from a RCRA facility.
RCRA Non-CORRACTS/TSDs	The RCRA Non-CORRACTS/TSD Database is a compilation by the USEPA of facilities which report storage, transportation, treatment, or disposal of hazardous waste. Unlike the RCRA CORRACTS/TSD database, the RCRA Non-CORRACTS/TSD database does not include RCRA facilities where corrective action is required.
RCRA Violators List	RAATS. RCRA Administrative Actions Taken. RAATS information is now contained in the RCRIS database and includes records of administrative enforcement actions against facilities for noncompliance.
RCRIS	Resource Conservation and Recovery Information System, as defined in the Records Review section of this report.
REC	Recognized Environmental Conditions" are defined by ASTM E1527-13 as "the presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, a past release, or a material threat of release of any hazardous substances or petroleum products into structures on the property or into the ground, ground water, or surface water of the property. The term includes hazardous substances or petroleum products even under conditions of compliance with laws. The term is not intended to include *de minimis* conditions that generally do not present a threat to human health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies."
SCL	State "CERCLIS" List (see SPL /State Priority List, below).
SPCC	Spill Prevention, Control and Countermeasures. SPCC plans are required under federal law (Clean Water Act and Oil Pollution Act) for any facility storing petroleum in tanks and/or containers of 55-gallons or more that when taken in aggregate exceed 1,320 gallons. SPCC plans are also required for facilities with underground petroleum storage tanks with capacities of over 42,000 gallons. Many states have similar spill prevention programs, which may have additional requirements.
SPL	State Priority List. State list of confirmed sites having contamination in which the state is actively involved in clean up activities or is actively pursuing potentially responsible parties for clean up. Sometimes referred to as a State "CERCLIS" List.
SQG	Small quantity generators.
SWF	Solid Waste Facility List. A Vista Information Solutions, Inc. database of solid waste facilities listed by state.
TPH	Total Petroleum Hydrocarbons
TRI	Toxic Release Inventory. Routine EPA report on releases of toxic chemicals to the environment based upon information submitted by entities subject to reporting under the Emergency Planning and Community Right to Know Act.
TSCA	Toxic Substances Control Act. A federal law regulating manufacture, import, processing and distribution of chemical substances not specifically regulated by other federal laws (such as asbestos, PCBs, lead-based paint and radon). 15 U.S.C 2601 et seq.
USACE	United States Army Corps of Engineers
USC	United States Code
USGS	United States Geological Survey

Description of Terms and Acronyms (cont.)

USNRCS	United States Department of Agriculture-Natural Resource Conservation Service
UST	Underground Storage Tank. Most federal and state regulations, as well as ASTM E1527-13, define this as any tank, incl., underground piping connected to the tank, that is or has been used to contain hazardous substances or petroleum products and the volume of which is 10% or more beneath the surface of the ground (i.e., buried).
VCP	Voluntary Cleanup Program
VOC	Volatile Organic Compound
Wetlands	Areas that are typically saturated with surface or ground water that creates an environment supportive of wetland vegetation (i.e., swamps, marshes, bogs). The Corps of Engineers Wetlands Delineation Manual (Technical Report Y-87-1) defines wetlands as areas inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. For an area to be considered a jurisdictional wetland, it must meet the following criteria: more than 50 percent of the dominant plant species must be categorized as Obligate, Facultative Wetland, or Facultative on lists of plant species that occur in wetlands; the soil must be hydric; and, wetland hydrology must be present. The federal Clean Water Act which regulates “waters of the US,” also regulates wetlands, a program jointly administered by the USACE and the EPA. Waters of the U.S. are defined as: (1) waters used in interstate or foreign commerce, including all waters subject to the ebb and flow of tides; (2) all interstate waters including interstate wetlands; (3) all other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, etc., which the use, degradation, or destruction could affect interstate/ foreign commerce; (4) all impoundments of waters otherwise defined as waters of the U. S., (5) tributaries of waters identified in 1 through 4 above; (6) the territorial seas; and (7) wetlands adjacent to waters identified in 1 through 6 above. Only the USACE has the authority to make a final wetlands jurisdictional determination.

APPENDIX C

Historical Documentation

English Cabinets
5236 Memorial Boulevard
Kingsport, TN 37664

Inquiry Number: 3770036.4
October 28, 2013

EDR Historical Topographic Map Report

EDR® Environmental Data Resources Inc

440 Wheelers Farms Road
Milford, CT 06461
800.352.0050
www.edrnet.com

EDR Historical Topographic Map Report

Environmental Data Resources, Inc.s (EDR) Historical Topographic Map Report is designed to assist professionals in evaluating potential liability on a target property resulting from past activities. EDRs Historical Topographic Map Report includes a search of a collection of public and private color historical topographic maps, dating back to the early 1900s.

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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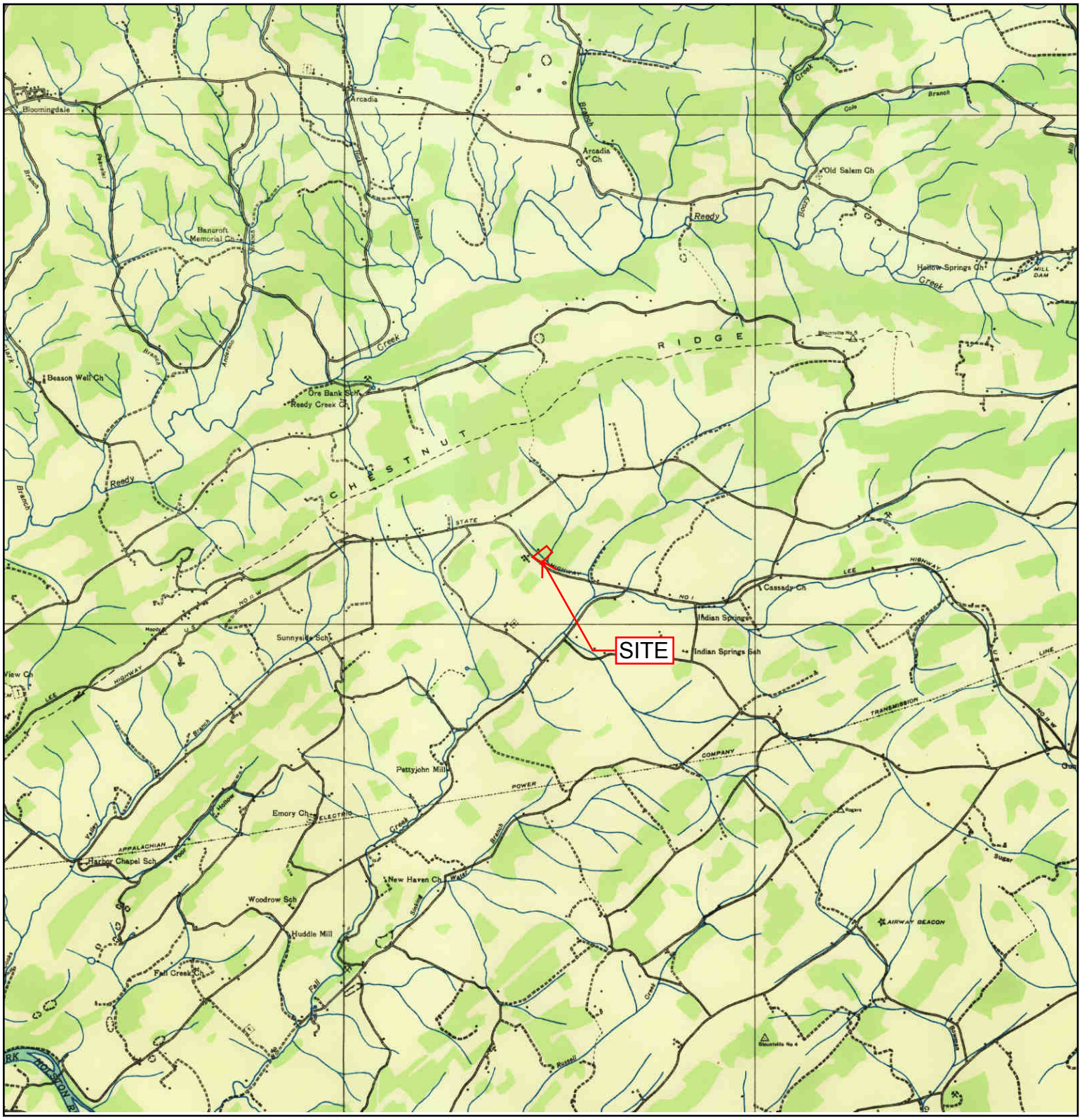
Historical Topographic Map



N	TARGET QUAD NAME: BRISTOL MAP YEAR: 1902 SERIES: 30 SCALE: 1:125000	SITE NAME: English Cabinets ADDRESS: 5236 Memorial Boulevard Kingsport, TN 37664 LAT/LONG: 36.5475 / -82.4377	CLIENT: Terracon, Inc. CONTACT: Marie Maher INQUIRY#: 3770036.4 RESEARCH DATE: 10/28/2013

Historical Topographic Map



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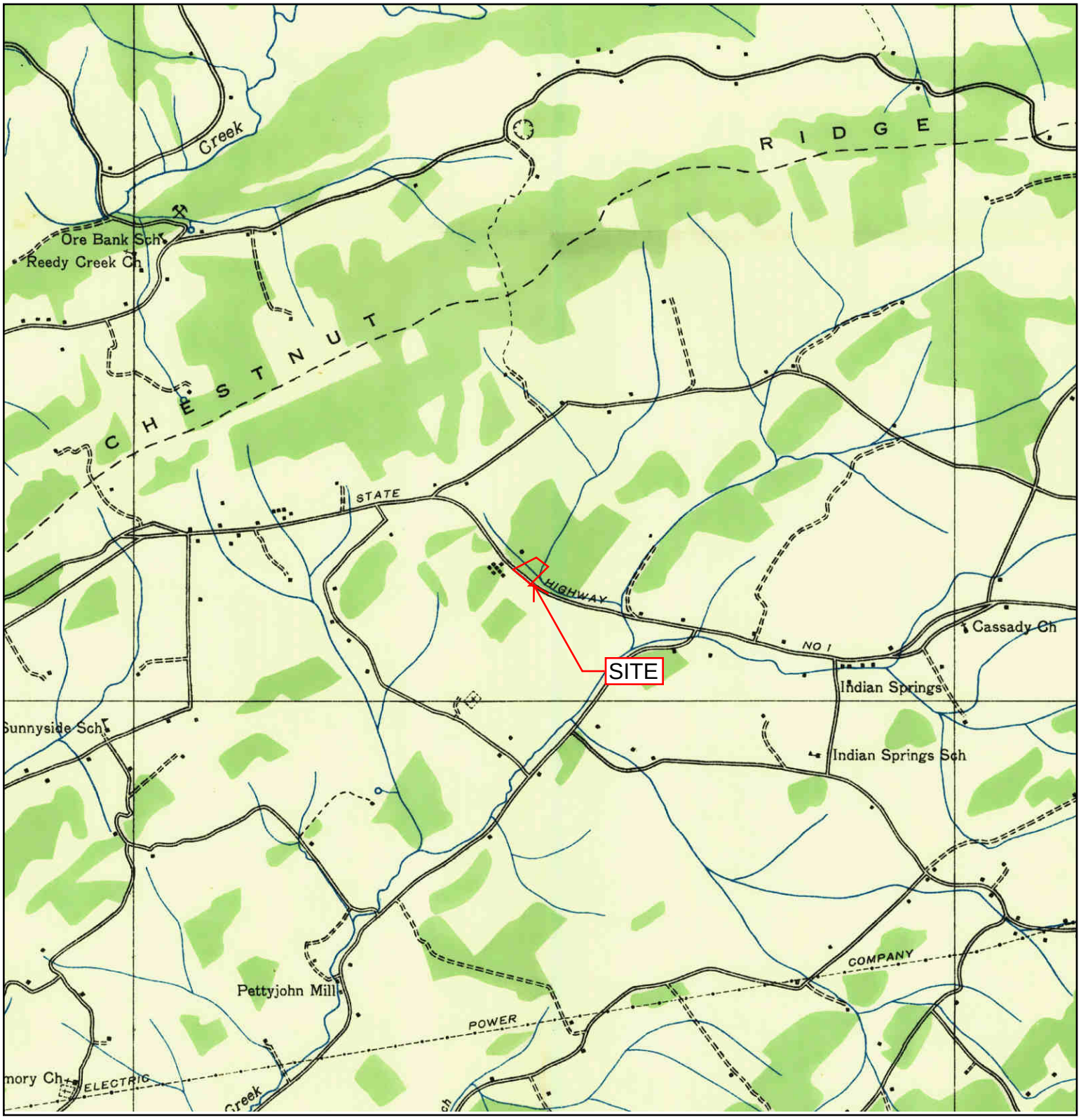
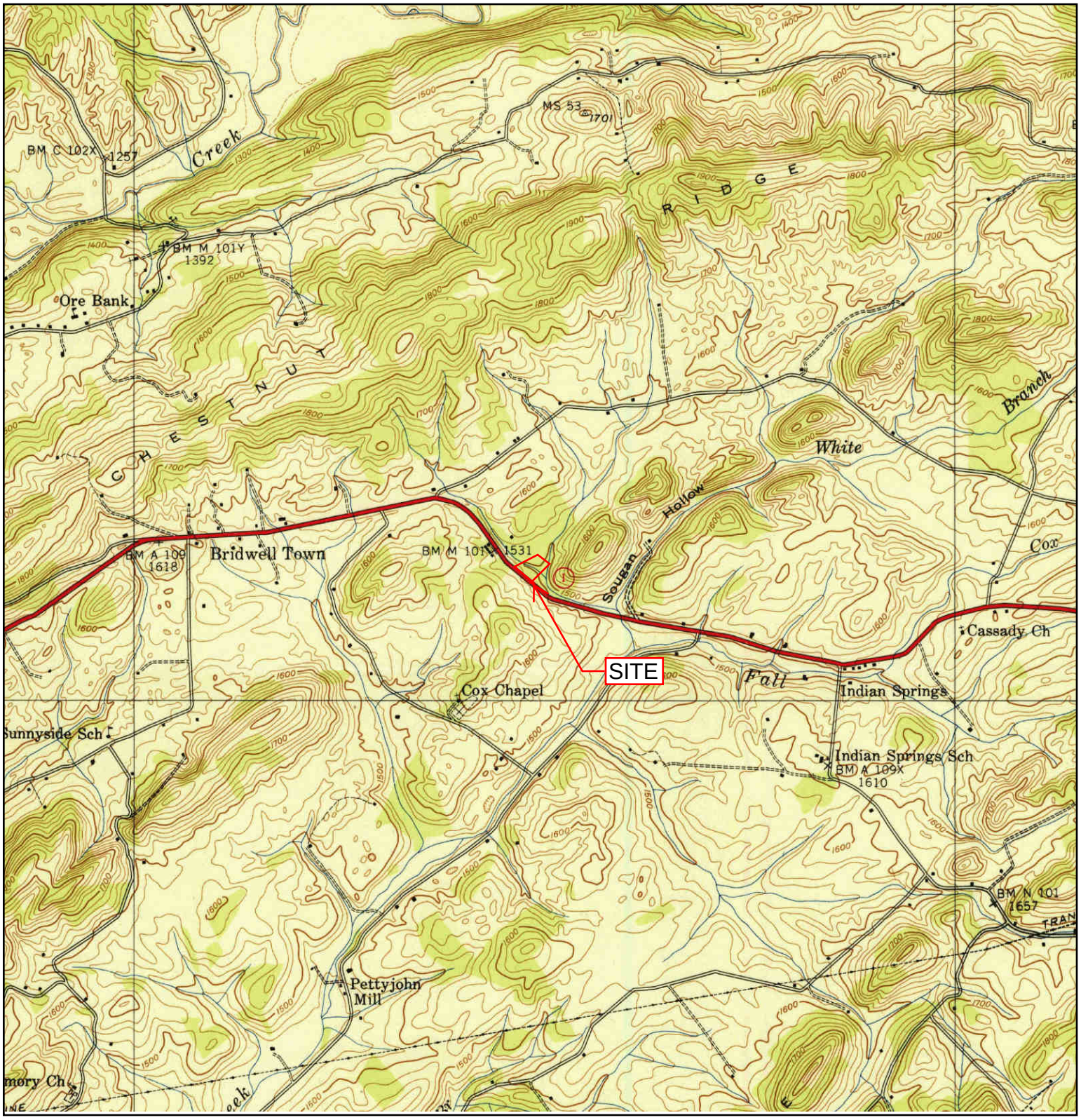
Historical Topographic Map



N	TARGET QUAD NAME: INDIAN SPRINGS MAP YEAR: 1935 SERIES: 7.5 SCALE: 1:24000	SITE NAME: English Cabinets ADDRESS: 5236 Memorial Boulevard Kingsport, TN 37664 LAT/LONG: 36.5475 / -82.4377	CLIENT: Terracon, Inc. CONTACT: Marie Maher INQUIRY#: 3770036.4 RESEARCH DATE: 10/28/2013

Historical Topographic Map



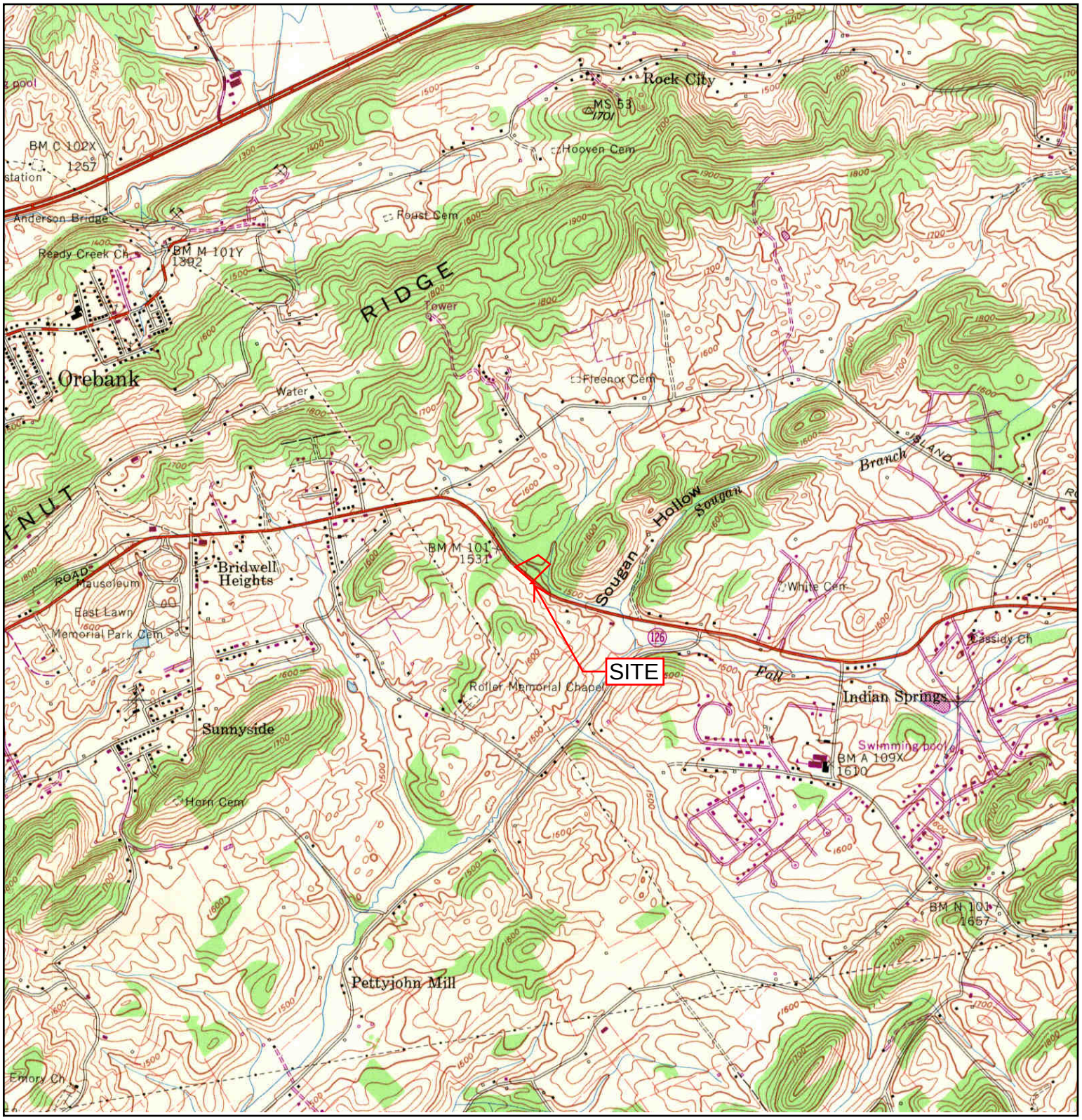
N	TARGET QUAD NAME: INDIAN SPRINGS MAP YEAR: 1940 PRELIMINARY SERIES: 7.5 SCALE: 1:24000	SITE NAME: English Cabinets ADDRESS: 5236 Memorial Boulevard Kingsport, TN 37664 LAT/LONG: 36.5475 / -82.4377	CLIENT: Terracon, Inc. CONTACT: Marie Maher INQUIRY#: 3770036.4 RESEARCH DATE: 10/28/2013

Historical Topographic Map



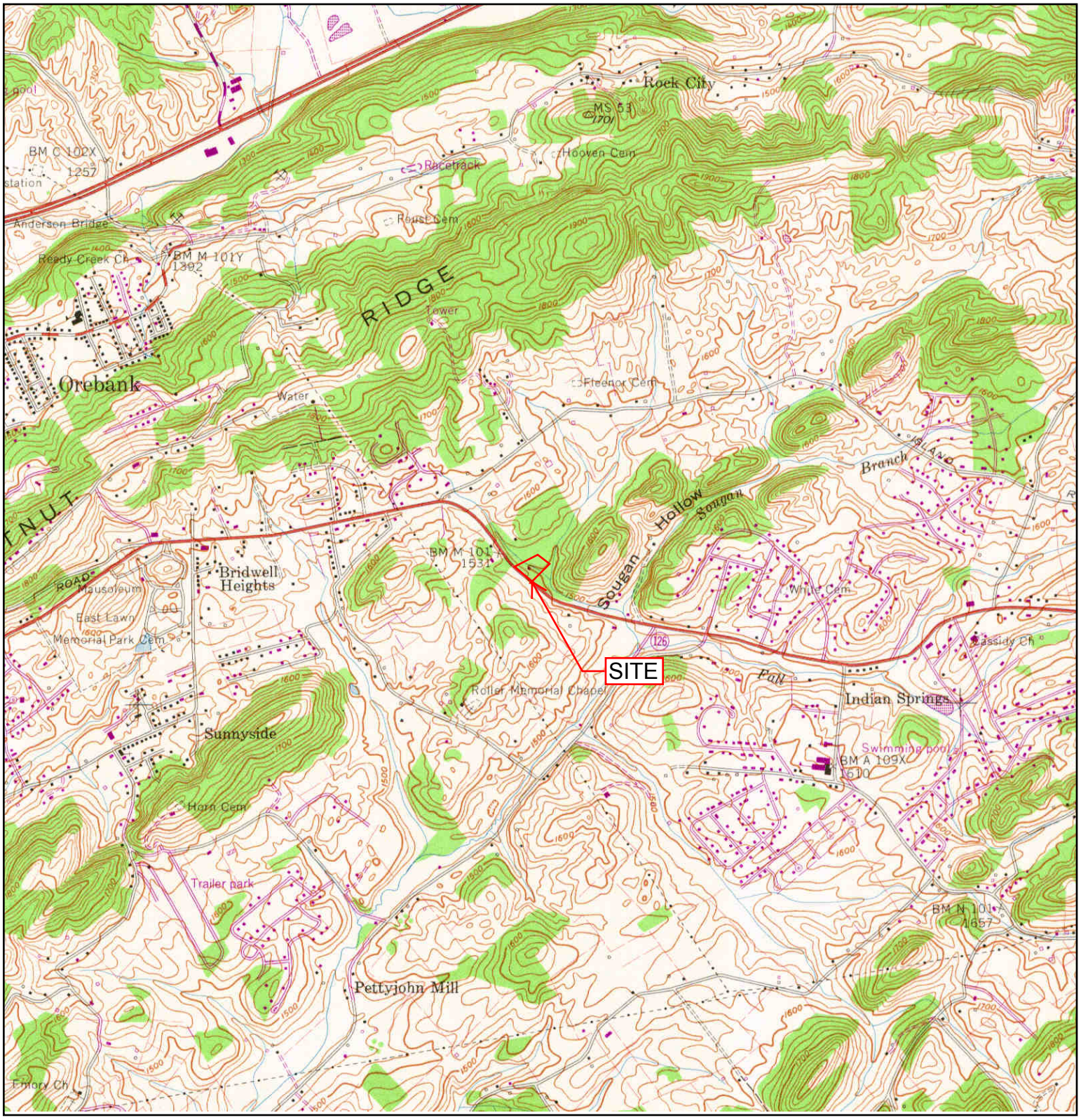
N	TARGET QUAD NAME: INDIAN SPRINGS MAP YEAR: 1959 SERIES: 7.5 SCALE: 1:24000	SITE NAME: English Cabinets ADDRESS: 5236 Memorial Boulevard Kingsport, TN 37664 LAT/LONG: 36.5475 / -82.4377	CLIENT: Terracon, Inc. CONTACT: Marie Maher INQUIRY#: 3770036.4 RESEARCH DATE: 10/28/2013

Historical Topographic Map



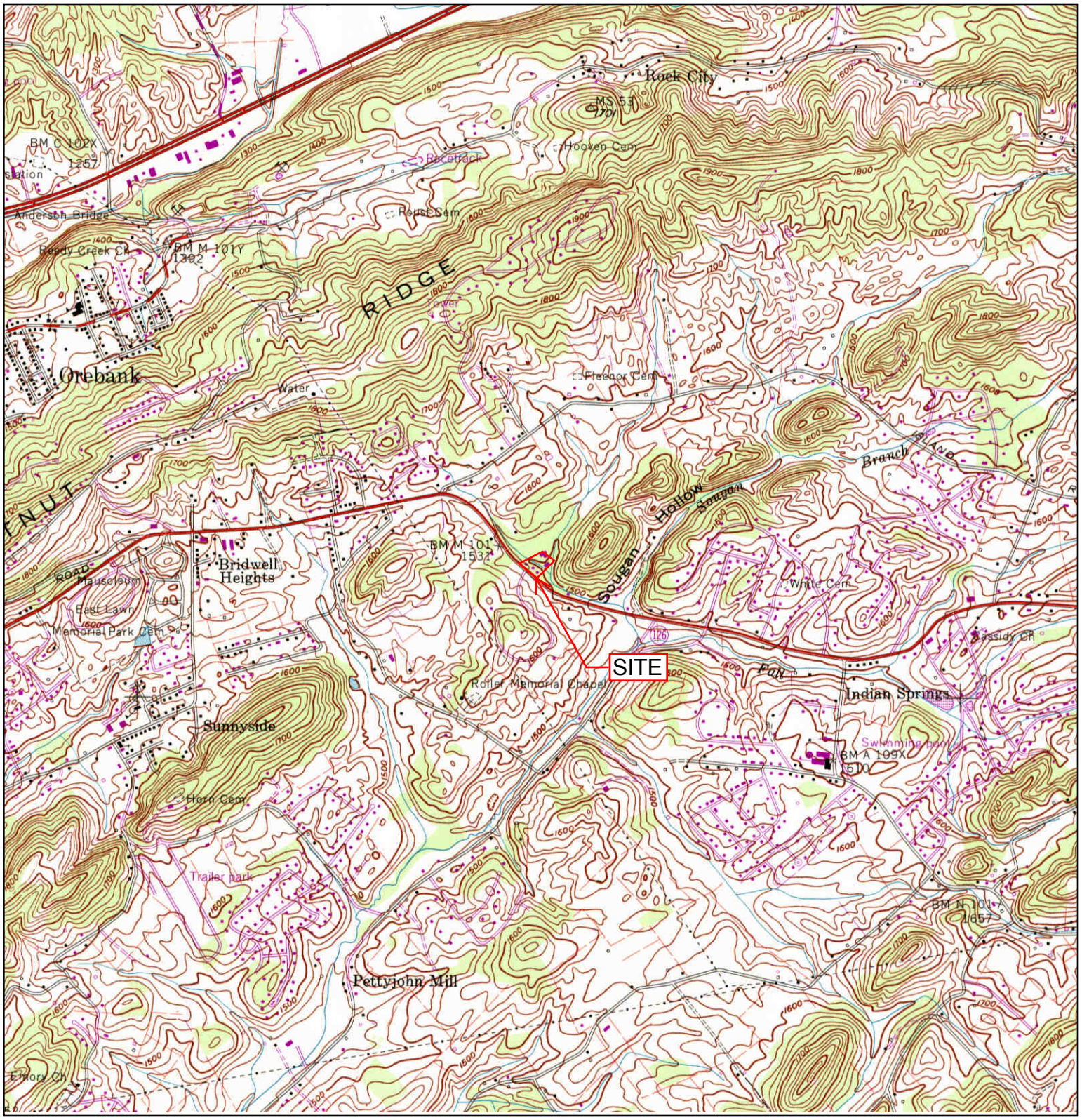
N	TARGET QUAD NAME: INDIAN SPRINGS MAP YEAR: 1968 PHOTOREVISED FROM :1959 SERIES: 7.5 SCALE: 1:24000	SITE NAME: English Cabinets ADDRESS: 5236 Memorial Boulevard Kingsport, TN 37664 LAT/LONG: 36.5475 / -82.4377	CLIENT: Terracon, Inc. CONTACT: Marie Maher INQUIRY#: 3770036.4 RESEARCH DATE: 10/28/2013

Historical Topographic Map



N	TARGET QUAD NAME: INDIAN SPRINGS MAP YEAR: 1978 PHOTOREVISED FROM :1959 SERIES: 7.5 SCALE: 1:24000	SITE NAME: English Cabinets ADDRESS: 5236 Memorial Boulevard Kingsport, TN 37664 LAT/LONG: 36.5475 / -82.4377	CLIENT: Terracon, Inc. CONTACT: Marie Maher INQUIRY#: 3770036.4 RESEARCH DATE: 10/28/2013

Historical Topographic Map



N	TARGET QUAD NAME: INDIAN SPRINGS MAP YEAR: 1991 PHOTOREVISED FROM :1959 SERIES: 7.5 SCALE: 1:24000	SITE NAME: English Cabinets ADDRESS: 5236 Memorial Boulevard Kingsport, TN 37664 LAT/LONG: 36.5475 / -82.4377	CLIENT: Terracon, Inc. CONTACT: Marie Maher INQUIRY#: 3770036.4 RESEARCH DATE: 10/28/2013

English Cabinets
5236 Memorial Boulevard
Kingsport, TN 37664

Inquiry Number: 3770036.5
October 29, 2013

The EDR Aerial Photo Decade Package

EDR® Environmental Data Resources Inc

440 Wheelers Farms Road
Milford, CT 06461
800.352.0050
www.edrnet.com

EDR Aerial Photo Decade Package

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Date EDR Searched Historical Sources:

Aerial Photography October 29, 2013

Target Property:

5236 Memorial Boulevard

Kingsport, TN 37664

Year	***Scale***	***Details***	***Source***
1988	Aerial Photograph. Scale: 1"=1000'	Panel #: 36082-E4, Indian Springs, TN;/Flight Date: May 27, 1988	EDR
1992	Aerial Photograph. Scale: 1"=750'	Panel #: 36082-E4, Indian Springs, TN;/Flight Date: April 13, 1992	EDR
1997	Aerial Photograph. Scale: 1"=500'	Panel #: 36082-E4, Indian Springs, TN;/DOQQ - acquisition dates: March 16, 1997	EDR
2000	Aerial Photograph. Scale: 1"=750'	Panel #: 36082-E4, Indian Springs, TN;/Flight Date: April 05, 2000	EDR
2006	Aerial Photograph. Scale: 1"=500'	Panel #: 36082-E4, Indian Springs, TN;/Flight Year: 2006	EDR
2007	Aerial Photograph. Scale: 1"=500'	Panel #: 36082-E4, Indian Springs, TN;/Flight Year: 2007	EDR
2008	Aerial Photograph. Scale: 1"=500'	Panel #: 36082-E4, Indian Springs, TN;/Flight Year: 2008	EDR
2010	Aerial Photograph. Scale: 1"=500'	Panel #: 36082-E4, Indian Springs, TN;/Flight Year: 2010	EDR
2012	Aerial Photograph. Scale: 1"=500'	Panel #: 36082-E4, Indian Springs, TN;/Flight Year: 2012	EDR


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YEAR: 1992
= 750'
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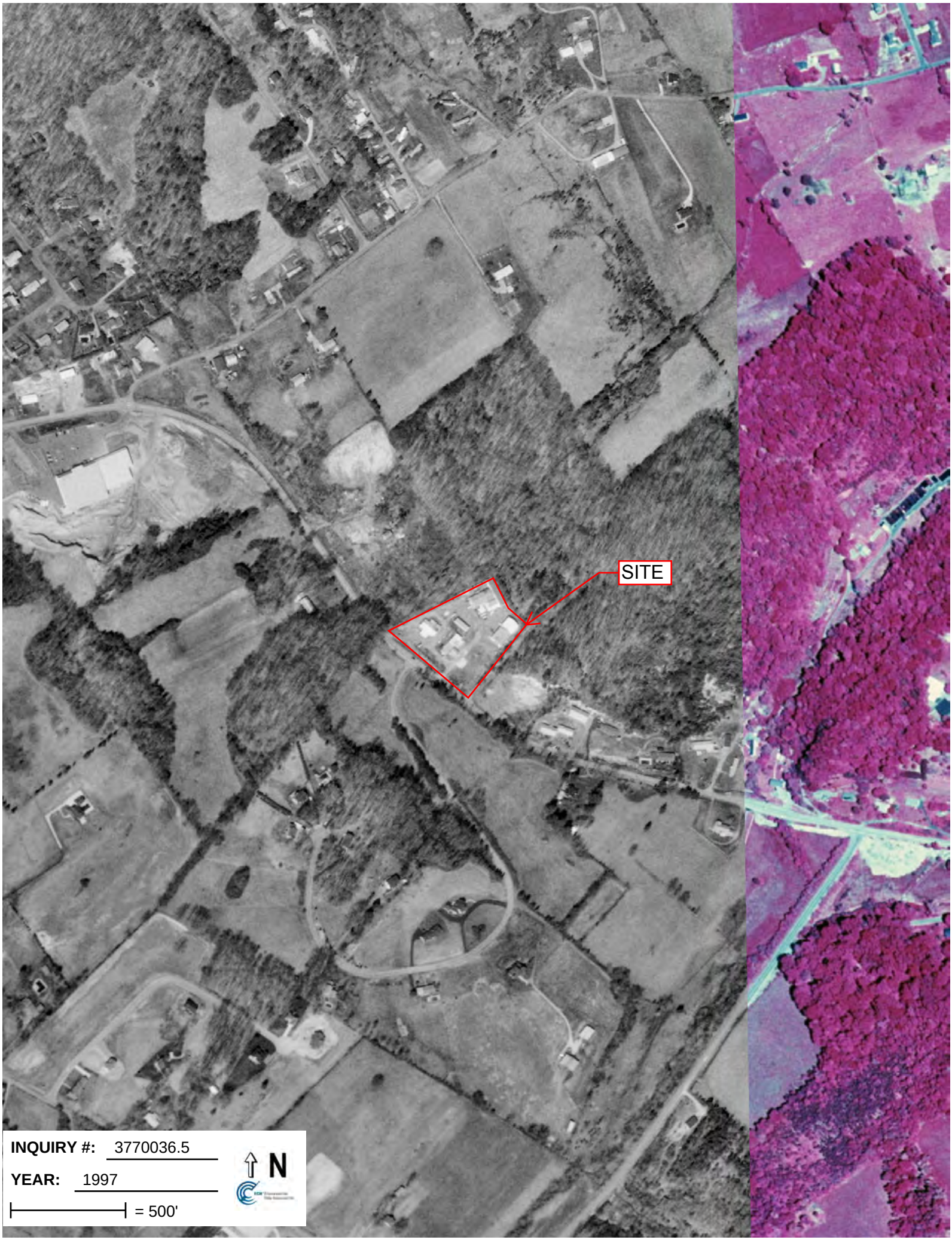
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SITE
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YEAR: 2012
= 500'
N

English Cabinets
5236 Memorial Boulevard
Kingsport, TN 37664

Inquiry Number: 3770036.6
October 30, 2013

The EDR-City Directory Image Report

Environmental Data Resources Inc

440 Wheelers Farms Road
Milford, CT 06461
800.352.0050
www.edrnet.com

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SECTION

Executive Summary

Findings

City Directory Images

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EXECUTIVE SUMMARY

DESCRIPTION

Environmental Data Resources, Inc.'s (EDR) City Directory Report is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's City Directory Report includes a search of available city directory data at 5 year intervals.

RESEARCH SUMMARY

The following research sources were consulted in the preparation of this report. A check mark indicates where information was identified in the source and provided in this report.

Year	Target Street	Cross Street	Source
2013	☑	☐	Polk's City Directory
2007	☑	☐	Polk's City Directory
2002	☑	☐	Polk's City Directory
1996	☑	☐	Polk's City Directory
1989	☑	☐	Johnson's City Directory

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FINDINGS

TARGET PROPERTY STREET

5236 Memorial Boulevard
Kingsport, TN 37664

Year	*CD Image*	*Source*
Memorial Boulevard		
2013	pg A1	Polk's City Directory
2007	pg A2	Polk's City Directory
2002	pg A3	Polk's City Directory
2002	pg A4	Polk's City Directory
1996	pg A5	Polk's City Directory
1996	pg A6	Polk's City Directory
1989	pg A7	Johnson's City Directory

FINDINGS

CROSS STREETS

No Cross Streets Identified

City Directory Images

Target Street	Cross Street	Source
✓	-	Polk's City Directory

Memorial Boulevard 2013

5108 No Current Listing
5109 Deel Jean N ✓ [34] ● (1958)
5112 Wears Sheri ✓ [4] 423-212-0497
5116 Tribble Betty J & Allen ✓ [21] ● (1932) 423-212-0614
5121 GREENWOOD MARKET grocers-retail ✓@ 423-288-2481
+ WEMBECK DR INTERSECTS
5129 Birchfield David & Sarah K ✓@ [7] ● (1976)
5130 PIZZA PLUS pizza ✓@ 423-288-7724
+ RED ROBIN LN CONTINUES
+ RED ROBIN LN INTERSECTS
+ WOODS WAY INTERSECTS
5205 BOULEVARD HAIR SALON beauty salons ✓@ 423-765-2300
5209 ROCKY TOP SELF STORAGE storage- household & commercial ✓@ 423-323-1945
5210 SUPER SUB CO restaurants ✓@ 423-343-0114
5213 CVS/PHARMACY pharmacies ✓@ 423-279-7430
5215 30 DOLLAR GENERAL variety stores ✓@ 423-323-8634
5216 AMERICAN GLASS WORKS glass ✓@ 423-928-9296
5227 Hyatt Violet B & Mitchell D ✓ [39] ● (1972) 423-323-7585
5234 ALSTEL ASSOCIATES buildings-metal ✓@ 423-323-8183
DINO'S DINO-MITE FIREWORKS fireworks ✓@ ..423-323-9183
5236 ENGLISH CABINET SHOP INC cabinets-mfrs ✓@ 423-323-3342
+ COUNTRY DR CONTINUES
5238 No Current Listing
5242 ABSOLUTE AUTO BODY REPAIR auto body- rpr & painting ✓@ 423-579-2317
5250 (N) Boswell Tommy M
5315 Hernandez Christopher J ✓ [3] ● (1953)
Hernandez Andrea D
5320 Ketron David J & Joy M ✓@ [23] ● (1986)
5332 Ketron Denver C & Helen L ✓ [38] ● (1970) 423-323-8365
5340 Maggart Gale [2]
2 (N) Garrett James S & Rebecca I ✓@
6 Reese Delmara D [2]
7 Franklin Chris ✓ [7]
8 Baxter Larry ✓@ [12] 423-354-0309
8 Baxter William R 423-354-0309
5341 (N) Ausderau Keith ✓
Page Lisa ✓ [2]
5352 3 Croy Hester A @ [17]
3 (N) Minor Anita ✓
5356 Cowden James F Jr ✓ [34] ● (1900) 423-323-2945
5360 Moore Thomas R & Betty R ✓ [22] ● (1951) 423-323-9454
5364 No Current Listing
5368 Ramey Nannie J ✓ [25] ● (1972) 423-323-1417

Target Street	Cross Street	Source
✓	-	Polk's City Directory

Memorial Boulevard 2007



5129 Birchfield Chris A
Birchfield David
5130 PIZZA PLUS OF INDIAN SPRINGS restaurants 423-288-7724
+ RED ROBIN LN CONTINUES
+ RED ROBIN LN INTERSECTS
5180 MASTERLINE SPECIALTIES advertising- specialties
.....423-288-9722
+ WOODS WAY ENDS
+ WOODS WAY CONTINUES
5209 IDEAL STORAGE storage- household & commercial
.....423-323-1945
5210 SUPER SUB CO restaurants 423-343-0114
5213 CVS PHARMACY pharmacies 423-279-7430
5215 No Current Listing
B DOLLAR GENERAL variety stores 423-323-8634
5216 SUN VALLEY CONSTR CONCEPTS INC genl contractors
.....423-247-4504
+ ISLAND RD BEGINS
5227 Hyatt Violet B & Mitchell D [34] ▲ 423-323-7585
5234 ALSTEL ASSOCIATES buildings-metal 423-323-8183
5236 ENGLISH CABINET SHOP INC cabinets-mfrs ...423-323-3342
5238 ART-TECH SURFACING INC counter tops 423-323-9899
+ COUNTRY DR CONTINUES
5278 No Current Listing
5300 CRAFTMATIC ADJUSTABLE BEDS bedding 423-323-2616
CRAFTMATIC AMERICA INC mattresses 423-323-1616
5315 Horn Kenneth C [5] ▲
Horn Samantha
5320 Ketron David J [18] ▲ 423-323-4233
Ketron Joy M 423-323-4233
5332 Ketron Denver C [33] ▲ 423-323-8365
5340 Baxter Bob [6] 423-354-0309
Baxter Larry 423-354-0309
Keen Brook 423-212-0418
2 Vaughn Diana [6]
5341 Gray Louise M [12] ▲
5352 No Current Listing
5356 Cowden James F Jr [29] ▲ 423-323-2945
5360 Moore Thomas R [16] ▲ 423-323-9454
Moore Susan C 423-323-9454

Target Street	Cross Street	Source
✓	-	Polk's City Directory

Memorial Boulevard 2002



5109 Deel Scottie C 20
Deel Kimberly D
5112 Not Verified
5116 Tribble Walter A & Betty J 11
5121 GREENWOOD MARKET grocers-retail 423-288-2481
5129 Henley Thomas J & Ruth S 20
5130 PIZZA PLUS OF INDIAN SPRINGS pizza 423-288-7724
+ COUNTRY DR ENDS
5180 MASTERLINE SPECIALTIES darts & dart boards 423-288-9722
5205 NOOKS N CRANNIES gift shops 423-288-0390
5210 POPS CARRY OUT restaurants-food delivery 423-343-1833
ROBERTS VIDEO video tapes discs & cassettes 423-288-6011
5215 CVS PHARMACY pharmacies 423-279-7430
DOLLAR GENERAL department stores 423-323-8634

orts on-line and other Polk Directories @ www.M

Target Street	Cross Street	Source
✓	-	Polk's City Directory

Memorial Boulevard 2002



MEMORIAL BLVD - MEMORY LANE PRIVATE DR

MEMORIAL BLVD Cont'd

WHITE'S FRESH FOODS grocers-retail 423-323-0969

5227 Hyatt Violet B & Mitchell D 20 ▲ 423-323-7585

5236 ENGLISH CABINET SHOP INC cabinet makers 423-323-3342

5238 ART-TECH SURFACING INC counter tops 423-323-9899

5240 PIPE LINE SUPPLY CO pipe-whol 423-279-0376

5278 Ⓓ Boyer Harrison D ▲ 423-288-5299

Boyer Glenda F 423-288-5299

5300 CRAFTMATIC AMERICA INC bedding 423-323-2616

5315 Puckett Eulis F 20 ▲ 423-323-7382

5320 Ketron David J 13 ▲

5332 Ketron Denver C & Helen L 20 ▲ 423-323-8365

5340 Ⓓ Vaughn Diana 423-279-9910

1 Huffman Randy H 5 423-323-1525

1 Manis Joseph A 2

2 - 7 Not Verified (6 Apts)

5341 Gray Louise M 7 ▲

5352 1 - 3 Not Verified (2 Apts)

5356 Cowden James F Jr 20 ▲

5360 Moore Thomas R 11 ▲ 423-323-8147

OLD MILL LANDSCAPING lawn & grounds maintenance 423-323-9454

Target Street	Cross Street	Source
✓	-	Polk's City Directory

Memorial Boulevard 1996

5112	Bledsoe C R	-4774	R014	288-8760
5116	Tribble Allen	-4774	R014	288-3575
	Tribble Betty	-4774	R014	288-3575
5121	GREENWOOD MARKET	-4776	R014	288-2481
	Sturgill Johnny	-4776	R014	288-2840
5129	Henley Thomas J	-4776	R014	288-6741
5180	MASTERLINE SPECIALTIES	-4775	R014	288-9722
5205	DOUBLE M AUTO SALES	-4430	R013	288-9003
5210	ROBERTS MUSIC & VIDEO	-4426	R013	288-6011
5215	WHITE'S DISCOUNT FOODS INC	-4430	R013	323-0969
5227	Hyatt M D	-4430	R013	323-7585
5236	ENGLISH CABINET SHOP INC	-4426	R013	323-3342
5240	TIMBER STEEL CONSTRUCTION CO	-4426	R013	323-1785
5315	Puckett E F	-4431	R013	323-7382
5320	Ketron David	-4427	R013	323-4233
5332	Ketron Denver C	-4427	R013	323-8365
5340	LE BISTRO LOUNGE	-4471	R013	323-7566

Target Street	Cross Street	Source
✓	-	Polk's City Directory

Memorial Boulevard 1996

MEMORIAL BLVD *cont'd*

Address		Zip+4	CarrRte	Phone
	Danna Jeff	-4471	R013	323-0769
	Danna Vickie	-4471	R013	323-0769
	Depriest F S	-4471	R013	323-0198
	Lewis L A	-4471	R013	323-7287
	Logan Sylvia	-4471	R013	323-3521
	Schultz Hal	-4471	R013	323-1124
	Smith J L	-4471	R013	279-0511
	Stacy Amy R	-4471	R013	269-9035
	Williams A M	-4471	R013	279-9135
5341	Pettyjohn S D	-4431	R013	323-7492
5352	Mouck Dana	-4427	R013	279-0172
	Mouck Nathan	-4427	R013	279-0172
5356	Cowden James F Jr	-4427	R013	323-2945
5360	Moore Betty	-4427	R013	323-4048
5364	Price Earl H	-4427	R013	323-7610
5368	Ramey N J	-4427	R013	323-1417
5372	Marshall Walter	-4427	R013	323-8890
5376	INDIAN SPRINGS NURSERY-GRNHS	-4427	R013	323-3481
5400	Burchett Cecil	-4428	R013	323-7719
5402	Taylor Bernie W	-4428	R013	323-3151
5404	Taylor Mack B	-4428	R013	323-7180
5509	Cross C M	-4433	R013	323-2553

Target Street	Cross Street	Source
✓	-	Johnson's City Directory

Memorial Boulevard 1989

5105	MOODY Kyle H®	288-2390
5108	No Information	
5109	DEEL Jeff	288-2579
5109	DEEL Libby	288-2579
5109	DEEL Scottie C®	288-2579
5112	No Information	
5116	NUNLEY Dennis®	288-8791
5121	GREENWOOD MARKET	288-2481
5121	BALL Michael D	288-4704
5121	STURGILL Johnny	288-2840
5129	HENLEY Thomas J®	288-6667
5180	SHULER PLUMBING & GENERAL REPAIR	288-5715
5205	ROBERTS MUSIC	288-6011
5227	HYATT Mitchell D MD®	323-7585
5232	SMITH Lowell	323-7926
5236	ENGLISH CABINET SHOP INC	323-3342
5238	PINE PRODUCTIONS	323-2476
5240	TIMBER STEEL CONSTRUCTION CO	323-5222
5240	WALTERS POSTEEL BUILDINGS	323-3186
5248	KETRON David®	323-4233
5251	PUCKETT E F®	323-7382
5300	SUN SATELLITE SYSTEMS OF TENNESSEE	323-4274
5332	KETRON Denver C®	323-8365
5340	LEWIS L A	323-0686
5340	WRIGHT Gaynell	323-1835
5340	(#7)GRUBB John M	323-1042
5352	SULLIVAN COUNTY EDUCATIONAL ASSOCIATION	323-2131

English Cabinets
5236 Memorial Boulevard
Kingsport, TN 37664

Inquiry Number: 3770036.3
October 28, 2013

Certified Sanborn® Map Report

EDR® Environmental Data Resources Inc

440 Wheelers Farms Road
Milford, CT 06461
800.352.0050
www.edrnet.com

Certified Sanborn® Map Report

10/28/13

Site Name:
English Cabinets
5236 Memorial Boulevard
Kingsport, TN 37664

Client Name:
Terracon, Inc.
51 Lost Mound Drive, Suite 135
Chattanooga, TN 37406-0000

EDR Inquiry # 3770036.3

Contact: Marie Maher

EDR® Environmental Data Resources Inc

The complete Sanborn Library collection has been searched by EDR, and fire insurance maps covering the target property location provided by Terracon, Inc. were identified for the years listed below. The certified Sanborn Library search results in this report can be authenticated by visiting www.edrnet.com/sanborn and entering the certification number. Only Environmental Data Resources Inc. (EDR) is authorized to grant rights for commercial reproduction of maps by Sanborn Library LLC, the copyright holder for the collection.

Certified Sanborn Results:

Site Name: English Cabinets
Address: 5236 Memorial Boulevard
City, State, Zip: Kingsport, TN 37664
Cross Street:
P.O. # E2137131
Project: English Cabinets
Certification # 5931-41E3-9860

UNMAPPED PROPERTY

This report certifies that the complete holdings of the Sanborn Library, LLC collection have been searched based on client supplied target property information, and fire insurance maps covering the target property were not found.

Sanborn® Library search results
Certification # 5931-41E3-9860

The Sanborn Library includes more than 1.2 million Sanborn fire insurance maps, which track historical property usage in approximately 12,000 American cities and towns. Collections searched:

- ☑ Library of Congress
- ☑ University Publications of America
- ☑ EDR Private Collection

The Sanborn Library LLC Since 1866™

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APPENDIX D

Environmental Database Information

English Cabinets
5236 Memorial Boulevard
Kingsport, TN 37664

Inquiry Number: 3770036.2s
October 28, 2013

The EDR Radius Map™ Report with GeoCheck®

EDR® Environmental Data Resources Inc

440 Wheelers Farms Road
Milford, CT 06461
Toll Free: 800.352.0050
www.edrnet.com

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GEOCHECK ADDENDUM

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EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-05) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

5236 MEMORIAL BOULEVARD
KINGSPORT, TN 37664

COORDINATES

Latitude (North):	36.5475000 - 36° 32' 51.00''
Longitude (West):	82.4377000 - 82° 26' 15.72''
Universal Tranverse Mercator:	Zone 17
UTM X (Meters):	371318.0
UTM Y (Meters):	4045436.5
Elevation:	1503 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map:	36082-E4 INDIAN SPRINGS, TN VA
Most Recent Revision:	1991

AERIAL PHOTOGRAPHY IN THIS REPORT

Photo Year:	2012
Source:	USDA

TARGET PROPERTY SEARCH RESULTS

The target property was identified in the following records. For more information on this property see page 7 of the attached EDR Radius Map report:

Site	Database(s)	EPA ID
ENGLISH CABINET SHOP INC. 5236 MEMORIAL BOULEVARD KINGSPORT, TN 37664	RCRA NonGen / NLR	TNR000024232
ENGLISH CABINET SHOP INC. 5236 MEMORIAL BOULEVARD KINGSPORT, TN	FINDS	N/A

EXECUTIVE SUMMARY

DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the search radius around the target property for the following databases:

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL ---------- National Priority List
Proposed NPL ---------- Proposed National Priority List Sites
NPL LIENS ---------- Federal Superfund Liens

Federal Delisted NPL site list

Delisted NPL ---------- National Priority List Deletions

Federal CERCLIS list

CERCLIS ---------- Comprehensive Environmental Response, Compensation, and Liability Information System
FEDERAL FACILITY ---------- Federal Facility Site Information listing

Federal CERCLIS NFRAP site List

CERC-NFRAP ---------- CERCLIS No Further Remedial Action Planned

Federal RCRA CORRACTS facilities list

CORRACTS ---------- Corrective Action Report

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF ---------- RCRA - Treatment, Storage and Disposal

Federal RCRA generators list

RCRA-LQG ---------- RCRA - Large Quantity Generators
RCRA-SQG ---------- RCRA - Small Quantity Generators
RCRA-CESQG ---------- RCRA - Conditionally Exempt Small Quantity Generator

Federal institutional controls / engineering controls registries

US ENG CONTROLS ---------- Engineering Controls Sites List
US INST CONTROL ---------- Sites with Institutional Controls
LUCIS ---------- Land Use Control Information System

Federal ERNS list

ERNS ---------- Emergency Response Notification System

State- and tribal - equivalent NPL

SHWS ---------- List of Inactive Hazardous Substance Sites

EXECUTIVE SUMMARY

State and tribal landfill and/or solid waste disposal site lists

SWF/LF ---------- Solid Waste Disposal Facilities

State and tribal leaking storage tank lists

LUST ---------- Leaking Underground Storage Tank Database Listing
LUST TRUST ---------- LUST TRUST Fund Database
HIST_LUST CO ---------- Leaking Underground Storage Tanks Sites
INDIAN LUST ---------- Leaking Underground Storage Tanks on Indian Land

State and tribal registered storage tank lists

UST ---------- Facility and Tank Report
AST ---------- Aboveground Storage Tanks
INDIAN UST ---------- Underground Storage Tanks on Indian Land
FEMA UST ---------- Underground Storage Tank Listing

State and tribal institutional control / engineering control registries

ENG CONTROLS ---------- Engineering Control Sites
INST CONTROL ---------- Institutional Control Sites

State and tribal voluntary cleanup sites

INDIAN VCP ---------- Voluntary Cleanup Priority Listing
VCP ---------- Voluntary Cleanup, Oversight and Assistance Program Sites
SRP ---------- State Remediation Program List

State and tribal Brownfields sites

BROWNFIELDS ---------- Superfund VOAP Listing

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS ---------- A Listing of Brownfields Sites

Local Lists of Landfill / Solid Waste Disposal Sites

ODI ---------- Open Dump Inventory
DEBRIS REGION 9 ---------- Torres Martinez Reservation Illegal Dump Site Locations
SWRCY ---------- Recycling Facilities Listing
INDIAN ODI ---------- Report on the Status of Open Dumps on Indian Lands

Local Lists of Hazardous waste / Contaminated Sites

US CDL ---------- Clandestine Drug Labs
DEL SHWS ---------- Deleted State Hazardous Waste Sites
PRIORITYCLEANERS ---------- DCERP Remediation Sites Listing
CDL ---------- Registry of Contaminated Properties
US HIST CDL ---------- National Clandestine Laboratory Register

EXECUTIVE SUMMARY

Local Lists of Registered Storage Tanks

HIST UST ---- Underground Storage Tank Database

Local Land Records

LIENS 2 ---- CERCLA Lien Information
LIENS ---- Liens Information

Records of Emergency Release Reports

HMIRS ---- Hazardous Materials Information Reporting System
SPILLS ---- State Spills

Other Ascertainable Records

DOT OPS ---- Incident and Accident Data
DOD ---- Department of Defense Sites
FUDS ---- Formerly Used Defense Sites
CONSENT ---- Superfund (CERCLA) Consent Decrees
ROD ---- Records Of Decision
UMTRA ---- Uranium Mill Tailings Sites
US MINES ---- Mines Master Index File
TRIS ---- Toxic Chemical Release Inventory System
TSCA ---- Toxic Substances Control Act
FTTS ---- FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
HIST FTTS ---- FIFRA/TSCA Tracking System Administrative Case Listing
SSTS ---- Section 7 Tracking Systems
ICIS ---- Integrated Compliance Information System
PADS ---- PCB Activity Database System
MLTS ---- Material Licensing Tracking System
RADINFO ---- Radiation Information Database
RAATS ---- RCRA Administrative Action Tracking System
RMP ---- Risk Management Plans
DRYCLEANERS ---- Registered Facilities List
NPDES ---- Permitted Facility Listing
AIRS ---- Listing of Permitted Sources
INDIAN RESERV ---- Indian Reservations
SCRD DRYCLEANERS ---- State Coalition for Remediation of Drycleaners Listing
US AIRS ---- Aerometric Information Retrieval System Facility Subsystem
PRP ---- Potentially Responsible Parties
2020 COR ACTION ---- 2020 Corrective Action Program List
LEAD SMELTERS ---- Lead Smelter Sites
COAL ASH EPA ---- Coal Combustion Residues Surface Impoundments List
EPA WATCH LIST ---- EPA WATCH LIST
US FIN ASSUR ---- Financial Assurance Information
PCB TRANSFORMER ---- PCB Transformer Registration Database
COAL ASH DOE ---- Steam-Electric Plant Operation Data

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP ---- EDR Proprietary Manufactured Gas Plants

EXECUTIVE SUMMARY

EDR US Hist Auto Stat ------- EDR Exclusive Historic Gas Stations
EDR US Hist Cleaners ------- EDR Exclusive Historic Dry Cleaners

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were not identified.

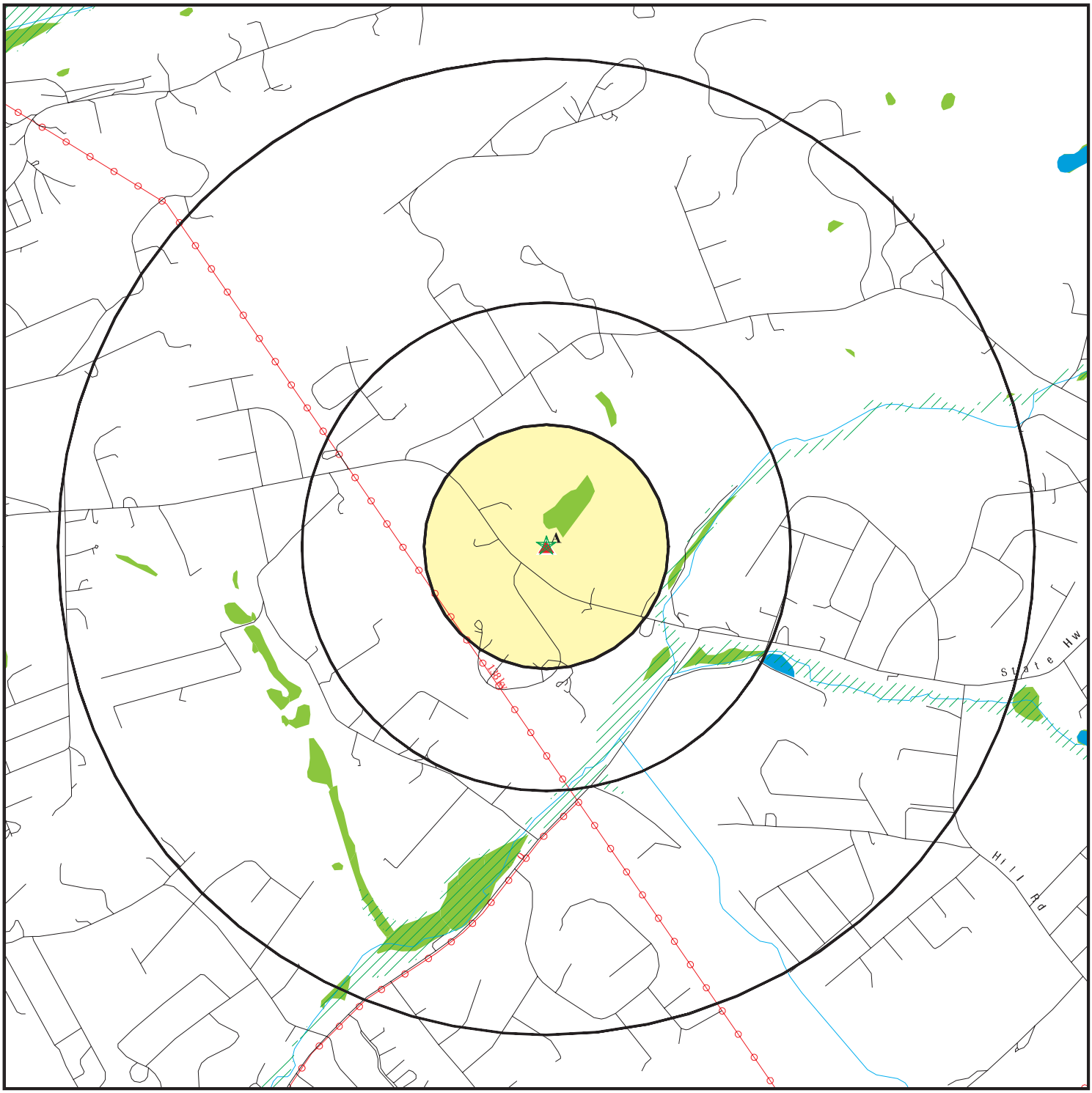
Unmappable (orphan) sites are not considered in the foregoing analysis.

EXECUTIVE SUMMARY

Due to poor or inadequate address information, the following sites were not mapped. Count: 31 records.

Site Name	Database(s)
SULLIVAN CO. COURTHOUSE	HIST UST
BALL BROS FURNITURE	HIST UST
COOPER FUEL OIL	HIST UST
TRI CITIES GOLF	HIST UST
MR J P HAWK	LUST,HIST UST
WOODYS DIST	HIST UST
FEDERAL EXPRESS	HIST UST
VERMILLION BUILDING	HIST UST
HANK'S MARKET. AND DELI	HIST UST
INTERSTATE TEXACO	HIST UST
HARR'S SERVICE STATION	HIST UST
RIGGS BROTHERS CONSTRUCTION CO	HIST UST
TRI-CITY AIRPORT COMMISSION	HIST LUST CO,LUST
THURSTON MOTOR LINES	LUST
BALL BROS FURNITURE	LUST,UST
SULLIVAN CO. COURTHOUSE	LUST,UST
WOODYS DIST	LUST,UST
ALLEN BOURNE CHEVROLET	LUST
BLOUNTVILLE FOOD MART	LUST
HANK'S MARKET. AND DELI	LUST,UST
VERMILLION BUILDING	LUST,UST
HARR'S SERVICE STATION	LUST,UST
SULLIVAN CO. PARK	LUST
RIGGS BROTHERS CONSTRUCTION CO	LUST,UST
COOPER FUEL OIL	UST
TRI CITIES GOLF	UST
FEDERAL EXPRESS	UST
DALE'S QUICK MARKET	UST
INTERSTATE TEXACO	UST
SULLIVAN CO. PARK	UST
BROWN THURSTON MOTOR LINE	LUST TRUST

OVERVIEW MAP - 3770036.2s



0 1/4 1/2 1 Miles

N

- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- Power transmission lines
- Oil & Gas pipelines from USGS
- 100-year flood zone
- 500-year flood zone
- National Wetland Inventory
- State Wetlands

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: English Cabinets	CLIENT: Terracon, Inc.
ADDRESS: 5236 Memorial Boulevard Kingsport TN 37664	CONTACT: Marie Maher
LAT/LONG: 36.5475 / 82.4377	INQUIRY #: 3770036.2s DATE: October 28, 2013 6:00 pm

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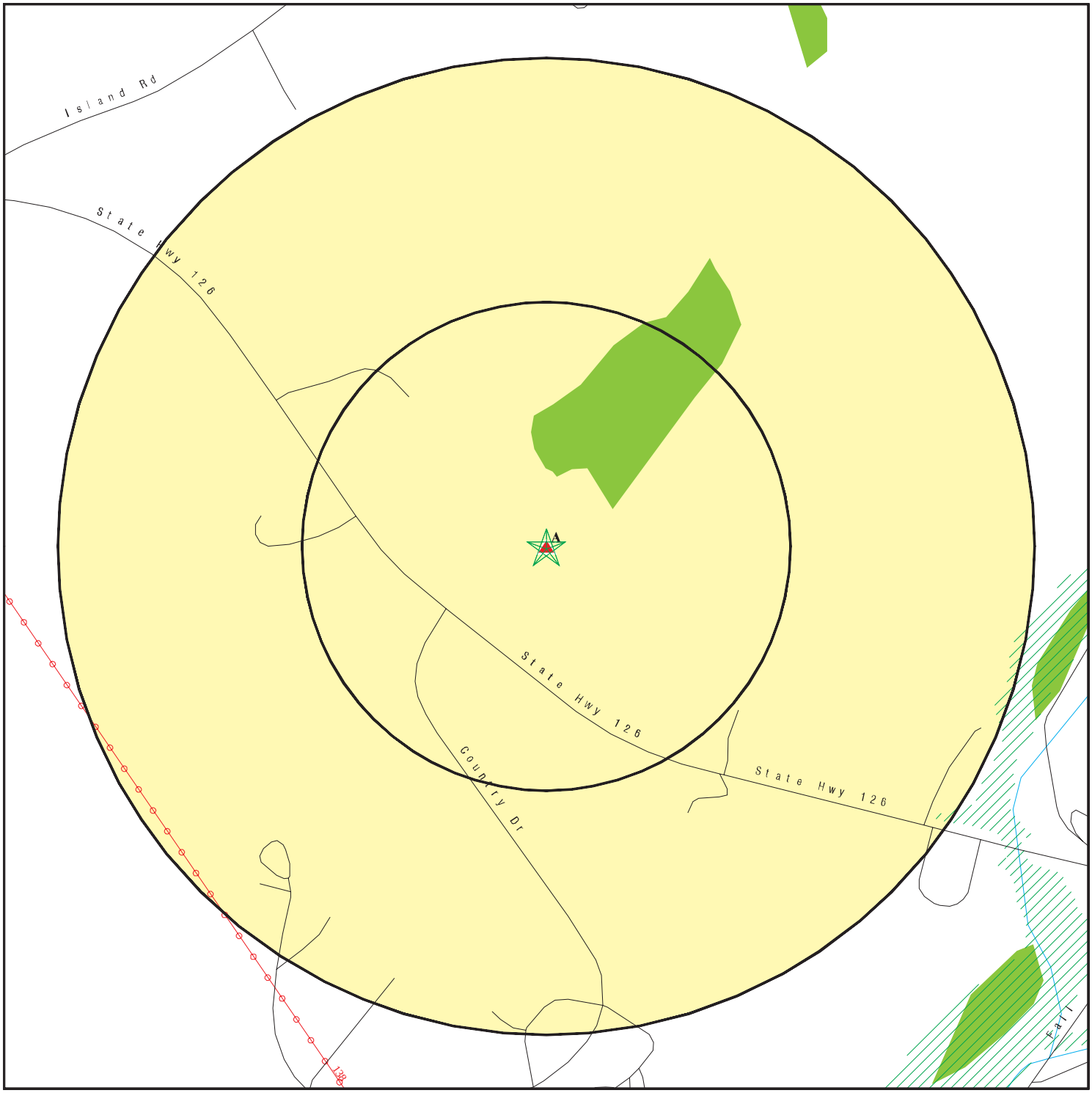
DETAIL MAP - 3770036.2s



- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- Sensitive Receptors
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- Power transmission lines
- Oil & Gas pipelines from USGS
- 100-year flood zone
- 500-year flood zone
- National Wetland Inventory
- State Wetlands

0 1/16 1/8 1/4 Miles

N

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: English Cabinets	CLIENT: Terracon, Inc.
ADDRESS: 5236 Memorial Boulevard Kingsport TN 37664	CONTACT: Marie Maher
LAT/LONG: 36.5475 / 82.4377	INQUIRY #: 3770036.2s DATE: October 28, 2013 6:02 pm

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MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENTAL RECORDS								
Federal NPL site list								
NPL	1.000		0	0	0	0	NR	0
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	TP		NR	NR	NR	NR	NR	0
Federal Delisted NPL site list								
Delisted NPL	1.000		0	0	0	0	NR	0
Federal CERCLIS list								
CERCLIS	0.500		0	0	0	NR	NR	0
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
Federal CERCLIS NFRAP site List								
CERC-NFRAP	0.500		0	0	0	NR	NR	0
Federal RCRA CORRACTS facilities list								
CORRACTS	1.000		0	0	0	0	NR	0
Federal RCRA non-CORRACTS TSD facilities list								
RCRA-TSDF	0.500		0	0	0	NR	NR	0
Federal RCRA generators list								
RCRA-LQG	0.250		0	0	NR	NR	NR	0
RCRA-SQG	0.250		0	0	NR	NR	NR	0
RCRA-CESQG	0.250		0	0	NR	NR	NR	0
Federal institutional controls / engineering controls registries								
US ENG CONTROLS	0.500		0	0	0	NR	NR	0
US INST CONTROL	0.500		0	0	0	NR	NR	0
LUCIS	0.500		0	0	0	NR	NR	0
Federal ERNS list								
ERNS	TP		NR	NR	NR	NR	NR	0
State- and tribal - equivalent NPL								
SHWS	1.000		0	0	0	0	NR	0
State and tribal landfill and/or solid waste disposal site lists								
SWF/LF	0.500		0	0	0	NR	NR	0
State and tribal leaking storage tank lists								
LUST	0.500		0	0	0	NR	NR	0
LUST TRUST	0.500		0	0	0	NR	NR	0
HIST_LUST CO	0.500		0	0	0	NR	NR	0
INDIAN LUST	0.500		0	0	0	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
State and tribal registered storage tank lists								
UST	0.250		0	0	NR	NR	NR	0
AST	0.250		0	0	NR	NR	NR	0
INDIAN UST	0.250		0	0	NR	NR	NR	0
FEMA UST	0.250		0	0	NR	NR	NR	0
State and tribal institutional control / engineering control registries								
ENG CONTROLS	0.500		0	0	0	NR	NR	0
INST CONTROL	0.500		0	0	0	NR	NR	0
State and tribal voluntary cleanup sites								
INDIAN VCP	0.500		0	0	0	NR	NR	0
VCP	0.500		0	0	0	NR	NR	0
SRP	0.500		0	0	0	NR	NR	0
State and tribal Brownfields sites								
BROWNFIELDS	0.500		0	0	0	NR	NR	0
ADDITIONAL ENVIRONMENTAL RECORDS								
Local Brownfield lists								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
Local Lists of Landfill / Solid Waste Disposal Sites								
ODI	0.500		0	0	0	NR	NR	0
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
SWRCY	0.500		0	0	0	NR	NR	0
INDIAN ODI	0.500		0	0	0	NR	NR	0
Local Lists of Hazardous waste / Contaminated Sites								
US CDL	TP		NR	NR	NR	NR	NR	0
DEL SHWS	1.000		0	0	0	0	NR	0
PRIORITYCLEANERS	0.500		0	0	0	NR	NR	0
CDL	TP		NR	NR	NR	NR	NR	0
US HIST CDL	TP		NR	NR	NR	NR	NR	0
Local Lists of Registered Storage Tanks								
HIST UST	0.250		0	0	NR	NR	NR	0
Local Land Records								
LIENS 2	TP		NR	NR	NR	NR	NR	0
LIENS	TP		NR	NR	NR	NR	NR	0
Records of Emergency Release Reports								
HMIRS	TP		NR	NR	NR	NR	NR	0
SPILLS	TP		NR	NR	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
Other Ascertainable Records								
RCRA NonGen / NLR	0.250	1	0	0	NR	NR	NR	1
DOT OPS	TP		NR	NR	NR	NR	NR	0
DOD	1.000		0	0	0	0	NR	0
FUDS	1.000		0	0	0	0	NR	0
CONSENT	1.000		0	0	0	0	NR	0
ROD	1.000		0	0	0	0	NR	0
UMTRA	0.500		0	0	0	NR	NR	0
US MINES	0.250		0	0	NR	NR	NR	0
TRIS	TP		NR	NR	NR	NR	NR	0
TSCA	TP		NR	NR	NR	NR	NR	0
FTTS	TP		NR	NR	NR	NR	NR	0
HIST FTTS	TP		NR	NR	NR	NR	NR	0
SSTS	TP		NR	NR	NR	NR	NR	0
ICIS	TP		NR	NR	NR	NR	NR	0
PADS	TP		NR	NR	NR	NR	NR	0
MLTS	TP		NR	NR	NR	NR	NR	0
RADINFO	TP		NR	NR	NR	NR	NR	0
FINDS	TP	1	NR	NR	NR	NR	NR	1
RAATS	TP		NR	NR	NR	NR	NR	0
RMP	TP		NR	NR	NR	NR	NR	0
DRYCLEANERS	0.250		0	0	NR	NR	NR	0
NPDES	TP		NR	NR	NR	NR	NR	0
AIRS	TP		NR	NR	NR	NR	NR	0
INDIAN RESERV	1.000		0	0	0	0	NR	0
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
US AIRS	TP		NR	NR	NR	NR	NR	0
PRP	TP		NR	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
LEAD SMELTERS	TP		NR	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
EPA WATCH LIST	TP		NR	NR	NR	NR	NR	0
US FIN ASSUR	TP		NR	NR	NR	NR	NR	0
PCB TRANSFORMER	TP		NR	NR	NR	NR	NR	0
COAL ASH DOE	TP		NR	NR	NR	NR	NR	0
EDR HIGH RISK HISTORICAL RECORDS								
EDR Exclusive Records								
EDR MGP	1.000		0	0	0	0	NR	0
EDR US Hist Auto Stat	0.250		0	0	NR	NR	NR	0
EDR US Hist Cleaners	0.250		0	0	NR	NR	NR	0

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

A1 Target Property **ENGLISH CABINET SHOP INC.**
5236 MEMORIAL BOULEVARD
KINGSPORT, TN 37664

RCRA NonGen / NLR **1010332629** **TNR000024232**

Site 1 of 2 in cluster A

Actual: 1503 ft.

RCRA NonGen / NLR:

Date form received by agency:	04/12/2007
Facility name:	ENGLISH CABINET SHOP INC.
Facility address:	5236 MEMORIAL BOULEVARD KINGSPORT, TN 37664
EPA ID:	TNR000024232
Contact:	Not reported
Contact address:	Not reported Not reported
Contact country:	Not reported
Contact telephone:	Not reported
Contact email:	Not reported
EPA Region:	04
Land type:	Facility is not located on Indian land. Additional information is not known.
Classification:	Non-Generator
Description:	Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:

Owner/operator name:	RANDY ENGLISH
Owner/operator address:	Not reported Not reported
Owner/operator country:	Not reported
Owner/operator telephone:	Not reported
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	04/12/2007
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Violation Status: No violations found

Evaluation Action Summary:

Evaluation date:	04/11/2007
Evaluation:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation:	Not reported
Date achieved compliance:	Not reported

ENGLISH CABINET SHOP INC. (Continued) **1010332629**

Evaluation lead agency: State

A2 Target Property **ENGLISH CABINET SHOP INC.** **FINDS** **1010438296**
5236 MEMORIAL BOULEVARD **N/A**
KINGSPORT, TN

Site 2 of 2 in cluster A

Actual: 1503 ft.

FINDS:

Registry ID: 110031366055

Environmental Interest/Information System

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

Count: 31 records. ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
BLOUNTVILLE	1001017416	THURSTON MOTOR LINES	HIGHWAY 11-W	37617	LUST
BLOUNTVILLE	S101134885	TRI-CITY AIRPORT COMMISSION	HWY 75	37617	HIST LUST CO,LUST
BRISTOL	S103301555	SULLIVAN CO. PARK	HWY 421	37617	LUST
BLOUNTVILLE	S104780616	BROWN THURSTON MOTOR LINE	US HIGHWAY 11 WEST	37617	LUST TRUST
BLOUNTVILLE	S105694789	ALLEN BOURNE CHEVROLET	HWY 37 @ HWY 126	37617	LUST
BLOUNTVILLE	S106131414	BLOUNTVILLE FOOD MART	HWY 37 & 126	37617	LUST
BLOUNTVILLE	U003609333	COOPER FUEL OIL	HIGHWAY 126 AND 75	37617	HIST UST
BLOUNTVILLE	U003609362	HARR'S SERVICE STATION	BOX 2883, HIGHWAY 126	37617	HIST UST
BLOUNTVILLE	U003609372	INTERSTATE TEXACO	I-81 AND HIGHWAY 126	37617	HIST UST
KINGSPORT	U003609432	RIGGS BROTHERS CONSTRUCTION CO	1010 JOHN B DENNIS HIGHWAY	37664	HIST UST
BLOUNTVILLE	U003609482	WOODYS DIST	RT. 3 HIGHWAY 75	37617	HIST UST
BLOUNTVILLE	U003609495	MR J P HAWK	ROUTE 3	37617	LUST,HIST UST
BLOUNTVILLE	U003609498	HANK'S MARKET. AND DELI	HIGHWAY 75	37617	HIST UST
BLOUNTVILLE	U003609503	BALL BROS FURNITURE	HIGHWAY 126	37617	HIST UST
BLOUNTVILLE	U003609506	SULLIVAN CO. COURTHOUSE	HIGHWAY 126	37617	HIST UST
BLOUNTVILLE	U003609527	TRI CITIES GOLF	RT. 2 HIGHWAY 37 P O BOX 18	37617	HIST UST
BLOUNTVILLE	U003609555	VERMILLION BUILDING	HIGHWAY 75	37617	HIST UST
BLOUNTVILLE	U003712316	FEDERAL EXPRESS	RT. 3 HIGHWAY 37	37617	HIST UST
BLOUNTVILLE	U004163458	COOPER FUEL OIL	HIGHWAY 126 AND 75	37617	UST
BLOUNTVILLE	U004163480	FEDERAL EXPRESS	RT. 3 HIGHWAY 37	37617	UST
BLOUNTVILLE	U004163493	HARR'S SERVICE STATION	BOX 2883, HIGHWAY 126	37617	LUST,UST
BLOUNTVILLE	U004163504	INTERSTATE TEXACO	I-81 AND HIGHWAY 126	37617	UST
KINGSPORT	U004163571	RIGGS BROTHERS CONSTRUCTION CO	1010 JOHN B DENNIS HIGHWAY	37664	LUST,UST
BLOUNTVILLE	U004163630	WOODYS DIST	RT. 3 HIGHWAY 75	37617	LUST,UST
BLOUNTVILLE	U004163646	HANK'S MARKET. AND DELI	HIGHWAY 75	37617	LUST,UST
BLOUNTVILLE	U004163656	BALL BROS FURNITURE	HIGHWAY 126	37617	LUST,UST
BLOUNTVILLE	U004163661	SULLIVAN CO. COURTHOUSE	HIGHWAY 126	37617	LUST,UST
BLOUNTVILLE	U004163662	SULLIVAN CO. PARK	337 KNOB PARK ROAD, HIGHWAY 42	37617	UST
BLOUNTVILLE	U004163713	VERMILLION BUILDING	HIGHWAY 75	37617	LUST,UST
BLOUNTVILLE	U004183956	DALE'S QUICK MARKET	HIGHWAY 37	37617	UST
BLOUNTVILLE	U004183957	TRI CITIES GOLF	RT. 2 HIGHWAY 37 P O BOX 18	37617	UST

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

Number of Days to Update: Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL: National Priority List

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 04/26/2013
Date Data Arrived at EDR: 05/09/2013
Date Made Active in Reports: 07/10/2013
Number of Days to Update: 62

Source: EPA
Telephone: N/A
Last EDR Contact: 10/11/2013
Next Scheduled EDR Contact: 01/20/2014
Data Release Frequency: Quarterly

NPL Site Boundaries

Sources:

EPA's Environmental Photographic Interpretation Center (EPIC)
Telephone: 202-564-7333

EPA Region 1
Telephone 617-918-1143

EPA Region 6
Telephone: 214-655-6659

EPA Region 3
Telephone 215-814-5418

EPA Region 7
Telephone: 913-551-7247

EPA Region 4
Telephone 404-562-8033

EPA Region 8
Telephone: 303-312-6774

EPA Region 5
Telephone 312-886-6686

EPA Region 9
Telephone: 415-947-4246

EPA Region 10
Telephone 206-553-8665

Proposed NPL: Proposed National Priority List Sites

A site that has been proposed for listing on the National Priorities List through the issuance of a proposed rule in the Federal Register. EPA then accepts public comments on the site, responds to the comments, and places on the NPL those sites that continue to meet the requirements for listing.

Date of Government Version: 04/26/2013
Date Data Arrived at EDR: 05/09/2013
Date Made Active in Reports: 07/10/2013
Number of Days to Update: 62

Source: EPA
Telephone: N/A
Last EDR Contact: 10/11/2013
Next Scheduled EDR Contact: 01/20/2014
Data Release Frequency: Quarterly

NPL LIENS: Federal Superfund Liens

Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Date of Government Version: 10/15/1991
Date Data Arrived at EDR: 02/02/1994
Date Made Active in Reports: 03/30/1994
Number of Days to Update: 56

Source: EPA
Telephone: 202-564-4267
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Federal Delisted NPL site list

DELISTED NPL: National Priority List Deletions

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 04/26/2013
Date Data Arrived at EDR: 05/09/2013
Date Made Active in Reports: 07/10/2013
Number of Days to Update: 62

Source: EPA
Telephone: N/A
Last EDR Contact: 10/11/2013
Next Scheduled EDR Contact: 01/20/2014
Data Release Frequency: Quarterly

Federal CERCLIS list

CERCLIS: Comprehensive Environmental Response, Compensation, and Liability Information System

CERCLIS contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). CERCLIS contains sites which are either proposed to or on the National Priorities List (NPL) and sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 04/26/2013
Date Data Arrived at EDR: 05/29/2013
Date Made Active in Reports: 08/09/2013
Number of Days to Update: 72

Source: EPA
Telephone: 703-412-9810
Last EDR Contact: 10/18/2013
Next Scheduled EDR Contact: 12/09/2013
Data Release Frequency: Quarterly

FEDERAL FACILITY: Federal Facility Site Information listing

A listing of National Priority List (NPL) and Base Realignment and Closure (BRAC) sites found in the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) Database where EPA Federal Facilities Restoration and Reuse Office is involved in cleanup activities.

Date of Government Version: 07/31/2012
Date Data Arrived at EDR: 10/09/2012
Date Made Active in Reports: 12/20/2012
Number of Days to Update: 72

Source: Environmental Protection Agency
Telephone: 703-603-8704
Last EDR Contact: 10/11/2013
Next Scheduled EDR Contact: 01/20/2014
Data Release Frequency: Varies

Federal CERCLIS NFRAP site List

CERCLIS-NFRAP: CERCLIS No Further Remedial Action Planned

Archived sites are sites that have been removed and archived from the inventory of CERCLIS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list this site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. This decision does not necessarily mean that there is no hazard associated with a given site; it only means that, based upon available information, the location is not judged to be a potential NPL site.

Date of Government Version: 04/26/2013
Date Data Arrived at EDR: 05/29/2013
Date Made Active in Reports: 08/09/2013
Number of Days to Update: 72

Source: EPA
Telephone: 703-412-9810
Last EDR Contact: 10/18/2013
Next Scheduled EDR Contact: 12/09/2013
Data Release Frequency: Quarterly

Federal RCRA CORRACTS facilities list

CORRACTS: Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 07/11/2013
Date Data Arrived at EDR: 08/08/2013
Date Made Active in Reports: 09/13/2013
Number of Days to Update: 36

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 10/02/2013
Next Scheduled EDR Contact: 01/13/2014
Data Release Frequency: Quarterly

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF: RCRA - Treatment, Storage and Disposal

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 07/11/2013
Date Data Arrived at EDR: 08/08/2013
Date Made Active in Reports: 09/13/2013
Number of Days to Update: 36

Source: Environmental Protection Agency
Telephone: (404) 562-8651
Last EDR Contact: 10/02/2013
Next Scheduled EDR Contact: 01/13/2014
Data Release Frequency: Quarterly

Federal RCRA generators list

RCRA-LQG: RCRA - Large Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

Date of Government Version: 07/11/2013
Date Data Arrived at EDR: 08/08/2013
Date Made Active in Reports: 09/13/2013
Number of Days to Update: 36

Source: Environmental Protection Agency
Telephone: (404) 562-8651
Last EDR Contact: 10/02/2013
Next Scheduled EDR Contact: 01/13/2014
Data Release Frequency: Quarterly

RCRA-SQG: RCRA - Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

Date of Government Version: 07/11/2013
Date Data Arrived at EDR: 08/08/2013
Date Made Active in Reports: 09/13/2013
Number of Days to Update: 36

Source: Environmental Protection Agency
Telephone: (404) 562-8651
Last EDR Contact: 10/02/2013
Next Scheduled EDR Contact: 01/13/2014
Data Release Frequency: Quarterly

RCRA-CESQG: RCRA - Conditionally Exempt Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Conditionally exempt small quantity generators (CESQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Date of Government Version: 07/11/2013
Date Data Arrived at EDR: 08/08/2013
Date Made Active in Reports: 09/13/2013
Number of Days to Update: 36

Source: Environmental Protection Agency
Telephone: (404) 562-8651
Last EDR Contact: 10/02/2013
Next Scheduled EDR Contact: 01/13/2014
Data Release Frequency: Varies

Federal institutional controls / engineering controls registries

US ENG CONTROLS: Engineering Controls Sites List

A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 06/17/2013
Date Data Arrived at EDR: 06/21/2013
Date Made Active in Reports: 10/03/2013
Number of Days to Update: 104

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 09/10/2013
Next Scheduled EDR Contact: 12/23/2013
Data Release Frequency: Varies

US INST CONTROL: Sites with Institutional Controls

A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 06/17/2013
Date Data Arrived at EDR: 06/21/2013
Date Made Active in Reports: 10/03/2013
Number of Days to Update: 104

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 09/10/2013
Next Scheduled EDR Contact: 12/23/2013
Data Release Frequency: Varies

LUCIS: Land Use Control Information System

LUCIS contains records of land use control information pertaining to the former Navy Base Realignment and Closure properties.

Date of Government Version: 12/09/2005
Date Data Arrived at EDR: 12/11/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 31

Source: Department of the Navy
Telephone: 843-820-7326
Last EDR Contact: 08/15/2013
Next Scheduled EDR Contact: 09/02/2013
Data Release Frequency: Varies

Federal ERNS list

ERNS: Emergency Response Notification System

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 12/31/2012
Date Data Arrived at EDR: 01/17/2013
Date Made Active in Reports: 02/15/2013
Number of Days to Update: 29

Source: National Response Center, United States Coast Guard
Telephone: 202-267-2180
Last EDR Contact: 10/01/2013
Next Scheduled EDR Contact: 01/13/2014
Data Release Frequency: Annually

State- and tribal - equivalent NPL

SHWS: Promulgated Sites

"Inactive hazardous substance sites that constitute an imminent, substantial danger" is an inactive hazardous substance site where there is a threat of danger to the public health, safety, or environment which is both real and presently existing. Such situations may include, but are not limited to one or more of the following: an immediate action is necessary to minimize an ongoing threat to the public health or pollution of the environment, an inactive hazardous substance site where there is an active release, where direct access to the hazardous substance is not controlled, or where incompatible hazardous substances are found in close proximity. Also known as Promulgated Sites List.

Date of Government Version: 08/07/2012
Date Data Arrived at EDR: 01/09/2013
Date Made Active in Reports: 02/06/2013
Number of Days to Update: 28

Source: Department of Environment & Conservation
Telephone: 615-532-0900
Last EDR Contact: 10/07/2013
Next Scheduled EDR Contact: 01/20/2014
Data Release Frequency: Semi-Annually

State and tribal landfill and/or solid waste disposal site lists

SWF/LF: Solid Waste Disposal Facilities

Solid Waste Facilities/Landfill Sites. SWF/LF type records typically contain an inventory of solid waste disposal facilities or landfills in a particular state. Depending on the state, these may be active or inactive facilities or open dumps that failed to meet RCRA Subtitle D Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 08/05/2013
Date Data Arrived at EDR: 08/07/2013
Date Made Active in Reports: 09/30/2013
Number of Days to Update: 54

Source: Department of Environment and Conservation
Telephone: 615-532-0804
Last EDR Contact: 09/19/2013
Next Scheduled EDR Contact: 12/30/2013
Data Release Frequency: Annually

State and tribal leaking storage tank lists

LUST: Fund Eligible Leaking Underground Storage Tank Sites

A listing of leaking underground storage tank site locations.

Date of Government Version: 07/02/2013
Date Data Arrived at EDR: 08/22/2013
Date Made Active in Reports: 09/19/2013
Number of Days to Update: 28

Source: Department of Environment and Conservation
Telephone: 615-532-0945
Last EDR Contact: 08/22/2013
Next Scheduled EDR Contact: 12/02/2013
Data Release Frequency: Quarterly

LUST TRUST: LUST TRUST Fund Database

This list contains information on sites that had accidental releases of petroleum and are eligible for reimbursement from the TN Petroleum UST Fund.

Date of Government Version: 01/03/2013
Date Data Arrived at EDR: 02/21/2013
Date Made Active in Reports: 04/15/2013
Number of Days to Update: 53

Source: Department of Environment & Conservation
Telephone: 615-532-0971
Last EDR Contact: 08/22/2013
Next Scheduled EDR Contact: 12/02/2013
Data Release Frequency: Varies

HIST_LUST CO: Leaking Underground Storage Tanks Sites

A listing of leaking underground storage tank site locations from the Columbia Field Office. The listing is no longer updated.

Date of Government Version: 10/18/1994
Date Data Arrived at EDR: 10/24/1994
Date Made Active in Reports: 12/30/1994
Number of Days to Update: 67

Source: Department of Environmental Conservation, Columbia Field Office
Telephone: 931-380-3371
Last EDR Contact: 06/29/2009
Next Scheduled EDR Contact: 09/28/2009
Data Release Frequency: No Update Planned

INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 02/05/2013
Date Data Arrived at EDR: 02/06/2013
Date Made Active in Reports: 04/12/2013
Number of Days to Update: 65

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 10/28/2013
Next Scheduled EDR Contact: 02/11/2014
Data Release Frequency: Quarterly

INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.

Date of Government Version: 08/27/2012
Date Data Arrived at EDR: 08/28/2012
Date Made Active in Reports: 10/16/2012
Number of Days to Update: 49

Source: EPA Region 8
Telephone: 303-312-6271
Last EDR Contact: 10/28/2013
Next Scheduled EDR Contact: 02/11/2014
Data Release Frequency: Quarterly

INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Florida, Mississippi and North Carolina.

Date of Government Version: 02/06/2013
Date Data Arrived at EDR: 02/08/2013
Date Made Active in Reports: 04/12/2013
Number of Days to Update: 63
Source: EPA Region 4
Telephone: 404-562-8677
Last EDR Contact: 10/28/2013
Next Scheduled EDR Contact: 02/11/2014
Data Release Frequency: Semi-Annually

INDIAN LUST R9: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Arizona, California, New Mexico and Nevada

Date of Government Version: 03/01/2013
Date Data Arrived at EDR: 03/01/2013
Date Made Active in Reports: 04/12/2013
Number of Days to Update: 42
Source: Environmental Protection Agency
Telephone: 415-972-3372
Last EDR Contact: 10/28/2013
Next Scheduled EDR Contact: 02/11/2014
Data Release Frequency: Quarterly

INDIAN LUST R1: Leaking Underground Storage Tanks on Indian Land
A listing of leaking underground storage tank locations on Indian Land.

Date of Government Version: 09/28/2012
Date Data Arrived at EDR: 11/01/2012
Date Made Active in Reports: 04/12/2013
Number of Days to Update: 162
Source: EPA Region 1
Telephone: 617-918-1313
Last EDR Contact: 08/02/2013
Next Scheduled EDR Contact: 11/11/2013
Data Release Frequency: Varies

INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 09/12/2011
Date Data Arrived at EDR: 09/13/2011
Date Made Active in Reports: 11/11/2011
Number of Days to Update: 59
Source: EPA Region 6
Telephone: 214-665-6597
Last EDR Contact: 10/28/2013
Next Scheduled EDR Contact: 02/11/2014
Data Release Frequency: Varies

INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 12/31/2012
Date Data Arrived at EDR: 02/28/2013
Date Made Active in Reports: 04/12/2013
Number of Days to Update: 43
Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 10/28/2013
Next Scheduled EDR Contact: 02/11/2014
Data Release Frequency: Varies

State and tribal registered storage tank lists

UST: Facility and Tank Report
Registered Underground Storage Tanks. UST's are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA) and must be registered with the state department responsible for administering the UST program. Available information varies by state program.

Date of Government Version: 07/02/2013
Date Data Arrived at EDR: 08/22/2013
Date Made Active in Reports: 10/01/2013
Number of Days to Update: 40
Source: Department of Environment and Conservation
Telephone: 615-532-0945
Last EDR Contact: 08/22/2013
Next Scheduled EDR Contact: 12/02/2013
Data Release Frequency: Quarterly

AST: Aboveground Storage Tanks
Registered Aboveground Storage Tanks.

Date of Government Version: 10/01/1999
Date Data Arrived at EDR: 10/12/1999
Date Made Active in Reports: 11/05/1999
Number of Days to Update: 24

Source: Department of Environment and Conservation
Telephone: 615-532-0965
Last EDR Contact: 10/28/2013
Next Scheduled EDR Contact: 02/11/2014
Data Release Frequency: No Update Planned

INDIAN UST R6: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 6 (Louisiana, Arkansas, Oklahoma, New Mexico, Texas and 65 Tribes).

Date of Government Version: 05/10/2011
Date Data Arrived at EDR: 05/11/2011
Date Made Active in Reports: 06/14/2011
Number of Days to Update: 34

Source: EPA Region 6
Telephone: 214-665-7591
Last EDR Contact: 10/28/2013
Next Scheduled EDR Contact: 02/11/2014
Data Release Frequency: Semi-Annually

INDIAN UST R5: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 5 (Michigan, Minnesota and Wisconsin and Tribal Nations).

Date of Government Version: 08/02/2012
Date Data Arrived at EDR: 08/03/2012
Date Made Active in Reports: 11/05/2012
Number of Days to Update: 94

Source: EPA Region 5
Telephone: 312-886-6136
Last EDR Contact: 10/28/2013
Next Scheduled EDR Contact: 02/11/2014
Data Release Frequency: Varies

INDIAN UST R4: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee and Tribal Nations)

Date of Government Version: 02/06/2013
Date Data Arrived at EDR: 02/08/2013
Date Made Active in Reports: 04/12/2013
Number of Days to Update: 63

Source: EPA Region 4
Telephone: 404-562-9424
Last EDR Contact: 10/28/2013
Next Scheduled EDR Contact: 02/11/2014
Data Release Frequency: Semi-Annually

INDIAN UST R1: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont and ten Tribal Nations).

Date of Government Version: 09/28/2012
Date Data Arrived at EDR: 11/07/2012
Date Made Active in Reports: 04/12/2013
Number of Days to Update: 156

Source: EPA, Region 1
Telephone: 617-918-1313
Last EDR Contact: 08/02/2013
Next Scheduled EDR Contact: 11/11/2013
Data Release Frequency: Varies

INDIAN UST R7: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 7 (Iowa, Kansas, Missouri, Nebraska, and 9 Tribal Nations).

Date of Government Version: 12/31/2012
Date Data Arrived at EDR: 02/28/2013
Date Made Active in Reports: 04/12/2013
Number of Days to Update: 43

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 10/28/2013
Next Scheduled EDR Contact: 02/11/2014
Data Release Frequency: Varies

INDIAN UST R10: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 10 (Alaska, Idaho, Oregon, Washington, and Tribal Nations).

Date of Government Version: 02/05/2013
Date Data Arrived at EDR: 02/06/2013
Date Made Active in Reports: 04/12/2013
Number of Days to Update: 65

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 10/28/2013
Next Scheduled EDR Contact: 02/11/2014
Data Release Frequency: Quarterly

INDIAN UST R9: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 9 (Arizona, California, Hawaii, Nevada, the Pacific Islands, and Tribal Nations).

Date of Government Version: 02/21/2013
Date Data Arrived at EDR: 02/26/2013
Date Made Active in Reports: 04/12/2013
Number of Days to Update: 45

Source: EPA Region 9
Telephone: 415-972-3368
Last EDR Contact: 10/28/2013
Next Scheduled EDR Contact: 02/11/2014
Data Release Frequency: Quarterly

INDIAN UST R8: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming and 27 Tribal Nations).

Date of Government Version: 08/27/2012
Date Data Arrived at EDR: 08/28/2012
Date Made Active in Reports: 10/16/2012
Number of Days to Update: 49

Source: EPA Region 8
Telephone: 303-312-6137
Last EDR Contact: 10/28/2013
Next Scheduled EDR Contact: 02/11/2014
Data Release Frequency: Quarterly

FEMA UST: Underground Storage Tank Listing

A listing of all FEMA owned underground storage tanks.

Date of Government Version: 01/01/2010
Date Data Arrived at EDR: 02/16/2010
Date Made Active in Reports: 04/12/2010
Number of Days to Update: 55

Source: FEMA
Telephone: 202-646-5797
Last EDR Contact: 10/17/2013
Next Scheduled EDR Contact: 01/27/2014
Data Release Frequency: Varies

State and tribal institutional control / engineering control registries

ENG CONTROLS: Engineering Control Sites

Sites that have engineering controls.

Date of Government Version: 07/31/2013
Date Data Arrived at EDR: 08/20/2013
Date Made Active in Reports: 09/30/2013
Number of Days to Update: 41

Source: Department of Environment & Conservation
Telephone: 615-532-0900
Last EDR Contact: 08/15/2013
Next Scheduled EDR Contact: 12/02/2013
Data Release Frequency: Varies

INST CONTROL: Institutional Control Sites

Sites that have institutional controls.

Date of Government Version: 07/31/2013
Date Data Arrived at EDR: 08/20/2013
Date Made Active in Reports: 09/30/2013
Number of Days to Update: 41

Source: Department of Environment & Conservation
Telephone: 615-532-0900
Last EDR Contact: 08/15/2013
Next Scheduled EDR Contact: 12/02/2013
Data Release Frequency: Varies

State and tribal voluntary cleanup sites

VCP: Voluntary Cleanup, Oversight and Assistance Program Sites

The Voluntary Cleanup Oversight and Assistance Program (VOAP) offers people the opportunity to work proactively with state government to address necessary cleanup of a property to return it to productive use. In return for their efforts, participants can receive a No Further Action letter and a release of liability for areas where investigation and cleanup is conducted. The program is open to everyone with an interest in addressing contamination at a site.

Date of Government Version: 07/03/2013
Date Data Arrived at EDR: 07/29/2013
Date Made Active in Reports: 07/30/2013
Number of Days to Update: 1

Source: Department of Environmental & Conservation
Telephone: 615-532-0912
Last EDR Contact: 10/07/2013
Next Scheduled EDR Contact: 01/20/2014
Data Release Frequency: Varies

INDIAN VCP R1: Voluntary Cleanup Priority Listing

A listing of voluntary cleanup priority sites located on Indian Land located in Region 1.

Date of Government Version: 09/28/2012
Date Data Arrived at EDR: 10/02/2012
Date Made Active in Reports: 10/16/2012
Number of Days to Update: 14

Source: EPA, Region 1
Telephone: 617-918-1102
Last EDR Contact: 10/01/2013
Next Scheduled EDR Contact: 01/13/2014
Data Release Frequency: Varies

SRP: State Remediation Program List

The State Remediation Program (SRP) was established in 1994 within the Division of Solid Waste Management for the purpose of providing owners, prospective purchasers and other interested parties the means to voluntarily investigate, clean up or monitor contaminated sites not regulated under RCRA, CERCLA or the Tennessee Division of Underground Tanks (UST).

Date of Government Version: 08/01/2013
Date Data Arrived at EDR: 08/08/2013
Date Made Active in Reports: 09/19/2013
Number of Days to Update: 42

Source: Department of Environemtn & Conservation
Telephone: 615-532-0853
Last EDR Contact: 08/01/2013
Next Scheduled EDR Contact: 11/18/2013
Data Release Frequency: Varies

INDIAN VCP R7: Voluntary Cleanup Priority Lisitng

A listing of voluntary cleanup priority sites located on Indian Land located in Region 7.

Date of Government Version: 03/20/2008
Date Data Arrived at EDR: 04/22/2008
Date Made Active in Reports: 05/19/2008
Number of Days to Update: 27

Source: EPA, Region 7
Telephone: 913-551-7365
Last EDR Contact: 04/20/2009
Next Scheduled EDR Contact: 07/20/2009
Data Release Frequency: Varies

State and tribal Brownfields sites

BROWNFIELDS: Superfund VOAP Listing

Brownfields sites included on the Superfund Voluntary Cleanup, Oversight & Assistance Program listing.

Date of Government Version: 07/03/2013
Date Data Arrived at EDR: 07/29/2013
Date Made Active in Reports: 07/30/2013
Number of Days to Update: 1

Source: Department of Environment & Conservation
Telephone: 615-532-0912
Last EDR Contact: 10/07/2013
Next Scheduled EDR Contact: 01/20/2014
Data Release Frequency: Varies

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS: A Listing of Brownfields Sites

Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. Assessment, Cleanup and Redevelopment Exchange System (ACRES) stores information reported by EPA Brownfields grant recipients on brownfields properties assessed or cleaned up with grant funding as well as information on Targeted Brownfields Assessments performed by EPA Regions. A listing of ACRES Brownfield sites is obtained from Cleanups in My Community. Cleanups in My Community provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs.

Date of Government Version: 06/24/2013
Date Data Arrived at EDR: 06/25/2013
Date Made Active in Reports: 08/09/2013
Number of Days to Update: 45

Source: Environmental Protection Agency
Telephone: 202-566-2777
Last EDR Contact: 09/24/2013
Next Scheduled EDR Contact: 01/08/2014
Data Release Frequency: Semi-Annually

Local Lists of Landfill / Solid Waste Disposal Sites

DEBRIS REGION 9: Torres Martinez Reservation Illegal Dump Site Locations
A listing of illegal dump sites location on the Torres Martinez Indian Reservation located in eastern Riverside County and northern Imperial County, California.

Date of Government Version: 01/12/2009
Date Data Arrived at EDR: 05/07/2009
Date Made Active in Reports: 09/21/2009
Number of Days to Update: 137

Source: EPA, Region 9
Telephone: 415-947-4219
Last EDR Contact: 10/28/2013
Next Scheduled EDR Contact: 02/11/2014
Data Release Frequency: No Update Planned

ODI: Open Dump Inventory
An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria.

Date of Government Version: 06/30/1985
Date Data Arrived at EDR: 08/09/2004
Date Made Active in Reports: 09/17/2004
Number of Days to Update: 39

Source: Environmental Protection Agency
Telephone: 800-424-9346
Last EDR Contact: 06/09/2004
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

SWRCY: Recycling Facilities Listing
A listing of recycling facility locations.

Date of Government Version: 03/26/2013
Date Data Arrived at EDR: 03/29/2013
Date Made Active in Reports: 04/15/2013
Number of Days to Update: 17

Source: Department of Environment & Conservation
Telephone: 615-532-8657
Last EDR Contact: 10/10/2013
Next Scheduled EDR Contact: 01/27/2014
Data Release Frequency: Varies

INDIAN ODI: Report on the Status of Open Dumps on Indian Lands
Location of open dumps on Indian land.

Date of Government Version: 12/31/1998
Date Data Arrived at EDR: 12/03/2007
Date Made Active in Reports: 01/24/2008
Number of Days to Update: 52

Source: Environmental Protection Agency
Telephone: 703-308-8245
Last EDR Contact: 07/31/2013
Next Scheduled EDR Contact: 11/18/2013
Data Release Frequency: Varies

Local Lists of Hazardous waste / Contaminated Sites

US CDL: Clandestine Drug Labs
A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 08/06/2013
Date Data Arrived at EDR: 09/11/2013
Date Made Active in Reports: 10/03/2013
Number of Days to Update: 22

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 09/04/2013
Next Scheduled EDR Contact: 12/16/2013
Data Release Frequency: Quarterly

DEL SHWS: Deleted State Hazardous Waste Sites
A listing of sites removed from the Promulgated Sites Listing.

Date of Government Version: 08/07/2012
Date Data Arrived at EDR: 01/09/2013
Date Made Active in Reports: 02/06/2013
Number of Days to Update: 28
Source: Department of Environment & Conservation
Telephone: 615-532-0900
Last EDR Contact: 10/07/2013
Next Scheduled EDR Contact: 01/20/2014
Data Release Frequency: Varies

PRIORITY CLEANERS: DCERP Remediation Sites Listing
Drycleaner Environmental Response Program remediation sites.

Date of Government Version: 02/04/2013
Date Data Arrived at EDR: 02/07/2013
Date Made Active in Reports: 02/20/2013
Number of Days to Update: 13
Source: Department of Environment & Conservation
Telephone: 615-253-3876
Last EDR Contact: 10/21/2013
Next Scheduled EDR Contact: 02/03/2014
Data Release Frequency: Varies

CDL: Registry of Contaminated Properties
Pursuant to TCA 68212509 the following properties have been quarantined because of methamphetamine production, but have not been cleaned and certified within the 60day time frame allotted by the statute. These properties are hereby registered by the Tennessee Department of Environment and Conservation as unremediated methamphetamine sites. This is not a comprehensive list of quarantined properties. These are properties that TDEC has been notified as being quarantined, but have not been cleaned within the 60 day grace period. Other properties where methamphetamine production residues are a concern may not have been quarantined, may not have been reported to TDEC, or may not have passed the 60day grace

Date of Government Version: 05/01/2013
Date Data Arrived at EDR: 05/09/2013
Date Made Active in Reports: 06/04/2013
Number of Days to Update: 26
Source: Department of Environment & Conservation
Telephone: 615-532-0900
Last EDR Contact: 09/18/2013
Next Scheduled EDR Contact: 11/18/2013
Data Release Frequency: Varies

US HIST CDL: National Clandestine Laboratory Register
A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 09/01/2007
Date Data Arrived at EDR: 11/19/2008
Date Made Active in Reports: 03/30/2009
Number of Days to Update: 131
Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 03/23/2009
Next Scheduled EDR Contact: 06/22/2009
Data Release Frequency: No Update Planned

Local Lists of Registered Storage Tanks

HIST UST: Underground Storage Tank Database
This database is no longer updated by the agency. It contains records and detail fields that the current UST database does not.

Date of Government Version: 07/02/2013
Date Data Arrived at EDR: 08/22/2013
Date Made Active in Reports: 10/01/2013
Number of Days to Update: 40
Source: Department of Environment & Conservation
Telephone: 615-532-0945
Last EDR Contact: 08/22/2013
Next Scheduled EDR Contact: 12/02/2013
Data Release Frequency: No Update Planned

Local Land Records

LIENS 2: CERCLA Lien Information

A Federal CERCLA ('Superfund') lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties.

Date of Government Version: 02/06/2013
Date Data Arrived at EDR: 04/25/2013
Date Made Active in Reports: 05/10/2013
Number of Days to Update: 15

Source: Environmental Protection Agency
Telephone: 202-564-6023
Last EDR Contact: 07/24/2013
Next Scheduled EDR Contact: 11/11/2013
Data Release Frequency: Varies

LIENS: Liens Information

A listing of sites with environmental liens information.

Date of Government Version: 04/08/2013
Date Data Arrived at EDR: 04/11/2013
Date Made Active in Reports: 05/17/2013
Number of Days to Update: 36

Source: Department of Environment & Conservation
Telephone: 615-532-0900
Last EDR Contact: 10/07/2013
Next Scheduled EDR Contact: 01/20/2014
Data Release Frequency: Varies

Records of Emergency Release Reports

HMIRS: Hazardous Materials Information Reporting System

Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 12/31/2012
Date Data Arrived at EDR: 01/03/2013
Date Made Active in Reports: 02/27/2013
Number of Days to Update: 55

Source: U.S. Department of Transportation
Telephone: 202-366-4555
Last EDR Contact: 10/01/2013
Next Scheduled EDR Contact: 01/13/2014
Data Release Frequency: Annually

SPILLS: State Spills

A listing of spills locations.

Date of Government Version: 07/19/2013
Date Data Arrived at EDR: 07/19/2013
Date Made Active in Reports: 08/20/2013
Number of Days to Update: 32

Source: Department of Environment & Conservation
Telephone: 615-532-0109
Last EDR Contact: 10/07/2013
Next Scheduled EDR Contact: 01/20/2014
Data Release Frequency: Varies

Other Ascertainable Records

RCRA NonGen / NLR: RCRA - Non Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

Date of Government Version: 07/11/2013
Date Data Arrived at EDR: 08/08/2013
Date Made Active in Reports: 09/13/2013
Number of Days to Update: 36

Source: Environmental Protection Agency
Telephone: (404) 562-8651
Last EDR Contact: 10/02/2013
Next Scheduled EDR Contact: 01/13/2014
Data Release Frequency: Varies

DOT OPS: Incident and Accident Data

Department of Transporation, Office of Pipeline Safety Incident and Accident data.

Date of Government Version: 07/31/2012
Date Data Arrived at EDR: 08/07/2012
Date Made Active in Reports: 09/18/2012
Number of Days to Update: 42

Source: Department of Transporation, Office of Pipeline Safety
Telephone: 202-366-4595
Last EDR Contact: 08/05/2013
Next Scheduled EDR Contact: 11/18/2013
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

DOD: Department of Defense Sites

This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 11/10/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 62

Source: USGS
Telephone: 888-275-8747
Last EDR Contact: 10/18/2013
Next Scheduled EDR Contact: 01/27/2014
Data Release Frequency: Semi-Annually

FUDS: Formerly Used Defense Sites

The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 12/31/2011
Date Data Arrived at EDR: 02/26/2013
Date Made Active in Reports: 03/13/2013
Number of Days to Update: 15

Source: U.S. Army Corps of Engineers
Telephone: 202-528-4285
Last EDR Contact: 09/10/2013
Next Scheduled EDR Contact: 12/23/2013
Data Release Frequency: Varies

CONSENT: Superfund (CERCLA) Consent Decrees

Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: 06/30/2013
Date Data Arrived at EDR: 08/07/2013
Date Made Active in Reports: 10/03/2013
Number of Days to Update: 57

Source: Department of Justice, Consent Decree Library
Telephone: Varies
Last EDR Contact: 09/30/2013
Next Scheduled EDR Contact: 01/13/2014
Data Release Frequency: Varies

ROD: Records Of Decision

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 12/18/2012
Date Data Arrived at EDR: 03/13/2013
Date Made Active in Reports: 04/12/2013
Number of Days to Update: 30

Source: EPA
Telephone: 703-416-0223
Last EDR Contact: 09/13/2013
Next Scheduled EDR Contact: 12/23/2013
Data Release Frequency: Annually

UMTRA: Uranium Mill Tailings Sites

Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

Date of Government Version: 09/14/2010
Date Data Arrived at EDR: 10/07/2011
Date Made Active in Reports: 03/01/2012
Number of Days to Update: 146

Source: Department of Energy
Telephone: 505-845-0011
Last EDR Contact: 05/28/2013
Next Scheduled EDR Contact: 09/09/2013
Data Release Frequency: Varies

US MINES: Mines Master Index File

Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

Date of Government Version: 08/01/2013
Date Data Arrived at EDR: 09/05/2013
Date Made Active in Reports: 10/03/2013
Number of Days to Update: 28

Source: Department of Labor, Mine Safety and Health Administration
Telephone: 303-231-5959
Last EDR Contact: 09/05/2013
Next Scheduled EDR Contact: 12/16/2013
Data Release Frequency: Semi-Annually

TRIS: Toxic Chemical Release Inventory System

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/2011
Date Data Arrived at EDR: 07/31/2013
Date Made Active in Reports: 09/13/2013
Number of Days to Update: 44

Source: EPA
Telephone: 202-566-0250
Last EDR Contact: 08/30/2013
Next Scheduled EDR Contact: 12/09/2013
Data Release Frequency: Annually

TSCA: Toxic Substances Control Act

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/2006
Date Data Arrived at EDR: 09/29/2010
Date Made Active in Reports: 12/02/2010
Number of Days to Update: 64

Source: EPA
Telephone: 202-260-5521
Last EDR Contact: 09/24/2013
Next Scheduled EDR Contact: 01/08/2014
Data Release Frequency: Every 4 Years

FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25

Source: EPA/Office of Prevention, Pesticides and Toxic Substances
Telephone: 202-566-1667
Last EDR Contact: 08/22/2013
Next Scheduled EDR Contact: 12/09/2013
Data Release Frequency: Quarterly

FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

A listing of FIFRA/TSCA Tracking System (FTTS) inspections and enforcements.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25

Source: EPA
Telephone: 202-566-1667
Last EDR Contact: 08/22/2013
Next Scheduled EDR Contact: 12/09/2013
Data Release Frequency: Quarterly

HIST FTTS: FIFRA/TSCA Tracking System Administrative Case Listing

A complete administrative case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2007
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

HIST FTTS INSP: FIFRA/TSCA Tracking System Inspection & Enforcement Case Listing

A complete inspection and enforcement case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40
Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2008
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

SSTS: Section 7 Tracking Systems

Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 12/31/2009
Date Data Arrived at EDR: 12/10/2010
Date Made Active in Reports: 02/25/2011
Number of Days to Update: 77
Source: EPA
Telephone: 202-564-4203
Last EDR Contact: 10/28/2013
Next Scheduled EDR Contact: 02/11/2014
Data Release Frequency: Annually

ICIS: Integrated Compliance Information System

The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

Date of Government Version: 07/20/2011
Date Data Arrived at EDR: 11/10/2011
Date Made Active in Reports: 01/10/2012
Number of Days to Update: 61
Source: Environmental Protection Agency
Telephone: 202-564-5088
Last EDR Contact: 10/09/2014
Next Scheduled EDR Contact: 01/27/2014
Data Release Frequency: Quarterly

PADS: PCB Activity Database System

PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 11/01/2012
Date Data Arrived at EDR: 01/16/2013
Date Made Active in Reports: 05/10/2013
Number of Days to Update: 114
Source: EPA
Telephone: 202-566-0500
Last EDR Contact: 10/18/2013
Next Scheduled EDR Contact: 01/27/2014
Data Release Frequency: Annually

MLTS: Material Licensing Tracking System

MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 03/14/2013
Date Data Arrived at EDR: 03/20/2013
Date Made Active in Reports: 07/10/2013
Number of Days to Update: 112
Source: Nuclear Regulatory Commission
Telephone: 301-415-7169
Last EDR Contact: 09/10/2013
Next Scheduled EDR Contact: 12/23/2013
Data Release Frequency: Quarterly

RADINFO: Radiation Information Database

The Radiation Information Database (RADINFO) contains information about facilities that are regulated by U.S. Environmental Protection Agency (EPA) regulations for radiation and radioactivity.

Date of Government Version: 04/09/2013
Date Data Arrived at EDR: 04/11/2013
Date Made Active in Reports: 05/10/2013
Number of Days to Update: 29
Source: Environmental Protection Agency
Telephone: 202-343-9775
Last EDR Contact: 10/09/2013
Next Scheduled EDR Contact: 01/20/2014
Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

FINDS: Facility Index System/Facility Registry System

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 03/08/2013
Date Data Arrived at EDR: 03/21/2013
Date Made Active in Reports: 07/10/2013
Number of Days to Update: 111

Source: EPA
Telephone: (404) 562-9900
Last EDR Contact: 09/11/2013
Next Scheduled EDR Contact: 12/23/2013
Data Release Frequency: Quarterly

RAATS: RCRA Administrative Action Tracking System

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/1995
Date Data Arrived at EDR: 07/03/1995
Date Made Active in Reports: 08/07/1995
Number of Days to Update: 35

Source: EPA
Telephone: 202-564-4104
Last EDR Contact: 06/02/2008
Next Scheduled EDR Contact: 09/01/2008
Data Release Frequency: No Update Planned

RMP: Risk Management Plans

When Congress passed the Clean Air Act Amendments of 1990, it required EPA to publish regulations and guidance for chemical accident prevention at facilities using extremely hazardous substances. The Risk Management Program Rule (RMP Rule) was written to implement Section 112(r) of these amendments. The rule, which built upon existing industry codes and standards, requires companies of all sizes that use certain flammable and toxic substances to develop a Risk Management Program, which includes a(n): Hazard assessment that details the potential effects of an accidental release, an accident history of the last five years, and an evaluation of worst-case and alternative accidental releases; Prevention program that includes safety precautions and maintenance, monitoring, and employee training measures; and Emergency response program that spells out emergency health care, employee training measures and procedures for informing the public and response agencies (e.g the fire department) should an accident occur.

Date of Government Version: 05/08/2012
Date Data Arrived at EDR: 05/25/2012
Date Made Active in Reports: 07/10/2012
Number of Days to Update: 46

Source: Environmental Protection Agency
Telephone: 202-564-8600
Last EDR Contact: 10/28/2013
Next Scheduled EDR Contact: 02/11/2014
Data Release Frequency: Varies

BRS: Biennial Reporting System

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/2011
Date Data Arrived at EDR: 02/26/2013
Date Made Active in Reports: 04/19/2013
Number of Days to Update: 52

Source: EPA/NTIS
Telephone: 800-424-9346
Last EDR Contact: 08/26/2013
Next Scheduled EDR Contact: 12/09/2013
Data Release Frequency: Biennially

DRYCLEANERS: Registered Facilities List

A list of all active registered drycleaner facilities, There may be some inactive facilities included.

Date of Government Version: 05/02/2011
Date Data Arrived at EDR: 08/05/2011
Date Made Active in Reports: 08/18/2011
Number of Days to Update: 13

Source: Dept. of Environment & Conservation
Telephone: 615-532-0900
Last EDR Contact: 10/25/2013
Next Scheduled EDR Contact: 02/03/2014
Data Release Frequency: Annually

NPDES: Permitted Facility Listing
A listing of permitted wastewater facilities.

Date of Government Version: 08/23/2013
Date Data Arrived at EDR: 08/28/2013
Date Made Active in Reports: 10/01/2013
Number of Days to Update: 34
Source: Department of Environment & Conservation
Telephone: 615-253-2245
Last EDR Contact: 08/23/2013
Next Scheduled EDR Contact: 12/09/2013
Data Release Frequency: Varies

AIRS: Listing of Permitted Sources
A listing of permitted sources issued by the Division of Air Pollution Control.

Date of Government Version: 03/18/2013
Date Data Arrived at EDR: 03/21/2013
Date Made Active in Reports: 05/14/2013
Number of Days to Update: 54
Source: Department of Environment & Conservation
Telephone: 615-532-0545
Last EDR Contact: 09/06/2013
Next Scheduled EDR Contact: 11/18/2013
Data Release Frequency: Varies

INDIAN RESERV: Indian Reservations
This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 12/08/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 34
Source: USGS
Telephone: 202-208-3710
Last EDR Contact: 10/18/2013
Next Scheduled EDR Contact: 01/27/2014
Data Release Frequency: Semi-Annually

SCRD DRYCLEANERS: State Coalition for Remediation of Drycleaners Listing
The State Coalition for Remediation of Drycleaners was established in 1998, with support from the U.S. EPA Office of Superfund Remediation and Technology Innovation. It is comprised of representatives of states with established drycleaner remediation programs. Currently the member states are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin.

Date of Government Version: 03/07/2011
Date Data Arrived at EDR: 03/09/2011
Date Made Active in Reports: 05/02/2011
Number of Days to Update: 54
Source: Environmental Protection Agency
Telephone: 615-532-8599
Last EDR Contact: 10/21/2013
Next Scheduled EDR Contact: 02/03/2014
Data Release Frequency: Varies

US AIRS MINOR: Air Facility System Data
A listing of minor source facilities.

Date of Government Version: 01/23/2013
Date Data Arrived at EDR: 01/30/2013
Date Made Active in Reports: 05/10/2013
Number of Days to Update: 100
Source: EPA
Telephone: 202-564-5962
Last EDR Contact: 09/30/2013
Next Scheduled EDR Contact: 01/13/2014
Data Release Frequency: Annually

PRP: Potentially Responsible Parties
A listing of verified Potentially Responsible Parties

Date of Government Version: 04/15/2013
Date Data Arrived at EDR: 07/03/2013
Date Made Active in Reports: 09/13/2013
Number of Days to Update: 72
Source: EPA
Telephone: 202-564-6023
Last EDR Contact: 10/04/2013
Next Scheduled EDR Contact: 01/13/2014
Data Release Frequency: Quarterly

FEDLAND: Federal and Indian Lands
Federally and Indian administrated lands of the United States. Lands included are administrated by: Army Corps of Engineers, Bureau of Reclamation, National Wild and Scenic River, National Wildlife Refuge, Public Domain Land, Wilderness, Wilderness Study Area, Wildlife Management Area, Bureau of Indian Affairs, Bureau of Land Management, Department of Justice, Forest Service, Fish and Wildlife Service, National Park Service.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 02/06/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 339

Source: U.S. Geological Survey
Telephone: 888-275-8747
Last EDR Contact: 10/18/2013
Next Scheduled EDR Contact: 01/27/2014
Data Release Frequency: N/A

US AIRS (AFS): Aerometric Information Retrieval System Facility Subsystem (AFS)

The database is a sub-system of Aerometric Information Retrieval System (AIRS). AFS contains compliance data on air pollution point sources regulated by the U.S. EPA and/or state and local air regulatory agencies. This information comes from source reports by various stationary sources of air pollution, such as electric power plants, steel mills, factories, and universities, and provides information about the air pollutants they produce. Action, air program, air program pollutant, and general level plant data. It is used to track emissions and compliance data from industrial plants.

Date of Government Version: 01/23/2013
Date Data Arrived at EDR: 01/30/2013
Date Made Active in Reports: 05/10/2013
Number of Days to Update: 100

Source: EPA
Telephone: 202-564-5962
Last EDR Contact: 09/30/2013
Next Scheduled EDR Contact: 01/13/2014
Data Release Frequency: Annually

LEAD SMELTER 2: Lead Smelter Sites

A list of several hundred sites in the U.S. where secondary lead smelting was done from 1931and 1964. These sites may pose a threat to public health through ingestion or inhalation of contaminated soil or dust

Date of Government Version: 04/05/2001
Date Data Arrived at EDR: 10/27/2010
Date Made Active in Reports: 12/02/2010
Number of Days to Update: 36

Source: American Journal of Public Health
Telephone: 703-305-6451
Last EDR Contact: 12/02/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

LEAD SMELTER 1: Lead Smelter Sites

A listing of former lead smelter site locations.

Date of Government Version: 01/29/2013
Date Data Arrived at EDR: 02/14/2013
Date Made Active in Reports: 02/27/2013
Number of Days to Update: 13

Source: Environmental Protection Agency
Telephone: 703-603-8787
Last EDR Contact: 09/24/2013
Next Scheduled EDR Contact: 01/20/2014
Data Release Frequency: Varies

2020 COR ACTION: 2020 Corrective Action Program List

The EPA has set ambitious goals for the RCRA Corrective Action program by creating the 2020 Corrective Action Universe. This RCRA cleanup baseline includes facilities expected to need corrective action. The 2020 universe contains a wide variety of sites. Some properties are heavily contaminated while others were contaminated but have since been cleaned up. Still others have not been fully investigated yet, and may require little or no remediation. Inclusion in the 2020 Universe does not necessarily imply failure on the part of a facility to meet its RCRA obligations.

Date of Government Version: 11/11/2011
Date Data Arrived at EDR: 05/18/2012
Date Made Active in Reports: 05/25/2012
Number of Days to Update: 7

Source: Environmental Protection Agency
Telephone: 703-308-4044
Last EDR Contact: 08/16/2013
Next Scheduled EDR Contact: 11/25/2013
Data Release Frequency: Varies

COAL ASH EPA: Coal Combustion Residues Surface Impoundments List

A listing of coal combustion residues surface impoundments with high hazard potential ratings.

Date of Government Version: 08/17/2010
Date Data Arrived at EDR: 01/03/2011
Date Made Active in Reports: 03/21/2011
Number of Days to Update: 77

Source: Environmental Protection Agency
Telephone: N/A
Last EDR Contact: 09/13/2013
Next Scheduled EDR Contact: 12/23/2013
Data Release Frequency: Varies

EPA WATCH LIST: EPA WATCH LIST

EPA maintains a "Watch List" to facilitate dialogue between EPA, state and local environmental agencies on enforcement matters relating to facilities with alleged violations identified as either significant or high priority. Being on the Watch List does not mean that the facility has actually violated the law only that an investigation by EPA or a state or local environmental agency has led those organizations to allege that an unproven violation has in fact occurred. Being on the Watch List does not represent a higher level of concern regarding the alleged violations that were detected, but instead indicates cases requiring additional dialogue between EPA, state and local agencies - primarily because of the length of time the alleged violation has gone unaddressed or unresolved.

Date of Government Version: 06/30/2013
Date Data Arrived at EDR: 08/13/2013
Date Made Active in Reports: 09/13/2013
Number of Days to Update: 31
Source: Environmental Protection Agency
Telephone: 617-520-3000
Last EDR Contact: 08/07/2013
Next Scheduled EDR Contact: 11/25/2013
Data Release Frequency: Quarterly

US FIN ASSUR: Financial Assurance Information

All owners and operators of facilities that treat, store, or dispose of hazardous waste are required to provide proof that they will have sufficient funds to pay for the clean up, closure, and post-closure care of their facilities.

Date of Government Version: 03/04/2013
Date Data Arrived at EDR: 03/15/2013
Date Made Active in Reports: 05/10/2013
Number of Days to Update: 56
Source: Environmental Protection Agency
Telephone: 202-566-1917
Last EDR Contact: 09/27/2013
Next Scheduled EDR Contact: 12/02/2013
Data Release Frequency: Quarterly

PCB TRANSFORMER: PCB Transformer Registration Database

The database of PCB transformer registrations that includes all PCB registration submittals.

Date of Government Version: 02/01/2011
Date Data Arrived at EDR: 10/19/2011
Date Made Active in Reports: 01/10/2012
Number of Days to Update: 83
Source: Environmental Protection Agency
Telephone: 202-566-0517
Last EDR Contact: 08/02/2013
Next Scheduled EDR Contact: 11/11/2013
Data Release Frequency: Varies

COAL ASH DOE: Sleam-Electric Plan Operation Data

A listing of power plants that store ash in surface ponds.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 08/07/2009
Date Made Active in Reports: 10/22/2009
Number of Days to Update: 76
Source: Department of Energy
Telephone: 202-586-8719
Last EDR Contact: 10/15/2013
Next Scheduled EDR Contact: 01/27/2014
Data Release Frequency: Varies

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP: EDR Proprietary Manufactured Gas Plants

The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A
Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

EDR US Hist Auto Stat: EDR Exclusive Historic Gas Stations

EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR US Hist Cleaners: EDR Exclusive Historic Dry Cleaners

EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR US Hist Auto Stat: EDR Proprietary Historic Gas Stations - Cole

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: N/A
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR US Hist Cleaners: EDR Proprietary Historic Dry Cleaners - Cole

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: N/A
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

CT MANIFEST: Hazardous Waste Manifest Data

Facility and manifest data. Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a tsd facility.

Date of Government Version: 07/30/2013
Date Data Arrived at EDR: 08/19/2013
Date Made Active in Reports: 10/03/2013
Number of Days to Update: 45

Source: Department of Energy & Environmental Protection
Telephone: 860-424-3375
Last EDR Contact: 08/19/2013
Next Scheduled EDR Contact: 12/02/2013
Data Release Frequency: Annually

NY MANIFEST: Facility and Manifest Data

Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD facility.

Date of Government Version: 08/01/2013
Date Data Arrived at EDR: 08/07/2013
Date Made Active in Reports: 09/10/2013
Number of Days to Update: 34

Source: Department of Environmental Conservation
Telephone: 518-402-8651
Last EDR Contact: 08/07/2013
Next Scheduled EDR Contact: 11/18/2013
Data Release Frequency: Annually

PA MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2012
Date Data Arrived at EDR: 07/24/2013
Date Made Active in Reports: 08/19/2013
Number of Days to Update: 26

Source: Department of Environmental Protection
Telephone: 717-783-8990
Last EDR Contact: 10/21/2013
Next Scheduled EDR Contact: 02/03/2014
Data Release Frequency: Annually

RI MANIFEST: Manifest information

Hazardous waste manifest information

Date of Government Version: 12/31/2012
Date Data Arrived at EDR: 06/21/2013
Date Made Active in Reports: 08/05/2013
Number of Days to Update: 45

Source: Department of Environmental Management
Telephone: 401-222-2797
Last EDR Contact: 08/23/2013
Next Scheduled EDR Contact: 12/09/2013
Data Release Frequency: Annually

VT MANIFEST: Hazardous Waste Manifest Data

Hazardous waste manifest information.

Date of Government Version: 05/01/2013
Date Data Arrived at EDR: 08/14/2013
Date Made Active in Reports: 09/20/2013
Number of Days to Update: 37

Source: Department of Environmental Conservation
Telephone: 802-241-3443
Last EDR Contact: 10/21/2013
Next Scheduled EDR Contact: 02/03/2014
Data Release Frequency: Annually

WI MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2012
Date Data Arrived at EDR: 08/09/2013
Date Made Active in Reports: 09/27/2013
Number of Days to Update: 49

Source: Department of Natural Resources
Telephone: N/A
Last EDR Contact: 09/16/2013
Next Scheduled EDR Contact: 12/30/2013
Data Release Frequency: Annually

Oil/Gas Pipelines: This data was obtained by EDR from the USGS in 1994. It is referred to by USGS as GeoData Digital Line Graphs from 1:100,000-Scale Maps. It was extracted from the transportation category including some oil, but primarily gas pipelines.

Electric Power Transmission Line Data
Source: Rextag Strategies Corp.
Telephone: (281) 769-2247
U.S. Electric Transmission and Power Plants Systems Digital GIS Data

Sensitive Receptors: There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

AHA Hospitals:
Source: American Hospital Association, Inc.
Telephone: 312-280-5991
The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

Medical Centers: Provider of Services Listing
Source: Centers for Medicare & Medicaid Services
Telephone: 410-786-3000
A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services, a federal agency within the U.S. Department of Health and Human Services.

Nursing Homes
Source: National Institutes of Health
Telephone: 301-594-6248
Information on Medicare and Medicaid certified nursing homes in the United States.

Public Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on elementary and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.

Private Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on private school locations in the United States.

Daycare Centers: Child Care Listing
Source: Department Of Human Services
Telephone: 615-313-4778

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 2003 & 2011 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002 and 2005 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetlands Inventory
Source: Tennessee Spatial Data Server
Telephone: 931-528-6481

Tennesee Lust TDEC: In 1998 EDR reviewed technical reports, phase II reports and phase II report equivalents held by the Tennessee Department of Environment and Conservation and recorded data on leaking underground storage tanks in Davidson, Knox, and Shelby counties.

Scanned Digital USGS 7.5' Topographic Map (DRG)
Source: United States Geologic Survey
A digital raster graphic (DRG) is a scanned image of a U.S. Geological Survey topographic map. The map images are made by scanning published paper maps on high-resolution scanners. The raster image is georeferenced and fit to the Universal Transverse Mercator (UTM) projection.

STREET AND ADDRESS INFORMATION

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GEOCHECK ®- PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

ENGLISH CABINETS
5236 MEMORIAL BOULEVARD
KINGSPORT, TN 37664

TARGET PROPERTY COORDINATES

Latitude (North):	36.5475 - 36° 32' 51.00''
Longitude (West):	82.4377 - 82° 26' 15.72''
Universal Tranverse Mercator:	Zone 17
UTM X (Meters):	371318.0
UTM Y (Meters):	4045436.5
Elevation:	1503 ft. above sea level

USGS TOPOGRAPHIC MAP

Target Property Map:	36082-E4 INDIAN SPRINGS, TN VA
Most Recent Revision:	1991

EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principal investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

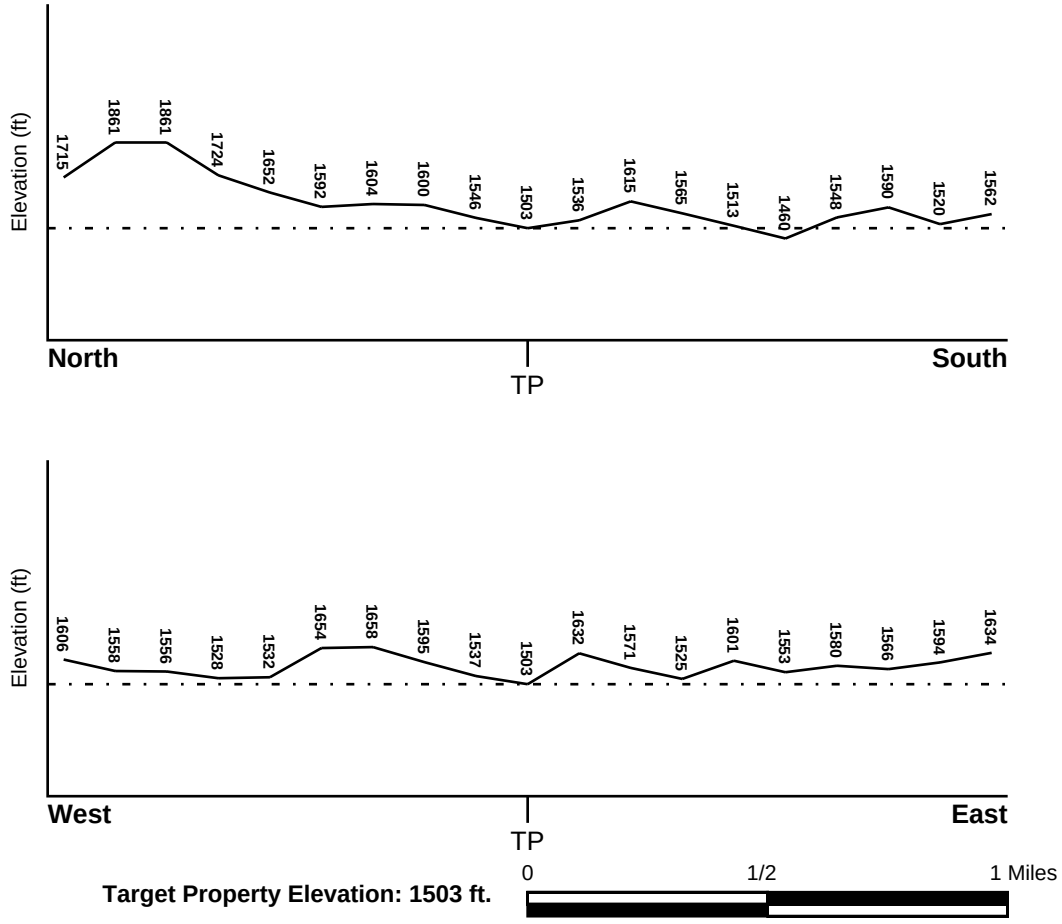
TOPOGRAPHIC INFORMATION

Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General East

SURROUNDING TOPOGRAPHY: ELEVATION PROFILES



Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

FEMA FLOOD ZONE

Target Property County	FEMA Flood Electronic Data
SULLIVAN, TN	YES - refer to the Overview Map and Detail Map

Flood Plain Panel at Target Property: 47163C - FEMA DFIRM Flood data

Additional Panels in search area: Not Reported

NATIONAL WETLAND INVENTORY

NWI Quad at Target Property	NWI Electronic Data Coverage
INDIAN SPRINGS	YES - refer to the Overview Map and Detail Map

HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

AQUIFLOW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

MAP ID	LOCATION FROM TP	GENERAL DIRECTION GROUNDWATER FLOW
Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

ROCK STRATIGRAPHIC UNIT

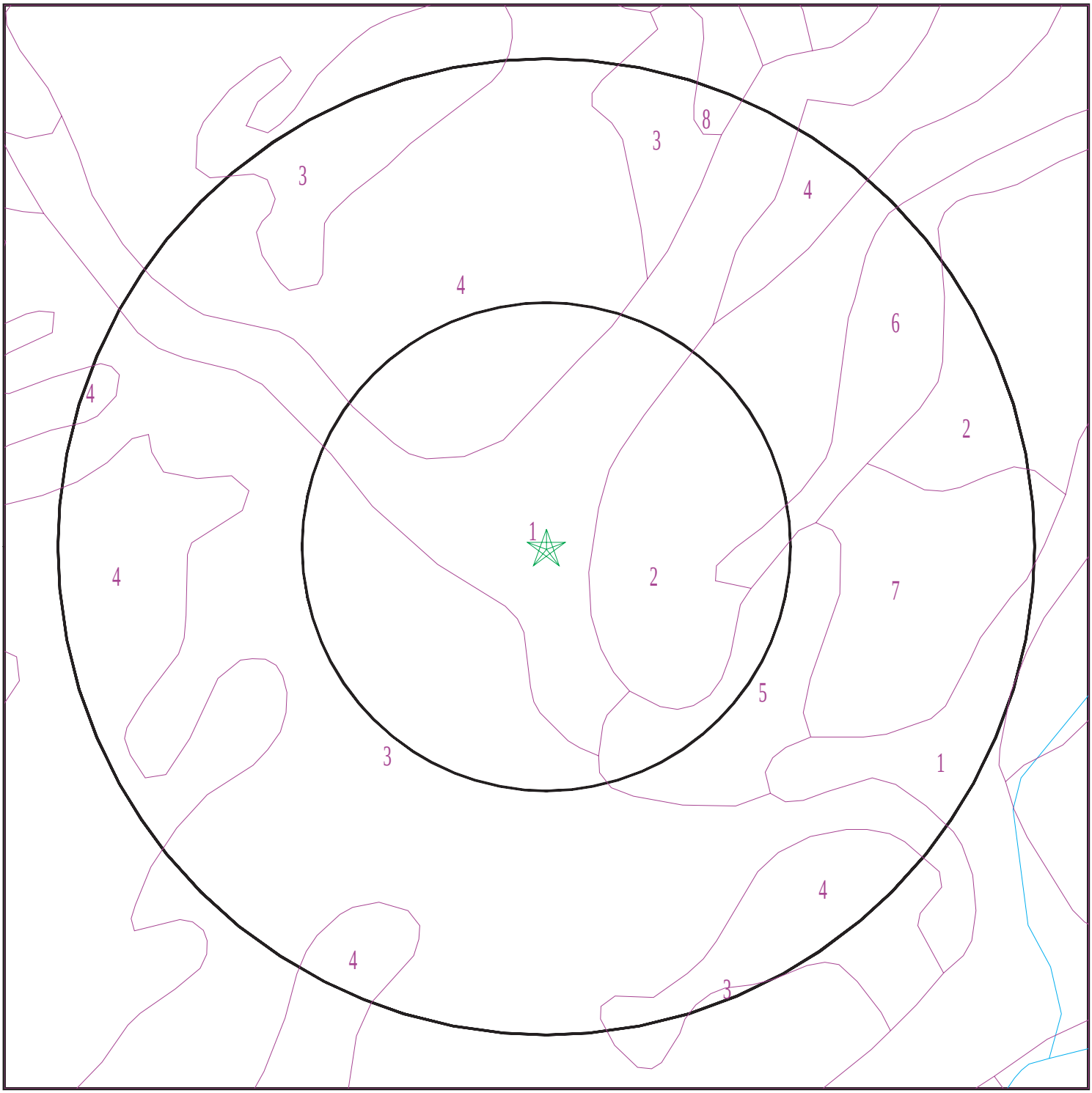
Era:	Paleozoic
System:	Cambrian
Series:	Cambrian
Code:	C *(decoded above as Era, System & Series)*

GEOLOGIC AGE IDENTIFICATION

Category: Stratified Sequence

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

SSURGO SOIL MAP - 3770036.2s



Target Property
SSURGO Soil
Water

0 1/16 1/8 1/4 Miles

N

SITE NAME:	English Cabinets	CLIENT:	Terracon, Inc.
ADDRESS:	5236 Memorial Boulevard Kingsport TN 37664	CONTACT:	Marie Maher
LAT/LONG:	36.5475 / 82.4377	INQUIRY #:	3770036.2s
		DATE:	October 28, 2013 6:02 pm

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GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. The following information is based on Soil Conservation Service SSURGO data.

Soil Map ID: 1

Soil Component Name: STEADMAN

Soil Surface Texture: silt loam

Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class: Moderately well drained

Hydric Status: Partially hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 69 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	11 inches	silt loam	Not reported	Not reported	Max: 14.11 Min: 4.23	Max: 7.8 Min: 5.6
2	11 inches	51 inches	silt loam	Not reported	Not reported	Max: 14.11 Min: 4.23	Max: 7.8 Min: 5.6
3	51 inches	74 inches	silty clay loam	Not reported	Not reported	Max: 14.11 Min: 4.23	Max: 7.8 Min: 5.6

Soil Map ID: 2

Soil Component Name: MONTEVALLO

Soil Surface Texture: channery silt loam

Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	5 inches	channery silt loam	Not reported	Not reported	Max: 14.11 Min: 4.23	Max: 6 Min: 4.5
2	5 inches	16 inches	very channery silt loam	Not reported	Not reported	Max: 14.11 Min: 4.23	Max: 6 Min: 4.5
3	16 inches	59 inches	weathered bedrock	Not reported	Not reported	Max: 1.41 Min: 0	Max: Min:

Soil Map ID: 3

Soil Component Name: COLLEGEDALE

Soil Surface Texture: silty clay loam

Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	3 inches	silty clay loam	Not reported	Not reported	Max: 4.23 Min: 1.41	Max: 5.5 Min: 4.5
2	3 inches	59 inches	silty clay	Not reported	Not reported	Max: 4.23 Min: 1.41	Max: 5.5 Min: 4.5

Soil Map ID: 4

Soil Component Name: COLLEGEDALE

Soil Surface Texture: silt loam

Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	3 inches	silt loam	Not reported	Not reported	Max: 14.11 Min: 4.23	Max: 5.5 Min: 4.5
2	3 inches	61 inches	silty clay	Not reported	Not reported	Max: 4.23 Min: 1.41	Max: 5.5 Min: 4.5

Soil Map ID: 5

Soil Component Name: TALBOTT

Soil Surface Texture: silt loam

Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 77 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	1 inches	silt loam	Not reported	Not reported	Max: 14.11 Min: 4.23	Max: 6 Min: 5.1
2	1 inches	22 inches	clay	Not reported	Not reported	Max: 4.23 Min: 1.41	Max: 6 Min: 5.1
3	22 inches	25 inches	unweathered bedrock	Not reported	Not reported	Max: 0.42 Min: 0	Max: Min:

Soil Map ID: 6

Soil Component Name: MONTEVALLO

Soil Surface Texture: channery silt loam

Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	5 inches	channery silt loam	Not reported	Not reported	Max: 14.11 Min: 4.23	Max: 6 Min: 4.5
2	5 inches	16 inches	very channery silt loam	Not reported	Not reported	Max: 14.11 Min: 4.23	Max: 6 Min: 4.5
3	16 inches	59 inches	weathered bedrock	Not reported	Not reported	Max: 1.41 Min: 0	Max: Min:

Soil Map ID: 7

Soil Component Name: COLLEGEDALE

Soil Surface Texture: silty clay loam

Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	3 inches	silty clay loam	Not reported	Not reported	Max: 4.23 Min: 1.41	Max: 5.5 Min: 4.5
2	3 inches	59 inches	silty clay	Not reported	Not reported	Max: 4.23 Min: 1.41	Max: 5.5 Min: 4.5

Soil Map ID: 8

Soil Component Name: TALBOTT

Soil Surface Texture: silt loam

Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 77 inches

Depth to Watertable Min: > 0 inches

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	1 inches	silt loam	Not reported	Not reported	Max: 14.11 Min: 4.23	Max: 6 Min: 5.1
2	1 inches	22 inches	clay	Not reported	Not reported	Max: 4.23 Min: 1.41	Max: 6 Min: 5.1
3	22 inches	25 inches	unweathered bedrock	Not reported	Not reported	Max: 0.42 Min: 0	Max: Min:

LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

WELL SEARCH DISTANCE INFORMATION

DATABASE	SEARCH DISTANCE (miles)
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 1 mile
State Database	1.000

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
No Wells Found		

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
1	TN0000854	1/4 - 1/2 Mile SSE

Note: PWS System location is not always the same as well location.

STATE DATABASE WELL INFORMATION

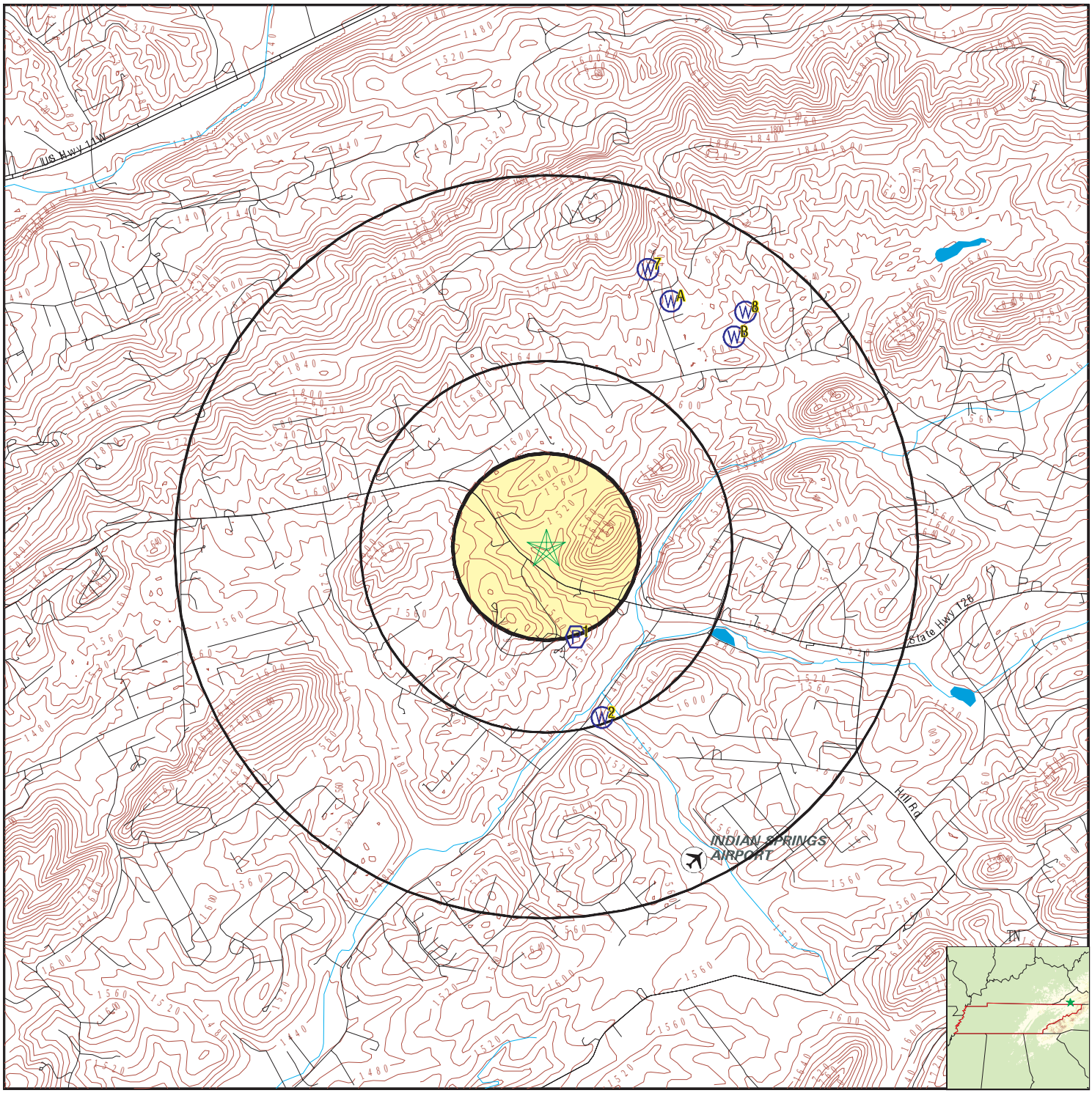
MAP ID	WELL ID	LOCATION FROM TP
2	TN5000000040129	1/4 - 1/2 Mile SSE

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
A3	TN5000000040396	1/2 - 1 Mile NNE
B4	TN5000000040382	1/2 - 1 Mile NE
A5	TN5000000040398	1/2 - 1 Mile NNE
B6	TN5000000040388	1/2 - 1 Mile NE
7	TN5000000040415	1/2 - 1 Mile NNE
8	TN5000000040394	1/2 - 1 Mile NE

PHYSICAL SETTING SOURCE MAP - 3770036.2s



- County Boundary
- Major Roads
- Contour Lines
- Airports
- Earthquake epicenter, Richter 5 or greater
- Water Wells
- Public Water Supply Wells
- Cluster of Multiple Icons
- Groundwater Flow Direction
- GI Indeterminate Groundwater Flow at Location
- GV Groundwater Flow Varies at Location

SITE NAME:	English Cabinets	CLIENT:	Terracon, Inc.
ADDRESS:	5236 Memorial Boulevard Kingsport TN 37664	CONTACT:	Marie Maher
		INQUIRY #:	3770036.2s
LAT/LONG:	36.5475 / 82.4377	DATE:	October 28, 2013 6:02 pm

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Map ID
Direction
Distance
Elevation | Database | EDR ID Number

1
SSE
1/4 - 1/2 Mile
Higher | **FRDS PWS** | **TN0000854**

Pwsid:	TN0000854	Epa region:	04
State:	TN	County:	Sullivan
Pws name:	FOXFIRE HOMEOWNERS ASSOC		
Population Served:	110	Pwssvcconn:	44
PWS Source:	Groundwater		
Pws type:	CWS		
Status:	Closed	Owner type:	Private
Facility id:	1		
Facility name:	WELL #1		
Facility type:	Well	Treatment process:	hypochlorination, post
Treatment objective:	disinfection		
Contact name:	HENRY SOMERS, JR.		
Original name:	Not Reported		
Contact phone:	423-288-6444	Contact address1:	5309 FOXFIRE PLACE
Contact address2:	Not Reported		
Contact city:	KINGSPORT		
Contact zip:	37644		

Facility id:	165		
Facility name:	WELLS		
Facility type:	Sampling_station	Treatment process:	hypochlorination, post
Treatment objective:	disinfection		

Facility id:	2		
Facility name:	WELL #2		
Facility type:	Well	Treatment process:	hypochlorination, post
Treatment objective:	disinfection		

Facility id:	TP001		
Facility name:	WELLS		
Facility type:	Treatment_plant	Treatment process:	hypochlorination, post
Treatment objective:	disinfection		

PWS ID:	TN0000854		
Date Initiated:	Not Reported	Date Deactivated:	Not Reported
PWS Name:	FOXFIRE HOMEOWNERS ASSOC MR. HENRY SOMERS 5309 FOXFIRE PLACE KINGSPORT, TN 37644		
Addressee / Facility:	Not Reported		
Facility Latitude:	36 32 38.0000	Facility Longitude:	82 26 11.0000
Facility Latitude:	36 32 36.0000	Facility Longitude:	82 26 9.0000
City Served:	Not Reported		
Treatment Class:	Treated	Population:	107

Violations information not reported.

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation

Database	EDR ID Number
TN WELLS	TN5000000040129

2
SSE
1/4 - 1/2 Mile
Lower

County nam:	SULLIVAN	Well numbr:	94004946
Owner name:	BOWERS, TONY	Addr line1:	241 FALL CREEK
License co:	Not Reported	Cmpltn dat:	11/15/94 12:00:00 A
Latitude:	363227	Cmpltn tot:	Not Reported
Cmpltn est:	Not Reported	Quad numbr:	0197SW8
Driller ta:	D0005730	Longitude:	822606
Accuracy:	S	Casing fee:	Not Reported
Wbz:	Not Reported	Descriptio:	Residential
Site id:	TN5000000040129		

Database	EDR ID Number
TN WELLS	TN5000000040396

A3
NNE
1/2 - 1 Mile
Higher

County nam:	SULLIVAN	Well numbr:	97005022
Owner name:	OLD ISLAND GOLF CLUB	Addr line1:	ISLAND RD 535
License co:	Not Reported	Cmpltn dat:	10/07/97 12:00:00 A
Latitude:	363325	Cmpltn tot:	Not Reported
Cmpltn est:	Not Reported	Quad numbr:	0197SW5
Driller ta:	D0027436	Longitude:	822555
Accuracy:	F	Casing fee:	Not Reported
Wbz:	Not Reported	Descriptio:	Irrigation
Site id:	TN5000000040396		

Database	EDR ID Number
TN WELLS	TN5000000040382

B4
NE
1/2 - 1 Mile
Higher

County nam:	SULLIVAN	Well numbr:	97004566
Owner name:	OLD ISLAND GOLF CLUB	Addr line1:	535 ISLAND RD
License co:	Not Reported	Cmpltn dat:	09/02/97 12:00:00 A
Latitude:	363320	Cmpltn tot:	Not Reported
Cmpltn est:	Not Reported	Quad numbr:	0197SW5
Driller ta:	D0023679	Longitude:	822543
Accuracy:	F	Casing fee:	Not Reported
Wbz:	Not Reported	Descriptio:	Irrigation
Site id:	TN5000000040382		

Database	EDR ID Number
TN WELLS	TN5000000040398

A5
NNE
1/2 - 1 Mile
Higher

County nam:	SULLIVAN	Well numbr:	97005026
Owner name:	OLD ISLAND GOLF CLUB	Addr line1:	ISLAND RD 535
License co:	Not Reported	Cmpltn dat:	10/09/97 12:00:00 A
Latitude:	363326	Cmpltn tot:	Not Reported
Cmpltn est:	Not Reported	Quad numbr:	0197SW5
Driller ta:	D0027437	Longitude:	822553
Accuracy:	F	Casing fee:	Not Reported
Wbz:	Not Reported	Descriptio:	Irrigation
Site id:	TN5000000040398		

B6
NE
1/2 - 1 Mile
Higher

TN WELLS **TN5000000040388**

County nam:	SULLIVAN	Well numbr:	97004576
Owner name:	OLD ISLAND GOLF CLUB	Addr line1:	ISLAND RD 535
License co:	Not Reported	Cmpltn dat:	09/15/97 12:00:00 A
Latitude:	363321	Cmpltn tot:	Not Reported
Cmpltn est:	Not Reported	Quad numbr:	0197SW5
Driller ta:	D0027434	Longitude:	822543
Accuracy:	F	Casing fee:	Not Reported
Wbz:	Not Reported	Descriptio:	Irrigation
Site id:	TN5000000040388		

7
NNE
1/2 - 1 Mile
Higher

TN WELLS **TN5000000040415**

County nam:	SULLIVAN	Well numbr:	97005145
Owner name:	OLD ISLAND GOLF CLUB	Addr line1:	ISLAND RD 535
License co:	Not Reported	Cmpltn dat:	10/01/97 12:00:00 A
Latitude:	363330	Cmpltn tot:	Not Reported
Cmpltn est:	Not Reported	Quad numbr:	0197SW5
Driller ta:	D0023686	Longitude:	822558
Accuracy:	F	Casing fee:	Not Reported
Wbz:	Not Reported	Descriptio:	Irrigation
Site id:	TN5000000040415		

8
NE
1/2 - 1 Mile
Higher

TN WELLS **TN5000000040394**

County nam:	SULLIVAN	Well numbr:	97004577
Owner name:	OLD ISLAND GOLF CLUB	Addr line1:	ISLAND RD 535
License co:	Not Reported	Cmpltn dat:	09/15/97 12:00:00 A
Latitude:	363324	Cmpltn tot:	Not Reported
Cmpltn est:	Not Reported	Quad numbr:	0197SW5
Driller ta:	D0027435	Longitude:	822541
Accuracy:	F	Casing fee:	Not Reported
Wbz:	Not Reported	Descriptio:	Irrigation
Site id:	TN5000000040394		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS
RADON

AREA RADON INFORMATION

State Database: TN Radon

Radon Test Results

County	Total Sites	Avg	Max	<4 pCi/L	4-10 pCi/L	10-20 pCi/L	20-50 pCi/L	50-100 pCi/L	>100 pCi/L
SULLIVAN	161	5.6	40.2	89	44	23	5	0	0

Federal EPA Radon Zone for SULLIVAN County: 1

Note: Zone 1 indoor average level > 4 pCi/L.
: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
: Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for Zip Code: 37664

Number of sites tested: 5

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	1.575 pCi/L	75%	25%	0%
Living Area - 2nd Floor	Not Reported	Not Reported	Not Reported	Not Reported
Basement	13.500 pCi/L	40%	20%	40%

PHYSICAL SETTING SOURCE RECORDS SEARCHED

TOPOGRAPHIC INFORMATION

USGS 7.5' Digital Elevation Model (DEM)
Source: United States Geologic Survey
EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

Scanned Digital USGS 7.5' Topographic Map (DRG)
Source: United States Geologic Survey
A digital raster graphic (DRG) is a scanned image of a U.S. Geological Survey topographic map. The map images are made by scanning published paper maps on high-resolution scanners. The raster image is georeferenced and fit to the Universal Transverse Mercator (UTM) projection.

HYDROLOGIC INFORMATION

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 2003 & 2011 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002 and 2005 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetlands Inventory
Source: Tennessee Spatial Data Server
Telephone: 931-528-6481

HYDROGEOLOGIC INFORMATION

AQUIFLOW^{R} Information System
Source: EDR proprietary database of groundwater flow information
EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

GEOLOGIC INFORMATION

Geologic Age and Rock Stratigraphic Unit
Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Services
The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

SSURGO: Soil Survey Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Services (NRCS)
Telephone: 800-672-5559
SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Services, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

LOCAL / REGIONAL WATER AGENCY RECORDS

FEDERAL WATER WELLS

PWS: Public Water Systems
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS)
This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

STATE RECORDS

County Water Wells in Tennessee
Source: Department of Environment and Conservation
Telephone: 615-532-0191
Water well locations in the following counties - Anderson, Blount, Bradley, Coffee, Cumberland, Davidson, Dickson, Hamilton, Hamblen, Jefferson, Knox, Loudon, Montgomery, Maury, Madison, Putman, Robertson, Rutherford, Shelby, Sevier, Sumner, Sullivan, Washington, Wilson, Williamson.

OTHER STATE DATABASE INFORMATION

RADON

State Database: TN Radon
Source: Department of Environment & Conservation
Telephone: 615-299-9725
Radon Test Results

Area Radon Information
Source: USGS
Telephone: 703-356-4020
The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

EPA Radon Zones
Source: EPA
Telephone: 703-356-4020
Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

OTHER

Airport Landing Facilities: Private and public use landing facilities
Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater
Source: Department of Commerce, National Oceanic and Atmospheric Administration

PHYSICAL SETTING SOURCE RECORDS SEARCHED

STREET AND ADDRESS INFORMATION

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APPENDIX E

Site Photographs



Photo #1 View of site looking southeast from Memorial Boulevard.



Photo #2 View of non-hazardous waste dumpster on northern portion of the site looking north from parking area.



Photo #3 View of manufacturing building on northern portion of site looking northeast from parking area.



Photo #4 View of solid-surface assembly shop on southeastern portion of site looking south from parking area.



Photo #5 View of non-hazardous waste dumpster adjacent to solid-surface assembly shop.



Photo #6 View of 55-gallon drums on northwestern portion of site adjacent to chain-linked perimeter fence.



Photo #7 View of office building on northwestern portion of site looking west from parking area.



Photo #8 View of manufacturing buildings on northern portion of the site looking northwest from drive area.



Photo #9 View of adjacent automotive repair shop looking northeast from Memorial Boulevard.



Photo #10 View of adjacent automotive repair shop looking east from Memorial Boulevard.



Photo #11 View of adjacent automotive repair shop looking west from central portion of the site.



Photo #12 View of pole-mounted transformers on northern portion of site looking east.

APPENDIX F

Credentials

MARIE A. MAHER, P.G.
PROJECT GEOLOGIST

PROFESSIONAL EXPERIENCE

Ms. Maher, P.G. is a Project Geologist in Terracon's Chattanooga, Tennessee office. Ms. Maher, P.G. is responsible for Phase I Environmental Site Assessments, Phase II Environmental Site Assessments, Limited Subsurface Investigations, soil classification and laboratory testing, rock core logging and stratigraphic interpretations, soil and groundwater monitoring, geographic information systems (GIS) spatial analysis operations, drafting operations, remote sensing applications, and geologic mapping/interpretation.

Ms. Maher, P.G. also has specialized training in various geophysical techniques including seismic refraction, shear-wave velocity profiling, electrical resistivity and ground-penetrating radar applications. Ms. Maher, P.G. has applied these techniques for karst topography investigations, seismic site classification applications and probabilistic seismic hazard analyses (PSHAs).

PROJECT EXPERIENCE

Electric Power Board- Chattanooga, Tennessee

Served as project manager for the subsurface exploration and excavation monitoring of the redevelopment project as part of a Brownfields Agreement. Oversaw soil and groundwater sampling during excavation activities, maintained liaison between the Electric Power Board and the Tennessee Department of Environment and Conservation (TDEC), and finalized reports regarding environmental issues associated with the site. In addition to soil and groundwater sampling, indoor air sampling was also conducted prior to and following construction activities onsite.

Alstom Power Turbomachines- Chattanooga, Tennessee

Served as project manager for the subsurface exploration and excavation monitoring of the redevelopment project as part of a Brownfields Agreement. Oversaw soil and groundwater sampling during excavation activities, maintained liaison between Alstom and the Tennessee Department of Environment and Conservation (TDEC), and finalized reports regarding environmental issues associated with the site. In addition to daily monitoring duties, remediation of subsurface material was also organized and executed in conjunction with TDEC officials.

River Gorge Road- Chattanooga, Tennessee

Served as the project manager for surficial mapping of geologic structure and stratigraphy for development of a new roadway on Mount Aetna in Chattanooga, Tennessee. Mapping features included marker beds, bedding orientation, geomorphologic features, erosional features, colluvial layers, and fossiliferous carbonate identification.

Oxford Commons Geophysical- Oxford, Alabama

Served as project manager for a limited geophysical investigation in which shear-wave profiling was used to identify zones of relatively softer soils adjacent to weathered bedrock and bedrock. This project focused on the use of geophysical techniques in conjunction with down-hole exploration to characterize areas of subsidence across a graded building pad.

Education

Master of Science, Geology
Baylor University, 2007

Bachelor of Science, Envir. Science
Slippery Rock University, 2005

Registrations

Professional Geologist: Tennessee, No. 5366

TN EPSC Level 1 Certified

Certifications

40-Hour HAZWOPER

ASFE Environmental Committee Member

Affiliations

American Society of Civil Engineers

Geologic Society of America

American Geophysical Union

Work History

Terracon Consultants, Inc., Project Geologist, 2009-Present

Gallet & Associates, Inc., Geologist, 2007-2009

Tri-State Testing & Drilling, LLC, Geologist, 2007

U.S. Environmental Protection Agency (EPA), Region 6, Environmental Scientist, 2006-2007

Baylor University, Research Assistant, 2005-2006

Slippery Rock University, GIS Technician, 2001-2005

DALLAS E. WHITMILL, P.E.

SENIOR PROJECT ENGINEER / ENVIRONMENTAL DEPARTMENT MANAGER

PROFESSIONAL EXPERIENCE

Mr. Whitmill is a senior environmental engineer and environmental department manager in Terracon's Chattanooga, Tennessee office. Mr. Whitmill is responsible for managing all aspects of multiple, simultaneous projects, providing engineering and senior level technical support for other project managers including risk-based analysis, design, construction and installation of remediation systems, stormwater plans, phase I and phase II environmental assessments, air permitting, NEPA survey and documentation and development of corrective action plans.

PROJECT EXPERIENCE

Chattanooga Metropolitan Airport NEPA Assessment – Chattanooga, Tennessee

Provided program management, acted as senior engineer and performed senior oversight and review for multiple NEPA assessments for the Chattanooga Metropolitan Airport's multi-year expansion project. Services performed included NEPA assessments, categorical exclusions and environmental assessments.

Chickamauga Battelfield NEPA Assessment – Chickamauga, Georgia

Provided senior oversight and review for NEPA documentation for a new sidewalk project to be funded by a Federal Highway Administration grant. Services performed included NEPA survey, air and noise assessment, phase I ecology assessment, stream/wetland assessment, protected species habitat assessment, invasive plant species survey and programmatic categorical exclusion.

Southern Group Water Quality Improvement – Marion County, Tennessee

Served as project manager and lead engineer. Services included providing stormwater design, inspections and management, USACE and TDEC natural resource permitting, endangered and threatened species surveys, stream and wetland restoration design and water resource assessments for multiple developments in Tennessee, Alabama and Georgia, consisting of over 17,000 acres.

Whisper Creek Stream Restoration – Hamilton County, Tennessee

Served as senior engineer and provided project oversight. Services included habitat assessment, threatened and endangered species survey, stream channel restoration through diversion and sediment removal. Additional services included stream bank riparian buffer restoration and subsequent monitoring.

Presentations/Published Articles

"Perspectives from the Field – Meth Labs: Your Neighborhood Hazardous Waste Facility" Environmental Practice Journal. P. 187, October 2010.

"Meth Labs – A Melting Pot of Liabilities" E News, Environmental Law Section, Tennessee Bar Association. P. 4, November 2009.

Education

Bachelor of Science, Environmental Engineering, University of Tennessee at Chattanooga, 1996

Registrations

Professional Engineer: Tennessee, Georgia, and Alabama

Certifications

40-Hour HAZWOPER

TN ESPC Level I and II Certified Clandestine Methamphetamine Lab Hygienist, TN

Work History

Terracon Consultants, Inc., Senior Project Engineer/Environmental Department Manager, 2009-Present

Aquaterra Engineering, Senior Engineer/Environmental Department Manager, 1999-2009

TDEC, Division of Underground Storage Tanks, Environmental Protection Specialist, 1998-1999

Pathway Polymers- Chattanooga, Tennessee

Ms. Maher, P.G. conducted a Phase II Environmental Site Assessment and risk assessment at the above-referenced site. The purpose of this investigation was to confirm or refute the presence of constituents of concern in soil and groundwater in the area of aboveground chemical holding tanks adjacent to railroad service tracks. Based on the calculations derived from the risk assessment, it was determined that the concentration of the chemicals of concern in the soil and groundwater were not a threat to personnel at the site.

Dale Hollow Dam USACE- Celina, Tennessee

Ms. Maher, P.G. served as the lead field geologist at the Dale Hollow Dam exploratory grouting project supervised by the United Army Corp of Engineers. Ms. Maher, P.G. was responsible for logging rock core, interpreting stratigraphic successions, and finalizing submittals to the United States Army Corp of Engineers. Rock cores were logged in accordance with the *Army Corp of Engineers Manual EM Nashville District.* Noted features identified in the rock core included the Cathey's Formation sequences and mineralogical gradations from calcium-rich limestone to argillaceous shale.

Published Articles

Geologic Society of America (Sigma Gamma Epsilon), Seattle, Washington (2003). *Radiocarbon Dating of Paleosols to Constrain Timing of Holocene Land Surfaces, Badlands National Park, South Dakota.*

Geologic Society of America, Philadelphia, Pennsylvania (2006). *Construction of Comprehensive Modern Lagoonal Patch Reef Model with an Application to Ancient Bioherms. Jamaica.*

American Association of Petroleum Geologists, Houston, Texas (2006). *Construction of Comprehensive Modern Lagoonal Patch Reef Model with an Application to Ancient Bioherms. Jamaica.*

Geologic Society of America, Denver, Colorado (2010). *Empirical Correlation of Dynamic Cone Penetration and Refraction Microtremor Technique to Obtain Shear Wave Velocity Profiles, Tennessee.*

Additional Courses

ESRI Operations Training and Spatial Analysis/Drafting, Pittsburgh, Pennsylvania (2002)

Depositional Environments and Related Systems, Lee Stocking Island, Bahamas (2002)

Paleosol Studies and Landscape Reconstruction, Badlands National Park, South Dakota (2003)

Speleolithic Formations and Karst Topography, Discovery Bay, Jamaica (2005)

Modern Depositional Environments and Carbonate Diagenesis, Discovery Bay, Jamaica (2006)

SHAKE Seismic Analysis Training Course, St. Louis, Missouri (2008)

Phase I Preliminary Assessment Study

Riviera Apartment Complex

5340 Memorial Boulevard

Kingsport, Sullivan County, Tennessee

TDOT Project No. PE 82085-0225-14

TDOT PIN No. 105467.00

November 26, 2013

Terracon Project No. E2137131; Task 2



Prepared for:

Tennessee Department of Transportation
Nashville, Tennessee

Prepared by:

Terracon Consultants, Inc.
Chattanooga, Tennessee

Offices Nationwide Established in 1965
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Terracon

Geotechnical ■ Environmental ■ Construction Materials ■ Facilities

Terracon

November 26, 2013

Tennessee Department of Transportation
505 Deadrick Street, Suite 900
JK Polk Building
Nashville, Tennessee 37243

Attn: Mr. Jim Ozment

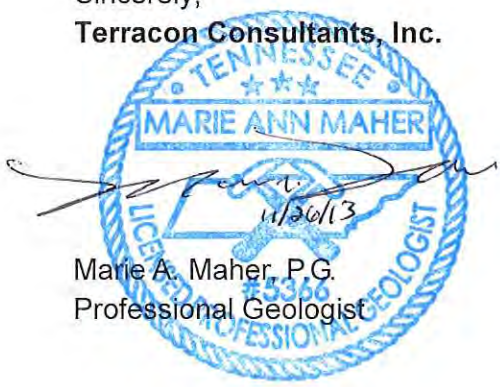
Re: Phase I Preliminary Assessment Study
Riviera Apartment Complex
5340 Memorial Boulevard
Kingsport, Sullivan County, Tennessee
TDOT Project No. PE 82085-0225-14
TDOT PIN No. 105467.00
Terracon Project No. E2137131, Task 2

Dear Mr. Ozment:

Terracon Consultants, Inc. (Terracon) is pleased to submit the enclosed Phase I Preliminary Assessment Study for the above-referenced site. This study was performed in accordance with our Proposal, dated October 23, 2013.

We appreciate the opportunity to perform these services for you. Please contact us if you have questions regarding this information or if we can provide any other services.

Sincerely,
Terracon Consultants, Inc.



Marie A. Maher, P.G.
Professional Geologist

Travis Stamper
Senior Environmental Scientist

Attachments

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COMMON ACRONYMS [1]

ACM..... Asbestos containing material
AST..... Aboveground storage tank
ASTM..... American Society for Testing and Materials
AUL..... Activity and use limitation
BGS ..... Below ground surface
BTEX ..... Benzene, toluene, ethylbenzene, and xylenes
CERCLA ..... Comprehensive Environmental Response, Compensation, and Liability Act
CFR ..... Code of Federal Regulations
DOT ..... United States Department of Transportation
EPA..... United States Environmental Protection Agency
HREC..... Historical recognized environmental condition
LUST..... Leaking underground storage tank
MCL ..... Maximum contaminant level
MSDS..... Material safety data sheet
NGVD..... National Geodetic Vertical Datum
NOV ..... Notice of violation
NPL..... National Priority List
NRCS..... USDA Natural Resource Conservation Service
OSHA..... Occupational Safety and Health Administration
PCB ..... Poly-chlorinated biphenyl
RCRA..... Resource Conservation and Recovery Act
REC ..... Recognized environmental condition
SPCC..... Spill Prevention, Control and Countermeasure
SWPPP..... Stormwater pollution prevention plan
TEPH ..... Total extractable petroleum hydrocarbons
TPH..... Total petroleum hydrocarbons
TVPH ..... Total volatile petroleum hydrocarbons
TRI..... Toxic release inventory
TSCA ..... Toxic Substances Control Act
USGS..... United States Geological Survey
UST..... Underground storage tank
VCP ..... Voluntary cleanup program
VOC..... Volatile organic compound

Units of measure

sq ft or ft^2..... square feet
mg/kg..... milligrams per kilogram
mg/l..... milligrams per liter
ug/l..... micrograms per liter
ppb..... parts per billion
ppm…….parts per million

[1] An additional list of acronyms and definitions is included in Appendix B.

PHASE I PRELIMINARY ASSESSMENT STUDY

RIVIERA APARTMENT COMPLEX
5340 MEMORIAL BOULEVARD
TDOT PROJECT NO. PE 82085-0225-14
TDOT PIN NO. 105467.00
KINGSPORT, SULLIVAN COUNTY, TENNESSEE

Terracon Project No. E2137131, Task 2
Report Date: November 26, 2013

EXECUTIVE SUMMARY

This Phase I Preliminary Assessment Study (PAS) was performed in general accordance with the TDOT Environmental Procedures Manual, dated April 2007, our Proposal dated October 23, 2013 and consistent with the procedures included in ASTM E 1527-13, Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process. The PAS was conducted under the supervision or responsible charge of Travis Stamper, Environmental Professional. Marie A. Maher, P.G. performed the site reconnaissance on November 5, 2013.

A cursory summary of findings is provided below. It should be recognized that details were not included or fully developed in this section, and the report must be read in its entirety for a comprehensive understanding of the items contained herein.

- The project includes the widening of lanes along Memorial Boulevard (U.S. Highway 126) resulting in the expansion of the associated TDOT R.O.W. in Kingsport, Sullivan County, Tennessee. The site assessed during this investigation consisted of the 4.45-acre parcel located at 5340 Memorial Boulevard. At the time of our site reconnaissance, the southern portion of the site was developed with a multi-tenant apartment structure, two outbuildings used for storage and maintenance, and two mobile trailer structures currently occupied with residences. A commercial sign reading “Riviera Apartments” and an unnamed tributary to Slougan Branch were observed along the southwestern portion of the site, adjacent to Memorial Boulevard (U.S. Highway 126). The remaining portions of the site consisted of wooded and grassed land. The purpose of this study was to identify recognized environmental conditions (RECs) within the site limits.

- At the time of the Terracon site reconnaissance, an air compressor, HVAC systems, 5-gallon capacity containers, one pole-mounted transformer, stained pavement, a non-hazardous waste dumpster, and an unnamed tributary to Slougan Branch were observed on site. Based on our observations during our site and area reconnaissance, these items are not considered RECs in connection with the site at this time.

EXECUTIVE SUMMARY (cont.)

- Based on historical information reviewed as part of this assessment, the site appears to have been undeveloped land until the 1970s. In the 1970s, the site was developed with the present day structures. Based on our review of historical city directories, the majority of the site has operated as residential land since its development in the 1970s. A portion of the site operated as a lounge/restaurant in the 1990s.

- Review of the regulatory database revealed two facilities (English Cabinets Shop, Inc. and Tony's Small Engine Repair) within the specified search radius of the site. Based on information gathered during preparation of this report, these facilities are not considered RECs in connection with the site at this time.

- A hazardous materials rating system was used to rate facilities that were identified as being potential RECs to the site. Two facilities, English Cabinets Shop, Inc. and Tony's Small Engine Repair, were identified as being located within the specified search distance of the site. Both facilities were assigned a risk rating of NO.

- Based on the authorized scope of services, no additional services (e.g., asbestos sampling, lead-based paint sampling, wetlands evaluation, radon testing, etc.) were conducted.

We have performed a Phase I PAS consistent with the procedures included in ASTM Practice E 1527-13 of the site located at 5340 Memorial Boulevard in Kingsport, Sullivan County, Tennessee. RECs which would warrant further investigation were not identified in connection with the property. Based on the scope of services, limitations, and findings of this assessment, Terracon did not identified RECs in connection with the site; therefore, further investigation of the site is not recommended at this time.

PHASE I PRELIMINARY ASSESSMENT STUDY

RIVIERA APARTMENT COMPLEX
TDOT PROJECT NO. PE 82085-0225-14
TDOT PIN NO. 105467.00
KINGSPORT, SULLIVAN COUNTY, TENNESSEE

Terracon Project No. E2137131, Task 2
Report Date: November 26, 2013

1.0 INTRODUCTION

1.1 Site Description

Site Description

Site Name	Riviera Apartment Complex
Site Location/Address	5340 Memorial Boulevard in Kingsport, Sullivan County, Tennessee
Site Improvements	The southern portion of the site is improved with a multi-tenant apartment structure, a commercial sign, two outbuildings used for maintenance and storage, and two mobile trailer structures. Currently, the two mobile trailer structures operate as residential dwellings. The multi-tenant apartment structure is currently unoccupied. The remaining portions of the site consist of wooded and grassed land with approximately 300 feet of road frontage along Memorial Boulevard (U.S. Highway 126).

We understand this project includes the widening of lanes along Memorial Boulevard (U.S. Highway 126) resulting in the expansion of the associated Tennessee Department of Transportation (TDOT) right-of-way (R.O.W.) in Kingsport, Sullivan County, Tennessee. The purpose of this Phase I Preliminary Assessment Study (PAS) is to present the preliminary findings of a literature search and a field review of the potential for finding hazardous materials or petroleum contamination on parcels included in, or adjacent to the proposed project that may impact the construction of the proposed project. The site location is depicted on Figure 1 of Appendix A, which was reproduced from a portion of applicable USGS 7.5-minute series topographic maps. A Site Diagram of the site and adjoining properties is included as Figure 2 of Appendix A. Acronyms and terms used in this report are described in Appendix B.

1.2 Scope of Services

This Phase I PAS was performed in general accordance with the TDOT Environmental Procedures Manual, dated April 2007, our Proposal dated October 23, 2013 and consistent with the procedures included in ASTM E 1527-13, Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process. The purpose of this PAS was to assist the client in developing information to identify RECs in connection with the site as

reflected by the scope of this report. This purpose was undertaken through user-provided information, a regulatory database review, historical and physical records review, interviews, including local government inquiries, as applicable, user-provided information, and a visual noninvasive reconnaissance of the site and adjoining properties. Limitations, ASTM deviations, and significant data gaps (if identified) are evident from reviewing the applicable scope of services and the report text. Per the agreed scope of services specified in the proposal, no additional services (e.g., asbestos sampling, lead-based paint sampling, wetlands evaluation, radon testing, etc.) were conducted.

1.3 Standard of Care

This PAS was performed in accordance with generally accepted practices of this profession, undertaken in similar studies at the same time and in the same geographical area. We have endeavored to meet this standard of care, but may be limited by conditions encountered during performance, a client-driven scope of work, or inability to review information not received by the report date. Where appropriate, these limitations are discussed in the text of the report, and an evaluation of their significance with respect to our findings has been conducted.

Phase I PASs, such as the one performed at this site, are of limited scope, are noninvasive, and cannot eliminate the potential that hazardous, toxic, or petroleum substances are present or have been released at the site beyond what is identified by the limited scope of this PAS. In conducting the limited scope of services described herein, certain sources of information and public records were not reviewed. It should be recognized that environmental concerns may be documented in public records that were not reviewed. No PAS can wholly eliminate uncertainty regarding the potential for RECs in connection with a property. Performance of this practice is intended to reduce, but not eliminate, uncertainty regarding the potential for RECs. No warranties, express or implied, are intended or made. The limitations herein must be considered when the user of this report formulates opinions as to risks associated with the site or otherwise uses the report for any other purpose. These risks may be further evaluated – but not eliminated – through additional research or assessment. We will, upon request, advise you of additional research or assessment options that may be available and associated costs.

1.4 Additional Scope Limitations, ASTM Deviations and Significant Data Gaps

Based upon the agreed-on scope of services, this PAS did not include subsurface or other invasive assessments, business environmental risk evaluations, or other services not particularly identified and discussed herein. Reasonable attempts were made to obtain information within the scope and time constraints set forth by the client; however, in some instances, information requested is not, or was not, received by the issuance date of the report. Information obtained for this PAS was received from several sources that we believe to be reliable; nonetheless, the authenticity or reliability of these sources cannot and is not warranted hereunder.

This PAS was further limited by the following:

- Pertinent documents are referred in the text of this report, and a separate reference section has not been included;
- Credentials of the company (Statement of Qualifications) have not been included in this report, but are available upon request;
- Requests were submitted to local government agencies regarding documented environmental conditions on the site. Responses from one or more agencies were not received as of the issuance of this report. Lack of these responses does not pose a significant data gap; and
- The onsite structure interiors were not observed due to dilapidated conditions of the multi-tenant apartment structure and current occupation of the two mobile trailer residential structures.

An evaluation of the significance of these limitations and missing information with respect to our findings has been conducted, and where appropriate, significant data gaps are identified and discussed in the text of the report. However, it should be recognized that an evaluation of significant data gaps is based on the information available at the time of report issuance, and an evaluation of information received after the report issuance date may result in an alteration of our conclusions, recommendations, or opinions. We have no obligation to provide information obtained or discovered by us after the issuance date of the report, or to perform any additional services, regardless of whether the information would affect any conclusions, recommendations, or opinions in the report. This disclaimer specifically applies to any information that has not been provided by the client.

This report represents our service to you as of the report date and constitutes our final document; its text may not be altered after final issuance. Findings in this report are based upon the site's current utilization, information derived from the most recent reconnaissance and from other activities described herein; such information is subject to change. Certain indicators of the presence of hazardous substances or petroleum products may have been latent, inaccessible, unobservable, or not present during the most recent reconnaissance and may subsequently become observable (such as after site renovation or development). Further, these services are not to be construed as legal interpretation or advice.

1.5 Reliance

This Phase I PAS is prepared for the exclusive use and reliance of TDOT. Use or reliance by any other party is prohibited without the written authorization of TDOT and Terracon.

Reliance on the PAS by the client and all authorized parties will be subject to the terms, conditions and limitations stated in the PAS report and our Proposal, dated October 23, 2013,

with the Tennessee Department of Transportation. The limitation of liability defined in the MSA is the aggregate limit of Terracon's liability to the client and all relying parties. Continued viability of this report is subject to ASTM E 1527-13 Sections 4.6 and 4.8. If the PAS will be used by a different user (third party) than the user for whom the PAS was originally prepared, the third party must also satisfy the user's responsibilities in Section 6 of ASTM E 1527-13.

1.6 Client Provided Information

TDOT provided a Baseline Study Phase I Site Assessment of Underground Storage Tanks and Hazardous Material Sites, State Route 126, Memorial Boulevard from Center Street to Interstate 81, prepared by HMB Professional Engineers, Inc., dated March 2008. Information obtained from the *2008 Baseline Phase I Report* is included in Section 3.9.

1.6.1 Knowledge of Environmental Liens or Activity and Use Limitations (AULs)

Actual knowledge of any environmental liens or AULs encumbering the site or in connection with the site was requested from the client. This information has not been received as of the issuance date of the report, and unless notified otherwise, we assume the client is evaluating this information outside the context of this report.

1.6.2 Specialized Knowledge or Experience

Specialized knowledge or experience material to RECs in connection with the site was requested from the client. This information has not been received as of the issuance date of the report, and unless notified otherwise, we assume the client is evaluating this information outside the context of this report.

1.6.3 Significantly Lower Purchase Price

Actual knowledge of a significantly lower purchase price due to the presence of hazardous substances or petroleum products in connection with the site was requested from the client. This information has not been received as of the issuance date of the report, and unless notified otherwise, we assume the client is evaluating this information outside the context of this report.

1.6.4 Commonly Known or Reasonably Ascertainable Information

Commonly known or reasonably ascertainable information within the local community about the site that is material to RECs in connection with the site was requested from the client. This information has not been received as of the issuance date of the report, and unless notified otherwise, we assume the client is evaluating this information outside the context of this report.

1.6.5 Obvious Indicators

Information about any obvious indicators that point to the presence or likely presence of contamination at the site was requested from the client. This information has not been received as of the issuance date of the report, and unless notified otherwise, we assume the client is evaluating this information outside the context of this report.

1.6.6 Proceedings Involving the Site

Information about any proceedings involving the site was requested from the client. This information has not been received as of the issuance date of the report, and unless notified otherwise, we assume the client is evaluating this information outside the context of this report.

2.0 REGIONAL GEOLOGY/HYDROGEOLOGY

Geology/Hydrogeology		
Formation	Sevier Shale Formation	Geologic Map of Tennessee, East Sheet, dated 1966
Description	A review of published geologic information indicates that the site is underlain primarily by the Sevier Shale Formation, which is characterized by calcareous bluish-grey shale with thin limestone layers.	
Primary Aquifer	There are no defined aquifers in the Ordovician-carbonate bedrock that underlies Sullivan County. The primary pathways along which groundwater can migrate and accumulate include secondary features such as fractures and dissolution cavities within the predominately carbonate rock. The occurrence of water is typically restricted to fractures that have been enlarged by dissolution, and the quantity of water obtainable by a well is dependent upon the size and number of fractures encountered. Due to the intense faulting and folding of rocks in the region, the number of fractures can vary significantly from location to location. Domestic supplies are usually obtained from wells at depths of 50 feet or less in shale, and 100 feet or more in carbonate rock. Perched water may occur on top of the bedrock at the soil/bedrock interface. The depth to the soil/bedrock interface varies significantly in carbonate bedrock formations.	Groundwater Atlas of the United States issued by the USGS, dated 1990-1999
**Hydrogeologic Gradient*	Not verified, but previous subsurface studies at nearby locations indicate groundwater flow is to south-southwest.	

* The groundwater flow direction and the depth to shallow, unconfined groundwater, if present, would likely vary depending upon seasonal variations in rainfall and other hydrogeological features. Without the benefit of on-site groundwater monitoring wells surveyed to a datum, groundwater depth and flow direction beneath the site cannot be directly ascertained.

3.0 HISTORICAL USE INFORMATION

Terracon reviewed the following historical sources for indications of RECs. Copies of selected historical documents are included in Appendix C.

3.1 Historical Topographic Maps

Readily available historical USGS topographic maps from Environmental Data Resources, Inc. (EDR), an information services company, were reviewed to identify land development in connection with the site. Reviewed historical topographic maps are summarized below:

- Bristol, Tennessee, published 1902, scale: 1:125,000
- Mages, Tennessee, published 1935, scale: 1:48,000
- Indian Springs, Tennessee, published 1935, 1940, 1959, 1968, 1978, 1991, scale: 1:24,000

The scale of the Bristol, Tennessee, 1902 map is small; therefore, detailed information regarding the site and surrounding properties is not depicted. The site is depicted as undeveloped land with unnamed tributaries to Slougan Branch traversing the southwestern and eastern property boundaries in the 1935 historical topographic maps and the 1940, 1959, and 1968 historical topographic maps. Surrounding property is depicted as undeveloped land with scattered residential dwellings along Memorial Boulevard in the 1935 historical topographic maps and the 1940, 1959, 1968, 1978 and 1991 historical topographic maps. The site appears to be developed with three structures on the southern portion of the site on the 1978 and 1991 historical topographic maps. Topographic maps indicating the site are included in Appendix C.

3.2 Historical Aerial Photographs

Selected historical aerial photographs from EDR were reviewed at approximately 10 to 15 year intervals, if readily available, to obtain information concerning the history of development on and near the site. Evaluation of these aerials may be limited by a photo's quality and scale. Selected photographs are included in Appendix C and summarized on the following page:

- EDR, dated 1988, scale: 1" = 1,000'
- EDR, dated 1992, scale: 1" = 750'
- EDR, dated 1997, scale: 1" = 500'
- EDR, dated 2000, scale: 1" = 750'
- EDR, dated 2006, scale: 1" = 500'
- EDR, dated 2007, scale: 1" = 500'
- EDR, dated 2008, scale: 1" = 500'

- EDR, dated 2010, scale: 1" = 500'
- EDR, dated 2012, scale: 1" = 500'

The quality of the 1988 and 1992 aerial photographs do not allow details of the site and surrounding properties to be visible; however, the site does appear to be developed with multiple structures. Four structures appear to be located on the southern portion of the site on the 1997, 2000, 2006, 2007, 2008, 2010, and 2012 aerial photographs. Surrounding properties appear to consist of undeveloped land with scattered residential dwellings along Memorial Boulevard in the 1988, 1992, 1997, and 2000 aerial photographs. Indications of RECs were not identified based on a review of the available aerial photographs.

3.3 Historical City Directories

The Polk's City Directory and Johnson's City Directory listings of residences, businesses and professional entities organized both alphabetically by name and alphanumerically by street address. The directories used in this study were requested and compiled through EDR. The street address for the site was identified as 5340 Memorial Boulevard. City directories were available for review for the years 1989, 1996, 2002, 2007, and 2013.

Direction	Address/Listings from Historical City Directories
Site	**5340 Memorial Boulevard** – Residential Listings (1989); Le Bistro Lounge & Residential Listings (1996); Residential Listings (2002, 2007, 2013).
North	No listings.
East	**5352 Memorial Boulevard** – Sullivan County Educational Association (1989); Residential Listing (1996); Not Verified (2002); No Current Listing (2007); Residential Listings (2013).
South	No listings.
West	**5332 Memorial Boulevard** – Residential Listing (1989, 1996, 2002, 2007, 2013). **5300 Memorial Boulevard** – Sun Satellite Systems of Tennessee (1989); No Listing (1996); Craftmatic America Beds (2002, 2007); No Listing (2013). **5251 Memorial Boulevard** – Residential Listing (1989); No Listing (1996, 2002, 2007, 2013). **5248 Memorial Boulevard** – Residential Listing (1989); No Listing (1996, 2002, 2007, 2013). **5240 Memorial Boulevard** – Timber Steel Construction (1989, 1996); Pipe Line Supply (pipe whole) (2002); No Listing (2007, 2013). **5238 Memorial Boulevard** – Pine Productions (1989); No Listing (1996); Art-Tech Surfacing (2002, 2007); No Listing (2013).

Based on our review of available city directory listings, the site operated as residential property since the late 1980s. According to the 1996 historical city directory listing, the site operated as residential property as well as Le Bistro Lounge. City directory listings in the 2000s indicate the site operated as residential property.

3.4 Historical Fire Insurance Maps

Historical fire insurance maps produced by the Sanborn Map Company were requested from EDR to evaluate past uses and relevant characteristics of the site and surrounding properties. Based on information from EDR, Sanborn mapping for the site is not available.

3.5 Property Tax File Information

Based on a review of the State of Tennessee Property Assessment Data website, the site at 5340 Memorial Boulevard consists of one parcel of land identified as parcel 69.03 on control map 048. The site consists of 4.45 acres of land currently owned by Mr. William R. Baxter.

3.6 Title Search

At the direction of the client, a title search was not included in the scope of services for this assessment. Unless notified otherwise, we assume that the client is evaluating this information outside the scope of this report.

3.7 Environmental Liens

Environmental lien records recorded against the site were not provided by the client. At the direction of the client, performance of a review of these records was not included as part of the scope of services and unless notified otherwise, we assume that the client is evaluating this information outside the scope of this report.

3.8 Historical Interviews

The following individuals were interviewed regarding historical use of the site.

Interviewee(s)

Interviewer	Interviewee	Title	Date/Time
Marie Maher	Mr. Alan Hayes	Field Office Manager/ Johnson City TDEC Field Office	November 1, 2013 8:00 am
Marie Maher	Ms. Gena English	Owner of English Cabinet Shop	November 11, 2013 12:00 pm

Mr. Alan Hayes, P.G., Field Office Manager of the Tennessee Department of Environment and Conservation (TDEC) Johnson City Field Office was interviewed regarding his knowledge of the site and surrounding properties. Mr. Hayes, P.G. was not aware of any pending, threatened or past environmental litigation, proceedings or notices of possible violations of environmental laws or liability in connection with the site or immediately surrounding properties.

Ms. Gena English, owner of English Cabinet Shop, Inc., was interviewed in person during our site reconnaissance. Ms. English noted that the site has operated primarily as residnetial proeprty since the 1970s. Ms. English also noted that a portion of the site operated as a restaurant/lounge in the 1990s. Ms. English stated that she was not aware of any environmental issues associated with the site.

3.9 Prior Report Review

TDOT provided a Baseline Study Phase I Site Assessment of Underground Storage Tanks and Hazardous Material Sites, State Route 126, Memorial Boulevard from Center Street to Interstate 81, prepared by HMB Professional Engineers, Inc., dated March 2008. The *2008 Baseline Phase I Report* was conducted for an approximate 8.8 mile corridor of State Route 126 (Memorial Boulevard). According to the *2008 Baseline Phase I Report*, there were no identified regulated facilities located at 5340 Memorial Boulevard, or directly adjacent to 5340 Memorial Boulevard. Additional reports have not been provided by TDOT to Terracon for review.

4.0 RECORDS REVIEW

Regulatory database information was provided by EDR, a contract information services company. The purpose of the records review was to identify RECs in connection with the site. Evaluating identified regulatory facilities for potential vapor intrusion conditions was outside the scope of this assessment. Information in this section is subject to the accuracy of the data provided by the information services company and the date at which the information is updated, and the scope herein did not include confirmation of facilities listed as "unmappable" by regulatory databases.

In some of the following subsections, the words up gradient, cross gradient and down gradient refer to the topographic gradient in relation to the site. As stated previously, the groundwater flow direction and the depth to shallow groundwater, if present, would likely vary depending upon seasonal variations in rainfall and the depth to the soil/bedrock interface. Without the benefit of on-site groundwater monitoring wells surveyed to a datum, groundwater depth and flow direction beneath the site cannot be directly ascertained.

4.1 Federal and State/Tribal Databases

Listed on the following pages are the facility listings identified on federal and state/tribal databases within the ASTM-required search distances from the approximate site boundaries. Database definition, descriptions, and the database search report are included in Appendix D.

Federal and State Databases

Database	Description	Radius (Miles)	Listings
	Federal		
NPL	The NPL is the EPA's database of uncontrolled or abandoned hazardous waste facilities that have been listed for priority remedial actions under the Superfund Program.	1.0	0
NPL (Delisted)	The NPL (Delisted) refers to facilities that have been removed from the NPL.	1.0	0
CERCLIS	The CERCLIS database is a compilation of facilities which the EPA has investigated or is currently investigating for a release or threatened release of hazardous substances pursuant to the CERCLA of 1980.	0.5	0
CERCLIS/ NFRAP	CERCLIS/NFRAP refers to facilities that have been removed and archived from EPA's inventory of CERCLA sites.	0.5	0
RCRA CORRACTS/ TSD	The EPA maintains a database of RCRA facilities associated with treatment, storage, and disposal (TSD) of hazardous waste that are undergoing "corrective action." A "corrective action" order is issued when there has been a release of hazardous waste or constituents into the environment from a RCRA facility.	1.0	0
RCRA Non-CORRACTS/ TSD	The RCRA Non-CORRACTS/TSD Database is a compilation by the USEPA of facilities which report storage, transportation, treatment, or disposal of hazardous waste. Unlike the RCRA CORRACTS/TSD database, the RCRA Non-CORRACTS/TSD database does not include RCRA facilities where corrective action is required.	0.5	0
RCRA Generators	The RCRA Generators database, maintained by the EPA, lists facilities that generate hazardous waste as part of their normal business practices. Generators are listed as either large (LQG), small (SQG), or conditionally exempt (CESQG). LQG produce at least 1000 kg/month of non-acutely hazardous waste or 1 kg/month of acutely hazardous waste. SQG produce 100-1000 kg/month of non-acutely hazardous waste. CESQG are those that generate less than 100 kg/month of non-acutely hazardous waste.	0.25	0
IC / EC	A listing of sites with institutional and/or engineering controls in place. IC include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls. EC include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.	0.5	0
ERNS	The Emergency Response Notification System (ERNS) is a listing compiled by the EPA on reported releases of petroleum and hazardous substances to the air, soil and/or water.	Site	0

Database	Description	Radius (Miles)	Listings
RCRA NonGen	A listing of site that historically generated, transported, stored, treated and/or disposed of hazardous waste as defined by RCRA; however, the sites do not presently generate hazardous waste.	0.25	1
	State/Tribal		
SHWS	State-equivalent and/or Tribal-equivalent database of NPL sites.	1.0	0
SWF / LF	State and/or Tribal database of solid waste facilities located within Tennessee. The database information may include the facility name, class, operation type, area, estimated operational life, and owner.	0.5	0
LUST	State and/or Tribal database of leaking underground storage tanks in state of Tennessee.	0.5	0
LUST TRUST	State and/or Tribal database of leaking underground storage tanks in state of Tennessee that had accidental petroleum releases.	1.0	0
UST	State and/or Tribal database of registered storage tanks in the State of Tennessee which may include the owner and location of the tanks.	0.25	0
HIST UST	State and/or Tribal database of historical registered storage tanks in the State of Tennessee which may include the owner and location of the tanks.	0.25	0
IC/EC	State and/or Tribal equivalent to the Federal IC / EC database list.	0.5	0
VCP	State and/or Tribal facilities included as Voluntary Cleanup Program sites.	0.5	0
Brownfields	State and/or tribal listing of Brownfield properties addressed by Cooperative Agreement Recipients or Targeted Brownfields Assessments.	0.5	0

In addition to the above ASTM-required listings, Terracon reviewed other federal, state, local, and proprietary databases provided by the database firm. A list of the additional reviewed databases is included in the regulatory database report included in Appendix D.

The site was not identified as a regulated facility during our database search; however, two facilities (English Cabinet Shop, Inc. and 215 Fall Creek Road) were identified within the minimum prescribed search distances. Additional information is provided in the following paragraphs.

English Cabinet Shop, Inc.
The English Cabinet Shop, Inc. facility is located at 5236 Memorial Boulevard, approximately 1,500 feet northwest of the site. The English Cabinet Shop, Inc. facility is identified on the Resource Conservation and Recovery Act (RCRA) Non-Generator (Non-Gen) and the Facility Index System (FINDS) databases. According to the database search report, the English Cabinet Shop, Inc. facility does not currently generate hazardous waste. During our site and area reconnaissance, Ms. Gena English, owner of English Cabinet Shop, Inc., was interviewed. Ms. English noted that the English Cabinet Shop, Inc. faciltiy does not use hazardous materials.

Additional comments provided by Ms. English are Provided in Section 3.8. Based on the current nature of operations, the English Cabinet Shop, Inc. facility is not considered a REC in connection with the site at this time.

Tony's Small Engine Repair
The Tony's Small Engine Repair facility is located at 215 Fall Creek Road, south of the site. The Tony's Small Engine Repair facility is identified on the Unites States Historical Automobile Station (US HIST AUTO STAT) database. Based on our site and area reconnaissance, this facility was identified approximately 2,000 feet down-gradient from the site and is no longer in commercial operation. Based on proximity and topographic relationship to the site, the Tony's Small Engine Repair facility is not considered a REC in connection with the site at this time.

Unmapped facilities are those that do not contain sufficient address or location information to evaluate the facility listing locations relative to the site. The report listed 82 facilities in the unmapped section. Determining the location of unmapped facilities is beyond the scope of this assessment; however, none of these facilities appeared to be present on the site at the time of our site reconnaissance. These facilities are listed in the database report in Appendix D.

4.2 Local Agency Inquiries

4.2.1 Health Department/Environmental Division

The Sullivan County Health Department (SCHD), Environmental Health Division was contacted by telephone regarding environmental records or information indicating environmental concerns for the site. The SCHD representative contacted indicated that she was not aware of any environmental concerns associated with the site.

4.2.2 Fire Department

The Kingsport Fire Department was contacted by telephone regarding environmental records or information indicating environmental concerns for the site. At the issuance of this report a response had not been received from the Kingsport Fire Department.

4.2.3 Local/Regional Pollution Control Agency

See Section 4.2.1.

4.2.4 Local/Regional Water Quality Agency

According to the database search report, an unnamed tributary to Slougan Branch traverses the southwestern portion of the site. The Kingsport Public Works office was contacted by phone

regarding environmental records for the site. Mr. Ryan Reynolds of the Kingsport Public Works, is unaware of any significant surface or groundwater water quality issues on or near the site.

5.0 SITE RECONNAISSANCE

5.1 General Site Information

Information contained in this section is based on a visual reconnaissance conducted while walking through the site and the accessible interior areas of structures, if any, located on the site. Figure 2 in Appendix A depicts the site. Photo documentation of the site at the time of the visual reconnaissance is provided in Appendix E. Credentials of the individuals planning and conducting the site visit are included in Appendix F.

General Site Information

Site Reconnaissance	
Field Personnel	Marie Maher, P.G.
Reconnaissance Date	November 5, 2013
Weather Conditions	Partly cloudy, approximately 65° F
Site Contact/Title	Unaccompanied
Site Description	
Site Name	Riviera Apartment Complex
Site Location/Address	5340 Memorial Boulevard in Kingsport, Sullivan County, Tennessee
Land Area	Approximately 4.45 acres
Site Improvements	The southern portion of the site is improved with a multi-tenant apartment structure, a commercial sign, two outbuildings used for maintenance and storage, and two mobile trailer structures. Currently, the two mobile trailer structures operate as residential dwellings. The multi-tenant apartment structure is unoccupied. The remaining portions of the site consist of wooded and grassed land with approximately 300 feet of road frontage along Memorial Boulevard (U.S. Highway 126).
Zoning	Not specified
Site Topographic Relief	Varies, but in general to the south-southwest toward an unnamed tributary to Slougan Branch.
Site Utilities	
Electricity	Kingsport Utility Services
Drinking Water	City of Kingsport
Natural Gas	East Tennessee Natural Gas Co.

5.2 General Description of Site, Occupants and Operations

The project includes the widening of lanes along Memorial Boulevard (U.S. Highway 126) resulting in the expansion of the associated TDOT R.O.W. in Kingsport, Sullivan County, Tennessee. The site assessed during this investigation consists of the 4.45-acre parcel located at 5340 Memorial Boulevard. At the time of our site reconnaissance, the southern portion of the site was developed with a multi-tenant apartment structure, two outbuildings used for storage and maintenance, and two mobile trailer structures currently occupied with residences. A commercial sign reading “Riviera Apartments” and an unnamed tributary to Slougan Branch were observed along the southwestern portion of the site, adjacent to Memorial Boulevard (U.S. Highway 126). The remaining portions of the site consist of wooded and grassed land. The purpose of this study was to identify RECs within the site limits, specifically the proposed R.O.W. expansion area which is along the southwestern boundary of this parcel.

5.3 Site Observations

The following table summarizes site observations and interviews. Affirmative responses (designated by an “X”) are discussed in more detail following the table.

Site Characteristics

Category	Item or Feature	Response
Site Operations, Processes, and Equipment	Emergency generators	
	Elevators	
	Air compressors	X
	Hydraulic lifts	
	Dry cleaning	
	Photo processing	
	Laboratory hoods and/or incinerators	
	Waste treatment systems and/or water treatment systems	
	Heating and/or cooling systems	X
	Other processes or equipment	
Aboveground Chemical or Waste Storage	Aboveground storage tanks	
	Drums, barrels and/or containers ≥ 5 gallons	X
	MSDS	

Site Characteristics (cont.)

Category	Item or Feature	Response
Underground Chemical or Waste Storage, Drainage or Collection Systems	Underground storage tanks or ancillary UST equipment	
	Sumps, cisterns, catch basins and/or dry wells	
	Grease traps	
	Septic tanks and/or leach fields	
	Oil/water separators	
	Pipeline markers	
	Interior floor drains	
Electrical Transformers/ PCBs	Pad or pole mounted transformers and/or capacitors	X
	Other equipment	
Releases or Potential Releases	Stressed vegetation	
	Stained soil	
	Stained pavement or similar surface	X
	Leachate and/or waste seeps	
	Trash, debris and/or other waste materials	X
	Dumping or disposal areas	
	Construction/demolition debris and/or dumped fill dirt	
	Surface water discoloration, odor, sheen, and/or free floating product	
	Strong, pungent or noxious odors	
	Exterior pipe discharges and/or other effluent discharges	
Other Notable Site Features	Surface water bodies	X
	Quarries or pits	
	Wells	

The features checked in the above table are adjacent to TDOT's planned R.O.W. acquisition. Further discussion is provided on the following pages.

Site Operations, Processes, and Equipment

Air Compressors

During our site and area reconnaissance, a residential-grade air compressor was observed in one of the outbuildings on the southern portion of the site. Based on our observations, the air compressor is not considered a REC in connection with the site at this time.

Heating and/or Cooling Systems

The multi-tenant apartment structure appeared to utilize a package heating, ventilation, and air conditioning (HVAC) system located northeast of the structure with interior and exterior components. Based on our observations during our site reconnaissance, the HVAC equipment is not considered a REC at this time.

Above Ground Chemical Waste or Storage

Drums, Barrels and/or Containers ≥ 5 Gallons

During our site and area reconnaissance, several 5-gallon capacity containers were observed in one of the outbuildings on the southern portion of the site. Based on our observations, the containers did not appear to be leaking, or contain hazardous materials; therefore, the containers are not considered RECs in connection with the site at this time.

Electrical Transformers/PCBs

Transformers and/or capacitors

One pole-mounted transformer, owned and serviced by the Kingsport Utility Services was observed along the western property line, adjacent to Memorial Boulevard (U.S. Highway 126); however, no information with regard to PCB content of the transformer fluids was observed. Transformers contain mineral oil which may contain minor amounts of PCB and could be considered “PCB contaminated” (PCB content of 50-500 ppm).

The Kingsport Utility Services maintains responsibility for the transformer, and if the transformer were “PCB contaminated,” the utility company is not required to replace the transformer fluids until a release is identified. However, no evidence of a current or prior release was observed in the vicinity of the electrical equipment during our site reconnaissance. The pole-mounted transformer is not considered a REC at this time.

Releases or Potential Releases

Stained Pavement or Similar Surfaces
The observed stained pavement is located in the parking lot areas and appeared to be a *de minimis* condition. Based on our observations during our site reconnaissance, the stained pavement is not considered a REC at this time.

Trash, debris and/or other waste materials
The site's non-hazardous waste dumpster was observed on the southern portion of the site. The dumpster is owned and serviced by Waste Connections. Evidence of staining, noxious odors or hazardous waste disposal was not observed in the vicinity of the on-site dumpsters. The waste dumpster is not considered a REC at this time.

Other Notable Site Features

Surface Water Bodies
An unnamed tributary to Slougan Branch was observed along the southwestern portion of the site, adjacent to Memorial Boulevard (U.S. Highway 126). Mr. Reynolds, of the Kingsport Public Works, is unaware of any significant surface or groundwater water quality issues on or near the site. No discoloration or odors were observed in the vicinity of the tributary at the time of our site and area reconnaissance. Based on our site observations, the unnamed tributary to Slougan Branch is not considered a REC in connection with the site at this time.

5.4 Interviews Conducted

The following individuals were interviewed regarding the presence or absence of the features listed in the table above.

Interviewee(s)

Interviewer	Interviewee	Title	Date/Time
Marie Maher, P.G.	Mr. Ryan Reynolds	Kingsport Public Works	November 6, 2013 9:30 am

Information obtained from the above-listed interviewees is discussed in Sections 4.2.4.

6.0 PROJECT IMPACTS

6.1 Site Rankings

A hazardous materials rating system was used to rate the facilities that were identified as being potential RECs to the site. The ratings include: NO, LOW, MEDIUM and HIGH, and are generally defined as follows:

NO: A review of all available information finds there is nothing to indicate that the facility is a REC to the site. It is possible that contaminants were handled on the property; however, based on a review of available information, the facility does not appear to constitute a REC to the site.

LOW: The former or current facility has a hazardous waste generator identification number, or deals with hazardous materials; however, based on all available information, there is no reason to believe that there would be any involvement with contamination in relation to the site. This is the lowest possible rating a gasoline station operating within current regulations can receive. Some facilities designated with a LOW rating should be reevaluated during the design phase.

MEDIUM: After a review of all available information, indications are found (visual observations, reports, violation notices, consent orders, etc.) that identify known soil and/or groundwater contamination and that the problem does not need remediation, is currently being remediated, or that continued monitoring is required. The complete details of remediation requirements are important to determine what the TDOT must do if the property were to be acquired. A recommendation should be made on each property falling into this category to its acceptability for use within the proposed project, what actions might be required if the property is acquired, and the possible alternatives if there is a need to avoid the property.

HIGH: After a review of all available information, there is a potential for contamination problems. Further assessment will be required after alignment selection to determine the actual presence and/or levels of contamination and the need for remedial action. A recommendation must be included for what further assessment is required. Conducting the actual Contamination Assessment is not expected to begin until alignment is defined; however, circumstances may require additional screening assessments (i.e., collecting soil or water samples for laboratory analysis necessary to determine the presence and/or levels of contaminants) to begin earlier. Properties previously used as gasoline station and which have not been evaluated or assessed would probably receive this rating.

6.2 Potential Contamination Sites

Two nearby facilities were identified and evaluated for potential hazardous materials and petroleum involvement. The facilities were identified based on visual observations and/or other

resources available for review. The facilities are listed and described in the table below, and are also indicated on Figure 2. Additional discussion regarding the facilities listed below is provided after the table.

Potential Contamination Sites

Site No.	Site Name, Location, and Identification Numbers	Tax Map No., Parcel ID	Database Listings	Storage Tank(s) Currently In Service	Potential Contaminant Parameters	Proposed Alignment		
						Right-of-way Required for Expansion	Distance from Proposed Right-of-way	Risk Evaluation Rating
1	English Cabinet Shop, Inc.	Map 048; Parcel 69.30	RCRA-NonGen	None Listed	No Contaminant Identified	No	Approximately 50 feet from parcel boundary to R.O.W.	NO
2	Tony's Small Engine Repair	Map 048; Parcel 052.00	HIST AUTO STAT	None Listed	No Contaminant Identified	No	Approximately 1,250 feet from parcel boundary to R.O.W.	NO

Site No. 1 – English Cabinet Shop, Inc., 5236 Memorial Boulevard

The English Cabinet Shop, Inc. facility is located at 5236 Memorial Boulevard, approximately 1,500 feet northwest of the site. The English Cabinet Shop, Inc. facility is identified on the RCRA-NonGen and the FINDS databases. According to the database search report, the English Cabinet Shop, Inc. facility does not currently generate hazardous waste. Based on the current nature of operation, the English Cabinet Shop, Inc. facility is not considered a REC in connection with the site at this time. Therefore, the facility was assigned a risk rating of NO.

Site No. 2 – Tony's Small Engine Repair, 215 Fall Creek Road

The Tony's Small Engine Repair facility is located at 215 Fall Creek Road, approximately 1,250 feet south of the site. The Tony's Small Engine Repair facility is identified on the Unites States Historical Automobile Station (US HIST AUTO STAT) database. Based on our site and area reconnaissance, this facility is located approximately 2,000 feet down-gradient from the site and is no longer in commercial operation. Based on proximity and topographic relationship to the site, the Tony's Small Engine Repair facility is not considered a REC in connection with the site at this time. Therefore, the facility was assigned a risk rating of NO.

7.0 ADDITIONAL SERVICES

Per the agreed scope of services specified in the proposal, no additional services (e.g., asbestos sampling, lead-based paint sampling, wetlands evaluation, radon testing, vapor intrusion, etc.) were conducted.

8.0 FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS

8.1 Findings

This Phase I Preliminary Assessment Study (PAS) was performed in general accordance with the TDOT Environmental Procedures Manual, dated April 2007, our Proposal, dated October 23, 2013, and consistent with the procedures included in ASTM E 1527-13, Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process. The PAS was conducted under the supervision or responsible charge of Travis Stamper, Environmental Professional. Marie A. Maher, P.G. performed the site reconnaissance on November 5, 2013.

A cursory summary of findings is provided below. It should be recognized that details were not included or fully developed in this section, and the report must be read in its entirety for a comprehensive understanding of the items contained herein.

- The project includes the widening of lanes along Memorial Boulevard (U.S. Highway 126) resulting in the expansion of the associated TDOT R.O.W. in Kingsport, Sullivan County, Tennessee. The site assessed during this investigation consists of the 4.45-acre parcel located at 5340 Memorial Boulevard. At the time of our site reconnaissance, the southern portion of the site was developed with a multi-tenant apartment structure, two outbuildings used for storage and maintenance, and two mobile trailer structures currently occupied with residences. A commercial sign reading “Riviera Apartments” and an unnamed tributary to Slougan Branch were observed along the southwestern portion of the site, adjacent to Memorial Boulevard (U.S. Highway 126). The remaining portions of the site consist of wooded and grassed land. The purpose of this study was to identify RECs within the site limits, specifically the proposed R.O.W. expansion area which is along the west boundary of this parcel.

- At the time of the Terracon site reconnaissance, an air compressor, HVAC system, 5-gallon capacity containers, one pole-mounted transformer, stained pavement, a non-hazardous waste dumpster, and an unnamed tributary to Slougan Branch were observed on site. Based on our observations during our site and area reconnaissance, these items are not considered RECs in connection with the site at this time.

- Based on historical information reviewed as part of this assessment, the site appears to have been undeveloped land until the 1970s. In the 1970s, the site was developed with the present day structures. Based on our review of historical city directories, the majority of the site has operated as residential land since its development in the 1970s. A portion of the site operated as a lounge/restaurant in the 1990s.

- Review of the regulatory database revealed two facilities (English Cabinets Shop, Inc. and Tony's Small Engine Repair) within the specified search radius of the site. Based on information gathered during preparation of this report, these facilities are not considered RECs in connection with the site at this time.

- A hazardous materials rating system was used to rate facilities that were identified as being potential RECs to the site. Two facilities, English Cabinets Shop, Inc. and Tony's Small Engine Repair, were identified as being located within the specified search distance of the site. Both facilities were assigned a risk rating of NO.

- Based on the authorized scope of services, no additional services (e.g., asbestos sampling, lead-based paint sampling, wetlands evaluation, radon testing, etc.) were conducted.

8.2 Conclusions and Recommendations

We have performed a Phase I PAS consistent with the procedures included in ASTM Practice E 1527-13 of the site located at 5340 Memorial Boulevard in Kingsport, Sullivan County, Tennessee. RECs which would warrant further investigation were not identified in connection with the property. Based on the scope of services, limitations, and findings of this assessment, Terracon did not identified RECs in connection with the site; therefore, further investigation of the site is not recommended at this time.

9.0 DECLARATION

I, Travis Stamper, declare that, to the best of my professional knowledge and belief, I meet the definition of Environmental Professional as defined in Section 312.10 of 40 CFR 312; and I have the specific qualifications based on education, training, and experience to assess a site of the nature, history, and setting of the subject site. I have developed and performed the All Appropriate Inquiries in conformance with the standards and practice set forth in 40 CFR Part 312.

APPENDIX A

Figure 1 – Topographic Map, Figure 2 – Site Map

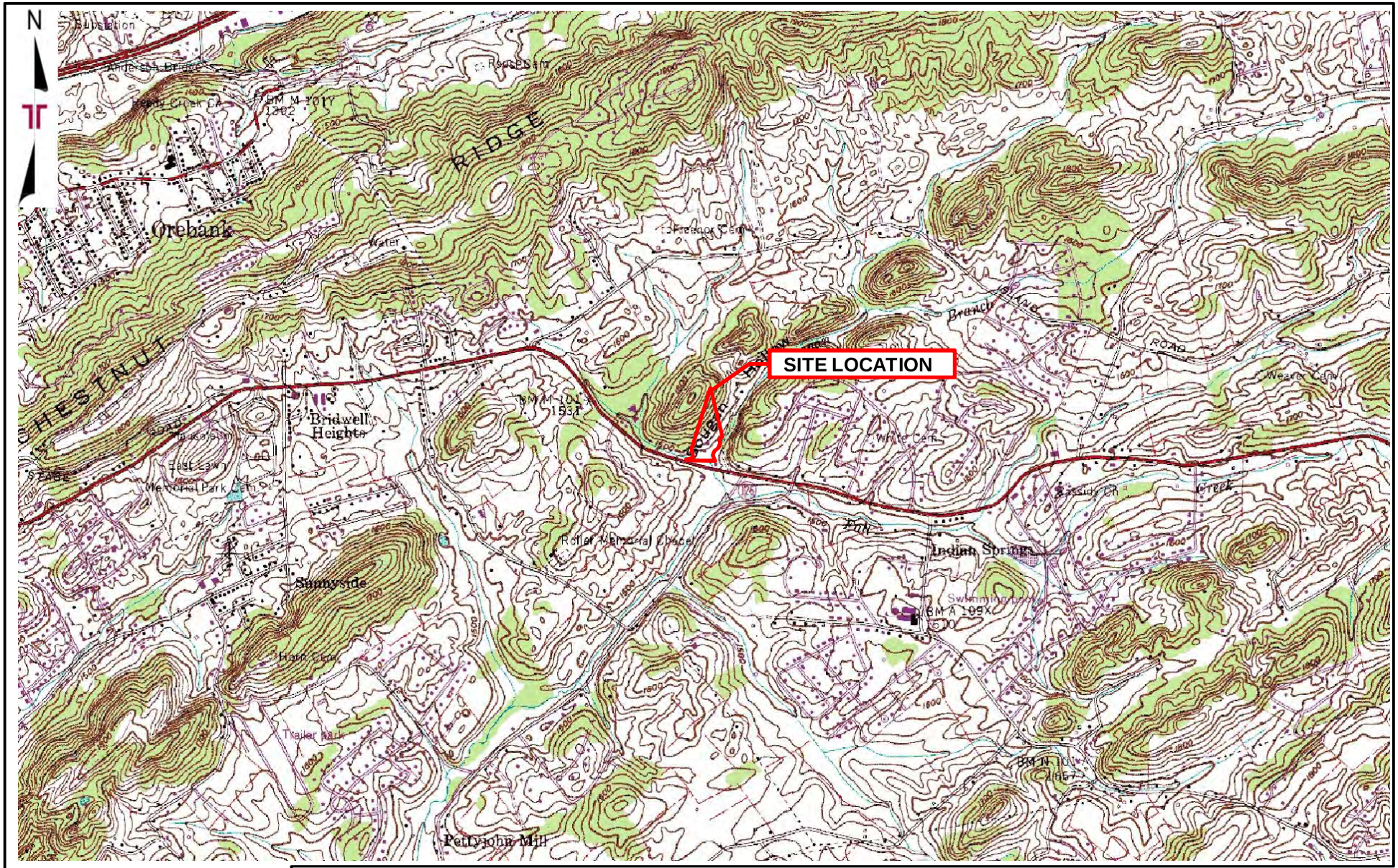


DIAGRAM IS FOR GENERAL LOCATION ONLY, AND IS NOT INTENDED FOR CONSTRUCTION PURPOSES

TOPOGRAPHIC MAP IMAGE COURTESY OF THE U.S. GEOLOGICAL SURVEY QUADRANGLES INCLUDE: INDIAN SPRINGS, TN (1/1/1991).

Project Manager:	MAM
Drawn by:	MAM
Checked by:	MAM
Approved by:	TS

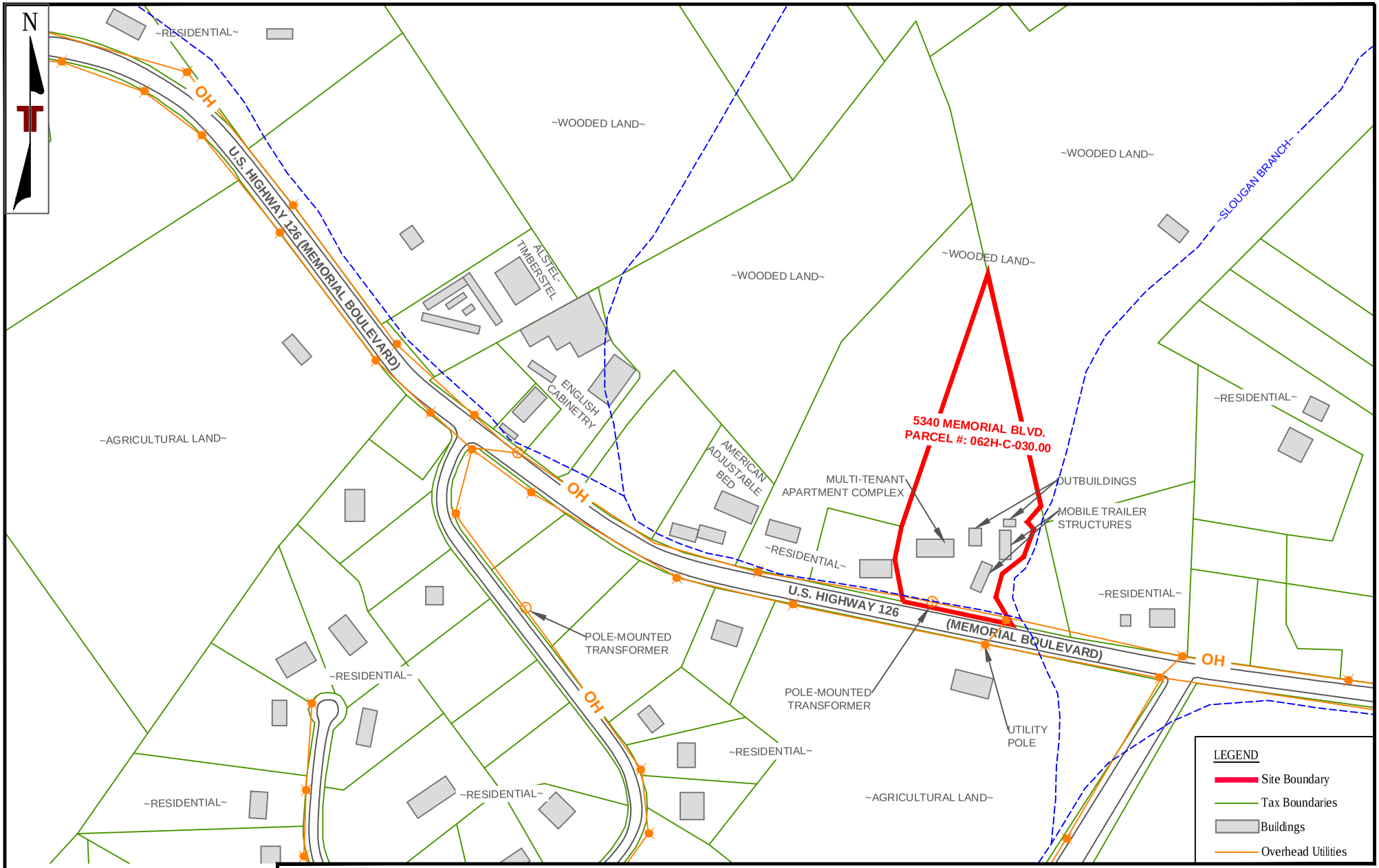
Project No.	E2137131.T2
Scale:	1" = ~24,000'
File Name:	E2137131.T2
Date:	11/11/2013

Terracon
Consulting Engineers & Scientists
51 Lost Mound Drive Chattanooga, Tennessee 37406
PH. (423) 499-6111 FAX. (423) 499-8099

Topographic Map

Phase I Preliminary Assessment Study
Riviera Apartment Complex
5340 Memorial Boulevard
Kingsport, Sullivan County, Tennessee

Figure
1



Note:

Site Map image derived from Sullivan County Tax Map Information.

0 200 400

1" = 400'

Project Mngr:	MAM
Drawn By:	MAM
Checked By:	MAM
Approved By:	DEW

Project No.	E2137131
Scale:	AS SHOWN
File No.	E2137131
Date:	11/11/13

Terracon
Consulting Engineers and Scientists
51 Lost Mound Dr. Suite 135 Chattanooga, TN 37406
PH. (423) 499-6111 FAX. (423) 499-8099

Site Diagram

Phase I Preliminary Assessment Study

Riviera Apartment Complex

5340 Memorial Boulevard

Kingsport, Sullivan County, Tennessee

Figure 2

APPENDIX B

Description of Terms and Acronyms

Description of Selected General Terms and Acronyms

Term/Acronym	*Description*
ACM	Asbestos Containing Material. Asbestos is a naturally occurring mineral, three varieties of which (chrysotile, amosite, crocidolite) have been commonly used as fireproofing or binding agents in construction materials. Exposure to asbestos, as well as ACM, has been documented to cause lung diseases including asbestosis (scarring of the lung), lung cancer and mesothelioma (a cancer of the lung lining). Regulatory agencies have generally defined ACM as a material containing greater that one (1) percent asbestos, however some states (e.g. California) define ACM as materials having 0.1% asbestos. In order to define a homogenous material as non-ACM, a minimum number of samples must be collected from the material dependent upon its type and quantity. Homogenous materials defined as non-ACM must either have 1) no asbestos identified in all of its samples or 2) an identified asbestos concentration below the appropriate regulatory threshold. Asbestos concentrations are generally determined using polarized light microscopy or transmission electron microscopy. Point counting is an analytical method to statistically quantify the percentage of asbestos in a sample. The asbestos component of ACM may either be friable or non-friable. Friable materials, when dry, can be crumbled, pulverized, or reduced to powder by hand pressure and have a higher potential for a fiber release than non-friable ACM. Non-friable ACM are materials that are firmly bound in a matrix by plastic, cement, etc. and, if handled carefully, will not become friable. Federal and state regulations require that either all suspect building materials be presumed ACM or that an asbestos survey be performed prior to renovation, dismantling, demolition, or other activities that may disturb potential ACM. Notifications are required prior to demolition and/or renovation activities that may impact the condition of ACM in a building. ACM removal may be required if the ACM is likely to be disturbed or damaged during the demolition or renovation. Abatement of friable or potentially friable ACM must be performed by a licensed abatement contractor in accordance with state rules and NESHAP. Additionally, OSHA regulations for work classification, worker training and worker protection will apply.
AHERA	Asbestos Hazard Emergency Response Act
AST	Above Ground Storage Tanks. ASTs are generally described as storage tanks less than 10% of which are below ground (i.e., buried). Tanks located in a basement, but not buried, are also considered ASTs. Whether, and the extent to which, an AST is regulated, is determined on a case-by-case basis and depends upon tank size, its contents and the jurisdiction of its location.
BGS	Below Ground Surface
BTEX	Benzene, Toluene, Ethylbenzene, and Xylenes. BTEX are VOC components found in gasoline and commonly used as analytical indicators of a petroleum hydrocarbon release.
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act (a.k.a. Superfund). CERCLA is the federal act that regulates abandoned or uncontrolled hazardous waste sites. Under this Act, joint and several liability may be imposed on potentially responsible parties for cleanup-related costs.
CERCLIS	Comprehensive Environmental Response, Compensation and Liability Information System. An EPA compilation of sites having suspected or actual releases of hazardous substances to the environment. CERCLIS also contains information on site inspections, preliminary assessments and remediation of hazardous waste sites. These sites are typically reported to EPA by states and municipalities or by third parties pursuant to CERCLA Section 103.
CESQG	Conditionally exempt small quantity generators.
CFR	Code of Federal Regulations
DOT	U.S. Department of Transportation
EPA	U.S. Environmental Protection Agency
ERNS	Emergency Response Notification System. An EPA-maintained federal database which stores information on notifications of oil discharges and hazardous substance releases in quantities greater than the applicable reportable quantity under CERCLA. ERNS is a cooperative data-sharing effort between EPA, DOT, and the National Response Center.
PAS	Environmental Site Assessment

Description of Terms and Acronyms (cont.)

FRP	Fiberglass Reinforced Plastic
Hazardous Substance	As defined under CERCLA, this is (A) any substance designated pursuant to section 1321(b)(2)(A) of Title 33, (B) any element, compound, mixture, solution, or substance designated pursuant to section 9602 of this title; (C) any hazardous waste having characteristics identified under or listed pursuant to section 3001 of the Solid Waste Disposal Act (with some exclusions); (D) any toxic pollutant listed under section 1317(a) of Title 33; (E) any hazardous air pollutant listed under section 112 of the Clear Air Act; and (F) any imminently hazardous chemical substance or mixture with respect to which the EPA Administrator has taken action under section 2606 of Title 15. This term does not include petroleum, including crude oil or any fraction thereof which is not otherwise listed as a hazardous substance under subparagraphs (A) through (F) above, and the term include natural gas, or synthetic gas usable for fuel (or mixtures of natural gas and such synthetic gas).
Hazardous Waste	This is defined as having characteristics identified or listed under section 3001 of the Solid Waste Disposal Act (with some exceptions). RCRA, as amended by the Solid Waste Disposal Act of 1980, defines this term as a "solid waste, or combination of solid wastes, which because of its quantity, concentration, or physical, chemical, or infectious characteristics may (A) cause, or significantly contribute to an increase in mortality or an increase in serious irreversible, or incapacitating reversible illness; or (B) pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, or disposed of, or otherwise managed."
ILP	Innocent Landowner/Operator Program
LQG	Large quantity generators.
LUST	Leaking Underground Storage Tank. This is a federal term set forth under RCRA for leaking USTs. Some states also utilize this term.
MCL	Maximum Contaminant Level. This Safe Drinking Water concept (and also used by many states as a ground water cleanup criteria) refers to the limit on drinking water contamination that determines whether a supplier can deliver water from a specific source without treatment.
MSDS	Material Safety Data Sheets. Written/printed forms prepared by chemical manufacturers, importers and employers which identify the physical and chemical traits of hazardous chemicals under OSHA's Hazard Communication Standard.
NESHAP	National Emissions Standard for Hazardous Air Pollutants (Federal Clean Air Act). This part of the Clean Air Act regulates emissions of hazardous air pollutants.
NFRAP	Facilities where there is "No Further Remedial Action Planned," as more particularly described under the Records Review section of this report.
NOV	Notice of Violation. A notice of violation or similar citation issued to an entity, company or individual by a state or federal regulatory body indicating a violation of applicable rule or regulations has been identified.
NPDES	National Pollutant Discharge Elimination System (Clean Water Act). The federal permit system for discharges of polluted water.
NPL	National Priorities List, as more particularly described under the Records Review section of this report.
OSHA	Occupational Safety and Health Administration or Occupational Safety and Health Act
PACM	Presumed Asbestos-Containing Material. A material that is suspected of containing or presumed to contain asbestos but which has not been analyzed to confirm the presence or absence of asbestos.
PCB	Polychlorinated Biphenyl. A halogenated organic compound commonly in the form of a viscous liquid or resin, a flowing yellow oil, or a waxy solid. This compound was historically used as dielectric fluid in electrical equipment (such as electrical transformers and capacitors, electrical ballasts, hydraulic and heat transfer fluids), and for numerous heat and fire sensitive applications. PCB was preferred due to its durability, stability (even at high temperatures), good chemical resistance, low volatility, flammability, and conductivity. PCBs, however, do not break down in the environment and are classified by the EPA as a suspected carcinogen. 1978 regulations, under the Toxic Substances Control Act, prohibit manufacturing of PCB-containing equipment; however, some of this equipment may still be in use today.
pCi/l	Pico Curies per Liter of Air. Unit of measurement for Radon and similar radioactive materials.
PLM	Polarized Light Microscopy (see ACM section of the report, if included in the scope of services)
PST	Petroleum Storage Tank. An AST or UST that contains a petroleum product.

Description of Terms and Acronyms (cont.)

Radon	A radioactive gas resulting from radioactive decay of naturally-occurring radioactive materials in rocks and soils containing uranium, granite, shale, phosphate, and pitchblende. Radon concentrations are measured in Pico Curies per Liter of Air. Exposure to elevated levels of radon creates a risk of lung cancer; this risk generally increases as the level of radon and the duration of exposure increases. Outdoors, radon is diluted to such low concentrations that it usually does not present a health concern. However, radon can accumulate in building basements or similar enclosed spaces to levels that can pose a risk to human health. Indoor radon concentrations depend primarily upon the building's construction, design and the concentration of radon in the underlying soil and ground water. The EPA recommended annual average indoor "action level" concentration for residential structures is 4.0 pCi/l.
RCRA	Resource Conservation and Recovery Act. Federal act regulating solid and hazardous wastes from point of generation to time of disposal ('cradle to grave"). 42 U.S.C. 6901 et seq.
RCRA Generators	The RCRA generators list is part of the RCRIS database maintained by EPA and lists facilities that generate hazardous waste as part of their normal business operations, as more particularly defined under Section 5.0 of this report.
RCRA CORRACTS/TSDs	The USEPA maintains a database of RCRA facilities associated with treatment, storage, and disposal (TSD) of hazardous materials which are undergoing "corrective action". A "corrective action" order is issued when there is a release of hazardous waste or constituents into the environment from a RCRA facility.
RCRA Non-CORRACTS/TSDs	The RCRA Non-CORRACTS/TSD Database is a compilation by the USEPA of facilities which report storage, transportation, treatment, or disposal of hazardous waste. Unlike the RCRA CORRACTS/TSD database, the RCRA Non-CORRACTS/TSD database does not include RCRA facilities where corrective action is required.
RCRA Violators List	RAATS. RCRA Administrative Actions Taken. RAATS information is now contained in the RCRIS database and includes records of administrative enforcement actions against facilities for noncompliance.
RCRIS	Resource Conservation and Recovery Information System, as defined in the Records Review section of this report.
REC	Recognized Environmental Conditions" are defined by ASTM E1527-13 as "the presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, a past release, or a material threat of release of any hazardous substances or petroleum products into structures on the property or into the ground, ground water, or surface water of the property. The term includes hazardous substances or petroleum products even under conditions of compliance with laws. The term is not intended to include *de minimis* conditions that generally do not present a threat to human health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies."
SCL	State "CERCLIS" List (see SPL /State Priority List, below).
SPCC	Spill Prevention, Control and Countermeasures. SPCC plans are required under federal law (Clean Water Act and Oil Pollution Act) for any facility storing petroleum in tanks and/or containers of 55-gallons or more that when taken in aggregate exceed 1,320 gallons. SPCC plans are also required for facilities with underground petroleum storage tanks with capacities of over 42,000 gallons. Many states have similar spill prevention programs, which may have additional requirements.
SPL	State Priority List. State list of confirmed sites having contamination in which the state is actively involved in clean up activities or is actively pursuing potentially responsible parties for clean up. Sometimes referred to as a State "CERCLIS" List.
SQG	Small quantity generators.
SWF	Solid Waste Facility List. A Vista Information Solutions, Inc. database of solid waste facilities listed by state.
TPH	Total Petroleum Hydrocarbons
TRI	Toxic Release Inventory. Routine EPA report on releases of toxic chemicals to the environment based upon information submitted by entities subject to reporting under the Emergency Planning and Community Right to Know Act.
TSCA	Toxic Substances Control Act. A federal law regulating manufacture, import, processing and distribution of chemical substances not specifically regulated by other federal laws (such as asbestos, PCBs, lead-based paint and radon). 15 U.S.C 2601 et seq.
USACE	United States Army Corps of Engineers
USC	United States Code
USGS	United States Geological Survey

Description of Terms and Acronyms (cont.)

USNRCS	United States Department of Agriculture-Natural Resource Conservation Service
UST	Underground Storage Tank. Most federal and state regulations, as well as ASTM E1527-13, define this as any tank, incl., underground piping connected to the tank, that is or has been used to contain hazardous substances or petroleum products and the volume of which is 10% or more beneath the surface of the ground (i.e., buried).
VCP	Voluntary Cleanup Program
VOC	Volatile Organic Compound
Wetlands	Areas that are typically saturated with surface or ground water that creates an environment supportive of wetland vegetation (i.e., swamps, marshes, bogs). The Corps of Engineers Wetlands Delineation Manual (Technical Report Y-87-1) defines wetlands as areas inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. For an area to be considered a jurisdictional wetland, it must meet the following criteria: more than 50 percent of the dominant plant species must be categorized as Obligate, Facultative Wetland, or Facultative on lists of plant species that occur in wetlands; the soil must be hydric; and, wetland hydrology must be present. The federal Clean Water Act which regulates "waters of the US," also regulates wetlands, a program jointly administered by the USACE and the EPA. Waters of the U.S. are defined as: (1) waters used in interstate or foreign commerce, including all waters subject to the ebb and flow of tides; (2) all interstate waters including interstate wetlands; (3) all other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, etc., which the use, degradation, or destruction could affect interstate/ foreign commerce; (4) all impoundments of waters otherwise defined as waters of the U. S., (5) tributaries of waters identified in 1 through 4 above; (6) the territorial seas; and (7) wetlands adjacent to waters identified in 1 through 6 above. Only the USACE has the authority to make a final wetlands jurisdictional determination.

APPENDIX C

Historical Documentation

Kingsport, TN 37664

Inquiry Number: 3770036.5

October 29, 2013

The EDR Aerial Photo Decade Package

EDR® Environmental Data Resources Inc

440 Wheelers Farms Road
Milford, CT 06461
800.352.0050
www.edrnet.com

EDR Aerial Photo Decade Package

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with any questions or comments.

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Date EDR Searched Historical Sources:

Aerial Photography October 29, 2013

Target Property:

Kingsport, TN 37664

Year	***Scale***	***Details***	***Source***
1988	Aerial Photograph. Scale: 1"=1000'	Panel #: 36082-E4, Indian Springs, TN;/Flight Date: May 27, 1988	EDR
1992	Aerial Photograph. Scale: 1"=750'	Panel #: 36082-E4, Indian Springs, TN;/Flight Date: April 13, 1992	EDR
1997	Aerial Photograph. Scale: 1"=500'	Panel #: 36082-E4, Indian Springs, TN;/DOQQ - acquisition dates: March 16, 1997	EDR
2000	Aerial Photograph. Scale: 1"=750'	Panel #: 36082-E4, Indian Springs, TN;/Flight Date: April 05, 2000	EDR
2006	Aerial Photograph. Scale: 1"=500'	Panel #: 36082-E4, Indian Springs, TN;/Flight Year: 2006	EDR
2007	Aerial Photograph. Scale: 1"=500'	Panel #: 36082-E4, Indian Springs, TN;/Flight Year: 2007	EDR
2008	Aerial Photograph. Scale: 1"=500'	Panel #: 36082-E4, Indian Springs, TN;/Flight Year: 2008	EDR
2010	Aerial Photograph. Scale: 1"=500'	Panel #: 36082-E4, Indian Springs, TN;/Flight Year: 2010	EDR
2012	Aerial Photograph. Scale: 1"=500'	Panel #: 36082-E4, Indian Springs, TN;/Flight Year: 2012	EDR


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SITE
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= 750'
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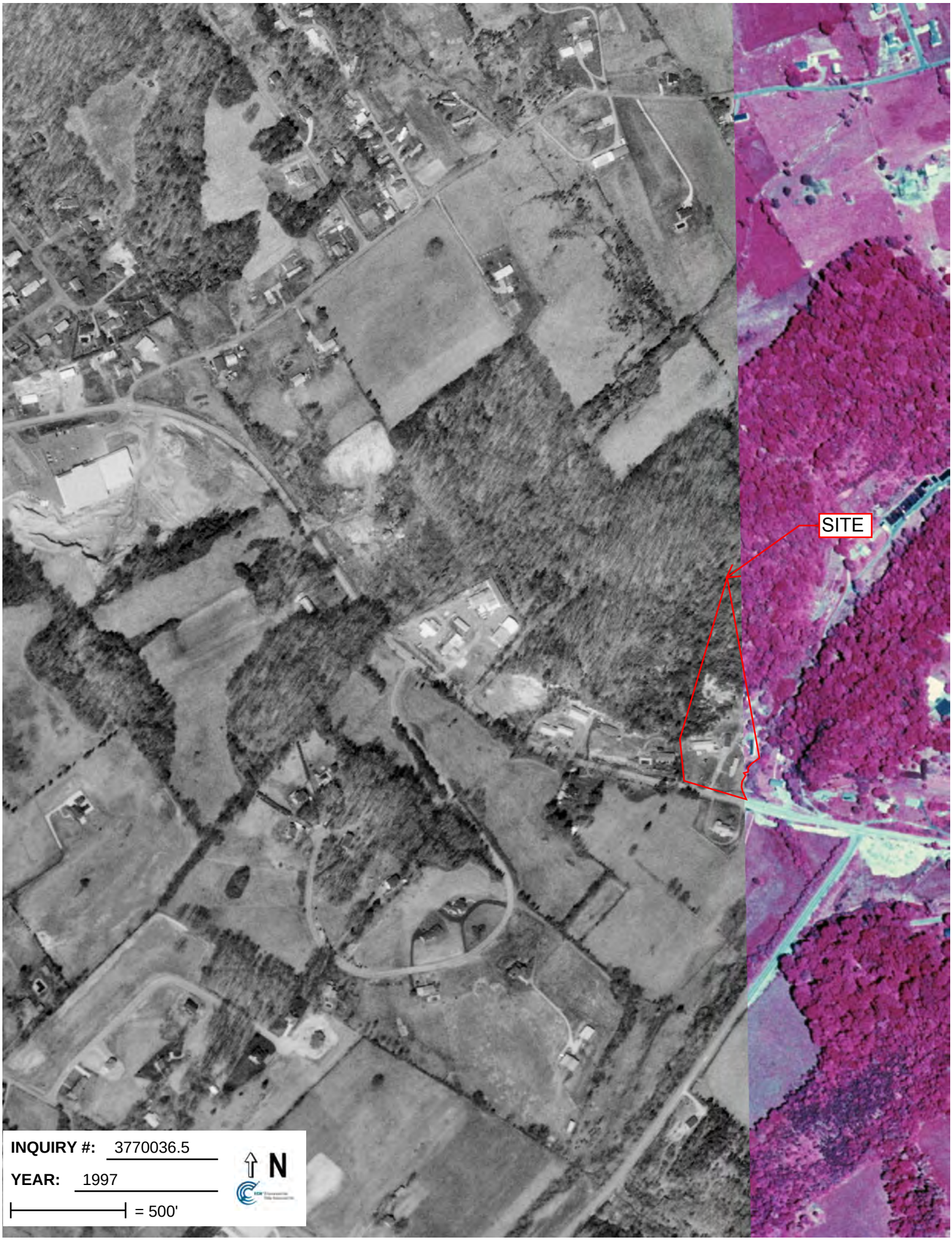
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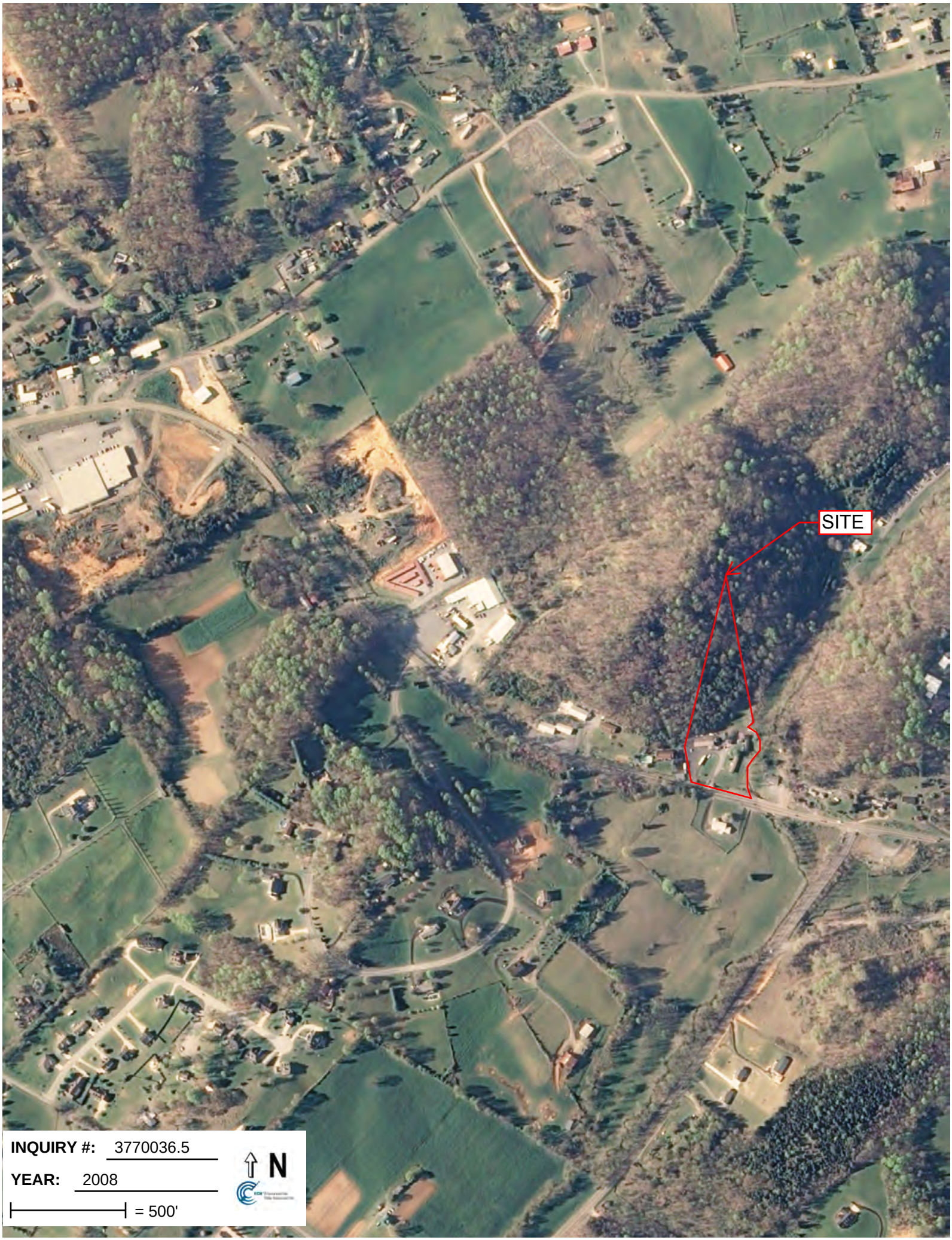
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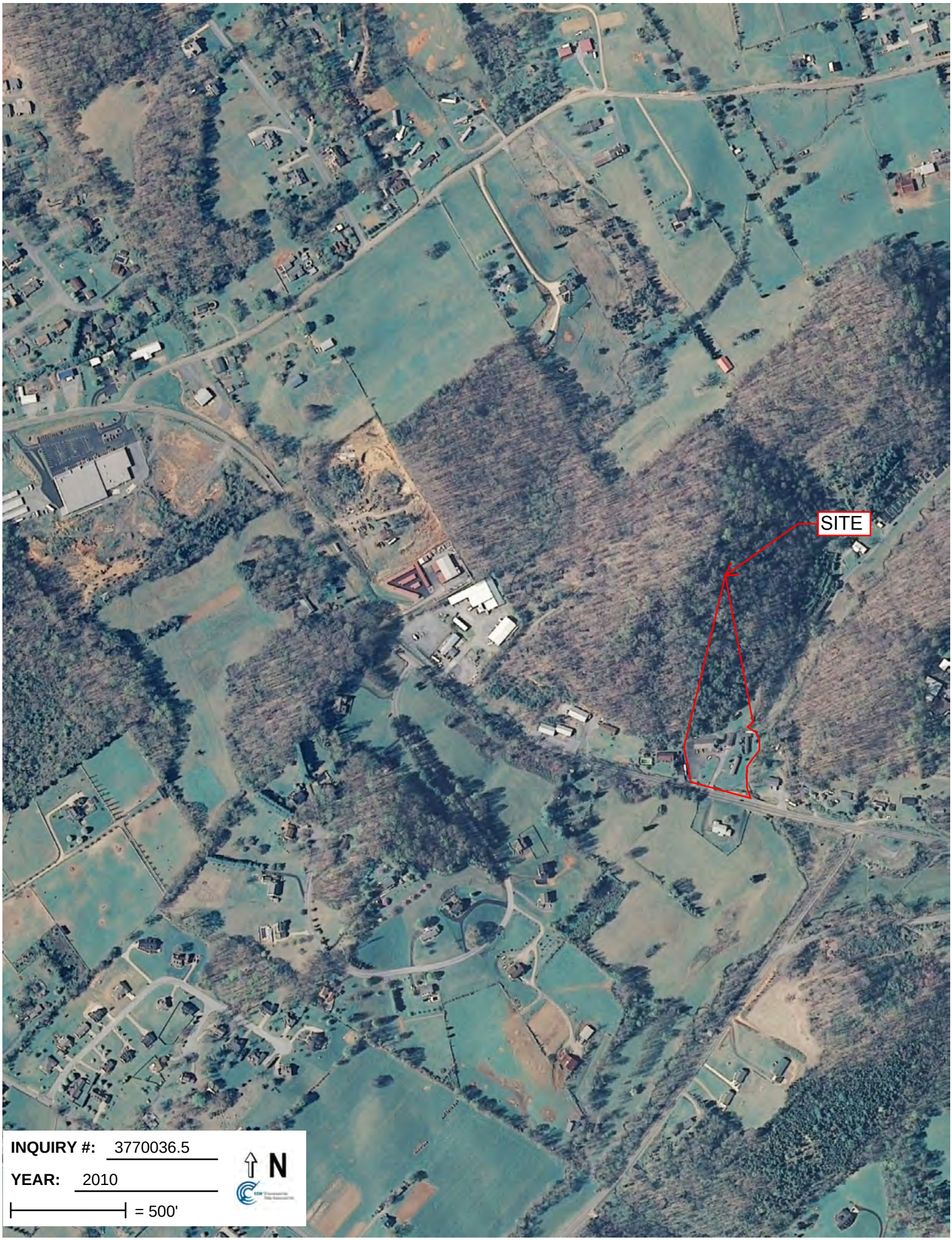
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YEAR: 2010
= 500'
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SITE
INQUIRY #: 3770036.5
YEAR: 2012
= 500'
N

Kingsport, TN 37664

Inquiry Number: 3770036.6
October 30, 2013

The EDR-City Directory Image Report

Environmental Data Resources Inc

440 Wheelers Farms Road
Milford, CT 06461
800.352.0050
www.edrnet.com

TABLE OF CONTENTS

SECTION

Executive Summary

Findings

City Directory Images

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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EXECUTIVE SUMMARY

DESCRIPTION

Environmental Data Resources, Inc.'s (EDR) City Directory Report is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's City Directory Report includes a search of available city directory data at 5 year intervals.

RESEARCH SUMMARY

The following research sources were consulted in the preparation of this report. A check mark indicates where information was identified in the source and provided in this report.

Year	Target Street	Cross Street	Source
2013	☑	☐	Polk's City Directory
2007	☑	☐	Polk's City Directory
2002	☑	☐	Polk's City Directory
1996	☑	☐	Polk's City Directory
1989	☑	☐	Johnson's City Directory

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FINDINGS

TARGET PROPERTY STREET

Kingsport, TN 37664

Year	*CD Image*	*Source*
Memorial Boulevard		
2013	pg A1	Polk's City Directory
2007	pg A2	Polk's City Directory
2002	pg A3	Polk's City Directory
2002	pg A4	Polk's City Directory
1996	pg A5	Polk's City Directory
1996	pg A6	Polk's City Directory
1989	pg A7	Johnson's City Directory

FINDINGS

CROSS STREETS

No Cross Streets Identified

City Directory Images

Target Street	Cross Street	Source
✓	-	Polk's City Directory

Memorial Boulevard 2013

5108 No Current Listing
5109 Deel Jean N ✓ [34] ● (1958)
5112 Wears Sheri ✓ [4] 423-212-0497
5116 Tribble Betty J & Allen ✓ [21] ● (1932) 423-212-0614
5121 GREENWOOD MARKET grocers-retail ✓@ 423-288-2481
+ WEMBECK DR INTERSECTS
5129 Birchfield David & Sarah K ✓@ [7] ● (1976)
5130 PIZZA PLUS pizza ✓@ 423-288-7724
+ RED ROBIN LN CONTINUES
+ RED ROBIN LN INTERSECTS
+ WOODS WAY INTERSECTS
5205 BOULEVARD HAIR SALON beauty salons ✓@ 423-765-2300
5209 ROCKY TOP SELF STORAGE storage- household & commercial ✓@ 423-323-1945
5210 SUPER SUB CO restaurants ✓@ 423-343-0114
5213 CVS/PHARMACY pharmacies ✓@ 423-279-7430
5215 30 DOLLAR GENERAL variety stores ✓@ 423-323-8634
5216 AMERICAN GLASS WORKS glass ✓@ 423-928-9296
5227 Hyatt Violet B & Mitchell D ✓ [39] ● (1972) 423-323-7585
5234 ALSTEL ASSOCIATES buildings-metal ✓@ 423-323-8183
DINO'S DINO-MITE FIREWORKS fireworks ✓@ ..423-323-9183
5236 ENGLISH CABINET SHOP INC cabinets-mfrs ✓@ 423-323-3342
+ COUNTRY DR CONTINUES
5238 No Current Listing
5242 ABSOLUTE AUTO BODY REPAIR auto body- rpr & painting ✓@ 423-579-2317
5250 (N) Boswell Tommy M
5315 Hernandez Christopher J ✓ [3] ● (1953)
Hernandez Andrea D
5320 Ketron David J & Joy M ✓@ [23] ● (1986)
5332 Ketron Denver C & Helen L ✓ [38] ● (1970) 423-323-8365
5340 Maggart Gale [2]
2 (N) Garrett James S & Rebecca I ✓@
6 Reese Delmara D [2]
7 Franklin Chris ✓ [7]
8 Baxter Larry ✓@ [12] 423-354-0309
8 Baxter William R 423-354-0309
5341 (N) Ausderau Keith ✓
Page Lisa ✓ [2]
5352 3 Croy Hester A @ [17]
3 (N) Minor Anita ✓
5356 Cowden James F Jr ✓ [34] ● (1900) 423-323-2945
5360 Moore Thomas R & Betty R ✓ [22] ● (1951) 423-323-9454
5364 No Current Listing
5368 Ramey Nannie J ✓ [25] ● (1972) 423-323-1417

Target Street	Cross Street	Source
✓	-	Polk's City Directory

Memorial Boulevard 2007



5129 Birchfield Chris A
Birchfield David
5130 PIZZA PLUS OF INDIAN SPRINGS restaurants 423-288-7724
+ RED ROBIN LN CONTINUES
+ RED ROBIN LN INTERSECTS
5180 MASTERLINE SPECIALTIES advertising- specialties
.....423-288-9722
+ WOODS WAY ENDS
+ WOODS WAY CONTINUES
5209 IDEAL STORAGE storage- household & commercial
.....423-323-1945
5210 SUPER SUB CO restaurants 423-343-0114
5213 CVS PHARMACY pharmacies 423-279-7430
5215 No Current Listing
B DOLLAR GENERAL variety stores 423-323-8634
5216 SUN VALLEY CONSTR CONCEPTS INC genl contractors
.....423-247-4504
+ ISLAND RD BEGINS
5227 Hyatt Violet B & Mitchell D [34] ▲ 423-323-7585
5234 ALSTEL ASSOCIATES buildings-metal 423-323-8183
5236 ENGLISH CABINET SHOP INC cabinets-mfrs ...423-323-3342
5238 ART-TECH SURFACING INC counter tops 423-323-9899
+ COUNTRY DR CONTINUES
5278 No Current Listing
5300 CRAFTMATIC ADJUSTABLE BEDS bedding 423-323-2616
CRAFTMATIC AMERICA INC mattresses 423-323-1616
5315 Horn Kenneth C [5] ▲
Horn Samantha
5320 Ketron David J [18] ▲ 423-323-4233
Ketron Joy M 423-323-4233
5332 Ketron Denver C [33] ▲ 423-323-8365
5340 Baxter Bob [6] 423-354-0309
Baxter Larry 423-354-0309
Keen Brook 423-212-0418
2 Vaughn Diana [6]
5341 Gray Louise M [12] ▲
5352 No Current Listing
5356 Cowden James F Jr [29] ▲ 423-323-2945
5360 Moore Thomas R [16] ▲ 423-323-9454
Moore Susan C 423-323-9454

Target Street	Cross Street	Source
✓	-	Polk's City Directory

Memorial Boulevard 2002



5109 Deel Scottie C 20
Deel Kimberly D
5112 Not Verified
5116 Tribble Walter A & Betty J 11
5121 GREENWOOD MARKET grocers-retail 423-288-2481
5129 Henley Thomas J & Ruth S 20
5130 PIZZA PLUS OF INDIAN SPRINGS pizza 423-288-7724
+ COUNTRY DR ENDS
5180 MASTERLINE SPECIALTIES darts & dart boards 423-288-9722
5205 NOOKS N CRANNIES gift shops 423-288-0390
5210 POPS CARRY OUT restaurants-food delivery 423-343-1833
ROBERTS VIDEO video tapes discs & cassettes 423-288-6011
5215 CVS PHARMACY pharmacies 423-279-7430
DOLLAR GENERAL department stores 423-323-8634

orts on-line and other Polk Directories @ www.M

Target Street	Cross Street	Source
✓	-	Polk's City Directory

Memorial Boulevard 2002



MEMORIAL BLVD - MEMORY LANE PRIVATE DR

MEMORIAL BLVD Cont'd

WHITE'S FRESH FOODS grocers-retail 423-323-0969

5227 Hyatt Violet B & Mitchell D 20 ▲ 423-323-7585

5236 ENGLISH CABINET SHOP INC cabinet makers 423-323-3342

5238 ART-TECH SURFACING INC counter tops 423-323-9899

5240 PIPE LINE SUPPLY CO pipe-whol 423-279-0376

5278 Ⓓ Boyer Harrison D ▲ 423-288-5299

Boyer Glenda F 423-288-5299

5300 CRAFTMATIC AMERICA INC bedding 423-323-2616

5315 Puckett Eulis F 20 ▲ 423-323-7382

5320 Ketron David J 13 ▲

5332 Ketron Denver C & Helen L 20 ▲ 423-323-8365

5340 Ⓓ Vaughn Diana 423-279-9910

1 Huffman Randy H 5 423-323-1525

1 Manis Joseph A 2

2 - 7 Not Verified (6 Apts)

5341 Gray Louise M 7 ▲

5352 1 - 3 Not Verified (2 Apts)

5356 Cowden James F Jr 20 ▲

5360 Moore Thomas R 11 ▲ 423-323-8147

OLD MILL LANDSCAPING lawn & grounds maintenance 423-323-9454

Target Street	Cross Street	Source
✓	-	Polk's City Directory

Memorial Boulevard 1996

5112	Bledsoe C R	-4774	R014	288-8760
5116	Tribble Allen	-4774	R014	288-3575
	Tribble Betty	-4774	R014	288-3575
5121	GREENWOOD MARKET	-4776	R014	288-2481
	Sturgill Johnny	-4776	R014	288-2840
5129	Henley Thomas J	-4776	R014	288-6741
5180	MASTERLINE SPECIALTIES	-4775	R014	288-9722
5205	DOUBLE M AUTO SALES	-4430	R013	288-9003
5210	ROBERTS MUSIC & VIDEO	-4426	R013	288-6011
5215	WHITE'S DISCOUNT FOODS INC	-4430	R013	323-0969
5227	Hyatt M D	-4430	R013	323-7585
5236	ENGLISH CABINET SHOP INC	-4426	R013	323-3342
5240	TIMBER STEEL CONSTRUCTION CO	-4426	R013	323-1785
5315	Puckett E F	-4431	R013	323-7382
5320	Ketron David	-4427	R013	323-4233
5332	Ketron Denver C	-4427	R013	323-8365
5340	LE BISTRO LOUNGE	-4471	R013	323-7566

Target Street	Cross Street	Source
✓	-	Polk's City Directory

Memorial Boulevard 1996

MEMORIAL BLVD *cont'd*

Address		Zip+4	CarrRte	Phone
	Danna Jeff	-4471	R013	323-0769
	Danna Vickie	-4471	R013	323-0769
	Depriest F S	-4471	R013	323-0198
	Lewis L A	-4471	R013	323-7287
	Logan Sylvia	-4471	R013	323-3521
	Schultz Hal	-4471	R013	323-1124
	Smith J L	-4471	R013	279-0511
	Stacy Amy R	-4471	R013	269-9035
	Williams A M	-4471	R013	279-9135
5341	Pettyjohn S D	-4431	R013	323-7492
5352	Mouck Dana	-4427	R013	279-0172
	Mouck Nathan	-4427	R013	279-0172
5356	Cowden James F Jr	-4427	R013	323-2945
5360	Moore Betty	-4427	R013	323-4048
5364	Price Earl H	-4427	R013	323-7610
5368	Ramey N J	-4427	R013	323-1417
5372	Marshall Walter	-4427	R013	323-8890
5376	INDIAN SPRINGS NURSERY-GRNHS	-4427	R013	323-3481
5400	Burchett Cecil	-4428	R013	323-7719
5402	Taylor Bernie W	-4428	R013	323-3151
5404	Taylor Mack B	-4428	R013	323-7180
5509	Cross C M	-4433	R013	323-2553

Target Street	Cross Street	Source
✓	-	Johnson's City Directory

Memorial Boulevard 1989

5105	MOODY Kyle H®	288-2390
5108	No Information	
5109	DEEL Jeff	288-2579
5109	DEEL Libby	288-2579
5109	DEEL Scottie C®	288-2579
5112	No Information	
5116	NUNLEY Dennis®	288-8791
5121	GREENWOOD MARKET	288-2481
5121	BALL Michael D	288-4704
5121	STURGILL Johnny	288-2840
5129	HENLEY Thomas J®	288-6667
5180	SHULER PLUMBING & GENERAL REPAIR	288-5715
5205	ROBERTS MUSIC	288-6011
5227	HYATT Mitchell D MD®	323-7585
5232	SMITH Lowell	323-7926
5236	ENGLISH CABINET SHOP INC	323-3342
5238	PINE PRODUCTIONS	323-2476
5240	TIMBER STEEL CONSTRUCTION CO	323-5222
5240	WALTERS POSTEEL BUILDINGS	323-3186
5248	KETRON David®	323-4233
5251	PUCKETT E F®	323-7382
5300	SUN SATELLITE SYSTEMS OF TENNESSEE	323-4274
5332	KETRON Denver C®	323-8365
5340	LEWIS L A	323-0686
5340	WRIGHT Gaynell	323-1835
5340	(#7)GRUBB John M	323-1042
5352	SULLIVAN COUNTY EDUCATIONAL ASSOCIATION	323-2131

Residential Property
5340 Memorial Boulevard
Kingsport, TN 37664

Inquiry Number: 3770042.2
October 28, 2013

Certified Sanborn® Map Report

EDR® Environmental Data Resources Inc

440 Wheelers Farms Road
Milford, CT 06461
800.352.0050
www.edrnet.com

Certified Sanborn® Map Report

10/28/13

Site Name:
Residential Property
5340 Memorial Boulevard
Kingsport, TN 37664

Client Name:
Terracon, Inc.
51 Lost Mound Drive, Suite 135
Chattanooga, TN 37406-0000

EDR Inquiry # 3770042.2

Contact: Marie Maher

EDR® Environmental Data Resources Inc

The complete Sanborn Library collection has been searched by EDR, and fire insurance maps covering the target property location provided by Terracon, Inc. were identified for the years listed below. The certified Sanborn Library search results in this report can be authenticated by visiting www.edrnet.com/sanborn and entering the certification number. Only Environmental Data Resources Inc. (EDR) is authorized to grant rights for commercial reproduction of maps by Sanborn Library LLC, the copyright holder for the collection.

Certified Sanborn Results:

Site Name: Residential Property
Address: 5340 Memorial Boulevard
City, State, Zip: Kingsport, TN 37664
Cross Street:
P.O. # E2137131
Project: Residential Property
Certification # 600C-4A44-B54F

UNMAPPED PROPERTY

This report certifies that the complete holdings of the Sanborn Library, LLC collection have been searched based on client supplied target property information, and fire insurance maps covering the target property were not found.

Sanborn® Library search results
Certification # 600C-4A44-B54F

The Sanborn Library includes more than 1.2 million Sanborn fire insurance maps, which track historical property usage in approximately 12,000 American cities and towns. Collections searched:

- ☑ Library of Congress
- ☑ University Publications of America
- ☑ EDR Private Collection

The Sanborn Library LLC Since 1866™

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Kingsport, TN 37664

Inquiry Number: 3770036.4

October 28, 2013

EDR Historical Topographic Map Report

EDR® Environmental Data Resources Inc

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800.352.0050
www.edrnet.com

EDR Historical Topographic Map Report

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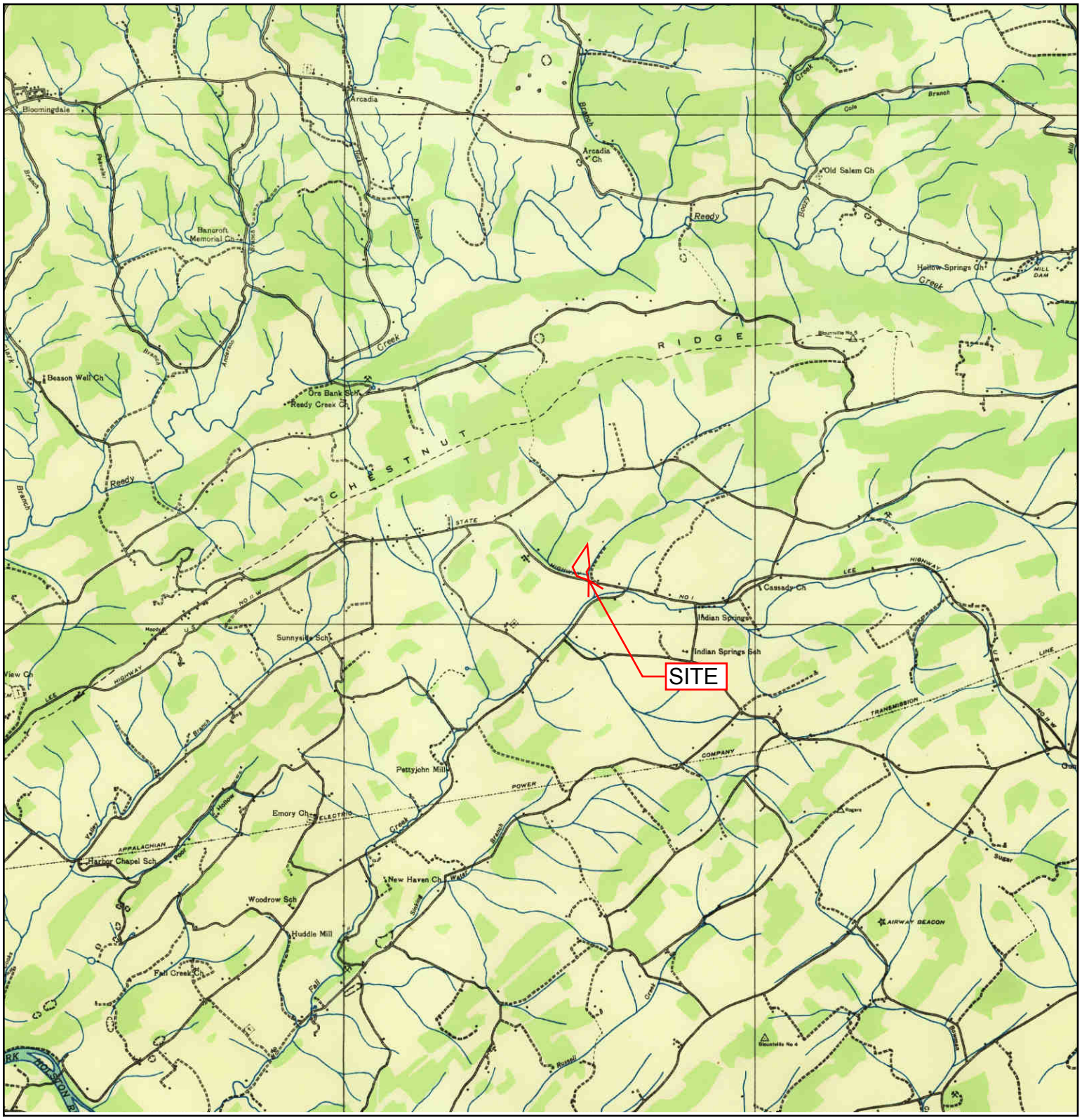
Historical Topographic Map



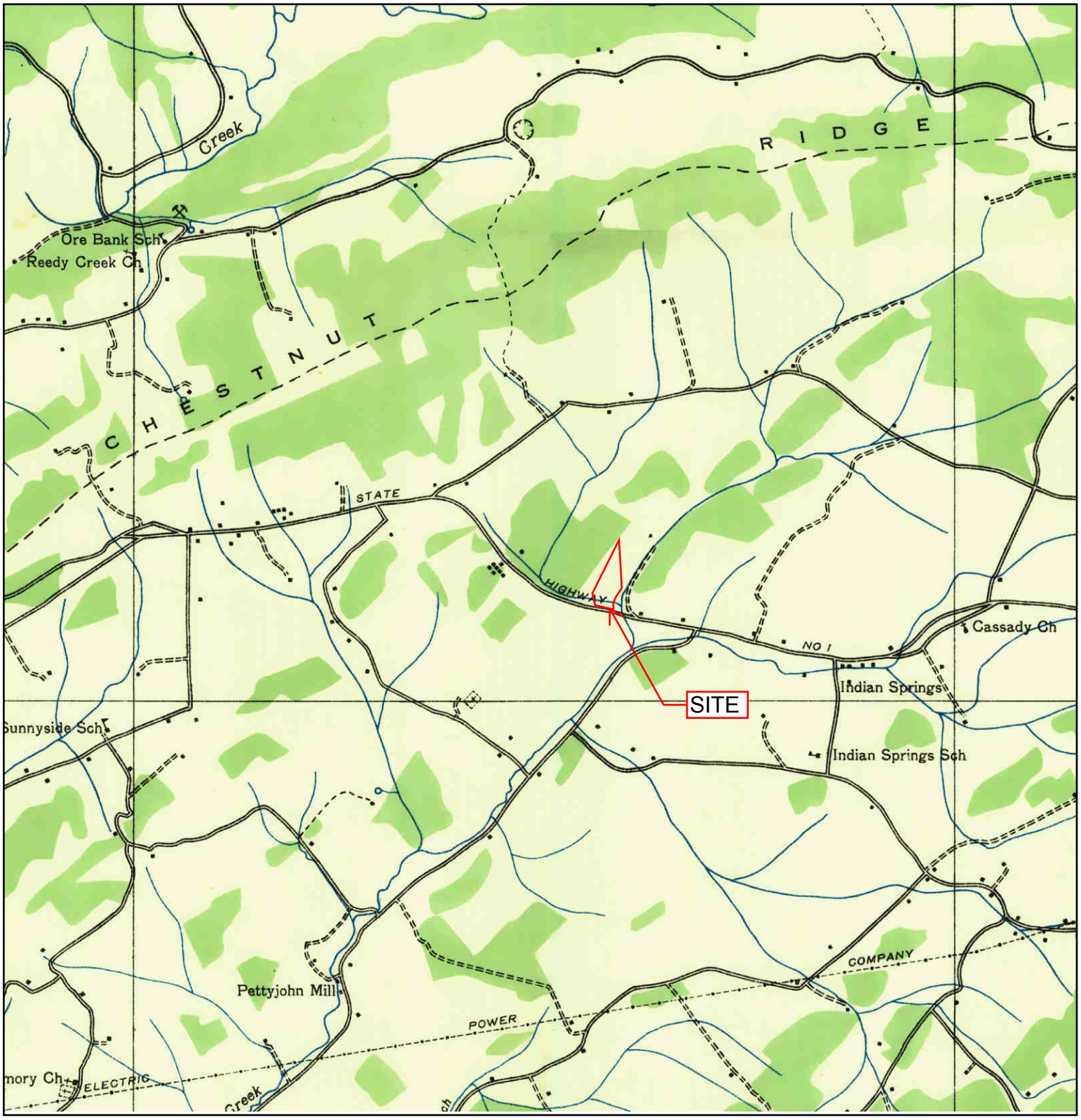
N	TARGET QUAD NAME: BRISTOL MAP YEAR: 1902 SERIES: 30 SCALE: 1:125000	SITE NAME: ADDRESS: Kingsport, TN 37664 LAT/LONG: 36.5475 / -82.4377	CLIENT: Terracon, Inc. CONTACT: Marie Maher INQUIRY#: 3770036.4 RESEARCH DATE: 10/28/2013

Historical Topographic Map



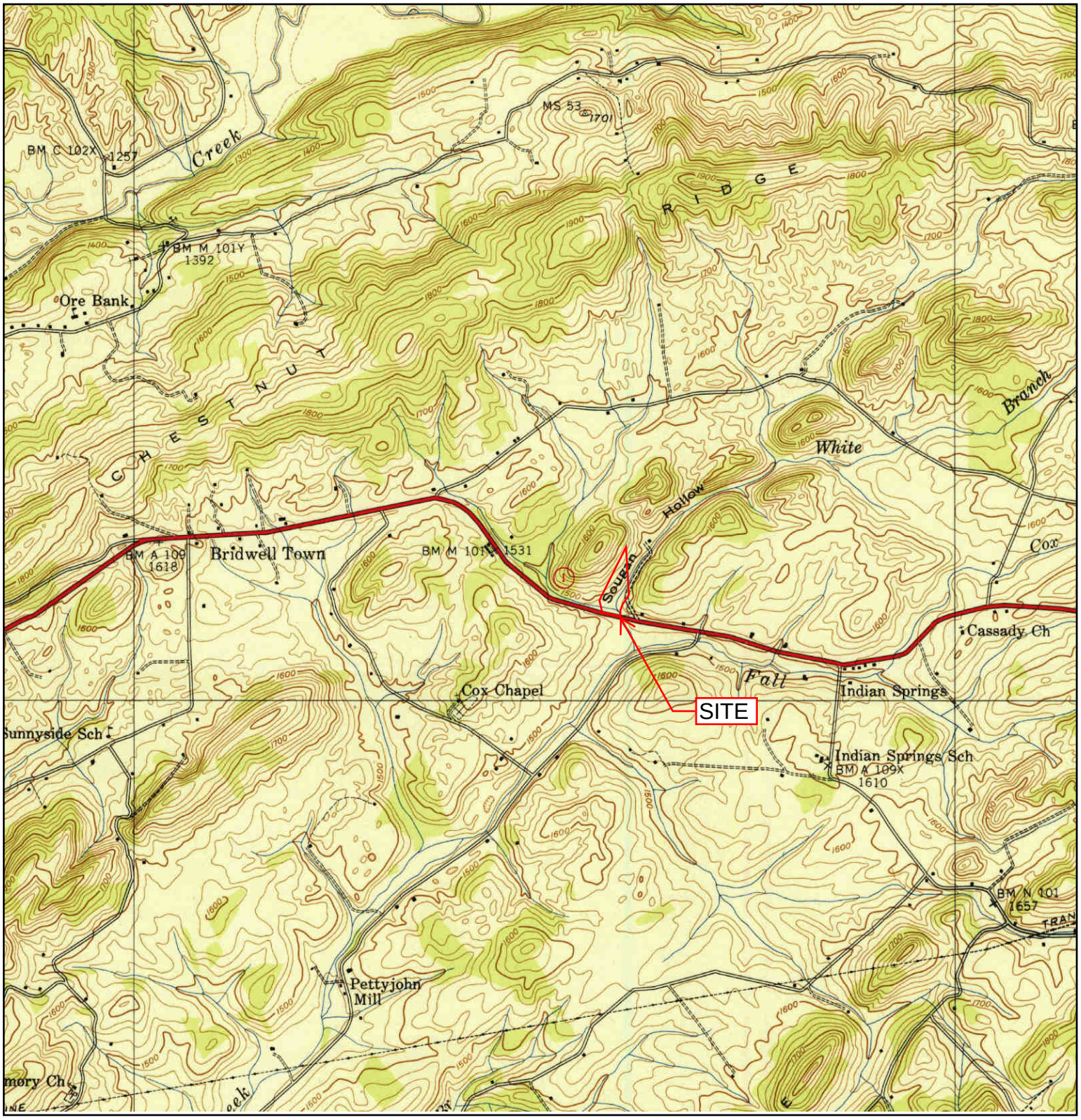
N	TARGET QUAD NAME: MAGES MAP YEAR: 1935 SERIES: 15 SCALE: 1:48000	SITE NAME: ADDRESS: Kingsport, TN 37664 LAT/LONG: 36.5475 / -82.4377	CLIENT: Terracon, Inc. CONTACT: Marie Maher INQUIRY#: 3770036.4 RESEARCH DATE: 10/28/2013

Historical Topographic Map



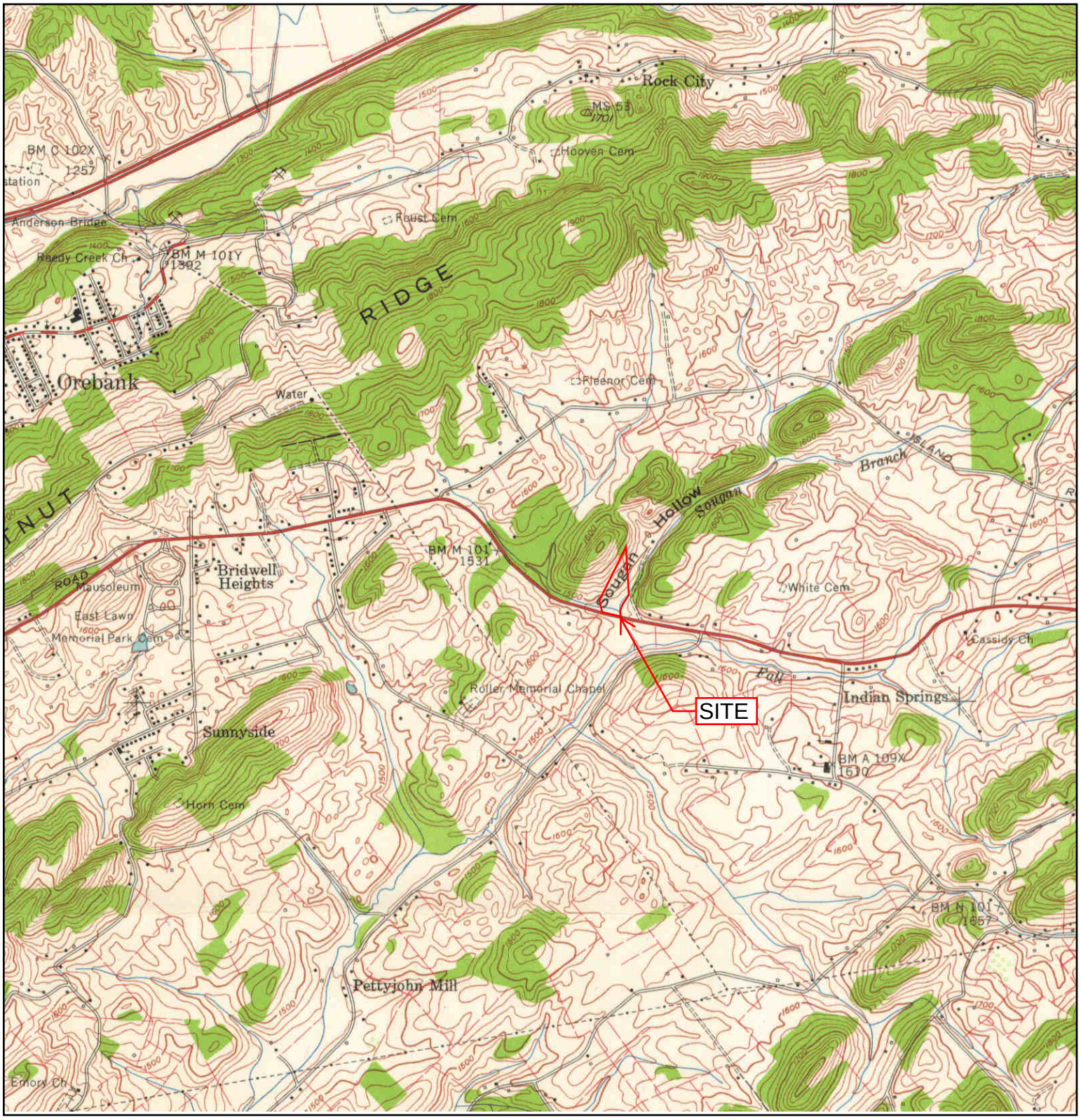
N	TARGET QUAD NAME: INDIAN SPRINGS MAP YEAR: 1935 SERIES: 7.5 SCALE: 1:24000	SITE NAME: ADDRESS: Kingsport, TN 37664 LAT/LONG: 36.5475 / -82.4377	CLIENT: Terracon, Inc. CONTACT: Marie Maher INQUIRY#: 3770036.4 RESEARCH DATE: 10/28/2013

Historical Topographic Map



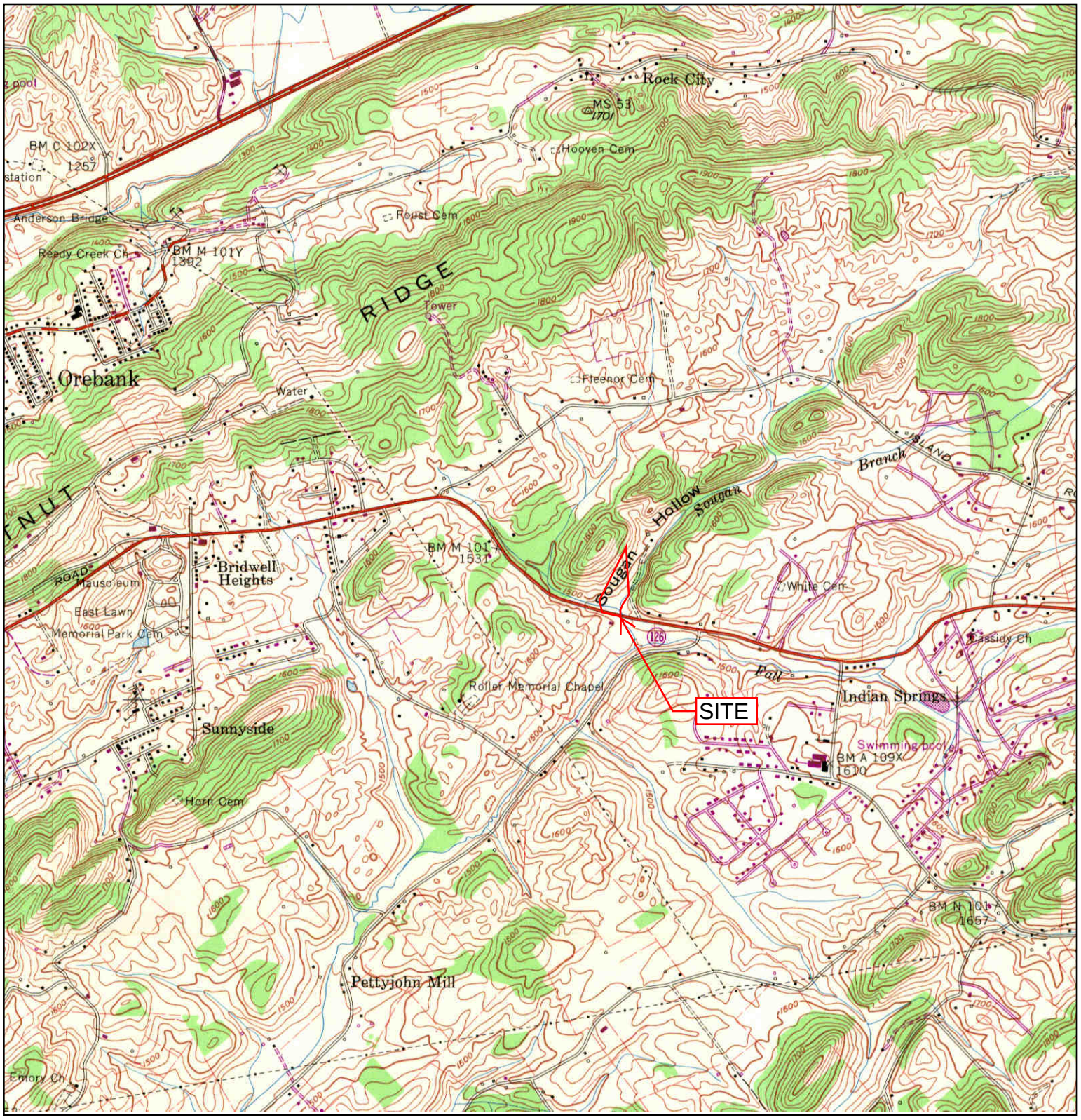
N	TARGET QUAD	SITE NAME:	CLIENT: Terracon, Inc.
	NAME: INDIAN SPRINGS	ADDRESS:	CONTACT: Marie Maher
	MAP YEAR: 1940	Kingsport, TN 37664	INQUIRY#: 3770036.4
	PRELIMINARY	LAT/LONG: 36.5475 / -82.4377	RESEARCH DATE: 10/28/2013
	SERIES: 7.5		
	SCALE: 1:24000		

Historical Topographic Map



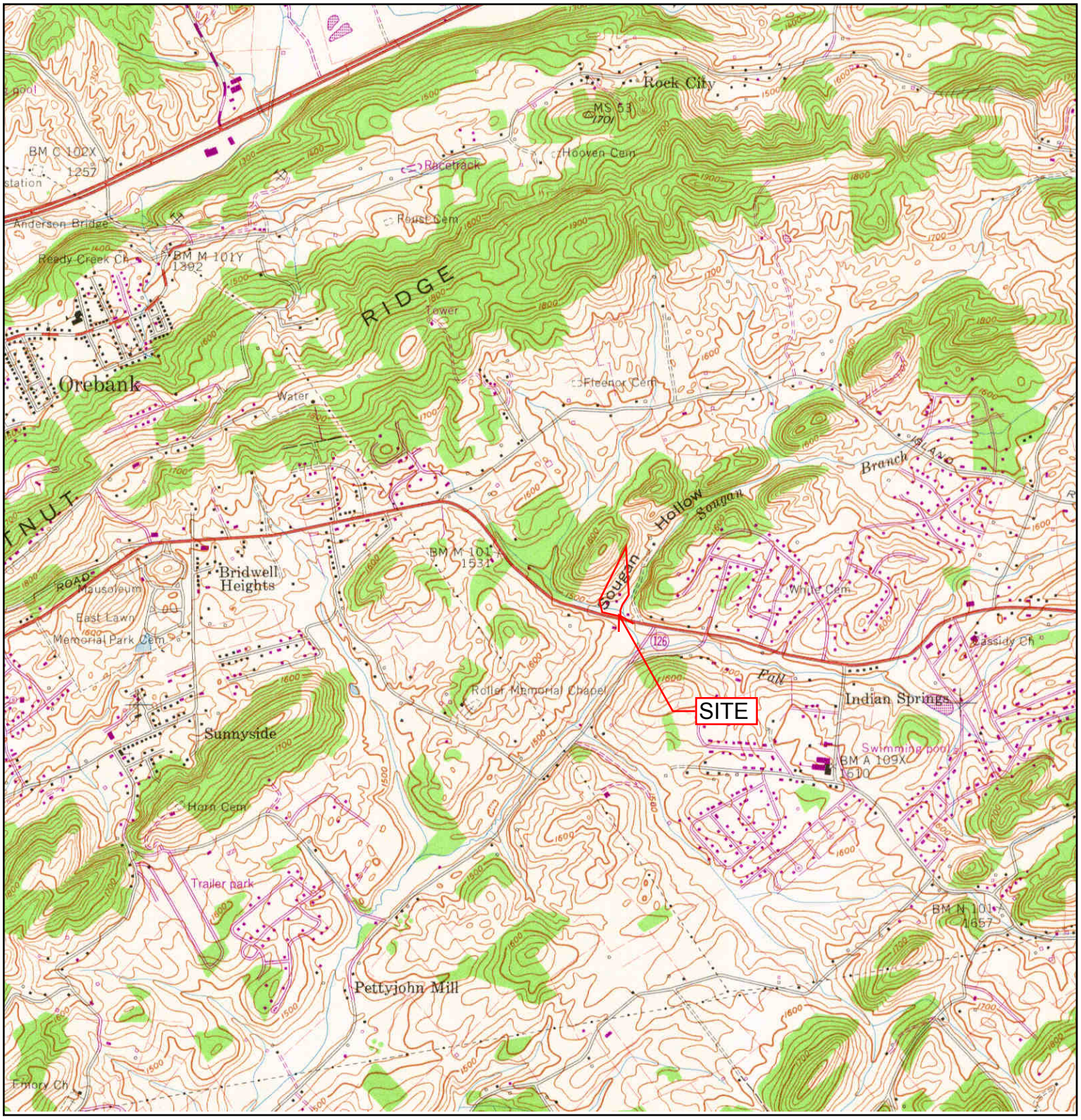
N	TARGET QUAD NAME: INDIAN SPRINGS MAP YEAR: 1959 SERIES: 7.5 SCALE: 1:24000	SITE NAME: ADDRESS: Kingsport, TN 37664 LAT/LONG: 36.5475 / -82.4377	CLIENT: Terracon, Inc. CONTACT: Marie Maher INQUIRY#: 3770036.4 RESEARCH DATE: 10/28/2013

Historical Topographic Map



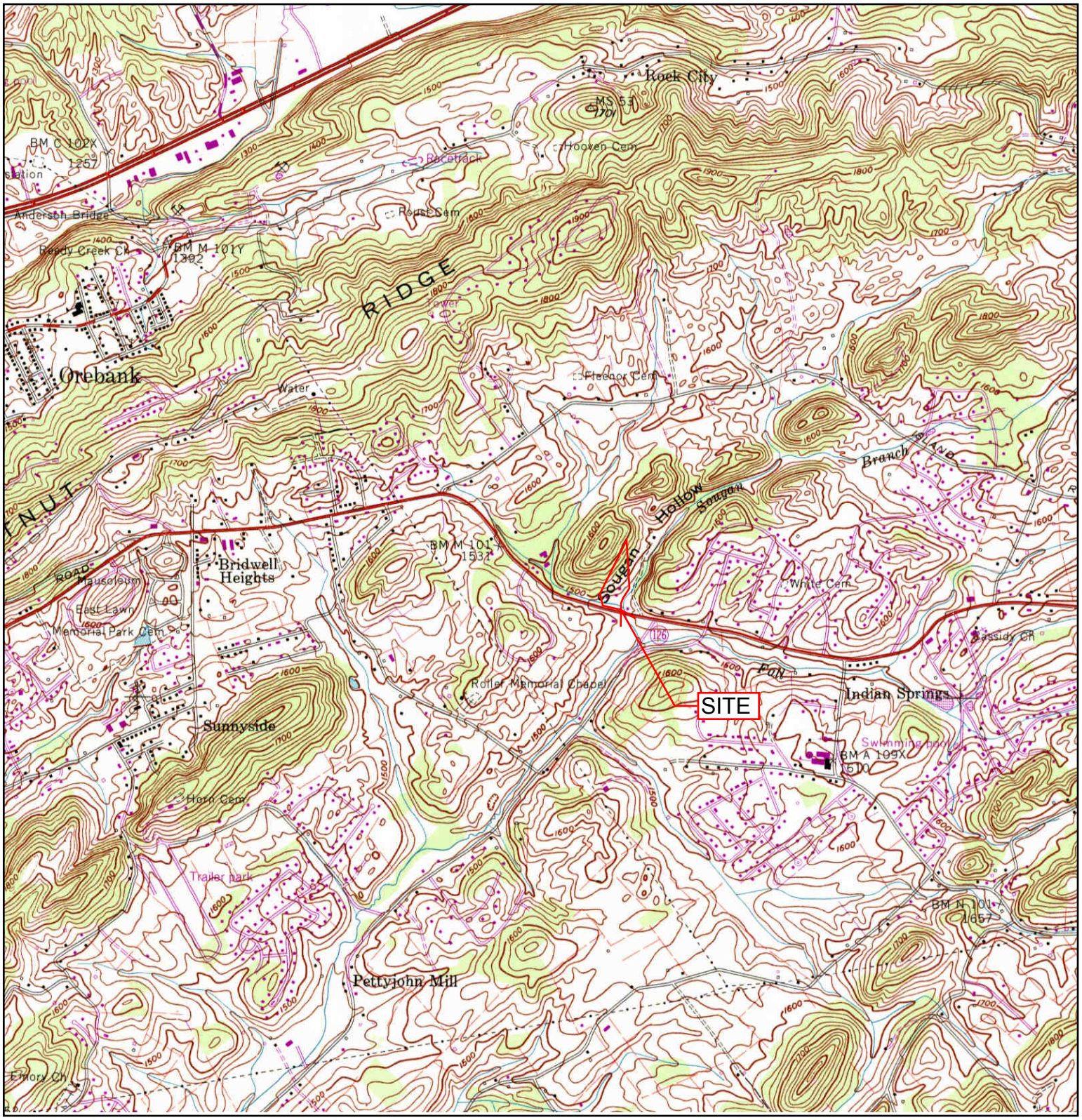
N	TARGET QUAD NAME: INDIAN SPRINGS MAP YEAR: 1968 PHOTOREVISED FROM :1959 SERIES: 7.5 SCALE: 1:24000	SITE NAME: ADDRESS: Kingsport, TN 37664 LAT/LONG: 36.5475 / -82.4377	CLIENT: Terracon, Inc. CONTACT: Marie Maher INQUIRY#: 3770036.4 RESEARCH DATE: 10/28/2013

Historical Topographic Map



N	TARGET QUAD	SITE NAME:	CLIENT: Terracon, Inc.
	NAME: INDIAN SPRINGS	ADDRESS:	CONTACT: Marie Maher
	MAP YEAR: 1978	Kingsport, TN 37664	INQUIRY#: 3770036.4
	PHOTOREVISED FROM :1959	LAT/LONG: 36.5475 / -82.4377	RESEARCH DATE: 10/28/2013
	SERIES: 7.5		
	SCALE: 1:24000		

Historical Topographic Map



N	TARGET QUAD NAME: INDIAN SPRINGS MAP YEAR: 1991 PHOTOREVISED FROM :1959 SERIES: 7.5 SCALE: 1:24000	SITE NAME: ADDRESS: Kingsport, TN 37664 LAT/LONG: 36.5475 / -82.4377	CLIENT: Terracon, Inc. CONTACT: Marie Maher INQUIRY#: 3770036.4 RESEARCH DATE: 10/28/2013

APPENDIX D

Environmental Database Information

Residential Property
5340 Memorial Boulevard
Kingsport, TN 37664

Inquiry Number: 3770042.1s
October 28, 2013

The EDR Radius Map™ Report

EDR® Environmental Data Resources Inc

440 Wheelers Farms Road
Milford, CT 06461
Toll Free: 800.352.0050
www.edrnet.com

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Detail Map	3
Map Findings Summary	4
Map Findings	7
Orphan Summary	9
Government Records Searched/Data Currency Tracking	GR-1

GEOCHECK ADDENDUM

GeoCheck - Not Requested

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EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-05) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

5340 MEMORIAL BOULEVARD
KINGSPORT, TN 37664

COORDINATES

Latitude (North):	36.5462000 - 36° 32' 46.32''
Longitude (West):	82.4340000 - 82° 26' 2.40''
Universal Tranverse Mercator:	Zone 17
UTM X (Meters):	371647.1
UTM Y (Meters):	4045287.5
Elevation:	1503 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map:	36082-E4 INDIAN SPRINGS, TN VA
Most Recent Revision:	1991

AERIAL PHOTOGRAPHY IN THIS REPORT

Photo Year:	2012
Source:	USDA

TARGET PROPERTY SEARCH RESULTS

The target property was not listed in any of the databases searched by EDR.

DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the search radius around the target property for the following databases:

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL ---------- National Priority List

EXECUTIVE SUMMARY

Proposed NPL ---------- Proposed National Priority List Sites
NPL LIENS ---------- Federal Superfund Liens

Federal Delisted NPL site list

Delisted NPL ---------- National Priority List Deletions

Federal CERCLIS list

CERCLIS ---------- Comprehensive Environmental Response, Compensation, and Liability Information System
FEDERAL FACILITY ---------- Federal Facility Site Information listing

Federal CERCLIS NFRAP site List

CERC-NFRAP ---------- CERCLIS No Further Remedial Action Planned

Federal RCRA CORRACTS facilities list

CORRACTS ---------- Corrective Action Report

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF ---------- RCRA - Treatment, Storage and Disposal

Federal RCRA generators list

RCRA-LQG ---------- RCRA - Large Quantity Generators
RCRA-SQG ---------- RCRA - Small Quantity Generators
RCRA-CESQG ---------- RCRA - Conditionally Exempt Small Quantity Generator

Federal institutional controls / engineering controls registries

US ENG CONTROLS ---------- Engineering Controls Sites List
US INST CONTROL ---------- Sites with Institutional Controls
LUCIS ---------- Land Use Control Information System

Federal ERNS list

ERNS ---------- Emergency Response Notification System

State- and tribal - equivalent NPL

SHWS ---------- List of Inactive Hazardous Substance Sites

State and tribal landfill and/or solid waste disposal site lists

SWF/LF ---------- Solid Waste Disposal Facilities

State and tribal leaking storage tank lists

LUST ---------- Leaking Underground Storage Tank Database Listing
LUST TRUST ---------- LUST TRUST Fund Database
HIST_LUST CO ---------- Leaking Underground Storage Tanks Sites
INDIAN LUST ---------- Leaking Underground Storage Tanks on Indian Land

State and tribal registered storage tank lists

UST ---------- Facility and Tank Report

AST ---------- Aboveground Storage Tanks
INDIAN UST ---------- Underground Storage Tanks on Indian Land
FEMA UST ---------- Underground Storage Tank Listing

State and tribal institutional control / engineering control registries

ENG CONTROLS ---------- Engineering Control Sites
INST CONTROL ---------- Institutional Control Sites

State and tribal voluntary cleanup sites

INDIAN VCP ---------- Voluntary Cleanup Priority Listing
VCP ---------- Voluntary Cleanup, Oversight and Assistance Program Sites
SRP ---------- State Remediation Program List

State and tribal Brownfields sites

BROWNFIELDS ---------- Superfund VOAP Listing

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS ---------- A Listing of Brownfields Sites

Local Lists of Landfill / Solid Waste Disposal Sites

ODI ---------- Open Dump Inventory
DEBRIS REGION 9 ---------- Torres Martinez Reservation Illegal Dump Site Locations
SWRCY ---------- Recycling Facilities Listing
INDIAN ODI ---------- Report on the Status of Open Dumps on Indian Lands

Local Lists of Hazardous waste / Contaminated Sites

US CDL ---------- Clandestine Drug Labs
DEL SHWS ---------- Deleted State Hazardous Waste Sites
PRIORITYCLEANERS ---------- DCERP Remediation Sites Listing
CDL ---------- Registry of Contaminated Properties
US HIST CDL ---------- National Clandestine Laboratory Register

Local Lists of Registered Storage Tanks

HIST UST ---------- Underground Storage Tank Database

Local Land Records

LIENS 2 ---------- CERCLA Lien Information
LIENS ---------- Liens Information

Records of Emergency Release Reports

HMIRS ---------- Hazardous Materials Information Reporting System
SPILLS ---------- State Spills

Other Ascertainable Records

DOT OPS ---------- Incident and Accident Data

EXECUTIVE SUMMARY

DOD	Department of Defense Sites
FUDS	Formerly Used Defense Sites
CONSENT	Superfund (CERCLA) Consent Decrees
ROD	Records Of Decision
UMTRA	Uranium Mill Tailings Sites
US MINES	Mines Master Index File
TRIS	Toxic Chemical Release Inventory System
TSCA	Toxic Substances Control Act
FTTS	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
HIST FTTS	FIFRA/TSCA Tracking System Administrative Case Listing
SSTS	Section 7 Tracking Systems
ICIS	Integrated Compliance Information System
PADS	PCB Activity Database System
MLTS	Material Licensing Tracking System
RADINFO	Radiation Information Database
FINDS	Facility Index System/Facility Registry System
RAATS	RCRA Administrative Action Tracking System
RMP	Risk Management Plans
DRYCLEANERS	Registered Facilities List
NPDES	Permitted Facility Listing
AIRS	Listing of Permitted Sources
INDIAN RESERV	Indian Reservations
SCRD DRYCLEANERS	State Coalition for Remediation of Drycleaners Listing
US AIRS	Aerometric Information Retrieval System Facility Subsystem
PRP	Potentially Responsible Parties
2020 COR ACTION	2020 Corrective Action Program List
LEAD SMELTERS	Lead Smelter Sites
COAL ASH EPA	Coal Combustion Residues Surface Impoundments List
EPA WATCH LIST	EPA WATCH LIST
US FIN ASSUR	Financial Assurance Information
PCB TRANSFORMER	PCB Transformer Registration Database
COAL ASH DOE	Steam-Electric Plant Operation Data

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP	EDR Proprietary Manufactured Gas Plants
EDR US Hist Cleaners	EDR Exclusive Historic Dry Cleaners

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.
Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

EXECUTIVE SUMMARY

ADDITIONAL ENVIRONMENTAL RECORDS

Other Ascertainable Records

RCRA NonGen / NLR: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

A review of the RCRA NonGen / NLR list, as provided by EDR, and dated 07/11/2013 has revealed that there is 1 RCRA NonGen / NLR site within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
ENGLISH CABINET SHOP INC.	5236 MEMORIAL BOULEVARD	WNW 1/8 - 1/4 (0.224 mi.)	2	7

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR US Hist Auto Stat: EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

A review of the EDR US Hist Auto Stat list, as provided by EDR, has revealed that there is 1 EDR US Hist Auto Stat site within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
Not reported	215 FALL CREEK RD	SSE 1/8 - 1/4 (0.194 mi.)	1	7

EXECUTIVE SUMMARY

Due to poor or inadequate address information, the following sites were not mapped. Count: 82 records.

Site Name	Database(s)
THURSTON MOTOR LINES INC	HIST UST
BROWN TRANSPORT CORP	HIST UST
SULLIVAN CO. COURTHOUSE	HIST UST
BALL BROS FURNITURE	HIST UST
COOPER FUEL OIL	HIST UST
TRI CITIES GOLF	HIST UST
MR J P HAWK	LUST, HIST UST
THRIFTY CAR RENTAL	HIST UST
FEDERAL EXPRESS	HIST UST
WOODYS DIST	HIST UST
MCNUTT & SONS ELEC CONT INC	LUST, HIST UST
FEDERAL EXPRESS	HIST UST
EMERY WORLDWIDE LEASEHOLD	HIST UST
VERMILLION BUILDING	HIST UST
HANK'S MARKET. AND DELI	HIST UST
INTERSTATE TEXACO	HIST UST
HARR'S SERVICE STATION	HIST UST
MORTON'S GROCERY	HIST UST
CARR BROS CONSTRUCTION CO	HIST UST
ISLAND RD GROCERY	HIST UST
MCKINNON BRIDGE CO INC	HIST UST
C AND S TRANSIT	HIST UST
DANIEL BOONE TRUCKSTOP	HIST UST
SUNBRIDGE CARE AND REHABILITATION	HIST UST
RIGGS BROTHERS CONSTRUCTION CO	HIST UST
TRI-CITY AIRPORT COMMISSION	LUST, HIST_LUST CO
APPALACHIAN OIL COMPANY, INC.	SWF/LF
ASR SYSTEMS OF THE TRI-CITIES	SWF/LF
DYNAMIC RECYCLING LLC	SWF/LF
ECOSAFE CLASS I LANDFILL	SWF/LF
HOLSTON ARMY INCINERATOR	SWF/LF
SULLIVAN COUNTY ANIMAL DISPOSAL MO	SWF/LF
SULLIVAN CO LANDFILL INC	SWF/LF
HIGHWAY MARKET #2	LUST
THURSTON MOTOR LINES	LUST
BALL BROS FURNITURE	LUST, UST
SULLIVAN CO. COURTHOUSE	LUST, UST
THRIFTY CAR RENTAL	LUST, UST
WOODYS DIST	LUST, UST
ALLEN BOURNE CHEVROLET	LUST
BLOUNTVILLE FOOD MART	LUST
EMERY WORLDWIDE LEASEHOLD	LUST, UST
HANK'S MARKET. AND DELI	LUST, UST
VERMILLION BUILDING	LUST, UST
MORTON'S GROCERY	LUST, UST
HARR'S SERVICE STATION	LUST, UST
BUDGET RENT CAR	LUST, UST
ISLAND RD GROCERY	LUST, UST
SULLIVAN CO. PARK	LUST
RIGGS BROTHERS CONSTRUCTION CO	LUST, UST
BROWN TRANSPORT CORP	UST
THURSTON MOTOR LINES INC	UST
COOPER FUEL OIL	UST
TRI CITIES GOLF	UST
FEDERAL EXPRESS	UST
FEDERAL EXPRESS	UST
DALE'S QUICK MARKET	UST
INTERSTATE TEXACO	UST
MR J P HAWK	UST

CARR BROS CONSTRUCTION CO	UST
SULLIVAN CO. PARK	UST
MCNUTT AND SONS ELECTRIC CONT INC.	UST
MCKINNON BRIDGE CO INC	UST
C AND S TRANSIT	UST
ESC MANUFACTURING	RCRA NonGen / NLR, FINDS
BROWN THURSTON MOTOR LINE	LUST TRUST
DENZIL SYDEBOTHOM PROPERTY	NPDES
GRIZZEL PROPERTY	NPDES
WAYNE CONSTRUCTION RESIDENTIAL PAR	NPDES
PEACH ORCHARD PROPERTY	NPDES
BUCKNER PROPERTY IN KINGSPORT	NPDES
KATHY AND MACKEY CASEY RESIDENTIAL	NPDES
EAST PROPERTY	NPDES
SANITARY SEWER FACILITIES FOR LYON	NPDES
JIM GRIFFITH PROPERTY	NPDES
R.L. PENDLETON PROPERTY	NPDES
TAYLOR INDUSTRIAL PROPERTY	NPDES
GATTON PROPERTY	NPDES
GATTON PROPERTY	NPDES
SANITARY SEWER EXTENSION TO GATTON	NPDES
GATTON PROPERTY	NPDES
GATTON PROPERTY	NPDES

OVERVIEW MAP - 3770042.1s



- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- National Priority List Sites
- Dept. Defense Sites

0 1/4 1/2 1 Miles

- Indian Reservations BIA
- Power transmission lines
- Oil & Gas pipelines from USGS
- 100-year flood zone
- 500-year flood zone
- National Wetland Inventory
- State Wetlands

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Residential Property	CLIENT: Terracon, Inc.
ADDRESS: 5340 Memorial Boulevard Kingsport TN 37664	CONTACT: Marie Maher
LAT/LONG: 36.5462 / 82.434	INQUIRY #: 3770042.1s DATE: October 28, 2013 5:57 pm

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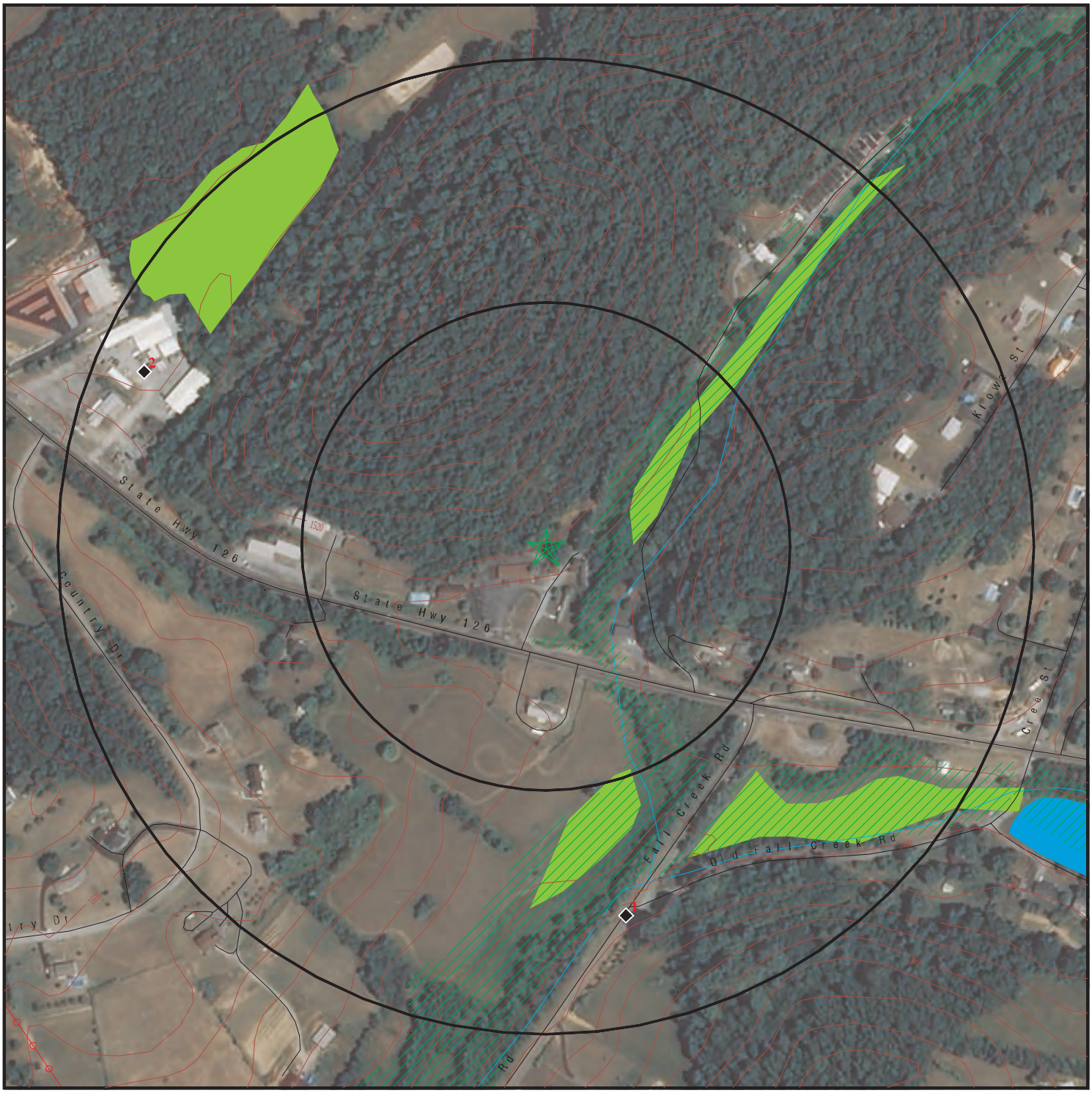
DETAIL MAP - 3770042.1s



- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- Sensitive Receptors
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- Power transmission lines
- Oil & Gas pipelines from USGS
- 100-year flood zone
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This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

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ADDRESS: 5340 Memorial Boulevard Kingsport TN 37664	CONTACT: Marie Maher
LAT/LONG: 36.5462 / 82.434	INQUIRY #: 3770042.1s DATE: October 28, 2013 6:01 pm

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MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENTAL RECORDS								
Federal NPL site list								
NPL	1.000		0	0	0	0	NR	0
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	TP		NR	NR	NR	NR	NR	0
Federal Delisted NPL site list								
Delisted NPL	1.000		0	0	0	0	NR	0
Federal CERCLIS list								
CERCLIS	0.500		0	0	0	NR	NR	0
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
Federal CERCLIS NFRAP site List								
CERC-NFRAP	0.500		0	0	0	NR	NR	0
Federal RCRA CORRACTS facilities list								
CORRACTS	1.000		0	0	0	0	NR	0
Federal RCRA non-CORRACTS TSD facilities list								
RCRA-TSDF	0.500		0	0	0	NR	NR	0
Federal RCRA generators list								
RCRA-LQG	0.250		0	0	NR	NR	NR	0
RCRA-SQG	0.250		0	0	NR	NR	NR	0
RCRA-CESQG	0.250		0	0	NR	NR	NR	0
Federal institutional controls / engineering controls registries								
US ENG CONTROLS	0.500		0	0	0	NR	NR	0
US INST CONTROL	0.500		0	0	0	NR	NR	0
LUCIS	0.500		0	0	0	NR	NR	0
Federal ERNS list								
ERNS	TP		NR	NR	NR	NR	NR	0
State- and tribal - equivalent NPL								
SHWS	1.000		0	0	0	0	NR	0
State and tribal landfill and/or solid waste disposal site lists								
SWF/LF	0.500		0	0	0	NR	NR	0
State and tribal leaking storage tank lists								
LUST	0.500		0	0	0	NR	NR	0
LUST TRUST	0.500		0	0	0	NR	NR	0
HIST_LUST CO	0.500		0	0	0	NR	NR	0
INDIAN LUST	0.500		0	0	0	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
State and tribal registered storage tank lists								
UST	0.250		0	0	NR	NR	NR	0
AST	0.250		0	0	NR	NR	NR	0
INDIAN UST	0.250		0	0	NR	NR	NR	0
FEMA UST	0.250		0	0	NR	NR	NR	0
State and tribal institutional control / engineering control registries								
ENG CONTROLS	0.500		0	0	0	NR	NR	0
INST CONTROL	0.500		0	0	0	NR	NR	0
State and tribal voluntary cleanup sites								
INDIAN VCP	0.500		0	0	0	NR	NR	0
VCP	0.500		0	0	0	NR	NR	0
SRP	0.500		0	0	0	NR	NR	0
State and tribal Brownfields sites								
BROWNFIELDS	0.500		0	0	0	NR	NR	0
ADDITIONAL ENVIRONMENTAL RECORDS								
Local Brownfield lists								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
Local Lists of Landfill / Solid Waste Disposal Sites								
ODI	0.500		0	0	0	NR	NR	0
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
SWRCY	0.500		0	0	0	NR	NR	0
INDIAN ODI	0.500		0	0	0	NR	NR	0
Local Lists of Hazardous waste / Contaminated Sites								
US CDL	TP		NR	NR	NR	NR	NR	0
DEL SHWS	1.000		0	0	0	0	NR	0
PRIORITYCLEANERS	0.500		0	0	0	NR	NR	0
CDL	TP		NR	NR	NR	NR	NR	0
US HIST CDL	TP		NR	NR	NR	NR	NR	0
Local Lists of Registered Storage Tanks								
HIST UST	0.250		0	0	NR	NR	NR	0
Local Land Records								
LIENS 2	TP		NR	NR	NR	NR	NR	0
LIENS	TP		NR	NR	NR	NR	NR	0
Records of Emergency Release Reports								
HMIRS	TP		NR	NR	NR	NR	NR	0
SPILLS	TP		NR	NR	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
Other Ascertainable Records								
RCRA NonGen / NLR	0.250		0	1	NR	NR	NR	1
DOT OPS	TP		NR	NR	NR	NR	NR	0
DOD	1.000		0	0	0	0	NR	0
FUDS	1.000		0	0	0	0	NR	0
CONSENT	1.000		0	0	0	0	NR	0
ROD	1.000		0	0	0	0	NR	0
UMTRA	0.500		0	0	0	NR	NR	0
US MINES	0.250		0	0	NR	NR	NR	0
TRIS	TP		NR	NR	NR	NR	NR	0
TSCA	TP		NR	NR	NR	NR	NR	0
FTTS	TP		NR	NR	NR	NR	NR	0
HIST FTTS	TP		NR	NR	NR	NR	NR	0
SSTS	TP		NR	NR	NR	NR	NR	0
ICIS	TP		NR	NR	NR	NR	NR	0
PADS	TP		NR	NR	NR	NR	NR	0
MLTS	TP		NR	NR	NR	NR	NR	0
RADINFO	TP		NR	NR	NR	NR	NR	0
FINDS	TP		NR	NR	NR	NR	NR	0
RAATS	TP		NR	NR	NR	NR	NR	0
RMP	TP		NR	NR	NR	NR	NR	0
DRYCLEANERS	0.250		0	0	NR	NR	NR	0
NPDES	TP		NR	NR	NR	NR	NR	0
AIRS	TP		NR	NR	NR	NR	NR	0
INDIAN RESERV	1.000		0	0	0	0	NR	0
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
US AIRS	TP		NR	NR	NR	NR	NR	0
PRP	TP		NR	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
LEAD SMELTERS	TP		NR	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
EPA WATCH LIST	TP		NR	NR	NR	NR	NR	0
US FIN ASSUR	TP		NR	NR	NR	NR	NR	0
PCB TRANSFORMER	TP		NR	NR	NR	NR	NR	0
COAL ASH DOE	TP		NR	NR	NR	NR	NR	0
EDR HIGH RISK HISTORICAL RECORDS								
EDR Exclusive Records								
EDR MGP	1.000		0	0	0	0	NR	0
EDR US Hist Auto Stat	0.250		0	1	NR	NR	NR	1
EDR US Hist Cleaners	0.250		0	0	NR	NR	NR	0

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

1
SSE
1/8-1/4
0.194 mi.
1022 ft.

215 FALL CREEK RD
BLOUNTVILLE, TN 37617

EDR US Hist Auto Stat **1015327043**
N/A

Relative:
Lower

Actual:
1466 ft.

EDR Historical Auto Stations:

Name:	TONYS SMALL ENGINE REPAIR
Year:	2006
Address:	215 FALL CREEK RD

2
WNW
1/8-1/4
0.224 mi.
1185 ft.

ENGLISH CABINET SHOP INC.
5236 MEMORIAL BOULEVARD
KINGSPORT, TN 37664

RCRA NonGen / NLR **1010332629**
TNR000024232

Relative:
Lower

Actual:
1502 ft.

RCRA NonGen / NLR:

Date form received by agency:	04/12/2007
Facility name:	ENGLISH CABINET SHOP INC.
Facility address:	5236 MEMORIAL BOULEVARD KINGSPORT, TN 37664
EPA ID:	TNR000024232
Contact:	Not reported
Contact address:	Not reported Not reported
Contact country:	Not reported
Contact telephone:	Not reported
Contact email:	Not reported
EPA Region:	04
Land type:	Facility is not located on Indian land. Additional information is not known.
Classification:	Non-Generator
Description:	Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:

Owner/operator name:	RANDY ENGLISH
Owner/operator address:	Not reported Not reported
Owner/operator country:	Not reported
Owner/operator telephone:	Not reported
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	04/12/2007
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No

ENGLISH CABINET SHOP INC. (Continued) **1010332629**

Used oil transfer facility: No
Used oil transporter: No

Violation Status: No violations found

Evaluation Action Summary:
Evaluation date: 04/11/2007
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Count: 82 records. ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
BLOUNTVILLE	S105004415	HIGHWAY MARKET #2	RT 1	37617	LUST
BLOUNTVILLE	U003609457	THURSTON MOTOR LINES INC	RT. 1 BOX 354-C	37617	HIST UST
BLOUNTVILLE	U003609501	BROWN TRANSPORT CORP	RT. 1 BOX 354 C	37617	HIST UST
BLOUNTVILLE	U004163653	BROWN TRANSPORT CORP	RT. 1 BOX 354 C	37617	UST
BLOUNTVILLE	U004163600	THURSTON MOTOR LINES INC	RT. 1 BOX 354-C	37617	UST
BLOUNTVILLE	1001017416	THURSTON MOTOR LINES	HIGHWAY 11-W	37617	LUST
BLOUNTVILLE	U003609506	SULLIVAN CO. COURTHOUSE	HIGHWAY 126	37617	HIST UST
BLOUNTVILLE	U003609503	BALL BROS FURNITURE	HIGHWAY 126	37617	HIST UST
BLOUNTVILLE	U003609333	COOPER FUEL OIL	HIGHWAY 126 AND 75	37617	HIST UST
BLOUNTVILLE	U004163458	COOPER FUEL OIL	HIGHWAY 126 AND 75	37617	UST
BLOUNTVILLE	U004163656	BALL BROS FURNITURE	HIGHWAY 126	37617	LUST, UST
BLOUNTVILLE	U004163661	SULLIVAN CO. COURTHOUSE	HIGHWAY 126	37617	LUST, UST
BLOUNTVILLE	U004183957	TRI CITIES GOLF	RT. 2 HIGHWAY 37 P O BOX 18	37617	UST
BLOUNTVILLE	U003609527	TRI CITIES GOLF	RT. 2 HIGHWAY 37 P O BOX 18	37617	HIST UST
BLOUNTVILLE	U004163599	THRIFTY CAR RENTAL	RT. 3	37617	LUST, UST
BLOUNTVILLE	U003609495	MR J P HAWK	ROUTE 3	37617	LUST, HIST UST
BLOUNTVILLE	U003609456	THRIFTY CAR RENTAL	RT. 3	37617	HIST UST
BLOUNTVILLE	U004163481	FEDERAL EXPRESS	RT. 3	37617	UST
BLOUNTVILLE	U003970481	FEDERAL EXPRESS	RT. 3	37617	HIST UST
BLOUNTVILLE	U003609482	WOODYS DIST	RT. 3 HIGHWAY 75	37617	HIST UST
BLOUNTVILLE	U003609524	MCNUTT & SONS ELEC CONT INC	RT 3 MCKELLAR	37617	LUST, HIST UST
BLOUNTVILLE	U004163630	WOODYS DIST	RT. 3 HIGHWAY 75	37617	LUST, UST
BLOUNTVILLE	U003712316	FEDERAL EXPRESS	RT. 3 HIGHWAY 37	37617	HIST UST
BLOUNTVILLE	U004163480	FEDERAL EXPRESS	RT. 3 HIGHWAY 37	37617	UST
BLOUNTVILLE	S105694789	ALLEN BOURNE CHEVROLET	HWY 37 @ HWY 126	37617	LUST
BLOUNTVILLE	U004183956	DALE'S QUICK MARKET	HIGHWAY 37	37617	UST
BLOUNTVILLE	S106131414	BLOUNTVILLE FOOD MART	HWY 37 & 126	37617	LUST
BLOUNTVILLE	1000919633	ESC MANUFACTURING	HIGHWAY 37	37617	RCRA NonGen / NLR, FINDS
BLOUNTVILLE	U003609518	EMERY WORLDWIDE LEASEHOLD	RT. 7 SHIPLEY FERRY ROAD	37617	HIST UST
BLOUNTVILLE	U004163676	EMERY WORLDWIDE LEASEHOLD	RT. 7 SHIPLEY FERRY ROAD	37617	LUST, UST
BLOUNTVILLE	U004163646	HANK'S MARKET. AND DELI	HIGHWAY 75	37617	LUST, UST
BLOUNTVILLE	U003609555	VERMILLION BUILDING	HIGHWAY 75	37617	HIST UST
BLOUNTVILLE	S101134885	TRI-CITY AIRPORT COMMISSION	HWY 75	37617	LUST, HIST_LUST CO
BLOUNTVILLE	U003609498	HANK'S MARKET. AND DELI	HIGHWAY 75	37617	HIST UST
BLOUNTVILLE	U004163713	VERMILLION BUILDING	HIGHWAY 75	37617	LUST, UST
BLOUNTVILLE	U003609372	INTERSTATE TEXACO	I-81 AND HIGHWAY 126	37617	HIST UST
BLOUNTVILLE	U004163504	INTERSTATE TEXACO	I-81 AND HIGHWAY 126	37617	UST
BLOUNTVILLE	U004163643	MR J P HAWK	RT.3 BOX 482	37617	UST
BLOUNTVILLE	U004163438	CARR BROS CONSTRUCTION CO	RT.2 BOX 312	37617	UST
BLOUNTVILLE	U003609362	HARR'S SERVICE STATION	BOX 2883, HIGHWAY 126	37617	HIST UST
BLOUNTVILLE	U004163542	MORTON'S GROCERY	RT.6 BOX 121	37617	LUST, UST
BLOUNTVILLE	U003609408	MORTON'S GROCERY	RT.6 BOX 121	37617	HIST UST
BLOUNTVILLE	U003609318	CARR BROS CONSTRUCTION CO	RT.2 BOX 312	37617	HIST UST

Count: 82 records. ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
BLOUNTVILLE	U004163493	HARR'S SERVICE STATION	BOX 2883, HIGHWAY 126	37617	LUST, UST
BLOUNTVILLE	S104780616	BROWN THURSTON MOTOR LINE	US HIGHWAY 11 WEST	37617	LUST TRUST
BLOUNTVILLE	U004163662	SULLIVAN CO. PARK	337 KNOB PARK ROAD, HIGHWAY 42	37617	UST
BLOUNTVILLE	U004163682	MCNUTT AND SONS ELECTRIC CONT INC.	RT.3 MCKELLAR	37617	UST
BLOUNTVILLE	U004163432	BUDGET RENT CAR	RT.3 P O BOX 1062 TCAS	37617	LUST, UST
BLOUNTVILLE	U004163505	ISLAND RD GROCERY	RT.4	37617	LUST, UST
BLOUNTVILLE	U003609373	ISLAND RD GROCERY	RT.4	37617	HIST UST
BLOUNTVILLE	U004163632	MCKINNON BRIDGE CO INC	STATE RT. 75 AIRPORT ROAD	37617	UST
BLOUNTVILLE	U003609485	MCKINNON BRIDGE CO INC	STATE RT. 75 AIRPORT ROAD	37617	HIST UST
BRISTOL	S103301555	SULLIVAN CO. PARK	HWY 421	37617	LUST
KINGSPORT	U004163436	C AND S TRANSIT	RT. 12	37664	UST
KINGSPORT	U003609316	C AND S TRANSIT	RT. 12	37664	HIST UST
KINGSPORT	U003609509	DANIEL BOONE TRUCKSTOP	RT. 4, I-81 EXIT 63		HIST UST
KINGSPORT	S111793271	DENZIL SYDEBOTHOM PROPERTY	BEECH CREEK		NPDES
KINGSPORT	S111793296	GRIZZEL PROPERTY	1537 BROOK VALLEY DRIVE		NPDES
KINGSPORT	S111820541	WAYNE CONSTRUCTION RESIDENTIAL PAR	CORNER OF WAYNE CONSTRUCTION R		NPDES
KINGSPORT	S111821682	PEACH ORCHARD PROPERTY	CORNER OF FAIRVIEW AVE. AND PE		NPDES
KINGSPORT	S111821364	BUCKNER PROPERTY IN KINGSPORT	CORNER OF CENTER ST. AND MEMOR		NPDES
KINGSPORT	U003609536	SUNBRIDGE CARE AND REHABILITATION	DBA HILLSIDE MANOR 3641 MEMORI	37664	HIST UST
KINGSPORT	S111821259	KATHY AND MACKEY CASEY RESIDENTIAL	HILTON ST.		NPDES
KINGSPORT	S111821741	EAST PROPERTY	HOLLYWOOD DRIVE AND LYNN GARDE		NPDES
KINGSPORT	S111799263	SANITARY SEWER FACILITIES FOR LYON	INTERSECTION OF RESERVOIR ROAD		NPDES
KINGSPORT	U004163571	RIGGS BROTHERS CONSTRUCTION CO	1010 JOHN B DENNIS HIGHWAY	37664	LUST, UST
KINGSPORT	U003609432	RIGGS BROTHERS CONSTRUCTION CO	1010 JOHN B DENNIS HIGHWAY	37664	HIST UST
KINGSPORT	S111820897	JIM GRIFFITH PROPERTY	MORELOCK STREET ~1000' EAST OF		NPDES
KINGSPORT	S111820548	R.L. PENDLETON PROPERTY	NELSE ROBERTS ROAD		NPDES
KINGSPORT	S111821217	TAYLOR INDUSTRIAL PROPERTY	NORTH SIDE OF KENDRICK CREEK R		NPDES
KINGSPORT	S111821494	GATTON PROPERTY	EAST STONE DRIVE-KINGSPORT		NPDES
KINGSPORT	S111821493	GATTON PROPERTY	EAST STONE DRIVE-KINGSPORT		NPDES
KINGSPORT	S111794860	SANITARY SEWER EXTENSION TO GATTON	EAST STONE DRIVE		NPDES
KINGSPORT	S111794872	GATTON PROPERTY	EAST STONE DRIVE-KINGSPORT		NPDES
KINGSPORT	S111821492	GATTON PROPERTY	EAST STONE DRIVE-KINGSPORT		NPDES
SULLIVAN COUNTY	S107030830	APPALACHIAN OIL COMPANY, INC.	APPALACHIAN OIL COMPANY, INC.		SWF/LF
SULLIVAN COUNTY	S111151676	ASR SYSTEMS OF THE TRI-CITIES	ASR SYSTEMS OF THE TRI-CITIES		SWF/LF
SULLIVAN COUNTY	S112193283	DYNAMIC RECYCLING LLC	DYNAMIC RECYCLING LLC		SWF/LF
SULLIVAN COUNTY	S111151657	ECOSAFE CLASS I LANDFILL	ECOSAFE CLASS I LANDFILL		SWF/LF
SULLIVAN COUNTY	S107031119	HOLSTON ARMY INCINERATOR	HOLSTON ARMY INCINERATOR		SWF/LF
SULLIVAN COUNTY	S110676242	SULLIVAN COUNTY ANIMAL DISPOSAL MO	SULLIVAN COUNTY ANIMAL DISPOSA		SWF/LF
SULLIVAN COUNTY	S107030997	SULLIVAN CO LANDFILL INC	SULLIVAN CO LANDFILL INC		SWF/LF

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

Number of Days to Update: Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL: National Priority List

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 04/26/2013
Date Data Arrived at EDR: 05/09/2013
Date Made Active in Reports: 07/10/2013
Number of Days to Update: 62

Source: EPA
Telephone: N/A
Last EDR Contact: 10/11/2013
Next Scheduled EDR Contact: 01/20/2014
Data Release Frequency: Quarterly

NPL Site Boundaries

Sources:

EPA's Environmental Photographic Interpretation Center (EPIC)
Telephone: 202-564-7333

EPA Region 1
Telephone 617-918-1143

EPA Region 6
Telephone: 214-655-6659

EPA Region 3
Telephone 215-814-5418

EPA Region 7
Telephone: 913-551-7247

EPA Region 4
Telephone 404-562-8033

EPA Region 8
Telephone: 303-312-6774

EPA Region 5
Telephone 312-886-6686

EPA Region 9
Telephone: 415-947-4246

EPA Region 10
Telephone 206-553-8665

Proposed NPL: Proposed National Priority List Sites

A site that has been proposed for listing on the National Priorities List through the issuance of a proposed rule in the Federal Register. EPA then accepts public comments on the site, responds to the comments, and places on the NPL those sites that continue to meet the requirements for listing.

Date of Government Version: 04/26/2013
Date Data Arrived at EDR: 05/09/2013
Date Made Active in Reports: 07/10/2013
Number of Days to Update: 62

Source: EPA
Telephone: N/A
Last EDR Contact: 10/11/2013
Next Scheduled EDR Contact: 01/20/2014
Data Release Frequency: Quarterly

NPL LIENS: Federal Superfund Liens

Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Date of Government Version: 10/15/1991
Date Data Arrived at EDR: 02/02/1994
Date Made Active in Reports: 03/30/1994
Number of Days to Update: 56

Source: EPA
Telephone: 202-564-4267
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Federal Delisted NPL site list

DELISTED NPL: National Priority List Deletions

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 04/26/2013
Date Data Arrived at EDR: 05/09/2013
Date Made Active in Reports: 07/10/2013
Number of Days to Update: 62

Source: EPA
Telephone: N/A
Last EDR Contact: 10/11/2013
Next Scheduled EDR Contact: 01/20/2014
Data Release Frequency: Quarterly

Federal CERCLIS list

CERCLIS: Comprehensive Environmental Response, Compensation, and Liability Information System

CERCLIS contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). CERCLIS contains sites which are either proposed to or on the National Priorities List (NPL) and sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 04/26/2013
Date Data Arrived at EDR: 05/29/2013
Date Made Active in Reports: 08/09/2013
Number of Days to Update: 72

Source: EPA
Telephone: 703-412-9810
Last EDR Contact: 10/18/2013
Next Scheduled EDR Contact: 12/09/2013
Data Release Frequency: Quarterly

FEDERAL FACILITY: Federal Facility Site Information listing

A listing of National Priority List (NPL) and Base Realignment and Closure (BRAC) sites found in the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) Database where EPA Federal Facilities Restoration and Reuse Office is involved in cleanup activities.

Date of Government Version: 07/31/2012
Date Data Arrived at EDR: 10/09/2012
Date Made Active in Reports: 12/20/2012
Number of Days to Update: 72

Source: Environmental Protection Agency
Telephone: 703-603-8704
Last EDR Contact: 10/11/2013
Next Scheduled EDR Contact: 01/20/2014
Data Release Frequency: Varies

Federal CERCLIS NFRAP site List

CERCLIS-NFRAP: CERCLIS No Further Remedial Action Planned

Archived sites are sites that have been removed and archived from the inventory of CERCLIS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list this site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. This decision does not necessarily mean that there is no hazard associated with a given site; it only means that, based upon available information, the location is not judged to be a potential NPL site.

Date of Government Version: 04/26/2013
Date Data Arrived at EDR: 05/29/2013
Date Made Active in Reports: 08/09/2013
Number of Days to Update: 72

Source: EPA
Telephone: 703-412-9810
Last EDR Contact: 10/18/2013
Next Scheduled EDR Contact: 12/09/2013
Data Release Frequency: Quarterly

Federal RCRA CORRACTS facilities list

CORRACTS: Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 07/11/2013
Date Data Arrived at EDR: 08/08/2013
Date Made Active in Reports: 09/13/2013
Number of Days to Update: 36

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 10/02/2013
Next Scheduled EDR Contact: 01/13/2014
Data Release Frequency: Quarterly

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF: RCRA - Treatment, Storage and Disposal

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 07/11/2013
Date Data Arrived at EDR: 08/08/2013
Date Made Active in Reports: 09/13/2013
Number of Days to Update: 36

Source: Environmental Protection Agency
Telephone: (404) 562-8651
Last EDR Contact: 10/02/2013
Next Scheduled EDR Contact: 01/13/2014
Data Release Frequency: Quarterly

Federal RCRA generators list

RCRA-LQG: RCRA - Large Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

Date of Government Version: 07/11/2013
Date Data Arrived at EDR: 08/08/2013
Date Made Active in Reports: 09/13/2013
Number of Days to Update: 36

Source: Environmental Protection Agency
Telephone: (404) 562-8651
Last EDR Contact: 10/02/2013
Next Scheduled EDR Contact: 01/13/2014
Data Release Frequency: Quarterly

RCRA-SQG: RCRA - Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

Date of Government Version: 07/11/2013
Date Data Arrived at EDR: 08/08/2013
Date Made Active in Reports: 09/13/2013
Number of Days to Update: 36

Source: Environmental Protection Agency
Telephone: (404) 562-8651
Last EDR Contact: 10/02/2013
Next Scheduled EDR Contact: 01/13/2014
Data Release Frequency: Quarterly

RCRA-CESQG: RCRA - Conditionally Exempt Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Conditionally exempt small quantity generators (CESQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Date of Government Version: 07/11/2013
Date Data Arrived at EDR: 08/08/2013
Date Made Active in Reports: 09/13/2013
Number of Days to Update: 36

Source: Environmental Protection Agency
Telephone: (404) 562-8651
Last EDR Contact: 10/02/2013
Next Scheduled EDR Contact: 01/13/2014
Data Release Frequency: Varies

Federal institutional controls / engineering controls registries

US ENG CONTROLS: Engineering Controls Sites List

A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 06/17/2013
Date Data Arrived at EDR: 06/21/2013
Date Made Active in Reports: 10/03/2013
Number of Days to Update: 104

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 09/10/2013
Next Scheduled EDR Contact: 12/23/2013
Data Release Frequency: Varies

US INST CONTROL: Sites with Institutional Controls

A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 06/17/2013
Date Data Arrived at EDR: 06/21/2013
Date Made Active in Reports: 10/03/2013
Number of Days to Update: 104

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 09/10/2013
Next Scheduled EDR Contact: 12/23/2013
Data Release Frequency: Varies

LUCIS: Land Use Control Information System

LUCIS contains records of land use control information pertaining to the former Navy Base Realignment and Closure properties.

Date of Government Version: 12/09/2005
Date Data Arrived at EDR: 12/11/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 31

Source: Department of the Navy
Telephone: 843-820-7326
Last EDR Contact: 08/15/2013
Next Scheduled EDR Contact: 09/02/2013
Data Release Frequency: Varies

Federal ERNS list

ERNS: Emergency Response Notification System

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 12/31/2012
Date Data Arrived at EDR: 01/17/2013
Date Made Active in Reports: 02/15/2013
Number of Days to Update: 29

Source: National Response Center, United States Coast Guard
Telephone: 202-267-2180
Last EDR Contact: 10/01/2013
Next Scheduled EDR Contact: 01/13/2014
Data Release Frequency: Annually

State- and tribal - equivalent NPL

SHWS: Promulgated Sites

"Inactive hazardous substance sites that constitute an imminent, substantial danger" is an inactive hazardous substance site where there is a threat of danger to the public health, safety, or environment which is both real and presently existing. Such situations may include, but are not limited to one or more of the following: an immediate action is necessary to minimize an ongoing threat to the public health or pollution of the environment, an inactive hazardous substance site where there is an active release, where direct access to the hazardous substance is not controlled, or where incompatible hazardous substances are found in close proximity. Also known as Promulgated Sites List.

Date of Government Version: 08/07/2012
Date Data Arrived at EDR: 01/09/2013
Date Made Active in Reports: 02/06/2013
Number of Days to Update: 28

Source: Department of Environment & Conservation
Telephone: 615-532-0900
Last EDR Contact: 10/07/2013
Next Scheduled EDR Contact: 01/20/2014
Data Release Frequency: Semi-Annually

State and tribal landfill and/or solid waste disposal site lists

SWF/LF: Solid Waste Disposal Facilities

Solid Waste Facilities/Landfill Sites. SWF/LF type records typically contain an inventory of solid waste disposal facilities or landfills in a particular state. Depending on the state, these may be active or inactive facilities or open dumps that failed to meet RCRA Subtitle D Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 08/05/2013
Date Data Arrived at EDR: 08/07/2013
Date Made Active in Reports: 09/30/2013
Number of Days to Update: 54

Source: Department of Environment and Conservation
Telephone: 615-532-0804
Last EDR Contact: 09/19/2013
Next Scheduled EDR Contact: 12/30/2013
Data Release Frequency: Annually

State and tribal leaking storage tank lists

LUST: Fund Eligible Leaking Underground Storage Tank Sites

A listing of leaking underground storage tank site locations.

Date of Government Version: 07/02/2013
Date Data Arrived at EDR: 08/22/2013
Date Made Active in Reports: 09/19/2013
Number of Days to Update: 28

Source: Department of Environment and Conservation
Telephone: 615-532-0945
Last EDR Contact: 08/22/2013
Next Scheduled EDR Contact: 12/02/2013
Data Release Frequency: Quarterly

LUST TRUST: LUST TRUST Fund Database

This list contains information on sites that had accidental releases of petroleum and are eligible for reimbursement from the TN Petroleum UST Fund.

Date of Government Version: 01/03/2013
Date Data Arrived at EDR: 02/21/2013
Date Made Active in Reports: 04/15/2013
Number of Days to Update: 53

Source: Department of Environment & Conservation
Telephone: 615-532-0971
Last EDR Contact: 08/22/2013
Next Scheduled EDR Contact: 12/02/2013
Data Release Frequency: Varies

HIST_LUST CO: Leaking Underground Storage Tanks Sites

A listing of leaking underground storage tank site locations from the Columbia Field Office. The listing is no longer updated.

Date of Government Version: 10/18/1994
Date Data Arrived at EDR: 10/24/1994
Date Made Active in Reports: 12/30/1994
Number of Days to Update: 67

Source: Department of Environmental Conservation, Columbia Field Office
Telephone: 931-380-3371
Last EDR Contact: 06/29/2009
Next Scheduled EDR Contact: 09/28/2009
Data Release Frequency: No Update Planned

INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 02/05/2013
Date Data Arrived at EDR: 02/06/2013
Date Made Active in Reports: 04/12/2013
Number of Days to Update: 65

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 10/28/2013
Next Scheduled EDR Contact: 02/11/2014
Data Release Frequency: Quarterly

INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.

Date of Government Version: 08/27/2012
Date Data Arrived at EDR: 08/28/2012
Date Made Active in Reports: 10/16/2012
Number of Days to Update: 49

Source: EPA Region 8
Telephone: 303-312-6271
Last EDR Contact: 10/28/2013
Next Scheduled EDR Contact: 02/11/2014
Data Release Frequency: Quarterly

INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Florida, Mississippi and North Carolina.

Date of Government Version: 02/06/2013
Date Data Arrived at EDR: 02/08/2013
Date Made Active in Reports: 04/12/2013
Number of Days to Update: 63
Source: EPA Region 4
Telephone: 404-562-8677
Last EDR Contact: 10/28/2013
Next Scheduled EDR Contact: 02/11/2014
Data Release Frequency: Semi-Annually

INDIAN LUST R9: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Arizona, California, New Mexico and Nevada

Date of Government Version: 03/01/2013
Date Data Arrived at EDR: 03/01/2013
Date Made Active in Reports: 04/12/2013
Number of Days to Update: 42
Source: Environmental Protection Agency
Telephone: 415-972-3372
Last EDR Contact: 10/28/2013
Next Scheduled EDR Contact: 02/11/2014
Data Release Frequency: Quarterly

INDIAN LUST R1: Leaking Underground Storage Tanks on Indian Land
A listing of leaking underground storage tank locations on Indian Land.

Date of Government Version: 09/28/2012
Date Data Arrived at EDR: 11/01/2012
Date Made Active in Reports: 04/12/2013
Number of Days to Update: 162
Source: EPA Region 1
Telephone: 617-918-1313
Last EDR Contact: 08/02/2013
Next Scheduled EDR Contact: 11/11/2013
Data Release Frequency: Varies

INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 09/12/2011
Date Data Arrived at EDR: 09/13/2011
Date Made Active in Reports: 11/11/2011
Number of Days to Update: 59
Source: EPA Region 6
Telephone: 214-665-6597
Last EDR Contact: 10/28/2013
Next Scheduled EDR Contact: 02/11/2014
Data Release Frequency: Varies

INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 12/31/2012
Date Data Arrived at EDR: 02/28/2013
Date Made Active in Reports: 04/12/2013
Number of Days to Update: 43
Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 10/28/2013
Next Scheduled EDR Contact: 02/11/2014
Data Release Frequency: Varies

State and tribal registered storage tank lists

UST: Facility and Tank Report
Registered Underground Storage Tanks. UST's are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA) and must be registered with the state department responsible for administering the UST program. Available information varies by state program.

Date of Government Version: 07/02/2013
Date Data Arrived at EDR: 08/22/2013
Date Made Active in Reports: 10/01/2013
Number of Days to Update: 40
Source: Department of Environment and Conservation
Telephone: 615-532-0945
Last EDR Contact: 08/22/2013
Next Scheduled EDR Contact: 12/02/2013
Data Release Frequency: Quarterly

AST: Aboveground Storage Tanks
Registered Aboveground Storage Tanks.

Date of Government Version: 10/01/1999
Date Data Arrived at EDR: 10/12/1999
Date Made Active in Reports: 11/05/1999
Number of Days to Update: 24

Source: Department of Environment and Conservation
Telephone: 615-532-0965
Last EDR Contact: 10/28/2013
Next Scheduled EDR Contact: 02/11/2014
Data Release Frequency: No Update Planned

INDIAN UST R6: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 6 (Louisiana, Arkansas, Oklahoma, New Mexico, Texas and 65 Tribes).

Date of Government Version: 05/10/2011
Date Data Arrived at EDR: 05/11/2011
Date Made Active in Reports: 06/14/2011
Number of Days to Update: 34

Source: EPA Region 6
Telephone: 214-665-7591
Last EDR Contact: 10/28/2013
Next Scheduled EDR Contact: 02/11/2014
Data Release Frequency: Semi-Annually

INDIAN UST R5: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 5 (Michigan, Minnesota and Wisconsin and Tribal Nations).

Date of Government Version: 08/02/2012
Date Data Arrived at EDR: 08/03/2012
Date Made Active in Reports: 11/05/2012
Number of Days to Update: 94

Source: EPA Region 5
Telephone: 312-886-6136
Last EDR Contact: 10/28/2013
Next Scheduled EDR Contact: 02/11/2014
Data Release Frequency: Varies

INDIAN UST R4: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee and Tribal Nations)

Date of Government Version: 02/06/2013
Date Data Arrived at EDR: 02/08/2013
Date Made Active in Reports: 04/12/2013
Number of Days to Update: 63

Source: EPA Region 4
Telephone: 404-562-9424
Last EDR Contact: 10/28/2013
Next Scheduled EDR Contact: 02/11/2014
Data Release Frequency: Semi-Annually

INDIAN UST R1: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont and ten Tribal Nations).

Date of Government Version: 09/28/2012
Date Data Arrived at EDR: 11/07/2012
Date Made Active in Reports: 04/12/2013
Number of Days to Update: 156

Source: EPA, Region 1
Telephone: 617-918-1313
Last EDR Contact: 08/02/2013
Next Scheduled EDR Contact: 11/11/2013
Data Release Frequency: Varies

INDIAN UST R7: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 7 (Iowa, Kansas, Missouri, Nebraska, and 9 Tribal Nations).

Date of Government Version: 12/31/2012
Date Data Arrived at EDR: 02/28/2013
Date Made Active in Reports: 04/12/2013
Number of Days to Update: 43

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 10/28/2013
Next Scheduled EDR Contact: 02/11/2014
Data Release Frequency: Varies

INDIAN UST R10: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 10 (Alaska, Idaho, Oregon, Washington, and Tribal Nations).

Date of Government Version: 02/05/2013
Date Data Arrived at EDR: 02/06/2013
Date Made Active in Reports: 04/12/2013
Number of Days to Update: 65

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 10/28/2013
Next Scheduled EDR Contact: 02/11/2014
Data Release Frequency: Quarterly

INDIAN UST R9: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 9 (Arizona, California, Hawaii, Nevada, the Pacific Islands, and Tribal Nations).

Date of Government Version: 02/21/2013
Date Data Arrived at EDR: 02/26/2013
Date Made Active in Reports: 04/12/2013
Number of Days to Update: 45

Source: EPA Region 9
Telephone: 415-972-3368
Last EDR Contact: 10/28/2013
Next Scheduled EDR Contact: 02/11/2014
Data Release Frequency: Quarterly

INDIAN UST R8: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming and 27 Tribal Nations).

Date of Government Version: 08/27/2012
Date Data Arrived at EDR: 08/28/2012
Date Made Active in Reports: 10/16/2012
Number of Days to Update: 49

Source: EPA Region 8
Telephone: 303-312-6137
Last EDR Contact: 10/28/2013
Next Scheduled EDR Contact: 02/11/2014
Data Release Frequency: Quarterly

FEMA UST: Underground Storage Tank Listing

A listing of all FEMA owned underground storage tanks.

Date of Government Version: 01/01/2010
Date Data Arrived at EDR: 02/16/2010
Date Made Active in Reports: 04/12/2010
Number of Days to Update: 55

Source: FEMA
Telephone: 202-646-5797
Last EDR Contact: 10/17/2013
Next Scheduled EDR Contact: 01/27/2014
Data Release Frequency: Varies

State and tribal institutional control / engineering control registries

ENG CONTROLS: Engineering Control Sites

Sites that have engineering controls.

Date of Government Version: 07/31/2013
Date Data Arrived at EDR: 08/20/2013
Date Made Active in Reports: 09/30/2013
Number of Days to Update: 41

Source: Department of Environment & Conservation
Telephone: 615-532-0900
Last EDR Contact: 08/15/2013
Next Scheduled EDR Contact: 12/02/2013
Data Release Frequency: Varies

INST CONTROL: Institutional Control Sites

Sites that have institutional controls.

Date of Government Version: 07/31/2013
Date Data Arrived at EDR: 08/20/2013
Date Made Active in Reports: 09/30/2013
Number of Days to Update: 41

Source: Department of Environment & Conservation
Telephone: 615-532-0900
Last EDR Contact: 08/15/2013
Next Scheduled EDR Contact: 12/02/2013
Data Release Frequency: Varies

State and tribal voluntary cleanup sites

VCP: Voluntary Cleanup, Oversight and Assistance Program Sites

The Voluntary Cleanup Oversight and Assistance Program (VOAP) offers people the opportunity to work proactively with state government to address necessary cleanup of a property to return it to productive use. In return for their efforts, participants can receive a No Further Action letter and a release of liability for areas where investigation and cleanup is conducted. The program is open to everyone with an interest in addressing contamination at a site.

Date of Government Version: 07/03/2013
Date Data Arrived at EDR: 07/29/2013
Date Made Active in Reports: 07/30/2013
Number of Days to Update: 1

Source: Department of Environmental & Conservation
Telephone: 615-532-0912
Last EDR Contact: 10/07/2013
Next Scheduled EDR Contact: 01/20/2014
Data Release Frequency: Varies

INDIAN VCP R1: Voluntary Cleanup Priority Listing

A listing of voluntary cleanup priority sites located on Indian Land located in Region 1.

Date of Government Version: 09/28/2012
Date Data Arrived at EDR: 10/02/2012
Date Made Active in Reports: 10/16/2012
Number of Days to Update: 14

Source: EPA, Region 1
Telephone: 617-918-1102
Last EDR Contact: 10/01/2013
Next Scheduled EDR Contact: 01/13/2014
Data Release Frequency: Varies

SRP: State Remediation Program List

The State Remediation Program (SRP) was established in 1994 within the Division of Solid Waste Management for the purpose of providing owners, prospective purchasers and other interested parties the means to voluntarily investigate, clean up or monitor contaminated sites not regulated under RCRA, CERCLA or the Tennessee Division of Underground Tanks (UST).

Date of Government Version: 08/01/2013
Date Data Arrived at EDR: 08/08/2013
Date Made Active in Reports: 09/19/2013
Number of Days to Update: 42

Source: Department of Environemtn & Conservation
Telephone: 615-532-0853
Last EDR Contact: 08/01/2013
Next Scheduled EDR Contact: 11/18/2013
Data Release Frequency: Varies

INDIAN VCP R7: Voluntary Cleanup Priority Lisitng

A listing of voluntary cleanup priority sites located on Indian Land located in Region 7.

Date of Government Version: 03/20/2008
Date Data Arrived at EDR: 04/22/2008
Date Made Active in Reports: 05/19/2008
Number of Days to Update: 27

Source: EPA, Region 7
Telephone: 913-551-7365
Last EDR Contact: 04/20/2009
Next Scheduled EDR Contact: 07/20/2009
Data Release Frequency: Varies

State and tribal Brownfields sites

BROWNFIELDS: Superfund VOAP Listing

Brownfields sites included on the Superfund Voluntary Cleanup, Oversight & Assistance Program listing.

Date of Government Version: 07/03/2013
Date Data Arrived at EDR: 07/29/2013
Date Made Active in Reports: 07/30/2013
Number of Days to Update: 1

Source: Department of Environment & Conservation
Telephone: 615-532-0912
Last EDR Contact: 10/07/2013
Next Scheduled EDR Contact: 01/20/2014
Data Release Frequency: Varies

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS: A Listing of Brownfields Sites

Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. Assessment, Cleanup and Redevelopment Exchange System (ACRES) stores information reported by EPA Brownfields grant recipients on brownfields properties assessed or cleaned up with grant funding as well as information on Targeted Brownfields Assessments performed by EPA Regions. A listing of ACRES Brownfield sites is obtained from Cleanups in My Community. Cleanups in My Community provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs.

Date of Government Version: 06/24/2013
Date Data Arrived at EDR: 06/25/2013
Date Made Active in Reports: 08/09/2013
Number of Days to Update: 45

Source: Environmental Protection Agency
Telephone: 202-566-2777
Last EDR Contact: 09/24/2013
Next Scheduled EDR Contact: 01/08/2014
Data Release Frequency: Semi-Annually

Local Lists of Landfill / Solid Waste Disposal Sites

DEBRIS REGION 9: Torres Martinez Reservation Illegal Dump Site Locations
A listing of illegal dump sites location on the Torres Martinez Indian Reservation located in eastern Riverside County and northern Imperial County, California.

Date of Government Version: 01/12/2009
Date Data Arrived at EDR: 05/07/2009
Date Made Active in Reports: 09/21/2009
Number of Days to Update: 137

Source: EPA, Region 9
Telephone: 415-947-4219
Last EDR Contact: 10/28/2013
Next Scheduled EDR Contact: 02/11/2014
Data Release Frequency: No Update Planned

ODI: Open Dump Inventory
An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria.

Date of Government Version: 06/30/1985
Date Data Arrived at EDR: 08/09/2004
Date Made Active in Reports: 09/17/2004
Number of Days to Update: 39

Source: Environmental Protection Agency
Telephone: 800-424-9346
Last EDR Contact: 06/09/2004
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

SWRCY: Recycling Facilities Listing
A listing of recycling facility locations.

Date of Government Version: 03/26/2013
Date Data Arrived at EDR: 03/29/2013
Date Made Active in Reports: 04/15/2013
Number of Days to Update: 17

Source: Department of Environment & Conservation
Telephone: 615-532-8657
Last EDR Contact: 10/10/2013
Next Scheduled EDR Contact: 01/27/2014
Data Release Frequency: Varies

INDIAN ODI: Report on the Status of Open Dumps on Indian Lands
Location of open dumps on Indian land.

Date of Government Version: 12/31/1998
Date Data Arrived at EDR: 12/03/2007
Date Made Active in Reports: 01/24/2008
Number of Days to Update: 52

Source: Environmental Protection Agency
Telephone: 703-308-8245
Last EDR Contact: 07/31/2013
Next Scheduled EDR Contact: 11/18/2013
Data Release Frequency: Varies

Local Lists of Hazardous waste / Contaminated Sites

US CDL: Clandestine Drug Labs
A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 08/06/2013
Date Data Arrived at EDR: 09/11/2013
Date Made Active in Reports: 10/03/2013
Number of Days to Update: 22

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 09/04/2013
Next Scheduled EDR Contact: 12/16/2013
Data Release Frequency: Quarterly

DEL SHWS: Deleted State Hazardous Waste Sites
A listing of sites removed from the Promulgated Sites Listing.

Date of Government Version: 08/07/2012
Date Data Arrived at EDR: 01/09/2013
Date Made Active in Reports: 02/06/2013
Number of Days to Update: 28

Source: Department of Environment & Conservation
Telephone: 615-532-0900
Last EDR Contact: 10/07/2013
Next Scheduled EDR Contact: 01/20/2014
Data Release Frequency: Varies

PRIORITY CLEANERS: DCERP Remediation Sites Listing
Drycleaner Environmental Response Program remediation sites.

Date of Government Version: 02/04/2013
Date Data Arrived at EDR: 02/07/2013
Date Made Active in Reports: 02/20/2013
Number of Days to Update: 13

Source: Department of Environment & Conservation
Telephone: 615-253-3876
Last EDR Contact: 10/21/2013
Next Scheduled EDR Contact: 02/03/2014
Data Release Frequency: Varies

CDL: Registry of Contaminated Properties
Pursuant to TCA 68212509 the following properties have been quarantined because of methamphetamine production, but have not been cleaned and certified within the 60day time frame allotted by the statute. These properties are hereby registered by the Tennessee Department of Environment and Conservation as unremediated methamphetamine sites. This is not a comprehensive list of quarantined properties. These are properties that TDEC has been notified as being quarantined, but have not been cleaned within the 60 day grace period. Other properties where methamphetamine production residues are a concern may not have been quarantined, may not have been reported to TDEC, or may not have passed the 60day grace

Date of Government Version: 05/01/2013
Date Data Arrived at EDR: 05/09/2013
Date Made Active in Reports: 06/04/2013
Number of Days to Update: 26

Source: Department of Environment & Conservation
Telephone: 615-532-0900
Last EDR Contact: 09/18/2013
Next Scheduled EDR Contact: 11/18/2013
Data Release Frequency: Varies

US HIST CDL: National Clandestine Laboratory Register
A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 09/01/2007
Date Data Arrived at EDR: 11/19/2008
Date Made Active in Reports: 03/30/2009
Number of Days to Update: 131

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 03/23/2009
Next Scheduled EDR Contact: 06/22/2009
Data Release Frequency: No Update Planned

Local Lists of Registered Storage Tanks

HIST UST: Underground Storage Tank Database
This database is no longer updated by the agency. It contains records and detail fields that the current UST database does not.

Date of Government Version: 07/02/2013
Date Data Arrived at EDR: 08/22/2013
Date Made Active in Reports: 10/01/2013
Number of Days to Update: 40

Source: Department of Environment & Conservation
Telephone: 615-532-0945
Last EDR Contact: 08/22/2013
Next Scheduled EDR Contact: 12/02/2013
Data Release Frequency: No Update Planned

Local Land Records

LIENS 2: CERCLA Lien Information

A Federal CERCLA ('Superfund') lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties.

Date of Government Version: 02/06/2013
Date Data Arrived at EDR: 04/25/2013
Date Made Active in Reports: 05/10/2013
Number of Days to Update: 15

Source: Environmental Protection Agency
Telephone: 202-564-6023
Last EDR Contact: 07/24/2013
Next Scheduled EDR Contact: 11/11/2013
Data Release Frequency: Varies

LIENS: Liens Information

A listing of sites with environmental liens information.

Date of Government Version: 04/08/2013
Date Data Arrived at EDR: 04/11/2013
Date Made Active in Reports: 05/17/2013
Number of Days to Update: 36

Source: Department of Environment & Conservation
Telephone: 615-532-0900
Last EDR Contact: 10/07/2013
Next Scheduled EDR Contact: 01/20/2014
Data Release Frequency: Varies

Records of Emergency Release Reports

HMIRS: Hazardous Materials Information Reporting System

Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 12/31/2012
Date Data Arrived at EDR: 01/03/2013
Date Made Active in Reports: 02/27/2013
Number of Days to Update: 55

Source: U.S. Department of Transportation
Telephone: 202-366-4555
Last EDR Contact: 10/01/2013
Next Scheduled EDR Contact: 01/13/2014
Data Release Frequency: Annually

SPILLS: State Spills

A listing of spills locations.

Date of Government Version: 07/19/2013
Date Data Arrived at EDR: 07/19/2013
Date Made Active in Reports: 08/20/2013
Number of Days to Update: 32

Source: Department of Environment & Conservation
Telephone: 615-532-0109
Last EDR Contact: 10/07/2013
Next Scheduled EDR Contact: 01/20/2014
Data Release Frequency: Varies

Other Ascertainable Records

RCRA NonGen / NLR: RCRA - Non Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

Date of Government Version: 07/11/2013
Date Data Arrived at EDR: 08/08/2013
Date Made Active in Reports: 09/13/2013
Number of Days to Update: 36

Source: Environmental Protection Agency
Telephone: (404) 562-8651
Last EDR Contact: 10/02/2013
Next Scheduled EDR Contact: 01/13/2014
Data Release Frequency: Varies

DOT OPS: Incident and Accident Data

Department of Transporation, Office of Pipeline Safety Incident and Accident data.

Date of Government Version: 07/31/2012
Date Data Arrived at EDR: 08/07/2012
Date Made Active in Reports: 09/18/2012
Number of Days to Update: 42

Source: Department of Transporation, Office of Pipeline Safety
Telephone: 202-366-4595
Last EDR Contact: 08/05/2013
Next Scheduled EDR Contact: 11/18/2013
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

DOD: Department of Defense Sites

This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 11/10/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 62

Source: USGS
Telephone: 888-275-8747
Last EDR Contact: 10/18/2013
Next Scheduled EDR Contact: 01/27/2014
Data Release Frequency: Semi-Annually

FUDS: Formerly Used Defense Sites

The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 12/31/2011
Date Data Arrived at EDR: 02/26/2013
Date Made Active in Reports: 03/13/2013
Number of Days to Update: 15

Source: U.S. Army Corps of Engineers
Telephone: 202-528-4285
Last EDR Contact: 09/10/2013
Next Scheduled EDR Contact: 12/23/2013
Data Release Frequency: Varies

CONSENT: Superfund (CERCLA) Consent Decrees

Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: 06/30/2013
Date Data Arrived at EDR: 08/07/2013
Date Made Active in Reports: 10/03/2013
Number of Days to Update: 57

Source: Department of Justice, Consent Decree Library
Telephone: Varies
Last EDR Contact: 09/30/2013
Next Scheduled EDR Contact: 01/13/2014
Data Release Frequency: Varies

ROD: Records Of Decision

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 12/18/2012
Date Data Arrived at EDR: 03/13/2013
Date Made Active in Reports: 04/12/2013
Number of Days to Update: 30

Source: EPA
Telephone: 703-416-0223
Last EDR Contact: 09/13/2013
Next Scheduled EDR Contact: 12/23/2013
Data Release Frequency: Annually

UMTRA: Uranium Mill Tailings Sites

Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

Date of Government Version: 09/14/2010
Date Data Arrived at EDR: 10/07/2011
Date Made Active in Reports: 03/01/2012
Number of Days to Update: 146

Source: Department of Energy
Telephone: 505-845-0011
Last EDR Contact: 05/28/2013
Next Scheduled EDR Contact: 09/09/2013
Data Release Frequency: Varies

US MINES: Mines Master Index File

Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

Date of Government Version: 08/01/2013
Date Data Arrived at EDR: 09/05/2013
Date Made Active in Reports: 10/03/2013
Number of Days to Update: 28

Source: Department of Labor, Mine Safety and Health Administration
Telephone: 303-231-5959
Last EDR Contact: 09/05/2013
Next Scheduled EDR Contact: 12/16/2013
Data Release Frequency: Semi-Annually

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

TRIS: Toxic Chemical Release Inventory System

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/2011
Date Data Arrived at EDR: 07/31/2013
Date Made Active in Reports: 09/13/2013
Number of Days to Update: 44

Source: EPA
Telephone: 202-566-0250
Last EDR Contact: 08/30/2013
Next Scheduled EDR Contact: 12/09/2013
Data Release Frequency: Annually

TSCA: Toxic Substances Control Act

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/2006
Date Data Arrived at EDR: 09/29/2010
Date Made Active in Reports: 12/02/2010
Number of Days to Update: 64

Source: EPA
Telephone: 202-260-5521
Last EDR Contact: 09/24/2013
Next Scheduled EDR Contact: 01/08/2014
Data Release Frequency: Every 4 Years

FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25

Source: EPA/Office of Prevention, Pesticides and Toxic Substances
Telephone: 202-566-1667
Last EDR Contact: 08/22/2013
Next Scheduled EDR Contact: 12/09/2013
Data Release Frequency: Quarterly

FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

A listing of FIFRA/TSCA Tracking System (FTTS) inspections and enforcements.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25

Source: EPA
Telephone: 202-566-1667
Last EDR Contact: 08/22/2013
Next Scheduled EDR Contact: 12/09/2013
Data Release Frequency: Quarterly

HIST FTTS: FIFRA/TSCA Tracking System Administrative Case Listing

A complete administrative case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2007
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

HIST FTTS INSP: FIFRA/TSCA Tracking System Inspection & Enforcement Case Listing

A complete inspection and enforcement case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40
Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2008
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

SSTS: Section 7 Tracking Systems

Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 12/31/2009
Date Data Arrived at EDR: 12/10/2010
Date Made Active in Reports: 02/25/2011
Number of Days to Update: 77
Source: EPA
Telephone: 202-564-4203
Last EDR Contact: 10/28/2013
Next Scheduled EDR Contact: 02/11/2014
Data Release Frequency: Annually

ICIS: Integrated Compliance Information System

The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

Date of Government Version: 07/20/2011
Date Data Arrived at EDR: 11/10/2011
Date Made Active in Reports: 01/10/2012
Number of Days to Update: 61
Source: Environmental Protection Agency
Telephone: 202-564-5088
Last EDR Contact: 10/09/2014
Next Scheduled EDR Contact: 01/27/2014
Data Release Frequency: Quarterly

PADS: PCB Activity Database System

PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 11/01/2012
Date Data Arrived at EDR: 01/16/2013
Date Made Active in Reports: 05/10/2013
Number of Days to Update: 114
Source: EPA
Telephone: 202-566-0500
Last EDR Contact: 10/18/2013
Next Scheduled EDR Contact: 01/27/2014
Data Release Frequency: Annually

MLTS: Material Licensing Tracking System

MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 03/14/2013
Date Data Arrived at EDR: 03/20/2013
Date Made Active in Reports: 07/10/2013
Number of Days to Update: 112
Source: Nuclear Regulatory Commission
Telephone: 301-415-7169
Last EDR Contact: 09/10/2013
Next Scheduled EDR Contact: 12/23/2013
Data Release Frequency: Quarterly

RADINFO: Radiation Information Database

The Radiation Information Database (RADINFO) contains information about facilities that are regulated by U.S. Environmental Protection Agency (EPA) regulations for radiation and radioactivity.

Date of Government Version: 04/09/2013
Date Data Arrived at EDR: 04/11/2013
Date Made Active in Reports: 05/10/2013
Number of Days to Update: 29
Source: Environmental Protection Agency
Telephone: 202-343-9775
Last EDR Contact: 10/09/2013
Next Scheduled EDR Contact: 01/20/2014
Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

FINDS: Facility Index System/Facility Registry System

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 03/08/2013
Date Data Arrived at EDR: 03/21/2013
Date Made Active in Reports: 07/10/2013
Number of Days to Update: 111

Source: EPA
Telephone: (404) 562-9900
Last EDR Contact: 09/11/2013
Next Scheduled EDR Contact: 12/23/2013
Data Release Frequency: Quarterly

RAATS: RCRA Administrative Action Tracking System

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/1995
Date Data Arrived at EDR: 07/03/1995
Date Made Active in Reports: 08/07/1995
Number of Days to Update: 35

Source: EPA
Telephone: 202-564-4104
Last EDR Contact: 06/02/2008
Next Scheduled EDR Contact: 09/01/2008
Data Release Frequency: No Update Planned

RMP: Risk Management Plans

When Congress passed the Clean Air Act Amendments of 1990, it required EPA to publish regulations and guidance for chemical accident prevention at facilities using extremely hazardous substances. The Risk Management Program Rule (RMP Rule) was written to implement Section 112(r) of these amendments. The rule, which built upon existing industry codes and standards, requires companies of all sizes that use certain flammable and toxic substances to develop a Risk Management Program, which includes a(n): Hazard assessment that details the potential effects of an accidental release, an accident history of the last five years, and an evaluation of worst-case and alternative accidental releases; Prevention program that includes safety precautions and maintenance, monitoring, and employee training measures; and Emergency response program that spells out emergency health care, employee training measures and procedures for informing the public and response agencies (e.g the fire department) should an accident occur.

Date of Government Version: 05/08/2012
Date Data Arrived at EDR: 05/25/2012
Date Made Active in Reports: 07/10/2012
Number of Days to Update: 46

Source: Environmental Protection Agency
Telephone: 202-564-8600
Last EDR Contact: 10/28/2013
Next Scheduled EDR Contact: 02/11/2014
Data Release Frequency: Varies

BRS: Biennial Reporting System

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/2011
Date Data Arrived at EDR: 02/26/2013
Date Made Active in Reports: 04/19/2013
Number of Days to Update: 52

Source: EPA/NTIS
Telephone: 800-424-9346
Last EDR Contact: 08/26/2013
Next Scheduled EDR Contact: 12/09/2013
Data Release Frequency: Biennially

DRYCLEANERS: Registered Facilities List

A list of all active registered drycleaner facilities, There may be some inactive facilities included.

Date of Government Version: 05/02/2011
Date Data Arrived at EDR: 08/05/2011
Date Made Active in Reports: 08/18/2011
Number of Days to Update: 13

Source: Dept. of Environment & Conservation
Telephone: 615-532-0900
Last EDR Contact: 10/25/2013
Next Scheduled EDR Contact: 02/03/2014
Data Release Frequency: Annually

NPDES: Permitted Facility Listing
A listing of permitted wastewater facilities.

Date of Government Version: 08/23/2013
Date Data Arrived at EDR: 08/28/2013
Date Made Active in Reports: 10/01/2013
Number of Days to Update: 34
Source: Department of Environment & Conservation
Telephone: 615-253-2245
Last EDR Contact: 08/23/2013
Next Scheduled EDR Contact: 12/09/2013
Data Release Frequency: Varies

AIRS: Listing of Permitted Sources
A listing of permitted sources issued by the Division of Air Pollution Control.

Date of Government Version: 03/18/2013
Date Data Arrived at EDR: 03/21/2013
Date Made Active in Reports: 05/14/2013
Number of Days to Update: 54
Source: Department of Environment & Conservation
Telephone: 615-532-0545
Last EDR Contact: 09/06/2013
Next Scheduled EDR Contact: 11/18/2013
Data Release Frequency: Varies

INDIAN RESERV: Indian Reservations
This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 12/08/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 34
Source: USGS
Telephone: 202-208-3710
Last EDR Contact: 10/18/2013
Next Scheduled EDR Contact: 01/27/2014
Data Release Frequency: Semi-Annually

SCRD DRYCLEANERS: State Coalition for Remediation of Drycleaners Listing
The State Coalition for Remediation of Drycleaners was established in 1998, with support from the U.S. EPA Office of Superfund Remediation and Technology Innovation. It is comprised of representatives of states with established drycleaner remediation programs. Currently the member states are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin.

Date of Government Version: 03/07/2011
Date Data Arrived at EDR: 03/09/2011
Date Made Active in Reports: 05/02/2011
Number of Days to Update: 54
Source: Environmental Protection Agency
Telephone: 615-532-8599
Last EDR Contact: 10/21/2013
Next Scheduled EDR Contact: 02/03/2014
Data Release Frequency: Varies

US AIRS MINOR: Air Facility System Data
A listing of minor source facilities.

Date of Government Version: 01/23/2013
Date Data Arrived at EDR: 01/30/2013
Date Made Active in Reports: 05/10/2013
Number of Days to Update: 100
Source: EPA
Telephone: 202-564-5962
Last EDR Contact: 09/30/2013
Next Scheduled EDR Contact: 01/13/2014
Data Release Frequency: Annually

PRP: Potentially Responsible Parties
A listing of verified Potentially Responsible Parties

Date of Government Version: 04/15/2013
Date Data Arrived at EDR: 07/03/2013
Date Made Active in Reports: 09/13/2013
Number of Days to Update: 72
Source: EPA
Telephone: 202-564-6023
Last EDR Contact: 10/04/2013
Next Scheduled EDR Contact: 01/13/2014
Data Release Frequency: Quarterly

FEDLAND: Federal and Indian Lands
Federally and Indian administrated lands of the United States. Lands included are administrated by: Army Corps of Engineers, Bureau of Reclamation, National Wild and Scenic River, National Wildlife Refuge, Public Domain Land, Wilderness, Wilderness Study Area, Wildlife Management Area, Bureau of Indian Affairs, Bureau of Land Management, Department of Justice, Forest Service, Fish and Wildlife Service, National Park Service.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 02/06/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 339

Source: U.S. Geological Survey
Telephone: 888-275-8747
Last EDR Contact: 10/18/2013
Next Scheduled EDR Contact: 01/27/2014
Data Release Frequency: N/A

US AIRS (AFS): Aerometric Information Retrieval System Facility Subsystem (AFS)

The database is a sub-system of Aerometric Information Retrieval System (AIRS). AFS contains compliance data on air pollution point sources regulated by the U.S. EPA and/or state and local air regulatory agencies. This information comes from source reports by various stationary sources of air pollution, such as electric power plants, steel mills, factories, and universities, and provides information about the air pollutants they produce. Action, air program, air program pollutant, and general level plant data. It is used to track emissions and compliance data from industrial plants.

Date of Government Version: 01/23/2013
Date Data Arrived at EDR: 01/30/2013
Date Made Active in Reports: 05/10/2013
Number of Days to Update: 100

Source: EPA
Telephone: 202-564-5962
Last EDR Contact: 09/30/2013
Next Scheduled EDR Contact: 01/13/2014
Data Release Frequency: Annually

LEAD SMELTER 2: Lead Smelter Sites

A list of several hundred sites in the U.S. where secondary lead smelting was done from 1931and 1964. These sites may pose a threat to public health through ingestion or inhalation of contaminated soil or dust

Date of Government Version: 04/05/2001
Date Data Arrived at EDR: 10/27/2010
Date Made Active in Reports: 12/02/2010
Number of Days to Update: 36

Source: American Journal of Public Health
Telephone: 703-305-6451
Last EDR Contact: 12/02/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

LEAD SMELTER 1: Lead Smelter Sites

A listing of former lead smelter site locations.

Date of Government Version: 01/29/2013
Date Data Arrived at EDR: 02/14/2013
Date Made Active in Reports: 02/27/2013
Number of Days to Update: 13

Source: Environmental Protection Agency
Telephone: 703-603-8787
Last EDR Contact: 09/24/2013
Next Scheduled EDR Contact: 01/20/2014
Data Release Frequency: Varies

2020 COR ACTION: 2020 Corrective Action Program List

The EPA has set ambitious goals for the RCRA Corrective Action program by creating the 2020 Corrective Action Universe. This RCRA cleanup baseline includes facilities expected to need corrective action. The 2020 universe contains a wide variety of sites. Some properties are heavily contaminated while others were contaminated but have since been cleaned up. Still others have not been fully investigated yet, and may require little or no remediation. Inclusion in the 2020 Universe does not necessarily imply failure on the part of a facility to meet its RCRA obligations.

Date of Government Version: 11/11/2011
Date Data Arrived at EDR: 05/18/2012
Date Made Active in Reports: 05/25/2012
Number of Days to Update: 7

Source: Environmental Protection Agency
Telephone: 703-308-4044
Last EDR Contact: 08/16/2013
Next Scheduled EDR Contact: 11/25/2013
Data Release Frequency: Varies

COAL ASH EPA: Coal Combustion Residues Surface Impoundments List

A listing of coal combustion residues surface impoundments with high hazard potential ratings.

Date of Government Version: 08/17/2010
Date Data Arrived at EDR: 01/03/2011
Date Made Active in Reports: 03/21/2011
Number of Days to Update: 77

Source: Environmental Protection Agency
Telephone: N/A
Last EDR Contact: 09/13/2013
Next Scheduled EDR Contact: 12/23/2013
Data Release Frequency: Varies

EPA WATCH LIST: EPA WATCH LIST

EPA maintains a "Watch List" to facilitate dialogue between EPA, state and local environmental agencies on enforcement matters relating to facilities with alleged violations identified as either significant or high priority. Being on the Watch List does not mean that the facility has actually violated the law only that an investigation by EPA or a state or local environmental agency has led those organizations to allege that an unproven violation has in fact occurred. Being on the Watch List does not represent a higher level of concern regarding the alleged violations that were detected, but instead indicates cases requiring additional dialogue between EPA, state and local agencies - primarily because of the length of time the alleged violation has gone unaddressed or unresolved.

Date of Government Version: 06/30/2013
Date Data Arrived at EDR: 08/13/2013
Date Made Active in Reports: 09/13/2013
Number of Days to Update: 31
Source: Environmental Protection Agency
Telephone: 617-520-3000
Last EDR Contact: 08/07/2013
Next Scheduled EDR Contact: 11/25/2013
Data Release Frequency: Quarterly

US FIN ASSUR: Financial Assurance Information

All owners and operators of facilities that treat, store, or dispose of hazardous waste are required to provide proof that they will have sufficient funds to pay for the clean up, closure, and post-closure care of their facilities.

Date of Government Version: 03/04/2013
Date Data Arrived at EDR: 03/15/2013
Date Made Active in Reports: 05/10/2013
Number of Days to Update: 56
Source: Environmental Protection Agency
Telephone: 202-566-1917
Last EDR Contact: 09/27/2013
Next Scheduled EDR Contact: 12/02/2013
Data Release Frequency: Quarterly

PCB TRANSFORMER: PCB Transformer Registration Database

The database of PCB transformer registrations that includes all PCB registration submittals.

Date of Government Version: 02/01/2011
Date Data Arrived at EDR: 10/19/2011
Date Made Active in Reports: 01/10/2012
Number of Days to Update: 83
Source: Environmental Protection Agency
Telephone: 202-566-0517
Last EDR Contact: 08/02/2013
Next Scheduled EDR Contact: 11/11/2013
Data Release Frequency: Varies

COAL ASH DOE: Sleam-Electric Plan Operation Data

A listing of power plants that store ash in surface ponds.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 08/07/2009
Date Made Active in Reports: 10/22/2009
Number of Days to Update: 76
Source: Department of Energy
Telephone: 202-586-8719
Last EDR Contact: 10/15/2013
Next Scheduled EDR Contact: 01/27/2014
Data Release Frequency: Varies

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP: EDR Proprietary Manufactured Gas Plants

The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A
Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

EDR US Hist Auto Stat: EDR Exclusive Historic Gas Stations

EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A	Source: EDR, Inc.
Date Data Arrived at EDR: N/A	Telephone: N/A
Date Made Active in Reports: N/A	Last EDR Contact: N/A
Number of Days to Update: N/A	Next Scheduled EDR Contact: N/A
	Data Release Frequency: Varies

EDR US Hist Cleaners: EDR Exclusive Historic Dry Cleaners

EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A	Source: EDR, Inc.
Date Data Arrived at EDR: N/A	Telephone: N/A
Date Made Active in Reports: N/A	Last EDR Contact: N/A
Number of Days to Update: N/A	Next Scheduled EDR Contact: N/A
	Data Release Frequency: Varies

EDR US Hist Auto Stat: EDR Proprietary Historic Gas Stations - Cole

Date of Government Version: N/A	Source: N/A
Date Data Arrived at EDR: N/A	Telephone: N/A
Date Made Active in Reports: N/A	Last EDR Contact: N/A
Number of Days to Update: N/A	Next Scheduled EDR Contact: N/A
	Data Release Frequency: Varies

EDR US Hist Cleaners: EDR Proprietary Historic Dry Cleaners - Cole

Date of Government Version: N/A	Source: N/A
Date Data Arrived at EDR: N/A	Telephone: N/A
Date Made Active in Reports: N/A	Last EDR Contact: N/A
Number of Days to Update: N/A	Next Scheduled EDR Contact: N/A
	Data Release Frequency: Varies

OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

CT MANIFEST: Hazardous Waste Manifest Data

Facility and manifest data. Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a tsd facility.

Date of Government Version: 07/30/2013
Date Data Arrived at EDR: 08/19/2013
Date Made Active in Reports: 10/03/2013
Number of Days to Update: 45

Source: Department of Energy & Environmental Protection
Telephone: 860-424-3375
Last EDR Contact: 08/19/2013
Next Scheduled EDR Contact: 12/02/2013
Data Release Frequency: Annually

NY MANIFEST: Facility and Manifest Data

Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD facility.

Date of Government Version: 08/01/2013
Date Data Arrived at EDR: 08/07/2013
Date Made Active in Reports: 09/10/2013
Number of Days to Update: 34

Source: Department of Environmental Conservation
Telephone: 518-402-8651
Last EDR Contact: 08/07/2013
Next Scheduled EDR Contact: 11/18/2013
Data Release Frequency: Annually

PA MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2012
Date Data Arrived at EDR: 07/24/2013
Date Made Active in Reports: 08/19/2013
Number of Days to Update: 26

Source: Department of Environmental Protection
Telephone: 717-783-8990
Last EDR Contact: 10/21/2013
Next Scheduled EDR Contact: 02/03/2014
Data Release Frequency: Annually

RI MANIFEST: Manifest information

Hazardous waste manifest information

Date of Government Version: 12/31/2012
Date Data Arrived at EDR: 06/21/2013
Date Made Active in Reports: 08/05/2013
Number of Days to Update: 45

Source: Department of Environmental Management
Telephone: 401-222-2797
Last EDR Contact: 08/23/2013
Next Scheduled EDR Contact: 12/09/2013
Data Release Frequency: Annually

VT MANIFEST: Hazardous Waste Manifest Data

Hazardous waste manifest information.

Date of Government Version: 05/01/2013
Date Data Arrived at EDR: 08/14/2013
Date Made Active in Reports: 09/20/2013
Number of Days to Update: 37

Source: Department of Environmental Conservation
Telephone: 802-241-3443
Last EDR Contact: 10/21/2013
Next Scheduled EDR Contact: 02/03/2014
Data Release Frequency: Annually

WI MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2012
Date Data Arrived at EDR: 08/09/2013
Date Made Active in Reports: 09/27/2013
Number of Days to Update: 49

Source: Department of Natural Resources
Telephone: N/A
Last EDR Contact: 09/16/2013
Next Scheduled EDR Contact: 12/30/2013
Data Release Frequency: Annually

Oil/Gas Pipelines: This data was obtained by EDR from the USGS in 1994. It is referred to by USGS as GeoData Digital Line Graphs from 1:100,000-Scale Maps. It was extracted from the transportation category including some oil, but primarily gas pipelines.

Electric Power Transmission Line Data
Source: Rextag Strategies Corp.
Telephone: (281) 769-2247
U.S. Electric Transmission and Power Plants Systems Digital GIS Data

Sensitive Receptors: There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

AHA Hospitals:
Source: American Hospital Association, Inc.
Telephone: 312-280-5991
The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

Medical Centers: Provider of Services Listing
Source: Centers for Medicare & Medicaid Services
Telephone: 410-786-3000
A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services, a federal agency within the U.S. Department of Health and Human Services.

Nursing Homes
Source: National Institutes of Health
Telephone: 301-594-6248
Information on Medicare and Medicaid certified nursing homes in the United States.

Public Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on elementary and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.

Private Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on private school locations in the United States.

Daycare Centers: Child Care Listing
Source: Department Of Human Services
Telephone: 615-313-4778

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 2003 & 2011 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002 and 2005 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetlands Inventory
Source: Tennessee Spatial Data Server
Telephone: 931-528-6481

Scanned Digital USGS 7.5' Topographic Map (DRG)
Source: United States Geologic Survey
A digital raster graphic (DRG) is a scanned image of a U.S. Geological Survey topographic map. The map images are made by scanning published paper maps on high-resolution scanners. The raster image is georeferenced and fit to the Universal Transverse Mercator (UTM) projection.

STREET AND ADDRESS INFORMATION

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APPENDIX E

Site Photographs



Photo #1 View of site looking east from Memorial Boulevard.



Photo #2 View of onsite mobile trailer structures on southern portion of site looking east from parking area.



Photo #3 View of onsite drive area and outbuilding on southern portion of site looking northeast.



Photo #4 View of non-hazardous waste dumpster on southern portion of site.



Photo #5 View of multi-tenant apartment complex on southern portion of site looking northeast from parking area.



Photo #6 View of onsite mobile trailer structures on southern portion of site looking east from drive area.



Photo #7 View of onsite mobile trailer structure on southern portion of site looking south from drive area.



Photo #8 View of unnamed tributary to Sougan Branch on southwestern portion of site looking southeast from drive area.



Photo #9 View of multi-tenant apartment complex on southern portion of site looking east from Memorial Blvd.



Photo #10 View of overhead utilities and signage along Memorial Boulevard looking east from Memorial Boulevard.



Photo #11 View of site looking northeast from Memorial Boulevard.



Photo #12 View of pole-mounted transformer on southwestern portion of site adjacent to Memorial Boulevard.

APPENDIX F

Credentials

MARIE A. MAHER, P.G.
PROJECT GEOLOGIST

PROFESSIONAL EXPERIENCE

Ms. Maher, P.G. is a Project Geologist in Terracon's Chattanooga, Tennessee office. Ms. Maher, P.G. is responsible for Phase I Environmental Site Assessments, Phase II Environmental Site Assessments, Limited Subsurface Investigations, soil classification and laboratory testing, rock core logging and stratigraphic interpretations, soil and groundwater monitoring, geographic information systems (GIS) spatial analysis operations, drafting operations, remote sensing applications, and geologic mapping/interpretation.

Ms. Maher, P.G. also has specialized training in various geophysical techniques including seismic refraction, shear-wave velocity profiling, electrical resistivity and ground-penetrating radar applications. Ms. Maher, P.G. has applied these techniques for karst topography investigations, seismic site classification applications and probabilistic seismic hazard analyses (PSHAs).

PROJECT EXPERIENCE

Electric Power Board- Chattanooga, Tennessee

Served as project manager for the subsurface exploration and excavation monitoring of the redevelopment project as part of a Brownfields Agreement. Oversaw soil and groundwater sampling during excavation activities, maintained liaison between the Electric Power Board and the Tennessee Department of Environment and Conservation (TDEC), and finalized reports regarding environmental issues associated with the site. In addition to soil and groundwater sampling, indoor air sampling was also conducted prior to and following construction activities onsite.

Alstom Power Turbomachines- Chattanooga, Tennessee

Served as project manager for the subsurface exploration and excavation monitoring of the redevelopment project as part of a Brownfields Agreement. Oversaw soil and groundwater sampling during excavation activities, maintained liaison between Alstom and the Tennessee Department of Environment and Conservation (TDEC), and finalized reports regarding environmental issues associated with the site. In addition to daily monitoring duties, remediation of subsurface material was also organized and executed in conjunction with TDEC officials.

River Gorge Road- Chattanooga, Tennessee

Served as the project manager for surficial mapping of geologic structure and stratigraphy for development of a new roadway on Mount Aetna in Chattanooga, Tennessee. Mapping features included marker beds, bedding orientation, geomorphologic features, erosional features, colluvial layers, and fossiliferous carbonate identification.

Oxford Commons Geophysical- Oxford, Alabama

Served as project manager for a limited geophysical investigation in which shear-wave profiling was used to identify zones of relatively softer soils adjacent to weathered bedrock and bedrock. This project focused on the use of geophysical techniques in conjunction with down-hole exploration to characterize areas of subsidence across a graded building pad.

Education

Master of Science, Geology
Baylor University, 2007

Bachelor of Science, Envir. Science
Slippery Rock University, 2005

Registrations

Professional Geologist: Tennessee, No. 5366

TN EPSC Level 1 Certified

Certifications

40-Hour HAZWOPER

ASFE Environmental Committee Member

Affiliations

American Society of Civil Engineers

Geologic Society of America

American Geophysical Union

Work History

Terracon Consultants, Inc., Project Geologist, 2009-Present

Gallet & Associates, Inc., Geologist, 2007-2009

Tri-State Testing & Drilling, LLC, Geologist, 2007

U.S. Environmental Protection Agency (EPA), Region 6, Environmental Scientist, 2006-2007

Baylor University, Research Assistant, 2005-2006

Slippery Rock University, GIS Technician, 2001-2005

Pathway Polymers- Chattanooga, Tennessee

Ms. Maher, P.G. conducted a Phase II Environmental Site Assessment and risk assessment at the above-referenced site. The purpose of this investigation was to confirm or refute the presence of constituents of concern in soil and groundwater in the area of aboveground chemical holding tanks adjacent to railroad service tracks. Based on the calculations derived from the risk assessment, it was determined that the concentration of the chemicals of concern in the soil and groundwater were not a threat to personnel at the site.

Dale Hollow Dam USACE- Celina, Tennessee

Ms. Maher, P.G. served as the lead field geologist at the Dale Hollow Dam exploratory grouting project supervised by the United Army Corp of Engineers. Ms. Maher, P.G. was responsible for logging rock core, interpreting stratigraphic successions, and finalizing submittals to the United States Army Corp of Engineers. Rock cores were logged in accordance with the *Army Corp of Engineers Manual EM Nashville District.* Noted features identified in the rock core included the Cathey's Formation sequences and mineralogical gradations from calcium-rich limestone to argillaceous shale.

Published Articles

Geologic Society of America (Sigma Gamma Epsilon), Seattle, Washington (2003). *Radiocarbon Dating of Paleosols to Constrain Timing of Holocene Land Surfaces, Badlands National Park, South Dakota.*

Geologic Society of America, Philadelphia, Pennsylvania (2006). *Construction of Comprehensive Modern Lagoonal Patch Reef Model with an Application to Ancient Bioherms. Jamaica.*

American Association of Petroleum Geologists, Houston, Texas (2006). *Construction of Comprehensive Modern Lagoonal Patch Reef Model with an Application to Ancient Bioherms. Jamaica.*

Geologic Society of America, Denver, Colorado (2010). *Empirical Correlation of Dynamic Cone Penetration and Refraction Microtremor Technique to Obtain Shear Wave Velocity Profiles, Tennessee.*

Additional Courses

ESRI Operations Training and Spatial Analysis/Drafting, Pittsburgh, Pennsylvania (2002)

Depositional Environments and Related Systems, Lee Stocking Island, Bahamas (2002)

Paleosol Studies and Landscape Reconstruction, Badlands National Park, South Dakota (2003)

Speleolithic Formations and Karst Topography, Discovery Bay, Jamaica (2005)

Modern Depositional Environments and Carbonate Diagenesis, Discovery Bay, Jamaica (2006)

SHAKE Seismic Analysis Training Course, St. Louis, Missouri (2008)

TRAVIS STAMPER
SENIOR ENVIRONMENTAL SCIENTIST

PROFESSIONAL EXPERIENCE

Mr. Stamper is a senior environmental scientist in Terracon's Chattanooga, Tennessee office. Mr. Stamper's responsibilities include the management of several on-going projects and supervision of field-related and data management tasks.

Mr. Stamper has worked in the environmental field for over 19 years, and has extensive experience in a variety of disciplines, including site investigations, wetland delineation, stream assessment, risk-based assessments, and groundwater monitoring. Some of Mr. Stamper's projects include service as a crew leader on a multi-million dollar mercury assessment project for a major natural gas pipeline company, a 53-acre wetland delineation, and Tennessee Department of Transportation wetland delineation.

PROJECT EXPERIENCE

Solid Waste

Birchwood Landfill – Hamilton County, Tennessee

Project Manager for quarterly groundwater Assessment Monitoring at the Birchwood Landfill. A statistical method to evaluate the groundwater data was selected in accordance with the EPA statistical guidance document ("Statistical Analysis of Ground-Water Monitoring Data at RCRA Facilities, Addendum to Interim Final Guidance", July 1992), and ASTM standard D6312-98 Standard Guide for Developing Appropriate Statistical Approaches for Groundwater Detection. Statistical evaluations are made by comparing inorganic parameters to background using inter-well (upgradient vs. downgradient) comparisons. This statistical method consists of a comparison of site prediction limits (established by historical data from upgradient wells) to downgradient wells and checking for exceedances.

Solid Waste

Republic Services, Inc. – Southeast, USA

This project included assistance with Storm Water Pollution Prevention (SWPP) and Spill Prevention Control and Countermeasures (SPCC) compliance audits for 10 facilities in Tennessee, Georgia and Alabama. One purpose of this SWPP and SPCC Compliance Audit was to assist in developing a compliance calendar with significant milestones notated for each facility. The SWPP and SPCC Compliance Audit was conducted through user-provided information, an online regulatory database review, historical and physical records review, interviews, including local government inquiries and a visual reconnaissance of the facilities.

Natural Resources

Privately Owned Wetland Mitigation Bank – Sequatchie Valley, Tennessee

Completion of wetlands delineation through classification of dominant hydrophytic vegetation, hydrology, and hydric soils. Compilation of supporting data including assessment of piezometer data and local stream gauge data in preparation of converting active farmland into one of the largest mitigation banks in southeast Tennessee.

EDUCATION

B.S., Biology, University of Tennessee at Chattanooga, 1991

CERTIFICATIONS

OSHA 29 CFR 1910.120 40 Hour Training for HAZWOPER, 1992

OSHA 29 CFR 1910.120 8 Hour Refresher

EPA/AHERA/ASHARA (TSCA Title II) Approved Reaccreditation and NESHAP Regulations Training - Asbestos in Buildings: Inspector

WORK HISTORY

Terracon Consultants, Inc., Senior Environmental Scientist, 2009-Present

Aquaterra Engineering, LLC, Project Manager/Senior Environmental Specialist, 1993-2009

Signal Environmental Services, Environmental Technician, Chattanooga, TN, 1992-1993

Phase I Preliminary Assessment Study

People's Food Store (Shell Station)

3104 Memorial Boulevard

Kingsport, Sullivan County, Tennessee

TDOT Project No. PE 82085-0225-14

TDOT PIN No. 105467.00

November 26, 2013

Terracon Project No. E2137131; Task 3



Prepared for:

Tennessee Department of Transportation
Nashville, Tennessee

Prepared by:

Terracon Consultants, Inc.
Chattanooga, Tennessee

Offices Nationwide Established in 1965
Employee-Owned terracon.com

Terracon

Geotechnical Environmental Construction Materials Facilities

Terracon

November 26, 2013

Tennessee Department of Transportation
505 Deadrick Street, Suite 900
JK Polk Building
Nashville, Tennessee 37243

Attn: Mr. Jim Ozment

Re: Phase I Preliminary Assessment Study
People's Food Store (Shell Station)
3104 Memorial Boulevard
Kingsport, Sullivan County, Tennessee
TDOT Project No. PE 82085-0225-14
TDOT PIN No. 105467.00
Terracon Project No. E2137131, Task 3

Dear Mr. Ozment:

Terracon Consultants, Inc. (Terracon) is pleased to submit the enclosed Phase I Preliminary Assessment Study for the above-referenced site. This study was performed in accordance with our Proposal, dated October 23, 2013.

We appreciate the opportunity to perform these services for you. Please contact us if you have questions regarding this information or if we can provide any other services.

Sincerely,
Terracon Consultants, Inc.

TENNESSEE
MARIE ANN MAHER
LICENSED PROFESSIONAL GEOLOGIST
#5944

11/26/13

Marie A. Maher, P.G.
Professional Geologist

Travis Stamper
Senior Environmental Scientist

Attachments

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COMMON ACRONYMS [1]

ACM..... Asbestos containing material
AST..... Aboveground storage tank
ASTM..... American Society for Testing and Materials
AUL..... Activity and use limitation
BGS ..... Below ground surface
BTEX ..... Benzene, toluene, ethylbenzene, and xylenes
CERCLA ..... Comprehensive Environmental Response, Compensation, and Liability Act
CFR ..... Code of Federal Regulations
DOT ..... United States Department of Transportation
EPA..... United States Environmental Protection Agency
HREC..... Historical recognized environmental condition
LUST..... Leaking underground storage tank
MCL ..... Maximum contaminant level
MSDS..... Material safety data sheet
NGVD..... National Geodetic Vertical Datum
NOV ..... Notice of violation
NPL..... National Priority List
NRCS..... USDA Natural Resource Conservation Service
OSHA..... Occupational Safety and Health Administration
PCB ..... Poly-chlorinated biphenyl
RCRA..... Resource Conservation and Recovery Act
REC ..... Recognized environmental condition
SPCC..... Spill Prevention, Control and Countermeasure
SWPPP..... Stormwater pollution prevention plan
TEPH ..... Total extractable petroleum hydrocarbons
TPH..... Total petroleum hydrocarbons
TVPH ..... Total volatile petroleum hydrocarbons
TRI..... Toxic release inventory
TSCA ..... Toxic Substances Control Act
USGS..... United States Geological Survey
UST..... Underground storage tank
VCP ..... Voluntary cleanup program
VOC..... Volatile organic compound

Units of measure

sq ft or ft^2..... square feet
mg/kg..... milligrams per kilogram
mg/l..... milligrams per liter
ug/l..... micrograms per liter
ppb..... parts per billion
ppm…….parts per million

[1] An additional list of acronyms and definitions is included in Appendix B.

PHASE I PRELIMINARY ASSESSMENT STUDY

PEOPLE'S FOOD STORE (SHELL STATION)
3104 MEMORIAL BOULEVARD
TDOT PROJECT NO. PE 82085-0225-14
TDOT PIN NO. 105467.00
KINGSPORT, SULLIVAN COUNTY, TENNESSEE

Terracon Project No. E2137131, Task 3
Report Date: November 26, 2013

EXECUTIVE SUMMARY

This Phase I Preliminary Assessment Study (PAS) was performed in general accordance with the TDOT Environmental Procedures Manual, dated April 2007, our Proposal dated October 23, 2013 and consistent with the procedures included in ASTM E 1527-13, Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process. The PAS was conducted under the supervision or responsible charge of Travis Stamper, Environmental Professional. Marie A. Maher, P.G. performed the site reconnaissance on November 5, 2013.

A cursory summary of findings is provided below. It should be recognized that details were not included or fully developed in this section, and the report must be read in its entirety for a comprehensive understanding of the items contained herein.

- The project includes the widening of lanes along U.S. Highway 126 (Memorial Boulevard) resulting in the expansion of the associated Tennessee Department of Transportation (TDOT) right-of-way (R.O.W.) in Kingsport, Sullivan County, Tennessee. The purpose of this PAS is to present the preliminary findings of a literature search and a field review of the potential for finding hazardous materials or petroleum contamination on parcels included in, or adjacent to the proposed project that may impact the construction of the proposed project.

- The site currently has one 5,000-gallon capacity underground storage tank (UST), one 10,000-gallon capacity, and one 15,000-gallon capacity UST in operation. Based on our review, these USTs were installed at the site in 2010 and are used to store gasoline and diesel fuel. According to Mr. Alan Hayes, P.G., Field Office Manager of the Tennessee Department of Environment and Conservation (TDEC) Johnson City Field Office, the site has had no reported releases of product since tank installation in 2010. Mr. Hayes, P.G. noted that there were no files stored at the TDEC Johnson City Field Office which indicate a release from the site. While current operations at the site do not indicate significant adverse impact to TDOTs planned R.O.W., a more thorough investigation would be required to adequately assess potential impact to TDOTs planned R.O.W. As such, the site is deemed to constitute a REC.

- Based on historical information reviewed as part of this assessment, the site appears to have been developed as residential land from at least the 1930s until the late 1950s. The site appears to have been redeveloped with multiple commercial-type structures in the late 1950s. The structures located on the southern portion of the site appear to be razed and the current gas station appears to have been developed in 2010.

- Based on our review of regulatory database information, the site was identified on the UST database as having three USTs in operation. The operational USTs at the site constitute a recognized environmental condition (REC). Additional review of the regulatory database revealed seven facilities, Garden Basket Convenience Store #4 (current Model City Motel), Amoco Service Station (current Points Auto Sales), B&W Cleaners, Old Simpson's Motors (current Tony's Pipe and Muffler), Sears Roebuck and Company #2825, JC Penny, and Regency-TN-DBA Hillside Man within the specified search radius of the site. Three of these facilities (Garden Basket Convenience Store #4, Amoco Service Station, and B&W Cleaners) are deemed to constitute offsite RECs associated with the site based on available information reviewed.

- A hazardous materials rating system was used to rate facilities that were identified as being potential RECs to the site. Three facilities (Garden Basket Convenience Store #4, Amoco Service Station, and B&W Cleaners) and the on-site facility (People's Food Store) were identified as having the potential for contamination. The onsite facility was assigned a risk rating of HIGH. The offsite facilities identified as having the potential for contamination were assigned a risk rating of MEDIUM.

- Based on the authorized scope of services, no additional services (e.g., asbestos sampling, lead-based paint sampling, wetlands evaluation, radon testing, etc.) were conducted.

The site (People's Food Store) was identified as having a HIGH risk evaluation rating. Due to the potential acquisition of a portion of this parcel (map 062H parcel C030.00), Terracon recommends that the site be further evaluated through a Level 2 Contamination Assessment. This assessment would include soil and groundwater sampling, to further clarify potential contamination concerns. Based on the findings of the Level 2 Contamination Assessment, the rating of this facility may or may not be revised.

Garden Basket Convenience Store #4 (Model City Motel), was identified as having a MEDIUM risk evaluation rating. Due to the close proximity of this facility with respect to the site, as well as regulatory information reviewed with regard to a past product release at this

facility, Terracon recommends that potential impact from the Garden Basket Convenience Store #4 (Model City Motel) facility be further evaluated through a Level 2 Contamination Assessment, which would include soil and groundwater sampling, to further clarify potential contamination concerns. Based on the findings of the Level 2 Contamination Assessment, the rating of this facility may or may not be revised.

Amoco Service Station (Point Auto Sales) was identified as having a MEDIUM risk evaluation rating. Due to the close proximity and cross-gradient location of this facility with respect to the site, as well as regulatory information reviewed with regard to a past product release at this facility, Terracon recommends that potential impact from the Amoco Service Station (Point Auto Sales) facility be further evaluated through a Level 2 Contamination Assessment. This assessment would include soil and groundwater sampling, to further clarify potential contamination concerns. Based on the findings of the Level 2 Contamination Assessment, the rating of this facility may or may not be revised.

B&W Cleaners was identified as having a MEDIUM risk evaluation rating. Due to the close proximity of this facility with respect to the site, Terracon recommends that potential impact from the B&W Cleaners facility be further evaluated through a Level 2 Contamination Assessment. This assessment would include soil and groundwater sampling, to further clarify potential contamination concerns. Based on the findings of the Level 2 Contamination Assessment, the rating of this facility may or may not be revised.

PHASE I PRELIMINARY ASSESSMENT STUDY

PEOPLE'S FOOD STORE (SHELL STATION)
TDOT PROJECT NO. PE 82085-0225-14
TDOT PIN NO. 105467.00
KINGSPORT, SULLIVAN COUNTY, TENNESSEE

Terracon Project No. E2137131, Task 3
Report Date: November 26, 2013

1.0 INTRODUCTION

1.1 Site Description

Site Description

Site Name	People's Food Store (Shell Station)
Site Location/Address	3104 Memorial Boulevard in Kingsport, Sullivan County, Tennessee
Site Improvements	The southern portion of the site is currently developed with a gas station containing three underground storage tanks, two canopies with a total of seven fuel dispensers, and concrete-paved parking and drive areas. The northern portion of the site consists of undeveloped wooded land.

The project includes the widening of lanes along U.S. Highway 126 (Memorial Boulevard) resulting in the expansion of the associated Tennessee Department of Transportation (TDOT) right-of-way (R.O.W.) in Kingsport, Sullivan County, Tennessee. The purpose of this Phase I Preliminary Assessment Study (PAS) is to present the preliminary findings of a literature search and a field review of the potential for finding hazardous materials or petroleum contamination on parcels included in, or adjacent to the proposed project that may impact the construction of the proposed project. The site location is depicted on Figure 1 of Appendix A, which was reproduced from a portion of applicable USGS 7.5-minute series topographic maps. A Site Diagram of the site and adjoining properties is included as Figure 2 of Appendix A. Acronyms and terms used in this report are described in Appendix B.

1.2 Scope of Services

This Phase I PAS was performed in general accordance with the TDOT Environmental Procedures Manual, dated April 2007, our Proposal dated October 23, 2013 and consistent with the procedures included in ASTM E 1527-13, Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process. The purpose of this PAS was to assist the client in developing information to identify RECs in connection with the site as reflected by the scope of this report. This purpose was undertaken through user-provided information, a regulatory database review, historical and physical records review, interviews, including local government inquiries, as applicable, user-provided information, and a visual

noninvasive reconnaissance of the site and adjoining properties. Limitations, ASTM deviations, and significant data gaps (if identified) are evident from reviewing the applicable scope of services and the report text. Per the agreed scope of services specified in the proposal, no additional services (e.g., asbestos sampling, lead-based paint sampling, wetlands evaluation, radon testing, etc.) were conducted.

1.3 Standard of Care

This PAS was performed in accordance with generally accepted practices of this profession, undertaken in similar studies at the same time and in the same geographical area. We have endeavored to meet this standard of care, but may be limited by conditions encountered during performance, a client-driven scope of work, or inability to review information not received by the report date. Where appropriate, these limitations are discussed in the text of the report, and an evaluation of their significance with respect to our findings has been conducted.

Phase I PASs, such as the one performed at this site, are of limited scope, are noninvasive, and cannot eliminate the potential that hazardous, toxic, or petroleum substances are present or have been released at the site beyond what is identified by the limited scope of this PAS. In conducting the limited scope of services described herein, certain sources of information and public records were not reviewed. It should be recognized that environmental concerns may be documented in public records that were not reviewed. No PAS can wholly eliminate uncertainty regarding the potential for RECs in connection with a property. Performance of this practice is intended to reduce, but not eliminate, uncertainty regarding the potential for RECs. No warranties, express or implied, are intended or made. The limitations herein must be considered when the user of this report formulates opinions as to risks associated with the site or otherwise uses the report for any other purpose. These risks may be further evaluated – but not eliminated – through additional research or assessment. We will, upon request, advise you of additional research or assessment options that may be available and associated costs.

1.4 Additional Scope Limitations, ASTM Deviations and Significant Data Gaps

Based upon the agreed-on scope of services, this PAS did not include subsurface or other invasive assessments, business environmental risk evaluations, or other services not particularly identified and discussed herein. Reasonable attempts were made to obtain information within the scope and time constraints set forth by the client; however, in some instances, information requested is not, or was not, received by the issuance date of the report. Information obtained for this PAS was received from several sources that we believe to be reliable; nonetheless, the authenticity or reliability of these sources cannot and is not warranted hereunder. This PAS was further limited by the following:

- Pertinent documents are referred in the text of this report, and a separate reference section has not been included;

- Credentials of the company (Statement of Qualifications) have not been included in this report, but are available upon request; and
- Requests were submitted to local government agencies regarding documented environmental conditions on the site. Responses from one or more agencies were not received as of the issuance of this report. Lack of these responses does not pose a significant data gap.

An evaluation of the significance of these limitations and missing information with respect to our findings has been conducted, and where appropriate, significant data gaps are identified and discussed in the text of the report. However, it should be recognized that an evaluation of significant data gaps is based on the information available at the time of report issuance, and an evaluation of information received after the report issuance date may result in an alteration of our conclusions, recommendations, or opinions. We have no obligation to provide information obtained or discovered by us after the issuance date of the report, or to perform any additional services, regardless of whether the information would affect any conclusions, recommendations, or opinions in the report. This disclaimer specifically applies to any information that has not been provided by the client.

This report represents our service to you as of the report date and constitutes our final document; its text may not be altered after final issuance. Findings in this report are based upon the site's current utilization, information derived from the most recent reconnaissance and from other activities described herein; such information is subject to change. Certain indicators of the presence of hazardous substances or petroleum products may have been latent, inaccessible, unobservable, or not present during the most recent reconnaissance and may subsequently become observable (such as after site renovation or development). Further, these services are not to be construed as legal interpretation or advice.

1.5 Reliance

This Phase I PAS is prepared for the exclusive use and reliance of TDOT. Use or reliance by any other party is prohibited without the written authorization of TDOT and Terracon.

Reliance on the PAS by the client and all authorized parties will be subject to the terms, conditions and limitations stated in the PAS report and our Proposal, dated October 23, 2013, with the Tennessee Department of Transportation. The limitation of liability defined in the MSA is the aggregate limit of Terracon's liability to the client and all relying parties.

Continued viability of this report is subject to ASTM E 1527-13 Sections 4.6 and 4.8. If the PAS will be used by a different user (third party) than the user for whom the PAS was originally prepared, the third party must also satisfy the user's responsibilities in Section 6 of ASTM E 1527-13.

1.6 Client Provided Information

TDOT provided a Baseline Study Phase I Site Assessment of Underground Storage Tanks and Hazardous Material Sites, State Route 126, Memorial Boulevard from Center Street to Interstate 81, prepared by HMB Professional Engineers, Inc., dated March 2008. Information obtained from the *2008 Baseline Phase I Report* is included throughout this PAS.

1.6.1 Knowledge of Environmental Liens or Activity and Use Limitations (AULs)

Actual knowledge of any environmental liens or AULs encumbering the site or in connection with the site was requested from the client. This information has not been received as of the issuance date of the report, and unless notified otherwise, we assume the client is evaluating this information outside the context of this report.

1.6.2 Specialized Knowledge or Experience

Specialized knowledge or experience material to RECs in connection with the site was requested from the client. This information has not been received as of the issuance date of the report, and unless notified otherwise, we assume the client is evaluating this information outside the context of this report.

1.6.3 Significantly Lower Purchase Price

Actual knowledge of a significantly lower purchase price due to the presence of hazardous substances or petroleum products in connection with the site was requested from the client. This information has not been received as of the issuance date of the report, and unless notified otherwise, we assume the client is evaluating this information outside the context of this report.

1.6.4 Commonly Known or Reasonably Ascertainable Information

Commonly known or reasonably ascertainable information within the local community about the site that is material to RECs in connection with the site was requested from the client. This information has not been received as of the issuance date of the report, and unless notified otherwise, we assume the client is evaluating this information outside the context of this report.

1.6.5 Obvious Indicators

Information about any obvious indicators that point to the presence or likely presence of contamination at the site was requested from the client. This information has not been received as of the issuance date of the report, and unless notified otherwise, we assume the client is evaluating this information outside the context of this report.

1.6.6 Proceedings Involving the Site

Information about any proceedings involving the site was requested from the client. This information has not been received as of the issuance date of the report, and unless notified otherwise, we assume the client is evaluating this information outside the context of this report.

2.0 REGIONAL GEOLOGY/HYDROGEOLOGY

Geology/Hydrogeology		
Formation	Knox Group	Geologic Map of Tennessee, East Sheet, dated 1966
Description	A review of published geologic information indicates that the site is underlain primarily by the Ordovician-aged Knox Group, which is characterized by siliceous well-bedded dolomite and magnesium-rich limestone.	
Primary Aquifer	There are no defined aquifers in the Ordovician-carbonate bedrock that underlies Sullivan County. The primary pathways along which groundwater can migrate and accumulate include secondary features such as fractures and dissolution cavities within the predominately carbonate rock. The occurrence of water is typically restricted to fractures that have been enlarged by dissolution, and the quantity of water obtainable by a well is dependent upon the size and number of fractures encountered. Due to the intense faulting and folding of rocks in the region, the number of fractures can vary significantly from location to location. Domestic supplies are usually obtained from wells at depths of 50 feet or less in shale, and 100 feet or more in carbonate rock. Perched water may occur on top of the bedrock at the soil/bedrock interface. The depth to the soil/bedrock interface varies significantly in carbonate bedrock formations.	Groundwater Atlas of the United States issued by the USGS, dated 1990-1999
**Hydrogeologic Gradient*	Not verified, but visual observations indicate groundwater flow is toward south-southeast.	

* The groundwater flow direction and the depth to shallow, unconfined groundwater, if present, would likely vary depending upon seasonal variations in rainfall and other hydrogeological features. Without the benefit of on-site groundwater monitoring wells surveyed to a datum, groundwater depth and flow direction beneath the site cannot be directly ascertained.

3.0 HISTORICAL USE INFORMATION

Terracon reviewed the historical sources listed on the following pages for indications of RECs. Copies of selected historical documents are included in Appendix C.

3.1 Historical Topographic Maps

Readily available historical USGS topographic maps from Environmental Data Resources, Inc. (EDR), an information services company, were reviewed to identify land development in connection with the site. Reviewed historical topographic maps are summarized below:

- Estillville, Tennessee, published 1894, scale: 1:125,000
- Moccasin, Tennessee, published 1935, scale: 1:62,500
- Kingsport, Tennessee, published 1935, 1939, 1959, 1968, 1978, 1991, scale: 1:24,000

The scale of the Estillville, Tennessee, 1894 map is relatively small; therefore, detailed information regarding the site and surrounding properties is not depicted; however, the site is depicted as being located in a developed area of Kingsport, Tennessee. The site is depicted as being developed with a residential-type structure on the southern portion of the site and an unnamed tributary traversing the northwestern property boundary in the 1935 historical topographic maps. The residential-type structure is depicted on the site; however, the unnamed tributary is no longer depicted as traversing the northwestern property boundary on the 1939 historical topographic map. Additional structures are depicted on the southeastern portion of the site, adjacent to Memorial Boulevard on the 1959, 1968, 1978, and 1991 historical topographic maps.

Surrounding properties include residential dwellings, commercial structures, and subsurface quarry/mines in the 1935 historical topographic maps and the 1939, 1959, 1968, 1978, and 1991 historical topographic maps. Dixson School is depicted directly north of the site in the 1935 historical topographic maps and the 1939, 1959, 1968, 1978, and 1991 historical topographic maps. Topographic maps indicating the site are included in Appendix C.

3.2 Historical Aerial Photographs

Selected historical aerial photographs from EDR were reviewed at approximately 10 to 15 year intervals, if readily available, to obtain information concerning the history of development on and near the site. Evaluation of these aerials may be limited by a photo's quality and scale. Selected photographs are included in Appendix C and summarized on the following page:

- EDR, dated 1976, scale: 1" = 1,000'
- EDR, dated 1992, scale: 1" = 750'
- EDR, dated 1999, scale: 1" = 500'
- EDR, dated 2001, scale: 1" = 750'

- EDR, dated 2006, scale: 1" = 500'
- EDR, dated 2007, scale: 1" = 500'
- EDR, dated 2008, scale: 1" = 500'
- EDR, dated 2010, scale: 1" = 500'
- EDR, dated 2012, scale: 1" = 500'

The southern portion of the site appears to be developed, adjacent to Memorial Boulevard, on the 1976, 1992, 1999, 2001, 2006, 2007, and 2008 aerial photographs. The structures located on the southern portion of the site appear to be razed, and a new structure appears to be located on the central portion of the site in the 2010 aerial photograph. Two canopies are depicted directly south and east of the onsite structure in the 2012 aerial photograph. These canopies appear to be associated with fuel service dispensers. Surrounding properties appear to consist of residential and commercial properties in the 1976, 1992, 1999, 2001, 2006, 2007, 2008, 2010, and 2012 aerial photographs.

3.3 Historical City Directories

The Polk's City Directory and Johnson's City Directory listings of residences, businesses and professional entities organized both alphabetically by name and alphanumerically by street address. The directories used in this study were requested and compiled through EDR. The street address for the site was identified as 3104 Memorial Boulevard. City directories were available for review for the years 1989, 1996, 2002, 2007, and 2013.

Historical City Directories

Direction	Address/Listings from Historical City Directories
Site	**3104 Memorial Boulevard** – Residential Listing (1989, 1996); No Listing (2002, 2007); Knoxville Phone & Vending (2013).
North	**2921 East Center Street** – Dan's Package Store (1989, 1996); Clean & Save Cleaners (2002); Broad Street Bar-B-Que (2007, 2013). **2916 East Center Street** – No Listing (1989, 1996, 2002); Residential Listing (2007, 2013). **2912 East Center Street** – Residential Listing (1989); No Listing (1996, 2002); Residential Listing (2007, 2013). **2900 East Center Street** – Residential Listing (1989, 1996); Not Verified (2002); Residential Listing (2007); No Current Listing (2013). **2824 East Center Street** – Residential Listing (1989, 1996, 2002, 2007); No Listing (2013). **2821 East Center Street** – Residential Listing (1989, 1996, 2002); No Current Listing (2007, 2013).

Direction	Address/Listings from Historical City Directories
East	**3106 Memorial Boulevard** – Residential Listing (1989); Tree House Wall (1996); Cellular Accessories (2002); No Listing (2007, 2013). **3109 Memorial Boulevard** – Model City Motel (1989, 1996, 2002, 2007, 2013). **3113 Memorial Boulevard** – Garden Basket (1989); No Listing (1996, 2002, 2007, 2013). **3126 Memorial Boulevard** – Hawks Furniture (1989); Tri-City Sales (1996); No Listing (2002, 2007, 2013). **3132 Memorial Boulevard** – Ads Unlimited (1989); Newton's Printing (1996, 2002); No Listing (2007); **3136 Memorial Boulevard** – Kingsport Upholstering (1989); Kingsport Upholstering (1996); No Listing (2002, 2007, 2013).
South	No listings.
West	**3101 Memorial Boulevard** – L&S Car Care (1989, 1996); Chips Amoco (2002); No Listing (2007); Five Point Auto Sales (2013). **2469 Memorial Boulevard** – Hairbender (1989, 1996, 2002, 2007, 2013). **2465 Memorial Boulevard** – Entre Computer Center/Kirkham Corporation/US Government (1989, 1996); Music Doctors (2002, 2007, 2013). **2461 Memorial Boulevard** – US Navy Recruiting Station (1989, 1996, 2002); US Air Force Recruiting (2007); No Listing (2013). **2450 Memorial Boulevard** – Winn-Dixie Pay Phone (1989, 1996, 2002); Magnum Tanning (2007, 2013). **2449 Memorial Boulevard** – Warpath Bowling (1989, 1996, 2002, 2007, 2013).

Based on our review of available city directory listings, the site was identified as the Knoxville Phone and Vending Company in the 2013 listing. Based on further reviewed information, the site address of 3104 Memorial Boulevard in the city directories does not appear to correlate with the actual location of the site. The Five Point Auto Sales facility was identified as the Point Auto Sales facility, located directly south of the site, during our area reconnaissance. The Model City Motel and Five Point Auto Sales facilities are discussed in additional detail in Section 4.1.

3.4 Historical Fire Insurance Maps

Historical fire insurance maps produced by the Sanborn Map Company were requested from EDR to evaluate past uses and relevant characteristics of the site and surrounding properties. Based on information from EDR, Sanborn mapping for the site was available for 1963. According to the 1963 Sanborn map, a residential dwelling was located on the south-central portion of the site and paint storage facilities were located on the southeastern portion of the site. In addition, a dry cleaning facility was noted directly east, adjacent to the site, in the 1963 Sanborn map. The site and dry cleaning facility are discussed in additional detail in the following Sections.

3.5 Property Tax File Information

Based on a review of the State of Tennessee Property Assessment Data website, the site at 3104 Memorial Boulevard consists of one parcel of land identified as parcel C-30.00 on control map 062H. The site consists of 1.4 acres of land currently owned by Mr. Lee V. Buckner.

3.6 Title Search

At the direction of the client, a title search was not included in the scope of services for this assessment. Unless notified otherwise, we assume that the client is evaluating this information outside the scope of this report.

3.7 Environmental Liens

Environmental lien records recorded against the site were not provided by the client. At the direction of the client, performance of a review of these records was not included as part of the scope of services and unless notified otherwise, we assume that the client is evaluating this information outside the scope of this report.

3.8 Historical Interviews

The following individuals were interviewed regarding historical use of the site.

Interviewee(s)

Interviewer	Interviewee	Title	Date/Time
Marie Maher	Mr. Alan Hayes	Field Office Manager/ Johnson City TDEC Field Office	November 1, 2013 8:00 am
Marie Maher	Ms. Angela Griffen	Cashier at People's Food Store	November 5, 2013 1:00 pm
Marie Maher	Mr. Chris Morgan	Site Manager of Customer Gas Services, Inc.	November 5, 2013 2:30 pm

Mr. Alan Hayes, P.G., Field Office Manager of the Tennessee Department of Environment and Conservation (TDEC) Johnson City Field Office was interviewed regarding his knowledge of the site and surrounding properties. According to Mr. Hayes, P.G., the site has three registered Underground Storage Tanks (USTs). Mr. Hayes, P.G. was not aware of any pending, threatened or past environmental litigation, proceedings or notices of possible violations of environmental laws or liability in connection with the site. However, Mr. Hayes, P.G. did note remedial investigative activities associated with immediately surrounding properties. Additional information regarding environmental issues with surrounding properties is included in Section 4.0.

Ms. Angela Griffen, employee of the People's Food Store, was interviewed in person during our site reconnaissance. Ms. Griffen noted that the site has operated as a gas station since 2010. Ms. Griffen was not aware of any pending, threatened or past environmental litigation, proceedings or notices of possible violations of environmental laws or liability in connection with the site or surrounding properties.

Mr. Chris Morgan, Site Manager with Customer Gas Services, Inc. (an adjacent commercial business), was also interviewed in person during our site reconnaissance. Mr. Morgan noted that the site has operated as a gas station since approxiatley 2010. Mr. Morgan also noted that the service repair facility located directly southwest of the site has been in operation for the past 40 years. According to Mr. Morgan, the dry cleaner facility located directly east of the site has been located there since he has been managing Customer Gas Services, Inc. (approximately 8 years). Mr. Morgan was not aware of any previous product releases, environmental investigations or remediation activities associated with the site or surrounding properties.

3.9 Prior Report Review

TDOT provided a Baseline Study Phase I Site Assessment of Underground Storage Tanks and Hazardous Material Sites, State Route 126, Memorial Boulevard from Center Street to Interstate 81, prepared by HMB Professional Engineers, Inc., dated March 2008. The *2008 Baseline Phase I Report* was conducted for an approximate 8.8 mile corridor of State Route 126 (Memorial Boulevard). According to the *2008 Baseline Phase I Report*, the B&W Cleaners facility is located directly adjacent to the site. Based on our review of the *2008 Baseline Phase I Report*, the B&W Cleaners facility may represent an environmental concern for the project corridor. Additional information pertaining to the B&W Cleaners facility is provided in Section 4.1. Additional reports have not been provided by TDOT to Terracon for review.

In addition to the *2008 Baseline Phase I Report*, Terracon completed a file review at the TDEC Johnson City Field Office on November 5, 2013. Reports reviewed from the TDEC Johnson City Field Office include:

- Garden Basket Convenience Store #4 facility Contamination Case Closure Letter, dated February 2, 2011;
- Amoco Service Station facility Permanent Closure Report, dated May 1, 2002;
- Amoco Service Station facility Monitoring Well Abandonment Report, dated July 22, 2002;
- Old Simpson's Motor facility Permanent Closure Report, dated November 14, 1995; and
- Old Simpson's Motor facility Final Closure Letter, dated December 14, 2013.

4.0 RECORDS REVIEW

Regulatory database information was provided by EDR, a contract information services company. The purpose of the records review was to identify RECs in connection with the site. Evaluating identified regulatory facilities for potential vapor intrusion conditions was outside the scope of this assessment. Information in this section is subject to the accuracy of the data provided by the information services company and the date at which the information is updated, and the scope herein did not include confirmation of facilities listed as "unmappable" by regulatory databases.

In some of the following subsections, the words up gradient, cross gradient and down gradient refer to the topographic gradient in relation to the site. As stated previously, the groundwater flow direction and the depth to shallow groundwater, if present, would likely vary depending upon seasonal variations in rainfall and the depth to the soil/bedrock interface. Without the benefit of on-site groundwater monitoring wells surveyed to a datum, groundwater depth and flow direction beneath the site cannot be directly ascertained.

4.1 Federal and State/Tribal Databases

Listed below are the facility listings identified on federal and state/tribal databases within the ASTM-required search distances from the approximate site boundaries. Database definition, descriptions, and the database search report are included in Appendix D.

Federal and State Databases

Database	Description	Radius (Miles)	Listings
	Federal		
NPL	The NPL is the EPA's database of uncontrolled or abandoned hazardous waste facilities that have been listed for priority remedial actions under the Superfund Program.	1.0	0
NPL (Delisted)	The NPL (Delisted) refers to facilities that have been removed from the NPL.	1.0	0
CERCLIS	The CERCLIS database is a compilation of facilities which the EPA has investigated or is currently investigating for a release or threatened release of hazardous substances pursuant to the CERCLA of 1980.	0.5	0
CERCLIS/ NFRAP	CERCLIS/NFRAP refers to facilities that have been removed and archived from EPA's inventory of CERCLA sites.	0.5	0
RCRA CORRACTS/ TSD	The EPA maintains a database of RCRA facilities associated with treatment, storage, and disposal (TSD) of hazardous waste that are undergoing "corrective action." A "corrective action" order is issued when there has been a release of hazardous waste or constituents into the environment from a RCRA facility.	1.0	0

Database	Description	Radius (Miles)	Listings
RCRA Non-CORRACTS/ TSD	The RCRA Non-CORRACTS/TSD Database is a compilation by the USEPA of facilities which report storage, transportation, treatment, or disposal of hazardous waste. Unlike the RCRA CORRACTS/TSD database, the RCRA Non-CORRACTS/TSD database does not include RCRA facilities where corrective action is required.	0.5	0
RCRA Generators	The RCRA Generators database, maintained by the EPA, lists facilities that generate hazardous waste as part of their normal business practices. Generators are listed as either large (LQG), small (SQG), or conditionally exempt (CESQG). LQG produce at least 1000 kg/month of non-acutely hazardous waste or 1 kg/month of acutely hazardous waste. SQG produce 100-1000 kg/month of non-acutely hazardous waste. CESQG are those that generate less than 100 kg/month of non-acutely hazardous waste.	0.25	0
IC / EC	A listing of sites with institutional and/or engineering controls in place. IC include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls. EC include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.	0.5	0
ERNS	The Emergency Response Notification System (ERNS) is a listing compiled by the EPA on reported releases of petroleum and hazardous substances to the air, soil and/or water.	Site	0
RCRA NonGen	A listing of site that historically generated, transported, stored, treated and/or disposed of hazardous waste as defined by RCRA; however, the sites do not presently generate hazardous waste.	0.25	1
	State/Tribal		
SHWS	State-equivalent and/or Tribal-equivalent database of NPL sites.	1.0	0
SWF / LF	State and/or Tribal database of solid waste facilities located within Tennessee. The database information may include the facility name, class, operation type, area, estimated operational life, and owner.	0.5	0
LUST	State and/or Tribal database of leaking underground storage tanks in state of Tennessee.	0.5	6
LUST TRUST	State and/or Tribal database of leaking underground storage tanks in state of Tennessee that had accidental petroleum releases.	1.0	0
UST	State and/or Tribal database of registered storage tanks in the State of Tennessee which may include the owner and location of the tanks.	0.25	4
HIST UST	State and/or Tribal database of historical registered storage tanks in the State of Tennessee which may include the owner and location of the tanks.	0.25	0
IC/EC	State and/or Tribal equivalent to the Federal IC / EC database list.	0.5	0

Database	Description	Radius (Miles)	Listings
VCP	State and/or Tribal facilities included as Voluntary Cleanup Program sites.	0.5	0
Brownfields	State and/or tribal listing of Brownfield properties addressed by Cooperative Agreement Recipients or Targeted Brownfields Assessments.	0.5	0

In addition to the above ASTM-required listings, Terracon reviewed other federal, state, local, and proprietary databases provided by the database firm. A list of the additional reviewed databases is included in the regulatory database report included in Appendix D.

The following table summarizes the site-specific information provided by the database and/or gathered by this office for identified facilities within 2,000-feet of the site. Facilities are listed in order of proximity to the subject site. Additional discussion for selected facilities follow the summary table and are provided on the following pages.

Selected Listed Facilities

Facility Name and Location	Estimated Distance from R.O.W./Direction/Gradient	Database Listings
People's Food Store (Shell Station) 3104 Memorial Boulevard	Site	UST
Garden Basket Convenience Store #4 3117 Memorial Boulevard	Approximately 0.33 miles south-southeast / up-gradient	LUST, HIST UST, UST
Amoco Service Station 3101 Memorial Boulevard	Approximately 0.041 miles southwest/ up-gradient	LUST, LUST TRUST, UST, HIST UST, HIST Auto Stat
B&W Cleaners 3200 Memorial Boulevard	Approximately 0.50 miles east-southeast/ up-gradient	RCRA NonGen, DRY CLEANERS, HIST Cleaners
Old Simpsons Motor 3310 Memorial Boulevard	Approximately 0.165 miles east-northeast/ up-gradient	LUST, UST, HIST UST HIST Auto Stat
Sears Roebuck and Company #2825 2101 Ft. Henry Drive	Approximately 0.452 miles west-southwest/ up-gradient	LUST
JC Penny 2101 Ft. Henry Drive	Approximately 0.452 miles west-southwest/ up-gradient	LUST
Regency-TN-DBA Hillside Man 3641 Memorial Boulevard	Approximately 0.461 miles east/ up-gradient	LUST

People's Food Store (Shell Station)

Based on our review of the database search report, the site was identified on the UST database. According to the EDR report, the site currently has one 5,000-gallon capacity UST, one 10,000-gallon capacity, and one 15,000-gallon capacity UST in operation. Based on our review, these USTs were installed at the site in 2010 and are used to store gasoline and diesel fuel. According to Mr. Hayes, P.G., the site has had no reported releases of product since tank installation in 2010. To obtain additional information regarding this facility, Terracon conducted a file review at the TDEC Johnson City Field Office on November 5, 2013. Mr. Hayes, P.G. noted that there were no files stored at the TDEC Johnson City Field Office which indicate a release from the site. While the documented results do not indicate significant adverse impact to TDOTs planned R.O.W., a more thorough investigation would be required to adequately assess potential impact to TDOTs planned R.O.W. As such, the site is deemed to constitute a REC.

Garden Basket Convenience Store #4

According to the database search report, the Garden Basket Convenience Store #4 facility is identified on the UST, Historical Underground Storage Tank (HIST UST), and Leaking Underground Storage Tank (LUST) databases. Based on our site and area reconnaissance, the Garden Basket Convenience Store #4 facility is located approximately 100 feet directly southeast of the site, at the location currently operating as the Model City Motel. According to the EDR report, the Garden Basket Convenience Store #4 facility has two 6,000-gallon capacity USTs and one 4,000-gallon capacity UST permanently out of use. According to our review, a product release was discovered in 1998. Currently, the LUST case is considered closed. Based on our review of the EDR report, the Garden Basket Convenience Store #4 facility does not currently have USTs in operation.

During our file review at the TDEC Johnson City Field Office, Mr. Hayes, P.G. provided a Contamination Case Closure Letter, dated February 2, 2011 regarding contamination at the site. Mr. Hayes, P.G. noted that the contamination case file has been sent to the TDEC Nashville Office for archiving. Based on the unknown extent of the product release from the Garden Basket Convenience Store #4 facility, the topographic relationship to the site, and the proximity to the site, the Garden Basket Convenience Store #4 facility is considered a REC in connection with the site at this time.

Amoco Service Station

According to the database search report, the Amoco Service Station facility is identified on the UST, HIST UST, LUST, and Historical Auto Station (Hist Auto Stat) databases. Based on our site and area reconnaissance, the Amoco Service Station facility is located approximately 100 feet directly south of the site, at the location currently operating as Points Auto Sales and Service. According to the EDR report, the Amoco Service Station facility has two 4,000-gallon capacity USTs and one 6,000-gallon capacity UST permanently out of use. According to our review, a product release was discovered during tank closures in 2002. Currently, the LUST

case is considered closed. Based on our review of the EDR report, the Amoco Service Station facility does not currently have USTs in operation.

During our file review at the TDEC Johnson City Field Office, Mr. Hayes, P.G. provided a Permanent Closure Report prepared by Terracon, dated May 1, 2002. Based on our review of the *2002 Permanent Closure Report*, three USTs were removed from the ground in 2002. According to drawings included in the *2002 Permanent Closure Report*, the tank pit was located approximately 30 feet south of Memorial Boulevard and approximately 60 feet south of the site. Based on soil sampling from the Amoco Service Station facility during tank closure activities, gasoline constituents from the soil samples exceeded TDEC action levels and was further excavated for offsite disposal. In addition, the groundwater sampled at the site during closure activities was classified as 'non-drinking water' due to concentrations of iron and manganese exceeding Secondary Drinking Water Standards. A Final Approval of Contaminated Closure Letter (2002) and subsequent Monitoring Well Abandonment Approval Letter (2002) were also reviewed regarding the Amoco Service Station facility. The proximity of the Amoco Service Station in relation to the site indicates a potential for groundwater migration; therefore, based on the data reviewed during our file review and the proximity to the site, the Amoco Service Station facility is considered a REC in connection with the site at this time.

B&W Cleaners

According to the database search report, the B&W Cleaners facility is identified on the Resource Conservation and Recovery Act (RCRA) Non-Generator (Non-Gen), Dry Cleaners (DRY CLEANERS), and Historical Dry Cleaners (HIST CLEANERS) databases. Based on our site and area reconnaissance, the B&W Cleaners facility is located directly east, adjacent to the site. According to our review of historical information, the B&W Cleaners facility has been in operations since at least 1963. According to the EDR report, the B&W Cleaners facility does not currently generate hazardous waste. Based on the unknown status of the B&W Cleaners facility, proximity to the site, and topographic relationship to the site, the the B&W Cleaners facility is considered a REC in connection with the site at this time.

Old Simpson's Motor

According to the database search report, the Old Simpson's Motor facility is identified on the UST, HIST UST, LUST databases. Based on our site and area reconnaissance, the Old Simpson's Motor facility was identified as Tony's Pipe and Muffler facility approximatley 800 feet east-northeast of the site. Based on our review, the Old Simpson's Motor facility had two 10,000-gallon capacity USTs and one 550-gallon capacity UST closed in 1995. According to our review, the Old Simpson's Motor facility reported a release at the site during closure and was listed on the LUST database. Based on the database search report, the Old Simpson's Motor facility case has been closed.

During our file review at the TDEC Johnson City Field Office, Mr. Hayes, P.G. provided a Permanent Closure Report prepared by Environmental Pollution Services, Inc., dated November 14, 1995. Based on our review of the *1995 Permanent Closure Report*, three USTs were removed from the ground in 1995. According to drawings included in the *1995 Permanent Closure Report*, the tank pit was located approximately 30 feet north of Memorial Boulevard. According to our review of the *1995 Permanent Closure Report*, a portion of the soil excavated and sampled during closure activities was determined to be above action levels. The stockpiled material was subsequently disposed of offsite and the case was closed. Based on the distance from the site and the nature of contamination reviewed during our file review, the Old Simpson's Motor facility is not considered a REC in connection with the site at this time.

The remaining listed facilities are not considered to represent RECs in connection with the site based on proximity from the site, topographic relationship, and/or current regulatory status. Unmapped facilities are those that do not contain sufficient address or location information to evaluate the facility listing locations relative to the site. The report listed 22 facilities in the unmapped section. Determining the location of unmapped facilities is beyond the scope of this assessment; however, none of these facilities appeared to be present on the site at the time of our site reconnaissance. These facilities are listed in the database report in Appendix D.

4.2 Local Agency Inquiries

4.2.1 Health Department/Environmental Division

The Sullivan County Health Department (SCHD), Environmental Health Division was contacted by telephone regarding environmental records or information indicating environmental concerns for the site. The SCHD representative contacted indicated that she was not aware of any environmental concerns associated with the site.

4.2.2 Fire Department

The Sullivan County Fire Department (SCFD) was contacted by telephone regarding environmental records or information indicating environmental concerns for the site. At the issuance of this report a response had not been received from the SCFD.

4.2.3 Local/Regional Pollution Control Agency

See Section 4.2.1.

4.2.4 Local/Regional Water Quality Agency

The Kingsport Public Works office was contacted by phone regarding environmental records for the site. Mr. Ryan Reynolds of the Kingsport Public Works, is unaware of any significant surface or groundwater water quality issues on or near the site.

5.0 SITE RECONNAISSANCE

5.1 General Site Information

Information contained in this section is based on a visual reconnaissance conducted while walking through the site and the accessible interior areas of structures, if any, located on the site. Figure 2 in Appendix A depicts the site. Photo documentation of the site at the time of the visual reconnaissance is provided in Appendix E. Credentials of the individuals planning and conducting the site visit are included in Appendix F.

General Site Information

Site Reconnaissance	
Field Personnel	Marie Maher, P.G.
Reconnaissance Date	November 5, 2013
Weather Conditions	Partly cloudy, approximately 65° F
Site Contact/Title	Unaccompanied
Site Description	
Site Name	People's Food Store (Shell Station)
Site Location/Address	3104 Memorial Boulevard in Kingsport, Sullivan County, Tennessee
Land Area	1.4 Acres
Site Improvements	The southern portion of the site is currently developed with a gas station containing three underground storage tanks, two canopies with a total of seven fuel dispensers, and concrete-paved parking and drive areas. The northern portion of the site consists of undeveloped wooded land.
Zoning	Not specified
Site Topographic Relief	Varies, but in general to the south/southeast
Site Utilities	
Electricity	Kingsport Utility Services
Drinking Water	City of Kingsport
Natural Gas	East Tennessee Natural Gas Co.

5.2 General Description of Site, Occupants and Operations

The project includes the widening of lanes along Memorial Boulevard (U.S. Highway 126) resulting in the expansion of the associated TDOT R.O.W. in Kingsport, Sullivan County, Tennessee. The site assessed during this investigation consists of the 1.4-acre parcel of land located at 3104 Memorial Boulevard. At the time of our site and area reconnaissance, the southern portion of the site was developed with a gas station containing three underground storage tanks, two canopies with a total of seven fuel dispensers, and concrete-paved parking and drive areas. The northern portion of the site consists of undeveloped, wooded land. The purpose of this study was to identify RECs within the site limits, specifically the proposed R.O.W. expansion area which is along the west boundary of this parcel.

5.3 Site Observations

The following table summarizes site observations and interviews. Affirmative responses (designated by an "X") are discussed in more detail following the table.

Site Characteristics

Category	Item or Feature	Affirmative
Site Operations, Processes, and Equipment	Emergency generators	
	Elevators	
	Air compressors	
	Hydraulic lifts	
	Dry cleaning	
	Photo processing	
	Laboratory hoods and/or incinerators	
	Waste treatment systems and/or water treatment systems	
	Heating and/or cooling systems	X
	Other processes or equipment	
Aboveground Chemical or Waste Storage	Aboveground storage tanks	
	Drums, barrels and/or containers ≥ 5 gallons	
	MSDS	

Category	Item or Feature	Affirmative
Underground Chemical or Waste Storage, Drainage or Collection Systems	Underground storage tanks or ancillary UST equipment	X
	Sumps, cisterns, catch basins and/or dry wells	
	Grease traps	X
	Septic tanks and/or leach fields	
	Oil/water separators	
	Pipeline markers	
	Interior floor drains	
Electrical Transformers/ PCBs	Pad or pole mounted transformers and/or capacitors	
	Other equipment	
Releases or Potential Releases	Stressed vegetation	
	Stained soil	
	Stained pavement or similar surface	X
	Leachate and/or waste seeps	
	Trash, debris and/or other waste materials	X
	Dumping or disposal areas	
	Construction/demolition debris and/or dumped fill dirt	
	Surface water discoloration, odor, sheen, and/or free floating product	
	Strong, pungent or noxious odors	
	Exterior pipe discharges and/or other effluent discharges	
Other Notable Site Features	Surface water bodies	
	Quarries or pits	
	Wells	

The features checked in the above table are adjacent to TDOT's planned R.O.W. acquisition. Further discussion is as follows:

Site Operations, Processes, and Equipment

Heating and/or Cooling Systems

The office structure located on the southern portion of the site appeared to utilize a package heating, ventilation, and air conditioning (HVAC) system located on the eastern exterior wall of the onsite convenience store structure with interior and exterior components. Based on our

observations during our site reconnaissance, the HVAC equipment is not considered a REC at this time.

Underground Chemical or Waste Storage, Drainage or Collection Systems

Underground Storage Tanks or Ancillary UST Equipment
Three USTs were present and active at the site at the time of our site reconnaissance. All three USTs are located within a tank pit that is located on the southeastern portion of the site adjacent to Memorial Boulevard (see Figure 2). The USTs consist of one 5,000-gallon capacity UST, one 10,000-gallon capacity, and one 15,000-gallon capacity UST. Based on our review, these USTs were installed at the site in 2010 and are used to store gasoline and diesel fuel. Additional information regarding these USTs has been previously provided in Section 4.2 of this report. The USTs on the site constitute a REC.

Grease Traps
One grease trap was observed on the site, adjacent to the eastern façade of the onsite structure. The grease trap is owned and serviced by Valley Proteins, Inc. During our site and area reconnaissance, staining was not observed in the areas surrounding the grease trap; therefore, the onsite grease trap is not considered a REC in connection with the site at this time.

Releases or Potential Releases

Stained Pavement or Similar Surfaces
Areas of black staining were evident at the location of each of the two canopies and associated fuel dispensers on the site. The staining appeared to be *de minimis* in nature, and typical for gas station facilities.

Trash, debris and/or other waste materials
One waste dumpster was observed on the southern portion of the site adjacent to the grease trap along the eastern façade of the onsite structure. The dumpster is owned and serviced by Allied Waste Services. Evidence of staining, noxious odors or hazardous waste disposal was not observed in the vicinity of the on-site dumpster; therefore, waste dumpster is not considered a REC at this time.

5.4 Interviews Conducted

The individuals listed on the following page were interviewed regarding the presence or absence of the features listed in the table above.

Interviewee(s)

Interviewer	Interviewee	Title	Date/Time
Marie Maher	Mr. Alan Hayes	Field Office Manager/ Johnson City TDEC Field Office	November 1, 2013 8:00 am
Marie Maher	Ms. Angela Griffen	Cashier at People's Food Store	November 5, 2013 1:00 pm
Marie Maher	Mr. Chris Morgan	Site Manager of Customer Gas Services, Inc.	November 5, 2013 2:30 pm

Information obtained from the above-listed interviewees is discussed in Sections 3.8 and 5.3.

6.0 PROJECT IMPACTS

6.1 Site Rankings

A hazardous materials rating system was used to rate the facilities that were identified as being RECs to the site. The ratings include: NO, LOW, MEDIUM and HIGH, and are generally defined as follows:

NO: A review of all available information finds there is nothing to indicate that the facility is a REC to the site. It is possible that contaminants were handled on the property; however, based on a review of available information, the facility does not appear to constitute a REC to the site.

LOW: The former or current facility has a hazardous waste generator identification number, or deals with hazardous materials; however, based on all available information, there is no reason to believe that there would be any involvement with contamination in relation to the site. This is the lowest possible rating a gasoline station operating within current regulations can receive. Some facilities designated with a LOW rating should be reevaluated during the design phase.

MEDIUM: After a review of all available information, indications are found (visual observations, reports, violation notices, consent orders, etc.) that identify known soil and/or groundwater contamination and that the problem does not need remediation, is currently being remediated, or that continued monitoring is required. The complete details of remediation requirements are important to determine what the TDOT must do if the property were to be acquired. A recommendation should be made on each property falling into this category to its acceptability for use within the proposed project, what actions might be required if the property is acquired, and the possible alternatives if there is a need to avoid the property.

HIGH: After a review of all available information, there is a potential for contamination problems. Further assessment will be required after alignment selection to determine the actual presence

and/or levels of contamination and the need for remedial action. A recommendation must be included for what further assessment is required. Conducting the actual Contamination Assessment is not expected to begin until alignment is defined; however, circumstances may require additional screening assessments (i.e., collecting soil or water samples for laboratory analysis necessary to determine the presence and/or levels of contaminants) to begin earlier. Properties previously used as gasoline station and which have not been evaluated or assessed would probably receive this rating.

6.2 Potential Contamination Sites

The site and three nearby facilities (Garden Basket Convenience Store #4, Amoco Service Station, and B&W Cleaners) were identified and evaluated for potential hazardous materials and petroleum involvement. The facilities were identified based on visual observations and/or other resources available for review. The facilities are listed and described in the table below, and are also indicated on Figure 2. Additional discussion regarding the facilities listed below is provided after the table.

Potential Contamination Sites

Site No.	Site Name, Location, and Identification Numbers	Tax Map No., Parcel ID	Database Listings	Storage Tank(s) Currently In Service	Potential Contaminant Parameters	Proposed Alignment		
						Right-of-way Required for Expansion	Distance from Proposed Right-of-way	Risk Evaluation Rating
1	People's Food Store; 3104 Memorial Boulevard	Map 062H; Parcel C030.00	UST	5,000-gallon diesel UST, 10,000-gallon gasoline UST 15,000-gallon gasoline UST	Presence of petroleum products	Yes	UST pit & associated piping approx. 30-40 feet from R.O.W.	HIGH
2	Garden Basket Convenience Store #4; 3109 Memorial Boulevard	Map 062H; Parcel G002.00	UST HIST UST LUST	None	Presence of petroleum products	Yes	UST pit approx. 40-50 feet from R.O.W.	MEDIUM
3	Amoco Service Station; 3101 Memorial Boulevard	Map 062H; Parcel G001.00	UST HIST UST LUST HIST Auto Station	None	Presence of petroleum products	Yes	UST pit approx. 30-40 feet from R.O.W.	MEDIUM

Site No.	Site Name, Location, and Identification Numbers	Tax Map No., Parcel ID	Database Listings	Storage Tank(s) Currently In Service	Potential Contaminant Parameters	Proposed Alignment		
						Right-of-way Required for Expansion	Distance from Proposed Right-of-way	Risk Evaluation Rating
4	B&W Cleaners; 3200 Memorial Boulevard	Map 062H; Parcel C025.00	RCRA NonGen HIST Cleaners DRY Cleaners	None	Presence of dry cleaner chlorinated solvents	Yes	Structure approx. 20-30 feet from R.O.W.	MEDIUM

Site No. 1 – People's Food Store; 3104 Memorial Boulevard

The site currently has one 5,000-gallon capacity UST, one 10,000-gallon capacity, and one 15,000-gallon capacity UST in operation. Based on our review, these USTs were installed at the site in 2010 and are used to store gasoline and diesel fuel. According to Mr. Hayes, P.G., the site has had no reported releases of product since tank installation in 2010. Mr. Hayes, P.G. noted that there were no files stored at the TDEC Johnson City Field Office which indicate a release from the site. While the documented results do not indicate significant adverse impact to TDOTs planned R.O.W., a more thorough investigation would be required to adequately assess potential impact to TDOTs planned R.O.W. As such, the site is deemed to constitute a REC. Therefore, the facility was assigned a risk rating of HIGH.

Site No. 2 – Garden Basket Convenience Store; 3109 Memorial Boulevard

The Garden Basket Convenience Store #4 facility is identified on the UST, HIST UST, and LUST databases. Based on our site and area reconnaissance, the Garden Basket Convenience Store #4 facility is located approximately 100 feet directly southeast of the site, at the location currently operating as the Model City Motel. According to the EDR report, the Garden Basket Convenience Store #4 facility has two 6,000-gallon capacity USTs and one 4,000-gallon capacity UST permanently out of use. According to our review, a product release was discovered in 1998. Currently, the LUST case is considered closed. Based on our review of the EDR report, the Garden Basket Convenience Store #4 facility does not currently have USTs in operation. During our file review at the TDEC Johnson City Field Office, Mr. Hayes, P.G. provided a Contamination Case Closure Letter, dated February 2, 2011 regarding contamination at the site. Based on the unknown extent of the product release from the Garden Basket Convenience Store #4 facility, the topographic relationship to the site, and the proximity to the site, the Garden Basket Convenience Store #4 facility is considered a REC in connection with the site at this time. Therefore, the facility was assigned a risk rating of MEDIUM.

Site No. 3 – Amoco Service Station; 3101 Memorial Boulevard

The Amoco Service Station facility is identified on the UST, HIST UST, LUST, and Hist Auto Stat databases. Based on our site and area reconnaissance, the Amoco Service Station facility is located approximately 100 feet directly south of the site, at the location currently operating as Points Auto Sales and Service. According to the EDR report, the Amoco Service Station facility has two 4,000-gallon capacity USTs and one 6,000-gallon capacity UST permanently out of use. According to our review, a product release was discovered during tank closures in 2002. Currently, the LUST case is considered closed. Based on our review of the EDR report, the Amoco Service Station facility does not currently have USTs in operation.

During our file review at the TDEC Johnson City Field Office, Mr. Hayes, P.G. provided a Permanent Closure Report prepared by Terracon, dated May 1, 2002. Based on our review of the *2002 Permanent Closure Report*, three USTs were removed from the ground in 2002. According to drawings included in the *2002 Permanent Closure Report*, the tank pit was located approximately 30 feet south of Memorial Boulevard and approximately 60 feet south of the site. Based on soil sampling from the Amoco Service Station facility during tank closure activities, gasoline constituents from the soil samples exceeded TDEC action levels and was further excavated for offsite disposal. In addition, the groundwater sampled at the site during closure activities was classified as 'non-drinking water' due to concentrations of iron and manganese exceeding Secondary Drinking Water Standards. A Final Approval of Contaminated Closure Letter (2002) and subsequent Monitoring Well Abandonment Approval Letter (2002) were also reviewed regarding the Amoco Service Station facility. The proximity of the Amoco Service Station in relation to the site indicates a potential for groundwater migration; therefore, based on the data reviewed during our file review and the proximity to the site, the Amoco Service Station facility is considered a REC in connection with the site at this time. Therefore, the facility was assigned a risk rating of MEDIUM.

Site No. 4 – B&W Cleaners; 3200 Memorial Boulevard

According to the database search report, the B&W Cleaners facility is identified on the RCRA Non-Gen, DRY CLEANERS, and HIST CLEANERS databases. Based on our site and area reconnaissance, the B&W Cleaners facility is located directly east, adjacent to the site. According to the EDR report, the B&W Cleaners facility does not currently generate hazardous waste. According to our review of historical information, the B&W Cleaners facility has been in operations since at least 1963. Based on the unknown status of the B&W Cleaners facility, proximity to the site, and topographic relationship to the site, the the B&W Cleaners facility is considered a REC in connection with the site at this time. Therefore, the facility was assigned a risk rating of MEDIUM.

7.0 ADDITIONAL SERVICES

Per the agreed scope of services specified in the proposal, no additional services (e.g., asbestos sampling, lead-based paint sampling, wetlands evaluation, radon testing, vapor intrusion, etc.) were conducted.

8.0 FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS

8.1 Findings

This PAS was performed in general accordance with the TDOT Environmental Procedures Manual, dated April 2007, our Proposal, dated October 23, 2013, and consistent with the procedures included in ASTM E 1527-13, Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process. The PAS was conducted under the supervision or responsible charge of Travis Stamper, Environmental Professional. Marie A. Maher, P.G. performed the site reconnaissance on November 5, 2013.

A cursory summary of findings is provided below. It should be recognized that details were not included or fully developed in this section, and the report must be read in its entirety for a comprehensive understanding of the items contained herein.

- The project includes the widening of lanes along U.S. Highway 126 (Memorial Boulevard) resulting in the expansion of the associated Tennessee Department of Transportation (TDOT) right-of-way (R.O.W.) in Kingsport, Sullivan County, Tennessee. The purpose of this PAS is to present the preliminary findings of a literature search and a field review of the potential for finding hazardous materials or petroleum contamination on parcels included in, or adjacent to the proposed project that may impact the construction of the proposed project.

- The site currently has one 5,000-gallon capacity underground storage tank (UST), one 10,000-gallon capacity, and one 15,000-gallon capacity UST in operation. Based on our review, these USTs were installed at the site in 2010 and are used to store gasoline and diesel fuel. According to Mr. Alan Hayes, P.G., Field Office Manager of the Tennessee Department of Environment and Conservation (TDEC) Johnson City Field Office, the site has had no reported releases of product since tank installation in 2010. Mr. Hayes, P.G. noted that there were no files stored at the TDEC Johnson City Field Office which indicate a release from the site. While current operations at the site do not indicate significant adverse impact to TDOTs planned R.O.W., a more thorough investigation would be required to adequately assess potential impact to TDOTs planned R.O.W. As such, the site is deemed to constitute a REC.

- Based on historical information reviewed as part of this assessment, the site appears to have been developed as residential land from at least the 1930s until the late 1950s. The site appears to have been redeveloped with multiple commercial-type structures in the late 1950s. The structures located on the southern portion of the site appear to be razed and the current gas station appears to have been developed in 2010.

- Based on our review of regulatory database information, the site was identified on the UST database as having three USTs in operation. The operational USTs at the site constitute a recognized environmental condition (REC). Additional review of the regulatory database revealed seven facilities, Garden Basket Convenience Store #4 (current Model City Motel), Amoco Service Station (current Points Auto Sales), B&W Cleaners, Old Simpson's Motors (current Tony's Pipe and Muffler), Sears Roebuck and Company #2825, JC Penny, and Regency-TN-DBA Hillside Man within the specified search radius of the site. Three of these facilities (Garden Basket Convenience Store #4, Amoco Service Station, and B&W Cleaners) are deemed to constitute offsite RECs associated with the site based on available information reviewed.

- A hazardous materials rating system was used to rate facilities that were identified as being potential RECs to the site. Three facilities (Garden Basket Convenience Store #4, Amoco Service Station, and B&W Cleaners) and the on-site facility (People's Food Store) were identified as having the potential for contamination. The onsite facility was assigned a risk rating of HIGH. The offsite facilities identified as having the potential for contamination were assigned a risk rating of MEDIUM.

- Based on the authorized scope of services, no additional services (e.g., asbestos sampling, lead-based paint sampling, wetlands evaluation, radon testing, etc.) were conducted.

8.2 Conclusions and Recommendations

The site (People's Food Store) was identified as having a HIGH risk evaluation rating. Due to the potential acquisition of a portion of this parcel (map 062H parcel C030.00), Terracon recommends that the site be further evaluated through a Level 2 Contamination Assessment. This assessment would include soil and groundwater sampling, to further clarify potential contamination concerns. Based on the findings of the Level 2 Contamination Assessment, the rating of this facility may or may not be revised.

Garden Basket Convenience Store #4 (Model City Motel), was identified as having a MEDIUM risk evaluation rating. Due to the close proximity of this facility with respect to the site, as well as regulatory information reviewed with regard to a past product release at this facility, Terracon

recommends that potential impact from the Garden Basket Convenience Store #4 (Model City Motel) facility be further evaluated through a Level 2 Contamination Assessment, which would include soil and groundwater sampling, to further clarify potential contamination concerns. Based on the findings of the Level 2 Contamination Assessment, the rating of this facility may or may not be revised.

Amoco Service Station (Point Auto Sales) was identified as having a MEDIUM risk evaluation rating. Due to the close proximity and cross-gradient location of this facility with respect to the site, as well as regulatory information reviewed with regard to a past product release at this facility, Terracon recommends that potential impact from the Amoco Service Station (Point Auto Sales) facility be further evaluated through a Level 2 Contamination Assessment. This assessment would include soil and groundwater sampling, to further clarify potential contamination concerns. Based on the findings of the Level 2 Contamination Assessment, the rating of this facility may or may not be revised.

B&W Cleaners was identified as having a MEDIUM risk evaluation rating. Due to the close proximity of this facility with respect to the site, Terracon recommends that potential impact from the B&W Cleaners facility be further evaluated through a Level 2 Contamination Assessment. This assessment would include soil and groundwater sampling, to further clarify potential contamination concerns. Based on the findings of the Level 2 Contamination Assessment, the rating of this facility may or may not be revised.

9.0 DECLARATION

I, Travis Stamper, declare that, to the best of my professional knowledge and belief, I meet the definition of Environmental Professional as defined in Section 312.10 of 40 CFR 312; and I have the specific qualifications based on education, training, and experience to assess a site of the nature, history, and setting of the subject site. I have developed and performed the All Appropriate Inquiries in conformance with the standards and practice set forth in 40 CFR Part 312.

APPENDIX A

Figure 1 – Topographic Map, Figure 2 – Site Map

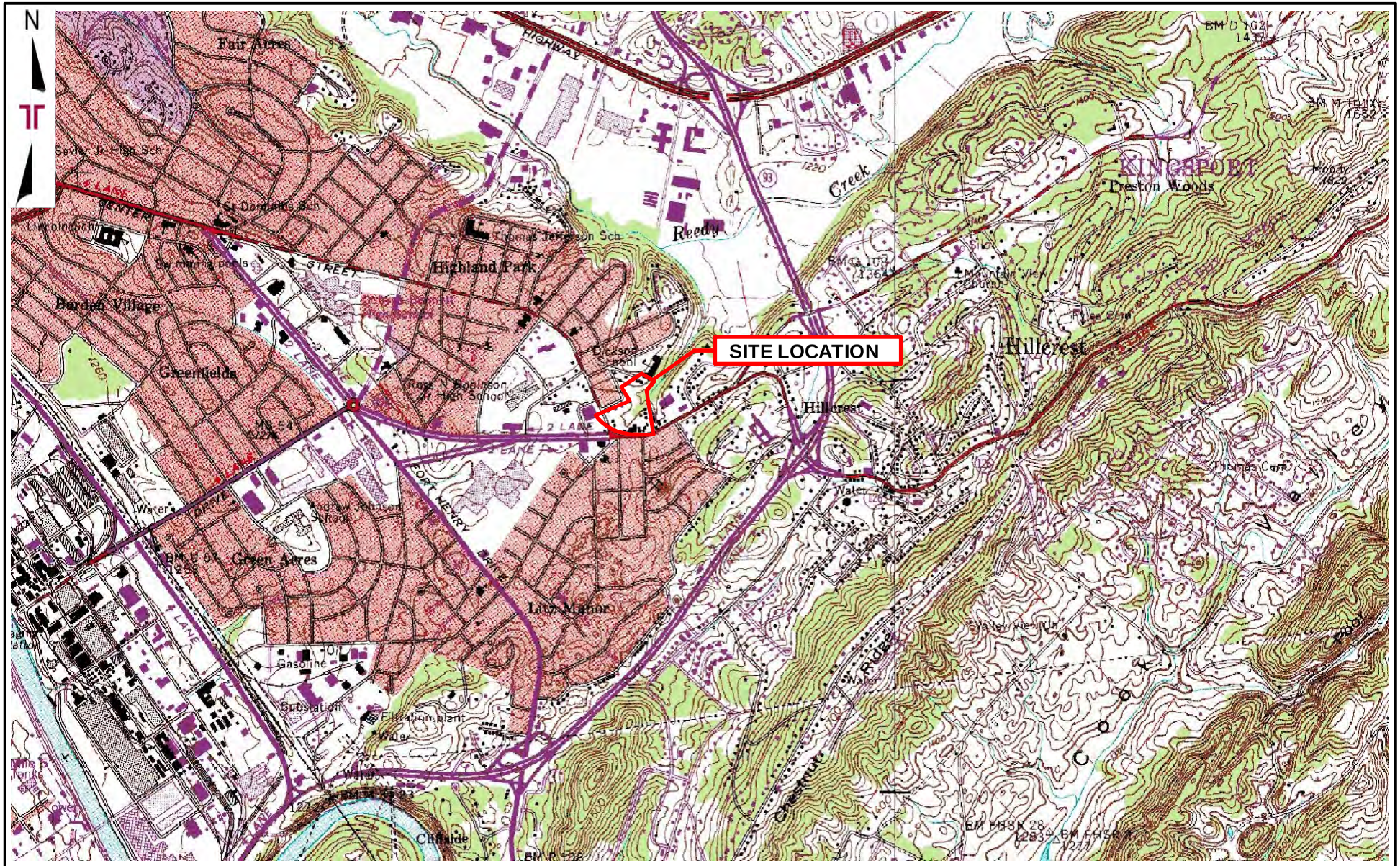


DIAGRAM IS FOR GENERAL LOCATION ONLY, AND IS NOT INTENDED FOR CONSTRUCTION PURPOSES

TOPOGRAPHIC MAP IMAGE COURTESY OF THE U.S. GEOLOGICAL SURVEY QUADRANGLES INCLUDE: INDIAN SPRINGS, TN (1/1/1991).

Project Manager:	MAM
Drawn by:	MAM
Checked by:	MAM
Approved by:	TS

Project No.	E2137131.T3
Scale:	1" = ~24,000'
File Name:	E2137131.T3
Date:	11/11/2013

Terracon
Consulting Engineers & Scientists
51 Lost Mound Drive Chattanooga, Tennessee 37406
PH. (423) 499-6111 FAX. (423) 499-8099

Topographic Map

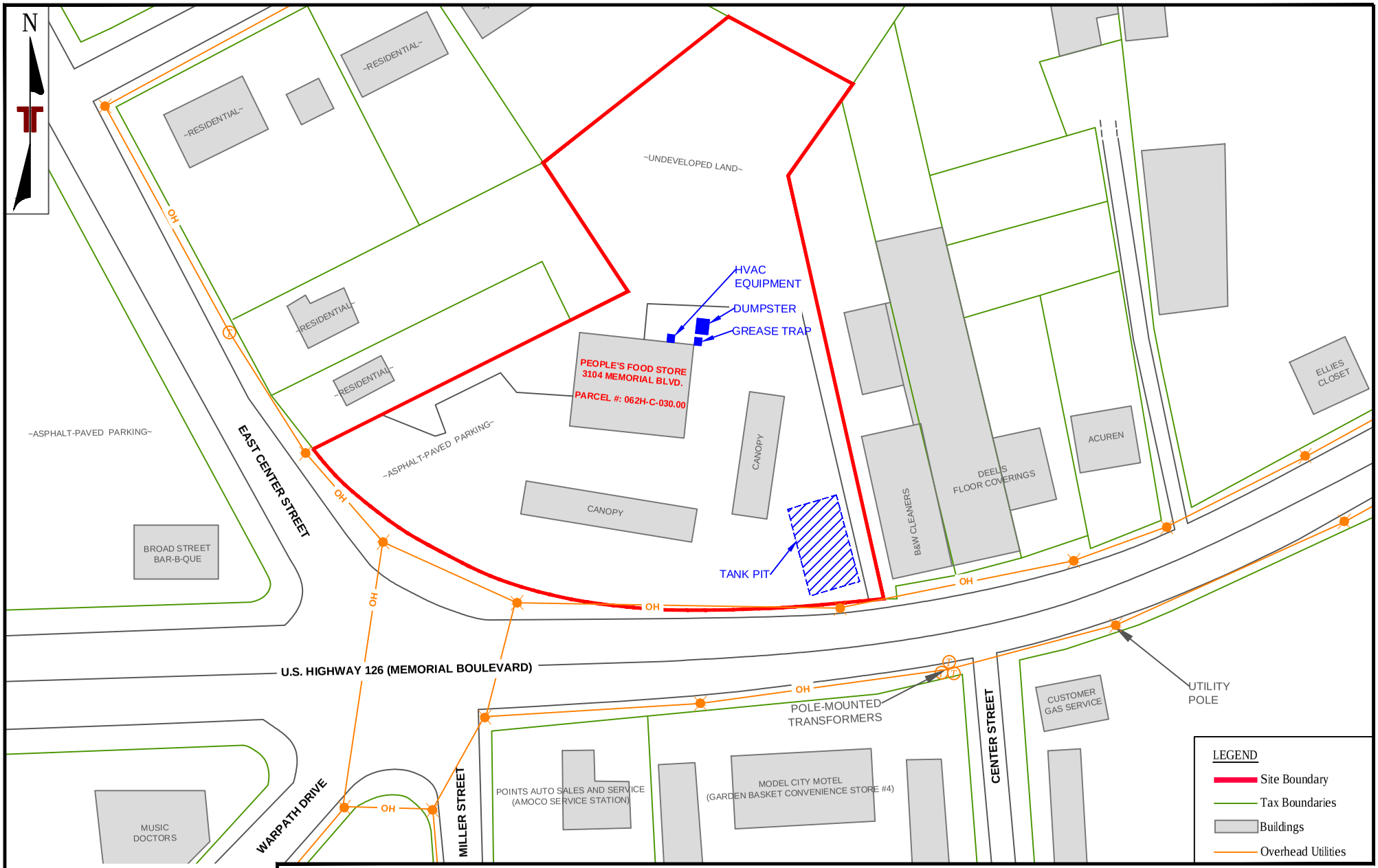
Phase I Preliminary Assessment Study

People's Food Sore

3104 Memorial Boulevard

Kingsport, Sullivan County, Tennessee

Figure 1



Note:

Site Map image derived from Sullivan County Tax Map Information.

0 70 140

1" = 70'

Project Mngr:	MAM
Drawn By:	MAM
Checked By:	MAM
Approved By:	DEW

Project No.	E2137125
Scale:	AS SHOWN
File No.	N:\Projects\2013
Date:	10/28/13

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51 Lost Mound Dr. Suite 135 Chattanooga, TN 37406
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Site Diagram

Phase I Preliminary Assessment Study

People's Food Store

3104 Memorial Boulevard

Kingsport, Sullivan County, Tennessee

Figure 2

APPENDIX B

Description of Terms and Acronyms

Description of Selected General Terms and Acronyms

Term/Acronym	*Description*
ACM	Asbestos Containing Material. Asbestos is a naturally occurring mineral, three varieties of which (chrysotile, amosite, crocidolite) have been commonly used as fireproofing or binding agents in construction materials. Exposure to asbestos, as well as ACM, has been documented to cause lung diseases including asbestosis (scarring of the lung), lung cancer and mesothelioma (a cancer of the lung lining). Regulatory agencies have generally defined ACM as a material containing greater that one (1) percent asbestos, however some states (e.g. California) define ACM as materials having 0.1% asbestos. In order to define a homogenous material as non-ACM, a minimum number of samples must be collected from the material dependent upon its type and quantity. Homogenous materials defined as non-ACM must either have 1) no asbestos identified in all of its samples or 2) an identified asbestos concentration below the appropriate regulatory threshold. Asbestos concentrations are generally determined using polarized light microscopy or transmission electron microscopy. Point counting is an analytical method to statistically quantify the percentage of asbestos in a sample. The asbestos component of ACM may either be friable or non-friable. Friable materials, when dry, can be crumbled, pulverized, or reduced to powder by hand pressure and have a higher potential for a fiber release than non-friable ACM. Non-friable ACM are materials that are firmly bound in a matrix by plastic, cement, etc. and, if handled carefully, will not become friable. Federal and state regulations require that either all suspect building materials be presumed ACM or that an asbestos survey be performed prior to renovation, dismantling, demolition, or other activities that may disturb potential ACM. Notifications are required prior to demolition and/or renovation activities that may impact the condition of ACM in a building. ACM removal may be required if the ACM is likely to be disturbed or damaged during the demolition or renovation. Abatement of friable or potentially friable ACM must be performed by a licensed abatement contractor in accordance with state rules and NESHAP. Additionally, OSHA regulations for work classification, worker training and worker protection will apply.
AHERA	Asbestos Hazard Emergency Response Act
AST	Above Ground Storage Tanks. ASTs are generally described as storage tanks less than 10% of which are below ground (i.e., buried). Tanks located in a basement, but not buried, are also considered ASTs. Whether, and the extent to which, an AST is regulated, is determined on a case-by-case basis and depends upon tank size, its contents and the jurisdiction of its location.
BGS	Below Ground Surface
BTEX	Benzene, Toluene, Ethylbenzene, and Xylenes. BTEX are VOC components found in gasoline and commonly used as analytical indicators of a petroleum hydrocarbon release.
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act (a.k.a. Superfund). CERCLA is the federal act that regulates abandoned or uncontrolled hazardous waste sites. Under this Act, joint and several liability may be imposed on potentially responsible parties for cleanup-related costs.
CERCLIS	Comprehensive Environmental Response, Compensation and Liability Information System. An EPA compilation of sites having suspected or actual releases of hazardous substances to the environment. CERCLIS also contains information on site inspections, preliminary assessments and remediation of hazardous waste sites. These sites are typically reported to EPA by states and municipalities or by third parties pursuant to CERCLA Section 103.
CESQG	Conditionally exempt small quantity generators.
CFR	Code of Federal Regulations
DOT	U.S. Department of Transportation
EPA	U.S. Environmental Protection Agency
ERNS	Emergency Response Notification System. An EPA-maintained federal database which stores information on notifications of oil discharges and hazardous substance releases in quantities greater than the applicable reportable quantity under CERCLA. ERNS is a cooperative data-sharing effort between EPA, DOT, and the National Response Center.
PAS	Environmental Site Assessment

Description of Terms and Acronyms (cont.)

FRP	Fiberglass Reinforced Plastic
Hazardous Substance	As defined under CERCLA, this is (A) any substance designated pursuant to section 1321(b)(2)(A) of Title 33, (B) any element, compound, mixture, solution, or substance designated pursuant to section 9602 of this title; (C) any hazardous waste having characteristics identified under or listed pursuant to section 3001 of the Solid Waste Disposal Act (with some exclusions); (D) any toxic pollutant listed under section 1317(a) of Title 33; (E) any hazardous air pollutant listed under section 112 of the Clear Air Act; and (F) any imminently hazardous chemical substance or mixture with respect to which the EPA Administrator has taken action under section 2606 of Title 15. This term does not include petroleum, including crude oil or any fraction thereof which is not otherwise listed as a hazardous substance under subparagraphs (A) through (F) above, and the term include natural gas, or synthetic gas usable for fuel (or mixtures of natural gas and such synthetic gas).
Hazardous Waste	This is defined as having characteristics identified or listed under section 3001 of the Solid Waste Disposal Act (with some exceptions). RCRA, as amended by the Solid Waste Disposal Act of 1980, defines this term as a "solid waste, or combination of solid wastes, which because of its quantity, concentration, or physical, chemical, or infectious characteristics may (A) cause, or significantly contribute to an increase in mortality or an increase in serious irreversible, or incapacitating reversible illness; or (B) pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, or disposed of, or otherwise managed."
ILP	Innocent Landowner/Operator Program
LQG	Large quantity generators.
LUST	Leaking Underground Storage Tank. This is a federal term set forth under RCRA for leaking USTs. Some states also utilize this term.
MCL	Maximum Contaminant Level. This Safe Drinking Water concept (and also used by many states as a ground water cleanup criteria) refers to the limit on drinking water contamination that determines whether a supplier can deliver water from a specific source without treatment.
MSDS	Material Safety Data Sheets. Written/printed forms prepared by chemical manufacturers, importers and employers which identify the physical and chemical traits of hazardous chemicals under OSHA's Hazard Communication Standard.
NESHAP	National Emissions Standard for Hazardous Air Pollutants (Federal Clean Air Act). This part of the Clean Air Act regulates emissions of hazardous air pollutants.
NFRAP	Facilities where there is "No Further Remedial Action Planned," as more particularly described under the Records Review section of this report.
NOV	Notice of Violation. A notice of violation or similar citation issued to an entity, company or individual by a state or federal regulatory body indicating a violation of applicable rule or regulations has been identified.
NPDES	National Pollutant Discharge Elimination System (Clean Water Act). The federal permit system for discharges of polluted water.
NPL	National Priorities List, as more particularly described under the Records Review section of this report.
OSHA	Occupational Safety and Health Administration or Occupational Safety and Health Act
PACM	Presumed Asbestos-Containing Material. A material that is suspected of containing or presumed to contain asbestos but which has not been analyzed to confirm the presence or absence of asbestos.
PCB	Polychlorinated Biphenyl. A halogenated organic compound commonly in the form of a viscous liquid or resin, a flowing yellow oil, or a waxy solid. This compound was historically used as dielectric fluid in electrical equipment (such as electrical transformers and capacitors, electrical ballasts, hydraulic and heat transfer fluids), and for numerous heat and fire sensitive applications. PCB was preferred due to its durability, stability (even at high temperatures), good chemical resistance, low volatility, flammability, and conductivity. PCBs, however, do not break down in the environment and are classified by the EPA as a suspected carcinogen. 1978 regulations, under the Toxic Substances Control Act, prohibit manufacturing of PCB-containing equipment; however, some of this equipment may still be in use today.
pCi/l	Pico Curies per Liter of Air. Unit of measurement for Radon and similar radioactive materials.
PLM	Polarized Light Microscopy (see ACM section of the report, if included in the scope of services)
PST	Petroleum Storage Tank. An AST or UST that contains a petroleum product.

Description of Terms and Acronyms (cont.)

Radon	A radioactive gas resulting from radioactive decay of naturally-occurring radioactive materials in rocks and soils containing uranium, granite, shale, phosphate, and pitchblende. Radon concentrations are measured in Pico Curies per Liter of Air. Exposure to elevated levels of radon creates a risk of lung cancer; this risk generally increases as the level of radon and the duration of exposure increases. Outdoors, radon is diluted to such low concentrations that it usually does not present a health concern. However, radon can accumulate in building basements or similar enclosed spaces to levels that can pose a risk to human health. Indoor radon concentrations depend primarily upon the building's construction, design and the concentration of radon in the underlying soil and ground water. The EPA recommended annual average indoor "action level" concentration for residential structures is 4.0 pCi/l.
RCRA	Resource Conservation and Recovery Act. Federal act regulating solid and hazardous wastes from point of generation to time of disposal ('cradle to grave"). 42 U.S.C. 6901 et seq.
RCRA Generators	The RCRA generators list is part of the RCRIS database maintained by EPA and lists facilities that generate hazardous waste as part of their normal business operations, as more particularly defined under Section 5.0 of this report.
RCRA CORRACTS/TSDs	The USEPA maintains a database of RCRA facilities associated with treatment, storage, and disposal (TSD) of hazardous materials which are undergoing "corrective action". A "corrective action" order is issued when there is a release of hazardous waste or constituents into the environment from a RCRA facility.
RCRA Non-CORRACTS/TSDs	The RCRA Non-CORRACTS/TSD Database is a compilation by the USEPA of facilities which report storage, transportation, treatment, or disposal of hazardous waste. Unlike the RCRA CORRACTS/TSD database, the RCRA Non-CORRACTS/TSD database does not include RCRA facilities where corrective action is required.
RCRA Violators List	RAATS. RCRA Administrative Actions Taken. RAATS information is now contained in the RCRIS database and includes records of administrative enforcement actions against facilities for noncompliance.
RCRIS	Resource Conservation and Recovery Information System, as defined in the Records Review section of this report.
REC	Recognized Environmental Conditions" are defined by ASTM E1527-13 as "the presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, a past release, or a material threat of release of any hazardous substances or petroleum products into structures on the property or into the ground, ground water, or surface water of the property. The term includes hazardous substances or petroleum products even under conditions of compliance with laws. The term is not intended to include *de minimis* conditions that generally do not present a threat to human health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies."
SCL	State "CERCLIS" List (see SPL /State Priority List, below).
SPCC	Spill Prevention, Control and Countermeasures. SPCC plans are required under federal law (Clean Water Act and Oil Pollution Act) for any facility storing petroleum in tanks and/or containers of 55-gallons or more that when taken in aggregate exceed 1,320 gallons. SPCC plans are also required for facilities with underground petroleum storage tanks with capacities of over 42,000 gallons. Many states have similar spill prevention programs, which may have additional requirements.
SPL	State Priority List. State list of confirmed sites having contamination in which the state is actively involved in clean up activities or is actively pursuing potentially responsible parties for clean up. Sometimes referred to as a State "CERCLIS" List.
SQG	Small quantity generators.
SWF	Solid Waste Facility List. A Vista Information Solutions, Inc. database of solid waste facilities listed by state.
TPH	Total Petroleum Hydrocarbons
TRI	Toxic Release Inventory. Routine EPA report on releases of toxic chemicals to the environment based upon information submitted by entities subject to reporting under the Emergency Planning and Community Right to Know Act.
TSCA	Toxic Substances Control Act. A federal law regulating manufacture, import, processing and distribution of chemical substances not specifically regulated by other federal laws (such as asbestos, PCBs, lead-based paint and radon). 15 U.S.C 2601 et seq.
USACE	United States Army Corps of Engineers
USC	United States Code
USGS	United States Geological Survey

Description of Terms and Acronyms (cont.)

USNRCS	United States Department of Agriculture-Natural Resource Conservation Service
UST	Underground Storage Tank. Most federal and state regulations, as well as ASTM E1527-13, define this as any tank, incl., underground piping connected to the tank, that is or has been used to contain hazardous substances or petroleum products and the volume of which is 10% or more beneath the surface of the ground (i.e., buried).
VCP	Voluntary Cleanup Program
VOC	Volatile Organic Compound
Wetlands	Areas that are typically saturated with surface or ground water that creates an environment supportive of wetland vegetation (i.e., swamps, marshes, bogs). The Corps of Engineers Wetlands Delineation Manual (Technical Report Y-87-1) defines wetlands as areas inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. For an area to be considered a jurisdictional wetland, it must meet the following criteria: more than 50 percent of the dominant plant species must be categorized as Obligate, Facultative Wetland, or Facultative on lists of plant species that occur in wetlands; the soil must be hydric; and, wetland hydrology must be present. The federal Clean Water Act which regulates "waters of the US," also regulates wetlands, a program jointly administered by the USACE and the EPA. Waters of the U.S. are defined as: (1) waters used in interstate or foreign commerce, including all waters subject to the ebb and flow of tides; (2) all interstate waters including interstate wetlands; (3) all other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, etc., which the use, degradation, or destruction could affect interstate/ foreign commerce; (4) all impoundments of waters otherwise defined as waters of the U. S., (5) tributaries of waters identified in 1 through 4 above; (6) the territorial seas; and (7) wetlands adjacent to waters identified in 1 through 6 above. Only the USACE has the authority to make a final wetlands jurisdictional determination.

APPENDIX C

Historical Documentation

Peoples Food Store
3104 Memorial Boulevard
Kingsport, TN 37664

Inquiry Number: 3770050.5
October 29, 2013

The EDR Aerial Photo Decade Package

EDR® Environmental Data Resources Inc

440 Wheelers Farms Road
Milford, CT 06461
800.352.0050
www.edrnet.com

EDR Aerial Photo Decade Package

Environmental Data Resources, Inc. (EDR) Aerial Photo Decade Package is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's professional researchers provide digitally reproduced historical aerial photographs, and when available, provide one photo per decade.

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Date EDR Searched Historical Sources:

Aerial Photography October 29, 2013

Target Property:

3104 Memorial Boulevard

Kingsport, TN 37664

Year	***Scale***	***Details***	***Source***
1976	Aerial Photograph. Scale: 1"=1000'	Panel #: 36082-E5, Kingsport, TN;/Flight Date: March 23, 1976	EDR
1992	Aerial Photograph. Scale: 1"=750'	Panel #: 36082-E5, Kingsport, TN;/Flight Date: April 13, 1992	EDR
1999	Aerial Photograph. Scale: 1"=500'	Panel #: 36082-E5, Kingsport, TN;/DOQQ - acquisition dates: May 10, 1999	EDR
2001	Aerial Photograph. Scale: 1"=750'	Panel #: 36082-E5, Kingsport, TN;/Flight Date: April 27, 2001	EDR
2006	Aerial Photograph. Scale: 1"=500'	Panel #: 36082-E5, Kingsport, TN;/Flight Year: 2006	EDR
2007	Aerial Photograph. Scale: 1"=500'	Panel #: 36082-E5, Kingsport, TN;/Flight Year: 2007	EDR
2008	Aerial Photograph. Scale: 1"=500'	Panel #: 36082-E5, Kingsport, TN;/Flight Year: 2008	EDR
2010	Aerial Photograph. Scale: 1"=500'	Panel #: 36082-E5, Kingsport, TN;/Flight Year: 2010	EDR
2012	Aerial Photograph. Scale: 1"=500'	Panel #: 36082-E5, Kingsport, TN;/Flight Year: 2012	EDR


SITE
INQUIRY #: 3770050.5
YEAR: 1976
= 1000'
N


SITE
INQUIRY #: 3770050.5
YEAR: 1992
= 750'
N


SITE
INQUIRY #: 3770050.5
YEAR: 1999
= 500'
N


SITE
INQUIRY #: 3770050.5
YEAR: 2001
= 750'
N


SITE
INQUIRY #: 3770050.5
YEAR: 2006
= 500'
N


SITE
INQUIRY #: 3770050.5
YEAR: 2007
= 500'
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SITE
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= 500'
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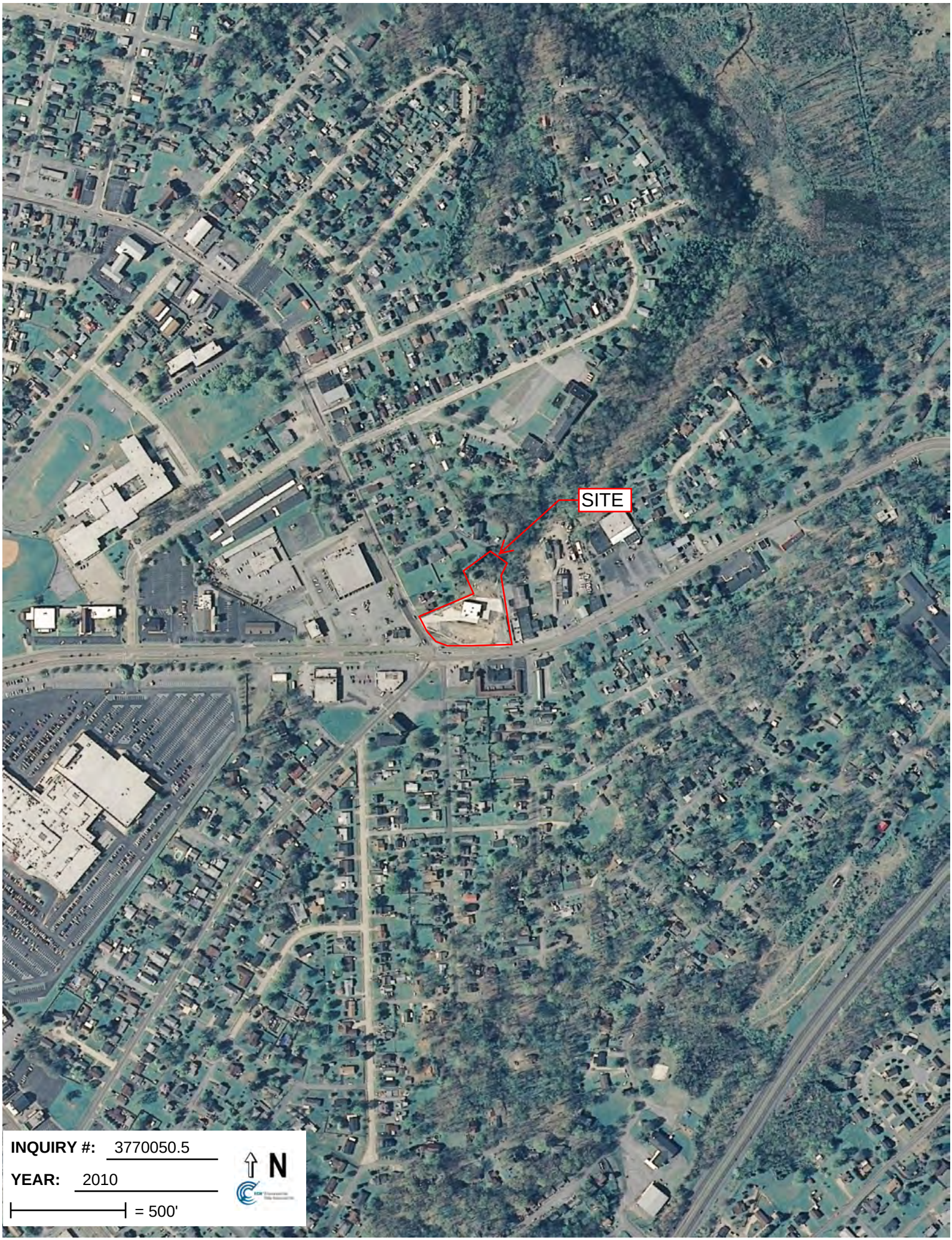
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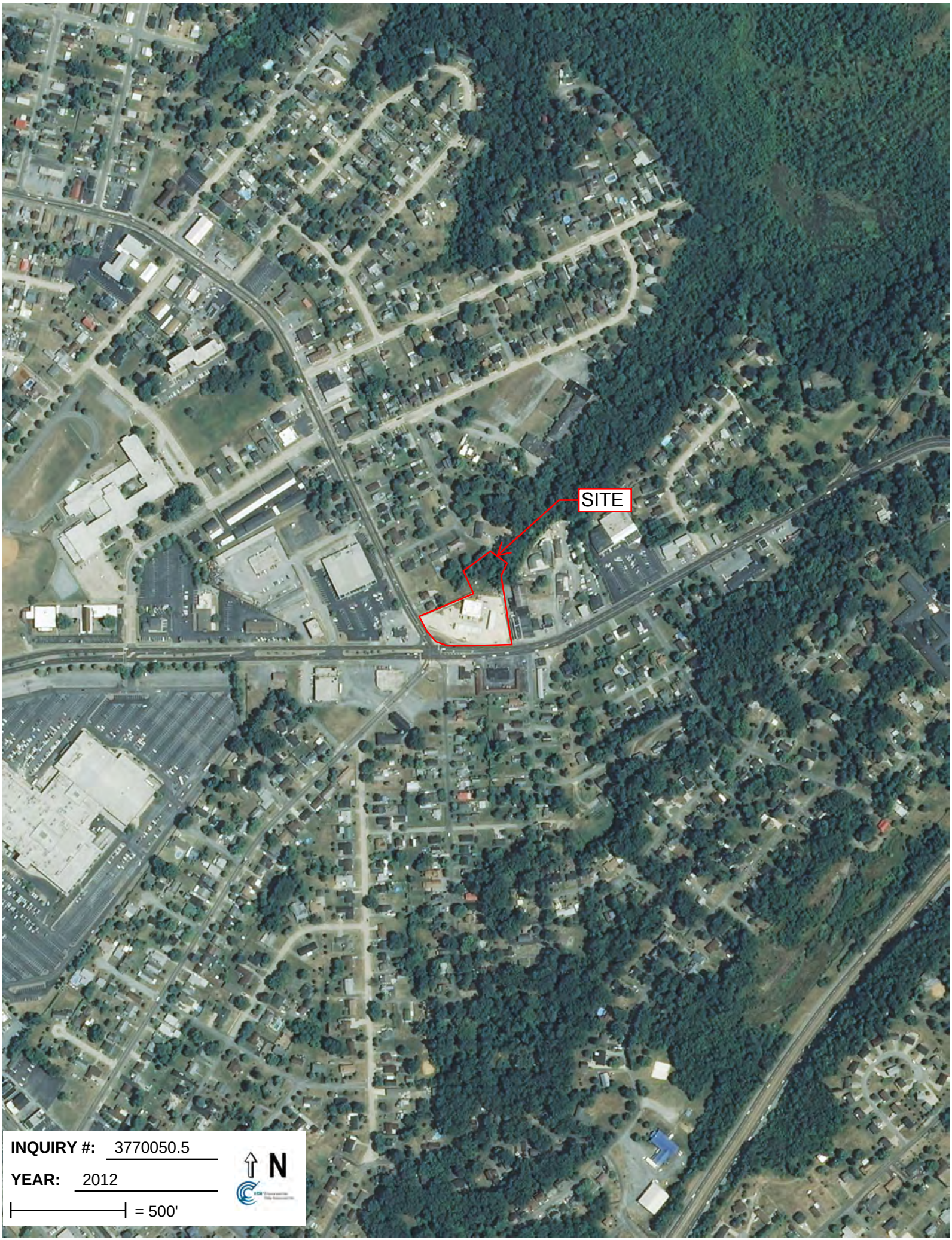
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INQUIRY #: 3770050.5
YEAR: 2012
= 500'
N

Peoples Food Store
3104 Memorial Boulevard
Kingsport, TN 37664

Inquiry Number: 3770050.6
October 30, 2013

The EDR-City Directory Image Report

Environmental Data Resources Inc
440 Wheelers Farms Road
Milford, CT 06461
800.352.0050
www.edrnet.com

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SECTION

Executive Summary

Findings

City Directory Images

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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EXECUTIVE SUMMARY

DESCRIPTION

Environmental Data Resources, Inc.'s (EDR) City Directory Report is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's City Directory Report includes a search of available city directory data at 5 year intervals.

RESEARCH SUMMARY

The following research sources were consulted in the preparation of this report. A check mark indicates where information was identified in the source and provided in this report.

Year	Target Street	Cross Street	Source
2013	☑	☑	Polk's City Directory
2007	☑	☑	Polk's City Directory
2002	☑	☑	Polk's City Directory
1996	☑	☑	Polk's City Directory
1989	☑	☑	Johnson's City Directory

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FINDINGS

TARGET PROPERTY STREET

3104 Memorial Boulevard
Kingsport, TN 37664

Year	*CD Image*	*Source*
Memorial Boulevard		
2013	pg A1	Polk's City Directory
2007	pg A3	Polk's City Directory
2002	pg A5	Polk's City Directory
2002	pg A6	Polk's City Directory
1996	pg A8	Polk's City Directory
1989	pg A10	Johnson's City Directory

FINDINGS

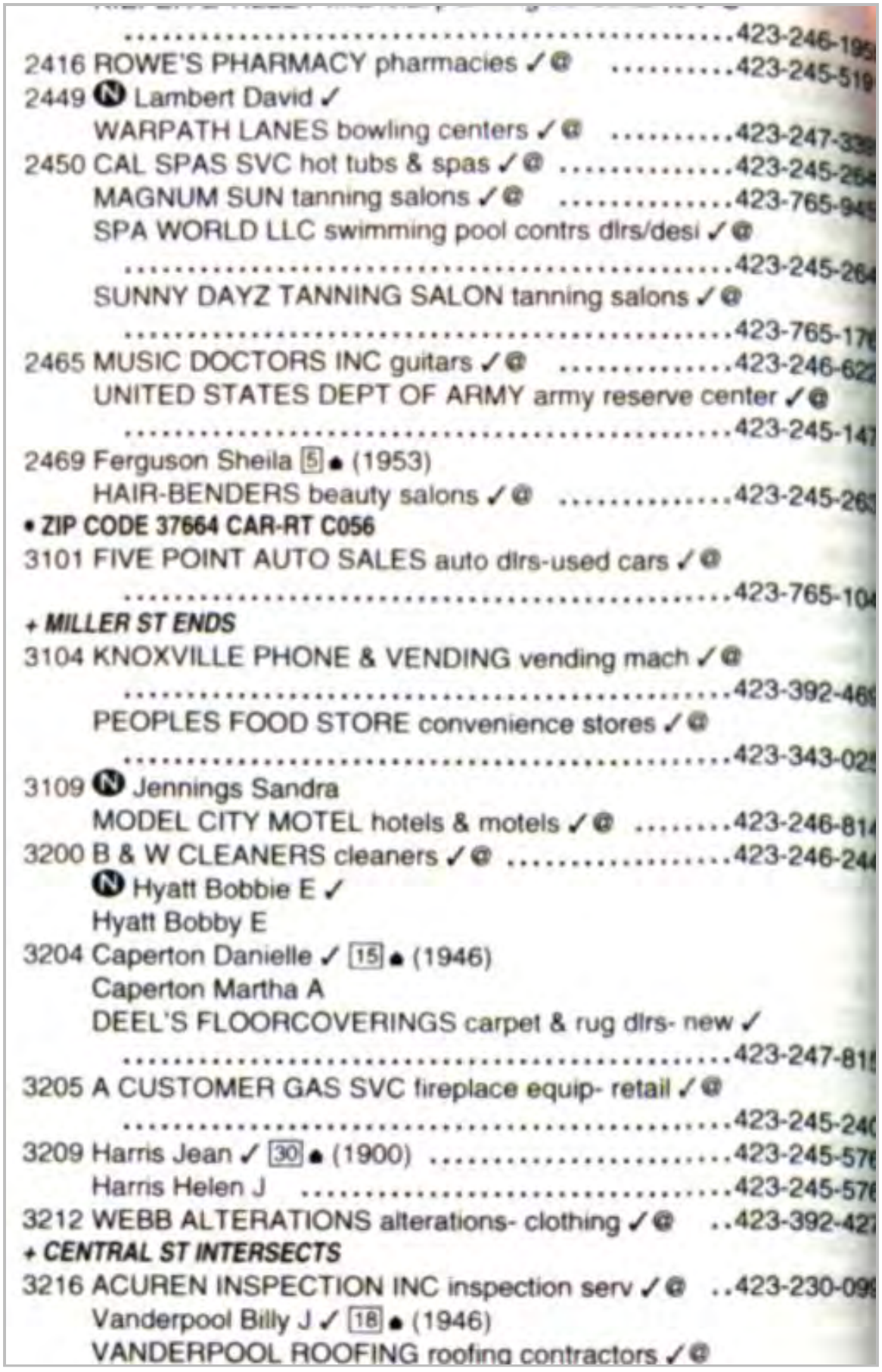
CROSS STREETS

Year	*CD Image*	*Source*
E Center St		
2013	pg. A2	Polk's City Directory
2007	pg. A4	Polk's City Directory
2002	pg. A7	Polk's City Directory
1996	pg. A9	Polk's City Directory
1989	pg. A11	Johnson's City Directory

City Directory Images

Target Street	Cross Street	Source
✓	-	Polk's City Directory

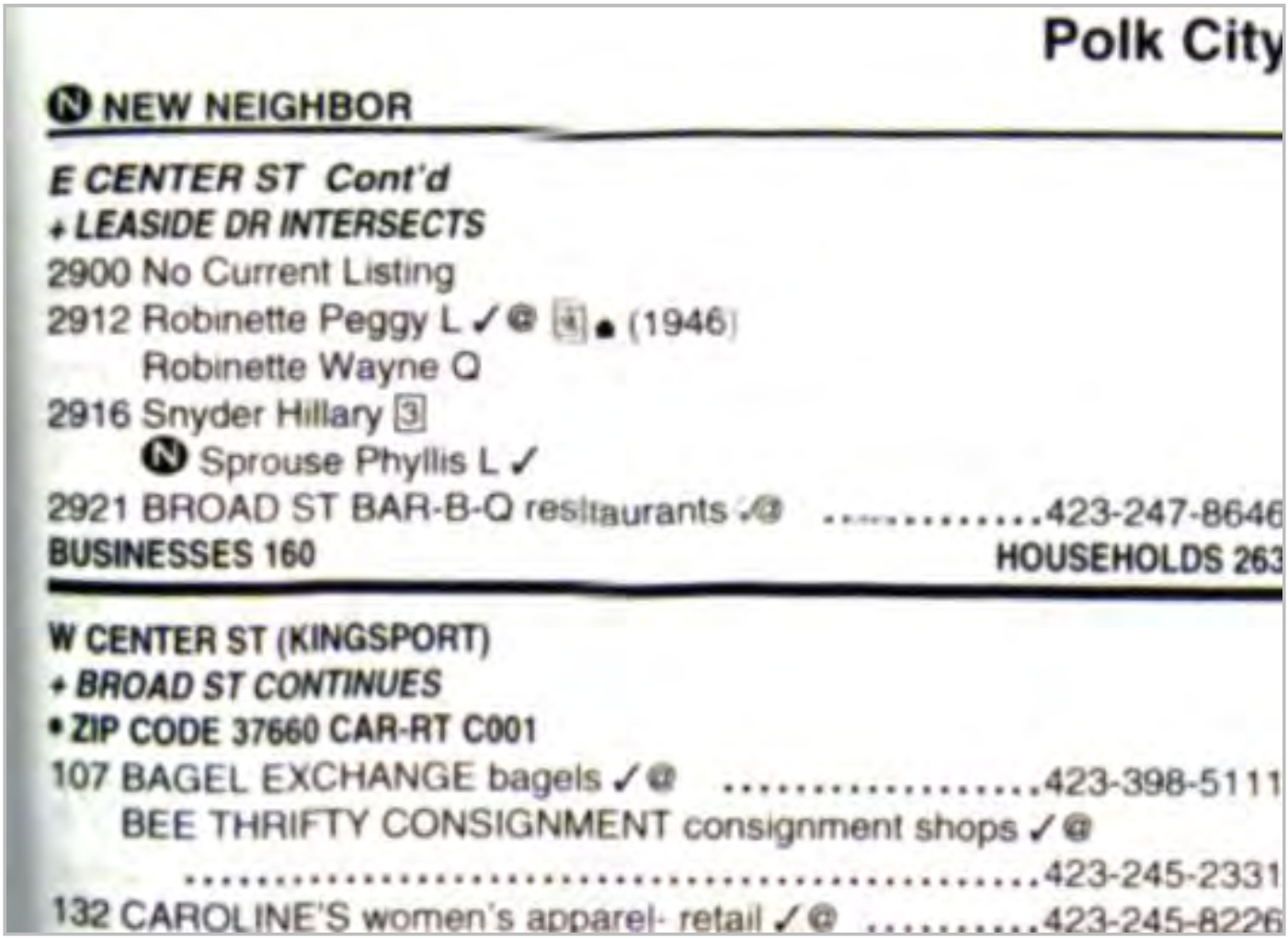
Memorial Boulevard 2013



.....423-246-19
2416 ROWE'S PHARMACY pharmacies ✓@ 423-245-519
2449 (N) Lambert David ✓
WARPATH LANES bowling centers ✓@ 423-247-33
2450 CAL SPAS SVC hot tubs & spas ✓@ 423-245-26
MAGNUM SUN tanning salons ✓@ 423-765-94
SPA WORLD LLC swimming pool contrs dlrs/desi ✓@
.....423-245-26
SUNNY DAYZ TANNING SALON tanning salons ✓@
.....423-765-17
2465 MUSIC DOCTORS INC guitars ✓@ 423-246-62
UNITED STATES DEPT OF ARMY army reserve center ✓@
.....423-245-14
2469 Ferguson Sheila 5 ● (1953)
HAIR-BENDERS beauty salons ✓@ 423-245-26
• ZIP CODE 37664 CAR-RT C056
3101 FIVE POINT AUTO SALES auto dlrs-used cars ✓@
.....423-765-10
+ MILLER ST ENDS
3104 KNOXVILLE PHONE & VENDING vending mach ✓@
.....423-392-46
PEOPLES FOOD STORE convenience stores ✓@
.....423-343-02
3109 (N) Jennings Sandra
MODEL CITY MOTEL hotels & motels ✓@ 423-246-81
3200 B & W CLEANERS cleaners ✓@ 423-246-24
(N) Hyatt Bobbie E ✓
Hyatt Bobby E
3204 Caperton Danielle ✓ 15 ● (1946)
Caperton Martha A
DEEL'S FLOORCOVERINGS carpet & rug dlrs- new ✓
.....423-247-81
3205 A CUSTOMER GAS SVC fireplace equip- retail ✓@
.....423-245-24
3209 Harris Jean ✓ 30 ● (1900) 423-245-57
Harris Helen J 423-245-57
3212 WEBB ALTERATIONS alterations- clothing ✓@ ..423-392-42
+ CENTRAL ST INTERSECTS
3216 ACUREN INSPECTION INC inspection serv ✓@ ..423-230-09
Vanderpool Billy J ✓ 18 ● (1946)
VANDERPOOL ROOFING roofing contractors ✓@

Target Street	Cross Street	Source
-	✓	Polk's City Directory

E Center St 2013



Polk City

N NEW NEIGHBOR

E CENTER ST Cont'd
+ LEASIDE DR INTERSECTS
2900 No Current Listing
2912 Robinette Peggy L ✓@ [4] ● (1946)
Robinette Wayne Q
2916 Snyder Hillary [3]
N Sprouse Phyllis L ✓
2921 BROAD ST BAR-B-Q restaurants ✓@ 423-247-8646
BUSINESSES 160 HOUSEHOLDS 263

W CENTER ST (KINGSPORT)
+ BROAD ST CONTINUES
• ZIP CODE 37660 CAR-RT C001
107 BAGEL EXCHANGE bagels ✓@ 423-398-5111
BEE THRIFTY CONSIGNMENT consignment shops ✓@
.....423-245-2331
132 CAROLINE'S women's apparel- retail ✓@ 423-245-8226

Target Street	Cross Street	Source
✓	-	Polk's City Directory

Memorial Boulevard 2007

2408 BELTONE hearing impaired equip/supl 423-246-3800
2412 AMERIPRISE FINANCIAL financial planning consultants
.....423-246-6200
2416 ROWE'S PHARMACY pharmacies 423-245-5191
2449 WARPATH BOWLING LANES bowling centers 423-247-3391
2450 MAGNUM SUN beds-retail 423-245-6920
2461 US AIR FORCE RECRUITING recruiting- us armed forces
.....423-245-2521
US ARMY RECRUITING recruiting- us armed forces
.....423-245-1051
US MARINE CORPS RECRUITING recruiting- us armed forces
.....423-245-1132
US NAVAL RECRUITING recruiting- us armed forces
.....423-378-3960
2465 MUSIC DOCTORS INC musical instruments-dlrs ..423-246-6220
2469 DIANE PATTERSON HAIR BENDERS beauty salons
.....423-378-8214
• ZIP CODE 37664 CAR-RT C056
3109 MODEL CITY MOTEL hotels & motels 423-246-8148
3200 B & W CLEANERS cleaners 423-246-2441
3204 Caperton David J [9]♠
DEEL'S FLOORCOVERINGS carpet & rug dlrs- new
.....423-247-8157
3205 CUSTOMER GAS SVC fireplace equip- retail 423-245-2403
Ⓜ Morgan Tom
3209 Harris Jean & Charles R [25]♠ 423-245-5760
3212 WEBB ALTERATIONS alterations- clothing 423-392-4277
3213 No Current Listing
3216 LONGVIEW INSPECTIONS CORP laboratories- testing
.....423-230-0998
VANDERPOOL CONSTRUCTION roofing contractors
.....423-392-4170
3220 Edwards James [2]
3224 LIVEWIRE COMMUNICATIONS CO telephone equip/supl
.....423-288-2012

Target Street	Cross Street	Source
-	✓	Polk's City Directory

E Center St 2007

Hagie Jeanette A .....

2821 No Current Listing

2824 Feagins Thomas W & Alita A 29 ♠ 423-247-8577

2825 Ⓝ Funk Atn S

TRISTAR MORTGAGE GROUP real estate loans ..423-246-1093

+ WILBURN DR ENDS

+ LEASIDE DR INTERSECTS

2900 Cox Nealie D 35 ♠ 423-247-8086

2912 Greever David C 2 423-246-0350

2916 Ⓝ Eldridge Michael & Jessica 423-245-3841

Ⓝ Griffin Linda

Griffin Jessica

2921 BROAD ST BAR BQ restaurants 423-247-8646

BUSINESSES 153 **HOUSEHOLDS 250**

W CENTER ST (KINGSPORT)

+ BROAD ST CONTINUES

• ZIP CODE 37660 CAR-RT C001

132 CAROLINE'S women's apparel- retail 423-245-8226

Target Street	Cross Street	Source
✓	-	Polk's City Directory

Memorial Boulevard 2002



financial planning consultants ..423-246-6200
2416 ROWE'S PHARMACY pharmacies
.....423-245-5191
2441 RIVERFRONT PRODUCE fruits & vegetables
& produce 423-230-0960
2449 WARPATH BOWLING LANES bowling
centers 423-247-3391
2450 WINN-DIXIE grocers-retail 423-246-4430
2461 US AIR FORCE RECRUITING recruiting-us
armed forces 423-245-2521
US NAVAL RECRUITING recruiting-us
armed forces 423-378-3960
2465 MUSIC DOCTORS INC musical instruments-
dlrs 423-246-6220
US MARINE CORPS RECRUITING
recruiting-us armed forces 423-245-1132
A US ARMY RECRUITING recruiting-us
armed forces 423-245-1051
2469 HAIR BENDERS beauty salons 423-378-4247
VIOLA MAKING WAVES beauty salons
.....423-247-7717
+ CENTRAL ST ENDS
+ PARKERSON DR BEGINS

olk.com

Target Street	Cross Street	Source
✓	-	Polk's City Directory

Memorial Boulevard 2002



● NEW NEIGHBOR

MEMORIAL BLVD Cont'd
+ CONWAY DR INTERSECTS
+ OREBANK RD INTERSECTS
+ HILLCREST DR ENDS
+ STRATFORD RD INTERSECTS
+ STRATFORD RD CONTINUES
+ MILTON CT ENDS
+ HAWTHORNE ST INTERSECTS
+ KITE ST ENDS
+ KENT ST BEGINS
+ BEVERLY HILL ST INTERSECTS
+ AMY AVE INTERSECTS
• ZIP CODE 37664 CAR-RT C056
3101 CHIPS AMOCO auto rpr & serv 423-247-8801
3106 CELLULAR ACCESSORIES cellular telephones 423-247-0085
PIRANHA WIRELESS cellular telephones 423-245-9500
3109 MODEL CITY MOTEL hotels & motels 423-246-8148
+ SKYLAND DR INTERSECTS
3132 NEWTON'S PRINTING SVC commercial printing 423-247-8881
+ TRINITY LN BEGINS
3200 B & W CLEANERS cleaners ..423-246-2441
3204 DEEL'S FLOORCOVERINGS carpet & rug dlrs-new 423-247-8157
3205 AMERICAN CHECK ADVANCE check cashing serv 423-246-1617
BRENDA'S HAIR STYLES beauty salons 423-247-8371
CUSTOMER GAS SVC fireplace equip-retail 423-245-2403
TRI CITIES TOWING & RECOVERY wrecker serv 423-245-7524
3209 Harris Charles R 20 ♠
Harris Hellen G
3212 WEBB ALTERATIONS alterations-clothing 423-392-4277
3213 Meade Rick L 13
Meade Melissa L

Target Street	Cross Street	Source
-	✓	Polk's City Directory

E Center St 2002



+ VIRGINIA AVE INTERSECTS
2809 1/2 Not Verified
2812 Bruner Marjorie 423-245-6279
2816 Long Hubert A & Mattie L 7 423-245-0787
2817 Not Verified
2820 Hagie W E 20 423-247-4940
2821 Not Verified
2824 Archer Virginia M 9
Archer Opie R
LITAA Feagins Thomas W & Alita A 20
.....423-247-8577
+ WILBURN DR ENDS
+ LEASIDE DR BEGINS
2900 - 2916 Not Verified (3 Hses)
2921 CLEAN & SAVE CLEANERS cleaners
.....423-245-8455
BUSINESSES 168 HOUSEHOLDS 256

W CENTER ST (KINGSPORT)
• ZIP CODE 37660 CAR-RT C015
101 TAYLOR'S INSURANCE INC insurance

Target Street	Cross Street	Source
✓	-	Polk's City Directory

Memorial Boulevard 1996

	Colin Roger	-3343	C056	246-6200
2416	ROWE'S PHARMACY	-3343	C056	245-5191
2441	GERMAN MOTORS	-3342	C056	245-5941
2449	WARPATH BOWLING LANES	-3342	C056	247-3391
2450	WINN-DIXIE	-3343	C056	246-4433
	Winn Dixie	-3343	C056	246-4433
2461	US AIR FORCE RECRUITING	-3342	C056	245-2521
	US NAVAL RECRUITING	-3342	C056	378-3960
2465	US ARMY RECRUITING	-3342	C056	245-1051
	US MARINE CORPS RECRUITING	-3342	C056	245-1132
2469	HAIR BENDERS	-3342	C056	378-4247
3101	L & S CAR CARE	-3344	C056	246-9471
3104	Poston Jim	-3345	C056	246-6836
3106	TREE HOUSE WALL COVERING	-3345	C056	245-5240
3109	MODEL CITY MOTEL	-3344	C056	246-8148
3111	GARDEN BASKET	-3344	C056	246-6471
3117	CHEROKEE FOOD MART	-3344	C056	245-7070
3126	TRI-CITIES SALES & SVC	-3345	C056	245-3636
3132	NEWTON'S PRINTING SVC	-3345	C056	247-8881
3136	KINGSPORT UPHOLSTERING CO	-3345	C056	246-7971
3200	B & W CLEANERS	-3439	C056	246-2441
3204	DEEL'S FLOORCOVERINGS	-3439	C056	247-3761
3205	BRENDA'S HAIR STYLES	-3438	C056	247-8371
3209	Harris C R	-3438	C056	245-5760
3216	VANDERPOOL CONSTRUCTION	-3461	C056	392-4170
	KINGSPORT			

Target Street	Cross Street	Source
-	✓	Polk's City Directory

E Center St 1996



		Steffen Ruth	-2717	C056	246-4025
	2808	Castle J L Jr	-2718	C056	246-9614
	2809	DEAN GREER	-2717	C056	246-1988
		Reed Jonathan	-2717	C056	246-8268
		Sword B J	-2717	C056	246-8268
	2816	Stitt C J	-2718	C056	247-1575
	2817	Simpson Ann	-2717	C056	245-0537
	2820	Hagie W E	-2718	C056	247-4940
	2821	Hopkins Marcus	-2717	C056	247-8778
		Hopkinsgwinn Rebecca A	-2717	C056	247-6858
	2824	Feagins Thomas W	-2718	C056	247-8577
	2900	Cox N D	-2720	C056	247-8086
	2916	Gentry Kim	-2720	C056	247-7560
	2921	MASSEY'S ONE HOUR CLEANERS	-2719	C056	245-8455

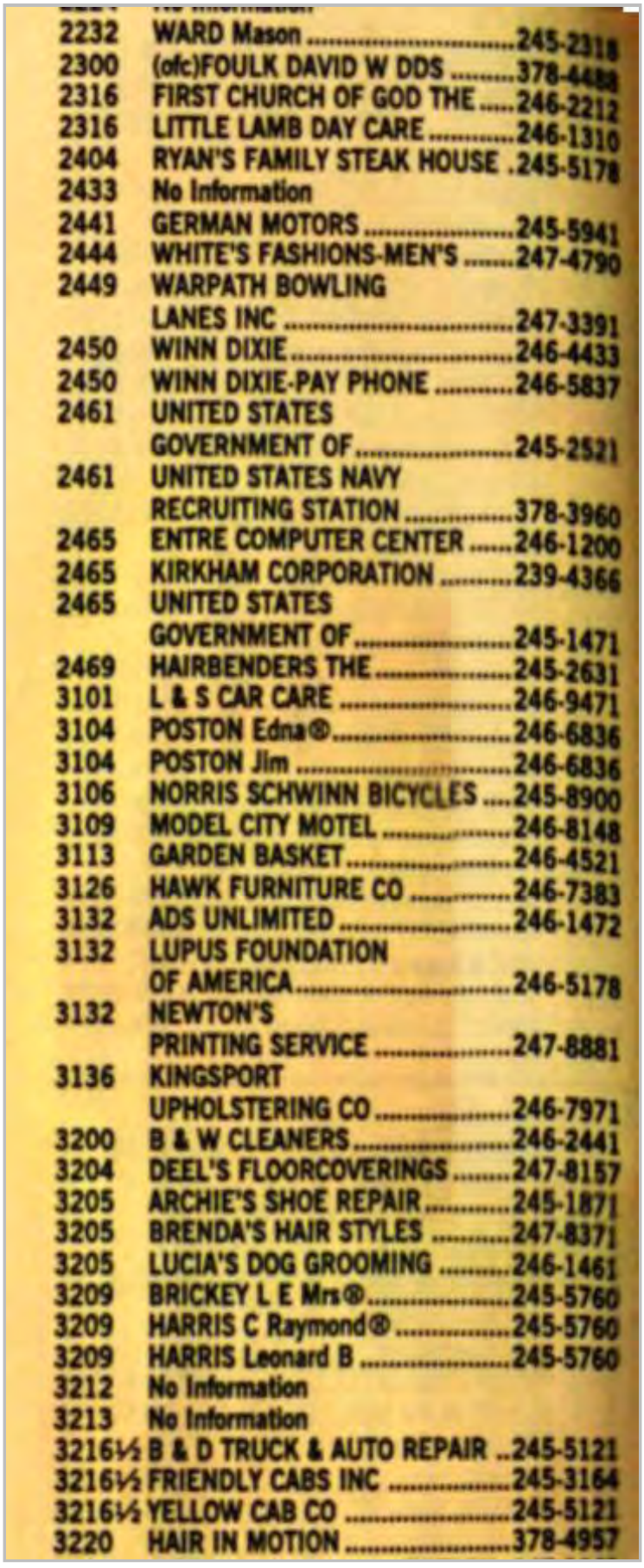
BUSINESSES 161 HOUSEHOLDS 265

NE CENTER ST *(A)* **24210**

	112	Fendley Bill	-2002	C004	676-3977

Target Street	Cross Street	Source
✓	-	Johnson's City Directory

Memorial Boulevard 1989



2232	WARD Mason	245-2318
2300	(ofc)FOULK DAVID W DDS	378-4488
2316	FIRST CHURCH OF GOD THE	246-2212
2316	LITTLE LAMB DAY CARE	246-1310
2404	RYAN'S FAMILY STEAK HOUSE	245-5178
2433	No Information	
2441	GERMAN MOTORS	245-5941
2444	WHITE'S FASHIONS-MEN'S	247-4790
2449	WARPATH BOWLING LANES INC	247-3391
2450	WINN DIXIE	246-4433
2450	WINN DIXIE-PAY PHONE	246-5837
2461	UNITED STATES GOVERNMENT OF	245-2521
2461	UNITED STATES NAVY RECRUITING STATION	378-3960
2465	ENTRE COMPUTER CENTER	246-1200
2465	KIRKHAM CORPORATION	239-4366
2465	UNITED STATES GOVERNMENT OF	245-1471
2469	HAIRBENDERS THE	245-2631
3101	L & S CAR CARE	246-9471
3104	POSTON Edna®	246-6836
3104	POSTON Jim	246-6836
3106	NORRIS SCHWINN BICYCLES	245-8900
3109	MODEL CITY MOTEL	246-8148
3113	GARDEN BASKET	246-4521
3126	HAWK FURNITURE CO	246-7383
3132	ADS UNLIMITED	246-1472
3132	LUPUS FOUNDATION OF AMERICA	246-5178
3132	NEWTON'S PRINTING SERVICE	247-8881
3136	KINGSPORT UPHOLSTERING CO	246-7971
3200	B & W CLEANERS	246-2441
3204	DEEL'S FLOORCOVERINGS	247-8157
3205	ARCHIE'S SHOE REPAIR	245-1871
3205	BRENDA'S HAIR STYLES	247-8371
3205	LUCIA'S DOG GROOMING	246-1461
3209	BRICKEY L E Mrs®	245-5760
3209	HARRIS C Raymond®	245-5760
3209	HARRIS Leonard B	245-5760
3212	No Information	
3213	No Information	
3216½	B & D TRUCK & AUTO REPAIR	245-5121
3216½	FRIENDLY CABS INC	245-3164
3216½	YELLOW CAB CO	245-5121
3220	HAIR IN MOTION	378-4957

Target Street	Cross Street	Source
-	✓	Johnson's City Directory

E Center St 1989



2805 KOALA ADOLESCENT
OUTREACH OFFICE THE 378-5005
2808 CASTLE Virginia L® 246-9614
2809 KISS O G Mrs® 245-7067
2812 No Information
2816 No Information
2820 HAGIE William® 247-4940
2821 McMURRAY S K 378-4124
2824 FEAGINS Mark 247-8577
2824 FEAGINS Thomas W® 247-8577
2900 COX G C Jr® 247-8086
2912 SPAIN John 245-2867
2916 No Information
2921 DAN'S PACKAGE STORE 246-4910

CENTER W

NW FROM BROAD ST TO INDUSTRY DR,
2 NE OF W MAIN ST ZIP CODE 37660

Peoples Food Store
3104 Memorial Boulevard
Kingsport, TN 37664

Inquiry Number: 3770050.3
October 29, 2013

Certified Sanborn® Map Report

EDR® Environmental Data Resources Inc

440 Wheelers Farms Road
Milford, CT 06461
800.352.0050
www.edrnet.com

Certified Sanborn® Map Report

10/29/13

Site Name:
Peoples Food Store
3104 Memorial Boulevard
Kingsport, TN 37664

Client Name:
Terracon, Inc.
51 Lost Mound Drive, Suite 135
Chattanooga, TN 37406-0000

EDR Inquiry # 3770050.3

Contact: Marie Maher

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Certified Sanborn Results:

Site Name: Peoples Food Store
Address: 3104 Memorial Boulevard
City, State, Zip: Kingsport, TN 37664
Cross Street:
P.O. # E2137131
Project: People s Food Store
Certification # E4F3-421D-A5D5

Maps Provided:

1963

Sanborn® Library search results
Certification # E4F3-421D-A5D5

The Sanborn Library includes more than 1.2 million Sanborn fire insurance maps, which track historical property usage in approximately 12,000 American cities and towns. Collections searched:

- ☑ Library of Congress
- ☑ University Publications of America
- ☑ EDR Private Collection

The Sanborn Library LLC Since 1866™

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Sanborn Sheet Thumbnails

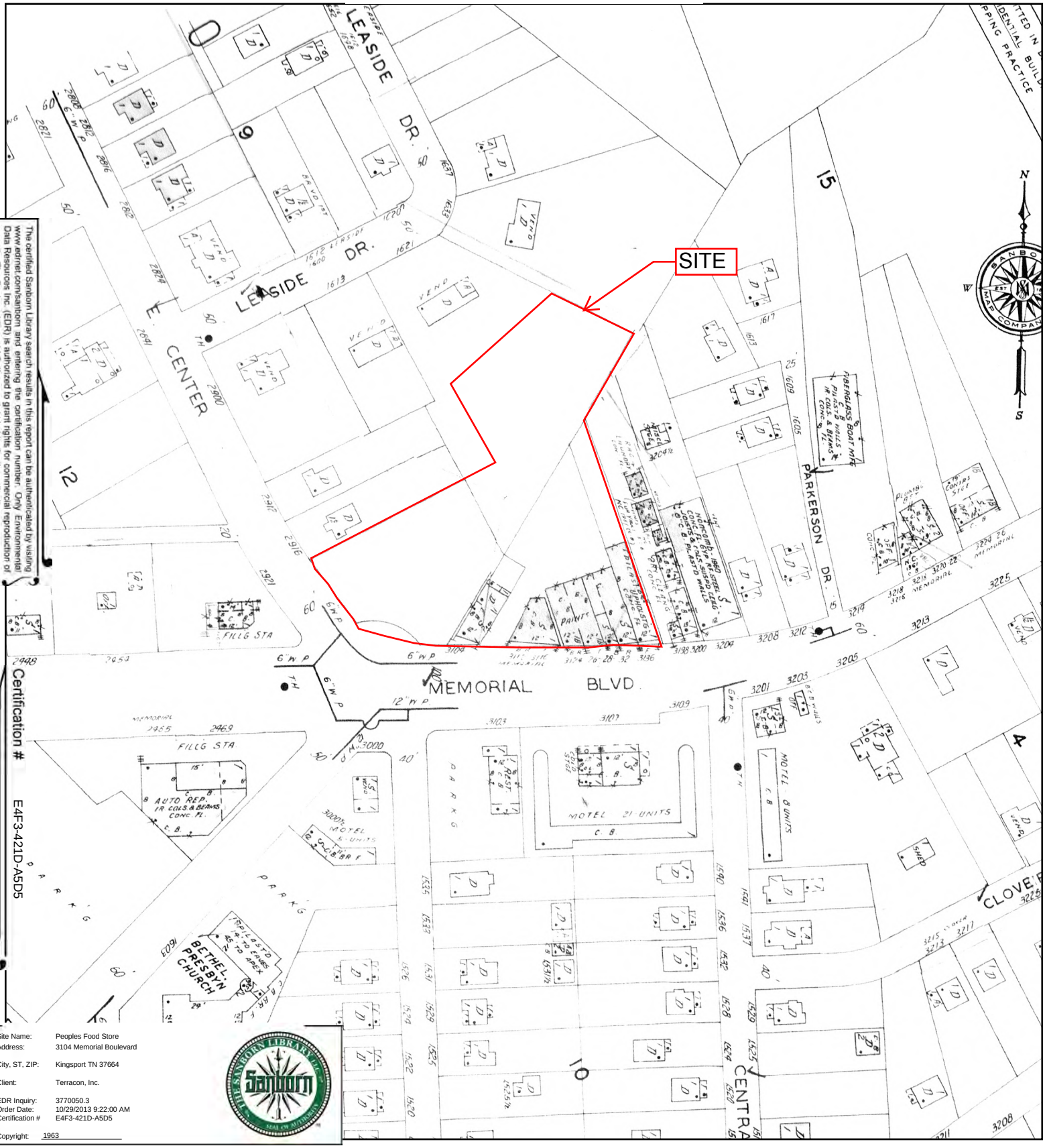
This Certified Sanborn Map Report is based upon the following Sanborn Fire Insurance map sheets.

1963 Source Sheets



Volume 1, Sheet 48

1963 Certified Sanborn Map



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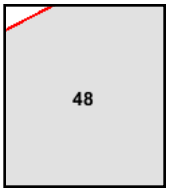
Certification # E4F3-421D-A5D5

Site Name:	Peoples Food Store
Address:	3104 Memorial Boulevard
City, ST, ZIP:	Kingsport TN 37664
Client:	Terracon, Inc.
EDR Inquiry:	3770050.3
Order Date:	10/29/2013 9:22:00 AM
Certification #	E4F3-421D-A5D5
Copyright:	1963

This Certified Sanborn Map combines the following sheets.
Outlined areas indicate map sheets within the collection.

0 Feet 150 300 600





Volume 1, Sheet 48

N

Peoples Food Store
3104 Memorial Boulevard
Kingsport, TN 37664

Inquiry Number: 3770050.4
October 28, 2013

EDR Historical Topographic Map Report

EDR® Environmental Data Resources Inc

440 Wheelers Farms Road
Milford, CT 06461
800.352.0050
www.edrnet.com

EDR Historical Topographic Map Report

Environmental Data Resources, Inc.s (EDR) Historical Topographic Map Report is designed to assist professionals in evaluating potential liability on a target property resulting from past activities. EDRs Historical Topographic Map Report includes a search of a collection of public and private color historical topographic maps, dating back to the early 1900s.

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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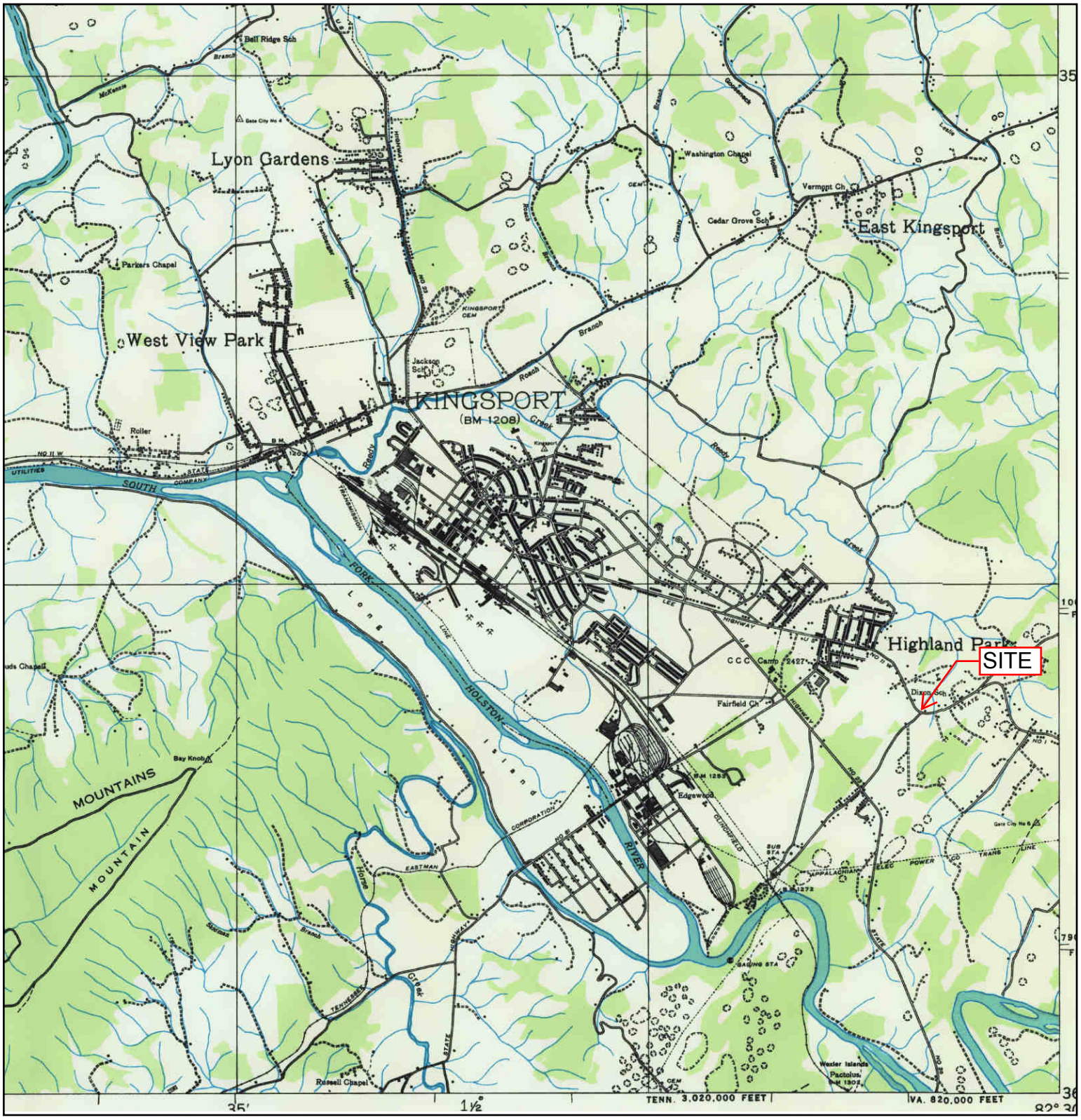
Historical Topographic Map



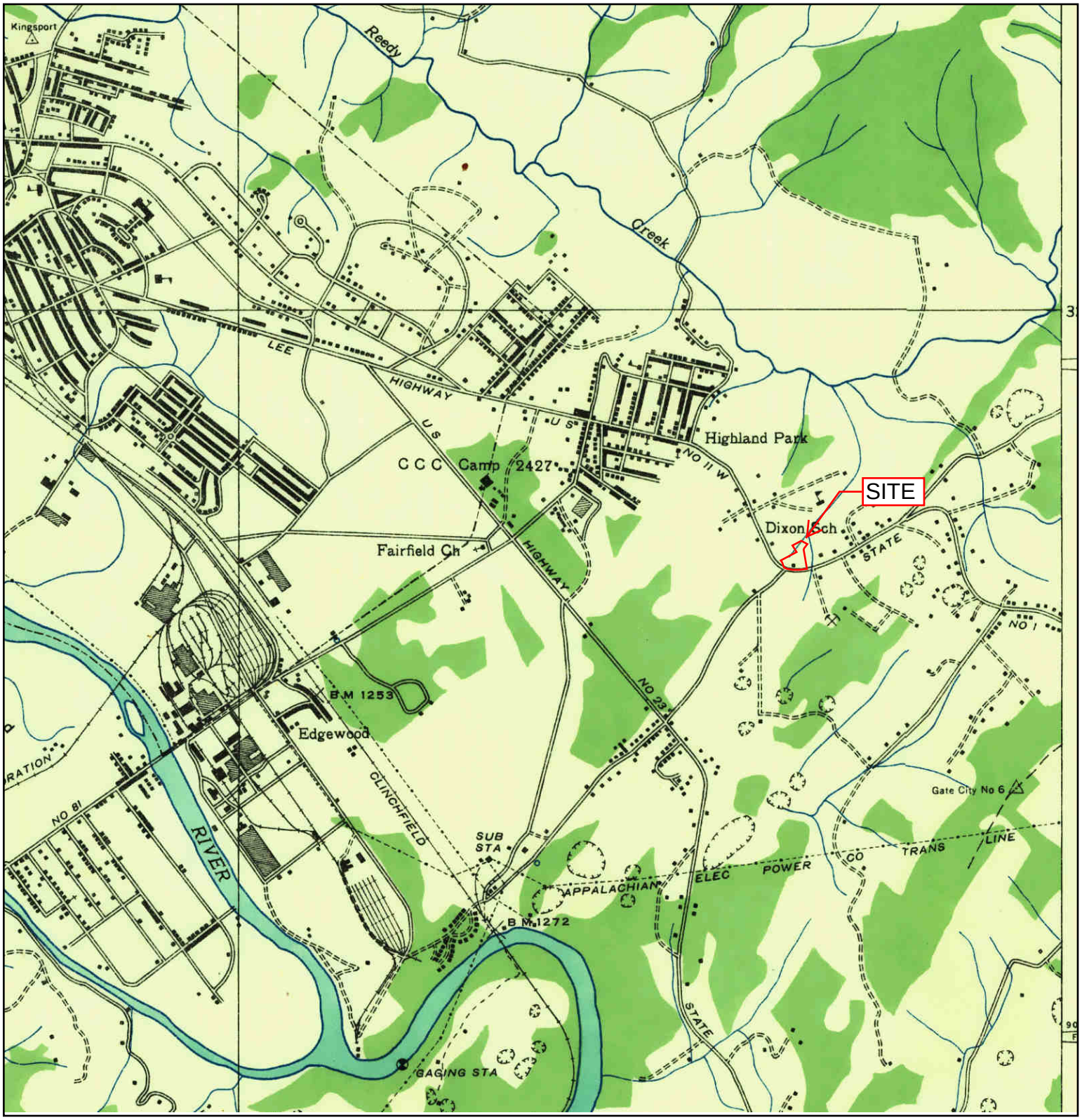
N	TARGET QUAD NAME: ESTILLVILLE MAP YEAR: 1894 SERIES: 30 SCALE: 1:125000	SITE NAME: Peoples Food Store ADDRESS: 3104 Memorial Boulevard Kingsport, TN 37664 LAT/LONG: 36.5315 / -82.5135	CLIENT: Terracon, Inc. CONTACT: Marie Maher INQUIRY#: 3770050.4 RESEARCH DATE: 10/28/2013

Historical Topographic Map



N	TARGET QUAD NAME: MOCCASIN MAP YEAR: 1935 SERIES: 15 SCALE: 1:62500	SITE NAME: Peoples Food Store ADDRESS: 3104 Memorial Boulevard Kingsport, TN 37664 LAT/LONG: 36.5315 / -82.5135	CLIENT: Terracon, Inc. CONTACT: Marie Maher INQUIRY#: 3770050.4 RESEARCH DATE: 10/28/2013

Historical Topographic Map



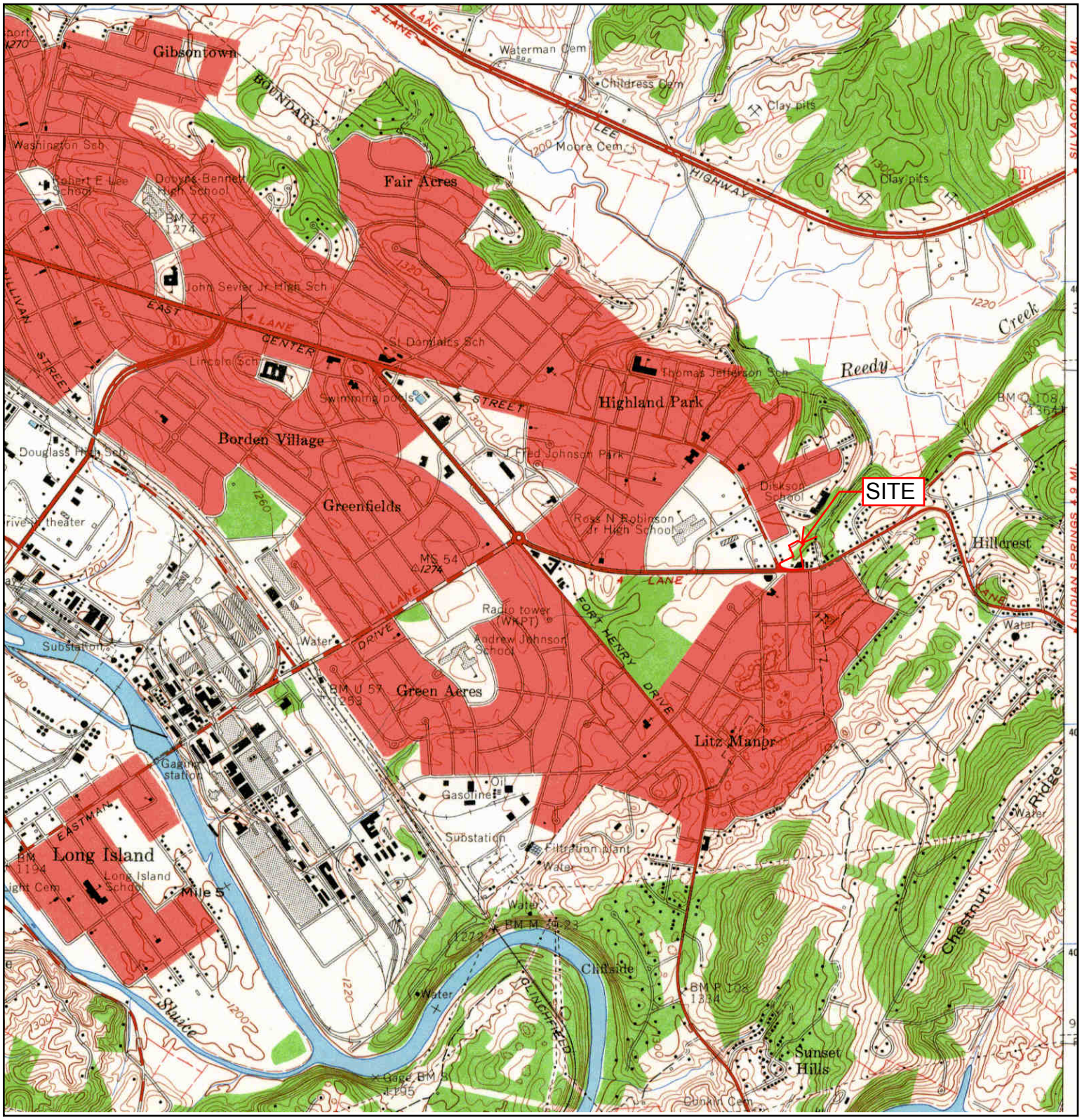
N	TARGET QUAD NAME: KINGSPORT MAP YEAR: 1935 SERIES: 7.5 SCALE: 1:24000	SITE NAME: Peoples Food Store ADDRESS: 3104 Memorial Boulevard Kingsport, TN 37664 LAT/LONG: 36.5315 / -82.5135	CLIENT: Terracon, Inc. CONTACT: Marie Maher INQUIRY#: 3770050.4 RESEARCH DATE: 10/28/2013

Historical Topographic Map



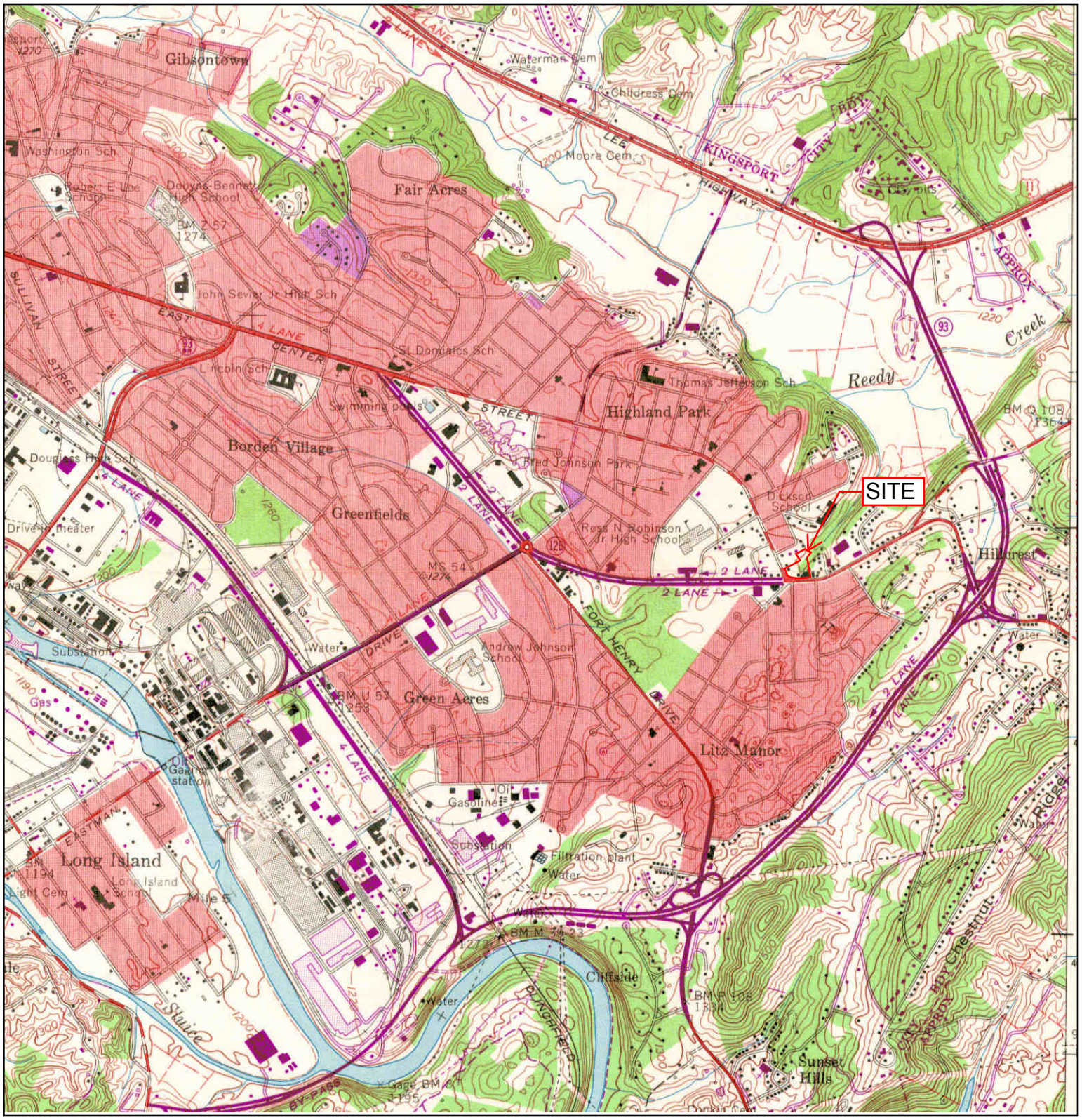
N	**TARGET QUAD** NAME: KINGSPORT MAP YEAR: 1939 SERIES: 7.5 SCALE: 1:24000	SITE NAME: Peoples Food Store ADDRESS: 3104 Memorial Boulevard Kingsport, TN 37664 LAT/LONG: 36.5315 / -82.5135	CLIENT: Terracon, Inc. CONTACT: Marie Maher INQUIRY#: 3770050.4 RESEARCH DATE: 10/28/2013

Historical Topographic Map



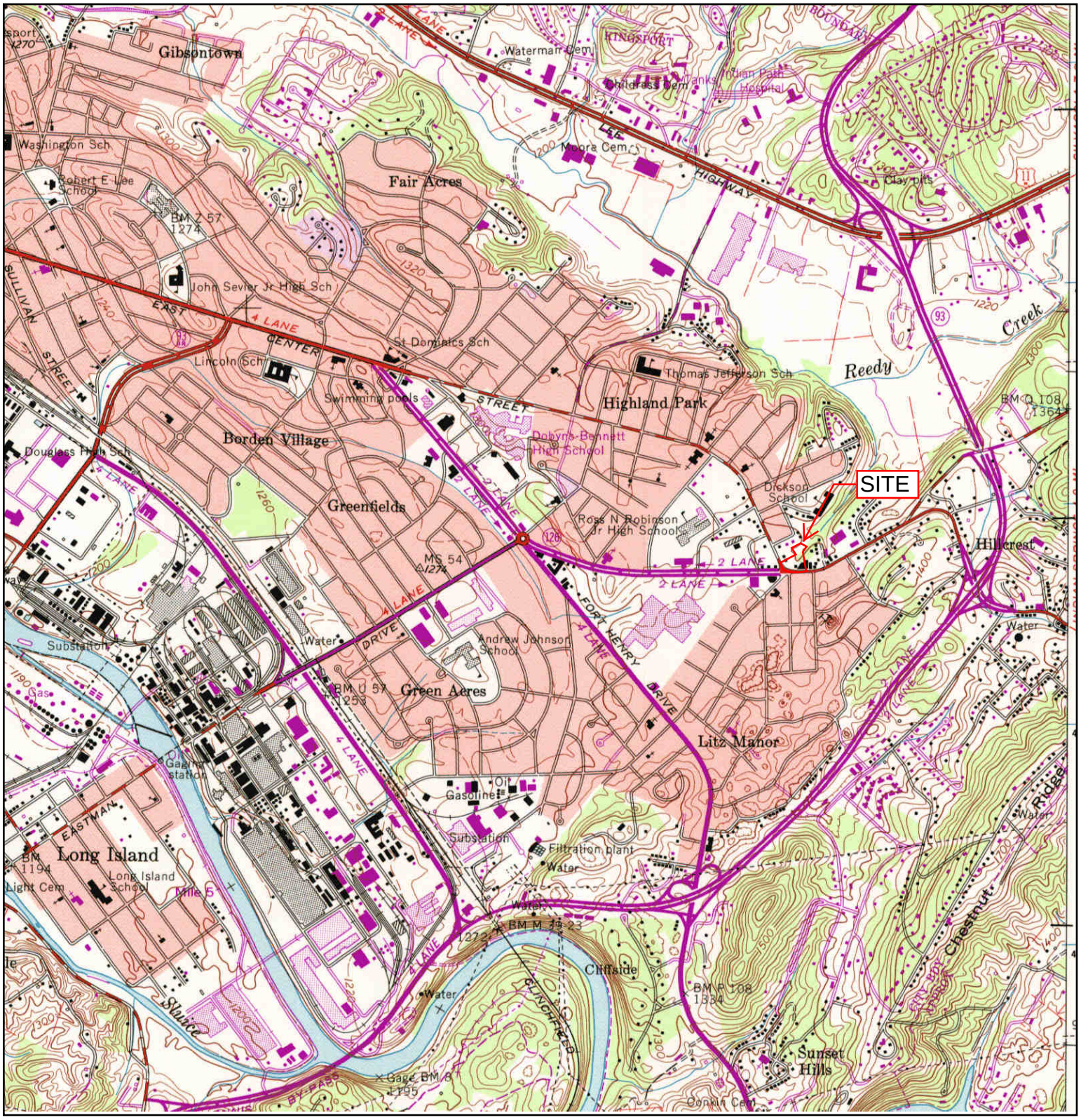
N	TARGET QUAD NAME: KINGSPORT MAP YEAR: 1959 SERIES: 7.5 SCALE: 1:24000	SITE NAME: Peoples Food Store ADDRESS: 3104 Memorial Boulevard Kingsport, TN 37664 LAT/LONG: 36.5315 / -82.5135	CLIENT: Terracon, Inc. CONTACT: Marie Maher INQUIRY#: 3770050.4 RESEARCH DATE: 10/28/2013

Historical Topographic Map



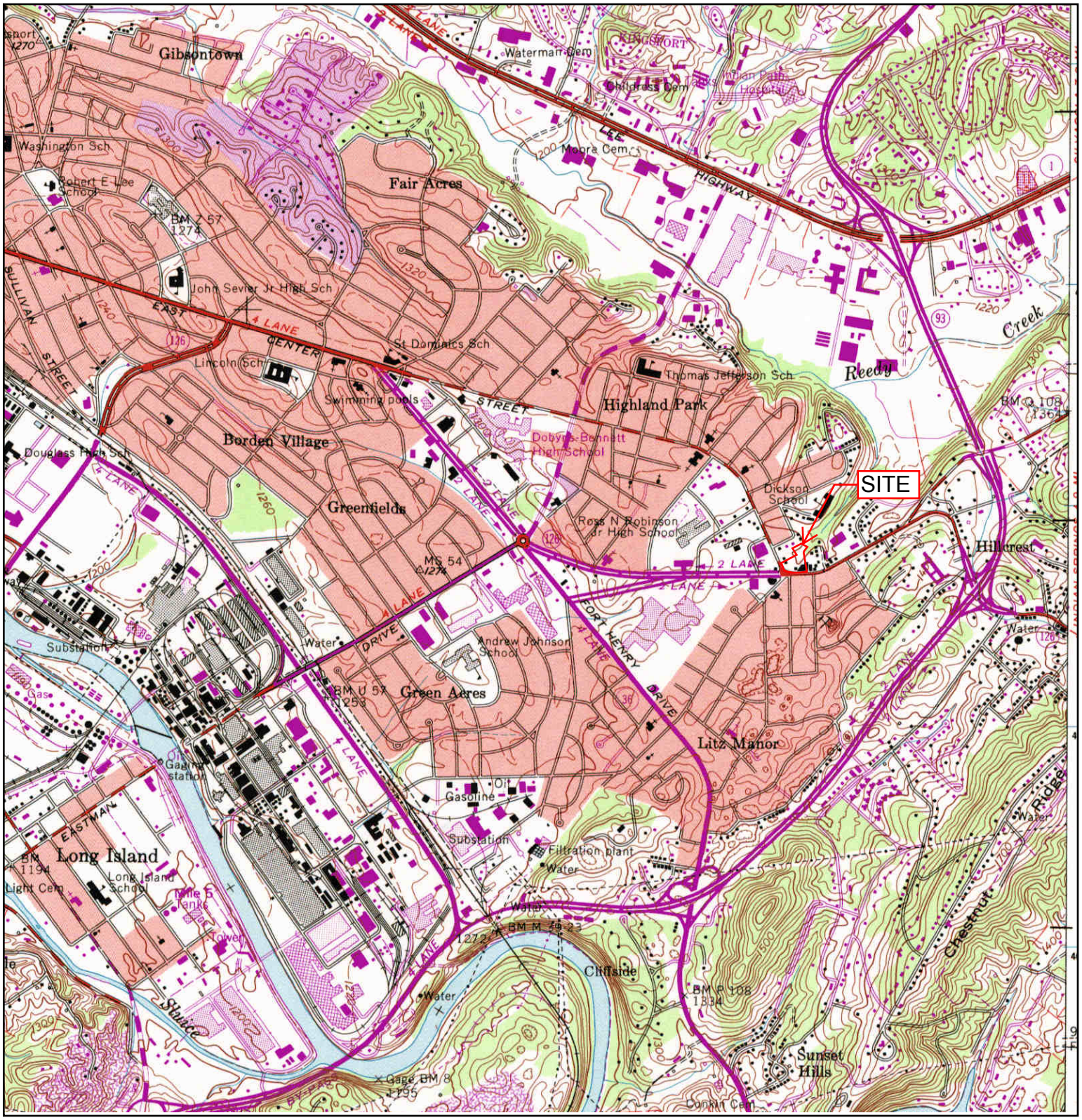
N	TARGET QUAD		SITE NAME:	Peoples Food Store	CLIENT:	Terracon, Inc.
	NAME:	KINGSPORT	ADDRESS:	3104 Memorial Boulevard	CONTACT:	Marie Maher
	MAP YEAR:	1968		Kingsport, TN 37664	INQUIRY#:	3770050.4
	PHOTOREVISED FROM:	1959	LAT/LONG:	36.5315 / -82.5135	RESEARCH DATE:	10/28/2013
	SERIES:	7.5				
	SCALE:	1:24000				

Historical Topographic Map



N	TARGET QUAD NAME: KINGSPORT MAP YEAR: 1978 PHOTOREVISED FROM :1959 SERIES: 7.5 SCALE: 1:24000	SITE NAME: Peoples Food Store ADDRESS: 3104 Memorial Boulevard Kingsport, TN 37664 LAT/LONG: 36.5315 / -82.5135	CLIENT: Terracon, Inc. CONTACT: Marie Maher INQUIRY#: 3770050.4 RESEARCH DATE: 10/28/2013

Historical Topographic Map



N	TARGET QUAD NAME: KINGSPORT MAP YEAR: 1991 PHOTOREVISED FROM :1959 SERIES: 7.5 SCALE: 1:24000	SITE NAME: Peoples Food Store ADDRESS: 3104 Memorial Boulevard Kingsport, TN 37664 LAT/LONG: 36.5315 / -82.5135	CLIENT: Terracon, Inc. CONTACT: Marie Maher INQUIRY#: 3770050.4 RESEARCH DATE: 10/28/2013

APPENDIX D

Environmental Database Information

Peoples Food Store
3104 Memorial Boulevard
Kingsport, TN 37664

Inquiry Number: 3770050.2s
October 28, 2013

The EDR Radius Map™ Report with GeoCheck®

EDR® Environmental Data Resources Inc

440 Wheelers Farms Road
Milford, CT 06461
Toll Free: 800.352.0050
www.edrnet.com

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Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-05) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

3104 MEMORIAL BOULEVARD
KINGSPORT, TN 37664

COORDINATES

Latitude (North):	36.5315000 - 36° 31' 53.40''
Longitude (West):	82.5135000 - 82° 30' 48.60''
Universal Tranverse Mercator:	Zone 17
UTM X (Meters):	364505.1
UTM Y (Meters):	4043765.8
Elevation:	1300 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map:	36082-E5 KINGSPORT, TN VA
Most Recent Revision:	1991
East Map:	36082-E4 INDIAN SPRINGS, TN VA
Most Recent Revision:	1991

AERIAL PHOTOGRAPHY IN THIS REPORT

Photo Year:	2012
Source:	USDA

TARGET PROPERTY SEARCH RESULTS

The target property was identified in the following records. For more information on this property see page 7 of the attached EDR Radius Map report:

Site	Database(s)	EPA ID
PEOPLE'S FOOD STORE 3104 MEMORIAL BLVD. KINGSPORT, TN 37660	UST Tank Status: Currently In Use	N/A

EXECUTIVE SUMMARY

DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the search radius around the target property for the following databases:

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL ---------- National Priority List
Proposed NPL ---------- Proposed National Priority List Sites
NPL LIENS ---------- Federal Superfund Liens

Federal Delisted NPL site list

Delisted NPL ---------- National Priority List Deletions

Federal CERCLIS list

CERCLIS ---------- Comprehensive Environmental Response, Compensation, and Liability Information System
FEDERAL FACILITY ---------- Federal Facility Site Information listing

Federal CERCLIS NFRAP site List

CERC-NFRAP ---------- CERCLIS No Further Remedial Action Planned

Federal RCRA CORRACTS facilities list

CORRACTS ---------- Corrective Action Report

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF ---------- RCRA - Treatment, Storage and Disposal

Federal RCRA generators list

RCRA-LQG ---------- RCRA - Large Quantity Generators
RCRA-SQG ---------- RCRA - Small Quantity Generators
RCRA-CESQG ---------- RCRA - Conditionally Exempt Small Quantity Generator

Federal institutional controls / engineering controls registries

US ENG CONTROLS ---------- Engineering Controls Sites List
US INST CONTROL ---------- Sites with Institutional Controls
LUCIS ---------- Land Use Control Information System

Federal ERNS list

ERNS ---------- Emergency Response Notification System

State- and tribal - equivalent NPL

SHWS ---------- List of Inactive Hazardous Substance Sites

EXECUTIVE SUMMARY

State and tribal landfill and/or solid waste disposal site lists

SWF/LF ---------- Solid Waste Disposal Facilities

State and tribal leaking storage tank lists

HIST_LUST CO ---------- Leaking Underground Storage Tanks Sites
INDIAN LUST ---------- Leaking Underground Storage Tanks on Indian Land

State and tribal registered storage tank lists

AST ---------- Aboveground Storage Tanks
INDIAN UST ---------- Underground Storage Tanks on Indian Land
FEMA UST ---------- Underground Storage Tank Listing

State and tribal institutional control / engineering control registries

ENG CONTROLS ---------- Engineering Control Sites
INST CONTROL ---------- Institutional Control Sites

State and tribal voluntary cleanup sites

INDIAN VCP ---------- Voluntary Cleanup Priority Listing
VCP ---------- Voluntary Cleanup, Oversight and Assistance Program Sites
SRP ---------- State Remediation Program List

State and tribal Brownfields sites

BROWNFIELDS ---------- Superfund VOAP Listing

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS ---------- A Listing of Brownfields Sites

Local Lists of Landfill / Solid Waste Disposal Sites

ODI ---------- Open Dump Inventory
DEBRIS REGION 9 ---------- Torres Martinez Reservation Illegal Dump Site Locations
SWRCY ---------- Recycling Facilities Listing
INDIAN ODI ---------- Report on the Status of Open Dumps on Indian Lands

Local Lists of Hazardous waste / Contaminated Sites

US CDL ---------- Clandestine Drug Labs
DEL SHWS ---------- Deleted State Hazardous Waste Sites
PRIORITYCLEANERS ---------- DCERP Remediation Sites Listing
CDL ---------- Registry of Contaminated Properties
US HIST CDL ---------- National Clandestine Laboratory Register

Local Land Records

LIENS 2 ---------- CERCLA Lien Information

LIENS ---------- Liens Information

Records of Emergency Release Reports

HMIRS ---------- Hazardous Materials Information Reporting System
SPILLS ---------- State Spills

Other Ascertainable Records

DOT OPS ---------- Incident and Accident Data
DOD ---------- Department of Defense Sites
FUDS ---------- Formerly Used Defense Sites
CONSENT ---------- Superfund (CERCLA) Consent Decrees
ROD ---------- Records Of Decision
UMTRA ---------- Uranium Mill Tailings Sites
US MINES ---------- Mines Master Index File
TRIS ---------- Toxic Chemical Release Inventory System
TSCA ---------- Toxic Substances Control Act
FTTS ---------- FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
HIST FTTS ---------- FIFRA/TSCA Tracking System Administrative Case Listing
SSTS ---------- Section 7 Tracking Systems
ICIS ---------- Integrated Compliance Information System
PADS ---------- PCB Activity Database System
MLTS ---------- Material Licensing Tracking System
RADINFO ---------- Radiation Information Database
FINDS ---------- Facility Index System/Facility Registry System
RAATS ---------- RCRA Administrative Action Tracking System
RMP ---------- Risk Management Plans
NPDES ---------- Permitted Facility Listing
AIRS ---------- Listing of Permitted Sources
INDIAN RESERV ---------- Indian Reservations
SCRD DRYCLEANERS ---------- State Coalition for Remediation of Drycleaners Listing
US AIRS ---------- Aerometric Information Retrieval System Facility Subsystem
PRP ---------- Potentially Responsible Parties
2020 COR ACTION ---------- 2020 Corrective Action Program List
LEAD SMELTERS ---------- Lead Smelter Sites
COAL ASH EPA ---------- Coal Combustion Residues Surface Impoundments List
EPA WATCH LIST ---------- EPA WATCH LIST
US FIN ASSUR ---------- Financial Assurance Information
PCB TRANSFORMER ---------- PCB Transformer Registration Database
COAL ASH DOE ---------- Steam-Electric Plant Operation Data

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP ---------- EDR Proprietary Manufactured Gas Plants

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

EXECUTIVE SUMMARY

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.
Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

STANDARD ENVIRONMENTAL RECORDS

State and tribal leaking storage tank lists

LUST: A listing of leaking underground storage tank site locations.

A review of the LUST list, as provided by EDR, and dated 07/02/2013 has revealed that there are 6 LUST sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
GARDEN BASKET CONV.STORE #4	***3117 MEMORIAL BLVD.***	***SSE 0 - 1/8 (0.033 mi.)***	***A2***	***10***
Current Status: 8 Case Closed				
AMOCO SERVICE STATION	***3101 MEMORIAL BLVD.***	***SW 0 - 1/8 (0.041 mi.)***	***B3***	***12***
Current Status: 1a Completed Tank Closure				
OLD SIMPSON MOTORS	***3310 MEMORIAL BLVD.***	***ENE 1/8 - 1/4 (0.165 mi.)***	***D15***	***28***
Current Status: 1a Completed Tank Closure				
SEARS ROEBUCK AND CO. # 2825	***2101 FT. HENRY DRIVE***	***WSW 1/4 - 1/2 (0.452 mi.)***	***E18***	***34***
Current Status: 1a Completed Tank Closure				
J C PENNEY	***2101 FORT HENRY DRIVE***	***WSW 1/4 - 1/2 (0.452 mi.)***	***E19***	***36***
Current Status: 1a Completed Tank Closure				
REGENCY-TENN- DBA HILLSIDE MAN	3641 MEMORIAL BLVD	E 1/4 - 1/2 (0.461 mi.)	20	39
Current Status: 8 Case Closed				

LUST TRUST: This list contains information on sites that had accidental releases of petroleum and are eligible for reimbursement from the TN Petroleum UST Fund.

A review of the LUST TRUST list, as provided by EDR, and dated 01/03/2013 has revealed that there are 2 LUST TRUST sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
AMOCO SERVICE STATION	3101 MEMORIAL BLVD	SW 0 - 1/8 (0.041 mi.)	B6	18
CHEROKEE FOOD STORE #4	3177 MEMORIAL BLVD.	SE 0 - 1/8 (0.046 mi.)	A8	21

EXECUTIVE SUMMARY

State and tribal registered storage tank lists

UST: The Underground Storage Tank database contains registered USTs. USTs are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA). The data come from the Department of Environment & Conservation's Facility and Tank Report.

A review of the UST list, as provided by EDR, and dated 07/02/2013 has revealed that there are 3 UST sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
AMOCO SERVICE STATION Tank Status: Permanently Out of Use	***3101 MEMORIAL BLVD.***	***SW 0 - 1/8 (0.041 mi.)***	***B3***	***12***
GARDEN BASKET CONV.STORE #4 Tank Status: Permanently Out of Use	3177 MEMORIAL BLVD.	SE 0 - 1/8 (0.046 mi.)	A7	18
OLD SIMPSON MOTORS Tank Status: Permanently Out of Use	***3310 MEMORIAL BLVD.***	***ENE 1/8 - 1/4 (0.165 mi.)***	***D15***	***28***

ADDITIONAL ENVIRONMENTAL RECORDS

Local Lists of Registered Storage Tanks

HIST UST: This database is no longer updated by the agency. It contains records and detail fields that the current UST database does not.

A review of the HIST UST list, as provided by EDR, and dated 07/02/2013 has revealed that there are 3 HIST UST sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
GARDEN BASKET CONV.STORE #4	***3117 MEMORIAL BLVD.***	***SSE 0 - 1/8 (0.033 mi.)***	***A2***	***10***
AMOCO SERVICE STATION	3101 MEMORIAL BLVD.	SW 0 - 1/8 (0.041 mi.)	B4	16
OLD SIMPSON MOTORS	3310 MEMORIAL BLVD.	ENE 1/8 - 1/4 (0.165 mi.)	D16	32

Other Ascertainable Records

RCRA NonGen / NLR: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

A review of the RCRA NonGen / NLR list, as provided by EDR, and dated 07/11/2013 has revealed that there is 1 RCRA NonGen / NLR site within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
B & W CLEANERS	3200 MEMORIAL BOULEVARD	ESE 0 - 1/8 (0.050 mi.)	C12	26

DRYCLEANERS: Registered drycleaner facilities.

A review of the DRYCLEANERS list, as provided by EDR, and dated 05/02/2011 has revealed that there are 2 DRYCLEANERS sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
B & W CLEANERS	3200 MEMORIAL BLVD	ESE 0 - 1/8 (0.050 mi.)	C9	22
B&W CLEANERS	3200 MEMORIAL BLVD.	ESE 0 - 1/8 (0.050 mi.)	C11	24

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR US Hist Auto Stat: EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

A review of the EDR US Hist Auto Stat list, as provided by EDR, has revealed that there are 3 EDR US Hist Auto Stat sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
Not reported	3101 MEMORIAL BLVD	SW 0 - 1/8 (0.041 mi.)	B5	18
Not reported	3310 MEMORIAL BLVD	ENE 1/8 - 1/4 (0.163 mi.)	D14	27
Not reported	2441 MEMORIAL BLVD	W 1/8 - 1/4 (0.183 mi.)	17	34

EDR US Hist Cleaners: EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

A review of the EDR US Hist Cleaners list, as provided by EDR, has revealed that there are 2 EDR US Hist Cleaners sites within approximately 0.25 miles of the target property.

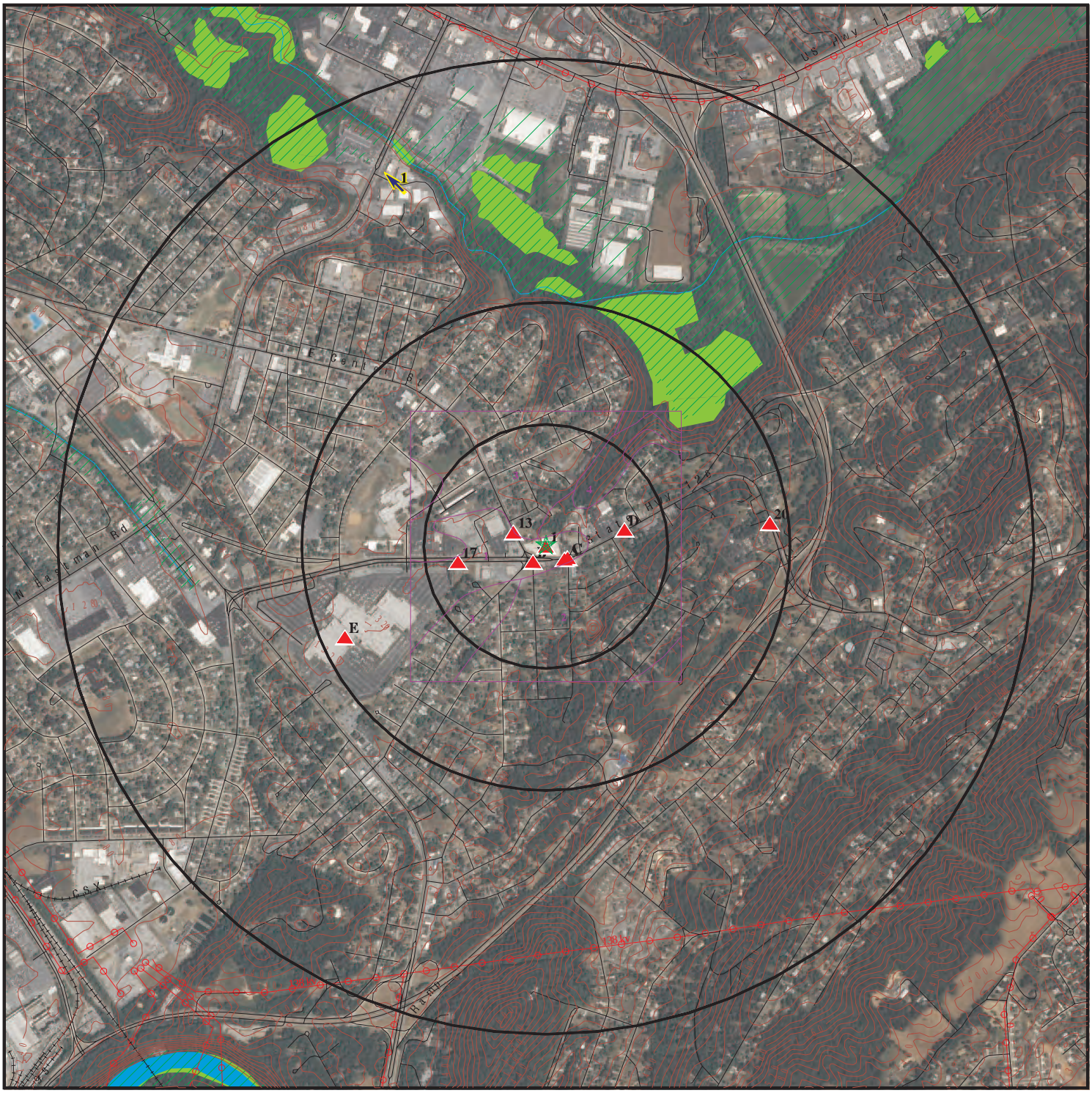
Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
Not reported	3200 MEMORIAL BLVD	ESE 0 - 1/8 (0.050 mi.)	C10	23
Not reported	2921 E CENTER ST	WNW 0 - 1/8 (0.072 mi.)	13	27

EXECUTIVE SUMMARY

Due to poor or inadequate address information, the following sites were not mapped. Count: 22 records.

Site Name	Database(s)
KINGSPORT #525	HIST UST
VIC'S GAS AND GO	HIST UST
BARTLETT TREE EXPERTS	HIST UST
WOODLAND HEIGHTS	HIST UST
LUCKY 7	HIST UST
SULLIVAN CO SHERIFF DEPT.	HIST UST
TENNESSEE DIV OF FORESTRY	HIST UST
RIGGS BROTHERS CONSTRUCTION CO	HIST UST
SULLIVAN CO SHERIFF DEPT.	LUST
LAKESHORE PROPERTIES	LUST
WOODLAND HEIGHTS	LUST
TENNESSEE DIV OF FORESTRY	LUST,UST
RIGGS BROTHERS CONSTRUCTION CO	LUST,UST
CHEROKEE FOOD STORE #11	LUST
KINGSPORT #525	UST
BARTLETT TREE EXPERTS	UST
B MART	UST
VIC'S GAS AND GO	UST
WOODLAND HEIGHTS	UST
LUCKY 7	UST
SULLIVAN CO SHERIFF DEPT.	UST
BAUMGARDNER CO	FINDS,RCRA-NLR

OVERVIEW MAP - 3770050.2s



- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- National Priority List Sites
- Dept. Defense Sites

0 1/4 1/2 1 Miles

- Indian Reservations BIA
- Power transmission lines
- Oil & Gas pipelines from USGS
- 100-year flood zone
- 500-year flood zone
- National Wetland Inventory
- State Wetlands

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Peoples Food Store ADDRESS: 3104 Memorial Boulevard Kingsport TN 37664 LAT/LONG: 36.5315 / 82.5135	CLIENT: Terracon, Inc. CONTACT: Marie Maher INQUIRY #: 3770050.2s DATE: October 28, 2013 6:02 pm

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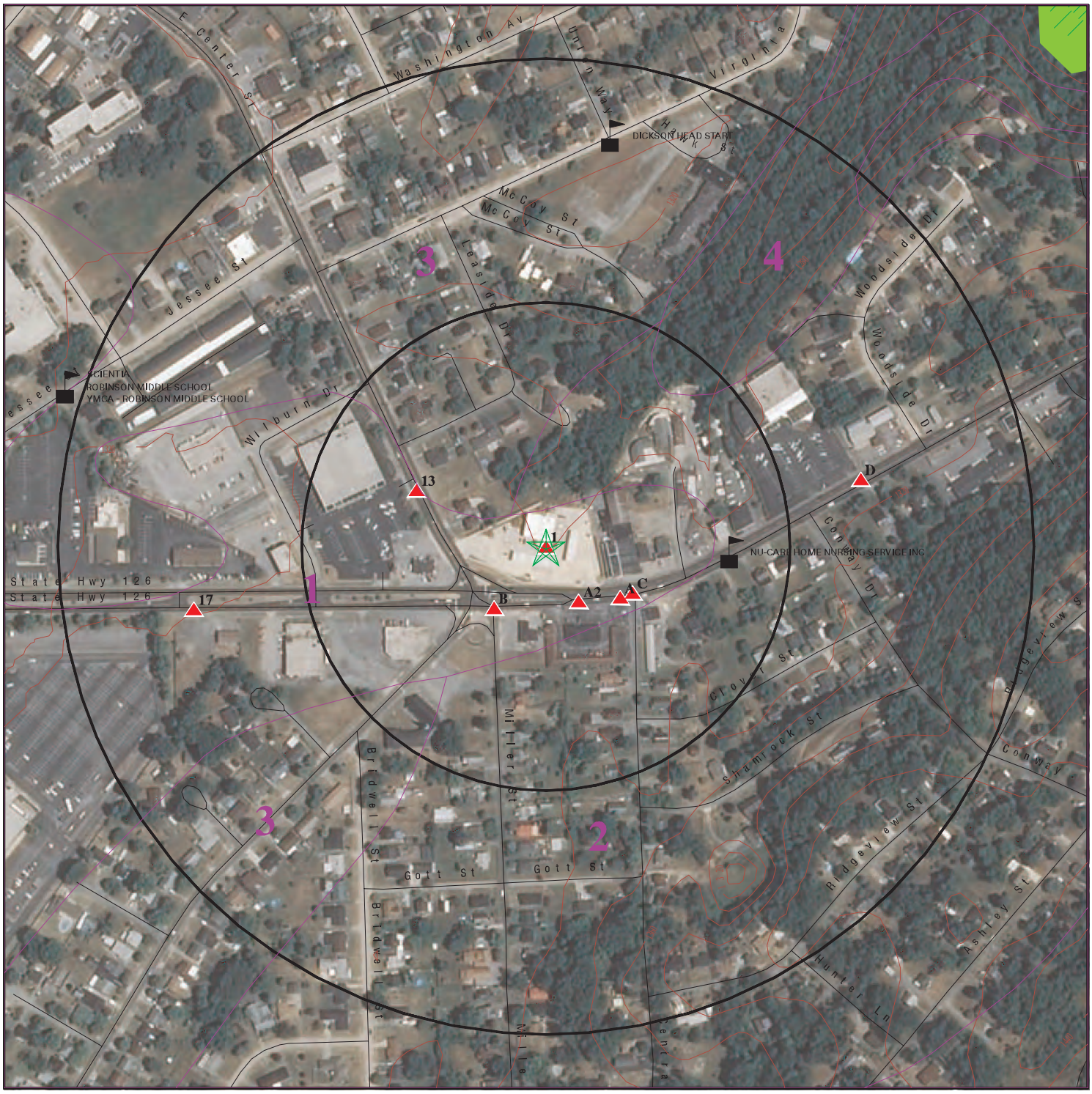
DETAIL MAP - 3770050.2s



- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- Sensitive Receptors
- National Priority List Sites
- Dept. Defense Sites

0 1/16 1/8 1/4 Miles

- Indian Reservations BIA
- Oil & Gas pipelines from USGS
- 100-year flood zone
- 500-year flood zone
- National Wetland Inventory
- State Wetlands

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Peoples Food Store ADDRESS: 3104 Memorial Boulevard Kingsport TN 37664 LAT/LONG: 36.5315 / 82.5135	CLIENT: Terracon, Inc. CONTACT: Marie Maher INQUIRY #: 3770050.2s DATE: October 28, 2013 6:03 pm

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MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENTAL RECORDS								
Federal NPL site list								
NPL	1.000		0	0	0	0	NR	0
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	TP		NR	NR	NR	NR	NR	0
Federal Delisted NPL site list								
Delisted NPL	1.000		0	0	0	0	NR	0
Federal CERCLIS list								
CERCLIS	0.500		0	0	0	NR	NR	0
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
Federal CERCLIS NFRAP site List								
CERC-NFRAP	0.500		0	0	0	NR	NR	0
Federal RCRA CORRACTS facilities list								
CORRACTS	1.000		0	0	0	0	NR	0
Federal RCRA non-CORRACTS TSD facilities list								
RCRA-TSDF	0.500		0	0	0	NR	NR	0
Federal RCRA generators list								
RCRA-LQG	0.250		0	0	NR	NR	NR	0
RCRA-SQG	0.250		0	0	NR	NR	NR	0
RCRA-CESQG	0.250		0	0	NR	NR	NR	0
Federal institutional controls / engineering controls registries								
US ENG CONTROLS	0.500		0	0	0	NR	NR	0
US INST CONTROL	0.500		0	0	0	NR	NR	0
LUCIS	0.500		0	0	0	NR	NR	0
Federal ERNS list								
ERNS	TP		NR	NR	NR	NR	NR	0
State- and tribal - equivalent NPL								
SHWS	1.000		0	0	0	0	NR	0
State and tribal landfill and/or solid waste disposal site lists								
SWF/LF	0.500		0	0	0	NR	NR	0
State and tribal leaking storage tank lists								
LUST	0.500		2	1	3	NR	NR	6
LUST TRUST	0.500		2	0	0	NR	NR	2
HIST_LUST CO	0.500		0	0	0	NR	NR	0
INDIAN LUST	0.500		0	0	0	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
State and tribal registered storage tank lists								
UST	0.250	1	2	1	NR	NR	NR	4
AST	0.250		0	0	NR	NR	NR	0
INDIAN UST	0.250		0	0	NR	NR	NR	0
FEMA UST	0.250		0	0	NR	NR	NR	0
State and tribal institutional control / engineering control registries								
ENG CONTROLS	0.500		0	0	0	NR	NR	0
INST CONTROL	0.500		0	0	0	NR	NR	0
State and tribal voluntary cleanup sites								
INDIAN VCP	0.500		0	0	0	NR	NR	0
VCP	0.500		0	0	0	NR	NR	0
SRP	0.500		0	0	0	NR	NR	0
State and tribal Brownfields sites								
BROWNFIELDS	0.500		0	0	0	NR	NR	0
ADDITIONAL ENVIRONMENTAL RECORDS								
Local Brownfield lists								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
Local Lists of Landfill / Solid Waste Disposal Sites								
ODI	0.500		0	0	0	NR	NR	0
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
SWRCY	0.500		0	0	0	NR	NR	0
INDIAN ODI	0.500		0	0	0	NR	NR	0
Local Lists of Hazardous waste / Contaminated Sites								
US CDL	TP		NR	NR	NR	NR	NR	0
DEL SHWS	1.000		0	0	0	0	NR	0
PRIORITYCLEANERS	0.500		0	0	0	NR	NR	0
CDL	TP		NR	NR	NR	NR	NR	0
US HIST CDL	TP		NR	NR	NR	NR	NR	0
Local Lists of Registered Storage Tanks								
HIST UST	0.250		2	1	NR	NR	NR	3
Local Land Records								
LIENS 2	TP		NR	NR	NR	NR	NR	0
LIENS	TP		NR	NR	NR	NR	NR	0
Records of Emergency Release Reports								
HMIRS	TP		NR	NR	NR	NR	NR	0
SPILLS	TP		NR	NR	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
Other Ascertainable Records								
RCRA NonGen / NLR	0.250		1	0	NR	NR	NR	1
DOT OPS	TP		NR	NR	NR	NR	NR	0
DOD	1.000		0	0	0	0	NR	0
FUDS	1.000		0	0	0	0	NR	0
CONSENT	1.000		0	0	0	0	NR	0
ROD	1.000		0	0	0	0	NR	0
UMTRA	0.500		0	0	0	NR	NR	0
US MINES	0.250		0	0	NR	NR	NR	0
TRIS	TP		NR	NR	NR	NR	NR	0
TSCA	TP		NR	NR	NR	NR	NR	0
FTTS	TP		NR	NR	NR	NR	NR	0
HIST FTTS	TP		NR	NR	NR	NR	NR	0
SSTS	TP		NR	NR	NR	NR	NR	0
ICIS	TP		NR	NR	NR	NR	NR	0
PADS	TP		NR	NR	NR	NR	NR	0
MLTS	TP		NR	NR	NR	NR	NR	0
RADINFO	TP		NR	NR	NR	NR	NR	0
FINDS	TP		NR	NR	NR	NR	NR	0
RAATS	TP		NR	NR	NR	NR	NR	0
RMP	TP		NR	NR	NR	NR	NR	0
DRYCLEANERS	0.250		2	0	NR	NR	NR	2
NPDES	TP		NR	NR	NR	NR	NR	0
AIRS	TP		NR	NR	NR	NR	NR	0
INDIAN RESERV	1.000		0	0	0	0	NR	0
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
US AIRS	TP		NR	NR	NR	NR	NR	0
PRP	TP		NR	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
LEAD SMELTERS	TP		NR	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
EPA WATCH LIST	TP		NR	NR	NR	NR	NR	0
US FIN ASSUR	TP		NR	NR	NR	NR	NR	0
PCB TRANSFORMER	TP		NR	NR	NR	NR	NR	0
COAL ASH DOE	TP		NR	NR	NR	NR	NR	0
EDR HIGH RISK HISTORICAL RECORDS								
EDR Exclusive Records								
EDR MGP	1.000		0	0	0	0	NR	0
EDR US Hist Auto Stat	0.250		1	2	NR	NR	NR	3
EDR US Hist Cleaners	0.250		2	0	NR	NR	NR	2

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

1 **PEOPLE'S FOOD STORE** **UST** **U004157671**
Target **3104 MEMORIAL BLVD.** **N/A**
Property **KINGSPORT, TN 37660**

Actual:
1300 ft.

UST:

Facility ID:	1820631
Facility Description:	Gas Station
Owner ID:	328200
Owner Name:	Lee Buckner
Owner Address:	809 Lizbeth Drive
Owner Address 2:	Not reported
Owner City,St,Zip:	Johnson City, TN 37604
Owner Description:	Not reported
Tank ID:	1
Tank Status:	**Currently In Use**
Compartment Capacity:	5000
Substance Description:	Gasoline
Date Installed:	06/16/2010
Date Last Used:	Not reported
Date Closed:	Not reported
Regulated:	Regulated
Compartment ID:	B
Tank Mat Desc:	Composite (Steel w/FRP)
Tank Mods Desc:	Double-Walled
Tank Other Material:	Not reported
Tank Manual Gauge:	False
Tank Tightness:	False
Tank Inventory Control:	False
Tank ATG:	False
Tank Vapor Monitor:	False
Tank GW Monitor:	False
Tank Interstitial Dbl Walled:	True
Tank Interstitial Second Contain:	False
Tank SIR:	False
Tank LD Other:	False
Tank LD Deferred:	False
Tank LD Not Listed:	False
Tank Emergen:	False
Tank No Fee:	True
Pipe Mat Desc:	Fiberglass Reinforced Plastic
Pipe Mod Desc:	Not reported
Pipe Other Material:	Not reported
Pipe Repaired:	False
Pipe Type Desc:	Not reported
Pipe Auto Line Leak Detection:	True
Pipe Line Tightness:	False
Pipe Vapor Monitoring:	False
Pipe GW Monitoring:	False
Pipe Interstitial Dbl Walled:	False
Pipe Interstitial Sec Contain:	False
Pipe SIR:	False
Pipe LD Other:	False
Pipe LD Deferred:	False
Pipe LD Not Listed:	False
LD Other Methods:	Not reported
Overfill Type:	Ball Float Valves
Overfill Installed:	True
Spill Installed:	True

PEOPLE'S FOOD STORE (Continued) **U004157671**

CP Met:	True
Small Delivery:	False
Flex Piping Type:	Not reported
Year Flex Piping Installed:	Not reported

Tank ID:	2
Tank Status:	**Currently In Use**
Compartment Capacity:	10000
Substance Description:	Diesel
Date Installed:	06/16/2010
Date Last Used:	Not reported
Date Closed:	Not reported
Regulated:	Regulated
Compartment ID:	A
Tank Mat Desc:	Composite (Steel w/FRP)
Tank Mods Desc:	Double-Walled
Tank Other Material:	Not reported
Tank Manual Gauge:	False
Tank Tightness:	False
Tank Inventory Control:	False
Tank ATG:	False
Tank Vapor Monitor:	False
Tank GW Monitor:	False
Tank Interstitial Dbl Walled:	True
Tank Interstitial Second Contain:	False
Tank SIR:	False
Tank LD Other:	False
Tank LD Deferred:	False
Tank LD Not Listed:	False
Tank Emergen:	False
Tank No Fee:	True
Pipe Mat Desc:	Fiberglass Reinforced Plastic
Pipe Mod Desc:	Not reported
Pipe Other Material:	Not reported
Pipe Repaired:	False
Pipe Type Desc:	Not reported
Pipe Auto Line Leak Detection:	False
Pipe Line Tightness:	False
Pipe Vapor Monitoring:	False
Pipe GW Monitoring:	False
Pipe Interstitial Dbl Walled:	False
Pipe Interstitial Sec Contain:	False
Pipe SIR:	False
Pipe LD Other:	False
Pipe LD Deferred:	False
Pipe LD Not Listed:	False
LD Other Methods:	Not reported
Overfill Type:	Ball Float Valves
Overfill Installed:	True
Spill Installed:	True
CP Met:	True
Small Delivery:	False
Flex Piping Type:	Not reported
Year Flex Piping Installed:	Not reported

PEOPLE'S FOOD STORE (Continued) **U004157671**

Tank ID:	1
Tank Status:	**Currently In Use**
Compartment Capacity:	15000
Substance Description:	Gasoline
Date Installed:	06/16/2010
Date Last Used:	Not reported
Date Closed:	Not reported
Regulated:	Regulated
Compartment ID:	A
Tank Mat Desc:	Composite (Steel w/FRP)
Tank Mods Desc:	Double-Walled
Tank Other Material:	Not reported
Tank Manual Gauge:	False
Tank Tightness:	False
Tank Inventory Control:	False
Tank ATG:	False
Tank Vapor Monitor:	False
Tank GW Monitor:	False
Tank Interstitial Dbl Walled:	True
Tank Interstitial Second Contain:	False
Tank SIR:	False
Tank LD Other:	False
Tank LD Deferred:	False
Tank LD Not Listed:	False
Tank Emergen:	False
Tank No Fee:	True
Pipe Mat Desc:	Fiberglass Reinforced Plastic
Pipe Mod Desc:	Not reported
Pipe Other Material:	Not reported
Pipe Repaired:	False
Pipe Type Desc:	Not reported
Pipe Auto Line Leak Detection:	True
Pipe Line Tightness:	False
Pipe Vapor Monitoring:	False
Pipe GW Monitoring:	False
Pipe Interstitial Dbl Walled:	False
Pipe Interstitial Sec Contain:	False
Pipe SIR:	False
Pipe LD Other:	False
Pipe LD Deferred:	False
Pipe LD Not Listed:	False
LD Other Methods:	Not reported
Overfill Type:	Ball Float Valves
Overfill Installed:	True
Spill Installed:	True
CP Met:	True
Small Delivery:	False
Flex Piping Type:	Not reported
Year Flex Piping Installed:	Not reported

A2
SSE
< 1/8
0.033 mi.
172 ft.

GARDEN BASKET CONV.STORE #4
3117 MEMORIAL BLVD.
KINGSPORT, TN 37660

LUST **U003609359**
HIST UST **N/A**

Site 1 of 3 in cluster A

Relative:
Higher

Actual:
1305 ft.

LUST:

Region:	STATE
Region Number:	1
Facility Id:	1820144
Case Number:	1
Current Status:	8 Case Closed
Product Released:	Not reported
Discovery Date:	06/11/1998
How Discovered:	1 At Closure
Cause:	7 Unknown
Case Manager:	ABH
Case Description:	2-6K G & 1-4K G
Section:	LT - SL
Priority:	High
Consultant ID:	C0265
Consultant Name:	Theta Technologies, Inc.
Consultant Contact:	Jack Finchum
Consultant Contact Title:	Not reported
Consultant Contact First Name:	Not reported
Consultant Contact Last Name:	Not reported
Consultant Contact Address2:	Not reported
Consultant City:	Oak Ridge
Consultant State:	TN
Consultant Telephone:	865-482-0056
Owner ID:	1588
Owner Name:	CHEROKEE OIL, INC.
Owner Contact:	Not reported
Owner Contact Title:	Not reported
Owner Contact First Name:	Not reported
Owner Contact Last Name:	Not reported
Owner Address:	233 NEW BEASON WELL RD.
Owner City:	KINGSPORT
Owner State:	TN
Owner Zip Code:	37660
Owner Telephone:	(615) 288-2011

HIST UST:

Facility ID:	1-820144
Facility Description:	Gas Station
Owner ID:	1588
Owner Name:	CHEROKEE OIL, CO., INC
Owner Address:	930 Wilcox Court Suite #7
Owner City,St,Zip:	Kingsport, TN 37660
Owner Telephone:	(423) 288-2011
Owner Description:	Commercial
Tank ID:	1
Tank Status:	**Permanently Out of Use**
Tank Capacity:	6000
Tank Contents:	Gasoline
Tank Material:	Asphalt Coated or Bare Steel
Tank 2ndary Trait:	None
Tank Manual Gauge:	False

GARDEN BASKET CONV.STORE #4 (Continued) **U003609359**

Tank Tightness:	False
Tank Inventory Control:	False
Tank ATG:	False
Tank Vapor Monitor:	False
Tank Groundwater Monitor:	False
Tank Double Walled:	False
Tank 2nd Contained:	False
Tank SIR:	True
Overfill Installed:	False
Spill Installed:	False
Cathodic Protection:	False
Date Installed:	01/16/1985
Tank Leak Detection Listed:	False
Pipe Material:	Galvanized Steel
Pipe Other Material:	None
Pipe Type:	Not Listed
Pipe Auto Line Leak Detect.:	True
Pipe Leak Detection Listed:	False
Pipe Vapor Monitor:	False
Pipe Groundwater Monitor:	False
Pipe Dbl Walled:	Not reported
Pipe 2nd Contained:	False
Pipe SIR:	True
Pipe Leak Detection Listed:	False

Tank ID:	2
Tank Status:	**Permanently Out of Use**
Tank Capacity:	6000
Tank Contents:	Gasoline
Tank Material:	Asphalt Coated or Bare Steel
Tank 2ndary Trait:	None
Tank Manual Gauge:	False
Tank Tightness:	False
Tank Inventory Control:	False
Tank ATG:	False
Tank Vapor Monitor:	False
Tank Groundwater Monitor:	False
Tank Double Walled:	False
Tank 2nd Contained:	False
Tank SIR:	True
Overfill Installed:	False
Spill Installed:	False
Cathodic Protection:	False
Date Installed:	01/16/1985
Tank Leak Detection Listed:	False
Pipe Material:	Galvanized Steel
Pipe Other Material:	None
Pipe Type:	Not Listed
Pipe Auto Line Leak Detect.:	True
Pipe Leak Detection Listed:	False
Pipe Vapor Monitor:	False
Pipe Groundwater Monitor:	False
Pipe Dbl Walled:	Not reported
Pipe 2nd Contained:	False
Pipe SIR:	True
Pipe Leak Detection Listed:	False

GARDEN BASKET CONV.STORE #4 (Continued) **U003609359**

Tank ID:	3
Tank Status:	**Permanently Out of Use**
Tank Capacity:	4000
Tank Contents:	Gasoline
Tank Material:	Asphalt Coated or Bare Steel
Tank 2ndary Trait:	None
Tank Manual Gauge:	False
Tank Tightness:	False
Tank Inventory Control:	False
Tank ATG:	False
Tank Vapor Monitor:	False
Tank Groundwater Monitor:	False
Tank Double Walled:	False
Tank 2nd Contained:	False
Tank SIR:	True
Overfill Installed:	False
Spill Installed:	False
Cathodic Protection:	False
Date Installed:	01/16/1985
Tank Leak Detection Listed:	False
Pipe Material:	Galvanized Steel
Pipe Other Material:	None
Pipe Type:	Not Listed
Pipe Auto Line Leak Detect.:	True
Pipe Leak Detection Listed:	False
Pipe Vapor Monitor:	False
Pipe Groundwater Monitor:	False
Pipe Dbl Walled:	Not reported
Pipe 2nd Contained:	False
Pipe SIR:	True
Pipe Leak Detection Listed:	False

B3 **AMOCO SERVICE STATION** **LUST U004163652**
SW **3101 MEMORIAL BLVD.** **UST N/A**
< 1/8 **KINGSPORT, TN 37664**
0.041 mi.
217 ft. **Site 1 of 4 in cluster B**

Relative:
Higher

Actual:
1306 ft.

LUST:

Region:	STATE
Region Number:	1
Facility Id:	1820435
Case Number:	1
Current Status:	1a Completed Tank Closure
Product Released:	Not reported
Discovery Date:	03/07/2002
How Discovered:	1 At Closure
Cause:	7 Unknown
Case Manager:	MPB
Case Description:	1-6K G & 2-4K G
Section:	FO
Priority:	Not reported
Consultant ID:	Not reported
Consultant Name:	Remedial Action Associates
Consultant Contact:	Mark Crumley
Consultant Contact Title:	Not reported
Consultant Contact First Name:	Not reported
Consultant Contact Last Name:	Not reported

AMOCO SERVICE STATION (Continued) **U004163652**

Consultant Contact Address2:	Not reported
Consultant City:	Gray
Consultant State:	TN
Consultant Telephone:	423/ 477-0898
Owner ID:	Not reported
Owner Name:	John Fry
Owner Contact:	Not reported
Owner Contact Title:	Not reported
Owner Contact First Name:	Not reported
Owner Contact Last Name:	Not reported
Owner Address:	3036 Cliffside Road
Owner City:	Kingsport
Owner State:	TN
Owner Zip Code:	37664
Owner Telephone:	423/ 246-8148 or 9705

UST:

Facility ID:	1820435
Facility Description:	Gas Station
Owner ID:	301088
Owner Name:	John E Fry
Owner Address:	3036 Cliffside Road
Owner Address 2:	Not reported
Owner City,St,Zip:	Kingsport, TN 37664
Owner Description:	Private
Tank ID:	2
Tank Status:	**Permanently Out of Use**
Compartment Capacity:	4000
Substance Description:	Gasoline
Date Installed:	12/15/1986
Date Last Used:	05/01/2002
Date Closed:	03/07/2002
Regulated:	Regulated
Compartment ID:	A
Tank Mat Desc:	Cathodically Protected Steel-StiP3
Tank Mods Desc:	None
Tank Other Material:	Not reported
Tank Manual Gauge:	False
Tank Tightness:	False
Tank Inventory Control:	False
Tank ATG:	False
Tank Vapor Monitor:	False
Tank GW Monitor:	False
Tank Interstitial Dbl Walled:	False
Tank Interstitial Second Contain:	False
Tank SIR:	True
Tank LD Other:	False
Tank LD Deferred:	False
Tank LD Not Listed:	False
Tank Emergen:	False
Tank No Fee:	True
Pipe Mat Desc:	Fiberglass Reinforced Plastic
Pipe Mod Desc:	Not reported
Pipe Other Material:	Not reported
Pipe Repaired:	False
Pipe Type Desc:	Not reported

AMOCO SERVICE STATION (Continued) **U004163652**

Pipe Auto Line Leak Detection:	False
Pipe Line Tightness:	False
Pipe Vapor Monitoring:	False
Pipe GW Monitoring:	False
Pipe Interstitial Dbl Walled:	False
Pipe Interstitial Sec Contain:	False
Pipe SIR:	True
Pipe LD Other:	False
Pipe LD Deferred:	False
Pipe LD Not Listed:	False
LD Other Methods:	Not reported
Overfill Type:	Not reported
Overfill Installed:	True
Spill Installed:	True
CP Met:	True
Small Delivery:	False
Flex Piping Type:	Not reported
Year Flex Piping Installed:	Not reported

Tank ID:	3
Tank Status:	**Permanently Out of Use**
Compartment Capacity:	4000
Substance Description:	Gasoline
Date Installed:	08/01/1987
Date Last Used:	05/01/2002
Date Closed:	03/07/2002
Regulated:	Regulated
Compartment ID:	A
Tank Mat Desc:	Cathodically Protected Steel-StiP3
Tank Mods Desc:	None
Tank Other Material:	Not reported
Tank Manual Gauge:	False
Tank Tightness:	False
Tank Inventory Control:	False
Tank ATG:	False
Tank Vapor Monitor:	False
Tank GW Monitor:	False
Tank Interstitial Dbl Walled:	False
Tank Interstitial Second Contain:	False
Tank SIR:	True
Tank LD Other:	False
Tank LD Deferred:	False
Tank LD Not Listed:	False
Tank Emergen:	False
Tank No Fee:	True
Pipe Mat Desc:	Fiberglass Reinforced Plastic
Pipe Mod Desc:	Not reported
Pipe Other Material:	Not reported
Pipe Repaired:	False
Pipe Type Desc:	Not reported
Pipe Auto Line Leak Detection:	False
Pipe Line Tightness:	False
Pipe Vapor Monitoring:	False
Pipe GW Monitoring:	False
Pipe Interstitial Dbl Walled:	False
Pipe Interstitial Sec Contain:	False

AMOCO SERVICE STATION (Continued) **U004163652**

Pipe SIR:	True
Pipe LD Other:	False
Pipe LD Deferred:	False
Pipe LD Not Listed:	False
LD Other Methods:	Not reported
Overfill Type:	Not reported
Overfill Installed:	True
Spill Installed:	True
CP Met:	True
Small Delivery:	False
Flex Piping Type:	Not reported
Year Flex Piping Installed:	Not reported

Tank ID:	1
Tank Status:	**Permanently Out of Use**
Compartment Capacity:	6000
Substance Description:	Gasoline
Date Installed:	12/15/1986
Date Last Used:	05/01/2002
Date Closed:	03/07/2002
Regulated:	Regulated
Compartment ID:	A
Tank Mat Desc:	Cathodically Protected Steel-StiP3
Tank Mods Desc:	None
Tank Other Material:	Not reported
Tank Manual Gauge:	False
Tank Tightness:	False
Tank Inventory Control:	False
Tank ATG:	False
Tank Vapor Monitor:	False
Tank GW Monitor:	False
Tank Interstitial Dbl Walled:	False
Tank Interstitial Second Contain:	False
Tank SIR:	True
Tank LD Other:	False
Tank LD Deferred:	False
Tank LD Not Listed:	False
Tank Emergen:	False
Tank No Fee:	True
Pipe Mat Desc:	Fiberglass Reinforced Plastic
Pipe Mod Desc:	Not reported
Pipe Other Material:	Not reported
Pipe Repaired:	False
Pipe Type Desc:	Not reported
Pipe Auto Line Leak Detection:	False
Pipe Line Tightness:	False
Pipe Vapor Monitoring:	False
Pipe GW Monitoring:	False
Pipe Interstitial Dbl Walled:	False
Pipe Interstitial Sec Contain:	False
Pipe SIR:	True
Pipe LD Other:	False
Pipe LD Deferred:	False
Pipe LD Not Listed:	False
LD Other Methods:	Not reported
Overfill Type:	Not reported

AMOCO SERVICE STATION (Continued) **U004163652**

Overfill Installed:	True
Spill Installed:	True
CP Met:	True
Small Delivery:	False
Flex Piping Type:	Not reported
Year Flex Piping Installed:	Not reported

B4
SW
< 1/8
0.041 mi.
217 ft.

AMOCO SERVICE STATION **HIST UST** **U001311676**
3101 MEMORIAL BLVD. **N/A**
KINGSPORT, TN 37664

Site 2 of 4 in cluster B

Relative:
Higher

Actual:
1306 ft.

HIST UST:

Facility ID:	1-820435
Facility Description:	Gas Station
Owner ID:	157426
Owner Name:	JOHN E FRY
Owner Address:	3036 Cliffside Road
Owner City,St,Zip:	Kingsport, TN 37664
Owner Telephone:	(423) 246-9705
Owner Description:	Private
Tank ID:	1
Tank Status:	**Permanently Out of Use**
Tank Capacity:	6000
Tank Contents:	Gasoline
Tank Material:	Cathodically Protected Steel
Tank 2ndary Trait:	None
Tank Manual Gauge:	False
Tank Tightness:	False
Tank Inventory Control:	False
Tank ATG:	False
Tank Vapor Monitor:	False
Tank Groundwater Monitor:	False
Tank Double Walled:	False
Tank 2nd Contained:	False
Tank SIR:	True
Overfill Installed:	True
Spill Installed:	True
Cathodic Protection:	True
Date Installed:	12/15/1986
Tank Leak Detection Listed:	False
Pipe Material:	Fiberglass Reinforced Plastic
Pipe Other Material:	None
Pipe Type:	Pressurized
Pipe Auto Line Leak Detect.:	True
Pipe Leak Detection Listed:	False
Pipe Vapor Monitor:	False
Pipe Groundwater Monitor:	False
Pipe Dbl Walled:	Not reported
Pipe 2nd Contained:	False
Pipe SIR:	True
Pipe Leak Detection Listed:	False
Tank ID:	3
Tank Status:	**Permanently Out of Use**

AMOCO SERVICE STATION (Continued) **U001311676**

Tank Capacity:	4000
Tank Contents:	Gasoline
Tank Material:	Cathodically Protected Steel
Tank 2ndary Trait:	None
Tank Manual Gauge:	False
Tank Tightness:	False
Tank Inventory Control:	False
Tank ATG:	False
Tank Vapor Monitor:	False
Tank Groundwater Monitor:	False
Tank Double Walled:	False
Tank 2nd Contained:	False
Tank SIR:	True
Overfill Installed:	True
Spill Installed:	True
Cathodic Protection:	True
Date Installed:	08/01/1987
Tank Leak Detection Listed:	False
Pipe Material:	Fiberglass Reinforced Plastic
Pipe Other Material:	None
Pipe Type:	Pressurized
Pipe Auto Line Leak Detect.:	True
Pipe Leak Detection Listed:	False
Pipe Vapor Monitor:	False
Pipe Groundwater Monitor:	False
Pipe Dbl Walled:	Not reported
Pipe 2nd Contained:	False
Pipe SIR:	True
Pipe Leak Detection Listed:	False

Tank ID:	2
Tank Status:	**Permanently Out of Use**
Tank Capacity:	4000
Tank Contents:	Gasoline
Tank Material:	Cathodically Protected Steel
Tank 2ndary Trait:	None
Tank Manual Gauge:	False
Tank Tightness:	False
Tank Inventory Control:	False
Tank ATG:	False
Tank Vapor Monitor:	False
Tank Groundwater Monitor:	False
Tank Double Walled:	False
Tank 2nd Contained:	False
Tank SIR:	True
Overfill Installed:	True
Spill Installed:	True
Cathodic Protection:	True
Date Installed:	12/15/1986
Tank Leak Detection Listed:	False
Pipe Material:	Fiberglass Reinforced Plastic
Pipe Other Material:	None
Pipe Type:	Pressurized
Pipe Auto Line Leak Detect.:	True
Pipe Leak Detection Listed:	False
Pipe Vapor Monitor:	False

AMOCO SERVICE STATION (Continued) **U001311676**

Pipe Groundwater Monitor: False
Pipe Dbl Walled: Not reported
Pipe 2nd Contained: False
Pipe SIR: True
Pipe Leak Detection Listed: False

B5 **EDR US Hist Auto Stat** **1015413027**
SW **3101 MEMORIAL BLVD** **N/A**
< 1/8 **KINGSPORT, TN 37664**
0.041 mi.
217 ft. **Site 3 of 4 in cluster B**

Relative:
Higher

Actual:
1306 ft.

EDR Historical Auto Stations:
Name: L & S CAR CARE
Year: 1999
Address: 3101 MEMORIAL BLVD

Name: L & S CAR CARE
Year: 2000
Address: 3101 MEMORIAL BLVD

B6 **AMOCO SERVICE STATION** **LUST TRUST** **S105488502**
SW **3101 MEMORIAL BLVD** **N/A**
< 1/8 **KINGSPORT, TN 37664**
0.041 mi.
217 ft. **Site 4 of 4 in cluster B**

Relative:
Higher

Actual:
1306 ft.

A7 **GARDEN BASKET CONV.STORE #4** **UST** **U004163488**
SE **3177 MEMORIAL BLVD.** **N/A**
< 1/8 **KINGSPORT, TN 37660**
0.046 mi.
244 ft. **Site 2 of 3 in cluster A**

Relative:
Higher

Actual:
1308 ft.

UST:
Facility ID: 1820144
Facility Description: Gas Station
Owner ID: 300104
Owner Name: Cherokee Oil Co., Inc
Owner Address: 930 Wilcox Court
Owner Address 2: Suite #130
Owner City,St,Zip: Kingsport, TN 37660
Owner Description: Commercial

Tank ID: 3
Tank Status: **Permanently Out of Use**
Compartment Capacity: 4000
Substance Description: Gasoline
Date Installed: 01/16/1985
Date Last Used: 05/01/1998
Date Closed: 05/20/1998
Regulated: Regulated
Compartment ID: A

GARDEN BASKET CONV.STORE #4 (Continued) **U004163488**

Tank Mat Desc:	Asphalt Coated or Bare Steel
Tank Mods Desc:	None
Tank Other Material:	Not reported
Tank Manual Gauge:	False
Tank Tightness:	False
Tank Inventory Control:	False
Tank ATG:	False
Tank Vapor Monitor:	False
Tank GW Monitor:	False
Tank Interstitial Dbl Walled:	False
Tank Interstitial Second Contain:	False
Tank SIR:	True
Tank LD Other:	False
Tank LD Deferred:	False
Tank LD Not Listed:	False
Tank Emergen:	False
Tank No Fee:	True
Pipe Mat Desc:	Galvanized Steel
Pipe Mod Desc:	Not reported
Pipe Other Material:	Not reported
Pipe Repaired:	False
Pipe Type Desc:	Not reported
Pipe Auto Line Leak Detection:	False
Pipe Line Tightness:	False
Pipe Vapor Monitoring:	False
Pipe GW Monitoring:	False
Pipe Interstitial Dbl Walled:	False
Pipe Interstitial Sec Contain:	False
Pipe SIR:	True
Pipe LD Other:	False
Pipe LD Deferred:	False
Pipe LD Not Listed:	False
LD Other Methods:	Not reported
Overfill Type:	Not reported
Overfill Installed:	False
Spill Installed:	False
CP Met:	False
Small Delivery:	False
Flex Piping Type:	Not reported
Year Flex Piping Installed:	Not reported

Tank ID:	1
Tank Status:	**Permanently Out of Use**
Compartment Capacity:	6000
Substance Description:	Gasoline
Date Installed:	01/16/1985
Date Last Used:	05/01/1998
Date Closed:	05/20/1998
Regulated:	Regulated
Compartment ID:	A
Tank Mat Desc:	Asphalt Coated or Bare Steel
Tank Mods Desc:	None
Tank Other Material:	Not reported
Tank Manual Gauge:	False
Tank Tightness:	False
Tank Inventory Control:	False

GARDEN BASKET CONV.STORE #4 (Continued) **U004163488**

Tank ATG:	False
Tank Vapor Monitor:	False
Tank GW Monitor:	False
Tank Interstitial Dbl Walled:	False
Tank Interstitial Second Contain:	False
Tank SIR:	True
Tank LD Other:	False
Tank LD Deferred:	False
Tank LD Not Listed:	False
Tank Emergen:	False
Tank No Fee:	True
Pipe Mat Desc:	Galvanized Steel
Pipe Mod Desc:	Not reported
Pipe Other Material:	Not reported
Pipe Repaired:	False
Pipe Type Desc:	Not reported
Pipe Auto Line Leak Detection:	False
Pipe Line Tightness:	False
Pipe Vapor Monitoring:	False
Pipe GW Monitoring:	False
Pipe Interstitial Dbl Walled:	False
Pipe Interstitial Sec Contain:	False
Pipe SIR:	True
Pipe LD Other:	False
Pipe LD Deferred:	False
Pipe LD Not Listed:	False
LD Other Methods:	Not reported
Overfill Type:	Not reported
Overfill Installed:	False
Spill Installed:	False
CP Met:	False
Small Delivery:	False
Flex Piping Type:	Not reported
Year Flex Piping Installed:	Not reported

Tank ID:	2
Tank Status:	**Permanently Out of Use**
Compartment Capacity:	6000
Substance Description:	Gasoline
Date Installed:	01/16/1985
Date Last Used:	05/01/1998
Date Closed:	05/20/1998
Regulated:	Regulated
Compartment ID:	A
Tank Mat Desc:	Asphalt Coated or Bare Steel
Tank Mods Desc:	None
Tank Other Material:	Not reported
Tank Manual Gauge:	False
Tank Tightness:	False
Tank Inventory Control:	False
Tank ATG:	False
Tank Vapor Monitor:	False
Tank GW Monitor:	False
Tank Interstitial Dbl Walled:	False
Tank Interstitial Second Contain:	False
Tank SIR:	True

GARDEN BASKET CONV.STORE #4 (Continued) **U004163488**

Tank LD Other:	False
Tank LD Deferred:	False
Tank LD Not Listed:	False
Tank Emergen:	False
Tank No Fee:	True
Pipe Mat Desc:	Galvanized Steel
Pipe Mod Desc:	Not reported
Pipe Other Material:	Not reported
Pipe Repaired:	False
Pipe Type Desc:	Not reported
Pipe Auto Line Leak Detection:	False
Pipe Line Tightness:	False
Pipe Vapor Monitoring:	False
Pipe GW Monitoring:	False
Pipe Interstitial Dbl Walled:	False
Pipe Interstitial Sec Contain:	False
Pipe SIR:	True
Pipe LD Other:	False
Pipe LD Deferred:	False
Pipe LD Not Listed:	False
LD Other Methods:	Not reported
Overfill Type:	Not reported
Overfill Installed:	False
Spill Installed:	False
CP Met:	False
Small Delivery:	False
Flex Piping Type:	Not reported
Year Flex Piping Installed:	Not reported

A8 **CHEROKEE FOOD STORE #4** **LUST TRUST** **S104780687**
SE **3177 MEMORIAL BLVD.** **N/A**
< 1/8 **KINGSPORT, TN 37660**
0.046 mi.
244 ft. **Site 3 of 3 in cluster A**

Relative:
Higher

Actual:
1308 ft.

LUST TRUST:

Facility Id:	1820144
Case Number:	1
Application Num:	00005
Tank Owner:	Not reported
Owner Id:	Not reported
Deductible:	10561.444
Applied Requested:	Not reported
Applied Not Eligible:	Not reported
Applied Net Pay:	Not reported
Applied Deductible:	Not reported
Applied Payment:	Not reported
Total Requested:	69007.94
Total Not Eligible:	549.55
Total Paid:	42245.76
Total Net Pay:	68458.39
Case Status:	**CLOSED**

C9
ESE
< 1/8
0.050 mi.
266 ft.

B & W CLEANERS
3200 MEMORIAL BLVD
KINGSPORT, TN

Site 1 of 4 in cluster C

DRYCLEANERS **S110118373**
N/A

Relative:
Higher

Actual:
1308 ft.

DRYCLEANERS:

Facility Id:	D-82-103
Serial Num:	2373
Receipt Num:	Not reported
Receipt Date:	Not reported
P/M Date:	Not reported
Light:	Not reported
Dense:	Not reported
2004 Aband Fees:	Not reported
Penalty:	Not reported
Penalty Paid:	Not reported
Mailing Address:	Not reported
Mailing City,St,Zip:	Not reported
2004 Comments:	Not reported
Year:	2009

Facility Id:	D-82-103
Serial Num:	2373
Receipt Num:	Not reported
Receipt Date:	Not reported
P/M Date:	Not reported
Light:	Not reported
Dense:	Not reported
2004 Aband Fees:	Not reported
Penalty:	Not reported
Penalty Paid:	Not reported
Mailing Address:	Not reported
Mailing City,St,Zip:	Not reported
2004 Comments:	Not reported
Year:	2010

Facility Id:	D-82-103
Serial Num:	2373
Receipt Num:	Not reported
Receipt Date:	Not reported
P/M Date:	Not reported
Light:	Not reported
Dense:	Not reported
2004 Aband Fees:	Not reported
Penalty:	Not reported
Penalty Paid:	Not reported
Mailing Address:	Not reported
Mailing City,St,Zip:	Not reported
2004 Comments:	Not reported
Year:	2010

Facility Id:	D-82-103
Serial Num:	2785
Receipt Num:	Not reported
Receipt Date:	Not reported
P/M Date:	Not reported
Light:	Not reported
Dense:	Not reported

B & W CLEANERS (Continued) **S110118373**

2004 Aband Fees:	Not reported
Penalty:	Not reported
Penalty Paid:	Not reported
Mailing Address:	Not reported
Mailing City,St,Zip:	Not reported
2004 Comments:	Not reported
Year:	2011

C10 **EDR US Hist Cleaners** **1015042512**
ESE **3200 MEMORIAL BLVD** **N/A**
< 1/8 **KINGSPORT, TN 37664**
0.050 mi.
266 ft. **Site 2 of 4 in cluster C**

Relative:
Higher

Actual:
1308 ft.

EDR Historical Cleaners:

Name:	B & W CLEANERS
Year:	1999
Address:	3200 MEMORIAL BLVD
Name:	B & W CLEANERS
Year:	2000
Address:	3200 MEMORIAL BLVD
Name:	B & W CLEANERS
Year:	2001
Address:	3200 MEMORIAL BLVD
Name:	B & W CLEANERS
Year:	2002
Address:	3200 MEMORIAL BLVD
Name:	HYATT CLEANERS
Year:	2003
Address:	3200 MEMORIAL BLVD
Name:	HYATT CLEANERS
Year:	2004
Address:	3200 MEMORIAL BLVD
Name:	B & W CLEANERS
Year:	2005
Address:	3200 MEMORIAL BLVD
Name:	B & W CLEANERS
Year:	2006
Address:	3200 MEMORIAL BLVD
Name:	B & W CLEANERS
Year:	2007
Address:	3200 MEMORIAL BLVD
Name:	B & W CLEANERS
Year:	2008
Address:	3200 MEMORIAL BLVD
Name:	B & W CLEANERS
Year:	2010
Address:	3200 MEMORIAL BLVD

(Continued) **1015042512**

Name: B & W CLEANERS
Year: 2011
Address: 3200 MEMORIAL BLVD

Name: B & W CLEANERS
Year: 2012
Address: 3200 MEMORIAL BLVD

C11 **B&W CLEANERS** **DRYCLEANERS** **S104585629**
ESE **3200 MEMORIAL BLVD.** **N/A**
< 1/8 **KINGSPORT, TN**
0.050 mi.
266 ft. **Site 3 of 4 in cluster C**

Relative:
Higher

Actual:
1308 ft.

DRYCLEANERS:

Facility Id:	D-82-103
Serial Num:	9647
Receipt Num:	0647
Receipt Date:	10/07/04
P/M Date:	10/04/04
Light:	Not reported
Dense:	0
2004 Aband Fees:	Not reported
Penalty:	Not reported
Penalty Paid:	Not reported
Mailing Address:	Not reported
Mailing City,St,Zip:	Not reported
2004 Comments:	Not reported
Year:	Not reported

Facility Id:	D-82-103
Serial Num:	1452
Receipt Num:	Not reported
Receipt Date:	Not reported
P/M Date:	Not reported
Light:	Not reported
Dense:	Not reported
2004 Aband Fees:	Not reported
Penalty:	Not reported
Penalty Paid:	Not reported
Mailing Address:	Not reported
Mailing City,St,Zip:	Not reported
2004 Comments:	Not reported
Year:	2007

Facility Id:	D-82-103
Serial Num:	9647
Receipt Num:	0647
Receipt Date:	10/07/04
P/M Date:	10/04/04
Light:	Not reported
Dense:	0
2004 Aband Fees:	Not reported
Penalty:	Not reported
Penalty Paid:	Not reported
Mailing Address:	Not reported
Mailing City,St,Zip:	Not reported
2004 Comments:	Not reported

B&W CLEANERS (Continued) **S104585629**

Year:	Not reported
Facility Id:	D-82-103
Serial Num:	9647
Receipt Num:	0647
Receipt Date:	10/07/04
P/M Date:	10/04/04
Light:	Not reported
Dense:	0
2004 Aband Fees:	Not reported
Penalty:	Not reported
Penalty Paid:	Not reported
Mailing Address:	Not reported
Mailing City,St,Zip:	Not reported
2004 Comments:	Not reported
Year:	Not reported
Facility Id:	D-82-103
Serial Num:	9647
Receipt Num:	0647
Receipt Date:	10/07/04
P/M Date:	10/04/04
Light:	Not reported
Dense:	0
2004 Aband Fees:	Not reported
Penalty:	Not reported
Penalty Paid:	Not reported
Mailing Address:	Not reported
Mailing City,St,Zip:	Not reported
2004 Comments:	Not reported
Year:	Not reported
Facility Id:	Not reported
Serial Num:	Not reported
Receipt Num:	Not reported
Receipt Date:	Not reported
P/M Date:	Not reported
Light:	Not reported
Dense:	Not reported
2004 Aband Fees:	Not reported
Penalty:	Not reported
Penalty Paid:	Not reported
Mailing Address:	Not reported
Mailing City,St,Zip:	Not reported
2004 Comments:	Not reported
Year:	2009
Facility Id:	D-82-103
Serial Num:	2215
Receipt Num:	Not reported
Receipt Date:	Not reported
P/M Date:	Not reported
Light:	Not reported
Dense:	Not reported
2004 Aband Fees:	Not reported
Penalty:	Not reported
Penalty Paid:	Not reported

B&W CLEANERS (Continued) **S104585629**

Mailing Address: Not reported
Mailing City,St,Zip: Not reported
2004 Comments: Not reported
Year: 2009

C12 **B & W CLEANERS** **RCRA NonGen / NLR** **1006931523**
ESE **3200 MEMORIAL BOULEVARD** **TNR000017160**
< 1/8 **KINGSPORT, TN 37660**
0.050 mi.
266 ft. **Site 4 of 4 in cluster C**

Relative:
Higher

Actual:
1308 ft.

RCRA NonGen / NLR:
Date form received by agency: 08/27/2003
Facility name: B & W CLEANERS
Facility address: 3200 MEMORIAL BOULEVARD
KINGSPORT, TN 37660
EPA ID: TNR000017160
Mailing address: MEMORIAL BOULEVARD
KINGSPORT, TN 37660
Contact: BOB HYATT
Contact address: MEMORIAL BOULEVARD
KINGSPORT, TN 37660
Contact country: US
Contact telephone: (423) 246-2441
Contact email: Not reported
EPA Region: 04
Land type: Private
Classification: Non-Generator
Description: Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:
Owner/operator name: BOB HYATT
Owner/operator address: Not reported
Not reported
Owner/operator country: US
Owner/operator telephone: (423) 246-2441
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

B & W CLEANERS (Continued) **1006931523**

Violation Status: No violations found

Evaluation Action Summary:
Evaluation date: 08/24/2009
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 08/27/2003
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

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13 **EDR US Hist Cleaners** **1015035887**
WNW **2921 E CENTER ST** **N/A**
< 1/8 **KINGSPORT, TN 37664**
0.072 mi.
382 ft.

Relative:
Higher

Actual:
1309 ft.

EDR Historical Cleaners:
Name: CLEAN & SAVE CLEANERS
Year: 1999
Address: 2921 E CENTER ST

Name: CLEAN & SAVE CLEANERS
Year: 2000
Address: 2921 E CENTER ST

Name: CLEAN & SAVE CLEANERS
Year: 2001
Address: 2921 E CENTER ST

Name: CLEAN & SAVE CLEANERS
Year: 2002
Address: 2921 E CENTER ST

Name: CLEAN & SAVE CLEANERS
Year: 2003
Address: 2921 E CENTER ST

Name: CLEAN & SAVE CLEANERS
Year: 2004
Address: 2921 E CENTER ST

D14 **EDR US Hist Auto Stat** **1015431045**
ENE **3310 MEMORIAL BLVD** **N/A**
1/8-1/4 **KINGSPORT, TN 37664**
0.163 mi.
861 ft. **Site 1 of 3 in cluster D**

Relative:
Higher

Actual:
1317 ft.

EDR Historical Auto Stations:
Name: KINGSPORT AUTO
Year: 1999
Address: 3310 MEMORIAL BLVD

(Continued) **1015431045**

Name: KINGSPORT AUTO
Year: 2000
Address: 3310 MEMORIAL BLVD

Name: BLUE RIDGE MOTOR WORKS
Year: 2002
Address: 3310 MEMORIAL BLVD

Name: BLUE RIDGE MOTOR WORKS
Year: 2003
Address: 3310 MEMORIAL BLVD

Name: BLUE RIDGE MOTOR WORKS
Year: 2004
Address: 3310 MEMORIAL BLVD

Name: BLUE RIDGE MOTOR WORKS
Year: 2006
Address: 3310 MEMORIAL BLVD

Name: BLUE RIDGE MOTOR WORKS
Year: 2007
Address: 3310 MEMORIAL BLVD

Name: BLUE RIDGE MOTOR WORKS
Year: 2008
Address: 3310 MEMORIAL BLVD

Name: BLUE RIDGE MOTOR WORKS
Year: 2010
Address: 3310 MEMORIAL BLVD

Name: BLUE RIDGE MOTOR WORKS
Year: 2011
Address: 3310 MEMORIAL BLVD

D15 **OLD SIMPSON MOTORS** **LUST U004163747**
ENE **3310 MEMORIAL BLVD.** **UST N/A**
1/8-1/4 **KINGSPORT, TN 37660**
0.165 mi.
872 ft. **Site 2 of 3 in cluster D**

Relative:
Higher

Actual:
1317 ft.

LUST:
Region: STATE
Region Number: 1
Facility Id: 1820587
Case Number: 1
Current Status: 1a Completed Tank Closure
Product Released: Not reported
Discovery Date: Not reported
How Discovered: Not reported
Cause: Not reported
Case Manager: SRB
Case Description: 2-10K G, 1-550gal WO
Section: FO
Priority: Not reported
Consultant ID: Not reported
Consultant Name: Not reported

OLD SIMPSON MOTORS (Continued) **U004163747**

Consultant Contact:	Not reported
Consultant Contact Title:	Not reported
Consultant Contact First Name:	Not reported
Consultant Contact Last Name:	Not reported
Consultant Contact Address2:	Not reported
Consultant City:	Not reported
Consultant State:	Not reported
Consultant Telephone:	Not reported
Owner ID:	15490
Owner Name:	W D HARLESS
Owner Contact:	Not reported
Owner Contact Title:	Not reported
Owner Contact First Name:	Not reported
Owner Contact Last Name:	Not reported
Owner Address:	1405 Rufus Road
Owner City:	Kingsport
Owner State:	TN
Owner Zip Code:	37660
Owner Telephone:	(423) 246-3876

UST:

Facility ID:	1820587
Facility Description:	Gas Station
Owner ID:	300937
Owner Name:	W D Harless
Owner Address:	1405 Rufus Road
Owner Address 2:	Not reported
Owner City,St,Zip:	Kingsport, TN 37660
Owner Description:	Private
Tank ID:	3
Tank Status:	**Permanently Out of Use**
Compartment Capacity:	550
Substance Description:	Used Oil
Date Installed:	01/02/1900
Date Last Used:	09/01/1980
Date Closed:	10/19/1995
Regulated:	Regulated
Compartment ID:	A
Tank Mat Desc:	Asphalt Coated or Bare Steel
Tank Mods Desc:	None
Tank Other Material:	Not reported
Tank Manual Gauge:	False
Tank Tightness:	False
Tank Inventory Control:	False
Tank ATG:	False
Tank Vapor Monitor:	False
Tank GW Monitor:	False
Tank Interstitial Dbl Walled:	False
Tank Interstitial Second Contain:	False
Tank SIR:	False
Tank LD Other:	False
Tank LD Deferred:	False
Tank LD Not Listed:	True
Tank Emergen:	False
Tank No Fee:	True
Pipe Mat Desc:	Galvanized Steel

OLD SIMPSON MOTORS (Continued) **U004163747**

Pipe Mod Desc:	Not reported
Pipe Other Material:	Not reported
Pipe Repaired:	False
Pipe Type Desc:	Not reported
Pipe Auto Line Leak Detection:	False
Pipe Line Tightness:	False
Pipe Vapor Monitoring:	False
Pipe GW Monitoring:	False
Pipe Interstitial Dbl Walled:	False
Pipe Interstitial Sec Contain:	False
Pipe SIR:	False
Pipe LD Other:	False
Pipe LD Deferred:	False
Pipe LD Not Listed:	False
LD Other Methods:	Not reported
Overfill Type:	Not reported
Overfill Installed:	False
Spill Installed:	False
CP Met:	False
Small Delivery:	False
Flex Piping Type:	Not reported
Year Flex Piping Installed:	Not reported

Tank ID:	1
Tank Status:	**Permanently Out of Use**
Compartment Capacity:	10000
Substance Description:	Gasoline
Date Installed:	01/02/1900
Date Last Used:	09/01/1980
Date Closed:	10/23/1995
Regulated:	Regulated
Compartment ID:	A
Tank Mat Desc:	Asphalt Coated or Bare Steel
Tank Mods Desc:	None
Tank Other Material:	Not reported
Tank Manual Gauge:	False
Tank Tightness:	False
Tank Inventory Control:	False
Tank ATG:	False
Tank Vapor Monitor:	False
Tank GW Monitor:	False
Tank Interstitial Dbl Walled:	False
Tank Interstitial Second Contain:	False
Tank SIR:	False
Tank LD Other:	False
Tank LD Deferred:	False
Tank LD Not Listed:	True
Tank Emergen:	False
Tank No Fee:	True
Pipe Mat Desc:	Galvanized Steel
Pipe Mod Desc:	Not reported
Pipe Other Material:	Not reported
Pipe Repaired:	False
Pipe Type Desc:	Not reported
Pipe Auto Line Leak Detection:	False
Pipe Line Tightness:	False

OLD SIMPSON MOTORS (Continued) **U004163747**

Pipe Vapor Monitoring:	False
Pipe GW Monitoring:	False
Pipe Interstitial Dbl Walled:	False
Pipe Interstitial Sec Contain:	False
Pipe SIR:	False
Pipe LD Other:	False
Pipe LD Deferred:	False
Pipe LD Not Listed:	False
LD Other Methods:	Not reported
Overfill Type:	Not reported
Overfill Installed:	False
Spill Installed:	False
CP Met:	False
Small Delivery:	False
Flex Piping Type:	Not reported
Year Flex Piping Installed:	Not reported

Tank ID:	2
Tank Status:	**Permanently Out of Use**
Compartment Capacity:	10000
Substance Description:	Gasoline
Date Installed:	01/02/1900
Date Last Used:	09/01/1980
Date Closed:	10/23/1995
Regulated:	Regulated
Compartment ID:	A
Tank Mat Desc:	Asphalt Coated or Bare Steel
Tank Mods Desc:	None
Tank Other Material:	Not reported
Tank Manual Gauge:	False
Tank Tightness:	False
Tank Inventory Control:	False
Tank ATG:	False
Tank Vapor Monitor:	False
Tank GW Monitor:	False
Tank Interstitial Dbl Walled:	False
Tank Interstitial Second Contain:	False
Tank SIR:	False
Tank LD Other:	False
Tank LD Deferred:	False
Tank LD Not Listed:	True
Tank Emergen:	False
Tank No Fee:	True
Pipe Mat Desc:	Galvanized Steel
Pipe Mod Desc:	Not reported
Pipe Other Material:	Not reported
Pipe Repaired:	False
Pipe Type Desc:	Not reported
Pipe Auto Line Leak Detection:	False
Pipe Line Tightness:	False
Pipe Vapor Monitoring:	False
Pipe GW Monitoring:	False
Pipe Interstitial Dbl Walled:	False
Pipe Interstitial Sec Contain:	False
Pipe SIR:	False
Pipe LD Other:	False

OLD SIMPSON MOTORS (Continued) **U004163747**

Pipe LD Deferred:	False
Pipe LD Not Listed:	False
LD Other Methods:	Not reported
Overfill Type:	Not reported
Overfill Installed:	False
Spill Installed:	False
CP Met:	False
Small Delivery:	False
Flex Piping Type:	Not reported
Year Flex Piping Installed:	Not reported

D16 **OLD SIMPSON MOTORS** **HIST UST** **U003609588**
ENE **3310 MEMORIAL BLVD.** **N/A**
1/8-1/4 **KINGSPORT, TN 37660**
0.165 mi.
872 ft. **Site 3 of 3 in cluster D**

Relative:
Higher

Actual:
1317 ft.

HIST UST:

Facility ID:	1-820587
Facility Description:	Gas Station
Owner ID:	15490
Owner Name:	W D HARLESS
Owner Address:	1405 Rufus Road
Owner City,St,Zip:	Kingsport, TN 37660
Owner Telephone:	(423) 246-3876
Owner Description:	Commercial
Tank ID:	2
Tank Status:	**Permanently Out of Use**
Tank Capacity:	10000
Tank Contents:	Gasoline
Tank Material:	Asphalt Coated or Bare Steel
Tank 2ndary Trait:	None
Tank Manual Gauge:	False
Tank Tightness:	False
Tank Inventory Control:	False
Tank ATG:	False
Tank Vapor Monitor:	False
Tank Groundwater Monitor:	False
Tank Double Walled:	False
Tank 2nd Contained:	False
Tank SIR:	False
Overfill Installed:	False
Spill Installed:	False
Cathodic Protection:	False
Date Installed:	/ /
Tank Leak Detection Listed:	True
Pipe Material:	Galvanized Steel
Pipe Other Material:	None
Pipe Type:	U.S. Suction
Pipe Auto Line Leak Detect.:	False
Pipe Leak Detection Listed:	False
Pipe Vapor Monitor:	False
Pipe Groundwater Monitor:	False
Pipe Dbl Walled:	Not reported
Pipe 2nd Contained:	False
Pipe SIR:	False
Pipe Leak Detection Listed:	True

OLD SIMPSON MOTORS (Continued) **U003609588**

Tank ID:	1
Tank Status:	**Permanently Out of Use**
Tank Capacity:	10000
Tank Contents:	Gasoline
Tank Material:	Asphalt Coated or Bare Steel
Tank 2ndary Trait:	None
Tank Manual Gauge:	False
Tank Tightness:	False
Tank Inventory Control:	False
Tank ATG:	False
Tank Vapor Monitor:	False
Tank Groundwater Monitor:	False
Tank Double Walled:	False
Tank 2nd Contained:	False
Tank SIR:	False
Overfill Installed:	False
Spill Installed:	False
Cathodic Protection:	False
Date Installed:	/ /
Tank Leak Detection Listed:	True
Pipe Material:	Galvanized Steel
Pipe Other Material:	None
Pipe Type:	U.S. Suction
Pipe Auto Line Leak Detect.:	False
Pipe Leak Detection Listed:	False
Pipe Vapor Monitor:	False
Pipe Groundwater Monitor:	False
Pipe Dbl Walled:	Not reported
Pipe 2nd Contained:	False
Pipe SIR:	False
Pipe Leak Detection Listed:	True

Tank ID:	3
Tank Status:	**Permanently Out of Use**
Tank Capacity:	550
Tank Contents:	Used Oil
Tank Material:	Asphalt Coated or Bare Steel
Tank 2ndary Trait:	None
Tank Manual Gauge:	False
Tank Tightness:	False
Tank Inventory Control:	False
Tank ATG:	False
Tank Vapor Monitor:	False
Tank Groundwater Monitor:	False
Tank Double Walled:	False
Tank 2nd Contained:	False
Tank SIR:	False
Overfill Installed:	False
Spill Installed:	False
Cathodic Protection:	False
Date Installed:	/ /
Tank Leak Detection Listed:	True
Pipe Material:	Galvanized Steel
Pipe Other Material:	None
Pipe Type:	U.S. Suction
Pipe Auto Line Leak Detect.:	False

OLD SIMPSON MOTORS (Continued) **U003609588**

Pipe Leak Detection Listed: False
Pipe Vapor Monitor: False
Pipe Groundwater Monitor: False
Pipe Dbl Walled: Not reported
Pipe 2nd Contained: False
Pipe SIR: False
Pipe Leak Detection Listed: True

---

17 **EDR US Hist Auto Stat** **1015358342**
West **2441 MEMORIAL BLVD** **N/A**
1/8-1/4 **KINGSPORT, TN 37664**
0.183 mi.
967 ft.

Relative:
Higher

Actual:
1320 ft.

EDR Historical Auto Stations:

Name: GERMAN MOTORS
Year: 1999
Address: 2441 MEMORIAL BLVD

Name: GERMAN MOTORS
Year: 2000
Address: 2441 MEMORIAL BLVD

Name: KONNAROCK TIRE CO
Year: 2007
Address: 2441 MEMORIAL BLVD

E18 **SEARS ROEBUCK AND CO. # 2825** **LUST** **U004163587**
WSW **2101 FT. HENRY DRIVE** **UST** **N/A**
1/4-1/2 **KINGSPORT, TN 37660**
0.452 mi.
2385 ft. **Site 1 of 2 in cluster E**

Relative:
Higher

Actual:
1310 ft.

LUST:

Region: STATE
Region Number: 1
Facility Id: 1820314
Case Number: 1
Current Status: 1a Completed Tank Closure
Product Released: Not reported
Discovery Date: Not reported
How Discovered: Not reported
Cause: Not reported
Case Manager: JLH
Case Description: 1-0.56K WO
Section: FO
Priority: Not reported
Consultant ID: Not reported
Consultant Name: Not reported
Consultant Contact: Not reported
Consultant Contact Title: Not reported
Consultant Contact First Name: Not reported
Consultant Contact Last Name: Not reported
Consultant Contact Address2: Not reported
Consultant City: Not reported
Consultant State: Not reported

SEARS ROEBUCK AND CO. # 2825 (Continued) **U004163587**

Consultant Telephone:	Not reported
Owner ID:	8185
Owner Name:	FORT HENRY MALL MGT. OFFICE
Owner Contact:	Not reported
Owner Contact Title:	Not reported
Owner Contact First Name:	Not reported
Owner Contact Last Name:	Not reported
Owner Address:	2101 Forth Henry Drive
Owner City:	Kingsport
Owner State:	TN
Owner Zip Code:	37664
Owner Telephone:	(423) 246-3871

UST:

Facility ID:	1820314
Facility Description:	Not Listed
Owner ID:	300886
Owner Name:	Fort Henry Mall Mgt. Office
Owner Address:	2101 Forth Henry Drive
Owner Address 2:	Not reported
Owner City,St,Zip:	Kingsport, TN 37664
Owner Description:	Private
Tank ID:	1
Tank Status:	**Permanently Out of Use**
Compartment Capacity:	560
Substance Description:	Used Oil
Date Installed:	05/05/1976
Date Last Used:	12/06/1993
Date Closed:	09/24/1994
Regulated:	Regulated
Compartment ID:	A
Tank Mat Desc:	Asphalt Coated or Bare Steel
Tank Mods Desc:	None
Tank Other Material:	Not reported
Tank Manual Gauge:	False
Tank Tightness:	False
Tank Inventory Control:	False
Tank ATG:	False
Tank Vapor Monitor:	False
Tank GW Monitor:	False
Tank Interstitial Dbl Walled:	False
Tank Interstitial Second Contain:	False
Tank SIR:	False
Tank LD Other:	False
Tank LD Deferred:	False
Tank LD Not Listed:	True
Tank Emergen:	False
Tank No Fee:	True
Pipe Mat Desc:	Galvanized Steel
Pipe Mod Desc:	Not reported
Pipe Other Material:	Not reported
Pipe Repaired:	False
Pipe Type Desc:	Not reported
Pipe Auto Line Leak Detection:	False
Pipe Line Tightness:	False
Pipe Vapor Monitoring:	False

SEARS ROEBUCK AND CO. # 2825 (Continued) **U004163587**

Pipe GW Monitoring:	False
Pipe Interstitial Dbl Walled:	False
Pipe Interstitial Sec Contain:	False
Pipe SIR:	False
Pipe LD Other:	False
Pipe LD Deferred:	False
Pipe LD Not Listed:	False
LD Other Methods:	Not reported
Overfill Type:	Not reported
Overfill Installed:	False
Spill Installed:	False
CP Met:	False
Small Delivery:	False
Flex Piping Type:	Not reported
Year Flex Piping Installed:	Not reported

E19 **J C PENNEY** **LUST U004163507**
WSW **2101 FORT HENRY DRIVE** **UST N/A**
1/4-1/2 **KINGSPORT, TN 37660**
0.452 mi.
2385 ft. **Site 2 of 2 in cluster E**

Relative:
Higher

Actual:
1310 ft.

LUST:

Region:	STATE
Region Number:	1
Facility Id:	1820180
Case Number:	1
Current Status:	1a Completed Tank Closure
Product Released:	Not reported
Discovery Date:	Not reported
How Discovered:	Not reported
Cause:	Not reported
Case Manager:	SRB
Case Description:	1-550 gal WO
Section:	FO
Priority:	Not reported
Consultant ID:	Not reported
Consultant Name:	Not reported
Consultant Contact:	Not reported
Consultant Contact Title:	Not reported
Consultant Contact First Name:	Not reported
Consultant Contact Last Name:	Not reported
Consultant Contact Address2:	Not reported
Consultant City:	Not reported
Consultant State:	Not reported
Consultant Telephone:	Not reported
Owner ID:	3970
Owner Name:	HAHN PROP MGNT CORP
Owner Contact:	Not reported
Owner Contact Title:	Not reported
Owner Contact First Name:	Not reported
Owner Contact Last Name:	Not reported
Owner Address:	4350 Lajolla Village
Owner City:	San Diego
Owner State:	CA
Owner Zip Code:	92122
Owner Telephone:	(619) 569-4949

J C PENNEY (Continued) **U004163507**

UST:

Facility ID:	1820180
Facility Description:	Not Listed
Owner ID:	300693
Owner Name:	Hahn Prop Mgnt Corp
Owner Address:	4350 Lajolla Village
Owner Address 2:	Not reported
Owner City,St,Zip:	San Diego, CA 92122
Owner Description:	Commercial
Tank ID:	2
Tank Status:	**Permanently Out of Use**
Compartment Capacity:	550
Substance Description:	Used Oil
Date Installed:	07/01/1977
Date Last Used:	07/01/1983
Date Closed:	01/25/1993
Regulated:	Regulated
Compartment ID:	A
Tank Mat Desc:	Asphalt Coated or Bare Steel
Tank Mods Desc:	None
Tank Other Material:	Not reported
Tank Manual Gauge:	False
Tank Tightness:	False
Tank Inventory Control:	False
Tank ATG:	False
Tank Vapor Monitor:	False
Tank GW Monitor:	False
Tank Interstitial Dbl Walled:	False
Tank Interstitial Second Contain:	False
Tank SIR:	False
Tank LD Other:	False
Tank LD Deferred:	False
Tank LD Not Listed:	True
Tank Emergen:	False
Tank No Fee:	True
Pipe Mat Desc:	Bare Steel
Pipe Mod Desc:	Not reported
Pipe Other Material:	Not reported
Pipe Repaired:	False
Pipe Type Desc:	Not reported
Pipe Auto Line Leak Detection:	False
Pipe Line Tightness:	False
Pipe Vapor Monitoring:	False
Pipe GW Monitoring:	False
Pipe Interstitial Dbl Walled:	False
Pipe Interstitial Sec Contain:	False
Pipe SIR:	False
Pipe LD Other:	False
Pipe LD Deferred:	False
Pipe LD Not Listed:	False
LD Other Methods:	Not reported
Overfill Type:	Not reported
Overfill Installed:	False
Spill Installed:	False
CP Met:	False
Small Delivery:	False

J C PENNEY (Continued) **U004163507**

Flex Piping Type:	Not reported
Year Flex Piping Installed:	Not reported

Tank ID:	1
Tank Status:	**Permanently Out of Use**
Compartment Capacity:	8000
Substance Description:	Diesel
Date Installed:	05/07/1977
Date Last Used:	07/01/1983
Date Closed:	01/25/1993
Regulated:	Regulated
Compartment ID:	A
Tank Mat Desc:	Unknown
Tank Mods Desc:	None
Tank Other Material:	Not reported
Tank Manual Gauge:	False
Tank Tightness:	False
Tank Inventory Control:	False
Tank ATG:	False
Tank Vapor Monitor:	False
Tank GW Monitor:	False
Tank Interstitial Dbl Walled:	False
Tank Interstitial Second Contain:	False
Tank SIR:	False
Tank LD Other:	False
Tank LD Deferred:	False
Tank LD Not Listed:	True
Tank Emergen:	False
Tank No Fee:	True
Pipe Mat Desc:	Unknown
Pipe Mod Desc:	Not reported
Pipe Other Material:	Not reported
Pipe Repaired:	False
Pipe Type Desc:	Not reported
Pipe Auto Line Leak Detection:	False
Pipe Line Tightness:	False
Pipe Vapor Monitoring:	False
Pipe GW Monitoring:	False
Pipe Interstitial Dbl Walled:	False
Pipe Interstitial Sec Contain:	False
Pipe SIR:	False
Pipe LD Other:	False
Pipe LD Deferred:	False
Pipe LD Not Listed:	False
LD Other Methods:	Not reported
Overfill Type:	Not reported
Overfill Installed:	False
Spill Installed:	False
CP Met:	False
Small Delivery:	False
Flex Piping Type:	Not reported
Year Flex Piping Installed:	Not reported

20
East
1/4-1/2
0.461 mi.
2436 ft.

REGENCY-TENN- DBA HILLSIDE MANOR
3641 MEMORIAL BLVD
KINGSPORT, TN 37664

LUST **S103808321**
N/A

Relative:
Higher

Actual:
1369 ft.

LUST:

Region:	STATE
Region Number:	1
Facility Id:	1820516
Case Number:	1
Current Status:	8 Case Closed
Product Released:	Not reported
Discovery Date:	12/22/1998
How Discovered:	1 At Closure
Cause:	7 Unknown
Case Manager:	MPB
Case Description:	2-0.25K D (emergency generator)
Section:	FO
Priority:	Low
Consultant ID:	c0254-a
Consultant Name:	SPATCO Environmental, Inc.
Consultant Contact:	James Bruce
Consultant Contact Title:	Not reported
Consultant Contact First Name:	Not reported
Consultant Contact Last Name:	Not reported
Consultant Contact Address2:	Not reported
Consultant City:	Knoxville
Consultant State:	TN
Consultant Telephone:	423-588-7004
Owner ID:	15849
Owner Name:	KHC LIMITED PARTNERSHIP : LESSOR
Owner Contact:	Not reported
Owner Contact Title:	Not reported
Owner Contact First Name:	Not reported
Owner Contact Last Name:	Not reported
Owner Address:	3641 MEMORIAL BLVD
Owner City:	Kingsport
Owner State:	TN
Owner Zip Code:	37664
Owner Telephone:	(901) 767-2220

Count: 22 records. ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
KINGSPORT	1000298967	BAUMGARDNER CO	RT#1 BROOKSIDE ROAD	37660	FINDS,RCRA-NLR
KINGSPORT	S103283384	LAKESHORE PROPERTIES	HWY 11W	37660	LUST
BLOUNTVILLE	S103283400	SULLIVAN CO SHERIFF DEPT.	HWY 37 BYPASS	37660	LUST
KINGSPORT	S105694792	CHEROKEE FOOD STORE #11	1428 ROCK SPGS RD. HWY I-181	37660	LUST
KINGSPORT	S106131419	WOODLAND HEIGHTS	RR 19 HWY 36	37660	LUST
KINGSPORT	U003608859	TENNESSEE DIV OF FORESTRY	US HIGHWAY 23 SOUTHEAST OF KIN	37660	HIST UST
KINGSPORT	U003609301	BARTLETT TREE EXPERTS	HIGHWAY 11 WEST	37660	HIST UST
KINGSPORT	U003609385	KINGSPORT #525	HIGHWAY 11 WEST	37660	HIST UST
KINGSPORT	U003609399	LUCKY 7	HIGHWAY 23	37660	HIST UST
KINGSPORT	U003609432	RIGGS BROTHERS CONSTRUCTION CO	1010 JOHN B DENNIS HIGHWAY	37664	HIST UST
KINGSPORT	U003609483	WOODLAND HEIGHTS	RR 19 HIGHWAY 36	37660	HIST UST
KINGSPORT	U003609508	SULLIVAN CO SHERIFF DEPT.	HIGHWAY 37 BY-PASS	37660	HIST UST
KINGSPORT	U003610534	VIC'S GAS AND GO	HIGHWAY 11 EAST	37660	HIST UST
KINGSPORT	U004162881	TENNESSEE DIV OF FORESTRY	US HIGHWAY 23 SOUTHEAST OF KIN	37660	LUST,UST
KINGSPORT	U004163417	BARTLETT TREE EXPERTS	HIGHWAY 11 WEST	37660	UST
KINGSPORT	U004163519	KINGSPORT #525	HIGHWAY 11 WEST	37660	UST
KINGSPORT	U004163533	LUCKY 7	HIGHWAY 23	37660	UST
KINGSPORT	U004163571	RIGGS BROTHERS CONSTRUCTION CO	1010 JOHN B DENNIS HIGHWAY	37664	LUST,UST
KINGSPORT	U004163663	SULLIVAN CO SHERIFF DEPT.	HIGHWAY 37 BY-PASS	37660	UST
KINGSPORT	U004163715	B MART	4990 HIGHWAY 11 WEST	37660	UST
KINGSPORT	U004164874	VIC'S GAS AND GO	HIGHWAY 11 EAST	37660	UST
KINGSPORT	U004183954	WOODLAND HEIGHTS	RR 19 HIGHWAY 36	37660	UST

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

Number of Days to Update: Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL: National Priority List

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 04/26/2013
Date Data Arrived at EDR: 05/09/2013
Date Made Active in Reports: 07/10/2013
Number of Days to Update: 62

Source: EPA
Telephone: N/A
Last EDR Contact: 10/11/2013
Next Scheduled EDR Contact: 01/20/2014
Data Release Frequency: Quarterly

NPL Site Boundaries

Sources:

EPA's Environmental Photographic Interpretation Center (EPIC)
Telephone: 202-564-7333

EPA Region 1
Telephone 617-918-1143

EPA Region 6
Telephone: 214-655-6659

EPA Region 3
Telephone 215-814-5418

EPA Region 7
Telephone: 913-551-7247

EPA Region 4
Telephone 404-562-8033

EPA Region 8
Telephone: 303-312-6774

EPA Region 5
Telephone 312-886-6686

EPA Region 9
Telephone: 415-947-4246

EPA Region 10
Telephone 206-553-8665

Proposed NPL: Proposed National Priority List Sites

A site that has been proposed for listing on the National Priorities List through the issuance of a proposed rule in the Federal Register. EPA then accepts public comments on the site, responds to the comments, and places on the NPL those sites that continue to meet the requirements for listing.

Date of Government Version: 04/26/2013
Date Data Arrived at EDR: 05/09/2013
Date Made Active in Reports: 07/10/2013
Number of Days to Update: 62

Source: EPA
Telephone: N/A
Last EDR Contact: 10/11/2013
Next Scheduled EDR Contact: 01/20/2014
Data Release Frequency: Quarterly

NPL LIENS: Federal Superfund Liens

Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Date of Government Version: 10/15/1991
Date Data Arrived at EDR: 02/02/1994
Date Made Active in Reports: 03/30/1994
Number of Days to Update: 56

Source: EPA
Telephone: 202-564-4267
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Federal Delisted NPL site list

DELISTED NPL: National Priority List Deletions

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 04/26/2013
Date Data Arrived at EDR: 05/09/2013
Date Made Active in Reports: 07/10/2013
Number of Days to Update: 62

Source: EPA
Telephone: N/A
Last EDR Contact: 10/11/2013
Next Scheduled EDR Contact: 01/20/2014
Data Release Frequency: Quarterly

Federal CERCLIS list

CERCLIS: Comprehensive Environmental Response, Compensation, and Liability Information System

CERCLIS contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). CERCLIS contains sites which are either proposed to or on the National Priorities List (NPL) and sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 04/26/2013
Date Data Arrived at EDR: 05/29/2013
Date Made Active in Reports: 08/09/2013
Number of Days to Update: 72

Source: EPA
Telephone: 703-412-9810
Last EDR Contact: 10/18/2013
Next Scheduled EDR Contact: 12/09/2013
Data Release Frequency: Quarterly

FEDERAL FACILITY: Federal Facility Site Information listing

A listing of National Priority List (NPL) and Base Realignment and Closure (BRAC) sites found in the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) Database where EPA Federal Facilities Restoration and Reuse Office is involved in cleanup activities.

Date of Government Version: 07/31/2012
Date Data Arrived at EDR: 10/09/2012
Date Made Active in Reports: 12/20/2012
Number of Days to Update: 72

Source: Environmental Protection Agency
Telephone: 703-603-8704
Last EDR Contact: 10/11/2013
Next Scheduled EDR Contact: 01/20/2014
Data Release Frequency: Varies

Federal CERCLIS NFRAP site List

CERCLIS-NFRAP: CERCLIS No Further Remedial Action Planned

Archived sites are sites that have been removed and archived from the inventory of CERCLIS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list this site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. This decision does not necessarily mean that there is no hazard associated with a given site; it only means that, based upon available information, the location is not judged to be a potential NPL site.

Date of Government Version: 04/26/2013
Date Data Arrived at EDR: 05/29/2013
Date Made Active in Reports: 08/09/2013
Number of Days to Update: 72

Source: EPA
Telephone: 703-412-9810
Last EDR Contact: 10/18/2013
Next Scheduled EDR Contact: 12/09/2013
Data Release Frequency: Quarterly

Federal RCRA CORRACTS facilities list

CORRACTS: Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 07/11/2013
Date Data Arrived at EDR: 08/08/2013
Date Made Active in Reports: 09/13/2013
Number of Days to Update: 36

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 10/02/2013
Next Scheduled EDR Contact: 01/13/2014
Data Release Frequency: Quarterly

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF: RCRA - Treatment, Storage and Disposal

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 07/11/2013
Date Data Arrived at EDR: 08/08/2013
Date Made Active in Reports: 09/13/2013
Number of Days to Update: 36

Source: Environmental Protection Agency
Telephone: (404) 562-8651
Last EDR Contact: 10/02/2013
Next Scheduled EDR Contact: 01/13/2014
Data Release Frequency: Quarterly

Federal RCRA generators list

RCRA-LQG: RCRA - Large Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

Date of Government Version: 07/11/2013
Date Data Arrived at EDR: 08/08/2013
Date Made Active in Reports: 09/13/2013
Number of Days to Update: 36

Source: Environmental Protection Agency
Telephone: (404) 562-8651
Last EDR Contact: 10/02/2013
Next Scheduled EDR Contact: 01/13/2014
Data Release Frequency: Quarterly

RCRA-SQG: RCRA - Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

Date of Government Version: 07/11/2013
Date Data Arrived at EDR: 08/08/2013
Date Made Active in Reports: 09/13/2013
Number of Days to Update: 36

Source: Environmental Protection Agency
Telephone: (404) 562-8651
Last EDR Contact: 10/02/2013
Next Scheduled EDR Contact: 01/13/2014
Data Release Frequency: Quarterly

RCRA-CESQG: RCRA - Conditionally Exempt Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Conditionally exempt small quantity generators (CESQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Date of Government Version: 07/11/2013
Date Data Arrived at EDR: 08/08/2013
Date Made Active in Reports: 09/13/2013
Number of Days to Update: 36

Source: Environmental Protection Agency
Telephone: (404) 562-8651
Last EDR Contact: 10/02/2013
Next Scheduled EDR Contact: 01/13/2014
Data Release Frequency: Varies

Federal institutional controls / engineering controls registries

US ENG CONTROLS: Engineering Controls Sites List

A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 06/17/2013
Date Data Arrived at EDR: 06/21/2013
Date Made Active in Reports: 10/03/2013
Number of Days to Update: 104

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 09/10/2013
Next Scheduled EDR Contact: 12/23/2013
Data Release Frequency: Varies

US INST CONTROL: Sites with Institutional Controls

A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 06/17/2013
Date Data Arrived at EDR: 06/21/2013
Date Made Active in Reports: 10/03/2013
Number of Days to Update: 104

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 09/10/2013
Next Scheduled EDR Contact: 12/23/2013
Data Release Frequency: Varies

LUCIS: Land Use Control Information System

LUCIS contains records of land use control information pertaining to the former Navy Base Realignment and Closure properties.

Date of Government Version: 12/09/2005
Date Data Arrived at EDR: 12/11/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 31

Source: Department of the Navy
Telephone: 843-820-7326
Last EDR Contact: 08/15/2013
Next Scheduled EDR Contact: 09/02/2013
Data Release Frequency: Varies

Federal ERNS list

ERNS: Emergency Response Notification System

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 12/31/2012
Date Data Arrived at EDR: 01/17/2013
Date Made Active in Reports: 02/15/2013
Number of Days to Update: 29

Source: National Response Center, United States Coast Guard
Telephone: 202-267-2180
Last EDR Contact: 10/01/2013
Next Scheduled EDR Contact: 01/13/2014
Data Release Frequency: Annually

State- and tribal - equivalent NPL

SHWS: Promulgated Sites

"Inactive hazardous substance sites that constitute an imminent, substantial danger" is an inactive hazardous substance site where there is a threat of danger to the public health, safety, or environment which is both real and presently existing. Such situations may include, but are not limited to one or more of the following: an immediate action is necessary to minimize an ongoing threat to the public health or pollution of the environment, an inactive hazardous substance site where there is an active release, where direct access to the hazardous substance is not controlled, or where incompatible hazardous substances are found in close proximity. Also known as Promulgated Sites List.

Date of Government Version: 08/07/2012
Date Data Arrived at EDR: 01/09/2013
Date Made Active in Reports: 02/06/2013
Number of Days to Update: 28

Source: Department of Environment & Conservation
Telephone: 615-532-0900
Last EDR Contact: 10/07/2013
Next Scheduled EDR Contact: 01/20/2014
Data Release Frequency: Semi-Annually

State and tribal landfill and/or solid waste disposal site lists

SWF/LF: Solid Waste Disposal Facilities

Solid Waste Facilities/Landfill Sites. SWF/LF type records typically contain an inventory of solid waste disposal facilities or landfills in a particular state. Depending on the state, these may be active or inactive facilities or open dumps that failed to meet RCRA Subtitle D Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 08/05/2013
Date Data Arrived at EDR: 08/07/2013
Date Made Active in Reports: 09/30/2013
Number of Days to Update: 54

Source: Department of Environment and Conservation
Telephone: 615-532-0804
Last EDR Contact: 09/19/2013
Next Scheduled EDR Contact: 12/30/2013
Data Release Frequency: Annually

State and tribal leaking storage tank lists

LUST: Fund Eligible Leaking Underground Storage Tank Sites

A listing of leaking underground storage tank site locations.

Date of Government Version: 07/02/2013
Date Data Arrived at EDR: 08/22/2013
Date Made Active in Reports: 09/19/2013
Number of Days to Update: 28

Source: Department of Environment and Conservation
Telephone: 615-532-0945
Last EDR Contact: 08/22/2013
Next Scheduled EDR Contact: 12/02/2013
Data Release Frequency: Quarterly

LUST TRUST: LUST TRUST Fund Database

This list contains information on sites that had accidental releases of petroleum and are eligible for reimbursement from the TN Petroleum UST Fund.

Date of Government Version: 01/03/2013
Date Data Arrived at EDR: 02/21/2013
Date Made Active in Reports: 04/15/2013
Number of Days to Update: 53

Source: Department of Environment & Conservation
Telephone: 615-532-0971
Last EDR Contact: 08/22/2013
Next Scheduled EDR Contact: 12/02/2013
Data Release Frequency: Varies

HIST_LUST CO: Leaking Underground Storage Tanks Sites

A listing of leaking underground storage tank site locations from the Columbia Field Office. The listing is no longer updated.

Date of Government Version: 10/18/1994
Date Data Arrived at EDR: 10/24/1994
Date Made Active in Reports: 12/30/1994
Number of Days to Update: 67

Source: Department of Environmental Conservation, Columbia Field Office
Telephone: 931-380-3371
Last EDR Contact: 06/29/2009
Next Scheduled EDR Contact: 09/28/2009
Data Release Frequency: No Update Planned

INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 02/05/2013
Date Data Arrived at EDR: 02/06/2013
Date Made Active in Reports: 04/12/2013
Number of Days to Update: 65

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 10/28/2013
Next Scheduled EDR Contact: 02/11/2014
Data Release Frequency: Quarterly

INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.

Date of Government Version: 08/27/2012
Date Data Arrived at EDR: 08/28/2012
Date Made Active in Reports: 10/16/2012
Number of Days to Update: 49

Source: EPA Region 8
Telephone: 303-312-6271
Last EDR Contact: 10/28/2013
Next Scheduled EDR Contact: 02/11/2014
Data Release Frequency: Quarterly

INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Florida, Mississippi and North Carolina.

Date of Government Version: 02/06/2013
Date Data Arrived at EDR: 02/08/2013
Date Made Active in Reports: 04/12/2013
Number of Days to Update: 63
Source: EPA Region 4
Telephone: 404-562-8677
Last EDR Contact: 10/28/2013
Next Scheduled EDR Contact: 02/11/2014
Data Release Frequency: Semi-Annually

INDIAN LUST R9: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Arizona, California, New Mexico and Nevada

Date of Government Version: 03/01/2013
Date Data Arrived at EDR: 03/01/2013
Date Made Active in Reports: 04/12/2013
Number of Days to Update: 42
Source: Environmental Protection Agency
Telephone: 415-972-3372
Last EDR Contact: 10/28/2013
Next Scheduled EDR Contact: 02/11/2014
Data Release Frequency: Quarterly

INDIAN LUST R1: Leaking Underground Storage Tanks on Indian Land
A listing of leaking underground storage tank locations on Indian Land.

Date of Government Version: 09/28/2012
Date Data Arrived at EDR: 11/01/2012
Date Made Active in Reports: 04/12/2013
Number of Days to Update: 162
Source: EPA Region 1
Telephone: 617-918-1313
Last EDR Contact: 08/02/2013
Next Scheduled EDR Contact: 11/11/2013
Data Release Frequency: Varies

INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 09/12/2011
Date Data Arrived at EDR: 09/13/2011
Date Made Active in Reports: 11/11/2011
Number of Days to Update: 59
Source: EPA Region 6
Telephone: 214-665-6597
Last EDR Contact: 10/28/2013
Next Scheduled EDR Contact: 02/11/2014
Data Release Frequency: Varies

INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 12/31/2012
Date Data Arrived at EDR: 02/28/2013
Date Made Active in Reports: 04/12/2013
Number of Days to Update: 43
Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 10/28/2013
Next Scheduled EDR Contact: 02/11/2014
Data Release Frequency: Varies

State and tribal registered storage tank lists

UST: Facility and Tank Report
Registered Underground Storage Tanks. UST's are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA) and must be registered with the state department responsible for administering the UST program. Available information varies by state program.

Date of Government Version: 07/02/2013
Date Data Arrived at EDR: 08/22/2013
Date Made Active in Reports: 10/01/2013
Number of Days to Update: 40
Source: Department of Environment and Conservation
Telephone: 615-532-0945
Last EDR Contact: 08/22/2013
Next Scheduled EDR Contact: 12/02/2013
Data Release Frequency: Quarterly

AST: Aboveground Storage Tanks
Registered Aboveground Storage Tanks.

Date of Government Version: 10/01/1999
Date Data Arrived at EDR: 10/12/1999
Date Made Active in Reports: 11/05/1999
Number of Days to Update: 24

Source: Department of Environment and Conservation
Telephone: 615-532-0965
Last EDR Contact: 10/28/2013
Next Scheduled EDR Contact: 02/11/2014
Data Release Frequency: No Update Planned

INDIAN UST R6: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 6 (Louisiana, Arkansas, Oklahoma, New Mexico, Texas and 65 Tribes).

Date of Government Version: 05/10/2011
Date Data Arrived at EDR: 05/11/2011
Date Made Active in Reports: 06/14/2011
Number of Days to Update: 34

Source: EPA Region 6
Telephone: 214-665-7591
Last EDR Contact: 10/28/2013
Next Scheduled EDR Contact: 02/11/2014
Data Release Frequency: Semi-Annually

INDIAN UST R5: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 5 (Michigan, Minnesota and Wisconsin and Tribal Nations).

Date of Government Version: 08/02/2012
Date Data Arrived at EDR: 08/03/2012
Date Made Active in Reports: 11/05/2012
Number of Days to Update: 94

Source: EPA Region 5
Telephone: 312-886-6136
Last EDR Contact: 10/28/2013
Next Scheduled EDR Contact: 02/11/2014
Data Release Frequency: Varies

INDIAN UST R4: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee and Tribal Nations)

Date of Government Version: 02/06/2013
Date Data Arrived at EDR: 02/08/2013
Date Made Active in Reports: 04/12/2013
Number of Days to Update: 63

Source: EPA Region 4
Telephone: 404-562-9424
Last EDR Contact: 10/28/2013
Next Scheduled EDR Contact: 02/11/2014
Data Release Frequency: Semi-Annually

INDIAN UST R1: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont and ten Tribal Nations).

Date of Government Version: 09/28/2012
Date Data Arrived at EDR: 11/07/2012
Date Made Active in Reports: 04/12/2013
Number of Days to Update: 156

Source: EPA, Region 1
Telephone: 617-918-1313
Last EDR Contact: 08/02/2013
Next Scheduled EDR Contact: 11/11/2013
Data Release Frequency: Varies

INDIAN UST R7: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 7 (Iowa, Kansas, Missouri, Nebraska, and 9 Tribal Nations).

Date of Government Version: 12/31/2012
Date Data Arrived at EDR: 02/28/2013
Date Made Active in Reports: 04/12/2013
Number of Days to Update: 43

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 10/28/2013
Next Scheduled EDR Contact: 02/11/2014
Data Release Frequency: Varies

INDIAN UST R10: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 10 (Alaska, Idaho, Oregon, Washington, and Tribal Nations).

Date of Government Version: 02/05/2013
Date Data Arrived at EDR: 02/06/2013
Date Made Active in Reports: 04/12/2013
Number of Days to Update: 65

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 10/28/2013
Next Scheduled EDR Contact: 02/11/2014
Data Release Frequency: Quarterly

INDIAN UST R9: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 9 (Arizona, California, Hawaii, Nevada, the Pacific Islands, and Tribal Nations).

Date of Government Version: 02/21/2013
Date Data Arrived at EDR: 02/26/2013
Date Made Active in Reports: 04/12/2013
Number of Days to Update: 45

Source: EPA Region 9
Telephone: 415-972-3368
Last EDR Contact: 10/28/2013
Next Scheduled EDR Contact: 02/11/2014
Data Release Frequency: Quarterly

INDIAN UST R8: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming and 27 Tribal Nations).

Date of Government Version: 08/27/2012
Date Data Arrived at EDR: 08/28/2012
Date Made Active in Reports: 10/16/2012
Number of Days to Update: 49

Source: EPA Region 8
Telephone: 303-312-6137
Last EDR Contact: 10/28/2013
Next Scheduled EDR Contact: 02/11/2014
Data Release Frequency: Quarterly

FEMA UST: Underground Storage Tank Listing

A listing of all FEMA owned underground storage tanks.

Date of Government Version: 01/01/2010
Date Data Arrived at EDR: 02/16/2010
Date Made Active in Reports: 04/12/2010
Number of Days to Update: 55

Source: FEMA
Telephone: 202-646-5797
Last EDR Contact: 10/17/2013
Next Scheduled EDR Contact: 01/27/2014
Data Release Frequency: Varies

State and tribal institutional control / engineering control registries

ENG CONTROLS: Engineering Control Sites

Sites that have engineering controls.

Date of Government Version: 07/31/2013
Date Data Arrived at EDR: 08/20/2013
Date Made Active in Reports: 09/30/2013
Number of Days to Update: 41

Source: Department of Environment & Conservation
Telephone: 615-532-0900
Last EDR Contact: 08/15/2013
Next Scheduled EDR Contact: 12/02/2013
Data Release Frequency: Varies

INST CONTROL: Institutional Control Sites

Sites that have institutional controls.

Date of Government Version: 07/31/2013
Date Data Arrived at EDR: 08/20/2013
Date Made Active in Reports: 09/30/2013
Number of Days to Update: 41

Source: Department of Environment & Conservation
Telephone: 615-532-0900
Last EDR Contact: 08/15/2013
Next Scheduled EDR Contact: 12/02/2013
Data Release Frequency: Varies

State and tribal voluntary cleanup sites

VCP: Voluntary Cleanup, Oversight and Assistance Program Sites

The Voluntary Cleanup Oversight and Assistance Program (VOAP) offers people the opportunity to work proactively with state government to address necessary cleanup of a property to return it to productive use. In return for their efforts, participants can receive a No Further Action letter and a release of liability for areas where investigation and cleanup is conducted. The program is open to everyone with an interest in addressing contamination at a site.

Date of Government Version: 07/03/2013
Date Data Arrived at EDR: 07/29/2013
Date Made Active in Reports: 07/30/2013
Number of Days to Update: 1

Source: Department of Environmental & Conservation
Telephone: 615-532-0912
Last EDR Contact: 10/07/2013
Next Scheduled EDR Contact: 01/20/2014
Data Release Frequency: Varies

INDIAN VCP R1: Voluntary Cleanup Priority Listing

A listing of voluntary cleanup priority sites located on Indian Land located in Region 1.

Date of Government Version: 09/28/2012
Date Data Arrived at EDR: 10/02/2012
Date Made Active in Reports: 10/16/2012
Number of Days to Update: 14

Source: EPA, Region 1
Telephone: 617-918-1102
Last EDR Contact: 10/01/2013
Next Scheduled EDR Contact: 01/13/2014
Data Release Frequency: Varies

SRP: State Remediation Program List

The State Remediation Program (SRP) was established in 1994 within the Division of Solid Waste Management for the purpose of providing owners, prospective purchasers and other interested parties the means to voluntarily investigate, clean up or monitor contaminated sites not regulated under RCRA, CERCLA or the Tennessee Division of Underground Tanks (UST).

Date of Government Version: 08/01/2013
Date Data Arrived at EDR: 08/08/2013
Date Made Active in Reports: 09/19/2013
Number of Days to Update: 42

Source: Department of Environemtn & Conservation
Telephone: 615-532-0853
Last EDR Contact: 08/01/2013
Next Scheduled EDR Contact: 11/18/2013
Data Release Frequency: Varies

INDIAN VCP R7: Voluntary Cleanup Priority Lisitng

A listing of voluntary cleanup priority sites located on Indian Land located in Region 7.

Date of Government Version: 03/20/2008
Date Data Arrived at EDR: 04/22/2008
Date Made Active in Reports: 05/19/2008
Number of Days to Update: 27

Source: EPA, Region 7
Telephone: 913-551-7365
Last EDR Contact: 04/20/2009
Next Scheduled EDR Contact: 07/20/2009
Data Release Frequency: Varies

State and tribal Brownfields sites

BROWNFIELDS: Superfund VOAP Listing

Brownfields sites included on the Superfund Voluntary Cleanup, Oversight & Assistance Program listing.

Date of Government Version: 07/03/2013
Date Data Arrived at EDR: 07/29/2013
Date Made Active in Reports: 07/30/2013
Number of Days to Update: 1

Source: Department of Environment & Conservation
Telephone: 615-532-0912
Last EDR Contact: 10/07/2013
Next Scheduled EDR Contact: 01/20/2014
Data Release Frequency: Varies

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS: A Listing of Brownfields Sites

Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. Assessment, Cleanup and Redevelopment Exchange System (ACRES) stores information reported by EPA Brownfields grant recipients on brownfields properties assessed or cleaned up with grant funding as well as information on Targeted Brownfields Assessments performed by EPA Regions. A listing of ACRES Brownfield sites is obtained from Cleanups in My Community. Cleanups in My Community provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs.

Date of Government Version: 06/24/2013
Date Data Arrived at EDR: 06/25/2013
Date Made Active in Reports: 08/09/2013
Number of Days to Update: 45

Source: Environmental Protection Agency
Telephone: 202-566-2777
Last EDR Contact: 09/24/2013
Next Scheduled EDR Contact: 01/08/2014
Data Release Frequency: Semi-Annually

Local Lists of Landfill / Solid Waste Disposal Sites

DEBRIS REGION 9: Torres Martinez Reservation Illegal Dump Site Locations
A listing of illegal dump sites location on the Torres Martinez Indian Reservation located in eastern Riverside County and northern Imperial County, California.

Date of Government Version: 01/12/2009
Date Data Arrived at EDR: 05/07/2009
Date Made Active in Reports: 09/21/2009
Number of Days to Update: 137

Source: EPA, Region 9
Telephone: 415-947-4219
Last EDR Contact: 10/28/2013
Next Scheduled EDR Contact: 02/11/2014
Data Release Frequency: No Update Planned

ODI: Open Dump Inventory
An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria.

Date of Government Version: 06/30/1985
Date Data Arrived at EDR: 08/09/2004
Date Made Active in Reports: 09/17/2004
Number of Days to Update: 39

Source: Environmental Protection Agency
Telephone: 800-424-9346
Last EDR Contact: 06/09/2004
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

SWRCY: Recycling Facilities Listing
A listing of recycling facility locations.

Date of Government Version: 03/26/2013
Date Data Arrived at EDR: 03/29/2013
Date Made Active in Reports: 04/15/2013
Number of Days to Update: 17

Source: Department of Environment & Conservation
Telephone: 615-532-8657
Last EDR Contact: 10/10/2013
Next Scheduled EDR Contact: 01/27/2014
Data Release Frequency: Varies

INDIAN ODI: Report on the Status of Open Dumps on Indian Lands
Location of open dumps on Indian land.

Date of Government Version: 12/31/1998
Date Data Arrived at EDR: 12/03/2007
Date Made Active in Reports: 01/24/2008
Number of Days to Update: 52

Source: Environmental Protection Agency
Telephone: 703-308-8245
Last EDR Contact: 07/31/2013
Next Scheduled EDR Contact: 11/18/2013
Data Release Frequency: Varies

Local Lists of Hazardous waste / Contaminated Sites

US CDL: Clandestine Drug Labs
A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 08/06/2013
Date Data Arrived at EDR: 09/11/2013
Date Made Active in Reports: 10/03/2013
Number of Days to Update: 22

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 09/04/2013
Next Scheduled EDR Contact: 12/16/2013
Data Release Frequency: Quarterly

DEL SHWS: Deleted State Hazardous Waste Sites
A listing of sites removed from the Promulgated Sites Listing.

Date of Government Version: 08/07/2012
Date Data Arrived at EDR: 01/09/2013
Date Made Active in Reports: 02/06/2013
Number of Days to Update: 28

Source: Department of Environment & Conservation
Telephone: 615-532-0900
Last EDR Contact: 10/07/2013
Next Scheduled EDR Contact: 01/20/2014
Data Release Frequency: Varies

PRIORITY CLEANERS: DCERP Remediation Sites Listing
Drycleaner Environmental Response Program remediation sites.

Date of Government Version: 02/04/2013
Date Data Arrived at EDR: 02/07/2013
Date Made Active in Reports: 02/20/2013
Number of Days to Update: 13

Source: Department of Environment & Conservation
Telephone: 615-253-3876
Last EDR Contact: 10/21/2013
Next Scheduled EDR Contact: 02/03/2014
Data Release Frequency: Varies

CDL: Registry of Contaminated Properties
Pursuant to TCA 68212509 the following properties have been quarantined because of methamphetamine production, but have not been cleaned and certified within the 60day time frame allotted by the statute. These properties are hereby registered by the Tennessee Department of Environment and Conservation as unremediated methamphetamine sites. This is not a comprehensive list of quarantined properties. These are properties that TDEC has been notified as being quarantined, but have not been cleaned within the 60 day grace period. Other properties where methamphetamine production residues are a concern may not have been quarantined, may not have been reported to TDEC, or may not have passed the 60day grace

Date of Government Version: 05/01/2013
Date Data Arrived at EDR: 05/09/2013
Date Made Active in Reports: 06/04/2013
Number of Days to Update: 26

Source: Department of Environment & Conservation
Telephone: 615-532-0900
Last EDR Contact: 09/18/2013
Next Scheduled EDR Contact: 11/18/2013
Data Release Frequency: Varies

US HIST CDL: National Clandestine Laboratory Register
A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 09/01/2007
Date Data Arrived at EDR: 11/19/2008
Date Made Active in Reports: 03/30/2009
Number of Days to Update: 131

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 03/23/2009
Next Scheduled EDR Contact: 06/22/2009
Data Release Frequency: No Update Planned

Local Lists of Registered Storage Tanks

HIST UST: Underground Storage Tank Database
This database is no longer updated by the agency. It contains records and detail fields that the current UST database does not.

Date of Government Version: 07/02/2013
Date Data Arrived at EDR: 08/22/2013
Date Made Active in Reports: 10/01/2013
Number of Days to Update: 40

Source: Department of Environment & Conservation
Telephone: 615-532-0945
Last EDR Contact: 08/22/2013
Next Scheduled EDR Contact: 12/02/2013
Data Release Frequency: No Update Planned

Local Land Records

LIENS 2: CERCLA Lien Information

A Federal CERCLA ('Superfund') lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties.

Date of Government Version: 02/06/2013
Date Data Arrived at EDR: 04/25/2013
Date Made Active in Reports: 05/10/2013
Number of Days to Update: 15

Source: Environmental Protection Agency
Telephone: 202-564-6023
Last EDR Contact: 07/24/2013
Next Scheduled EDR Contact: 11/11/2013
Data Release Frequency: Varies

LIENS: Liens Information

A listing of sites with environmental liens information.

Date of Government Version: 04/08/2013
Date Data Arrived at EDR: 04/11/2013
Date Made Active in Reports: 05/17/2013
Number of Days to Update: 36

Source: Department of Environment & Conservation
Telephone: 615-532-0900
Last EDR Contact: 10/07/2013
Next Scheduled EDR Contact: 01/20/2014
Data Release Frequency: Varies

Records of Emergency Release Reports

HMIRS: Hazardous Materials Information Reporting System

Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 12/31/2012
Date Data Arrived at EDR: 01/03/2013
Date Made Active in Reports: 02/27/2013
Number of Days to Update: 55

Source: U.S. Department of Transportation
Telephone: 202-366-4555
Last EDR Contact: 10/01/2013
Next Scheduled EDR Contact: 01/13/2014
Data Release Frequency: Annually

SPILLS: State Spills

A listing of spills locations.

Date of Government Version: 07/19/2013
Date Data Arrived at EDR: 07/19/2013
Date Made Active in Reports: 08/20/2013
Number of Days to Update: 32

Source: Department of Environment & Conservation
Telephone: 615-532-0109
Last EDR Contact: 10/07/2013
Next Scheduled EDR Contact: 01/20/2014
Data Release Frequency: Varies

Other Ascertainable Records

RCRA NonGen / NLR: RCRA - Non Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

Date of Government Version: 07/11/2013
Date Data Arrived at EDR: 08/08/2013
Date Made Active in Reports: 09/13/2013
Number of Days to Update: 36

Source: Environmental Protection Agency
Telephone: (404) 562-8651
Last EDR Contact: 10/02/2013
Next Scheduled EDR Contact: 01/13/2014
Data Release Frequency: Varies

DOT OPS: Incident and Accident Data

Department of Transporation, Office of Pipeline Safety Incident and Accident data.

Date of Government Version: 07/31/2012
Date Data Arrived at EDR: 08/07/2012
Date Made Active in Reports: 09/18/2012
Number of Days to Update: 42

Source: Department of Transporation, Office of Pipeline Safety
Telephone: 202-366-4595
Last EDR Contact: 08/05/2013
Next Scheduled EDR Contact: 11/18/2013
Data Release Frequency: Varies

DOD: Department of Defense Sites

This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 11/10/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 62

Source: USGS
Telephone: 888-275-8747
Last EDR Contact: 10/18/2013
Next Scheduled EDR Contact: 01/27/2014
Data Release Frequency: Semi-Annually

FUDS: Formerly Used Defense Sites

The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 12/31/2011
Date Data Arrived at EDR: 02/26/2013
Date Made Active in Reports: 03/13/2013
Number of Days to Update: 15

Source: U.S. Army Corps of Engineers
Telephone: 202-528-4285
Last EDR Contact: 09/10/2013
Next Scheduled EDR Contact: 12/23/2013
Data Release Frequency: Varies

CONSENT: Superfund (CERCLA) Consent Decrees

Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: 06/30/2013
Date Data Arrived at EDR: 08/07/2013
Date Made Active in Reports: 10/03/2013
Number of Days to Update: 57

Source: Department of Justice, Consent Decree Library
Telephone: Varies
Last EDR Contact: 09/30/2013
Next Scheduled EDR Contact: 01/13/2014
Data Release Frequency: Varies

ROD: Records Of Decision

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 12/18/2012
Date Data Arrived at EDR: 03/13/2013
Date Made Active in Reports: 04/12/2013
Number of Days to Update: 30

Source: EPA
Telephone: 703-416-0223
Last EDR Contact: 09/13/2013
Next Scheduled EDR Contact: 12/23/2013
Data Release Frequency: Annually

UMTRA: Uranium Mill Tailings Sites

Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

Date of Government Version: 09/14/2010
Date Data Arrived at EDR: 10/07/2011
Date Made Active in Reports: 03/01/2012
Number of Days to Update: 146

Source: Department of Energy
Telephone: 505-845-0011
Last EDR Contact: 05/28/2013
Next Scheduled EDR Contact: 09/09/2013
Data Release Frequency: Varies

US MINES: Mines Master Index File

Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

Date of Government Version: 08/01/2013
Date Data Arrived at EDR: 09/05/2013
Date Made Active in Reports: 10/03/2013
Number of Days to Update: 28

Source: Department of Labor, Mine Safety and Health Administration
Telephone: 303-231-5959
Last EDR Contact: 09/05/2013
Next Scheduled EDR Contact: 12/16/2013
Data Release Frequency: Semi-Annually

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

TRIS: Toxic Chemical Release Inventory System

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/2011
Date Data Arrived at EDR: 07/31/2013
Date Made Active in Reports: 09/13/2013
Number of Days to Update: 44

Source: EPA
Telephone: 202-566-0250
Last EDR Contact: 08/30/2013
Next Scheduled EDR Contact: 12/09/2013
Data Release Frequency: Annually

TSCA: Toxic Substances Control Act

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/2006
Date Data Arrived at EDR: 09/29/2010
Date Made Active in Reports: 12/02/2010
Number of Days to Update: 64

Source: EPA
Telephone: 202-260-5521
Last EDR Contact: 09/24/2013
Next Scheduled EDR Contact: 01/08/2014
Data Release Frequency: Every 4 Years

FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25

Source: EPA/Office of Prevention, Pesticides and Toxic Substances
Telephone: 202-566-1667
Last EDR Contact: 08/22/2013
Next Scheduled EDR Contact: 12/09/2013
Data Release Frequency: Quarterly

FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

A listing of FIFRA/TSCA Tracking System (FTTS) inspections and enforcements.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25

Source: EPA
Telephone: 202-566-1667
Last EDR Contact: 08/22/2013
Next Scheduled EDR Contact: 12/09/2013
Data Release Frequency: Quarterly

HIST FTTS: FIFRA/TSCA Tracking System Administrative Case Listing

A complete administrative case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2007
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

HIST FTTS INSP: FIFRA/TSCA Tracking System Inspection & Enforcement Case Listing

A complete inspection and enforcement case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40
Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2008
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

SSTS: Section 7 Tracking Systems

Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 12/31/2009
Date Data Arrived at EDR: 12/10/2010
Date Made Active in Reports: 02/25/2011
Number of Days to Update: 77
Source: EPA
Telephone: 202-564-4203
Last EDR Contact: 10/28/2013
Next Scheduled EDR Contact: 02/11/2014
Data Release Frequency: Annually

ICIS: Integrated Compliance Information System

The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

Date of Government Version: 07/20/2011
Date Data Arrived at EDR: 11/10/2011
Date Made Active in Reports: 01/10/2012
Number of Days to Update: 61
Source: Environmental Protection Agency
Telephone: 202-564-5088
Last EDR Contact: 10/09/2014
Next Scheduled EDR Contact: 01/27/2014
Data Release Frequency: Quarterly

PADS: PCB Activity Database System

PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 11/01/2012
Date Data Arrived at EDR: 01/16/2013
Date Made Active in Reports: 05/10/2013
Number of Days to Update: 114
Source: EPA
Telephone: 202-566-0500
Last EDR Contact: 10/18/2013
Next Scheduled EDR Contact: 01/27/2014
Data Release Frequency: Annually

MLTS: Material Licensing Tracking System

MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 03/14/2013
Date Data Arrived at EDR: 03/20/2013
Date Made Active in Reports: 07/10/2013
Number of Days to Update: 112
Source: Nuclear Regulatory Commission
Telephone: 301-415-7169
Last EDR Contact: 09/10/2013
Next Scheduled EDR Contact: 12/23/2013
Data Release Frequency: Quarterly

RADINFO: Radiation Information Database

The Radiation Information Database (RADINFO) contains information about facilities that are regulated by U.S. Environmental Protection Agency (EPA) regulations for radiation and radioactivity.

Date of Government Version: 04/09/2013
Date Data Arrived at EDR: 04/11/2013
Date Made Active in Reports: 05/10/2013
Number of Days to Update: 29
Source: Environmental Protection Agency
Telephone: 202-343-9775
Last EDR Contact: 10/09/2013
Next Scheduled EDR Contact: 01/20/2014
Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

FINDS: Facility Index System/Facility Registry System

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 03/08/2013
Date Data Arrived at EDR: 03/21/2013
Date Made Active in Reports: 07/10/2013
Number of Days to Update: 111

Source: EPA
Telephone: (404) 562-9900
Last EDR Contact: 09/11/2013
Next Scheduled EDR Contact: 12/23/2013
Data Release Frequency: Quarterly

RAATS: RCRA Administrative Action Tracking System

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/1995
Date Data Arrived at EDR: 07/03/1995
Date Made Active in Reports: 08/07/1995
Number of Days to Update: 35

Source: EPA
Telephone: 202-564-4104
Last EDR Contact: 06/02/2008
Next Scheduled EDR Contact: 09/01/2008
Data Release Frequency: No Update Planned

RMP: Risk Management Plans

When Congress passed the Clean Air Act Amendments of 1990, it required EPA to publish regulations and guidance for chemical accident prevention at facilities using extremely hazardous substances. The Risk Management Program Rule (RMP Rule) was written to implement Section 112(r) of these amendments. The rule, which built upon existing industry codes and standards, requires companies of all sizes that use certain flammable and toxic substances to develop a Risk Management Program, which includes a(n): Hazard assessment that details the potential effects of an accidental release, an accident history of the last five years, and an evaluation of worst-case and alternative accidental releases; Prevention program that includes safety precautions and maintenance, monitoring, and employee training measures; and Emergency response program that spells out emergency health care, employee training measures and procedures for informing the public and response agencies (e.g the fire department) should an accident occur.

Date of Government Version: 05/08/2012
Date Data Arrived at EDR: 05/25/2012
Date Made Active in Reports: 07/10/2012
Number of Days to Update: 46

Source: Environmental Protection Agency
Telephone: 202-564-8600
Last EDR Contact: 10/28/2013
Next Scheduled EDR Contact: 02/11/2014
Data Release Frequency: Varies

BRS: Biennial Reporting System

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/2011
Date Data Arrived at EDR: 02/26/2013
Date Made Active in Reports: 04/19/2013
Number of Days to Update: 52

Source: EPA/NTIS
Telephone: 800-424-9346
Last EDR Contact: 08/26/2013
Next Scheduled EDR Contact: 12/09/2013
Data Release Frequency: Biennially

DRYCLEANERS: Registered Facilities List

A list of all active registered drycleaner facilities, There may be some inactive facilities included.

Date of Government Version: 05/02/2011
Date Data Arrived at EDR: 08/05/2011
Date Made Active in Reports: 08/18/2011
Number of Days to Update: 13

Source: Dept. of Environment & Conservation
Telephone: 615-532-0900
Last EDR Contact: 10/25/2013
Next Scheduled EDR Contact: 02/03/2014
Data Release Frequency: Annually

NPDES: Permitted Facility Listing
A listing of permitted wastewater facilities.

Date of Government Version: 08/23/2013
Date Data Arrived at EDR: 08/28/2013
Date Made Active in Reports: 10/01/2013
Number of Days to Update: 34
Source: Department of Environment & Conservation
Telephone: 615-253-2245
Last EDR Contact: 08/23/2013
Next Scheduled EDR Contact: 12/09/2013
Data Release Frequency: Varies

AIRS: Listing of Permitted Sources
A listing of permitted sources issued by the Division of Air Pollution Control.

Date of Government Version: 03/18/2013
Date Data Arrived at EDR: 03/21/2013
Date Made Active in Reports: 05/14/2013
Number of Days to Update: 54
Source: Department of Environment & Conservation
Telephone: 615-532-0545
Last EDR Contact: 09/06/2013
Next Scheduled EDR Contact: 11/18/2013
Data Release Frequency: Varies

INDIAN RESERV: Indian Reservations
This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 12/08/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 34
Source: USGS
Telephone: 202-208-3710
Last EDR Contact: 10/18/2013
Next Scheduled EDR Contact: 01/27/2014
Data Release Frequency: Semi-Annually

SCRD DRYCLEANERS: State Coalition for Remediation of Drycleaners Listing
The State Coalition for Remediation of Drycleaners was established in 1998, with support from the U.S. EPA Office of Superfund Remediation and Technology Innovation. It is comprised of representatives of states with established drycleaner remediation programs. Currently the member states are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin.

Date of Government Version: 03/07/2011
Date Data Arrived at EDR: 03/09/2011
Date Made Active in Reports: 05/02/2011
Number of Days to Update: 54
Source: Environmental Protection Agency
Telephone: 615-532-8599
Last EDR Contact: 10/21/2013
Next Scheduled EDR Contact: 02/03/2014
Data Release Frequency: Varies

US AIRS MINOR: Air Facility System Data
A listing of minor source facilities.

Date of Government Version: 01/23/2013
Date Data Arrived at EDR: 01/30/2013
Date Made Active in Reports: 05/10/2013
Number of Days to Update: 100
Source: EPA
Telephone: 202-564-5962
Last EDR Contact: 09/30/2013
Next Scheduled EDR Contact: 01/13/2014
Data Release Frequency: Annually

PRP: Potentially Responsible Parties
A listing of verified Potentially Responsible Parties

Date of Government Version: 04/15/2013
Date Data Arrived at EDR: 07/03/2013
Date Made Active in Reports: 09/13/2013
Number of Days to Update: 72
Source: EPA
Telephone: 202-564-6023
Last EDR Contact: 10/04/2013
Next Scheduled EDR Contact: 01/13/2014
Data Release Frequency: Quarterly

FEDLAND: Federal and Indian Lands
Federally and Indian administrated lands of the United States. Lands included are administrated by: Army Corps of Engineers, Bureau of Reclamation, National Wild and Scenic River, National Wildlife Refuge, Public Domain Land, Wilderness, Wilderness Study Area, Wildlife Management Area, Bureau of Indian Affairs, Bureau of Land Management, Department of Justice, Forest Service, Fish and Wildlife Service, National Park Service.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 02/06/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 339

Source: U.S. Geological Survey
Telephone: 888-275-8747
Last EDR Contact: 10/18/2013
Next Scheduled EDR Contact: 01/27/2014
Data Release Frequency: N/A

US AIRS (AFS): Aerometric Information Retrieval System Facility Subsystem (AFS)

The database is a sub-system of Aerometric Information Retrieval System (AIRS). AFS contains compliance data on air pollution point sources regulated by the U.S. EPA and/or state and local air regulatory agencies. This information comes from source reports by various stationary sources of air pollution, such as electric power plants, steel mills, factories, and universities, and provides information about the air pollutants they produce. Action, air program, air program pollutant, and general level plant data. It is used to track emissions and compliance data from industrial plants.

Date of Government Version: 01/23/2013
Date Data Arrived at EDR: 01/30/2013
Date Made Active in Reports: 05/10/2013
Number of Days to Update: 100

Source: EPA
Telephone: 202-564-5962
Last EDR Contact: 09/30/2013
Next Scheduled EDR Contact: 01/13/2014
Data Release Frequency: Annually

LEAD SMELTER 2: Lead Smelter Sites

A list of several hundred sites in the U.S. where secondary lead smelting was done from 1931and 1964. These sites may pose a threat to public health through ingestion or inhalation of contaminated soil or dust

Date of Government Version: 04/05/2001
Date Data Arrived at EDR: 10/27/2010
Date Made Active in Reports: 12/02/2010
Number of Days to Update: 36

Source: American Journal of Public Health
Telephone: 703-305-6451
Last EDR Contact: 12/02/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

LEAD SMELTER 1: Lead Smelter Sites

A listing of former lead smelter site locations.

Date of Government Version: 01/29/2013
Date Data Arrived at EDR: 02/14/2013
Date Made Active in Reports: 02/27/2013
Number of Days to Update: 13

Source: Environmental Protection Agency
Telephone: 703-603-8787
Last EDR Contact: 09/24/2013
Next Scheduled EDR Contact: 01/20/2014
Data Release Frequency: Varies

2020 COR ACTION: 2020 Corrective Action Program List

The EPA has set ambitious goals for the RCRA Corrective Action program by creating the 2020 Corrective Action Universe. This RCRA cleanup baseline includes facilities expected to need corrective action. The 2020 universe contains a wide variety of sites. Some properties are heavily contaminated while others were contaminated but have since been cleaned up. Still others have not been fully investigated yet, and may require little or no remediation. Inclusion in the 2020 Universe does not necessarily imply failure on the part of a facility to meet its RCRA obligations.

Date of Government Version: 11/11/2011
Date Data Arrived at EDR: 05/18/2012
Date Made Active in Reports: 05/25/2012
Number of Days to Update: 7

Source: Environmental Protection Agency
Telephone: 703-308-4044
Last EDR Contact: 08/16/2013
Next Scheduled EDR Contact: 11/25/2013
Data Release Frequency: Varies

COAL ASH EPA: Coal Combustion Residues Surface Impoundments List

A listing of coal combustion residues surface impoundments with high hazard potential ratings.

Date of Government Version: 08/17/2010
Date Data Arrived at EDR: 01/03/2011
Date Made Active in Reports: 03/21/2011
Number of Days to Update: 77

Source: Environmental Protection Agency
Telephone: N/A
Last EDR Contact: 09/13/2013
Next Scheduled EDR Contact: 12/23/2013
Data Release Frequency: Varies

EPA WATCH LIST: EPA WATCH LIST

EPA maintains a "Watch List" to facilitate dialogue between EPA, state and local environmental agencies on enforcement matters relating to facilities with alleged violations identified as either significant or high priority. Being on the Watch List does not mean that the facility has actually violated the law only that an investigation by EPA or a state or local environmental agency has led those organizations to allege that an unproven violation has in fact occurred. Being on the Watch List does not represent a higher level of concern regarding the alleged violations that were detected, but instead indicates cases requiring additional dialogue between EPA, state and local agencies - primarily because of the length of time the alleged violation has gone unaddressed or unresolved.

Date of Government Version: 06/30/2013
Date Data Arrived at EDR: 08/13/2013
Date Made Active in Reports: 09/13/2013
Number of Days to Update: 31
Source: Environmental Protection Agency
Telephone: 617-520-3000
Last EDR Contact: 08/07/2013
Next Scheduled EDR Contact: 11/25/2013
Data Release Frequency: Quarterly

US FIN ASSUR: Financial Assurance Information

All owners and operators of facilities that treat, store, or dispose of hazardous waste are required to provide proof that they will have sufficient funds to pay for the clean up, closure, and post-closure care of their facilities.

Date of Government Version: 03/04/2013
Date Data Arrived at EDR: 03/15/2013
Date Made Active in Reports: 05/10/2013
Number of Days to Update: 56
Source: Environmental Protection Agency
Telephone: 202-566-1917
Last EDR Contact: 09/27/2013
Next Scheduled EDR Contact: 12/02/2013
Data Release Frequency: Quarterly

PCB TRANSFORMER: PCB Transformer Registration Database

The database of PCB transformer registrations that includes all PCB registration submittals.

Date of Government Version: 02/01/2011
Date Data Arrived at EDR: 10/19/2011
Date Made Active in Reports: 01/10/2012
Number of Days to Update: 83
Source: Environmental Protection Agency
Telephone: 202-566-0517
Last EDR Contact: 08/02/2013
Next Scheduled EDR Contact: 11/11/2013
Data Release Frequency: Varies

COAL ASH DOE: Sleam-Electric Plan Operation Data

A listing of power plants that store ash in surface ponds.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 08/07/2009
Date Made Active in Reports: 10/22/2009
Number of Days to Update: 76
Source: Department of Energy
Telephone: 202-586-8719
Last EDR Contact: 10/15/2013
Next Scheduled EDR Contact: 01/27/2014
Data Release Frequency: Varies

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP: EDR Proprietary Manufactured Gas Plants

The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A
Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

EDR US Hist Auto Stat: EDR Exclusive Historic Gas Stations

EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A	Source: EDR, Inc.
Date Data Arrived at EDR: N/A	Telephone: N/A
Date Made Active in Reports: N/A	Last EDR Contact: N/A
Number of Days to Update: N/A	Next Scheduled EDR Contact: N/A
	Data Release Frequency: Varies

EDR US Hist Cleaners: EDR Exclusive Historic Dry Cleaners

EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A	Source: EDR, Inc.
Date Data Arrived at EDR: N/A	Telephone: N/A
Date Made Active in Reports: N/A	Last EDR Contact: N/A
Number of Days to Update: N/A	Next Scheduled EDR Contact: N/A
	Data Release Frequency: Varies

EDR US Hist Auto Stat: EDR Proprietary Historic Gas Stations - Cole

Date of Government Version: N/A	Source: N/A
Date Data Arrived at EDR: N/A	Telephone: N/A
Date Made Active in Reports: N/A	Last EDR Contact: N/A
Number of Days to Update: N/A	Next Scheduled EDR Contact: N/A
	Data Release Frequency: Varies

EDR US Hist Cleaners: EDR Proprietary Historic Dry Cleaners - Cole

Date of Government Version: N/A	Source: N/A
Date Data Arrived at EDR: N/A	Telephone: N/A
Date Made Active in Reports: N/A	Last EDR Contact: N/A
Number of Days to Update: N/A	Next Scheduled EDR Contact: N/A
	Data Release Frequency: Varies

OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

CT MANIFEST: Hazardous Waste Manifest Data

Facility and manifest data. Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a tsd facility.

Date of Government Version: 07/30/2013
Date Data Arrived at EDR: 08/19/2013
Date Made Active in Reports: 10/03/2013
Number of Days to Update: 45

Source: Department of Energy & Environmental Protection
Telephone: 860-424-3375
Last EDR Contact: 08/19/2013
Next Scheduled EDR Contact: 12/02/2013
Data Release Frequency: Annually

NY MANIFEST: Facility and Manifest Data

Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD facility.

Date of Government Version: 08/01/2013
Date Data Arrived at EDR: 08/07/2013
Date Made Active in Reports: 09/10/2013
Number of Days to Update: 34

Source: Department of Environmental Conservation
Telephone: 518-402-8651
Last EDR Contact: 08/07/2013
Next Scheduled EDR Contact: 11/18/2013
Data Release Frequency: Annually

PA MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2012
Date Data Arrived at EDR: 07/24/2013
Date Made Active in Reports: 08/19/2013
Number of Days to Update: 26

Source: Department of Environmental Protection
Telephone: 717-783-8990
Last EDR Contact: 10/21/2013
Next Scheduled EDR Contact: 02/03/2014
Data Release Frequency: Annually

RI MANIFEST: Manifest information

Hazardous waste manifest information

Date of Government Version: 12/31/2012
Date Data Arrived at EDR: 06/21/2013
Date Made Active in Reports: 08/05/2013
Number of Days to Update: 45

Source: Department of Environmental Management
Telephone: 401-222-2797
Last EDR Contact: 08/23/2013
Next Scheduled EDR Contact: 12/09/2013
Data Release Frequency: Annually

VT MANIFEST: Hazardous Waste Manifest Data

Hazardous waste manifest information.

Date of Government Version: 05/01/2013
Date Data Arrived at EDR: 08/14/2013
Date Made Active in Reports: 09/20/2013
Number of Days to Update: 37

Source: Department of Environmental Conservation
Telephone: 802-241-3443
Last EDR Contact: 10/21/2013
Next Scheduled EDR Contact: 02/03/2014
Data Release Frequency: Annually

WI MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2012
Date Data Arrived at EDR: 08/09/2013
Date Made Active in Reports: 09/27/2013
Number of Days to Update: 49

Source: Department of Natural Resources
Telephone: N/A
Last EDR Contact: 09/16/2013
Next Scheduled EDR Contact: 12/30/2013
Data Release Frequency: Annually

Oil/Gas Pipelines: This data was obtained by EDR from the USGS in 1994. It is referred to by USGS as GeoData Digital Line Graphs from 1:100,000-Scale Maps. It was extracted from the transportation category including some oil, but primarily gas pipelines.

Electric Power Transmission Line Data
Source: Rextag Strategies Corp.
Telephone: (281) 769-2247
U.S. Electric Transmission and Power Plants Systems Digital GIS Data

Sensitive Receptors: There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

AHA Hospitals:
Source: American Hospital Association, Inc.
Telephone: 312-280-5991
The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

Medical Centers: Provider of Services Listing
Source: Centers for Medicare & Medicaid Services
Telephone: 410-786-3000
A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services, a federal agency within the U.S. Department of Health and Human Services.

Nursing Homes
Source: National Institutes of Health
Telephone: 301-594-6248
Information on Medicare and Medicaid certified nursing homes in the United States.

Public Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on elementary and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.

Private Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on private school locations in the United States.

Daycare Centers: Child Care Listing
Source: Department Of Human Services
Telephone: 615-313-4778

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 2003 & 2011 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002 and 2005 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetlands Inventory
Source: Tennessee Spatial Data Server
Telephone: 931-528-6481

Tennesee Lust TDEC: In 1998 EDR reviewed technical reports, phase II reports and phase II report equivalents held by the Tennessee Department of Environment and Conservation and recorded data on leaking underground storage tanks in Davidson, Knox, and Shelby counties.

Scanned Digital USGS 7.5' Topographic Map (DRG)
Source: United States Geologic Survey
A digital raster graphic (DRG) is a scanned image of a U.S. Geological Survey topographic map. The map images are made by scanning published paper maps on high-resolution scanners. The raster image is georeferenced and fit to the Universal Transverse Mercator (UTM) projection.

STREET AND ADDRESS INFORMATION

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GEOCHECK ®- PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

PEOPLES FOOD STORE
3104 MEMORIAL BOULEVARD
KINGSPORT, TN 37664

TARGET PROPERTY COORDINATES

Latitude (North):	36.5315 - 36° 31' 53.40''
Longitude (West):	82.5135 - 82° 30' 48.60''
Universal Tranverse Mercator:	Zone 17
UTM X (Meters):	364505.1
UTM Y (Meters):	4043765.8
Elevation:	1300 ft. above sea level

USGS TOPOGRAPHIC MAP

Target Property Map:	36082-E5 KINGSPORT, TN VA
Most Recent Revision:	1991
East Map:	36082-E4 INDIAN SPRINGS, TN VA
Most Recent Revision:	1991

EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principal investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

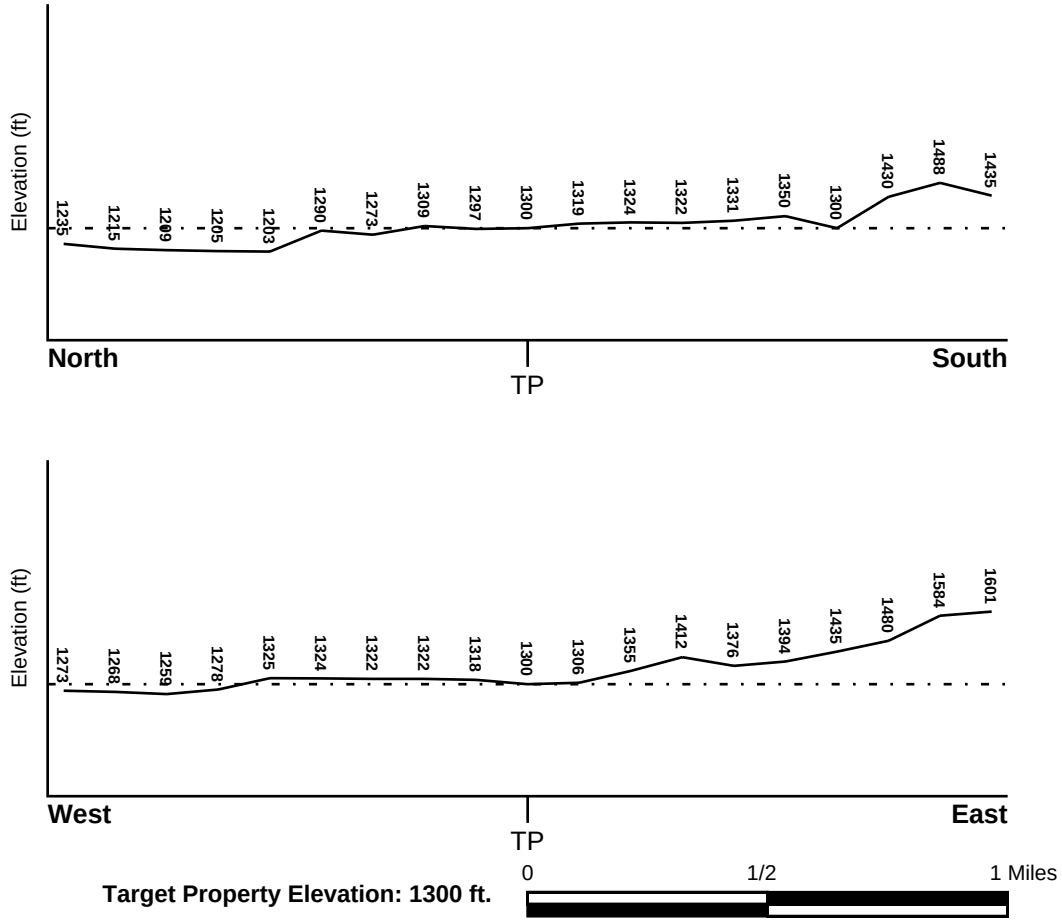
TOPOGRAPHIC INFORMATION

Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General WNW

SURROUNDING TOPOGRAPHY: ELEVATION PROFILES



Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

FEMA FLOOD ZONE

Target Property County	FEMA Flood Electronic Data
SULLIVAN, TN	YES - refer to the Overview Map and Detail Map

Flood Plain Panel at Target Property: 47163C - FEMA DFIRM Flood data

Additional Panels in search area: Not Reported

NATIONAL WETLAND INVENTORY

NWI Quad at Target Property	NWI Electronic Data Coverage
KINGSPORT	YES - refer to the Overview Map and Detail Map

HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

AQUIFLOW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

MAP ID	LOCATION FROM TP	GENERAL DIRECTION GROUNDWATER FLOW
1	1/2 - 1 Mile NNW	NW

For additional site information, refer to Physical Setting Source Map Findings.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

ROCK STRATIGRAPHIC UNIT

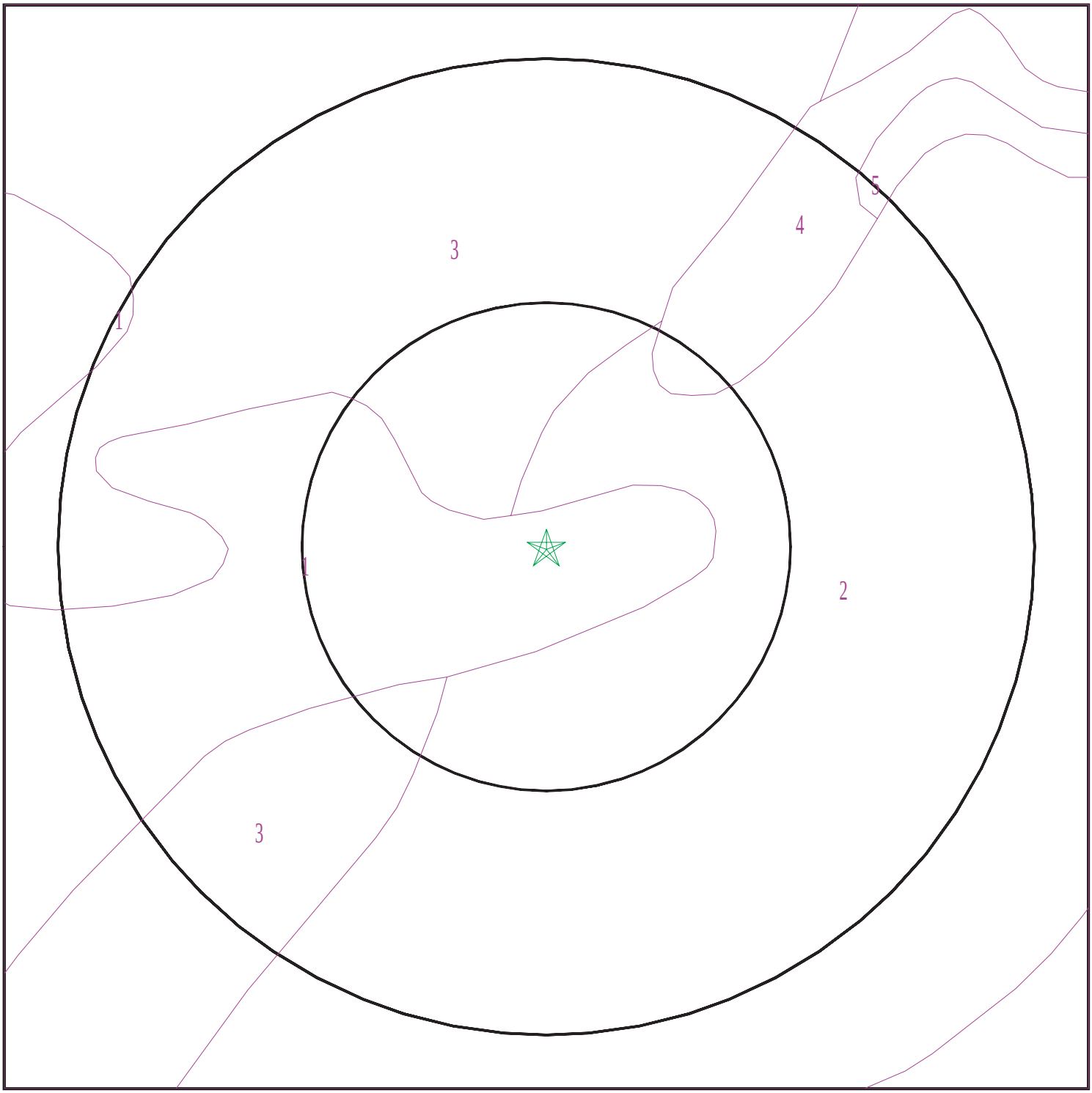
Era:	Paleozoic
System:	Ordovician
Series:	Ordovician
Code:	O *(decoded above as Era, System & Series)*

GEOLOGIC AGE IDENTIFICATION

Category: Stratified Sequence

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

SSURGO SOIL MAP - 3770050.2s



Target Property
SSURGO Soil
Water

0 1/16 1/8 1/4 Miles

N

SITE NAME:	Peoples Food Store	CLIENT:	Terracon, Inc.
ADDRESS:	3104 Memorial Boulevard Kingsport TN 37664	CONTACT:	Marie Maher
LAT/LONG:	36.5315 / 82.5135	INQUIRY #:	3770050.2s
		DATE:	October 28, 2013 6:03 pm

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GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. The following information is based on Soil Conservation Service SSURGO data.

Soil Map ID: 1

Soil Component Name:	URBAN LAND
Soil Surface Texture:	
Hydrologic Group:	Not reported
Soil Drainage Class:	
Hydric Status: Not hydric	
Corrosion Potential - Uncoated Steel:	Not Reported
Depth to Bedrock Min:	> 0 inches
Depth to Watertable Min:	> 0 inches

No Layer Information available.

Soil Map ID: 2

Soil Component Name:	COLLEGEDALE
Soil Surface Texture:	silt loam
Hydrologic Group:	Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures.
Soil Drainage Class:	Well drained
Hydric Status: Not hydric	
Corrosion Potential - Uncoated Steel:	High
Depth to Bedrock Min:	> 0 inches
Depth to Watertable Min:	> 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	3 inches	silt loam	Not reported	Not reported	Max: 14.11 Min: 4.23	Max: 5.5 Min: 4.5
2	3 inches	61 inches	silty clay	Not reported	Not reported	Max: 4.23 Min: 1.41	Max: 5.5 Min: 4.5

Soil Map ID: 3

Soil Component Name: HOLSTON

Soil Surface Texture: loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	5 inches	loam	Not reported	Not reported	Max: 14.11 Min: 4.23	Max: 5.5 Min: 4.5
2	5 inches	22 inches	loam	Not reported	Not reported	Max: 14.11 Min: 4.23	Max: 5.5 Min: 4.5
3	22 inches	61 inches	clay loam	Not reported	Not reported	Max: 14.11 Min: 4.23	Max: 5.5 Min: 4.5

Soil Map ID: 4

Soil Component Name: MONTEVALLO

Soil Surface Texture: channery silt loam

Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	5 inches	channery silt loam	Not reported	Not reported	Max: 14.11 Min: 4.23	Max: 6 Min: 4.5
2	5 inches	16 inches	very channery silt loam	Not reported	Not reported	Max: 14.11 Min: 4.23	Max: 6 Min: 4.5
3	16 inches	59 inches	weathered bedrock	Not reported	Not reported	Max: 1.41 Min: 0	Max: Min:

Soil Map ID: 5

Soil Component Name: TALBOTT

Soil Surface Texture: silt loam

Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 77 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	1 inches	silt loam	Not reported	Not reported	Max: 14.11 Min: 4.23	Max: 6 Min: 5.1
2	1 inches	22 inches	clay	Not reported	Not reported	Max: 4.23 Min: 1.41	Max: 6 Min: 5.1

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
3	22 inches	25 inches	unweathered bedrock	Not reported	Not reported	Max: 0.42 Min: 0	Max: Min:

LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

WELL SEARCH DISTANCE INFORMATION

DATABASE	SEARCH DISTANCE (miles)
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 1 mile
State Database	1.000

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
No Wells Found		

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

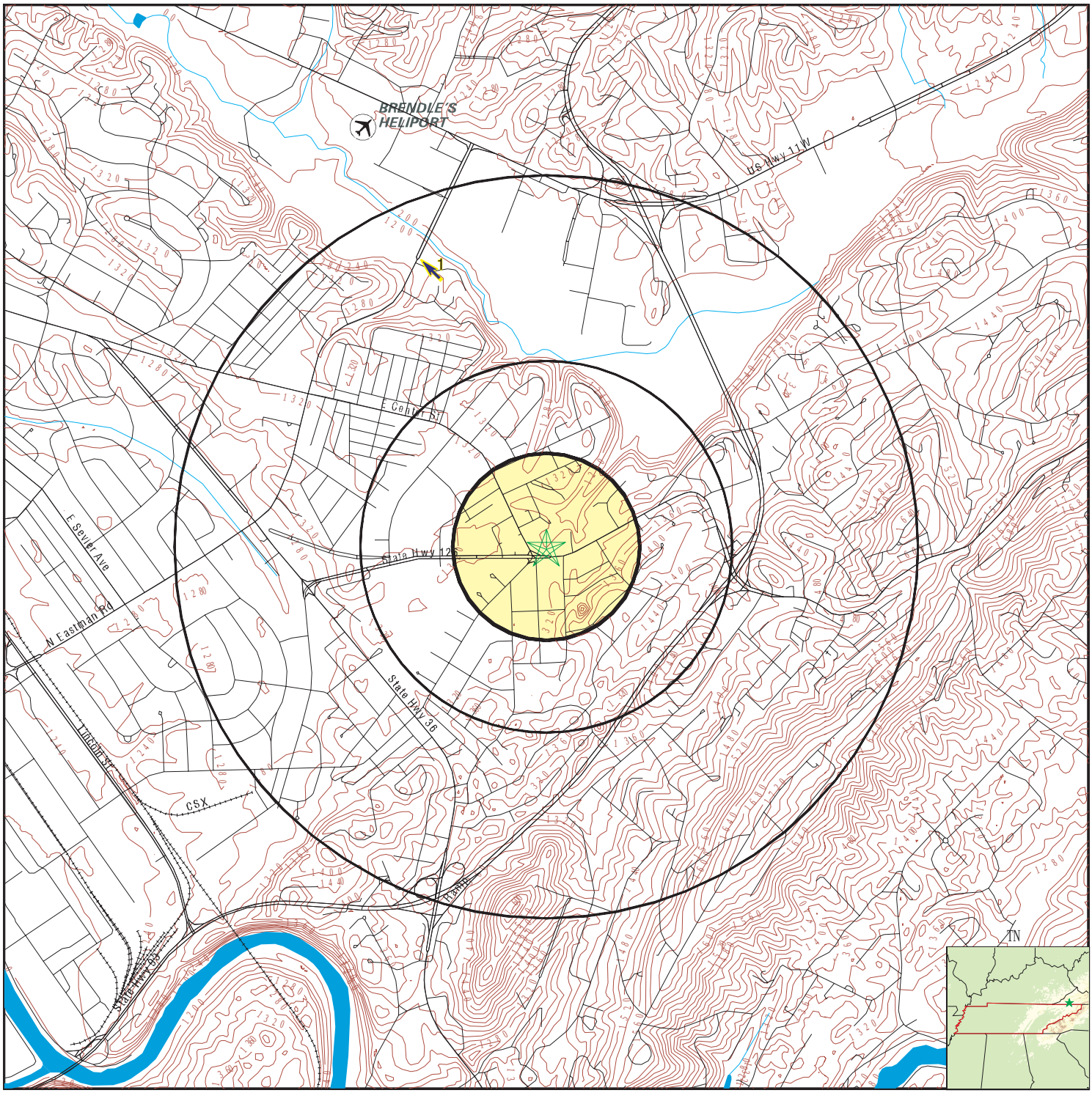
MAP ID	WELL ID	LOCATION FROM TP
No PWS System Found		

Note: PWS System location is not always the same as well location.

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
No Wells Found		

PHYSICAL SETTING SOURCE MAP - 3770050.2s



County Boundary
Major Roads
Contour Lines
Airports
Earthquake epicenter, Richter 5 or greater
Water Wells
Public Water Supply Wells
Cluster of Multiple Icons

0 1/4 1/2 1 Miles

Groundwater Flow Direction
GI Indeterminate Groundwater Flow at Location
GV Groundwater Flow Varies at Location

N

SITE NAME:	Peoples Food Store	CLIENT:	Terracon, Inc.
ADDRESS:	3104 Memorial Boulevard Kingsport TN 37664	CONTACT:	Marie Maher
LAT/LONG:	36.5315 / 82.5135	INQUIRY #:	3770050.2s
		DATE:	October 28, 2013 6:03 pm

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GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation			Database	EDR ID Number
1 **NNW** **1/2 - 1 Mile** **Lower**	Site ID:	38-10973	**AQUIFLOW**	**50925**
	Groundwater Flow:	NW		
	Shallow Water Depth:	14.0		
	Deep Water Depth:	16.0		
	Average Water Depth:	Not Reported		
	Date:	05/01/1998		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS
RADON

AREA RADON INFORMATION

State Database: TN Radon

Radon Test Results

County	Total Sites	Avg	Max	<4 pCi/L	4-10 pCi/L	10-20 pCi/L	20-50 pCi/L	50-100 pCi/L	>100 pCi/L
SULLIVAN	161	5.6	40.2	89	44	23	5	0	0

Federal EPA Radon Zone for SULLIVAN County: 1

Note: Zone 1 indoor average level > 4 pCi/L.
: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
: Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for Zip Code: 37664

Number of sites tested: 5

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	1.575 pCi/L	75%	25%	0%
Living Area - 2nd Floor	Not Reported	Not Reported	Not Reported	Not Reported
Basement	13.500 pCi/L	40%	20%	40%

PHYSICAL SETTING SOURCE RECORDS SEARCHED

TOPOGRAPHIC INFORMATION

USGS 7.5' Digital Elevation Model (DEM)
Source: United States Geologic Survey
EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

Scanned Digital USGS 7.5' Topographic Map (DRG)
Source: United States Geologic Survey
A digital raster graphic (DRG) is a scanned image of a U.S. Geological Survey topographic map. The map images are made by scanning published paper maps on high-resolution scanners. The raster image is georeferenced and fit to the Universal Transverse Mercator (UTM) projection.

HYDROLOGIC INFORMATION

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 2003 & 2011 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002 and 2005 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetlands Inventory
Source: Tennessee Spatial Data Server
Telephone: 931-528-6481

HYDROGEOLOGIC INFORMATION

AQUIFLOW^{R} Information System
Source: EDR proprietary database of groundwater flow information
EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

GEOLOGIC INFORMATION

Geologic Age and Rock Stratigraphic Unit
Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Services
The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

SSURGO: Soil Survey Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Services (NRCS)
Telephone: 800-672-5559
SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Services, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

LOCAL / REGIONAL WATER AGENCY RECORDS

FEDERAL WATER WELLS

PWS: Public Water Systems
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS)
This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

STATE RECORDS

County Water Wells in Tennessee
Source: Department of Environment and Conservation
Telephone: 615-532-0191
Water well locations in the following counties - Anderson, Blount, Bradley, Coffee, Cumberland, Davidson, Dickson, Hamilton, Hamblen, Jefferson, Knox, Loudon, Montgomery, Maury, Madison, Putman, Robertson, Rutherford, Shelby, Sevier, Sumner, Sullivan, Washington, Wilson, Williamson.

OTHER STATE DATABASE INFORMATION

RADON

State Database: TN Radon
Source: Department of Environment & Conservation
Telephone: 615-299-9725
Radon Test Results

Area Radon Information
Source: USGS
Telephone: 703-356-4020
The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

EPA Radon Zones
Source: EPA
Telephone: 703-356-4020
Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

OTHER

Airport Landing Facilities: Private and public use landing facilities
Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater
Source: Department of Commerce, National Oceanic and Atmospheric Administration

PHYSICAL SETTING SOURCE RECORDS SEARCHED

STREET AND ADDRESS INFORMATION

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APPENDIX E

Site Photographs



Photo #1 View of site looking northeast from Memorial Boulevard.



Photo #2 View of site looking southwest from East Center Street.



Photo #3 View of dumpster and grease trap directly east of onsite structure.



Photo #4 View of canopies on the southern portion of site looking west toward Memorial Boulevard.



Photo #5 View of tank pit on southeastern portion of site looking west toward Memorial Boulevard.



Photo #6 View of tank pit on southeastern portion of site looking east toward B&W Cleaners.

APPENDIX F

Credentials

MARIE A. MAHER, P.G.
PROJECT GEOLOGIST

PROFESSIONAL EXPERIENCE

Ms. Maher, P.G. is a Project Geologist in Terracon's Chattanooga, Tennessee office. Ms. Maher, P.G. is responsible for Phase I Environmental Site Assessments, Phase II Environmental Site Assessments, Limited Subsurface Investigations, soil classification and laboratory testing, rock core logging and stratigraphic interpretations, soil and groundwater monitoring, geographic information systems (GIS) spatial analysis operations, drafting operations, remote sensing applications, and geologic mapping/interpretation.

Ms. Maher, P.G. also has specialized training in various geophysical techniques including seismic refraction, shear-wave velocity profiling, electrical resistivity and ground-penetrating radar applications. Ms. Maher, P.G. has applied these techniques for karst topography investigations, seismic site classification applications and probabilistic seismic hazard analyses (PSHAs).

PROJECT EXPERIENCE

Electric Power Board- Chattanooga, Tennessee

Served as project manager for the subsurface exploration and excavation monitoring of the redevelopment project as part of a Brownfields Agreement. Oversaw soil and groundwater sampling during excavation activities, maintained liaison between the Electric Power Board and the Tennessee Department of Environment and Conservation (TDEC), and finalized reports regarding environmental issues associated with the site. In addition to soil and groundwater sampling, indoor air sampling was also conducted prior to and following construction activities onsite.

Alstom Power Turbomachines- Chattanooga, Tennessee

Served as project manager for the subsurface exploration and excavation monitoring of the redevelopment project as part of a Brownfields Agreement. Oversaw soil and groundwater sampling during excavation activities, maintained liaison between Alstom and the Tennessee Department of Environment and Conservation (TDEC), and finalized reports regarding environmental issues associated with the site. In addition to daily monitoring duties, remediation of subsurface material was also organized and executed in conjunction with TDEC officials.

River Gorge Road- Chattanooga, Tennessee

Served as the project manager for surficial mapping of geologic structure and stratigraphy for development of a new roadway on Mount Aetna in Chattanooga, Tennessee. Mapping features included marker beds, bedding orientation, geomorphologic features, erosional features, colluvial layers, and fossiliferous carbonate identification.

Oxford Commons Geophysical- Oxford, Alabama

Served as project manager for a limited geophysical investigation in which shear-wave profiling was used to identify zones of relatively softer soils adjacent to weathered bedrock and bedrock. This project focused on the use of geophysical techniques in conjunction with down-hole exploration to characterize areas of subsidence across a graded building pad.

Education

Master of Science, Geology
Baylor University, 2007

Bachelor of Science, Envir. Science
Slippery Rock University, 2005

Registrations

Professional Geologist: Tennessee, No. 5366

TN EPSC Level 1 Certified

Certifications

40-Hour HAZWOPER

ASFE Environmental Committee Member

Affiliations

American Society of Civil Engineers

Geologic Society of America

American Geophysical Union

Work History

Terracon Consultants, Inc., Project Geologist, 2009-Present

Gallet & Associates, Inc., Geologist, 2007-2009

Tri-State Testing & Drilling, LLC, Geologist, 2007

U.S. Environmental Protection Agency (EPA), Region 6, Environmental Scientist, 2006-2007

Baylor University, Research Assistant, 2005-2006

Slippery Rock University, GIS Technician, 2001-2005

Pathway Polymers- Chattanooga, Tennessee

Ms. Maher, P.G. conducted a Phase II Environmental Site Assessment and risk assessment at the above-referenced site. The purpose of this investigation was to confirm or refute the presence of constituents of concern in soil and groundwater in the area of aboveground chemical holding tanks adjacent to railroad service tracks. Based on the calculations derived from the risk assessment, it was determined that the concentration of the chemicals of concern in the soil and groundwater were not a threat to personnel at the site.

Dale Hollow Dam USACE- Celina, Tennessee

Ms. Maher, P.G. served as the lead field geologist at the Dale Hollow Dam exploratory grouting project supervised by the United Army Corp of Engineers. Ms. Maher, P.G. was responsible for logging rock core, interpreting stratigraphic successions, and finalizing submittals to the United States Army Corp of Engineers. Rock cores were logged in accordance with the *Army Corp of Engineers Manual EM Nashville District.* Noted features identified in the rock core included the Cathey's Formation sequences and mineralogical gradations from calcium-rich limestone to argillaceous shale.

Published Articles

Geologic Society of America (Sigma Gamma Epsilon), Seattle, Washington (2003). *Radiocarbon Dating of Paleosols to Constrain Timing of Holocene Land Surfaces, Badlands National Park, South Dakota.*

Geologic Society of America, Philadelphia, Pennsylvania (2006). *Construction of Comprehensive Modern Lagoonal Patch Reef Model with an Application to Ancient Bioherms. Jamaica.*

American Association of Petroleum Geologists, Houston, Texas (2006). *Construction of Comprehensive Modern Lagoonal Patch Reef Model with an Application to Ancient Bioherms. Jamaica.*

Geologic Society of America, Denver, Colorado (2010). *Empirical Correlation of Dynamic Cone Penetration and Refraction Microtremor Technique to Obtain Shear Wave Velocity Profiles, Tennessee.*

Additional Courses

ESRI Operations Training and Spatial Analysis/Drafting, Pittsburgh, Pennsylvania (2002)

Depositional Environments and Related Systems, Lee Stocking Island, Bahamas (2002)

Paleosol Studies and Landscape Reconstruction, Badlands National Park, South Dakota (2003)

Speleolithic Formations and Karst Topography, Discovery Bay, Jamaica (2005)

Modern Depositional Environments and Carbonate Diagenesis, Discovery Bay, Jamaica (2006)

SHAKE Seismic Analysis Training Course, St. Louis, Missouri (2008)

TRAVIS STAMPER
SENIOR ENVIRONMENTAL SCIENTIST

PROFESSIONAL EXPERIENCE

Mr. Stamper is a senior environmental scientist in Terracon's Chattanooga, Tennessee office. Mr. Stamper's responsibilities include the management of several on-going projects and supervision of field-related and data management tasks.

Mr. Stamper has worked in the environmental field for over 19 years, and has extensive experience in a variety of disciplines, including site investigations, wetland delineation, stream assessment, risk-based assessments, and groundwater monitoring. Some of Mr. Stamper's projects include service as a crew leader on a multi-million dollar mercury assessment project for a major natural gas pipeline company, a 53-acre wetland delineation, and Tennessee Department of Transportation wetland delineation.

PROJECT EXPERIENCE

Solid Waste

Birchwood Landfill – Hamilton County, Tennessee

Project Manager for quarterly groundwater Assessment Monitoring at the Birchwood Landfill. A statistical method to evaluate the groundwater data was selected in accordance with the EPA statistical guidance document ("Statistical Analysis of Ground-Water Monitoring Data at RCRA Facilities, Addendum to Interim Final Guidance", July 1992), and ASTM standard D6312-98 Standard Guide for Developing Appropriate Statistical Approaches for Groundwater Detection. Statistical evaluations are made by comparing inorganic parameters to background using inter-well (upgradient vs. downgradient) comparisons. This statistical method consists of a comparison of site prediction limits (established by historical data from upgradient wells) to downgradient wells and checking for exceedances.

Solid Waste

Republic Services, Inc. – Southeast, USA

This project included assistance with Storm Water Pollution Prevention (SWPP) and Spill Prevention Control and Countermeasures (SPCC) compliance audits for 10 facilities in Tennessee, Georgia and Alabama. One purpose of this SWPP and SPCC Compliance Audit was to assist in developing a compliance calendar with significant milestones notated for each facility. The SWPP and SPCC Compliance Audit was conducted through user-provided information, an online regulatory database review, historical and physical records review, interviews, including local government inquiries and a visual reconnaissance of the facilities.

Natural Resources

Privately Owned Wetland Mitigation Bank – Sequatchie Valley, Tennessee

Completion of wetlands delineation through classification of dominant hydrophytic vegetation, hydrology, and hydric soils. Compilation of supporting data including assessment of piezometer data and local stream gauge data in preparation of converting active farmland into one of the largest mitigation banks in southeast Tennessee.

EDUCATION

B.S., Biology, University of Tennessee at Chattanooga, 1991

CERTIFICATIONS

OSHA 29 CFR 1910.120 40 Hour Training for HAZWOPER, 1992

OSHA 29 CFR 1910.120 8 Hour Refresher

EPA/AHERA/ASHARA (TSCA Title II) Approved Reaccreditation and NESHAP Regulations Training - Asbestos in Buildings: Inspector

WORK HISTORY

Terracon Consultants, Inc., Senior Environmental Scientist, 2009-Present

Aquaterra Engineering, LLC, Project Manager/Senior Environmental Specialist, 1993-2009

Signal Environmental Services, Environmental Technician, Chattanooga, TN, 1992-1993

APPENDIX G – PUBLIC INVOLVEMENT COORDINATION

PUBLIC HEARING COMMENT SUMMARY – GENERAL

PUBLIC HEARING COMMENT SUMMARY – KINGSPORT CIVIC CENTER

PUBLIC HEARING COMMENT SUMMARY – SULLIVAN CENTRAL HIGH

PUBLIC HEARING & CITIZEN COMMENT TRANSCRIPTS – KINGSPORT CIVIC CENTER

PUBLIC HEARING & CITIZEN COMMENT TRANSCRIPTS – SULLIVAN CENTRAL HIGH

PUBLIC HEARING COMMENT CARDS & SUBMITTALS – KINGSPORT CIVIC CENTER

PUBLIC HEARING COMMENT CARDS & SUBMITTALS – SULLIVAN CENTRAL HIGH

PUBLIC HEARING SIGN-IN SHEETS – KINGSPORT CIVIC CENTER

PUBLIC HEARING SIGN-IN SHEETS – SULLIVAN CENTRAL HIGH

PUBLIC LETTERS & RESPONSES

NOTICE OF PUBLIC HEARING

PUBLIC HEARING PRESENTATION

PUBLIC HEARING HANDOUT

Summary of Public Hearing Comments

Letters

Name	Comment Summary
Ellen Sims	Supports B Modified - Long Island Chapter, National Society Daughters of American Revolution, (NSDAR). Concerned about both visual and physical impact of SR 126 on Yancey's Tavern and along Chestnut Ridge. Afford maximum protection to Tavern and East Lawn Cemetery. Minimize foot print of road. Spend tax dollars efficiently. Questioned if sidewalks and curb and gutter were necessary in the Tavern area.
Rann Vaulx	Supports B Modified - Cost effective, context sensitive solution for project. Concerned about Adverse Visual impact to Yancy's Tavern. Wants to receive any information on retaining walls and wants to remain engaged in the project.
Jolly Hill	Supports B Modified - Support for retaining wall without a Trinity Lane connector. Oppose version without retaining wall. (Impacts Pyle Cemetery)
Kimberly Davis	Supports No-Build - Prefers Alt. B with 3-lane road **if** No-Build is not selected. "No-Build" - Does not see supporting studies on web site. Concerns about noise study and suggests noise study not done correctly. Suggests Noise Barrier above Preston Hills. Opposed to connecting Trinity Lane to Greenspring Circle. Sidewalks seem needlessly excessive. A divided highway with grass median is overkill. Give further consideration to public transportation.
Ann Seeger	Supports Project, Opposes 4-lane - Concerned about the impact a 4-lane divided highway will have on the Indian Springs Community. A 4-lane will increase traffic speeds which will add to the tragedies that have already occurred. Please make highway safer and intact not divided by a 4-lane.
Diane Somers	Supports 4-lane - Use minimal 4-lane from Chestnut Ridge Rd. to Cooks Valley Rd. Use retaining walls between cemetery and historical property without disturbing graves.
Henry Somers	Supports 4-lane - Use minimal 4-lane from Chestnut Ridge Rd. to Cooks Valley Rd. Use retaining walls between cemetery and historical property without disturbing graves.
Joseph Smith	Supports 4-lane - Use minimal 4-lane from Chestnut Ridge Rd. to Cooks Valley Rd. Use retaining walls between cemetery and historical property without disturbing graves.
Anne Laura Smith	Supports 4-lane - Use minimal 4-lane from Chestnut Ridge Rd. to Cooks Valley Rd. Use retaining walls between cemetery and historical property without disturbing graves.
Arved Harding	Supports 4-lane - Use minimal 4-lane from Chestnut Ridge Rd. to Cooks Valley Rd. Use retaining walls between cemetery and historical property without disturbing graves.
Jerry Teague	Supports 4-lane - Use minimal 4-lane from Chestnut Ridge Rd. to Cooks Valley Rd. Use retaining walls between cemetery and historical property without disturbing graves.
Doug Russam	Supports 4-lane - Use minimal 4-lane from Chestnut Ridge Rd. to Cooks Valley Rd. Use retaining walls between cemetery and historical property without disturbing graves.
William Kelly	Supports 4-lane - Use minimal 4-lane from Chestnut Ridge Rd. to Cooks Valley Rd. Use retaining walls between cemetery and historical property without disturbing graves.
Bob Wallace	Supports 4-lane - Use minimal 4-lane from Chestnut Ridge Rd. to Cooks Valley Rd. Use retaining walls between cemetery and historical property without disturbing graves.
John J. Hurt	Supports 4-lane - Use minimal 4-lane from Chestnut Ridge Rd. to Cooks Valley Rd. Use retaining walls between cemetery and historical property without disturbing graves.
Scott George	Support 4-lane - Critical to safety. A 3-lane is not adequate. Do project right way now and it will carry us well into the future.
Ervin Holman	Supports most of the proposed changes to SR 126 - Opposed to closing one end of Graveltop Rd. Several needs for the roadway have been noted: Improved access for school buses; Improve mail delivery; Improve response time for emergencies; Improved road geometry. Closing one end of Graveltop Rd, school buses will require a longer trip up and down the street. Mail delivery will take longer. Response time for emergency vehicles will take longer. When an accident occurs on SR 126 there will be no alternate route for vehicles.

Summary of Public Hearing Comments

Keith Johnson	Supports 4-lane - Lives in Indian Springs Community. Now is the time to get this safe improvement on the agenda.
Juliet Hyatt	Not in favor of 4-lane - Takes to much land, historic site should be protected. Need improved 2-lane from Old Stage to I-81. Need wider shoulders, reflective paint edging lanes, guardrails, occasional turn lanes, pull offs for emergency vehicles and realignment of side roads.
Thomas Floyd & Jenny Gillespie	Supports No-Build - Concerns regarding lower property value and thinks, retaining wall takes a lot of backyard. Makes my driveway a public road. (Green Springs connector to Trinity Lane) Plans not clear whether Trinity Lane is left opened or closed. Prefer Trinity be kept as a dead end.
Blanche Fillers	Opposes 4-lane - Need better stripping and signing of lanes in transition areas. No need for bike lanes, need wider lanes and shoulders. 4-lane would only encourage students leaving school to speed and cause more accidents.
Allan & Carol Newland	Supports 4-lane - Residents in Indian Springs over whelmingly voiced their support for 4-lane, eliminating sidewalks and bike lanes on section between cemetery and Tavern. Please provide road that stimulates growth and provides easier access.
Keith Johnson	Supports Project - No preference, just wants the road improved.
Jolly Hill	Concerned about Trinity Lane Connector. Wants clarification on whether Trinity Lane is to be closed or left open before project is designed.
Terry Larkin	Project adds no value from Center St. to Old Stage Rd. The high cost is overkill. Rather see improvement from Old Stage Rd to Interstate which is greatly needed.
Paul Castille	Concerned previous work on John B. Dennis exit ramp made it worse. Change it back to what it was.
Rep. Tony Shipley	Supports 4-lane - 4-lane with sidewalks, bike lanes and 12' grass median is excessive. Suggest minimal 4-lane no grassy median only a center barrier to seperate lanes, no sidewalk, no bike lanes and possibly no curb and gutter. 4-lane should be further compressed between cemetery and Tavern. Wants to know the difference in feet of a minimum 4-lane as described and Modified B.
Fix 126 right.com	Supports 4-lane (See Letters)
Diane Somers	Supports 4-lane (See Letter)
Judy Murray	Opposes 4-lane (See Letter)
Arthur Ellis	Concerned about the impact the road would have on the landscape and scenic beauty of the area.

Summary of Public Hearing Comments

Emails and Fix126.com

Name	Comment
Cathy Dunn	Oppose 4-lane - 4-lane is to expensive, will increase speed, will depreciated historic and cultural attributes of region suggest camera to catch speeders (generate revenue). Add turn lanes in area that need it.
Kurt Larkin	Stated that he has not seen the road as congested as shown in the (Level of Service example) photos. Would like to know when work will begin and how long the project will last.
Paul Castille	TDOT already made John B. Demnis exit ramp worse, need to change it back.
Al Price	Stated that he owns land on SR 126 at Shuler Dr. Wants to know if the project will affect his land.
John Hurt	For 4-lane - Accidents will continue if 4-lane not built. Drivers speed and talk on cell phones and do not pay attention. Road is to crooked in places and to narrow in others. How much longer do we have to endure this.
John Trent	No Build - Do not waste anymore money, traffic enforcement is what is needed.
Chad Austin	(Shoulders) - Any incidents on this road are caused by inattentive drivers, fatalities are not caused by road but by the drivers. Wider shoulders is what's needed. If the project is built it will lead to increased speeds.
Sue Nichols	No Stated Prefence - Need safer highway as soon as possible. Existing road is dangerous (curves, single lanes)
John Pollak	Not sure 4-lane will work due to topography, but turn lanes will alleviate a lot of problems, since TN has no turn signal requirements.
Allan Newland	Favors 4-lane - Due to lack of improvements of SR 126 has resulted in loss of businesses. Improved safety main concern, but improved business conditions should be considered.
Randal English	3-lanes - Business owner involved in two accidents trying to enter property. Curve in road restricts vision, hard to see on-coming traffic. Need 3-lanes and lowering of speed limit.
Fix 126	Summary Feedback email - For 4-lane; Concerns safety and future development
Keith Johnston	Wants road improved in the immediate future Lives in Indian Springs Community
Delores York	(Shoulders) - This road is dangerous, we need shoulders to help drivers not familiar with this winding road.
Jerry Case	Concerned about dangerous intersection at Fall Creek Rd. and SR 126. Suggest traffic light to control traffic through the intersection.
Jennifer Krull	No Build - Suggest leaving road alone and cut back some slope bank to improve site distance. (Not a fan of Ms. Sommers)
John Townsend	4-lane all the way - It will serve future needs and will be much safer than the "other way". Do not put in 2, 3, and 4-lane option.
Jan Nichols	4-lane - 4-lanes with less curves and more visibility and safer highway all around.
Keith Elton	The only problem with this road is distracted drivers. Deaths are caused by reckless drivers. 4-lanes will lead to increased traffic and higher speeds. Suggest using money to hire more THP to enforce speed and educate drivers.
Crystal Dots	We need to do something NOW. Road is to dangerous, people speed, pass school buses. It is difficult to get out of driveway at times.
Phillip Bridges	4-lanes - Fix the road right the first time or you always have a dangerous road
Larry Landis	(Shoulders) Careless drivers on road causes accidents. Road needs shoulders.
Willis Wagner	Wants the road improved as soon as we can.
John W. Dotson	Opposed to moving graves - Please find a way to improve the road without disturbing cemetery.
Janrose Dotson Hall	Opposed to moving graves - Speeders need to slow down and given tickets or take their driving rights away. Do not disturb graves.

Summary of Public Hearing Comments

Vickie Jones	Oppose grave removal - Does not feel widening the road is the answer. Control texting and phone use while driving would be a huge help. Do not move any graves.
Arnold Dixon	Favor 2-lanes with a 3-lane for turning. If road is not patrolled by officers or cameras fatalities will still occur.
Lesley Kilgore	Enforce the speed limit, need shoulders and street lights, bike lanes and walking lanes are a waste of money. Do not impact cemetery or Yancy's Tavern. Adding 3-4 lanes and back to 2 will cause more reckless driving (people trying to pass)
Scott Williams	More asphalt means more upkeep and funding - Determine where most accidents occur and concentrate on making those areas safe. Wider roads usually mean increased speed, distraction from cell phone use that lead to more accidents.
Lisa Burchell	Roadway needs better lighting all the way to I-81. Need red lights at intersections, poor visibility makes it hard to get on and off highway. 3-laning or 4-laning would only increase truck traffic and speeding. THP and local police should patrol area more often to discourage speeding.
Dr. La-Verne & Lois Ready	Concerned about noise associated with new highway. What type of barriers are being considered.
Patricia Richards Dellinger	Opposed to moving graves.
Angela Tipton	Opposed to moving graves.

Summary of Public Hearing Comments

Kingsport Civic Center

Name	Comment
Ernest Brookman	Stated no preference - Would like to see more coordination between City and TDOT on the alignment of the road. Need to fix Kite Street. Recognized construction limitations.
Ellen Sims	Generally Supports Project - Representing Long Island Chapter of the National Society Daughters of American Revolution. Concerned about visual and physical impact of the proposed project on Yancy's Tavern and along Chestnut Ridge. Blasting and Road construction will change the landscape causing a negative impact both physical and visually to Yancy's Tavern and associated properties. NSDAR is concerned about safety and building a road efficiently and effectively and respecting the communities values. Do not over build.
Nathan Vaughn	(Former Rep.) Recognized the work of the CSS team and is concerned TDOT is looking at an option not sanctioned by the CSS group and using different selection process. He is concerned about traffic counts not accurately reflecting the volumes on SR 126. Wants the project to reflect the values of the community.
Tim Bledsoe	No Alt. Prefence - Concerned about moving family graves. Opposed to moving graves. Move the Tavern.
Tom Gatti	Oppose 4-lane - Opposed to 4-lane cutting through Chestnut Ridge and Indian Springs. B modified takes care of some safety issues, will have visual problems and road connecting issues. Not in favor of straight road it tempts people to drive faster. Ask if sidewalks had to be ADA compliant.
Judy Murray	Served on CSS team that came up with original alternatives and feels the spirit of CSS is being honored. She felt TDOT was listening to the community.
Wendy Gordon	Generally Supports Project - Thanked TDOT for the work on this project.
Tony Grills	Concerned about compensation of property that maybe used for roadway as well as zoning and tax issues. He was referred to the ROW representative present at the meeting. Also questioned how removing asbestos would be paid for, the owner or TDOT. Also asked about statue of limitations mentioned in EIS.
Frank Castleberry	Favors 4-lane - Concerned Indian Springs will be shortchanged in a 4-lane is not constructed. Limits future growth. More the Tavern back up the hill and build a parking lot.
Mr. Vaulx	Opposed to moving graves. Concerned that the historic site (Yancy's Tavern) is going to be on a retaining wall over looking a multi-lane highway and that will be an adverse visual impact. He further state an MOA would be required to complete the requirements of Section 106, of the National Historic Preservation Act. Favors leaving 2-lane and shoulders, ruble strip and turn lean into Cooks Valley Rd. Wants a safe road.
Charlotte Ellis	Would like to see community and its assets protected as well as having a safe road. (Rural Indian Springs). Protect Chestnut Ridge, historic sites and cemetery.
Kathleen Beine	Concerned about safety issues, beauty and historic preservation. Concerned about 4-lane widening through Chestnut Ridge. The road needs to be improved. Concerned about miles and miles of 5-lane road and increased accidents. Concerned about sidewalks and bike lanes adding to the highway impact on the landscape.
Mark Bowery	Favors taking the 4-lane to 3-lane to 2-lane and the 4-lane would go all the way to Cooks Valley. Use design options to avoid Yancy's and Cemetery.
Dorothy Houser	She has lived in her home 87 years and does not want to move. Do anything you can to keep this from happening.
Eugene DeBaker	Opposes closing Holiday Hills Rd. out of her subdivision. There needs to be another alternative or stop lights.
Betty Tribble	Take my house to save a life.
Mark Tribble	(Speaking on behalf of his mother Betty) - She is an elderly widow and all alternatives impact her. Concerned about run-off caused by the roadway and flooding. Take my mothers home for her safety. Blind spot when you pull out of the driveway.

Summary of Public Hearing Comments

Chris Lacey	Concerned about sight distance problems pulling out of his business onto SR 126. Previous work on the road has impacted his property causing a drop off that is dangerous for his customers. Would like the access fixed to his property, as well as the sight distance improved at his business.
Susan Nodal	(Local) - Concerned about planned median in front of her property prohibiting her from turning left out of her driveway, forcing her to use the dangerous Orebank Rd intersection. This is the only viable access to our property. Request that two historic stone pillars be relocated up into her yard. An access point in the median would also serve a business next door.
Dan Cheek	B Modified - (Former member of CSS team) I originally supported a 4-lane roadway, but now feel a less invasive plan is needed. A 4-lane would destroy Indian Springs. The B modified plan it is very much consistent with what our team came up with.
Scott George	4-lane - 4-lane is needed fix it now, fit it correctly. Safety is the biggest concern; no shoulders, no recovery area exist.
Dewey Harless	Feels we are only building part of what is needed. Quit making 2-lane bottlenecks. Build 4-lane, don't need sidewalks, curbs and gutters is sufficient. I's rather have a safe road even though it impacts my property.

Summary of Public Hearing Comments

Sullivan Co. High School

Name	Comment
Scott Mendenhall	Questioned why project was taking so long. Believes if road had already been improved, his wife may still be living today. Pointed out that it has been 10 years since the project began and wants to know how the Department is going to speed up the process. Plan B should be eliminated and A could be a little bit more improvement on that part.
Charlotte Dade	Five concerns; safety, historical, environmental, aesthetical and personal. Certainly improvements need to be made a 4 or 5-lane roadway is not necessary. Modified B concerned about preserving heritage for future generations. Aesthetic quality of Chestnut Ridge is important. Do not want to destroy beauty of area. Our property has historical valve (Exchange Places). Wants to know what will happen to the springs and the serenity of the woods behind her home. We want to save lives and hope the plans make continued improvements and consider the historical, aesthetical and environmental issues.
Cathy Dean	Favors B Modified - Opposed to moving graves.
Danny Moody	Opposed to 3-lane roadway; for 4-lane people using turn-lane do not know where to yield to anybody.
Erwin Holman	Concerned about closing off Gravel Top Rd. access point. It will increase response time for emergency vehicles, increase mail delivery route. School buses will have to use cul-de-sac at end of road. It will close off a detour route around SR 126 when accident occurs or bad weather closes roadway. Fix geometry of road and leave both entrances open.
Tim McCoy	Modified B - Modified B addresses our concerns and still gives us a nice safe road.
Paul Bodenweiser	Modified B - Modified B is far and away the smartest one rumble strips have made a difference, we need to improve the lines of sight, add guardrail, and shoulders.
Henry Somers	Safety is a huge issue; CSS team after 2 years of study recommended 4-lane to Cooks Valley Rd. We need a bare bones, minimum 4-lane to accommodate future traffic. We need to eliminate the grassy medium, sidewalks, and curb and gutter. Basic 4-lane will be very similar to 3-lane with sidewalk. Nobody wants a big cut, future traffic will need extra lanes. A 4-lane from East Center St. is possible and is needed for safe travel. There is 47' from white-line to white-line at Yancy's Tavern, we know a minimum 4-lane can be done. We need interim improvements we can't wait another 8-10 years.
Vance Ramsey	Modified B - Lines on section of SR 126 that has seen many accidents. Believe drivers not the road caused accidents (Speed, drinking). The road needs improving, straighten curves, and shoulders, need turn lanes at major intersection. Oppose 4-lane do not want to destroy scenic value of Chestnut Ridge or destroy the communities of Sunnyside, Birdwell Height and Indian Springs. Do not want to remove graves. Made reference to petition with over 1200 signatures opposing 4-lane and whether or not TDOT had a copy.
Kerney Timmons	Modified B - is reasonable avoids cemetery and historical property. Likes a 4-lane and 3-lane. Leave the sidewalk off the 3-lane and make it 4-lane. The lanes are to narrow, rumble strip has kept me on my side of the roadway.
Donna McCoy	Modified B - Son was killed on highway, opposed to 4-lanes, 2-lanes in each directions raises the possibility of more accidents. It will allow people to drive faster. Concerned about increase in truck traffic.
Thomas Moore	Concerned about driveway connections, poor sight distance is a hazard. Requested TDOT to fix his driveway (no action by State) wants the roadway (Fall Creek) either up to SR 126 or cut back down to improve site distance make the road safe take out curves and bumps in the road to improve the line of sight.
Kathy Dunn	Disagrees with 4-lane, straight through because it will simple increase speed. Grass medians will be a maintenance issue MPO and State traffic numbers don't agree, let get calculation right. Not willing to see ridiculous speeding for a continuous 4-lane.

Summary of Public Hearing Comments

Don Cole	Family member in East Lawn Cemetery, Alt. A & B upset me. Road needs to be improved. Alcohol, drugs and telephones distract drivers. I can live with Alternative B.
Gene Bledsoe	Concerned about traffic lights and wants to know if there will be red lights at intersection. Concerned about the 3-lanes merging to 2-lane near Lacy's Insurance and wants to know if there will be better merging with the project. Questioned recent traffic analysis showing a reduction in traffic. Concerned about property value between being above the road or below the road. Last meeting at Sunnyside, they shot down the 4-lane nobody wants a truck route between Center St. and I-81. Wants to know when project will begin. Its been ten years in the making.
Wendy Niebruegge	I like the rumble strips, I think we can make improvements by adding shoulders and cutting out banks to improve sight distance. Realigning driveways. Can make improvements without 4-laning entire route.
Joe Smith	Lets make sure we are building a road to handle the traffic, do no under build the road.
Jim Fuller	The road is unforgiving and has resulted in fatalities. Do what you have to get between Tavern and cemetery, lets make a safe road.
Kenneth Pate	The existing road is narrow and dangerous, people speed to get around you. We need 4-lane all the way. The best option it would be a much safer road.
Allan Newland	In favor of 4-lane, lack of improvements on SR 126 have resulted in a loss of businesses. It will not be built all at once but need to get started and 4-lane all the way to Cooks Valley Rd.
Jay Schlag	Concerned about traffic during construction and the impact it will have on other local roads. Travel the road frequently it is not a dangerous road drivers on it are dangerous.
Wendy Gordon	People want a safer road and assume a 4-lane divided road is safer. Non limited access 4-lane are not safer. More fatalities happen there than do on 2-lanes.
Dave Dots	4-lane, no sidewalks - I am in favor of Alt. A (4-lane) but think we can do away with sidewalks. Install traffic lights at major intersection to slow down truck traffic (Cooks Valley, Lemay, Stage Coach, Briarwood, Island, Harr Town, Overhill, and Carolina Pottery). We need to look at the growth in the next 30 to 40 years. We need a 4-lane and straightening the road as much as possible.
Mr. Vaulx	For Modified B - Owner of Yancy's Tavern; you can buy and demolish National Register property you just can't use federal funds to do it. Your not supposed to adversely impact an historic site. I like missing the cemetery, but don't overbuild the road. I favor the Modified B
Rena Robinette	Not in favor of road widening if it going to impact the cemetery. The previously proposed Stone Dr. to the Airport would alleviate some of the traffic on SR 126 and should be reconsidered.
Betty Feathers	Thank you for lowering the speed limit to 45 mph.
Scott Mendenhall	Favor 4-lane all the way because of accidents.
Keith Elton	Suggest instead of closing Shuler Ave. and SR 126 close Shuler Ave. at the other end where it comes off Cooks Valley Rd. Shuler DR. and Lemay and Peers St. are overwhelmed now with traffic coming off Cooks Valley Rd. SR 126 is a perfectly good road. The problem is drivers not paying attention.
Tom Floyd	(Trinity Lane Connector) - On Alt. B Modified it is no clear to me why the Trinity Lane connector is taking land off my property.
Erwin Holman	Want to make sure I continue to have access to SR 126 (Gravel Top Rd.).
Fred Johnson	Make the road for the living not the dead.

STATE OF TENNESSEE

DEPARTMENT OF TRANSPORTATION

Public Hearing

SR-126 (Memorial Boulevard)

From East Center Street to Interstate 81

In Sullivan County

TDOT PIN 105467.00

December 11, 2012

Kingsport Civic Center

1550 Fort Henry Drive

Kingsport, TN

Barringer Court Reporting
P.O. Box 8035, Gray, TN - 423-477-7844

MR. NAGI: My name is Mark Nagi. I'm the Community Relations Officer for Region I of Tennessee's Department of Transportation. We're here this morning at the Kingsport Civic Center auditorium to gather public input on the proposed State Route 126/Memorial Boulevard project in Sullivan County. This project would go along existing alignment from East Center Street within the City of Kingsport's City Limits east to Interstate 81.

Joining us tonight from the Tennessee Department of Transportation are: TDOT's Chief of Environment and Planning, Toks Omishakin, TDOT's Assistant Chief of Environment and Planning, Ralph Comer, TDOT Director Of Project Planning, Steve Allen. From TDOT's Environmental Division are Jim Ozment, JonnaLeigh Stack, Tammy Sellers and Martha Carver. From TDOT Construction, Randy Busler and Jason Farmer. From TDOT's Project Management Division, Project Manager Gary King. From TDOT's Design Division are Jeff Turner and Randy Plummer. From TDOT's Right-Of-Way Division are Sonya Sneed, Debbie Morgan, Bill Rives, Amber Warren, Phil Addison and Steve Head. From TDOT consultants, Florence and Hutcheson, are Stan King and Ray Brisson.

Once again, this is a TDOT hearing, a

public hearing, which means there's a few ways to get your comments on the record. Following this morning's presentation, which will begin in just a couple of minutes, we'll have a session in which you can make comments or ask questions of TDOT officials. There's a microphone set up at the front of the room for you to do just that. Now there was a sign-up sheet as you walked in today. In order to speak during the meeting, you need to sign up on that sheet. So if you would like to make a public comment at the microphone following the presentation, please make sure you are signed up on that sheet. If you have not signed in, please do so. We'll go in order and announce those names in groups of four. That way we don't have a big line throughout the room. We ask that you limit your comments to right around three minutes in order to give everyone a chance to speak. Once again, that session will take place after the presentation.

We also have two court reporters present. They will be recording all public comments made at this hearing. We have a court reporter present at the back corner of the room. She's available during the presentation and during all the activities today. If you would like to make a comment privately to her,

you can do so in the back corner at any time during today's public hearing.

Also, we have comment cards and pens up front as you walked in. You can write down those comments and hand them in to us today, or you can take those cards home and send them back to us. You can also take a few cards home and give them to your neighbors if you so choose for them to send them to us as well. You have until January 31st to have those comments postmarked if you, in fact, choose to send those to us.

Okay. With all that being said, I now turn things over to Jim Ozment from TDOT's Environmental Division for today's presentation. Jim?

MR. OZMENT: Thank you. Well, good morning. Good afternoon. I'm not sure which we are right now, but we certainly appreciate you coming out. Thank you very much for your time and attention. Before I get started, the Assistant Commissioner for Environment and Planning for TDOT, Mr. Toks Omishakin, would like to say a few words on behalf of the Commissioner. So I'm going to let him speak.

MR. OMISHAKIN: Good morning. I'm going to start off by -- and I'll be very quick because I want

us to get to the important part of the agenda this morning. I want to start off by thanking you all for taking the time to come out to this meeting and participate in this process as we look to move this project forward. We know this project has been on the books for a while, and we want to get it moved forward. We want to help make this project happen. Commissioner Schroer spends as much time on this project as any other project that we have in the Department. That's one of the messages he wanted me to bring to you this morning. I spend as much time in my role as Assistant Commissioner of Environmental Planning at TDOT. I spend as much time on this project as any other project we have in the Department. This project is very important to us. The reason why it's important to us is because we know it's important to you. We know that. We know that on average 16,000 cars are on this road in one day in average. We know about the safety issues. We know about the safety concerns. We know about the traffic. We know about cemeteries. We know about homes. We know about historic properties. But we want to make the right decision. So we're here today to listen to you and to learn from you all as we look to make that right decision for the people of

Sullivan County, for you all.

So I just wanted to stress that this morning, that this project is important to us. We want to do the right thing. We want to make the right decision. That's why we're here as a part of this process. So we look forward to hearing from you either way, written or if you're coming up to the mike. We want to hear your comments this morning. We're going to take them back, and we're going to really use them to help us make the right decision on this project.

Thank you very much for your time.

MR. OZMENT: All right. Thank you very much. Again, my name is Jim Ozment. I'm the Director of TDOT's Environmental Division. The Environmental Division's purpose is to take projects and study them to try to determine the impacts across the board of what might happen under certain circumstances if we build roads. And it's a part of the planning process, and it's part of a long process of refinement where we go through every phase of this and we refine the process further and further. So what I wanted to do today was just to run you through a few things that talk about the project. Don't tell me this isn't going to work. Oh, I've got to turn it

on. There we go. Thank you.

Again, we understand that this is a very important project for the people in this community, safety concerns, transportation concerns, and so what we're doing tonight is we're here to talk about the NEPA process. NEPA is basically the environmental studies process it goes through. It's a federal law, and it's probably all you need to know about that. But primarily we're here to get your input. These public hearings are designed because we only know what we can see a lot of times on a map or, you know, in a design file. You are the people that live it. You're the people that drive it. I spoke to a gentleman just earlier that talked about how the percentage of traffic moved on the road right in front of his house on a side road. I might not have known that, possibly could have but won't unless you're here to help us and explain to us and tell us your story. So that's why we're here today, and we're going to give you a chance after the presentation to come up and make any comments that you'd like. We're also going to try to answer any questions that you have and talk a little about the next steps in our process.

So primarily our presentation, and I'm

going to cover a little bit about the project history. It has a long history. Unfortunately, it hasn't moved as fast as anyone probably would like. Talk a little about the road building project process, the proposed changes that we have for the road so that you can see what the proposed design changes would be, the impacts that those changes would cause and to also, any efforts that we've already taken to try to reduce those impacts.

So I think everybody is familiar with the road, and this is probably a terrible slide because I've got a blue line and nobody can see it, but this just shows that Memorial Boulevard runs from 81 to East Center Street. A little about the history of this project: Back in about 2003 the Metropolitan Planning Organization for Kingsport and the mayor of Kingsport at that time both contacted TDOT with a resolution and said, "We believe that something needs to be done about this road. Can you help us?" And we said, "Yes, we can." So at that point, it was the very first time that we decided or the Department decided to use what's called a context-sensitive process where we involve teams of people from the community to help in the very beginning of the project to identify the issues that were at play and

possibly identify some of those solutions. It was called a CSS team or a Community Resource Team. So we put that together. They had 13 meetings over the course of a couple of years. We held three public meetings to talk to the public about what was coming out of that and get input back, and also we were at -- at the end of the day we came out with two build alternatives that they asked that we study. So we always have to have something to study, and that was what we put forth -- or was put forth. Excuse me.

So the things that were determined to be needs for this project were safety improvements, Number 1. It was clearly everybody -- safety was on everyone's mind, and the safety resulted from inadequate roadway deficiencies. The shoulders are nonexistent. There's a lot of hills and valleys. There are blind curves. You know what's wrong with the road primarily. I don't have to go through a lot of this. But also one of the other things was the improvement of access management, and this is basically talking about how many driveways and how many side roads come in at very steep angles and create, you know, issues for trying to turn back into traffic and can you see around the corner. So those were sort of what was identified as the primary

problems, I would say, or the needs for this improvement. This is just a picture that illustrates the fact - no shoulders, bad skews, a lot of curves and hills in the potential area there. And that leads to just general safety issues. A car breaks down, if there's somebody waiting to turn, all of those would be under general safety. It also affects the mail delivery, school buses, emergency vehicle travel up and down the road. All of those things are also in play and the safety issues for the project.

So the overall concept was that this project needed to provide a safe and efficient transportation facility from Kingsport to I-81 is the overall goal of the project, safe and efficient.

So now we move -- excuse me. Now we move on from that first stage into the environmental stage, and this is where we start. Once we have an alignment to study, we go out and start to do what we call our technical studies to figure out what the impacts might be to a couple of those different alternatives. And we completed by having what's called a Draft Environmental Impact Statement written and published in January of this year. So these sort of illustrate the steps in the project delivery process. It starts with planning. It moves through

the environmental stage on to design. Once the design plans are done, then you know where you need to go buy right-of-way. Once the right-of-way is acquired, then we can go ahead and start construction.

When the CSS team was working, it primarily was in the planning stages. That was the stage that all of that work occurred in and the development of those two alternatives. So let's talk about those two alternatives for a minute. Well, the first one, we cleverly named them Alternative A and Alternative B, so not to confuse ourselves, but Alternative A consisted of three different segments. Well, actually four. A five-lane, four-lane, three-lane and two-lane segments throughout the whole project length. Part of the recommendations from the CRT team was that different parts of the corridor in essence had different needs and that people on the east end - it was a more rural environment - wanted to keep it having more of a rural type of an environment there, a rural roadway there, where it was much more urban on the western end. So that's how it kind of came out with this four-three-two concept. The thing about Alternative A that you'll see later on is that when it's put in, it was

designed and laid out to basically straighten the road a lot, and also there was something called constructibility that was -- well, it was in a lot of the decisions about where it would go. So if you have a curve and we cut the curve off, you could see that we would move a decent distance away from the road. A lot of times when you think about widening the road, you could think about, "Well, I've got two lanes. I need four. So I'll add one on the right and one on the left." That's one way to do it, and that's kind of called symmetrical widening, and the other way to do that is to basically try to move it all to one side. And if you straighten it, you start to get further off the road. Well, as you can clearly imagine, the further off the road you move, the more you move out into people's properties, homes, and, you know, therefore the impact numbers go up. So the more you straighten it, the more those types of impacts start to go up.

So the team basically thought, "Well, that's an awful lot of impact if you think about doing it that way." So they asked also to have an Alternative B in. Alternative B did two different things. In one instance, it tried to widen more to the right and to the left and keep it in closer to

the road. It didn't wander so far off of the existing road. But it also extended the three-lane section from basically Cooks Valley Road to Lemay Drive. All of you all are probably familiar with this area. This is where East Lawn Memorial Cemetery is located, and there's Yancey's Tavern on one side and that on the other. And to run a fully -- a median four lane through there was going to impact potentially one or both in a significant manner. So Alternative B was designed to see if we could reduce some of those impacts early on. But, again, what we're doing is we're putting those basic alignments that would consist of either three, four or five lanes or two lanes, and we're just laying them on the map and saying, "Okay. Go study and see what that impact would be." It's a very ask-a-question, get-an-answer kind of a process. So that was what Alternative B turns out to look like. I should have pushed the button again.

So now where are we? As I said, we're in the environmental phase, and what the environmental phase basically talks about is we go out and we study what different types of improvements would be gained by the changing of the operations of the road, the straightening, improving the curves and all that. We

also look at the impacts to the natural environment, what happens to the streams and the wetlands and anything else that might be out there. We look at the social and economic impacts to the road change and what it does to the community, what it does to the businesses. All of that type of stuff goes into these studies. And then once we get that done, we write this report called an Environmental Impact Statement. So it's just a report of our findings, and that's, again, we published in January. We have copies tonight if no one has seen it. They've been in the library or on the website for a long time as well if you want to view the whole thing.

So, and then after we do that, as I said earlier, we hold a public hearing, and we come out, and we say, "Okay. We made these assumptions. We laid out these roads. We went out and studied what would happen if we built them just that way, and now we're here to talk to you about it tonight" -- or today. We're going to do it again tonight. Excuse me. Come back at 6:00 at the high school if you want to hear this all over again. But that's the way the process works. And, again, we're here to hear what you have to say about this particular project and those impacts.

So just to go through a few of those, basically they are social, economic, noise, historic, archaeological kind of in the human environment. There's wetlands, streams, endangered species. We have to look -- there's federal laws that require we look at all these different things as part of this process. So we're pretty well driven by federal law.

So now we get to the impacts themselves, and I've got a couple of slides here that summarize what we found in that particular instance. For example, noise impacts under Alternative A are 35 but under Alternative B would be 45. The reason for that is because there are more houses taken under Alternative A. So there wouldn't be an impact to them if they were actually taken. So that's just one of the issues. There was one historic site found. That was Yancey's where five streams that basically would be crossed. We have 75 acres taken on one, 55 acres taken on Alternative B. Loss of 15 acres of farmland versus five from A to B. Things like that. And we go through a lot. This is just a quick summary of some of the things that we talk about.

What we consider to be the key impacts for this project -- and every project is different. We have projects where the streams and wetlands and

endangered species are huge issues for us to try to get through, and we don't have very many displacements. In this case there weren't very many of those type of things, but there are a lot of displacement type of issues.

And so if you look at Alternative A, there were 241 potential displacements, and let me explain how we come up with that number. Again, this is called a -- we do what's called a conceptual stage relocation plan that said if we just laid this road out, how many properties do you think it'll run into? We don't do a lot of survey work. We make a whole bunch of assumptions. So this is kind of a crude. How many would it be? It gets refined much more later on as we know more about the slopes and we know more about how driveways are going to be affected and things of that nature. So it does change a lot over time. But out of that 241, 102 would have been residential, single-family homes. 135 were multi-family, the apartments or on four were I think mobile homes. Compared to Alternative B, once the reduction was done at 90, 69 and 3. So it was a reduction by putting in the alternative where we didn't stray as far off of the road. Business displacements were 43 under Alternative A and 30

under Alternative B, requiring also 239 acres versus 122. So, again, you can if we straightened the road and we wander further away, we wind up taking a lot more land, hence, a lot more displacement. One displacement would have been the Volunteer Fire Department under either of the alternatives, and then we come down to grave relocations at the cemetery, and we've already heard from the community what they think about this. So, and this isn't the end of the story. This is not my last slide. So you can hold on. There's more to come. But under the initial plan of having a four lane through there, there were 350 graves that would have had to have been relocated. Under the other alternative, there were 90, but 90 is still significantly way more than needs to be done, if any, and we've already said we're going to try to avoid that at all costs. And then the historic property was one.

So here's where the NEPA process I guess for us gets difficult. NEPA is all about balance. It's about trying to figure out and justify, you know, one impact versus another. We do that every day in our own lives. You know, you have to justify is this price of this worth what it's going to cost me from my back account. We have to do the same

thing. A lot of times we're driven by federal law as to how we can make those decisions and try to balance those, and other times it's more just up to us and what we hear from the people that tell us how we balance the needs for a road versus impacts, what you've just seen, that would be, you know, a loss of a lot of homes or businesses. And that's never, never an easy thing for us to do. So, again, we always look to try to minimize it, and we minimize it more and more. So I'm going to talk a little bit about that effort now.

Well, first of all, as I said, after we published the document, the study in January, but before we could hold the other public hearing, there was probably 100 people at least showed up at the MPO meeting here in town, the Municipal Planning Organization meeting, and wanted to express deep concerns about any relocations in the cemetery. And that would have normally come out at our public hearing if we had held it earlier, but instead, it came out at that MPO meeting, and that was fine. That was great because with that feedback, we were able to basically stop for a moment, go back and see what can we do to minimize that before we got here tonight to talk to you again -- or today to talk to

you again. So we have worked on that.

The second thing that happened just kind of not necessarily out of the blue but on a routine schedule was that the MPO changed their traffic projections, and every so many years they have to re -- they basically project how the growth of the community is going to occur, where it'll go up, where it'll go down and how that will affect traffic, and then we turn around and use those numbers, put it into our own traffic model to predict how many cars will be going by the road, you know, in twenty years from now.

Well, they updated their numbers during the same time we were doing this. So we had to turn around and update our numbers. And the result of that was that the traffic was now projected to decrease over certain portions, not so much on the western end but a lot on the eastern end of the project. So it ranged anywhere from 4 to 68 percent reduction in traffic. And traffic models we can talk about later, but we've got people here that will explain that for you, but what, in essence, is happening is projections of the way the economy is going to work, where the land uses are going to occur, those changes. So that changed their

projections of how traffic would change. That allowed us to look at it and say, "Okay. Will the road perform better or worse with this new traffic number, these fewer cars in different places, and what could we do to take advantage of that?"

So what we did was -- let's see. Back up. So this is what Alternative B looked like. It had a four-lane section through here, three lanes and then two lanes primarily under Alternate B. So what we did was we modified that, and we extended the road between Lemay and Harbor Chapel to extend that three lane from here back down to here. And the reduction in traffic allowed us to do that because then it tended to work. It was still safe. It still meets all those purpose and needs. You've still got turning lanes. You've got full shoulders. You've got curb and gutter and some sidewalks. Those types of things are all in play. It gives people ways to get off the road, turn without blocking traffic and all of that, and under those traffic conditions, that seems to work. So what we did was we have taken the proposal, just that segment, and we looked at, well, if we did that -- and we also looked at could we reduce the cross section a little bit more between the cemetery and Yancey's. If we did those things,

then what would happen? Well, this was a result of the modification.

It does say that we can reduce it by compressing the -- that's what I just said, and then we'll be able to avoid Yancey's and all the graves. We'll reduce the number of displacements. We're still -- it still addressed the safety concerns. That's what I just said. And it reduced the project's overall cost. So now when we add that column that talks about impacts here, you can see that the number of -- just by reducing that during that small, smaller section of the whole, overall project, we went from 162 residential displacements to 104. Business went from 30 down to 24. None of these are going to go to zero under those circumstances if we widen this road. The non-profit fire hall is still going to be taken it appears, but under graves, we went from 90 to zero, and we don't impact the Yancey's Tavern, the historic site. So several things occurred there that appear to be positive at this point. But, again, this is why we're here tonight - to find out what you think about that.

So where are we now in this process? Well, after we get done with today's hearings, we're going

to go back and we take all of these comments and we put them together and we answer all the questions and we summarize them altogether to see how many people said this and how many people said that. We then pick -- the Commissioner picks a selected option. It could be the no-build. It could be Alternate A, B, B Modified or perhaps even after we get impact, some other combination of these things. And then we write a report, called a Final Environmental Study. After that, it moves to the design phase, and this is where we will go through even more efforts to try to minimize and reduce the impacts. So when we say there's X number of houses going to be moved, that's not exactly 100 percent known because every time we work on it and we do a better survey, we then start to look at things that we could do to reduce them. Like maybe we could build retaining walls so that the slope won't go so far back up and take someone's home. There are things that can happen during design that will further minimize the impacts and will occur. So just to let you know, that last list wasn't the final count on things.

So after we do the design, by the way, then it would go to Right-Of-Way again and finally to Construction. So what is the schedule for this

portion of the project? Well, first of all, we're going to allow public comments to come until January the 31st because of the holidays here. I know everybody is busy. We don't want to shortchange anybody on having the time to write something up and give us a good explanation of what you think. So we've extended it from what normally would have been 20 days to January 31st. Sometime, probably in the spring, we will -- or late spring we'll be able to announce what we think is the preferred alternative or option. Then by the end of the year, fall, winter type area, we'll be able to start to write our final environmental statement, and then we close that process in the winter of '14 with a final write. After we write that, we have to send it to the Federal Highway Administration. They have to review it. They send it off to their attorneys and do legal sufficiency reviews. So there's time periods of things that go on that you don't always necessarily think about.

But that's kind of how the process works, and that was the time period. So now here we are. We've got a lot of plans laid out. So we're going to have a question and answer period, and then we're going to let everybody go out and have individual

questions. If you have a question about your property that you haven't already had opportunity to have addressed, there's TDOT people all around the room that will be able to help you answer some of those. You can make your public comment three different ways. We have court reporters both in front and the back of the room if you would like to do that on your way out, or if you want to leave early while questions and answers are going, you can stop in the back of the room. You can turn it in by comment cards that are included in your handout and mail them to us. We'll even take an e-mail. If you want to send us an e-mail, be sure to put your address, name and address in it, though. And I guess that's basically it.

So we have asked, and I think Mark said it originally, that when -- we have a microphone down front here. So we're going to let you come up. He's going to read off a name. You can make your public comment or ask a question, either one. We're asking that you hold it to three minutes because there's a lot of people here, and we want to be sure to get everybody heard. Three minutes is kind of a long time. It doesn't sound long, but it is once you start talking anyway. But if you've got a written

statement that you want to read, it's just as effective to summarize that in three minutes and turn it in to the court reporter because at the end of the day we're going to be reading these anyway. We're reading whatever the court reporters have written down when we try to answer all these questions.

At this point, I'm going to go ahead and turn it over to Mark. Would the people that are going to be on the panel - we're going to have a panel up here - come on up, and we will, we'll take off from there. Mark? Yeah, panel members, come on over.

MR. NAGI: Thank you. Once again, this is your last chance. If you would like to sign up to speak publicly during the public question and answer session -- once again, there was a sign-in sheet up front. We still have that sign-in sheet up front. So if you would like to speak, please make sure you've signed in on the sheet, which is up front. We're going to announce names in groups of four. The first four people that are to speak are, and I apologize if I pronounce anyone's name incorrectly - Ernest Brookman, Ellen Sims, Steve Ball and Rodney Hurd. Ernest Brookman, Ellen Sims, Steve Ball and Rodney Hurd. And if you could, when you say your

name, please also say what your address is. Thank you, Sir. You're first.

MR. BROOKMAN: My name is Ernest Brookman, and I live at 3980 Memorial Boulevard. My comment is basically the lack of coordination between the City of Kingsport and TDOT. They're talking about relocating businesses, for example, and as I've called them up and talked to them, they will tell us that they're going to do something. In my case they said they were going to run the road in an open field, a hay field up there across from my house, but they don't have any plans for relocating businesses, which need to be there and such. And when we look at this plan that they have, they're taking the line right behind my house. In the past, the line was going through the house, and now it's going behind the house. And so they keep saying that they don't think they're going to take any houses up through there and then end up doing it.

So I'd like to see more cooperation and coordination with Kingsport because they need to get things like Kite Street straightened out. You shouldn't have a street coming in at an angle to a four-lane highway, especially uphill and such. Now for anybody that doesn't know me, in 1959 I went to

the Air Force, and road construction is what I was in. So a lot of these things from John B. Dennis, 93 Highway, to Cooks Valley Road entrance, closest to the City of Kingsport, this is a simple, basic framework that you really can't get around. You can't move the highway at John B. Dennis, and you can't move the mountain at the upper end there because it is so steep. If you try to go to the right, you have to dig into the mountain, and if you go to the left, it's going to be off the embankment, and you also will close off a road there. So the whole thing seems to be locked in. They know where the road is going to have to go to a certain degree, and they should be planning on that. Thank you very much.

MR. OZMENT: Thank you, Sir.

MS. SIMS: Commissioner Schroer, Members of the Panel -- do I need to address the mike?

MR. OZMENT: You can pull it down. I think it'll lower if it's -- unless it's locked down here.

MS. SIMS: Okay.

MR. OZMENT: That's set for me, isn't it?

MS. SIMS: Pardon?

MR. OZMENT: I said that thing is set up there tall for me, isn't it?

MS. SIMS: I know. Yeah. Some of us are height challenged. Commissioner Schroer, members of the Panel and Committee, Concerned Citizens, I'm Ellen Sims, Region of the Long Island Chapter, National Society Daughters of the American Revolution. I'm requesting that the following comments be entered into the public record for the SR-126 Highway improvement project.

Long Island Chapter NSDAR is concerned with the impact, both visual and physical of the 126 plans on Yancey Tavern and along Chestnut Ridge. As you're aware, this area is filled with the history of our past. The area proposed changes to Highway 126 follows closely the Old Island Road, one of America's oldest wagon routes established before the American Revolution. Old Island Road was the military road from Chilhowie, Virginia to historic Long Island in present day Kingsport. It was completed in September 1761. Yancey's Tavern property is located just off Highway 126 across from East Lawn Cemetery. It was built in 1779, and it's listed on the National Register of Historic Places. It was listed in 1973. Being listed protects the property from both physical and visual impact. The property includes Yancey's Tavern, a spring house with water running through a

historic, hand cut, stone culvert across the property and then underneath Chestnut Ridge Road and a historic barn standing on a cut stone foundation.

In 2004 Yancey's Tavern was auctioned. It was bought by Dr. Rann Vaulx. The barn was purchased later in 2006. During this time, Dr. Vaulx spent his own money, redid the whole thing and furnished it with reproductions of 18th century furniture. This enables this to be used by the city, by various groups interested in historic preservation, patriotism, genealogy, and it is shown by appointment. It is not a museum.

Our concern is that blasting and road construction on Chestnut Ridge and the roadway running in front of it will totally change the configuration of the landscape, causing a negative impact both physically and visually to Yancey's Tavern and associated properties. It is also possible it will be adverse to the spring. This spring has never run dry, apparently being fed by underwater sources from Chestnut Ridge.

Long Island NSDAR is concerned with the safety of the highway to both local and distant motorists. We ask that you value and protect Chestnut Ridge and build a road that is safe for both

motorists and the community. We must afford maximum protection to Yancey's Tavern and to East Lawn Cemetery. We ask that you spend our hard-earned tax dollars efficiently and effectively and respect our community. In keeping all this in mind, please don't overbuild Highway 126. Thank you.

MR. OZMENT: Thank you very much. Next?

MR. NAGI: Out of Ernest Brookman, Ellen Sims, Rodney Hurd, anyone else out of that group of four? Okay. Moving on to the next group of four will be Henry Somors, Bruce Dodson, Nathan Vaughn and Tim Bledsoe. Henry Somors, Bruce Dodson, Nathan Vaughn, Tim Bledsoe, and when you guys speak at the microphone, please say your name and your address.

MR. SOMORS: My name is Henry Somors, and I would like to pass for the moment. There's a new option here, and I would like to study it a little more and reserve the right and come back to speak to you later about that. May I do that?

MR. NAGI: Of course, Sir.

MS. SOMORS: Thank you.

MR. NAGI: Bruce Dodson, Nathan Vaughn or Tim Bledsoe?

MR. DODSON: (Inaudible).

MR. NAGI: Your name, Sir?

MR. DODSON: Bruce Dodson.

MR. NAGI: Thank you, Sir.

MR. OZMENT: I'm sorry. We've overlooked something up here protocol wise. We didn't introduce our panel when they came up. We jumped right to the questions because we were so eager to hear what you had to say tonight. But up here with me we have Stan King with Florence & Hutcheson. They're the engineering and environmental company that's been doing some of the studies and engineering work. Ralph Comer, who works for TDOT as the assistant to Mr. Omishakin in planning and environment. Gary King, who is the project manager for TDOT. I think we've already met Mark. Steve Allen, who's the Director of Project Planning, and Sonya Sneed is with our right-of-way office. And we have other people with our right-of-way office as well around the room and some of the other divisions also. So I apologize for not getting that out. I'm sorry. Go right ahead. I didn't mean to interrupt there.

MR. VAUGHN: Thank you. My name is Nathan Vaughn, and just to give you a perspective of how I have been involved in this project, at the point in time that this project was brought back on the agenda, I represented the 126 community as the State

Representative there and was very involved in this project, bringing it to the Mayor and the City Manager to get this put on the agenda to be considered as the State of Tennessee's first contact sensitive project. So I've been very involved in this and continue to this very day.

The thing that concerns me about it, an awful lot of work went into this project. There was a Community Resource Team that spent basically years looking at this project and to some extent trying to find consensus as to what was going to be done. Everyone agreed that the biggest issue associated with this road was safety, and that's what the Community Resource Team tried to look at. And some of the things that concerned me at this eleventh hour is some of the things that we are going to look at trying to consider -- looking at a totally different process and a totally different alternative as to what needs to be done, as such things such as websites, which talk about "Fix 126 right," such as resolutions by our County Commission and these things being brought to the City of Kingsport.

One of the problems that we have had in Tennessee for along time has been the politicalization of our road building projects, and

one of the things I know when I was in Nashville, we tried to get away and make road building a process that involved the best interest of communities all across this state. We've got limited resources in terms of being able to build roads, and one of the last things that anybody I believe wants to see happen is for us to spend large sums of money building boondoggles that basically just consume money that really doesn't really exist. One of the issues such as we have looked at the traffic counts on numerous occasions, and one of the things that you still could look at and say that our traffic counts are still not accurate as to how they reflect the actual traffic counts in many of these areas, such as Station 167 where in 2009 there was an actual count of 7,535 cars, and we used that as the starting point, and we used a count of 9,866. Now why did we use 9,866 when we had the actual count? When we look at those counts, in 2012 those counts had gone down to 7,060, but still, we use 9,866. My concern is, just briefly, is that we are potentially allowing this road to be politicized. We went through a long process of trying to make sure we got it right, and we did what was in the best interest of the community. And my concern is that as this project

winds down to a point as to what is actually going to be done, that this project still reflect the values of the community as compared to a back room political process where a few people decide the actual direction that this project is going to take. Thank you.

MR. OZMENT: Thank you very much.

MR. NAGI: Tim Bledsoe.

MR. BLEDSOE: Yeah. My name is Tim Bledsoe. I was just talking to Steve back...

MR. NAGI: Sir, what is your address?

MR. BLEDSOE: Archcrest Street, Kingsport. I was just talking to Steve Godsey back here, and I know Nathan, but Steve says he just did a new study three weeks ago on the traffic. But the road needs to be fixed. Everybody knows that. My problem is I've got seven family members. You can't dig them up. I'm sorry. I can't stand for it, and I won't stand for. If it comes down to the tavern or the graves, move the tavern. (Applause.) And anybody in here that's got anybody buried there, do you want your parents dug up? I don't. And I think that's the main consensus with most of the people here. I understand the property, the yards, the driveways. They're graves. We bury our family members there.

You can't dig them up. Which I understand Plan A. We're going to go to B probably, but as polite as I can be, you can't dig up my daddy. Try to understand. You know what I'm saying?

MR. OZMENT: I think we do. I think, you know, we've heard that message clearly, Sir, and that was the whole purpose of us coming up with a modified version, to get out of all those impacts both ways.

MR. BLEDSOE: I understand that. I talked to Tony Shipley. He talked to the Commissioner last week and called me back. Don't touch the graves. That's all I care about. I don't care if you build an eight lane. Don't dig up my daddy.

MR. OZMENT: Yeah.

MR. BLEDSOE: Okay? Thank you all.

MR. OZMENT: We hear you. Thank you very much.

MR. NAGI: Okay. Next to speak, Tom Gatti, Judy Murray, Wendy Gordon and Tony Grills. Tom Gatti, Judy Murray, Wendy Gordon, Tony Grills.

MR. GATTI: My name is Tom Gatti. I live on Rock City Road. In looking through the handout, I'm really pleased to see at first glance, at least, the modified Alternative B. In just looking at it here without having a lot of time to study it, it

seems like it could possibly work. For me, a four lane cutting through Chestnut Ridge would just be horrendous, and a four lane through the community of Indian Springs would just devastate the community. It's hard to imagine a road like 11-W going through, which Alternative A is. Going through Chestnut Ridge and looking like what we have on there, it would just -- it would ruin the last unspoiled ridge in Kingsport, and the entranceway through Indian Springs is probably the prettiest coming into town at this point in time, and I'd hate to see that ruined.

The proposed Alternative B, the modified, it seems to take care of a lot of the safety issues. There's no doubt that there's some visual problems and some road connects issues that could certainly make that road a lot safer. I'm not in favor of having a dead straight road. It just tempt's people to drive all the faster, making it all the more dangerous. It just sort of reminds me of a time when the Army Corps of Engineers thought that straightening rivers would solve flood problems, and it just made them worse. So in my written comments, after studying the proposed Alternative B, the Modified, I'll probably have a little bit more to say, but the four lane just doesn't seem necessary,

and it would devastate the ridge. And one question I do have concerning sidewalks, does the grade of the sidewalks have to be ADA compliant in a project like this?

MR. OZMENT: Yes.

MR. GATTI: Because when -- once you cross the ridge and head down, I'm not exactly sure what that grade is, and in that proposed alternative modified you do list sidewalks, and a major portion -- I can't remember if it goes past Cooks Valley, but I question whether you're going to be able to meet that ADA grade compliance with your sidewalk there. While it would be nice to have it, I just don't know if you're going to be able to do it, and if you're not able to do it, that would even decrease your footprint and your devastation even more, you know, if you do end up going with the three lane. Thanks.

MR. OZMENT: Thank you very much. That was exactly three minutes. Did you have a stopwatch when you did that? That was great. Thank you. Next, come ahead, please.

MS. MURRAY: Like Ms. Sims, I'm height challenged as well. My name is Judy Murray, and I live on Rock City Road, 804 Rock City Road in Kingsport. And I was one of the members of the

Community Resource Team, which was started back in 2003, and it's also been referred to as the CSS Team. And for the benefit of folks who might not know, CSS means Contact Sensitive Solutions. It's a relatively new approach to road building. Well, it's been around for a few decades, but it is one that honors the community as well as the motorists. It values both, and it was originally called Thinking Beyond the Pavement. And our team convened, the team of Kingsport officials, elected officials, professionals, Sullivan County, citizen representatives. I think that we had an incredible list of team members. We worked very hard for two and a half years. We had training and team development and CSS training, and we had 13 meetings. There were three public meetings. I'm not going to say it was easy. We worked very hard. We knocked heads, but I believe, you know, we came up with a consensus, and there were minority reports as well. Maybe everybody had a little bit of heartburn, but it felt good to wrap that concept up and turn it over to you.

Now I've been representing citizens. I've had many of them contact me, starting with the public meetings, and I think it'll come to no surprise to

you, but there's a lot of resignation over there, that I hear over and over, "They're going to do what they want to anyway. What difference does it make what I say?" Well, I'm a cheerleader, and I say, you know, "This is America. You have a right to speak. You have a responsibility to speak." And so I continue to encourage my fellow citizens to do that. And I do want to mention for those here that we did identify values to the community such as the graves in the cemetery and Yancey's Tavern and just the history of the area. There are several old residences on there. There are mom and pop businesses, and we wanted a road that was going to be safe and not destroy the community.

So I have not had the opportunity to look in depth at your new modification for Alternative B, but it looks to me very much like TDOT does listen, especially on this process. I can't speak for other roads, but I think that the spirit of CSS is being honored here, and I look forward to continuing to work. I don't think it's the end. The community on a CSS project is to be involved from start to finish, and so you'll probably be hearing more from me. But I thank you, and I thank Commissioner Schroer. Please convey my thanks to him.

MR. OZMENT: All right. Thank you very much. I'm going to take just a minute to try to address that question. We hear that a lot at public hearings, that we're just going to do what we want and that the public is -- you know, your voice is not important and will just be ignored. And I've been the Director or the Acting Director for the Environmental Division for just six months, but from what I've been told every day by my boss, Mr. Omishakin, and his boss, Commissioner Schroer, is that we will listen. I mean he has been here on multiple occasions. He's talking. You know, one things that folks forgot to say was 126 is on my standing weekly meeting to talk to him about as well. So it's also on my desk every week to say, "What's going on here?" So we are listening, and maybe we talk about the old TDOT, but today's TDOT I don't believe is that way. I mean sometimes, as I said, it's a balancing act, and we have to make hard decisions, which, you know, they're inevitable to be made, but hopefully that won't be because we didn't listen and try to weigh those things out. So I just wanted to try to insert that into the conversation. Go ahead, Mark.

MR. NAGI: Wendy.

MS. GORDON: Yes. I'm Wendy Gordon, and I'm at 326 Wine Circle in Blountville. I was actually going to defer I was so incredibly pleased with what you guys presented. I've been -- in this process I've been attending -- I've attended every single community meetings that you guys have had, and I distinctly remember Gerald Nicely coming and pointing his finger at the very first meeting and saying, "TDOT will not overbuild this road." And I would like to applaud the members of this panel and everyone who's worked because it looks like you guys have held his promise. But I started not to come up here because I'm cautiously optimistic and a big cheerleader for what you guys have done, but I would like to enter into public record a comment for the community. I'm really upset at what I've heard today in this Hatfield and McCoy's mentality, that it's got to be either the tavern or the graves. That's egregious to me, and shame on you for that mentality. No one here who is interested in historic preservation is interested in disturbing where someone's daddy lays. And I'd just like to enter that into comment because I think it's incredibly dangerous. As Nathan pointed out, this has become political. It also becomes personal, and it

shouldn't be that way. I think that if we put our heads together as a community and if we work together -- look what TDOT's done. TDOT has spent millions of dollars and tens of thousands of hours, if not more, and you guys are working really hard. Thank you for honoring the CSS process, and we hope that what you guys -- we hope that what it looks like comes to wonderful fruition. Thank you.

MR. OZMENT: Thank you very much.

MR. NAGI: Tony Grills.

MR. GRILLS: Yes. I'm Tony Grills. Our property address, 3813 and 3817. I'm here representing my 96-year old mother. And some of the questions that my family has is basically what I'm trying to address today, and I've tried to get these questions answered from people on the floor. I haven't found them yet, but I want to go on record that these are questions that have been brought up. We have read the Environmental Impact Statement. My older brother is a retired colonel in the U. S. Air Force and spent 38 years there, and he's very specific sometimes. So I tried to limit what his specifics were. But anyway, the questions that we have is, as far as the time frame property owners have to reinvest monies received without incurring

capital gains tax, is that the standard two years, or is it possible that it could be extended?

MR. OZMENT: I'm going to have to defer that one. Is there a quick answer to that, or is that a long answer?

MR. GRILLS: I mean these don't have to be answered directly today, but if someone up there does have an answer, please...

MS. SNEED: Okay. I'm Sonya Sneed. I am from Kingsport, Dobyns-Bennett alumni, and so I am familiar with this community. I used to dance ballet on this stage. So I am a Kingsport citizen. But as far as capital gains, I'm in the Relocation Buyers Acquisition Office. We will not give you an answer regarding any legal or tax issue. We will tell you to consult an attorney or a tax attorney or someone more familiar with that.

MR. GRILLS: Okay.

MS. SNEED: Yes, Sir.

MR. GRILLS: Thank you, Sonya.

MS. SNEED: Thank you.

MR. GRILLS: My next question is because of a controversy that came up from my brother, the colonel. He researched some documentation, and according to some of the documentation, our property

was zoned commercial in some of the files that he found. Other websites listed one as commercial and one as residential, and I'd kind of like to know what was the determining factor on how they are categorized as far as commercial and residential. Does anybody have a...

MR. OZMENT: Back to Sonya.

MR. GRILLS: Thank you, Sonya.

MS. SNEED: I'm sorry. We do have an appraiser here, Mr. Phil Addison. Phil, would you stand, please? This is out of the Right-Of-Way Office, and he is a review appraiser. If you have a question regarding how the appraiser determines the zoning before he makes his final appraisal, please ask Phil because we do research that very detailed.

MR. GRILLS: Okay. Thank you. Like I say, I've got a couple more here. I'll try not to run over here. As far as a building that can possibly be razed, if it contains asbestos, in that particular process I know that there's some government regulations as to how that building that it contains the asbestos -- the monies that are paid out and the relocation or the razing process, will those monies actually have to incur the demolition of that -- or in the disposal of that asbestos, or will that be

incurred by the State?

MR. OZMENT: That's incurred by the State. We basically have to do surveys before any building is demolished. It's State regulation. And once asbestos is determined to be there, we have it removed. That's after we've already acquired the property.

MR. GRILLS: Okay. The next question, is the statute of limitation that was in a paragraph in the Environmental Impact Statement is 180 days from the judicial review process, and it mentioned the Federal Registry.

MR. OZMENT: Uh-huh.

MR. GRILLS: Okay? Now as far as I know, the Federal Registry would be where the information would be, is that correct, in the decision?

MR. OZMENT: Yes, Sir.

MR. GRILLS: And as far as the judicial review process, at the end of the judicial review process, you have 180 days to contest just the general building of the project, or is this for individuals also?

MR. OZMENT: I think that's to actually file a lawsuit against the project.

MR. GRILLS: Okay. On an individual basis

or the project in whole?

MR. OZMENT: It would probably be the project as a whole. Does that sound right?

MR. GRILLS: So that would be kind of a class action lawsuit type of thing?

MR. OZMENT: Well, it could be an individual, but it could be, you know, a group or a class action. It could be an environmental group that's opposed to the overall project. It could be anybody.

MR. GRILLS: Okay.

MR. OZMENT: That 180 I think is down to 150 under the new Transportation Act maybe.

MR. GRILLS: Okay.

MR. OZMENT: They reduced that time that people have to file, in essence, a major lawsuit contesting the process that was undertaken for the entire study.

MR. GRILLS: Okay. All right. One last question as far as -- and, Sonya, this may be something for you again. As far as the -- if a property is condemned and a portion of it only is condemned, will the entire percentage be taken, or will it be something -- for example, if they take 90 percent of a property and leaves a small strip that's

really of no value to the individual, is that considered when the...

MR. OZMENT: There are partial takes, and then there are, you know, total basically buyouts but they still leave the property, even though they've damaged the whole property out. Those are some specific right-of-way issues that that's outside of my area of expertise, but I'm sure people at the right-of-way table will be able to fill you in if I was wrong on that.

MR. GRILLS: Okay.

MR. OZMENT: There can be partial takes. We'll take ten feet off the front of people's property sometimes, you know. So it could go from, you know, 90 or...

MR. GRILLS: Well, I'm considering, you know, like I say, a major portion of the property being taken and just leaving something of no value where it couldn't be used to build a...

MS. SNEED: Okay. It's called an uneconomic remnant. We will make you two offers. We will make you an offer to buy 100 percent of your property, and if there is a portion that is left that has no utility value, we make you a second offer to buy either 100 percent or just the portion that the

first offer, like 5,000 square feet and leave 2,000. You can either have either option.

MR. GRILLS: So you do have an option as far as...

MS. SONYA: You do have an option. Yes, Sir.

MR. GRILLS: ...percentage or a whole?

MS. SONYA: Yes, you do.

MR. GRILLS: And what was that called again?

MS. SONYA: It's called an uneconomic remnant.

MR. GRILLS: Okay. Thank you.

MS. SONYA: You will, in essence, be made two offers, but we can go into more detail over yonder.

MR. GRILLS: Okay. All right. Thank you very much.

MR. OZMENT: Thank you, Sir.

MR. NAGI: Thank you, Sir. We have four more speakers before we ask if any public officials would like to say a few words. Our last four speakers are Frank Castleberry, Rann Vaulx, Charlotte Ellis and Kathleen Beine. Frank Castleberry, Rann Vaulx, Charlotte Ellis and Kathleen Beine.

MR. CASTLEBERRY: My name is Frank Castleberry. I live in Country Acres in Indian Springs, and I have two major concerns. I feel that the people of Indian Springs are being shortchanged and in the future will be shortchanged by not four laneing from the road at Cooks Valley Road to the interstate. The reasons are our kids and our grandkids go to school at Indian Springs and Sullivan Central and on into Holston Middle School. This will always continue to be that way, and with shortchanging the design of road and not giving us the opportunity to have future growth, it will stunt Indian Springs. If you do a further study, it would be my belief that from Cooks Valley Road to the interstate there's more travel from Indian Springs than it is to Kingsport. I think our future people do more business going to Blountville and Bristol than they do in Kingsport because of inaccessibility. And the last thing, if truly Yancey is a historical site, it would be much cheaper to move it back up on the hill, make a parking lot. There's no accessibility to it now. Thank you.

MR. OZMENT: Thank you very much.

MR. NAGI: Still looking for Rann Vaulx, Charlotte Ellis or Kathleen Beine. I can just bring

the microphone down there if that's okay.

MR. VAULX: Thank you. I do eventually get there. I'm just a bit slow. I am Rann Vaulx, and I live at 405 Wine Circle, and I may be better known as the owner of Yancey's Tavern, which has figured rather prominently in this, and I do thank Commissioner Schroer and all of his staff for the effort that they have made to protect the community and the historical sources that we have, especially the new design of Chestnut Ridge and the area between the cemetery and the tavern.

I am as opposed as Mr. Bledsoe to moving graves, but apparently we've passed that point with the new design. I do want to say this about a national registered property. It may surprise you to learn that you can buy and demolish a national registered site. They do not have the protection that the public thinks they do. You just can't do it if you're dealing with federal money. In fact, you're not really supposed to adversely impact a national registered site. And this case is admitted in the draft of the Environmental Impact Statement that there is a visual adverse impact to Yancey's Tavern because of the increased amount of paving. I now notice that the historic site is going to be on a

retaining wall overlooking a multi-lane highway. That is surely an adverse visual impact.

MR. OZMENT: Thank you very much for your comment. Oh, not finished. All right. I'm sorry.

MR. VAULX: What is involved that TDOT will face and I'm now quoting a sentence from the Advisory Council of Historic Preservation, which is in Washington. This letter was received February 18th, 2011, and here's what they say about what will be done. "The filing of the memorandum of agreement and supporting documentation with the Advisory Council on Historic Preservation is required in order to complete the requirements of Section 106 of the National Historic Preservation Act." That is the agreement that TDOT will need to adversely impact the tavern. And I would like to suggest that if the effort is to minimize the impact, that can be done by leaving the road as a two lane as it is now, adding the shoulder and the rumble strip that it desperately needs and turn lane to Cooks Valley Road. It'll have a turn lane in the three lane from the east. But I am most anxious that the road be made safe. The next-to-last fatality was Donna Feathers Mendenhall, a good friend of mine as is her Feathers family. So I know very well the heartbreak and ache of a lost

life on that road. In fact, my mother and I spent Thanksgiving dinner with the Feathers family 20 years ago this year, which was the first year of my mother's widowhood. So I was heartbroken when that fatality occurred. It was a head-on collision, the first we've had since the center line rumble strip was installed. And, again, it was the last -- the shoulder with rumble strips to warn the driver that they had dropped off the side of the road, and then, of course, they jerked and over corrected and caused the fatality. So I am most anxious that the road be made safe. And, again, I am very grateful to Commissioner Schroer and all of his staff for the efforts you have made. Many thanks.

MR. OZMENT: Thank you very much.

MS. ELLIS: My name is Charlotte Ellis. I live on Big Hollow Road in Blountville. For eleven years I lived right on 126, and we use that corridor today. I would like to be one more voice saying I would like to see the community and its assets protected as well as having the road made a safer road, the community being the rural community that Indian Springs is today and has been for so long, a beautiful community. I would like to see Chestnut Ridge protected, a lovely gateway to our city, the

historic sites, including the cemetery. And I would like to thank TDOT. I, too, am really impressed with what I've heard today from you, and I will be eagerly waiting to see that you are listening as it seems that you are. Thanks to the Commissioner and to TDOT folks for that.

I would like also to applaud Wendy Gordon for her very eloquent remarks. She has certainly gotten past the pavement with those ideas and into the heart of the community. And I hope that in giving lip service to making this corridor a safer corridor we do not in actuality make it a more dangerous road. Thank you very much.

MR. OZMENT: Thank you.

MS. BEINE: Good afternoon. I'm Kathleen Beine. I am a family physician and a community researcher, particularly regarding community design issues, physical design issues. I've been very much involved with several major community research projects regarding community designs over the past 20 years actually because it's my firm belief that the physical design of the community impacts the physical, mental, emotional, spiritual and the economic well-being of the people that live within those communities. Our roads have a major impact on

our community as you folks very well know, and over designing or under designing obviously has a very major impact, too. And one of the things as I was looking back on some of the records - this has been a ten-year process so far, and we ain't done yet. I do appreciate very much TDOT's patience with all of this. This has been I know a fractious process, and people have got very strong opinions on both sides of the court. I am very much concerned regarding safety issues, also regarding beauty and historic preservation. There should be some sort of compromise, which I think that you folks are working very hard to accomplish, that will accommodate these things. I, like others that have spoken before, am concerned about the widening, the four lane widening through Chestnut Ridge. I do think -- I do know, not just think, I do know that the road needs to be improved there, and exactly how that's going to be done I'm not sure. But regarding the issue of the five-lane sections, I have been very concerned about miles and miles and miles of five-lane roads because as I have become aware, that frequently is called suicide lanes and oftentimes becomes head-on collisions in those sections. And so if you are going to be putting in those portions, I'd appreciate

you putting in some sort of striping or something of that nature to make more like turn lanes in there. I am concerned about trying to preserve the historic sites and the cemetery. The other comment that I do want to make is that there had been a comment or a question earlier about sidewalks, and a lot of the people here in our community know that the whole effort for me has been sidewalks. In fact, I'm called Dr. Sidewalk by a few people because of my research and my efforts in this. And at least a few years ago when I talked to folks in Washington, D. C. regarding about ADA requirements and slopes, the comment that they made to me then, and, of course, it may have changed because it's been a few years, is that if it really is a steep slope, that people that are disabled know that they shouldn't be on those steep slopes and that they don't always have to meet the ADA requirements. Now, again, I could be -- that could have changed since I spoke to them because it was several years ago, but they referenced me to some folks in San Francisco, and San Francisco has sidewalks on every one of their roads because I talked to their engineer there and including, as you folks know, steps in a number of their sidewalks. And the man in San Francisco made the comment to me,

he said, "If somebody is in a wheelchair, they know which sidewalks they can go down and which ones they can't." So as much as I want sidewalks and bike ways, I also want the roads not to be big gashes through our landscape and to be able to maintain the beauty and the quality of our community. And I do appreciate everything that you folks are doing on our behalf because I know this is many, many hours or work. Thank you so much.

MR. OZMENT: Thank you very much.

MR. NAGI: Okay. With that, that's the public question and answer. We'll ask. Are there any elected officials present with us today that would like to say a few words? Okay. Well then, the remaining time that we have for the public meeting can be spent one on one with different TDOT officials as well.

MR. OZMENT: I have one comment I'd like to make.

MR. NAGI: Yeah. Go ahead, Jim.

MR. OZMENT: Well, first, I really appreciate all that you all have done and you've shared with us today. This is very informative to us, and as I said, it's very informative to the process and the decision makers that are coming. A

lot of what, you know, I've heard today is, and I think that you all have heard, is different people's visions of where, as I talked about balance earlier, you're having to try to balance, you know, an impact versus a gain somewhere else. So actually, the law requires that we avoid, minimize and mitigate impacts as part of our studying and design work. It's not something that's just a good idea. It's sort of the whole foundation of the National Environmental Policy Act is to avoid, minimize and mitigate and to build roads that are in harmony and help support the communities that they're in, that they don't segregate them, that they don't cause problems that aren't already -- you know, that are worse than maybe what they're fixing. So I really, again, appreciate your time. Thank you very much. Mark, how are we going to end today, and what's our time here?

MR. NAGI: Sure. Well, we're here until at least 1:30. We've got plenty of time. TDOT officials are set up throughout the room. You can meet with them, ask them any questions you may have. Also, we still have a court reporter in the back corner, and she can take your comments if you would like on an individual basis. And if you have any other questions, just let us know. Thank you very

much for joining us today. We really appreciate it.

MR. OZMENT: Thank you.

COMMENTS TO COURT REPORTER

COURT REPORTER: May I have your name and address, please?

MR. BOWERY: Mark Bowery, 3713 Memorial Boulevard. Okay. My short comment is, is that the design team had -- taking the four lane to three lane to two lane and the four lane would go all the way to Cooks Valley Road, and I think that's the least of the options, and I'd like to see that followed through with. I think there is design options out there to not impact Yancey's Tavern and the cemetery. I'd like to see that explored more. And doing a great job, and we appreciate TDOT. Thank you.

COURT REPORTER: Thank you.

* * * * * *

COURT REPORTER: May I have your name and address, please?

MS. HOUSER: Yes. My name is Dorothy Houser. My name previously was Dorothy Fulkerson.

COURT REPORTER: How do you spell that?

MS. HOUSER: F-u-l-k-e-r-s-o-n.

COURT REPORTER: Thank you. And your address?

MS. HOUSER: 3991 Memorial Boulevard.

COURT REPORTER: And what would you like to

say?

MS. HOUSER: I am concerned about taking my property for the road up through there. That is my home place. I have lived there for 87 years, and the property previously belonged to my father, John W. Fulkerson. And twice before we have furnished property for the Memorial Boulevard, and I do not want to have to move at this late a date in my life, and I would appreciate very much anything that you could do about this to keep that from happening.

COURT REPORTER: Thank you.

MS. HOUSER: Thank you very much.

* * * * * *

COURT REPORTER: Okay. Go ahead and say your name and address.

MR. DeBAKER: My name is Eugene DeBaker. I live at 145 Euclair Street, Kingsport, Tennessee. My access to State Route 126 is along Holiday Hills Road out of our subdivision. This road is now going -- shows as being closed off and an extension put on Parker Street for everybody to come out on LeMay intersection with State Route 126. According to my information, I have been told that this intersection has the most number of crashes and fatalities along this entire highway. My comment to this is that

there needs to be another alternative or stop lights or some way because you're closing off probably 500 houses from access in and out of Holiday Hills Road going to State Route 126.

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MS. TRIBBLE: My name is Betty Tribble. I live at 5116 Memorial Boulevard, Kingsport, Tennessee 37664. I would like to say take my house to save a life. Thank you.

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MR. TRIBBLE: My name is Mark Tribble. I live at 461 Eastly Court, Number 6, Kingsport, Tennessee. I'm speaking on behalf of my mother, Betty, who lives at 5116 Memorial Boulevard, Kingsport, Tennessee 37664. I'm speaking on behalf of what was my childhood home. My mom is now a widow and lives in this home by herself. This road project will greatly impact her any way you look at it, whether you go with the Option A, B or Modified B. With the increased lanes, the traffic in front of her house will be greatly increased because she lives directly across the street from what is now Greenwood Market. In addition to the project, causing rain runoff and things of that nature, I'm concerned about an increase of flood possibilities as water already

gathers on her property. And so regardless of whatever option you decide to go with, I would like you to greatly consider taking my mother's house for her safety. I'm greatly concerned for my mother's safety with this project in any of the avenues that you are looking at. Her house sits at the base of a hill, and when you pull out of her driveway onto Memorial Boulevard, it's a blind spot, and regardless of whether you go with Option A, B or Modified B, that will not change. And so, again, my request is, even if you go with any of these plans, consider taking the house at 5116 Memorial Boulevard for my mother's safety. Thank you.

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COURT REPORTER: Okay. State your name and address again, please.

MR. LACEY: Chris Lacey, 4601 Memorial Boulevard for Lacey Insurance Service. The problem I have is TDOT has done work on the road to improve it and make it safer, and that is wonderful, but they've not addressed the sight problems of pulling in and out from the area where my office is and Briarwood and Tanglewood. I've had two of my customers -- I didn't watch them get killed there, but I watched the wrecks that killed them over the past 30 years, and

it's something that common sense could fix, but when politics gets involved, common sense is very uncommon in common man. TDOT has done a couple of things, though. They've capped the pavement on Memorial Boulevard. When they repaved it several years ago, they paved about ten or twelve feet onto my parking lot and left a drop off. They didn't smooth the edge. They just left a drop off. Then they came through maybe six months ago or so, and they put a very thin, like maybe a half-inch cap on top of Memorial Boulevard, maybe an inch. I'm not sure. But they've left another drop off. So now for my customers to get in and out of my office, not only is it extremely dangerous, they've got two little drop offs to drive down, going down and going up. TDOT sent an engineer out there and looked at it and said, "Yeah, it's a problem, but you're a small company. So we're not going to do anything about it." At least that's what I heard them say. And I think it would go a long way, if nothing else showing goodwill to the community, if they would do the right thing on that one piece of property. They're the ones that's messed up the entrance. Let them come and fix it, and I don't think that's unfair to ask. And it would be very easy on the sight distance. There's a couple

little knolls there that could be knocked down. That's not expensive. I could probably do that with my own tractor, but I don't own those properties, but they could knock them down. It's not expensive, and it would save lives because people could see around those curves. That's all I have to comment on.

COURT REPORTER: Thank you.

MR. LACEY: Thank you for your time.

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MS. NODAL: My name is Susan Lodal. Address is 3501 Memorial Boulevard, Kingsport, 37664. Our concern has been from the beginning and we have expressed this at other events like this, that at the base of our driveway, the plan is to have a median that will not be able to be crossed in front of our driveway. The majority of the time that we pull out of our driveway, we need to turn left to go into town, and therefore, we will be forced to go to the right, either do a U-turn at an unsafe intersection at Orebank Road, which is a very busy intersection. So I would hesitate to do that. Or go much further out of our way or go one block past the intersection of Orebank and turn into a back, a neighborhood that is not really equipped for large numbers of cars so that I could go back to Orebank Road and then take a

right onto Memorial. So we have expressed a concern about this from the beginning. We do not have access to the back of our property. Our property does go to the end of Ridgeview Street, which is up above Memorial, but we do not have access back there to that back -- it's a dead-end street on a circle. So it would be -- and our 600 foot driveway and our garage are on the side away from Ridgeview, and putting a driveway across our back yard is not something we care to do either or having to rebuild the garage. So that has been a concern, and I just wanted to make sure and get that on record again. We know we would lose part of our front yard. We have almost three acres. So that is not as much a concern for us, although we do have two historic stone pillars. Our house was built in 1930. So we had asked early on for those to be relocated up into the yard if we were to lose the front section. So -- or a part of the front section. So anyway, that is my main concern is that we have access to be able to turn left out of our driveway. So that if there's a way that the median could have a cut across it. We -- also at the base of our driveway is located Farm Bureau Insurance Company, and they may have a similar concern, and if there was a cut-through in the median

that we could share, that might solve their concerns as well since it will limit access to their property or their business as well. So thank you.

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MR. CHEEK: Hi. My name is Dan Cheek. I live at 5308 Foxfire Place. I was an original member of the CSS team that helped develop the original concept for the new road. I was very much involved in the entire process. I attended all thirteen meetings and most of the training sessions we had before. When I entered into this process, I was adamant for a four-lane highway. However, as I became educated, I realized that that was not the way to go, and I completely changed to a less invasive, less environmental impact on our community. I think a four lane would completely destroy Indian Springs. It would just be a very bad way to go. So to make a long statement short, I'm very pleased to see that you've come up with this modified plan, the B Modified plan. It's very much consistent with what our team came up with in the end, and I'm glad to see that you've received input from the public, the people that live along this highway. I'm very confident that you will proceed with a less invasive road and one that will provide safety for the

citizens. Thank you very much.

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MR. GEORGE: My name is Scott George. I live at 4005 Foxfire Lane, and my comment is that I really hope that this improvement goes through. A four-lane improvement really is needed. We need to fix it now, fix it correctly, and the biggest thing here really is safety because right now the road we have is very, very outdated, and there is no margin for error. It's not the road that causes these accidents or fatalities because it's the same for everybody, but what it is that none of us are perfect, and everybody makes mistakes. And with this road, there's no shoulders. There's just no room to recover, and it's so sorely needed, and now is the time. If we're going to fix it, let's take the option that gives us the correct fix. Do it once, and do it correctly. I respectfully ask that you consider this and do the four-lane option. Thank you.

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MR. HARLESS: I'm Dewey E. Harless. I've got the property at 5027 Memorial Boulevard. And all I can see here is they're just going to be doing part of this road work. I see fit that since we're going

to be doing this work, we need to quit making these two-lane roads and bottlenecks because that's going to be right where my property is, and if we're going to make a road, why not make it right to start with. Okay. A four lane? We don't need sidewalks. Curbs and water drainages is sufficient for us. But I know the way it is, the bottleneck is going to be right where I'm at, and I have a time getting into the road now on account of that. I want to treat everybody right, but when I was growing up, my daddy always told me, "If you do a job, it is to do right." Well, when you take a drop back down to a two lane, that has been a death trap of our 126 anyway, and I would like to see a four lane. If we're going to spend the money, might as well spend it now because just in a few years you're going to have to go right back over that and put the four lane the way I see it because it just don't -- in other words, I'm no contractor or anything, but it don't make sense to me to put a four lane through and two bottlenecks of dropping it back down, and that is where accidents do occur. And I sure appreciate the road construction going on, and I know it'll take time, but this has been needing for a long time, over ten years. And I do think that if you do the job, we don't care -- or I don't about

sidewalks because nobody uses sidewalks out that far out of town anyway. But it's a little community, but still yet, curbs and waterways -- to curb the waterways to the ditches or wherever the lines goes would be the only thing that we would need. So that's going to save a lot, and even if I have to give some of my property for that, I'll be glad to do that because I'd rather have safety for transportation because I'm on that road pretty much. I worked at Mason & Dixon, and I traveled that road from there right at ten year, and I do know that we needed it back then, and that was back about the middle '50s to the early '70s. So I sure appreciate the Highway Department or the State of Tennessee getting this road done because we sure do need it as soon as possible, and I would sure be proud to see the four lane go. Since we're starting it, we should fulfill it. The historic site, they don't have to do much to that to get that to go back to a four lane there and take it on through and leave the cemetery alone if they don't want to move grave sites. But grave sites can be moved, too, but everybody's again it. That's fine with me. But the historic, that don't amount to much to people's life. So that's where the bottlenecks is going to be started. And I

sure appreciate this lady letting me speak to this, and I sure hope that they will make a four lane, since they started it, make a four lane, and that will take care of that road for years. And I thank you very much.

THIS COMPLETES THE PUBLIC HEARING AND COMMENTS.

CERTIFICATE

This TDOT Public Hearing was recorded on December 11, 2012 by Cathy Heinze and Debbie Ramey of Barringer Court Reporting, Gray, Tennessee.

I, C. D. Neal, Notary Public and Licensed Court Reporter, Barringer Court Reporting, hereby certify that the foregoing is a true and complete transcript of said hearing re: SR 126, Sullivan County, Tennessee, held at the Kingsport Civic Center, Kingsport, Tennessee.

WITNESS my hand and official seal at Gray, Tennessee, this the 18th day of December 2012.

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NOTARY PUBLIC

My Commission Expires: October 24, 2016.

STATE OF TENNESSEE

DEPARTMENT OF TRANSPORTATION

Public Hearing

SR-126 (Memorial Boulevard)

From East Center Street to Interstate 81

In Sullivan County

TDOT PIN 105467.00

December 11, 2012

Sullivan Central High School

131 Shipley Ferry Road

Blountville, TN

Barringer Court Reporting
P.O. Box 8035, Gray, TN - 423-477-7844

MR. NAGI: Well, good evening everyone. Thank you very much for coming out tonight to see us. My name is Mark Nagi. I'm the Community Relations Officer for Region I for Tennessee's Department of Transportation. We're here tonight at Sullivan Central High School to gather public input on the proposed State Route 126/Memorial Boulevard project in Sullivan County. This project would go along existing alignment from East Center Street within the City of Kingsport city limits east to I-81.

Joining us tonight from the Tennessee Department of Transportation are: TDOT's Chief of Environment and Planning, Toks Omishakin, TDOT Assistant Chief of Environment and Planning, Ralph Comer, TDOT Director of Project Planning, Steve Allen. From TDOT's Environmental Division are: Jim Ozment, JonnaLeigh Stack, Tammy Sellers and Martha Carver. From TDOT Construction Randy Busler and Jason Farmer. TDOT Project Managers Gary King and John Barrett. From TDOT's Design Division are Jeff Turner and Randy Plummer. From TDOT's Right-Of-Way Division are Debbie Morgan, Bill Rives, Amber Warren, Phil Addison and Steve Head. From TDOT Consultant, Florence and Hutcheson, are Stan King and Ray Brisson.

Once again, this is a TDOT public hearing, which means you have a few ways to get your comments on the record. Following our presentation, which will begin shortly, we'll have a session in which you can make comments or ask questions. There's a microphone at the front of the room for you to do just that. There was a sign-up sheet as you walked in tonight. In order to speak at the microphone, you need to make sure you've signed up on that specific Public Speaking sheet. If you have not signed up on that sheet and you would still like to comment, you can go back to the front and do that or you can go here to the back corner where we also have that same sign-up sheet. So once again, you need to make sure you're signed up specifically on the Public Speaking sheet in order to make comments. We'll be announcing those names in groups of four. That way we don't have a bunch of people all standing in the aisle at the same time. We ask that you limit your comments to less than three minutes apiece. That way we can make sure that everyone gets a chance to speak tonight. Again, that session will take place after the presentation.

We have two court reporters present tonight that will be recording all public comments made at

this hearing. We have a court reporter present in the corner back over there. She's available during all the festivities taking place tonight. That way you can also leave your comments with her privately if you so choose at any time tonight.

Also, we have comment cards and pens up front as you walked in. You can write down your comments and hand those back to us tonight, or you can take the cards home and send them back to us. They have to be postmarked by January the 31st in order for those comments to be part of the record.

With all that being said, I'll now turn things over to TDOT's Chief of Environment and Planning, Toks Omishakin, who has a few words before we get started. Toks.

MR. OMISHAKIN: Thank you, Mark. Good evening. Two quick things that I just wanted to share with you. Again, my name is Toks Omishakin. I'm Assistant Commissioner of Environment and Planning at TDOT. One, I wanted to thank you all for your time, for coming out tonight. We know you have very busy schedules. A lot of you probably went to work today, but you're here tonight. I want to thank you for your time as we look to move this project forward and this process. We've been working on

this, a lot of you know, for almost ten years now, and we want to move beyond this point, beyond the point that we are right now. So thank you for your time.

The second thing that I wanted to share was we know this project is important to you. We know that. We know about the numbers, the safety and the traffic numbers. We know more than 16,000 people are on this road on a daily basis in some locations. Sorry about that, Mark. So we know this road is important to you. We know the safety numbers. We know they're higher than the state average in some places, but we also want you to know, I personally want you to know that this project is important to TDOT. I spend, the Commissioner of TDOT spends just as much time on this project as any other project in the state, in the entire State of Tennessee. He is constantly asking me, asking Jim Ozment, who will be speaking next, our environment director, constantly asking where we are on this project. It's a critical project, and we want to get it right.

You know, earlier today I heard somebody make a brief comment about whether or not TDOT is the same, ole TDOT. And, again, I can tell you for sure in my role as the Assistant Commissioner that that's

definitely not the case. Whatever perceptions that you may have had about TDOT not listening, that's the old TDOT. I can promise you that the reason why we're here is to listen, to listen and take what you share with us tonight, take it back and use it to continue to move this process and this project forward. Any old perceptions about TDOT just coming in and doing what they want to do, I can promise you that's no longer the case. We want to listen to our communities. We want to engage our communities in this process and help get the solutions that are right for the community done. So I can assure you that's where we are as a department, and you'll see when Jim presents a little later, next, you'll see that we've actually gone back and we've looked at some new numbers, some new input that we've received from you all and taken it and used it to address some of the designs that we have on this project.

So, again, I want to thank you for taking the time out. This project is -- I know it's -- we know it's important to your community. We've seen everything that's happened over the last several years, but I also want you to know that it's important to us. We want to make the right decision. We want to get this right. So thank you all for your

time and look forward to hearing both your verbal comments later and your written comments. Thank you all.

MR. NAGI: Thank you, Toks. We'll now turn things over to Jim Ozment for today's presentation. Jim.

MR. OZMENT: Thank you, Mark. Again, I'm Jim Ozment. I'm the Director of the Environmental Division for TDOT in Nashville. As Mr. Omishakin said, we are very pleased with our turnout tonight. Thank you all for your time, for coming out on a dark night here. It's obvious that it's important to you, this project. It's important to us. If you all don't know - you probably are aware - that there was a meeting held around lunch time today downtown in Kingsport. We had a lot of people. There was probably more than there are here tonight actually. There was over 200 there. And there was a lot of good feedback, and we heard from the community some of the issues once we showed what concepts that we have come up with. So we hope to continue that tonight. So what I'm going to do is - let's see if I can get my slide show moving here - talk a little bit about the reason that we're here tonight.

Well, first, there's a law called the

National Environmental Policy Act that sort of governs the way that we do studies of roads, and one of those requirements is that we have public hearings at certain points to get public input. But it's not just because there's a law that say that. I mean this is clearly the right thing to do. TDOT is at a point where input from the public, input from your elected officials is very important to us in making decisions, and as Toks said, that probably wasn't so true in times past. You know, a lot of times people think that when we show up, that we've already got the road done and the bulldozers are in the parking lot, and that's not the case here tonight. I'll talk a little bit about the road building process. We're going to try to answer your questions, give you time to tell us what your feelings are. I'm going to talk a little about the project history, tell you about what the road designs that are being proposed look like. I'm also going to talk about the impacts.

You know, whenever you do anything, there's typically an impact, either it's positive or negative, and the same goes with building a road. Very rarely do you do some project unless it's changing light bulbs in the street signs that are going to not cause some kind of a problem or possibly

benefits. So we're going to talk a little about that. And also some of the efforts that we've done to reduce some of those impacts of late, in the last few months since this document was originally released in January of this year.

Now I apologize for my slide. I realize that you all probably know exactly where we're talking. This project goes from East Center Street in Kingsport to I-81 just outside here, and my blue line didn't show at all, and the lights didn't help that at all. But let me tell you a little about the history of the project.

In 2003 the local Metropolitan Planning Organization - we call it MPO - and the mayor's office, both contacted TDOT and asked for us to do something about the road. Can we do something to improve the safety of the road, and the answer was, "Yes, we can." And at that time we had a process that was just beginning called Contact Sensitive Solutions. It was CSS, and what that basically means is that TDOT will go out and create - or from members of the public, business community, private citizens, several different types of people being represented - a team to look at what the problems are with a particular facility and see what they could do to

suggest solutions to us, because there's a lot of times that we could look at something from a map or from a photo, but you drive that road all the time. I can't tell you how many times somebody will go, "Well, if you'd only move the road this way just a hair," and the engineer will go, "Well, that makes perfect sense," because you've driven it your whole life or the last ten years, and you know those types of things. So in the beginning when we were scoping the project, it's very helpful to have that. And we put together a team. I believe it was 15 people on a Community Resource Team, that met over 13 times over two years and got feedback from all of them, and then we went to the actual public and said, "What do you all think about the ideas they're coming up with and what their problems are?" to see if there was a general agreement. And there pretty much was. So at the end of the day, basically what happened was that there were two built alternatives that were proposed by that team for us to study. And as with -- nope. Two slides back. As with any project, when it comes down to what are you going to study, we have to basically set a baseline. So in this particular instance, we came up with a certain set of needs first. And those things were things that you are

very familiar with. There are no shoulders on this road. The roadway goes up and down, and there's a lot of curves, a lot of bad angles where the roads come in, driveways come in at skewed angles. You know, that was considered to be the major problems with the road, and this sort of just illustrates, you know, no shoulders, bad connections, difficulty for mail delivery. And all of those kinds of problems generate general safety issues, but they also generate issues for mail delivery, school buses, emergency vehicle response, what happens when the bus breaks down and a flat tire on the road and there's no shoulder. All of those things are at play.

So there were two alternatives that were presented. First of all, I'll say the overall purpose of the project was at that point determined to be, we need a safe and efficient route between Kingsport and 81. So that was the overall purpose. After they defined the need, they came up with this statement. So then the project moved on into the environmental stage, which is where we are now. And that basically is the bottom line for that. But how we go about building roads is a little bit what this slide is here to tell you.

There's a planning process. There's an

environmental process. It goes step by step. Then it goes to design. Once there's a design that the people can look at and they know where the right-of-way lines would be, right-of-way is purchased, and then construction can begin. When the CSS teams met, that was the planning stage when they were coming up with those alternatives. Now we're in the environmental stage.

So let's talk about those alternatives for just a minute in case you all aren't real familiar. I think a lot of it is in your handout. A lot more detail is in your handout than what I can try to explain because there's a lot of things that change over short distances, like sidewalks and curb and gutter, and it moves back and forth. It's all in your handouts. But I'm going to in general talk to you about what went on. The character of the road was believed to best be served if it met the basic characteristics of the neighborhood. So if you start on the western end of the road near Kingsport, there's already a five-lane section down there. But it was believed that a four-lane section with a raised median -- and then it would move all the way from Harbor Chapel to Cooks Valley Road, and then it would change to a three-lane section. There would

still be the climbing lane, by the way, I think in here. No, excuse me. That's a four-lane section. So it's not. But then it would go on over to Harrtown Road, and it would turn into a two-lane section because that maintained the character of the neighborhood is what the Community Resource Team's thoughts were.

So what we do is we look at that, what is a four lane, a three lane and a two lane do when it comes to building it? Well, to build the road most efficiently, a lot of times it means straightening out curves, and also you have to have something called constructibility. You can't tear up the road and still drive on the road. So a lot of this comes down to if you shift off the road so that you can like build next to it and then still let traffic go, that's one way to do this. But the more you shift off the road, the more you're in somebody's yard or field or, you know, whatever. So the impacts go up. So when that happened, they looked at it and said, "You know, there may be a way to minimize this if we don't shift so far off the road and straighten quite so much." So the team proposed what was called Alternate B. You know, we cleverly named those A and B. That's so state employees don't get confused.

But what happened is we moved the three-lane section because of the problem with it being so narrow between Yancey's Tavern here at Cooks Valley Road and the East Lawn Cemetery. And so the section was reduced through there. The road width was reduced to reduce the impacts in through that particular area. Also at the same time, it was decided that we probably could widen the road more closely to the road. Instead of having it just move all the lanes out in the field and straighten it out, maybe we could widen a little on the right and a little on the left or very much closer. So that came up with a whole, another set of impacts when we studied it that were less than A. So anyway, then we go about doing our studies on those particular alternatives, and that's what happens in the environmental process. We look to see how the operational efficiencies work in that particular process. We also look at the natural environment. We look at the social and cultural environment, and then we go -- after we've done all that, we write a study, and it's called an Environmental Impact Statement. You've probably heard that term at some point, and it's nothing more than just the results of our studies to figure out what has happened and what are the likely, you know,

benefits and negative impacts to that.

Then after we do that, we bring it to you, the public. So that's what we did back in - let's see - January of this year. We published that. Put them at the library, put them on the website, and that's when we published our draft Environmental Impact Statement. In the meantime -- well, let me tell you a little bit more about what goes into this. The human environment side of things are more like social and economic impacts, noise impacts, visual impacts, things that bother people or benefit people, either one, or it could be economic input. On the natural environment side, that's things more like streams and wetlands or there are endangered species that have to be avoided, this type of thing, and more -- like caves, sinkholes, are there any hazardous material sites you need to get around, landfills. So that's kind of the natural environment side of things. We study all those things. A lot of times -- well, most all the time it's a requirement of some law that we do this, whether it be the NEPA law or some other law, Historic Preservation law or Hazardous Material Cleanup laws that say we have to do these things. So we're out doing all of those studies in accordance with somebody's regulation.

So what happens at the end of the day? We look at this, and we say -- we start counting impacts, and this is a good example that says, like for noise example. If traffic is moving on the road at a certain speed, what would the noise decibel level be at the houses along there and how many of those would be impacted? Impact, by the way, is defined as like 66 decibels, and that's about the level where you would have to raise your voice slightly if you were standing in the yard talking. That's how you can tell when you're at 66. If it's less than that, you don't have to raise your voice because of the cars, then it's probably not -- it's below the national threshold for being an impact. So we have to have a definition for that.

But we also look and see if there are historic sites, and there were a couple, but one in particular, the Yancey's Tavern, was likely to be impacted at least from a visual perspective. Acres of wetlands, not really any wetlands along there. Five streams would be impacted. Seventy-five acres versus fifty-five acres of forest land would be disturbed and purchased. There was either two or three hazardous material sites, and I know it sounds bad, but that's really just gas stations, and

farmland. A would take 15 acres of farmland and turn it into state road right-of-way, and Alternate B would take five acres. So you can see that there's a difference in that. A lot of times when we do this, these are where a lot of the severe impacts are at. A lot of agencies out there protect a lot of those natural things, like the streams and the wetlands. In this particular case, the key impacts to us anyway appear to be in displacements and relocations of homes and businesses.

So here's a chart that shows how many residential displacements would occur if we were to build Alternative A. Now under the first column here, it says 241. Of that 102 would be single family; 135 would be multi-family such as apartments or duplexes, and four would be, I think, mobile homes. If Alternate B were to be built where we're not so far running the road, you know, off the current alignment and if it was kept a more narrow track through there, then it drops to 162, 90 single families, 69 of the multi-family and three trailers. In both cases, businesses would have to be relocated, 43 on A and 30 on B. So obviously, that's pretty substantial impacts to the area. Also in acreage, it turns out to be 239 versus 122. One non-profit,

which is the volunteer fire hall, under either circumstance would have to be relocated, and under the first option where they ran the big four lane through there, it was 350 graves would be displaced, and under the Alternate B where they were trying to run a three lane through there, it would be more like 90. Now before you all start throwing things at me, I want you all to be sure that you know we heard you, and when everybody came out since this has been published and said, "That's unacceptable." The Commissioner heard you. We've heard you, and we've done some additional work to try to minimize that and have been successful in coming up with another alternative. Because of the way the laws are written, I have to tell you about what we studied first. Then I'm going to tell you what we've done since that point to continue to reduce and minimize impacts to zero. So that's where it stands, and the impacted historic sites basically were one and one, the same thing.

Now this is where our job becomes difficult because as you can automatically start to see, there are tradeoffs involved when you have to build a road. There are no easy decisions, and a lot of times there's really hardly a right one. There's a lot of

shades of gray in there. But we're looking at trying to balance the needs of the driving public, you know, 16 to 25 thousand cars a day going through there, and the safety of those people versus the impacts that it would cause to the community, to your social fabric of your community, to the businesses in that community, and try to come up with something that balances the best that we can and minimizes -- we're required by law to avoid, minimize and mitigate. So it's our obligation to try to keep finding ways to minimize these numbers.

So anyway, that is our charge - to come up with that. Your input, besides knowing those numbers -- those are just kind of hard, cold numbers. Your input as to what that means to you is what was important to us to help us as the decision maker and to inform the Commissioner and others at TDOT as to what might be the best of these decisions. And obviously, you know, any displacements are important to that one person. So here we go.

Since that graph study was produced -- excuse me. Since that graph study was produced, there were about 100 people showed up when they heard about the possibility of 90 graves being disturbed at the Metropolitan Planning Organization's meeting and

clearly expressed their displeasure with that. So before we held the meeting, we thought, "Well, we'd better go back to the drawing board and see if we can find a way to minimize that a little bit further." At the same time, sort of coincidental, the Metropolitan Planning Organization updates their traffic numbers. There's always projections of how much traffic is going to be on a road, and we look at it 20 years out in the future. They have to update their planning numbers every so often, and when they do that, then we are, in turn, required to use their data to update our projections. Well, that kind of came in right after that. So they gave us more information to work with because primarily, it said that traffic on the road in 20 years from now was actually going to go down. And on one end of the road it was as little as four percent. On the other end of the road it was much as 68 percent, and it varied across the entire length of the project. So with that in mind, it gave us the opportunity to say, "Well, what kind of a road best fits through here and still is able to carry and traffic in a safe way and get people to where they need to go?"

So we came up with an alternate called B Modified, and B is on the top. If you'll recall, we

had the extension of the three lane. This is B Modified. What it did was it extended that three-lane section further to the west from Lemay all the way to Harbor Chapel. The other things that it did was we went out and -- a lot of this work is done sort of on aerial photographs. It's not like we've been out with a survey crew and actually measured to the inch where everything is at. In the particular case between Yancey's and East Lawn Memorial, we actually went out and surveyed because we had to know exactly what could and could not fit through there in any particular design. So we went to the extra step of doing that for this particular project, and we came up with another design that says that if we put three lanes through there and we removed the sidewalks off of one side and we built some retaining walls, we think that everything will fit without any impacts to the graves and without any impact to the Yancey's Tavern and still be able to safely carry the traffic. So that's part of this B Modified idea here. Again, we're here to get your all's comments on all of these tonight.

So what came out of that is basically what I just said. We reduced the cross section through Cooks Valley to Lemay. We compressed the center lane

by removing the sidewalks adjacent to the tavern. We also avoided all the graves, reduced the number of displacements. We still addressed the safety concerns, and we reduced the cost of the overall project because of the less displacements.

So when we put the chart back up now and we have another column, we get to say, "Okay. What does that do?" If we just work on a piece of that project, we've been able to drop from 162 relocations of residential down to 104. It didn't go away, but we didn't work the whole section either. And business displacements dropped from 30 to 24. At the same time, we didn't recalculate, I don't think, the acreage, but the grave relocations go to zero. We think that we could avoid moving or relocating any graves at all under this scenario. And we also would have, we don't believe, any impact to the historic structure that's there. So that's a pretty positive reduction just by that extra work that goes on in trying to find ways to get through there.

So where do we go from here in the environmental process? The next thing we do is we take all of your comments back, and we review them. We put together everything we hear today, tonight, after this meeting. It's turned in. We again talk

to the officials. We analyze all of this and decide what would be the appropriate option to choose. So then we'll chose the option. The Commissioner would announce that, and then after that we would move forward with writing our final environmental document because it's a draft document now. So then we write the final one, and it says what the preferred alternative we want to move forward would be and list all of those impacts. That, in turn, has to go to the Federal Highway Administration for approval. They send it to their lawyers in Washington. They do legal sufficiency reviews to be sure that we've done everything in accordance with the law. They're our oversight partners. So that's kind of how that works.

After that document is complete, then we move to the design phase. This is where the engineers can get in and start doing more than what we have done in the environmental phase in terms of trying to figure out ways to further reduce the footprint. They get to have the survey data, all the topography, how the hills work, how the valleys are laid out, and they can use all that information to try to minimize. They can add retaining walls where we probably didn't add retaining walls to that

concept because what we're studying it's more of a generic. If we did A, if we did B down through there, what would happen. This is where they start to refine those because obviously, as I said, legally we're supposed to avoid minimizing any chance we get. So this our chance in design phase to continue with what we've already done in the environmental phase. So those numbers that I've just shown you are not final. Those are called conceptual numbers because we don't know where that road might get shifted just a little bit during the design phase. So we have to put that up there to be sure that you understand that. After we finish that, it would go to Right-Of-Way. We would acquire a right-of-way, and then we could go on to construction.

So what is our schedule? Well, at this point, as Mark said, we're going to give everybody to January 31st to submit their comments. You can submit your comments in writing tonight. You can go home and write them all up and send them in in the mail anytime between now and then. That would be fine, too. You could come down, and you can speak and give your comments, and you can still turn in a Comment Card. You can do all three or, you know, any combination you want to. We have court reporters

here, one up front and one in the back. If you need to get on home tonight, I know it's a work night and a school night, perhaps you want to go ahead after seeing this and go talk to them. You're welcome to do that, too, on the way out, or you're welcome to stay till the end and make comments, whatever suits your choice here. But then we would probably in late spring have an opportunity to say, "We think we've got enough information to make a decision on the preferred alternative," unless for some reason input comes back and tells us that we haven't looked at enough different options for some reason. But if not, that's probably our time frame. If that's done, we will have to go through a few steps as I described earlier, and hopefully by the fall or early winter we'll be able to write the final environmental document, and then at the end of next -- or winter of 2014, we write what's called The Record of Decision that finalizes this particular process.

So that's the steps in the whole shooting match and what we've come up with. We have maps all around the room. We have a lot of people from TDOT and the consulting firms that help do a lot of this work that are here to answer questions. Hopefully you had a chance to talk to them before you got here

and had to sit down. If not, we're going to be here afterwards for a while. So you can come over and ask any additional questions that you might have.

When it comes to speaking at the podium, Mark said he was going to call four people at a time. So just come down and sort of line up. Then you can make your comment. Please try to keep it to three minutes, and a lot of people probably want to speak, and we want to be sure everybody has time to do that. And I think that's it. So, Mark, do you want to get things started, and then we'll be able -- we're going to bring a panel up here of folks that hopefully can answer any questions that I can't answer, and that's how we're going to proceed.

MR. NAGI: Thank you, Jim. Okay. The first four people that we're going to ask to come and speak, and the microphone is right up front, and, once again, we've asked people to sign in specifically for this purpose. The first four people to speak are: Scott Mendenhall, Charlotte Dade, Danny Moody and Cathy Dear, and I apologize if I mispronounced your name and not being able to read it correctly. Scott Mendenhall, Charlotte Dade, Danny Moody and Cathy Dear.

MR. OZMENT: Before we get started -- I'm

sorry to interrupt you and make you stand there with the light on there. I want to introduce the panel members as they've come up. This is Stan King with Florence & Hutcheson Engineering Company. Gary King is the project manager for our project. This probably will be called the King section of the stands over here. That way you can remember who they are. Steve Allen is the Director of our Project Planning Division. Ralph Comer is the Assistant Chief for Planning and Environment -- or Environment and Planning. Excuse me. And Bill Rives is with our Right-Of-Way office in Region I. I'm sorry. So go right ahead anytime you're ready.

MR. NAGI: And, Sir, if you can, please say your name and your address. We add that to the record.

MR. MENDENHALL: Scott Mendenhall. Scott Mendenhall. I live at 161 Wembeck Drive, Kingsport, Tennessee 37664. My question is for you, is I've lived there 17 years. You said you done this study ten years ago. How come nothing ain't been done, not even shoulders? The only improvements I've ever seen done since I've lived there is guardrails and rumble strips. Now what's the deal on that? If something would have been done, my wife would have still been

living.

MR. OZMENT: Well...

MR. MENDENHALL: It don't take long to answer that question.

MR. OZMENT: No. No, Sir. It doesn't. There's really not a very good answer either, and first of all, let me say that I've very sorry for your loss. I mean we would -- you know, all the tragedies that have occurred up and down through there are very...

MR. MENDENHALL: I mean you done your studies. You know what -- ten years ago. You know what was already there. It ain't changed none, hardly much at all in that.

MR. OZMENT: It's not, and it's -- all you can say, and it's not a good answer, is that it's a process that you go through, and there are times where it moves faster and times where it moves slower, and it's hard to say how ten years could slip by and let that happen. We have, as you said, looked at a couple of safety projects through there where we've added rumble strips, signing, striping to try to improve that in the meantime. But that basically is it. We've changed consultants along the way one time. It was a bit of a delay. So that's the best

answer that I have at the moment for you. I can tell you, though, that since this administration has been here, it's been a top priority, and as Mr. Omishakin said earlier, the Commissioner talks about this routinely to him. It's on our standing meeting that I have weekly with him as to what's the status of the project and how are you moving it forward. So at this point, we are moving at the rate as fast as we can go. And I know that doesn't address the past, but that basically is the answer.

MR. MENDENHALL: What are you going to do to improve all your speed on all this?

MR. OZMENT: The speed?

MR. MENDENHALL: Yeah. Getting things done.

MR. OZMENT: Oh, for the process itself?

MR. MENDENHALL: Yes. I mean to improve all this. I mean what's going to be -- what are you going to do to another highway that's just going to take another ten years on that highway to get something done for that? How are you going to improve to get all this done a lot quicker? Something needs to be done sooner than what it has been.

MR. OZMENT: I tell you. This is a problem

that's not only plagued us I guess, but it plagues most states because there are national initiatives to improving the time frame for project delivery. There are a multitude of people from the Federal Highway Administration in Washington all through all the states that recognize this project delivery process takes too long. And there are a number of initiatives that are out there where they're trying to find ways to expedite project delivery. I'm going to one tomorrow, a conference on just that subject. So hopefully, you know, as we continue to make it a priority and are able to look at new and more innovative ways that other people have come up with, that we'll be able to improve on that time.

MR. MENDENHALL: I think Plan B needs to be done away with, and A could be a little bit more improvement on that part.

MR. OZMENT: Okay.

MR. MENDENHALL: That's my opinion about it.

MR. OZMENT: All right. Well, thank you very much. We appreciate your time.

MR. NAGI: So Charlotte Dade, Danny Moody, Cathy Bear.

MS. DADE: My name is Charlotte Dade. I

live at 4400 Briarwood Road inside the city. Briarwood Road is just right almost directly across from Old Stage Road. I'd like to thank you for this opportunity to be able to share my thoughts. I have five concerns. Of course, the first one of which is safety. The second one is historical. The third, environmental, fourth, aesthetical and fifth, personal.

Foremost, of course, in improving 126, the foremost concern is for safety. Certainly improvements need to be made to alleviate the dangerous conditions on this road. In view of the fact that according to the traffic studies which you've just cited, automobile traffic is now considerably less on 126 than it was several years ago, and that traffic appears to be declining. Therefore, I'd like to emphasize that a four or five-lane road would not be necessary, and I hope that we can go possibly with the Modified Plan B, which would eliminate the necessity for four and five-lane roads.

Secondly, as an amateur genealogist, I recognize the importance of preserving our heritage and our environment for future generations. Highway 126 has historical significance for our area.

Sections of this road have been known first as a wagon road. It's also been known as the Stage Road from Blountville, and, of course, it's known as -- parts of it are known as Island Road. This road brought settlers from Virginia into Tennessee, to the Long Island of the Holston where Fort Robinson was erected. It was from Fort Robinson that Daniel Boone and his axe men began their mission of cutting the Wilderness Trail through the Cumberland Gap, and along in the vicinity of the path of 126 there's such historic landmarks as the Yancey Tavern, Eaton Station and the Exchange Place, sites that we need to preserve as a reminder of our past.

In addition to these significant historical sites, the aesthetic quality of the path of the road, particularly along the Chestnut Ridge area, is important. We don't want to destroy the beauty of this area with the construction of a multi-lane highway.

Finally, of course, I have some personal concerns. The present plans project that a corner of our property may be used as a construction site. Our property has some historical value in that it's the upper corner of what was part of the original Exchange Place property. Our property is in a wooded

area with several springs. According to the State Department's Division of Water Pollution Control, our property and the surrounding area is a watershed area for the Holston River. What will happen to these springs and the serenity of the wooded area behind our home with the intrusion of heavy equipment making its way up that rugged terrain to Highway 126?

Of course, we want to save lives, and my condolences go to the gentleman who just spoke. No one understands that better than I because in February of 1986 I nearly lost my husband to a severe accident at the intersection of our road, Briarwood Road, and 126.

I truly appreciate the work that the Department of -- the Tennessee Department of Transportation has done, and my hope is that as it plans to make continued improvements in the highway, that it will consider the historical, aesthetical and environmental issues involved in the decisions. And, again, thank you so much for this opportunity.

MR. OZMENT: Thank you for your comments.

MR. NAGI: Danny Moody or Cathy Dear.

MS. DEAN: I don't see Danny. I'm Cathy Dean. I live at 1013 Cedar Hills Drive in Church Hill, Tennessee, and the reason I came, I have no

property except I have very dear family members buried in the Garden of Devotion at the East Lawn Cemetery. So I'm thankful that you have looked into not eliminating or moving or exhuming my family from the cemetery. Thank you so much for that because honestly, that was more than I could bear. I thank you for that, and I want to -- the Modified B I think is the one that you would not disturb any graves. So thank you.

MR. OZMENT: Thank you for your comments.

MR. MOODY: I'm Danny Moody. I live at 3621 Hazelnut Drive in Kingsport. I own some property on 126. I've got two or three questions that are just questions, short questions. Where was the last three-lane highway built in the State of Tennessee?

MR. OZMENT: I'm not sure I can answer that.

MR. MOODY: May I help you a little bit?

MR. OZMENT: Sure.

MR. MOODY: Memorial Boulevard according to the records. I remember when it was built. I've lived here all my life. I've traveled this road 65 years. Okay. And when you're talking about the three lane, when that three lane was built on

Memorial, did that solve the problem? Did that solve the problem now? You're having to go back and redo it. Okay. That's the one question. A quicker question was the number of accidents that has happened in the portion of the road that you're wanting to four lane against the number of accidents and fatalities of the section of where the four lane ends to right out here at the interstate? If my figures are right, they've either been one or two fatalities on the four-lane section. All the other fatalities have occurred this side of there, between there and the interstate. And question is, is why are you four-laneing a three lane when you're going to put three lanes on this side? Why don't you just put the four lane at the interstate and go that way, and you'll have a good four-lane road down through there?

As far as the rumble strips, I've been at my property quite a few years, and I can be aware at least every three to four minutes, at least every two to three cars they are driving on the rumble strips. They are driving on the rumble strips. You can hear them. You can hear them a quarter of a mile away. And basically a three-lane road is a two-lane road. It's not a three-lane road. It's a two-lane road.

You're going to be turning. So, therefore, you've got traffic coming in each direction heading towards each other. Look at the problem you have on Stone Drive where it's a five lane. You have the same problem there. You've got turn lanes, and people don't know where to yield to anybody. And here you are, you're going to put this on a major highway. I just don't understand. I just don't understand the logic of none of your planning here. I mean I've built a few roads in my lifetime. This road, like the lady said, was an old horse and buggy road. It's got concrete under it. It's flat. It's flat because that's what was used back in the A Model and T Model days. So that basically you've got an A Model and T Model road here with modern day vehicles traveling on it. Thank you.

MR. OZMENT: Thank you, Sir.

MR. NAGI: Okay. The next four people to speak are: Erwin Holman, Rena Robinette, Tim McCoy and Paul Bodenweiser. Erwin Holman, Rena Robinette, Tim McCoy, Paul Bodenweiser.

MR. HOLMAN: My name is Erwin Holman. I live at 180 Gravel Top Road. I have some concerns specifically of the closing of one end of Gravel Top Road. I know you talked about the geometry of some

of the access roads to 126, and Gravel Top Road both comes in at odd angles. But by closing one end of Gravel Top and putting a cul-de-sac at the other end, you have not completed your project goals. You have increased the mail delivery along Gravel Top Road. You've increased the problems for school buses on Gravel Top Road and in Adams Acres because now the school bus has got to go into that subdivision, come back out, make the cul-de-sac. That is not a very big road. You've increased my response time for emergency vehicles on Gravel Top because closing. All the emergency vehicles come from Central High School or this area that direction. You have -- so, therefore, those three areas have not been met in your project goals for the people in Adams Acres and Gravel Top Road. You've also -- you eliminate one entrance of Gravel Top Road. It is presently used as an emergency route around the 126 due to the geometry of the current road. Cars slide off in the wintertime. They come around Gravel Top and bypass that area. You closed one end. You don't have that access. I know the present proposals to fix the geometry, but if you don't fix it or if you get a severe ice storm, you're eliminating that road and cutting us off. So I would just suggest that you

maintain both entrances, fix the geometry of the entrances of both ends to 90 degrees but leave both ends open. Thank you.

MR. OZMENT: Thank you for that comment.

MR. NAGI: I'm looking for Rena Robinette, Tim McCoy or Paul Bodenweiser.

MR. McCOY: My name is Tim McCoy. I live at 5974 Highway 126 right by Harrtown Road. I've been involved with watching this road and the process with the building of it and recruiting it better since 2005, and it's been a long time coming, but I really want to say thank you to TDOT for coming out here and meeting with us earlier in the year after all the -- when they came out originally the first time, and Modified B has I think really done a lot to look at all our concerns and still get us a nice, safe road. Thank you.

MR. OZMENT: Thank you, Sir.

MR. BODENWEISER: I'm Paul Bodenweiser. I live at 220 Hollydale Drive, Kingsport. I travel 126 many times each week and expect to for quite some time to come. My good friends, Tim and Donna McCoy, lost a son on that road I think eight years ago. To see these plans evolve as they go along, Modified B far and away is the smartest one. We haven't heard

dollar amounts to these, but I'm really thinking Modified B is a lot cheaper than even B. I really would like to just see the road be improved, made safer. Just the rumble strips -- Mr. Moody made the point a moment ago. I don't know whether he's for them or not. I didn't really understand all that he was saying, but the rumble strips have made a tremendous difference in the safety of that road. The addition of guardrails. The one thing I think could be done to that road to really make it a lot safer is improve some of the lines of sight, especially around Cassidy, using Cassidy where the deputy recently passed. If you could just improve those. Shoulders would be nice and all these other things that are -- bike paths and all that, but that's a tremendous amount of money to spend on a road that's being traveled less and less. Another thing that might be taken into account is when traveling east on that road in the mornings, just the sun alone is a very dangerous thing. It's credibly dangerous. That's my two cents. I don't live on the road, but I do travel it a lot.

MR. OZMENT: Thank you very much.

MR. NAGI: Last chance, Rena Robinette. Okay. The next four people to speak, Henry Somers,

Vance Ramsey, Mark Gable, Kerney Timmons. Henry Somers, Vance Ramsey, Mark Gable, Kerney Timmons.

MR. SOMERS: My name is Henry Somers. I live at 5309 Foxfire Place, Kingsport. I got to looking. I've driven this highway for nearly 46 years. We're imports to the area, but obviously this is home by now. I've driven it for a lot of years. Safety is a huge issue. And also for a number of years since about 2005 I started keeping up with the number of fatalities on the road. Since 1999 -- the Highway Patrol only keeps fatalities for five years, and after that, you can't find them. So we would have lost a lot of that information if we did not have a record. There have been a total of 18 fatalities since 1999. And so Mr. Moody's point, 14 of those were on the two lane, two were on the three lane and two were on the four lane. And I think we've all been touched by the folks that have lost their loved ones, and it's happened in our neighborhood, and we've had some really close calls. Seven of those have been also teen drivers.

One of the things, the reason for the 126 project that was not mentioned, and I don't know. Some of you at TDOT may or may not be aware of this. There was an Airport Parkway project that was by the

City of Kingsport back in the 2002 time frame. That project was actually, I'll use the word killed. There was a number of people that were against that project, and one of the things that was said was that they would do away of that project, but as a result of not having a good highway from the airport over to 11-W, that we would update and upgrade Highway 126 as a major road to the east entrance to Kingsport. So that's one of the reasons we're here is to upgrade Highway 126 rather than do the Airport Parkway.

Also the CSS Team, I was at the meeting this morning, and there was a little bit of information there that I would say was not maybe exactly accurate. There are 18 people on that team. There was Kingsport and Sullivan County government people. It included the mayors, and it included some of the people from the Kingsport MPO, Sullivan County. So there was broad representation on that team. That team worked hard for two years, and there was a lot of back and forth that was done and a lot of compromises that were made.

Alternate A is the closest to their product that they recommended. That was recommended to TDOT in 2005. It was accepted by TDOT in 2005. And this is a -- after two years of work that they recommended

that. The CSS recommendation was a four lane to Cooks Valley Road.

What we need in my opinion is, we need a bare bones, minimum four lane to accommodate future traffic. I think anything you've got on the four lane there, it's got a grassy median. It's got sidewalks. It's got curb and gutter. We need to take all that out, and we need to get it down to just the very basic four-lane highway, especially across the ridge. Nobody wants to see a big cut in there. But the footprint of the four lane would be a very basic, is not going to be that much different from the three lane and you put a sidewalk on it. And I think for future traffic, we're actually going to need the extra lane-age.

MR. NAGI: Thank you, Sir. Thirty seconds.

MR. SOMERS: Okay. Traffic projections: The counts you were running in July, they're a thousand down. You run them in July. There's no school traffic, and the economy hopefully is going to be back in the areas within the urban growth boundary. Also, I'd like to say that in the 126 Phase Rebuild, a four-lane option is possible from East Center Street in Kingsport to Cooks Valley Road. This option is needed for the capability of safe

travel needs of our children and grandchildren until the 25th (sic) and beyond. A minimum of four lanes shall be constructed in the 650 feet from Chestnut Ridge Road to Cooks Valley Road with the appropriate deviation approval, using retaining walls and the available -- there's 60 distance feet of right-of-way between East Lawn Cemetery and the historical property. Nobody wants to see Yancey's Tavern impacted, and we don't want to see any graves moved. But that can be -- without the sidewalks, we can put that in without impacting -- moving graves or without Yancey's Tavern. And the example of where this is done is every day on State Route 36 from Holston River Bridge to Moreland Drive over the railroad overpass, there is 57 feet, and we're talking about 60 feet right-of-way at Yancey's Tavern and the cemetery. There's 47 feet from white line to white line. So we know that it can be done. And just...

MR. OZMENT: Sir...

MR. SOMERS: Just real quickly. Also we need interim improvements. We can't wait another eight to ten years, and a really good example is at Yancey's Tavern -- I'm sorry, at Cassidy, that blind curve. Interim improvements were proposed in 2009, and we really need to get those done for safety.

Thank you.

MR. OZMENT: Thank you, Sir.

MR. RAMSEY: My name is Vance Ramsey. I do live on 126 and have lived there for some 46 years. I probably have had as many wrecks in front of my house as anybody in this audience tonight. I could probably prove that if I wanted to, but I don't intend to do that. And let me say that the majority of wrecks that's happened in front of my house, the road had very little to do with it. I've woke up many nights, and I've heard cars coming down the road at 70 and 80-mile an hour. They run off the road, and they wreck. A great majority of the wrecks have also been drunk drivers who wreck, run through my fence, and in three cases abandoned the car and run, and the next day on one of them I found four six-packs of beer in my creek, that they run and put them in my creek. So I guess I'm starting with that to say that roads don't necessarily cause wrecks. People driving the vehicles are usually at fault in some way. Just like guns don't kill people. People kill people.

I believe that 126 definitely needs improving, and as most of you have heard me say before in the meetings, about four or five things

need to be done. We need to straighten a few curves on the highway. We need to put shoulders all the way on the road on both sides, and we need turn-off lanes for four to five major intersections so traffic does not have to stop to turn left or right.

I'm speaking against four laneing the highway for basically the same reason a lady said earlier. I don't want to destroy the scenic value of Chestnut Ridge. I don't want to destroy the communities of Sunnyside, Bridwell Heights, Indian Springs, and I also don't want to move graves of loved ones. You know, it's hard enough to have to bury your loved ones, but then the State of Tennessee comes along and says you've got to dig them up and re-bury them again. And that's a burden that not a lot of people would have to encounter in here, but at least one person would, and I'm one of the ones that would.

So I believe in improving the road as I've said, and I think the State's done a good job in coming up with their Alternate B Modified Version. I think that's the closest thing to what I would go for. I think that would get the job done, improve the road and satisfy most people's concern. And I do want to ask one question to the TDOT people before I

sit down. Three year in the Bredesen administration and the former TDOT people were here, as many meetings we've had, a petition was given to the TDOT people to give to Governor Bredesen of over 1,200 signatures opposing four laneing this highway. And the question I want to ask and you can answer after I sit down is, is Governor Haslam aware of that petition? And I need to know if he is for sure. If he isn't, then we need to give him a copy of the petition that we worked hard three years ago to do. Thank you.

MR. OZMENT: Well, to answer that question, Sir, I'm -- let me check. I'm, told that it was. In this draft Environmental Impact Statement, there's reference to it. Whether we know whether Governor Haslam is aware of that or not, I can't say.

MR. RAMSEY: Would you mind (away from mike).

MR. OZMENT: Well, yes, certainly. If you're asking right now would we make him aware of it, yes, we will.

MR. RAMSEY: I've got a man that's (left mike).

MR. OZMENT: Thank you.

MR. TIMMONS: My name is Kerney Timmons,

and I live at 5300 Foxfire Place, Kingsport, and I've been living there in that neighborhood for about 30 years. I applaud you on your Modified Plan B. It is a much more reasonable approach. The impact on the cemetery and on the historical site looks much better. I like the four lane. I like the three lane. I was involved in an accident a few years ago that could have been avoided if we'd had a center turn lane. I've seen other accidents that could have been avoided for the same reason. I agree with what Hank said, Hank Somers. I think that if we -- where you have the three lanes and the sidewalk, if you could possibly make that a four lane, that would be better than using it for the sidewalk. I think one of the biggest problems is the lanes are too narrow. The rumble strip in the middle has kept me on my side of the road many, many times late at night, and it probably has other people, too. I know it's an annoyance when we hear ourselves run on that, but it's better than being in the wrong lane.

I guess my final comment is let's get going.

MR. OZMENT: Thank you.

MR. NAGI: I'm looking for Mark Gamble. Okay. The next four people to speak: Donna McCoy,

Thomas Moore, Cathy Dunn, Deloris Kale. Donna McCoy, Thomas Moore, Cathy Dunn, Deloris Kale.

MS. McCOY: Hi. I'm Donna McCoy. I live at 5974 Highway 126. My son, Tim -- my son, Nelson, was one of the people that were killed on this road. I want to thank you so much for listening to the public, for inviting us to be a part of this process. We're talking about some of the different configurations that have been proposed. One thing that people that have come out and said they're opposed to a four lane. Personally, I am very opposed to a four lane, but one of the things that hasn't been mentioned is the fact that four-lane roads, two travel lanes in each direction, raise the possibility I fear for even more accidents on this road. People, we've seen it over time, they change lanes back and forth to get around people. It will be an opportunity for them to drive even faster if they can pass someone who is going the speed limit. And I'm also worried about increased truck traffic. As we said, this would be a much more direct route from the north into Kingsport to come down Highway 126 rather than having to stay on 81 and come in further on down. So I'm definitely favor of the Modified Plan B, and from looking at the map, I can

see where you've made a lot of improvements to the horizontal curvature of the road where you have to turn right and left. Are we looking also at the vertical curvature where people get lost in a dip? I know myself, coming out of my home, I will lose a car for a full ten seconds. I can see it coming around the curve. I can see their headlights. I lose it for a full ten seconds until it reappears practically right in front of my house.

MR. OZMENT: Yes, Ma'am. Those would be addressed in this proposal.

MS. McCOY: Okay. Thank you.

MR. NAGI: Thomas Moore, Cathy Dunn, Deloris Kale.

MR. MOORE: Yes. My name is Thomas Moore. I live at 5360 Memorial Boulevard, which is just on the western side of the Fall Creek intersection with 126. The first thing I want to make sure that we take into consideration are the driveway connectors just as importantly as major road connections along that road. The sight line at my house gives me two seconds from the time I can see a car until I would have impact. So needless to say, coming out of there, out of my driveway, I could not tell you how many times myself or someone in my family have had

feet clearance from our back bumper the front bumper of a car when we're looking out of our driveway. And the drivers coming down Memorial Boulevard do not give you a break. You will not see them on their brakes. You will not see the nose of that car dive. And so it's a crap shoot coming out of my driveway. I've contacted the State for years about this and have had them come out to my house one time to look at the solution for it. There's not a good solution for it. I've asked for them to build up the shoulder so I can at least get to the top of the hill and come out. At least I'll be able to see over the hill, but they tell me that's unacceptable because I would be head on. Let me tell you. Coming out of my driveway - okay - it's not dead head on, but it's within a degree or two of head on. So in the meantime, there still are things that can be done to improve the safety for the residents along that road until this major project is done. It would not be that hard to put in a culvert and fill in that shoulder so I can get up so I can see over the hill.

The three-lane option right there, as it is, normally I wait -- I try to wait until there's a car stopped to make that turn. So I know that a car would at least see their brake lights before I pull

out. If you do a three lane there, that car will now go shift into the turn lane, and there will be no safety net for whenever I come out of there with my boat attached or something like that, to let me sit and wait for something to hold the traffic up for me. So in that particular area, sight lines have to be addressed. Either bring up the dips on either side or cut Fall Creek back down so that that sight line is fixed. And so that's my question. At that intersection, do we know are we actively addressing that hump or those two dips on either side of Fall Creek Road?

MR. OZMENT: I'm not sure I can address that specifically at this point, but when we are finished here, if you'd like to go over to the maps and point that out, then one of our engineers would be glad to talk to you about what it looks like at this point. Remember, this is a conceptual design. Additional, you know, work on cuts and fills and, you know, slopes are all done further on in design as well.

MR. MOORE: Right.

MR. OZMENT: All we tell you is conceptually what is coming up.

MR. MOORE: Well, like I said, I've been

contacting the State for at least ten years about this to try and do something there, even a stop light. I don't care. Make the road safe, and I think most of that comes from sight lines. Take out the curves and take out the humps. That's all we...

MR. OZMENT: Thank you. We appreciate it.

MR. NAGI: Kathy Dunn or Deloris Kale.

MS. DUNN: Kathy Dunn. I'm a resident at 2356 Woodridge Avenue, which is - oh, I'm sorry - immediately to the town side of Harbor Chapel Road. I'm glad that we're thinking about an alternative to B. I've been concerned and involved for a long time, and I've listened to people who have been directly affected by fatalities on 126. And I hope that there will be a speedy resolution. I disagree with the four-lane, straight through conception because it will simply increase speed. I think some good points have been made about visual necessity for turning lanes and so forth. I would point out that the use of grass medians, unless we're going to allow animals to graze in them, is going to be a maintenance issue. You know, I like those things, but I'm concerned about an impractical idea of just profligate spending. You know, I would encourage TDOT to measure actual increases in traffic. I think our MPO

has done some studies of that, and they did not match the prior DES studies. Those were much, much higher. So we're back here now talking again, and I think that has been -- there was someone that wanted to know why it took so long. Well, let's get the calculations right, and maybe this process will speed up, and we can do it in a manner that isn't spendthrift and excessive and we'll actually put more people at risk. And I thank you, you know, for all the opportunity. I will be directly impacted with anything that's done, the improvements needed on Memorial, and I'm willing to acquiesce, you know, what aesthetics. I'm not speaking about the historic value. I'm talking about just looking up the ridge from my house to see lives saved, but I'm not willing to see just ridiculous spending for a continuous four lane that it was pointed out would just increase the volume of traffic. I think there are many other ways that drivers can get visual cues to slow down to -- I mean maybe even being monitored like some of those camera devices, which have worked where my farm is in Hawkins County. But thank you. I appreciate the opportunity.

MR. OZMENT: Thank you very much.

MR. NAGI: Looking for Deloris Kale.

MS. COLE: I believe it's Cole.

MR. NAGI: Yes, Ma'am.

MS. COLE: It's Cole.

MR. NAGI: Got it.

MR. COLE: I'm Don Cole, and I live at 235 Oak Street in Blountville, and I want to thank TDOT for coming here tonight and explaining these different phases to us. A and B is the one that had me upset, but B Alternative I think I can live with. It was concerning probably eight or ten of my family members in East Lawn, and I'm not against, you know, progress, but that's what had me upset. And I know parts of the road is dangerous. I was in law enforcement about thirty some years in this county. I was with the Highway Patrol in the county. I worked several wrecks on all state roads, and 11-W and 126 and the Johnson City, all the main roads, and several fatalities on secondary roads. I know parts of the, like I say, the road is dangerous, but I don't think that's the main problem. I think what we're facing -- times change, and I think the biggest problems are -- used to be this alcohol. Now it's alcohol and drugs and telephones, things to distract them. Well, I think that's the main problem. But I can live with the B Alternate.

MR. OZMENT: Thank you, Sir.

MR. NAGI: Thank you, Mr. Cole. Next to speak: Gene Bledsoe, Allan Novak, Wendy Niebruegge, Joe Smith. Gene Bledsoe, Allan Novak, Wendy Niebruegge, Joe Smith.

MR. GENE BLEDSOE: Yeah. My name is Gene Bledsoe. I live at 113 Holiday Hills Road, Kingsport. I've been living there pretty much my whole life. I don't have a comment because, you know, Memorial Boulevard/126 needs to be worked on. My question is red lights. A lot of the intersections that you're talking about, these roads and everything, are you going to be putting red lights at these intersections like coming up out of Lemay, Cooks Valley, up out of one street onto Memorial Boulevard? Are they going to be a red light there, or is people just going to be sitting there in line like they used to down on Harbor Chapel Road before they put the red light in down there?

MR. KING: During the design phase of the project, traffic will be counted at each intersection, and if a signal is warranted based on the proposed design, then a signal will be installed. But that has yet to be looked at yet in detail.

MR. BLEDSOE: Okay. And I noticed -- I

read a little bit in the paper and everything about the speed. Memorial Boulevard, people fly on it anyway, and, you know, in the mornings I leave out early and the evenings I come home, it's bumper to bumper. And when you come up the three lane and you go to a two lane there at Lacey's Insurance, it's always a big problem about people trying to get over, people won't, you know, be courteous and let somebody over and everything like that. It don't matter if there's 15 cars in front of you. They still try to push you out of the road. So the three lane, the question, you know, are you going to have a little bit better merging along through there because just as it comes into the two lane, you've got to turn there down in Briarwood. And I mean people slamming on their brakes there and everything like that, and I mean traffic all the way back, you know. Everybody is just hitting their brakes trying to keep from running into somebody in front of them.

The traffic count, I don't understand really how it can be down except for the time of the year that the traffic count because, I mean myself, I drive it. I drive it all the time, and there's as much traffic on it now as it's ever been. And when the school is in session and things like that, you

get behind a school bus, and you can see the traffic count behind you and all because, you know, the school buses come down through there, and traffic really, you know, really gets slowed down.

Property values, I've got property on 126, and I'm below the road. I'll be below the road when you build it. And from my understanding that if a property is below the road, the value goes down. If it's above the road, it goes up. How is that going to be met? Is that something that later on when it gets into the planning phase that you're going to be addressing or do you know how it's going to be affecting the property values?

MR. OZMENT: I think I'm going to have to toss that one to our right-of-way expert here.

MR. RIVES: Well, that would be up to the appraiser if the after effect your property -- once the road comes through, they would do an analysis to see whether the fill that's in front of your house has made your house less valuable, and he would assign damages based on that.

MR. BLEDSOE: Okay.

MR. RIVES: And you would get, you know, the value that your property has gone down in a damage estimate, and then that would be part of the

offer. Now that's if they're acquiring some of your property. If your property is back and it's from...

MR. BLEDSOE: Mine's right on Chestnut Ridge.

MR. RIVES: It's actually acquiring some of your property?

MR. BLEDSOE: Oh, yeah.

MR. RIVES: That would be addressed by the appraiser, and it would be his opinion as to how much damages he would apply.

MR. BLEDSOE: Okay. And, you know, there has been talk about the four lane going all the way. Well, you know, the last time we had this meeting over in Sunnyside, they shot that down because nobody wants a four lane from 81 down to Center Street because then it's going to become a truck route and, you know, tractor and trailers and everything trying to make the distance from 81 down to Kingsport a lot quicker that way.

The biggest question I have and everything is that what is the time factor from now until the time that you're going to be planning on purchasing the property and starting construction? Are we talking about another five, six, seven, eight years, or are we talking about, you know, within the next

three or four years?

MR. OZMENT: Right. Well, we talked about in the slides what -- the environmental document has to be approved before right-of-way can be acquired. That also sort of turns loose the design phase. Once the concept is approved as to which one they want more design, you know, to take forward, then the design phase has to start. So for how long it takes to design it, and the road would not be built all eight miles at one time.

MR. BLEDSOE: Correct.

MR. OZMENT: It's going to be broken into certain segments, and I can't say at this point whether it would be two fours or four twos or just what it would be. That will be determined probably by the engineers as well. But the length of that roadway to be designed is going to determine how long it takes to finish those plans. If it's -- probably four miles of it to acquire right-of-way. I asked that question earlier myself, and I was told that would probably take two years to work through just the acquisition of all the property that would need to be taken and all the negotiations and all that go on like that. Once that's done, then we could start construction. So let's say it takes us another year,

then a couple years for design and a couple years for right-of-way. Now you're looking at five years probably on that first segment, but that's all very tentative. And so try not to hold me to that. I'm just trying to sort of use my crystal ball to vision a little bit on that.

MR. BLEDSOE: Okay. Well, a lot of us here and a lot of people lives on this road -- I mean it's been ten years in the making.

MR. OZMENT: Uh-huh.

MR. BLEDSOE: And, you know, you've done a lot of changes in that time and everything like that, and, you know, everybody talks about the rumble strips and everything. I think they're a noise issue, but it does wake people up when they go across the line. And I've seen a lot of, you know, improvements made on Memorial Boulevard, and, you know, we're looking at -- all these people here and everything looking at, "Hey, is this going to be done in the next few years, or is this going to be something where the state is not going to have the money so they're going to put it on the back burner?", things like that. You know, 18 years from now they'll still be talking about trying to work on Memorial Boulevard.

MR. OZMENT: Well, that's one factor I didn't mention was the funding factor, but at this point, I'm not sure there's -- you know, right-of-way hasn't been funded at this point clearly. So we fund in stages, and it goes to the Legislature to be funded for the next segment. So, you know, if all moves forward, you know, smoothly, then the money should be there.

MR. BLEDSOE: Okay. All right. Thank you all.

MR. ALLEN: I want to address the comment you had about the traffic, Mr. Somers had. We actually came back in September after schools were open and conducted brand-new traffic counts on every segment of this roadway, and I'd also like to correct, Jim said that traffic was reduced. Actually, what he's talking about is the reduction in the future growth, and that came out of the Kingsport model. It was a reduction in the growth factors over the years and not the reduction in the traffic overall.

MR. OZMENT: That's why I let traffic people speak about traffic, and I try to keep my comments to environmental. Sorry about that. Thank you, Steve.

MS. NIEBRUEGGE: I'm Wendy Niebruegge. I'm on Cochise Trail and grew up as a neighbor to Mr. Ramsey, and it's kind of hard to speak after hearing Scott and the family that lost their son. Things start feeling a little trivial, but I like -- I'm speaking to this end of the road, and I like -- the rumble strips are great, and I think we can do a ton of improvements with the shoulders, cutting out the banks. I guess I could just give Mr. Ramsey a resounding amen because I think I agreed with everything that he said. I think there will be major impact of improvements without necessarily having to do all the four lanes and increasing the speed and everything. So cutting out the banks, bringing up the shoulders for over corrections. I think a lot of our wrecks and our head-on collisions are people don't know how to drive, and you get a couple of wheels off and you panic and you jerk and you cross over, and it's not a forgiving road. And cutting the banks, bringing some driveways and some roads in more straight, those are all the things that we are in favor of. And thanks for the opportunity to say it.

MR. OZMENT: Thank you.

MR. NAGI: Allan Novak or Joe Smith?

MR. OZMENT: Come on down.

MR. SMITH: Good evening, Gentlemen, and thanks for the opportunity to make a comment or two. I've been sitting up in the seats there wondering how in the world we were going to get...

MR. OZMENT: I'm sorry, Sir. Sir, your name and your address.

MR. SMITH: I'm sorry. My name is Joe Smith, and I live at 5110 Foxfire Trail, which is off of Old Island Road, and I was over there just contemplating how we were going to have a four percent traffic reduction by the time the road was built. And, of course, thank you for clarifying that - that it's not a four percent reduction. It's a lower projected growth rate. But the thing that was still bothering me a little bit was we are building or we will be building a road hopefully for some purpose way out several years from now, hopefully not too many but quite a number. And whatever the traffic is going to be on that day when the new road opens up, no one here knows what it's going to be. And if we build behind ourself and the growth is faster than is projected, by the time we get the road built, we may be out here again talking about the next plan to build the next road because we're already inadequate at that point in time. I've seen

it happen in some cities. You gentlemen have as well where they have continuous road construction. By the time you finally get a street that's -- Knoxville is a good example. You get it done, and by the time you've got it done, it's already outdated. You need to do it again. We'll be spending taxpayer money. I know a lot of my neighbors are in favor of Option B Modified, and it certainly has less environmental impact, but that said, let's don't under build this thing. Let's make sure we're building enough road so at least when it's built, it's adequate, and hopefully for some time after that. Otherwise, Option B, which is the lowest up front cost right now, could turn out to be far and away the most expensive option if you have to come back and do the project again. Thank you.

MR. OZMENT: Thank you, Sir.

MR. NAGI: Allan Novak?

MR. ___: Would that be Allan Newland?

MR. NAGI: Sir?

MR. ___: Would that be Allan Newland?

MR. NAGI: No. I see Allan Novak.

MR. OZMENT: He left us.

MR. NAGI: Okay. Moving on with Jim Fuller, Ken Pate, Allan Newland, Jay Schlag. Jim

Fuller, Ken Pate, Allan Newland, Jay Schlag.

MR. FULLER: Jim Fuller. I'm at 264 Cane Drive off of Fall Creek. I've been driving the road for 50 years and when I came to Eastman in '63. I would encourage the best road we can put in beyond any question. The traffic from Central to Kingsport, from Blountville to Kingsport back and forth, the area is going to grow if we have a highway. That's all we can say.

And then I want to tell you a little story. My wife was killed in '88 on Interstate 81. A lady got on at Exit 66 and went three and a half miles in the wrong direction and hit her head on. I can't tell you what that Friday night was like alone in the bed when I'd been with her for 28 years and in love with her for 32. I have two friends. Jimmy Light lived in front of me when I lived on Shiloh Private Drive, and his wife, Pam, was killed between the guardrails at the cemetery in front of whatever the -- what's the...

MR. OZMENT: Yancey's Tavern?

MR. FULLER: Yeah. She hit black ice early in the morning going to work, turned sideways, no place to go and was T-boned in the side with a neighbor coming home from Eastman. Killed her. He

experienced the same thing I did.

And then recently Scott Mendenhall's wife was killed after they pulled out going to Kingsport to eat. A lady, a neighbor came out of her house. The road is very unforgiving. You can't even tune your radio on it, you know. And so she came out of her house, hit the ditch, lost control, pulled back across in front of them and hit them head on. Scott was out of work quite a while. He went home the same way I did - to an empty bed, no children. And I'd just like to encourage you. The road is very unforgiving, and I know this is an emotional appeal, but emotions are part of it, too, not just the dollars and cents. Whatever we have to do to get through the cemetery and the tavern or whatever, let's do it. Bite the bullet and do it, and let's make it safe for somebody that's driven it 50 years. Thank you.

MR. OZMENT: Thank you, Sir.

MR. PATE: My name is Kenneth Pate. I live at 3913 Foxfire Lane. I've lived in this area for 47 years. I drive 126 pretty much every day. Most of the time I come out on Island Road and turn toward Kingsport, but many times I come out Island Road and turn towards the interstate. So I drive both

directions.

Somebody said that there had been a decline in traffic on this highway. I haven't seen that. In fact, when I first moved out here, when I went to work in the morning, I could drive down to the highway. I didn't have to even look. I could pull out on the highway and go to work. Didn't have to worry about traffic. You sure can't do that now. And in the evening it's bumper to bumper going home. I come through the drag strip on top of Chestnut Ridge up there, and people can't go anywhere, but they're going to get around you, you know. You're going to be behind them. That's for sure. And if it had not been for the fact that the roadway is a little bit wider through there, even though the lanes are painted narrow, there would have been a lot of collisions there because I've seen people just charge down that turning lane in order to get around another couple of cars, you know.

If I remember or if I know correctly about this Alternate B, you're ending the four-lane section at Lemay. Is that correct?

MR. OZMENT: Ending the four lane at LeMay?

MR. PATE: Where you come down Chestnut Ridge there at Holiday Hills, isn't that what that

alternate is?

MR. OZMENT: Yes. Yes.

MR. PATE: Yeah. How in the world anybody could think that that was a natural place to end that is beyond me. And even out at the cemetery there, that just doesn't look natural. I think, and I'm probably in the minority, that the best option would be to four lane this road all the way to the interstate because one of these days it's going to be that way, and it's going to be cheaper to do it now than it will be to keep coming back and piecemealing this thing. I've seen that happen a lot of places, and we've been talking about this for ten years, and we're no closer right this minute than we were ten years ago. So the cost, how much has it gone up in ten years? I'm sure it's at least doubled what it would cost to build that road to what it would have ten years ago. So I'm not disrespecting any of the people here. Everybody has got an opinion. I've got mine. I think it would be a much safer road if we had a four-lane road all the way through. The other day I was driving a bus and came by the beer store there on 126 just before you get to Fall Creek Road. There's a straight shoot, although it's a short straight shoot. I was doing the speed limit with the

bus, but somebody in a little sports car decided I wasn't going fast enough, and they passed me through there, and nobody happened to come out of the beer store, thank goodness, because they sure couldn't have stopped. And as far as these rumble strips, me and my wife were coming home from town here a while back, and we met a Jeep that was pulled halfway of the vehicle across those rumble strips coming right straight at us. And it's through that section of the S-curve, and there's guardrails through there. We got over as far as we could and could go no further, and I didn't know whether he was going to miss us or not. Thank goodness he did. But the rumble strip didn't have much effect on him. But I just think a four lane all the way is a better option for us. I think eventually it will be done, and in all honesty, I don't think I'll ever see that road built. There's a lot of people here that will never see it built. If we started on that thing right now, you know, we're talking 15 years down the road before that road will be built. So I think we do need to do something. I think we need to get on with it. Thank you.

MR. OZMENT: Appreciate your opinion. Thank you, Sir.

MR. NAGI: Allan Newland or Jay Schlag.

MR. NEWLAND: My name is Allan Newland. I live at 5301 Lonesome Pine Road in Indian Springs. First, I'd like to make a comment that I think the folks opposed to the four lanes are much more motivated to come out and speak than the ones that are in favor of it, even though on at least two different polls that you did, the folks in favor of a four lane were overwhelming in favor of that in your own documentation.

But anyway, when I came to Indian Springs in 1974, we had a doctor's office. We had a dentist office. We had a service station, full service. We had an auto parts store, grocery store, later on a full-service grocery store. All those gone now. And I think the reason is that nothing has been done to 126. And I definitely am in favor of four laneing it. I'm sure that it's not going to be all done now, but I agree that eventually it will be done, but in order to get it started, you need to four lane it all the way to Cooks Road. Every community in this area has got a four-lane access to grocery stores or hospitals except Indian Springs, and we need it, too. Thank you.

MR. OZMENT: Thank you, Sir.

MR. SCHLAG: My name is Jay Schlag. I live at 1017 Tiptop Avenue, Kingsport. I do not live in the area. I have family, adopted family that do live in the area, and I work in the area. I travel 126 every week and up and down the side roads picking up garbage. I am one of the traffic hazards. I realize that. We do what we can to minimize our impact. Have you as the engineers in this Planning Committee considered the impact that the traffic delays that you're going to have while you're doing this construction into the little side communities? There's already people cutting down Holiday Hills, Island Road, and they're booking down these roads to try and get somewheres else. You start doing major construction and rework and everything else, you're going to increase traffic into these side communities. I think that's something most people don't think of and haven't realized.

And as far as the City of Kingsport deciding that they want something done with a road that runs outside of the city, I'm sorry to whoever is offended. My parents own property out in the Rock Springs area that was annexed. The city doesn't care about the people that they're annexing. They don't care about the property that they're taking. They

don't care about what you earned with your liberty, what your family has had. They don't care. I ask, Gentlemen, that you take this into account when you think about taking the property that someone has earned with their blood, sweat and tears so that other people who are not directly affected can get a little bit more money in their pocket. I moved out in the county originally to get away from the city. If you don't like the county, move into the city. You want city living. Move there. I'm sorry. I can't stand Knoxville. I can't stand Johnson City. I originally moved out here 13 years ago from California. I love it out here, and I love the country. I've driven that road for 13 years, motorcycles, cars, pickups, vans, commercial vehicles in every weather situation that's happened over the last 13 years. That's not a dangerous road. The drivers on it are dangerous. The people who were talking about people coming across the median, that's not the road's fault. It's the people on the road. Please also keep that in consideration when you're talking about penalizing and taking property from people because of the mistakes of others. My condolences to those that have lost family, to those that have suffered accidents. I do severely offer my

condolences, and I feel for you, but you don't have to steal from others to try and prevent. Thank you.

MR. OZMENT: Thank you, Sir.

MR. NAGI: Here are our last three speakers: Wendy Gordon, Judy Murray, Rann Vaulx.

MS. GORDON: Yes. Wendy Gordon, 326 Wine Circle. I spoke earlier this morning, and I want to make one clarification. I misspoke, and I said that Commissioner Nicely wagged his finger at us and told us a year and some odd months ago that TDOT would not overbuild this road. It was Ed Cole. Sorry. So, still, you know, a different administration, but I just wanted to clarify that, that it was not Nicely. I misspoke.

I want to thank you guys again because there are a lot of people that weren't here earlier. You all have done a tremendous job so far with a really tough charge. You have taken into account -- there's a real changing of the guard at TDOT, and it's just tremendous to witness. I've been to every single meeting and public hearing that you guys have had. I've spoken at quite a few of them, and it is just an honor really to see the changing of the guard at TDOT. Thank you.

My issue, I lived in Middle Tennessee and

drove professionally, drove a UPS truck for twelve and a half years. I drove Highway 70 in DeKalb County and into Wilson County most of that time. Highway 70 is a road that when I started driving was very much like Highway 126, the topography incredibly similar, incredibly. TDOT came through and built a wider, straighter, flatter four lane. The problem and the misconception is I hear a lot of people tonight talking about a safer road, and they all assume that a safer road is a divided four lane. When we're talking about our interstates, which are designed as limited access roads, that is true, but when we're talking about Highway 70 in DeKalb County and Wilson County and when we're talking about a divided four lane in Sullivan County with no limited access, very few roads, very few access roads eliminated and only a handful of homes -- I know 104 is still a lot, but there's still 160 left, you know, that you didn't take as opposed to Plan A. You are creating -- I drove the road every day almost, and I would speed. The posted speed on that road was 45 miles an hour. I would run 70 because I had things to do and places to go and lots to do in the day. I would be passed by people on a regular basis probably doing 90, 95 miles an hour. Passed me like I'm

sitting still.

Here's the fact. This is not opinion. This is fact. I don't have the data. I plan on driving to Middle Tennessee and going to the THP office and looking up the fatality rate. You can't get it just for segments of roads, but I can tell you this from being there, living there, driving up on these accidents, they were horrific in nature. When you have people running 90 miles an hour and hitting each other head on or T-boning each other, it is grotesque. Cars are obliterated. It's horrific. And as TDOT's data on all other segments, it hasn't held true for the small, tiny section of Highway 126 that is four laned, but by and large, in Sullivan County it's fact. This isn't opinion. It's facts. Four lanes, the non-limited access four lanes are not safer. More fatalities happen there than do on two lanes. So we would like to applaud you for scaling back, for maybe putting the road on a road diet, and, you know, I know that there's a whole planning theory out there with a road diet. Thank you. You guys have done a tremendous job. We are really interested in safety, and we're glad that you guys are, too. Thank you.

MR. OZMENT: Thank you.

MR. NAGI: One of the name -- with Dave Dots. So our last three figures are now Rann Vaulx, Judy Murray and Dave Dots.

MR. DOTS: I'm Dave Dots. I live at 5372 Memorial Boulevard. I also own a business at 5376 Memorial Boulevard. One of the things I've been listening to everybody speak about, I think in my opinion the Alternative A, I am very much in favor of a four lane, but I also think that maybe we could do away with the sidewalks. I don't believe anybody is going to be walking down Memorial Boulevard at any point in time. So that's one thing.

The other thing I was mentioning, too, was possibly with the four lane is to keep the truck traffic down is to put traffic lights at major intersections. Not only that, for safety, too, as well as turning out on four-lane highways. Some of those proposed intersections I was thinking about would be Cooks Valley, Lemay, Stage Coach, Briarwood, Island, Harrtown, Overhill, right here at Carolina Pottery. I think that some of the improvements that would be made, you know, with speed, be taking that into factor with the four lanes is if we had traffic lights at major intersections. It's going to slow people down because they know that there's going to

be a light up there that's probably going to turn red. And that way, you know, they're not going to be buzzing a four-lane highway. That's one of the things I think would probably be the best thing because I'm looking at the future. I'm looking at maybe growth rates are down now, but they're going to be rising. I'm from a larger city. I've only lived at my address for about three and a half years, and I know some of you all have lived in this area for 60 and 70 years, and I understand that, you know, those are your home places and that you're going to lose that possibly if the big road comes through, and I also understand that the East Lawn Cemetery grave sites is a major impact and Yancey's Tavern as well, too. But what I've seen in this area -- I've lived in East Tennessee now for about twelve years, and I've been driving down Memorial Boulevard for almost that long, and I've bought property out here because I like the area, plus I needed some commercial property for my business. But I think we've got to look at the growth in the next 30 and 40 years. We can't just look -- I think one of you had mentioned under building the road, and I've seen that a hundred thousand times in the big cities where they build the road and it's immediately outgrown and they're having

to start road construction once again. And so that can be a real major factor in taxpayers' dollars and money that's spent. I think we need to build the road and build it right, and I think a four-lane highway would be the way to go, but the traffic lights would be also a very good improvement on the major intersections for safety and turning onto that four-lane highway. And, of course, also straightening it as much as possible, not only vertically but horizontally as well and then also trying to minimize the impact of how many houses that we do take and how many business that we do take in the process. So that's what my opinion is, and I appreciate the time. I appreciate you guys coming out.

MR. OZMENT: Thank you very much.

MR. VAULX: I am Rann Vaulx, and I live at 405 Wine Circle, and I am also an owner of Yancey's Tavern. And I do appreciate Commissioner Schroer and all of your staff's efforts that you have made to address these concerns. There's no question what the road needs shoulders. Shoulders or rumble strips could have certainly prevented the last head-on fatality we had, Donna Feathers Mendenhall, a friend of mine, as is her Feathers family. That is

certainly an improvement that has long been needed, which you have addressed. All of the business about multi lanes could easily be overbuilding based on the gentleman's traffic projections, and you do the best you can with what forecasts you have. But as far as Yancey's Tavern, it may surprise you to learn that you can buy and demolish a national registered site. You just can't do it with federal funds. The national registered sites really have very little protection. In a federally funded project, you're really not supposed to adversely impact. And you've done at least what you could to minimize the impact of this, and I applaud that you're not going to move any graves. That was appalling. But, again, I beg that you don't overbuild the road based on dreams of development and false projections. I think you've done a great job, and I certainly favor the Modified B. Thank you ever so much.

MR. OZMENT: Thank you, Sir.

MR. NAGI: Judy Murray.

MS. MURRAY: I think my points have been covered.

MR. NAGI: Thank you, Ma'am. Are there any elected public officials that would like to speak now? All right.

MR. OZMENT: Well, I think -- is there anyone else that didn't get to sign up that has a question that we didn't call your name. Excuse me. The City Fire Department. Did I say volunteer? Okay. All right. Thank you. Well, I'd like to thank you all for coming out and sharing your opinions tonight. I think that once you sit and listen to your friends and your neighbors in your community and what we have had to take in and work with, you can quickly start to see how there are multiple opinions and lots of impacts that are to be taken into account in a decision like this. It's not clear as to any particular choice. That's why we're here - to gather this information, to blend it with what we know about the engineering side of things and the safety components of different types of roads under different traffic circumstances. There's a lot more technical things we could have talked about probably but didn't. But anyway, we certainly appreciate that. As I said earlier and maybe it wasn't noted, that laws require us to actually avoid, minimize and mitigate impacts when we have an opportunity. And in some cases in doing so, that means that it's not the biggest thing because the biggest usually carries the biggest impacts as well.

So we have certain laws that are involved that we have to abide by as well. We certainly want to be forward thinkers in looking at what the future holds and what needs to be done for the community at the same time. So to all of those who have spoke tonight, we certainly appreciate your input, and we certainly want to issue our condolences to all of you who have lost friends and neighbors and loved ones in the years past in this road. Clearly, everything that you said about the road hopefully we sort of talked about, you know. There are no shoulders. There is bad traffic. Obviously, drivers play a role in that as well. To the degree that we can, we hope to be able to improve this situation for you, and, again, we thank you for coming out tonight, and we'll have people over here for a little while. So if you all want to come and ask individual questions, please come on forward. Thank you.

COMMENTS TO COURT REPORTER

MS. ROBINETTE: Rena Robinette, 387 Holston Drive, Blountville, Tennessee 37617, and I am not in favor of the road widening if it's going to impact East Lawn Cemetery. I have family members that are buried already in areas that I feel sure if that were to happen, it would involve them. And I personally feel like this is wrong, whether it's my family members or somebody else's. And I do think that should be taken into consideration. And I believe it was five or six years ago there was a road from Stone Drive to the airport that was proposed, and somehow that fell by the wayside. I think that would alleviate some of the traffic problem on 126 had that road been built from Stone Drive to the airport. And I think that's something that maybe they should consider bringing back up. But those are my two comments, my two thoughts about the matter.

* * * * * *

MS. FEATHERS: Betty Feathers, 1957 Island Road, Blountville, Tennessee 37617, and I'd just like to say a thank you for the speed limit being lowered to 45 all the way through this highway and that the Highway Patrol are enforcing that speed limit on

motorcycles, but there's not many places they can pull anyone off the road, but they're working on it. Thank you.

* * * * * *

MR. MENDENHALL: All right. My name is Scott Mendenhall. I live at 161 Wembeck Drive, Kingsport, Tennessee 37664. And my opinion on this highway, they need to four lane it all the way through. For one reason, because of accidents, and for the main reason, if they had done something sixteen years ago like they said they was going to, my wife might be living today.

* * * * * *

MR. ELTON: Keith Elton, 4841 Peers Street, Kingsport, Tennessee 37664. My comments in relation to the Highway 126 would be that if they were to close Shuler Avenue where it joins 126 and make a cul-de-sac, they should close Shuler Avenue at the other end where it comes off Cooks Valley Road. Shuler Drive and Lemay and Peers Street are overwhelmed right now with traffic coming off Cooks Valley, Harbor Chapel, Fall Creek, several hundred cars a day, and they would all be diverted to Peers and Lemay Street. That's where I live. And cars already fly by there, and they don't stop at the stop

sign, and this will just increase the dangers in our neighborhood twenty fold because the amounts of traffic that will come through would be all falling into one small, residential street as opposed to two. One of the reasons we didn't buy a house on Shuler Avenue was because of the traffic that connects between Cooks Valley Road and State Route 126. So we found another house on a side street where the traffic wasn't so overwhelming. Now if they close Shuler at 126, all the traffic will be diverted to Peers Street and Lemay, and that is dangerous for our community. It's dangerous for my kids, and it's dangerous for my grandchildren to have all that traffic coming by my house.

Also, I drive 126 every day between Peers Street and Blountville, Tennessee. The road is perfectly -- it's a perfectly good road. The problems we have on 126 is 126 is not a very forgiving road, but it's a perfectly good road. The accidents that I'm aware of are not any fault of the highway. They're the fault of inattentive drivers, people that follow too close, people who go too fast, people that text, people that eat on the way to work, people that apply makeup on the way to work. It is people that are distracted drivers and speeding

and/or reckless drivers. It's never been the road's fault. We've had representatives from the state and City of Kingsport blame this road for all the death and destruction of our innocent children and citizens, but by the same token, they said that between Johnson City and Kingsport. So they built this fabulous road called Interstate 26. And Interstate 26 has a high rate of death, serious injuries, really, really serious accidents, and that's a perfectly good, federally funded, four-lane highway. And that didn't cure what the problem was. The problem was drivers on the highways not paying any attention and disobeying every traffic law in the book. Thank you so much.

* * * * * *

MR. FLOYD: This is Tom Floyd. I live at 4409 Green Springs Circle, Kingsport, Tennessee 37664. I wanted to leave a comment on Alternate B Modified. That seems to be the only schematic or diagram that shows a Trinity Lane connection in the sense that it's taking I guess the right-of-way of my existing private driveway and making it a through road onto Trinity Lane. It's not clear to me why that property is being taken. So I guess I need an explanation and why is it not on the other two

diagrams, and I guess a little bit more explanation about the process of taking that road. I believe that's all I want to leave.

* * * * * *

MR. HOLMAN: My name is Erwin Holman. I live at 180 Gravel Top Road, Blountville, Tennessee 37617. I have a concern on the construction from the standpoint is I own a lot that's about 400 east of Gravel Top Road, and it's adjacent to 126, and I want to make sure that I have a drive accessible off of 126 when the construction is finished. Right now there is a culvert that was installed by the State of Tennessee back 40 years ago that provides me access to there. They used that lot as a fill area 40, 50 years ago, put the culvert in to maintain the creek/stream flow. And so I want to make sure that that culvert and I have access to 126 for that lot. Thank you.

* * * * * *

COURT REPORTER: Okay.

MR. JOHNSON: My name is Fred Johnson. I live at 125 Wonderland Drive, Kingsport. Make the road a road for the living and not for the dead. Thank you very much.

THIS COMPLETES THE PUBLIC HEARING AND COMMENTS.

CERTIFICATE

This TDOT Public Hearing was recorded on December 11, 2012 by Cathy Heinze and Debbie Ramey of Barringer Court Reporting, Gray, Tennessee.

I, C. D. Neal, Notary Public and Licensed Court Reporter, Barringer Court Reporting, hereby certify that the foregoing is a true and complete transcript of said hearing re: SR 126, Sullivan County, Tennessee, held at the Sullivan Central High School, Blountville, Tennessee.

WITNESS my hand and official seal at Gray, Tennessee, this the 18th day of December 2012.

_____

NOTARY PUBLIC

My Commission Expires: October 24, 2016.

Your Name: Robert Booher Date: 12-11-12

Mailing Address: 5013 memorial Blvd
Kingsport, TN 37664

County of Residence: Sullivan

Phone Number (optional): 423-212-0565

E-mail Address (optional): rcbspark@charter.net *Please make sure to include your name and/or address on your submitted comments form in order to be included in the official record.

Please return comment from postmarked no later than **January 31, 2013**

Fold at this line first

Project Comments
Tennessee Department of Transportation
Suite 700, James K. Polk Building
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Nashville, TN 37243-0332



Project Meeting Comments
Attn: State Route 126 Corridor
Tennessee Department of Transportation
Suite 700, James K. Polk Building
505 Deaderick Street
Nashville, TN 37243-0332

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Which describes your primary interest in the project?

X Affected resident ___Affected landowner ___Affected business ___Concerned citizen

For additional project information:

Visit the TDOT website at www.tn.gov/tdot/SR126/involvement.asp
Or contact Gary King, TDOT Project Manager at Gary.King@tn.gov
Or (615) 741-4777

State Route 126 Corridor Improvement Project
Public Hearing, December 11, 2012
Kingsport Civic Center Auditorium
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Of the alternatives presented, which alternative do you prefer: (CHOOSE ONLY ONE)

___ No Build (no improvements to existing roadways)

X Build Alternatives; ***Circle*** (A) or B or B Modified

Please list reasons for choosing your preferred alternative (Please Print Clearly).

This road needs to be fixed We need a four lane I live & drive on this road everyday. Too much traffic too many accidents.

What issues/concerns do you have about the proposed Build Alternatives and are there any changes you would make to the project? If so, please explain.

What concerns do you have about the environmental impacts of the project addressed in the DEIS? Are there any issues or concerns that you feel were not addressed in the DEIS? If so, please explain.

___ Impacts to Natural Resources
___ Impacts to Communities/Neighborhoods
___ Impacts to Farmlands
___ Air Quality Impacts
___ Noise Impacts
___ Impacts to Historic/Archaeological Resources
___ Floodplain Impacts
___ Other(s) – Please described below

(Kingsport Civic Center Auditorium)

Your Name: ED LEEPER JR Date: 12/11/12

Mailing Address: 905 MEADOW LANE

County of Residence: SULLIVAN

Phone Number (optional): (423) 239-8925
(423) 930-7554

E-mail Address (optional): _____ ***Please make sure to include your name and/or address on your submitted comments form in order to be included in the official record.**

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Please list reasons for choosing your preferred alternative (Please Print Clearly).

What issues/concerns do you have about the proposed Build Alternatives and are there any changes you would make to the project? If so, please explain.

PINEGREST ~ LOST OF PARKING FOR 15 UNITS - OFFICE LAUNDRY

SUNNY TERRACE LOST OF PARKING 8 UNITS.

What concerns do you have about the environmental impacts of the project addressed in the DEIS? Are there any issues or concerns that you feel were not addressed in the DEIS? If so, please explain.

___ Impacts to Natural Resources
___ Impacts to Communities/Neighborhoods
___ Impacts to Farmlands
___ Air Quality Impacts
___ Noise Impacts
___ Impacts to Historic/Archaeological Resources
___ Floodplain Impacts
___ Other(s) – Please described below

(Kingsport Civic Center Auditorium)

Your Name: Craig Moody Date: 12-11-12

Mailing Address: 157 Wombeck Dr.
Kpt. TN. 37664

County of Residence: Sullivan

Phone Number (optional): 423-288-5986

E-mail Address (optional): _____ ***Please make sure to include your name and/or address on your submitted comments form in order to be included in the official record.**

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Please list reasons for choosing your preferred alternative (Please Print Clearly).

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What concerns do you have about the environmental impacts of the project addressed in the DEIS? Are there any issues or concerns that you feel were not addressed in the DEIS? If so, please explain.

- X Impacts to Natural Resources
- ___ Impacts to Communities/Neighborhoods
- X Impacts to Farmlands
- ___ Air Quality Impacts
- ___ Noise Impacts
- ___ Impacts to Historic/Archaeological Resources
- ___ Floodplain Impacts
- ___ Other(s) – Please described below

Why are you taking more property from 4713 Mem. Blvd. in B-modified than other alternatives. Very concerned about pasture land. Smaller road more property? There are springs on both sides of the farm. what do you do about these.

(Kingsport Civic Center Auditorium)

Your Name: (Dr.) Carlotta Paulsen Date: 12/11/12

Mailing Address: 4501 Stagecoach Rd
Kingsport TN 37664

County of Residence: Sullivan

Phone Number (optional): 423 378 9361

E-mail Address (optional): cpaulsenhoaz@charter.net *Please make sure to include your name and/or address on your submitted comments form in order to be included in the official record.

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Please list reasons for choosing your preferred alternative (Please Print Clearly).

I do not believe that current trassic levels, or those in the next decades, will justify the extent (& cost) of either alternative A or B. Additionally, I feel strongly that historic sites such as Yancy's tavern should be protected as well as the lovely forested slopes of NE Tennessee I do feel though, that improvements to the current road are a necessity for the safety of our community

What issues/concerns do you have about the proposed Build Alternatives and are there any changes you would make to the project? If so, please explain.

I am most concerned about damage due to erosion on these very steep slopes during construction & also afterwards should the drainage issues posed by the increased roadwidth, hillside regrading, & loss of tree cover not be adequately addressed. (PS I live on the down hill side of the roadway!)

What concerns do you have about the environmental impacts of the project addressed in the DEIS? Are there any issues or concerns that you feel were not addressed in the DEIS? If so, please explain.

- ✓ Impacts to Natural Resources
- ✓ Impacts to Communities/Neighborhoods
- ___ Impacts to Farmlands
- ___ Air Quality Impacts
- ✓ Noise Impacts
- ✓ Impacts to Historic/Archaeological Resources
- ✓ Floodplain Impacts
- ___ Other(s) – Please described below

(Kingsport Civic Center Auditorium)

Your Name: Kimberly Strouth Date: 12-11-12

Mailing Address: 5013 memorial Blvd
Kingsport, TN 376604

County of Residence: Sullivan

Phone Number (optional): 423-212-0565

E-mail Address (optional): krs350@charter.net *Please make sure to include your name and/or address on your submitted comments form in order to be included in the official record.

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X Build Alternatives; ***Circle*** (A) or B or B Modified

Please list reasons for choosing your preferred alternative (Please Print Clearly).

I live on 126 and drive this road every day. This road is dangerous. I am urging you to please fix this road it is long over due. Save lives fix road!

What issues/concerns do you have about the proposed Build Alternatives and are there any changes you would make to the project? If so, please explain.

What concerns do you have about the environmental impacts of the project addressed in the DEIS? Are there any issues or concerns that you feel were not addressed in the DEIS? If so, please explain.

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___ Impacts to Farmlands
___ Air Quality Impacts
___ Noise Impacts
___ Impacts to Historic/Archaeological Resources
___ Floodplain Impacts
___ Other(s) – Please described below

Your Name: FRANK CASTLEBERRY Date: 12-12-12

Mailing Address: 5042 COUNTY DR
KSPT TN 37664

County of Residence: SULLIVAN

Phone Number (optional): 423 323 207

E-mail Address (optional): MFCAS59@AOL.COM *Please make sure to include your name and/or address on your submitted comments form in order to be included in the official record.

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JOHNSON CITY TN 376
12 DEC 2012 PM 2



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Reverse A - Have 3 Lanes over the M-10, & 4 Lanes from cooks valley all the way to I-85

Please list reasons for choosing your preferred alternative (Please Print Clearly).

The majority of Residence within Indian Springs + RASVerse to the east & Beyond, OUR Kids go to School, sports in the scool system. Our churcs are all to the east Not towards Kingsport. The Four Lane Plus Sidewalf would benefit more than the proposed 'A'.

What issues/concerns do you have about the proposed Build Alternatives and are there any changes you would make to the project? If so, please explain.

Listed above.

What ever road system is decided on - Red lights should be placed at the intersections of cook valley Road and Fallcreek Road. This helps in two ways (1) stows traffic at these very busy intersection (2) allow vehicals to enter 126 ~~at~~ from a safety stand point

What concerns do you have about the environmental impacts of the project addressed in the DEIS? Are there any issues or concerns that you feel were not addressed in the DEIS? If so, please explain.

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___ Impacts to Communities/Neighborhoods
___ Impacts to Farmlands
___ Air Quality Impacts
___ Noise Impacts
___ Impacts to Historic/Archaeological Resources
___ Floodplain Impacts
___ Other(s) – Please described below

None of these should be of concern. This is the time to build before the area becomes even more crowed & dangerous. Fallcreek Road has grown by leaps & bounds in the last 10 yrs, & will continue to grow even more

(Kingsport Civic Center Auditorium)

Your Name: DAN Cheek Date: 12-12-12

Mailing Address: 5308 FOXFIRE PL

KINGSPORT 37664

County of Residence: SULLIVAN

Phone Number (optional): 676-4208

E-mail Address (optional): DTCheek@CHARTER.TN.NET *Please make sure to include your name and/or address on your submitted comments form in order to be included in the official record.

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Of the alternatives presented, which alternative do you prefer: (CHOOSE ONLY ONE)

___ No Build (no improvements to existing roadways)

___ Build Alternatives; ***Circle*** A or B or (B Modified)

Please list reasons for choosing your preferred alternative (Please Print Clearly).

1- Provides SAFE ALTERNATIVE
2- FAR LESS INTRUSIVE THAN other CHOICES
3- YANCEY'S TAVERN & CEMENTARY protected
4- LESS COSTLY
5- FITS traffic VOLUMN best over time
6- FAR SAFER THAN 4 LANE

What issues/concerns do you have about the proposed Build Alternatives and are there any changes you would make to the project? If so, please explain.

WAS ON THE ORIGINAL CSS TEAM - Attended ALL 13 MEETINGS - HAVE NOT studied the NEW ALT B, but it BASICALLY IS SIMULAR to the exception Letter I SIGNED. I'M very HAPPY TDOT seems to be responding to community.

What concerns do you have about the environmental impacts of the project addressed in the DEIS? Are there any issues or concerns that you feel were not addressed in the DEIS? If so, please explain.

- ✓ Impacts to Natural Resources
- ✓ Impacts to Communities/Neighborhoods
- ✓ Impacts to Farmlands
- ___ Air Quality Impacts
- ✓ Noise Impacts
- ✓ Impacts to Historic/Archaeological Resources
- ✓ Floodplain Impacts
- ___ Other(s) – Please described below

I HAVE CONCERNS ABOUT ALL ENVIRONMENTAL IMPACTS - ONE NOT SPECIFICALLY LISTED IS IMPACT TO INDIAN SPRINGS. THOSE SPRINGS HAVE HISTORICAL SIGNIFICANCE AND NEED TO BE PROTECTED - I WILL PERSONALLY SEE TO THAT. OBVIOUSLY ALT B HAS THE LESS IMPACT ON ENVIRONMENT THAN THE OTHER PLANS

(Kingsport Civic Center Auditorium)

Your Name: KENNETH & PHYLLIS COX Date: 12-12-12

Mailing Address: 2321 AMY AV
KINGSPORT, TN 37664

County of Residence: SULLIVAN

Phone Number (optional): _____

E-mail Address (optional): _____ ***Please make sure to include your name and/or address on your submitted comments form in order to be included in the official record.**

Please return comment from postmarked no later than **January 31, 2013**

Fold at this line first

Project Comments
Tennessee Department of Transportation
Suite 700, James K. Polk Building
505 Deaderick Street
Nashville, TN 37243-0332



Project Meeting Comments
Attn: State Route 126 Corridor
Tennessee Department of Transportation
Suite 700, James K. Polk Building
505 Deaderick Street
Nashville, TN 37243-0332

37243-0332

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Which describes your primary interest in the project?

✓ Affected resident ✓ Affected landowner ___ Affected business ✓ Concerned citizen

For additional project information:

Visit the TDOT website at www.tn.gov/tdot/SR126/involvement.asp
Or contact Gary King, TDOT Project Manager at Gary.King@tn.gov
Or (615) 741-4777

State Route 126 Corridor Improvement Project
Public Hearing, December 11, 2012
Kingsport Civic Center Auditorium
Public Comment Form

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Of the alternatives presented, which alternative do you prefer: (CHOOSE ONLY ONE)

___ No Build (no improvements to existing roadways)

___ Build Alternatives; ***Circle*** (A) or B or B Modified

Please list reasons for choosing your preferred alternative (Please Print Clearly).

HEAVY VOLUME OF TRAFFIC. WOULD REDUCE SEVERE ACCIDENTS.

What issues/concerns do you have about the proposed Build Alternatives and are there any changes you would make to the project? If so, please explain.

What concerns do you have about the environmental impacts of the project addressed in the DEIS? Are there any issues or concerns that you feel were not addressed in the DEIS? If so, please explain.

___ Impacts to Natural Resources
___ Impacts to Communities/Neighborhoods
___ Impacts to Farmlands
___ Air Quality Impacts
___ Noise Impacts
___ Impacts to Historic/Archaeological Resources
___ Floodplain Impacts
___ Other(s) – Please described below

Your Name: John + Margaret Colley Date: 12/13/12

Mailing Address: 4721 Edens View Rd.
Kingsport, TN. 37664

County of Residence: Sullivan

Phone Number (optional): 423-288-4155

E-mail Address (optional): N/A *Please make sure to include your name and/or address on your submitted comments form in order to be included in the official record.

Please return comment from postmarked no later than **January 31, 2013**

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Project Comments
Tennessee Department of Transportation
Suite 700, James K. Polk Building
505 Deaderick Street
Nashville, TN 37243-0332



Project Meeting Comments
Attn: State Route 126 Corridor
Tennessee Department of Transportation
Suite 700, James K. Polk Building
505 Deaderick Street
Nashville, TN 37243-0332

3724330332

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Which describes your primary interest in the project?

___Affected resident ___Affected landowner ___Affected business ✓ Concerned citizen

For additional project information:

Visit the TDOT website at www.tn.gov/tdot/SR126/involvement.asp
Or contact Gary King, TDOT Project Manager at Gary.King@tn.gov
Or (615) 741-4777

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___ No Build (no improvements to existing roadways)

✓ Build Alternatives; ***Circle*** A or (B) or B Modified

Please list reasons for choosing your preferred alternative (Please Print Clearly).

B IS THE ONLY REASONABLE SOLUTION. IS NOT MUCH MORE CHANGES THAN B Modified AND WOULD REQUIRE FUTHER EXPANSION AT A LATER DATE.

What issues/concerns do you have about the proposed Build Alternatives and are there any changes you would make to the project? If so, please explain.

MOST IMPORTANT ISSUE IS SAFETY. AS A FORMER TRAFFIC POLICE OFFICER I UNDERSTAND WHAT CONSTITUTES TRAFFIC SAFETY.

What concerns do you have about the environmental impacts of the project addressed in the DEIS? Are there any issues or concerns that you feel were not addressed in the DEIS? If so, please explain.

___ Impacts to Natural Resources
___ Impacts to Communities/Neighborhoods
___ Impacts to Farmlands
___ Air Quality Impacts .
___ Noise Impacts
___ Impacts to Historic/Archaeological Resources
___ Floodplain Impacts
✓ Other(s) – Please described below

ONLY IMPACT HERE IS LOCAL POLITICS, THOSE WHO THINK THEY KNOW BEST FOR EVERYONE ELSE, WHEN THEIR ONLY CONCERN IS FOR THEMSELVES + WANT TOO BE A INFLUENCE IN THIS DICESSION MAKING PROCESS!

(Kingsport Civic Center Auditorium)

Your Name: Jolly Hill Date: 12/13/12

Mailing Address: 4407 Greensprings
Kingsport TN 37664

County of Residence: Sullivan

Phone Number (optional): _____

E-mail Address (optional): _____ ***Please make sure to include your name and/or address on your submitted comments form in order to be included in the official record.**

Please return comment from postmarked no later than **January 31, 2013**

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Project Comments
Tennessee Department of Transportation
Suite 700, James K. Polk Building
505 Deaderick Street
Nashville, TN 37243-0332

JOHNSON CITY TN
19 DEC 2012 PM



Project Meeting Comments
Attn: State Route 126 Corridor
Tennessee Department of Transportation
Suite 700, James K. Polk Building
505 Deaderick Street
Nashville, TN 37243-0332

37243$0332

Fold at this line second

Which describes your primary interest in the project?

✓ Affected resident ___Affected landowner ___Affected business ___Concerned citizen

For additional project information:

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___ Build Alternatives; ***Circle*** A or (B) or ~~B Modified~~

Please list reasons for choosing your preferred alternative (Please Print Clearly).

DON'T LIKE THE TRINTY CONNECTOR COMING OFF A DEAD END CIRCLE AND TAKING A PRIVATE DRIVEWAY TO ACCESS A PUBLIC CEMETARY.

What issues/concerns do you have about the proposed Build Alternatives and are there any changes you would make to the project? If so, please explain.

MAKE A MORE DIRECT ROUTE - OFF STAGECOACH OR AMY - TO ACCESS HOUSES AND CEMETARY NOW ON TRINTY

What concerns do you have about the environmental impacts of the project addressed in the DEIS? Are there any issues or concerns that you feel were not addressed in the DEIS? If so, please explain.

___ Impacts to Natural Resources
✓ Impacts to Communities/Neighborhoods
___ Impacts to Farmlands
___ Air Quality Impacts
___ Noise Impacts
___ Impacts to Historic/Archaeological Resources
___ Floodplain Impacts
___ Other(s) – Please described below

(Kingsport Civic Center Auditorium)

Your Name: Rodney Hurd Date: 12-13-12

Mailing Address: 1237 Sussex Dr
Kpt TN

County of Residence: Sullivan

Phone Number (optional): 423-416-3077

E-mail Address (optional): hurdproperties@charter.net *Please make sure to include your name and/or address on your submitted comments form in order to be included in the official record.

Please return comment from postmarked no later than **January 31, 2013**

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Project Comments
Tennessee Department of Transportation
Suite 700, James K. Polk Building
505 Deaderick Street
Nashville, TN 37243-0332



Project Meeting Comments
Attn: State Route 126 Corridor
Tennessee Department of Transportation
Suite 700, James K. Polk Building
505 Deaderick Street
Nashville, TN 37243-0332

37243$0332

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Which describes your primary interest in the project?

___Affected resident ___Affected landowner ___Affected business ___Concerned citizen

For additional project information:

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Or contact Gary King, TDOT Project Manager at Gary.King@tn.gov
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___ No Build (no improvements to existing roadways)

___ Build Alternatives; ***Circle*** A or B or (B Modified)

Please list reasons for choosing your preferred alternative (Please Print Clearly).

Thanks for not messing with the graveyard. Please look At Shuler Dr Closer IT Needs More Attention then Its Getting

What issues/concerns do you have about the proposed Build Alternatives and are there any changes you would make to the project? If so, please explain.

Shuler Dr. Needs Attention

What concerns do you have about the environmental impacts of the project addressed in the DEIS? Are there any issues or concerns that you feel were not addressed in the DEIS? If so, please explain.

___ Impacts to Natural Resources
___ Impacts to Communities/Neighborhoods
___ Impacts to Farmlands
___ Air Quality Impacts
___ Noise Impacts
___ Impacts to Historic/Archaeological Resources
✓ Floodplain Impacts
___ Other(s) – Please described below

I Dont want Flooding At 4823 or 4831 Memorial

(Kingsport Civic Center Auditorium)

Your Name: Kathy PARHAM Date: 12-13-12

Mailing Address: 350 Celtic Ct
Kingsport TN 37660

County of Residence: HAWKINS

Phone Number (optional): 423-247-8618

E-mail Address (optional): KMParham2004@yahoo.com *Please make sure to include your name and/or address on your submitted comments form in order to be included in the official record.

Please return comment from postmarked no later than **January 31, 2013**

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Project Comments
Tennessee Department of Transportation
Suite 700, James K. Polk Building
505 Deaderick Street
Nashville, TN 37243-0332



Project Meeting Comments
Attn: State Route 126 Corridor
Tennessee Department of Transportation
Suite 700, James K. Polk Building
505 Deaderick Street
Nashville, TN 37243-0332

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Which describes your primary interest in the project?

___Affected resident ✓Affected landowner ___Affected business ___Concerned citizen

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_✓_ Build Alternatives; ***Circle*** A or B or B Modified

Please list reasons for choosing your preferred alternative (Please Print Clearly).

It does not disturb cemetery.

What issues/concerns do you have about the proposed Build Alternatives and are there any changes you would make to the project? If so, please explain.

What concerns do you have about the environmental impacts of the project addressed in the DEIS? Are there any issues or concerns that you feel were not addressed in the DEIS? If so, please explain.

___ Impacts to Natural Resources
___ Impacts to Communities/Neighborhoods
___ Impacts to Farmlands
___ Air Quality Impacts
___ Noise Impacts
___ Impacts to Historic/Archaeological Resources
___ Floodplain Impacts
___ Other(s) – Please described below

Thankyou as I think TDOT has best Highway System in US!

(Kingsport Civic Center Auditorium)

Your Name: David P. Salyer Date: 12-13-12

Mailing Address: P.O. Box 263

Kpt. TN. 37662

County of Residence: Sullivan

Phone Number (optional): 423-676-6012

E-mail Address (optional): _____ ***Please make sure to include your name and/or address on your submitted comments form in order to be included in the official record.**

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Project Comments
Tennessee Department of Transportation
Suite 700, James K. Polk Building
505 Deaderick Street
Nashville, TN 37243-0332

JOHNSON CITY TN 376
13 DEC 2012 PM



Project Meeting Comments
Attn: State Route 126 Corridor
Tennessee Department of Transportation
Suite 700, James K. Polk Building
505 Deaderick Street
Nashville, TN 37243-0332

37243$0332

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Which describes your primary interest in the project?

___Affected resident ✓Affected landowner ✓Affected business ___Concerned citizen

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_✓_ Build Alternatives; ***Circle*** A or B or (B Modified)

Please list reasons for choosing your preferred alternative (Please Print Clearly).

DO NOT MOVE GRAVES
GO TO THE LEFT MOVE HOUSES

What issues/concerns do you have about the proposed Build Alternatives and are there any changes you would make to the project? If so, please explain.

PLEASE BUILD FOR FUTURE

What concerns do you have about the environmental impacts of the project addressed in the DEIS? Are there any issues or concerns that you feel were not addressed in the DEIS? If so, please explain.

___ Impacts to Natural Resources
___ Impacts to Communities/Neighborhoods
___ Impacts to Farmlands
___ Air Quality Impacts
___ Noise Impacts
___ Impacts to Historic/Archaeological Resources
___ Floodplain Impacts
___ Other(s) – Please described below

(Kingsport Civic Center Auditorium)

Your Name: Mark Addington Date: 12/14/12

Mailing Address: 263 Old Cooks Valley Rd
Kingsport TN 37664

County of Residence: Sullivan

Phone Number (optional): 423-288-7202

E-mail Address (optional): _____ ***Please make sure to include your name and/or address on your submitted comments form in order to be included in the official record.**

Please return comment from postmarked no later than **January 31, 2013**

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Project Comments
Tennessee Department of Transportation
Suite 700, James K. Polk Building
505 Deaderick Street
Nashville, TN 37243-0332



Project Meeting Comments
Attn: State Route 126 Corridor
Tennessee Department of Transportation
Suite 700, James K. Polk Building
505 Deaderick Street
Nashville, TN 37243-0332

37243$0332

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Which describes your primary interest in the project?

✓ Affected resident ___Affected landowner ___Affected business ___Concerned citizen

For additional project information:

Visit the TDOT website at www.tn.gov/tdot/SR126/involvement.asp
Or contact Gary King, TDOT Project Manager at Gary.King@tn.gov
Or (615) 741-4777

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___ No Build (no improvements to existing roadways)

___ Build Alternatives; ***Circle*** A or B or B Modified

Please list reasons for choosing your preferred alternative (Please Print Clearly).

Builds the ROAD without impacting GRAVES OR YANCEY'S TAVERN.

What issues/concerns do you have about the proposed Build Alternatives and are there any changes you would make to the project? If so, please explain.

You need to 4 lane this ROAD All the way from Center St to I-81.

Through use of retaining walls there is room to avoid GRAVES & The TAVERN. Get better ideas from engineers OR get some NEW engineers. St Rt 36 & St Rt 75 gets 4 lanes — Sullivan Co getting SHORT CHANGED!!!

What concerns do you have about the environmental impacts of the project addressed in the DEIS? Are there any issues or concerns that you feel were not addressed in the DEIS? If so, please explain.

___ Impacts to Natural Resources
___ Impacts to Communities/Neighborhoods
___ Impacts to Farmlands
___ Air Quality Impacts
___ Noise Impacts
✓ Impacts to Historic/Archaeological Resources
___ Floodplain Impacts
___ Other(s) – Please described below

SAME ANSWER AS ABOVE — try HARDER!

(Kingsport Civic Center Auditorium)

Your Name: _____ Date: 12-14-12

Mailing Addre: Jackie R Martin
3821 Telstar Dr
Kingsport TN 37664-3434

County of Residence: Sullivan

Phone Number (optional): (423) 246-4504

E-mail Address (optional): fourjacksons@embarqmail.com *Please make sure to include your name and/or address on your submitted comments form in order to be included in the official record.

Please return comment from postmarked no later than **January 31, 2013**

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Project Comments
Tennessee Department of Transportation
Suite 700, James K. Polk Building
505 Deaderick Street
Nashville, TN 37243-0332

JOHNSON CITY TN 376
12 DEC 2012 PM 1 L



Project Meeting Comments
Attn: State Route 126 Corridor
Tennessee Department of Transportation
Suite 700, James K. Polk Building
505 Deaderick Street
Nashville, TN 37243-0332

37243#0332

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___Affected resident ___Affected landowner ___Affected business ✓Concerned citizen

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___ Build Alternatives; ***Circle*** A or B or B Modified

Please list reasons for choosing your preferred alternative (Please Print Clearly).

(Four lanes 126) From a Harbor Chapel Road to Cooks Valley Road efcen road onto 126 should be Closed have traffic use two exits Harbor Chapel Road + Cooks Valley Rd. red light at Cooks Valley rd. Harbor Chapel rd. ~~has~~ has a red light now.

What issues/concerns do you have about the proposed Build Alternatives and are there any changes you would make to the project? If so, please explain.

This road 126 should be four lanes (8) Miles for future years to come.

What concerns do you have about the environmental impacts of the project addressed in the DEIS? Are there any issues or concerns that you feel were not addressed in the DEIS? If so, please explain.

___ Impacts to Natural Resources
___ Impacts to Communities/Neighborhoods
___ Impacts to Farmlands
___ Air Quality Impacts
___ Noise Impacts
___ Impacts to Historic/Archaeological Resources
___ Floodplain Impacts
___ Other(s) – Please described below

East Lawn Memorial Gardens Cemetary should have #1 Priority over yanceys Tavern as #2 and safety always should rule.

I do have property on 126 and East Lawn Cemetary safety is my No.1 Concern.

(Kingsport Civic Center Auditorium)

Your Name: Merton Dibble Date: 17-Dec-2012

Mailing Address: 4736 Eden's View Rd

County of Residence: Sullivan

Phone Number (optional): 423 288 4474

E-mail Address (optional): mdibble@charter.net **Please make sure to include your name and/or address on your submitted comments form in order to be included in the official record.**

Please return comment from postmarked no later than **January 31, 2013**

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Project Comments
Tennessee Department of Transportation
Suite 700, James K. Polk Building
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Project Meeting Comments
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505 Deaderick Street
Nashville, TN 37243-0332

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✓ Affected resident ___ Affected landowner ___ Affected business ___ Concerned citizen

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___ No Build (no improvements to existing roadways)

✓ Build Alternatives; ***Circle*** A or B or (B Modified)

Please list reasons for choosing your preferred alternative (Please Print Clearly).

Minimum disruption

What issues/concerns do you have about the proposed Build Alternatives and are there any changes you would make to the project? If so, please explain.

I am concerned about safe access to Chestnut Ridge (Eden's View Road and Old Stage Road) during inclement or icy weather due to the loss of the Chestnut Ridge Road access. This is the only non-steep route to the top of the ridge for normal or emergency traffic. I would suggest allowing access from Eaton's Station Road to Chestnut Ridge Road.

What concerns do you have about the environmental impacts of the project addressed in the DEIS? Are there any issues or concerns that you feel were not addressed in the DEIS? If so, please explain.

___ Impacts to Natural Resources
___ Impacts to Communities/Neighborhoods
___ Impacts to Farmlands
___ Air Quality Impacts
___ Noise Impacts
___ Impacts to Historic/Archaeological Resources
___ Floodplain Impacts
___ Other(s) – Please described below

(Kingsport Civic Center Auditorium)

Your Name: Malcolm M. Jones Date: 1-2-13

Mailing Address: 1140 Knollwood Lane

Kingsport, TN 37660

County of Residence: Sullivan

Phone Number (optional): 423 246 4072

E-mail Address (optional): Zelig40@gmail.com ***Please make sure to include your name and/or address on your submitted comments form in order to be included in the official record.**

Please return comment from postmarked no later than **January 31, 2013**

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Project Comments
Tennessee Department of Transportation
Suite 700, James K. Polk Building
505 Deaderick Street
Nashville, TN 37243-0332



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Tennessee Department of Transportation
Suite 700, James K. Polk Building
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Nashville, TN 37243-0332

37243$0332

Fold at this line second

Which describes your primary interest in the project?

___Affected resident X Affected landowner ___Affected business ___Concerned citizen

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Or contact Gary King, TDOT Project Manager at Gary.King@tn.gov
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___ No Build (no improvements to existing roadways)

___ Build Alternatives; ***Circle*** A or B or (B Modified)

Please list reasons for choosing your preferred alternative (Please Print Clearly).

Less impact
Will not devastate Chestnut Ridge
We do not need A 4 lane to Interstate just more Alert drivers

What issues/concerns do you have about the proposed Build Alternatives and are there any changes you would make to the project? If so, please explain.

Hwy does did shoulders

What concerns do you have about the environmental impacts of the project addressed in the DEIS? Are there any issues or concerns that you feel were not addressed in the DEIS? If so, please explain.

___ Impacts to Natural Resources
___ Impacts to Communities/Neighborhoods
___ Impacts to Farmlands
___ Air Quality Impacts
___ Noise Impacts
___ Impacts to Historic/Archaeological Resources
___ Floodplain Impacts
___ Other(s) – Please described below

(Kingsport Civic Center Auditorium)

Your Name: Rosemarie Lane Date: 1-3-13

Mailing Address: 4216 Skyland Lane
Kingsport, TN 37664

County of Residence: Sullivan

Phone Number (optional): 423-306-9315

E-mail Address (optional): _____ ***Please make sure to include your name and/or address on your submitted comments form in order to be included in the official record.**

Please return comment from postmarked no later than **January 31, 2013**

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Project Comments
Tennessee Department of Transportation
Suite 700, James K. Polk Building
505 Deaderick Street
Nashville, TN 37243-0332

NORTHEASTERN
TN 376 4 T
09 JAN 2013 PM



Project Meeting Comments
Attn: State Route 126 Corridor
Tennessee Department of Transportation
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505 Deaderick Street
Nashville, TN 37243-0332

37243*0332

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Which describes your primary interest in the project?

✓ Affected resident ___Affected landowner ___Affected business ___Concerned citizen

For additional project information:

Visit the TDOT website at www.tn.gov/tdot/SR126/involvement.asp
Or contact Gary King, TDOT Project Manager at Gary.King@tn.gov
Or (615) 741-4777

State Route 126 Corridor Improvement Project
Public Hearing, December 11, 2012
Kingsport Civic Center Auditorium
Public Comment Form

The Tennessee Department of Transportation (TDOT) has prepared a Draft Environmental Impact Statement (DEIS) for the proposed State Route 126 Corridor Improvement Project. TDOT is interested in your comments regarding the alternatives presented in the DEIS and in any areas of concern you may have regarding the environmental analysis of the alternatives. Please return comment form postmarked no later than **January 31, 2013**.

Of the alternatives presented, which alternative do you prefer: (CHOOSE ONLY ONE)

___ No Build (no improvements to existing roadways)

___ Build Alternatives; ***Circle*** A or (B) or B Modified

Please list reasons for choosing your preferred alternative (Please Print Clearly).

Alternative "B" has more 4 lane sections which we need - Lets fix Route 126 now and not compromize - We are a growing City / County fix Route 126 so we can continue to grow and not regret short cutting This project

What issues/concerns do you have about the proposed Build Alternatives and are there any changes you would make to the project? If so, please explain.

Leave The graves & Yancy Tavern -
Rt 126 need The 4 Lane from Harbor Chapel Rd To Cooks Valley Rd - at least To The Kingsport City Limits - also need Turning lanes at Harbor Chapel Rd

What concerns do you have about the environmental impacts of the project addressed in the DEIS? Are there any issues or concerns that you feel were not addressed in the DEIS? If so, please explain.

___ Impacts to Natural Resources
___ Impacts to Communities/Neighborhoods
___ Impacts to Farmlands
___ Air Quality Impacts
___ Noise Impacts
___ Impacts to Historic/Archaeological Resources
___ Floodplain Impacts
___ Other(s) – Please described below

(Kingsport Civic Center Auditorium)

Your Name: Susan Owenby Date: 1/13/13

Mailing Address: 5149 Spring Hill Dr.
Kingsport, TN. 37664

County of Residence: Sullivan

Phone Number (optional): 423-288-2779

E-mail Address (optional): _____ ***Please make sure to include your name and/or address on your submitted comments form in order to be included in the official record.**

Please return comment from postmarked no later than **January 31, 2013**

Fold at this line first

Project Comments
Tennessee Department of Transportation
Suite 700, James K. Polk Building
505 Deaderick Street
Nashville, TN 37243-0332

Place Stamp Here

Project Meeting Comments
Attn: State Route 126 Corridor
Tennessee Department of Transportation
Suite 700, James K. Polk Building
505 Deaderick Street
Nashville, TN 37243-0332

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Which describes your primary interest in the project?

✓ Affected resident ___Affected landowner ___Affected business ___Concerned citizen

For additional project information:

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Or contact Gary King, TDOT Project Manager at Gary.King@tn.gov
Or (615) 741-4777

State Route 126 Corridor Improvement Project
Public Hearing, December 11, 2012
Kingsport Civic Center Auditorium
Public Comment Form

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Of the alternatives presented, which alternative do you prefer: (CHOOSE ONLY ONE)

___ No Build (no improvements to existing roadways)

✓ Build Alternatives; ~~Circle~~ A or B or (B Modified)

Please list reasons for choosing your preferred alternative (Please Print Clearly).

No graves disturbed. Yancey's Tavern would not be greatly changed. With B Modified less property, homes and businesses would be disturbed. It will allow for wide shoulders which are much needed. Modified B would give police a safe way to patrol for speeders with shoulders to pull vehicles over.

What issues/concerns do you have about the proposed Build Alternatives and are there any changes you would make to the project? If so, please explain.

Plan A is not needed. We don't need a four-lane highway cutting through the community. A four-lane would encourage speeding and take too much property. Plan B still takes graves and no one wants graves disturbed. B Modified seems to be a good compromise.

What concerns do you have about the environmental impacts of the project addressed in the DEIS? Are there any issues or concerns that you feel were not addressed in the DEIS? If so, please explain.

___ Impacts to Natural Resources
___ Impacts to Communities/Neighborhoods
___ Impacts to Farmlands
___ Air Quality Impacts
___ Noise Impacts
___ Impacts to Historic/Archaeological Resources
___ Floodplain Impacts
___ Other(s) – Please described below

(Kingsport Civic Center Auditorium)

Your Name: Jim Von Bramer Date: 1-17-13

Mailing Address: 1409 Brightridge Dr.
Kingsport, TN 37664

County of Residence: Sullivan

Phone Number (optional): (423) 246-9093

E-mail Address (optional): _____ ***Please make sure to include your name and/or address on your submitted comments form in order to be included in the official record.**

Please return comment from postmarked no later than **January 31, 2013**

Fold at this line first

Project Comments
Tennessee Department of Transportation
Suite 700, James K. Polk Building
505 Deaderick Street
Nashville, TN 37243-0332



Project Meeting Comments
Attn: State Route 126 Corridor
Tennessee Department of Transportation
Suite 700, James K. Polk Building
505 Deaderick Street
Nashville, TN 37243-0332

37243$0332

Fold at this line second

Which describes your primary interest in the project?

___Affected resident ___Affected landowner ___Affected business ✓Concerned citizen

For additional project information:

Visit the TDOT website at www.tn.gov/tdot/SR126/involvement.asp
Or contact Gary King, TDOT Project Manager at Gary.King@tn.gov
Or (615) 741-4777

State Route 126 Corridor Improvement Project
Public Hearing, December 11, 2012
Kingsport Civic Center Auditorium
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Of the alternatives presented, which alternative do you prefer: (CHOOSE ONLY ONE)

___ No Build (no improvements to existing roadways)

___ Build Alternatives; ***Circle*** A or B or B Modified

Please list reasons for choosing your preferred alternative (Please Print Clearly).

Less 4 Lane Highway – we can not continue making 4 lane Highways. It is very bad on the environment – used much resources; Need to protect historically places such as Yancy's Tavern and Cemetery; bike lanes are important good signs & barricade and good caution Lights is very important

What issues/concerns do you have about the proposed Build Alternatives and are there any changes you would make to the project? If so, please explain.

SAME as question 1.

What concerns do you have about the environmental impacts of the project addressed in the DEIS? Are there any issues or concerns that you feel were not addressed in the DEIS? If so, please explain.

- ✓ Impacts to Natural Resources
- ✓ Impacts to Communities/Neighborhoods
- ✓ Impacts to Farmlands
- ✓ Air Quality Impacts
- ✓ Noise Impacts
- ✓ Impacts to Historic/Archaeological Resources
- ✓ Floodplain Impacts
- ___ Other(s) – Please described below

(Kingsport Civic Center Auditorium)

Long Island Chapter 3-050-TN
Daughters of the American Revolution
Kingsport, Tennessee

January 18, 2013

Public Hearing Comments
SR 126 (Memorial Boulevard) Corridor Improvement Project
Tennessee Department of Transportation
Suite 700, James K. Polk Building
505 Deaderick Street
Nashville, TN 3723-0332

Dear Sir:

I am requesting the following comments be entered into the Public Hearing record for the SR 126 Highway improvement Project.

Long Island Chapter, National Society Daughters of the American Revolution is concerned with the impact, both visual and physical, of the improvements to Highway 126 at Yancey's Tavern and along Chestnut Ridge. This is an area of historical significance. The section of road that concerns us is from Old Stage Road to Cooks Valley Road. Yancey's Tavern was built in 1779 and is listed on the National Register of Historic Places. We ask that you value and protect Chestnut Ridge. We must afford maximum protection to Yancey's Tavern and East Lawn Cemetery. We ask that you spend tax dollars effectively, efficiently, and respectfully keeping in mind both the motorist and the community.

We would choose Alternative B Modified because zero graves will be impacted, there is less impact to Chestnut Ridge and properties, it is built at a lower cost, there is less four lane construction and, therefore, less chance of speeding. Additionally, we ask that you minimize the profile (footprint) at the Yancey's Tavern/East Lawn location in order to minimize visual impact. Are a five foot sidewalk and two foot curb and gutter necessary at this location?

Sincerely,

Ellen C. Sims

Ellen C. Sims, Regent
Long Island Chapter, NSDAR
505 Forestdale Road
Kingsport, TN 37660

Cc: Rann Vaulx, Darryl Addington, Patrick McIntyre, LaShavio Johnson

Your Name: PATRICK SPIVEY Date: 1-21-13

Mailing Address: 4311 Memorial Blvd
Kingsport TN 37664

County of Residence: Sullivan

Phone Number (optional): _____

E-mail Address (optional): _____ ***Please make sure to include your name and/or address on your submitted comments form in order to be included in the official record.**

Please return comment from postmarked no later than **January 31, 2013**

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Project Comments
Tennessee Department of Transportation
Suite 700, James K. Polk Building
505 Deaderick Street
Nashville, TN 37243-0332

NORTHEASTERN
TN 376 4 T
31 JAN 2013 PM



Project Meeting Comments
Attn: State Route 126 Corridor
Tennessee Department of Transportation
Suite 700, James K. Polk Building
505 Deaderick Street
Nashville, TN 37243-0332

37243$0332

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Which describes your primary interest in the project?

___Affected resident X Affected landowner ___Affected business ___Concerned citizen

For additional project information:

Visit the TDOT website at www.tn.gov/tdot/SR126/involvement.asp
Or contact Gary King, TDOT Project Manager at Gary.King@tn.gov
Or (615) 741-4777

State Route 126 Corridor Improvement Project
Public Hearing, December 11, 2012
Kingsport Civic Center Auditorium
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Of the alternatives presented, which alternative do you prefer: (CHOOSE ONLY ONE)

___ No Build (no improvements to existing roadways)

___ Build Alternatives; ***Circle*** A or B or (B Modified)

Please list reasons for choosing your preferred alternative (Please Print Clearly).

I reside on Memorial (126) between Harbor Chapel & Old Stage. All Builds will severely impact my property destroying its value & removing my access to memorial nearly impossible.

What issues/concerns do you have about the proposed Build Alternatives and are there any changes you would make to the project? If so, please explain.

I believe the section of Memorial (126) between Harbor Chapel & East Lawn Cemetery should simply be widened where possible and add a bike lane on walk area.

What concerns do you have about the environmental impacts of the project addressed in the DEIS? Are there any issues or concerns that you feel were not addressed in the DEIS? If so, please explain.

- ✓ Impacts to Natural Resources
- ✓ Impacts to Communities/Neighborhoods
- ___ Impacts to Farmlands
- ___ Air Quality Impacts
- ___ Noise Impacts
- ___ Impacts to Historic/Archaeological Resources
- ___ Floodplain Impacts
- ___ Other(s) – Please described below

The TDOT Environmental Impact Statement states: THERE WILL BE LONG TERM adverse economic impacts due to the construction of alternative A or B. How can one justify such a high cost to produce Adverse long term economic impact!

(Kingsport Civic Center Auditorium)

Your Name: CARL L DEVAULT Date: 01-25-2013

Mailing Address: 796 ISLAND ROAD

KINGSPORT, TN 37664

County of Residence: SULLIVAN

Phone Number (optional): (423) 323-5636

E-mail Address (optional): _____ ***Please make sure to include your name and/or address on your submitted comments form in order to be included in the official record.**

Please return comment from postmarked no later than **January 31, 2013**

Fold at this line first

Project Comments
Tennessee Department of Transportation
Suite 700, James K. Polk Building
505 Deaderick Street
Nashville, TN 37243-0332

NORTHEASTERN
TN 376 4 T
28 JAN 2013 PM



Project Meeting Comments
Attn: State Route 126 Corridor
Tennessee Department of Transportation
Suite 700, James K. Polk Building
505 Deaderick Street
Nashville, TN 37243-0332

37243$0332

Fold at this line second

Which describes your primary interest in the project?

___Affected resident ___Affected landowner ___Affected business X Concerned citizen

For additional project information:

Visit the TDOT website at www.tn.gov/tdot/SR126/involvement.asp
Or contact Gary King, TDOT Project Manager at Gary.King@tn.gov
Or (615) 741-4777

State Route 126 Corridor Improvement Project
Public Hearing, December 11, 2012
Kingsport Civic Center Auditorium
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___ No Build (no improvements to existing roadways)

X Build Alternatives; ***Circle*** A or B or (B Modified)

Please list reasons for choosing your preferred alternative (Please Print Clearly).

PREFERRANCE FOR "B MODIFIED" MEETS PURPOSE OF SAFE, MORE EFFICIENT TRAFFIC ROUTE WHILE AVOIDING TAKING FANCY'S TAVERN PROPERTY AND AVOIDING DISPLACING ANY KNOWN GRAVE SITES. "B MODIFIED" ALSO HAS ADVANTAGE OF LEAST RIGHTS-OF-WAY ACQUISITION AND CONSTRUCTION COSTS.

What issues/concerns do you have about the proposed Build Alternatives and are there any changes you would make to the project? If so, please explain.

What concerns do you have about the environmental impacts of the project addressed in the DEIS? Are there any issues or concerns that you feel were not addressed in the DEIS? If so, please explain.

___ Impacts to Natural Resources
___ Impacts to Communities/Neighborhoods
___ Impacts to Farmlands
___ Air Quality Impacts
___ Noise Impacts
___ Impacts to Historic/Archaeological Resources
___ Floodplain Impacts
___ Other(s) – Please described below

(Kingsport Civic Center Auditorium)

Your Name: Vinton A. Hoyle Date: Jan 25, 2013

Mailing Address: 4500 Old Stage Rd

Kingsport, TN 37664-2939

County of Residence: _____

Phone Number (optional): 423-288-3529

E-mail Address (optional): skiphoyle@gmail.com ***Please make sure to include your name and/or address on your submitted comments form in order to be included in the official record.**

Please return comment from postmarked no later than **January 31, 2013**

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Project Comments
Tennessee Department of Transportation
Suite 700, James K. Polk Building
505 Deaderick Street
Nashville, TN 37243-0332

KNOXVILLE TN 377
26 JAN 2013 PM 2 L



Project Meeting Comments
Attn: State Route 126 Corridor
Tennessee Department of Transportation
Suite 700, James K. Polk Building
505 Deaderick Street
Nashville, TN 37243-0332

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Which describes your primary interest in the project?

___Affected resident ✓Affected landowner ___Affected business ___Concerned citizen

For additional project information:

Visit the TDOT website at www.tn.gov/tdot/SR126/involvement.asp
Or contact Gary King, TDOT Project Manager at Gary.King@tn.gov
Or (615) 741-4777

State Route 126 Corridor Improvement Project
Public Hearing, December 11, 2012
Kingsport Civic Center Auditorium
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Of the alternatives presented, which alternative do you prefer: (CHOOSE ONLY ONE)

___ No Build (no improvements to existing roadways)

___ Build Alternatives: ***Circle*** A or B or (B Modified)

Please list reasons for choosing your preferred alternative (Please Print Clearly).

see attachment

What issues/concerns do you have about the proposed Build Alternatives and are there any changes you would make to the project? If so, please explain.

see attachment

What concerns do you have about the environmental impacts of the project addressed in the DEIS? Are there any issues or concerns that you feel were not addressed in the DEIS? If so, please explain.

- ✓ Impacts to Natural Resources
- ✓ Impacts to Communities/Neighborhoods
- ✓ Impacts to Farmlands
- ✓ Air Quality Impacts
- ✓ Noise Impacts
- ✓ Impacts to Historic/Archaeological Resources
- ___ Floodplain Impacts
- ___ Other(s) – Please described below

Thomas C. Hoyle, Jr.

(Kingsport Civic Center Auditorium)

State route 126 Corridor Improvement Project
Public Hearing, December 11, 2012
Kingsport Civic Center Auditorium
Public Comment Form

Attachment
Choice: B modified

Reasons for Choice:
Least expensive, best use of available funds, least invasive of private property, and above all the safest. In my opinion the safety issue is most important because we need to control speed along 126. At one end we have young inexperienced drivers(high school students) and along the road we have a number of older citizens coming out of private drives and side roads. This is a well known condition causing accidents. The average age in Sullivan county is among the oldest in the state. We need wider shoulders so drivers can pull over in case of problems. What we don't need is a multi-lane highway encouraging speed. I see little reason for change in the future. State route 126 is not one of the major conduits among the Tri-Cities. There are not the kind of properties that would attract a shopping mall or a large manufacturing concern. The uncommitted property will be used for private homes, apartments or small businesses. Since the U. S., like other first world countries, will see an ever aging population, I suspect that northeast Tennessee will also. For these reasons I expect the traffic along 126 will not grow materially or the type of driver change. Most of the new comers to the area I have met are retired professionals who were attracted to the area because of the lower cost of living and the good medical facilities. I don't see many young chemists or engineers like I saw when I came to town 50 years ago.

Issues and Concerns
Highway 126 is not the type of road that will attract recreational bicycle riders, particularly after you pass Orebank Road. The climb is severe going up Chestnut Ridge until you reach Harbor Chapel Road.. I have seen very few bicycle riders on state route 126 in the last 26 years. We can no longer afford to build in options that have very little utility. It is not just a waste of money, it uses non-renewable natural resources.

The proposed sidewalks from Harbor Chapel Road to Old Stage Road appear to be solely for eye candy. Who will walk on them? The three houses on the east side of the road are well above the road and there are no houses that front on the west side of the road due to the sharp drop. Surely we can find better ways to spend our tax dollars. I discussed both of these concerns with Mr. Jim Ozment, Interim Director Environmental Division, when he was the major spokesman for the December 11 public hearing in Kingsport.

I also discussed the rerouting of Old Stage Road with Mr. Ozment. Since I have lived in the first house on the west side of Old Stage Road for over 26 years and own lots along Memorial Blvd and Old Stage Road, I have paid close attention to the traffic for the last seven years. Old Stage Road follows the ridge-line coming down a pronounced decline where it joins Memorial Blvd at the Kingsport city limits. Drivers have a clear vision of traffic on Memorial Blvd because of the change in elevation. There is easy access because the roads join at approximately 30 degrees. I propose to make the left turn illegal going down Old Stage Road at this intersection. The only vehicle I have ever seen turn left is the school bus. I discussed the matter with the bus driver, Mike Cox, on May 7, 2012. He told me that he could not make the sharp right turn going from Memorial Blvd to Old Stage Road. When the roads are widened I would think he should be able to make that turn. He makes the turn at 6:30 and 7:15 am in the morning and 2:15 and 3:30 pm in the afternoon. There is not much traffic on either road during his

runs. It would be safer if he could pick up and deliver the children coming up Memorial Blvd because there would be fewer children crossing 126. This would be more important in the winter as it is dark in the mornings and the roads are more apt to be slick. There is a double benefit because it would be safer for the children and safer for the drivers. Coming out of town there is a turn lane at the intersection so drivers can easily see any incoming traffic. As the roads exist now it is a straight line up a steep hill after the turn going up Old Stage Road. All of the options appear to show this intersection coming in at 90 degrees with the option to turn left at the intersection. I made the suggestion of having a turn lane in my letter of June 9, 2005. The turn lane was put in several years ago.

Vinton A. Hoyle, Jr- Jan. 25, 2013

Dr. Vinton A. Hoyle, Jr.

Your Name: LUTHER MINOR Date: 1/25/13

Mailing Address: 7595 WATERS EDGE Rd.
DUFFIELD, VA. 24244

County of Residence: SCOTT COUNTY

Phone Number (optional): 1-276-940-1631

E-mail Address (optional): LMINOR@PGA.COM ***Please make sure to include your name and/or address on your submitted comments form in order to be included in the official record.**

Please return comment from postmarked no later than **January 31, 2013**

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Project Comments
Tennessee Department of Transportation
Suite 700, James K. Polk Building
505 Deaderick Street
Nashville, TN 37243-0332

NORTHEASTERN
TN 376 4 T
28 JAN 2013 PM



Project Meeting Comments
Attn: State Route 126 Corridor
Tennessee Department of Transportation
Suite 700, James K. Polk Building
505 Deaderick Street
Nashville, TN 37243-0332

37243*0332

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Which describes your primary interest in the project?

___Affected resident ✓ Affected landowner ___Affected business ___Concerned citizen

For additional project information:

Visit the TDOT website at www.tn.gov/tdot/SR126/involvement.asp
Or contact Gary King, TDOT Project Manager at Gary.King@tn.gov
Or (615) 741-4777

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Public Hearing, December 11, 2012
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___ No Build (no improvements to existing roadways)

✓ Build Alternatives; ***Circle*** A or B or B Modified SAFE + BEST ROUTE

Please list reasons for choosing your preferred alternative (Please Print Clearly).

BEST ROUTE TO SERVE COMMUNITIES - I DO FEEL ANY KIND OF 2 LANE WILL MAKE ROUTE DANGEROUS.

What issues/concerns do you have about the proposed Build Alternatives and are there any changes you would make to the project? If so, please explain.

SAFETY, TRAFFIC FLOW & SPEED

What concerns do you have about the environmental impacts of the project addressed in the DEIS? Are there any issues or concerns that you feel were not addressed in the DEIS? If so, please explain.

___ Impacts to Natural Resources
✓ Impacts to Communities/Neighborhoods
___ Impacts to Farmlands
___ Air Quality Impacts
✓ Noise Impacts
___ Impacts to Historic/Archaeological Resources
___ Floodplain Impacts
___ Other(s) – Please described below

(Kingsport Civic Center Auditorium)

January 25, 2013

Project Meeting Comments
Attn: State Route 126 Corridor
Tennessee Department of Transportation
Suite 700, James K. Polk Building
505 Deaderick Street
Nashville TN 37243-0332

Dear Sirs:

I'm writing to support the **Modified B WITH THE RETAINING WALL** version **without** a Trinity Lane connector of the proposed road improvement.

I vehemently oppose the version without a retaining wall as shown by the dashed orange line that would cut off the existing Trinity Lane. Modified B with the Retaining Wall will have the least impact on the area it passes through and not isolate the public Pyle cemetery at the end of Trinity Lane.

Sincerely,

Jolly Hill
4407 Greenspring Circle
Kingsport TN 37664
JGHHill@aol.com

Please add this to the record.

Your Name: ROD SCHUTT Date: 1/26/13

Mailing Address: 4741 EDENS VIEW RD,
KINGSPORT, TN 37664

County of Residence: SULLIVAN

Phone Number (optional): 423-343-1935

E-mail Address (optional): RNSCHUTT@CENTURYLINK.NET *Please make sure to include your name and/or address on your submitted comments form in order to be included in the official record.

Please return comment from postmarked no later than **January 31, 2013**

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Project Comments
Tennessee Department of Transportation
Suite 700, James K. Polk Building
505 Deaderick Street
Nashville, TN 37243-0332

KNOXVILLE TN 377
25 JAN 2013 PM 2 L



Project Meeting Comments
Attn: State Route 126 Corridor
Tennessee Department of Transportation
Suite 700, James K. Polk Building
505 Deaderick Street
Nashville, TN 37243-0332

37243-0332

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Which describes your primary interest in the project?

X Affected resident X Affected landowner ___ Affected business ___ Concerned citizen

For additional project information:

Visit the TDOT website at www.tn.gov/tdot/SR126/involvement.asp
Or contact Gary King, TDOT Project Manager at Gary.King@tn.gov
Or (615) 741-4777

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Public Hearing, December 11, 2012
Kingsport Civic Center Auditorium
Public Comment Form

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___ No Build (no improvements to existing roadways)

X Build Alternatives; ***Circle*** A or B or (B Modified)

Please list reasons for choosing your preferred alternative (Please Print Clearly).

LOOKS LIKE B MODIFIED IS THE CHEAPEST AND LEAST DISRUPTIVE ALTERNATIVE.

What issues/concerns do you have about the proposed Build Alternatives and are there any changes you would make to the project? If so, please explain.

WE LIVE ON CHESTNUT RIDGE AT ONE OF THE HIGHEST POINTS. THERE ARE WAYS TO COME UP & DOWN THE RIDGE. IN BAD WEATHER - (SNOW & ICE) - CHESTNUT RIDGE ROAD IS LEAST STEEP & BEST WAY - AND SAFEST TO TRAVEL. ALL PLANS WOULD BLOCK OFF CHESTNUT RIDGE ROAD AND MAKE IT DEAD END. PLEASE LET IT CONNECT WITH EATONS STATION ROAD TO ALLOW USE OF CHESTNUT RIDGE ROAD IN BAD WEATHER AND EMERGENCIES.

What concerns do you have about the environmental impacts of the project addressed in the DEIS? Are there any issues or concerns that you feel were not addressed in the DEIS? If so, please explain.

___ Impacts to Natural Resources
X Impacts to Communities/Neighborhoods
___ Impacts to Farmlands
___ Air Quality Impacts
___ Noise Impacts
___ Impacts to Historic/Archaeological Resources
___ Floodplain Impacts
___ Other(s) – Please described below

405 Wine Circle
Blountville, TN 37617
January 26, 2013

Public Meeting Comments
Attn: SR 126 Corridor

I commend TDOT for its Alternative B Modified: a cost effective, context sensitive solution for the difficult section of SR 126 from Harbor Chapel Road to Cooks Valley Road. This section includes the beautiful and historically significant Chestnut Ridge, the 1761 Island Road (present day Chestnut Ridge Road), the National Register site Yancey's Tavern including reportedly the last cut stone culvert in the state, and East Lawn Cemetery. The modification of Alternative B from a divided four lane east of Harbor Chapel Road to two travel lanes with center turn lane should give real cost savings and reflects the decreasing traffic counts east of Old Stage Road and moderated growth projections for the area. Alternative B Modified will preserve the character of Chestnut Ridge and eliminate the need to destroy the 1761 Island Road north of SR126. Slight narrowing of the lanes will allow the upgraded SR 126 to fit between the National Register site and the cemetery with no movement of graves and no invasion of the Yancey's Tavern grounds.

Since 2004, my project to save Yancey's Tavern has consumed a quarter million dollars of my resources (no grants, no tax write-offs). This includes buying it (and four acres of the original 5-acre site), restoring it from a 40-year vacancy and 15-year neglect, furnishing it, and maintaining it and its grounds ($6000/year). In view of this I am concerned over the admitted adverse visual impact of more lanes and pavement in front of an 18th century tavern. Ms. Tammy Sellers, TDOT Historic Preservation Supervisor, told me at the public hearing to expect to receive information in February 2013 on this matter. As I expect to remain engaged and follow this as closely as possible, I will appreciate anything received regarding mitigation, retaining walls, etc. I have to hope the Advisory Council on Historic Preservation and the TN State Historic Preservation Officer will insure minimal adverse impact on Yancey's Tavern from the SR 126 project as the Memorandum of Agreement is negotiated.

Sincerely,

Rann Vaulx

Rann Vaulx, Owner Yancey's Tavern

Your Name: Marcella Ann Harris Clark

Date: JAN 27, 2013

Mailing Address: 518 Julia Dr
Cookeville, TN 38506

wrote this for

Helen Jean Harris
3209 Memorial Blvd
Kingsport, TN 37664

County of Residence: Putnam

Phone Number (optional): 931-525-6770

E-mail Address (optional): [redacted]

***Please make sure to include your name and/or address on your submitted comments form in order to be included in the official record.**

Please return comment from postmarked no later than **January 31, 2013**

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Marci Clark
518 Julia Dr.
Cookeville TN 38506 ★

tation

COOKEVILLE TN 38501-9998
JAN 30 2013
USPS



USPS

Project Meeting Comments
Attn: State Route 126 Corridor
Tennessee Department of Transportation
Suite 700, James K. Polk Building
505 Deaderick Street
Nashville, TN 37243-0332

37243-0332

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Which describes your primary interest in the project?

✓ Affected resident ✓ Affected landowner ✓ Affected business ___ Concerned citizen

For additional project information:

Visit the TDOT website at www.tn.gov/tdot/SR126/involvement.asp
Or contact Gary King, TDOT Project Manager at Gary.King@tn.gov
Or (615) 741-4777

State Route 126 Corridor Improvement Project
Public Hearing, December 11, 2012
Kingsport Civic Center Auditorium
Public Comment Form

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Of the alternatives presented, which alternative do you prefer: (CHOOSE ONLY ONE)

___ No Build (no improvements to existing roadways)

Build Alternatives: Circle A or B or B Modified

Our Concerns about State Route 126 Corridor (Memorial Blvd)

Re: 3205 and 3209 Memorial Blvd

My mother, Helen Jean Harris,is presently living at 3209 Memorial Blvd. and has rental property at 3205 Memorial. Both properties are involved in the Memorial Blvd. Improvement Project.

This property is presently up for sale. The amount of land required for the improvement will mean the loss of land for mom to sell. The rental property at 3205 will lose the parking and possibly the building itself. Our concern is if the Memorial Improvement Project moves forward this action will devalue the sale of the properties and place a hardship on our mother financially since she is renting space in the commercial building.

Our family has owned this property for sixty years. According to mom's memory, my grandfather, Leonard Brickey, gave up land without any compensation when the road was expanded to four lanes. According to the deed the property line is in the middle of the highway.

I do feel that my mom will be adversely affected if the Memorial Blvd Improvement Project moves forward. It will hurt the sale of her property and immediately affect her renter.

Please take into consideration the above situation when making your decision. Thank you., Marcella Clark

What concerns do you have about the environmental impacts of the project addressed in the DEIS? Are there any issues or concerns that you feel were not addressed in the DEIS? If so, please explain.

___ Impacts to Natural Resources
___ Impacts to Communities/Neighborhoods
___ Impacts to Farmlands
___ Air Quality Impacts
___ Noise Impacts
___ Impacts to Historic/Archaeological Resources
___ Floodplain Impacts
___ Other(s) – Please described below

_____
_____
_____
_____
_____
_____

(Kingsport Civic Center Auditorium)

Your Name: Julie S. Hyatt Date: Jan 27, 2013

Mailing Address: 5336 Foxfire Pl
Kingsport, Tn 37664

County of Residence: Sullivan

Phone Number (optional): _____

E-mail Address (optional): _____ ***Please make sure to include your name and/or address on your submitted comments form in order to be included in the official record.**

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Place



Project Meeting Comments
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Tennessee Department of Transportation
Suite 700, James K. Polk Building
505 Deaderick Street
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Which describes your primary interest in the project?

X Affected resident ___ Affected landowner ___ Affected business X Concerned citizen

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___ No Build (no improvements to existing roadways)

✓ Build Alternatives; ***Circle*** A or B or (B Modified)

Please list reasons for choosing your preferred alternative (Please Print Clearly).

Shoulders to pull off in case a car breaks down and intersections that are perpendicular would be safer. People drive faster on 4-lane ~~rd~~roads and keep drivers from entering from the side streets.

What issues/concerns do you have about the proposed Build Alternatives and are there any changes you would make to the project? If so, please explain.

The snows and ice storms of the last two weeks made me notice that the highway department and Appalachian Power need to trim the overhanging branches and leaning trees.
Please build a 2-lane road with better shoulders and reflective paint on the edges and down the center. Keep the Rumble Strip.
If you must build a four-lane highway you will soon have to put in Stop lights at Island Road and Fall Creek Road.

What concerns do you have about the environmental impacts of the project addressed in the DEIS? Are there any issues or concerns that you feel were not addressed in the DEIS? If so, please explain.

___ Impacts to Natural Resources
X Impacts to Communities/Neighborhoods
___ Impacts to Farmlands
X Air Quality Impacts
X Noise Impacts
X Impacts to Historic/Archaeological Resources
___ Floodplain Impacts
X Other(s) – Please described below

Expense. Sidewalks, curbs and bikepaths would be wasted on such a steep road.
We don't want the noise, smells and danger of more trucks in a residential neighborhood. They can use Ft. Henry Drive and 11-W.

(Kingsport Civic Center Auditorium)

Your Name: Leona P. Minor Date: 1/27/13

Mailing Address: 7595 Waters Edge Rd.
Duffield, VA. 24244

County of Residence: Scott County, VA.

Phone Number (optional): 1-276-940-1631

E-mail Address (optional): _____ ***Please make sure to include your name and/or address on your submitted comments form in order to be included in the official record.**

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Which describes your primary interest in the project?

___Affected resident ✓Affected landowner ___Affected business ___Concerned citizen

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___ No Build (no improvements to existing roadways)

___ Build Alternatives; ***Circle*** A or B or (B Modified)

Please list reasons for choosing your preferred alternative (Please Print Clearly).

I think we have to look ahead and think what would be best for 126 in 20 or 30 years.

What issues/concerns do you have about the proposed Build Alternatives and are there any changes you would make to the project? If so, please explain.

What concerns do you have about the environmental impacts of the project addressed in the DEIS? Are there any issues or concerns that you feel were not addressed in the DEIS? If so, please explain.

___ Impacts to Natural Resources
___ Impacts to Communities/Neighborhoods
___ Impacts to Farmlands
___ Air Quality Impacts
___ Noise Impacts
___ Impacts to Historic/Archaeological Resources
___ Floodplain Impacts
___ Other(s) – Please described below

Your Name: Linda SAWYER Date: Jan 27, 2013

Mailing Address: 1202 SUSSEX DR

KINGSPORT, TN 37660

County of Residence: Sullivan

Phone Number (optional): _____

E-mail Address (optional): _____ ***Please make sure to include your name and/or address on your submitted comments form in order to be included in the official record.**

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Tennessee Department of Transportation
Suite 700, James K. Polk Building
505 Deaderick Street
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Which describes your primary interest in the project?

___Affected resident ___Affected landowner ___Affected business _X_Concerned citizen
Family buried in East LAWN

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___ No Build (no improvements to existing roadways)

___ Build Alternatives; ***Circle*** A or B or (B Modified)

Please list reasons for choosing your preferred alternative (Please Print Clearly).

Does not impact graves sites

What issues/concerns do you have about the proposed Build Alternatives and are there any changes you would make to the project? If so, please explain.

What concerns do you have about the environmental impacts of the project addressed in the DEIS? Are there any issues or concerns that you feel were not addressed in the DEIS? If so, please explain.

___ Impacts to Natural Resources
___ Impacts to Communities/Neighborhoods
___ Impacts to Farmlands
___ Air Quality Impacts
___ Noise Impacts
X Impacts to Historic/Archaeological Resources
___ Floodplain Impacts
___ Other(s) – Please described below

(Kingsport Civic Center Auditorium)

Your Name: Tim W. Buckner DBA ~~Farm Bureau~~ Ins. Date: 1/28/13

Mailing Address: 3417 Memorial Blvd.

Kingsport, TN 37664

Tim W. Buckner Ins. Agency
DBA Farm Bureau Ins.

County of Residence: Sullivan

Phone Number (optional): 423-578-2181

E-mail Address (optional): Tim.Buckner@fbfi.com *Please make sure to include your name and/or address on your submitted comments form in order to be included in the official record.

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NORTHEASTERN
TN 376 4T
28 JAN 2013 PM

USA
Freedom
FOREVER

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Which describes your primary interest in the project?

___Affected resident ___Affected landowner _✓_Affected business ___Concerned citizen

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_✓_ No Build (no improvements to existing roadways)

___ Build Alternatives; ***Circle*** A or B or B Modified

Please list reasons for choosing your preferred alternative (Please Print Clearly).

THE ROAD AS IS CLEARLY HANDELS TRAFFIC COUNT.
THERE IS NEVER TRAFFIC JAMS
PEOPLE JUST DRIVE TO FAST... THE ROAD NEEDS TO BE PATROLLED
NOT REBUILT.

INFORCE SPEED LIMITS, NO NEED TO REBUILD.

What issues/concerns do you have about the proposed Build Alternatives and are there any changes you would make to the project? If so, please explain.

ANY OF THE CHANGES TAKES OUT MY PARKING WHICH IS
ALREADY VERY TIGHT AND WOULD FORCE US TO RELOCATE.

What concerns do you have about the environmental impacts of the project addressed in the DEIS? Are there any issues or concerns that you feel were not addressed in the DEIS? If so, please explain.

___ Impacts to Natural Resources
___ Impacts to Communities/Neighborhoods
___ Impacts to Farmlands
___ Air Quality Impacts
___ Noise Impacts
___ Impacts to Historic/Archaeological Resources
___ Floodplain Impacts
___ Other(s) – Please described below

(Kingsport Civic Center Auditorium)

Your Name: Kathleen Beine, MD Date: 1-30-2013

Mailing Address: 4515 Brookridge Drive
Kingsport, TN 37664

County of Residence: Sullivan

Phone Number (optional): (423) 863-3304

E-mail Address (optional): kbeine@tricon.net

I have done 3 major community-based research studies in Kingsport on our residents' preferences for design. In one study top issues were: Clean-Green-Sidewalks-Parks-and Good Neighborhoods

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Which describes your primary interest in the project?

✓ Affected resident ___ Affected landowner ___ Affected business ___ Concerned citizen

(Physician + Community Researcher

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Or (615) 741-4777

Safety improvements (rumble strips, guard rails) that have been made so far are much appreciated and have already improved safety of road.

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___ No Build (no improvements to existing roadways)

✓ Build Alternatives; ***Circle*** A or B or (B Modified) with additional modifications described below.

Please list reasons for choosing your preferred alternative (Please Print Clearly).

- No impact on Yanceys Tavern or cemetery
- Less dislocations
- Less cost — but cost can still be lower with my suggestions below.

What issues/concerns do you have about the proposed Build Alternatives and are there any changes you would make to the project? If so, please explain.

- Please place a grassy strip between roadway (curb/gutter) and sidewalks — This will promote pedestrian's ease of mind when walking next to relatively fast traffic
- TWTL = suicide lanes. Use grassy islands with turn lanes
- Keep travel lanes 11 ft. wide thru out until Carolina Pottery Dr.
- Need 2 pedestrian crossovers @ Yancy tavern area when only 1 sidewalk. • Need sidewalks on both sides in Indian Springs.

What concerns do you have about the environmental impacts of the project addressed in the DEIS? Are there any issues or concerns that you feel were not addressed in the DEIS? If so, please explain.

___ Impacts to Natural Resources
___ Impacts to Communities/Neighborhoods
___ Impacts to Farmlands
___ Air Quality Impacts
___ Noise Impacts
___ Impacts to Historic/Archaeological Resources
___ Floodplain Impacts
✓ Other(s) – Please described below

Would like to have seen new traffic counts.

- Pedestrian safety + comfort via having grassy strips separating sidewalk from road way. Ideally these strips would be wide enough that trees could be planted in them to promote safety + proride shade.
- Consider a mobility path in section from Harr Town Rd to ~~Carolina~~ I-81. Again, have a grassy strip separating it from road.
- Please read and use Road Diets! Fixing the Big Roads by Dan Burden + Peter Lagerway. Have traffic count = road size needed.

(Kingsport Civic Center Auditorium)

Concerned that it close Trinity Lane this will cause traffic thru Preston Hills subdivision.
- How will Orebank Road intersection w/ th Memorial Blvd change?

Your Name: Dr. Richard L. Zimmerman Date: 1/30/2013

Mailing Address: 4515 Brookridge Dr
Kingsport, TN 37664

County of Residence: Sullivan

Phone Number (optional): 423-~~229~~-6555

E-mail Address (optional): RLZimmer@eastman.com *Please make sure to include your name and/or address on your submitted comments form in order to be included in the official record.

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TN 376 4 1
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Which describes your primary interest in the project?

✓ Affected resident ___Affected landowner ___Affected business ___Concerned citizen

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___ No Build (no improvements to existing roadways)

X Build Alternatives; ***Circle*** A or B or (B Modified)

Please list reasons for choosing your preferred alternative (Please Print Clearly).

1) Fewer dislocations
2) Avoids impact on Yancey's Tavern & Cemetery
3) Lower cost while still improving safety

What issues/concerns do you have about the proposed Build Alternatives and are there any changes you would make to the project? If so, please explain.

1) Travel lanes 11 ft wide are adequate for the entire length until Carolina Pottery — wider lanes encourage speeding
2) Use islands with designated turn lanes instead of continuous center turn lanes which risk head-on collisions
3) Sidewalks need a grassy strip to separate them from the roadway
4) Need sidewalks on both sides in residential areas like Fordson Springs.

What concerns do you have about the environmental impacts of the project addressed in the DEIS? Are there any issues or concerns that you feel were not addressed in the DEIS? If so, please explain.

___ Impacts to Natural Resources
___ Impacts to Communities/Neighborhoods
___ Impacts to Farmlands
___ Air Quality Impacts
___ Noise Impacts
___ Impacts to Historic/Archaeological Resources
___ Floodplain Impacts
X Other(s) – Please described below

1) Proposed closure of Trinity Lane intersection with Memorial Blvd may adversely impact Preston Hills subdivision's ingress. The details of this possibility are unclear.
2) Traffic counts should determine the number & width of travel lanes throughout the corridor. I would have preferred to see recent traffic count data.

(Kingsport Civic Center Auditorium)

Your Name: Tom Gatti Date: 1-30-13

Mailing Address: 804 Rock City Rd
Kingsport TN 37664

County of Residence: Sullivan

Phone Number (optional): _____

E-mail Address (optional): _____ ***Please make sure to include your name and/or address on your submitted comments form in order to be included in the official record.**

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Which describes your primary interest in the project?

___Affected resident ___Affected landowner ___Affected business X Concerned citizen

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___ No Build (no improvements to existing roadways)

___ Build Alternatives; ***Circle*** A or B or (B Modified)

Please list reasons for choosing your preferred alternative (Please Print Clearly).

B-modified has the least impact to the Landscape, homes, the cemetery and especially Yancey's Tavern.

What issues/concerns do you have about the proposed Build Alternatives and are there any changes you would make to the project? If so, please explain.

I would like to see any and all measures taken to control the speed on this Highway which includes not 4-laning the road east of Hardtown Rd. I don't see the need for 10foot wide shoulders on this road. That seems a bit excessive and expensive.

What concerns do you have about the environmental impacts of the project addressed in the DEIS? Are there any issues or concerns that you feel were not addressed in the DEIS? If so, please explain.

___ Impacts to Natural Resources
X Impacts to Communities/Neighborhoods
___ Impacts to Farmlands
X Air Quality Impacts
X Noise Impacts
X Impacts to Historic/Archaeological Resources
___ Floodplain Impacts
___ Other(s) – Please described below

Your Name: Walter Owenby Date: 01-13-2013

Mailing Address: 5149 Spring Hill Dr.
Kingsport, TN 37664

County of Residence: Sullivan

Phone Number (optional): 423-288-2779

E-mail Address (optional): _____ ***Please make sure to include your name and/or address on your submitted comments form in order to be included in the official record.**

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Which describes your primary interest in the project?

✓ Affected resident ___ Affected landowner ___ Affected business ___ Concerned citizen

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___ No Build (no improvements to existing roadways)

✓ Build Alternatives; ***Circle*** A or B or (B Modified)

Please list reasons for choosing your preferred alternative (Please Print Clearly).

See attachment - Part 1

What issues/concerns do you have about the proposed Build Alternatives and are there any changes you would make to the project? If so, please explain.

See attachment - Part 2

What concerns do you have about the environmental impacts of the project addressed in the DEIS? Are there any issues or concerns that you feel were not addressed in the DEIS? If so, please explain.

___ Impacts to Natural Resources
✓ Impacts to Communities/Neighborhoods
___ Impacts to Farmlands
___ Air Quality Impacts
✓ Noise Impacts
✓ Impacts to Historic/Archaeological Resources
___ Floodplain Impacts
___ Other(s) – Please described below

See attachment - Part 3

State Route 126 Corridor Improvement Project
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Public Comment Form - Attachment

Part 1 -

B-Modified has the least impact and makes the smallest footprint through the community while providing the road improvements that have been needed for many years. Plan A (the complete four lane option) is complete overkill. I have been a resident of this community for many years and I am very familiar with the traffic problems on SR126. Everyone seems determined to blame the roadway for causing all the fatal and personal injury automobile crashes. This is absolutely absurd and makes just about as much sense as the recent statement by THP management that the significant increase in fatal crashes on Tennessee highways in 2012 was brought on by the mild weather in January and February last year. It seems that the weather was the only thing that could be blamed because apparently their methods and interventions failed terribly. Fatal crash reductions during the previous years were probably due to intangible factors related to the economic recession more than anything else. Statistically speaking contributing factors related to roadway design and construction are rare. Motor vehicles are safer now than ever before due to advancements in engineering, design, materials, passive safety devices, etc. Contributing factors related to driver condition and behavior are what is seen most often in serious highway traffic crashes. Wider lanes, a center turn lane and wide paved shoulders would certainly make the road safer for all residents, motorists, pedestrians, law enforcement and other emergency first responders. In my opinion a four lane highway would do nothing but invite dangerous driving behavior. The instances of speeding, reckless driving, distracted driving, etc. would likely increase because of the perceived built-in safety of such a roadway. SR126 does need some long overdue upgrades but we should stop blaming all of the serious crashes on the roadway and focus more on driver condition and behavior. An aggressive enforcement effort directed at statistically proven high crash areas has always been the best remedy. As it is now SR126 is not a safe place for law enforcement officers to mount such a proactive safety campaign.

Part 2 -

Plan A (the complete four lane option) requires too much property and would completely change the look and character of the community. Plan B reduces the impact through much of the community but still requires relocating family graves and/or Yancey's Tavern Historic Site. I am opposed to disturbing either of these for the sake of a four lane road. A four lane road is simply not needed.

Part 3 -

I think all of the concerns I had about this project were properly addressed at the public meeting at the Kingsport Civic Auditorium.

January 31, 2013

I am writing on behalf of my mother Ms. Margaret L. Davis, who lives at 4505 Stagecoach Road in the neighborhood called Preston Woods. My name is Kimberly Davis, and I am a registered Civil Engineer (TN 22990) with experience in NEPA studies (including Environmental Impact Studies), highway design, and environmental/natural resource protection. My family's residence is approximately 200' north of the stretch of road between 0.6 mile of this segment from Harbor Chapel Road to east of Old Stage Road (identified as segment 3 on page 63). I will be referring to this segment in all of my comments below. Preston Woods is comprised of homes built from the 1950s to the 1990s, and lots are typically ½ to 1 ½ acres in size.

Ms. Davis and I would like to go on record as wanting the *No-Build* alternative. However, in the likely event that TDOT goes forward with Alternative A or B, I recommend that **(1) consideration be made to include a sound barrier above Preston Woods in segment 3, and (2) Alternative B be selected.**

First of all, we are concerned that none of the supporting studies listed on page 206 of the DEIS are available on the TDOT web site. Mr. Gary King kindly sent me a copy of the Noise Evaluation Update, which is the report I was primarily interested in reading. However, it is worth noting that pertinent project studies are linked on other TDOT projects, such as the James White Parkway SR-71, SR-18, and the Sommerville Beltway, for example.

My comments that follow deal primarily with projected traffic noise from SR 126 and the need for a sound barrier. I also am very concerned about the extensive removal of trees at the roadside that currently help reduce some the harsher aspects of living near a highway, such as noise, visual blight, and poor air quality.

To begin my technical observations with regard to road noise, I would like to address terrain considerations along the segment of interest (segment 3). I have attached a topographic map showing the area of segment 3 where Ms. Davis's house is located (Attachment 1). Where the terrain forms a valley between a proposed road and the NAC B receptors,[1] noise levels will be greatly increased over situations when the terrain is fairly level, because ground adsorption is not present to attenuate the sound. In conditions like this, noise levels are generally projected to be at least 3 dBA more than in typical situations with level terrain. Noise will be further increased by the proposed deforestation along long stretches. In Ms. Davis's case, the right-of-way (ROW) appears to extend at least 110' down the heavily wooded hill from the existing road and toward her house, despite the DEIS stating the cross section is only 160 feet in this segment – which would allow for only 50' on each side. Did TDOT take any of these terrain characteristics into consideration?

Within the rectangle drawn on Attachment 2 (duplicated on Attachment 1), I count at least 50 houses that will clearly be impacted by greatly heightened noise. However, the closest measurement taken to Preston Woods was on Trinity Lane (Rec 23), and moreover, **was recorded outside of a "worst hour" as required by TDOT's own noise policy** for determining whether noise levels exceed NAC.[2]

As a long-time resident of this address, I can report that noise levels rise considerably during the afternoon commute and rarely abate until later into the evening. Therefore, this Trinity Lane measurement taken at 2:23 PM was likely woefully underestimated at 60 dBA. In fact, I would estimate that this is probably the *quietest* time of the day for that stretch of road, so the fact that levels are expected to rise to 65 dBA by the design year indicates to me that the actual design year sound level could potentially greatly exceed NAC. I also think that holding this area to such a stringent standard for justifying barriers (67 dBA) seems unreasonable, especially when the James White Highway project noise study in Knoxville found that barriers were justified for levels ranging from 46-67 dBA (also NAC B receptors).

The inclusion of sidewalks in segment 3 on the 0.6 mile of this segment from Harbor Chapel Road to east of Old Stage Road seems needlessly excessive, and would only serve to increase the cross section of disturbed area -- thus unnecessarily requiring removal of existing vegetation that currently acts as a sound barrier. As I have mentioned above, there are currently no business, nor residences connected by driveways to SR 126 on the north side of the road. And apparently after construction, all residences will be wiped out on the south side of the road, as well. Where would the pedestrians come from, and where would they be walking to, in the first place? Moreover, if traffic counts increase as TDOT projects, it will be an extremely unpleasant environment in which to

1 The average slope drop-off for the first 150 feet from the road for this section is estimated to be 30%.
2 Rec 23 was measured from 2:23 to 2:42 PM. Two other measurements, Rec 12 and Rec 22 were also outside of "worst hour."

walk. The sidewalks will just impose an increased maintenance burden on the city, and will likely be a very low budget priority resulting in unsightly, broken sidewalks after only a few years.

I have attached a screen shot of a typical area from mile markers 380-383 on I-40 in Knoxville that is protected by a 1.2 mile-long sound wall (Attachment 3). These are not densely built neighborhoods, and in many cases are quite similar to Preston Woods in density and age of houses. They were also built after I-40 was constructed in the 1960s, which leads me to believe that the policy dictating that residences pre-date "initial highway construction" is somewhat flexible. Just as roadside I-40 noise and pollution gradually increased over the years to barely tolerable levels, SR 126 has also become a much more heavily traveled road over the past 30 years, as more and more people commute to new outlying neighborhoods and the airport. My primary residence is in an extremely urban environment near downtown Knoxville where I am accustomed to sirens, construction sounds, distant I-40 noise, etc., and when I visit my Kingsport residence, I am continually astonished by the noise in Preston Woods from SR 126. It is much, much greater than when I was a child in the 1960s-1970s, and already comparable to sound levels in any urban area.

Although the feasibility of a sound barrier is dismissed by the DEIS and the Noise Evaluation due to the entirety of SR 126 not being a "limited access facility," the area above Preston Woods is actually quite amenable to construction of a barrier, due to the fact that it is uninterrupted by ANY driveway or road on the northern side of SR 126 for 0.7 mile (if the Trinity Lane entrance is relocated). This is partly due to the "steep side-slopes" (as described on page 21 of the DEIS) along this stretch, which would greatly hinder future roadside development. The construction of such a barrier would not only be appreciated by Preston Woods residents as a way to attenuate noise and maintain quality of life, but also to prevent the inevitable drop in property values due to unbearable traffic noise emanating from SR 126 after it is widened.

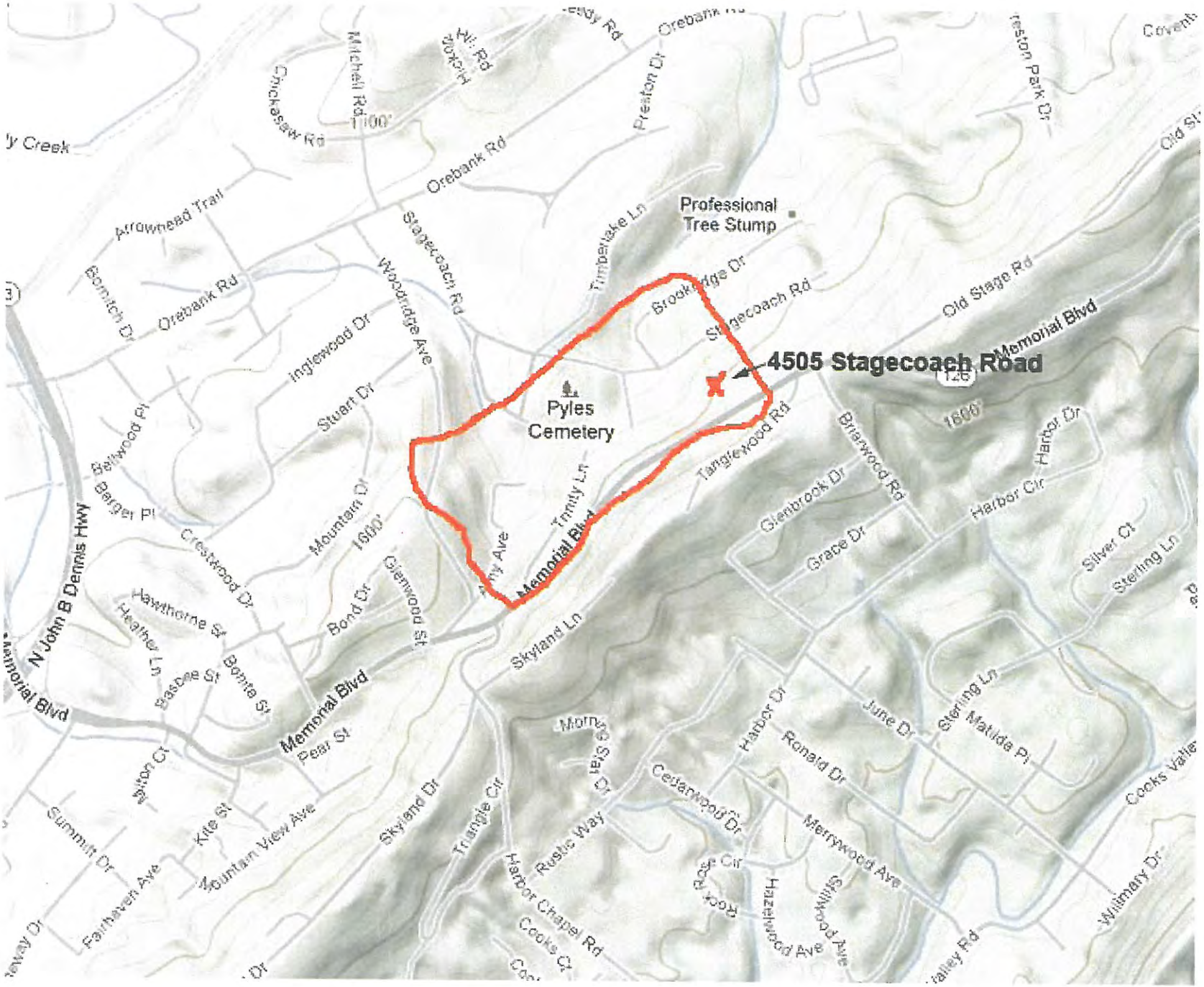
Finally, I would also like to dissuade TDOT from connecting Trinity Lane to Greenspring Circle as shown in "Alternative B Modified." Although this is (curiously) not discussed anywhere in the DEIS, it is simply shown on the map. Preston Woods is an old, cul-de-sac style neighborhood of stately homes, and it simply does not make sense to take property from 4407 and 4411 Greenspring Circle for this uncharacteristic roadway entry point.

In conclusion, I have the impression that TDOT is only including the No-Build alternative to meet federal guidelines, and will likely choose Alternative A or B. In the case that TDOT moves forward with either of these "build" options, I would strongly suggest that consideration be made to include a sound barrier above Preston Woods in segment 3, for the reasons stated. I also think that a divided highway with a grass median is overkill – thus our preference for Alternative B with the 3-lane road. This would reduce the amount of land that needs to be disturbed in the ROW and reduce expenditures for turf maintenance. Also, please give further consideration to exploring the expansion of public transportation (i.e., rail) throughout Tennessee. This would serve to lower Tennessee's extremely high per capita automobile fatality rate (15.8 per 100,000 people as compared to 10.4 per 100,000 nationally) and would allow TDOT to be far more accountable to Tennesseans in the use of our limited public dollars for the long term.

Thank you for entering our comments into the record, and we will be following this project with interest.

K. L. Davis for Ms. Margaret L. Davis

Kimberly L. Davis, Ph.D., P.E.
Ms. Margaret L. Davis (aka Ms. Robert E. Davis)
4505 Stagecoach Road
Kingsport, TN 37664
(423) 247-4537



Attachment 1



Attachment 2



Attachment 3

Project Comments
TN Dept. of Transportation
Suite 700, James K. Polk Bldg
505 Deaderick St.
Nashville, Tn 37243-0332

I would like to have the following comments entered into the official public record of the State highway 126 expansion project.

The Indian Springs community is a unique community that has much historical significance. Historical Yancey's Tavern is on one end of the community and old historically significant private homes dot the entire area. The very name "Indian Springs" denotes there was an actual spring in this area that was used by the Indians who inhabited this location prior to the arrival of the white settlers. Many families that still live in Indian Springs are descendents of the first white settlers to arrive in what is now Sullivan County.

Many of the community's street names bear names of Indian tribes. There are several locations within the Indian Springs area where Indian artifacts have been found. This is a close-knit community that is civic minded; they have worked for years to insure that this is a school/church/neighborhood/small business community. To divide this community by building a four-lane highway through the middle of it would devastate the quiet neighborhoods that surround highway 126. Many school buses run to the elementary school from the nearby neighborhoods. With a four lane these buses would have to travel this highway with additional traffic and higher speeds. The present highway doesn't interfere with local traffic to and from the school which is only about 100 yards from the present roadway. The school area is also home to many athletic fields and Ruritan property. Churches are scattered along this roadway, thus much of the present traffic is local community, school, business or church traffic. Bring in a four lane and it will

add much additional traffic traveling at greater speeds combining with family cars and school buses. This could result in more tragedy than has already occurred.

Please, make the highway safer – which is a good thing. Please don't wreck havoc with a wonderful community—keep it intact, not divided by 4 lanes of traffic. Please preserve the historic aspects of this area also. Thank you for allowing me, a teacher at Indian Springs Elementary School for twenty-three years to tell you that you don't want to divide this community.

Sincerely,

Ann Seeger

Ann Seeger
517 Woodmere Dr.
Kingsport, Tn 37663
Dec. 4, 2012

Your Name: Linda Allen Date: 12-11-12

Mailing Address: 230 Spurgeon Rd
Blountville TN 37617

County of Residence: Sullivan

Phone Number (optional): 423-863-3944

E-mail Address (optional): _____ ***Please make sure to include your name and/or address on your submitted comments form in order to be included in the official record.**

Please return comment from postmarked no later than **January 31, 2013**

Fold at this line first

Project Comments
Tennessee Department of Transportation
Suite 700, James K. Polk Building
505 Deaderick Street
Nashville, TN 37243-0332

Place Stamp Here

Project Meeting Comments
Attn: State Route 126 Corridor
Tennessee Department of Transportation
Suite 700, James K. Polk Building
505 Deaderick Street
Nashville, TN 37243-0332

Fold at this line second

Which describes your primary interest in the project?

✓ Affected resident ___Affected landowner ___Affected business ___Concerned citizen

For additional project information:

Visit the TDOT website at www.tn.gov/tdot/SR126/involvement.asp
Or contact Gary King, TDOT Project Manager at Gary.King@tn.gov
Or (615) 741-4777

State Route 126 Corridor Improvement Project
Public Hearing, December 11, 2012
Sullivan Central High School
Public Comment Form

The Tennessee Department of Transportation (TDOT) has prepared a Draft Environmental Impact Statement (DEIS) for the proposed State Route 126 Corridor Improvement Project. TDOT is interested in your comments regarding the alternatives presented in the DEIS and in any areas of concern you may have regarding the environmental analysis of the alternatives. Please return comment form postmarked no later than **January 31, 2013**.

Of the alternatives presented, which alternative do you prefer: (CHOOSE ONLY ONE)

___ No Build (no improvements to existing roadways)

✓ Build Alternatives; ***Circle*** A or (B) or B Modified

Please list reasons for choosing your preferred alternative (Please Print Clearly).

Feel its the safest plan - B Modified

What issues/concerns do you have about the proposed Build Alternatives and are there any changes you would make to the project? If so, please explain.

Prefer Alternative B - Do not want the Cemetery disrupted

What concerns do you have about the environmental impacts of the project addressed in the DEIS? Are there any issues or concerns that you feel were not addressed in the DEIS? If so, please explain.

___ Impacts to Natural Resources
✓ Impacts to Communities/Neighborhoods
___ Impacts to Farmlands
___ Air Quality Impacts
___ Noise Impacts
✓ Impacts to Historic/Archaeological Resources
___ Floodplain Impacts
___ Other(s) – Please described below

(Sullivan Central High School)

Your Name: Johnny M. Brown Date: 12/11/2012

Mailing Address: 124 Sugarcane Lane
Blountville, TN 37617

County of Residence: Sullivan

Phone Number (optional): 423-323-5054

E-mail Address (optional): Johnnybro@embarqmail.com *Please make sure to include your name and/or address on your submitted comments form in order to be included in the official record.

Please return comment from postmarked no later than **January 31, 2013**

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Johnny & Iris Brown
124 Sugarcane Ln
Blountville, TN 37617-4889

JOHNSON CITY TN 376
13 DEC 2012 PM



Project Meeting Comments
Attn: State Route 126 Corridor
Tennessee Department of Transportation
Suite 700, James K. Polk Building
505 Deaderick Street
Nashville, TN 37243-0332

37243$0332

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Which describes your primary interest in the project?

✓ Affected resident ✓ Affected landowner ___ Affected business ✓ Concerned citizen

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Of the alternatives presented, which alternative do you prefer: (CHOOSE ONLY ONE)

___ No Build (no improvements to existing roadways)

___ Build Alternatives; ***Circle*** A or B or (B Modified)

Please list reasons for choosing your preferred alternative (Please Print Clearly).

B modified offers the least amount of change and hopefully this could be completed in the shortest time and the lowest cost. ~~long~~ This may not be the best design, however it is very important "to get started" and include "long term goals. Like most engineering projects, none are perfect and need contengency funding and some design changes as the project proceeds to completion.

What issues/concerns do you have about the proposed Build Alternatives and are there any changes you would make to the project? If so, please explain.

A great deal of work has gone into the existing stages of planning with a great deal of effort toward designing safety and performance into the overall project. The overall ~~co~~ final completion of this project is going to take years. The community needs to have those parts of the project which offer "Quick Fixes!"

What concerns do you have about the environmental impacts of the project addressed in the DEIS? Are there any issues or concerns that you feel were not addressed in the DEIS? If so, please explain.

___ Impacts to Natural Resources
___ Impacts to Communities/Neighborhoods
___ Impacts to Farmlands
___ Air Quality Impacts
___ Noise Impacts
___ Impacts to Historic/Archaeological Resources
___ Floodplain Impacts
___ Other(s) – Please described below

This project is not like building a house!! Priorities ~~should~~ of parts of the project to be completed should be ~~best~~ based on safety and added ~~safety~~ performance. Cost is very important but "getting started" and prioritizing ~~for~~ parts of the project to quickly improve "safety" and "performance" is most important!!

(Sullivan Central High School)

Your Name: Cathy Dean Date: 12-11-12

Mailing Address: 1013 Cedar Hills Drive.
Church Hill, TN 37642

County of Residence: Hawkins

Phone Number (optional): _____

E-mail Address (optional): cld1717@yahoo.com **Please make sure to include your name and/or address on your submitted comments form in order to be included in the official record.**

Please return comment from postmarked no later than **January 31, 2013**

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Project Comments
Tennessee Department of Transportation
Suite 700, James K. Polk Building
505 Deaderick Street
Nashville, TN 37243-0332

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Project Meeting Comments
Attn: State Route 126 Corridor
Tennessee Department of Transportation
Suite 700, James K. Polk Building
505 Deaderick Street
Nashville, TN 37243-0332

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Which describes your primary interest in the project?

___Affected resident ✓Affected landowner ___Affected business ✓Concerned citizen

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Or contact Gary King, TDOT Project Manager at Gary.King@tn.gov
Or (615) 741-4777

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Of the alternatives presented, which alternative do you prefer: (CHOOSE ONLY ONE)

___ No Build (no improvements to existing roadways)

___ Build Alternatives; ***Circle*** A or B or B Modified

Please list reasons for choosing your preferred alternative (Please Print Clearly).

My family will Remain at Peace in the Garden of Devotion at East LAWN

THANK You for Re-evaluating the project

What issues/concerns do you have about the proposed Build Alternatives and are there any changes you would make to the project? If so, please explain.

I prefer no Retaining Wall @ East LAWN

However - No Build will Suit Many Concerned Citizens

What concerns do you have about the environmental impacts of the project addressed in the DEIS? Are there any issues or concerns that you feel were not addressed in the DEIS? If so, please explain.

___ Impacts to Natural Resources
___ Impacts to Communities/Neighborhoods
___ Impacts to Farmlands
✓ Air Quality Impacts
✓ Noise Impacts
___ Impacts to Historic/Archaeological Resources
___ Floodplain Impacts
✓ Other(s) – Please described below

My family is buried in the Garden of Devotion at East Lawn Cemetary - My mother, my maternal grandparents and extended family. I DO NOT WANT THEIR GRAVES Disturbed!

(Sullivan Central High School)

Your Name: DAVID J. DOTTS Date: 12-11-12
COMMERCIAL MAINTENANCE SYSTEMS LLC
Mailing Address: 5372 MEMORIAL BLVD

5376 MEMORIAL BLVD KINGSPORT, TN 37664

County of Residence: SULLIVAN

Phone Number (optional): 423-341-0192

E-mail Address (optional): COMMAINTSYSLLC@GMAIL.COM *Please make sure to include your name and/or address on your submitted comments form in order to be included in the official record.

Please return comment from postmarked no later than **January 31, 2013**

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Project Comments
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Nashville, TN 37243-0332



Project Meeting Comments
Attn: State Route 126 Corridor
Tennessee Department of Transportation
Suite 700, James K. Polk Building
505 Deaderick Street
Nashville, TN 37243-0332

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Which describes your primary interest in the project?

X Affected resident X Affected landowner X Affected business ___Concerned citizen

For additional project information:

Visit the TDOT website at www.tn.gov/tdot/SR126/involvement.asp
Or contact Gary King, TDOT Project Manager at Gary.King@tn.gov
Or (615) 741-4777

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Of the alternatives presented, which alternative do you prefer: (CHOOSE ONLY ONE)

___ No Build (no improvements to existing roadways)

X Build Alternatives; ***Circle*** (A) or B or B Modified

Please list reasons for choosing your preferred alternative (Please Print Clearly).

I BELIEVE THAT THIS ROAD SHOULD BE 4 LANES FROM I-81 TO KINGSPORT (ALL 8.4 MI)
I BELIEVE THAT THERE SHOULD BE TRAFFIC LIGHTS AT ALL MAJOR INTERSECTIONS ON THIS HIGHWAY TO REDUCE SPEED AND ALLOW FOR EARY ACCESS TO THE NEW HIGHWAY I DON'T THINK SIDEWALKS ARE IMPORTANT DUE TO THE FACT THAT THIS IS A HIGHWAY TRAVELED ROAD. THE TRAFFIC LIGHTS WOULD ALSO ~~[illegible]~~ KEEP SEMI-TRUCK TRAFFIC TO A MINIMUM. THE MAIN REASON I CHOOSE ALTERNATIVE A WITH 4 LANES ON ALL 8.4 MILES IS THE FUTURE GROWTH OF OUR AREA.

What issues/concerns do you have about the proposed Build Alternatives and are there any changes you would make to the project? If so, please explain.

I WOULD SAY TAKE WHAT YOU NEED TO MAKE IT 4 LANES. IT IS WHAT IT IS, GROWTH, IF YOU BUILD THE ROAD TO SMALL THEN IT WILL HAVE TO BE DONE AGAIN IN THE NEAR FUTURE. TRAFFIC IS AT AN ALL TIME HIGH AND WILL GET WORSE. I WILL LOSE MY HOUSE AND BUSINESS AND HAVE TO RELOCATE BUT THE SACRIFICE WILL BE SMALL FOR A BETTER, SAFER, ROAD TO ~~[illegible]~~ DRIVE ON. LETS MOVE FORWARD WITH THIS PROJECT AS FAST AS WE POSSIBLY CAN SOMETHING NEEDS TO BE DONE.

What concerns do you have about the environmental impacts of the project addressed in the DEIS? Are there any issues or concerns that you feel were not addressed in the DEIS? If so, please explain.

___ Impacts to Natural Resources
___ Impacts to Communities/Neighborhoods
___ Impacts to Farmlands
___ Air Quality Impacts
___ Noise Impacts
___ Impacts to Historic/Archaeological Resources
___ Floodplain Impacts
___ Other(s) – Please described below

(Sullivan Central High School)

Your Name: Erwin Holman Date: 12-11-12

Mailing Address: 180 Gravetop Rd
Blountville, TN

County of Residence: Sullivan

Phone Number (optional): 423-323-5019

E-mail Address (optional): eholman@chartertn.net *Please make sure to include your name and/or address on your submitted comments form in order to be included in the official record.

Please return comment from postmarked no later than **January 31, 2013**

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Project Comments
Tennessee Department of Transportation
Suite 700, James K. Polk Building
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Project Meeting Comments
Attn: State Route 126 Corridor
Tennessee Department of Transportation
Suite 700, James K. Polk Building
505 Deaderick Street
Nashville, TN 37243-0332

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Which describes your primary interest in the project?

X Affected resident X Affected landowner ___Affected business ___Concerned citizen

For additional project information:

Visit the TDOT website at www.tn.gov/tdot/SR126/involvement.asp
Or contact Gary King, TDOT Project Manager at Gary.King@tn.gov
Or (615) 741-4777

State Route 126 Corridor Improvement Project
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Sullivan Central High School
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Of the alternatives presented, which alternative do you prefer: (CHOOSE ONLY ONE)

X No Build (no improvements to existing roadways)

___ Build Alternatives; ***Circle*** A or B or B Modified

Please list reasons for choosing your preferred alternative (Please Print Clearly).

Road is not ~~the~~ problem; ~~but~~ lack of local enforcement is problem

Once the Road is straightened & widened you will make it into a dragstrip ~~or~~ unless you add ~~the~~ Law enforcement.

What issues/concerns do you have about the proposed Build Alternatives and are there any changes you would make to the project? If so, please explain.

Do not close off one end of Graveltop Road. Closing one end will increase school bus traffic trying to turn at end of newly closed Road. Two buses come through there now and just barely have room to pass as it is.

What concerns do you have about the environmental impacts of the project addressed in the DEIS? Are there any issues or concerns that you feel were not addressed in the DEIS? If so, please explain.

___ Impacts to Natural Resources
X Impacts to Communities/Neighborhoods
___ Impacts to Farmlands
___ Air Quality Impacts
___ Noise Impacts
___ Impacts to Historic/Archaeological Resources
___ Floodplain Impacts
___ Other(s) – Please described below

closing one end of Graveltop does not meet project goals since it increases traffic on Graveltop; ~~one~~ increases emergency response time to Graveltop ~~&~~ area; increases mail delivery time due to backtracking needed.

During winter Graveltop is used as detour for icy Road conditions.

(Sullivan Central High School)

Your Name: Terry O. + Carrie S. Larkins Date: 12-11-12

Mailing Address: 4912 Memorial Blvd

Kingsport, Tenn 37664

County of Residence: Sullivan

Phone Number (optional): 423 367-5803 or 423-367-5805

E-mail Address (optional): _____ ***Please make sure to include your name and/or address on your submitted comments form in order to be included in the official record.**

Please return comment from postmarked no later than **January 31, 2013**

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Project Comments
Tennessee Department of Transportation
Suite 700, James K. Polk Building
505 Deaderick Street
Nashville, TN 37243-0332

JOHNSON CITY TN 376
12 DEC 2012 PM L



Project Meeting Comments
Attn: State Route 126 Corridor
Tennessee Department of Transportation
Suite 700, James K. Polk Building
505 Deaderick Street
Nashville, TN 37243-0332

37243$0332

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Which describes your primary interest in the project?

✓ Affected resident ___Affected landowner ___Affected business ___Concerned citizen

For additional project information:

Visit the TDOT website at www.tn.gov/tdot/SR126/involvement.asp
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___ No Build (no improvements to existing roadways)

___ Build Alternatives; ***Circle*** (A) or (B) or B Modified

Please list reasons for choosing your preferred alternative (Please Print Clearly).

There has been FOUR WRECKS in my DRive WAY Something needs to be done promply it is Like playing Dodge ball getting out of our DRive WAY

What issues/concerns do you have about the proposed Build Alternatives and are there any changes you would make to the project? If so, please explain.

Listen TO people That Live on the Road go by what They Tell you of The Dangers the blind spots And Hills A lot of Vehicles need a place To pull off For emergencies

What concerns do you have about the environmental impacts of the project addressed in the DEIS? Are there any issues or concerns that you feel were not addressed in the DEIS? if so, please expiain.

___ Impacts to Natural Resources
___ Impacts to Communities/Neighborhoods
___ Impacts to Farmlands
___ Air Quality Impacts
___ Noise Impacts
___ Impacts to Historic/Archaeological Resources
___ Floodplain Impacts
___ Other(s) – Please described below

NO

(Sullivan Central High School)

Your Name: Ron Porter Date: 12-11-12

Mailing Address: 197 Samdal Rd.
Blf. Tn. 32617

County of Residence: Sullivan

Phone Number (optional): 423-323-4383

E-mail Address (optional): _____ ***Please make sure to include your name and/or address on your submitted comments form in order to be included in the official record.**

Please return comment from postmarked no later than **January 31, 2013**

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Tennessee Department of Transportation
Suite 700, James K. Polk Building
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Suite 700, James K. Polk Building
505 Deaderick Street
Nashville, TN 37243-0332

Fold at this line second

Which describes your primary interest in the project?

___Affected resident ___Affected landowner ___Affected business ___Concerned citizen

For additional project information:

Visit the TDOT website at www.tn.gov/tdot/SR126/involvement.asp
Or contact Gary King, TDOT Project Manager at Gary.King@tn.gov
Or (615) 741-4777

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Of the alternatives presented, which alternative do you prefer: (CHOOSE ONLY ONE)

___ No Build (no improvements to existing roadways)

___ Build Alternatives; ***Circle*** A or B or B Modified

Please list reasons for choosing your preferred alternative (Please Print Clearly).

Just go ahead quickly & Build it. 4 lanes all the way.

What issues/concerns do you have about the proposed Build Alternatives and are there any changes you would make to the project? If so, please explain.

What concerns do you have about the environmental impacts of the project addressed in the DEIS? Are there any issues or concerns that you feel were not addressed in the DEIS? If so, please explain.

___ Impacts to Natural Resources
___ Impacts to Communities/Neighborhoods
___ Impacts to Farmlands
___ Air Quality Impacts
___ Noise Impacts
___ Impacts to Historic/Archaeological Resources
___ Floodplain Impacts
___ Other(s) – Please described below

(Sullivan Central High School)

Your Name: Rena Robinette Date: 12/11/12

Mailing Address: 387 Holston Dr, Blountville, TN 37617

County of Residence: Sullivan

Phone Number (optional): (423) 323-5420 OR 408-0061

E-mail Address (optional): NONE *Please make sure to include your name and/or address on your submitted comments form in order to be included in the official record.

Please return comment from postmarked no later than **January 31, 2013**

Fold at this line first

Project Comments
Tennessee Department of Transportation
Suite 700, James K. Polk Building
505 Deaderick Street
Nashville, TN 37243-0332

Place Stamp Here

Project Meeting Comments
Attn: State Route 126 Corridor
Tennessee Department of Transportation
Suite 700, James K. Polk Building
505 Deaderick Street
Nashville, TN 37243-0332

Fold at this line second

Which describes your primary interest in the project?

___Affected resident ___Affected landowner ___Affected business ✓ Concerned citizen

(Area involved Relatives buried @ East Lawn own plot myself.)

For additional project information:

Visit the TDOT website at www.tn.gov/tdot/SR126/involvement.asp
Or contact Gary King, TDOT Project Manager at Gary.King@tn.gov
Or (615) 741-4777

State Route 126 Corridor Improvement Project
Public Hearing, December 11, 2012
Sullivan Central High School
Public Comment Form

The Tennessee Department of Transportation (TDOT) has prepared a Draft Environmental Impact Statement (DEIS) for the proposed State Route 126 Corridor Improvement Project. TDOT is interested in your comments regarding the alternatives presented in the DEIS and in any areas of concern you may have regarding the environmental analysis of the alternatives. Please return comment form postmarked no later than **January 31, 2013.**

Of the alternatives presented, which alternative do you prefer: (CHOOSE ONLY ONE)

✓ No Build (no improvements to existing roadways)

___ Build Alternatives; ***Circle*** A or B or B Modified

Please list reasons for choosing your preferred alternative (Please Print Clearly).

DO NOT want any graves effected at ALL. Why Not have Red lights at various places such as Look Valley Hill at East Lawn entrance, etc. Consider making Road from Stone Dr. to Tri City airport. Much better plan.

What issues/concerns do you have about the proposed Build Alternatives and are there any changes you would make to the project? If so, please explain.

Leave graves alone!
Why Not go back to DR Road proposed from Stone to Tri-City Airport

What concerns do you have about the environmental impacts of the project addressed in the DEIS? Are there any issues or concerns that you feel were not addressed in the DEIS? If so, please explain.

___ Impacts to Natural Resources
✓ Impacts to Communities/Neighborhoods
___ Impacts to Farmlands
___ Air Quality Impacts
✓ Noise Impacts
___ Impacts to Historic/Archaeological Resources
___ Floodplain Impacts
✓ Other(s) – Please described below

East Lawn Cemtary graves.
The wall proposed would impact beauty of area & view of cemtary!

(Sullivan Central High School)

Your Name: DONNA McCOY Date: 12/11/12

Mailing Address: 5974 HWY 126
BLOUNTVILLE TN 37617

County of Residence: SULLIVAN

Phone Number (optional): 423-323-1889

E-mail Address (optional): _____ ***Please make sure to include your name and/or address on your submitted comments form in order to be included in the official record.**

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Which describes your primary interest in the project?

✓ Affected resident ___ Affected landowner ___ Affected business ___ Concerned citizen

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Of the alternatives presented, which alternative do you prefer: (CHOOSE ONLY ONE)

___ No Build (no improvements to existing roadways)

✓ Build Alternatives; ***Circle*** A or B or (B Modified)

Please list reasons for choosing your preferred alternative (Please Print Clearly).

No impact to Graves
Not an over-build

Worries that 4-lane will actually increase safety hazards, allowing opportunities for speeding, lane changes + increased truck traffic.

What issues/concerns do you have about the proposed Build Alternatives and are there any changes you would make to the project? If so, please explain.

I like the proposed changes to "odd-angle" intersections, and addition of turn lanes.

Please make sure to address vertical curves

Thank you for Shoulders!!

What concerns do you have about the environmental impacts of the project addressed in the DEIS? Are there any issues or concerns that you feel were not addressed in the DEIS? If so, please explain.

___ Impacts to Natural Resources
✓ Impacts to Communities/Neighborhoods
___ Impacts to Farmlands
___ Air Quality Impacts
___ Noise Impacts
___ Impacts to Historic/Archaeological Resources
___ Floodplain Impacts
✓ Other(s) – Please described below

impacts to graves + homes

(Sullivan Central High School)

Environmental Impact Meeting
Feedback Statement to TDOT

Memorial Blvd./SR 126 Highway Rebuild
December 11, 2012

In the SR 126 Phase 1 rebuild, <u>I support a four-lane option</u> from East Center Street in Kingsport to Cooks Valley Road. This upgrade is critical for safety and now is the time to implement. A three lane upgrade will also be significant cost, but I do not feel is adequate to meet the need. Please support doing the project the right way now and it will then take us well into the future.

Sign name: [signature]

Print name: Scott George

Address: 4005 Foxfire Lane
Kingsport, TN 37664

Date: 12/11/12

Environmental Impact Meeting
Feedback Statement to TDOT

Memorial Blvd./SR 126 Highway Rebuild
December 11, 2012

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A current TDOT four-lane example used every day for high volume traffic is on SR 36 between the Holston River Bridge and Moreland Drive across the railroad bridge … where there is 57 ft. total distance from guard rail to guard rail and 47 ft. from edge of highway white line to white line.

Sign name: Arved Harding

Print name: Arved Harding

Address: 282 Blackburn Rd
Blountville, TN 37617

Date: 12/11/12

Comments concerning SR-126 (Memorial Boulevard) from East Center Street in the City of Kingsport to I-81, Sullivan County

A public meeting on this project was scheduled for March 22, 2012, but was cancelled and per the TDOT website has not been rescheduled yet. The following comments are respectfully being submitted for your consideration just in case I am not able to attend the public meeting when it is rescheduled.

I have several concerns about closure of one end of Graveltop Road as part of this project. I live on Graveltop Road and also own a parcel of property that adjoins SR-126. All the concerns below have a negative impact on the residence of Graveltop Road and its adjoining streets.

The TDOT project webpage lists several items as needs for the project, one being "**Improved access for school busses is needed.**" Closing one end of Graveltop Road means that busses must make a trip along the road and then double back to exit Graveltop Road. This will mean more bus traffic for the narrow road and double the bus for that street from two busses twice a day to two busses four times a day. Thus increasing the time that students have in riding the bus as well as increases gas cost to the Sullivan County school system and every county taxpayer.

"Improved mail delivery is needed." By closing the east end of Graveltop Road the mail delivery in our area and anywhere after Graveltop Road will take longer as the mail carrier now enters Graveltop from the east entrance and exits the west entrance. Under the proposed layout the mail carrier will have to go past all the houses on Graveltop and turn at the cul-de-sac before delivering any mail on this road.

"Improved response time for emergency equipment is needed." Emergency equipment responding to the residents in the Graveltop Road area comes from the Blountville direction. Once the closest access to Blountville is closed, response time will increase for residence alone Graveltop and its adjoining streets.

"The geometry of the roadway needs to be improved." Changing the alignment and grade for the section of SR-126 between the access points for Graveltop Road will be an improvement especially during the winter months. Vehicles are consistently sliding into the ditch and hillside during snow and icy conditions under the current alignment and grade. When this occurs a quick and easy detour is through Graveltop Road. By closing one end of Graveltop, this detour will no longer be available for normal traffic and emergency equipment. This could be a problem if the improved geometry is not enough to prevent icy slide-offs.

I support most of the proposed changes to SR-126 with the exception of the closure of one end of Graveltop Road. The closure will negatively impact the residents in the Graveltop Road area and should be addressed in the Final Environmental Impact as not meeting the needs of this project.

Erwin D. Holman 180 Graveltop Road, Blountville, TN

Erwin D. Holman 12-11-12

Environmental Impact Meeting
Feedback Statement to TDOT

Memorial Blvd./SR 126 Highway Rebuild
December 11, 2012

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Sign name: John J. Hurt

Print name: JOHN J. HURT

Address: 353 Lakecrest DR.
Kingsport, TN 37663

Date: 12-11-12

5336 Foxfire Place
Kingsport, TN 37664
December 11, 2012

The four lane plan for Highway 126 worries me for many reasons. As a taxpayer, I think it is way too expensive. It would take land from every property along the road. This would reduce the number of people using the road.

The Yancey's Tavern is an historic property which should be preserved, but would be subjected to visual and noise impacts, at the very least.

As a frequent driver on Highway 126, I do not want a four lane road. People see such a highway and drive as fast as they do on interstates. Drivers entering from cross roads have to wait longer to enter the road safely. We will be demanding stoplights next. The higher speed leads to more serious accidents.

A four lane road would be so wide that it would have to be built on fill. This causes maintenance problems as has happened on the road up to Bays Mountain Park. That road has recently been fixed because it was sliding off the side of the mountain.

The alternative to that is removing part of Chestnut Ridge and building an oppressive retaining wall. The wall also could collapse onto the road.

The road would take a long time to build. Drivers would stop using it and our businesses would close. Therefore, it would not be needed.

What I would like to see is an improved two lane road from Old Stage Road to near I-81. It should have wider shoulders, reflective paint edging the lanes, guard rails, occasional turn lanes and pull-offs for emergencies. Some of the intersections should be realigned to be perpendicular instead of acute angles. Possibly, some of the humps and valleys in the road could be leveled out.

If TDOT builds an improved two lane road, it can remain a neighborhood road with houses and businesses located along it. Please do not duplicate Stone Drive and Ft. Henry Drive.

Julie Hyatt

Feedback Statement to TDOT

Memorial Blvd./SR 126 Highway Rebuild
December 11, 2012

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I have lived in the Indian Springs community 45 years and have heard the plans were to 4-lane SR 126 all the way from Kingsport to I-81 and now the time is right to get this safe, improvement on the agenda by the politicians who control road building in Tennessee. My children and now grandchildren use this highway daily. I don't need to repeat the number of many deaths from wrecks on this highway.

Thank you!

Sign name: Keith Johnston

Print name: KEITH JOHNSTON

Address: 405 KILKENNY RD
KINGSPORT,
TN 37664

Date: 12-11-12

Environmental Impact Meeting
Feedback Statement to TDOT

Memorial Blvd./SR 126 Highway Rebuild
December 11, 2012

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Sign name: William C Kelly

Print name: William C Kelly

Address: 465 Canton Rd
Kpt, TN 37663

Date: 12/11/2012

Environmental Impact Meeting
Feedback Statement to TDOT

Memorial Blvd./SR 126 Highway Rebuild
December 11, 2012

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Sign name: Doug Russum

Print name: Doug Russum

Address: 1211 Imperial Dr
Kingsport, TN 37663

Date: 12/11/12

Environmental Impact Meeting
Feedback Statement to TDOT
Memorial Blvd./SR 126 Highway Rebuild
December 11, 2012

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Signed: Anne Laura J. Smith

Printed: Anne Laura J. Smith

Address: 5110 Foxfire Trail
Kingsport, TN 37664

Date: 12/11/2012

12/11/2012

Environmental Impact Meeting
Feedback Statement to TDOT

Memorial Blvd./SR 126 Highway Rebuild
December 11, 2012

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Sign name: Joe V. Smith

Print name: Joseph V. Smith

Address: 5110 Foxfire Trail
Kingsport, TN 37664

Date: 12-11-12

Environmental Impact Meeting
Feedback Statement to TDOT

Memorial Blvd./SR 126 Highway Rebuild
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Sign name: Diane Somers

Print name: Diane Somers

Address: 5309 Joffrie Pl
Kingsport Tn 37664

Date: 12/11/12

Environmental Impact Meeting
Feedback Statement to TDOT

Memorial Blvd./SR 126 Highway Rebuild
December 11, 2012

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Sign name: Henry Somers

Print name: Henry Somers

Address: 5309 Foxfire Place
Kingsport, TN 37664

Date: 12/11/2012

Environmental Impact Meeting
Feedback Statement to TDOT

Memorial Blvd./SR 126 Highway Rebuild
December 11, 2012

In the SR 126 Phase 1 rebuild, <u>I support a four-lane option</u> from East Center Street in Kingsport to Cooks Valley Road. This option will have the capability of meeting the safe travel needs of our children and grandchildren until 2050 and beyond. A minimal four-lane highway should be constructed in the 650 ft. from Chestnut Ridge Road to Cooks Valley Road with appropriate deviation approvals … using retaining walls and the available 60 ft. distance between East Lawn Cemetery and the historical property without disturbing gravesites.

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Sign name: Jerry C. Teague

Print name: JERRY C. TEAGUE

Address: 517 COLONIAL HGTS. RD.
KINGSPORT, TN 37663

Date: DECEMBER, 11, 2012

Environmental Impact Meeting
Feedback Statement to TDOT

Memorial Blvd./SR 126 Highway Rebuild
December 11, 2012

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Sign name: [signature]

Print name: BOB WALLACE

Address: 1234 MORNING DOVE DR
KINGSPORT TN

Date: 12-11-12

Your Name: IRIS BROWN Date: 12-12-12

Mailing Address: 124 Sugarcane LN.
Blountville, TN 37617

County of Residence: Sullivan

Phone Number (optional): _____

E-mail Address (optional): _____ ***Please make sure to include your name and/or address on your submitted comments form in order to be included in the official record.**

Please return comment from postmarked no later than **January 31, 2013**

Fold at this line first

Project Comments
Tennessee Department of Transportation
Suite 700, James K. Polk Building
505 Deaderick Street
Nashville, TN 37243-0332

JOHNSON CITY TN 376
17 DEC 2012 PM 1 T



Project Meeting Comments
Attn: State Route 126 Corridor
Tennessee Department of Transportation
Suite 700, James K. Polk Building
505 Deaderick Street
Nashville, TN 37243-0332

37243*0332

Fold at this line second

Which describes your primary interest in the project?

___Affected resident ___Affected landowner ___Affected business ✓Concerned citizen

For additional project information:

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State Route 126 Corridor Improvement Project
Public Hearing, December 11, 2012
Sullivan Central High School
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Of the alternatives presented, which alternative do you prefer: (CHOOSE ONLY ONE)

___ No Build (no improvements to existing roadways)

___ Build Alternatives; ***Circle*** A or B or B Modified

Please list reasons for choosing your preferred alternative (Please Print Clearly).

Please just do Something — We have discussed this Road for 20 years — Please Remember, Nashville, East Tennessee is A Part Of Tennessee also!

What issues/concerns do you have about the proposed Build Alternatives and are there any changes you would make to the project? If so, please explain.

Not only is 126 one of most dangerous Roads in Tn. but probably one most discussed by everyone "fix er done"

What concerns do you have about the environmental impacts of the project addressed in the DEIS? Are there any issues or concerns that you feel were not addressed in the DEIS? If so, please explain.

___ Impacts to Natural Resources
___ Impacts to Communities/Neighborhoods
___ Impacts to Farmlands
___ Air Quality Impacts
___ Noise Impacts
___ Impacts to Historic/Archaeological Resources
___ Floodplain Impacts
___ Other(s) – Please described below

EVEN 3 Lanes + Shoulders would help Safety + save lives

(Sullivan Central High School)

Your Name: CALVIN CLIFTON Date: 12·12·12

Mailing Address: 1108 FIDDLERS WAY
KINGSPORT TN 37664

County of Residence: SULLIVAN

Phone Number (optional): 423·349·6488

E-mail Address (optional): cliftoncdc@hotmail.com *Please make sure to include your name and/or address on your submitted comments form in order to be included in the official record.

Please return comment from postmarked no later than **January 31, 2013**

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Place Stamp Here



Project Meeting Comments
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Please list reasons for choosing your preferred alternative (Please Print Clearly).

THE "B MODIFIED" ALTERNATIVE ADDRESSES THE PRIMARY CONCERN WHICH IS SAFETY & CAUSES THE LEAST AMOUNT OF IMPACTS. IT'S ALSO LESS EXPENSIVE THAN THE OTHER OPTIONS. A 4 LN CROSS SECTION IS NOT NEEDED THROUGH THE ENTIRE CORRIDOR. CAPACITY IS NOT A MAJOR ISSUE.

What issues/concerns do you have about the proposed Build Alternatives and are there any changes you would make to the project? If so, please explain.

What concerns do you have about the environmental impacts of the project addressed in the DEIS? Are there any issues or concerns that you feel were not addressed in the DEIS? If so, please explain.

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___ Impacts to Farmlands
___ Air Quality Impacts
___ Noise Impacts
___ Impacts to Historic/Archaeological Resources
___ Floodplain Impacts
___ Other(s) – Please described below

(Sullivan Central High School)

Your Name: Laura Annie Gamble Date: 12/12/2012

Mailing Address: 4507 Tanglewood Drive
Kingsport TN 37664

County of Residence: Sullivan

Phone Number (optional): 423 361 2965

E-mail Address (optional): bicyclechick@hotmail.com *Please make sure to include your name and/or address on your submitted comments form in order to be included in the official record.

Please return comment from postmarked no later than **January 31, 2013**

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37243$0332

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Which describes your primary interest in the project?

✓ Affected resident ✓ Affected landowner ___ Affected business ✓ Concerned citizen

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Please list reasons for choosing your preferred alternative (Please Print Clearly).

Less invasive of my property, less disturbance to graves/sights of historic buildings, it straightens the "curves" on the worst (most beautiful part) of 126, less invasive for my neighbors property, also makes more sense to fill the area ~~more~~ North in the Harlee Chapel to Old Stage Road than dig into the South bank of Memorial Blvd. However that area of road doesn't really need much of anything just satisfying State Road demands. Ex. sidewalks, bike lanes.

What issues/concerns do you have about the proposed Build Alternatives and are there any changes you would make to the project? If so, please explain.

Removal of so many trees & houses. (In my immediate area) I do understand there are certain perimeters that have to be in place for road instatement plan B modified will change Tanglewood Drive by removal of trees & encroaching 126 closer to me & my 3-4 neighbors.

What concerns do you have about the environmental impacts of the project addressed in the DEIS? Are there any issues or concerns that you feel were not addressed in the DEIS? If so, please explain.

- ✓ Impacts to Natural Resources
- ✓ Impacts to Communities/Neighborhoods
- ___ Impacts to Farmlands
- ___ Air Quality Impacts
- ✓ Noise Impacts
- ✓ Impacts to Historic/Archaeological Resources
- ___ Floodplain Impacts
- ___ Other(s) – Please described below

Generally speaking, change is hard for everyone. Not withstanding the loss of life some people have had to make within their families due to the death of loved ones on this road. I look forward to a safer road & dread it at the same time. Not having immediate family in the East Lawn Graveyard its impossible for me to relate to the people complaining about the moving of grave sites. Mr Mosby had a point on where most accidents occur, That should be addressed for changes particularly in those areas. Thank you. Annie Gamby

(Sullivan Central High School)

Your Name: Louisa Jackson Date: 12-13-12

Mailing Address: 4408 Green Spring Circle
Kingsport, TN 37664 // after 12-15-12 it will change to 100 Netherland Lane #405 Kingsport, TN 37660

County of Residence: Sullivan + City

Phone Number (optional): will change

E-mail Address (optional): louisajckson@gmail.com *Please make sure to include your name and/or address on your submitted comments form in order to be included in the official record.

Please return comment from postmarked no later than **January 31, 2013**

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Project Comments
Tennessee Department of Transportation
Suite 700, James K. Polk Building
505 Deaderick Street
Nashville, TN 37243-0332

JOHNSON CITY TN 376
14 DEC 2012 PM



Project Meeting Comments
Attn: State Route 126 Corridor
Tennessee Department of Transportation
Suite 700, James K. Polk Building
505 Deaderick Street
Nashville, TN 37243-0332

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Which describes your primary interest in the project?

✓ Affected resident ✓ Affected landowner ___ Affected business ___ Concerned citizen

For additional project information:

Visit the TDOT website at www.tn.gov/tdot/SR126/involvement.asp
Or contact Gary King, TDOT Project Manager at Gary.King@tn.gov
Or (615) 741-4777

State Route 126 Corridor Improvement Project
Public Hearing, December 11, 2012
Sullivan Central High School
Public Comment Form

The Tennessee Department of Transportation (TDOT) has prepared a Draft Environmental Impact Statement (DEIS) for the proposed State Route 126 Corridor Improvement Project. TDOT is interested in your comments regarding the alternatives presented in the DEIS and in any areas of concern you may have regarding the environmental analysis of the alternatives. Please return comment form postmarked no later than **January 31, 2013**.

Of the alternatives presented, which alternative do you prefer: (CHOOSE ONLY ONE)

✓ No Build (no improvements to existing roadways)

___ Build Alternatives; ***Circle*** A or B or B Modified

Please list reasons for choosing your preferred alternative (Please Print Clearly).

As the road is widened, my house will lose great value. I am PLANNING to sell my house soon & need the money from it to live on.
If the road comes close to my house I assume you will buy it. I live at 4405 Green Spring Circle with the tennis court.

What issues/concerns do you have about the proposed Build Alternatives and are there any changes you would make to the project? If so, please explain.

Leaving off the sidewalks + bicycle paths is obvious.
I have lived here 55 years the only wreck I know of between Harbor Chapel Rd + Old Stage Road was a woman who died at the wheel of car + crashed into our tennis fence. AND there is less traffic as you reported. So why do it?

What concerns do you have about the environmental impacts of the project addressed in the DEIS? Are there any issues or concerns that you feel were not addressed in the DEIS? If so, please explain.

___ Impacts to Natural Resources
✓ Impacts to Communities/Neighborhoods
___ Impacts to Farmlands
___ Air Quality Impacts
___ Noise Impacts
___ Impacts to Historic/Archaeological Resources
___ Floodplain Impacts
___ Other(s) – Please described below

It is a waste of taxpayer money.
Who is pushing for this??

(Sullivan Central High School)

Your Name: ROBERT WATSON Date: 12/16/2012

Mailing Address: 322 Bridwell Heights Road
Kingsport, TN 37664

County of Residence: Sullivan

Phone Number (optional): _____

E-mail Address (optional): _____ ***Please make sure to include your name and/or address on your submitted comments form in order to be included in the official record.**

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Project Meeting Comments
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Suite 700, James K. Polk Building
505 Deaderick Street
Nashville, TN 37243-0332

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Which describes your primary interest in the project?

___Affected resident ✓Affected landowner ___Affected business ___Concerned citizen

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___ No Build (no improvements to existing roadways)

___ Build Alternatives; ***Circle*** A or B or (B Modified)

Please list reasons for choosing your preferred alternative (Please Print Clearly).

- This alternative seems to meet the objectives of the project (purpose) at lowest cost with fewest negatives.

What issues/concerns do you have about the proposed Build Alternatives and are there any changes you would make to the project? If so, please explain.

- Concerned about maintaining traffic flow during construction.
- Concerned about duration of construction phase.
- Concerned about controlling speeds, once completed. I travel Route 126 daily and observe speeds well above posted limits all along the corridor. (10 – 20 mph above limits)
- Concerned about safety of turns from side roads on to 126.

What concerns do you have about the environmental impacts of the project addressed in the DEIS? Are there any issues or concerns that you feel were not addressed in the DEIS? If so, please explain.

___ Impacts to Natural Resources
✓ Impacts to Communities/Neighborhoods
___ Impacts to Farmlands
___ Air Quality Impacts
✓ Noise Impacts
___ Impacts to Historic/Archaeological Resources
___ Floodplain Impacts
___ Other(s) – Please described below

(Sullivan Central High School)

Your Name: Paul Bodenweiser Date: 12-17-12

Mailing Address: 220 Hollydale Dr.
Kingsport, TN 37663

County of Residence: Sullivan

Phone Number (optional): _____

E-mail Address (optional): _____ ***Please make sure to include your name and/or address on your submitted comments form in order to be included in the official record.**

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Project Meeting Comments
Attn: State Route 126 Corridor
Tennessee Department of Transportation
Suite 700, James K. Polk Building
505 Deaderick Street
Nashville, TN 37243-0332

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Which describes your primary interest in the project?

___Affected resident ___Affected landowner ___Affected business X Concerned citizen

For additional project information:

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Of the alternatives presented, which alternative do you prefer: (CHOOSE ONLY ONE)

___ No Build (no improvements to existing roadways)

✓ Build Alternatives; ***Circle*** A or B or B Modified

Please list reasons for choosing your preferred alternative (Please Print Clearly).

No displacement of graves and leaves Yaceys Tavern "as is." Also seems to handle traffic needs from Kingsport to residential needs while still discouraging large truck traffic over Chesnut Ridge.

What issues/concerns do you have about the proposed Build Alternatives and are there any changes you would make to the project? If so, please explain.

A ~~four~~ full four lane entire distance would only encourage higher speeds the entire distance.

What concerns do you have about the environmental impacts of the project addressed in the DEIS? Are there any issues or concerns that you feel were not addressed in the DEIS? If so, please explain.

___ Impacts to Natural Resources
___ Impacts to Communities/Neighborhoods
___ Impacts to Farmlands
___ Air Quality Impacts
___ Noise Impacts
___ Impacts to Historic/Archaeological Resources
___ Floodplain Impacts
___ Other(s) – Please described below

(Sullivan Central High School)

Your Name: Mr. & Mrs. Donald W. Cole Date: 12-17-2012

Mailing Address: 235 Oak St.

Blountville TN. 37617

County of Residence: Sullivan

Phone Number (optional): 423-534-9344

E-mail Address (optional): _____ ***Please make sure to include your name and/or address on your submitted comments form in order to be included in the official record.**

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Project Comments
Tennessee Department of Transportation
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Project Meeting Comments
Attn: State Route 126 Corridor
Tennessee Department of Transportation
Suite 700, James K. Polk Building
505 Deaderick Street
Nashville, TN 37243-0332

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Which describes your primary interest in the project?

___Affected resident ___Affected landowner ___Affected business ___Concerned citizen

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State Route 126 Corridor Improvement Project
Public Hearing, December 11, 2012
Sullivan Central High School
Public Comment Form

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Of the alternatives presented, which alternative do you prefer: (CHOOSE ONLY ONE)

___ No Build (no improvements to existing roadways)

✓ Build Alternatives; ***Circle*** A or B or (B Modified)

Please list reasons for choosing your preferred alternative (Please Print Clearly).

(CEMETARY GRAVES)

WE HAVE NO PROBLEM, AND WE SUPPORT THE STATE ROUTE 126 CORRIDOR IMPROVEMENT PROJECT, AS LONG AS THE CEMETARY GRAVES ARE NOT DISTURBED.

What issues/concerns do you have about the proposed Build Alternatives and are there any changes you would make to the project? If so, please explain.

MY CONCERNS ARE DISTURBING OUR FAMILY GRAVES

What concerns do you have about the environmental impacts of the project addressed in the DEIS? Are there any issues or concerns that you feel were not addressed in the DEIS? If so, please explain.

___ Impacts to Natural Resources
___ Impacts to Communities/Neighborhoods
___ Impacts to Farmlands
___ Air Quality Impacts
___ Noise Impacts
___ Impacts to Historic/Archaeological Resources
___ Floodplain Impacts
___ Other(s) – Please described below

(Sullivan Central High School)

Your Name: Earl Carter Date: Dec 20, 2012

Mailing Address: 728 Rock Springs Dr
Kingsport, TN 37664

County of Residence: Sullivan

Phone Number (optional): _____

E-mail Address (optional): _____ ***Please make sure to include your name and/or address on your submitted comments form in order to be included in the official record.**

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Attn: State Route 126 Corridor
Tennessee Department of Transportation
Suite 700, James K. Polk Building
505 Deaderick Street
Nashville, TN 37243-0332

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Which describes your primary interest in the project?

___Affected resident ___Affected landowner ___Affected business ✓Concerned citizen

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Of the alternatives presented, which alternative do you prefer: (CHOOSE ONLY ONE)

___ No Build (no improvements to existing roadways)

___ Build Alternatives; ***Circle*** A or B or B Modified

Please list reasons for choosing your preferred alternative (Please Print Clearly).

family in graves that would be affected

safety concerns for family members and friends who travel that highway

Do not want road over built to protect historic value

What issues/concerns do you have about the proposed Build Alternatives and are there any changes you would make to the project? If so, please explain.

What concerns do you have about the environmental impacts of the project addressed in the DEIS? Are there any issues or concerns that you feel were not addressed in the DEIS? If so, please explain.

___ Impacts to Natural Resources
___ Impacts to Communities/Neighborhoods
___ Impacts to Farmlands
___ Air Quality Impacts
___ Noise Impacts
___ Impacts to Historic/Archaeological Resources
___ Floodplain Impacts
___ Other(s) – Please described below

(Sullivan Central High School)

Your Name: Bill Anderson Date: 12/21/2012

Mailing Address: 5317 Foxfire Place
Kingsport TN 37664

County of Residence: Sullivan

Phone Number (optional): _____

E-mail Address (optional): _____ ***Please make sure to include your name and/or address on your submitted comments form in order to be included in the official record.**

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505 Deaderick Street
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Which describes your primary interest in the project?

✓ Affected resident ___Affected landowner ___Affected business ___Concerned citizen

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Of the alternatives presented, which alternative do you prefer: (CHOOSE ONLY ONE)

___ No Build (no improvements to existing roadways)

✓ Build Alternatives; ***Circle*** A or B or B Modified

Please list reasons for choosing your preferred alternative (Please Print Clearly).

I BELIEVE the proposal will provide adequate And safe access to the City and I-81 from my residence.

What issues/concerns do you have about the proposed Build Alternatives and are there any changes you would make to the project? If so, please explain.

THERE ARE immediate needs that need to be addressed prior to building.

Consider SPEED CAMERAS - if they are operated by the State And not under contract with a for profit company. These could be An Extension or tool of LAW ENFORCEMENT.

What concerns do you have about the environmental impacts of the project addressed in the DEIS? Are there any issues or concerns that you feel were not addressed in the DEIS? If so, please explain.

___ Impacts to Natural Resources
___ Impacts to Communities/Neighborhoods
___ Impacts to Farmlands
___ Air Quality Impacts
___ Noise Impacts
___ Impacts to Historic/Archaeological Resources
___ Floodplain Impacts
___ Other(s) – Please described below

(Sullivan Central High School)

Your Name: EDDIE BRICKEY Date: 12/26/2012

Mailing Address: 4516 OLD STAGE RD

KINGSPORT TN 37664

County of Residence: SULLIVAN

Phone Number (optional): _____

E-mail Address (optional): _____ ***Please make sure to include your name and/or address on your submitted comments form in order to be included in the official record.**

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Project Comments
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Project Meeting Comments
Attn: State Route 126 Corridor
Tennessee Department of Transportation
Suite 700, James K. Polk Building
505 Deaderick Street
Nashville, TN 37243-0332

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Which describes your primary interest in the project?

___Affected resident ✓Affected landowner ___Affected business ___Concerned citizen

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✓ Build Alternatives; ***Circle*** A or B or (B Modified)

Please list reasons for choosing your preferred alternative (Please Print Clearly).

COST, RIGHT-OF-WAY REQUIRED, RESIDENTIAL + BUSINESS DISPLACEMENTS, GRAVESITES, YANCY'S TAVERN

What issues/concerns do you have about the proposed Build Alternatives and are there any changes you would make to the project? If so, please explain.

THERE IS NO NEED FOR SIDEWALKS BETWEEN HARBOR CHAPEL RD. AND COOKS VALLEY RD., NOR BETWEEN ISLAND RD. AND HILL RD. THE PROPOSED 6FT PAVED SHOULDERS ARE ADEQUATE FROM HARBOR CHAPEL RD. TO HARR TOWN RD. THE PROPOSED 10FT SHOULDERS (8FT PAVED) FROM HARR TOWN RD. TO NEAR CAROLINA POTTERY DR. SHOULD BE REDUCED TO THE SAME 6FT. PAVED SHOULDERS.

What concerns do you have about the environmental impacts of the project addressed in the DEIS? Are there any issues or concerns that you feel were not addressed in the DEIS? If so, please explain.

✓ Impacts to Natural Resources
✓ Impacts to Communities/Neighborhoods
___ Impacts to Farmlands
___ Air Quality Impacts
✓ Noise Impacts
✓ Impacts to Historic/Archaeological Resources
___ Floodplain Impacts
___ Other(s) – Please described below

(Sullivan Central High School)

Your Name: Sharon Carter Date: Dec 31, 2012

Mailing Address: 4637 Old Stage Rd
Kingsport, TN 37664

County of Residence: Sullivan

Phone Number (optional): _____

E-mail Address (optional): ewc_src @ yahoo ***Please make sure to include your name and/or address on your submitted comments form in order to be included in the official record.**

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Please list reasons for choosing your preferred alternative (Please Print Clearly).

graves that would be affected and property that adjoins 126. Also concerns about safety if overbuild occurs with truck traffic on 4 lane to Kpt.

What issues/concerns do you have about the proposed Build Alternatives and are there any changes you would make to the project? If so, please explain.

What concerns do you have about the environmental impacts of the project addressed in the DEIS? Are there any issues or concerns that you feel were not addressed in the DEIS? If so, please explain.

___ Impacts to Natural Resources
___ Impacts to Communities/Neighborhoods
___ Impacts to Farmlands
___ Air Quality Impacts
___ Noise Impacts
___ Impacts to Historic/Archaeological Resources
___ Floodplain Impacts
___ Other(s) – Please described below

(Sullivan Central High School)

Your Name: FRED MC MURRAY Date: 1-7-2013

Mailing Address: 5104 MEMORIAL BLVD

KING SPORT TENN 37664

County of Residence: SULLIVAN

Phone Number (optional): 423-288-7137

E-mail Address (optional): NONE ***Please make sure to include your name and/or address on your submitted comments form in order to be included in the official record.**

Please return comment from postmarked no later than **January 31, 2013**

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Project Comments
Tennessee Department of Transportation
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Project Meeting Comments
Attn: State Route 126 Corridor
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Suite 700, James K. Polk Building
505 Deaderick Street
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Which describes your primary interest in the project?

✓ Affected resident ___Affected landowner ___Affected business ___Concerned citizen

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___ Build Alternatives; ***Circle*** A or B or (B Modified)

Please list reasons for choosing your preferred alternative (Please Print Clearly).

THERE NOTHING WRONG WITH 126 IT THE WAY PEOPLE DRIVE THIS RD. SPEED CELL PHONE CELL PHONE TEXTING DRUNK DRIVERS I SAT ON MY FRONT PORCH AND I CAN TELL YOU WHAT WRONG WITH THE RD

What issues/concerns do you have about the proposed Build Alternatives and are there any changes you would make to the project? If so, please explain.

WIDEN SHOLDERS A LITTLE AND PAUR THEM PUT UP SOME MORE GUARD RAILS STRAITEN OUT THREE CURVES ON CHESTNUT RIDGE LEAVE THE RD ALONE DOAN,T WAST MONEY ON SOMETHING YOU DOAN,T NEED.

P.S. DOAN,T LISTEN to TONEY SHIPLEY

What concerns do you have about the environmental impacts of the project addressed in the DEIS? Are there any issues or concerns that you feel were not addressed in the DEIS? If so, please explain.

- ✓ Impacts to Natural Resources
- ✓ Impacts to Communities/Neighborhoods
- ✓ Impacts to Farmlands
- ✓ Air Quality Impacts
- ✓ Noise Impacts
- ✓ Impacts to Historic/Archaeological Resources
- ✓ Floodplain Impacts
- ___ Other(s) – Please described below

I DOAN,T WANT TO LOOSE MY HOUSE I AM TO OLD TO MOVE AND TRY TO BUY A NEW HOUSE ON A FIX INCOME

(Sullivan Central High School)

Your Name: Jerry Petzoldt Date: 1-11-13

Mailing Address: 125 Hawley Road
Blountville, TN 37617

County of Residence: Sullivan

Phone Number (optional): 423-677-2486

E-mail Address (optional): Jerrypetzoldt@gmail.com *Please make sure to include your name and/or address on your submitted comments form in order to be included in the official record.

Please return comment from postmarked no later than **January 31, 2013**

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Project Meeting Comments
Attn: State Route 126 Corridor
Tennessee Department of Transportation
Suite 700, James K. Polk Building
505 Deaderick Street
Nashville, TN 37243-0332

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Which describes your primary interest in the project?

___Affected resident ___Affected landowner ___Affected business ✓ Concerned citizen

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___ Build Alternatives; ***Circle*** A or B or B Modified

Please list reasons for choosing your preferred alternative (Please Print Clearly).

Speed is the Killer. Widen shoulders & Fix curve and distance visibility. Leave Lanes as they ARE.

I live behind Central High - Have driven 126 day, night, snow, Rain Twice a day Since 1982.

What issues/concerns do you have about the proposed Build Alternatives and are there any changes you would make to the project? If so, please explain.

To Slow traffic add street lights the total distance and Install traffic signals at key Roads. This slows traffic and keeps awareness in mind.

What concerns do you have about the environmental impacts of the project addressed in the DEIS? Are there any issues or concerns that you feel were not addressed in the DEIS? If so, please explain.

___ Impacts to Natural Resources
___ Impacts to Communities/Neighborhoods
___ Impacts to Farmlands
___ Air Quality Impacts
___ Noise Impacts
___ Impacts to Historic/Archaeological Resources
___ Floodplain Impacts
___ Other(s) – Please described below

I'm the developer of Old Island off Island Road. We got City to install street lights from Memorial Blvd to old island about 1 mile. It has slowed traffic day & night even with the narrow curvy country trail Roads

Thx Jerry Petzold 423.677.2486

(Sullivan Central High School)

Your Name: CHRISTOPHER HERNANDEZ Date: 01.20.13

Mailing Address: 5315 MEMORIAL BLVD
KINGSPORT, TN 37664

County of Residence: SULLIVAN

Phone Number (optional): 423.217.8988

E-mail Address (optional): _____ *Please make sure to include your name and/or address on your submitted comments form in order to be included in the official record.

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Project Comments
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TN 376
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Project Meeting Comments
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Fold at this line second

Which describes your primary interest in the project?

___Affected resident ___Affected landowner ___Affected business ___Concerned citizen

For additional project information:

Visit the TDOT website at www.tn.gov/tdot/SR126/involvement.asp
Or contact Gary King, TDOT Project Manager at Gary.King@tn.gov
Or (615) 741-4777

State Route 126 Corridor Improvement Project
Public Hearing, December 11, 2012
Sullivan Central High School
Public Comment Form

The Tennessee Department of Transportation (TDOT) has prepared a Draft Environmental Impact Statement (DEIS) for the proposed State Route 126 Corridor Improvement Project. TDOT is interested in your comments regarding the alternatives presented in the DEIS and in any areas of concern you may have regarding the environmental analysis of the alternatives. Please return comment form postmarked no later than **January 31, 2013**.

Of the alternatives presented, which alternative do you prefer: (CHOOSE ONLY ONE)

X No Build (no improvements to existing roadways)

___ Build Alternatives; ***Circle*** A or B or B Modified

Please list reasons for choosing your preferred alternative (Please Print Clearly).

I WOULD ASK THAT ONLY THREE LANES BE BUILT THROUGH MY SECTION OF 126 I DO NOT BELIEVE ANY OF THIS WILL REDUCE THE FATALITIES ON THE HIGHWAY I WATCH THE TRAFFIC CONSTANTLY AND THERE ARE NO CARS OF TWICE AS I WRITE THIS I DO NOT WANT A BICYCLE LANE BUILT SO FOLKS CAN RIDE THEIR BIKES UP TO MY HOUSE WHILE I'M AT WORK TO BREAK-IN AND I BOUGHT THIS HOUSE SO IS WHEELERS CAN DRIVE ON HIGHWAYS NOT SHORT CUT IN FRONT OF MY HOME.

What issues/concerns do you have about the proposed Build Alternatives and are there any changes you would make to the project? If so, please explain.

MY CONCERN IS THAT THE CONFISCATION OF MY FAMILIES PROPERTY IS NOT OF CONSTITUTIONAL PRACTICES THIS ROAD WILL ONLY INCREASE THE SPEED OF CARS TO RUN OVER MY CHILDREN IN THEIR FRONT YARD. IF THE ROAD IS BUILT THE OPPOSING SIDE OF THE ROAD SHOULD BE UTILIZED BECAUSE THOSE HOMES ARE FURTHER FROM THE HIGHWAY THAN ME. AND I BELIEVE SPEED BUMPS SHOULD BE UTILIZED TO KEEP TRAFFIC AT POSTED SPEED

What concerns do you have about the environmental impacts of the project addressed in the DEIS? Are there any issues or concerns that you feel were not addressed in the DEIS? If so, please explain.

- X Impacts to Natural Resources
- X Impacts to Communities/Neighborhoods
- X Impacts to Farmlands
- X Air Quality Impacts
- X Noise Impacts
- X Impacts to Historic/Archaeological Resources
- ___ Floodplain Impacts
- ___ Other(s) – Please described below

(Sullivan Central High School)

Your Name: Cathy Dunn Date: Jan 21 2013

Mailing Address: 2356 Woodridge Ave
Kingsport TN 37664

County of Residence: Sullivan

Phone Number (optional): 423-246-9583

E-mail Address (optional): wrenlywren007ead.com *Please make sure to include your name and/or address on your submitted comments form in order to be included in the official record.

Please return comment from postmarked no later than **January 31, 2013**

Fold at this line first

Project Comments
Tennessee Department of Transportation
Suite 700, James K. Polk Building
505 Deaderick Street
Nashville, TN 37243-0332



Project Meeting Comments
Attn: State Route 126 Corridor
Tennessee Department of Transportation
Suite 700, James K. Polk Building
505 Deaderick Street
Nashville, TN 37243-0332

37243#0332

Fold at this line second

Which describes your primary interest in the project?

✓ Affected resident ___Affected landowner ___Affected business ___Concerned citizen

For additional project information:

Visit the TDOT website at www.tn.gov/tdot/SR126/involvement.asp
Or contact Gary King, TDOT Project Manager at Gary.King@tn.gov
Or (615) 741-4777

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Of the alternatives presented, which alternative do you prefer: (CHOOSE ONLY ONE)

___ No Build (no improvements to existing roadways)

___ Build Alternatives; ***Circle*** A or B or (B Modified)

Please list reasons for choosing your preferred alternative (Please Print Clearly).

Enlarging 126 will make cars speed - I live right across from Chestnut Ridge. The commercial truck traffic will be worse.

Chestnut Ridge should be allowed to remain. I live on a cut through street - WOODRIDGE AVE - that is to become a MAIN shunt to Otebank/Memorial. Kingsport MPO won't give us any protection - NO speed bumps, etc. You have to live a rich neighborhood. We have a day school + several homes on this road.

What issues/concerns do you have about the proposed Build Alternatives and are there any changes you would make to the project? If so, please explain.

INCREASED SPEED! If TDOT would put some of those cameras that generate $100.00 fines - you: we would see decreased speed.

NO retaining walls for Chestnut Ridge. NO BODY SNATCHA 6

What concerns do you have about the environmental impacts of the project addressed in the DEIS? Are there any issues or concerns that you feel were not addressed in the DEIS? If so, please explain.

- ✓ ___ Impacts to Natural Resources
- ✓ ___ Impacts to Communities/Neighborhoods
- ✓ ___ Impacts to Farmlands
- ✓ ___ Air Quality Impacts
- ✓ ___ Noise Impacts
- ✓ ___ Impacts to Historic/Archaeological Resources
- ___ Floodplain Impacts
- ___ Other(s) – Please described below

I am already staging a Move. & it will NOT BE IN SULLIVAN COUNTY WHERE THERE IS SUCH FANATIC REPRESENTATION by the opportunistic parasites that have made 4 laning 126 their grandstand.

(Sullivan Central High School)

Your Name: KENNETH W. HOLLAND Date: JAN. 31, 2013

Mailing Address: 484 CANTERBURY DR.

BLOUNTVILLE, TN 37617

County of Residence: SULLIVAN

Phone Number (optional): 423-323-8161

E-mail Address (optional): KHOLL8161@aol.com ***Please make sure to include your name and/or address on your submitted comments form in order to be included in the official record.**

Please return comment from postmarked no later than **January 31, 2013**

Fold at this line first

Project Comments
Tennessee Department of Transportation
Suite 700, James K. Polk Building
505 Deaderick Street
Nashville, TN 37243-0332

NORTHEASTERN
TN 376
31 JAN 2013 PM



Project Meeting Comments
Attn: State Route 126 Corridor
Tennessee Department of Transportation
Suite 700, James K. Polk Building
505 Deaderick Street
Nashville, TN 37243-0332

37243$0332

Fold at this line second

Which describes your primary interest in the project?

__Affected resident ✓Affected landowner ___Affected business ___Concerned citizen

For additional project information:

Visit the TDOT website at www.tn.gov/tdot/SR126/involvement.asp
Or contact Gary King, TDOT Project Manager at Gary.King@tn.gov
Or (615) 741-4777

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___ No Build (no improvements to existing roadways)

✓ Build Alternatives; ***Circle*** A or B or (B Modified)

Please list reasons for choosing your preferred alternative (Please Print Clearly).

I HAVE A SON BURIED IN EAST LAWN CEMETERY, NEAR THE ROADWAY. I WOULD PREFER HIS GRAVE NOT BE DISTURBED, AND THAT YANCEY'S TAVERN ALSO BE LEFT INTACT.

What issues/concerns do you have about the proposed Build Alternatives and are there any changes you would make to the project? If so, please explain.

I WOULD STILL PREFER ~~THE~~ 4-LANE ALL THE WAY OPTION IF THE ROADWAY BE RE-ROUTED TO MISS THE CEMETERY AND TAVERN. I WONDER IF IT WOULD BE POSSIBLE TO RE-ROUTE THE ROADWAY TO THE SOUTH SIDE OF THE CEMETERY? THE BY-PASSED PORTIONS OF THE ROADWAY COULD THEN BE LEFT AS LOCAL STREETS TO ACCESS THE CEMETERY, HOMES AND BUSINESSES.

What concerns do you have about the environmental impacts of the project addressed in the DEIS? Are there any issues or concerns that you feel were not addressed in the DEIS? If so, please explain.

___ Impacts to Natural Resources
___ Impacts to Communities/Neighborhoods
___ Impacts to Farmlands
___ Air Quality Impacts
___ Noise Impacts
✓ Impacts to Historic/Archaeological Resources
___ Floodplain Impacts
___ Other(s) – Please described below

YANCEY TAVERN AND CEMETERY.

(Sullivan Central High School)

copy (354)

Tennessee Department of Transportation

Public Hearing Sign-In Sheet

Kingsport Civic Center Auditorium

Meeting Topic/Purpose: Corridor Public Hearing; SR 126 (Memorial Blvd) Corridor Improvement Project, Kingsport, TN, Sullivan County

Date: Tuesday, December 11, 2012

Time: 11:30 am to 1:30 pm

Name/Title	Address	Agency/Resident	Email Address	Phone Number
Cherie Castleberry	5042 Country Dr.	Resident	eaglecjc@aol.com	423-323-2074
Frank Castleberry	5042 Country Dr.	Resident		323-2074
Raun Vanly	405 Wine Circle	Resident		323-5742
Vickie Jones	3836 Memorial Blvd	Resident		288-2939
Nelson Weaver	125 Hill Rd	Resident		323-7189
William Barnes	531 Lonesome Pine Rd	Resident		3[illegible]-8062
Herren Floyd	229 Lakeview Circle	Resident		239-5455
Scott Boyd	130 Island ST	City of Kingsport		229-9444
Vinton Hoyle	4500 Old Stage	" " "	skiphoyle@gmail.com	288-3529
Dave Stauffer	220 Southridge Dr	Blountville	stauffercons@centurylink.net	3232454
Paula Stauffer	" "			
Jim Taylor	1822 Memorial Blvd	Resident	Taylor808@gmail.com	423-677-9884
Barbara M. Brown	1201 Lynn St			423-246-1224
Kathy Parham	3509 Cottie		KMparham@chartertn.net	247-8618
WENDY GORDON	326 WINE CIR.	RESIDENT	Wengordon@hotmail.com	423-292-8099
Dexter R. Harvey	4860 memorial Blvd	Resident	dexrharv@chartertn.net	423-288-4874

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Name/Title	Address	Agency/Resident	Email Address	Phone Number
LUTHER MINOR	5012 MEMORIAL BLVD	RESIDENT		1-276-940-1631
ROD SCHUTT	KOENS VIEW RD	RESIDENT		
MIKE E McGUIRE	3978 MEMORIAL BLVD	Resident		423-246-2385
Shea L. Payne	3913 Leaf Pt	Resident/Agency		423-229-4441
Michael Blair	4519 Memorial Blvd	Resident		9196282572
Matthew Lane		Kpt Times News		423-393-1378
Kimberly Strauth	5013 Memorial Blvd	Kingsport, TN		423-212-0765
GARY ARCHER	801 HARMONY RD	JONESBOROUGH, TN		423-348-8225
Craig Gibson	4856 Edens View	KINGSPORT, TN.		
Jay Browder	1726 Foxtail Lane	Kpt, TN. 37660		423-578-6763
Ida Patton	418 Silver Lake Rd.	Church Hill 37642		423-276-8256
Judy Roach	3919 Skyland	Kingsport 37664		423-247-8212
Todd Dickson	5022 Country Dr	Resident	toddjdickson@gmail.com	423-323-8874
DENNIS WINS	2129 SOUTHCUTE DR.	KPT. PLAN. COMM.	DWINS@CHARTER.NET	423-288-5625
Susan Owenby	5149 Spring Hill Dr.	Kpt. 37664		423-288-2775
MIKE BRACKEN	1523 CHILDRESS FERRY	BLOUNTVILLE		423 340-2376
Brenda Herndon	4606 HARBOR DR.	Kingsport		423-288-5601

Tennessee Department of Transportation

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Name/Title	Address	Agency/Resident	Email Address	Phone Number
James S. Jefferson	KINGSPORT	Resident	JimJoeJeff@ADL.com	—
Donald P. Salyer	KPT	Resident		
Ellen L Sims	KSPT	Resident	ellensims@charter.net	
Marcella A Clark	KSPT		cloggingmac@yahoo.com	
David Miller	kpt	Resident	dmillerlaw@embarqmail.com	
Michael Thompson	Kingsport	City Rep.	Michael.Thompson@kingsporttn.gov	224-2748
Jerry Howard Chapman	KPT	Resident	—	247-4256
Joe Todd	KPT	Resident		288-1728
Steve Bell	KPT	Resident, Bussness Comercial	Masonrybysteve@Gmail.com	423 737-3123
Rodney Hurd	KPT	Resident	hurdproperties@charter.net	
Eugene & Patsy Osborne	Hobbs St-Kpt	Resident	—	288-4886
Douglas Cate	Surgoinsville	Resident	—	327-3062
PAUL Light	KPT	Resident	LIGHTMD@NAX.NET	246-1104
Dorothy Stevens	Memorial Blvd	"	—	245-1715
Walter Owenby	5149 Spring Hill Dr. Kingsport	Resident	Wowenby@charter.net	288-2779
Paul Helton	Cascade ST KPT	Resident		288 3513
Tom Bledsoe	408 Archwood St.	Resident	Bledsoe01@charter.net	383 9292

Tennessee Department of Transportation

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Name/Title	Address	Agency/Resident	Email Address	Phone Number
Mack Robinson	103 Church Hill TN			357-7936
E. Ray Todd	4102 Thacheray Ct. Kpt.			239-9478
Don Helmer	WJCW Radio			
Chris Craig	3211 N. Roan, J.C.	1st TN RPO		
Patsy Harrison	673 Lynn Rd Blt TN 37617			
Ronald D. Harrison	673 Lynn Rd		rdharrison@chartertn.net	423-646-7902
Wm W. Munden	1621 Belmeade Dr. Kpt TN.		bill@themundens.com	423-247-6221
Ernest Brookman	3980 Memorial Blvd Kspt	R		4232300541
Brenda Brown	6140 Temple Star Rd	R	bcb349@charter.net	423-349-0108
Edward Brown	"	R	"	"
Grace Crawford	3824 Lone Star Rd. Kspt	R	"	423-349-7078
Lou Ann Davis	1729 Va. Ave Kpt.	R		423-247-7598
[illegible]	3136 Kansas Av. Kpt	R		423-239-9650
Arnold Fletcher	4534 Grace Dr Kpt 37664			288-5364
Eva Fletcher	"	"		288-5364
[illegible]	3029 Cliffs. Dr Rd	Bus Owner	PJGRILLS@AOL.COM	967-3673

Tennessee Department of Transportation

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Name/Title	Address	Agency/Resident	Email Address	Phone Number
Helen Ray	4879 Memorial Blvd	Resident	hhinay@aol.com	423-288-7071
Powell Kidd	1795 Island Rd	Resident	PKidd@Charter.Net	423-276-6352
ALLAN NEWLAND	5301 LONESOME PINE	RESIDENT	ANEWLAND@CHARTERTN.NET	423-344-2235
Matthew J Johnson	125 Wonderland Dr.	Resident/Commissioner	matthewjohnson@reasan.com	423-782-8722
Jackie Martin	3821 Telstar Dr	Kingsport, Tn.	fourJacksone@embarqmail.com	423-246-4504
CHRIS & PAM LACEY	4601 MEMORIAL	LACEY INS. SERVICE	ChrisM43@aol.com	288-6161/288-5917
Dewey E. Harless	1025 Harte St.	Resident	gsharless@gmail.com	247-5086
Shirley Harless	1025 Harte St.	owns property @ 5025 Memorial Blvd	gsharless@gmail.com	247-5086
[illegible]				
Carol Gaul	5040 Memorial Blvd			
Chuck Griffin	5108 Memorial Blvd.	Cassidy UMC	cwgriffiniii@gmail.com	202-2890
Dolan Thomas	917 Harrison Rd			323-7804
Mary McGuire	3978 Memorial Blvd	Resident		246-2385
Tyler Milhon	5040 Memorial Blvd	Resident	[illegible]	378-3152
Ed Leeper Jr	3996 Memorial	owner Apts	—	239-8925
Craig Moody	4713 Mem.	OWNER		288-5986
[illegible]	116 Jodoct	owner		323-0712

Tennessee Department of Transportation

Public Hearing Sign-In Sheet

Kingsport Civic Center Auditorium

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Name/Title	Address	Agency/Resident	Email Address	Phone Number
Mark Bowery	3713 Memorial Blvd	Resident	markebowerygins.com	(423) 446-0226
Barbara McKay	4911 Memorial Blvd	Resident		288-2698
Gary Manis	4501 Old Stage Rd	Resident	—	416-8178
CARL L DEVAULT	796 ISLAND RD	RESIDENT		323-5636
SAM MOODY	5105 MEMORIAL	RESIDENT		384-9196
Bobbie Spriggs	6899 Chestnut Ridge Rd	Resident		2884182
Carl Ray	4879 Memorial	"	RAYSEARCHER@AOL.COM	288-7071
Pat Miller	3849 Ridgeline Dr.	"		245-3726
Gene T. Snapp	706 Cole Hollow Rd	"		323-9114
Jason Brown	3916 memorial blvd	Resident		246-8789
Jewell Hamilton	1304 Lamont St	Resident		247-6383
Doug Hamilton	" " "	"		" "
Ryan McReynolds	718 Yadkin	City of Kingsport		229-9471
Sharon Carter	4637 Old Stage Road	Resident	ewc-src@yahoo.com	737-1690
Julia Hyatt	5336 Foxfire Pl.	Resident	jkshyatt@centurylink.net	343-0067
Rose Lane	4216 Shyland Ln	Resident		306-9315
Steve Godsey	3411 Hwy 126	County Mayor		

Tennessee Department of Transportation

Public Hearing Sign-In Sheet

Kingsport Civic Center Auditorium

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Name/Title	Address	Agency/Resident	Email Address	Phone Number
Leona G. Minor	7595 Waters Edge Rd	Duffield, VA 24244		276-940-1631
Charlotte Wade	4400 Briarwood Rd	Kingsport TN 37664		423-288-5974
Wilmer Dunca	5001 Memorial Blvd	Kpt TN 37664		288-3650
Burl Lawson	5005 Shenandoah St	Kpt TN 37664	blawson@charter.net	323-5704
John E. Hill	3600 Memorial	Kpt. TN. 37664	Karen524@charter.net	423-378-3101
Tod Weaver	121 Hill Road	Kpt. TN. 37664	tweaver2@Charter.net	423-360-3259
Betty Trivette	5116 Memorial Blvd. Kpt. TN. 37664			
Henry Somers	5309 Fortfive Place	Kingsport TN 37664	hsomers@hotmail.com	423-212-0666
Mark E. Addington	263 Old Cooks Valley Rd	Kingsport TN 37664	Addington1@charter.tn.net	423-288-7202
Tom Galli	804 Rock City Rd	Kpt TN 37664		323-4993
Craig Dye/Fire Chief	145 Chippendale Sq	Kpt TN 37660	dye@kingsporttn.gov	229-9444
Madison Vaughan	1046 Catawba St	Kpt, TN 37660		423 245-3849
Tim W Buckner - Farm Bureau	3417 Memorial Blvd	Kpt. TN		
Judy Murray	804 Rock City Rd	Kpt 37664	Roanwoman@aol.com	323-4993
Meeradevi Sudarsanan	3109 Memorial Blvd	Kpt 37664	alkasu@yahoo.com	246-8148
Arvel Harding	282 Blackburn Rd	Blountville 37617	aharding@eastman.com	323-0565
George Coleman	4573 Stagecoach Rd	Kingsport 37664	sgcoleman@charter.tn.net	288-9085

Tennessee Department of Transportation

Public Hearing Sign-In Sheet

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Date: Tuesday, December 11, 2012

Time: 11:30 am to 1:30 pm

Name/Title	Address	Agency/Resident	Email Address	Phone Number
[illegible]	1445 East Center			288-3544
RANDY DODSON		MATTERN & CRAIG ENG.		
DERWIN CARTMEL	235 SHORT LN KPT			239-3706
JOLLY HILL	4407 GREENSPRING		JGHHILL@aol.com	246-7246
MIKE HARBIN	351 TWIN HILLS DR			341 5423
ALAN D. HOUCHSTER	136 LESLIE CRT			
B. Gradley	3684 [illegible]			
ROSS KINGDON	1714 SKYLAND FALLS COURT			241-7794
ALLEN ANDREWS	44 Dunwoody CT			
John Hollowell	4613 Harbor Dr.			(423)247-5051
Jim Von Bramer	1408 Brighbridge DR.	none	Jvonbramer@yahoo.com	246-9043
Charlotte Ellis	1089 Big Hollow Rd	(P.O. Box 899 Blountville)	~~fjfancies@earthlink~~ .net	323-4933
CHARLES A SIPE	4409 STAGECOACH RD.			423-245-6722
Michael Elliott	110 Hartown Rd	Resident	ehli242@Yahoo.com	423-344-4687

Tennessee Department of Transportation

Public Hearing Sign-In Sheet

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Name/Title	Address	Agency/Resident	Email Address	Phone Number
Gladys Roberts	5141 Red Robin	R		423) 288-6585
Mr & Mrs Harold Riddle	2801 Caine St	R		423-288-4331
John C Johnson	210 GREEN TREE BLVD.	R		423-384-9492
Larry W. Jones	4801 MEMORIAL Blvd.	R		288-9715
Betty Feathers	1957 Island Rd.	R		341-6085
Steve Surgenor	206 MOODY LN	R		3235016
Elva Grills	238 S. Morgan	R		245-6947
Chris Campbell	201 W Market St	Kingsport MTPO	MTPO@KingsportTn.gov	224-2670
Judy Conkin	109 Running Deer Dr	Kpt R		
Dana Conkin	"	R		
Ronald Holtzclaw	5132 Red Robin Ln	R		
Michael A Cours	Kingsport	R		(423)328 4355
Phyllis Cox	2321 Amy Ave. Kpt.	Resident		276-646-3708
Linda Salyer	1202 SUSSEX DR	R - Kpt		
Don Cheek	5308 FORFIRE PL			676-5493
Bruce Dotson	221 Trace CT	Kingsport	rbdotson@charter.net	

Tennessee Department of Transportation

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Kingsport Civic Center Auditorium

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Name/Title	Address	Agency/Resident	Email Address	Phone Number
Chris Guest	233 Longview Ln	K	cguest@chmtenn.net	247-3323
Eddie Williams	1041 S. Wilcox Dr			
Stan Johnson	3916 Lake Valley Cr	Great Bldg Co.		677-1980
Ted Heilig	5217 Foxfire Place	Resident		
Phil Farrow	4220 Skyline Dr.	"		

Tennessee Department of Transportation

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Name/Title	Address	Agency/Resident	Email Address	Phone Number
Karen T Boatright	4824 Sunbright Dr.		Kboatright@charter.net	423 502-5849
Ray Hobbs	5364 Memorial Blvd			423-914 1874
Keith Johnston	405 KICKENNY RD		RKSANDGLORIA@GMAIL.COM	423-323-8956
Malcolm + MARIE JONES	4633 Old Stage Rd			423 246-4072
Steven Hale	3914 Leaf Pt			
Susan Lodal	3501 Memorial	Blvd.	pnlodal@aol.com	247-1002
Larry Laughlin	3950 Memorial Blvd		lwismbs@yahoo.com	963-2457
Tim Wheley	225 west Center Street	City of Kingsport	T.wheley@kingsport.TN	229-9413
Ed MARSH	106 Highland Blvd TN	Sullivan County Commissioner	Edmarsh@Yahoo.com	423 369-4922
JOE PARROTT			jpcivil@charter.net	423 794-9416
Sandra Farrow	4220 Skyland	Lane	phil.sanfarrow@gmail.com	288-2055
Patrick W. Shull	1338 Belmeade Dr.	Sullivan County Commission	patshull75@aol.com	423-245-6697
Kathleen Beine, MD	4515 Brookridge Dr.	resident	kbeine@tricon.net	423-863-3304

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Name/Title	Address	Agency/Resident	Email Address	Phone Number
John Colley	4731 Edensview R	N/A	N/A	423-288-4155
Ann Seeger	517 Woodmere Dr.	N/A	N/A	423-239-8873

Tennessee Department of Transportation

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Name/Title	Address	Agency/Resident	Email Address	Phone Number
Am McConnell, Jr	3904 Inwood			247-6589
[illegible]	2016 Eden Rd			
[illegible]	4005 Fortine Lane			

STAFF/AGENCY

Tennessee Department of Transportation

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Name	Title	Agency	Email Address	Phone Number
RANDY RUMMER	ROADWAY SPECIALIST 2	TDOT DESIGN REG. 1	randy.rummer@tn.gov	865-594-2429
Mark Nagi	Community Relations Officer	TDOT	mark.nagi@tn.gov	865 594-0161
Mark Long	Carpenter	TDOT		
Gary King	Project Manager	TDOT	gary.king@tn.gov	615-741-4777
Jennaleigh Stack	NEPA Doc. Dev	TDOT		
Martha Carver	Historian	TDOT	martha.carver@tn.gov	615-253-2461
KATHERINE LOONEY	"	"	katherine.looney@tn.gov	6154812719
Tammy Sellers	"	"	Tammy.Sellers@tn.gov	615-741-5367
Jeff Turner	Roadway Spec Sup I	TDOT	Jeff.N.Turner@tn.gov	865-594-2742
Debbie Morgan	"	"	Debbie.S.Morgan@tn.gov	865-594-2475
Sonya Sneed	Chief Acquisitions	TDOT/ROW	sonya.sneed@tn.gov	865-594-2485
Amber Warren	Roadway Sp. II	TDOT/ROW Engr	Amber.Warren@tn.gov	865-594-2474
Jason Farmer	Op. Sp. SVI	TDOT/Construction	jason.Farmer@tn.gov	423-928-6857
[illegible]	053	TDOT REG 1 Const	randy.busler@tn.gov	865-594-2908
TIM JONES	ELECT	TDOT		865-591-1849
Phil Addison	ROW APPRAISER	TDOT - ROW	Phil.Addison@TN.gov	423-928-3462
Theresa Hagler	Right of Way III	TDOT ROW	theresa.hagler@tn.gov	4239283462

STAFF/AGENCY

Tennessee Department of Transportation

Public Hearing Sign-In Sheet

Kingsport Civic Center Auditorium

Meeting Topic/Purpose: Corridor Public Hearing; SR 126 (Memorial Blvd) Corridor Improvement Project, Kingsport, TN, Sullivan County

Date: Tuesday, December 11, 2012

Time: 11:30 am to 1:30 pm

Name	Title	Agency	Email Address	Phone Number
Steven Head	R.O.W. Agent 3	R.O.W. TDOT	Steve.head@TN.gov	(423) 926-1637
Leigh Ann Tribble	Env Program Engr	FHWA	LeighAnn.Tribble@dot.gov	615-781-5760
Steve Allen	Project Planning	TDOT	Steve.Allen@TN.gov	615-741-2203
Tolks Omishakin	Asst Commissioner	TDOT	Tolks.Omishakin@TN.gov	615-741-5741
Liz Smith	Project Planning	TDOT	Elizabeth.A.Smith@TN.gov	615-532-3200
Ralph Comer	Asst Bureau Chief	TDOT	ralph.comer@tn.gov	615.741-3779
Amanda Snowden	Reg. 1	TDOT		
Steve Borden	"	TDOT		
Stan King	Reg. Mgr	F&H	sking@fhhut.com	615-631-5322

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Tennessee Department of Transportation

Public Hearing Sign-In Sheet

Kingsport Civic Center Auditorium

Meeting Topic/Purpose: Corridor Public Hearing; SR 126 (Memorial Blvd) Corridor Improvement Project, Kingsport, TN, Sullivan County

Date: Tuesday, December 11, 2012

Time: 11:30 am to 1:30 pm

Name/Title	Address	Agency/Resident	Email Address	Phone Number
Terry Miller	4756 Hwy 126		PolaricKpt@Btos.net	341-8361
Debi Cross	5504 Memorial Blvd		crossdebi@yahoo	930-3355

Tennessee Department of Transportation

Public Hearing Sign-In Sheet

Sullivan Central High School

Meeting Topic/Purpose: Corridor Public Hearing; SR 126 (Memorial Blvd) Corridor Improvement Project, Kingsport, TN, Sullivan County

Date: Tuesday, December 11, 2012

Time: 6:00 pm to 8:00 pm

Name/Title	Address	Agency/Resident	Email Address	Phone Number
Beth Doran	290 Edwards Ln	R		323-0694
Nathan Vaughn	1046 Catawba St	Kingsport, TN 37660		245-3819

Tennessee Department of Transportation

Public Hearing Sign-In Sheet

Sullivan Central High School

Meeting Topic/Purpose: Corridor Public Hearing; SR 126 (Memorial Blvd) Corridor Improvement Project, Kingsport, TN, Sullivan County

Date: Tuesday, December 11, 2012

Time: 6:00 pm to 8:00 pm

Name/Title	Address	Agency/Resident	Email Address	Phone Number
Henry Somers	5309 Foxfire Plow	Kingsport, TN 37664		
Carol Newland	5301 Lonesome Pine Rd.	Kingsport TN 37664		
June Puckett	416. Packing house	Kingsport, TN 37660		
Sarah Holcombe	509 Hill Rd.	Kingsport, TN 37664		323-8846
DONNA McCoy	5974 Hwy 126	BLFVL TN 37617	tnmccoy@charter.net	323-1889
CHARLES ARCHER	512 MONTEZUMA RD	KPT TN 37664	CHARLES.ARCHER@TN.GOV	292-9419
R.L. TOWNSEND	4579 OLD STAGE RD	KPT TN 37664		288-7494

Tennessee Department of Transportation

Public Hearing Sign-In Sheet

Sullivan Central High School

Meeting Topic/Purpose: Corridor Public Hearing; SR 126 (Memorial Blvd) Corridor Improvement Project, Kingsport, TN, Sullivan County

Date: Tuesday, December 11, 2012

Time: 6:00 pm to 8:00 pm

Name/Title	Address	Agency/Resident	Email Address	Phone Number
Gene & Tamia Bledsoe	113 Holiday Hills			323-8829
CALVIN CLIFTON				
Keith Val Elton	Peers			
Wendi Niebriegge	Hwy 126			323-2260
Iris Brown	Hwy 126			
Tom Floyd	~~Off~~ 4409 Green Spring	Kingsport		245-2596
Cynthia Smith				
Ann Laura J. Smith	5110 Foxfire Trail	Kingsport, TN 37664	alsmith51@embarqmail.com	863-6809
Katrina Price	210 Emory Harr Pvt Dr.	Bltr. TN 37617	katrinampria@yahoo.com	
Jim Fuller	264 Cain Dr.	Blountville, Tn		276-0397
Chris Campbell		Kpt MTPO		

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Tennessee Department of Transportation

Public Hearing Sign-In Sheet

Sullivan Central High School

Meeting Topic/Purpose: Corridor Public Hearing; SR 126 (Memorial Blvd) Corridor Improvement Project, Kingsport, TN, Sullivan County

Date: Tuesday, December 11, 2012

Time: 6:00 pm to 8:00 pm

Name/Title	Address	Agency/Resident	Email Address	Phone Number
Betty Feathers	1957 Island Rd	R		423 341-6085
Margaret Roller	325 Sunnyside St 37664	R.		
Fred Roller	Kpt. TN.			288-7736
Deloris Cole	Bltn. TN.			
Donnie Cole	" "			534-9344
Linda Allen	Bltn TN	R.		
Anne C. Overbay	Kingsport, Tn.			
Judy Murray	Kpt TN			
Tom Gatti	Kpt TN			323-4993
MARILYN BENTN	143 HARRTOWN RD BLOUNTVILLE			323-1988
Robert Watson	322 Bridwell Hts Rd	Kpt TN		
Steve + ~~Kathleen~~ M Ball	~~4839 Memorial Blvd.~~			737-3123
~~Steve~~ Ball	104 Lemay	4839 memorial Blvd		737-3123
Sharon Carter	728 Rock Springs Drive	Resident		349-7953
Glenn Arwood	279 Cooks Valley Rd	"		288-5642
Jackie Arwood	"	"		
Venton Hoyle	4500 old Stage	"		288-3529

Tennessee Department of Transportation

Public Hearing Sign-In Sheet

Sullivan Central High School

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Date: Tuesday, December 11, 2012

Time: 6:00 pm to 8:00 pm

Name/Title	Address	Agency/Resident	Email Address	Phone Number
Diane Somers	5309 Forfire	Kspt	dsomers@chartertn.net	423-212-0666
Vicki + Jeff Wilson	5100 Memorial Blvd	Kpt		423-288-3634
Charlotte Dade	4400 Briarwood Rd	Kingsport TN	dade4133@charter.net	423-288-5974
Douglas Dade	4400 Briarwood Rd	Kingsport TN	"	423-288-5974
Tom Dougherty	364 Barger Hollow	Blountville, TN		423-742-3145
Jackie Martin	3821 Telstar Dr.	Kpt.		
George H Reed	205 Montezuma Rd	Kpt 37664		423-571-7591
Erwin Holman	180 Graveltop Rd	Blountville 37617	eholman@chartertn.net	423-323-5019
Martha Johnson	105 Woodland	Kpt 37660		782-8722
Tim McCoy	5974 Hwy 126	Blountville, TN 37617	tnmccoy@charter.net	423-323-1889
Chris Hernandez	5315 Memorial	Kingsport, TN.	JAKEOLATER@AOL.com	423 217 8988
Harold Martin	1128 Buchelen Dr	Kingsport TN		423-239-5268
James Shea	—	Bristol, TN		276-645-2511
Annie Gamble	4507 Tanglewood	Drive Kingsport	bicyclechick@hotmail.com	423 361 2965
Carol Price	5951 Hwy 126	Blountville		423 323 8249
Max Wineyar	233 Harr Trail Rd.	Blountville		423-202-1020
Patsy Leonard	360 Poor Hollow Rd	Kingsport		423-288-6756

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Tennessee Department of Transportation

Public Hearing Sign-In Sheet

Sullivan Central High School

Meeting Topic/Purpose: Corridor Public Hearing; SR 126 (Memorial Blvd) Corridor Improvement Project, Kingsport, TN, Sullivan County

Date: Tuesday, December 11, 2012

Time: 6:00 pm to 8:00 pm

Name/Title	Address	Agency/Resident	Email Address	Phone Number
Dannie Moody	3621 Hazelnut Dr	Self		341-2888
Cathy Dean	5232 Morning Blvd			357-4403
Linda Fein	436 Cantaly Dr.			323-8423
Rena Robinette	387 Holston DR.	Self		323-5420
DANNIE JONES	405 ROXANA D	Sel		
Cleo Cox	429 Kilkenny Rd Kpt			765-1465
Phillip Bird	702 WEDGEWOOD Kpt. Tn.	Self		
Kenneth Timmons	5300 Foxfire Pl	"		341-3926
Bill Campbell	5609 Arapaho	self		323-8516
Wendell Lowe	1437 Holyoke St.	self		863-2049
Bill Anderson	5317 Foxfire Pl	Self		212-0125
James M. Price	5951 Hwy 126 Bloont.	Self		323-8249
Bentley Price	5951 Hwy 126 Bloont.	self		323-8249
[illegible]	125 Kelly Lane			534-8612
Mike McAnthey	5 Pendleton Place	Kingsport		289-6564
Jerry Petzoldt	125 Hawley Rd	Blountville		6772486
Roberta Oyeshy	328 CAINDR	Res		323-9885

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Tennessee Department of Transportation

Public Hearing Sign-In Sheet

Sullivan Central High School

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Time: 6:00 pm to 8:00 pm

Name/Title	Address	Agency/Resident	Email Address	Phone Number
Lennis France	4245 memorial	Resident	LENNIS FRANCE @YAHOO	423-288-2039
Kimball English	5236 Memorial	Resident	Randye@englishcabinetshop.com	423-323-3347
LENN C. BENTON JR	143 HARRISON RD	RESIDENT	LENMARBENTON@CHARTER.NET	323-1988
Paul Budenweiser	220 Hollydale Pl	Transit Road	PAUL@MAXCAL.NET	423-534-4691
Ceci McCoy	5974 Highway 126	Resident		423-782-9877
Doris Luckadoo	149 Silverleaf Ct	Resident		276-0049
Bob Luckadoo	"	"		"
Melissa Graham	46370ldStage	Resident	accord-chic@yahoo	423-677-0511
KEN PATE	3913 FOXFIRE LN	RESIDENT	dakota3913@YAHOO.COM	423-323-8247
BRENDA PATE	3913 FOXFIRE LN	RESIDENT	dakota3913@YAHOO.COM	423-323-8247
KEN HOLLAND	484 CANTERBURY DR	RESIDENT	KHOLA816I@aol.com	423-323-8161
Alan Novak	141 Rocky Branch Rd.	Resident	anovak@century link.net	423-323-8069
Cohny M. Brown	124 Sugarcreek LN			423-323-5054
WENDY GORDON	MORNING HEARING - CIVIC AUDITORIUM			
Nina Jones	529 Chadwell Rd	resident		2882359
BARBARA PUCKETT	4800 Memorial Blvd Kingsport TN			323-6879
JOE V. Smith	5110 Fox fire Trail Kingsport, TN		JVSmith@embarqmail.com	288-4660

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Tennessee Department of Transportation

Public Hearing Sign-In Sheet

Sullivan Central High School

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Date: Tuesday, December 11, 2012

Time: 6:00 pm to 8:00 pm

Name/Title	Address	Agency/Resident	Email Address	Phone Number
Fred Mengeway	5104 Memorial			
Carrie Larkin	4912 Memorial Blvd			
Terry Larkins	4912 Memorial Blvd		TERLark@CharterTN.net	
Fred W. Johnson	125 Wonderland Dr.			
EDDIE BRICKEY	4516 OLD STAGE RD	OWN PROPERTY		
Bernard Smith	769 Island Rd		bJSmith01@aol.com	323-5752
Tracy Massie	5400 Memorial Blvd			
Sidney Bryant	103 Natchez Cove			
C.K. Bryant	100 Huron Cir.			
DAVID J DOTTS	5372 MEMORIAL BLVD	RESIDENTIAL/OWNER		423-341-0192
COMMERCIAL MAINT. SYS. LLC	5376 MEMORIAL BVD	COMMERCIAL/OWNER		423-341-0192
Ralph Tilghman	5428 Lonesome Pine Rd			323 7608
Kell Chapman	254 Catawba Ln	Property Owner	Chapjow.le.rr.com	212-0708

Tennessee Department of Transportation

Public Hearing Sign-In Sheet

Sullivan Central High School

Meeting Topic/Purpose: Corridor Public Hearing; SR 126 (Memorial Blvd) Corridor Improvement Project, Kingsport, TN, Sullivan County

Date: Tuesday, December 11, 2012

Time: 6:00 pm to 8:00 pm

Name/Title	Address	Agency/Resident	Email Address	Phone Number
Brenda Minnick	4880 Memorial Blvd.			288-6963
Ken Minnick	4880 Memorial Blvd.			288-6963
Brent Price	210 EMORY HARR PVT DR.			
RON PORTER	197 Samilola Rd. Bolt Tn.			
Thomas Moore	5360 Memorial Blvd			967-4053
Carlotta Paulsen	4501 Stagecoach Rd		cpaulsenboaz@charter.net	423 378 9361
[illegible]	529 Chadwell Rd			

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Tennessee Department of Transportation

Public Hearing Sign-In Sheet

Sullivan Central High School

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Date: Tuesday, December 11, 2012

Time: 6:00 pm to 8:00 pm

Name/Title	Address	Agency/Resident	Email Address	Phone Number
Scott Meadenhall	161 Wembeck DR	Kingsport TN 37664		
ALLAN NEWLAND	5301 LONESOME PINE RD	KPT TN 37664	ANEWLAND@CHARTER.TN.NET	423-341-223
Jay Schleg	1017 TIPTOP AVE	KPT 37664		4232761687
Deborah Holman	180 Grandtop Rd	Blountville, Tn 37617	dholman1953@yahoo.com	423 323 5019
Fred Holcombe	5092 Hill Rd	Kingsport 37664		423-323-8846
Vance Ramsey	5614 Hwy 126	BLOUNTVILLE, TN 37617		423-323-8362
TAMI BLEDSOE	113 Holiday Hills Rd	Kingsport, TN	TAMIA@charter.net	423-288-3874
Linda Martin	1128 Buchalew Dr	Kingsport, Tenn		423-239-5268
MARK GAMBLE	4507 TANGLEWOOD DR	KINGSPORT TN	ohnothimagen@chartertn.net	423-782-9525
Freda Hubbard	3429 Page St	Kpt Tn		423-765-0746
Jerry Hubbard	3429 Page St	Kpt Tn		423-765-0746
Cathy Owens	2356 Woodridge	Kpt Tn	wrenlywren007aol.com	423-246-9583

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Tennessee Department of Transportation

Public Hearing Sign-In Sheet

Sullivan Central High School

Meeting Topic/Purpose: Corridor Public Hearing; SR 126 (Memorial Blvd) Corridor Improvement Project, Kingsport, TN, Sullivan County

Date: Tuesday, December 11, 2012

Time: 6:00 pm to 8:00 pm

Name/Title	Address	Agency/Resident	Email Address	Phone Number
Ranu Vardy	405 Wine Circle	Resident		323-5742
Judy Danenhart	112 Fisher Dr.	Resident		288-7135
Mark Bowery	3713 Memorial Blvd	Resident		446-0226
Greg Whitfield	547 Hart Town Rd	Resident		646-3143
Bruce Moody	205 Lynwood Ct	Resident		323-3186
Doyle H. Montgomery	1139 Hwy. 75 Blvd	Resident		323-7452
Kay Porter	197 Sembola	Resident		323-4383

Tennessee Department of Transportation

Public Hearing Sign-In Sheet

Sullivan Central High School

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Date: Tuesday, December 11, 2012

Time: 6:00 pm to 8:00 pm

Name/Title	Address	Agency/Resident	Email Address	Phone Number
Michael Thompson	Kingsport	City of Kingsport		

STAFF/AGENCY

Tennessee Department of Transportation

Public Hearing Sign-In Sheet

Sullivan Central High School

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Date: Tuesday, December 11, 2012

Time: 6:00 pm to 8:00 pm

Name	Title	Agency	Email Address	Phone Number
Mark Nagi	Comm. Relations Officer	TDOT	mark.nagie tn.gov	865594-0161
Tammy Sellers	HP Supervisor	TDOT	Tammy.Sellers@tn.gov	615-741-5367
Katherine Looney	Historian	TDOT	katherine.looney@tn.gov	615-741-3655
Martha Carver	"	"	martha.carver@tn.gov	615-253-2464
Jim Ozment	Dir. TDOT ENV.	TDOT	Jim.Ozmente TN.gov	615-741-5378
Gary King	Project Mgmt	TDOT	gary.King@tn.gov	615-741-4777
Jeff Turner	Rdwy Spec Sup I	TDOT	Jeff.d.Turner@tn.gov	865-594-2442
Randy Plummer	Roadway Specialist 2	TDOT	randy.plummer e.tn.gov	865-594-2429
Phil Addison	ROW APPRAISER	TDOT ROW	Phil.Addison@TN-gov	423-926-1637
Steve Head	Right-Of-Way Agent	TDOT ROW	steve.head@TN.gov	(423)926-1637
RALPH E. CUMER	Asst Bureau Chief	TDOT	ralph.cumer@tn.gov	615.741.3734
Jonnaleigh Keck	TDOT ENV.	TDOT		
Randy Busler	TDOT CONST	TDOT	randy.busler@tn.gov	865-594-2408
Steve Allen	TDOT Planning	TDOT	Steve.Allen e tn.gov	615 741 2008
Liz Smith	" "	"	Elizabeth.A.Smithe tn.gov	6155323200
Theresa Hagler	TDOT ROW		theresa.hagler@TN.gov	423926-1637
JOHN K. BARRETT	TDOT PROJECT MGMT	TDOT	JOHN.BARRETT@tn.gov	865-594-2494

STAFF/AGENCY

Tennessee Department of Transportation

Public Hearing Sign-In Sheet

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Date: Tuesday, December 11, 2012

Time: 6:00 pm to 8:00 pm

Name	Title	Agency	Email Address	Phone Number
Jason Farmer	Op. Sp. Sv. I	TDOT / Construction	jason.farmer@tn.gov	423-928-6957
William Rives	ROW Agent	TDOT	Bill.Rives@tn.gov	8655442641
Amber Warren	Roadway Sp. II	TDOT / ROW Engr.	Amber.Warren@tn.gov	865-594-2474
Debbie Morgan	Road Spec Supv I		Debbie.S.Morgan@tn.gov	865 594-2475
LEIGH ANN TRIBBLE	ENV PROG ENGR	FHWA	LeighAnn.Tribble@dot.gov	615-781-5760

40050

From the Offices of:

Dennis R. Phillips	Steve Godsey
Mayor	Mayor
City of Kingsport	Sullivan County

March 21, 2013

The Honorable John Schroer
Commissioner
Tennessee Department of Transportation
505 Deaderick Street
J K Polk Building, Ste 700
Nashville, TN 37243-0349

Dear Commissioner Schroer:

As the duly elected Mayors of Kingsport and Sullivan County, we write to you today to applaud your department's steadfast efforts to make an improved State Route 126/Memorial Boulevard a reality.

While this project has suffered delays throughout previous administrations, we wanted to let the Department of Transportation and the administration of Gov. Bill Haslam know we fully support TDOT's proposed Modified Plan B option for State Route 126.

We offer this support recognizing there are varying opinions on exactly what type of road should be built. But everyone is in agreement that improvements are desperately needed. As leaders of the County and City, we also recognize that in times of tight construction budgets, it is more important that a project commence ... or risk the project being orphaned yet again.

With that in mind, we urge the Department to move forward with all possible speed in moving from the environmental phase to right-of-way acquisition and construction. The Department and local legislators, including Lieutenant Governor Ron Ramsey, have spent countless hours and dollars in good faith with tremendous input trying to develop a viable project that pleases as many stakeholders as possible.

Those efforts are commendable, and we request the project be moved forward as soon as possible. We look forward to continuing conversations about how best to address phasing of the project, as we fully realize this is a sizeable project that will required several phases to fund. Please let us know anything else we might do to assist you and your Department in achieving this goal.

We thank you in advance for your time and consideration in this matter.

Sincerely,

Dennis R. Phillips
Mayor
City of Kingsport

Steve Godsey
Mayor
Sullivan County

RR/TS/DRP/SG/jlc

RECEIVED
MAR 28 2013

From: King, Stan
To: "Gary King"
Cc: Steve Allen (Steve.Allen@tn.gov); Goette, Matthew; Brisson, Ray
Subject: RE: SR 126
Date: Thursday, February 28, 2013 3:37:00 PM

Gary,

We have reviewed the crash data from the DEIS (years 1999-2007) and the crash diagram prepared by F&H (years 2007-2009 complete and 2010-2012 partial) looking specifically at the number of fatal crashes and locations experiencing a high number of crashes along the corridor. The eastern limit of the currently advertised design project is Cooks Valley Road, which is just east of the Chestnut Ridge Road as mentioned in the email from the citizen. The data shown in the DEIS, however, is segregated at Old Stage Road and Overhill Rd., which prevents us from determining how many were east or west of Cooks Valley. If the Department has this data, we could investigate. The data available is depicted below.

Fatal Crashes in Reference to Old Stage Road

Year Range	# Fatal Crashes	
	To the East	To the West
1999 to 2007	14	2
2007 to 2012	2 [1]	1

[1] includes the fatality of the off duty officer Nov. 2012

It is probable that a portion of the fourteen (14) crashes occurring to the east of Old Stage Road from 1999 to 2007 did occur within the proposed project limits of the currently advertised design project. If the data is available, we could check that. For the 2007-2012 available data, only one fatal crash occurred west of Cooks Valley Road and two occurred to the east.

We cannot dispute the claim that more fatal crashes occur east of Cooks Valley Road based on the data we have available. However, if you look at total crash rate, the portion of the project west of Cooks Valley (design limits) has predominately higher crash rates. We utilized the DEIS listing of locations that were identified as having a high number of crashes for years 1999-2007 and the locations on the crash diagram of locations with 10 or more crashes for 2007-2012. Areas of crash concentration is tabulated below.

Locations with a High Number of Crashes

Year Range	# High Crash Locations	
	To the East	To the West
1999 to 2007	2	5
2007 to 2012	2	4

This indicates that the design project will address more of the crash concentrations found in both the DEIS Safety Analysis and the Crash Diagram. Another point to consider is that higher AADT volumes along the corridor exist on the segment from E. Center Street to Cooks Valley. By addressing this area, the proposed improvements will serve a much higher

volume of motorists.

If you need any further assistance, please let us know.

Thanks,
Stan King

From: Gary King [mailto:Gary.King@tn.gov]
Sent: Thursday, February 28, 2013 12:57 PM
To: King, Stan; Steve Allen
Subject: FW: SR 126

Stan,
Do you have something identifying the location of fatalities?
I know there are more crashes at the beginning of the project.

Stan or Steve,
Do you have any additional information that would be useful in writing a response to Mr. Wagner's email below?

Thanks,

Gary D. King
Project Management Division
Suite 600, JK Polk Bldg.
Nashville, TN 37243
gary.king@tn.gov
(615) 741-4777

From: Willis Wagner [mailto:wwagner03@gmail.com]
Sent: Wednesday, February 20, 2013 2:52 PM
To: Gary King
Cc: Governor Bill Haslam
Subject: SR 126

Although I don't know for sure I do believe that 95% or more of the fatalities occurred east of Chesnut Ridge on SR126 in the past. For sure more than 50%. Yet TDOT is starting on the engineering phase at Center Street and stopping at Harbor Chapel. I believe you know for sure where the maximum number of fatilities occurred. Why on earth would you not expedite construction is those areas where so many people were killed first?? That is east of Chestnut Ridge no doubt. This is an irresponsible decision if in fact you do not reconsider.

James Wagner
37664

January 31, 2013

I am writing on behalf of my mother Ms. Margaret L. Davis, who lives at 4505 Stagecoach Road in the neighborhood called Preston Woods. My name is Kimberly Davis, and I am a registered Civil Engineer (TN 22990) with experience in NEPA studies (including Environmental Impact Studies), highway design, and environmental/natural resource protection. My family's residence is approximately 200' north of the stretch of road between 0.6 mile of this segment from Harbor Chapel Road to east of Old Stage Road (identified as segment 3 on page 63). I will be referring to this segment in all of my comments below. Preston Woods is comprised of homes built from the 1950s to the 1990s, and lots are typically ½ to 1 ½ acres in size.

Ms. Davis and I would like to go on record as wanting the *No-Build* alternative. However, in the likely event that TDOT goes forward with Alternative A or B, I recommend that **(1) consideration be made to include a sound barrier above Preston Woods in segment 3, and (2) Alternative B be selected.**

First of all, we are concerned that none of the supporting studies listed on page 206 of the DEIS are available on the TDOT web site. Mr. Gary King kindly sent me a copy of the Noise Evaluation Update, which is the report I was primarily interested in reading. However, it is worth noting that pertinent project studies are linked on other TDOT projects, such as the James White Parkway SR-71, SR-18, and the Sommerville Beltway, for example.

My comments that follow deal primarily with projected traffic noise from SR 126 and the need for a sound barrier. I also am very concerned about the extensive removal of trees at the roadside that currently help reduce some the harsher aspects of living near a highway, such as noise, visual blight, and poor air quality.

To begin my technical observations with regard to road noise, I would like to address terrain considerations along the segment of interest (segment 3). I have attached a topographic map showing the area of segment 3 where Ms. Davis's house is located (Attachment 1). Where the terrain forms a valley between a proposed road and the NAC B receptors,[1] noise levels will be greatly increased over situations when the terrain is fairly level, because ground adsorption is not present to attenuate the sound. In conditions like this, noise levels are generally projected to be at least 3 dBA more than in typical situations with level terrain. Noise will be further increased by the proposed deforestation along long stretches. In Ms. Davis's case, the right-of-way (ROW) appears to extend at least 110' down the heavily wooded hill from the existing road and toward her house, despite the DEIS stating the cross section is only 160 feet in this segment – which would allow for only 50' on each side. Did TDOT take any of these terrain characteristics into consideration?

Within the rectangle drawn on Attachment 2 (duplicated on Attachment 1), I count at least 50 houses that will clearly be impacted by greatly heightened noise. However, the closest measurement taken to Preston Woods was on Trinity Lane (Rec 23), and moreover, **was recorded outside of a "worst hour" as required by TDOT's own noise policy** for determining whether noise levels exceed NAC.[2]

As a long-time resident of this address, I can report that noise levels rise considerably during the afternoon commute and rarely abate until later into the evening. Therefore, this Trinity Lane measurement taken at 2:23 PM was likely woefully underestimated at 60 dBA. In fact, I would estimate that this is probably the *quietest* time of the day for that stretch of road, so the fact that levels are expected to rise to 65 dBA by the design year indicates to me that the actual design year sound level could potentially greatly exceed NAC. I also think that holding this area to such a stringent standard for justifying barriers (67 dBA) seems unreasonable, especially when the James White Highway project noise study in Knoxville found that barriers were justified for levels ranging from 46-67 dBA (also NAC B receptors).

The inclusion of sidewalks in segment 3 on the 0.6 mile of this segment from Harbor Chapel Road to east of Old Stage Road seems needlessly excessive, and would only serve to increase the cross section of disturbed area -- thus unnecessarily requiring removal of existing vegetation that currently acts as a sound barrier. As I have mentioned above, there are currently no business, nor residences connected by driveways to SR 126 on the north side of the road. And apparently after construction, all residences will be wiped out on the south side of the road, as well. Where would the pedestrians come from, and where would they be walking to, in the first place? Moreover, if traffic counts increase as TDOT projects, it will be an extremely unpleasant environment in which to

1 The average slope drop-off for the first 150 feet from the road for this section is estimated to be 30%.
2 Rec 23 was measured from 2:23 to 2:42 PM. Two other measurements, Rec 12 and Rec 22 were also outside of "worst hour."

walk. The sidewalks will just impose an increased maintenance burden on the city, and will likely be a very low budget priority resulting in unsightly, broken sidewalks after only a few years.

I have attached a screen shot of a typical area from mile markers 380-383 on I-40 in Knoxville that is protected by a 1.2 mile-long sound wall (Attachment 3). These are not densely built neighborhoods, and in many cases are quite similar to Preston Woods in density and age of houses. They were also built after I-40 was constructed in the 1960s, which leads me to believe that the policy dictating that residences pre-date "initial highway construction" is somewhat flexible. Just as roadside I-40 noise and pollution gradually increased over the years to barely tolerable levels, SR 126 has also become a much more heavily traveled road over the past 30 years, as more and more people commute to new outlying neighborhoods and the airport. My primary residence is in an extremely urban environment near downtown Knoxville where I am accustomed to sirens, construction sounds, distant I-40 noise, etc., and when I visit my Kingsport residence, I am continually astonished by the noise in Preston Woods from SR 126. It is much, much greater than when I was a child in the 1960s-1970s, and already comparable to sound levels in any urban area.

Although the feasibility of a sound barrier is dismissed by the DEIS and the Noise Evaluation due to the entirety of SR 126 not being a "limited access facility," the area above Preston Woods is actually quite amenable to construction of a barrier, due to the fact that it is uninterrupted by ANY driveway or road on the northern side of SR 126 for 0.7 mile (if the Trinity Lane entrance is relocated). This is partly due to the "steep side-slopes" (as described on page 21 of the DEIS) along this stretch, which would greatly hinder future roadside development. The construction of such a barrier would not only be appreciated by Preston Woods residents as a way to attenuate noise and maintain quality of life, but also to prevent the inevitable drop in property values due to unbearable traffic noise emanating from SR 126 after it is widened.

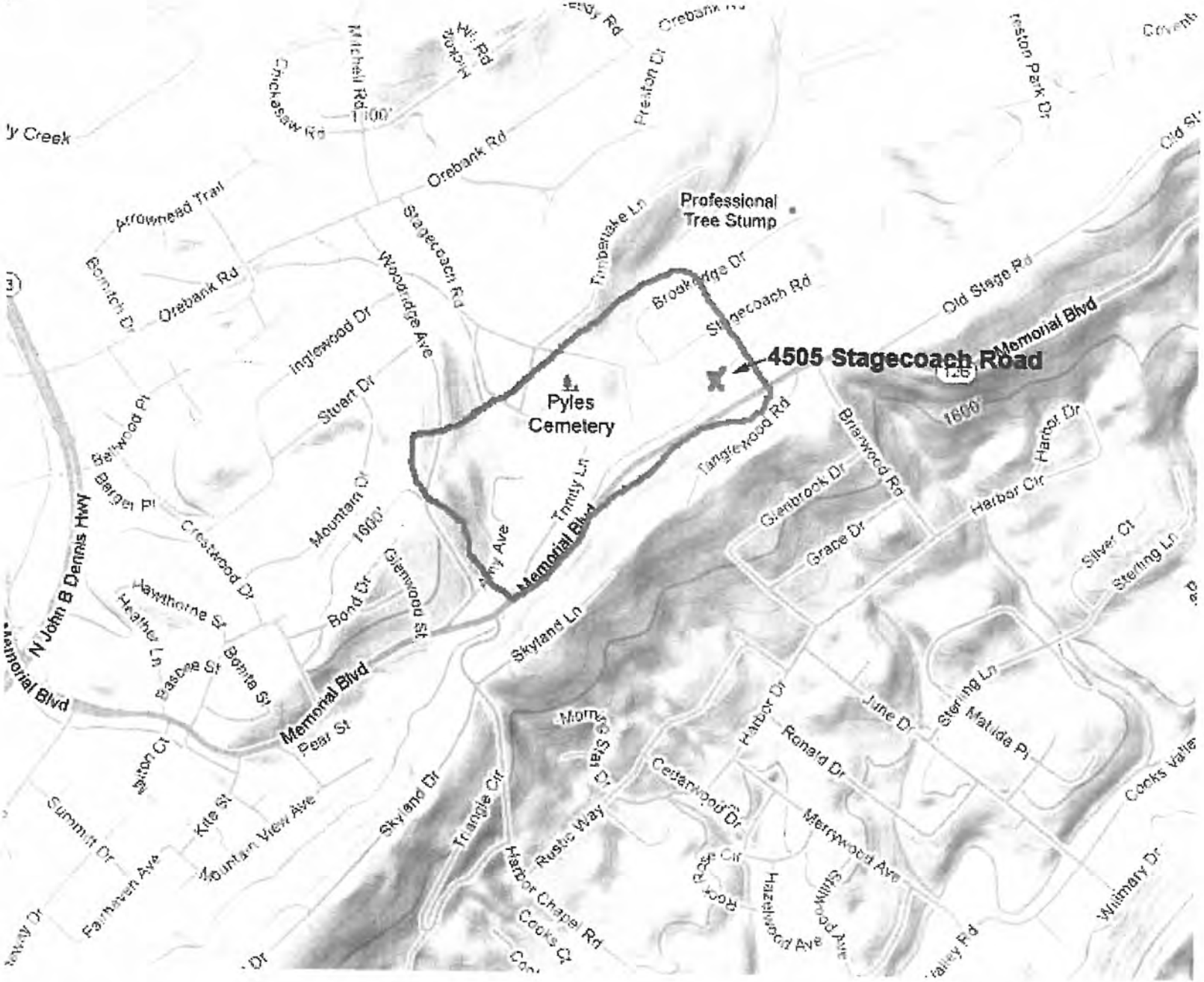
Finally, I would also like to dissuade TDOT from connecting Trinity Lane to Greenspring Circle as shown in "Alternative B Modified." Although this is (curiously) not discussed anywhere in the DEIS, it is simply shown on the map. Preston Woods is an old, cul-de-sac style neighborhood of stately homes, and it simply does not make sense to take property from 4407 and 4411 Greenspring Circle for this uncharacteristic roadway entry point.

In conclusion, I have the impression that TDOT is only including the No-Build alternative to meet federal guidelines, and will likely choose Alternative A or B. In the case that TDOT moves forward with either of these "build" options, I would strongly suggest that consideration be made to include a sound barrier above Preston Woods in segment 3, for the reasons stated. I also think that a divided highway with a grass median is overkill – thus our preference for Alternative B with the 3-lane road. This would reduce the amount of land that needs to be disturbed in the ROW and reduce expenditures for turf maintenance. Also, please give further consideration to exploring the expansion of public transportation (i.e., rail) throughout Tennessee. This would serve to lower Tennessee's extremely high per capita automobile fatality rate (15.8 per 100,000 people as compared to 10.4 per 100,000 nationally) and would allow TDOT to be far more accountable to Tennesseans in the use of our limited public dollars for the long term.

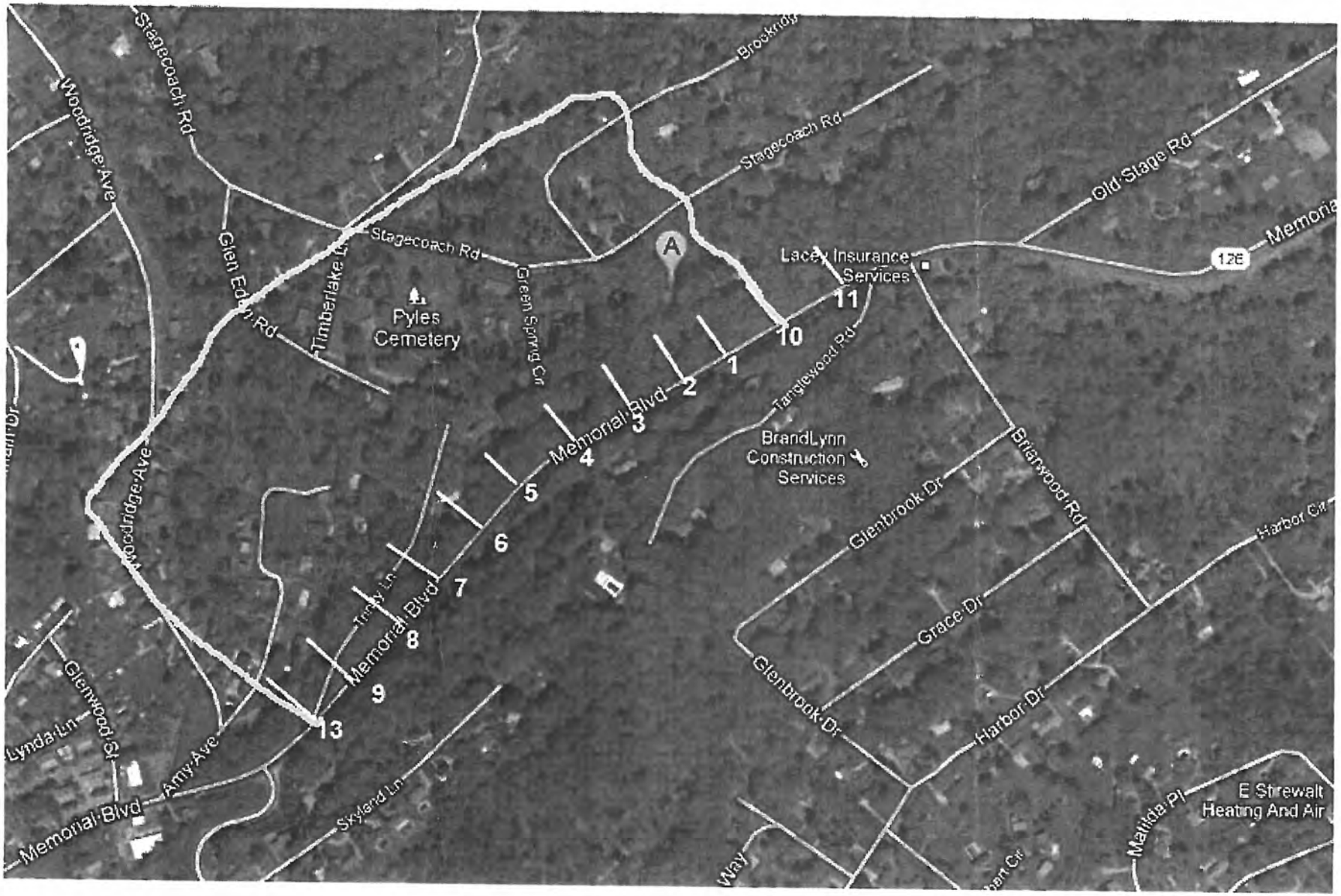
Thank you for entering our comments into the record, and we will be following this project with interest.

K. L. Davis for Ms. Margaret L. Davis

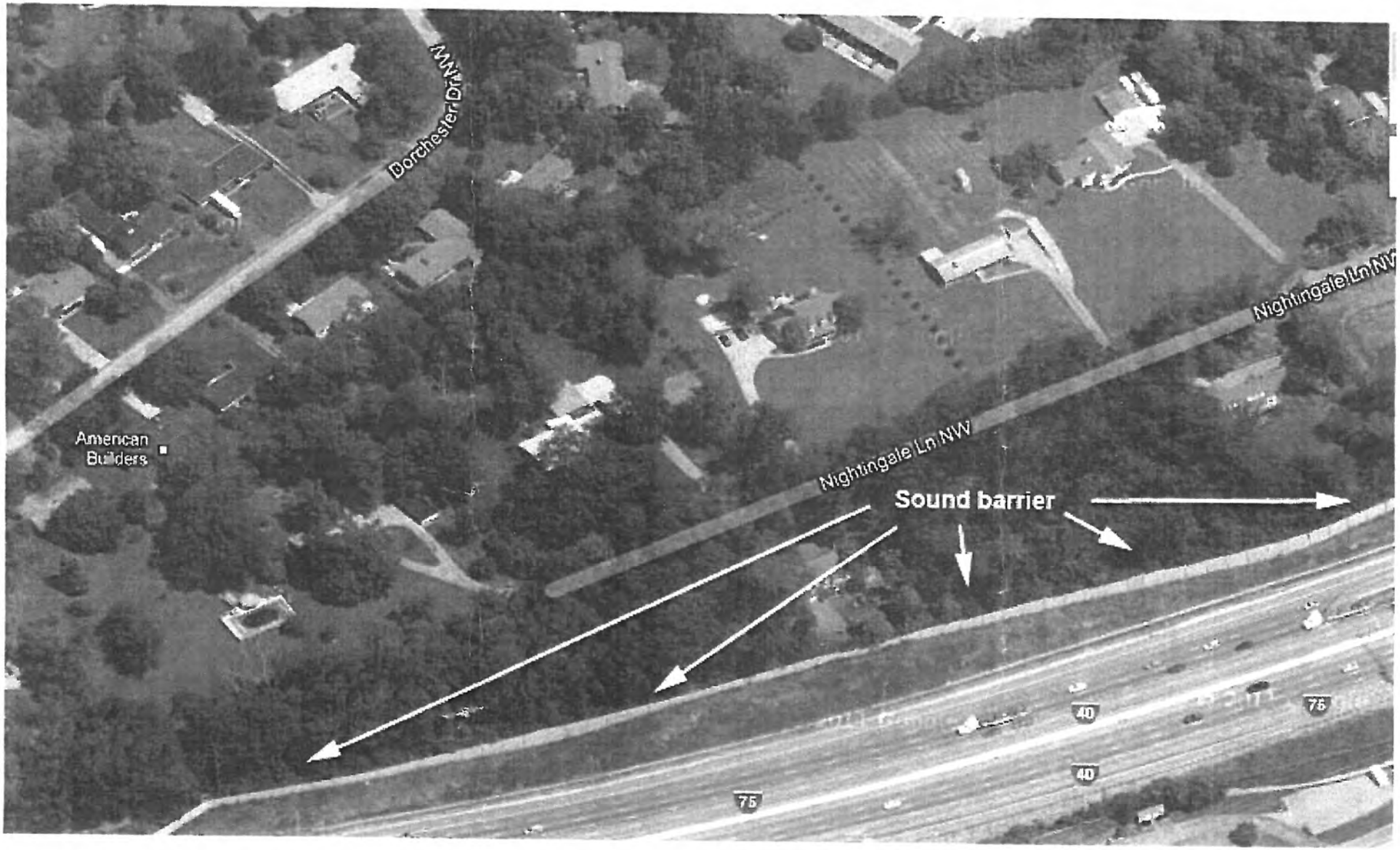
Kimberly L. Davis, Ph.D., P.E.
Ms. Margaret L. Davis (aka Ms. Robert E. Davis)
4505 Stagecoach Road
Kingsport, TN 37664
(423) 247-4537



Attachment 1



Attachment 2



Attachment 3

Subject: FW: Request for Additional 126 Alternatives
Date: Monday, February 04, 2013 2:23:08 PM

From: TDOT Comments
Sent: Monday, February 04, 2013 8:56 AM
To: 'dsomers@chartertn.net'
Cc: Gary King
Subject: RE: Request for Additional 126 Alternatives

Dear Ms. Somers:

Thank you for the comments on SR-126 (Memorial Blvd.) from East Center Street in Kingsport to I-81.

Your comments and suggestions relating to two additional alternatives will be included in the official hearing transcript of the December 11, 2012 Public Hearing. All the comments and recommendations in the transcript will be addressed and considered as the project proceeds.

If you have any questions, please contact Gary King, Project Manager for this project, and he will be happy to assist you. His contact information is as follows:

Gary D. King
Project Manager
Project Management Division
Tennessee Department of Transportation
Suite 600, James K. Polk Building
505 Deaderick Street
Nashville, Tennessee 37243
gary.king@tn.gov
(615) 741-4777

Sincerely,

John C. Schroer
Commissioner
Tennessee Department of Transportation

From: dsomers@chartertn.net [mailto:dsomers@chartertn.net]
Sent: Thursday, January 31, 2013 9:57 AM
To: John Schroer; Steve Allen; Gary King
Cc: Rep. Tony Shipley
Subject: Request for Additional 126 Alternatives

Subject: Formal request for the development of additional alternatives; Phase 1 and Phase 2, SR126 rebuild Project

Per TDOT's December 11, 2012 SR126 community input session, it is requested that TDOT evaluate the following two solutions for the SR126 rebuild project regarding both Phase 1 (Center St. to Cooks Valley Road) and Phase 2, etc. (to I-81) for the following reasons.

In 2004, it was explained that the normal practice of TDOT is to build a road no lower than the Level of Service "D" ... reason being... building a lesser road (LOS E or F) is neither cost effective nor does mobility remain at a sufficient level for the desired 20+ years after its completion. The resource team, wanting a long-lasting solution, put into place the requirement that rebuild options meet the standard of D for 20 or more years; and as recorded in 2004 public session minutes, TDOT made the commitment to the community to build a Level of Service D or better highway.

On June 22, 2012, Commissioner Schroer stated several times during a local meeting with concerned citizens and city personnel that he would not build an LOS E or F road. Per TDOT's Steve Allen, the recent summer 2012 traffic counts put the presently planned three-lane sections of highway at LOS E, the same as recorded in the 2012 DEIS. It is apparent that any three lane alternative for Phase 1 or the center section of the project is not an adequate solution and should not be carried into the design phase.

An additional concern is that TDOT spent more than two years and $350,000 in resources to determine the preference of a fully informed community, yet nothing close to the public's preference was brought forward as an alternative. In 2004-2005, in appears that the majority of citizens, the people who actually drive the highway, knew best what was needed as the long-term solution. TDOT is therefore asked to revisit the community's preference per its two TDOT sanctioned votes. To correct the above issues and to make the best use of taxpayer's dollars, it is asked that TDOT build SR126 to no less than the usual Level of Service standard of D. In so doing, it is asked that the following two solutions be carefully evaluated.

(1) Four-lanes from Center St. to Hill Road/Harr Town: This alternative is partially documented in the team recommendation. It appears as a Minority Objection on Page 13-14 of the June 22, 2005, SR126 Resource Team Recommendation. It was submitted by five CSS Resource Team members and reflects the overall preference for the four-lane concept with a very slight variance in public preference from Harr Town to I-81. (May 25-26, 2005: overall 46% 4-lane, 19% 3-lane, 25% 2-lane, 6% no build)

(2) Four-lanes from Center to I-81: According to Mr. Allen, TDOT just raised the LOS from Harr Town Road to I-81 from LOS F to LOS D for 2037. However, a four-lane solution may be more appropriate if the new predicted growth rate of 0.08% for the most eastern section is found to be incorrect. Currently a new church is planned for the corner of Harr Town/SR126; and a new housing development is going in between Harr Town and I-81. Though located in the center area, Crocket Ridge in the last few years opened an additional 100 building sites and continues to plan for the 100 townhouses along the golf course. These areas will be expanding if and when the current recession ends. The public's preference of the October 3-4, 2004 vote was for four-lanes in all sections. (60% 4-lane, 13% 3-lane, 25% 2-lane, 1.4% no build).

In order to reduce cost and unnecessary impact to the community while still providing much needed mobility and future growth, TDOT is asked to evaluate the following. Replace the previously proposed four-lane highway (divided by a 12 ft. raised grass median) with a more practical basic no-frills four-lane highway with an appropriate minimum-width median. The mobility of four-travel lanes is needed on Chestnut Ridge far

more than two LOS E rated travel lanes with side walk where there are few houses and rare pedestrians. As has been determined by TDOT staff, moving graves is not necessary. Please build the acceptable "non-standard" four-lane section within the existing right-of-way along the short pinch-point area between Yancey's and the cemetery. Extend the no-frills four-lane highway eastward per the community's wishes in order to provide the needed mobility and to attain a LOS D or higher. Please consider closing the east entrance to the cemetery. It is rarely used and will eliminate the need for a turn lane in this crowed area. Consider closing Chestnut Ridge Road to thru traffic as the next street Eaton Station can easily be used. Close Chestnut Ridge Rd. just west of the historical Yancey's to further protect the property and the historic hand-hewed culvert. Slightly realign the Chestnut Ridge Road bed as a driveway entrance to the historical property though the tavern has few visitors. Make the western part of Chestnut Ridge Road from Yancey's to Old Stage a "dead end" in and out only. There are five driveways in this section.

With 18 fatalities since 1999, safety and mobility are top issues and were reflected in the community vote. As stated by the former Kingsport Mayor in her June 30, 2005 letter to Commissioner Nicely, "It is clear that the majority of citizens that spoke and participated in the public sessions want a four lane highway. The recent Sullivan County resolution is in support of the community's preference and recognizes the need for adequate mobility to meet future needs. Many of them drive the highway. A major complaint of drivers is the inability to pass slow traffic while property owners complain about speed. Property owners and store fronts should be moved out of harms way along the highway corridor. Drivers will not be slowing down and traffic will only increase. The highway should be rebuilt to a standard for the purpose it serves as stated in the Sullivan County Resolution...SR126 is the city's east corridor connecting Kingsport to Interstate 81; and was designated to be upgraded as the main access route replacing the formerly proposed, but cancelled four-lane Airport Parkway North.

Respectfully submitted,

Diane Somers
Former Citizens Rep, 126 Resource Team
Jan. 27, 2013

Subject: FW: Highway 126 Project comments
Date: Thursday, January 31, 2013 1:48:22 PMrecord

From: TDOT Comments
Sent: Wednesday, January 30, 2013 1:57 PM
To: 'Arthur Ellis'
Cc: Gary King
Subject: RE: Highway 126 Project comments

Dear Ms. Ellis,

Thank you for the comments on SR-126 (Memorial Blvd.) from East Center Street in Kingsport to I-81.

I hope I can clear up any confusion about the Trinity Lane Connector.

This link, http://www.tdot.state.tn.us/sr126/involvement.shtml, takes you to the Public Involvement page on the SR-126 project website. The six public hearing maps on that page are the most up to date. There is no Trinity Lane Connector(s) currently in Alternate A or Alternate B. Trinity Lane Connectors were shown on the layouts in Appendix D of the DEIS that is also on that website page. Those layouts are out of date.

Regarding Alternate B Modified, there are two options along that part of the project:

One option would be to use a retaining wall along SR-126 (shown in black). With the retaining wall option, there would not be a Trinity Lane Connector on Alternate B Modified.
The other option would be to not use a retaining wall. The limits of the area that would be affected without a retaining wall are shown by the dashed orange line and would cut off existing Trinity Lane. The option without a retaining wall would require the Trinity Lane Connector on Alternate B Modified.
There is no Trinity Lane Connector on Alternate A, Alternate B or Alternate B Modified – with a retaining wall. However, there is a Trinity Lane Connector on Alternate B Modified – without a retaining wall.

Your comments about the Trinity Lane Connector and all the additional comments in your email about the proposed SR-126 improvement project will be included in the official hearing transcript of the December 11, 2012 Public Hearing. All the comments and recommendations in the transcript will be addressed and considered as the project proceeds.

If you have any questions, please contact Gary King, Project Manager for this project, and he will be happy to assist you. His contact information is as follows:

Gary D. King

From: Roanwoman@aol.com
Sent: Wednesday, January 30, 2013 12:55 PM
To: TDOT Comments
Cc: John Schroer; Gary King; Steve Allen; Tammy Sellers; billalbright@kingsporttn.gov; roanwoman@aol.com
Subject: NEPA Commments on SR 126 Corridor Improvement Project, Part 2
Attachments: Letter to Steve Allen, November 30, 2012.pdf; PyleCemetery_Old Kingsport cemetery needs assistance.docx; Station37TrafficProjections.zip

Dear TDOT Comment Staff Member,

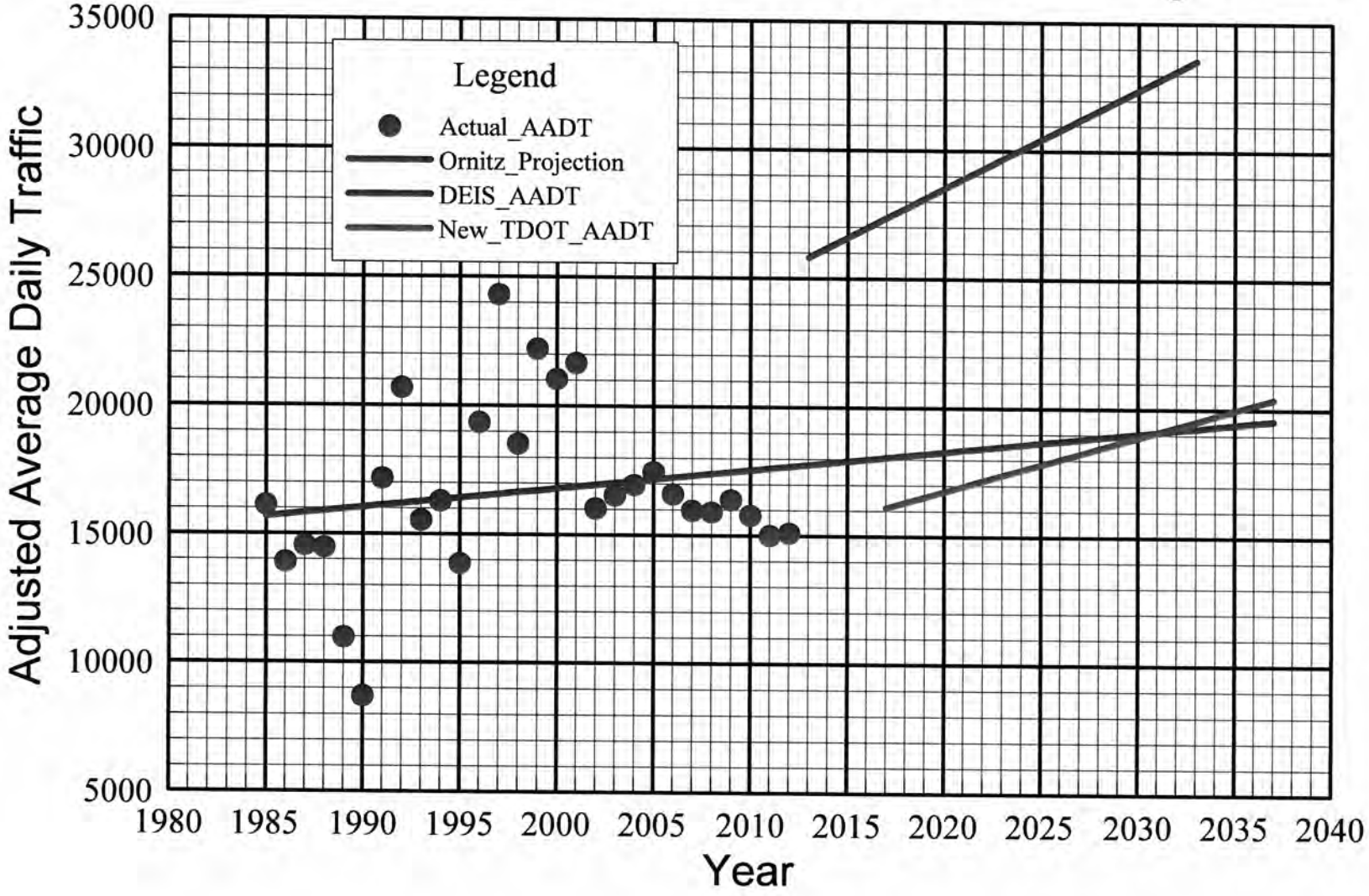
Please attach the attached **Appendices B (traffic projection graphs), C (November 30, 2012, letter to Steve Allen), and D (Pyle Cemetery article)** to my **NEPA Comments on SR 126 Corridor Improvement Project, Part 1**, submitted under separate cover.

Could you confirm that you have received these two parts of my comments for the official record?

Thank you again.

Judy Murray
804 Rock City Road
Kingsport, TN 37664

SR-93 to Hawthorne (Station #37) Traffic Projections



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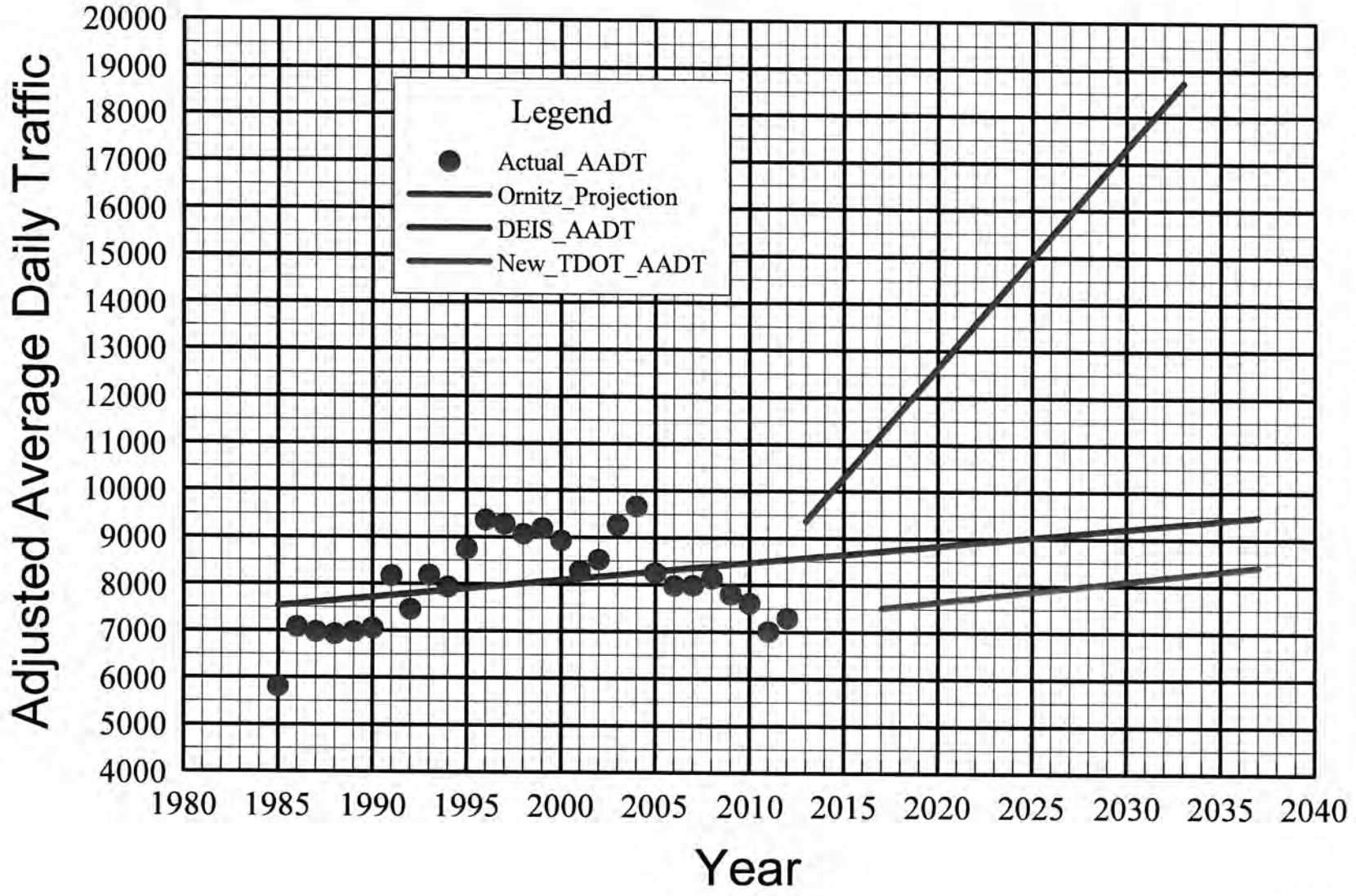
Island Rd. to Fall Creek (Station #108) Traffic Projections



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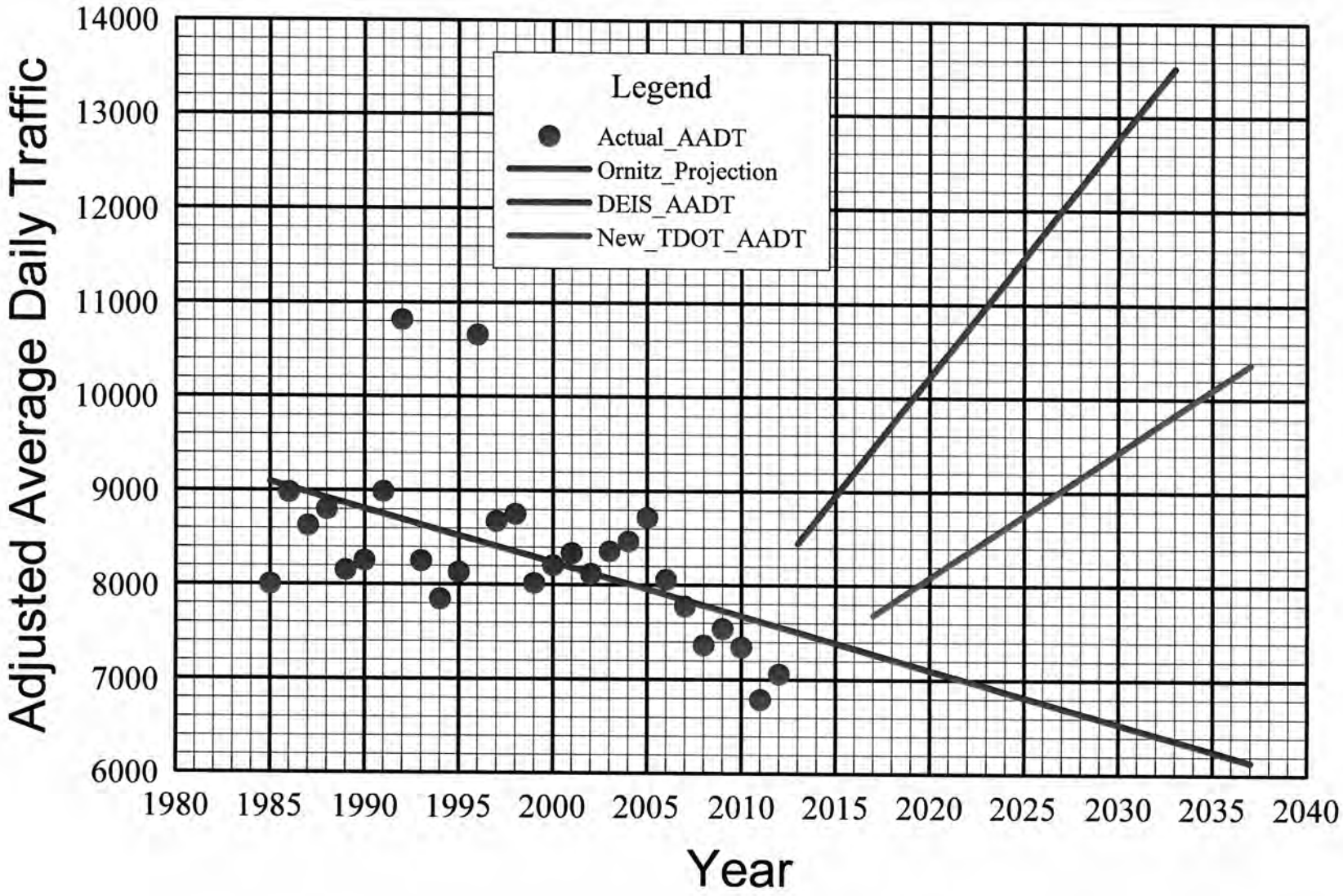
Old Stage to Lemay (Station #167) Traffic Projections



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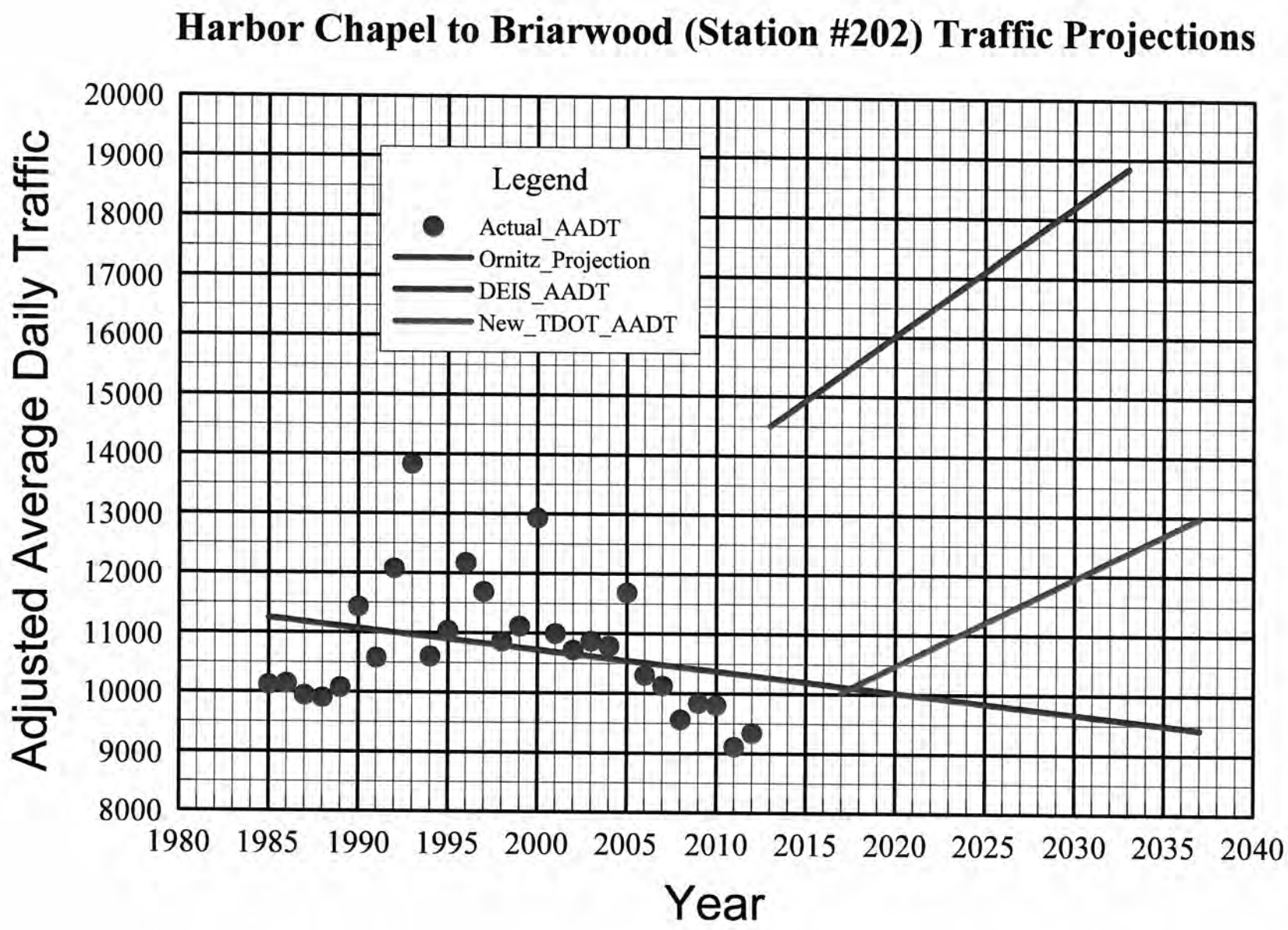
Harbor Chapel to Briarwood (Station #202) Traffic Projections
Adjusted Average Daily Traffic
20000
19000
18000
17000
16000
15000
14000
13000
12000
11000
10000
9000
8000
1980
1985
1990
1995
2000
2005
2010
2015
2020
2025
2030
2035
2040
Year
Legend
Actual_AADT
Ornitz_Projection
DEIS_AADT
New_TDOT_AADT

804 Rock City Road
Kingsport, TN 37664

November 30, 2012

Steve Allen
Director, Project Planning Division
Tennessee Department of Transportation
James K. Polk Building
505 Deaderick Street, Suite 700
Nashville, TN 37243

Subject: SR 126 Memorial Boulevard Improvement Project: Traffic Projection Recalculations
Harbor Chapel Road to Lemay Drive Segment

Dear Steve:

Many thanks for your email of November 6, 2012, and the accompanying materials on TDOT's methodology and arrival at 2037 target year traffic projections for the SR 126 improvement project. We further thank TDOT for conducting 2012 routine station and special counts and for recalculating traffic projections for all segments in advance of the December 11 Public Hearings.

It is our understanding that traffic forecasting is the generation of future roadway traffic volume projections derived by using historic trend data and by considering the effects that future changes in the socio-economic factors will have on the particular segment.

However, it appears that traffic history and trend line analyses were not factored into the SR 126 traffic forecasting and that the projections were based primarily, if not solely, on population, household and employment modeling as presented in the Kingsport MPO Long Range Transportation Plan (LRTP). Is that correct? If so, we find this troubling, especially in the case of traffic count Stations #167 and #202.

Base Year Traffic Counts: Deviation of "Assigned" from Actual

While 2037 projections on the west end of the project at Station # 37 and on the east end at Station #108 follow the historic trend line, those on the critical Chestnut Ridge section, Stations #167 & #202, deviate appreciably from historic trends and current counts. The MPO model base year is 2009. This table indicates the deviation of the model-assigned count from the 2009 Actual count:

Station	Actual Count	Model Assigned Count	Deviation from Actual
#167	7,535 AADT	9,866 AADT	+30.9%
#202	9,841 AADT	11,385 AADT	+15.7%

The LRTP states that comparison of assigned volumes to counted volumes is considered successful for a minor arterial if it is + or – 15% (10% is preferred by FHWA). Station #167 appears to be way off the mark. Station #202 is close to the 15% but not in sync with its long-term historic trend line.

We have some questions and observations concerning the robust traffic projections at Stations #167 and #202:

- According to the Kingsport *MPO 2035 Long Range Transportation Plan*, between 2010 - 2035, the population in the Sullivan County section of the Kingsport MPO is projected to grow by 9% or **0.38%/year**. Yet the traffic growth rate at #167 is projected to grow by a whopping **1.75%/year** and at #202 by **1.47/year**, rates that far outpace county-wide population growth.

- MPO Director Bill Albright predicted, in his 10/19/2021 letter to you, that current "stagnant development" is expected "to change moderately once economic conditions improve," yet TDOT's projected 1.47 to 1.75 % annual traffic growth indicate that dramatic socio-economic growth affecting these stations is anticipated.

- Taking the 2012 actual count and the 2037 projected count, the projected growth for the *next 25 years* is as follows:

Station	2012 Actual Count	Projected 2037 Count	25-Year Projected Growth
#167	7,060 AADT	10,370 AADT	46.8%
#202	9,340 AADT	12,980 AADT	39.0%

How is traffic expected to grow 39 to 47% in this location in the next 25 years? Beyond Mr. Albright's broad-range statement, what socio-economic indicators are there that growth and development will occur at the levels reflected in the traffic projections? **Where are these dynamic traffic growth rates in the segment in question coming from?**

Reasonableness Check

We understand that while models can aid in the production of traffic forecasts, travel demand model outputs must be treated with caution with respect to project-level forecasts. We are aware that forecasted model traffic *must be evaluated for reasonableness*, the best method being development of a forecast being based on historical trend lines. We feel either sufficient detail is lacking to justify the high projections between Harbor Chapel and Lemay or it has not yet been communicated. The marked differences between model and trend line data appear to need further investigation, possibly with regard to socio-economic assumptions within the corridor. **We question whether the assumptions and calibration and validation processes used in the modeling were reasonable and what level of confidence one can have in the forecast results?**

Significant Travel Patterns & Socio-economic Characteristics of the Study Corridor (that may not have been considered by the model):

- Residential areas on the feeder roads between Harbor Chapel and Lemay are built out.

- There may be a false assumption that all traffic east of Cooks Valley Road will travel west over Chestnut Ridge into Kingsport. That is simply not the case. East of Cooks Valley Road there are two schools, numerous churches, eating establishments, a pharmacy, a veterinarian, a garden center, and numerous other shops and businesses that generate internal traffic, not to mention traffic heading southwest on Fall Creek Road to Walmart, Colonial Heights supermarkets, retail, and other business on SR 36 *that never see Stations #167 or #202.* Factor in residential and business displacements, and the numbers will decline even more.

- Today in the Kingsport MPO area, nearly 16 % of the population is 65 years of age or older, and that trend is projected to increase to nearly 30% by the year 2035 (MPO LRTP, p. 1). In 2010, 20% of the population in the SR 126 study corridor was already 65+ years of age (DEIS, p. 102) and is expected to increase over the next 25 years, resulting in a lower rate of commute trips than other locales within the MPO area.

- Prior to the recorded traffic history years and into the mid-1990's, residential and moderate commercial growth was taking place in the study corridor. However, with Kingsport corporate down-sizing, technological advancements replacing countless workers, and retirement household increases, these socio-economic factors have led to steady traffic decline. While there was a dip in employment in 2008-09 as the national recession hit Kingsport, service sector jobs have made up for job losses since 2005 (http://data.bls.gov/pdq/SurveyOutputServlet), *yet traffic has continued to decline on #167 and #202.* (See attached graphs) Even as service sector and health care employment is expected to increase over time, we question the reasonableness that they will produce the dramatic increases in study corridor travel volumes reflected in the traffic projections.

Desired Future Condition

We sincerely appreciate the diligence that you and TDOT have gone to in taking a second look (and more!) at the target year projections—*and we respectfully request, in light of historic trends and socio-economic realities relevant to the study corridor, that TDOT reevaluate the projections for Stations #167 and #202, in this the most critical road section.* Construction in this section will undoubtedly be the most ground-impacting and expensive operation in the entire project. The reasons I persist in requesting reasonable traffic projections between Harbor Chapel Road and Lemay Drive are two-fold. The community will in no way be served by having its iconic Chestnut Ridge unjustifiably devastated, and the state will in no way be served by allocating millions of scarce transportation dollars to a lavish, but no-cost-benefit, 4-lane segment through the ridge. Commissioner Schroer has stated on many occasions the need for equitable distribution of transportation dollars across the state and, with that, his intention not to over-build SR 126.

Going into the Public Hearings, let us remind ourselves and the public that the SR 126 Corridor Improvement Project is TDOT's Context Sensitive Solutions Pilot Project, and as such, is based not only on safety, access & mobility, community values, aesthetics & scenic preservation, natural & human environment sensitivity, but also on efficient and effective use of resources. It appears that understanding and appreciation of CSS may have dwindled over time in some quarters and needs reiteration.

I thank you again for TDOT's commitment to provide accurate and well-considered information to the public. I look forward to your response and to meeting you at the Hearing.

Best regards,

Judy Murray

cc: TDOT Commissioner John Schroer
Scott Black
Gary King
Bill Albright
Dr. Barry Ornitz

Old Kingsport cemetery needs assistance

Published June 1st, 2012 2:55 am



Contributed photoThe Pyle Cemetery Association held Decoration Day at the cemetery off Memorial Boulevard this past weekend. The cemetery dates to the 1800s.

KINGSPORT — Pyle Cemetery, one of the oldest cemeteries in Kingsport, needs some help from the living.

The public cemetery, which dates from the 1800s and is located at the end of Trinity Lane, just past Harbor Chapel Road off Memorial Boulevard, needs donations and volunteers for the ongoing upkeep of the property. Members of the Pyle Cemetery Association, which was primarily organized by Elizabeth Shipley Collins, have moved away or died, greatly reducing the number of donations the association now receives, said Marie Nelms, who serves as the secretary-treasurer of the association.

According to a history written by Collins, whose father Oscar F. Shipley was the caretaker in 1928-29, the first person buried in the cemetery was William Hale.

Hale was traveling by stage coach east to west and came to the Preston Place stage stop. When the stage arrived, he was quite ill. The stage driver left him there, and he died on Oct. 3, 1855. Those at the stage stop buried his body in what became Pyle Cemetery. Later, a marble monument was shipped by stage and left at Preston Place (now Exchange Place) to be erected at Hale's grave.

It is believed that the cemetery was named after the William Pyle family who lived just north of the property. Several members of the Pyle family were buried there before the first deed was made.

On Nov. 25, 1903, the Preston heirs, E.W. Preston, Margaret T. Preston Cox, John G. Preston, W.G. Preston, J.J. Stuart and wife Kate G. Preston Stuart, and Gilbert Preston, conveyed to Noah Childress, Charley Childress and John Shoemaker, trustees, and their successors in trust, a tract of land "for the use of a cemetery for burying of the dead," according to Collins' history.

On May 1, 1945, the Preston heirs sold part of the Preston Farm to Preston Hills Associates Inc., to be subdivided and sold as lots or tracts.

On Nov. 26, 1951, Preston Hills Association Inc., made a deed to O.F. Shipley, John Shoemaker, George Spahr, John Ratliff, Ray Taylor, Verlin Peaveler and George E. Bradley, as trustees of Pyle Cemetery, two tracts of land, one containing three-tenths of an acre and the other one-tenth of an acre for use as a way of entering and exiting the property and parking there.

Pyle Cemetery was the only public cemetery in eastern Sullivan County for many years, and during the 1920s and Great Depression was the only cemetery in which people could be buried for free.

Anyone interested in making a donation to or volunteering with the Pyle Cemetery Association may mail a check to Marie Nelms, secretary-treasurer, 2548 Crestwood Drive, Kingsport, Tenn. 37664 or call Nelms at 245-3545.

Published June 1st, 2012 2:55 am

From: Gary King
To: "Roanwoman@aol.com"
Cc: TDOT Comments; Danielle Hagewood
Subject: RE: NEPA Commments on SR 126 Corridor Improvement Project, Part 1 & Part 2
Date: Thursday, January 31, 2013 8:33:58 AM
Attachments: NEPA Commments on SR 126 Corridor Improvement Project Part 1.msg
NEPA Commments on SR 126 Corridor Improvement Project Part 2.msg

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Ms. Murray,

Thank you for your comments. TDOT has received :

Part 1 of your **NEPA Comments on the SR 126/Memorial Boulevard Corridor Improvement Project** and **Appendix A: a map of Kingsport area traffic fatalities from 2008, 2009, and 2010,** 4-lane fatalities noted in red. And
Part 2 **Appendices B (traffic projection graphs), C (November 30, 2012, letter to Steve Allen), and D (Pyle Cemetery article).**

I have attached both of your emails so you can keep this one email for your records. I believe they are small enough that this email will get through to you.

All of your comments will be included in the official hearing transcript of the December 11, 2012 Public Hearing. All the comments and recommendations in the transcript will be addressed and considered as the project proceeds.

If you have any questions, please contact me and I will be happy to assist you.

Thanks,

Gary D. King
Project Management Division
Suite 600, JK Polk Bldg.
Nashville, TN 37243
gary.king@tn.gov
(615) 741-4777

From: Roanwoman@aol.com [mailto:Roanwoman@aol.com]
Sent: Wednesday, January 30, 2013 12:55 PM
To: TDOT Comments
Cc: John Schroer; Gary King; Steve Allen; Tammy Sellers; billalbright@kingsporttn.gov; roanwoman@aol.com
Subject: NEPA Commments on SR 126 Corridor Improvement Project, Part 1

Dear TDOT Comment Recorder,

Attached please find Part 1 of my **NEPA Comments on the SR 126/Memorial Boulevard Corridor Improvement Project** and **Appendix A: a map of Kingsport area traffic fatalities from 2008, 2009, and 2010,** 4-lane fatalities noted in red.

Appendices B, C, and D will be sent under a separate email, designated as "NEPA Comments on SR 126 Corridor Improvement Project, Part 2" in the Subject line.

Many thanks,

Judy Murray
904 Rock City Road
Kingsport, TN 37664

TO: TDOT Public Hearing Project Comment Department DATE: January 30, 2013
FROM: Judy Murray, 804 Rock City Road, Kingsport, TN 37664
SUBJECT: NEPA Official Comments on SR 126/Memorial Boulevard Corridor Improvement Project DEIS and December 11, 2012, Corridor Public Hearing Handout

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Preferred Alternative: Alternative B Modified

Overview: As a citizen with a deep interest and 10-year involvement with the SR 126/Memorial Boulevard Corridor Improvement Project, I appreciate the time and attention TDOT has given to this needed project. I feel that Alternative B Modified demonstrates that TDOT has listened to the community and developed a Context Sensitive alternative tailored to the urban and rural land uses through which it passes. This alternative lessens impacts to historic, cultural, social, environmental, and aesthetic values as compared to the original two A and B Alternatives, while providing safety measures in a relatively cost-effective manner.

We understand that the devil is in the details, and that important refinements will come in the Design Phase, in which we plan to participate, but feel it is important to go on the record at this time with comments directed toward those details. We encourage TDOT's use of creative design flexibility along the full project length to protect community context and promote traffic calming where speed has played a role in crash rates and highway fatalities. Attention to Design Speed and Speed Limits will provide a major built-in safety factor. More rigorous law enforcement is urged.

We are most gratified that TDOT is fully integrating CSS into its business approach and partnering with citizens to "complement the natural beauty, economic vitality and livability of the state," as stated in its Transportation Process Alternatives for Tennessee – Removing Barriers to Smarter Transportation Investments report. We appreciate the opportunity to work with TDOT throughout the project and to have our comments, including **Appendices A, B, C and D**, on the Environmental Phase placed on the record.

NEPA Record Comments on SR 126 Corridor Improvement Project DEIS and Public Hearing Handout:

Safety

- "Speeding…is a factor in almost one-third of all fatal crashes…" in the United States. http://safety.fhwa.dot.gov.speedmgt./
- Speed is a major contributor in crash rates and fatalities on SR 126
    - We request that TDOT adhere to 45 mph Design Speed throughout project length.
    - Maintain a consistent Speed Limit throughout project length, an exceedingly important practice in addressing driver expectancy and promoting safety.
    - Maintain 11-ft travel lanes throughout project length to discourage speeding.
    - The above parameters are particularly important because of numerous road intersections and driveway connections.

- In the interest of safety, we request that TDOT retain its current profile in Section 6 West of Carolina Pottery Drive to I-81. Extending the 4-lane further west will only serve to encourage Central High School teens and others to speed up as they approach the 2-lane section. TDOT's 2003 24-hour Speed Study & Classification field data recorded a vehicle speed of 90+ mph on SR 126's west end 4-lane and ten vehicles traveling west in excess of 70 mph (one 85+ and one 90+ mph) immediately after leaving the 4-lane on the east end. [This request represents a modification in all Build alternatives.]
- While some citizens have pointed out that most of SR 126 accidents occur on the 2-lane section, that's because most of the road is 2-lane. Kingsport data shows that most area road fatalities occur on its 4-lane roads. [See Kingsport 2008, 2009, 2010 fatality map, **Appendix A**]

Capacity

- TDOT is to be acknowledged for recalculating its projections for the 2037 project Target Year. With two exceptions, these projections are in line with trend line data. [Note: The Community Resource Team specified that trend line data be used in making projections.] The exceptions occur at Stations # 202 and #167. [See trend line graphs in **Appendix B**] Because of information presented in a letter to Steve Allen, November 30, 2012 [which see in the **Appendix C** for specifics], we do not feel that the projections pass the Reasonableness Test. We do concur with the 3-laning of the road at these locations in Alternative B Modified, but request that projections at these stations be recalculated for the record using expanded socio-economic data and trend lines, in the event that TDOT select any other alternatives or modification, both now and in the future.

Context Sensitive Solutions

- Historic Values
    - Seek to minimize visual impacts to the Yancey's Tavern property and stone culvert, as well as the traces of Island Road. Eliminating the sidewalk and curb & gutter could serve to reduce the profile by 5 to7 feet. We further question whether 5 feet is needed between the cemetery retaining wall and the cemetery property right-of-way? Every foot removed from the profile will help to decrease the visual impact to the Yancey's Tavern property. These are Feasible and Prudent actions.
    - We await Tammy Sellers' report on the new level of visual impacts in Alternative B Modified and a discussion on the MOA. Comments will be submitted upon review.
    - Pyle Cemetery property (parking grounds) at the end of Trinity Lane could be impacted by a Trinity Lane/Greenspring Circle Connector. This cemetery dates back to 1855 and has historic ties to the Exchange Place, Eastlawn Cemetery, the Spahr family of Yancey's Tavern and immediate area historic sites. [See Kingsport Times News article in **Appendix D**] This connector appeared in both Build Alternatives in the DEIS and in B Modified in the Public Hearings handout, yet there has never been any text describing it or justifying it. With the reduction of profile in B Modified of 20 feet between Harbor Chapel and Old Stage Road, it would appear that there would be less construction impact to

Trinity Lane, eliminating any necessity for this connector which would impact the older residential neighborhood of Preston Woods.

- Community Values
  - East Lawn Cemetery is dearly valued by the community, a fact that has been recognized and taken into consideration by TDOT. Take every action to minimize road profile impacts. See above under Yancey's Tavern.
  - Family home places, churches and businesses exist along 126 in the county, east of Old Stage Road. These connections with the landscape and rural way of life should be respected in the Design Phase, with the intent to minimize the profile wherever possible.

- Environmental & Aesthetic Values
  - Alternative B Modified will have the least impact on Chestnut Ridge and its viewshed, but even B Modified will have severe impacts. We seriously question the need or wisdom in having sidewalks east of Harbor Chapel Road. Where the slopes are steep, we question the feasibility of having ADA-compliant sidewalks, and recommend minimal impacts and profile reduction.

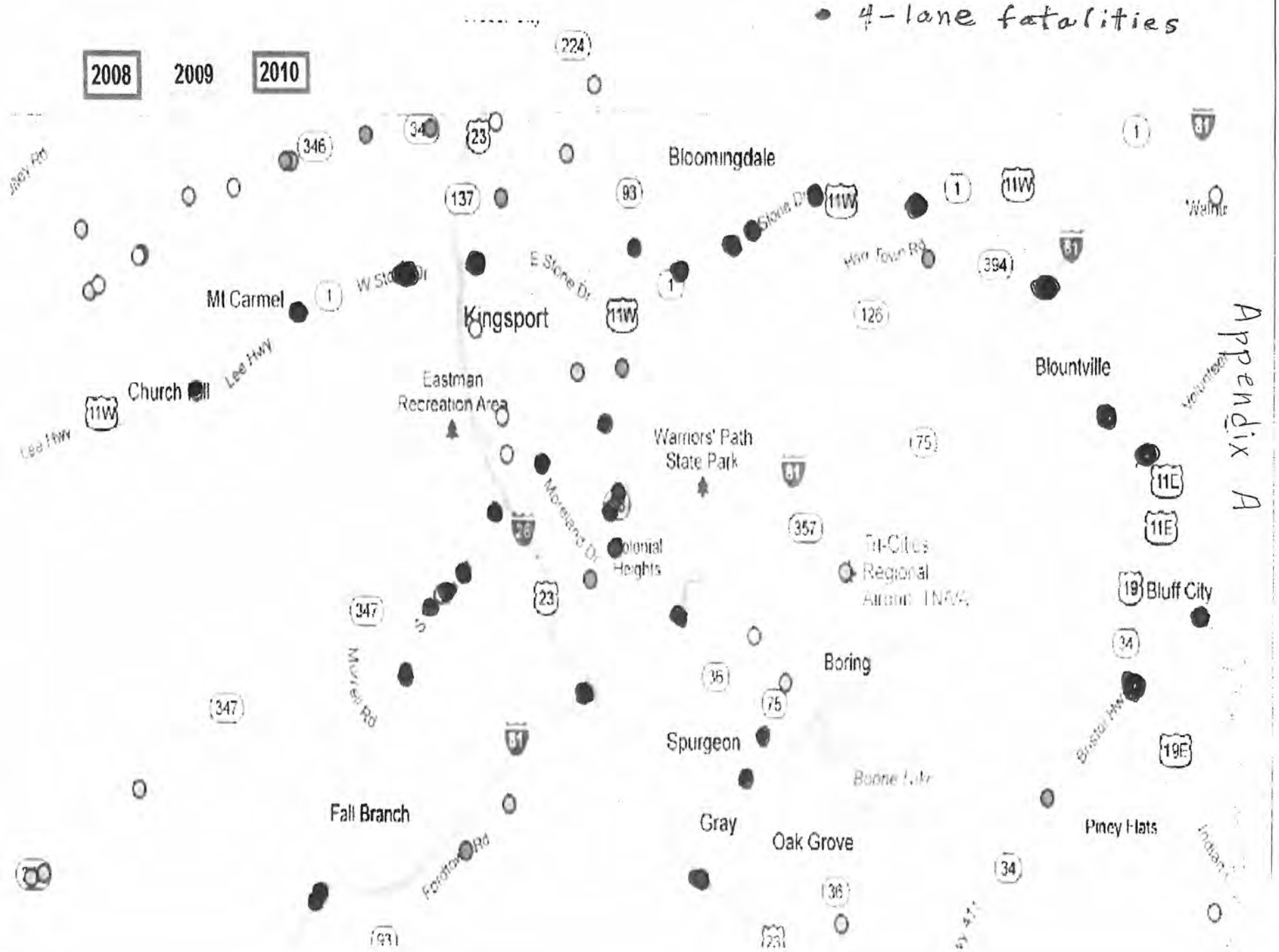
- Noise
  - It has come to my attention that a sound barrier on the Harbor Chapel Road to Old Stage Road section has been requested to provide noise abatement for Preston Woods residents located below the highway. Alternative B Modified will not increase traffic on this section. A sound barrier would provide a huge visual impact, expand the footprint, and add to the cost. I recommend against it.

- Road Profile/Footprint
  - All of the Build Alternatives show 12' lanes and 10' shoulders east of Harrtown Road, while travel lanes west of Harrtown are 11-ft and shoulders 6-ft. wide. This additional footprint width between Harrtown and Carolina Pottery Drive has not been justified, and, in terms of property impacts, safety and costs, is actually contra-indicated. By adhering to standards for the rest of the road, 10 feet could be saved which could be of great value to a homeowner and the state.
  - See Safety comments for additional justification for reducing travel lane width with regard to speeding inducement.

Communication & Transparency

- The community wishes to remain engaged throughout each phase of the project. Please keep the SR 126 web page updated, as well as keeping the public informed via conventional media.
- We look forward to productive future visits and communication with TDOT staff. This serves to strengthen the TDOT and community partnership and promote a successful outcome for this project.

Appendix A



• 4-lane fatalities
2008
2009
2010
Bloomingdale
Kingsport
Mt Carmel
Church Hill
Eastman Recreation Area
Warriors' Path State Park
Colonial Heights
Tri-Cities Regional Airport TNAA
Blountville
Bluff City
Boring
Spurgeon
Gray
Oak Grove
Fall Branch
Piney Flats
Lee Hwy
E Stone Dr
Stone Dr
Moreland Dr
Morrell Rd
Fordtown Rd
Bristol Hwy
Boone Lake

Project Manager
Project Management Division
Tennessee Department of Transportation
Suite 600, James K. Polk Building
505 Deaderick Street
Nashville, Tennessee 37243
gary.king@tn.gov
(615) 741-4777

Sincerely,

John C. Schroer
Commissioner

-----Original Message-----
From: Arthur Ellis [mailto:ffancies@earthlink.net]
Sent: Wednesday, January 30, 2013 8:42 AM
To: TDOT Comments; John Schroer
Subject: Highway 126 Project comments

Dear Commissioner Schroer,

Below are my comments submitted for the record regarding the SR126/Memorial Boulevard Corridor Improvement Project:

Since viewing both the old and new maps and learning more about Alternative B Modified, I would like to address the Trinity Lane/Greenspring Circle Connector. Is this actually a part of the SR 126 federally-funded project? Though it appears in Alternatives A, B and B Modified, I find no text addressing it in the DEIS or the Public Hearings hand-out. What is the justification? The impact to properties? The cost? Greenspring Circle is located in Preston Woods, one of Kingsport's oldest and most desirable neighborhoods. Introducing new construction and possibly a connection to SR 126 would be totally out of context with this community. There are only three homes on Trinity Lane. Routing their traffic onto Amy Ave. is certainly more feasible, context sensitive, and cost-effective than routing it through Greenspring Circle and Preston Woods.

A second issue I wish to address is sidewalks and bicycle lanes which would only serve to increase the footprint of the road in this delicate corridor bordering Preston Woods and across Chestnut Ridge and would not, I believe, serve the general population. In the 36 years I have lived in this area, I have never seen anyone walking along this portion of highway and rarely seen bicyclists. I can't imagine anyone wanting to walk here, or to what destination one might be going. For recreational walking, there are nearby traffic free neighborhoods, sidewalks along Orebank Road and forested walking trails. From a cost/benefit perspective, there would be great expense for little or no gain.

On the eastern end of the project, near the Carolina Pottery intersection, I have concerns about the safety of Central High School students. My understanding is that the divided 4-lane is to be extended west of where it now is and that travel lanes and shoulders between there and Harrtown Road will be wider than for the rest of the road. Knowing that wider roads tend to increase speed and having TDOT data showing excessive speeds already occurring on the east end, it seems that creating a wider, straighter road there would be counter to the community's safety concerns. Therefore, I request that you maintain the existing profile in this area.

I am pleased to feel that TDOT is indeed responding to citizen input and community needs in moving forward with the Highway 126 Project, that safety rather than development is the overriding factor in project planning. The citizens of Kingsport and especially the communities whose properties (and lives) are immediately impacted have been vocal and specific in their input to you, with the expectation that you are listening and adhering to the Context Sensitive model in this project. We treasure our homes and their surroundings and know that safety in this corridor can be increased without jeopardizing the environment we hold dear.

Our interest and involvement in this project as it develops will be ongoing.

Thank you for entering these comments into the record.

Cordially,
Charlotte Ellis

P. O. Box 899
Blountville, TN 37617

423-323-4933

#39532

TN Dept. of Transportation
Commissioner's Office
RECEIVED

TONY SHIPLEY
STATE REPRESENTATIVE
2nd LEGISLATIVE DISTRICT
SULLIVAN COUNTY

House of Representatives
State of Tennessee

NASHVILLE

CHAIR

GOVERNMENT OPERATIONS, HEALTH AND EDUCATION SUBCOMMITTEE

MEMBER OF COMMITTEES

TRANSPORTATION
FISCAL REVIEW BOARD
GOVERNMENT OPERATIONS
REPUBLICAN CAUCUS SECRETARY

January 28, 2013

Commissioner John Schroer
James K. Polk Building, Suite 700
505 Deaderick Street
Nashville, TN 37243-0349

Dear Commissioner,

As state representative for the 2nd district, I have concerns regarding TDOT's proposal for the Memorial Blvd. / SR 126 project.

I am concerned that TDOT's four lane option (A or B) with sidewalks, bike lanes, and 12 ft. grass center median from Harbor Chapel Road to Cooks Valley Road is excessive, more than needed across Chestnut Ridge, and too expensive.

I also have concerns regarding TDOT's modified Alternative B. The section from Harbor Chapel Road to the west of Old Stage Road is essentially the present configuration…which is unsatisfactory. This section is currently known by area residents as the "racetrack" as drivers in the center lane hurry to pass slower traffic to transition into two lanes prior to Old Stage Road. I am very concerned that with the future growth in the Indian Springs area (which is inside the City of Kingsport are growth boundary) that the highway project with the modified Alternative B will have insufficient capacity and become very congested in future years. The local economy will be recovering with new housing developments on vacant land and future economic development in the area.

I would like to request that TDOT evaluate a minimal four lane from Harbor Chapel Road to Cooks Valley Road. This proposal would be a four lane with no grassy median and only a center barrier to separate opposite travel lanes, and minimal paved shoulders. There should be no sidewalks, no bike lanes, and possibly no curb and gutter. This should be an efficient, cost-effective four lane. The section between East Lawn and Cemetery and Yancey's Tavern should be further compressed to a minimal four lane to avoid moving graves or disturbing the historical property. This minimum four lane footprint as described will minimize impact to Chestnut Ridge, the cemetery, and historical property while providing the traffic capacity needed for future years in an effective and different manner that minimizes costs.

Rec'd 1-31-13
CRD

I would like for TDOT to advise me how the footprint (in feet) of a minimal four lane as described compares to the footprint of the proposed TDOT modified Alternative B.

Please note that the Sullivan County Commission passed a resolution favoring a four lane from East Center Street to Interstate 81.

Respectfully Requested,

Tony Shipley

Tony Shipley
State Representative

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
COMMISSIONER'S OFFICE
SUITE 700, JAMES K. POLK BUILDING
505 DEADERICK STREET
NASHVILLE, TENNESSEE 37243-1402
(615) 741-2848

JOHN C. SCHROER
COMMISSIONER

BILL HASLAM
GOVERNOR

February 5, 2013

The Honorable Tony Shipley
State Representative
114 War Memorial Building
Nashville, Tennessee 37243

Dear Representative Shipley:

Thank you for your January 28, 2013 letter stating your concerns regarding the SR-126 (Memorial Blvd.) project in your district.

At the public hearing, the three alternatives presented are in keeping with the common ground recommendations of the Community Resource Team (CRT) with regard to the number of lanes through different areas of the project, and are in line with the latest travel models and traffic projections. TDOT is currently moving forward in the National Environmental Protection Act (NEPA) process by considering all input gathered during the public hearing process which will allow the department to develop the Final Environmental Impact Study (FEIS) document. Your letter will be included in the official public hearing record. There will be opportunities to address actual changes in community needs and actual changes in traffic demand during the design phases of the project. Adding a new alternative now, during the NEPA process, would require TDOT to go back and develop a new Draft Environmental Impact Statement (DEIS) and then hold another public hearing, delaying the project several more years.

Your letter stated some concerns with the alternatives from Harbor Chapel Road to Cooks Valley Road, and requested TDOT to evaluate a minimal four lane with a center barrier separating the opposing travel lanes and with minimal paved shoulders. On this type of roadway that has side road intersections and driveways, it is not appropriate to have a center barrier since the openings in the barrier would create very dangerous obstacles. The currently proposed 6' paved shoulders are about as narrow as can be constructed and still be wide enough to allow vehicles such as school busses and postal carriers to completely pull out of the travel lane. They also allow drivers leaving the travel lane to recover and not run off the side of the road or over-correct and be thrown into oncoming traffic. Adding adequately wide shoulders is one of the most significant safety features of the project. Since safety is a major need of the SR-126 (Memorial Blvd.) project, the suggested minimal four lane would not meet the project's purpose and need.

You are also concerned that Alternate B Modified has the same lane configuration traveling east from Harbor Chapel Road; however, the two eastbound lanes in the alternative will extend approximately 1,000' past the Old Stage Road intersection where they currently end prior to the intersection.

Thank you again for your active involvement and support of the SR-126 (Memorial Blvd.) project. If you have any questions, please contact Mr. Gary King, Project Manager for this project, at 615-741-4777 or by email at gary.king@tn.gov.

Sincerely,

John C. Schroer
Commissioner

JCS:GK

Cc: Mr. Gary King, W/Attach.

#39532
(all the following will receive attachments)

Bc: Mr. Scott Black
Mr. Paul Degges
Mr. Toks Omishakin
Mr. Joseph Galbato
Mr. Chris Christianson
Mr. Ralph Comer
Ms. BJ Doughty
Ms. Danielle Hagewood
Mr. Jim Ozment
Ms. JonnaLeigh Stack
Mr. Matt Barnes
Mr. Doug Gunnels
Ms. Michelle Griggs, W/Original Attach.

From: Gary King
To: "Lois Reedy"
Cc: TDOT Comments; Danielle Hagewood
Subject: RE: SR126(2)
Date: Monday, January 28, 2013 1:12:00 PM

Ms. Reedy,

Thank you for the additional comments and questions below relating to the SR-126 project. They will also be included with all the other comments made at the SR-126 project hearing held December 11, 2012 and become part of the official hearing transcript. TDOT will address all the questions received and will use the transcript comments in the process of selecting the preferred alternative and moving forward with the project.

Thanks again,

Gary D. King
Project Management Division
Suite 600, JK Polk Bldg.
Nashville, TN 37243
gary.king@tn.gov
(615) 741-4777

From: Lois Reedy [mailto:loisreedy@charter.net]
Sent: Sunday, January 27, 2013 5:54 PM
To: Lois Reedy; TDOT Comments; Gary King
Subject: SR126

Dr. La-Vern & Lois Reedy
4509 Stagecoach Rd.
Kingsport, TN 37664

Please enter this concern in the record-

In rereading the reports on the SR126 project, I find no concern shown for the noise problem that a 4 lane road would cause. Surely there is some treatment of this problem considered in the road project. If our trees are removed and the road built closer to our homes, we will have a considerable elevation of the noise level. Why is no consideration given to removing land from the upper level of the road? The should level does not travel uphill as badly. What type of barriers are being considered?

405 Wine Circle
Blountville, TN 37617
January 26, 2013

Public Meeting Comments
Attn: SR 126 Corridor

I commend TDOT for its Alternative B Modified: a cost effective, context sensitive solution for the difficult section of SR 126 from Harbor Chapel Road to Cooks Valley Road. This section includes the beautiful and historically significant Chestnut Ridge, the 1761 Island Road (present day Chestnut Ridge Road), the National Register site Yancey's Tavern including reportedly the last cut stone culvert in the state, and East Lawn Cemetery. The modification of Alternative B from a divided four lane east of Harbor Chapel Road to two travel lanes with center turn lane should give real cost savings and reflects the decreasing traffic counts east of Old Stage Road and moderated growth projections for the area. Alternative B Modified will preserve the character of Chestnut Ridge and eliminate the need to destroy the 1761 Island Road north of SR126. Slight narrowing of the lanes will allow the upgraded SR 126 to fit between the National Register site and the cemetery with no movement of graves and no invasion of the Yancey's Tavern grounds.

Since 2004, my project to save Yancey's Tavern has consumed a quarter million dollars of my resources (no grants, no tax write-offs). This includes buying it (and four acres of the original 5-acre site), restoring it from a 40-year vacancy and 15-year neglect, furnishing it, and maintaining it and its grounds ($6000/year). In view of this I am concerned over the admitted adverse visual impact of more lanes and pavement in front of an 18th century tavern. Ms. Tammy Sellers, TDOT Historic Preservation Supervisor, told me at the public hearing to expect to receive information in February 2013 on this matter. As I expect to remain engaged and follow this as closely as possible, I will appreciate anything received regarding mitigation, retaining walls, etc. I have to hope the Advisory Council on Historic Preservation and the TN State Historic Preservation Officer will insure minimal adverse impact on Yancey's Tavern from the SR 126 project as the Memorandum of Agreement is negotiated.

Sincerely,

Rann Vaulx

Rann Vaulx, Owner Yancey's Tavern

January 25, 2013

Project Meeting Comments
Attn: State Route 126 Corridor
Tennessee Department of Transportation
Suite 700, James K. Polk Building
505 Deaderick Street
Nashville TN 37243-0332

Dear Sirs:

I'm writing to support the **Modified B WITH THE RETAINING WALL** version **without** a Trinity Lane connector of the proposed road improvement.

I vehemently oppose the version without a retaining wall as shown by the dashed orange line that would cut off the existing Trinity Lane. Modified B with the Retaining Wall will have the least impact on the area it passes through and not isolate the public Pyle cemetery at the end of Trinity Lane.

Sincerely,

Jolly Hill
4407 Greenspring Circle
Kingsport TN 37664
JGHHill@aol.com

Please add this to the record.

From: Gary King
Sent: Tuesday, January 22, 2013 9:02 AM
To: 'Jenny Gillespie and Tom Floyd '
Cc: TDOT Comments; Danielle Hagewood
Subject: RE: SR-126 Hearing Comments

Ms. Gillespie & Mr. Floyd,

Thank you for your comments. Your document(attached) was received with your email below. That document will be included with all the other comments made at the SR-126 project hearing held December 11, 2012 and become part of the official hearing transcript. TDOT will use the transcript comments in the process of selecting the preferred alternative and moving forward with the project.

Thanks,

Gary D. King
Project Management Division
Suite 600, JK Polk Bldg.
Nashville, TN 37243
gary.king@tn.gov
(615) 741-4777

-----Original Message-----
From: Jenny Gillespie and Tom Floyd [mailto:greenspring@charter.net]
Sent: Sunday, January 20, 2013 1:46 PM
To: TDOT Comments
Cc: Jenny Gillespie and Tom Floyd ; Gary King
Subject: SR-126 Hearing Comments

To TN Dept of Transportation;

I've attached my comments from the December 11th, 2012 Public Hearing at Sullivan Central HS on State Route 126 Project as a PDF file in this email.
Please notify me if you did not receive this document.

Sincerely,

Jenny Gillespie and Tom Floyd
greenspring@charter.net

Long Island Chapter 3-050-TN
Daughters of the American Revolution
Kingsport, Tennessee

January 18, 2013

Public Hearing Comments
SR 126 (Memorial Boulevard) Corridor Improvement Project
Tennessee Department of Transportation
Suite 700, James K. Polk Building
505 Deaderick Street
Nashville, TN 3723-0332

Dear Sir:

I am requesting the following comments be entered into the Public Hearing record for the SR 126 Highway improvement Project.

Long Island Chapter, National Society Daughters of the American Revolution is concerned with the impact, both visual and physical, of the improvements to Highway 126 at Yancey's Tavern and along Chestnut Ridge. This is an area of historical significance. The section of road that concerns us is from Old Stage Road to Cooks Valley Road. Yancey's Tavern was built in 1779 and is listed on the National Register of Historic Places. We ask that you value and protect Chestnut Ridge. We must afford maximum protection to Yancey's Tavern and East Lawn Cemetery. We ask that you spend tax dollars effectively, efficiently, and respectfully keeping in mind both the motorist and the community.

We would choose Alternative B Modified because zero graves will be impacted, there is less impact to Chestnut Ridge and properties, it is built at a lower cost, there is less four lane construction and, therefore, less chance of speeding. Additionally, we ask that you minimize the profile (footprint) at the Yancey's Tavern/East Lawn location in order to minimize visual impact. Are a five foot sidewalk and two foot curb and gutter necessary at this location?

Sincerely,

Ellen C. Sims

Ellen C. Sims, Regent
Long Island Chapter, NSDAR
505 Forestdale Road
Kingsport, TN 37660

Cc: Rann Vaulx, Darryl Addington, Patrick McIntyre, LaShavio Johnson

From: Gary King <Gary.King@tn.gov>
Sent: Thursday, January 17, 2013 3:13 PM
To: 'anewland@chartertn.net'
Subject: RE: SR126

Mr. & Mrs. Newland,

Thank you for your comments on the SR-126 (Memorial Boulevard) from East Center Street to I-81. Your email below will be included with all the other comments made at the SR-126 project hearing held December 11, 2012 and become part of the official hearing transcript. TDOT will use the transcript comments in the process of selecting the preferred alternative.

Thanks,

Gary D. King
Project Management Division
Suite 600, JK Polk Bldg.
Nashville, TN 37243
gary.king@tn.gov
(615) 741-4777

From: anewland@chartertn.net [mailto:anewland@chartertn.net]
Sent: Friday, January 11, 2013 3:22 PM
To: John Schroer; lt.gov.ron.ramsey@capitol.tn.gov; rep.tony.shipley@capitol.tn.gov; rep.jon.lundberg@capitol.tn.gov; Gary King
Subject: SR126

Iam writing to express my support for the full four-laning of SR126 from Center Street in Kingsport to I-81. I understand that there are some vocal opponents to the project, but if you check you will find that most of the opposition is coming from people who do not live in Indian Springs. The residents of Indian Springs have overwhelmingly voiced their support for the four-lane option each time they were given the opportunity to do so. If you eliminate the bike lanes and sidewalks a four-lane highway can be constructed without adversely affecting East Lawn Cemetery or Yancey Tavern. Please provide us with a modern highway that stimulate growth and provide easier access to grocery stores and hospitals.

Allan and Carol Newland
5301 Lonesome Pine Road
Kingsport, Tn 37664
423-341-2235

Subject: FW: SR126 Corridor
Date: Friday, January 25, 2013 11:50:15 AM

From: TDOT Comments
Sent: Wednesday, January 23, 2013 7:45 AM
To: 'jghhill@aol.com'
Subject: RE: SR126 Corridor

Dear Ms. Hill:

Thank you for your recent email. I hope I can clear up any confusion about the Trinity Lane Connector.

This link, http://www.tdot.state.tn.us/sr126/involvement.shtm, takes you to the Public Involvement page on the SR-126 project website. The six public hearing maps on that page are the most up to date. There is no Trinity Lane Connector(s) currently in Alternate A or Alternate B. Trinity Lane Connectors were shown on the layouts in Appendix D of the DEIS that is also on that website page. Those layouts are out of date.

Regarding Alternate B Modified, there are two options along that part of the project:

- One option would be to use a retaining wall along SR-126 (shown in black). With the retaining wall option, there would not be a Trinity Lane Connector on Alternate B Modified.
- The other option would be to not use a retaining wall. The limits of the area that would be affected without a retaining wall are shown by the dashed orange line and would cut off existing Trinity Lane. The option without a retaining wall would require the Trinity Lane Connector on Alternate B Modified.

There is no Trinity Lane Connector on Alternate A, Alternate B or Alternate B Modified – with a retaining wall. However, there is a Trinity Lane Connector on Alternate B Modified – without a retaining wall.

I hope this helps you so you can send in your comments and recommendations to be considered along with all the comments received from the hearing. Please send in any comments before January 31, 2013.

If you have any questions, I will be happy to answer them.

Sincerely,

Gary D. King

Project Management Division
Suite 600, James K. Polk Bldg.
Nashville, TN 37243
gary.king@tn.gov
(615) 741-4777

From: JollyHill [mailto:jghhill@aol.com]
Sent: Thursday, January 10, 2013 10:50 AM
To: Gary King
Cc: John Schroer
Subject: SR126 Corridor

RE: SR126/Memorial Boulevard and the Trinity Lane Connector

January 10, 2012

Mr. King,

After our phone conversation Monday, January 7, 2013, I was still trying to understand the various plans for the Trinity Lane connector. Looking at Alternate A and B I see no indications that Trinity Lane would be closed but instead directed to Memorial Boulevard by way of Amy Avenue. So why would the Trinity connector be shown on those plans since there is no reason for it? And since Modified Plan B has a smaller profile than either A or B why would there be any road fill or dumping that would close part of Trinity? I would like to have these questions answered before the design phase of the project gets started and if you can't find the answers would you please forward this to someone who could?

Thank you for your attention to these matters.

Jolly Hill
JGHHill@aol.com
4407 Greenspring Circle
Kingsport TN 37664
423-246-7246

From: info@fix126right.com
Sent: Friday, January 11, 2013 7:10 AM
To: Kingsport_MPO Albright; Gary King_(TDOT)
Cc: tony_shipley@yahoo.com; Commisioner Bowery
Subject: [FWD: SR 126 Feedback] (received on 1/10/13)

This feedback was received at the Fix126Right.com website on 1/10/13. It is forwarded to TDOT and Kingsport MPO representing the opinion of a local citizen.

-------- Original Message --------
Subject: SR 126 Feedback
From: pdcastille@charter.net
Date: Thu, January 10, 2013 3:30 pm
To: info@fix126right.com

Fix126Right - Feedback Form Submission

First Name: Paul
Last Name: Castille
Address: 4533 Merrywood Ave.
City: Kingsport
State: TN
Zip: 37664

Frequency of road use: Every day

Email: pdcastille@charter.net

Comments: They already made the right turn from John B Dennis exit ramp worse. It used to have a curve and yield sign. Now you have to stop for the light and make a sharp right turn. They should change it back to the way it was.

From: TDOT Comments
To: "info@fix126right.com"
Cc: Gary King
Subject: RE: Feedback Summary to TDOT and Elected Officials
Date: Thursday, January 17, 2013 8:09:25 AM
Attachments: Feedback to Fix126Right Website d.pdf

Thank you for the comments through the "Fix126Right Website" on SR-126 (Memorial Blvd.) from East Center Street in Kingsport to I-81.

Those comments about the proposed SR-126 improvement project will be included in the official hearing transcript of the December 11, 2012 Public Hearing. All the comments and recommendations in the transcript will be addressed and considered as the project proceeds.

If you have any questions, please contact Gary King, Project Manager for this project, and he will be happy to assist you. His contact information is as follows:

Gary D. King
Project Manager
Project Management Division
Tennessee Department of Transportation
Suite 600, James K. Polk Building
505 Deaderick Street
Nashville, Tennessee 37243
gary.king@tn.gov
(615) 741-4777

Sincerely,

John C. Schroer
Commissioner

From: info@fix126right.com [mailto:info@fix126right.com]
Sent: Thursday, January 10, 2013 6:54 PM
To: John Schroer; Gary King
Cc: lt.gov.ron.ramsey@capitol.tn.gov; tony_shipley@yahoo.com; jon@corporatepr.com; Mayor Godsey; Vice_Mayor Parham; Commisioner Johnson; Commisioner Bowery; Commisioner Gardner; City _Manager Campbell; Gov._Relations Whaley; Kingsport_MPO Albright; Mayor Phillips
Subject: Feedback Summary to TDOT and Elected Officials

Attached is a summary of the feedback to the Fix126 website received from 12/7/12 thru 12/31/12. **Note that 57% of respondents favor a 4-lane solution, 17% a 2-lane, 13% a 3-lane, and 13% "Do Nothing".** With the ongoing large number of fatalities and heavy school traffic, doing nothing or putting shoulders on the existing outdated highway are not credible solutions to the Memorial Blvd./SR 126 rebuild. The 57% of respondents who favor a 4-lane is about the same percentage that favored a 4-lane solution in TDOT sanctioned community

votes in 2004-2005.

Feedback indicates a high level of frustration with TDOT and elected officials after many years of delay. After two additional fatalities in 2012 and 10 years of talk, residents are anxious for the treacherous highway to be fixed without further delay. Scott Mendenhall, husband of the March, 4, 2012 SR 126 fatality, asked TDOT representatives at the environmental feedback session ... **TDOT has been talking about fixing Highway 126 for the last 10 years, and my wife is dead. Why has TDOT not done something before now?**

Following is feedback from a resident who lives along SR 126:

> **"Something needs to be done with this road NOW.** The part of 126 Where i live It\'s so hard for me and my husband to get out of the driveway every morning. Im scared to live and drive on this road I can\'t let my 2 year old play in her own frond yard. In Nov. on thursday thur sunday there was 4 wrecks everyday and one was a dear friend of mine who lost her husband a COP.**I just really hope we all can do something about this road! PLEASE." Crystal Dotts, 5372 Memorial Blvd, Kingsport (12/07/12)**

Three additional comments include:

> "126 should be 4-laned from Center Street to I-81 to encourage businesses to locate in this area. When I moved to Indian Springs in 1974 there was a doctor, dentist, auto parts store, restaurant, and later a full service grocery store; all gone now and I believe due to lack of improvements to 126. Improved safety is the main concern, but improved business conditions should also be considered."
> **Allan Newland, Lonesome Pine Rd., Kingsport**

> "I think we need a 4 lane road all the way. Not only will it serve future needs but will be much safer than any other way. Please \"Do Not\" put in a 2, 3, and 4 lane highway in only 8 miles of distance. We have had enough wrecks and enough people killed on this road already." **John Townsend, Pettyjohn Rd., Kingsport**

> "PLEASE fix this road to 4 lane before other people are killed you can\'t put a price on someone\'s life. Thank You." **Kimberly Strouth, Memorial Blvd. Kingsport**

This feedback summary is submitted for TDOT and elected officials consideration.

Respectfully ...

Input Summary for Fix126Right Website (12/07/12 thru 12/31/12)

	Name	Address
	Favor 4-lane / long term solution (57%)	
1	T. Taylor	4822 Memorial Blvd., Kingsport
2	R. Frentz	587 Masengill Road, Blountville
3	D. Easley	3951 Hwy 126, Blountville
4	P. Bridges	702 Wedgewood Circle, Kingsport
5	J. Hurt	313 Lakecrest Drive, Kingsport
6	A. Harding	282 Blackburn Rd, Blountville
7	K. Johnston	405 Kilkenny Rd., Kingsport
8	K. Strouth	5013 Memorial Blvd., Kingsport
9	C. Lawson	294 Island Road, Kingsport
10	J. Nichols	104 Cedar Brook Court, Kingsport
11	J. Townsend	227 Pettyjohn Rd, Kingsport
12	D. Fleming	149 Rose Trace Ct. Blountville
13	A. Newland	5301 Lonesome Pine Rd., Kingsport
	Other	
1	Property owner with question for TDOT (A. Price, 108 Shuler Dr)	
1	Requested not to participate … not included	
1	Comments unclear … not included	
1	**Something needs to be done with this road NOW. …PLEASE.** C. Dotts, 5372 Memorial Blvd, Kingsport (12/07/12)	

	Name	Address
	Favor 2-lane (17%)	
1	D. York	5121 Foxfire Trl, Kingsport
2	L. Landis	5114 Springview St., Kingsport
3	C. Austin	4810 Lake Park Dr., Kingsport
4	C. Dunn	2356 Woodridge Ave, Kingsport
	Favor 3-lane (13%)	
1	A. Dixon	866 Harr Town Rd., Blountville
2	J. Pollak	217 Oneida Ct., Kingsport
3	R. English	5236 Memorial Blvd., Kingsport
	Do Nothing (13%)	
1	K. Elton	4841 Peers, Kingsport
2	J. Trent	537 Pleasant Hills Rd, Kingsport
3	P. Chapman	4592 Old Stage Rd. Kingsport

Subject: FW: 4 Lane 126 Is My Choice To Best Fix 126
Date: Friday, January 25, 2013 12:30:22 PM

From: TDOT Comments
Sent: Thursday, January 17, 2013 8:39 AM
To: 'rkjandgloria@gmail.com'
Cc: Gary King
Subject: RE: 4 Lane 126 Is My Choice To Best Fix 126

Dear Mr. Johnston:

Thank you for your comments on SR-126 (Memorial Blvd.) from East Center Street in Kingsport to I-81.

Your comments about the proposed SR-126 improvement project will be included in the official hearing transcript of the December 11, 2012 Public Hearing. All the comments and recommendations in the transcript will be addressed and considered as the project proceeds.

If you have any questions, please contact Gary King, Project Manager for this project, and he will be happy to assist you. His contact information is as follows:

Gary D. King
Project Manager
Project Management Division
Tennessee Department of Transportation
Suite 600, James K. Polk Building
505 Deaderick Street
Nashville, Tennessee 37243
gary.king@tn.gov
(615) 741-4777

Sincerely,

John C. Schroer
Commissioner

From: KEITH JOHNSTON [mailto:rkjandgloria@gmail.com]
Sent: Wednesday, January 09, 2013 7:01 PM
To: John Schroer; lt.gov.ron.ramsey@capitol.tn.gov; rep.tony.shipley@capitol.tn.gov; rep.jon.lundberg@capitol.tn.gov; Gary King; info@fix126right.com
Subject: 4 Lane 126 Is My Choice To Best Fix 126

Gentlemen:

I have lived in Indian Springs community for over 45 years and lived with the daily dangers of a poorly designed road. Thankfully, I have not had any major accidents thus far. I drove it daily to work and now use it 4-10 times a week. I hope that you, as my advocates, will push to get this problem road improved in the immediate future so my 4 grandchildren and my 2 children can drive home and to work on safer roads.

Thank you for allowing my input.

R Keith Johnston
405 Kilkenny Rd
Kingsport, Tn 37664

rkjandgloria@gmail.com

#39277

PUBLIC HEARING COMMENTS
SR 126 (Memorial Blvd) Corridor Improvement Project

TN Dept. of ... tion
Commissioner's ...ce
RECEIVED
JAN ... 2013

Terry Larkins
4912 Memorial Blvd.
Kingsport, TN 37664
terlark@chartertn.net
423-367-5803

Jan. 07, 2013

To: FHWA & TDOT Decision Makers,

As a resident with accession to state highway 126 for several years and have wittiness several accidents over that time. It seem to me this project has a high cost overkill attached with no real future value except to the city of Kingsport. Referring to improvements from center street to old stage road where no real safety improvement would be met, and would cut the cost of this project a great deal.

As a tax payer I hate waste and short term planning causes waste, like painting road lines, cutting center rumble strips adding reflector, then a few month later come back and repave having to cut rumble strips and reflector, and paint again

However improvements from Old Stage Road to Interstate 81 are greatly needed and should have been started 2 years ago, wither you drop Center Street to Old Stage Road or not.

Please do this project right! Before the death and accident rate rises again.

Sincerely: Terry Larkins

PS: Myself, I have had two separate accident just turning into my driveway hit in the rear twice, once in my car (Morning), once in my truck (Evening) about a year apart.

RECEIVED
JAN 10 2012
CONSTITUENT SERVICES

#39192

Commissi...
RECEIV...

December 20, 2012

To Whom It May Concern:

We are writing concerning the renovations to Highway 126 from Carolina Pottery to Center Street in Kingsport. Our home is at 5222 highway 126 and we have concerns about the signage on the Blountville end where the road reduces to a 2 lane highway from the 4 lane.

On numerous occasions our vehicle has been almost hit because there are no arrows on the road to indicate what lane that you should be in when the road reduces to the 2 lane. We would like to see the arrows painted on the road way as they are on the Kingsport end and better signage put up as well.

I also would like to voice my concerns on the road itself. I feel that should the road be 4 lanes it would only cause the road to become a racetrack. As I have noticed on many occasions, students leaving the school at day's end tend to speed on the highway. I feel an extra lane on each end would promote this thus causing more accidents than being a fix for the problem.

The widened shoulders and lanes are a very good idea, but I feel that we have no need for a bike lane. We only see one runner on our end of the road way and have never seen a bike rider.

Thank you for reading my comments.

Sincerely,

Blanche Faye Fillers

Blanche Faye Fillers
5222 Hwy 126
Blountville TN 37617

RECEIVED
JAN 02 2012
CONSTITUENT SERVICES

From: Willis Wagner
To: Gary King
Subject: Route 126
Date: Wednesday, December 19, 2012 1:26:55 PM

I really appreciate your most recent response to me. I realize that sometime I may have been a nag to you guys. But I sincerely hope we can do better with this road than is being discussed in our paper. Our politicians have failed us in the past on this road. You (TDOT)should have been asked years ago to consider this project. It just seems to me that narrowing of any roadway over and over again is danderous especially with the speeds people try to maintain today. I have attended most all of your previous meetings but due to health reasons I was unable to this time. Please, please do your best to give us a four lane highway.

Have a nice holiday.

James Wagner
37664

From: Gary King
To: "Scott Williams"
Cc: TDOT Comments; Danielle Hagewood
Subject: RE: SR 126 improvement project in Sullivan county
Date: Friday, December 14, 2012 4:51:51 PM

Mr. Williams,

Thank you for your comments. Your email below will be included with all the other comments made at the SR-126 project hearing held December 11, 2012 and become part of the official hearing transcript. TDOT will use the transcript comments in the process of selecting the preferred alternative.

Thanks,

Gary D. King
Project Management Division
Suite 600, JK Polk Bldg.
Nashville, TN 37243
gary.king@tn.gov
(615) 741-4777

-----Original Message-----
From: Scott Williams [mailto:smwill423@aol.com]
Sent: Friday, December 14, 2012 8:52 AM
To: TDOT Comments
Subject: SR 126 improvement project in Sullivan county

Greetings,
I would think the most practical solution is to determine where the accidents, especially fatal ones, have already occurred and if clustered, concentrate on solving correctable influences attributable to the road itself in those areas since you really can't eliminate enough human error to matter significantly.
More asphalt, etc. just means more upkeep in a time when taxpayers are already struggling, and straighter, wider roads usually means increased driver speeding, distractions from cell phone use and other factors that may lead to even more accidents than currently occurring.

Sincerely,
Scott Williams, Sullivan county resident

Dear Mr. Wagner,

Thank you for your email concerning the proposed improvements to SR-126 (memorial Boulevard) project from East Center Street to I-81 (PIN 105467.00. Per your request, I have forwarded your email to Commissioner Schroer and have been asked to respond to your questions.
The project "build" alternatives that were presented at the December 11, 2012 Public Hearings closely follow the recommendations made by the Community Resource Team. The main purpose and need for this project is safety. The Draft Environmental Impact Statement (DEIS) studied a "no build" alternative and two "build" alternatives. One "build" alternative has a 4-lane roadway in front of the Yancey's Tavern property and requires numerous grave relocations in the East Lawn Cemetery. Just past these properties the roadway transitions to 3-lanes at Cooks Valley Road. The other "build" alternative transitions to a 3-lane roadway just prior to the cemetery. It requires fewer grave relocations, but they are still numerous. An additional "build" alternative was presented at the Public Hearing. It has a 3-lane roadway in front of the Yancey's Tavern property and requires land acquisition from the cemetery but no grave relocations. This alternative has retaining walls on both sides of the roadway similar to your recommendation. It also has shoulders on both sides of the roadway which are a very important safety feature of this project.

After review of the public comments including your recommendations, the Department may further evaluate the possibility of using a reduced 4 lane roadway through this section as well as other options.

Everyone's input is important in the development of a project. I hope you were able to attend one of the project public hearings on December 11, 2011.

Thanks,

Gary D. King
Project Manager
TDOT, Project Management Division
Suite 600, JK Polk Bldg.

TN Dept. of Transportation
Commissioner's Office
RECEIVED

December 12, 2012

Tennessee Department of Transportation
Suite 700
James K. Polk Building
505 Deaderick Street
Nashville, TN 37243

Re: Comments State Route 126

Dear Sir:

I am very concerned about the most recent design you are proposing on State Route 126. I strongly recommend that you make every effort to start on Center Street and stop at Interstate 81 with a four lane road that includes 10 foot shoulders on both sides first. You simply cannot build a road as you have proposed with all of these lane changes and expect the general public to believe that you have their safety in mind. That "dog will not honestly hunt" out in the county

First of all I believe that as a general statement you are dumping a lot of funds in downtown Kingsport that is desperately needed to provide safety out in the county. We need the money you are spending on sidewalks and grass medians and other wasteful items to go toward constructing a safe road in the county. Not to mention what the additional right-of-way downtown will cost versus the same kind of land out in the county to make room for all of these items. Grass medians and sidewalks on both sides is a good example. Truck lane leaving Kingsport and no such thing on the east side of Chestnut Ridge is another. It is very hard to believe that your alignment must take the volunteer fire department building for instance with all of the public property that now exists at that location. What is the reason for that?

The Sullivan County Commission has gone on record recommending a four lane highway from one end to the other. Don't that vote count for anything? We elected the majority of most of these officials and had nothing to do with electing the City officials.

We have lived here for about twenty- three years now and believe that the public record will show that nearly all of the eighteen people who were killed on this death trap were on top of or east of Chestnut Ridge. Some small children and mothers that I am sure died east of Chestnut Ridge.

Last I still recommend that smaller projects be awarded as soon as possible rather than wait until the whole 100 million dollars is available by starting somewhere between the top of Chestnut Ridge and Interstate 81. That is where the safety problem exist now. Compared to the safety problem out here (Indian Springs) Kingsport is doing just fine.

I sincerely and honestly want Kingsport to continue their progressive ways but please do not allocate money to them that is desperately needed to provide safety to our community first. Multiple sidewalks can be funded later for example. Grass medians or any other extraordinary benefits included in this plan can wait.

Thank you for providing this additional comment period and I sincerely hope that my recommendations will be considered on the final plans of this much needed project. Safety must come first through out the entire project and we have waited far to long.

Sincerely,

James W. Wagner

cc: Governor Haslam

From: Gary King
To: "Kilgore, Stacy S"
Cc: TDOT Comments; Danielle Hagewood
Subject: RE: Hwy 126
Date: Friday, December 14, 2012 4:32:27 PM

Stacy Kilgore,

Thank you for your comments. Your email below will be included with all the other comments made at the SR-126 project hearing held December 11, 2012 and become part of the official hearing transcript. TDOT will use the transcript comments in the process of selecting the preferred alternative.

Thanks,

Gary D. King
Project Management Division
Suite 600, JK Polk Bldg.
Nashville, TN 37243
gary.king@tn.gov
(615) 741-4777

From: Kilgore, Stacy S [mailto:skilgore@eastman.com]
Sent: Wednesday, December 12, 2012 8:11 AM
To: TDOT Comments
Cc: Kilgore, Stacy S
Subject: FW: Hwy 126

I don't think it is the road, I think a lot of it is the drivers on the road. Some of then fly on the road and some of them do 10 to 20 miles under the speed limit. If people would just do the speed limit that would probably solve a lot of the problems. That is what I think causes a lot of the wrecks. That last wreck where it kill the off-duty deputy was not the roads fault at all. I think if you put in a four lane road they will be more wrecks than before because people will probably go faster on the four lane than they would on the two lane road.

Stacy Kilgore

-----Original Message-----
From: apryce@ymail.com [mailto:apryce@ymail.com]
Sent: Wednesday, December 12, 2012 7:52 AM
To: John Schroer; lt.gov.ron.ramsey@capitol.tn.gov; rep.tony.shipley@capitol.tn.gov; rep.jon.lundberg@capitol.tn.gov; info@fix126right.com
Subject: SR 126 Feedback to TDOT

Fix126Right - Feedback Form Submission

First Name: al
Last Name: price
Address: 108 shuler dr
City: kingsport
State: tn
Zip: 37664

Frequency of road use: everyday

Email: apryce@ymail.com

Comments: i live and own land rigth off of 126 on shuler dr ,will my land be affecetd in the road project,thank you for your time

-----Original Message-----
From: lkilgore@trisummitbank.com [mailto:lkilgore@trisummitbank.com]
Sent: Wednesday, December 12, 2012 12:25 PM
To: John Schroer; lt.gov.ron.ramsey@capitol.tn.gov; rep.tony.shipley@capitol.tn.gov; rep.jon.lundberg@capitol.tn.gov; info@fix126right.com
Subject: SR 126 Feedback to TDOT

Fix126Right - Feedback Form Submission

First Name: Lesley
Last Name: Kilgore
Address: 209 Fall Creek Road
City: Blountville
State: TN
Zip: 37617

Frequency of road use: every day

Email: lkilgore@trisummitbank.com

Comments: The road does not kill people, people driving recklessly kill people. I believe if the speed limit was enforced, it would help with driver\'s safety. I really don\'t understand why it was lowered from 50 to 45. You still have people that do 20 miles or more below the speed limit with traffic backed up for miles or people doing 10-15 miles or more over. I agree that added shoulders would be a great benefit to this road and more street lights. That might help with people running off the edge of the road and overcorrecting. I think it is ridiculous to want to add bike and walking lanes. A main highway is not the place for pedestrians and bicycles. It\'s a complete waste of our tax money. I do not agree with touching the graves or Yancey\'s Tavern. I think that is disrespectful to the deceased and their families. If you ever travel 126 in the 5 pm traffic where the road goes from a 3 lane to a 2 lane, you can see that would be a complete disaster to add sections of the road that are 3-4 lanes and back to 2. People would be driving even more recklessly than ever to pass everyone to get in the front and cause more wrecks and fatalities. How many wrecks and fatalities happen on Stone Dr (Hwy 11W), I-81, I-26, 394? A redlight was added to 11W at 394. There are still lots of wrecks there. There are a lot more things that we could spend our tax dollars on that people would benefit from like our schools. Also, with the deer population as overpopulated as it is, I think something could be done about that. There are deer everywhere on 126. That could kill someone too. Allow people to hunt in the area with bows to help weed them out some. Thanks for listening and good luck :) May God bless you!!

-----Original Message-----
From: arnoldjr60@charter.net [mailto:arnoldjr60@charter.net]
Sent: Wednesday, December 12, 2012 2:54 PM
To: John Schroer; lt.gov.ron.ramsey@capitol.tn.gov; rep.tony.shipley@capitol.tn.gov; rep.jon.lundberg@capitol.tn.gov; info@fix126right.com
Subject: SR 126 Feedback to TDOT

Fix126Right - Feedback Form Submission

First Name: Arnold
Last Name: Dixon
Address: 866 Harr Town Rd.
City: Blountville
State: TN
Zip: 37617

Frequency of road use: Usually more than once a day.

Email: arnoldjr60@charter.net

Comments: I believe 2 lanes with a 3rd lane for turning would be efficient for several years. However if it isn\'t patrolled by police officers and/or cameras implemented then there will still be fatalities.

From: Gary King
To: "Carl Smith"
Cc: TDOT Comments; Danielle Hagewood
Subject: RE: SR126 Corridor Improvement Project
Date: Friday, December 14, 2012 4:04:53 PM

Mr. Smith,

Thank you for your comments. Your email below will be included with all the other comments made at the SR-126 project hearing held December 11, 2012 and become part of the official hearing transcript. TDOT will use the transcript comments in the process of selecting the preferred alternative.

Thanks,

Gary D. King
Project Manager
TDOT, Project Management Division
Suite 600, JK Polk Bldg.
Nashville, TN 37243
gary.king@tn.gov
(615) 741-4777

From: Carl Smith [mailto:aa4h@charter.net]
Sent: Wednesday, December 12, 2012 11:01 AM
To: TDOT Comments
Subject: SR126 Corridor Improvement Project

Due to illness, I was unable to attend the SR126 Corridor Improvement Project meeting held in Sullivan County on Tuesday December 11, 2012; but, according to our local newspaper, TDOT will still accept my preference for one of the options and will include my comments for the public record.

TDOT offered a new modified plan "B" with the four-lane portion ending at Hawthorne Street. This option comes the closest to meeting the Context Sensitive Solutions criteria and is my preference from the options offered. Please add my "vote" for this option. Also I want to thank the Commissioner for keeping his word about not taking graves at East Lawn Cemetery or impacting the Yancey Tavern property.

Carl W. Smith, Jr.
5971 Hwy 126
Blountville, TN
37617-3959

From:	Gary King
To:	"Jones, Vickie H"
Cc:	TDOT Comments; Danielle Hagewood
Subject:	RE: SR 126 Comments
Date:	Friday, December 14, 2012 4:29:00 PM

Ms. Jones,

Thank you for your comments. Your email below will be included with all the other comments made at the SR-126 project hearing held December 11, 2012 and become part of the official hearing transcript. TDOT will use the transcript comments in the process of selecting the preferred alternative.

Thanks,

Gary D. King
Project Management Division
Suite 600, JK Polk Bldg.
Nashville, TN 37243
gary.king@tn.gov
(615) 741-4777

From: Jones, Vickie H [mailto:vjones@eastman.com]
Sent: Wednesday, December 12, 2012 11:49 AM
To: TDOT Comments
Subject: SR 126 Comments

I was raised in the Indian Springs community and have travelled SR 126 my whole life. My parents still live in Indian Springs and I am concerned for their driving safety during the upcoming construction which will last, I am sure, several years.

My 17 year old son was killed in an accident on SR 126 in December, 2005. He is buried, along with my brother, at East Lawn Cemetery. I am not in favor of construction that would affect ANY graves at East Lawn.

I do not feel widening the road is the answer to everyone's issues. Yes, the road is heavily travelled; however, if more could be done to control cell phone usage and texting during driving I think that would be a huge help.

The issue, in my opinion, is not the road. It is the multi-tasking that most drivers – including my son - seem to think they must do when they are behind the wheel.

Thank you for your consideration.

Vickie Jones
Eastman Chemical Company
Phone 423-229-1748
Fax 423-229-1194

From: Gary King
To: "Jan Hall"
Cc: TDOT Comments; Danielle Hagewood
Subject: RE: SR126 (Memorial Boulevard)
Date: Friday, December 14, 2012 4:34:32 PM

Ms. Hall,

Thank you for your comments. Your email below will be included with all the other comments made at the SR-126 project hearing held December 11, 2012 and become part of the official hearing transcript. TDOT will use the transcript comments in the process of selecting the preferred alternative.

Thanks,

Gary D. King
Project Management Division
Suite 600, JK Polk Bldg.
Nashville, TN 37243
gary.king@tn.gov
(615) 741-4777

From: Jan Hall [mailto:sassypoo@charter.net]
Sent: Wednesday, December 12, 2012 1:39 PM
To: TDOT Comments
Cc: Billy Ray Dotson; John W Dotson; Tom & Pearl Dotson; Wanda Adams; Wanda G Adams - Work (E-mail)
Subject: SR126 (Memorial Boulevard)

My mom and dad are buried in East Lawn Cemetery a few sites over from SR 126.
I do not want them moved!

The people who speed and drive like they own the road needs to slow down or be given tickets. Maybe if you hit them in the pocket book or take away their driving rights they will get the message.

DO NOT GO WITH THE PLAN TO MOVE SO MANY OF OUR LOVED ONE FINAL RESTING PLACE.

Janrose Dotson Hall

To: John W Dotson
Cc: TDOT Comments; Danielle Hagewood
Subject: RE: SR126 (Memorial Boulevard)

Mr. Dotson,

Thank you for your comments. Your email below will be included with all the other comments made at the SR-126 project hearing held December 11, 2012 and become part of the official hearing transcript. TDOT will use the transcript comments in the process of selecting the preferred alternative.

Thanks,

Gary D. King
Project Management Division
Suite 600, JK Polk Bldg.
Nashville, TN 37243
gary.king@tn.gov
(615) 741-4777

From: John W Dotson [mailto:jdotson7@gmail.com]
Sent: Wednesday, December 12, 2012 4:55 PM
To: TDOT Comments
Subject: SR126 (Memorial Boulevard)

In regard to the plans to improve SR126 Memorial Boulevard along East Lawn Cemetery. My parents Woodrow and Evelyn Dotson are buried in East Lawn close to SR126 and I do not want them moved. Please find a way to improve the road without disturbing the resting place of my and other loved ones.

John W Dotson

From: Gary King
To: "CDean@moog.com"
Cc: TDOT Comments; Danielle Hagewood
Subject: RE: SR 126 response
Date: Friday, December 14, 2012 4:15:26 PM
Attachments: SR 126.doc

Ms. Dean,

Thank you for your comments. Your email with the attached document will be included with all the other comments made at the SR-126 project hearing held December 11, 2012 and become part of the official hearing transcript. TDOT will use the transcript comments in the process of selecting the preferred alternative.

Thanks,

Gary D. King
Project Management Division
Suite 600, JK Polk Bldg.
Nashville, TN 37243
gary.king@tn.gov
(615) 741-4777

From: CDean@moog.com [mailto:CDean@moog.com]
Sent: Wednesday, December 12, 2012 1:11 PM
To: TDOT Comments
Subject: SR 126 response

Thank you...Cathy

Cathy Dean

In August 1970, a little 12-yr old girl's life was changed forever; as she stood at the graveside of her beloved mama....who had just succumbed to a 4-year battle with breast cancer.

A mere 6 years later, that same girl stood at the graveside of her grandfather with whom she made her home after her mother's death. Her grandfather was a WWI veteran. He served in France and survived the affects of mustard gas to live to the age of 83. Three months after her grandfather's passing, a beloved aunt who treated this girl as the daughter she never had, was also buried.

My name is Cathy Odham Dean, and before the age of 18, I lost 3 very precious loved ones. In the early 1990's, my Grandmother, who finished raising me, who helped me cope with a life full of losses, who guided me into adulthood...who literally saved my life....is also buried along with the rest of my family in the Garden of Devotion at East Lawn Cemetery.

I was taught that a cemetery was Sacred Ground. I was taught to respect both gravesites and markers. When the Todd family bought cemetery plots, they were assured that their final resting place on this earth would be secure.

I understand this meeting is a hearing to decide if my family, along with so many others who are laid to rest in the Garden of Devotion, are to be exhumed and relocated....all in the name of progress.

In the name of progress: Was that not the same reason this nation's Native American's Sacred Burial Grounds were destroyed? Is today's progress going to be as dishonorable as was our country's history? I understand an historical dwelling, Yancy's Tavern, is to remain undisturbed while sacred gravesites are the alternative.

Who exactly is pushing for the proposed road expansion? Is it for homes? Both the Indian Springs and Gunning's communities have been established for a number of years. The residents of those communities, as well as the Fall Creek community, have traveled these roads for decades without issue. If this is for newer, more costly homes, were those property owners not aware of the road condition prior to their move? There are other routes available if they do not like the Chestnut Ridge drive.

I submit that the route which SR-126 project encompasses be re-evaluated. With the projected millions of dollars in cost for right of way acquisition and construction costs, why not build an overpass and not disturb either the cemetery or the historical dwelling across the road if the project passes?

If the project passes....You are asking me to relive the burial of my family...of my Mama (Hazel Lou Todd Odham), my Grandparents (William Lee and Dorothy Hazel Todd), and my Aunt (Martha Jane Todd). Quite honestly, I cannot bear the thought of burying my Mama again. If that is required, I will stand at her grave again, 42 years later, as the same little 12-year old girl who lost her Mama in 1970. I cannot bear the thought of standing at another gravesite for my Grandparents, or my Aunt.

I am asking, no BEGGING, that you reconsider the SR126 proposal. Many lives will be affected, both living and dead.

Thank you for your time.

Cathy Odham Dean 1013 Cedar Hills Drive; Church Hill, TN 37642 423-357-4403

From: Gary King
To: "Lisa Burchell"
Cc: TDOT Comments; Danielle Hagewood
Subject: RE: SR126 improvement project
Date: Friday, December 14, 2012 4:25:57 PM

Ms. Burchell,

Thank you for your comments. Your email below will be included with all the other comments made at the SR-126 project hearing held December 11, 2012 and become part of the official hearing transcript. TDOT will use the transcript comments in the process of selecting the preferred alternative.

Thanks,

Gary D. King
Project Management Division
Suite 600, JK Polk Bldg.
Nashville, TN 37243
gary.king@tn.gov
(615) 741-4777

From: Lisa Burchell [mailto:burchell.lisa@yahoo.com]
Sent: Wednesday, December 12, 2012 9:02 AM
To: TDOT Comments
Subject: SR126 improvement project

To whom it may concern: MY father lives on 126;I live just off 126 at cooks valley rd next to cementary. Would it not make much more sense to consider putting street lights all the way from kpt.city limit sign to interstate 81 for better visibility? Please also consider placing red lights at various locations up 126 cause belive me they would be of great benefit. Most of the time it takes 10 minutes to get out at my intersection. Red lights should be considered for the following locations: cooks valley where the caution light is ,old island road next to cherry point; hill road where the caution light is;harrtown road and at carolina pottery road. Just like several have said its the people that drive the road ,its very frustrating when you are going to pull out and you can see for half a mile in either direction and nothing is coming before you can get up to speed you look in your rearview and someone is all over your bumper and all you can see is there hood.Police patrol by city,county,and t.h.p. should be more visible on a daily basis .T.H.P. the last work or so worked 126 on motorcycles and were seen writing quite a few tickets I am sure that they got a lot of speeders that day. People should not have to loose their homes and such for so called road improvements when other things can be attempted first without any displacement of homes or anything else and 3 laning or 4 laning would only allow for increaseed truck traffic and increase speeding which we do not need. Sure there have been numerious accidents on this section of roadway but quite a bit of those were due to speeding, driver impairment, and sun we cannot do anything about the sun but something can be done about speeding and driver impairment. Thank you for your time in hopefully reading
this. Sincerely,
lisa burchell

State Route 126 Corridor Improvement Project
December 11, 2012 Public Hearing
Sullivan Central HS
Public Comment Form

Name: Thomas Floyd and Jenny Gillespie
Address: 4409 Green Spring Circle, Kingsport, TN 37664
County of Residence: Sullivan
Phone Number: 423-245-2596
E-mail: greenspring@charter.net

Of the alternatives presented which alternative do you prefer:

- No Build (no improvement to existing roadway)

Please list reasons for choosing your preferred alternative.

- Lower value of my property. Alternative B Modified will build a retaining wall on my property and take a large section of my back yard.
- Increased noise due to higher volume of traffic and higher speeds.
- State plans to take my private driveway and make it a public road. (Green Spring connector to Trinity). Potential widening of Trinity Lane which would further impact value of my property by decreasing the size of our front yard and increase through traffic.
- Increased run-off from Rt. 126 will flood my property. Currently drainage from road is already a problem. State should also correct the poor run-off that exists on Trinity Lane.

What issues/concerns do you have about the proposed Build Alternatives and are there any changes you would make to the project? If so, please explain.

- Alternative B Modified was publicly proposed to respond to cemetery impact concerns. Additional changes were included bordering my property, which is miles away from the cemetery. No public explanation was given leaving the impression that more affluent homeowners on southern side of Rt. 126 (Trinity to Old Stage leg) influenced the movement of road more to the north. I suspect that building a large retaining wall on northern downward slope will be more costly than cutting into the slope.
- In alternative B modified the state plans to use my private driveway off Green Spring Circle as a connector to Trinity Lane. Trinity Lane was originally connected to Stage Coach Road on the eastern side of cemetery near 4409 Stagecoach Rd. This previously used roadway would be a more direct route to Trinity from Stagecoach, and it is already graded.
- State has not made it clear whether Trinity Lane will be a through road or a dead-end. Alternative B Modified shows Trinity as a through road while other alternatives do not. Presently Trinity Lane is too narrow, only wide enough for a single lane of traffic. Widening Trinity Lane would take additional property from me and add cost to the project. The road would potentially be moved within 50 feet of my home. Instead Trinity should be kept as a dead end with possible

access from Stagecoach. Another possible termination would be between my property and my western neighbor with access for the three homes from Amy. Cemetery can have access from Stagecoach.

What concerns do you have about the environmental impacts of the project addressed in the DEIS? Are there any issues or concerns that you feel were not addressed in the DEIS? If so, please explain.

- Impact of construction to property
- Impacts to Neighborhoods,
- Noise Impact,
- Air Quality Impact,
- Flooding impact

Environmental Impact Meeting
Feedback Statement to TDOT

Memorial Blvd./SR 126 Highway Rebuild

December 11, 2012

In the SR 126 Phase 1 rebuild, <u>I support a four-lane option</u> from East Center Street in Kingsport to Cooks Valley Road. This option will have the capability of meeting the safe travel needs of our children and grandchildren until 2050 and beyond. A minimal four-lane highway should be constructed in the 650 ft. from Chestnut Ridge Road to Cooks Valley Road with appropriate deviation approvals … using retaining walls and the available 60 ft. distance between East Lawn Cemetery and the historical property without disturbing gravesites.

A current TDOT four-lane example used every day for high volume traffic is on SR 36 between the Holston River Bridge and Moreland Drive across the railroad bridge … where there is 57 ft. total distance from guard rail to guard rail and 47 ft. from edge of highway white line to white line.

Sign name: _____

Print name: BOB WALLACE

Address: 1234 Morning Dove Dr

Kingsport TN

Date: 12-11-12

Environmental Impact Meeting
Feedback Statement to TDOT

Memorial Blvd./SR 126 Highway Rebuild

December 11, 2012

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Sign name: Jerry C. Teague

Print name: JERRY C. TEAGUE

Address: 517 COLONIAL HGTS. RD.
KINGSPORT, TN 37663

Date: DECEMBER, 11, 2012

Environmental Impact Meeting
Feedback Statement to TDOT

Memorial Blvd./SR 126 Highway Rebuild

December 11, 2012

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Sign name: Henry Somers

Print name: Henry Somers

Address: 5309 Fortiss Place
Kingsport, TN 37664

Date: 12/11/2012

Environmental Impact Meeting
Feedback Statement to TDOT

Memorial Blvd./SR 126 Highway Rebuild

December 11, 2012

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Sign name: Diane Somers

Print name: Diane Somers

Address: 5309 Forfar Pl
Kingsport Tn 37664

Date: 12/11/12

Environmental Impact Meeting
Feedback Statement to TDOT

Memorial Blvd./SR 126 Highway Rebuild

December 11, 2012

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Sign name: Joe V. Smith

Print name: Joseph V. Smith

Address: 5110 Foxfire Trail
Kingsport, TN 37664

Date: 12-11-12

Environmental Impact Meeting
Feedback Statement to TDOT
Memorial Blvd./SR 126 Highway Rebuild
December 11, 2012

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Signed: Anne Laura J. Smith

Printed: Anne Laura J. Smith

Address: 5110 Foxfire Trail
Kingsport, TN 37664

Date: 12/11/2012

12/11/2012

Environmental Impact Meeting
Feedback Statement to TDOT

Memorial Blvd./SR 126 Highway Rebuild

December 11, 2012

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Sign name: Doug Russell

Print name: Doug Russell

Address: 1211 Imperial Dr
Kingsport, TN 37663

Date: 12/11/12

Environmental Impact Meeting
Feedback Statement to TDOT

Memorial Blvd./SR 126 Highway Rebuild

December 11, 2012

In the SR 126 Phase 1 rebuild, <u>I support a four-lane option</u> from East Center Street in Kingsport to Cooks Valley Road. This option will have the capability of meeting the safe travel needs of our children and grandchildren until 2050 and beyond. A minimal four-lane highway should be constructed in the 650 ft. from Chestnut Ridge Road to Cooks Valley Road with appropriate deviation approvals … using retaining walls and the available 60 ft. distance between East Lawn Cemetery and the historical property without disturbing gravesites.

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Sign name: William C Kelly

Print name: William C Kelly

Address: 465 Canton Rd
Kpt, TN 37663

Date: 12/11/2012

Feedback Statement to TDOT

Memorial Blvd./SR 126 Highway Rebuild

December 11, 2012

In the SR 126 Phase 1 rebuild, <u>I support a four-lane option</u> from East Center Street in Kingsport to Cooks Valley Road. This option will have the capability of meeting the safe travel needs of our children and grandchildren until 2050 and beyond. A minimal four-lane highway should be constructed in the 650 ft. from Chestnut Ridge Road to Cooks Valley Road with appropriate deviation approvals … using retaining walls and the available 60 ft. distance between East Lawn Cemetery and the historical property without disturbing gravesites.

I have lived in the Indian Springs community 45 years and have heard the plans were to 4-lane SR 126 all the way from Kingsport to I-81 and now the time is right to get this safe, improvement on the agenda by the politicians who control road building in Tennessee. My children and now grandchildren use this highway daily. I don't need to repeat the number of many deaths from wrecks on this highway.

Thank you!

Sign name: Keith Johnston

Print name: KEITH JOHNSTON

Address: 405 KILKENNY RD
KINGSPORT,
TN 37664

Date: 12-11-12

5336 Foxfire Place
Kingsport, TN 37664
December 11, 2012

The four lane plan for Highway 126 worries me for many reasons. As a taxpayer, I think it is way too expensive. It would take land from every property along the road. This would reduce the number of people using the road.

The Yancey's Tavern is an historic property which should be preserved, but would be subjected to visual and noise impacts, at the very least.

As a frequent driver on Highway 126, I do not want a four lane road. People see such a highway and drive as fast as they do on interstates. Drivers entering from cross roads have to wait longer to enter the road safely. We will be demanding stoplights next. The higher speed leads to more serious accidents.

A four lane road would be so wide that it would have to be built on fill. This causes maintenance problems as has happened on the road up to Bays Mountain Park. That road has recently been fixed because it was sliding off the side of the mountain.

The alternative to that is removing part of Chestnut Ridge and building an oppressive retaining wall. The wall also could collapse onto the road.

The road would take a long time to build. Drivers would stop using it and our businesses would close. Therefore, it would not be needed.

What I would like to see is an improved two lane road from Old Stage Road to near I-81. It should have wider shoulders, reflective paint edging the lanes, guard rails, occasional turn lanes and pull-offs for emergencies. Some of the intersections should be realigned to be perpendicular instead of acute angles. Possibly, some of the humps and valleys in the road could be leveled out.

If TDOT builds an improved two lane road, it can remain a neighborhood road with houses and businesses located along it. Please do not duplicate Stone Drive and Ft. Henry Drive.

Julie Hyatt

Environmental Impact Meeting
Feedback Statement to TDOT

Memorial Blvd./SR 126 Highway Rebuild

December 11, 2012

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Sign name: John J. Hurt

Print name: JOHN J. HURT

Address: 353 Lakecrest DR.
Kingsport, TN 37663

Date: 12-11-12

Comments concerning SR-126 (Memorial Boulevard) from East Center Street in the City of Kingsport to I-81, Sullivan County

A public meeting on this project was scheduled for March 22, 2012, but was cancelled and per the TDOT website has not been rescheduled yet. The following comments are respectfully being submitted for your consideration just in case I am not able to attend the public meeting when it is rescheduled.

I have several concerns about closure of one end of Graveltop Road as part of this project. I live on Graveltop Road and also own a parcel of property that adjoins SR-126. All the concerns below have a negative impact on the residence of Graveltop Road and its adjoining streets.

The TDOT project webpage lists several items as needs for the project, one being "**Improved access for school busses is needed.**" Closing one end of Graveltop Road means that busses must make a trip along the road and then double back to exit Graveltop Road. This will mean more bus traffic for the narrow road and double the bus for that street from two busses twice a day to two busses four times a day. Thus increasing the time that students have in riding the bus as well as increases gas cost to the Sullivan County school system and every county taxpayer.

"Improved mail delivery is needed." By closing the east end of Graveltop Road the mail delivery in our area and anywhere after Graveltop Road will take longer as the mail carrier now enters Graveltop from the east entrance and exits the west entrance. Under the proposed layout the mail carrier will have to go past all the houses on Graveltop and turn at the cul-de-sac before delivering any mail on this road.

"Improved response time for emergency equipment is needed." Emergency equipment responding to the residents in the Graveltop Road area comes from the Blountville direction. Once the closest access to Blountville is closed, response time will increase for residence alone Graveltop and its adjoining streets.

"The geometry of the roadway needs to be improved." Changing the alignment and grade for the section of SR-126 between the access points for Graveltop Road will be an improvement especially during the winter months. Vehicles are consistently sliding into the ditch and hillside during snow and icy conditions under the current alignment and grade. When this occurs a quick and easy detour is through Graveltop Road. By closing one end of Graveltop, this detour will no longer be available for normal traffic and emergency equipment. This could be a problem if the improved geometry is not enough to prevent icy slide-offs.

I support most of the proposed changes to SR-126 with the exception of the closure of one end of Graveltop Road. The closure will negatively impact the residents in the Graveltop Road area and should be addressed in the Final Environmental Impact as not meeting the needs of this project.

Erwin D. Holman 180 Graveltop Road, Blountville, TN

Erwin D. Holman 12-11-12

Environmental Impact Meeting
Feedback Statement to TDOT

Memorial Blvd./SR 126 Highway Rebuild

December 11, 2012

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Sign name: Arved Harding

Print name: Arved Harding

Address: 282 Blackburn Rd
Blountville, TN 37617

Date: 12/11/12

Environmental Impact Meeting
Feedback Statement to TDOT

Memorial Blvd./SR 126 Highway Rebuild

December 11, 2012

In the SR 126 Phase 1 rebuild, <u>I support a four-lane option</u> from East Center Street in Kingsport to Cooks Valley Road. This upgrade is critical for safety and now is the time to implement. A three lane upgrade will also be significant cost, but I do not feel is adequate to meet the need. Please support doing the project the right way now and it will then take us well into the future.

Sign name: [signature]

Print name: Scott George

Address: 4005 Foxfire Lane
Kingsport, TN 37664

Date: 12/11/12

-----Original Message-----
From: jdyorktown@hotmail.com [mailto:jdyorktown@hotmail.com]
Sent: Tuesday, December 11, 2012 5:31 PM
To: John Schroer; lt.gov.ron.ramsey@capitol.tn.gov; rep.tony.shipley@capitol.tn.gov; rep.jon.lundberg@capitol.tn.gov; info@fix126right.com
Subject: SR 126 Feedback to TDOT

Fix126Right - Feedback Form Submission

First Name: Delores
Last Name: York
Address: 5121 Foxfire Trl
City: Kingsport
State: TN
Zip: 37664

Frequency of road use: Multi times daily

Email: jdyorktown@hotmail.com

Comments: We have been here for 5 years now and plan to retire here. But this road IS dangerous. We would like to see shoulders. Our son\'s tire left the road, at the white line, and was sandwiched between the thick asphalt and a guard rail. He over-corrected to get the car free and landed in the opposite side 15\' ditch. He\'s new here from IA, not used to the area and traveling at night. We love the rich beauty and charm of these winding roads and vistas that the landscape has to offer. Shoulders would keep speed limits down preserving the absolute pleasure of driving these roads and supplying a safer drive. Not to mention, new drivers, distracted parents, new residents and of course our seniors. Lets comprimise. Wide shoulders.

-----Original Message-----
From: lglandis@embarqmail.com [mailto:lglandis@embarqmail.com]
Sent: Tuesday, December 11, 2012 2:51 PM
To: John Schroer; lt.gov.ron.ramsey@capitol.tn.gov; rep.tony.shipley@capitol.tn.gov; rep.jon.lundberg@capitol.tn.gov; info@fix126right.com
Subject: SR 126 Feedback to TDOT

Fix126Right - Feedback Form Submission

First Name: Larry
Last Name: Landis
Address: 5114 Springview St.
City: Kingsport
State: Tn
Zip: 37664

Frequency of road use: Almost everyday since 1984

Email: lglandis@embarqmail.com

Comments: I do not know of any death that was caused by accident. I do know of careless, reckless drivers on that road.To me that road needs one very important addition A SHOULDER not of some soft ground limestone. Every time that road has been repaved the same crushed stone is laid down for a shoulder. What a waste of money!!! Whatever is done a real shoulder is a must.

-----Original Message-----
From: jnjHurt1@charter.net [mailto:jnjHurt1@charter.net]
Sent: Tuesday, December 11, 2012 9:32 AM
To: John Schroer; lt.gov.ron.ramsey@capitol.tn.gov; rep.tony.shipley@capitol.tn.gov; rep.jon.lundberg@capitol.tn.gov; info@fix126right.com
Subject: SR 126 Feedback to TDOT

Fix126Right - Feedback Form Submission

First Name: John
Last Name: Hurt
Address: 313 Lakecrest Drive
City: Kingsport
State: TN
Zip: 37663

Frequency of road use: 8-10 times a month

Email: jnjHurt1@charter.net

Comments: This road needs to have 4 lanes all the way to Interstate 81. Otherwise it will continue to have accidents that kill people and cause injury. I drive this road enough to see accidents about to happen all the time. Young and old, texting, talking on cell phones and not paying attention to their driving. The road is too crooked in places and too narrow for safe passage during foul weather when driving conditions become more hazardous. How much longer will the citizens of our county have to endure this?

-----Original Message-----
From: jcase36@chartertn.net [mailto:jcase36@chartertn.net]
Sent: Tuesday, December 11, 2012 2:48 PM
To: John Schroer; lt.gov.ron.ramsey@capitol.tn.gov; rep.tony.shipley@capitol.tn.gov; rep.jon.lundberg@capitol.tn.gov; info@fix126right.com
Subject: SR 126 Feedback to TDOT

Fix126Right - Feedback Form Submission

First Name: Jerry
Last Name: Case
Address: 257 Park Ridge Ct.
City: Kingsport
State: Tennessee
Zip: 37663

Frequency of road use: Daily

Email: jcase36@chartertn.net

Comments: My wife and I have been concerned for a long time about the dangerous intersection where Fall Creek road t-bones into highway 126. We highly recommend that a traffic light be placed in that location so as to create order into the movement of traffic through that intersection. The vertical curve on the northwest side coupled with the tremendous acceleration of traffic at that spot sets the potential for diasterous crashes. A traffic control light would seem like a very affordable hedge against what could be a catastrophic liability for the State. Than you for your consideration of our concern.

Jerry Case

-----Original Message-----
From: pbridges456@yahoo.com [mailto:pbridges456@yahoo.com]
Sent: Tuesday, December 11, 2012 11:02 PM
To: John Schroer; lt.gov.ron.ramsey@capitol.tn.gov; rep.tony.shipley@capitol.tn.gov; rep.jon.lundberg@capitol.tn.gov; info@fix126right.com
Subject: SR 126 Feedback to TDOT

Fix126Right - Feedback Form Submission

First Name: philip
Last Name: bridges
Address: 702 wedgewood circle
City: kingsport
State: tenn.
Zip: 37660

Frequency of road use: weekly

Email: pbridges456@yahoo.com

Comments: this is the most dangerous road in the united states. the reason i say it because the road was designed for horse and buggies and the traffic has outgrew the road in a soft ecomny.fix the road right the first time because tax payers cannot afford it the second time. PLAN A OR 4LANE is the only to fix the problem or you will always have a festiva like you have now but very dangerous one. I Think that someone else will get killed on this death trap before spring of 2013.

-----Original Message-----
From: Nonya@hotmail.com [mailto:Nonya@hotmail.com]
Sent: Monday, December 10, 2012 10:22 AM
To: John Schroer; lt.gov.ron.ramsey@capitol.tn.gov; rep.tony.shipley@capitol.tn.gov; rep.jon.lundberg@capitol.tn.gov; info@fix126right.com
Subject: SR 126 Feedback to TDOT

Fix126Right - Feedback Form Submission

First Name: John
Last Name: Trent
Address: 537 Pleasant Hills Rd
City: Blountville
State: Tennessee
Zip: 37617

Frequency of road use: Daily

Email: Nonya@hotmail.com

Comments: Don\'t spend anymore tax payer money, traffic enforcement is what is needed.

-----Original Message-----
From: Jennkrull@yahoo.com [mailto:Jennkrull@yahoo.com]
Sent: Monday, December 10, 2012 5:31 AM
To: John Schroer; lt.gov.ron.ramsey@capitol.tn.gov; rep.tony.shipley@capitol.tn.gov; rep.jon.lundberg@capitol.tn.gov; info@fix126right.com
Subject: SR 126 Feedback to TDOT

Fix126Right - Feedback Form Submission

First Name: Jennifer
Last Name: Krull
Address: 4745 Woodcliff Dr
City: Kingsport
State: TN
Zip: 37664

Frequency of road use: Multiple times daily

Email: Jennkrull@yahoo.com

Comments: I am in favor of leaving the road alone!!!! Thr most that is needed is cutting back some banks!!! I will not participate in the forums/input sessions as long as Diane Sommers is permitted to be there as a representative of the \"team\" as she had in the past and producing misleading information such as she is doing on the new website she & her husband have produced!!!! They are some of the most hateful people I have ever encountered !!!!!! Shameful people!!!

-----Original Message-----
From: chadchanda@gmail.com [mailto:chadchanda@gmail.com]
Sent: Monday, December 10, 2012 9:45 PM
To: John Schroer; lt.gov.ron.ramsey@capitol.tn.gov; rep.tony.shipley@capitol.tn.gov; rep.jon.lundberg@capitol.tn.gov; info@fix126right.com
Subject: SR 126 Feedback to TDOT

Fix126Right - Feedback Form Submission

First Name: Chad
Last Name: Austin
Address: 4810 Lake Park Dr
City: Kingsport
State: TN
Zip: 37664

Frequency of road use: every day

Email: chadchanda@gmail.com

Comments: I have driven this road for over 20 years. I drive at least the speed limit most of the time. I have never lost control on this road. I could tomorrow though and it would be completely my fault. Any incidents on this road are caused by inattention or mistake by the drivers. The fatalities along this road, while tragic, were not caused by the road but by those driving. Wider shoulders would be the only measures I would like to see. People complain about the speeds on this road now. If it is built as proposed here those speeds would increase dramatically.

-----Original Message-----
From: bytownsend@charter.net [mailto:bytownsend@charter.net]
Sent: Sunday, December 09, 2012 1:22 PM
To: John Schroer; lt.gov.ron.ramsey@capitol.tn.gov; rep.tony.shipley@capitol.tn.gov; rep.jon.lundberg@capitol.tn.gov; info@fix126right.com
Subject: SR 126 Feedback to TDOT

Fix126Right - Feedback Form Submission

First Name: John
Last Name: Townsend
Address: 227 Pettyjohn Rd
City: Kingsport
State: Tn
Zip: 37664

Frequency of road use: 4 or more times/day

Email: bytownsend@charter.net

Comments: I think we need a 4 lane road all the way. Not only will it serve future needs but will be much safer than any other way.

Please \"Do Not\" put in a 2, 3, and 4 lane highway in only 8 miles of distance. We have had enough wrecks and enough people killed on this road already.

$ lane it all the way.

J. B. Townsend

-----Original Message-----
From: jansuenichols@charter.net [mailto:jansuenichols@charter.net]
Sent: Sunday, December 09, 2012 6:56 PM
To: John Schroer; lt.gov.ron.ramsey@capitol.tn.gov; rep.tony.shipley@capitol.tn.gov; rep.jon.lundberg@capitol.tn.gov; info@fix126right.com
Subject: SR 126 Feedback to TDOT

Fix126Right - Feedback Form Submission

First Name: Jan
Last Name: Nichols
Address: 104 Cedar Brook Court
City: Kingsport
State: Tn.
Zip: 37664

Frequency of road use: 3 x daily

Email: jansuenichols@charter.net

Comments: 4 lanes with less curves more visibility of side streets and safer highway all around

-----Original Message-----
From: jansuenichols@charter.net [mailto:jansuenichols@charter.net]
Sent: Sunday, December 09, 2012 5:54 PM
To: John Schroer; lt.gov.ron.ramsey@capitol.tn.gov; rep.tony.shipley@capitol.tn.gov; rep.jon.lundberg@capitol.tn.gov; info@fix126right.com
Subject: SR 126 Feedback to TDOT

Fix126Right - Feedback Form Submission

First Name: Sue
Last Name: Nichols
Address: 104 Cedar Brook CT
City: Kingsport
State: Tn
Zip: 37664

Frequency of road use: daily

Email: jansuenichols@charter.net

Comments: The need for a safer highway is a must have as soon as possible. The curves and single lanes are extremely dangerous for constant travel. Enclement weather makes the conditions trecheorous. Unfamiliar drivers slowly cruise around curves at causing traffic to back up on this dangerous and curvaceous road. Please Help.

-----Original Message-----
From: jepoll1@yahoo.com [mailto:jepoll1@yahoo.com]
Sent: Saturday, December 08, 2012 10:04 AM
To: John Schroer; lt.gov.ron.ramsey@capitol.tn.gov; rep.tony.shipley@capitol.tn.gov; rep.jon.lundberg@capitol.tn.gov; info@fix126right.com
Subject: SR 126 Feedback to TDOT

Fix126Right - Feedback Form Submission

First Name: John
Last Name: Pollak
Address: 217 Oneida Ct.
City: Kingsport
State: Tn
Zip: 37664

Frequency of road use: Daily

Email: jepoll1@yahoo.com

Comments: I am not so sure making 126 4 lanes will work do to the topography but turn lanes will alleviate a lot of problems, especially since Tennessee does not have a turn signal requirement in their vehicle codes.

-----Original Message-----
From: kvtr@charter.net [mailto:kvtr@charter.net]
Sent: Saturday, December 08, 2012 1:24 PM
To: John Schroer; lt.gov.ron.ramsey@capitol.tn.gov; rep.tony.shipley@capitol.tn.gov; rep.jon.lundberg@capitol.tn.gov; info@fix126right.com
Subject: SR 126 Feedback to TDOT

Fix126Right - Feedback Form Submission

First Name: Keith
Last Name: Elton
Address: 4841 Peers Street
City: Kingsport
State: TN
Zip: 37664

Frequency of road use: several times a day

Email: kvtr@charter.net

Comments: I have driven this highway for years. The only problem with this road is distracted drivers and speeding vehicles. Although SR126 is unforgiving it is not to be blamed for deaths because of inattentive and reckless driving. I fear and I know that increasing lanes will lead to increased traffic, which will be traveling at higher rates of speed, leading to more serious injuries and/or deaths. I realize that Kingsport is promoting these improvements so they can further their goals and increase their tax base by developing more businesses or industrial areas that would use this highway increasing traffic/traffic control measures. They throw death at this as if to blame the road and not look at real issues. Take the money and have THP hire two officers to patrol/enforce the 45 mph for the next 25 years and you still save millions. I vote to enforce and educate drivers and change the deadly habits they choose to endanger all of our families.

-----Original Message-----
From: anewland@chartertn.net [mailto:anewland@chartertn.net]
Sent: Friday, December 07, 2012 10:14 AM
To: John Schroer; lt.gov.ron.ramsey@capitol.tn.gov; rep.tony.shipley@capitol.tn.gov; rep.jon.lundberg@capitol.tn.gov; info@fix126right.com
Subject: SR 126 Feedback to TDOT

Fix126Right - Feedback Form Submission

First Name: Allan
Last Name: Newland
Address: 5301 Lonesome Pine Road
City: Kingsport
State: Tennessee
Zip: 37664

Frequency of road use: daily

Email: anewland@chartertn.net

Comments: 126 should be 4-laned from Center Street to I-81 to encourage businesses to locate in this area. When I moved to Indian Springs in 1974 there was a doctor, dentist, auto parts store, restaurant, and later a full service grocery store; all gone now and I believe due to lack of improvements to 126. Improved safety is the main concern, but improved business conditions should also be considered.

-----Original Message-----
From: zdcms@yahoo.com [mailto:zdcms@yahoo.com]
Sent: Friday, December 07, 2012 10:05 AM
To: John Schroer; lt.gov.ron.ramsey@capitol.tn.gov; rep.tony.shipley@capitol.tn.gov; rep.jon.lundberg@capitol.tn.gov; info@fix126right.com
Subject: SR 126 Feedback to TDOT

Fix126Right - Feedback Form Submission

First Name: Crystal
Last Name: Dotts
Address: 5372 memorial blvd
City: Kingsport
State: Tn
Zip: 37664

Frequency of road use: Every day

Email: zdcms@yahoo.com

Comments: Something needs to be done with this road NOW. The part of 126 Where i live i see people past school buses and cars everyday of the week. And fly down the road. It\'s so hard for me and my husband and I to get out of the driveway every morning. Im scared to live and drive on this road I can\'t let my 2 year old play in her own frond yard or let my dog or cat outside! We have lost 5 cats to the road and it\'s very sad. In Nov. on thursday thur sunday there was 4 wrecks everyday and one was a dear friend of mine who lost her husband a COP.I just really hope we all can do something about this road! PLEASE.

Thank you,
Crystal Dotts

-----Original Message-----
From: PANZERFAUSTL@btes.tv [mailto:PANZERFAUSTL@btes.tv]
Sent: Thursday, December 06, 2012 5:55 PM
To: John Schroer; lt.gov.ron.ramsey@capitol.tn.gov; rep.tony.shipley@capitol.tn.gov; rep.jon.lundberg@capitol.tn.gov; info@fix126right.com
Subject: SR 126 Feedback to TDOT

Fix126Right - Feedback Form Submission

First Name: kurt
Last Name: larkin
Address: 261 oak street
City: blountville
State: tn
Zip: 37617

Frequency of road use: everyday

Email: PANZERFAUSTL@btes.tv

Comments: I don\'t know when and where those photos were taken but i have never seen that road congested like that. how congested will it be when the proposed roadwork begins and for how long.

-----Original Message-----
From: randye@englishcabinetshop.com [mailto:randye@englishcabinetshop.com]
Sent: Thursday, December 06, 2012 12:14 PM
To: John Schroer; lt.gov.ron.ramsey@capitol.tn.gov; rep.tony.shipley@capitol.tn.gov; rep.jon.lundberg@capitol.tn.gov; info@fix126right.com
Subject: SR 126 Feedback to TDOT

Fix126Right - Feedback Form Submission

First Name: Randal
Last Name: English
Address: 5236 Memorial Blvd.
City: Kingsport
State: Tenn
Zip: 37664

Frequency of road use: 4-6 times a day

Email: randye@englishcabinetshop.com

Comments: We have had a business on this road for about 20 years. I have been hit in the rear on two occasions while turning into our entranc. And we have had more than 6 custromers and employees who have also been rear ended.

The section is in a gentle left hand turn, and the vision of on coming cars is not redstricted. People just fail to pay attention.

I feel that an approach with no less than three lanes will help. I hav ehad many drivers cross the center line into my lane, even with the rumble strips. Cell phones and texting seems to be the most common items I have seen in thier hands as I pass them.

Lowering the speed limit dose not help improve the driving of the people I have observed. I think it gives them a false sense fo security.

-----Original Message-----
From: wrenlywren007@aol.com [mailto:wrenlywren007@aol.com]
Sent: Thursday, December 06, 2012 2:27 PM
To: John Schroer; lt.gov.ron.ramsey@capitol.tn.gov; rep.tony.shipley@capitol.tn.gov; rep.jon.lundberg@capitol.tn.gov; info@fix126right.com
Subject: SR 126 Feedback to TDOT

Fix126Right - Feedback Form Submission

First Name: Cathy
Last Name: Dunn
Address: 2356 Woodridge ave
City: kingsport
State: TN
Zip: 37664

Frequency of road use: daily

Email: wrenlywren007@aol.com

Comments: I do not support a continuous 4 lane proposal, as it is trmendously expensive, will increase traffic speeds,and actually depreciate the unique historical and cultural attributesto this region that are tourist revenue attractions. The idea of a four lane, and a useless grass median that will require more state money to maintain is a drain on Tennessee revenue.
There need to be safety improvements, such as robotic cameras that acually document speeding and generate revenue (tickets) and widening to include a turn lane in areas that need it.
New highways are expensive to build and to maintain, vs putting enforcement in position that will SLOW DRIVERS DOWN.

Project Comments
TN Dept. of Transportation
Suite 700, James K. Polk Bldg
505 Deaderick St.
Nashville, Tn 37243-0332

I would like to have the following comments entered into the official public record of the State highway 126 expansion project.

The Indian Springs community is a unique community that has much historical significance. Historical Yancey's Tavern is on one end of the community and old historically significant private homes dot the entire area. The very name "Indian Springs" denotes there was an actual spring in this area that was used by the Indians who inhabited this location prior to the arrival of the white settlers. Many families that still live in Indian Springs are descendents of the first white settlers to arrive in what is now Sullivan County.

Many of the community's street names bear names of Indian tribes. There are several locations within the Indian Springs area where Indian artifacts have been found. This is a close-knit community that is civic minded; they have worked for years to insure that this is a school/church/neighborhood/small business community. To divide this community by building a four-lane highway through the middle of it would devastate the quiet neighborhoods that surround highway 126. Many school buses run to the elementary school from the nearby neighborhoods. With a four lane these buses would have to travel this highway with additional traffic and higher speeds. The present highway doesn't interfere with local traffic to and from the school which is only about 100 yards from the present roadway. The school area is also home to many athletic fields and Ruritan property. Churches are scattered along this roadway, thus much of the present traffic is local community, school, business or church traffic. Bring in a four lane and it will

add much additional traffic traveling at greater speeds combining with family cars and school buses. This could result in more tragedy than has already occurred.

Please, make the highway safer – which is a good thing. Please don't wreck havoc with a wonderful community—keep it intact, not divided by 4 lanes of traffic. Please preserve the historic aspects of this area also. Thank you for allowing me, a teacher at Indian Springs Elementary School for twenty-three years to tell you that you don't want to divide this community.

Sincerely,

Ann Seeger

Ann Seeger
517 Woodmere Dr.
Kingsport, Tn 37663
Dec. 4, 2012

From: TDOT Comments
To: "jnjhurt@earthlink.net"
Cc: Gary King
Subject: RE: Fix state road 126
Date: Friday, November 02, 2012 3:24:53 PM

Dear Mr. Hurt:

Thank you for your interest in the SR-126 project from East Center Street in Kingsport to I-81. Safety is always a high priority at the Tennessee Department of Transportation (TDOT) and it is a very high priority on this project.

We will be holding public hearings on December 11, 2012 as part of the environmental process. I encourage you to attend one of the hearings to share your thoughts and register your support for the project. Following the hearings, a preferred alternative will be selected. Money has already been budgeted for designing the portion of the roadway from East Center Street to east of Cooks Valley Road. TDOT will begin the design process once the preferred alternative is selected.

If you have any questions, please contact Mr. Gary King, the Project Manager for this project, at 615-741-4777 or by email at gary.king@tn.gov.

Sincerely,

John C. Schroer
Commissioner

-----Original Message-----
From: JohnJHurt [mailto:jnjhurt@earthlink.net]
Sent: Wednesday, October 31, 2012 7:37 AM
To: John Schroer
Subject: Fix state road 126

Mr. John Schroer,
In the interest of safety, state road 126 needs to be corrected and made a safe road to travel. We have had too many accidents and too many deaths for this road to not be fixed. If we want the future of travel on this road to be safe, now is the time to consider the right choices and fix it. Thanks for your time, John Hurt

From: TDOT Comments
To: "hsomers@chartertn.net"
Cc: "rep.tony.shipley@capitol.tn.gov"; "lt.gov.ron.ramsey@capitol.tn.gov"; Matt Barnes; Toks Omishakin
Subject: Background regarding the SR-126 CSS process
Date: Tuesday, October 30, 2012 3:25:18 PM

Dear Mr. Somers:

Thank you for sharing information and background history with me, my staff, Lt. Governor Ramsey and Representative Shipley relating to the Context Sensitive Solutions (CSS) process for the SR-126 (Memorial Drive) project from Downtown Kingsport to I-81 in Sullivan County.

The Tennessee Department of Transportation (TDOT) will be conducting a public hearing this Fall regarding the Draft Environmental Impact Statement (DEIS) for the project. We will be presenting the findings, alternates and options developed in the processes up to, during, and since the development of the DEIS. All members of the public will be invited to share their opinions and ideas about the project at the hearing, and these will be recorded and included in the hearing transcript.

Following the public hearing, TDOT will review all information relevant to the SR-126 project. The department will study this information with the goal of selecting a project alternative that best provides a safe facility, serves the traveling public, is compatible with the community's values, and that will be a responsible use of the resources of the citizens of the State of Tennessee.

You and your family have spent a lot of your personal time and energy addressing the issues along this section of SR-126. We appreciate your commitment and encourage you to continue to participate in our process to achieve the best possible solution for this section of roadway.

Sincerely,

John C. Schroer
Commissioner

From: Henry Somers [mailto:hsomers@chartertn.net]
Sent: Thursday, October 04, 2012 7:53 PM
To: John Schroer
Cc: Ramsey_Ron(Lt. Gov.); Shipley_Tony; Toks Omishakin; Matt Barnes
Subject: Background regarding the SR-126 CSS process

Dear Commissioner Schroer:

In my email to you of 10/3/11, I mentioned the CFRR group that had much negative impact on the SR-126 CSS process. I know that you have a meeting in the near future with Lt. Governor Ramsey and Rep. Shipley regarding the SR-126 project. In addition, I am aware that the CFRR group has again mobilized and flooded TDOT and elected officials with communications opposing the CSS proposal, multiple lanes across Chestnut Ridge, and the overall SR-126 rebuild project. It may be helpful for TDOT, Lt. Governor

Ramsey, and Rep. Shipley to be aware of some history of the CSS project and the CFRR group.

In the 2002 time frame the CFRR group and its leaders successfully mounted a public relations campaign and defeated the proposed TDOT / Kingsport airport parkway project. CFRR, Inc. even hired its own consultant to counter and refute the TDOT study. The CFRR recommendation was that SR-126/ Memorial Blvd. be upgraded instead. Then the group actively mobilized, organized the community, and fought to limit the scope of the SR-126 rebuild. The CSS project could have been a great process for fair-minded team members who had the best interests of the community at heart. Instead, a small number in the CFRR group with a founding member on the CSS team was intent on controlling the highway design process and imposing their will on the team and community ... with unwillingness to ever compromise for majority preference and the public good.

There were two nonprofit community groups represented on the SR-126 CSS team (Indian Springs Ruritan Club and Citizens for Responsible Roads, Inc.). I asked each to provide information about their leaders, highway objectives, finances, membership, and campaign financial contributions for elected representatives on the CSS team. I readily received information from the Ruritan Club. CFRR, Inc. refused to reply to four requests for information which I find highly irregular for a Tennessee nonprofit corporation. **Judy Murray was a founder of CFRR, Inc. and a CSS team member. (A copy of the CFRR, Inc. corporate charter is attached.)**

I completed an independent investigation using public sources of information regarding CFRR, Inc. What I found is very troubling and follows in this email. This information may be helpful in understanding what the community has been dealing with in trying to obtain a safe highway to meet future community needs as the same people who founded CFRR, Inc. now continue to mobilize and oppose the scope of the 126 highway rebuild. Please be aware that this is a small, vocal group and there are many in the community who support the CSS proposal and TDOT as we work together to obtain a safe highway that will meet future travel needs.

Respectfully,
Henry Somers
Kingsport, TN

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The following is part of an email of May 3, 2006 from H. W. Somers to members of the SR-126 CSS team summarizing an investigation into the TN nonprofit corporation *Citizens for Responsible Roads, Inc.) founded by Judy Murray. CFRR, inc. has a history of opposing local TDOT highway projects. The investigation was conducted after Ms. Murray refused multiple times to provide answers to questions regarding the nonprofit corporation's finances, membership, and financial contribution to an elected official on the CSS team. **(Judy Murray was a member of the SR-126 CSS team representing Citizens for Responsible Roads, Inc.)**

1. **Details regarding Citizens for Responsible Roads, Inc. obtained from readily available public sources**

   (Please note that the following information was obtained after extensive research regarding the public corporation, **Citizens for Responsible Roads, Inc.**, which has been very active on the

Resource Team with the CFRR president and incorporator serving as a Resource Team citizen representative. It is preferred that this information be provided by representatives of the public benefit corporation to the Resource Team. However, since no information was made available to four requests, the following that is readily available to the public is provided. Note that the source of information is referenced.)

- **Please provide the names of the corporate officers, Board of Directors, and CFRR members**

(Source – Tennessee Secretary of State, Business Services, Nashville, TN)

Corporation Name:	**Citizens for Responsible Roads, Inc.**
Business Type:	**Corporation**
Profit / Nonprofit	**Nonprofit:**
Place of Incorporation:	**Sullivan**
Corporate Mailing Address:	**804 Rock City Road Kingsport, TN 37664**
Registered Agent:	**Judith B. Murray, 804 Rock City Road Kingsport, TN 37664**
Tennessee Charter / Qualification Date – **01/13/2003**	
Status:	**Active** (as of 5/3/2006)
Corporate Expiration Date:	**Perpetual**
Control number:	**0439788**
Jurisdiction:	**Tennessee**

Corporate Founders / Incorporators:

(Source CFRR corporate charter from Sullivan County Registrar of Deeds)

- Kathleen L. B. Beine 4515 Brookridge Drive Kingsport, TN 37664
- Judith B. Murray 804 Rock City Road Kingsport, TN 37664
- Barry L. Ornitz 4740 Edens View Road Kingsport, TN 37664

Quote from Article Eight of corporate charter as stated by CFRR incorporators: "In any event the corporation shall not carry on any activity not permitted to be carried on by a corporation exempt from Federal income taxation under section 501(c)(4) of the Internal Revenue Code."

CFRR Officers and Board of Directors

(Sources – 2004 and 2005 corporate annual reports on file with Tennessee Secretary of State, Business Services, Nashville, TN)

- **2004 corporate annual report**
  - President Judy Murray 804 Rock City Road Kingsport, TN 37664
  - Secretary Kathleen Beine 4515 Brookridge Drive Kingsport, TN 37664
  - 2004 annual filing stated there is **no Board of Directors**
- **2005 corporate annual report**
  - President Judy Murray 804 Rock City Road Kingsport, TN 37664
  - Secretary Kathleen Beine 4515 Brookridge Drive Kingsport, TN 37664
  - Treasurer Tom Gatti 804 Rock City Road Kingsport, TN 37664
  - 2005 annual filing stated the **Board of Directors is the same as the officers**

(Article Ten of the CFRR corporate charter states: "The business of the Corporation shall be managed and conducted by a board of not less than five and not more than nine Directors."

CFRR members

- From the corporate charter, annual corporate filings, and other public documentation, no CFRR members have been identified to date other than four officers and founders.

- **How does one become a member of CFRR? (Is this an open or closed membership organization)?**

No public information has been found to date indicating that CFRR membership is offered to the general public or qualifications for membership.

- **Are there open meetings that interested non-members can attend?**

  No public information has been found to date indicating that CFRR has regular meetings or that there are meetings open to the general public.

  (See IRS information regarding 501(c)(4) social welfare organization qualifications for benefiting the general public, paragraph 2 at HYPERLINK "http://www.irs.gov/charities/nonprofits/article/0,,id=96178,00.html" www.irs.gov/charities/nonprofits/article/0,,id=96178,00.html)

- **Being a nonprofit Tennessee corporation, what are the sources of CFRR revenues and project funding?**

  No public information has been located to date of CFRR corporate financial statements. For accountability for a nonprofit, tax-exempt 501(c)(4) corporation, the public should be able to obtain upon request the source of funds, and if any funds originate from organizations outside the immediate region. The public should be able to verify upon request that tax-exempt corporate funds are used to benefit the general public, and not special interests or a private group.

- **Has CFRR made monetary or in-kind contributions, or participated in any of the election campaigns of any elected officials who served on the SR-126 Memorial Boulevard CSS Team?**

  Under a **Freedom of Information Act** request, it was found that **Citizens for Responsible Roads** was an in-kind contributor ($300) of printed materials for the primary election campaign for **Tennessee State Representative Nathan Vaughn** as filed with the Sullivan County Election Commission on 07/22/2002.
  (Source Sullivan County Election Commission Freedom of Information Act request)

  (The intent of this political contribution and its impact on the SR-126 project is subject to question. If the Tennessee State Representative has been supportive of the CFRR position throughout the project to the detriment of other stakeholders of SR-126, this raises concerns regarding the CFRR campaign contribution and ethics in government. Note that the citizen representative / CFRR president and Tennessee State Representative were 2 of 4 signers for the Minority Objection Statement for Section 3 East, Chestnut Ridge where 14 other Resource Team members approved the Resource Team recommendation for Section 3 East. See page 10 HYPERLINK "http://www.tdot.state.tn.us/sr126/project_library/TeamRecommendation.pdf" http://www.tdot.state.tn.us/sr126/project_library/TeamRecommendation.pdf)

  (Tennessee State Representative Vaughn did not respond to two requests asking if he is a member of or has been affiliated with CFRR in any manner.)

  (See Tennessean article and sentences 1, 16, and 17 regarding political campaign contributions and ethics legislation at HYPERLINK "http://www.tennessean.com/apps/pbcs.dll/article?AID=/20060216/NEWS0201/602160419/1010/NEWS02&theme=ETHICS" http://www.tennessean.com/apps/pbcs.dll/article?AID=/20060216/NEWS0201/602160419/1010/NEWS02&theme=ETHICS)

  (See IRS documentation regarding 501(c)(4) social welfare organizations directly participating in and intervening in a political campaign on behalf of a particular candidate, paragraph 4 at HYPERLINK "http://www.irs.gov/charities/nonprofits/article/0,,id=96178,00.html" www.irs.gov/charities/nonprofits/article/0,,id=96178,00.html)

  (Article Eight of CFRR corporate charter states: "In any event the corporation shall not carry on any activity not permitted to be carried on by a corporation exempt from Federal income taxation under section 501(c)(4) of the Internal Revenue Code.")

- **Please share any past CFRR projects that have resulted in highway improvements (outside the CSS Team projects) to make SR-126 safer, cleaner, or more beautiful for the general public that travels this highway daily.**

  - No public records have been found regarding any CFRR sponsored improvement projects for SR-126 (or any highway).
  - **Documented CFRR objectives / projects** from public sources included
    - **Opposing Airport Parkway North** (see sentences 11-18 HYPERLINK "http://www.timesnews.net/archives/index3.php?id=37401" www.timesnews.net/archives/index3.php?id=37401 and sentence 2 of HYPERLINK "http://www.timesnews.net/archives/index3.php?id=40441" www.timesnews.net/archives/index3.php?id=40441)
    - **Coordinating public opposition to Airport Parkway North** (see sentence 13 HYPERLINK "http://www.timesnews.net/archives/index3.php?id=37401" www.timesnews.net/archives/index3.php?id=37401 and entirety of HYPERLINK "http://www.timesnews.net/archives/index3.php?id=37679" www.timesnews.net/archives/index3.php?id=37679)
    - **Hiring consultant to challenge TDOT study for Airport Parkway North** (see sentence 6 in HYPERLINK "http://www.timesnews.net/archives/index3.php?id=68276" www.timesnews.net/archives/index3.php?id=68276) The cost of the consultant paid by tax-exempt corporate funds, and the sources of funding should be available to the public in a financial statement upon request.
    - **Requesting and obtaining a "seat at the table" for the SR-126 project** (See sentences 25-29 HYPERLINK "http://www.timesnews.net/archives/index3.php?id=69849" www.timesnews.net/archives/index3.php?id=69849 and CFRR listed as represented on the Resource Team at HYPERLINK "http://www.tdot.state.tn.us/sr126/team.asp" http://www.tdot.state.tn.us/sr126/team.asp)
    - **Opposing and coordinating opposition to four-lane option for SR-126**
      - See last sentence in HYPERLINK "http://www.timesnews.net/archives/index3.php?id=9450944" www.timesnews.net/archives/index3.php?id=9450944
      - Reportedly challenging and lobbying TDOT to reduce original TDOT traffic growth projections for SR-126 (Ornitz, CFRR president, and Tennessee State representative)
      - See HYPERLINK "http://www.safe126.com" www.safe126.com use of data analyses publicly presented by CFRR founding incorporator Ornitz. Safe126.com appears to be a private group opposed to the four-lane option with similar objectives and strategies as that of CFRR. Safe126.com leaders as well as CFRR leaders are publicly unidentified. From information available to the public, it cannot be confirmed or rejected that the Safe126.com and CFRR organizations are directly linked or have common leadership.
      - See reference to petition opposing four-lane originating from Safe126.com website which was used in the Minority Objection Statement for Section 3 East signed by the CFRR president and Tennessee State Representative Vaughn. See page 10 HYPERLINK "http://www.tdot.state.tn.us/sr126/project_library/TeamRecommendation.pdf" http://www.tdot.state.tn.us/sr126/project_library/TeamRecommendation.pdf

      (Since a sizeable segment of the public desiring a four lane option for SR-126 has not been represented by CFRR, see 501(c)(4) social welfare organization qualifications, paragraph 2 at HYPERLINK "http://www.irs.gov/charities/nonprofits/article/0,,id=96178,00.html" www.irs.gov/charities/nonprofits/article/0,,id=96178,00.html)

2. Summary

Indian Springs Ruritan Club (ISRC) and **Citizens for Responsible Roads, Inc. (CFRR)** are the two nonprofit, tax-exempt public benefit organizations that have been actively involved with the SR-126 Memorial Boulevard CSS project other than government entities and TDOT. Both ISRC and CFRR have leaders who are members of the SR-126 Resource Team.

Indian Springs Ruritan Club readily provided answers to questions regarding leadership, membership, objectives, accomplishments, and participation on the SR-126 project. Because Citizens for Responsible Roads, Inc. would not provide any answers to questions concerning the tax-exempt, nonprofit corporation, an extensive investigation from sources readily accessible by the public was undertaken to obtain answers. Considerable information was found regarding both organizations. Many of the findings have been brought forward in this document.

This investigation revealed that **Indian Springs Ruritan Club** has been supportive of the SR-126 project, and has actively worked to improve the highway safety and appearance for 40 years. It was found that **Citizens for Responsible Roads, Inc.** with publicly unidentified leaders and members has apparently used various means and strategies to oppose certain Resource Team options, achieve unstated objectives, obtain support from elected officials, and impact public opinion. In any CSS process, it is reasonable to expect that the stakeholders have a right to know the leadership, membership, objectives, accomplishments, and full extent of participation of any organization that may influence the outcome. This investigation and the findings do raise concerns about how the CSS process could be influenced and manipulated to the detriment of a large segment of stakeholders. This also raises an issue of fairness to all stakeholders.

motorists and the community. We must afford maximum protection to Yancey's Tavern and to East Lawn Cemetery. We ask that you spend our hard-earned tax dollars efficiently and effectively and respect our community. In keeping all this in mind, please don't overbuild Highway 126. Thank you.

MR. OZMENT: Thank you very much. Next?

MR. NAGI: Out of Ernest Brookman, Ellen Sims, Rodney Hurd, anyone else out of that group of four? Okay. Moving on to the next group of four will be Henry Somors, Bruce Dodson, Nathan Vaughn and Tim Bledsoe. Henry Somors, Bruce Dodson, Nathan Vaughn, Tim Bledsoe, and when you guys speak at the microphone, please say your name and your address.

MR. SOMORS: My name is Henry Somors, and I would like to pass for the moment. There's a new option here, and I would like to study it a little more and reserve the right and come back to speak to you later about that. May I do that?

MR. NAGI: Of course, Sir.

MS. SOMORS: Thank you.

MR. NAGI: Bruce Dodson, Nathan Vaughn or Tim Bledsoe?

MR. DODSON: (Inaudible).

MR. NAGI: Your name, Sir?

Vance Ramsey, Mark Gable, Kerney Timmons. Henry Somers, Vance Ramsey, Mark Gable, Kerney Timmons.

MR. SOMERS: My name is Henry Somers. I live at 5309 Foxfire Place, Kingsport. I got to looking. I've driven this highway for nearly 46 years. We're imports to the area, but obviously this is home by now. I've driven it for a lot of years. Safety is a huge issue. And also for a number of years since about 2005 I started keeping up with the number of fatalities on the road. Since 1999 -- the Highway Patrol only keeps fatalities for five years, and after that, you can't find them. So we would have lost a lot of that information if we did not have a record. There have been a total of 18 fatalities since 1999. And so Mr. Moody's point, 14 of those were on the two lane, two were on the three lane and two were on the four lane. And I think we've all been touched by the folks that have lost their loved ones, and it's happened in our neighborhood, and we've had some really close calls. Seven of those have been also teen drivers.

One of the things, the reason for the 126 project that was not mentioned, and I don't know. Some of you at TDOT may or may not be aware of this. There was an Airport Parkway project that was by the

City of Kingsport back in the 2002 time frame. That project was actually, I'll use the word killed. There was a number of people that were against that project, and one of the things that was said was that they would do away of that project, but as a result of not having a good highway from the airport over to 11-W, that we would update and upgrade Highway 126 as a major road to the east entrance to Kingsport. So that's one of the reasons we're here is to upgrade Highway 126 rather than do the Airport Parkway.

Also the CSS Team, I was at the meeting this morning, and there was a little bit of information there that I would say was not maybe exactly accurate. There are 18 people on that team. There was Kingsport and Sullivan County government people. It included the mayors, and it included some of the people from the Kingsport MPO, Sullivan County. So there was broad representation on that team. That team worked hard for two years, and there was a lot of back and forth that was done and a lot of compromises that were made.

Alternate A is the closest to their product that they recommended. That was recommended to TDOT in 2005. It was accepted by TDOT in 2005. And this is a -- after two years of work that they recommended

that. The CSS recommendation was a four lane to Cooks Valley Road.

What we need in my opinion is, we need a bare bones, minimum four lane to accommodate future traffic. I think anything you've got on the four lane there, it's got a grassy median. It's got sidewalks. It's got curb and gutter. We need to take all that out, and we need to get it down to just the very basic four-lane highway, especially across the ridge. Nobody wants to see a big cut in there. But the footprint of the four lane would be a very basic, is not going to be that much different from the three lane and you put a sidewalk on it. And I think for future traffic, we're actually going to need the extra lane-age.

MR. NAGI: Thank you, Sir. Thirty seconds.

MR. SOMERS: Okay. Traffic projections: The counts you were running in July, they're a thousand down. You run them in July. There's no school traffic, and the economy hopefully is going to be back in the areas within the urban growth boundary. Also, I'd like to say that in the 126 Phase Rebuild, a four-lane option is possible from East Center Street in Kingsport to Cooks Valley Road. This option is needed for the capability of safe

travel needs of our children and grandchildren until the 25th (sic) and beyond. A minimum of four lanes shall be constructed in the 650 feet from Chestnut Ridge Road to Cooks Valley Road with the appropriate deviation approval, using retaining walls and the available -- there's 60 distance feet of right-of-way between East Lawn Cemetery and the historical property. Nobody wants to see Yancey's Tavern impacted, and we don't want to see any graves moved. But that can be -- without the sidewalks, we can put that in without impacting -- moving graves or without Yancey's Tavern. And the example of where this is done is every day on State Route 36 from Holston River Bridge to Moreland Drive over the railroad overpass, there is 57 feet, and we're talking about 60 feet right-of-way at Yancey's Tavern and the cemetery. There's 47 feet from white line to white line. So we know that it can be done. And just...

MR. OZMENT: Sir...

MR. SOMERS: Just real quickly. Also we need interim improvements. We can't wait another eight to ten years, and a really good example is at Yancey's Tavern -- I'm sorry, at Cassidy, that blind curve. Interim improvements were proposed in 2009, and we really need to get those done for safety.

Thank you.

MR. OZMENT: Thank you, Sir.

MR. RAMSEY: My name is Vance Ramsey. I do live on 126 and have lived there for some 46 years. I probably have had as many wrecks in front of my house as anybody in this audience tonight. I could probably prove that if I wanted to, but I don't intend to do that. And let me say that the majority of wrecks that's happened in front of my house, the road had very little to do with it. I've woke up many nights, and I've heard cars coming down the road at 70 and 80-mile an hour. They run off the road, and they wreck. A great majority of the wrecks have also been drunk drivers who wreck, run through my fence, and in three cases abandoned the car and run, and the next day on one of them I found four six-packs of beer in my creek, that they run and put them in my creek. So I guess I'm starting with that to say that roads don't necessarily cause wrecks. People driving the vehicles are usually at fault in some way. Just like guns don't kill people. People kill people.

I believe that 126 definitely needs improving, and as most of you have heard me say before in the meetings, about four or five things

From: TDOT Comments
To: "ffancies@earthlink.net"
Cc: Gary King
Subject: RE: SR 126
Date: Thursday, August 09, 2012 9:56:08 AM

Dear Ms. Ellis:

Thank you for your email regarding the SR-126 (Memorial Blvd.) project (PIN 105467.00) in Sullivan County.

I appreciate your attending the meeting in Bristol. I think these meetings are very productive.

TDOT will be bringing and explaining some new modified information and possible modified roadway sections in the area of Chestnut Ridge to the public hearing. I hope these will address some of your concerns in that area. We will be receiving and documenting all comments on the Draft Environmental Impact Statement, as well as on the modified information at the hearing.

I encourage you to attend the hearing when it is rescheduled. The date of the rescheduled hearing will be published in the local newspapers and at http://www.tdot.state.tn.us/sr126/ or http://www.tdot.state.tn.us/public/default.htm on the TDOT website.

If you have any questions, the Project Manager and point of contact for this project is Gary King, and his contact information is:

Gary D. King
Project Management Division
Suite 600, James K. Polk Bldg.
Nashville, TN 37243
gary.king@tn.gov
(615) 741-4777

Sincerely,

John C. Schroer
Commissioner

-----Original Message-----
From: Arthur Ellis [mailto:ffancies@earthlink.net]
Sent: Wednesday, August 08, 2012 5:46 AM
To: John Schroer
Subject: SR 126

> Dear Commissioner Schroer,
>
> Thank you for returning to the Tri-Cities area to explain and clarify a number of things for

attendees last Friday.
>
> I feel that you are indeed striving for transparency and seeking the best solutions for the multitude of situations under your purview, and I will continue to watch and hope that this is the case.
>
> My special concern, which has not yet been addressed in your remarks about SR 126, is Chestnut Ridge itself, which yields, in its present state, a breathtakingly beautiful view of the surrounding countryside and the mountains beyond. I always feel, as I approach its summit from the Kingsport side, that I am transitioning from city to country through something akin to a "magic kingdom" as its pastoral nature enfolds me. Environmentally and esthetically it is a very sensitive area which, once compromised, can never be restored.
>
> In the past, when traffic counts were higher on this stretch of road, I engaged in my own counts and observations at peak traffic times and found that traffic moved steadily along the highway, as well as entering and exiting it. As I understand it, destroying the integrity of this treasured landmark would be an extremely costly endeavor for what might be little or no traffic flow benefit and to the great emotional and financial distress of the many families who would be adversely affected by such a move.
>
> Would you speak to this issue, please?
>
> With best wishes,
> Charlotte Ellis
>

Subject: FW: SR 126
Date: Wednesday, August 08, 2012 10:01:07 AM

-----Original Message-----
From: Arthur Ellis [mailto:ffancies@earthlink.net]
Sent: Wednesday, August 08, 2012 5:46 AM
To: John Schroer
Subject: SR 126

> Dear Commissioner Schroer,
>
> Thank you for returning to the Tri-Cities area to explain and clarify a number of things for attendees last Friday.
>
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>
> Would you speak to this issue, please?
>
> With best wishes,
> Charlotte Ellis
>

TN Dept. of Transportation
Commissioner's Office
RECEIVED #37837
AUG 09 2012

405 Wine Circle
Blountville, TN 37617
July 26, 2012

TDOT Commissioner John Schroer
James K. Polk Building, Suite 700
505 Deaderick St.
Nashville, TN 37243

Dear Commissioner Schroer:

All present at Yancey's Tavern join me in thanking you and your staff for visiting with us to discuss the SR126 project. It is reassuring to learn of your own interest in historic preservation and that TN-SHPO and the Advisory Council on Historic Preservation are monitoring the impact of SR126 on the National Register Site. Thank you for your gratifying compliments on the results of my efforts for Yancey's Tavern. I recall with pleasure the similar appreciation of Governor and Mrs. Haslam when they visited during the campaign.

Your presentation of TDOT's continuing studies left unresolved the admitted adverse visual impact on the National Register Site, although it did lay to rest invasion of the Site and movement of graves in East Lawn Cemetery across the road. Alternative B adds a third lane and six-foot shoulders to the present two-lane road in front of Yancey's Tavern. This doubles the expanse of pavement and would be an adverse visual impact on the 18th century building as admitted in the draft environmental impact statement. There was no time to discuss this in our session so I will again suggest that adding shoulders to the present highway gives the needed safety improvement and mitigates the adverse visual impact. This only increases the expanse of pavement by 50% and reflects the fact that the traffic counts for this section of SR126 east of Old stage Road have been decreasing over the past five years and fell below 7000 cars/day last year. Adding lanes to roads with steadily declining traffic loads and low growth potential is still unjustified.

Measurements by two of my SR126 neighbors indicate a three-lane road with six-foot shoulders can be squeezed between the cemetery and Yancey's Tavern but the doubled expanse of pavement would have to be against the Tavern property. Not only would this enhance the adverse visual impact, but also it leads me to ask how does TDOT plan to protect and save the fine cut stone culvert that carries the spring outflow under the 1761 Island Road (Chestnut Ridge Road)? It is my understanding this is the last such culvert in the state and therefore an important part of the National Register Site.

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AUG 09 2012
CONSTITUENT SERVICES

There was considerable discussion of the Alternative B plan to build a divided four-lane highway with 12-foot grass median, shoulders and sidewalks for a mile at the beginning of this section of dwindling traffic load. The concern is loss of the 1761 Island Road (today's Chestnut Ridge Road north of SR126) to build a section of mock interstate in place of a road carrying less than 7000 cars/day. Island Road was the route of the militia and settlers to the important Battle of Island Flats July 1776. Later it was the route of the settlers from Yancey's Tavern to Exchange Place, Kingsport's Living History Farm. With this area's developing heritage tourism the ability to follow original 18th century routes where they still exist is important.

You have no doubt concluded from your study of SR126 that Yancey's Tavern is one of the area's most well known and popular historic sites. I do not charge for its use and numerous garden, civic, teachers, and patriotic/genealogy clubs have met there. Other events were a small wedding, a tour for the Tennessee state DAR convention, a Cub scout pack meeting, and a stop and tour by the local British Sports Car club, which was retracing the 1761 Island Road beginning in Bristol. A bus tour of Sullivan County Quilt Barns is becoming an annual event with a stop to see the house and hear its history. It appears in the local press fairly often and I am enclosing the most recent article for you and your wife.

Again thank you and your staff for coming. I am sure a context sensitive, cost effective solution will be developed for SR126.

Sincerely,

Rann Vaulx

Rann Vaulx

Enclosure, addressee only

Cc: Hon. Bill Haslam, Governor of Tennessee
Mr. Patrick McIntyre, TN-SHPO
Mr. LaShavio Johnson, Advisory Council on Historic Preservation
Ms. Ellen Sims, Regent, Long Island Chapter DAR
Ms. Cherel Henderson, Director, East Tennessee Historical Society
Mr. J. H. Osborne, Kingsport Times-News
Mr. John Scott, President, Netherland/Exchange Place Association
Mr. Bob Notestine, President, APTA (Association for the Preservation of Tennessee

SUNDAY STORIES

A SPECIAL EDITION OF THE KINGSPORT TIMES-NEWS • SUNDAY, JULY 1, 2012

Follow the Quilt Trail

Sullivan County Boasts 18 Barns Along the Route

By Susan Kendrick Lauhoff

It was the dream of a fifth generation quilter with Appalachian heritage.

Donna Sue Groves desired to honor her mother who sparked the creation of an "imaginary clothesline of connecting barns decorated with quilt squares across rural America." So, in 2001, just 11 years ago, the popular 8-by-8-foot quilt murals began "popping up" on barns in our county and across America as the Appalachian Resource Conservation and Development Council (Appalachian RC&D Council) in Northeast Tennessee was established.

According to the Appalachian RC&D Council, the process begins as barns are selected to host the quilt squares. Five criteria are considered: Visibility (must be able to be seen from the road), appropriateness (location must tie in to agriculture or a historic site), proximity (must be near other barns with quilt squares), attractiveness (barn area must be well-maintained) and compatibility (the surrounding area must be conducive to the goals of the Quilt Trail). Each square is painted by volunteers and are oftentimes a pattern design from a family quilt.

Sullivan County is part of the Appalachian RC&D Council and is currently home to 18 hand-painted quilts hanging on weathered barns. It is my privilege to have accepted the challenge of visiting each of them and sharing a bit of the process and history behind their creation.

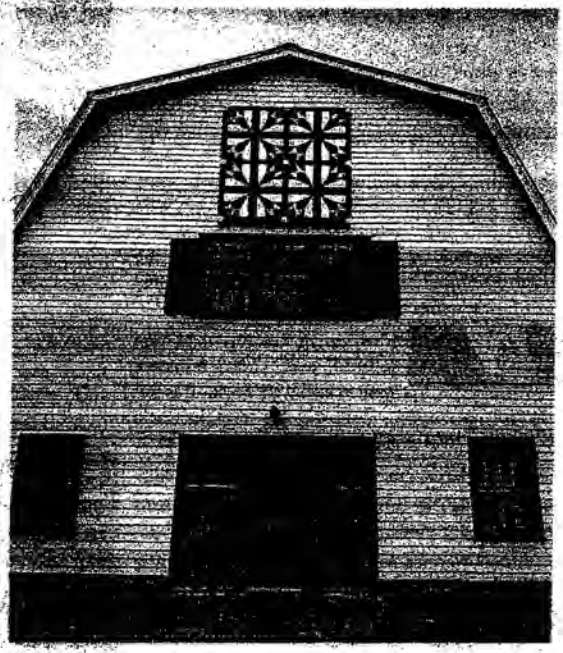
Anticipating the scent of freshly cut grass and hay, and with camera and notepad in tow, please journey with this Georgia peach as I seek the adventure of exploring the rural artwork in my new Upper East Tennessee home by traveling the back roads, highways and farming communities in Sullivan County.

For my first Quilt Trail barn visit, I chose the stately west barn at Allandale, located at 4444 West Stone Drive in Kingsport. According to Curator Rod Gemayel, "the Allandale barns were built in the late 1930s and early 1940s by J. Fred Johnson and later embellished by Harvey Brooks in 1949-50?"

A Brooks family quilt was never discovered after the City of Kingsport inherited the magnificent estate, so the "Stars Over Tennessee" pattern was chosen, painted and hung in 2005 by the youth leadership of S.H.O.U.T. (Students Helping Others Understand Tomorrow).

The second barn I visited on The Quilt Trail led me to one of the oldest buildings in Sullivan County - Yancey's Tavern and its regal old barn that was built in 1903. With its cobblestone foundation, I am reminded of barns in the rambling countrysides of Great Britain.

Owner Rann Vaulx shared that the stately barn had graced the cover of Kingsport's 2006 telephone directory, depicting the quilt with its "Grandmother Flower Garden" design that was painted by Blountville artist Anita Long and her children that same year.





There are 18 barns with quilt squares on display in Sullivan County, including the ones at Allandale (top) and Yancey's Tavern (bottom).

Located across from East Lawn Cemetery at 6290 Chestnut Ridge Road in Kingsport, the nationally-registered historic site held within its attic a small, unfinished Yo-Yo pattern quilt made from fabrics of 1920s-era dresses that were found during the renovation. Quite dirty, the soiled sample was professionally cleaned then framed and is now hanging in the tavern where I was able to admire it during a recent DAR meeting.

If you are interested in learning how your barn may be added to the Appalachian Quilt Trail, please visit www.quilttrail.org. And, if you own a barn on the Quilt Trail in Sullivan County, please contact me at susanckL@yahoo.com with Quilt Trail in the subject line to share your barn's story. I promise to bring the cookies if you'll make the lemonade!

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
SUITE 700, JAMES K. POLK BUILDING
NASHVILLE, TENNESSEE 37243-0349
(615) 741-2848

JOHN C. SCHROER
COMMISSIONER

BILL HASLAM
GOVERNOR

August 20, 2012

Mr. Rann Vaulx
405 Wine Circle
Blountville, TN 37617

Dear Mr. Vaulx:

Thank you for your July 26, 2012 letter and for sharing the news article about the Sullivan County Quilt Barns. The Tennessee Department of Transportation (TDOT) is continuing to work with local partners and government agencies with the goal of finding the best design for SR-126 that meets the needs of all the stakeholders.

As development of the project moves along, we will continue to work with you and TN-SHPO to minimize any visual impacts to Yancey's Tavern. TDOT is also committed to getting your input on what to do with existing Chestnut Ridge Road around the Yancey Tavern property and how to provide access to the property. In addition, we are aware of the stone culvert under Chestnut Ridge Road in that area and plan to avoid performing any project related work there that would disturb it.

I hope this letter has addressed your concerns. We look forward to working with you to develop a SR-126 project that is safe and cost effective, and at the same time is respectful of the historic value of Yancey's Tavern.

Sincerely,

John C. Schroer
Commissioner

JCS:GK

From: Michelle Griggs
To: Danielle Hagewood; Gary King
Cc: Scott C. Black
Subject: Route 126 East Tennessee
Date: Monday, July 23, 2012 9:02:16 AM

Gary:

Governor Haslam's Office has assigned the email below to TDOT for a response.

Please respond to Mr. Wagner by 7-25-12 and copy me at tdot.comments@tn.gov

NOTE: Only address the roadway concerns – not the political issues.

Thanks,

Michelle Griggs
Customer Service Coordinator
Community Relations Division
TN Dept. of Transportation
615-741-8261
615-253-1480 (fax)
michelle.griggs@tn.gov
How are we doing? *Customer Service Survey*

From: "Willis Wagner" <wwagner03@gmail.com>
Date: 7/2/2012 3:43:22 PM
To: "Governor Haslam" <bill.haslam@tn.gov>
Cc:
Subject: Route 126 East Tennessee

Governor Haslam:

Well in case you havn't heard sir there is a political campaign going on up here and yes guess what issue is very high in the discussion? You are right. State Route 126. This process has been going on for years campaign after campaign by both parties. One party says one year that the opposition hasn't done enough. Next campaign the process is reversed. The last time Representative Shipley ran he was making campaign ads of him riding the paver on a road they say was constructed in 1932. Six years before I was borned. According to our paper today he said over a million dollars was spent. The other party got $300,000 to $400,000 spent on a project that did not directly affect the old portion of highway in question but was a safety improvement. There seems to be an arguement starting now as to how to fund the project. TDOT is still after many years stating that they have a draft evironmental assessment tentaively approved by the Federal Government but we don't know what it says other than a long discussion about how many graves have to be moved. Graves are moved everyday for progress in our country. That is not something to hold up progess. I partly observed some of the operations of actually moving over two thousand graves to make way for Interstate 81and 50 to 100 graves to allow surface coal mining

operations to proceed in Virginia. I can honestly say that no grave was ever moved unless the conditions of that person were greatly improved and families were more satisfied. We are Americans we should do things honestly. I am retired military and proud of it. I also worked many years on reviewing the preparation of and the implementation of environmental documents. They seem to used on the general public as fearsome processes that we just must be so perfect while doing our planning where they are necessay. That is a pure falsehood sir. Now if you are using them to say you don't have enough money that is dishonesty. Another reason is the old structure that appeared to be hurridly placed on the National Historical Landmark Registry. That does not in anyway stall a project if you follow the guidelines. Yes protection is absolutely necessary but for heavens sake do that in the contract and move on. Don't use headlines like this to just stall the whole process for some dishonest reason of having this issue to run each campaign year after year.I am an independent voter who sometimes splits their vote to get the right person. There is not an ounce of difference between you and Governor Bredesen except your activities in changing the voting laws. That really does look shady to me especially for our college students and older people without transportation. Not sure how you live with that decision . However I believe you were the most qualified last time.

Now if you are waiting or counting on Senator Ramsey to help you out on Route 126 forget it. I do believe I have attended every announced public meeting held on this road. I have never seen Senator Ramsey at any of the meetings nor has he made a public statement about Route 126. According to our newspaper there was a meeting with other legislators in his office one time about this road and he excused hinself during the discussion. Other neighbors will give you the same account. He has been absent on this matter up here. It does seem like the newspaper tries to get his attention sometime but to no avail. Look all we have to do is drive toward Nashville or over in Washington County to see that this project is for sure neglected and gets no local backing except Representative Shipley at each election time regardless of the record of accidental killings in vehicle accidents. It claimed a young mother about three months ago. The front wheel dropped over where there was no shoulder and caused loss of control. A small child was thown out of the car and killed when he struck the highway less than a quarter of mile from our house. The road has a long record of devasting safety history. The general public is not stupid. It appears to be an ongoing process of misrepresenation by all of our officals up here unless there is the possibility of personal political gain.

Why does the State of Tennessee need to absolutely have all funding necessary promised or in the bank for the entire 8 to 10 miles before they will start construction anywhere? Why can't you start on one end or the other or on the most dangerous section and fund that now? The longer you wait the more people will lose their lives and the project will cost us more when completed. You cannot place a money value on the loss of life going on up here where it is easy for everyone to see that this antiquated road is the cause. I challenge you to find a place to change a flat tire without impeding traffic. Can't we do more than shuffle paper?

Willis Wagner
5524 Kiowa Street
Kingsport, TN 37664

From: Sr- Bruce
To: Gary King
Subject: State road 126 memorial project.
Date: Sunday, June 10, 2012 10:14:50 PM

Hi Gary King,

I live at 4900 memorial blvd Kingsport,TN, That's right across, from the west end, of East lawn funeral home. I'am looking for the current timetable, for the road project. From what I read, It's in the end part of the environmental stage. What does the next stage entail. If you could give me a time line in years, To the breaking of ground, It would be great, Even a estament will do. Even if the No go plan is used.

The plans all include my property, The new "A-B-C" Unless I mess read. This is a very dangerous area of road, I have seen wrecks that the police did not come out on, They was handled by other means. I've almost been hit on a few occasions my self, just trying to leave. So I am in favor, of the road being fixed, For safety reason's alone.

Thank's for your time, Bruce Piatt

My phone is 423-422-7702

Phone: 615.741.4777

From: Arthur Ellis [mailto:ffancies@earthlink.net]
Sent: Friday, June 01, 2012 11:54 AM
To: Governor Bill Haslam
Cc: John Schroer; eths@eastTNhistory.org
Subject: Federal and state dollars at risk on SR 126 highway project

Dear Governor Haslam,

I am writing to you because you are the one person who can dictate how tax dollars are responsibly spent in the state of Tennessee. I want to bring to your attention a part of a transportation project in Sullivan County that I and many community members consider a case of lavish spending and an egregious waste of millions of hard-earned taxpayer dollars -- that being a particular 1.5 mile section of the SR 126 Memorial Boulevard improvement project.

My husband and I lived for many years in the historic Barger House, now home of Cherry Point Veterinary Hospital, on state highway 126. I have served as a volunteer at Yancey's Tavern, built in 1780 and listed on the National Register of Historic Places. We treasure the history of this area, including the pre-Revolution Old Island Road traces on the property, the woodland and rural nature of Chestnut Ridge, and the friendly people of the community.
I am intimately acquainted with the history of this SR 126 road improvement project, having attended all of the public meetings, as well as some of the Community Resource Team meetings, and served on a Citizen Focus Group for the project. I am fully supportive of the need for improving the corridor for safety and salute TDOT for choosing this as the first Context Sensitive Solutions project in the state! However, I do have a serious problem with the 1.5 mile section between Old Stage Road (the end of the Kingsport City Limit) and Cooks Valley Road. This section is currently slated by TDOT to be a grass median-divided 4-lane (Alternative A) or a combination grass median-divided 4-lane/3-lane (Alternative B). I contend that both alternatives are gross over-building of this rural County section of the state highway.

Given that:
1) Old Stage Road separates the City from the County and the urban land use from the rural;
2) both Build alternatives feature a grass median-divided 4-lane in this section that will devastate our beautiful Chestnut Ridge;
3) both Build alternatives will negatively impact Yancey's Tavern and the East Lawn Cemetery;
4) this section has the lowest traffic numbers on the entire project length (fewer than 8000 cars/day in the last five years and in steady decline);
5) the cost (currently estimated total project cost for construction, ROW & utilities: $120,316,000 for Alternative A; $99,565,000 for Alternative B) of a divided 4-lane on this steep ridge section is enormous when compared with that of an improved 2-lane that would meet all of the project requirements (as submitted in a Minority Report in the Community Resource Team Report to TDOT); **how, then, does the state justify this level of expense and destruction for this rural, lowdensity, county section?** This has never been explained to the tax paying public. It is not only money down the drain; it also completely negates the context sensitivity so anticipated by the community in this model project.

Alternative B converts a half mile of this section to a 3-lane, for a savings of $20.4 million over Alternative A. **How much more would be saved by making this entire 1.5-mile section from Old Stage Road to Cooks Valley Road an improved 2-lane (NOT a 3-lane), one that is superior to the divided 4-lane on all counts?**

You have pledged a fiscally responsible administration, one that would cut out wasteful spending. May we count on you to live up to that promise, saving millions upon millions of dollars, while protecting our community's treasured landscape in keeping with TDOT's stated commitment to the principles of Context Sensitive Solutions? I urge you to intervene in this project to correct over-building of this section, and invite you to revisit our community to see firsthand the area in question. I would be happy to serve as an escort.

It seems a double tragedy to extravagantly spend many tens of millions of dollars to disfigure or destroy what is unique, beautiful and loved and what defines this particular area -- our picturesque Chestnut Ridge, the historic Yancey's Tavern property, and the community's Eastlawn Cemetery.

Many thanks for your attention to this matter, which is of extreme importance not only to the community but to the tax payers of the state as well.

Sincerely,

Charlotte B. Ellis
(1089 Big Hollow Road)
P. O. Box 899
Blountville, TN 37617

Subject: FW: SR 126
Date: Tuesday, May 29, 2012 3:23:47 PM
Attachments: flexability in highway design.pdf
SR126 Postcard from original sr126 web site.pdf

From: Tim McCoy [mailto:mccoy1958@charter.net]
Sent: Monday, May 28, 2012 11:50 AM
To: John Schroer
Cc: Governor Bill Haslam
Subject: SR 126

Dear Commissioner Schroer,

As I sit here this Memorial Day reflecting on those who have died defending our country I also reflect on those who have died on my road. I live on SR126 and my wife and I have been involved with the process since January 2005. We actually became involved and part of the statistics of this road when our oldest son Nelson was killed on the road the day before Thanksgiving 2004. The accident report stated that a car pulled into his lane as Nelson was rounding a blind curve instead of slowing down as a neighbor was turning into her driveway. It was a cold wet day and the narrow road did not allow him to correct his car before he slid off the road down a 30 ft embankment and hit a telephone pole broad side dying almost instantly. There were no guard rails to prevent his car from going over the bank and there were no shoulders on either side of the road. I recently followed a Sullivan County Sherriff's deputy car as we traveled past the site where Nelson died and that deputy did the exact same thing, pulled into the other lane as a neighbor was pulling into their driveway. I wish I had gotten the patrol car number but seeing this incident did show me what Nelson saw and how he had to react and how he didn't hit the car on that fateful day. I am glad no one was coming the day the deputy made his decision to not slow down. Those of us who use this road daily know the dangers and those of us with children who go to Sullivan Central High School also know all too well the dangers of this road and as a member of the PTSA I helped with a project called Car Control Clinic. This project brought in an organization that helped teach our children how to control their cars and the PTSA ran a golf tournament to raise money to supplement the cost of the clinic to our students. For three years this golf tournament was a memorial tournament for a Central student who had died on SR 126. I personally knew 2 of the three. One of Nelson's best friends died the summer before his senior year. Joseph Misciagia was a great kid, class officer, smart and a great soccer player. Joseph, like Nelson did, would have graduated in the top of his class. Nelson played basketball and baseball had a 4.0 GPA and was at the University of Alabama Huntsville as an engineering major on an academic scholarship. Nelson's death stirred lots of emotions with the students sending hundreds of letters to former Commissioner Nicely and former Governor Bredesen.

Since then I have pushed for continuing safety improvements with many having been implemented. There is now a guard rail where Nelson died and centerline rumble strips with centerline reflectors were installed in 2007. These improvements although not costly have

prevented many right of center accidents and the deaths on SR 126 have dropped substantially. But there is still problems with this road. The road bed is old and needs to be brought up to today's standards. The DEIS states that the road design speed does not meet the posted speed limits. And I have pushed for lower speed limits only to get double talk that it is the county commission's responsibility to ask for a lower speed limit and the county commission says it is a state road so it is the state's responsibility. And even with the DEIS review that the road design speed does not meet the posted speed limits nothing has changed. So how can TDOT justify and keep the posted speed limits if the DEIS says that the road does not meet the design speed. Why not, for safety sake, lower the speed limits? But even if the speed is lowered there are few places to pull over those who choose to speed on this road so enforcement is difficult.

The cancellation of the community meeting has me worried that the context sensitive program is now over. The TDOT employees and consultants who were on the resource team or who worked from behind the scenes are no longer involved with the project. I cannot tell you how many project managers there have been since Elizabeth Smith but it has been several. Ed Cole is no longer involved and I think is no longer with TDOT. There seems to be all new people and I am not sure if they even know that this is a context sensitive design project as an email reply to my questions stated that TDOT is going to the federal highway administration to see what is needed to be done so that they can encroach on a national historic registered property.

I was not happy with the only options being considered were basically the same except for ½ mile was reduced in design to limit the impact on East Lawn Cemetery. And for the record during the CSS process the question was asked how many graves would be impacted and the answer was that a specific number could not be given until after the DEIS is completed. But with the design being pushed by the members of the team that worked for the City of Kingsport of a 4 lane divided road from Center Street to I-81 was and is as designed in the DEIS would require the movement of many graves. There was a minority report written by members of the team who did not want Chestnut Ridge to be destroyed just to provide a 4 lane, plus a 5th lane that is either a raised grassy medium or a center turn lane and sidewalks and shoulders and for the segment across Chestnut Ridge is a 72' wide! There are very few roads to turn onto while traveling through the ridge and traffic counts drop drastically as soon as you pass Old Stage Road. And who will be responsible for mowing the grassy medium since TDOT has not yet mowed the right away along SR 126 yet this year. There is grass along the road that is waist high.

We were told during the meetings that TDOT will not overbuild but it appears that is exactly what will happen if the road is built as it is currently designed. I have read the DEIS and a few items standout for me in the report. First is the traffic count data listed in Table 1.5.6: SR126 Traffic Volumes. It has the title of existing and future traffic volumes but the years listed are 2013 and 2033. No existing traffic data is listed. The AADT on TDOT's website lists the volume at the following measuring stations, which are both east of Old Stage Road, as follows. Station 167 just east of Old Stage at 6,786 for 2011 and station 108 which is west of Harrtown Road at 7,010. Station 202 which is just west of Old Stage Road was 9,805. The chart in the DEIS lists the volume from Old Stage to Lemay (station 167) at 8,450 in 2013 and Island Road to Fall Creek Road (108) at 9,360. Are we to accept that these figures are accurate when if the actual AADT is looked at the traffic count has dropped each year since 2000! Station 167 had a volume of 8,200 in 2000 and in

2011 it was 6,786. Station 108 was 8,930 in 2000 and 7,010 in 2011. So do the actual numbers matter to TDOT? Do the actual numbers justify spending a $100 million minimum for a superhighway that will take several hundred homes and graves and many businesses just to provide a road for future commercial development maybe? And why should the City of Kingsport officials have such a great influence on the development of this road when I don't have the ability to vote for or against these people.

Another reason that I fear that the context sensitivity is gone from the project is several statements made by State Representative Shipley at a "town hall meeting" shortly after the cancelled community meeting that was not advertised. I was informed of this meeting by a friend who got an email telling her about the meeting. It was held at a home of a supporter of Rep Shipley and in that meeting the following statements were made. First he stated that he had chosen a couple Diane and Hank Somers to be his SR126 committee and was getting them meetings with TDOT officials. Now I appreciate everyone who tries to get safety improvements for the road these individuals do not represent everyone on this road. Also, where does the community involvement stand when a state representative selects a former resource team member who wrote a minority report for a 4 lane divide road from Center Street to I-81? Also, in this same meeting Rep Shipley told those in attendance that where the DEIS used the word adverse in respects to what the road would do to the community and to cemetery and to Yancey's Tavern does not mean a negative but just a change to the status quo. Now it has been a few years since I wrote a technical paper but I am sure you would not use the word adverse if it was a positive change! So with these statements and the recent response that TDOT is now going to the federal highway department to try to encroach on Yancey's Tavern just to put in a road that is not context sensitive nor that is not being over built. We all know that the economy has reduced the amount of money coming from the federal government and that Tennessee has more road work needed than money to do the work and when I asked if a new environmental impact statement would be needed if the foot print of the road was reduced I was informed that there would have to be a new DEIS and all this concerns me. I am afraid that the third option of no build will be the option chosen. The decision of a no build option if chosen would be, in my opinion, would be a decision against safety because the only options on the board are more development than safety. The actual AADT do not justify the need for more lanes, the road can be made safer by improving site lines, horizontal and vertical curves, the addition of shoulders and other safety improvements that TDOT has implemented on other roads like SR75 where edge of road rumble strips were installed from the TriCities airport to Blountville so drivers know when they are getting close to the shoulders or on highway 66 (I believe this is the highway number) in Jefferson County where both centerline and edge of road rumble strips have been installed.

I would like to ask for a meeting with you to discuss SR126 and some compromises to get this road built. I don't expect to have all my suggestions implemented but I do feel that I have given enough to get this road fixed that I deserve to have my opinions heard. I have never been asked by Rep Shipley for my thoughts and for him to ignore all constituents except the Somers' just adds to my frustration. I can come to Nashville at any time that fits your schedule.

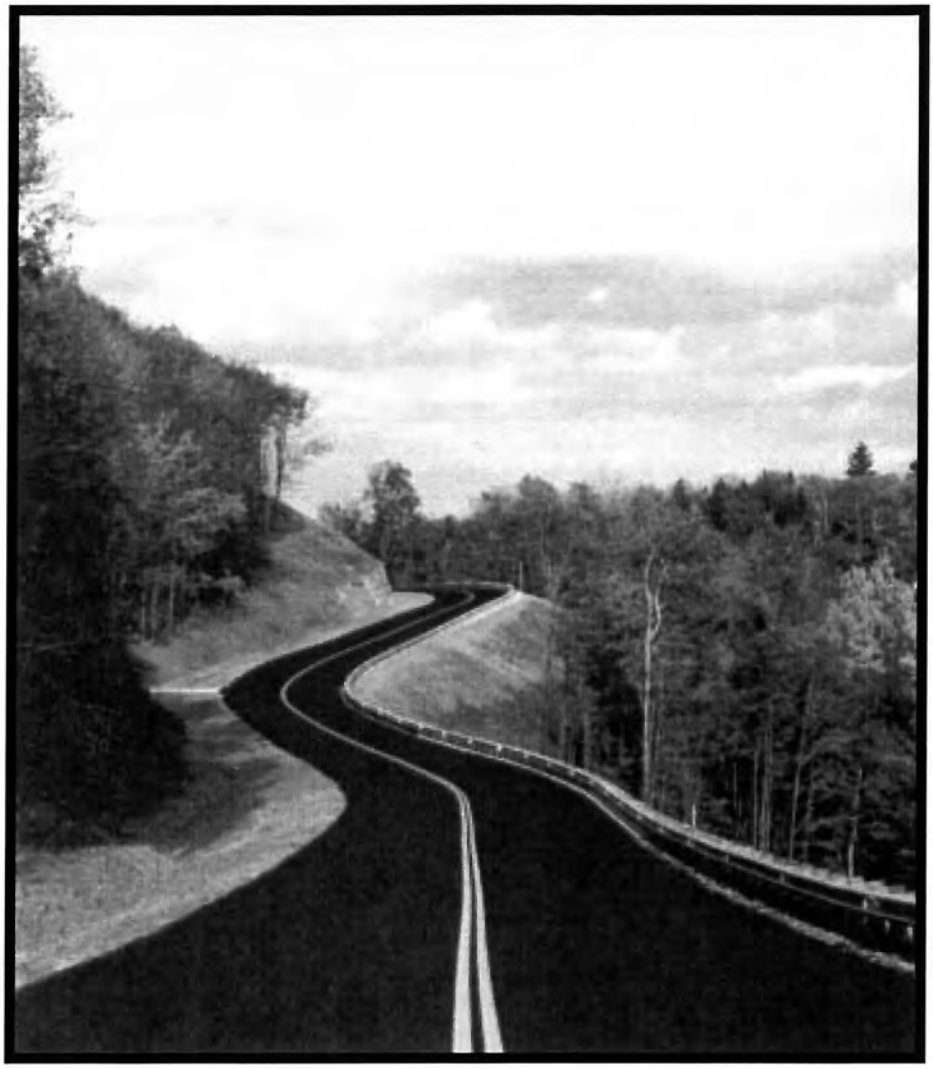
I have included 2 attachments to this letter. One is the Flexibility of Highway Design from the US Department of Transportation and a page from the old SR126 web page showing a post card from

the 1940's when SR126 was US 11W. Please look at the cover photo on the Flexibility of Highway Design and the post card and see if the pictures aren't similar. It is as if the Federal Highway Department had SR126 in mind for this guideline.

Thank you for your reading of this email and I look forward to hearing from you.

Tim McCoy
5974 Highway 126
Blountville, TN 37617
423-323-1889

Flexibility in Highway Design



U.S. Department of Transportation
Federal Highway Administration

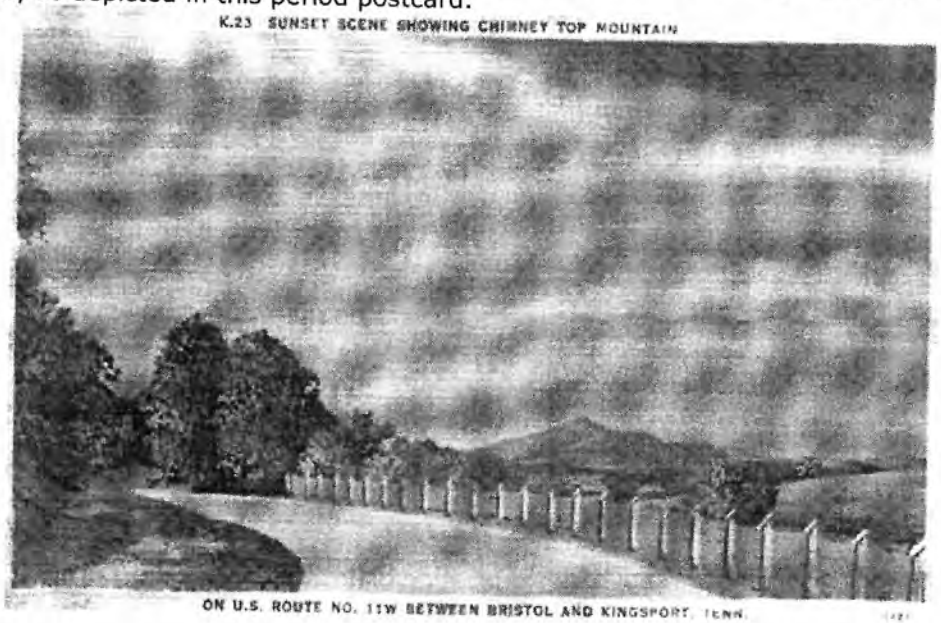
TDOT Go.

What is CSS?
Newsletter
Project Location Map
Project Area Photos
Public Involvement
Resource Team
Project Timeline
FAQs
SR-126 Home

Sullivan County
Memorial Boulevard (SR-126)
From East Center Street in the City of Kingsport to I-81
A Context Sensitive Solution Project

Project Overview

Life and traffic along Memorial Boulevard (SR 126) has come a long way since the 1940s, as depicted in this period postcard.



The need for improvements along the corridor that connects the City of Kingsport to I-81 has been discussed since the early 1990's. In 1992, the Tennessee Department

TN Dept. of Transportation
Commissioner's Office
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MAY 30 2012

#36882

May 24, 2012

2356 Woodridge Ave

Kingsport, TN 37664

TDOT Commissioner Schroer

James K Polk Bldg

505 Deadrick Street Suite 700

Nashville, TN 37243-0349

My residence is adjacent to Memorial Blvd. (HWY 126) in Sullivan County, about to impacted by construction proposals by TDOT. The construction proposals for this road are confusing and some alternative are so extremely costly that they stand in denial of a necessary budget, and this cannot be obfuscated by cancelling our public hearing concerning the DEIS for Memorial Blvd/126.

For example, TDOT studies pronounce that traffic will increase between Old Stage Road and Cooks Valley Road, when in reality it has decreased over the past 12 years. What will be the cost of a 2 lane improvement in this area. Really. We have heard, even from the TN Transportation committee, figures like 120 million dollars, for eight miles of a single road. How does TDOT justify the taxpayer burden for a grass median in a 4 lane? Can we graze our horses in this usufruct, or maybe having the maintenance mowing crew in this median will slow traffic down on 126?Why not instead a speed camera robots? They seem to grow overnight. Why not put one somewhere cost effective? The DEIS contains no accurate visual depiction of "Before " and "After". Nor does it reflect the transition to rural land use , just east of Old Stage Road. All the proposed blasting and retaining walls is really a desire to build a bigger highway, and a very spendthrift one indeed, when what needs to occur is to get drivers to simply slow down and pay attention. The disruption of the scheduled public input into the DEIS review mocks any consideration of public, taxpayer input into this process. We have a right of TDOT's accountability before we write this huge checks.

The favor of your reply is requested.

Cathy Dunn

Cathy Dunn
2356 Woodridge Ave
Kingsport TN 37664

RECEIVED
MAY 30 2012
CONSTITUENT SERVICES

From: wrenlywren007@aol.com
To: TDOT Comments
Subject: To Commissiioner Schroer HWY 126 TDOT proposals, DEIS
Date: Thursday, May 24, 2012 5:34:34 PM

My residence is adjacent to Memorial Blvd. (HWY 126) in Sullivan County, about to impacted by construction proposals by TDOT. The construction proposals for this road are confusing and some alternative are so extremely costly that they stand in denial of a necessary budget, and this cannot be obfuscated by cancelling our public hearing concerning the DEIS for Memorial Blvd/126.

For example, TDOT studies pronounce that traffic will increase between Old Stage Road and Cooks Valley Road, when in reality it has decreased over the past 12 years. What will be the cost of a 2 lane improvement in this area. Really. We have heard, even from the TN Transportation committee, figures like 120 million dollars, for eight miles of a single road. How does TDOT justify the taxpayer burden for a grass median in a 4 lane? Can we graze our horses in this usufruct, or maybe having the maintenance mowing crew in this median will slow traffic down on 126?Why not instead a speed camera robots? They seem to grow overnight. Why not put one somewhere cost effective? The DEIS contains no accurate visual depiction of "Before " and "After". Nor does it reflect the transition to rural land use , just east of Old Stage Road. All the proposed blasting and retaining walls is really a desire to build a bigger highway, and a very spendthrift one indeed, when what needs to occur is to get drivers to simply slow down and pay attention. The disruption of the scheduled public input into the DEIS review mocks any consideration of public, taxpayer input into this process. We have a right of TDOT's accountability before we write this huge checks.

The favor of your reply is requested.

Cathy Dunn

From: wrenlywren007@aol.com
To: TDOT Comments
Subject: SR 126 DEIS hearing postponement,and citizen questions
Date: Thursday, May 24, 2012 12:09:14 AM

Dear Commissioner Schoerer:

I am a taxpayer living on a road adjacent to HWY 126 in Sullivan County , on which there have been some contractor proposals, under the TDOT umbrella that involve gross over spending (which many other Tennessee roads cry out for repair).

-Why does TDOT show projected traffic growth between Old Stage and Cooks Valley when it has been in steady decline for the last 12 years?What would be the cost of a two lane road improvement between Cooks Valley and Old Stage Road? How does TDOT justify the tax payer burden of a 4 lane center grass median, if we cannot use it a usufruct for our horses. The transition tio rural occurs just east of Old stage road, and is not represented in the two to four lane transition. THe DEIS itself has no before and after visuals, which is germane to any permanent plan.

The contractor proposals of blasting, erecting retaining walls, all seem exorbitant to correct this road. Why not an few intersections with speed cameras? A We need a hearing and a referendum

Sincerely,

Cathy Dunn

From: wrenlywren007@aol.com
To: TDOT Comments
Subject: SR 126(improvements)
Date: Tuesday, May 22, 2012 10:58:14 PM

Hello:

As a taxpayer, recently told that our right to A DEIS hearing of the above project has **been indefinitely postponed**, let me say to you that this site map is ridiculous in that there is no SCALE representation of the mileage of 120 million dollars overhaul to be funded by us NON Participating taxpayers.

Could you be less obsequious and provide a to scale map, since we can't have a public DEIS hearing? (That is before the germaine time for Transportation board member Tony Shipley to run again???

Copy to:

File

Governor Haslam

#366377
related to
#36126 +
#36212

405 Wine Circle
Blountville, TN 37617
May 9, 2012

TDOT Commissioner John Schroer
James K. Polk Building, Suite 700
505 Deaderick St.
Nashville, TN 37243

TN Dept. of Transportation
Commissioner's Office
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MAY 17 2012

Dear Commissioner Schroer:

I appreciate your letter of April 23, which implies TDOT's respect and protection for my Yancey's Tavern National Register Site. However, my friend Tim McCoy received the following from SR 126 Project Manager Gary King: "SR 126 runs between the Yancey's Tavern historical property and the East Lawn Cemetery. The context sensitive concept was to minimize impact to both these properties as much as possible. Any new option will stick to that concept. Any encroachment onto registered historic property involves meeting legal requirements and usually is a lengthy process. Both build alternatives in the Draft Environmental Impact Statement avoids the historic property. From what we heard at the MPO meeting it was obvious that the resulting impacts to the cemetery were unacceptable to the community. This is a unique situation and TDOT has to work with the State and Federal authorities to determine what options are possible to pursue that encroach on the historic property and then how we can legally proceed with those options,"

My attorney friends tell me TDOT can hardly expect to get a court order to invade a National Register Site for its unjustifiable-over-build options while it ignores the build option that has no adverse impact on Yancey's Tavern and minimal (if any) impact on the cemetery. This option is the IMPROVED TWO LANE—paved shoulders with rumble strips, improved curves and sight distances. It appears this option would fit between the National Register property and the graves in the cemetery. The build options in the DEIS have SR 126 blast east of Old Stage Road into a divided four-lane for the section with the lowest traffic count (below 8000 cars per day). What is the justification for that massive expense and destruction of the historically significant Chestnut Ridge? What is the cost of the Improved Two Lane east of Old stage Road to Cooks Valley Road where the cemetery ends? How many homes and businesses are lost to this option and how many graves, if any, are displaced? This option would have no adverse impact on the National Register Site, as required by Federal Law.

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Cost effectiveness should be a major priority in the present political/economic climate. Spending a tenth of a billion dollars to hatch a superhighway out of a road carrying less than 8000 cars per day could be fodder for the Tea Party's next "bridge-to-nowhere" boondoggle.

As stated previously, the recent fatality and her Feathers family are long time friends of mine and I certainly want to see a safer SR 126 achieved by the most cost effective and context sensitive solution. Hopefully TDOT will discover that with its evaluation of the Improved Two Lane option.

Sincerely,

Rann Vaulx

Rann Vaulx, Owner Yancey's Tavern

Cc: Hon. Bill Haslam, Governor of Tennessee
Mr. Patrick McIntyre, TN-SHPO
Mr. LaShavio Johnson, Advisory Council on Historic Preservation
Ms. Ellen Sims, Regent, Long Island Chapter DAR
Ms. Cherel Henderson, Director, East Tennessee Historical Society
Mr. J. H. Osborne, Kingsport Times-News
Mr. John Scott, President, Netherland/Exchange Place Association
Mr. Bob Notestine, President, APTA (Association for the Preservation of Tennessee Antiquities)

From: Deborah Holman
To: Gary King
Subject: SR-126 (Memorial Boulevard), Sullivan County
Date: Tuesday, May 08, 2012 10:42:37 PM
Attachments: Comments SR-126.docx

Since the public meeting that was scheduled for March 22, 2012 for this project has not been reschedule yet, I am afraid that I might miss the announcement and not be able to attend a future meeting nor be able to provide my comments concerning this project. I have identified my concerns in the attached document for your consideration.

If you will recall, I expressed these concerns to you in a telephone conversation on April 11, 2012.

Erwin D. Holman P.E.
180 Graveltop Road
Blountville, TN 37617
423-341-4450

Comments concerning SR-126 (Memorial Boulevard) from East Center Street in the City of Kingsport to I-81, Sullivan County

A public meeting on this project was scheduled for March 22, 2012, but was cancelled and per the TDOT website has not been rescheduled yet. The following comments are respectfully being submitted for your consideration just in case I am not able to attend the public meeting when it is rescheduled.

I have several concerns about closure of one end of Graveltop Road as part of this project. I live on Graveltop Road and also own a parcel of property that adjoins SR-126. All the concerns below have a negative impact on the residence of Graveltop Road and its adjoining streets.

The TDOT project webpage lists several items as needs for the project, one being "**Improved access for school busses is needed.**" Closing one end of Graveltop Road means that busses must make a trip along the road and then double back to exit Graveltop Road. This will mean more bus traffic for the narrow road and double the bus for that street from two busses twice a day to two busses four times a day. Thus increasing the time that students have in riding the bus as well as increases gas cost to the Sullivan County school system and every county taxpayer.

"Improved mail delivery is needed." By closing the east end of Graveltop Road the mail delivery in our area and anywhere after Graveltop Road will take longer as the mail carrier now enters Graveltop from the east entrance and exits the west entrance. Under the proposed layout the mail carrier will have to go past all the houses on Graveltop and turn at the cul-de-sac before delivering any mail on this road.

"Improved response time for emergency equipment is needed." Emergency equipment responding to the residents in the Graveltop Road area comes from the Blountville direction. Once the closest access to Blountville is closed, response time will increase for residence alone Graveltop and its adjoining streets.

"The geometry of the roadway needs to be improved." Changing the alignment and grade for the section of SR-126 between the access points for Graveltop Road will be an improvement especially during the winter months. Vehicles are consistently sliding into the ditch and hillside during snow and icy conditions under the current alignment and grade. When this occurs a quick and easy detour is through Graveltop Road. By closing one end of Graveltop, this detour will no longer be available for normal traffic and emergency equipment. This could be a problem if the improved geometry is not enough to prevent icy slide-offs.

I support most of the proposed changes to SR-126 with the exception of the closure of one end of Graveltop Road. The closure will negatively impact the residents in the Graveltop Road area and should be addressed in the Final Environmental Impact as not meeting the needs of this project.

Erwin D. Holman 180 Graveltop Road, Blountville, TN

Subject: FW: Missing information in the SR 126 DEIS
Date: Sunday, May 06, 2012 11:42:16 PM
Importance: High

From: Linda [lindar@chartertn.net]
Sent: Sunday, May 06, 2012 8:44 PM
To: JonnaLeigh Stack
Subject: Missing information in the SR 126 DEIS

Dear Ms. Stack,

My husband and I have lived on SR 126 since 1964. We are property owners who have a small farm (15+ acres) that fronts the Highway. I have traveled the road for 71 years and have driven it since I was 16. My husband drove it to Kingsport to work for 23 years before he retired.

The Highway in front of our house has had numerous wrecks over the years, some that happened in our yard. It is a long straight stretch and most wrecks were the result of speed, alcohol and inattentiveness. We have never had a THP who was investigating a wreck comment that SR126 was at fault. The only complaint is that the road needs shoulders, the speed limit enforced and approximately four intersections need to have turn lanes installed to prevent traffic back-up.

I have followed the meetings of the Citizen Resource Team from the beginning, attending most of their work sessions as an observing member of the public. I attended the March 22, 2012, Kingsport MPO meeting where Commissioner Schroer and other TDOT people spoke. I have reviewed the Draft Environmental Impact Statement and the construction maps in the appendix. I am very concerned about the impacts this road, as presented, will have on our community--the residents, the businesses, Yancey's Tavern, East Lawn Cemetery, and Chestnut Ridge. And I am very confused about the sizes of the cross-sections. TODT has not provided all of the information in the diagrams, and **I am asking for that information before the Public Hearing, please**. I've covered every segment below, and request that you supply the missing information so we know the actual size of the footprint. Why was that information was not included in the DEIS? Just as with the grave displacements, the public needs to be armed with all the facts before going into the hearing, or they will feel very much mislead by TDOT.

Alternative A

Segment 1 Shown in the DEIS: 11' travel lanes x 4 = 44'
12' raised median 12
4' shoulders x 2 8
Total 64'

Not shown: Dist. from inside lane to median x 2 = ?
Curb & gutter, sidewalk x 2 = ?

Actual total footprint: ?

Segment 2 Shown: 11' travel lanes x 4 = 44'
12' twtl = 12
4' shoulders x 2 = 8
Total 64'

Not shown: Curb & gutter, sidewalk x 2 = ?

Actual total footprint: ?

Segment 3A Shown: 11' travel lanes x 4 = 44'
12' raised median = 12
4' shoulders x 2 = 8
Total 64'

Not shown: Dist. from inside lane to median x 2 = ?
Curb & gutter, sidewalk x 2 = ?

Actual total footprint: ?

Segment 3B Shown: 11' travel lanes x 4 = 44'
12' raised median = 12
8' shoulders x 2 = 16
Total 72'

Not shown: Dist. from inside lane to median = ?
Ditch x 2 = ?

Actual total footprint: ?

Segment 4 Shown: 11' travel lanes x 2 = 22'
12' twtl 12
6' shoulders x 2 = 12
Total 44'

Not shown: Curb & gutter, sidewalk x 2 = ?

Actual total footprint: ?

Segment 5 Shown: 12' travel lanes x 2 = 24'
10' shoulders x 2 = 20
Total 44'

Not shown: Ditch x 2 = ?

Actual total footprint: ?

Segment 6 Shown: 12' travel lanes x 4 = 48'
12' raised median = 12
12' shoulders x 2 = 24
Total 84'

Not shown: Dist. from inside lane to median = ?
Ditch x 2 = ?

Actual total footprint ?

Alternative B

Segment 3B Shown: 11' travel lanes x 4 = 44'
12' raised median = 12
8' shoulders x 2 = 16
Total 72'

Not shown: Dist. from inside lane to median = ?
Ditches x 2 = ?

Actual total footprint: ?

Segment 4 Shown: 11' travel lanes x 2 = 22'
12' twtl = 12
6' shoulders x 2 = 12
Total 46'

Not shown: Curb & gutter, sidewalk x 2 = ?

Actual total footprint: ?

Without being given the full size of the road cross-section (making it appear smaller than it really is), I feel the public is being disregarded. **In addition to replying to me, could you please post the information in the Kingsport Times News?**

Can you also explain why shoulder width varies from 4 to 10 feet? If 4 feet is acceptable in some segments, why not all of them? And why are travel lanes 12 feet wide in Segment 5? By making careful adjustments, you could spare many residents the pain of relocation or having the road at their front door and still have a safe road.

In the interest of providing the public with more of the information we need, I thank you very much for your time and response.

Sincerely,

Mrs. Vance Ramsey
5614 Hwy.126
Blountville, TN 37617

P. S.

I also think the Before & After pictures are mis-labled and very unrealistic, not giving the public the true picture of what the finished road would look like. All one has to do is look at the tree cutting and earth moving on SR 75 and SR 36 to see that our community will lose its beauty and change forever. Can TODT not furnish realistic and accurate pictures? Your pictures may say "Typical Section," but they are really not.

From: Tim McCoy <mccoy1958@charter.net>
Sent: Thursday, May 03, 2012 6:47 PM
To: Gary King
Subject: RE: SR 126 Community Meeting

Thank you for the information. But there also seems to be third option that is available on the section of road from Old Stage to Cooks Valley which should reduce the impact on both Yancey's Tavern and the cemetery and that would be to reduce the footprint of the road through that stretch from the 4 lane divided with shoulders to an improved 2 lane with shoulders. The current plan I think even shows sidewalks through this stretch.

Thanks again.

Tim McCoy

From: Gary King [mailto:Gary.King@tn.gov]
Sent: Thursday, May 03, 2012 9:36 AM
To: 'Tim McCoy'
Cc: JonnaLeigh Stack
Subject: RE: SR 126 Community Meeting

Mr. McCoy,

SR-126 runs between the Yancey's Tavern historical property and the East Lawn Cemetery. The context sensitive concept was to minimize impact to both these properties as much as possible. Any new option will stick to that concept.

Any encroachment onto registered historic property involves meeting legal requirements and usually is a lengthy process. Both build alternatives in the Draft Environmental Impact Statement avoids the historic property. From what we heard at the MPO meeting it was obvious that the resulting impacts to the cemetery were unacceptable to the community. This is a unique situation and TDOT has to work with the State and Federal authorities to determine what options are possible to pursue that encroach on the historic property and then how we can legally proceed with those options.

At this time we don't know when we will have enough information to share with the community and when we will be able to hold our next public meeting.

Thanks,
GK

Gary D. King
Project Manager
TDOT, Project Management Division
Suite 600, JK Polk Bldg.
Nashville, TN 37243-0341
gary.king@tn.gov
(615) 741-4777

From: Tim McCoy [mailto:mccoy1958@charter.net]
Sent: Saturday, April 28, 2012 8:57 AM
To: Gary King
Subject: SR 126 Community Meeting

Mr. King,

Can you give me an update on the rescheduled community meeting? Also, I have heard that during the meeting that the commissioner stated that TDOT was looking at other options for the road. Are there options being considered? What options are being considered and will they be consistent with the context sensitive design concepts? Are the other options a result of the complaints about the moving of the graves and/or the resulting homes that will be lost without adequate sources for replacement homes?

Thank you for your time.

Tim McCoy

#36898
"6"

Governor William Haslam
600 Charlotte Ave.
Nashville, TN 37243

TDOT R

MAY - 3 2012

Governor Haslam,

My letter is in regard to TDOT's project for Sullivan County for state highway 126 (SR126). Please refer to TDOT's Draft Environmental Impact Statement (DEIS) for SR126 on its website at the following link: http://www.tdot.state.tn.us/sr126/involvement.shtml .

The SR 126 Project was selected to be the first Context Sensitive Solutions (CSS) project in Tennessee. TDOT should be commended for instituting this innovative approach; however, success should be judged on the extent that the final product is truly context sensitive!

The city of Kingsport (COK) has for many years sought to widen SR126, and there are deficiencies that TDOT is addressing in the alternatives described in the DEIS. My concern is for the portion of the road after leaving the city and entering the rural area, the portion of the project between Old Stage Road and Cooks Valley Road in alternative A and Old Stage Road to Lemay Drive in alternative B. Neither alternative seems to be justifiable from a cost vs. benefits comparison and in the devastation that the construction footprint will leave.

The construction of a four-lane section from Old Stage Road to Cooks Valley Road (Alt. A); or even to Lemay Drive (Alt. B), introduces numerous impacts (see list below) in an area of the road where traffic counts are down significantly and forecast to continue to decline, TDOT's own traffic counts show this area of the project to have the lowest traffic for the entire project.

Impacts to the community:

- environmental and scenic desecration of Chestnut Ridge
- unnecessary taking of additional homes and businesses
- unnecessary relocation of numerous graves in East Lawn cemetery
- desecration of Yancey's Tavern property (listed on the National Register of Historic Places)

This at extraordinary construction and property acquisition costs of tens of millions of dollars for a public benefit that TDOT has failed to articulate. Someone needs to justify those costs to the community and the tax-paying public beyond saying, "That's what the Community Resource Team recommended."

At a time when leadership at the national level is in total collapse, I find it refreshing that your stated management plan is fiscal responsibility and promoting state government live within its means. Please ask Commissioner Schroer if TDOT might find a more flexible alternative to address the impacts to the community and to mitigate the spending of $120,000,000 of scarce highway funds.

Sincerely,

CW Smith Jr 5/1/2012

Carl W. Smith, Jr.
5971 Hwy 126
Blountville, TN 37617

804 Rock City Road
Kingsport, TN 37664

April 26, 2012

Commissioner John Schroer
Tennessee Department of Transportation
James K. Polk Building
505 Deaderick Street, Suite 700
Nashville, TN 37243

Subject: SR 126 (Memorial Boulevard) Corridor Improvement Project DEIS:
Context Sensitive Solutions Process

Dear Commissioner Schroer:

I am writing to express my appreciation for SR 126 Project Leader Gary King's April 11, 2012, response to my earlier letter and to your statement of intent at the recent Kingsport MPO meeting to deliver the least impact to the community as possible in the SR 126 Corridor Improvement Project. I am directing my comments and questions directly to you out of concern for adherence to the CSS process.

CSS Process

Mr. King states in his April 11, 2012, email that

"The department is exploring different possibilities to the issues raised at the MPO meeting especially the section of the roadway that runs between Yancey's Tavern and East Lawn Cemetery."

He further states,

"TDOT will work closely with the MPO and other locally elected officials to move forward with the project that best meets the community's needs, while encouraging citizens of the community to assist local officials in forming a consensus around a project that the officials can support and will help TDOT bring to completion."

That work has already been accomplished as a part of the CSS process. The MPO, state, city and county elected officials, city and county staff, and citizen representatives participated in this process from our appointment to the Community Resource Team (CRT) in October 2003 until completion of the *Memorial Boulevard State Route 126 Community Resource Team Recommendation. June 22, 2005*. The original members of the CRT, TDOT staff, and the project consultants took a full day CSS training course led by the Kentucky Transportation Cabinet to understand CSS principles and design flexibility. This team met thirteen times over a 17-month period to conduct intensive work in every aspect of project's Purpose & Need, from examining existing roadway deficiencies, crash & fatality rates, traffic & growth projections, level of service analysis, design speed issues, and access needs all the way to determining the

community's treasured values—environmental, scenic, aesthetic, historic, and natural resource attributes--the very core of CSS protection principles that set it apart from the traditional "straighter, wider, faster" road building approach. We participated in a design charette and three Public Involvement Sessions, ultimately providing TDOT with a consensus Concept Recommendation and Minority Reports (which we were assured were within the scope of the team report). I think all who participated would agree that this was as intensive a team working endeavor as one finds in civic life. That was Step One in the process—developing the Concept, which TDOT accepted. We have now moved into the Design phase, and several questions arise:

1) Is TDOT now considering options that were not developed and presented by the Community Resource Team?

2) If so, how did the CSS process get off track? Who is involved in the discussion of new options? The public has never been informed as to the actual facts that precipitated the deviation from the CSS process which calls for total transparency, stipulating that the public is to be informed every step of the way.

3) Why is it now necessary to take new options to the MPO and elected officials, most of whom have no familiarity with the complex issues at hand or CSS principles, to obtain their consensus, when the CRT put in hundreds of hours to obtain consensus and develop informed alternatives? CSS clearly defines the decision making process. Taking new alternatives to the MPO and current elected officials for their decision is not a public involvement process, nor at this stage part of the CSS process.

Significance of CSS

Kingsport and Sullivan County are very proud that the SR 126 Corridor Improvement Project was chosen as the first CSS project in the state. It is has all the elements that make it a perfect fit for this methodology. It combines the city and county jurisdictions, urban and rural environments, close-knit neighborhood residential and small business communities, natural beauty, and historical resources of national and regional significance. While the CSS process is referenced in Section 1.3 Project Background and Status in the Draft Environmental Impact Statement (DEIS), we find no reference to it in the Purpose & Need Summary, 1.8, which merely talks about traffic linkages and safety deficiencies. CSS originated in the Federal Highway Administration as "Thinking Beyond the Pavement." As a FHWA initiative, it puts project needs and community values on a level playing field.
http://www.fhwa.dot.gov/context/css_primer/whatis.htm And, importantly, CSS involves effective and efficient use of resources, an issue the public is now questioning in the segment immediately east of Old Stage Road where environmental, aesthetic, residential, and historic aspects are facing huge impacts for questionable benefits, and at a very high price.

In Summary

At the three initial public hearings when the CRT was working, the public responded to concepts put before them. However, when the DEIS was posted on the TDOT web page, and the newspaper listed impacts from the two Build alternatives, there was swift public reaction.

Characterized by some as a "doom and gloom" article, it was a list of facts taken directly from the DEIS and a reality check for the public, a public entitled to those reality checks before it responds to alternatives.

Within the CSS process, alternatives may be amended. However, if amendments or new alternatives are being considered, they require a full vetting by the citizen base prior to a NEPA Public Hearing. We in the community request that you delay the DEIS Public Hearing until these have been presented, with associated costs and impacts provided. This is state highway project funded by federal and state dollars, guided by the CSS and NEPA processes, and not a matter to be decided by the MPO or sitting elected officials.

Thank you very much for your time and consideration of these points. I look forward to your timely response.

Respectfully yours,

Judy Murray

Citizen Representative
SR 126 Community Resource Team
Kingsport, TN

and it would devastate the ridge. And one question I do have concerning sidewalks, does the grade of the sidewalks have to be ADA compliant in a project like this?

MR. OZMENT: Yes.

MR. GATTI: Because when -- once you cross the ridge and head down, I'm not exactly sure what that grade is, and in that proposed alternative modified you do list sidewalks, and a major portion -- I can't remember if it goes past Cooks Valley, but I question whether you're going to be able to meet that ADA grade compliance with your sidewalk there. While it would be nice to have it, I just don't know if you're going to be able to do it, and if you're not able to do it, that would even decrease your footprint and your devastation even more, you know, if you do end up going with the three lane. Thanks.

MR. OZMENT: Thank you very much. That was exactly three minutes. Did you have a stopwatch when you did that? That was great. Thank you. Next, come ahead, please.

MS. MURRAY: Like Ms. Sims, I'm height challenged as well. My name is Judy Murray, and I live on Rock City Road, 804 Rock City Road in Kingsport. And I was one of the members of the

Community Resource Team, which was started back in 2003, and it's also been referred to as the CSS Team. And for the benefit of folks who might not know, CSS means Contact Sensitive Solutions. It's a relatively new approach to road building. Well, it's been around for a few decades, but it is one that honors the community as well as the motorists. It values both, and it was originally called Thinking Beyond the Pavement. And our team convened, the team of Kingsport officials, elected officials, professionals, Sullivan County, citizen representatives. I think that we had an incredible list of team members. We worked very hard for two and a half years. We had training and team development and CSS training, and we had 13 meetings. There were three public meetings. I'm not going to say it was easy. We worked very hard. We knocked heads, but I believe, you know, we came up with a consensus, and there were minority reports as well. Maybe everybody had a little bit of heartburn, but it felt good to wrap that concept up and turn it over to you.

Now I've been representing citizens. I've had many of them contact me, starting with the public meetings, and I think it'll come to no surprise to

you, but there's a lot of resignation over there, that I hear over and over, "They're going to do what they want to anyway. What difference does it make what I say?" Well, I'm a cheerleader, and I say, you know, "This is America. You have a right to speak. You have a responsibility to speak." And so I continue to encourage my fellow citizens to do that. And I do want to mention for those here that we did identify values to the community such as the graves in the cemetery and Yancey's Tavern and just the history of the area. There are several old residences on there. There are mom and pop businesses, and we wanted a road that was going to be safe and not destroy the community.

So I have not had the opportunity to look in depth at your new modification for Alternative B, but it looks to me very much like TDOT does listen, especially on this process. I can't speak for other roads, but I think that the spirit of CSS is being honored here, and I look forward to continuing to work. I don't think it's the end. The community on a CSS project is to be involved from start to finish, and so you'll probably be hearing more from me. But I thank you, and I thank Commissioner Schroer. Please convey my thanks to him.

MR. OZMENT: All right. Thank you very much. I'm going to take just a minute to try to address that question. We hear that a lot at public hearings, that we're just going to do what we want and that the public is -- you know, your voice is not important and will just be ignored. And I've been the Director or the Acting Director for the Environmental Division for just six months, but from what I've been told every day by my boss, Mr. Omishakin, and his boss, Commissioner Schroer, is that we will listen. I mean he has been here on multiple occasions. He's talking. You know, one things that folks forgot to say was 126 is on my standing weekly meeting to talk to him about as well. So it's also on my desk every week to say, "What's going on here?" So we are listening, and maybe we talk about the old TDOT, but today's TDOT I don't believe is that way. I mean sometimes, as I said, it's a balancing act, and we have to make hard decisions, which, you know, they're inevitable to be made, but hopefully that won't be because we didn't listen and try to weigh those things out. So I just wanted to try to insert that into the conversation. Go ahead, Mark.

MR. NAGI: Wendy.

certainly an improvement that has long been needed, which you have addressed. All of the business about multi lanes could easily be overbuilding based on the gentleman's traffic projections, and you do the best you can with what forecasts you have. But as far as Yancey's Tavern, it may surprise you to learn that you can buy and demolish a national registered site. You just can't do it with federal funds. The national registered sites really have very little protection. In a federally funded project, you're really not supposed to adversely impact. And you've done at least what you could to minimize the impact of this, and I applaud that you're not going to move any graves. That was appalling. But, again, I beg that you don't overbuild the road based on dreams of development and false projections. I think you've done a great job, and I certainly favor the Modified B. Thank you ever so much.

MR. OZMENT: Thank you, Sir.

MR. NAGI: Judy Murray.

MS. MURRAY: I think my points have been covered.

MR. NAGI: Thank you, Ma'am. Are there any elected public officials that would like to speak now? All right.

From: Roanwoman@aol.com
To: Gary King; John Schroer
Cc: JonnaLeigh Stack; roanwoman@aol.com
Subject: Re: SR 126 Alternative to avoid adverse impacts to Yancey"s Tavern & East Law...
Date: Thursday, April 26, 2012 12:19:36 PM
Attachments: April 25,2012LettertoTDOT.docx

Hello Mr. King,

I appreciate your response indicating the department is currently seeking solutions to resolve issues that precipitated a cancellation of the Public Hearing.

My concerns expressed in the attached letter go to the CSS process itself, and so I have addressed the letter directly to Commissioner Schroer.

Again, many thanks to you and the agency for your desire to find creative and workable solutions to the issues at hand.

My best,

Judy Murray

In a message dated 4/11/2012 11:41:10 A.M. Eastern Daylight Time, Gary.King@tn.gov writes:

> Ms. Murray,
>
> Thanks you for your continued interest in the project and your attached email with attachments that you sent this past weekend. I want you to know that persons throughout TDOT are aware of your concerns including the commissioner. The department is exploring different possibilities to the issues raised at the MPO meeting especially the section of the roadway that runs between Yancey's Tavern and East lawn Cemetery.
>
> As Commissioner Schroer expressed at the meeting, TDOT will work closely with the MPO and other locally elected officials to move forward with a project that best meets the community's needs. TDOT is currently investigating many solutions that will accomplish that objective. At the same time, TDOT encourages the citizens of the community to assist their local officials in forming a consensus around a project that the officials can support and will help TDOT bring to completion.
>
> Hopefully the Department will have more information to release on the project shortly. Please feel free to contact me as the project moves forward. I hope you have a good Easter Holiday too.
>
> Thanks,
>
> GK

804 Rock City Road
Kingsport, TN 37664

April 13, 2012

Commissioner John Schroer
Tennessee Department of Transportation
James K. Polk Building
505 Deaderick Street, Suite 700
Nashville, TN 37243

Subject: SR 126 (Memorial Boulevard) Corridor Improvement Project:
A Feasible & Prudent Alternative in Avoiding or Minimizing Adverse Impacts to Yancey's Tavern and East Lawn Memorial Park

Dear Commissioner Schroer:

I am writing to you as a citizen representative on the SR 126 Community Resource Team (CRT) and as a concerned citizen myself. I attended the March 22, 2012, Kingsport MPO meeting which you and your staff held for the benefit of MPO members and the community. We were gratified to hear that TDOT is looking at every option available to arrive at the one that will result in the least impact possible, especially in the area of East Lawn Cemetery and Yancey's Tavern.

I would like to submit an option that you may well be considering, that expressed in the "Minority Report for Section 3 East Of State Route 126 in Sullivan County," which accompanied the CRT report and recommendations submitted to TDOT on June 22, 2005. http://www.tdot.state.tn.us/sr126/project_library/TeamRecommendation.pdf, pp. 9-10. Section 3 East is between Old Stage Road and Cooks Valley Road.

On p. 32 of the Draft Environmental Impact Statement (DEIS) it states, "Proposed Alternative B of this document was developed to address the minority objection statement to minimize impacts to Yancey's Tavern and the East Lawn Memorial Gardens, which are located on opposite sides of SR 126 (Memorial Boulevard) near Cooks Valley Road." On p, 82, the DEIS further states, "While Alternative B reduces the impacts associated with Alternative A, the number of residential, business, and gravesite relocations are still considerable." Unfortunately, Alternative B does not go far enough to avoid or even minimize the adverse effects on Yancey's Tavern or impacts to East Lawn cemetery. The option presented in the Minority Report for Section 3 East referenced above is a feasible and prudent alternative that does indeed avoid or minimize those impacts, while fulfilling the agreed-upon requirements of the project.

The Minority Report's Statement of Purpose: *"We find ourselves in fundamental disagreement to the exhumation of human remains or the destruction of an historical treasure (Yancey's*

Tavern property) while a viable alternative is available that fulfills the agreed upon requirements for the project. Further, with respect to the preservation of Chestnut Ridge, we are also unable to accept a solution or concept that is more destructive with respect to the original contours and appearance of the ridge than is required, while a viable alternative exists that, again fulfills the agreed upon requirements for the project."

Please see the Minority Report itself for Section 3 East (between Old Stage Road and Cooks Valley Road) for specifics on: Safety, Community Impacts, Cost Justification, Public Response, and Mobility. The drafters and signers were then-State Representative Nathan Vaughn, then-Sullivan County Commissioner, District 6, Larry Hall, Citizen Representative Dan Cheek, and myself.

The recommendation is based on Concept A of the original CRT Report, a well-designed two-lane road with safety features built in. In brief, again between Old Stage Road and Cooks Valley Road:

- 2 travel lanes
- Median: Centerline rumble strip only
- Shoulders: 8 ft. stabilized (6 ft. paved)
- Corrected horizontal & vertical curves
- Closure of some intersecting roads
- Added designated turn lane at Lemay Drive

In comparing Alternative B to the option recommended in the above Minority Report between Old Stage Road and Cooks Valley Road, given that:

- the Kingsport City Limit ends at Old Stage Road
- the traffic drops off 2500 ADT immediately east of Old Stage Road
- traffic between Old Stage Road and Cooks Valley Road has been below 8000 ADT for the last five years (6786 in 2011), continuing to show steep decline (see Growth Curve for Station 167, just east of Old Stage Road near Ethel Drive, attached)
- Alternative B requires the displacement of 90 graves in East lawn Cemetery
- Alternative B requires the displacement of 162 homes
- Alternative B requires the displacement of 30 businesses
- Alternative B has an adverse visual impact to Yancey's Tavern
- Alternative B will result in stark visual and environmental impacts to Chestnut Ridge, destroying Context Sensitivity in that area
- Alternative B will come at great construction and grave and property replacement costs,

while the Minority Report recommendation will

- require few to no grave displacements
- require far fewer home and business replacements
- produce only minimal visual impacts, if any, to Yancey's Tavern
- afford far greater visual and environmental protection to Chestnut Ridge

- dramatically reduce construction and home and business relocation costs by tens of millions of dollars

Those who submitted the Minority Report and many community residents fail to see what is gained by four-laning the road beyond Old Stage Road. In fact, much will be lost, not only to the community, but also to state and federal taxpayers who find no benefit to show for this enormous expenditure. Safety is the highest priority given by the community and TDOT for this improvement project, to be sure. However, one need only look at Kingsport's record of traffic fatalities for the last several years to find that, far and away, the bulk of them occurred on four-lane roads, many head-on collisions occurring on grass-median divided roads. The interim safety features put in place on SR 126 since 2008—centerline rumble strips, new guard rails, curve signage and brush control--had until last month cut fatalities on the 2-lane section to zero. As the mother of the woman who perished in that crash stated at the MPO meeting, if there had been a shoulder there, her daughter would be alive today. The Minority Report option provides a greatly improved, well-designed roadway with safety features that have reduced fatalities nationwide.

I and my colleagues urge you to give serious consideration to the Minority Report option as the one that provides the minimal impact solution between Old Stage Road and Cooks Valley that you are looking for, while fulfilling the agreed-upon requirements for the project. At a community meeting a few years ago, a citizen asked TDOT's Ed Cole, "Under what circumstance would TDOT over-build a road?" Mr. Cole replied, "Under no circumstance!" We hope that is still the case.

With much appreciation,

Judy Murray

Citizen Representative
SR 126 Community Resource Team
Kingsport, TN

cc: Gary King
E. Patrick McIntyre, Jr.
Joe Garrison
Najah Duvall-Gabriel
Dr. Rann Vaulx
Nancy Bishop
Nathan Vaughn
Larry Hall
Dan Cheek

Farmer, John

From: Diane Somers <dsomers@chartertn.net>
Sent: Thursday, April 12, 2012 1:59 AM
To: Gary King
Cc: Matt Barnes; Paul Degges; Suzanne Herron; JonnaLeigh Stack; Scott C. Black
Subject: RE: Request for TDOT Management to Review SR126 Project and Data

Mr. King,

Thank you for your response and for bringing the listed problems to the attention of current TDOT leadership. I believe that TDOT will find that the local MPO and elected officials are basically on the same page as the majority of citizens as reflected in the community's two votes regarding the future needs of the SR126 community; therefore your comments about TDOT working closely with these people to obtain the best outcome is reassuring. If further explanations or clarifications are needed to enable better understanding regarding the 2004-2005 study period, I will be glad to coordinate with MPO's former CSS team member as I have retained the project's records and will be glad to forward them along with explanations. Thank you again for everyone's attention to this matter.

Sincerely,

Diane Somers
5309 Foxfire Place
Kingsport, TN 37664
(423) 212-0666
dsomers@chartertn.net

From: Gary King [mailto:Gary.King@tn.gov]
Sent: Tuesday, April 03, 2012 12:13 PM
To: 'Diane Somers'
Cc: Matt Barnes; Paul Degges; Suzanne Herron; JonnaLeigh Stack; Scott C. Black
Subject: RE: Request for TDOT Management to Review SR126 Project and Data

Ms. Somers,

It was good meeting you and your husband at the Kingsport MPO meeting. I want to acknowledge receiving your email with attachments last week. I want you also to know that persons throughout TDOT are aware of your concerns including the commissioner. The department is exploring different possibilities to the issues raised at the MPO meeting.

As Commissioner Schroer expressed at the meeting, TDOT will work closely with the MPO and other locally elected officials to move forward with a project that best meets the community's needs. TDOT is currently investigating solutions that will accomplish that objective. At the same time, TDOT encourages the citizens of the community to assist their local officials in forming a consensus around a project that the officials can support and will help TDOT bring to completion.

Hopefully the Department will have more information to release on the project shortly. Please feel free to contact me as the project moves forward.

Thanks,
GK

Gary D. King
Project Manager
TDOT, Project Management Division
Suite 600, JK Polk Bldg.
Nashville, TN 37243-0341
gary.king@tn.gov
(615) 741-4777

From: Diane Somers [mailto:dsomers@chartertn.net]
Sent: Sunday, March 25, 2012 3:58 PM
To: John Schroer; Gary King; Suzanne Herron; JonnaLeigh Stack
Cc: Governor Bill Haslam; Claude Ramsey; Matt Barnes; Paul Degges; Ron Ramsey; Tony Shipley; Jon Lundberg; Diane Somers
Subject: Request for TDOT Management to Review SR126 Project and Data

Subject: Request for TDOT Management to Review SR126 Project and Data

This email is a follow up on my request made directly to Mr. Gary King, SR126 Project Manager, and Ms. Suzanne Herron, Director of Environmental Division, at the March 22, 2012, Kingsport MPO/TDOT meeting. These individuals were given a letter and CRT records and were requested to have TDOT management and Commissioner Schroer review the information. Of particular concern is the integrity of TDOT's capacity analysis chart used by the CRT.

I am a former member of the CRT who represented the citizen's interest on this project and am quit disturbed about what has happened with the SR126 CSS Project. I am also the team member who brought forward the 4-3-2 concept meant to be an example to aid the public in understanding that concepts could be mixed. This concept was adopted by a majority of CRT members over the public's preferred road, and the capacity analysis chart furnished by TDOT insured that such a road (LOS D - Year 2028), though not great, would be adequate to meet the community's future needs. However, as a daily driver of SR126 and witnessing the heavy increase in traffic over the past years, it became a realization that something was wrong and that the 4-3-2 team recommendation will not adequately meet the community's future mobility needs. This realization led to letters to then Mayor Bill Haslem dated August 7, 2010, and a second letter to Commissioner Schroer dated December 8, 2011. It is requested that these two letters be seriously reviewed again in context with the team records and the DEIS LOS chart showing that two-lane sections are now LOS E/F rather than the CRT's expected LOS D for 2028.

I would also ask (as was done by other citizens at the March 22 meeting) that more appropriate alternatives (LOS D or better) be offered that will better meet the future mobility and safety needs of the community. The collective wisdom of the majority of people who actually drive the road apparently got it right in their two public votes (attachment). There is no doubt that four-lanes is needed west of HarrTown Road and possibly the length of the project. For certain, any transitioning to two-travel lanes on Chestnut Ridge or anywhere in the western and middle sections of the project will result in a safety hazard that is much more severe than the one we have now west of Old Stage Road. My letter to Mr. King with slight changes is below and partial information provided to him is attached.
****
Mr. King:

I appreciate you returning our telephone call on Thursday, March 15. Please understand that I realize you are the 5th project manager on this CSS 126 project and that a substantial disconnect has occurred between the original project team and the present environmental study. Also please understand that some TDOT missteps have become a detriment to the SR126 community. It is our understanding that the DEIS is currently being reviewed. As a citizen representative on the former CRT**, I am requesting that TDOT Management undertake an additional internal review of the following circumstances regarding the handling of this project.**

Per our telephone conversation, the following is a recap of **major failures** that have occurred in the state's first CSS project:

- The 2-travel lane sections in **Alternative A & B do not meet the SR126 CRT's LOS requirement of D or better**…and are therefore considered "**unacceptable**" per the 2004 CRT team standard.
- The Capacity Analysis Chart furnished to the CRT team was inappropriately compromised per special interest input…this incorrect data in turn led to the current "**unacceptable" LOS E/F highway now being brought forward by TDOT. (Please carefully evaluate the capacity charts furnished).**

- The Environmental study did not proceed as explained to CRT/community members…therefore a viable option per CRT standards (LOS D+) is not available at this point in time for the Indian Springs Community.
- The DEIS reports that Alternative B was approved by CRT. It was not, neither was it discussed, considered, or recommended in 2005. **Alternative B carries an LOS E, unacceptable per CRT standards.** The alternatives that were to be used were stated in team notes…team notes are posted at the bottom of the Public Vote Summary attachment.

I am attaching the following information for review:

(1) Team minutes showing the LOS D requirement
(2) A compiled summary sheet reflecting the compromised LOS ratings for 2-lane sections of highway…(Note: the twice altered 9/28/04 chart was used by CRT to make the team recommendation) The 8/24/04 chart (not shown) was actually accepted by CRT which showed three E's remaining on 2-lane sections. Though being accepted by the CRT, this chart was further altered and reissued on 9/28/04 showing only D's in 2-lane sections. The current DEIS LOS chart and the original 7/06/04 LOS chart both reflect that two-travel lanes are below the CRT standard of D.
(3) The Public's Vote per two input sessions / Explanation on alternatives to be carried into the Environmental Study

TDOT must recognize that **it is critical that the integrity of TDOT data be maintained if public trust is to be maintained.** The mistake by a few TDOT personnel to allow incorrect altered data to be used has resulted in valuable tax-payer dollars and valuable time being wasted while injuries and fatalities still continue along the SR126 corridor. The CSS process has been undermined with the use of flawed data. The local CRT members and the Indian Springs Community were disenfranchised when incorrect future traffic analysis data was furnished to CRT by TDOT. **An LOS E/F road does not meet the CRT standard nor will it adequately meet the future needs of this growing SR126 community**. Surely, TDOT will not proceed with this mistake.

Though realizing that this project was started under the previous administration, it is never the less up to the present administration to obtain a good result for both itself and the SR126 community. Mr. King, I am requesting for you, as project manager, to bring the above circumstances to the attention of Commissioner Schroer and other TDOT management. **If past mistakes are not recognized, understood and corrected, the same mistakes are likely to reoccur in future CSS projects thus wasting more valuable resources and time.** I will provide addition team documentation and answer questions as needed. It is hoped that the current TDOT leadership will do the right thing by providing a road that reflects the Community Vote Results; is as safe as possible; and also one that will give us the mobility and growing room that we will soon need.

As a courtesy, I would ask that TDOT please advise me regarding the status of the above concerns.

Respectfully,

Diane Somers
Former CRT Member, SR126 CSS Project
423-212-0666
423-306-2550

Nashville and Kingsport agree to leave as stated.

Becky then introduced the next section, Mobility, with discussion of the item "Design Year Level of Service is Satisfied".

Judy read the paragraph she sent in her e-mail that stated "The LOS is currently satisfied by all alternatives. Further, adding shoulders and turn lanes, improving sight distances, intersection and horizontal and vertical curve deficiencies, will in and of themselves improve mobility and LOS. This is a non-issue and could support over-building. Build no more than we need, lest we cause the community undue impacts and the taxpayer undue costs."

The group proceeded into a discussion of the value of reserve capacity, and how well the various alternatives might satisfy LOS. **The group had decided early in the process that the minimum LOS acceptable would be D.** The practice of TDOT to build reserve capacity into a roadway that is not needed was questioned, and it was addressed by answering that if reserve capacity is a result of the chosen alternative then that it is fine. The design life of the project is 20 years, but certainly TDOT would hope the facility functions well after that 20 year period.

Liz explained that each cross-section will have a year in which it will break down and her understanding of the criterion was to examine when each would break down and how they related to each other.

Becky clarified that capacity analysis has not been performed using the alternative layouts. That a general cross-section was looked at in the analysis with the design year volumes.

Nathan stated that that didn't take into account straightening curves and improving site distance so that when those things happen the projected LOS should improve. It was determined that the 2-lane cross section could handle the design year volumes.

Becky explained that it had to be decided whether the minimum LOS D is the goal or the floor expectation.

Barry Ornitz stated that someone from TDOT stated to him at the last public hearing that the LOS would be above LOS D in 25 years without any improvements such that additional capacity is a waste of taxpayer money.

Jeff stated that right sizing the road for the 25 year period needs to be our goal.

There was discussion about the risk of over design or under design, because we don't really know what will happen. Judy stated that 1% growth, which is based upon historic trends, was factored into the traffic projections, so the road will not be under designed.

Diane Somers responded that as a resident she would rather overbuild than under build.

Discussion continued with regard to the unknowns in the situation, and that the design year level of service is not met in all sections for the alternatives. Sections near John B. Dennis Highway do not meet the LOS D minimum.

For Review: Summary of LOS Data (SR126 Project)
(CRT requirement in place: LOS D or better)

March 17, 2012
Diane Somers
SR126 CRT Member

Memorial Boulevard (SR 126)
Segment Capacity Analysis (Planning Level)

Road Segment	Existing Cross Section	2003 Volume	2003 LOS*	2025 Volume	2025 LOS*
E. Center Street to Orebank Rd	4-lane undivided	18,050	C	18,060	C
Orebank Rd to SR 93	4-lane undivided	14,460	B	14,460	B
SR 93 to Stratford Dr.	4-lane divided	22,440	C	28,670	E
Stratford Dr. to Harbor Chapel	3-lane undivided**	17,850	E	22,780	F
Harbor Chapel to Old Stage Rd	3-lane undivided**	13,440	C	17,100	E
Old Stage Rd to Cooks Valley Rd	2-lane undivided	12,840	E	18,340	F
Cooks Valley Rd to Island Rd	2-lane undivided	11,390	E	14,500	E
Island Rd to Fall Creek Rd	2-lane undivided	10,440	D	13,290	E
Fall Creek Rd to Shadowtown Rd	2-lane undivided	9,120	C	11,610	E
Shadowtown Rd to Harr Town Rd	2-lane undivided	8,520	C	10,850	D
Harr Town Rd to I-81***	2-lane undivided	8,360	C	10,870	D

* LOS stands for Level of Service, a measure of the amount of delay and congestion on a roadway. LOS ranges from A to F with A representing free-flow conditions and F representing severe congestion. The LOS standards for this analysis are taken from a table entitled "Daily Service Volumes (ADT) Related to Level of Service" from the Maryland State Highway Administration.

** LOS for the 3-lane section was calculated using 1.5 times the capacity standard for a 2-lane undivided roadway.

*** This section was calculated with the 2-lane standard since most of it is two lanes in width, only a small portion has four lanes.

Original TDOT LOS Chart

July 6, 2004
Source: Becky White email

*2-lanes LOS E & F **UNACCEPTABLE** to use as viable option per CRT standard*

8/24/04
Revised Chart # 2: Not shown
Chart # 2 Accepted by CRT 8/20/04...
Three E's remained on 2-lane sections...

Memorial Boulevard (SR 126)
Capacity Analysis Results
9/26/2004

Segment Capacity Analysis for 2-Lane Highway

Revision # 3 / **Chart Used by CRT**

September 26, 2004
Source: Becky White email 9/30/2004

Road Segment	Existing Cross Section	2026 DHV Volume	LOS	2026 DHV Volume	LOS*
Stratford Dr. to Harbor Chapel - (Eastbound)	2 lanes eastbound	1,925	C	2,329	C
Stratford Dr. to Harbor Chapel - (Westbound)	1 lane westbound	1,925	E	2,329	E
Harbor Chapel to Briarwood Rd. (Eastbound)	2 lanes eastbound	1,463	C	1,758	C
Harbor Chapel to Briarwood Rd. (Westbound	1 lane westbound	1,463	D	1,758	E
Briarwood Rd. to Old Stage Road (Eastbound)	2 lanes eastbound	1,258	C	1,522	C
Briarwood Rd. to Old Stage Road (Westbound)	1 lane westbound	1,258	D	1,522	D
Old Stage Rd to Cooks Valley Rd	2-lane undivided	968	D	1,170	D
Cooks Valley Rd to Island Rd	2-lane undivided	1,025	D	1,242	D
Island Rd to Fall Creek Rd	2-lane undivided	1,074	D	1,296	D
Fall Creek Rd to Shadowtown Rd.	2-lane undivided	1,020	D	1,233	D
Shadowtown Rd to Harr Town Rd	2-lane undivided	766	C	926	D
Harr Town Rd to I-81	2-lane undivided	835	D	1,011	D
Harr Town Rd to I-81	4-lane divided	356	A	1,101	A

Chart issued 9/26/04 for use by CRT for Charette Design...
*All 2-lane sections are now LOS D and **ACCEPTABLE** as viable option per CRT standard*

LOS stands for Level of Service, a measure of the amount of delay and congestion on a roadway. LOS ranges from A to F with A representing free-flow conditions and F representing severe congestion.

SR 126 DEIS
Sullivan County

TABLE 1.6.3: BUILD ALTERNATIVE A LOS

ID	From		To		Dist.	Cross Section	Speed Limit	2013				2033			
	LM	Desc.	LM	Desc.				AADT	LOS	Speed	v/c	AADT	LOS	Speed	v/c
1a	3.72	Center St.	4.44	SR 93	0.72	4-Lanes with a Raised Grass Median and 4 Ft Shoulders	35	16,880	C	31	0.51	20,650	C	31	0.59
1b	4.44	SR 93	4.71	Haw-thorne St.	0.27	4-Lanes with a Raised Grass Median and 4 Ft Shoulders	35	25,870	D	31	0.70	33,540	E	31	0.91
2	4.71	Haw-thorne St.	5.18	Harbor Chapel Rd.	0.47	4-Lanes with a TWLTL and 4 Ft. Shoulders	35	19,080	C	33	0.52	24,800	D	33	0.67
3	5.18	Harbor Chapel Rd.	7.66	Cooks Valley Rd.	2.48	4-Lanes with a Raised Grass Median and 4-8 Ft. Shoulders	45	10,430	A	43	0.24	13,550	B	43	0.31
4	7.66	Cooke Valley Rd.	10.11	Harr Town Rd.	2.45	2-Lanes with a TWLTL and 8 Ft. Shoulders	45	10,250	E	36	0.41	20,520	E	26	0.82
5	10.11	Harr Town Rd.	11.90	Caroline Pottery Rd.	1.79	2-Lanes with No Median and 10 Ft Shoulders	50	12,830	D	41	0.43	21,980	F	31	0.85
6	11.90	Caroline Pottery Rd.	12.12	I-81	0.22	4-Lanes with a Raised Grass Median and 12 Ft. Shoulders	40	10,830	B	43	0.27	21,980	C	43	0.55
					Σ = 8.4	Weighted Average =	44			38	0.38			34	0.64

January, 2012 DEIS Draft, Pg 50

*All 2-lane sections are back to LOS E & F and considered as **UNACCEPTABLE** per CRT standard*

PROBLEM:
TDOT'S ALTERNATIVE A & B 2-TRAVEL LANE SECTIONS FAIL TO MEET CRT LOS REQUIREMENT

TDOT SR-126 CSS Project - Community Vote Results

TDOT SR-126 Public Vote Results ...October 3-4, 2004

(Segments)		2-lane (%)	3-lane (%)	4-lane (%)	No Build (%)
Section 1	1 - **Center St-** Hawthorn	34	9	**55**	1.8
	2 - Hawthorn-Harbor Chapel	28	12	**61**	0
	3 - Harbor Chapel - **Cooks Valley**	22	21	**57**	0.06
Section II	4 - **Cooks Valley-HarrTown**	21	14	**64**	1.3
Section III	5 - **HarrTown-I-81**	20	11	**65**	3.8
Average		25%	13%	**60%**	1.4%

Source of information - CRT records: Becky White, TDOT Consultant - email attachment 12-01-2004

TDOT SR-126 Public Vote Results ...May 25-26, 2005

(Segments)		2-lane (%)	3-lane (%)	4-lane (%)	No Build (%)	No Response
Section I	1West - **Center-**Orebank	13.2	23.4	**51.8**	7.5	3.9
	1 East - Orebank-Hawthorn	13.8	20.7	**52.4**	7.9	4.9
	2 - Hawthorn-HarborChapel	15.8	11.6	**59.7**	6.9	5.2
	3 West- HarborChapel-OldStage	19.5	16.5	**53.1**	6.6	4.3
	3 East- OldStage- **CooksValley**	30.4	19.8	**41.6**	4.9	2.9
Section II	4 West **Cooks Valley-HarrTown**	28.7	25.1	**36.6**	5.6	3.3
Section III	4 East - **HarrTown-**Cochise	**35.9**	21.5	33.3	4.9	4.2
	5 - Cochise - **I-81**	**38.9**	15.8	34.9	5.3	4.9
Average		25%	19%	**46%**	6%	4%

Source of information - CRT Records: Elizabeth Smith, TDOT Project Manager - email attachment 06-14-2005

Regarding the Environmental Study, TDOT clearly stated on multiple occasions the process to be followed.... that all three (2-lane, 3-lane- 4-lane) Concepts, (A, B & C) which were presented to the public would be taken through the Environmental Study for the length of the project

Reference: 12/8/04 Becky White email states that none of the alternatives will be finalized until after the environmental document is completed. The Advance Planning Report (our work product for the planning phase) will present all three concepts. We may recommend one concept as the preferred plan but all three will be documented

Reference: 02/24/05- Meeting minutes, page 13: This is not a process that will lead to a single alternative that is handed over to TDOT to "build this road for us". It's about providing choices for TDOT to consider

Gary D. King
Project Manager
TDOT, Project Management Division
Suite 600, JK Polk Bldg.
Nashville, TN 37243-0341

gary.king@tn.gov
(615) 741-4777

-----Original Message-----
From: "Roanwoman@aol.com" <Roanwoman@aol.com>
To: Gary King <Gary.King@tn.gov>
CC: John Schroer <John.Schroer@tn.gov>, Patrick McIntyre <Patrick.McIntyre@tn.gov>, Joseph Garrison <Joseph.Garrison@tn.gov>, "ngabriel@achp.gov" <ngabriel@achp.gov>, "nate.vaughn.buo5@statefarm.com" <nate.vaughn.buo5@statefarm.com>, "slhall37617@yahoo.com" <slhall37617@yahoo.com>, "dtcheek@chartertn.net" <dtcheek@chartertn.net>, "roanwoman@aol.com" <roanwoman@aol.com>
Subject: SR 126 Alternative to avoid adverse impacts to Yancey's Tavern & East Lawn Cem.
Date: Fri, 6 Apr 2012 20:46:35 +0000

Dear Mr. King,

In light of the fact that TDOT is continuing to work on minimizing community impacts of SR 126 road improvements, I will take this opportunity to present a Feasible and Prudent alternative for your agency's consideration that will serve to avoid or minimize adverse impacts to Yancey's Tavern, as well as to East Lawn cemetery. Please find attachments.

Many thanks for your and your staff's hard work on this project. Have a good Easter holiday.

Best regards,

Judy Murray

Citizen Representative
SR 126 Community Resource Team
Kingsport, TN

From:	Roanwoman@aol.com
To:	Gary King
Cc:	John Schroer; Patrick McIntyre; Joseph Garrison; ngabriel@achp.gov; nate.vaughn.buo5@statefarm.com; slhall37617@yahoo.com; dtcheek@chartertn.net; roanwoman@aol.com
Subject:	SR 126 Alternative to avoid adverse impacts to Yancey"s Tavern & East Lawn Cem.
Date:	Friday, April 06, 2012 3:47:02 PM
Attachments:	Station167ExponentialGrowthModel.PDF April 13, 2012LettertoTDOT.docx

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Dear Mr. King,

In light of the fact that TDOT is continuing to work on minimizing community impacts of SR 126 road improvements, I will take this opportunity to present a Feasible and Prudent alternative for your agency's consideration that will serve to avoid or minimize adverse impacts to Yancey's Tavern, as well as to East Lawn cemetery. Please find attachments.

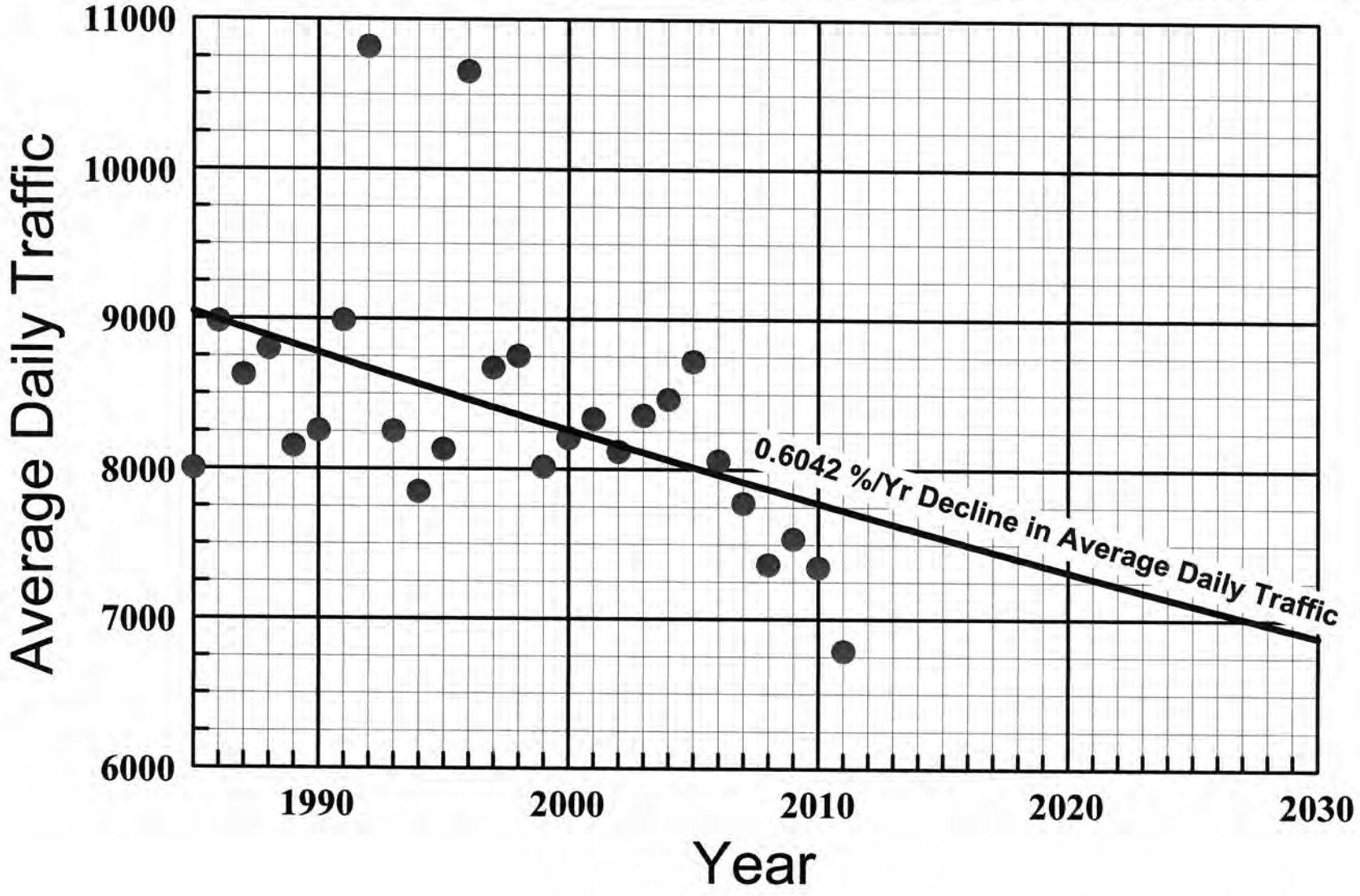
Many thanks for your and your staff's hard work on this project. Have a good Easter holiday.

Best regards,

Judy Murray

Citizen Representative
SR 126 Community Resource Team
Kingsport, TN

Exponential Growth Model for Station 167



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Memorial Boulevard State Route 126

Community Resource Team Recommendation
June 22, 2005

The Community Resource Team (CRT) for the State Route 126 (Memorial Boulevard) CSS project has worked together since October 2003 to study and prepare a concept plan recommendation for improving SR 126 in Kingsport and Sullivan County. The project study area extends from East Center Street to Interstate 81, a distance of approximately 8 miles. During the 21-month study process, the CRT met together thirteen times for meetings, training, and workshops and conducted three series of Public Involvement Sessions in Kingsport. Public opinion was surveyed at each Public Involvement Session and the results of those surveys were reviewed and discussed by the CRT. Concept plans for three distinct proposals (Concepts A, B, and C) and one blended proposal (Concept D) were prepared by the project's consultant team. Concepts A, B, and C were originally presented to the public at the November 2004 Public Involvement Session. Revised Concepts A, B, and C, along with Concept D, were presented to the public for review and comment at the May 2005 Public Involvement Session.

This document summarizes the collective recommendations of the SR 126 CRT. Included first are "common ground" recommendations, for which there was unanimous support among the CRT members. Following the common ground issues, is a summary of the team's recommendations concerning roadway cross sectional elements. These cross section recommendations are supported by a majority of CRT members. Finally, this document includes three minority objection statements that were prepared for specific sections of the project study area by members of the CRT. The minority objections clarify the diversity of opinion within the team.

COMMON GROUND RECOMMENDATIONS

Following is a list of items that the CRT unanimously agreed were important considerations for the SR 126 project.

Safety

- Safety is the number one priority on this project.
- Wide shoulders are desirable
- Improve sight distance and address geometric deficiencies at all intersections of side streets
- Provide left turn lanes at major intersections (even with two-lane Concept A):
  - Orebank Road
  - Harbor Chapel Road
  - Stratford Road
  - Old Stage Road
  - Amy Avenue /Glenwood Street
  - Cooks Valley Road
  - Island Road
  - Fall Creek Road
  - Hill Road
- Provide right turn lanes at major intersections (even with two-lane Concept A):
  - Cooks Valley Road
  - Fall Creek Road
  - Hill Road
- Consider using center line and shoulder rumble strips and reflective thermal markings where appropriate
- Special attention should be given to intersection improvements at the intersection of Carolina Pottery and Overhill Road to improve safety
- Plan development needs to be mindful of pedestrian safety and connectivity, providing a safe and separate walkway for pedestrians where feasible. Specific areas where sidewalks are desired include East Center Street to Old Stage Road (withing the City limits) and within the Indian Springs community
- Use side facing mailbox placement along SR 126 to improve safety for residents
- The CRT would like to avoid a "one size fits all" solution for SR 126

Points of Interest to the Community

The CRT wants to minimize impacts to and protect the integrity of community treasures in the SR 126 study area. Sites that are considered community treasures include:

- Cherry Point Animal Hospital
- White House at the corner of Satana Road and SR 126
- East Lawn Cemetery
- Old Indian Springs Post Office
- Chestnut Ridge view shed
- Anything within the historic boundary of Yancey's Tavern, including the tavern, barn, and trace of Old Island Road
- Shipley Mansion (near East Center Street)

Enhancements

The CRT supports the incorporation of the following enhancement features in the design plans for SR 126:

- Use of natural elements for retaining and buffering walls
- Landscaping to a human scale with native plant species
- Decorative guardrail where appropriate
- Use of decorative lighting where appropriate with sensitivity to residential areas
- Underground utilities instead of overhead
- Use of mast arms rather than span wire where traffic signals are installed
- Use of Texas rail instead of Jersey barrier type railing on bridges
- Bridge design needs to be an enhancement and fit within the context of the community
- Include irrigation with major landscaping
- Landscape design that is appropriate to the speed limit
- Inclusion of a roundabout at the intersection of SR 126 and East Center Street if adequate capacity can be provided for forecasted traffic volumes

Other Issues

- Where roadway widening is undertaken, use as much of the existing roadway as possible.
- Where the roadway is widened from two to four lanes, consider leaving the existing road in place and constructing the new lanes to one side (asymmetrical widening).
- The CRT identified two major benefits of asymmetrical widening: improved traffic flow during construction, and enhanced constructability.
- Asymmetrical widening should not preclude making improvements to horizontal and vertical alignment deficiencies.

HWY 126 PROJECT LOCATION

Begin Project

End Project



4 lane cross section with landscaped raised median
4 lane cross section with center turn lane
2 lane cross section with center turn lane
2 lane cross section

CROSS SECTION RECOMMENDATIONS

Following is a summary of recommendations for roadway cross sections agreed upon by a majority of the CRT. The recommendations are divided into eight sections, identified by intersecting cross streets. For three of the eight sections, minority objections were documented within the CRT. The sections with minority objections are noted in the cross section descriptions and a detailed description of each minority opinion is included at the end of this report.

Section 1 West – East Center Street to Orebank Road

Preferred Concept - Concept C
Design speed - 35
Travel lanes - 2 eastbound and 2 westbound (11' each)
Median - Raised landscaped
Bikeways - 4' shoulder
Sidewalks – Yes, on both sides
Curb and Gutter - Yes
Special features:
Roundabout with flared right turns at East Center Street. (An alternate option is to maintain the existing traffic signal, but a roundabout is preferred.)
Access Notes:
Median openings and turn lanes at Central Street, Conway Drive, Woodside Drive, and Orebank Road
Intersection and Geometric Improvements:
- Realign Orebank Road to 90 degree angle plus turn lanes

Section 1 East – Orebank Rd to West of Hawthorne St.

Preferred Concept - Concept C
Design speed - 35
Travel lanes - 2 eastbound and 2 westbound (11' each)
Median - Raised landscaped
Bikeways - 4' shoulder
Sidewalks – Yes, on both sides
Curb and Gutter - Yes
Access Notes:
Median opening at eastern driveway for Sun Bridge Hillside Care and Rehab
Intersection and Geometric Improvements:
- Improve curve at Orebank Road / Edens Ridge Road
- Close Edens Ridge Road intersections (access to Memorial Boulevard via Orebank Road)
- Improve northbound entrance ramp to John B. Dennis Highway
- Remove right turn yield condition from northbound John B. Dennis exit ramp to eastbound SR 126 in order to reduce vehicle conflicts; make right turns use the traffic signal

Section 2 – West of Hawthorne St to Harbor Chapel Road

Preferred Concept - Concept C
Design speed - 35
Travel lanes - 2 eastbound and 2 westbound (11' each)
Median – Center Turn Lane
Bikeways - 4' shoulder
Sidewalks – Yes, on both sides
Curb and Gutter - Yes
Intersection and Geometric Improvements:

- Close Milton Court (condominium access) intersection to SR 126 and provide alternate access via Stratford and Kite Street
- Close Hawthorne Street intersection on the south side of SR 126
- Close Kent Street intersection with SR 126 (access SR 126 via Kite Street)
- Improve side road sight distance at Hawthorne Street and Beverly Hills Street
- Correct deficient curves at Kite Street and Beverly Hills Street
- Close Amy Avenue / Woodridge Avenue intersection and tie Amy / Woodridge into Glenwood Street
- Close Trinity Lane and provide alternate access via a new connection near the cemetery (access to SR 126 via Orebank Road)

Section 3 West – Harbor Chapel Rd to east of Old Stage Rd

Preferred Concept - Concept C Modified to include curb & gutter and sidewalks
Design speed - 45
Travel lanes - 2 eastbound and 2 westbound (11' each)
Median – Raised Landscape
Bikeways – 4' shoulder
Sidewalks – Yes, on both sides
Curb and Gutter - Yes
Intersection and Geometric Improvements:

- Close off intersection of Tanglewood Road and tie Tanglewood into Briarwood Road
- Realign Old Stage Road to create a 90 degree intersection and decrease steepness of Old Stage Road

Section 3 East – East of Old Stage Rd to Cooks Valley Rd

Preferred Concept - Concept C
Design speed - 45
Travel lanes - 2 eastbound and 2 westbound (11' each)
Median – Raised Landscape
Bikeways – 8' stabilized (6' paved shoulder on both sides)
Sidewalks – Pedestrians use shoulder
Curb and Gutter - No
Intersection and Geometric Improvements:

- Correct deficient "S" curves on Chestnut Ridge
- Connect Holiday Hills Road to Shuler Drive via Parker Street

Section 3 East continued

- Close Shuler Drive intersection with SR 126 and redirect traffic to Lemay Drive
- Realign Chestnut Ridge Road to the west
- Realign Eaton Station Road to tie in opposite Cooks Valley Road
- Provide a left turn lane onto Cooks Valley Road and Eaton Station Road

*NOTE: A minority objection statement is documented for this section.

Section 4 West – Cooks Valley Rd to Harrtown Rd

Preferred Concept - Concept B
Design speed - 45
Travel lanes - 1 eastbound and 1 westbound (11' each)
Median – Center Turn Lane
Bikeways – 6' stabilized shoulder (does not include gutter pan) on both sides
Sidewalks – Yes, on both sides
Curb and Gutter - Yes
Intersection and Geometric Improvements:

- Close Red Robin Lane intersection (access to SR 126 via Bridwell Heights Road)
- Realign Woodsway Drive to a 90 degree intersection
- Realign Island Road and improve sight distance
- Realign Natchez Lane intersection
- Relocate Harrtown Road intersection further west to reduce steepness
- Correct deficient curves between Hill Road and Harrtown Road

*NOTE: A minority objection statement is documented for this section.

Section 4 East - Harrtown Rd to Cochise Trail

Preferred Concept - Concept A Modified
Design speed - 45
Travel lanes - 1 eastbound and 1 westbound (12' each)
Median – None
Bikeways – 8' paved and 2' stabilized shoulder on both sides
Sidewalks – No
Curb and Gutter - No
Special features:

- Use 18" double yellow center line (this is within the 12' travel lanes, both directions) and include rumble strips between the double yellow center line
- Include rumble strips between the travel lane and the shoulder

Access Notes:

- Require turn lane construction by future developers

Section 5 - Cochise Trail to Interstate 81

Preferred Concept - Concept A Modified
Design speed - 45
Travel lanes - 1 eastbound and 1 westbound (12' each)
Median – None
Bikeways – 8' paved and 2' stabilized shoulder on both sides
Sidewalks – No
Curb and Gutter - No
Special features:

- Use 18" double yellow center line (this is within the 12' travel lanes, both directions) and include rumble strips between the double yellow center line
- Include rumble strips between the travel lane and the shoulder
- Design passing zones by correcting vertical curves and improving sight distance
- Design better transition area from 4 lanes at I-81

Access Notes:

- Require turn lane construction by future developers

Intersection and geometric improvements:

- Correct deficient curves west and east of Samlola Road
- Realign Gravel Top Road (west) intersection
- Close Gravel Top Road (east) intersection

*NOTE: A minority objection statement is documented for this section.

Minority Report for Section 3 East
Of State Route 126 in Sullivan County

Basic concept for this segment:

Old Stage Road to Cooks Valley Road: Concept A with a right turn lane onto Lemay Drive.

Statement of Purpose:

We find ourselves in fundamental opposition to the exhumation of human remains or the destruction of an historical treasure (Yancey's Tavern property) while a viable alternative is available that fulfills the agreed upon requirements for the project. Further, with respect to the preservation of Chestnut Ridge, we also are unable to accept a solution or concept that is more destructive with respect to the original contours and appearance of the ridge than is required, while a viable alternative exists that, again fulfills the agreed upon requirements for the project.

Rationale:

- **Safety**
  - Has eight foot shoulders, guard rails, improved sight distances and improved horizontal and vertical curves
  - Has centerline & shoulder rumble strips to minimize lane departure (as recommended in State of Tennessee Strategic Highway Safety Plan, p. 8, 11/17/04)
  - Designated right turn lane into Lemay Drive provides greater safety for new traffic by adjacent road closures. Also allows eastbound traffic to continue while vehicles make right turn.

- **Community Impacts**
  - Concept A has the least impact to Chestnut Ridge both environmentally and visually.
  - Concept A has the smallest number of impacts to residences.
  - Best preserves the community wishes of maintaining the scenic beauty of Chestnut Ridge.

- **Cost Justification**
  - **B & C are not justified by actual and projected traffic counts through 2028.**
  - **B & C are not justified by turning needs (few driveways & minimal left turns to side roads since most traffic is westbound in the morning and eastbound in the evening)**

- There is a lack of consideration of cost in this section in light of the lack of potential benefit that might be realized by the community.

- **Public Response**
  - 58% of those surveyed in Public Session III chose an option other than a 4-lane, i.e. Concept C, in the section.
  - Additionally, a petition with 1100+ names expressed a preference for a two lane road in this section.
  - Eleven foot travel lanes minimize the road footprint.
  - Concept A impacts East Lawn Cemetery the least of all concepts
  - Concept A protects the historic Yancey tavern and barn, as well as remnants of Old Island Road and the surrounding site. The history of this area predates the American Revolution

- **Mobility**
  - **Right turn lane increases capacity in Concept A.**
  - **Traffic counts have drastically fallen east of Old Stage Road.**

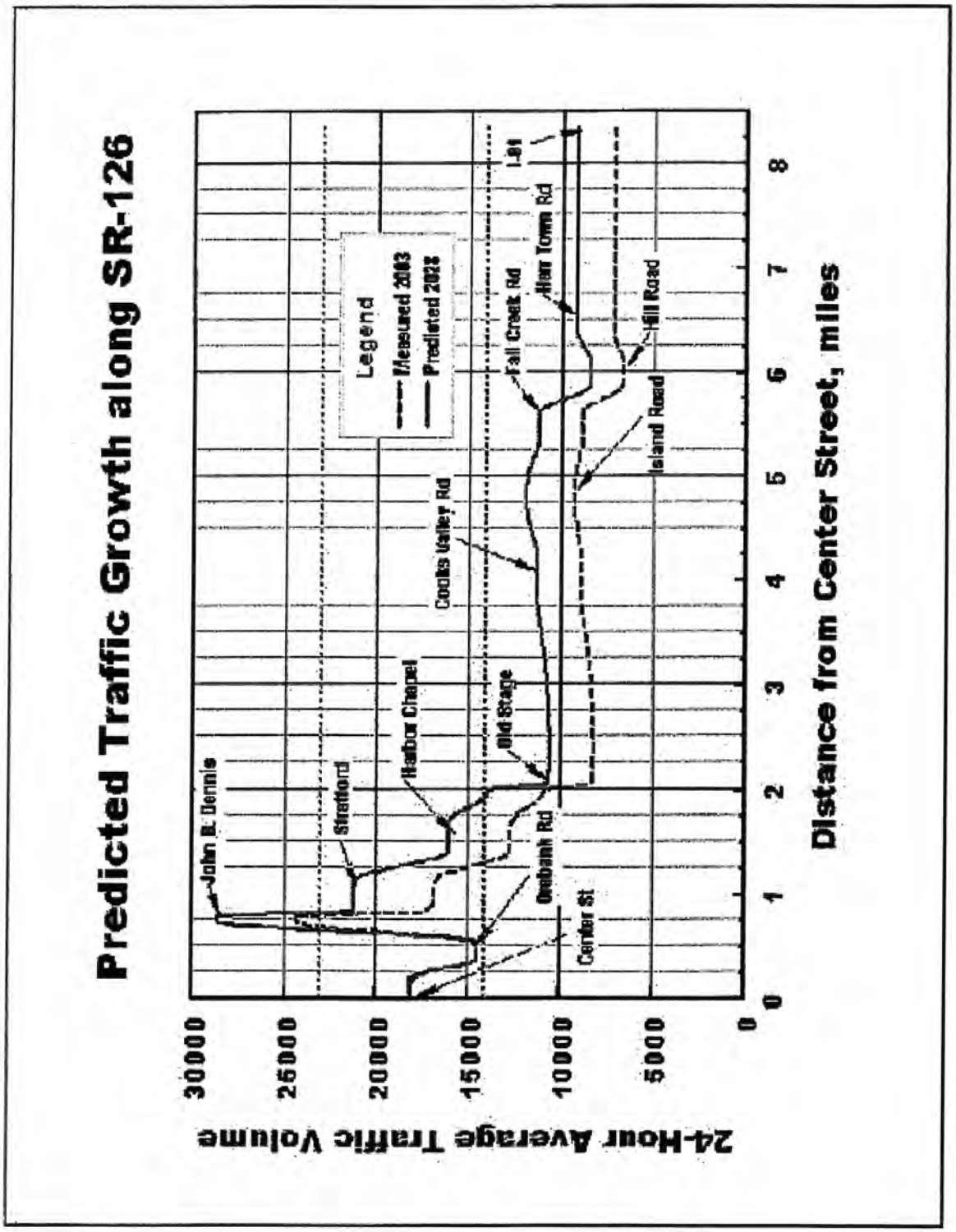
State Representative Nathan Vaughn

Larry Hall, Member of the Sullivan County Board of Commissioners, District 6

Judith Murray, Citizen Representative

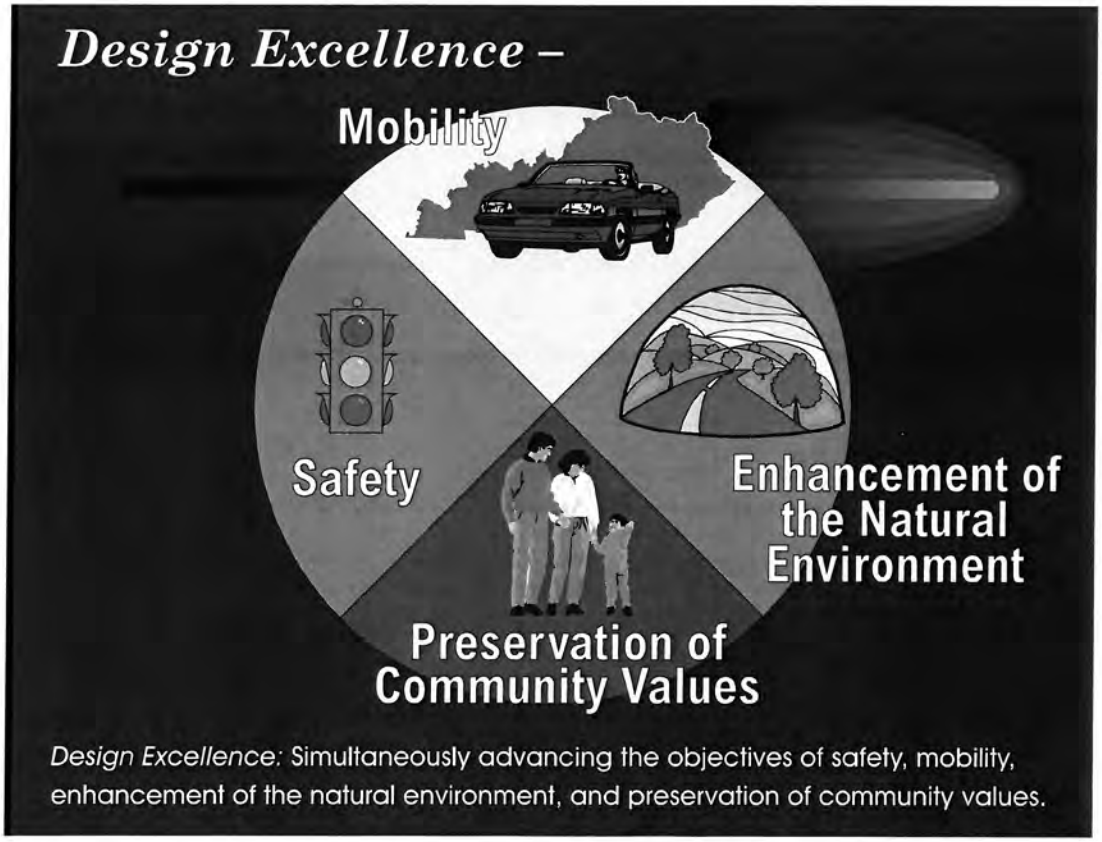
Dan Cheek, Citizen Representative

,2005


Predicted Traffic Growth along SR-126
Legend
Measured 2003
Predicted 2028
John B. Dennis
Stratford
Harbor Chapel
Old Stage
Cooks Valley Rd
Fall Creek Rd
Harr Town Rd
I-81
Hill Road
Island Road
Orebank Rd
Center St
24-Hour Average Traffic Volume
30000
25000
20000
15000
10000
5000
0
Distance from Center Street, miles
0
1
2
3
4
5
6
7
8

What is Context-Sensitive Design?

- Addresses purpose and need
- Addresses equally:
  - Safety
  - Mobility
  - Preservation of scenic, esthetic, historic, environmental, and community values



Minority Objection

for

Section 4 West – Cooks Valley Road to Harrtown Road

Tennessee State Route 126

June 22, 2005

We, whose names are listed below, strongly believe that Concept B is an inappropriate and unjustified recommendation for improving Section 4 West, Cooks Valley Road to Harrtown Road, a portion of the Tennessee State Route 126 project. The following statements describe our concerns:

Public Preference

- **Concept B (three-lane)** goes against the public's preference for **Concept C (four-lane divided)** as expressed in the two separate votes of November 2004 (98 vs. 22) and May 2005 (111 vs.76).
- Of the three concept choices, Concept B received the least number of favorable responses from the May 2005 public meetings.

Every member of the community has had equal opportunity to have their preference reflected in the hard numbers obtained from these two public input sessions. We believe these responses most accurately measures the public's desire.

Growth

- Concept B does not address the strong potential for growth along the 126 corridor.
- As of June 22, 2005, 344 family residential units are under development east of Cooks Valley Road that will feed traffic directly onto SR 126 and increase traffic west into Kingsport. (These are: Yancey's Tavern – 18 sites; Sugarwood – 74 units; near Old Island Rd – 100 apartment units; Rose Mary Villas – 13 units with more planned at Crockett Ridge Golf Course; Pectol property – 19 sites; Shadowtown Rd. – 120 units.) All but one of these developments are located within Section 4 West.
- In addition, Crockett Ridge Golf Course/Old Island residential development is under new ownership. Owners recently completed a new clubhouse and have received approval for rezoning of their development for condominiums, patio homes, and single home dwellings. This alone will significantly increase traffic volumes entering SR 126 from Island Road and Harrtown Road both of which are east of Cooks Valley Road and within Section 4 West.
- Concept B ignores additional strong growth potential in the areas as sewers are extended in 2005-2006 to the greater Indian Springs area.
- The Cooks Valley Road station for 2003-04 ADT is 8,950 with a projected 2028 ADT of 11,290 indicates expected growth of 2,340 ADT. The 344 family units listed above, in themselves, with an average of two autos per unit making one round trip daily to Kingsport **significantly** exceeds the 2008 projected ADT.
- ***We believe the projected traffic volumes furnished to the SR 126 Resource Team were inappropriately reduced from TDOT's original projections and do not accurately reflect future traffic volumes.***

- Concept B provides for a very limited increase over current traffic capacity and will not adequately address future capacity needs.
- One lane in each direction does not provide adequate mobility as requested by the public.

We recommend that Concept C be extended east from Section 3 East (Old Stage Road) to Hill Road rather than to Harrtown Road. This will adequately accommodate the large volume of traffic to and from Indian Springs School, most of which originates west of Hill Road.

Safety

- Concept B does not provide for safe passing opportunities as the public requested.
- Concept B promotes driver conflicts due to the inability to pass slow drivers.
- Concept B will encourage unsafe passing with the use of the center turn lane being used for that purpose.

Impact

- The physical impact of Concept C is essentially equal to that of Concept B.
- Issues concerning the cemetery and Yancey's Tavern/barn should be "fully" addressed during this project to accommodate future needs and not postponed, thus making it necessary to revisit the problem again in the near future. A proper solution should be implemented before future development has taken place thereby further complicating the issue.

In summary, TDOT has invested much time and money into the CSS process in providing information to the public and then asking the public for their preference. The public has responded, and the desires of the greater population should be honored. In addition, we strongly feel that Concept B is an ill-advised and extremely shortsighted plan for improving Section 4 West of SR 126 and will result in an immediate need for an additional upgrade.

Tom Carroll, Citizen Representative
Diane Somers, Citizen Representative
Wallace Putnam, Citizen Representative
Ray Griffin, Kingsport City Manager
Ken Marsh, Kingsport Alderman and Kingsport Planning Commission

Minority Objection Statement
for
Section 5 - Cochise Trail to Interstate 81

The preference of the Resource Team, after several votes promulgated by "modifications" to each concept, was Alternate A Modified. Alternate A Modified provides 2 lanes originally with no separation, was later adjusted to include centerline striping and/or skips that establish an 18 inch center space. An 18 inch median or space simply does not provide adequate separation for 2-way "unseparated" traffic. With safety an utmost priority, inadequate separation will continue to create potential for ongoing safety incidences (head-ons, close calls) or motorists crossing the center line causing more accidents. Additionally, and of utmost important, left turn conflicts will continue to exist, causing rear-end collisions, other accidents, and other close calls. Left turn inhibitions will also create additional traffic flow problems, with two way traffic passing "opportunities" becoming passing "hazards". With a grass median or center turn lane, passing in Section 5 will be prohibited; a much better scenario than affording a dangerous passing environment. A wide median with two lanes reduces vehicular conflicts, provides for greater visibility for motorists to see the road and see each other, and offers a chance for motorists to recover from either their mistakes or avoid the mistake of others – it is much more "forgiving" of driver error.

Section 5 has much more open/undeveloped properties alongside the existing roadway. In this section, because widening to 3 lanes (or grass median) can be flexible, the ability to move the centerline lessens the impact on homes and properties. Consequently, adding a median and turn lanes can be accommodated much easier with much less impact. Additionally, with the impacts being similar with all 3 concepts, why would TDOT and/or the local community want to put back a roadway that could potentially continue to entice head-on collisions and/or other incidences caused by 2-way traffic, when we could do and get a better quality roadway ??

Bill Albright
Tom Carroll
Diane Somers

We, the State Route 126 Resource Team, request that the Tennessee Department of Transportation accept and carry forward the improvements described in this document for State Route 126 from East Center Street to Interstate 81. Included in this document are objection statements for ~~two~~ three sections of the roadway that clarify diversity in opinion within this resource team. We appreciate the opportunity provided by TDOT to participate in this CSS process and we further recommend that the department continue to involve local participation in this project as it moves forward through subsequent stages.

Mayor Jeanette Blazier

Dan Cheek

Mayor Richard Venable

Forrest Koder

Representative Nathan Vaughn

Anne Morris, Consultant

Alderman Ken Marsh

Judy Murray

Commissioner Larry Hall

Wallace Putnam personal

Ray Griffin, City Manager

Elizabeth Smith, TDOT

Jeff Fleming, Assistant City Manager

Diane Somers

Bill Albright

Ambre Torbett

Tom Carroll

Becky White, Consultant

The following team members were unavailable to participate in preparation of the team recommendations: Humberto Collazo, David Ruller, Roy Settle.

PROJECT MANAGEMENT TEAM

TDOT PROJECT MANAGER
Mrs. Elizabeth Smith
Suite 600, James K. Polk Building
505 Deaderick Street
Nashville, TN 37243-0334
(615) 532-3183
Elizabeth.A.Smith@state.tn.us

CONSULTANT PROJECT MANAGER
Mrs. Becky White
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244 West Valley Avenue
Suite 200
Birmingham, AL 35209
(205) 940-6420
bwhite@sain.com

CONCEPT PLAN MANAGER
Mr. Richard Holt
Sain Associates, Inc.
120 South First Street
Pulaski, TN 38478
(931) 424-0300
rholt@sain.com

PUBLIC INVOLVEMENT MANAGER
Ms. Anne Morris
PBS&J
220 Stoneridge Drive
Suite 300
Columbia, TN 29210
(803) 806-8080
acmorris@pbsj.com

From: Angela Tipton
To: TDOT Comments
Subject: Concerns - Sullivan Cty Hwy 126 Project (350 Graves)
Date: Thursday, March 29, 2012 10:03:46 PM

Dear TDOT,

I had previously written the following concern about the worse case scenario of widening Highway I 126 (Memorial Blvd) in Sullivan Cty (Kingsport) to Governor Bill Haslam and Representative Tony Shipley whom have both kindly replied. Representative Shipley had kindly explained to me, that I was mis-informed and that the removal of the 350 graves at East Lawn Cemetery was a worse case scenario and that TDOT was heading up this project and making the decisions, thus my email to you regarding not just mine, but some of my family, friends, and others I may not know personally. I hope you will consider taking a look at the road in front of East Lawn Cemetery and understand how personal laying to rest someone in a grave and buying lots to be near them when our time comes up to be rested in peace in a grave near our family members (bought with our own money) can be to most anyone you ask and the road in front of East Lawn Cemetery isn't as bad as the road leading up to it.

I thank you in advance for taking our concerns serious and personal as you look and make decisions about this project.

In Christ's Love,
angela r tipton

Dear Sir,

I regretfully heard that TN Representative Tony Shipley has brought up an old idea to pursue widening a dangerous road that leads to a HUGE Graveyard - Highway 126 (Memorial Blvd) in Kingsport TN - that will be removing 350 Graves that include my Uncle, his widower when she passes, and my cousin and her husband's lots when they pass, among the 350 graves.

I can understand interest in helping a road that needs attention, but if you actually went to East Lawn Cemetery, you will see that the road in front of it isn't that bad - just getting to it is in more need of attention.

Can people and those who invested in future grave lots, Rest in Peace? My goodness, this breaks my heart and those close to me effected.

Thank you ahead of time for your consideration.

In Christ's Love,
angela r tipton

In Christ's Love,
angela

From: dougpatdell@charter.net
To: Gary King
Subject: State Route 126
Date: Friday, March 23, 2012 7:31:40 PM

I just learned about this project and am very upset over this. My Father is buried in the Garden of Love where you are looking at widening the road. He was laid to rest for eternity and should remain there. I understand the need to make the road safer but not to include a bicycle path. Also, I do not want my Father moved. My Mother has a plot there and so do my husband and I. If you get this approved, which I am sure you will, who will pay to have these precious family members moved? Where will you move them to? My parents chose this spot. This is one reason why I believe in creamation and scatter. You never know who wants to move you or build on top of you. I've said that for years and this is the reason why.

Shame on all of you!

Patricia Richards Dellinger
daughter of Plez E. Richards, deceased

NOTICE OF PUBLIC HEARING

The Tennessee Department of Transportation will host two public hearings on Tuesday, December 11, 2012 to gather public input on the proposed project, SR-126 (Memorial Boulevard) along the existing alignment from East Center Street, within the City of Kingsport's City Limits east to Interstate 81 in Sullivan County.

The Draft Environmental Impact Statement (DEIS) was made available for review in February 2012. TDOT has received public comments since that time and holds this hearing to offer the opportunity to all community citizens an opportunity to share input. The hearings will be held as follows:

11:30 a.m. until 1:30 p.m. at:
Kingsport Civic Center
1550 Fort Henry Drive
Kingsport, TN 37664

6:00 p.m. to 8:00 p.m. at:
Sullivan Central High School (Gym)
131 Shipley Ferry Rd
Blountville, TN 37617

Representatives of TDOT will be available to provide information on various aspects of this proposed project. Anyone with questions regarding the meeting should contact:

Gary King, Project Manager
505 Deaderick Street, Suite 900
James K. Polk Building
Nashville, TN 37243-0334
(615)741-4777
Gary.King@tn.gov

Persons with a disability, who require aids or services to participate at the meeting, may contact Ms. Margaret Mahler no less than ten (10) days prior to the date of the meeting:

Ms. Margaret Mahler
ADA Compliance
Tennessee Department of Transportation
Suite 400, James K. Polk Building
505 Deaderick Street
Nashville, TN 37243

or by e-mail: Margaret.Z.Mahler@tn.gov
615/741-4984 (phone)
615/532-5995 (fax)
615/253-8311 TTY Relay

A court reporter will be available to receive oral statements to be included in the project transcript. In addition, comment sheets will be available for those who prefer to make written statements. Written statements and other exhibits to be included in the project transcript may be submitted within twenty-one (21) days after the meeting date to the following address:

Project Comments
Tennessee Department of Transportation
Suite 700, James K. Polk Building
505 Deaderick Street
Nashville, TN 37243-0332
TDOT.comments@tn.gov

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TDOT

Public Hearing, December 11, 2012

Public Hearing Agenda

11:30 – 11:50 Welcome & Introductions

11:50 – 12:10 Slide Presentation

12:10 – 1:00 Questions & Answers

1:30 Meeting Adjourns



TDOT

U.S. Department of Transportation
Federal Highway Administration

Public Hearing Agenda

6:00 – 6:20	Welcome & Introductions
6:20 – 6:40	Slide Presentation
6:40 – 7:40	Questions & Answers
8:00	Meeting Adjourns



TDOT

U.S. Department of Transportation
Federal Highway Administration

What is the Purpose of this Hearing?

Present the Draft Environmental Impact Statement Findings



Opportunity to receive public comments

Answer your questions





Explain the next steps



Presentation Topics

- Project history
- Road building process
- Proposed improvements to the road design
- Impacts of those changes
- Efforts that we have made to reduce the negative impacts so far.



Project Location

East Center Street to Interstate 81



Project Background

Kingsport MPO & Mayor's Office submitted resolution to TDOT

3 Public Involvement Sessions

2 Build Alternatives developed by CSS Process

Citizen Resource Team Established (13 Meetings)

Needs of the Proposed Project

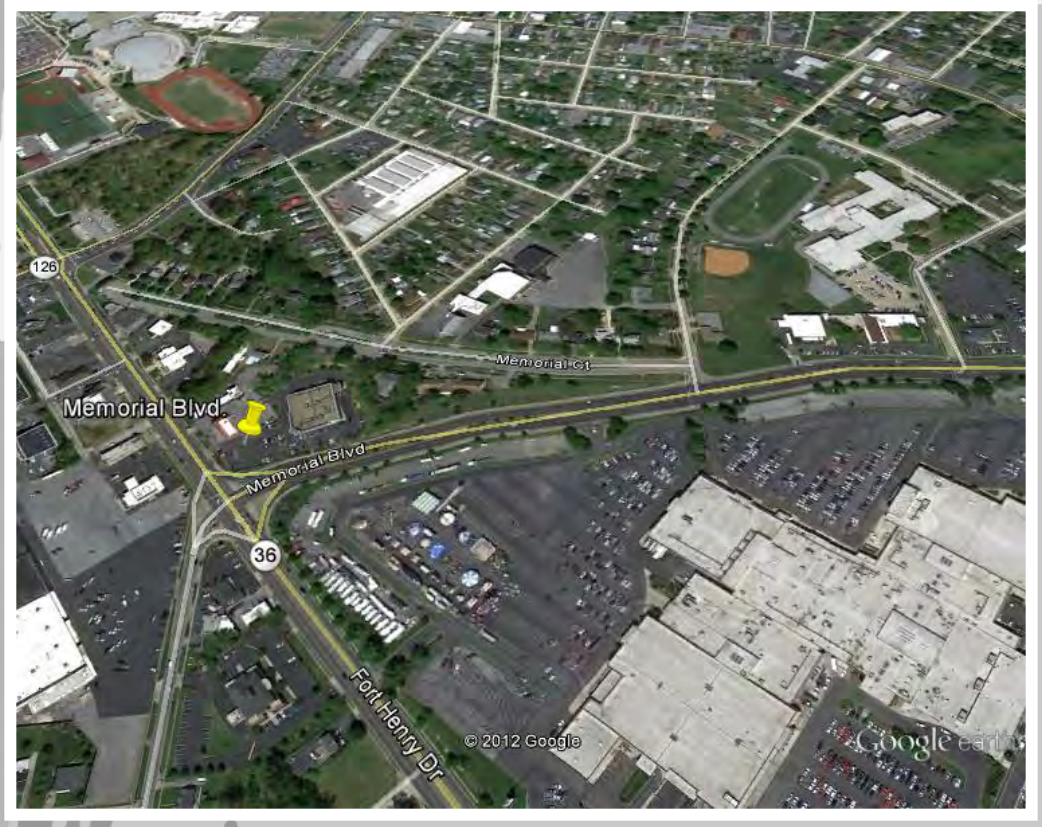
- Roadway & Shoulder Improvements
- Improve Geometry
  (Curves, Hills, Valleys)
- Improve Access Management
  (Road and Driveway Connections)



Needs of the Proposed Project

- Roadway & Shoulder Widths
- Geometry (Alignments)
- Access Management (Road and Driveways)
- General Safety
- Safety for Mail Delivery
- Safety & Access for School Buses
- Emergency Response Vehicles

Purpose of the Project



To provide a **safe, efficient route** for local traffic between the City of Kingsport and I-81.



Project Background

Kingsport MPO & Mayor's Office submitted resolution to TDOT

Citizen Resource Team Established (13 Meetings)

3 Public Involvement Sessions

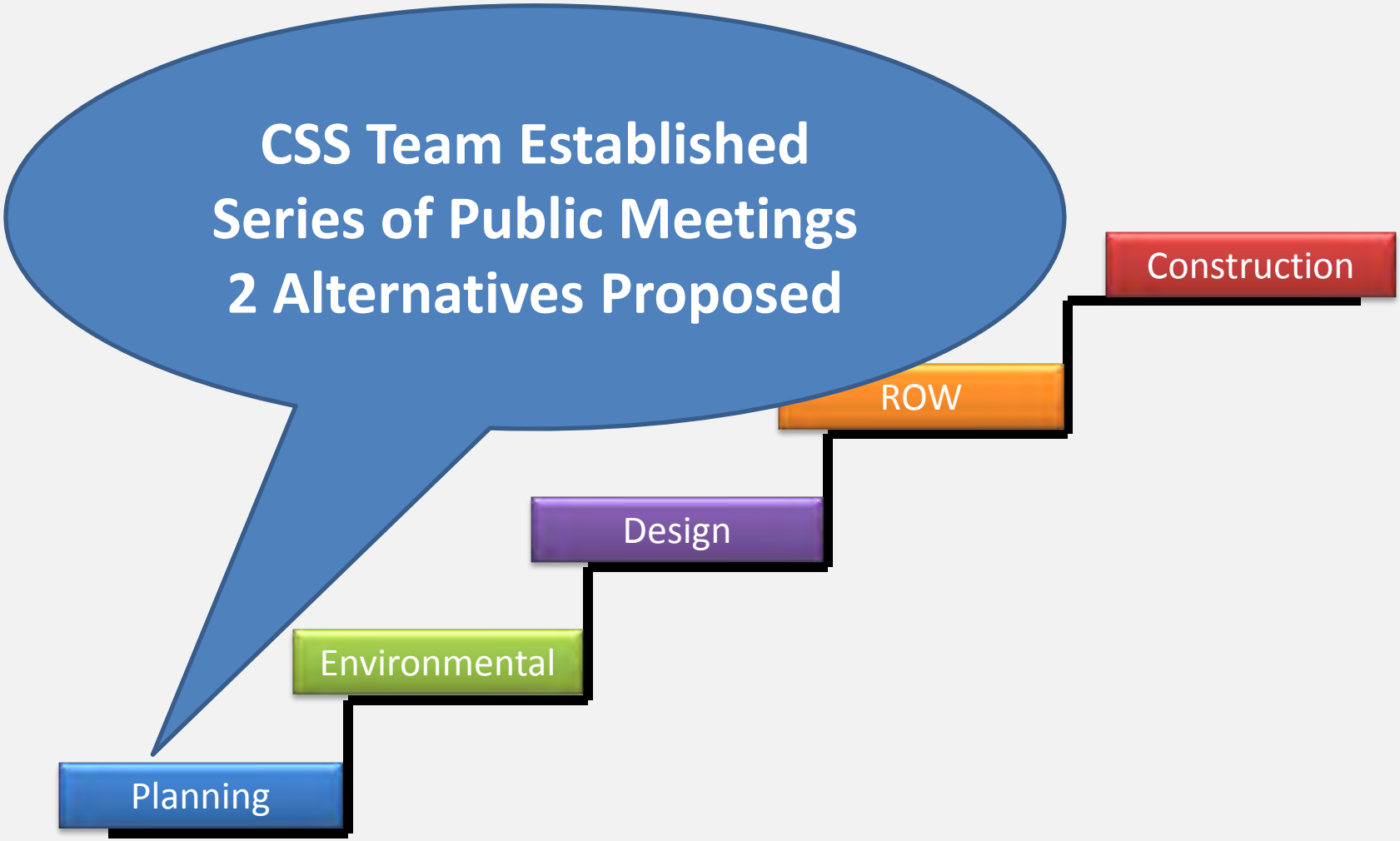
2 Build Alternatives developed by CSS Process

Environmental Studies

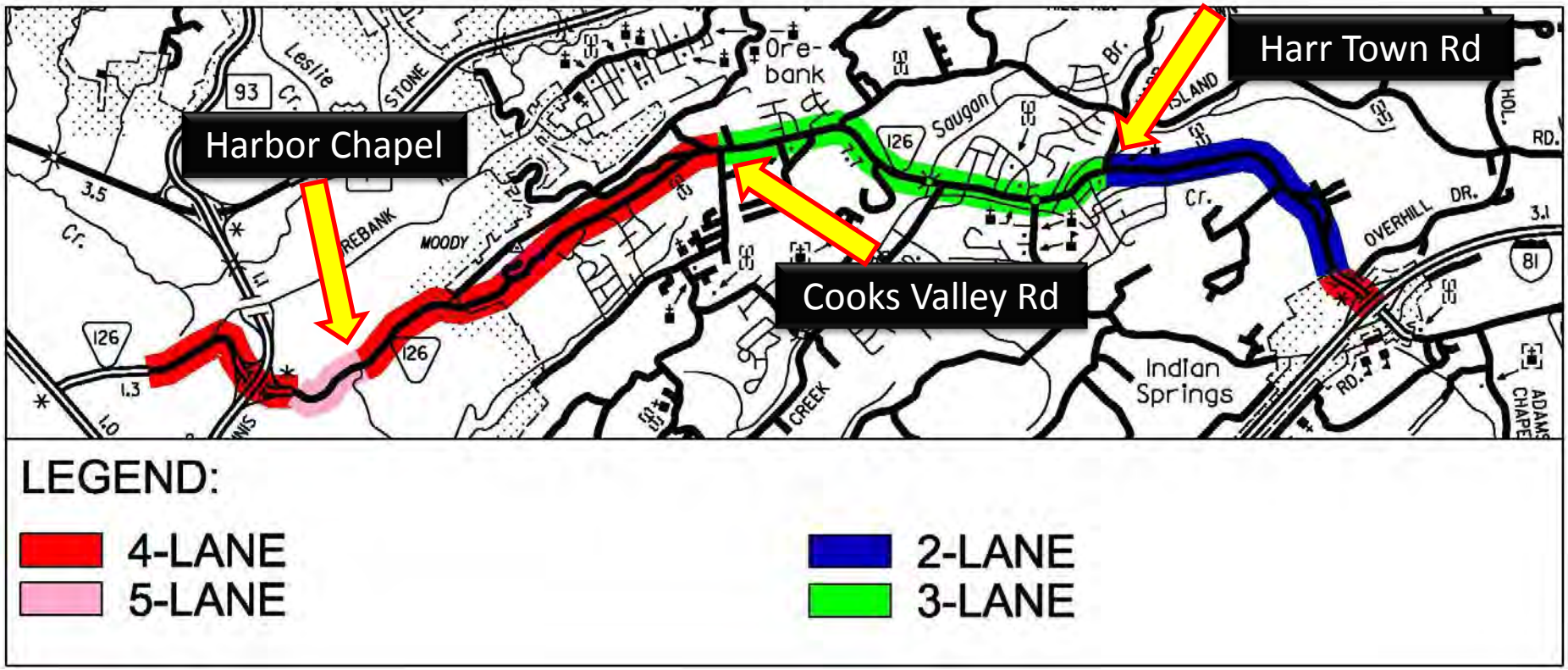
FHWA approved the DEIS (Jan. 5th)

Spot Safety Improvements

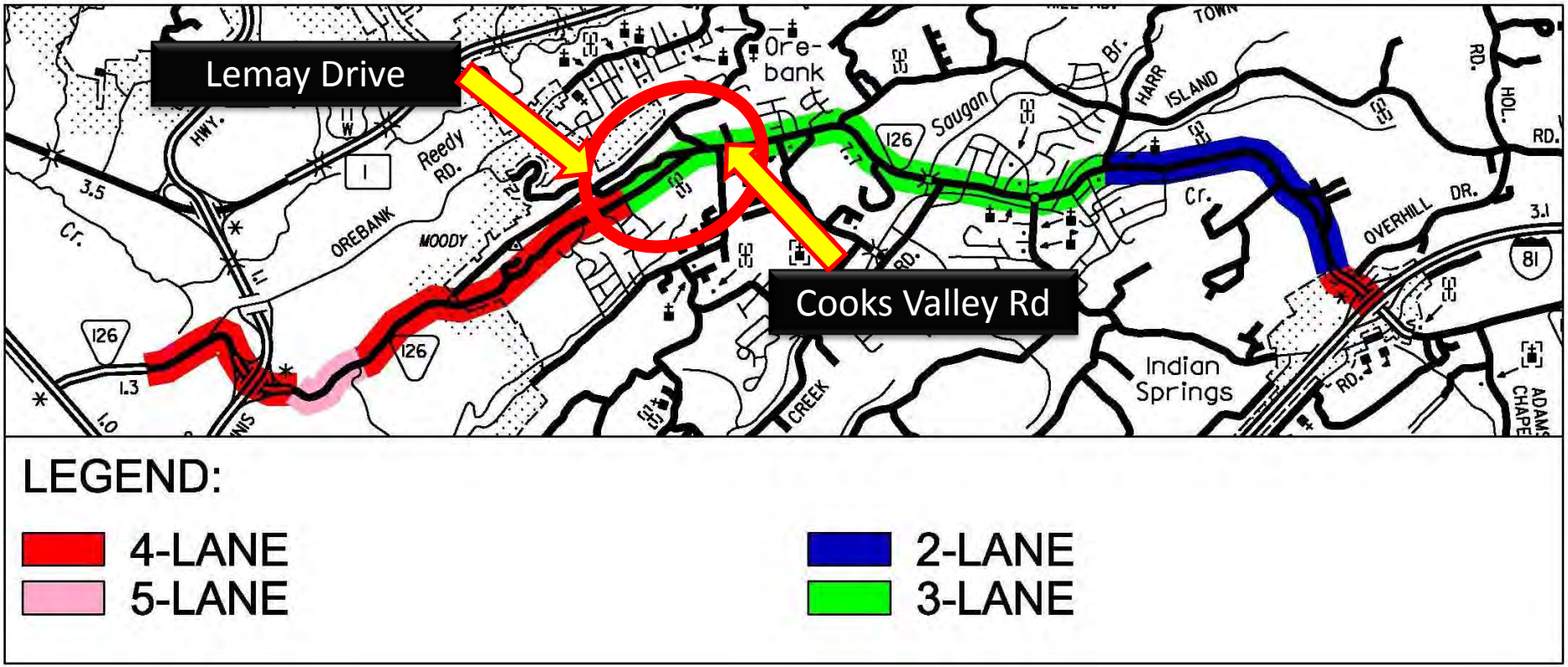
- Intersection at Carolina Pottery Drive
- Signing, Striping, rumble strips



Steps in the Project Development Process



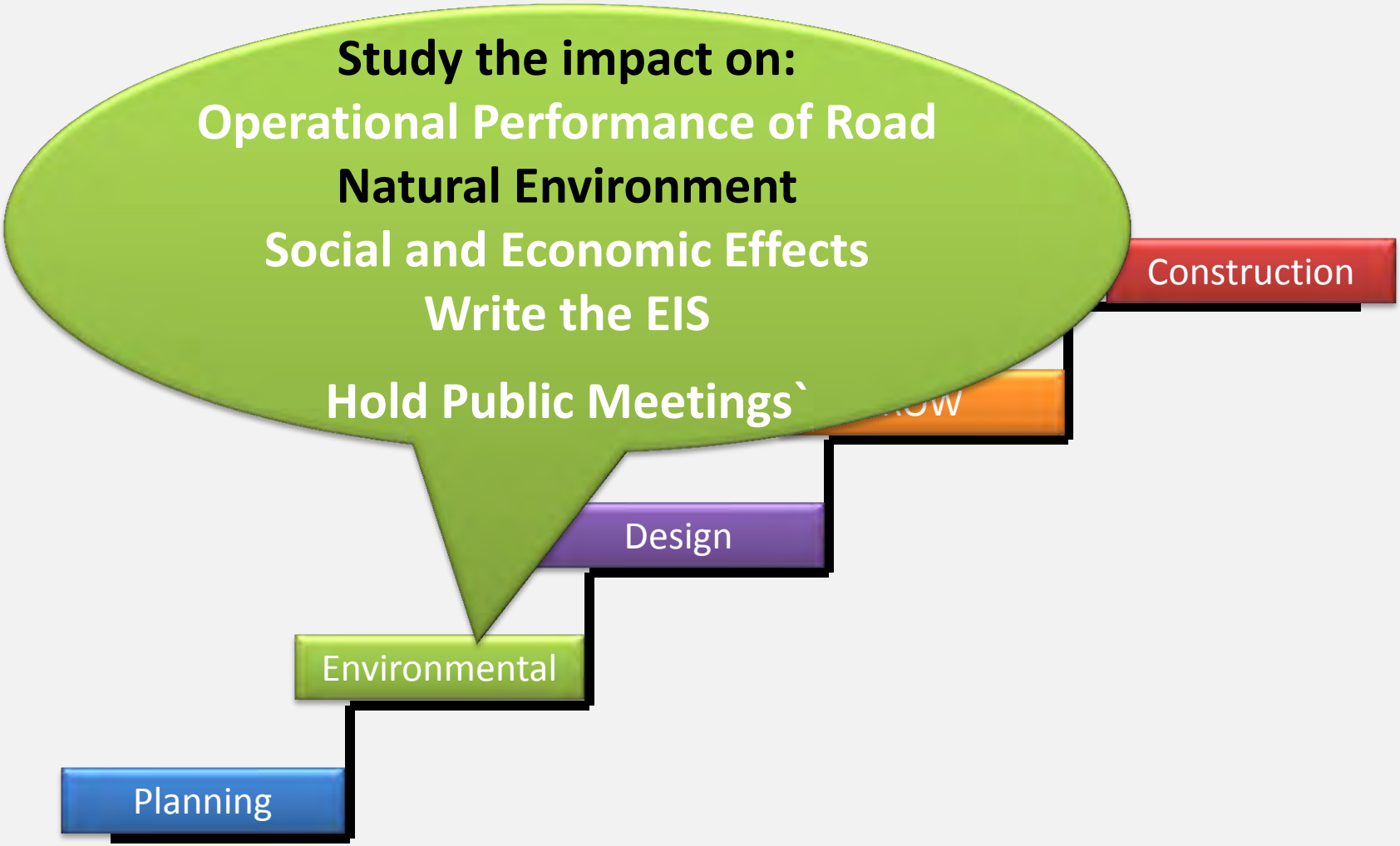
Alternative A



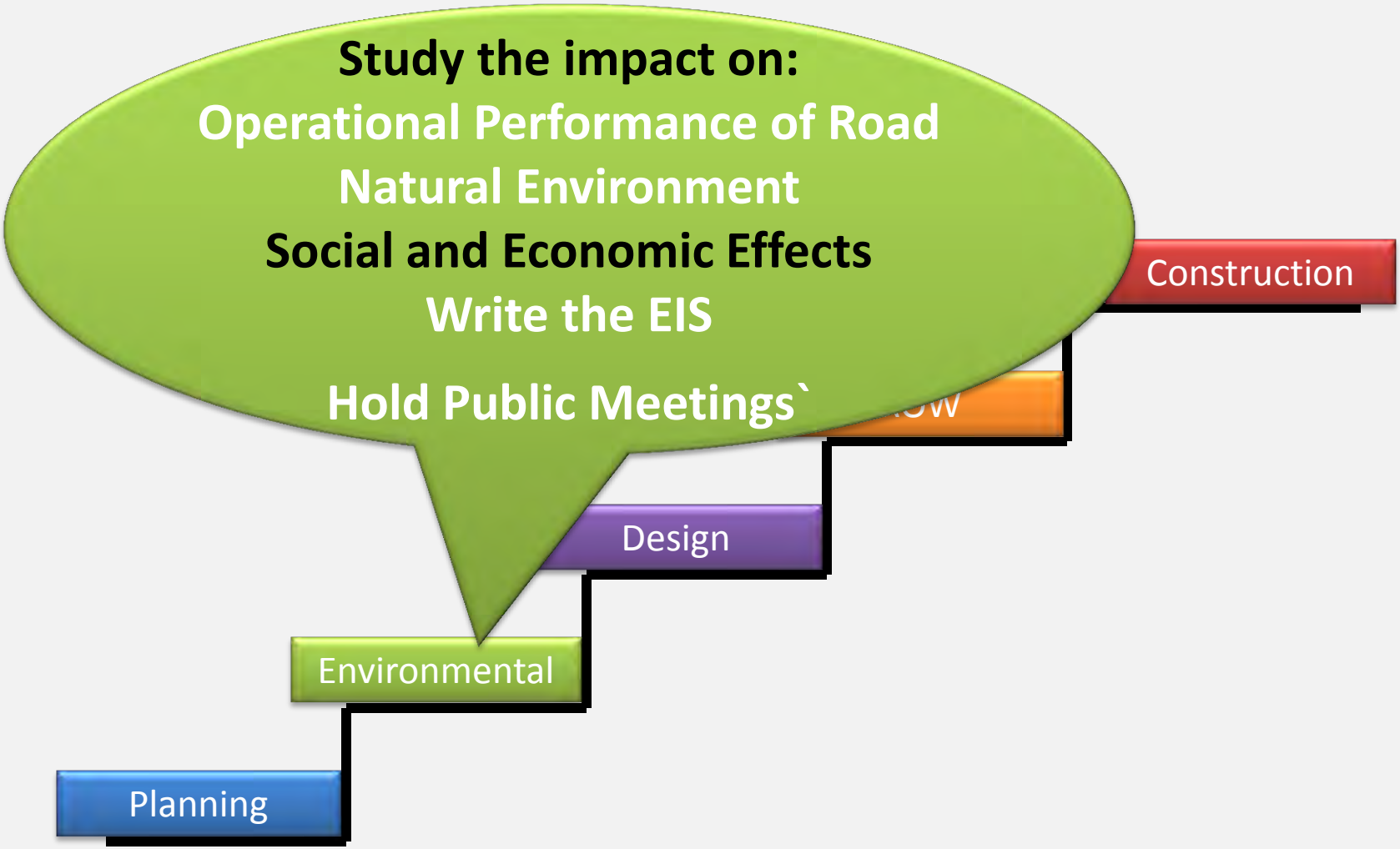
Alternative B



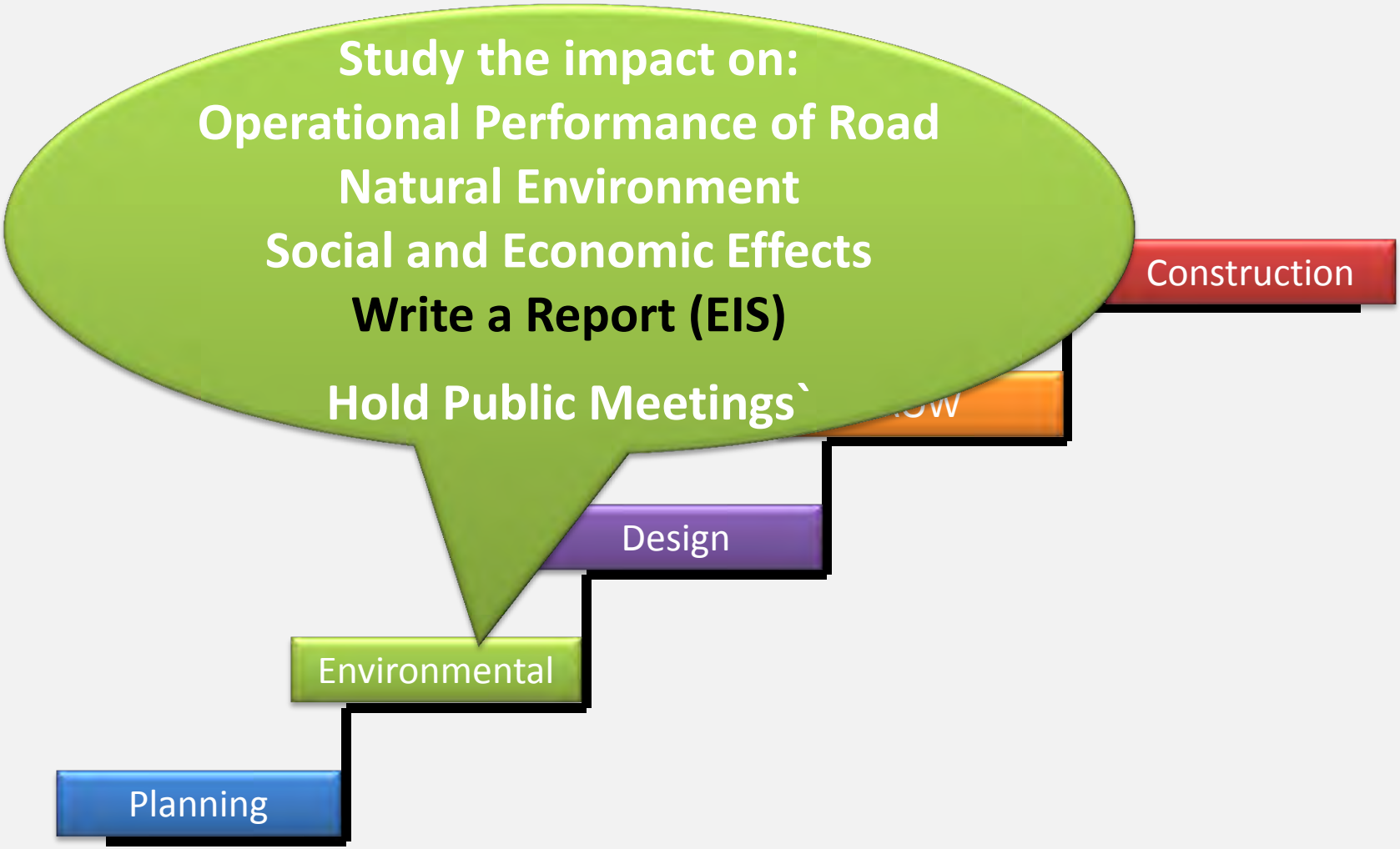
Steps in the Project Development Process



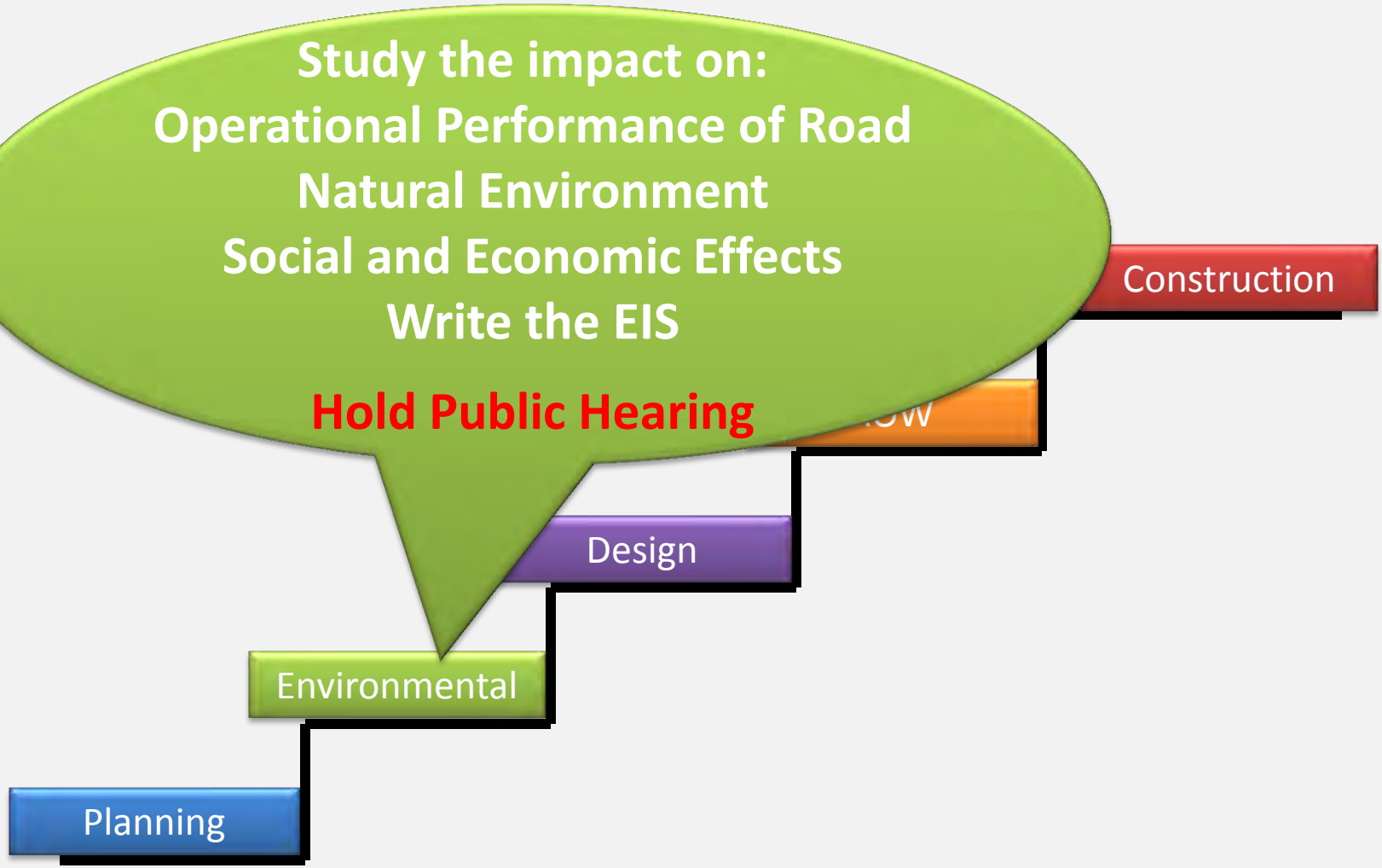
Steps in the Project Development Process



Steps in the Project Development Process



Steps in the Project Development Process



Steps in the Project Development Process

Impact Identification

Human Environment

- Social
- Economic
- Environmental Justice
- Historic
- Archaeological
- Visual
- Noise
- Recreational
- Air Quality
- Indirect and Cumulative

Natural Environment

- Steams
- Wetlands
- Rare & Endangered Species
- Floodplains
- Terrestrial
- Caves
- Sinkholes
- Hazardous Materials
- Geotechnical Study

Project Impacts

Subject Area	Alternate A	Alternate B
Noise Impacts	35	45
Historic Sites	1	1
Acres of Wetlands	0	0
Number of Streams	5	5
Forest Land (acres)	75	55
Hazardous Material Sites	2	3
Farm Land (acres)	15	5

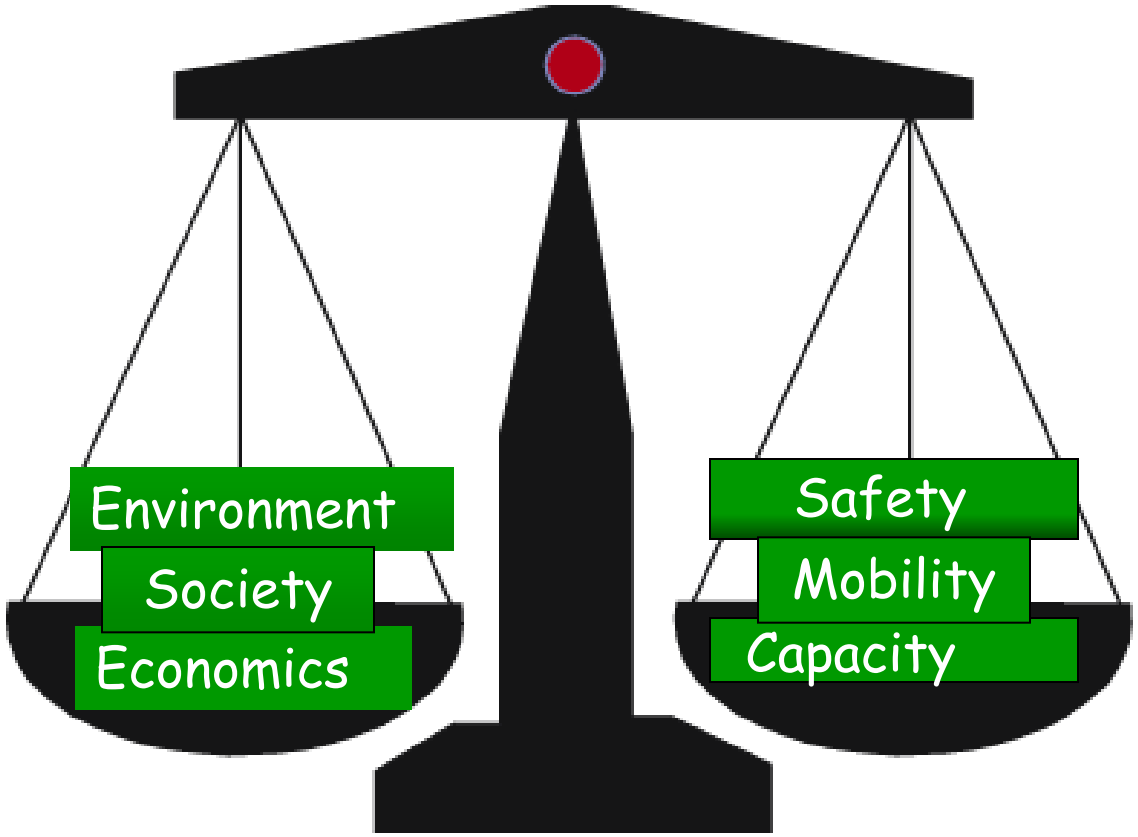
Key Project Impacts

Subject Area	Alternate A	Alternate B
Residential Displacements	241 102/135/4	162 90/69/3
Business Displacements	43	30
Total Acres of Acquisition	239	122
Non-Profit Displacements (Volunteer Fire Dept)	1	1
Grave Relocations	350	90
Impacted Historic Sites	1	1

NEPA

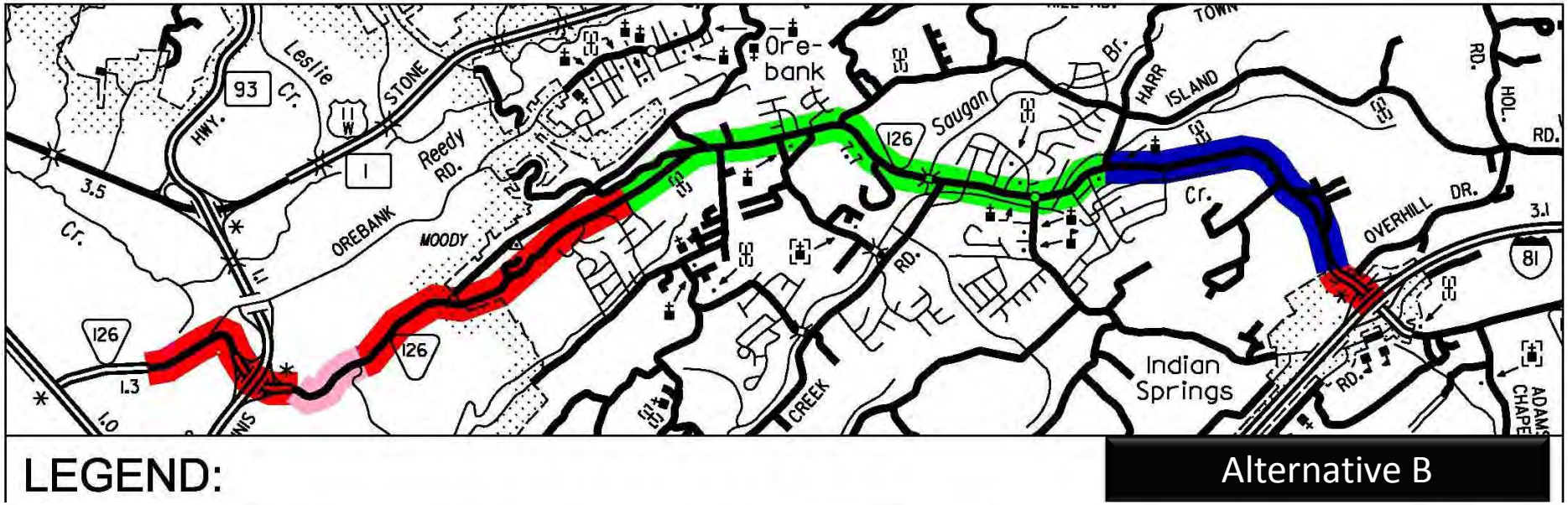
National Environmental Policy Act

A Balanced Decision-making Process



Project Updates

1. Public opposition to grave relocation expressed at Kingsport MPO meeting
2. Kingsport MPO updated its travel demand model. (Reduced projections)
3. Updated traffic volumes provided to TDOT.
4. Traffic reduction ranged from 4% to 68%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Saugan
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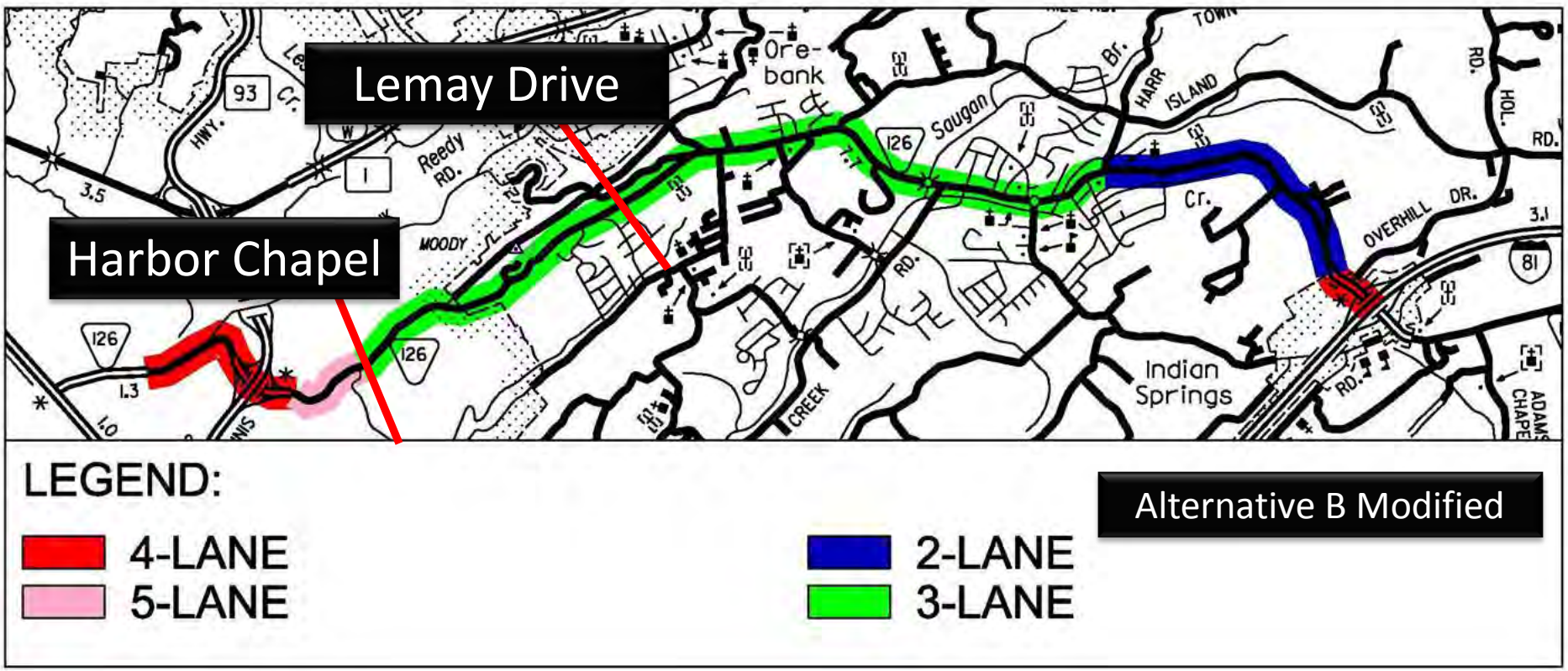
HARR
ISLAND
TOWN
RD.
HOL.
RD.
Leslie
Cr.
93
HWY.
STONE
Reedy
RD.
1
126
OREBANK
MOODY
3.5
Cr.
Cr.
OVERHILL
DR.
3.1
81
RD.
Indian
Springs
CREEK
1.3
1.0
ADAMS
CHAPE
LEGEND:
Alternative B


Lemay Drive
Harbor Chapel
Ore-
bank
Saugan
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ISLAND
TOWN
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MOODY
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OVERHILL
DR.
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81
RD.
Indian
Springs
CREEK
1.3
1.0
ADAMS
CHAPE
LEGEND:
Alternative B Modified
4-LANE
5-LANE
2-LANE
3-LANE

Results of Modifications

1. Reduced cross section of the road from Cook's Valley to Lemay Dr.

   Compressed by reducing the center turn lane width and removing the sidewalk adjacent to the tavern.

Results of Modifications

1. Reduced cross section of the road from Cook's Valley to Lemay Dr.

   Compressed by reducing the center turn lane width and removing the sidewalk adjacent to the tavern.

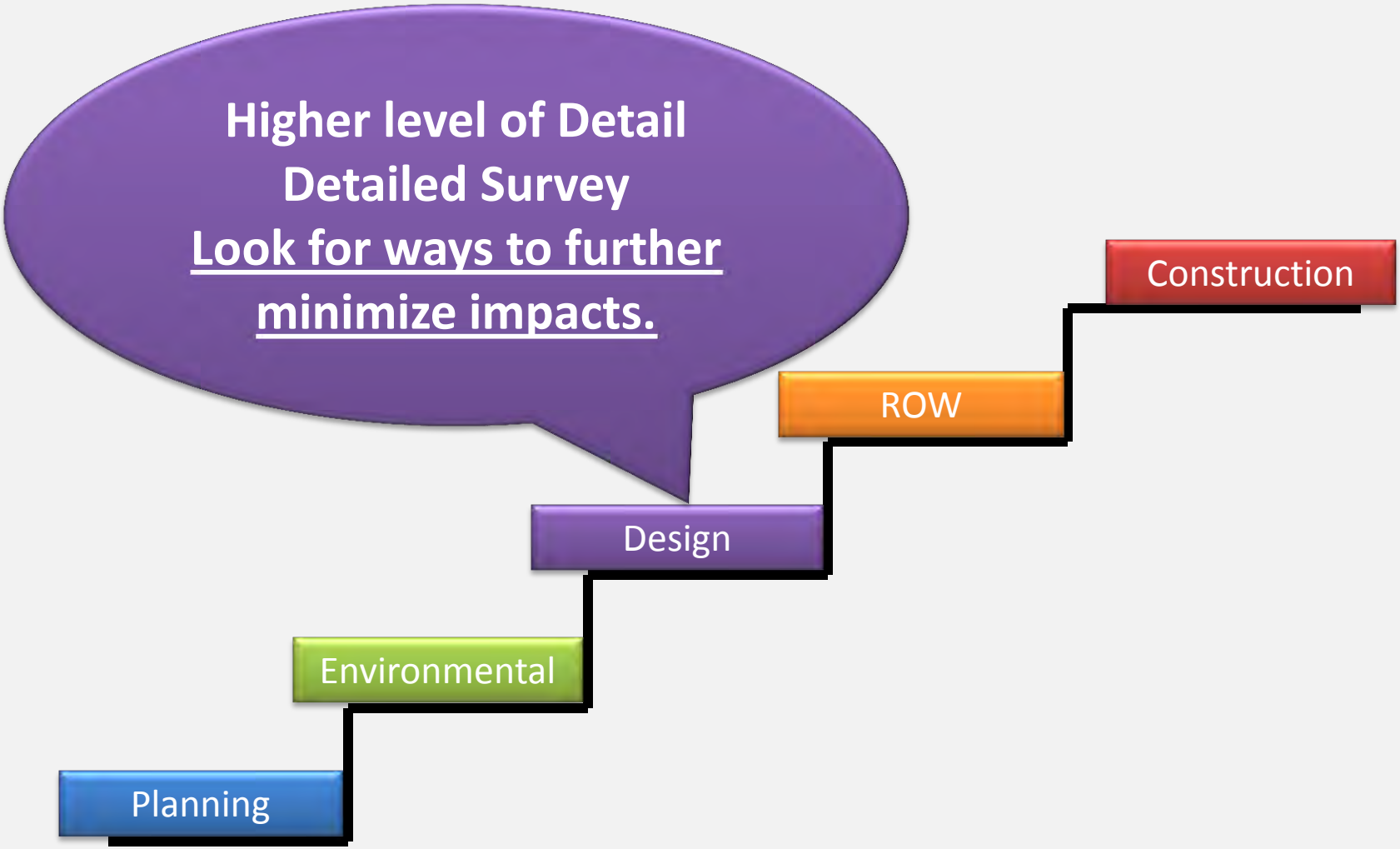
2. Avoided both Yancey's and all graves
3. Reduced the number of displacements
4. Still addressed safety concerns
5. Reduced project costs

Key Project Impacts

Subject Area	Alternate A	Alternate B	Alternate B Modified
Residential Displacements	241 102/135/4	162 90/69/3	104 81/22/1
Business Displacements	43	30	24
Total Acres of Acquisition	239	122	-
Non-Profit Displacements (Volunteer Fire Dept.)	1	1	1
Grave Relocations	350	90	0
Impacted Historic Sites	1	1	0



Next Steps in the Project Development Process



Next Steps in the Project Development Process

Tentative NEPA Project Schedule

- Close Public Comment Period: Jan 31, 2013
- Select/Announce Preferred Alternative (No Build, Build A, Build B): Spring 2013
- Final EIS: Fall 2013
- Issue Record of Decision: Winter 2014

NEXT STEPS

- Comments and Questions
- Review plans and speak to individuals

- Three ways to make your comments:

1. Make a public comment
2. Speak to the court reporter
3. Submit comment cards through Jan 31st

Three Minutes Please

CORRIDOR
PUBLIC HEARING

State Route 126 (Memorial Boulevard)
Corridor Improvement Project

From East Center Street to Interstate 81 in Sullivan County, Kingsport, TN

TDOT PIN 105467.00

December 11, 2012

11:30 a.m. to 1:30 p.m.
Kingsport Civic Center Auditorium
1550 Fort Henry Drive
Kingsport, TN 37664

6:00 p.m. to 8:00 p.m.
Sullivan Central High School
131 Shipley Ferry Road
Blountville, TN 37617



Welcome

Thank you for attending this Corridor Public Hearing. Please take this opportunity to read the information provided in this handout to become better acquainted with the proposed project.

The purpose of this hearing is to gather information from you about the Draft Environmental Impact Statement (DEIS) prepared for this project, and approved by the Federal Highway Administration (FHWA) on January 5, 2012. As well, TDOT will share information on activities that have occurred since that publication of the DEIS.

Tennessee Department of Transportation (TDOT) representatives are available to answer questions regarding the project. Please take time to discuss the project with them. A court reporter is also available for those persons who desire to make a verbal statement about the project and want that statement included in the official transcript of this hearing.

A comment form is available at this Public Hearing for your use. Please take a moment to fill out the form and give us your opinion regarding the proposed State Route 126 Corridor Improvements. The information that you provide will be used by the FHWA and TDOT decision makers regarding final approval of the project.

Completed comment forms may be deposited in the box by the door as you exit. If you would like to complete your comment form later, you may submit written comments to:

Public Hearing Comments
SR 126 (Memorial Blvd) Corridor Improvement Project
Tennessee Department of Transportation
Suite 700, James K. Polk Building
505 Deaderick Street
Nashville, TN 37243

All written comments submitted by mail must be post marked by **January 31, 2013.**

The agenda for this meeting is as follows:

– Informal Review of Project Plans and Informal Discussion with Project Team

– Welcome, Introductions, and Opening Remarks

– Presentation

– Formal Question & Answer Session with Panel

– Informal Review of Project Plans and Informal Discussion with Project Team

Facilitator:	
Mark Nagi	TDOT Community Relations Officer – Region 1
Project Panel List	
Jim Ozment	TDOT, Interim Director Environmental Division Mr. Ozment is responsible for the activities of the Environmental Division, which includes an Environmental Documentation Section.
Steve Allen	TDOT, Director Project Planning Division This division is comprised of three offices: Short Range Planning Office, Conceptual and NEPA Planning Office, and the Safety Planning and Travel Data Office.
Gary King	TDOT, Project Management Office Mr. King works with the Environmental Division Document Manager, JonnaLeigh Stack, and is responsible for coordination among TDOT divisions for this project.
Oliver Farris	TDOT, Region 1 Right-of-way Director This Division is responsible for the appraisal and acquisition of land needed for State roadway construction, and the relocation of affected families and businesses.
Ralph Comer	Assistant Chief, Environment and Planning Bureau This Bureau coordinates transportation and environmental planning for four Divisions: Environmental, Long-Range Planning, Project Planning, and Multimodal.
Stan King	Senior Manager, Environmental Consultant, Florence & Hutcheson This consultant firm assisted TDOT in the environmental document preparation.

PROJECT DESCRIPTION

The Tennessee Department of Transportation (TDOT), in cooperation with the Federal Highway Administration (FHWA), is proposing to improve State Route (SR) 126. The limits of the 8.4 mile long project extend from East Center Street, within the City of Kingsport's City Limits, east to Interstate 81 (I-81) in Sullivan County, Tennessee. SR 126 is also known as Memorial Boulevard within the study limits.

SR 126 (Memorial Boulevard) is primarily a two-travel lane facility (one travel lane in each direction) throughout the study corridor. Each travel lane is approximately eleven feet wide. The existing right-of-way varies from approximately sixty feet to three hundred feet wide. The speed limit varies from thirty-five to fifty miles per hour. Many sharp curves and steep grades along the route are signed with supplemental speed plaques advising lower safe travel speeds than the posted speed limit. Many roadside hazards are located in close proximity to the travel lanes. Narrow shoulders are present along the majority of the route. Sidewalks are present along approximately 0.1 mile (1%) of the 8.4 mile long corridor. Curbs are located sporadically along the route, with the majority of the corridor having roadside ditches.

WHERE TO VIEW THE DEIS
Printed copies of the DEIS are available for public review at:

Kingsport Mayor's Office
225 West Center Street
Kingsport, TN 37066

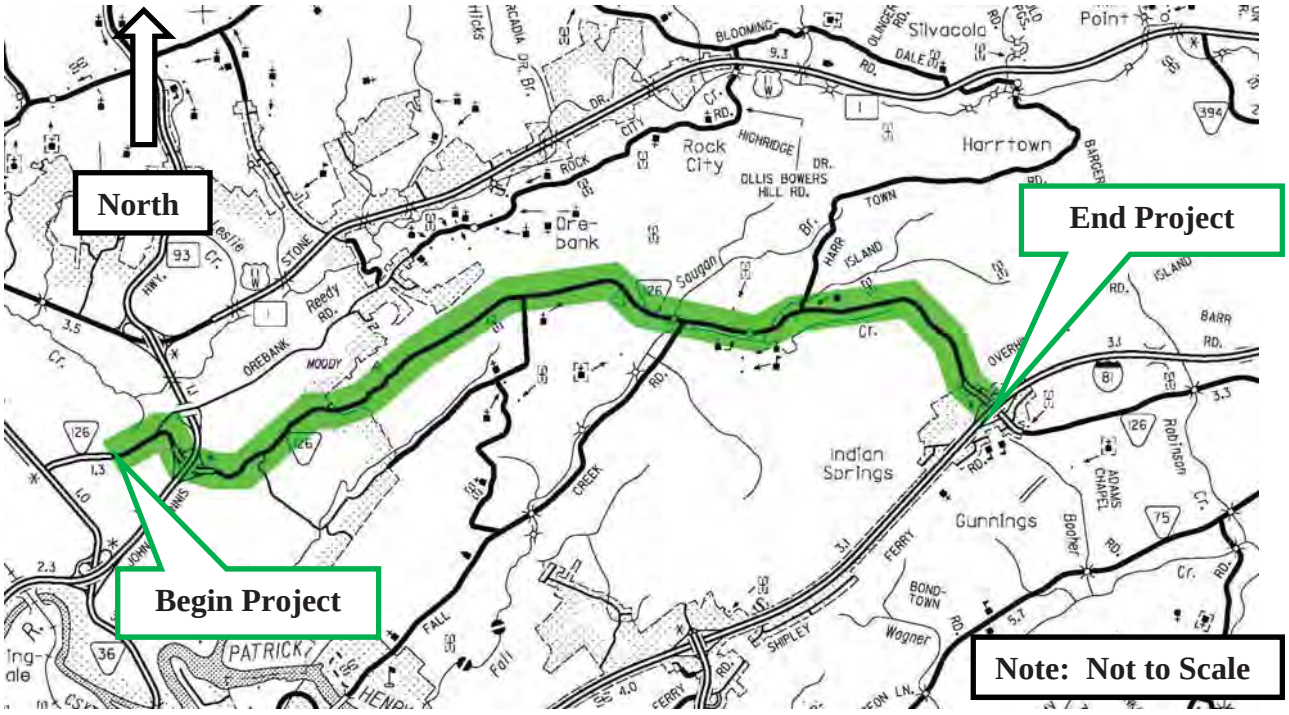
Kingsport Public Library
400 Broad Street
Kingsport, TN 37066

Kingsport Metropolitan
Planning Organization
201 West Market Street
Kingsport, TN 37066

TDOT Region I
Design Office
7345 Region Lane
Knoxville, TN 37914

An electronic copy of the DEIS is also available at:
http://www.tn.gov/tdot/SR126

General Location Map



From East Center Street to Interstate 81 in Sullivan County, Kingsport, Tennessee

REQUIREMENTS FOR ENVIRONMENTAL REVIEW
The National Environmental Policy Act (NEPA) requires that projects receiving federal funding or requiring major federal action (e.g., permits) undergo an environmental review process. Design, right-of-way acquisition, and construction of a project cannot proceed until this requirement has been successfully completed.

PURPOSE AND NEED OF THE PROJECT

The purpose of the project is to provide a safe, efficient route for local traffic between the City of Kingsport and I-81. Improvements should be sensitive to the context of the different land uses along the corridor. Specifically, the improvements along the western half of the project, which is more commercial and residential, are proposed improve access management to adjacent businesses and homes and improved pedestrian and bicycle connectivity. The improvements along the eastern half of the project should complement the rural nature of the area.

The safety of the route needs to be improved. Crash rates observed along the entire SR 126 (Memorial Boulevard) study corridor exceed the statewide average crash rates for similar roadway segments. These needs for improved safety can be summarized as follows:

- The width of the roadway generally needs to be improved. Most of the existing roadway includes 11 foot wide lanes with narrow shoulders.
- The width of the shoulders need to be improved. The shoulders along the route are typically no wider than 2 feet and often not paved. The narrow shoulders, along with other existing geometric deficiencies, contribute to the high crash rates and create a less than desirable route for pedestrians and bicyclists.
- The geometry of the roadway needs to be improved. Numerous horizontal and vertical curves along the route are inadequate for the posted speed limit.
- Improved access management is needed along the commercial areas of the route. The public cited access onto SR 126 (Memorial Boulevard) as a major problem. Difficulty entering or exiting business parking lots was identified as a significant problem because of uncontrolled access to businesses along the roadway. Many of the access points are located near or within substandard curves or hills that limit sight distance for drivers attempting to turn into or out of the businesses.
- Improved response time for emergency vehicles is needed. With improvements, emergency vehicles would be able to respond more efficiently to emergencies within and near the project corridor. Wider shoulders would enable motorists to pull over and allow the emergency vehicles to pass through to their intended destinations. Current conditions along SR 126 (Memorial Boulevard) do not feature many areas for vehicles to pull over.
- Improved access for mail delivery is needed. Current geometric conditions along SR 126 (Memorial Boulevard) create bottlenecks during mail delivery. Wider shoulders would enable delivery vehicles to depart the travel lane and motorists pass more safely.
- Improved access for school busses is needed. Current geometric conditions along SR 126 (Memorial Boulevard) make it difficult for school busses to make turns. Wider paved roadway widths would improve accessibility for the school busses along the corridor.

Improved traffic operations are needed along the route. This will be the result of the improvements described above, which will result in better traffic flow.

ALTERNATIVES EVALUATED IN DEIS

The No-Build and two Build Alternatives are currently under consideration for this project. The No-Build, or No-Action, Alternative makes no improvements to SR 126 (Memorial Boulevard) other than scheduled maintenance activities. Build Alternative A improves SR 126 (Memorial Boulevard) to a four-lane facility (two travel lanes in each direction) within the commercial and residential areas of the western half of the study corridor. The eastern half of the study corridor, which is rural in nature, will remain a two-travel lane facility. Improved shoulders will be provided along the entire corridor and sidewalks will be extended to the majority of the commercial and residential areas. Alternative B is a refinement of Alternative A. Alternative B utilizes the same proposed typical roadway cross sections as Alternative A, but the length of the four-travel lane section is reduced to minimize environmental impacts.

The No-Build Alternative does not meet the purpose and need of the project. The No-Build Alternative does not create a safer, more efficient route for local traffic between the City of Kingsport and I-81. The existing narrow lane and shoulder widths would not be improved. The numerous deficient horizontal and vertical curves would not be improved. These existing geometric deficiencies lead to the observed high crash rate along the route. The narrow shoulders and lack of sidewalks limit bicycle and pedestrian usage of the facility. The No-Build Alternative does not improve access management along the route. The existing poor access management contributes to poor traffic operations and higher crash rates. The No-Build Alternative does not improve traffic operations or travel times for commuters or emergency response vehicles.

Build Alternatives A and B both meet the purpose and need of the project. Both Build Alternatives create a safer, more efficient route between the City of Kingsport and I-81. Lane widths and shoulder widths will be improved along the corridor. Deficient horizontal and vertical curves will be improved. These geometric improvements will create a safer, more efficient route. The addition of wider shoulders along the entire corridor and sidewalks along commercial and residential areas will promote bicycle and pedestrian usage of the facility. Access management will be improved along the commercial areas of the corridor through the use of raised grass medians and curb and gutter. Throughout the entire study corridor access management will be improved by closing or realigning many side road intersections with SR 126 (Memorial Boulevard). Improved access management will improve the safety and efficiency of the route. Both Build Alternatives improve traffic operations and travel times for both commuters and emergency response vehicles. Both Build Alternatives A and B provide these improvements in a context sensitive design, preserving the rural nature of the eastern half of the study corridor.

ALTERNATIVE A

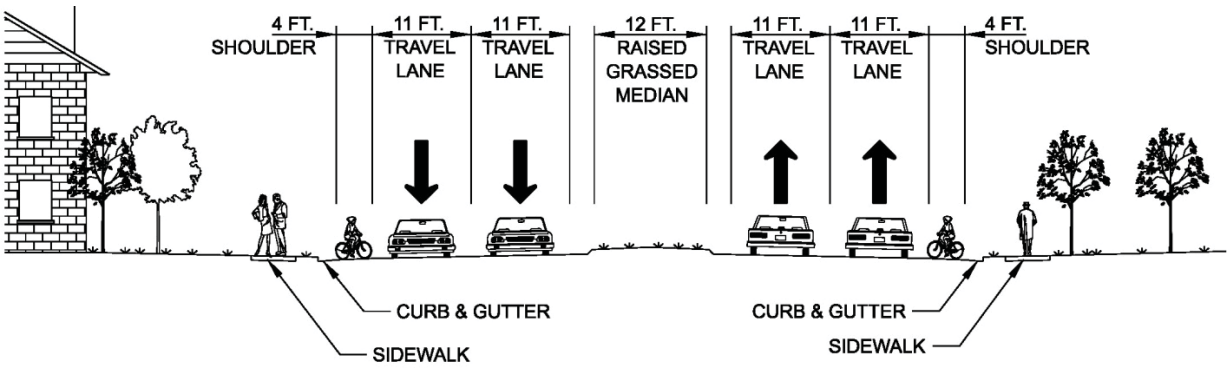
Build Alternative A improves SR 126 (Memorial Boulevard) to a four-lane facility (two travel lanes in each direction) within the commercial and residential areas of the western half of the study corridor. The eastern half of the study corridor, which is rural in nature, will remain a two-travel lane facility. Either a raised median or two way left turn lane (TWLTL) will be

provided along the majority of the route. Improved shoulders will be provided along the entire corridor and sidewalks will be extended to the majority of the commercial and residential areas.

Several different typical cross sections are proposed along the SR 126 (Memorial Boulevard) corridor. Additional right-of-way will be required along the entire corridor to accommodate the proposed improvements.

1. East Center Street (L.M. 3.72) to west of Hawthorne Street (L.M. 4.71)

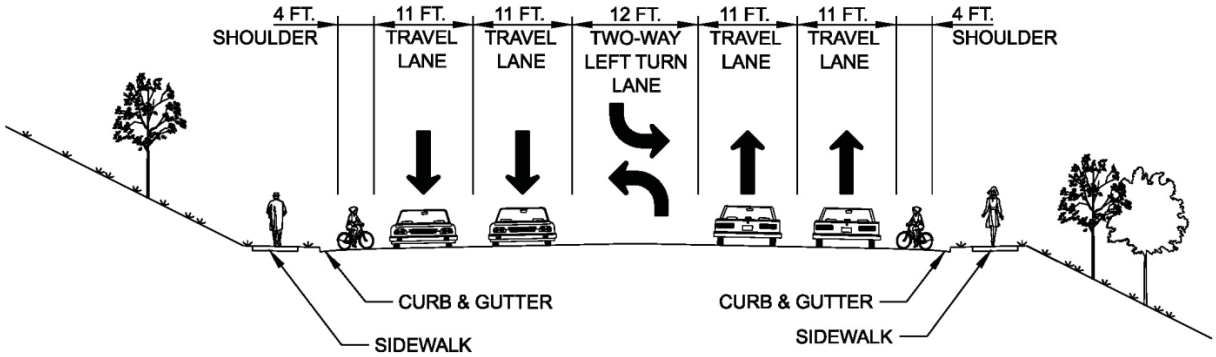
On the first 1.0 mile long segment from East Center Street to west of Hawthorne Street, the proposed cross section includes four travel lanes (two in each direction), a raised grass median, four-foot wide paved shoulders, and curb and gutter. Sidewalks will be located on both sides of the roadway. The travel lanes will be eleven feet wide. The four-foot wide shoulders will accommodate bicyclists. The design speed of this segment is 35 miles per hour.



SEGMENT 1 PROPOSED TYPICAL SECTION

2. West of Hawthorne Street (L.M. 4.71) to Harbor Chapel Road (L.M. 5.18)

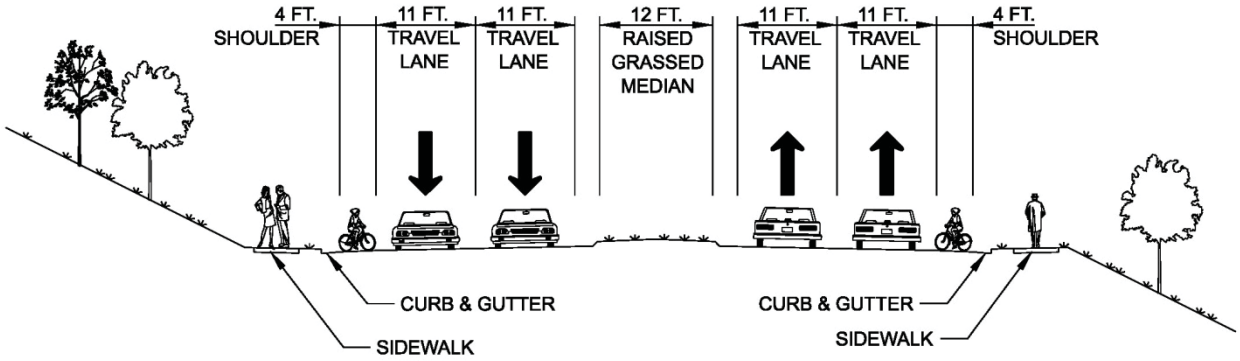
The proposed cross section of this 0.5 mile long segment of SR 126 (Memorial Boulevard) from west of Hawthorne Street to Harbor Chapel Road includes four travel lanes (two in each direction), four-foot wide paved shoulders, and curb and gutter. The median in this section will consist of a two-way left turn lane, instead of the raised grass median proposed in Segment 1. Sidewalks will be located on both sides of the roadway. The travel lanes will be eleven feet wide. The four-foot wide shoulders will accommodate bicyclists. The design speed of this segment is 35 miles per hour.



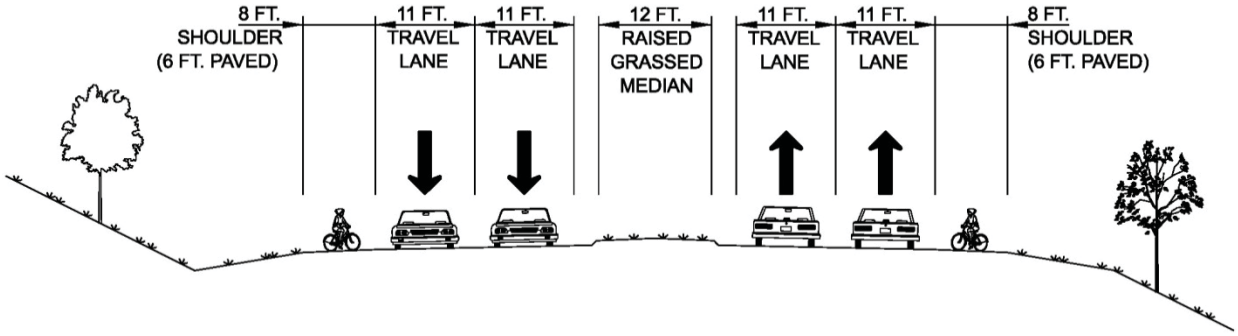
SEGMENT 2 PROPOSED TYPICAL SECTION

3. Harbor Chapel Road (L.M. 5.18) to Cooks Valley Road (L.M. 7.66)

The proposed cross section of this 2.5 mile long segment (Segment 3A) of SR 126 (Memorial Boulevard) from Harbor Chapel Road to Cooks Valley Road includes four travel lanes (two in each direction), and a raised grass median. The first 0.6 mile of this segment from Harbor Chapel Road to east of Old Stage Road includes four-foot wide paved shoulders, curb and gutter, and sidewalks on both sides of the roadway. The next 1.9 miles of this segment (Segment 3B) from east of Old Stage Road to Cooks Valley Road will not have curb and gutter, and instead will have roadside ditches for drainage. The shoulders will be eight feet wide, six feet of which will be paved. No sidewalks will be provided along this 1.9 mile segment between Old Stage Road and Cooks Valley Road due to the lack of properties fronting SR 126 (Memorial Boulevard). The travel lanes throughout the entire 2.5 mile long segment will be eleven feet wide. The four to six-foot wide paved shoulders will accommodate bicyclists. The design speed of this segment is 45 miles per hour.



SEGMENT 3A PROPOSED TYPICAL SECTION

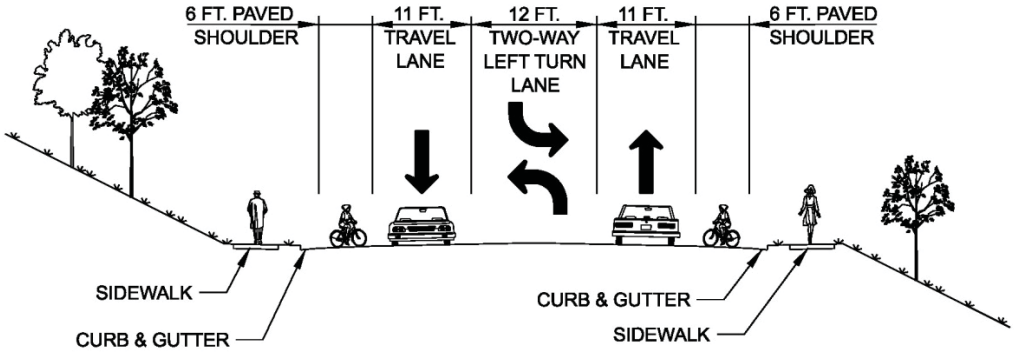


SEGMENT 3B PROPOSED TYPICAL SECTION

4. Cooks Valley Road (L.M. 7.66) to Harr Town Road (L.M. 10.11)

The proposed cross section of this 2.5 mile long segment of SR 126 (Memorial Boulevard) from Cooks Valley Road to Harr Town Road includes two travel lanes (one in each direction), six-foot wide paved shoulders, and curb and gutter. The median in this section will consist of a

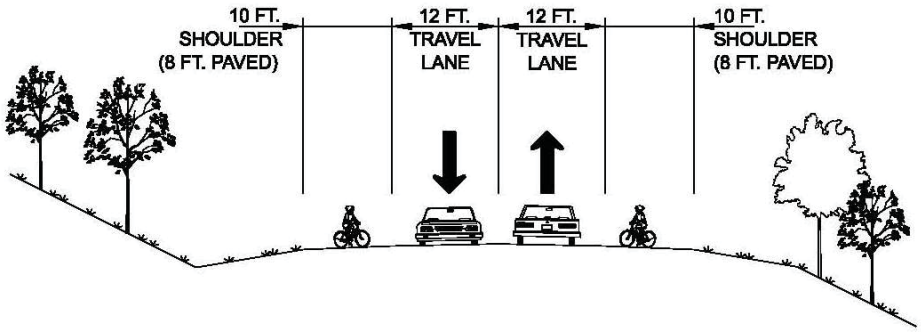
two-way left turn lane. Sidewalks will be located on both sides of the roadway. The travel lanes will be eleven feet wide. The six-foot wide shoulders will accommodate bicyclists. The design speed of this segment is 45 miles per hour.



SEGMENT 4 PROPOSED TYPICAL SECTION

5. Harr Town Road (L.M. 10.11) to west of Carolina Pottery Drive (L.M. 11.90)

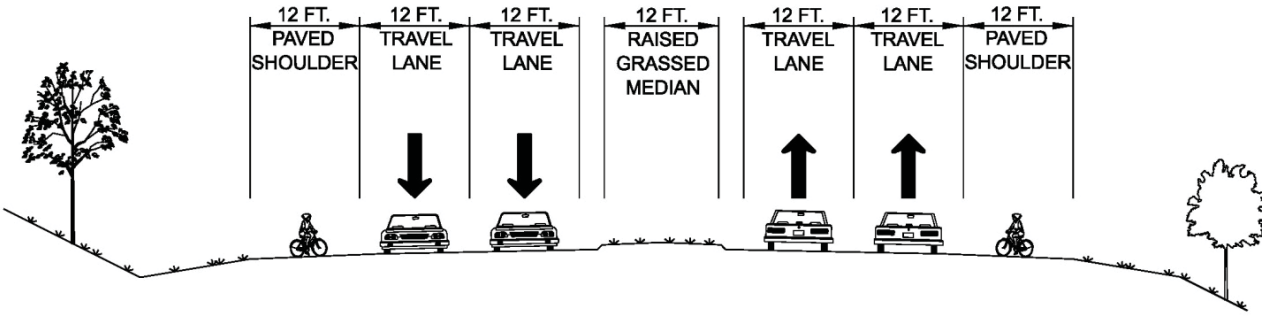
The proposed cross section of this 1.8 mile long segment of SR 126 (Memorial Boulevard) from Harr Town Road to west of Carolina Pottery Drive includes two travel lanes (one in each direction) with no median. This section will not have curb and gutter, and instead will have roadside ditches for drainage. The shoulders will be ten feet wide, eight feet of which will be paved. No sidewalks will be provided due to the rural nature of the surrounding community. The travel lanes will be twelve feet wide. Rumble stripes will be provided along the centerline of the roadway to deter drivers from crossing into the opposing lane. Rumble strips will also be provided along the shoulders. The shoulder rumble strips will include ten-foot gaps between thirty-foot rumble strip segments to accommodate bicyclists. The design speed of this segment is 45 miles per hour.



SEGMENT 5 PROPOSED TYPICAL SECTION

6. West of Carolina Pottery Drive (L.M. 11.90) to I-81 (L.M. 12.12)

The proposed cross section of this 0.2 mile long segment of SR 126 (Memorial Boulevard) from west of Carolina Pottery Drive to I-81 includes four travel lanes (two in each direction), and a raised grass median. This segment will not have curb and gutter, and instead will have roadside ditches for drainage. The shoulders will be twelve feet wide and paved. No sidewalks will be provided along this segment due to the rural nature of the surrounding community. The travel lanes will be twelve feet wide. The twelve-foot wide paved shoulders will accommodate bicyclists. The design speed of this segment is 45 miles per hour.



SEGMENT 6 PROPOSED TYPICAL SECTION

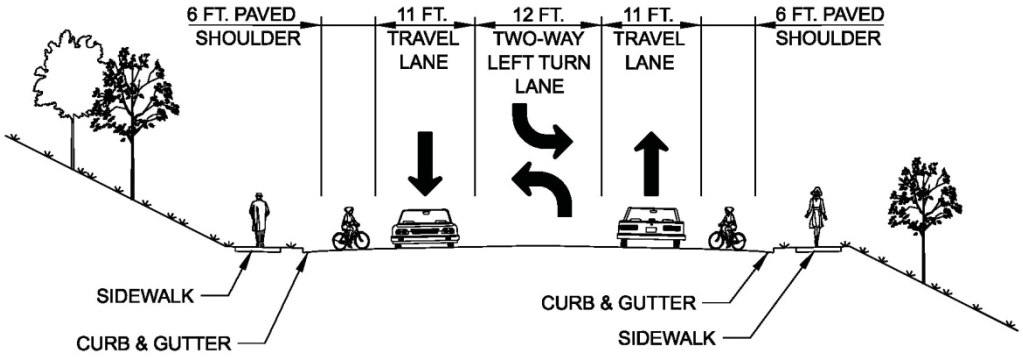
The proposed alignment of Alternative A generally follows the existing alignment. The proposed alignment shifts from side to side to minimize impacts, reduce earthwork volumes, simplify constructability, and improve the curvature of the roadway. Despite the effort to minimize impacts, considerable additional right-of-way will be required and many residences and businesses will need to be relocated. Numerous gravesites will also need to be relocated.

ALTERNATIVE B

Alternative B is a refinement of Alternative A. Alternative B utilizes the same proposed typical roadway cross sections as Alternative A, but the length of the four-travel lane section of Segment 3 is reduced. As a result, the two-travel lane section of Segment 4 begins further west, near Lemay Drive, and is longer than in Alternative A. Retaining walls will also be utilized in the vicinity of historic Yancey's Tavern and East Lawn Memorial Gardens Cemetery. These modifications were made to minimize impacts to Yancey's Tavern and the East Lawn Memorial Gardens Cemetery located on opposing sides of SR 126 (Memorial Boulevard) in Segment 4. It should be noted that numerous gravesites will still need to be relocated with Alternative B. Additional changes incorporated into Alternative B include minor modifications of the proposed centerline to minimize excavation and fill impacts. Alternative B subsequently requires less additional right-of-way and impacts fewer residences and businesses than Alternative A.

Segment 4 Alternate B East of Lemay Drive (L.M. 7.20) to Harr Town Road (L.M. 10.11)

The proposed cross section of this 2.9 mile long segment of SR 126 (Memorial Boulevard) from east of Lemay Drive to Harr Town Road includes two travel lanes (one in each direction), six-foot wide paved shoulders, and curb and gutter. The median in this section will consist of a two-way left turn lane. Sidewalks will be located on both sides of the roadway. The travel lanes will be eleven feet wide. The six-foot wide shoulders will accommodate bicyclists. The design speed of this segment is 45 miles per hour.



SEGMENT 4 ALT B PROPOSED TYPICAL SECTION

ENVIRONMENTAL IMPACTS

Build Alternative – The adverse impacts associated with this project involve:

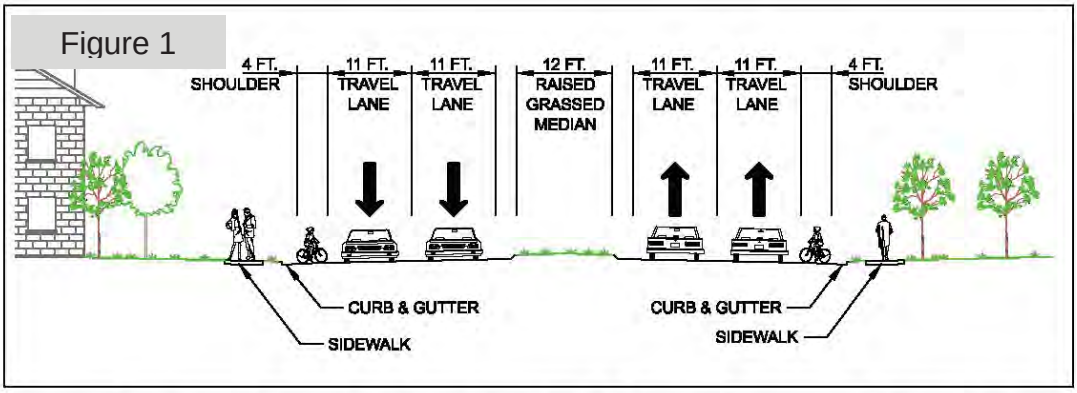
- The displacement of ninety (90) to three hundred and fifty (350) graves, dependent upon which Build Alternative is selected.
- The displacement of one hundred and sixty two (162) to two hundred and forty one (241) residential relocations, dependent upon which Build Alternative is selected.
- The displacement of thirty (30) to forty-three (43) business displacements, dependent upon which Build Alternative is selected.
- There will also be temporary impacts during construction such as traffic delays, noise and dust. (See Summary Table)

ALTERNATIVE B – REVISED DESIGN CONCEPT NOT EVALUATED IN DEIS

Since the approval and circulation of the Draft Environmental Impact Statement on January 9, 2012 updated traffic data has been developed and a new traffic capacity manual has become available. From these new developments, the Department of Transportation reevaluated the design of the alternatives and is considering changes that would reduce the number of project impacts. The design modifications being considered are described in the next four pages. (See Summary Table)

The original four-lane concept that extended from East Center Street to Lemay Road has been reduced in length. The revised design concept proposes a four-lane roadway from East Center Street to Harbor Chapel Road. The first segment of this four-lane beginning at East Center Street and extending to Hawthorne Street will have two, eleven foot lanes in each director separated by a twelve foot raised grass median with bicycle lanes and sidewalks on bother sides of the roadway. (Figure 1)

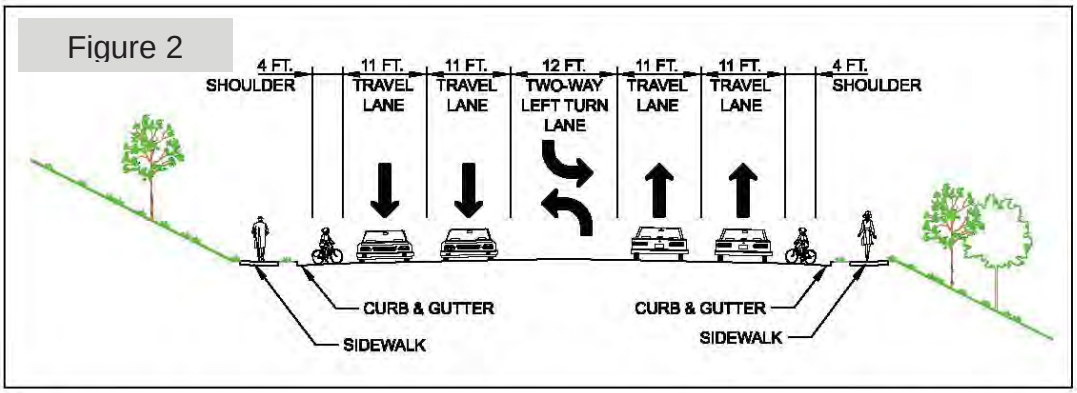
Figure 1



From East Center to Hawthorne Street

At Hawthorne Street the grass median will transition to a two-way left center turn-lane and continue to Harbor Chapel Road. (Figure 2)

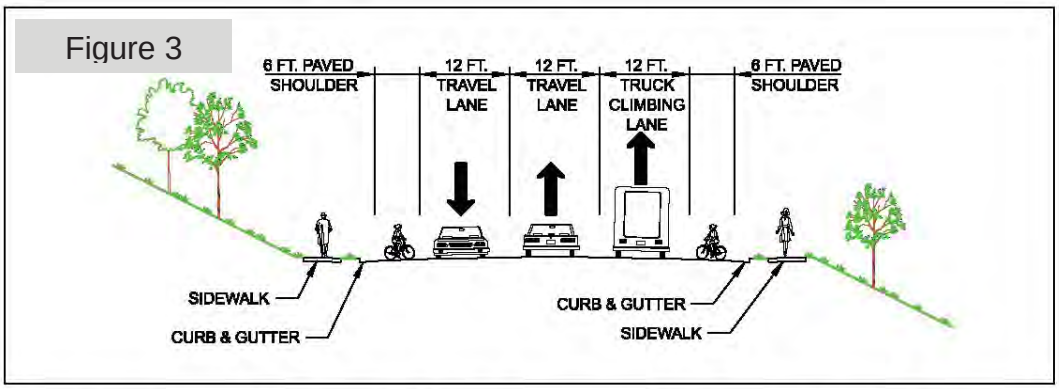
Figure 2



West of Hawthorne to Harbor Chapel Road

At Harbor Chapel Road the roadway cross-section is reduced to a two-lane roadway (one-lane in each direction) with a twelve foot eastbound truck climbing lane. Sidewalks and bike lanes are proposed for both sides of the roadway. This three-lane roadway will continue to Old Stage Road. (Figure 3)

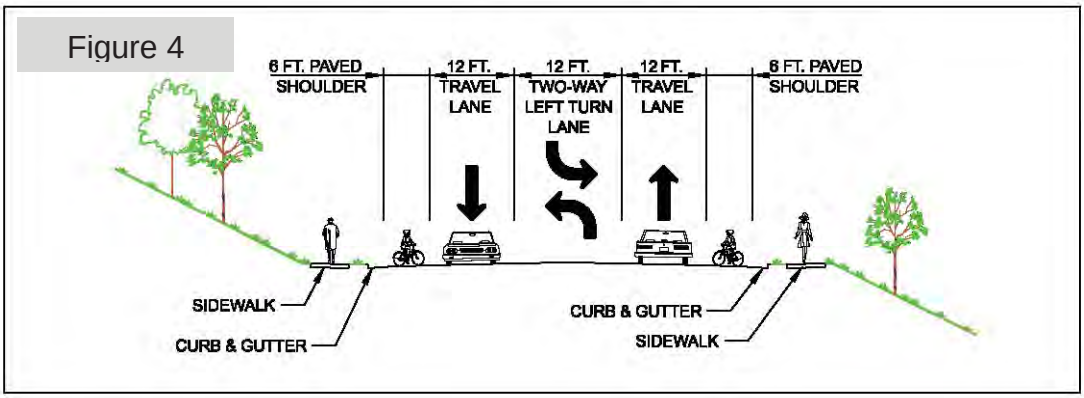
Figure 3



From Harbor Chapel Road to West of Old Stage Road

The three-lane roadway will transition near Old Stage Road to a two-lane roadway (one-lane in each direction) separated by a two-way left turn center lane, which is continued to Harr Town Road. Sidewalks and bike lanes are proposed for both sides of the roadway. (Figure 4)

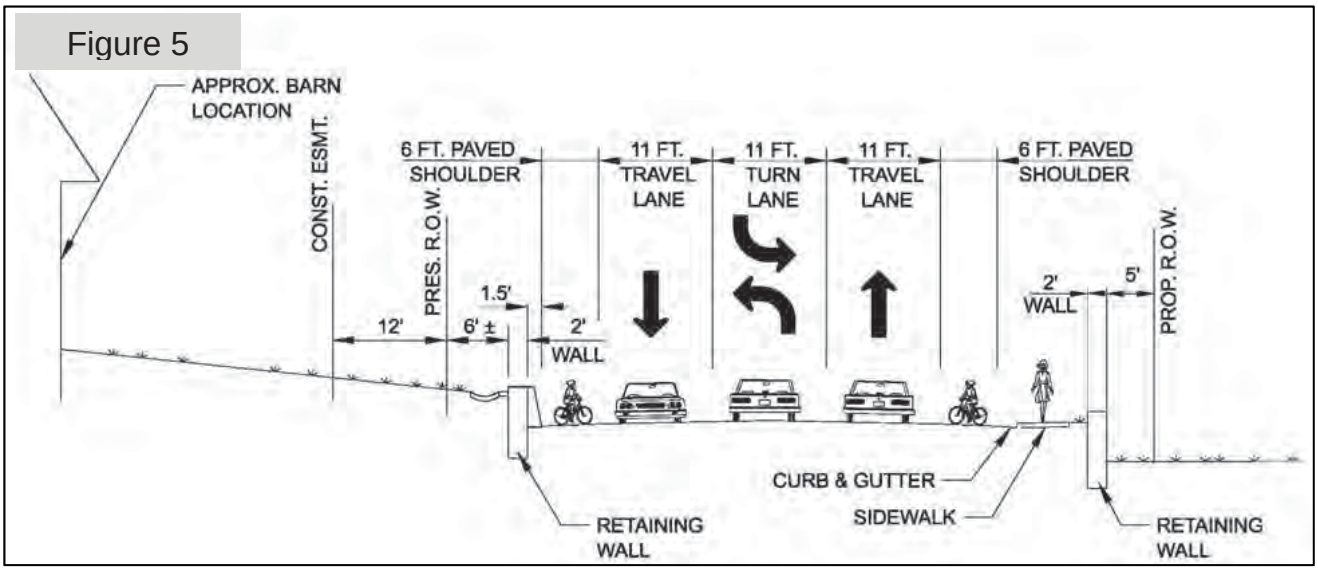
Figure 4



From East of Old Stage Road to Harr Town Road

The proposed three-lane cross-section is compressed as it passes between Yancey's Tavern and the East Lawn Memorial Gardens. This design concept avoids taking property from the National Register Listed Yancey's Tavern and avoids displacing any known grave sites. (Figure 5)

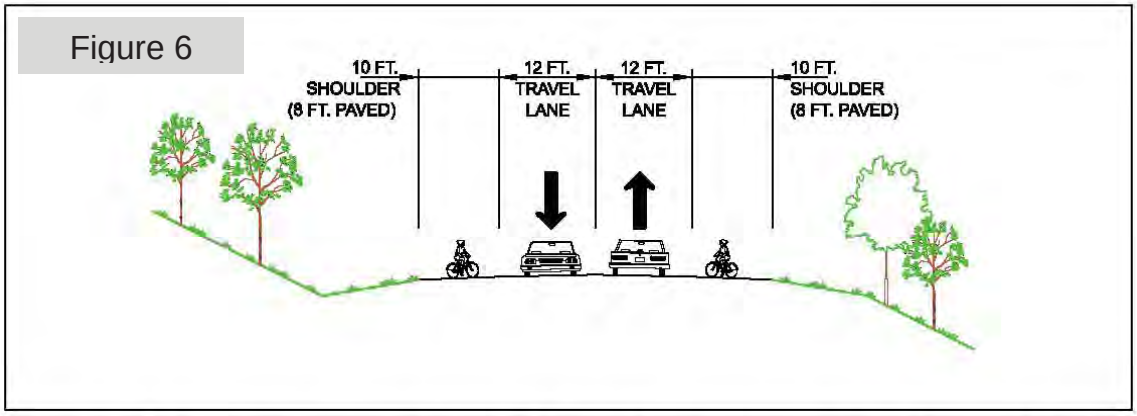
Figure 5



Compressed Typical Section at Yancey's Tavern and East Lawn Memorial Garden

At Harr Town Road the roadway cross-section transitions to a two-lane roadway with ten foot shoulders and continues to Carolina Pottery Road. (Figure 6)

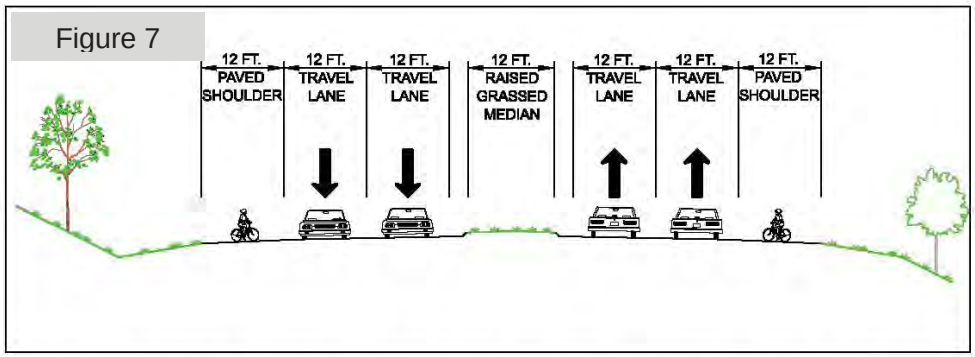
Figure 6



From Harr Town Road to Carolina Pottery Drive

The roadway transitions at Carolina Pottery Road to a four-lane divided highway with a twelve foot raised grass median with paved shoulders and continues to Intestate 81 the ending point for this project. (Figure 7)

Figure 7



From West of Carolina Pottery to I-81

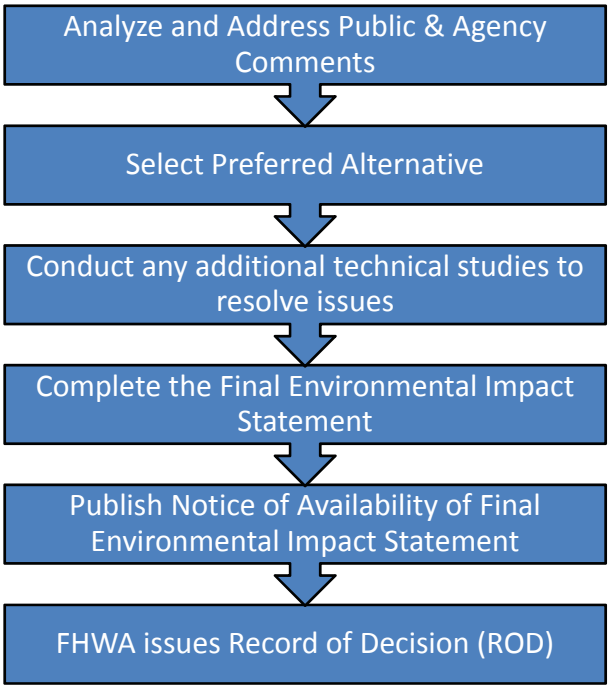
The revised design of Alternative B (B Modified) provides the same level of service as the alternatives proposed in the DEIS. The revised design reduces the cost and number of residential displacements, avoids Yancey's Tavern and avoids displacing all known grave sites, while offering the same level of safety improvements as Alternative A and B. The proposed revisions are shown on the exhibits being presented at the Corridor Public Hearing.

Summary of Project Data & Estimated Impacts for SR 126 (Memorial Boulevard)				
Item	No-Build	Build Alternative A	Build Alternative B	Alternative B Modified
Estimated Right-of-Way Acquisition (Acres)	0	239	121	100
Residential Displacements	0	241	162	104
Business Displacements	0	43	30	24
Non-Profit Displacements (Volunteer Fire Sta.)	0	1	1	1
Air Quality/Noise Impacts Requiring Mitigation	0	0	0	0
Archaelogical Sites Impacted	0	0	0	0
Historic Sites Impacted	0	1	1	1
Section 4(f) Properties Impacted	0	0	0	0
Gravesites Impacted	0	350	90	0
Wetlands Impacted (Acres)	0	0	0	0
Stream Crossings (Linear Feet)	0	4863	3107	3107
Floodplains Impacts (Acres)	0	4	3.2	3.2
Forest Land Acquired (Acres)[2]	0	75	54.8	50+
Threatened/Endangered Species Impacts	0	0	0	0
Hazardous Material Sites Impacted (Parcels)	0	2	3	3
Farmland Impacted (Acres)	0	15	5	5
Total Estimated Project Cost	$ -	$ 120,316,000	$ 99,565,000	$ 97,000,000

1. The estimated ROW width is reported and based upon the typical width needed for each typical section. Actual proposed ROW widths will vary throughout the project based upon the use of slope easements, total versus partial property acquisitions, uneconomic remnants, etc.
2. Includes all forest land impacted within the estimated construction limits, which may be within slope easements and outside of the ROW limits

NEXT STEPS IN THE ENVIROMENTAL PROCESS

The next steps in the environmental process for this project after this public hearing are illustrated below.



A Record of Decision must be issued prior to final design, right-of-way acquisition, purchase of construction materials, and the beginning of construction. The following federal and state actions will also be required for the implementation of the project:

- U.S. Corps of Engineers (COE): Section 404 permit under the Clean Water Act.
- Tennessee Department of Environment and Conservation (TDEC): Aquatic Resources Alteration Permit (ARAP).

RIGHT-OF-WAY ACQUISITION AND RELOCATION

In order to minimize unavoidable effects of right-of-way acquisition and the displacements of people, TDOT will carry out a right-of-way relocation program in accordance with Tennessee's Uniform Relocation Assistance Act of 1972, and the Federal Uniform Relocation Assistance and Real Property Acquisition Act of 1970 (P.L. 91646).

An information pamphlet "*Relocation Assistance Program*" is available and outlines the services offered and any payments for which you may be eligible, such as moving expenses and replacement housing benefits for owners and tenants. The brochure also outlines the eligibility requirements for receiving these payments.

TDOT will provide advance notification of impending right-of-way acquisition. The Right-of-Way Office has the responsibility, once a project is approved, of appraising, purchasing and, if required, assisting individuals, families or businesses in relocating.

Before acquiring property, all properties are appraised on the basis of comparable sales and land use values in the area. In some instance, for values of $10,000 or less, this process might not be done. The value will be established by using real estate appraisers who will prepare, for TDOT's use, written appraisals using actual sales data in the surrounding community.

When an appraisal is necessary, the appraiser will contact each property owner and offer the owner the opportunity to accompany him on an inspection of the property. After the appraisal is complete, the Right-of-Way Appraisal staff will review and field check the findings for accuracy to ensure that everything relating to value has been considered in establishing the amount to be offered.

Owners of property will be offered fair market value for their property rights, as it is TDOT's desire to pay fair market value for the necessary property.

REGISTER YOUR COMMENTS

You are encouraged to make a formal comment that will be incorporated into the official project summary in one of four ways:

1. Make an oral statement to the court reporter.
2. Submit your written comments tonight before you leave.
3. Make a comment and/or ask questions tonight during the formal portion of the hearing.
4. Mail your comments to the Department (postmarked by **January 31, 2013**) to:

Public Hearing Comments
SR 126 (Memorial Blvd) Corridor Improvement Project
Tennessee Department of Transportation
Suite 700, James K. Polk Building
505 Deaderick Street
Nashville, TN 37243

*Please make sure to include **your name and address** on your submitted comment form or letter so that it will be included in the official record.

FOR MORE INFORMATION PLEASE CONTACT:

JonnaLeigh Stack
TDOT Environmental Manager
(615)253-2463 - JonnaLeigh.Stack@tn.gov

Gary King
TDOT Project Management Division
(615)741-4777 – Gary.King@tn.gov



East Lawn Cemetery facing entrance and SR 126



Intersection of SR 126 and Chestnut Ridge Road



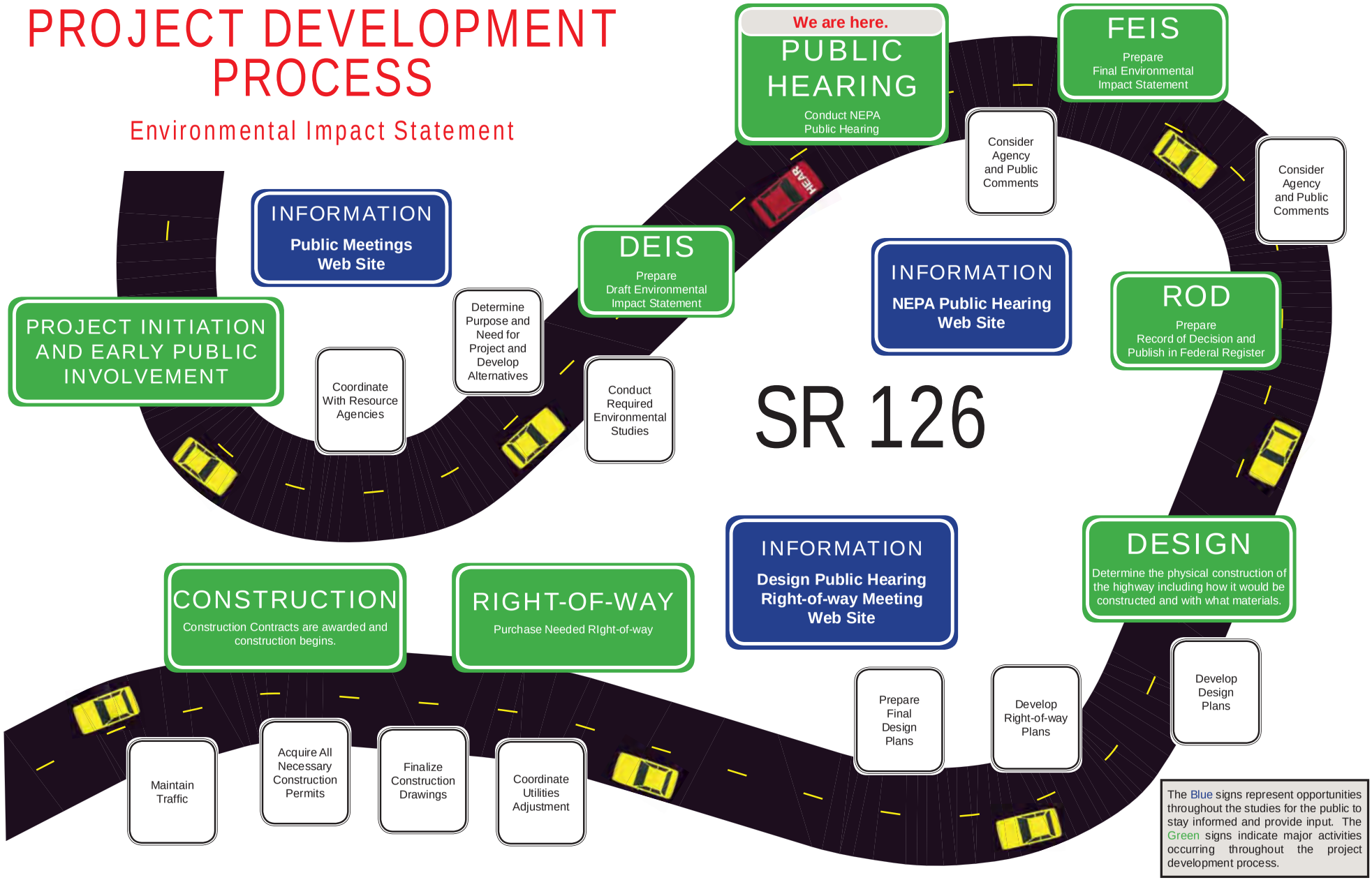
East Lawn Cemetery entrance and SR 126



Yancey's Tavern near intersection of Chestnut Ridge Road and SR 126

PROJECT DEVELOPMENT PROCESS

Environmental Impact Statement



The Blue signs represent opportunities throughout the studies for the public to stay informed and provide input. The Green signs indicate major activities occurring throughout the project development process.


CHESTNUT RIDGE

APPENDIX H – AGENCY COORDINATION

CP4 DISPOSITION EXAMPLE LETTER TO TESA AGENCIES

CP4 DISPOSITION LETTER TO NON-TESA AGENCY

CP4 COMMENT DISPOSITION DOCUMENT

CP4 COMMENTS FROM TESA AGENCIES

CP4 COMMENTS FROM NON-TESA AGENCIES

CP4 LETTERS TO TESA AGENCIES

CP4 LETTERS TO NON-TESA AGENCIES

CP4 DOCUMENT

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
ENVIRONMENTAL DIVISION
SUITE 900 - JAMES K. POLK BUILDING
505 DEADERICK STREET
NASHVILLE, TENNESSEE 37243-0334
(615) 741-3655

November 18, 2013

<Contact Name>
<Agency Name >
<Office>
<Address 1>
<Address 2>

Subject: TESA Concurrence Point 4
Preferred Alternative and Preliminary Mitigation for State Route 126 (Memorial Boulevard) Improvement Project from East Center Street to Interstate 81
Sullivan County, Tennessee
Environmental Impact Statement (PIN 105467.00)

Dear <Contact Name>,

On September 5, 2013 TDOT requested your concurrence with, and any input you may have on, TESA *Concurrence Point 4: Preferred Alternative and Preliminary Mitigation (CP4)* for the State Route 126 (Memorial Boulevard) Improvement Project in Sullivan County, Tennessee. The documentation was sent to your attention pursuant to the *Tennessee Environmental Streamlining Agreement* (TESA).

Enclosed please find the disposition of CP4 agency comments. If you have any questions or need additional information, please contact me at (615) 253-2463. You may also send me an email at jonnaleigh.stack@tn.gov.

Sincerely,

JonnaLeigh Stack, NEPA Document Manager
Major Projects Office
Environmental Division

cc: Margaret Slater

Enclosures
Attached to this email:
SR 126 (Memorial Boulevard) TESA Concurrence Point 4 Agency Comment Disposition

EXAMPLE

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
ENVIRONMENTAL DIVISION
SUITE 900, JAMES K. POLK BUILDING
505 DEADERICK STREET
NASHVILLE, TENNESSEE 37243-0334
(615) 741-3655

November 18, 2013

Mr. John G. Campbell
City Manager, City of Kingsport
Chairman, Kingsport MPO Executive Board
Kingsport City Hall
225 West Center Street
Kingsport, TN 37660-4237

RE: Response to TESA Concurrence Point 4 Comments
SR 126 (Memorial Boulevard) Improvement Project, Sullivan County
From East Center Street to Interstate 81
TDOT PIN 105467.00

Dear Mr. Campbell,

The Department appreciates your comments dated October 31, 2013 on the Preferred Alternative and Preliminary Mitigation package that was distributed on September 4, 2013 to signatory agencies of the Tennessee Environmental Streamlining Agreement (TESA) in accordance with the agreement for Concurrence Point 4 (CP4). The Kingsport MPO was a recipient of the package as a NEPA participating agency. The Department has reviewed your comments and provides the following responses at this time.

TDOT responded to citizen concerns and those expressed by the MPO in March of 2012 regarding alternatives presented in the Draft Environmental Impact Statement (DEIS) with the development of Alternative B-Modified following an update to the MPO's Travel Demand Model and traffic projections for the corridor. Considering public input and a reduction in traffic projections, the Department developed Alternative B-Modified to improve safety as a priority, while limiting improvements to only what is needed to accommodate the projected traffic. This strategy was directed at improving safety while minimizing impacts to the environment and community.

Alternative B-Modified was presented to the public on December 11, 2012 at two public hearings and there have been no changes since that date. The Department accepted comments on the information presented at the hearings through January 31, 2013. TDOT selected Alternative B-Modified as the

Preferred Alternative based on the comments received and on the project's approved Purpose and Need, which is primarily to improve safety.

As you noted, the City and County mayors support Alternative B-Modified as presented at the public hearings. As well, most of the public comments received that cited a preference for an alternative, supported Alternative B-Modified, which proposes three lanes along this segment from Harbor Chapel Road to Old Stage Road. While there were many comments in support of extending four travel lanes beyond Harbor Chapel Road, those specifically requesting a four-lane typical section, for any segment of the roadway, were less than those specifically requesting Alternative B-Modified.

Your comments and design recommendations for this section, including the transition near Briarwood Road, will be considered further during the design phase of this project. Care will be given to design of all roadway transitions needed for lane reductions, which must be in accordance with current design policy and standards. As you have suggested, retaining walls will be considered in project design to limit impacts.

The Department looks forward to a continued partnership with the City of Kingsport, Sullivan County, and the Kingsport MPO during development of this project. If you have further questions or comments, please let us know.

Sincerely,



JonnaLeigh Stack
Transportation Coordinator, NEPA Project Manager
Major Projects Office

cc: Lt. Governor Ron Ramsey
John Schroer, TDOT Commissioner
Paul Degges, TDOT Deputy Commissioner
Toks Omishakin, TDOT Environment and Planning Bureau Chief
Jim Ozment, TDOT Environmental Division Director
Steve Allen, TDOT Project Planning Division Director
Gary King, TDOT Design Division Project Manager
William Albright, Kingsport MPO Transportation Planning Manager

1.0 INTRODUCTION

On September 5, 2013 the Tennessee Department of Transportation (TDOT), pursuant to the *Tennessee Environmental Streamlining Agreement* (TESA), distributed copies of the *Concurrence Point 4: Preferred Alternative and Preliminary Mitigation* for the SR 126 (Memorial Boulevard) Corridor Improvement Project in Kingsport, Sullivan County.

The following agencies received the CP4 package.

- U.S. Fish and Wildlife Service
- U.S. Army Corps of Engineers, Nashville District
- U.S. Environmental Protection Agency
- Federal Highway Administration
- Tennessee Department of Environment and Conservation
- Tennessee Wildlife Resources Agency
- Tennessee Valley Authority
- Tennessee State Historic Preservation Office
- Kingsport Metropolitan Planning Organization

A response with a concurrence, non-concurrence or request for a review extension, along with any comments, was due October 21, 2013. TDOT sent correspondence October 4, 2013 reminding the agencies of the response due date. The 45-day review period was extended due to the federal government shutdown. All comments received are documented in this disposition. Concurrence with TESA *Concurrence Point 4: Preferred Alternative and Preliminary Mitigation* is assumed for any agency not responding in writing by the applicable response due date or not having requested an extension.

2.0 AGENCY CONCURRENCE

Five agencies provided signed concurrence with TESA Concurrence Point 4: Preferred Alternative and Preliminary Mitigation Package.

- U.S. Fish and Wildlife Service
- U.S. Army Corps of Engineers, Nashville District
- Tennessee Department of Environment and Conservation
- Tennessee Wildlife Resources Agency
- Tennessee Valley Authority

Agencies that did not provide written concurrence/or comment are assumed to concur.

- U.S. Environmental Protection Agency
- Tennessee State Historic Preservation Office

3.0 TESA AGENCY COMMENTS SUMMARY

This section details advisory comments received from TESA agencies regarding *Concurrence Point 4*: *Preferred Alternative and Preliminary Mitigation* and response to those comments.

1. U.S. Fish and Wildlife Service

Comment: According to Table 7.0-2, stream impacts would include alterations to 3,107 linear feet of perennial and intermittent streams. TDOT has committed to constructing the crossings perpendicular to the streams during low flow times to minimize impacts. We additionally recommend that the crossings be constructed with bottomless culverts or a span bridge design to minimize any long-term alterations to stream functions (e.g., fish and other aquatic species passage, sediment transport, movement of woody debris, etc.).

Response: TDOT will consider the design and construction of crossings with bottomless culverts and/or incorporate span bridges where feasible to minimize long-term alterations to stream functions.

Comment: Bat surveys were conducted along the proposed corridor in the summer of 2011 to establish whether the area is utilized as roosting habitat by the Indiana bat. Due to negative survey results for this species, we concurred with TDOT's determination of "not likely to adversely affect" in a letter dated November 9, 2011. Unless new information otherwise indicates Indiana bat use of the area, this survey will be valid until April 1, 2014. Although it is likely that this project would have an insignificant effect on the Indiana bat, we would appreciate consideration given to the removal of trees with a DBH (diameter at breast height) of five inches or greater from October 15 through March 31 to further minimize potential for harm to the Indiana bat.

Response: TDOT will carry forward the environmental commitment in the DEIS to the FEIS for the removal of trees with a DBH (diameter at breast height) of five inches or greater from October 15 through March 31 to further minimize potential for harm to the Indiana bat.

Comment: The capture of two gray bats during survey efforts indicates that this species utilizes the area streams as travel/feeding corridors. Our database indicates that the nearest gray bat cave is Morrell Cave, approximately 10 miles east of the project. We are unaware of any caves that would be impacted by the project and are concerned mainly for water quality along travel/feeding corridors. Best management practices, to include stringent erosion and sediment control measures, should be implemented throughout the project to minimize potential for harm to the gray bat.

Response: The project will be developed in accordance with the TDOT Standard Specifications for Road and Bridge Construction, which addresses sediment and erosion control and siltation.

Comment: Based on the best information available at this time, we believe that the requirements of section 7 of the Endangered Species Act of 1973, as amended, are fulfilled for all species that currently receive protection under the Act. Obligations under section 7 of the Act must be reconsidered if (1) new information reveals impacts of the proposed action that may affect listed species or critical habitat in a manner not previously considered, (2) the proposed action is subsequently modified to include activities which were not considered during this consultation, or (3) new species are listed or critical habitat designated that might be affected by the proposed action.

Response: TDOT will reconsider consultation with the U.S. Fish and Wildlife Service if (1) new information reveals impacts of the proposed action that may affect listed species or critical habitat in a manner not previously considered, (2) the proposed action is subsequently modified to include activities which were not considered during this consultation, or (3) new species are listed or critical habitat designated that might be affected by the proposed action.

2. U.S. Army Corps of Engineers

Comment: Please be advised that when a permit application is submitted, the Corps would evaluate alternatives pursuant to the Section 404(b)(1) Guidelines. The Section 404(b)(1) Guidelines require a determination that the preferred alternative is the Least Environmentally-Damaging Practicable Alternative.

Response: Further impact minimization will be considered during the final design of Alternate B Modified (Preferred Alternative).

Comment: With respect to the preliminary mitigation package, the Corps concurs with the preliminary mitigation measures outlined in the document. However, the threatened and endangered species information should include an effect determination for any listed species in Sullivan County that addresses any potential impacts resulting from the proposed project. While the Indiana bat discussion is valuable, the potential impacts on other listed species should also be provided.

Response: TDOT will again discuss the potential impacts to threatened and endangered species in the FEIS. The DEIS states that, based on reviews of records, surveys, and responses received from federal and state agencies, no threatened and endangered species will be impacted by the proposed project.

Comment: Additionally, the discussion of water quality impacts of the potential alignments included only perennial and intermittent streams. It should be noted that ephemeral streams may also be waters of the U.S. and subject to Section 404 of the CWA permitting requirements. Therefore, any impacts to ephemeral streams should also be included in the stream impact comparison tables. It is recommended that the applicant provide a stream and wetland delineation of the project area to this office for verification prior to the submittal of a permit application.

Response: TDOT will discuss the potential impacts to ephemeral streams in the FEIS. TDOT will include a description of the streams and wetlands within the project area as a part of the permit application process with the USACE.

Comment: Regarding mitigation of stream impacts, it should be clarified that compensatory mitigation may be required for certain Nationwide permits to ensure lost aquatic resource function is replaced. If compensatory mitigation is required, the 2008 Compensatory Mitigation Rule (33 CFR 332) requirements must be satisfied.

Response: TDOT will develop a compensatory mitigation plan as part of the permit application process with the USACE.

Comment: It appears that a Department of the Army (DA) permit would be required for the proposed highway improvement project; therefore, you should submit a permit application, construction plans, a stream and wetland impact summary, a compensatory mitigation proposal, and any additional supporting environmental documentation.

Response: TDOT will submit a complete Department of the Army (DA) permit application package to the USACE for impacts to waters of the U.S.

3. Tennessee Department of Environment and Conservation

Comment: We ask the Department of Transportation minimize all impacts to water resources. Which would include the use of bottomless box culverts where possible and employing natural stream channel design for all stream channels relocated due to the project.

Response: TDOT will consider the design and construction of crossings with bottomless culverts and/or incorporate span bridges where feasible as well as employ natural stream channel design for any relocated streams to minimize long-term alterations to stream functions.

4. Tennessee Wildlife Resources Agency

Comment: In our comments on Concurrence Point 3 for this proposed project that are included in Appendix C of the Concurrence Point 4 "Preferred Alternative and Preliminary Mitigation Package" it states:

> "Comment: On Page 121 in Chapter 3, the title of TABLE 3.5.2: entitled "ANIMALS IDENTIFIED WITHIN SULLIVAN COUNTY BY TWRA (1 OF 2)" should be reworded to read "ANIMALS IDENTIFIED WITHIN SULLIVAN COUNTY BY TWRA AND TDEC (1 OF 2)", since this information was provided to TDOT by TDEC and since TWRA does not have regulatory authority of the Stonefly (*Allocapnia brooksi)*, the Cherokee Clubtail Dragonfly (*Gomphus consanguis*), the Cave Spider (*Nesticus paynei*), and the Diana Fritillary (*Speyeria Diana*). We also request that the state status of "Wildlife-In-Need-Of-

> Management" be included in the table for the following species: Tangerine Darter (*Percina aurantiaca*), Blotchside Logperch (*Percina burtoni*), Bald Eagle (*Haliaeetus leucocephalus*), Swainson's Warbler (*Limnothlypis swainsonii*), Common Barn Owl (*Tyto alba*), Hairy-tailed Mole (*Parascalops breweri*), Smoky Shrew (*Sorex fumeus*) and the Meadow Jumping Mouse (*Zapus hudsonius*). The Sharphead Darter (*Etheostoma acuticeps*), the Tennessee Dace (*Phoxinus tennesseensis*) and the Least Weasel (*Mustela nivalis*) have no Tennessee Wildlife Resources Agency state status. The state status for the Longhead Darter (*Percina macrocephala*) is threatened. Response: The suggested changes will be made."

Nowhere in this document do we see that our comments have been incorporated into the Concurrence Point 4 document. The only mention of listed species in the Concurrence Point 4 document is in regard to the federally listed Indiana Bat (*Myotis sodalist*).

Response: TDOT changed the title of TABLE 3.5.2. in the DEIS from "ANIMALS IDENTIFIED WITHIN SULLIVAN COUNTY BY TWRA (1 OF 2)" to "ANIMALS IDENTIFIED WITHIN SULLIVAN COUNTY BY TWRA AND TDEC (1 OF 2)". TDOT included the state status of "Wildlife-In-Need-Of-Management" in Table 3.5.2. of the DEIS for the following species: Tangerine Darter (*Percina aurantiaca*), Blotchside Logperch (*Percina burtoni*), Bald Eagle (*Haliaeetus leucocephalus*), Swainson's Warbler (*Limnothlypis swainsonii*), Common Barn Owl (*Tyto alba*), Hairy-tailed Mole (*Parascalops breweri*), Smoky Shrew (*Sorex fumeus*) and the Meadow Jumping Mouse (*Zapus hudsonius*). TDOT also included the Longhead Darter (*Percina macrocephala*) in the table as threatened.

5. Tennessee Valley Authority

Comment: The Tennessee Valley Authority signed in concurrence with the *Concurrence Point #4: Preferred Alternative and Preliminary Mitigation Package* on October 21, 2013. There were no comments attached to the concurrence form.

Response: Not Applicable

Tennessee Environmental Streamlining Agreement - Concurrence Form

Concurrence Point 4 – Preferred Alternative and Preliminary Mitigation Package

State Route 126 (Memorial Boulevard) Improvement Project
From East Center Street to I-81
Sullivan County, Tennessee
PIN 105467.00

September 4, 2013

The Tennessee Department of Transportation (TDOT) is preparing an Environmental Impact Statement (EIS) for the SR 126 (Memorial Boulevard) Improvement Project from East Center Street to I-81 in Sullivan County, Tennessee. This EIS is being developed by TDOT to document the impacts of the subject project, in accordance with the *National Environmental Policy Act (NEPA)* and the *Tennessee Environmental Streamlining Agreement (TESA).*

Enclosed please find the *Concurrence Point (CP) 4* package introducing the Preferred Alternative and Preliminary Mitigation for your review and comment. In accordance with TESA, we are requesting your concurrence on the *CP 4* package by **October 21, 2013**.

Please sign and return this form to JonnaLeigh Stack, NEPA Project Manager at the address below by October 21, 2013.

Tennessee Department of Transportation
Environmental Division
c/o **JonnaLeigh Stack**
505 Deaderick Street, Suite 900
James K Polk Building
Nashville, TN 37243

If you feel all provisions of *TESA Concurrence Point 4, Preferred Alternative and Preliminary Mitigation*, have been satisfied, please acknowledge your concurrence by signing on the appropriate line below.

TESA AGENCY: TENNESSEE WILDLIFE RESOURCES AGENCY

CONCUR: ROBERT TODD (Print Name) Robert Todd (Signature) MANAGER 4 (Title)

DO NOT CONCUR: _____ (Print Name) _____ (Signature) _____ (Title)

DATE: 10-8-2013

PLEASE SEE ATTACHED COMMENTS.

TENNESSEE WILDLIFE RESOURCES AGENCY

ELLINGTON AGRICULTURAL CENTER
P. O. BOX 40747
NASHVILLE, TENNESSEE 37204

October 9, 2013

JonnaLeigh Stack
Transportation Coordinator, NEPA Project Manager
TDOT Environmental Division
James K. Polk Building, Suite 900,
505 Deaderick Street
Nashville, TN 37243-0334

Re: Concurrence Point 4 – Preferred Alternative and Preliminary Mitigation Package – State Route 126 (Memorial Boulevard) Improvement Project from East Center Street to I-81, Sullivan County, Tennessee, PIN 105467.00

Dear Ms. Stack:

The Tennessee Wildlife Resource Agency has reviewed the Tennessee Department of Transportation (TDOT) Concurrence Point 4 documents for the State Route 126 (Memorial Boulevard) Improvement Project from East Center Street to I-81 in Sullivan County and concurs on Concurrence Point 4 and supports Alternative B Modified as the Preferred Alternative. We have completed the Concurrence Point 4 Form as requested and it is attached.

The Tennessee Wildlife Resources Agency provides the following comments regarding "Preferred Alternative and Preliminary Mitigation Package" for the proposed State Route 126 (Memorial Boulevard) Improvement Project. In our comments on Concurrence Point 3 for this proposed project that are included in Appendix C of the Concurrence Point 4 "Preferred Alternative and Preliminary Mitigation Package" it states: "***Comment:*** On page 121 in Chapter 3, the title of TABLE 3.5.2: entitled "ANIMALS IDENTIFIED WITHIN SULLIVAN COUNTY BY TWRA (1 OF 2)" should be reworded to read "ANIMALS IDENTIFIED WITHIN SULLIVAN COUNTY BY TWRA AND TDEC (1 OF 2)", since this information was provided to TDOT by TDEC and since TWRA does not have regulatory authority of the Stonefly (*Allocapnia brooksi*), the Cherokee Clubtail Dragonfly (*Gomphus consanguis*), the Cave Spider (*Nesticus paynei*), and the Diana Fritillary (*Speyeria Diana*). We also request that the state status of "Wildlife-In-Need-Of-Management" be included in the table for the following species" Tangerine Darter (*Percina aurantiaca*), Blotchside Logperch (*Percina burtoni*), Bald Eagle (*Haliaeetus leucocephalus*) Swainson's Warbler (*Limnothlypis swainsonii)*, Common Barn Owl (*Tyto alba*), Hairy-tailed Mole (*Parascalops breweri*), Smoky Shrew (*Sorex fumeus*) and the Meadow Jumping Mouse (*Zapus hudsonius*). The Sharphead Darter (*Etheostoma acuticeps*), the Tennessee Dace (*Phoxinus tennesseensis*), and the Least Weasel (*Mustela nivalis*) have no Tennessee Wildlife Resources Agency state status. The state status for the Longhead Darter (*Percina macrocephala*) is threatened. ***Response:*** The suggested changes will be made."

Nowhere in this document do we see that our comments have been incorporated into the Concurrence Point 4 document. The only mention of listed species in the Concurrence Point 4 document is in regard to the federally listed Indiana Bat (Myotis sodalist).

Sincerely,

Robert M. Todd

Robert M. Todd
Fish and Wildlife Environmentalist

cc: Vincent Pontello, Wildlife Biologist/East TN TDOT Liaison
Rob Lindbom, Region IV Habitat Biologist
John Gregory, Region IV Manager
John Griffith, USFWS
Ben Brown, TDEC
Jamie Higgins, EPA
Larry Long, EPA
Amy Robinson, U.S. Army Corps of Engineers, Nashville District
Leigh Ann Tribble, Federal Highway Administration

Tennessee Environmental Streamlining Agreement - Concurrence Form

Concurrence Point 4 – Preferred Alternative and Preliminary Mitigation Package

State Route 126 (Memorial Boulevard) Improvement Project
From East Center Street to I-81
Sullivan County, Tennessee
PIN 105467.00

September 4, 2013

The Tennessee Department of Transportation (TDOT) is preparing an Environmental Impact Statement (EIS) for the SR 126 (Memorial Boulevard) Improvement Project from East Center Street to I-81 in Sullivan County, Tennessee. This EIS is being developed by TDOT to document the impacts of the subject project, in accordance with the *National Environmental Policy Act (NEPA)* and the *Tennessee Environmental Streamlining Agreement (TESA).*

Enclosed please find the *Concurrence Point (CP) 4* package introducing the Preferred Alternative and Preliminary Mitigation for your review and comment. In accordance with TESA, we are requesting your concurrence on the *CP 4* package by **October 21, 2013**.

Please sign and return this form to JonnaLeigh Stack, NEPA Project Manager at the address below by October 21, 2013.

Tennessee Department of Transportation
Environmental Division
c/o **JonnaLeigh Stack**
505 Deaderick Street, Suite 900
James K Polk Building
Nashville, TN 37243

If you feel all provisions of *TESA Concurrence Point 4, Preferred Alternative and Preliminary Mitigation*, have been satisfied, please acknowledge your concurrence by signing on the appropriate line below.

TESA AGENCY: TDEC

	(Print Name)	(Signature)	(Title)
CONCUR:	Benjamin Brown		Permit Coordinator
DO NOT CONCUR:			

DATE: 11-4-13

STATE OF TENNESSEE
DEPARTMENT OF ENVIRONMENT AND CONSERVATION
DIVISION OF WATER RESOURCES
William R. Snodgrass Tennessee Tower
312 Rosa L. Parks Avenue, 11th Floor
Nashville, Tennessee 37243-1102

November 4, 2013

JonnaLeigh Stack
Transportation Coordinator, NEPA Project Manager
TDOT Environmental Division
James K. Polk Building, Suite 900,
505 Deaderick Street
Nashville, TN 37243-0334

Subject: Concurrence Point 4
State Route 126 (Memorial Boulevard) from East Center Street to I-81
Sullivan County, Tennessee, PIN 105467.00

Dear Ms. Stack:

The Division of Water Resources with the Tennessee Department of Environment & Conservation has reviewed the Concurrence Point 4 documents for State Route 126 in Sullivan County and concurs with the selected alternative, Alternative B Modified.

We have the following comment regarding this concurrence point: We ask the Department of Transportation minimize all impacts to water resources. Which would include the use of bottomless box culverts where possible and employing natural stream channel design for all stream channels relocated due to the project.

Thank you for the opportunity to review this document. If you have any questions regarding this correspondence please contact Mr. Benjamin Brown via email at Benjamin.Brown@tn.gov or by phone at 615.532.0645.

Sincerely,

Jimmy R. Smith,
Manager, Natural Resources Unit

Cc: U.S. Army Corps of Engineers, Nashville Regulatory District
Elizabeth McGuire, U.S. Environmental Protection Agency, Atlanta, GA
Mary Jennings, U.S. Fish and Wildlife Service, Cookeville, TN
Rob Todd, Tennessee Wildlife Resources Agency, Nashville, TN
File copy

Tennessee Environmental Streamlining Agreement - Concurrence Form

Concurrence Point 4 – Preferred Alternative and Preliminary Mitigation Package

State Route 126 (Memorial Boulevard) Improvement Project
From East Center Street to I-81
Sullivan County, Tennessee
PIN 105467.00

September 4, 2013

The Tennessee Department of Transportation (TDOT) is preparing an Environmental Impact Statement (EIS) for the SR 126 (Memorial Boulevard) Improvement Project from East Center Street to I-81 in Sullivan County, Tennessee. This EIS is being developed by TDOT to document the impacts of the subject project, in accordance with the *National Environmental Policy Act (NEPA)* and the *Tennessee Environmental Streamlining Agreement (TESA).*

Enclosed please find the *Concurrence Point (CP) 4* package introducing the Preferred Alternative and Preliminary Mitigation for your review and comment. In accordance with TESA, we are requesting your concurrence on the *CP 4* package by **October 21, 2013**.

Please sign and return this form to JonnaLeigh Stack, NEPA Project Manager at the address below by October 21, 2013.

Tennessee Department of Transportation
Environmental Division
c/o **JonnaLeigh Stack**
505 Deaderick Street, Suite 900
James K Polk Building
Nashville, TN 37243

If you feel all provisions of *TESA Concurrence Point 4, Preferred Alternative and Preliminary Mitigation*, have been satisfied, please acknowledge your concurrence by signing on the appropriate line below.

TESA AGENCY: TVA

CONCUR: Ashley Farless (Print Name) Ashley K Farless (Signature) NEPA Specialist (Title)

DO NOT CONCUR: _____ (Print Name) _____ (Signature) _____ (Title)

DATE: 10/21/2013

Tennessee Environmental Streamlining Agreement Concurrence Form
Concurrence Point 4
State Route 126 (Memorial Boulevard) Improvement Project From East Center Street to Interstate 81
Sullivan County, Tennessee
PIN 105467.00

October 4, 2013

The Tennessee Department of Transportation (TDOT) is preparing an Environmental Impact Statement (EIS) for the State Route 126 (Memorial Boulevard) Improvement Project from East Center Street to Interstate 81 in Sullivan County, Tennessee. This EIS is being developed by TDOT to document the impacts of the subject project, in accordance with the *National Environmental Policy Act (NEPA)* and the *Tennessee Environmental Streamlining Agreement (TESA).* In accordance with TESA, we are requesting your review and concurrence on *Concurrence Point 4, Preferred Alternative and Preliminary Mitigation.*

The *Preferred Alternative and Preliminary Mitigation* package was sent to you on September 5, 2013 for a 45-day review period. Once you have had the opportunity to review the above referenced document, please sign this form. If you feel all provisions of TESA Concurrence Point 4 have been satisfied, please acknowledge concurrence with the adequacy of the State Route 126 (Memorial Boulevard) Improvement Project Preferred Alternative and Preliminary Mitigation. If you feel all provisions of TESA Concurrence Point 4 have not been met, and wish to initiate Issue Resolution per TESA, indicate your nonconcurrence below.

Please sign and return this form to Ms. JonnaLeigh Stack at the address below by October 21, 2013.

If you need additional time to review the material, please send a request by mail to the address provided below.

Sincerely,

JonnaLeigh Stack

JonnaLeigh Stack, NEPA Document Manager
TDOT Environmental Division, Major Projects Office
James K. Polk Building, Suite 900
505 Deaderick Street
Nashville, TN 37243-0334

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AGENCY: DEPARTMENT OF THE ARMY, CORPS OF ENGINEERS

CONCURRRENCE: E M

NONCONCURRENCE: _____

DATE: 11/6/13

DEPARTMENT OF THE ARMY
NASHVILLE DISTRICT, CORPS OF ENGINEERS
3701 BELL ROAD
NASHVILLE, TENNESSEE 37214

REPLY TO
ATTENTION OF:

November 6, 2013

Regulatory Branch

SUBJECT: File No. 2009-00048; Concurrence Point #4; Preferred Alternative and Preliminary Mitigation for Proposed Improvements to State Route 126 (Memorial Boulevard) from East Center Street, in Kingsport, to Interstate 81, in Sullivan County, Tennessee [TDOT Pin 105467.00]

Ms. JonnaLeigh Stack
NEPA Document Manager, Major Projects Office
Tennessee Department of Transportation
James K. Polk Building, Suite 900
505 Deaderick Street
Nashville, Tennessee 37243-0334

Dear Ms. Stack:

This is in response to your request for the U.S. Army Corps of Engineers' (Corps) concurrence and input on Concurrence Point #4, Preferred Alternative and Preliminary Mitigation Document, prepared for State Route 126 Improvements in Sullivan County, Tennessee. These comments are provided pursuant to the Tennessee Environmental Streamlining Agreement (TESA). Please refer to File No. 2009-00048 in any future correspondence to this office concerning the subject project.

The Concurrence Point (CP) #4 document provides information concerning the preferred alternative and preliminary mitigation options for the proposed highway improvement. The document evaluated four alternatives for the proposed project. These alternatives included the No-Build alternative, Alternative A, Alternative B, and Alternative B Modified. Review of the environmental and public impacts resulted in a determination that Alternative B Modified is the applicant's preferred alternative. Table 4.2-1, Summary of Project Data and Estimated Impacts, indicates that Alternative B Modified would minimize impacts on historic sites, grave sites, private property, and forest land. Compared to Alternative B, Alternative B Modified would result in similar impacts on stream crossings, floodplains, threatened and endangered species, and farmland. However, potential impacts associated with Alternative B and Alternative B Modified are less than the impacts associated with Alternative A. While the No-Build Alternative would not create any additional environmental impacts, this alternative would not meet the purpose and need of the highway improvement project, as outlined in the CP #1 document. Therefore, this office concurs with the rationale used to select the preferred alternative, Alignment B Modified. Please be advised that when a permit application is submitted, the Corps would evaluate alternatives pursuant to the Section 404(b)(1) Guidelines. The Section 404(b)(1) Guidelines require a determination that the preferred alternative is the Least Environmentally-Damaging Practicable Alternative.

With respect to the preliminary mitigation package, the Corps concurs with the preliminary mitigation measures outlined in the document. However, the threatened and endangered species information should include an effect determination for any listed species in Sullivan County that addresses any potential impacts resulting from the proposed project. While the Indiana bat discussion is valuable, the potential impacts on other listed species should also be provided. Additionally, the discussion of water quality impacts of the potential alignments included only perennial and intermittent streams. It should be noted that ephemeral streams may also be waters of the U.S and subject to Section 404 of the CWA permitting requirements. Therefore, any impacts to ephemeral streams should also be included in the stream impact comparison tables. It is recommended that the applicant provide a stream and wetland delineation of the project area to this office for verification prior to the submittal of a permit application. Regarding mitigation of stream impacts, it should be clarified that compensatory mitigation may be required for certain Nationwide permits to ensure lost aquatic resource function is replaced. If compensatory mitigation is required, the 2008 Compensatory Mitigation Rule (33 CFR 332) requirements must be satisfied.

Thank you for coordinating the CP#4 document with the Corps. As indicated above, the Corps concurs with the rationale used to select the preferred alternative, and the proposed preliminary mitigation measures. It appears that a Department of the Army (DA) permit would be required for the proposed highway improvement project; therefore, you should submit a permit application, construction plans, a stream and wetland impact summary, a compensatory mitigation proposal, and any additional supporting environmental documentation. If we can be of further assistance, or if you have any questions regarding DA permit requirements, please contact Amy Robinson at the above address, telephone number 615-369-7509, or email at amy.m.robinson@usace.army.mil.

Sincerely,



Eric Reusch
Chief, Eastern Regulatory Section
Operations Division

Tennessee Environmental Streamlining Agreement - Concurrence Form

Concurrence Point 4 – Preferred Alternative and Preliminary Mitigation Package

State Route 126 (Memorial Boulevard) Improvement Project
From East Center Street to I-81
Sullivan County, Tennessee
PIN 105467.00

September 4, 2013

The Tennessee Department of Transportation (TDOT) is preparing an Environmental Impact Statement (EIS) for the SR 126 (Memorial Boulevard) Improvement Project from East Center Street to I-81 in Sullivan County, Tennessee. This EIS is being developed by TDOT to document the impacts of the subject project, in accordance with the *National Environmental Policy Act (NEPA)* and the *Tennessee Environmental Streamlining Agreement (TESA).*

Enclosed please find the *Concurrence Point (CP) 4* package introducing the Preferred Alternative and Preliminary Mitigation for your review and comment. In accordance with TESA, we are requesting your concurrence on the *CP 4* package by **October 21, 2013**.

Please sign and return this form to JonnaLeigh Stack, NEPA Project Manager at the address below by October 21, 2013.

Tennessee Department of Transportation
Environmental Division
c/o **JonnaLeigh Stack**
505 Deaderick Street, Suite 900
James K Polk Building
Nashville, TN 37243

If you feel all provisions of *TESA Concurrence Point 4, Preferred Alternative and Preliminary Mitigation*, have been satisfied, please acknowledge your concurrence by signing on the appropriate line below.

TESA AGENCY: U.S. Fish & Wildlife Service

CONCUR: Mary E. Jennings (Print Name) Mary E Jennings (Signature) Field Supervisor (Title)

DO NOT CONCUR: _____ (Print Name) _____ (Signature) _____ (Title)

DATE: 10/24/13

United States Department of the Interior

FISH AND WILDLIFE SERVICE
446 Neal Street
Cookeville, TN 38501

October 24, 2013

Ms. JonnaLeigh Stack
Tennessee Department of Transportation
Environmental Planning and Permits Division
Suite 900, James K. Polk Building
505 Deaderick Street
Nashville, Tennessee 37243-0334

Subject: FWS# 13-CPA-0793. Concurrence Point 4. Proposed construction to State Route 126 (Memorial Boulevard), Sullivan County, Tennessee.

Dear Ms. Stack:

The Tennessee Department of Transportation (TDOT), in cooperation with the Federal Highway Administration (FHWA), has initiated National Environmental Policy Act (NEPA) documentation and analysis for the proposed construction to approximately 8.4 miles of State Route 126 between East Center Street and Interstate 81 (I-81) in Sullivan County, Tennessee. The purpose of this project is to improve the existing two-lane roadway, reduce the crash rates, and enhance travel and emergency response times from East Center Street in Kingsport to I-81. TDOT, the City of Kingsport, and local citizens conducted a Context Sensitive Solutions process which documents the majority decisions made by a Community Resource Team regarding design elements, roadway cross sections, and components of the project's purpose and need.

Concurrence Point 4 considered four alternatives under the NEPA process, the No-Build Alternative and three Build Alternatives. The No-Build Alternative would not provide for improvements to the existing roadway aside from standard maintenance activities. TDOT has concluded that the No-Build Alternative does not meet the purpose and need as documented in the approved Environmental Impact Statement. Alternative B Modified was selected as the preferred alternative.

According to Table 7.0-2, stream impacts would include alterations to 3,107 linear feet of perennial and intermittent streams. TDOT has committed to constructing the crossings perpendicular to the streams during low flow times to minimize impacts. We additionally recommend that the crossings be constructed with bottomless culverts or a span bridge design to minimize any long-term alterations to stream functions (e.g., fish and other aquatic species passage, sediment transport, movement of woody debris, etc.).

Bat surveys were conducted along the proposed corridor in the summer of 2011 to establish whether the area is being utilized as roosting habitat by the Indiana bat. Due to negative survey results for this species, we concurred with TDOT's determination of "not likely to adversely affect" in a letter dated November 9, 2011. Unless new information otherwise indicates Indiana bat use of the area, this survey will be valid until April 1, 2014. Although it is likely that this project would have an insignificant effect on the Indiana bat, we would appreciate consideration given to the removal of trees with a DBH (diameter at breast height) of five inches or greater from October 15 through March 31 to further minimize potential for harm to the Indiana bat.

The capture of two gray bats during survey efforts indicates that this species utilizes the area streams as travel/feeding corridors. Our database indicates that the nearest gray bat cave is Morrell Cave, approximately 10 miles east of the project. We are unaware of any caves that would be impacted by the project and are concerned mainly for water quality along travel/feeding corridors. Best management practices, to include stringent erosion and sediment control measures, should be implemented throughout the project to minimize potential for harm to the gray bat.

Based on the best information available at this time, we believe that the requirements of section 7 of the Endangered Species Act of 1973, as amended, are fulfilled for all species that currently receive protection under the Act. Obligations under section 7 of the Act must be reconsidered if (1) new information reveals impacts of the proposed action that may affect listed species or critical habitat in a manner not previously considered, (2) the proposed action is subsequently modified to include activities which were not considered during this consultation, or (3) new species are listed or critical habitat designated that might be affected by the proposed action. The signed TESA concurrence points 1 and 2 package for this project is attached.

We believe that the provisions of TESA Concurrence Point 4 have been satisfied, and we concur with the *Preferred Alternative and Preliminary Mitigation Package*. The signed TESA Concurrence Point 4 for this project is attached.

Thank you for the opportunity to participate in this process. If you have any questions regarding our comments, please contact John Griffith of my staff at 931/525-4995 or by email at *john_griffith@fws.gov*.

Sincerely,

Mary E. Jennings
Field Supervisor

Enclosure

October 31, 2013

JonnaLeigh Stack, NEPA Document Manager
TDOT, Major Projects Office
James K. Polk Building, Ste 900
505 Deaderick Street
Nashville, TN 376243

Dear Ms. Stack:

In partnership with the Kingsport MPO and the Tennessee Department of Transportation, the City of Kingsport has reviewed the "Preliminary Mitigation Package" for the State Route 126 project in Kingsport and Sullivan County, and respectfully submits the following for consideration as TDOT moves forward with the project development.

We open by noting the City and Sullivan County Mayors have steadfastly supported TDOT with regards to the "B Modified" approach to SR 126, stating such in a joint City-County letter to Commissioner John Schroer in March of 2013, and in spite of pushback from those desiring a four-lane project all the way to Interstate 81.

However, we now find that the latest "B Modified" plan has further downsized from four lanes to three, the segment from Harbor Chapel Road to the City limits near Old Stage Road.

Please note this Harbor Chapel Road segment is already three lanes (two outbound and one inbound) and, therefore, recommending the meager addition of shoulder and sidewalk offers zero in the way of capacity and only minimal motorist safety improvement.

Before any final cross-section is established through design specifications, Kingsport respectfully requests consideration of the following proposed enhancements to the Harbor Chapel Road to Old Stage Road section.

Foremost, *the community's preferred choice* is an additional travel lane for the segment, as well as a center turn lane to isolate opposing traffic, as already proposed under the Preliminary Mitigation Package for the segment from State Route 93 to Harbor Chapel Road.

In the alternate as a cost savings, the community could accept an additional travel lane and minimal median for this segment, while sidewalks could be safely limited to one side of the road in this segment.

Chokepoints in the section of SR 126 heading east in the vicinity of Tanglewood Road often result in a race track scenario, particularly at peak hours, as the road narrows from two lanes to one and motorists race to beat slower traffic before merging.

A construction proposal for this option would include retaining walls (much-like those on the current SR 36 project) that, along with a minimal median and singular sidewalk, would reduce the right-of-way need and construction slope impact on adjoining properties. This would also minimize environmental impact along this section.

By having four lanes with median separation, carrying capacity would meet current and projected traffic volumes while improving safety through isolation of opposing traffic. We further note current traffic volumes are easily within 10 percent of those on the SR 36 project in Washington County, which will feature similar or greater amenities.

In addition, the City hereby requests adjustment of the transition point where four lanes would narrow to three lanes to approximately 250 feet beyond Briarwood Road near Old Stage Road.

The citizens of Kingsport and Sullivan County have lived with the harsh, indeed calamitous, conditions of this State Route for many, many decades and remain pleased TDOT and the State of Tennessee are moving forward with significant funding to finally improve this sub-standard facility.

At the same time, with the exception of this section, the City is in full agreement with the balance of proposed improvements provided in Modified B, and look forward to fully supporting TDOT in this and other efforts.

Please feel free to contact my office for further discussion on this correspondence at 423-229-9411. Your time and consideration are deeply appreciated.

Sincerely,

John G. Campbell
City Manager
Chair, Kingsport MPO Executive Board
City of Kingsport

cc: Lt. Gov. Ron Ramsey
Commissioner John Schroer, TDOT
Deputy Commissioner Paul Degges, TDOT
Steve Allen, TDOT – Project Planning
Jim Ozmont, TDOT – Environmental
Gary King, TDOT – Project Manager

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
ENVIRONMENTAL DIVISION
SUITE 900 - JAMES K. POLK BUILDING
505 DEADERICK STREET
NASHVILLE, TENNESSEE 37243-0334
(615) 741-3655

September 4, 2013

<Contact Name>
<Agency Name >
<Office>
<Address 1>
<Address 2>

Subject: TESA Concurrence Point 4
Preferred Alternative and Preliminary Mitigation for State Route 126 (Memorial Boulevard) Improvement Project from East Center Street to Interstate 81
Sullivan County, Tennessee
Environmental Impact Statement (PIN 105467.00)

Dear <Contact Name>,

Enclosed please find the Preferred Alternative and Preliminary Mitigation package for State Route 126 (Memorial Boulevard) Improvement Project in Sullivan County, Tennessee, which is being transmitted to your agency pursuant to the *Tennessee Environmental Streamlining Agreement* (TESA). This document comprises the materials required for TESA Concurrence Point 4.

TDOT is requesting your concurrence with, and any input you may have on, the Preferred Alternative and Preliminary Mitigation in this package. Please submit the enclosed form, along with any comments, no later than October 21, 2013. Your comments are requested in writing and should involve a concurrence, a non-concurrence, a request for a review time extension up to 15 days, or a request for formal cessation of concurrence. You may also provide advisory comments based on your statutory or regulatory authority. Unless an extension is requested, TDOT will assume concurrence if your agency does not respond by **October 21, 2013**.

If you have any questions or need additional information, please contact me at (615) 253-2463. You may also send me an email at jonnaleigh.stack@tn.gov.

Sincerely,

JonnaLeigh Stack, NEPA Document Manager
Major Projects Office
Environmental Division

CC: Margaret Slater, Major Projects Office Manager, Environmental Division
Enclosures

Package sent via email with link: ftp://ftp.icaeng.com/SR 126 CP4 Sullivan Co/2013 09 04 SR 126_CP4 Final.pdf

EXAMPLE

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
ENVIRONMENTAL DIVISION
SUITE 900 - JAMES K. POLK BUILDING
505 DEADERICK STREET
NASHVILLE, TENNESSEE 37243-0334
(615) 741-3655

September 5, 2013

Mr. William Albright
Transportation Planning Manager
Kingsport MPO
201 West Market Street
Kingsport, TN 37660

Subject: TESA Concurrence Point 4
Preferred Alternative and Preliminary Mitigation for State Route 126 (Memorial Boulevard) Improvement Project from East Center Street to Interstate 81
Sullivan County, Tennessee
Environmental Impact Statement (PIN 105467.00)

Mr. William Albright,

Your agency is a participating agency for the above referenced project. Pursuant to Section 139 of the Moving Ahead for Progress in the 21st Century Act (MAP-21), participating agencies are responsible for identifying, as early as practicable, any issues of concern regarding the project's potential environmental or socioeconomic impacts that could substantially delay or prevent an agency from gathering a permit or other approval that is needed for the project.

TDOT is hereby requesting your input on the Preferred Alternative and Preliminary Mitigation package for State Route 126 (Memorial Boulevard) Improvement Project in Sullivan County, Tennessee.

TDOT is requesting any comments or concerns or additional information you may have on the Purpose and Need. Please submit your comments by October 21, 2013.

Please contact me at (615) 253-2463. You may also send me an email at jonnaleigh.stack@tn.gov with any questions or if you need additional information.

Sincerely,

JonnaLeigh Stack, NEPA Document Manager
Major Projects Office
Environmental Division

CC: Margaret Slater

Enclosures
Package sent via email with link:
ftp://ftp.icaeng.com/SR 126 CP4 Sullivan Co/2013 09 04 SR 126_CP4 Final.pdf

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
ENVIRONMENTAL DIVISION
SUITE 900 - JAMES K. POLK BUILDING
505 DEADERICK STREET
NASHVILLE, TENNESSEE 37243-0334
(615) 741-3655

September 5, 2013

Ms. Ambre Torbett
Director
Sullivan County Offices of Land Use
Department of Planning and Zoning
3411 Highway 126, Suite 30
Blountville, TN 37617

Subject: TESA Concurrence Point 4
Preferred Alternative and Preliminary Mitigation for State Route 126 (Memorial Boulevard) Improvement Project from East Center Street to Interstate 81
Sullivan County, Tennessee
Environmental Impact Statement (PIN 105467.00)

Ms. Ambre Torbett,

Your agency is a participating agency for the above referenced project. Pursuant to Section 139 of the Moving Ahead for Progress in the 21st Century Act (MAP-21), participating agencies are responsible for identifying, as early as practicable, any issues of concern regarding the project's potential environmental or socioeconomic impacts that could substantially delay or prevent an agency from gathering a permit or other approval that is needed for the project.

TDOT is hereby requesting your input on the Preferred Alternative and Preliminary Mitigation package for State Route 126 (Memorial Boulevard) Improvement Project in Sullivan County, Tennessee.

TDOT is requesting any comments or concerns or additional information you may have on the Purpose and Need. Please submit your comments by October 21, 2013.

Please contact me at (615) 253-2463. You may also send me an email at jonnaleigh.stack@tn.gov with any questions or if you need additional information.

Sincerely,

JonnaLeigh Stack, NEPA Document Manager
Major Projects Office
Environmental Division

CC: Margaret Slater

Enclosures
Package sent via email with link:
ftp://ftp.icaeng.com/SR 126 CP4 Sullivan Co/2013 09 04 SR 126_CP4 Final.pdf

TENNESSEE
ENVIRONMENTAL STREAMLINING AGREEMENT

CONCURRENCE POINT 4

Preferred Alternative and Preliminary Mitigation Package

State Route 126 (Memorial Boulevard)
Improvement Project

From East Center Street to Interstate 81
Sullivan County, Tennessee
PIN 105467.00

Prepared by:

Tennessee Department of Transportation Environmental Division

August 2013

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1.0 INTRODUCTION

This report has been prepared by the Tennessee Department of Transportation (TDOT) for the proposed improvement of State Route 126 (SR 126) in Kingsport, Sullivan County, Tennessee. The project is proposed to be constructed using federal-aid funds and is subject to the requirements of the National Environmental Policy Act (NEPA) of 1969.

This report constitutes the Preferred Alternative and Preliminary Mitigation Package required for Concurrence Point 4 under the Tennessee Environmental Streamlining Agreement (TESA) for the Environmental and Regulatory Coordination of Major Transportation Projects.

Pursuant to TESA, this package is being distributed to the project's TESA participating agencies as the final Concurrence Point. Before finalizing the Preferred Alternative and preparing the Final Environmental Impact Statement (FEIS), TDOT is requesting formal concurrence on the selection of Alternative B Modified as the project's Preferred Alternative. In addition, TDOT is requesting formal concurrence on the preliminary mitigation measures outlined in the section beginning on page 23 of this document.

This Concurrence Point 4 package is being distributed to the following TESA participating agencies:

- Tennessee Valley Authority (TVA)
- U.S. Army Corps of Engineers, Nashville District (USACE)
- U.S. Environmental Protection Agency, Region 4 (EPA)
- U.S. Department of the Interior (DOI) - Fish and Wildlife Service (USFWS)
- Tennessee Department of Environment and Conservation (TDEC)
- Tennessee Wildlife Resources Agency (TWRA)
- Tennessee Historic Commission (SHPO)

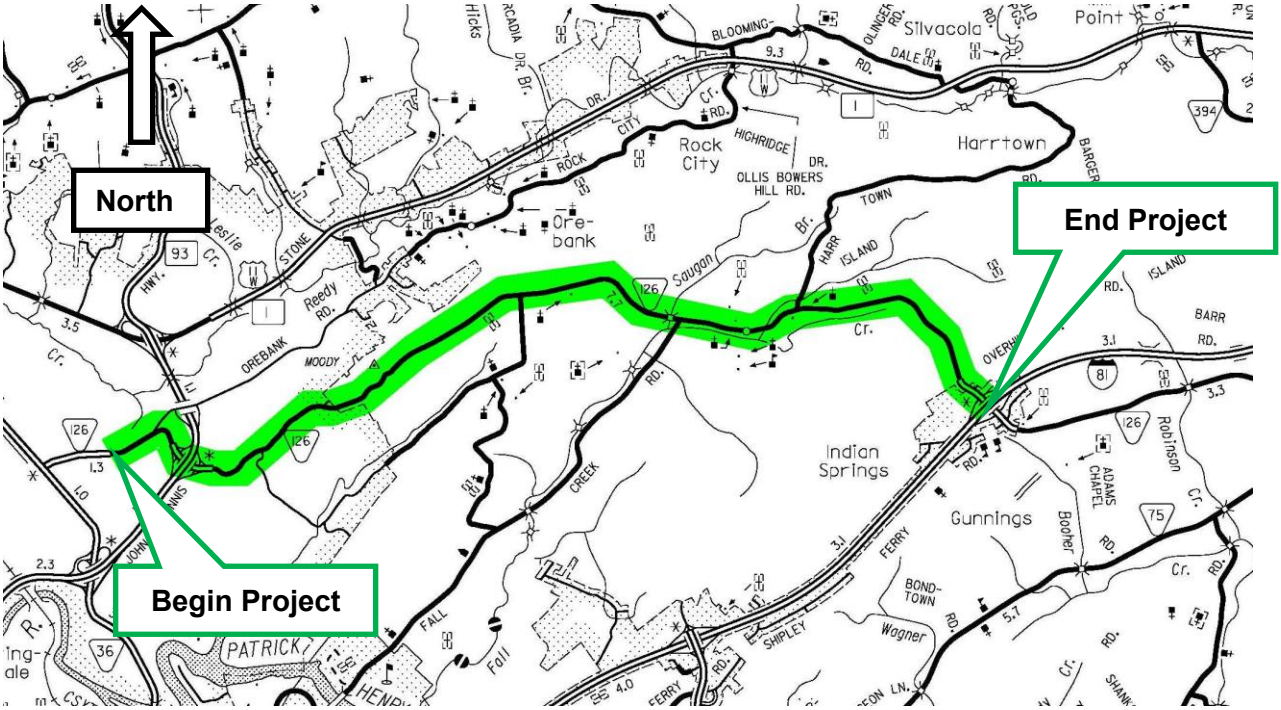
The Concurrence Point 4 package is also being distributed to the Kingsport Metropolitan Planning Organization (Kingsport MPO) and the Sullivan County Planning Department.

1.1 PROJECT BACKGROUND

The Tennessee Department of Transportation, in cooperation with the Federal Highway Administration (FHWA), is proposing to improve SR 126. The limits of the 8.4-mile project extend from East Center Street, within the Kingsport City Limits, east to Interstate 81 (I-81) in Sullivan County, Tennessee. SR 126 is also known as Memorial Boulevard within the study limits (Figure 1.1-1). FHWA approved the Draft Environmental Impact Statement (DEIS) on January 5, 2012.

SR 126 (Memorial Boulevard) is primarily a two-lane facility (one travel lane in each direction) throughout the study corridor. Each travel lane is approximately eleven feet wide. The existing right-of-way varies from approximately sixty feet to three hundred feet in width. The speed limit varies from thirty-five to fifty miles per hour (mph). Many sharp curves and steep grades along the route are signed with supplemental speed plaques advising lower safe travel speeds than the posted speed limit. Many roadside hazards are located in close proximity to the travel lanes. Narrow shoulders are present along the majority of the route. Sidewalks are present along approximately 0.1 mile (1%) of the 8.4-mile-long corridor. Curbs are located sporadically along the route, with the majority of the corridor having roadside ditches.

FIGURE 1.1-1 - GENERAL LOCATION MAP



1.2 PURPOSE AND NEED OF THE PROJECT

The purpose of the project is to provide a safe, efficient route for local traffic between the City of Kingsport and I-81. Improvements should be sensitive to the context of the different land uses along the corridor. Specifically, the improvements along the western half of the project, which is more commercial and residential, should provide improved access to adjacent businesses and homes, and improved pedestrian and bicycle connectivity. The improvements along the eastern half of the project should complement the rural nature of the area.

The needs of the project can be summarized as follows.

- The safety of the route needs to be improved. Crash rates observed along the entire SR 126 (Memorial Boulevard) study corridor exceed the statewide average crash rates for similar roadway segments.

- The width of the roadway generally needs to be improved. Most of the existing roadway is a two-lane roadway that includes 11-foot wide (maximum) lanes with narrow or no shoulders. These conditions create a narrow total roadway width that is unforgiving through the winding and hilly terrain.

- Wider shoulders are a specific safety need. The shoulders along the route are typically no wider than two feet and often not paved. The narrow shoulders, along with other existing geometric deficiencies, contribute to the high crash rates and create a less than desirable route for pedestrians and bicyclists. Wider shoulders would also enable mail delivery vehicles to depart the travel lane which would allow motorists to pass more safely.

- The geometry of the roadway needs to be improved. Numerous horizontal and vertical curves along the route are inadequate for the posted speed limit.

- Improved access management is needed along the commercial areas of the route. The public cited access onto SR 126 (Memorial Boulevard) as a major problem. Difficulty entering or exiting business parking lots was identified as a significant problem because of uncontrolled access to businesses along the roadway. Many of the access points are located near or within substandard curves or hills that limit sight distance for drivers attempting to turn into or out of the businesses.

- Improved response time for emergency vehicles is needed. With improvements, emergency vehicles would be able to respond more efficiently to emergencies within and near the project corridor. Wider shoulders would enable motorists to pull over and allow the emergency vehicles to pass through to their intended destinations. Current conditions along SR 126 (Memorial Boulevard) do not feature many areas for vehicles to pull over.

- Improved access for school buses is needed. Current geometric conditions along SR 126 (Memorial Boulevard) make it difficult for school buses to make turns. Wider paved roadway widths would improve accessibility for the school buses along the corridor.

- Improved traffic operations are needed along the route. Current operations are impeded by left turning vehicles for many residences, businesses, and side roads along the route.

2.0 ALTERNATIVES

2.1 ALTERNATIVES CONSIDERED IN THE DEIS

The No-Build and two Build Alternatives were evaluated in the DEIS. The No-Build Alternative makes no improvement to SR 126 (Memorial Boulevard) other than scheduled maintenance activities.

Build Alternative A improves SR 126 to a four-lane divided facility from the beginning of the project at East Center Street to Cooks Valley Road for a distance of approximately 3.94 miles. This includes a half mile segment from west of Hawthorn Street to Harbor Chapel Road that will utilize a continuous left turn-lane instead of a raised median. The cross-section at Cooks Valley Road transitions to a three-lane facility consisting of one travel lane in each direction separated by a continuous left turn-lane and continues 2.46 miles to Harr Town Road. The cross-section at Harr Town Road transitions to a two-lane roadway and continues to Carolina Pottery Road for a distance of 1.78 miles. The remaining 0.2 miles to the end of the project is existing four-lane to Interstate 81 (I-81).

Build Alternative B is a refinement of Alternative A and utilizes the same proposed typical section. However, the four-lane divided segment ends near Lemay Drive just west of the East Lawn Memorial Park Cemetery (referred to as East Lawn Memorial Gardens Cemetery in the DEIS) for a distance of 3.32 miles. The three-lane facility will begin east of Lemay Drive and continue to Harr Town Road for a distance of 3.08 miles. The two-lane segment from Harr Town Road to the end of the project is the same as Alternative A.

2.2 ALTERNATIVE B MODIFIED (PREFERRED ALTERNATIVE)

Since the approval of the DEIS on January 5, 2012, additional traffic data has been developed by the Kingsport MPO which indicates a reduction in future traffic projections. This new data along with a new Highway Capacity Manual (HCM 2010) prompted TDOT to re-evaluate the design of the alternatives. This led to a reduction in project impacts through development of a modification of Alternative B. Alternative B Modified was presented at the NEPA Public Hearings on December 11, 2012.

The original four-lane concept that extended from East Center Street to east of Lemay Drive for Build Alternative B (DEIS) has been reduced in length. The revised design concept proposes four basic travel lanes from East Center Street to Harbor Chapel Road. From Harbor Chapel to I-81, the concept proposes two basic travel lanes: one in each direction. There is an additional eastbound travel lane from Harbor Chapel to Old Stage Road to accommodate trucks ascending the steep grade. There will be a continuous left-turn lane separating the two travel lanes from Old Stage Road to Harr Town Road. The following information describes each section in more detail.

The first segment of the four-lane section, beginning at East Center Street and extending to west of Hawthorne Street, will have two, eleven-foot lanes in each direction separated by a twelve-foot raised grass median. It will also have four-foot shoulders to accommodate bicyclist and sidewalks for pedestrians on both sides of the roadway. Details such as delineation of bike lanes and sidewalk width will be determined in accordance with TDOT policies and standards during the design phase. (Figure 2.1-1)

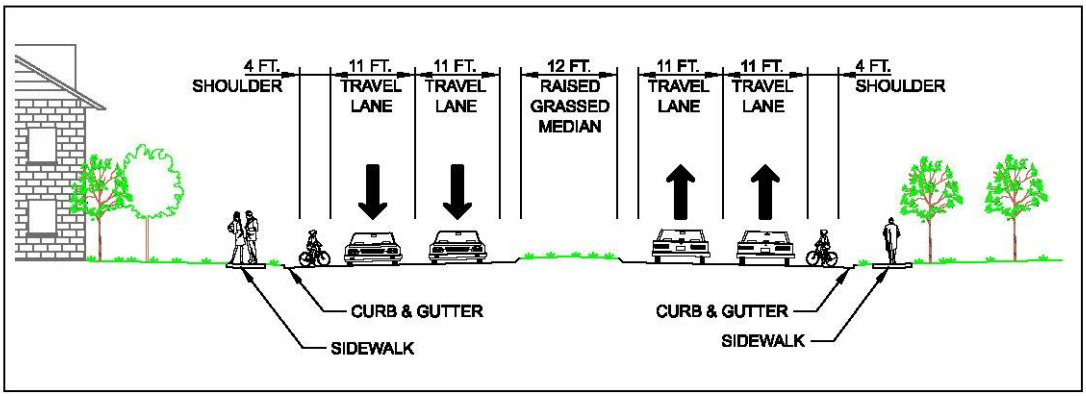


FIGURE 2.1-1 - FROM EAST CENTER STREET TO WEST OF HAWTHORNE STREET

West of Hawthorne Street the grass median will transition to a two-way left center turn-lane and continue to Harbor Chapel Road. All other features will remain the same. (Figure 2.1-2)

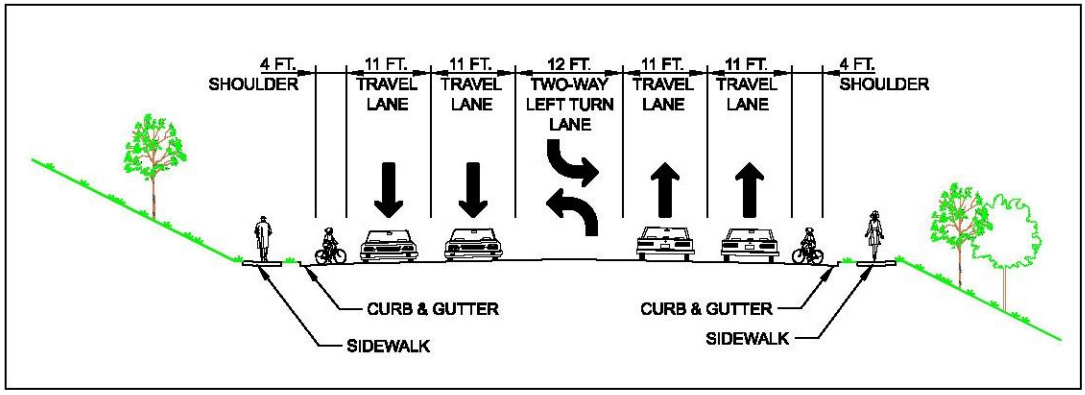


FIGURE 2.1-2 - WEST OF HAWTHORNE STREET TO HARBOR CHAPEL ROAD

At Harbor Chapel Road the roadway cross-section is reduced from the four-lane section of Alternative B (DEIS) to a three-lane roadway consisting of one lane in each direction and a twelve-foot eastbound truck climbing lane. Sidewalks and six-foot paved shoulders to accommodate bicyclist are proposed for both sides of the roadway. Details such as delineation of bike lanes sidewalk width will be determined in accordance with TDOT policies and standards during the design phase. This three-lane roadway will continue to west of Old Stage Road. (Figure 2.1-3)

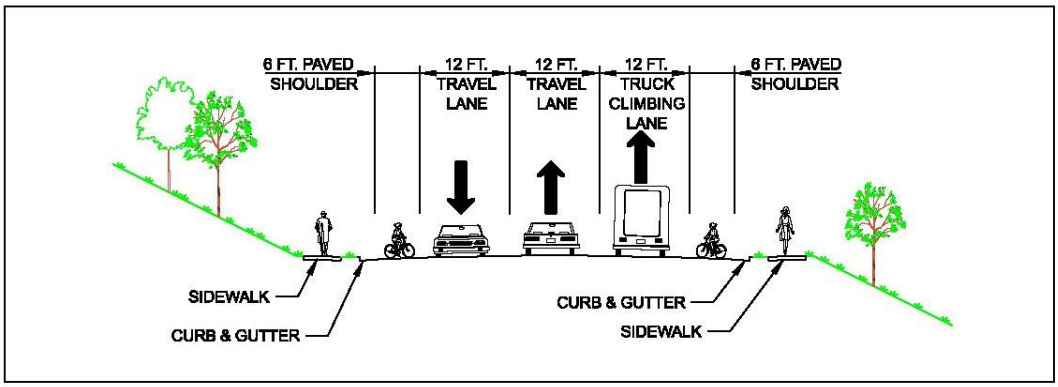


FIGURE 2.1-3 - FROM HARBOR CHAPEL ROAD TO WEST OF OLD STAGE ROAD

The three-lane roadway will transition near Old Stage Road to a two-lane roadway (one-lane in each direction) separated by a two-way center left turn-lane, which continues to Harr Town Road. Sidewalks for pedestrians and six-foot paved shoulders to accommodate bicyclist are proposed for both sides of the roadway. Details such as delineation of bike lanes sidewalk width will be determined in accordance with TDOT policies and standards during the design phase. (Figure 2.1-4)

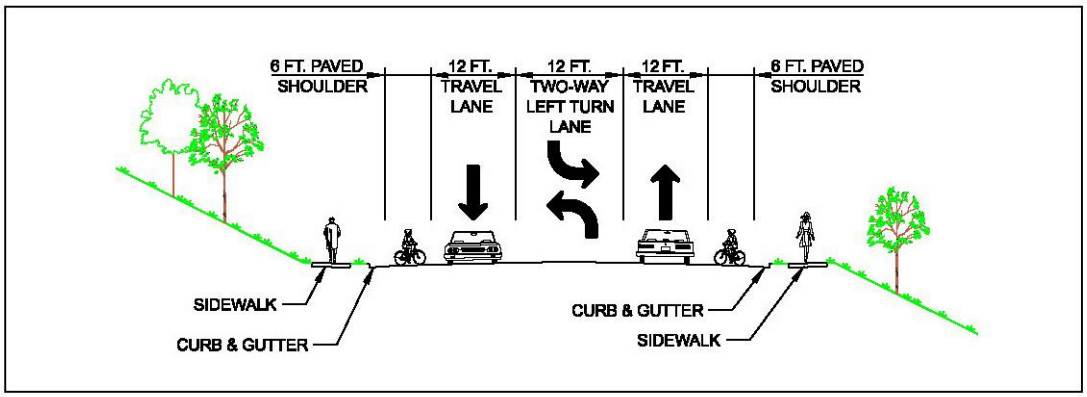


FIGURE 2.1-4 - FROM WEST OF OLD STAGE ROAD TO HARR TOWN ROAD

The proposed three-lane cross-section is compressed as it passes between Yancey's Tavern and the East Lawn Memorial Gardens Cemetery. This design concept avoids taking property from the National Register Listed Yancey's Tavern and avoids displacing any known grave sites. The compressed section (Figure 2.1-5) begins east of Lemay Drive and ends at the intersection of Cooks Valley Road and Eatons Station Road (See Figure 7.0-1).

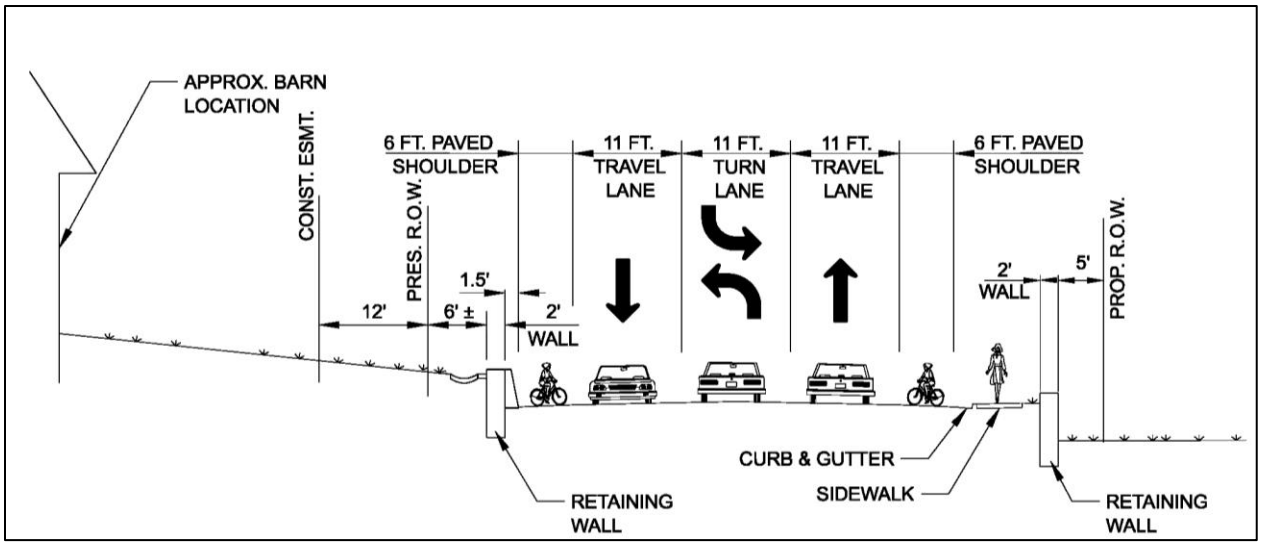


FIGURE 2.1-5 - COMPRESSED TYPICAL SECTION AT YANCEY'S TAVERN AND EAST LAWN MEMORIAL PARK CEMETERY

At Harr Town Road the roadway cross-section transitions to a two-lane roadway with ten-foot shoulders and continues to Carolina Pottery Road. (Figure 2.1-6)

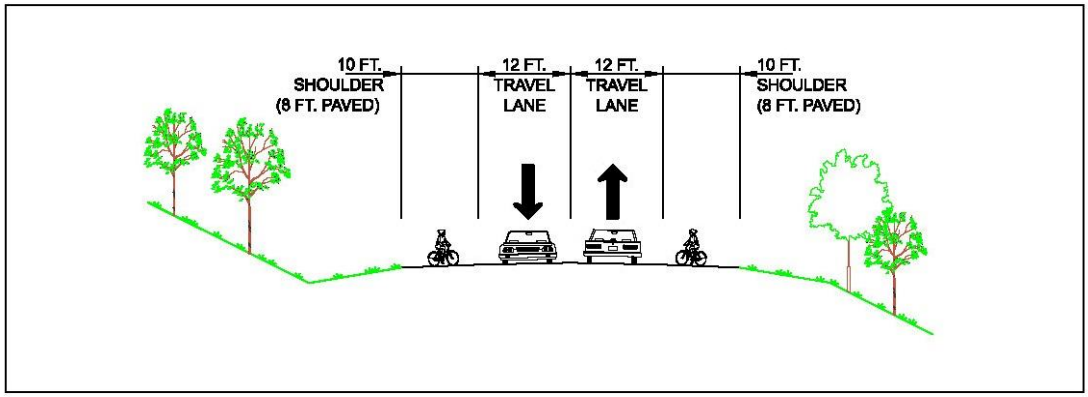


FIGURE 2.1-6 - FROM HARR TOWN ROAD TO CAROLINA POTTERY ROAD

The roadway transitions at Carolina Pottery Road to a four-lane divided highway with a twelve-foot raised grass median with paved shoulders and continues to I-81, the ending point for this project. (Figure 2.1-7)

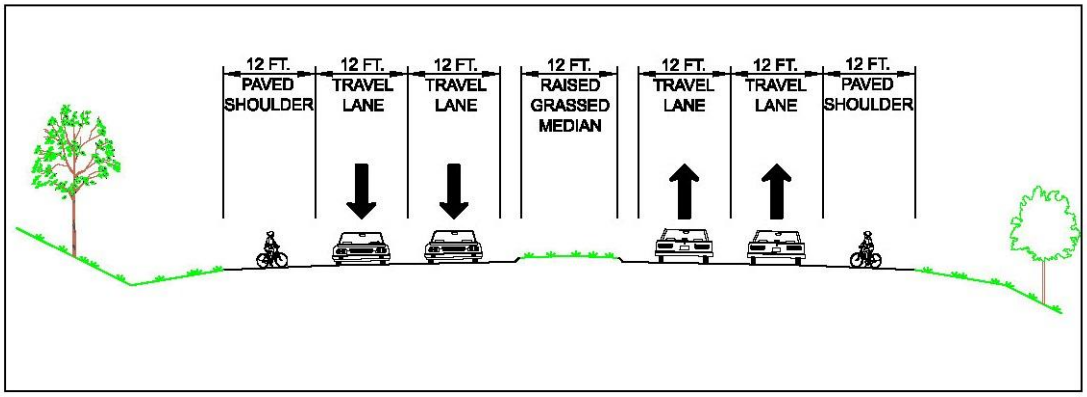


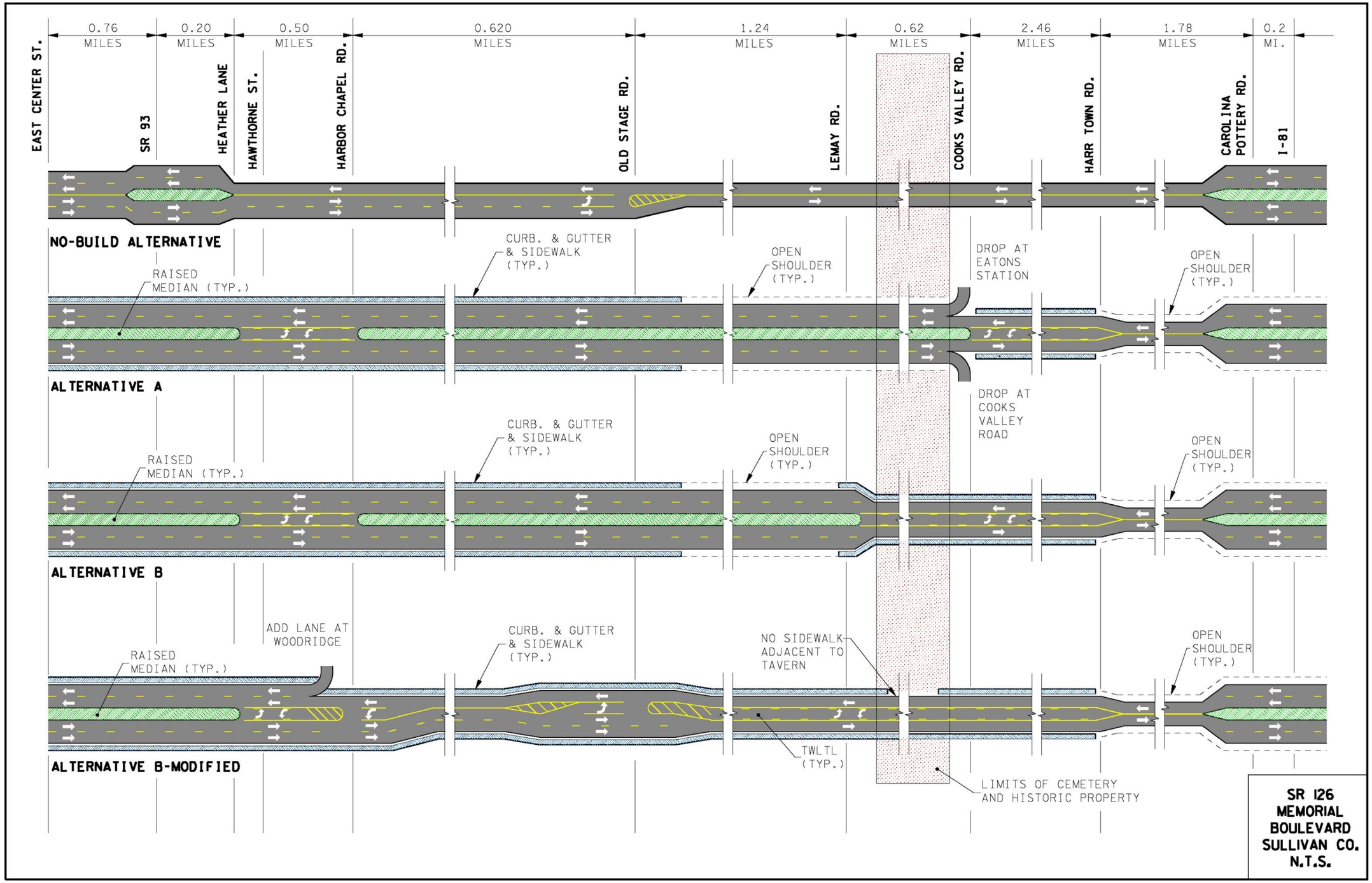
FIGURE 2.1-7 - FROM WEST OF CAROLINA POTTERY TO I-81

This modified design concept improves the existing traffic operations otherwise not addressed with the No-Build Alternative. The modified design reduces the footprint of the roadway, reduces the cost and number of displacements, and provides safety improvements similar to Alternatives A and B as presented in the DEIS. The No-Build Alternative and all three build alternatives were presented at the two NEPA Public Hearings held at two locations along the corridor on December 11, 2012.

2.3 COMPARISON OF BUILD ALTERNATIVE CROSS-SECTION

Figure 2.3-1 illustrates the proposed lane configurations for each Build Alternative and the existing conditions.

FIGURE 2.3-1 - COMPARISON OF BUILD ALTERNATIVE CROSS-SECTION



3.0 PUBLIC INVOLVEMENT

3.1 PUBLIC HEARING AND BACKGROUND

Two NEPA Public Hearings were held on December 11, 2012. The first occurred at 11:00 AM at the Kingsport Civic Center and the second at 6:00 PM at the Sullivan County High School. Both hearings were well attended with 172 signing in at the first and 128 signing in at the second for a total of 300.

TDOT presented the results of the Alternatives studied in the DEIS along with a modification to Alternative B, which was referred to as Alternative B Modified. Alternative B Modified was developed in response to comments received from the community in the spring of 2012 following the circulation of the approved DEIS to the public for review.

Each person attending the Public Hearing was given a general information handout and instructions as to how they could comment on the project (by card left at hearing; to court reporter; or by mail). A notice advertising the Public Hearing was published in local newspapers approximately one month prior to the Public Hearing. At each hearing, TDOT presented the alternatives studied and answered questions. TDOT project staff and the engineering consultant were available to discuss issues with individual citizens. There was broad based support of the project from residents and local officials, who generally agree that SR 126 should be improved primarily to address safety deficiencies. However, there are differing opinions regarding a preferred alternative.

Prior to and during the public hearing comment period, TDOT received over 200 responses in the form of letters, comment cards, and e-mails regarding the project. Each response was reviewed carefully and comments recorded and summarized. Comments were considered substantive if they questioned with reasonable basis the accuracy of the information presented or the accuracy of the analysis. During the highly publicized and participative process, several issues were raised that will be considered in preparation of the Final Environmental Impact Statement (FEIS). The major issues are listed below.

3.2 MAJOR ISSUES EXPRESSED BY THE COMMUNITY

- Safety and speed
- 4-lane vs. 3-lane cross section limits
- Minimize impact to the environment and property
- Avoid grave relocations
- Avoid Yancey's Tavern
- Questioned proposed sidewalks in rural areas
- Wide shoulders for safety vs. narrow shoulders to lower impacts
- No continuous left turn-lane (requires Right-of-Way and will be used to pass)
- No grass median (requires ROW and maintenance)
- Concern for closing side streets and loss of access
- Improved sight distance and alignment are needed
- Guardrail is needed
- Stop lights at major intersections are needed
- Need a 4-lane throughout for economic growth and future travel demand
- Reduce speed limit and enforce the law
- Process is taking too long
- Rumble strips work, but create noise

Safety improvements cited by many include straightening the alignment to remove dangerous curves and substandard roadway grades that limit sight distances. The lack of shoulders was a consistent issue raised in regard to safety. Side road and driveway profiles were noted as well. There were requests made for traffic signals at major intersections and installation of guardrail. Some citizens noted the need for more law enforcement and lower speed limits to improve the safety in addition to, or in lieu of the planned improvements.

While most agree that safety is a primary concern, one group favors limiting improvements to only those necessary to improve safety with only secondary concern for improving operational performance. This group generally favors Alternative B Modified, which provides for three lanes for most of the route east of Harbor Chapel. Some portion of this group would prefer to limit the project further and only provide shoulders and turn lanes at intersections that are warranted. This group is opposed to improving the roadway beyond what is needed for safety at the expense of environmental and community impacts. Most cited concerns for the natural beauty of Chestnut Ridge, the historic value of Yancey's Tavern, and the community resource of East Memorial Park Cemetery. They point to negatively trending traffic data and two count stations to support their position.

Another sizeable group favors improving operational performance through the Design Year (2035) with additional through lanes in addition to improvements needed for safety. Their preference is that a four-lane alternative with raised median and turn lanes, where needed, be used to I-81, or at least Harr Town Road. They acknowledge the importance of limiting impact to the environment and favor the use of retaining walls where necessary to achieve that goal. They are concerned that the project would not sufficiently meet the long term needs of the growing communities on the east end of the project without extending the four-lane sections to those limits. They claim TDOT committed to a Level of Service (LOS) D as a minimum standard for improvements in the Design Year.

The limits of the proposed four-lane typical section has become a focal point for comments from both groups described above. DEIS alternatives end the four-lane cross section near Lemay Drive or Cooks Valley Road. Alternative B Modified ends the four-lane section at Harbor Chapel Road. Those supporting additional lanes would prefer four lanes be carried to I-81, but to Cooks Valley Road at a minimum. Various comments made by those in favor of a four-lane cross section, as well as those in opposition are summarized below.

3.3 COMMENTS REGARDING A FOUR-LANE TYPICAL SECTION

Typical comments received in support of a four-lane cross section from east of Lemay Drive to Cooks Valley Road and for consideration to extend it to I-81 are:

- Will support economic development
- Will provide congestion relief to and beyond the design year
- Projected LOS for a three-lane section is unacceptable
- If we do not four-lane now, it will never happen
- It will cost more to widen again in the future
- The high school is a significant traffic generator and warrants the additional lanes
- Retaining walls can be used with a compressed section at the Tavern and Cemetery (note: this is true, but shoulder widths will have to be reduced to two feet, the median reduced, and sidewalks removed)
- Provides a LOS D or better in the design year for the rural section, which is seen as a minimum standard by the group supporting a four-lane section.

Typical comments received in opposition of a four-lane cross section from Lemay Drive to Cooks Valley Road and for consideration to extend it to I-81 are:

- Four-lane section will adversely impact Yancey's Tavern and East Lawn Memorial Park Cemetery
- Four-lane section will impact more properties and require more residential displacements
- Four-lane section will change the rural character of the corridor
- Four-lane section will encourage speeding, thus offsetting safety gains
- Four-lane section will impact environment more in general
- Four-lane section will cost more
- Traffic projections do not warrant the additional lanes. The projections have been questioned claiming the growth factors are too high and that travel demand is actually reducing over time

3.4 PUBLIC COMMENTS AND DISPOSITIONS

There were 202 comments received in the time period between the publishing of the approved DEIS (January 5, 2012) and the end of the Public Hearing Comment Period (Jan. 31, 2013). Of those, 165 comments were received during the Public Hearing Comment Period. All comments received are summarized in Appendix B. All comments were considered in selection of the Preferred Alternative. There were many repeat comments by the same households. When the comments are condensed by household, there were 136 households represented by comments.

In addition to the number of lanes issue described in Section 3.3, the following is a representative sample of comments received with the associated disposition of TDOT.

TABLE 3.4-1 - COMMENT SUMMARY FROM 2012 PUBLIC HEARING

Comment	Disposition
Thirty-two comments were submitted opposing the disturbance of graves at the East Lawn Memorial Park Cemetery.	TDOT has developed a preliminary design scheme that avoids impacting known grave sites and will continue to evaluate alternatives to avoid relocating any grave sites.
A number of comments were submitted opposing any impacts to Yancey's Tavern, a National Register listed property.	TDOT has developed Alternative B Modified that avoids taking property from Yancey's Tavern. The State Historic Preservation Office (TN-SHPO) has concurred in a "No Adverse Effect" finding on the latest proposed design. TDOT will continue to evaluate any potential impacts to Yancey's Traven.
Thirty comments were received regarding side road and driveway access and possible street closings. Issues with sight distance and oncoming traffic were mentioned.	TDOT will, in the final design of the roadway, evaluate each side road connection for safety and access. Some side roads will be realigned others that have unsafe sight distance or unsatisfactory grades will be closed and connected to other existing roadways.

Comment	Disposition
Fifteen comments were submitted regarding the need for sidewalks and bike lanes along sections of the proposed roadway.	TDOT in the final design of the roadway will provide adequate sidewalks and shoulders for pedestrians and bicyclists. Sidewalks will be provided in appropriate areas where pedestrian traffic warrants. Shoulders will be provided along the entire route. The adequate width of the shoulder will be determined during final design to meet approved design standards.
Thirteen comments were submitted regarding the adding of shoulders and guardrail to improve safety of the roadway.	TDOT in the final design will include shoulders based on current design standards and guardrail in appropriate areas along the roadway to improve safety for the traveling public.
Three comments were submitted opposing the continuous center left turn-lane and cited speeders using this turn-lane as a passing lane.	TDOT in the final design will evaluate possible turning lanes and safety concerns. If a continuous turn-lane is required, appropriate roadway signs and markings will be posted in accordance with current design standards.
Five commenters opposed the raised median. They felt it would be a maintenance issue and requires more right-of-way.	TDOT in the final design of the project will apply acceptable design criteria in evaluating the safest median design required along the roadway.
Ten comments were submitted regarding the use of retaining walls to reduce right-of-way requirements, improve safety and sight distances.	TDOT is evaluating the use of retaining walls in the design of the project to reduce right of way impacts where appropriate for safety and cost effective.
Five comments were submitted questioning the traffic projections. Requested recalculating traffic data using expanded socio-economic data and trend lines.	The current traffic projections used in this study are a function of the 2012 Kingsport MPO Model, which is a travel demand model, and existing traffic counts.
Eighteen comments were submitted regarding minimizing impacts to the environment. There were concerns over the physical and visual impact to Chestnut Ridge, as well as the Holly Springs area, Yancey's Tavern, Memorial Park and the loss of trees and other vegetation.	TDOT will design the project to minimize as many environmental impacts as reasonable and feasible. TDOT will use the best construction methods possible to reduce the physical and visual impacts. Retaining walls and native vegetation will be used wherever practicable to reduce physical and visual impacts.

Comment	Disposition
Five comments were submitted favoring the No-Build Alternative, cited driver behavior as the cause of most accidents.	Comments are noted.
Several commenters stated the project is needed for future economic development in the project area.	Comments are noted.
Four comments were submitted requesting the project stay on the existing alignment and only add shoulders and guardrail.	Comments are noted.
Five comments were submitted regarding impacts to private property. Specifically, regarding the process to identify property impacts, compensation and acquiring the property. One commenter questioned property lines as well as, ownership of certain tracts of land shown on the layouts.	TDOT will pay a fair market value for all properties impacted by displacement / relocation and right-of-way requirements, and provide sufficient notice of intent to acquire the property to minimize any harm. The relocation of displaced households, businesses, and any other affected property will be administered in accordance with the provisions and procedures of the, Uniform Relocation Assistance and Real Property Acquisition Act of 1970 (Public Law 91-646) and the Tennessee Uniform Relocation Assistance Act of 1972. All damages will be considered during the ROW negotiation and acquisition process. Before final right-of-way plans are completed, a title search will be conducted as surveyors check for specific items such as fences, circle drives, underground storage tanks, and building types and add them to the final ROW plans as appropriate. Where possible, the designer will reevaluate ROW plans based on new information. Any damages will be considered during the right-of-way process.
A number of comments were submitted regarding the installation of traffic signals and adding guardrail at major intersections to slow drivers down and improve safety,	TDOT in the final design of the project will evaluate intersections and include traffic signals where warranted along the roadway to promote safe and efficient traffic operations.

4.0 SELECTION OF PREFERRED ALTERNATIVE

TDOT reviewed the comments received at the public hearing and during the official comment period. All comments were read and considered in TDOT's alternative decision-making process. This information was compiled with data related to each alternative used to evaluate alternatives and select a preferred alternative.

4.1 ADVANTAGES AND DISADVANTAGES OF ALTERNATIVES

Each Build Alternative: follows the existing alignment; improves safety by realigning or closing approaches on intersecting roads (as appropriate); provides shoulders and turn lanes to improve safety; provides sidewalks and widened shoulders to accommodate bicyclist and pedestrians (where feasible); and improves traffic operations.

The following table summarizes the advantages and disadvantages of each alternative as considered for selection of a preferred alternative.

TABLE 4.1-1 - ADVANTAGES AND DISADVANTAGES OF ALTERNATIVES

ADVANTAGES OF PROJECT ALTERNATIVES		
ALTERNATIVE A *CRT Recommended Concept*	**ALTERNATIVE B** *Modification to Alternative A*	**ALTERNATIVE B MODIFIED** *Based on updated MPO model*
• Accommodates higher traffic volumes from Harbor Chapel to Cooks Valley Road.	• Accommodates higher traffic volumes from Harbor Chapel to east of Lemay Drive. • Requires less displacements than Alternative A • Less costly than Alternative A	• Least impact to ROW, (fewer displacements), Yancey's Tavern, East Lawn Memorial Park Cemetery, and the environment in general • Least costly • No Adverse Historic Effect to Yancey's Tavern and no additional study required • Received favorably at the Public Hearing.
DISADVANTAGES OF PROJECT ALTERNATIVES		
ALTERNATIVE A *CRT Recommended Concept*	**ALTERNATIVE B** *Modification to Alternative A*	**ALTERNATIVE B MODIFIED** *Based on updated MPO model*
• Greatest impact to right-of-way and graves. Requires the most displacements. • Adverse Visual Impact to Yancey's Tavern and requires Memorandum of Agreement. • Highest cost	• Significant impact to ROW and graves. Requires more displacements than Alternative B Modified. • Adverse Visual Impact to Yancey's Tavern and requires Memorandum of Agreement. • Higher cost than Alternative B Modified.	• Less capacity for future traffic than a four-lane section from Harbor Chapel to Cooks Valley Road. • Least desirable for maintenance of traffic and constructability.

4.2 SUMMARY OF PROJECT DATA & ESTIMATED IMPACTS

The following table summarizes project data contained in the DEIS for Alternatives A and B along with corresponding information compiled for Alternative B Modified. Like the alternatives proposed in the DEIS, Alternative B Modified provides an improvement to traffic operations in comparison to the No-Build Alternative. The revised design reduces the cost and number of residential displacements, avoids Yancey's Tavern and avoids displacing all known grave sites, while offering the same level of safety improvements as Alternatives A and B.

TABLE 4.2-1 SUMMARY OF PROJECT DATA & ESTIMATED IMPACTS FOR SR 126 (MEMORIAL BOULEVARD)

Item	No-Build	Alternative A	Alternative B	Alterative B Modified
Estimated Right-of-Way Acquisition (Acres)[1]	0	239	121	100
Residential Displacements	0	241	162	104
Business Displacements	0	43	30	24
Non-Profit Displacements (Volunteer Fire Station)	0	1	1	1
Air Quality/Noise Impacts Requiring Mitigation	0	0	0	0
Archaeological Sites Impacted	0	0	0	0
Historic Sites Adversely Impacted	0	1	1	0
Section 4(f) Properties Impacted	0	0	0	0
Gravesites Impacted	0	350	90	0
Wetlands Impacted (Acres)	0	0	0	0
Stream Crossings (Linear Feet)	0	4863	3107	3107
Floodplains Impacts (Acres)	0	4	3.2	3.2
Forest Land Acquired (Acres)[2]	0	75	54.8	50+
Threatened/Endangered Species Impacts	0	0	0	0
Hazardous Material Sites Impacted (Parcels)	0	2	3	3
Farmland Impacted (Acres)	0	15	5	5
Total Estimated Project Cost	$ -	$120,316,000	$99,565,000	$97,000,000

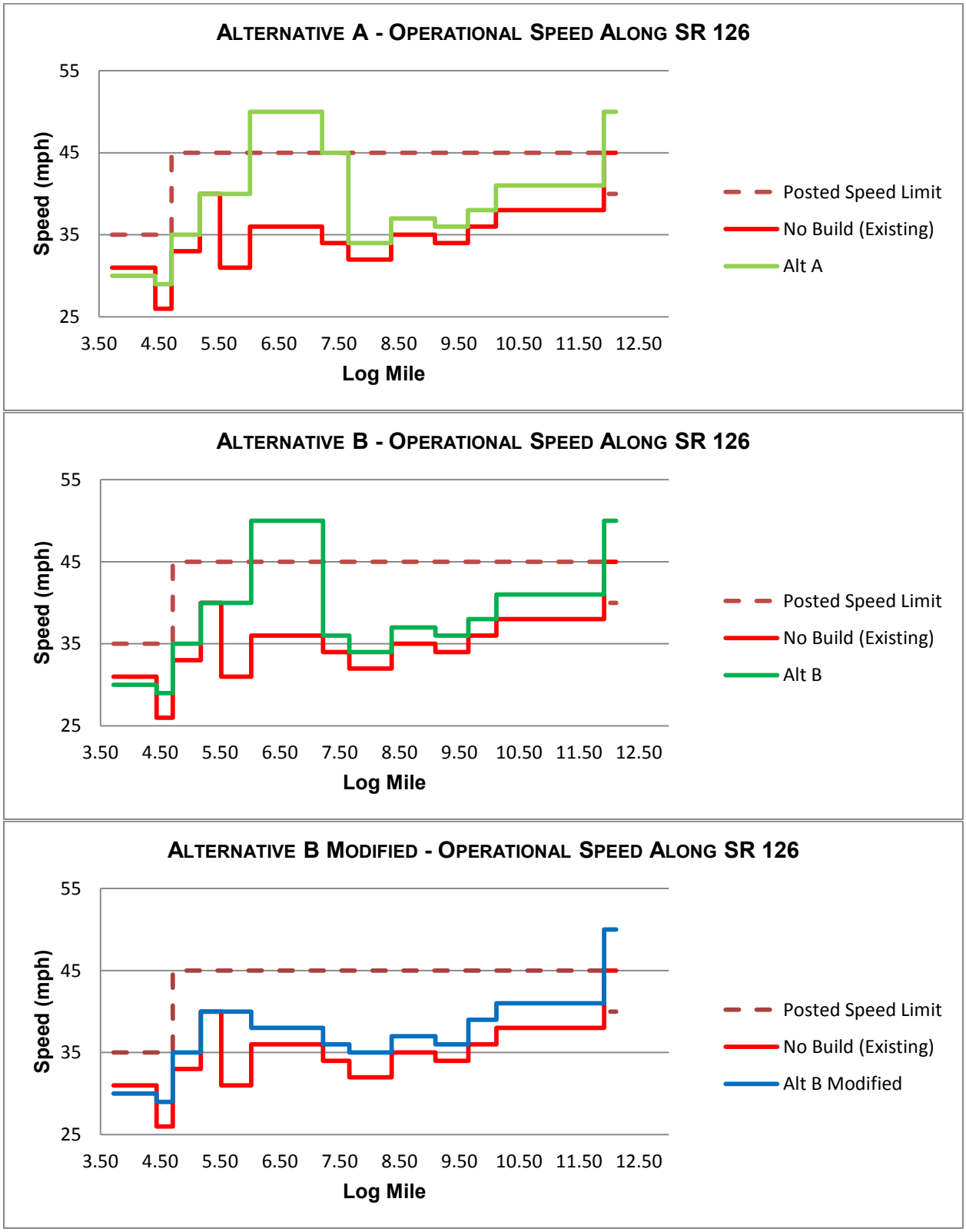
1. The estimated ROW width is reported and based upon the typical width needed for each typical section. Actual proposed ROW widths will vary throughout the project based upon the use of retaining walls, slope easements, total versus partial property acquisitions, uneconomic remnants, etc.
2. Includes all forest land impacted within the estimated construction limits, which may be within slope easements and outside of the ROW limits.

4.3 TRAFFIC ANALYSIS SUMMARY

A traffic analysis was performed for the design year (2037) traffic for each Build Alternative. Based on the analysis, each Build Alternative will improve traffic operations along the corridor and meet the purpose and need of the project. Build Alternative B Modified was developed to consider reductions in traffic volumes that were associated with the most recent travel demand model developed by the Kingsport MPO. The addition of a continuous two-way left turn-lane through the existing two-lane section of the corridor (east of Harbor Chapel Road) allows this alternative to reduce delay associated with left turning vehicles without the additional impact of a four-lane section.

The following figure compares the anticipated operational speed of each alternative along the route. The information is the result of traffic analysis performed on design year traffic with the 2010 HCM.

FIGURE 4.3-1 - OPERATIONAL SPEED ALONG SR 126



4.4 CRASH DATA

Based on 2007-2009 Crash Data, crash rates exceed the Statewide Average Crash Rates for similar roadway sections from Hillcrest Road to Old Stage Road (1.43 mi.), from Cooks Valley Road to Harr Town Road (2.45 mi.), and at the intersection with Overhill Road. All Build Alternatives improve the safety of the roadway with increased shoulder widths, improved geometry, and access management.

TABLE 4.4-1 - STATEWIDE AVERAGE CRASH RATES

Statewide Average Crash Rates for Interstates and State Routes (2006-2008)	
Highway Type	Total Crash Rate[1]
4+ Lane Divided	2.0112
3-Lane	2.3870
2-Lane	2.4188
5-Lane	2.6518
4+ Lane Undivided	3.3920
[1] Total crash rates are crashes per million vehicle miles	

With respect to the roadway segment between Yancey's Tavern and the East Lawn Memorial Park Cemetery, additional consideration was given to public comments requesting a four-lane undivided section in lieu of the three-lane section presented for Alternative B and Alternative B Modified and the four-lane divided section presented for Alternative A. However, Statewide Average Crash Rates for Interstates and State Routes for the years 2006-2008 published by TDOT indicate that four-lane undivided highways (4+ Lane Undivided) have a total crash rate of 3.3920 crashes per million vehicle miles versus three-lane highways at 2.3870 crashes per million vehicle miles (See Table 4.4-1). This indicates that four-lane undivided highways have a 42% higher crash rate than three-lane highways statewide. A four-lane divided section has a statistical advantage in safety to both, but has already been determined to adversely impact the historic Yancey's Tavern or require a significant number of grave relocations.

4.5 COMMUNITY FEEDBACK

Community feedback was an important consideration for the selection of the Preferred Alternative. As previously stated, two NEPA Public Hearings were held on December 11, 2012 with a total of 300 in attendance and 165 comments received during the comment period. Comments were also received prior to the Public Hearing for a total of 202 comments representing 136 households. All comments are summarized in Appendix B and discussed in Section 3 of this document.

While most agree that safety is a primary concern, two distinct groups evolved as a result of the public hearings. One group favors limiting improvements to only those necessary to improve safety with only secondary concern for improving operational performance. This group generally favors Alternative B Modified, which provides for three lanes for most of the route east of Harbor Chapel Road.

Another sizeable group favors improving operational performance through the Design Year (2037) with additional through lanes in addition to improvements needed for safety. Their preference is that a four-lane alternative, with raised median and turn lanes where needed, be used to I-81 or at least to Harr Town Road.

When tabulated by household, there were more comments in support of limiting the impact to the community to only what is needed to improve safety compared to those in support of providing additional capacity by approximately a 2:1 ratio.

5.0 PREFERRED ALTERNATIVE SELECTION SUMMARY

A Preferred Alternative was selected after the review of social, ecological, and cultural impacts as well as the consideration of public and agency comments. After careful consideration, Alternative B Modified was selected because it best meets the purpose and need of the project. It improves safety while minimizing impacts to the environment and the community. Alternative B Modified was the only alternative that did not have an adverse visual effect to Yancey's Tavern or impact East Lawn Memorial Park Cemetery. It also has a lower total number of residential and business displacements and is supported by the Mayor of Kingsport and the Mayor of Sullivan County.

- **Alternative B Modified was selected as the Preferred Alternative for the following reasons:**
    - Fewer displacements of residences and businesses.
    - Avoids displacing any known grave sites at the East Lawn Memorial Park Cemetery.
    - Will not adversely affect Yancey's Tavern, a National Register of Historic Places listed property.
    - Safety improvement is the primary purpose and need of project. Alternative B Modified meets the approved purpose and need of the project with the least amount of environmental impacts and cost.
    - Supported by the Honorable Mayor Dennis Phillips of Kingsport and the Honorable Mayor Steve Godsey of Sullivan County. (See Appendix A.)

6.0 DEIS AGENCY COMMENTS AND RESPONSES

The following agency comment was provided to TDOT after the DEIS was made available for review (January 2012).

UNITED STATES DEPARTMENT OF THE INTERIOR OFFICE OF THE SECRETARY,
OFFICE OF ENVIRONMENTAL POLICY AND COMPLIANCE
Date of Comment June 19, 2013

Comment: The Department of Interior (Department) has reviewed the DEIS for SR 126 Improvement Project. We have no comments at this time.

Response: No response required

7.0 MITIGATION SUMMARY

The following summarizes the proposed mitigation for meeting general requirements of TDOT projects.

- **Standard Specification.** This project will be developed in accordance with *TDOT's Standard Specifications for Road and Bridge Construction*, which addresses sediment and erosion control and siltation; channelization; floodplains; construction impacts; utility relocations; and traffic maintenance and detours.

- **Archaeological Resources.**
  Four archaeological sites are located in the project area (40SL412, 40SL413, 40SL419, and 40SL421). The proposed Build Alternatives have been modified to avoid impacting these sites. However, if archaeological materials are uncovered during construction, all construction work in the area of the find will cease. The Tennessee Division of Archaeology (615-741-1588) and the recognized Native American Tribes previously coordinated with will be immediately contacted so a representative of their office may have the opportunity to examine and evaluate the materials. Any sites identified during construction of the proposed project will be monitored during construction activities to ensure that the areas are avoided and not utilized as equipment staging areas or otherwise impacted by the construction of the project.

  Pursuant to TCA 11-6-107(d), if human remains are identified, construction work must be halted, and the state archaeologist, the county coroner and local law enforcement must be contacted immediately. In addition, a representative of Native American Tribes will be notified in the event they wish to be present.

- **Relocation Assistance.** To minimize the unavoidable effects of the ROW acquisition and displacement of people and businesses, TDOT will implement a ROW and relocation program in accordance with the Tennessee Uniform Relocation Assistance Act of 1972 and the Uniform Relocation Assistance and Real Property Acquisition Act of 1970 (Public Law 91-646). Relocation resources will be available without discrimination to all displaced residences and businesses.

- **Reduction in Relocations.** As the project moves forward into design, TDOT will look for ways to reduce the number of residential relocations based on available design solutions. One example of a potential design solution that will be considered is the use of retaining walls to reduce the width of ROW necessary to accommodate normal side slopes.

Project-specific mitigation measures are as follows.

Hazardous Materials
The following three (3) sites were identified by TDEC in comments to Concurrence Point 3 (September 19, 2011) and will be evaluated as potential hazardous waste sites prior to submittal of the Final EIS.

- English Cabinets (5236 Memorial Boulevard, Kingsport, TN)
- People's Food Store (3104 Memorial Boulevard, Kingsport, TN)
- Richard Chadbourne Property (5340 Memorial Boulevard, Kingsport, TN)

A Phase II Environmental Site Investigation will be performed prior to right-of-way acquisition on the following three (3) parcels identified in the Phase I Hazardous Materials Survey Report.

- Fuel and Convenience Store (4001 Memorial Boulevard, Kingsport, TN)
- Dry Cleaning Service (3200 Memorial Boulevard, Kingsport, TN)
- Fuel and Convenience Store (5121 Memorial Boulevard)

Historic Resources – Yancey's Tavern

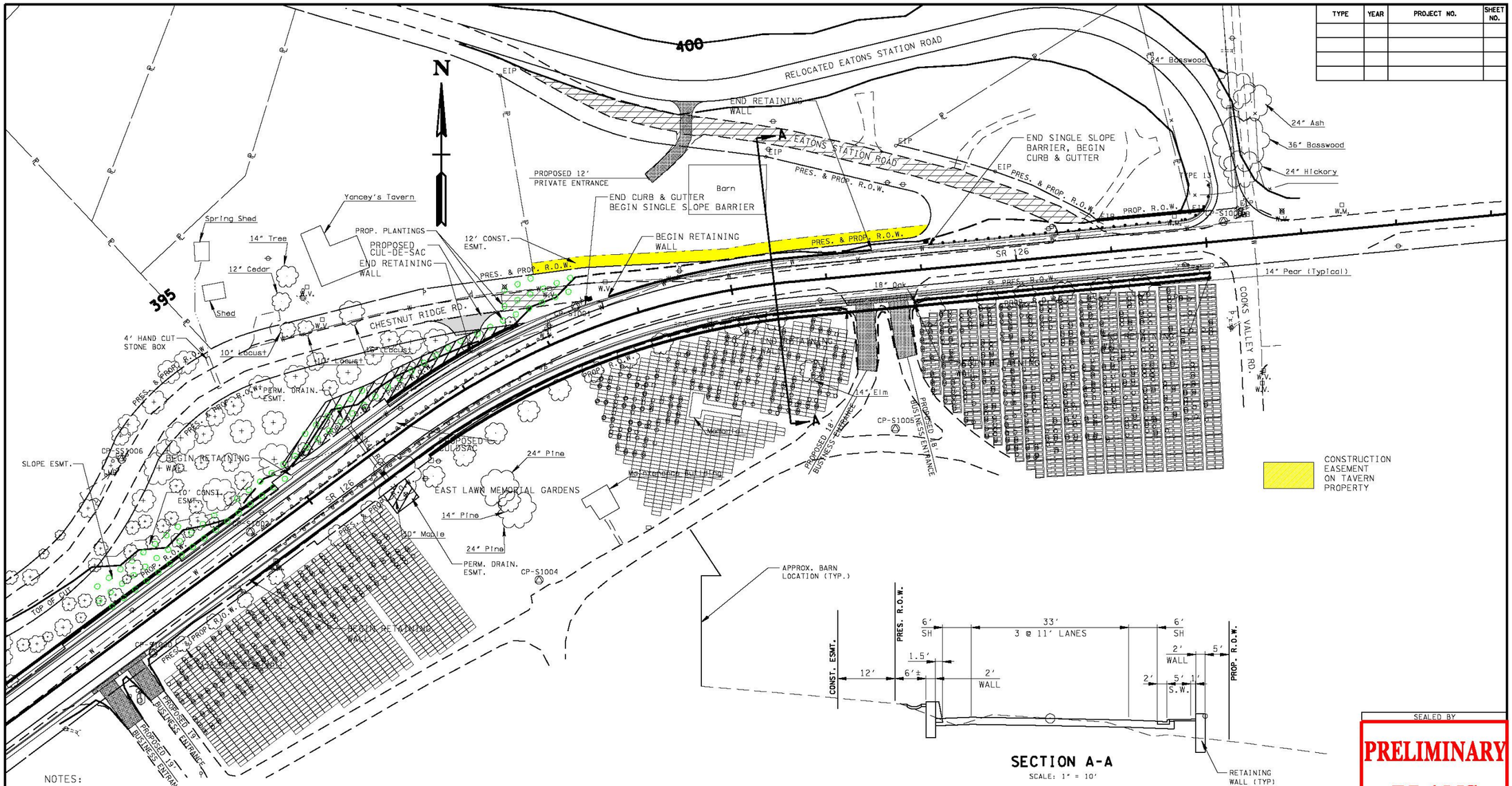
In an effort to minimize impacts to Yancey's Tavern, a property listed on the National Register of Historic Places, a mitigation plan was developed. On June 3, 2013 TDOT submitted to TN-SHPO an Addendum Documentation of Effects report for the proposed improvement to SR 126 in Sullivan County outlining proposed mitigation measures. The TN-SHPO responded on June 11, 2013 (see Appendix D) that the project as currently proposed would not adversely affect Yancey's Tavern. See Figure 7.0-1 for an area view of the Tavern and Cemetery and Figure 7.0-2 for details associated with Alternative B Modified. The following design commitments will be carried out in association with Alternative B Modified:

- The proposed project will shift the right-of-way from Yancey's Tavern to the south onto the East Lawn Memorial Park and Cemetery, but will not be shifted so far to the south that known occupied graves would need to be relocated.
- Only a temporary construction easement will be needed within the National Register boundary of Yancey's Tavern and that construction easement would be returned to the current grade and appearance after construction is completed.
- TDOT is proposing an aesthetic treatment to the retaining wall that will be compatible with the historic landscape and will be minimalist in its design. TDOT will consult with the TN-SHPO and consulting parties in designing the retaining wall in order to get their review and comments on the proposed design feature.
- The cross-section is reduced by the removal of the sidewalk on the northern side of State Route 126. (See Typical Section Figure 7.0-2)
- In order to re-screen the area in front of Yancey's Tavern, TDOT is proposing a detailed landscaping plan that will be created in consultation with the TN-SHPO and consulting parties to provide appropriate plantings for the area.
- Landscaping and aesthetic details will be presented to the TN-SHPO and consulting parties for review and comment.
- Chestnut Ridge Road will end slightly to the southeast of the tavern itself and a branch turn-around will be provided at the dead end to give travelers the opportunity to turn around. Having a branch turn-around rather than a cul-de-sac will give the dead end a more rural feel rather than the suburban feel of a bulb-out cul-de-sac.
- The branch turn-around will require some of the mature trees to the southwest of Yancey's Tavern to be removed; however, TDOT will develop a detailed landscaping plan, in conjunction with the TN-SHPO and consulting parties, that will replace the vegetation that will need to be removed with the branch, turn-around design.

FIGURE 7.0-1 - PROJECT LOCATION MAP AT YANCEY'S TAVERN

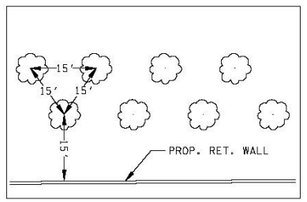


FIGURE 7.0-2 - FUNCTIONAL DESIGN FOR ALTERNATIVE B MODIFIED (PREFERRED ALTERNATIVE)



TYPE	YEAR	PROJECT NO.	SHEET NO.

SECTION A-A
SCALE: 1" = 10'



TYPICAL TREE PLANTING DETAIL
(SPECIES TO BE DETERMINED)

NOTES:

1 PROPOSED IMPROVEMENTS ARE BASED ON LIMITED DESIGN ONLY TO DETERMINE IMPACTS TO THE CEMETERY AND TAVERN PROPERTIES.

2 CONSTRUCTION LIMITS ARE APPROXIMATE FROM LIMITED DESIGN EFFORT. CONSTRUCTION LIMITS ARE SUBJECT TO CHANGE WITH COMPLETE SURVEY AND DESIGN TASKS INCLUDING DESIGN OF DRAINAGE, EROSION CONTROL, PERMITTING, MAINTENANCE OF TRAFFIC AND PRIVATE DRIVES.

3 HORIZONTAL AND VERTICAL ALIGNMENTS ARE BASED ON MINIMIZING IMPACT TO THE CEMETERY AND TAVERN PROPERTIES. INEFFICIENCIES MAY EXIST WITH DESIGN OF ADJACENT ROADWAY SECTIONS IN ORDER TO TIE TO THE DEPICTED DESIGN FOR THIS LOCATION.

4 EXISTING INFORMATION IS BASED ON LIMITED TOPOGRAPHIC SURVEY AND AVAILABLE AERIAL PHOTOGRAPHY. EXISTING RIGHT-OF-WAY BASED ON ARCHIVED CONSTRUCTION PLANS AND MAY VARY. GRAVE LOCATIONS BASED ON SURVEY OF VISIBLE HEADSTONES AND SCHEMATIC PROVIDED BY CEMETERY.

5 NO GEOTECHNICAL DATA WAS CONSIDERED.

6 RELOCATION OF EATONS STATION ROAD CONCEPTUAL ONLY AND BASED ON A 25 MPH DESIGN SPEED AT INTERSECTION.

SEALED BY

PRELIMINARY PLANS

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

3 LANE CONCEPTUAL LAYOUT
SCALE: 1"= 50'

Threatened and Endangered Species
The USFWS has concurred on November 17, 2011 (See Appendix E) with a "not likely to adversely affect" finding concerning the federally endangered Indiana Bat (*Myotis sodalis*). Although it is not likely that the project would have an effect on the Indiana Bat, USFWS requested that consideration be given to the removal of trees with a diameter at breast height of five inches or greater only from October 15 through March 31 to further minimize the potential for harm to the species.

Water Quality
Five (5) streams were identified within the project corridor. Three (3) are perennial streams: Sougans Branch, Fall Creek, and an unnamed tributary of Sougans Branch. Two (2) streams are intermittent streams: An unnamed tributary of Fall Creek and an unnamed tributary of Reedy Creek. None of the five (5) have been listed as Tennessee Exceptional Waters within the project impact area, and none were impaired to the degree that they have been placed upon the Tennessee 2008 303(d) List of impaired streams published by TDEC Division of Water Pollution Control. Habitat quality of each of the streams was investigated, and all five (5) streams scored in the below-average range. Tables 7.0-1 and 7.0-2 below identify the location of these streams.

TABLE 7.0-1 - LINEAR FEET OF STREAM IMPACT BY IMPACT TYPE, SR 126, SULLIVAN COUNTY, TENNESSEE FOR ALTERNATIVE A, ALTERNATIVE B AND ALTERNATIVE B MODIFIED (PREFERRED)

Item	Total Linear Feet Impacted	Culverts/Pipes (ft)	Crossing / Bridge (ft)	Relocation (ft)
Alternative A	4,863	1,278	NA	3,585
Alternative B	3,107	846	NA	2,261
Alternative B Modified	3,107	846	NA	2,261

TABLE 7.0-2 - COMPARISONS OF STREAM IMPACTS IN LINEAR FEET FOR ALTERNATIVE A, ALTERNATIVE B AND ALTERNATIVE B MODIFIED (PREFERRED)

Streams Impacted	Drainage Area (acres)	Flow Regime	Alternative A: Linear Feet Impacted	Alternative B: Linear Feet Impacted	Alternative B Modified: Linear Feet Impacted
U.T Reedy Creek	113	Intermittent	428	174	174
U.T. Fall Creek	53	Intermittent	192	92	92
U.T. Sougan Branch	439	Perennial	2,506	1,868	1,868
Sougan Branch	1,574	Perennial	93	99	99
Fall Creek	2,032	Perennial	1,644	874	874
			Total: 4,863	**Total: 3,107**	**Total: 3,107**

To protect water quality and aquatic species the stream crossings will be designed perpendicular to the direction of flow. The construction of culverts will be staged during the drier times of the year when stream flows have been reduced. The culverts will not be constructed immediately following rain events. Locations of these structures will be determined during final design and prior to submission of federal and state permit applications.

Where culverts penetrate the existing embankment, they will be lengthened so that the existing drainage function would be preserved. Additional culvert improvements will be made during final design, if necessary, based on a hydraulic capacity analysis. Culverts will also be wide enough to pass high flows and should be placed so as not to restrict the movement of aquatic vertebrates within the streams.

Mitigation is required for all stream impacts which do not meet requirements for general TDEC Division of Water Aquatic Resources Alterations permits (ARAP) and for certain Nationwide Section 404 permits (U.S. Army Corps of Engineers; TDOT 2004).

Unavoidable impacts to Waters of the U.S. could still occur after all appropriate avoidance and minimization measures have been taken. Compensatory mitigation is likely to be required to offset any unavoidable impacts to waters of the State/US. TDOT will implement the current sanctioned stream mitigation compensation, as necessary, at the time of obtaining permits.

Appendix A
City and County Mayors' Letter of Support

40050

From the Offices of:

Dennis R. Phillips	Steve Godsey
Mayor	Mayor
City of Kingsport	Sullivan County

March 21, 2013

The Honorable John Schroer
Commissioner
Tennessee Department of Transportation
505 Deaderick Street
J K Polk Building, Ste 700
Nashville, TN 37243-0349

Dear Commissioner Schroer:

As the duly elected Mayors of Kingsport and Sullivan County, we write to you today to applaud your department's steadfast efforts to make an improved State Route 126/Memorial Boulevard a reality.

While this project has suffered delays throughout previous administrations, we wanted to let the Department of Transportation and the administration of Gov. Bill Haslam know we fully support TDOT's proposed Modified Plan B option for State Route 126.

We offer this support recognizing there are varying opinions on exactly what type of road should be built. But everyone is in agreement that improvements are desperately needed. As leaders of the County and City, we also recognize that in times of tight construction budgets, it is more important that a project commence ... or risk the project being orphaned yet again.

With that in mind, we urge the Department to move forward with all possible speed in moving from the environmental phase to right-of-way acquisition and construction. The Department and local legislators, including Lieutenant Governor Ron Ramsey, have spent countless hours and dollars in good faith with tremendous input trying to develop a viable project that pleases as many stakeholders as possible.

Those efforts are commendable, and we request the project be moved forward as soon as possible. We look forward to continuing conversations about how best to address phasing of the project, as we fully realize this is a sizeable project that will required several phases to fund. Please let us know anything else we might do to assist you and your Department in achieving this goal.

We thank you in advance for your time and consideration in this matter.

Sincerely,

Dennis R. Phillips
Mayor
City of Kingsport

Steve Godsey
Mayor
Sullivan County

RR/TS/DRP/SG/jlc

MAR 28 2013

Appendix B
Summary of Public Hearing Comments

Summary of Public Hearing Comments

Letters

Name	Comment Summary
Ellen Sims	Supports B Modified - Long Island Chapter, National Society Daughters of American Revolution, (NSDAR). Concerned about both visual and physical impact of SR 126 on Yancey's Tavern and along Chestnut Ridge. Afford maximum protection to Tavern and East Lawn Cemetery. Minimize foot print of road. Spend tax dollars efficiently. Questioned if sidewalks and curb and gutter were necessary in the Tavern area.
Rann Vaulx	Supports B Modified - Cost effective, context sensitive solution for project. Concerned about Adverse Visual impact to Yancy's Tavern. Wants to receive any information on retaining walls and wants to remain engaged in the project.
Jolly Hill	Supports B Modified - Support for retaining wall without a Trinity Lane connector. Oppose version without retaining wall. (Impacts Pyle Cemetery)
Kimberly Davis	Supports No-Build - Prefers Alt. B with 3-lane road **if** No-Build is not selected. "No-Build" - Does not see supporting studies on web site. Concerns about noise study and suggests noise study not done correctly. Suggests Noise Barrier above Preston Hills. Opposed to connecting Trinity Lane to Greenspring Circle. Sidewalks seem needlessly excessive. A divided highway with grass median is overkill. Give further consideration to public transportation.
Ann Seeger	Supports Project, Opposes 4-lane - Concerned about the impact a 4-lane divided highway will have on the Indian Springs Community. A 4-lane will increase traffic speeds which will add to the tragedies that have already occurred. Please make highway safer and intact not divided by a 4-lane.
Diane Somers	Supports 4-lane - Use minimal 4-lane from Chestnut Ridge Rd. to Cooks Valley Rd. Use retaining walls between cemetery and historical property without disturbing graves.
Henry Somers	Supports 4-lane - Use minimal 4-lane from Chestnut Ridge Rd. to Cooks Valley Rd. Use retaining walls between cemetery and historical property without disturbing graves.
Joseph Smith	Supports 4-lane - Use minimal 4-lane from Chestnut Ridge Rd. to Cooks Valley Rd. Use retaining walls between cemetery and historical property without disturbing graves.
Anne Laura Smith	Supports 4-lane - Use minimal 4-lane from Chestnut Ridge Rd. to Cooks Valley Rd. Use retaining walls between cemetery and historical property without disturbing graves.
Arved Harding	Supports 4-lane - Use minimal 4-lane from Chestnut Ridge Rd. to Cooks Valley Rd. Use retaining walls between cemetery and historical property without disturbing graves.
Jerry Teague	Supports 4-lane - Use minimal 4-lane from Chestnut Ridge Rd. to Cooks Valley Rd. Use retaining walls between cemetery and historical property without disturbing graves.
Doug Russam	Supports 4-lane - Use minimal 4-lane from Chestnut Ridge Rd. to Cooks Valley Rd. Use retaining walls between cemetery and historical property without disturbing graves.
William Kelly	Supports 4-lane - Use minimal 4-lane from Chestnut Ridge Rd. to Cooks Valley Rd. Use retaining walls between cemetery and historical property without disturbing graves.
Bob Wallace	Supports 4-lane - Use minimal 4-lane from Chestnut Ridge Rd. to Cooks Valley Rd. Use retaining walls between cemetery and historical property without disturbing graves.
John J. Hurt	Supports 4-lane - Use minimal 4-lane from Chestnut Ridge Rd. to Cooks Valley Rd. Use retaining walls between cemetery and historical property without disturbing graves.
Scott George	Support 4-lane - Critical to safety. A 3-lane is not adequate. Do project right way now and it will carry us well into the future.
Ervin Holman	Supports most of the proposed changes to SR 126 - Opposed to closing one end of Graveltop Rd. Several needs for the roadway have been noted: Improved access for school buses; Improve mail delivery; Improve response time for emergencies; Improved road geometry. Closing one end of Graveltop Rd, school buses will require a longer trip up and down the street. Mail delivery will take longer. Response time for emergency vehicles will take longer. When an accident occurs on SR 126 there will be no alternate route for vehicles.

Summary of Public Hearing Comments

Keith Johnson	Supports 4-lane - Lives in Indian Springs Community. Now is the time to get this safe improvement on the agenda.
Juliet Hyatt	Not in favor of 4-lane - Takes to much land, historic site should be protected. Need improved 2-lane from Old Stage to I-81. Need wider shoulders, reflective paint edging lanes, guardrails, occasional turn lanes, pull offs for emergency vehicles and realignment of side roads.
Thomas Floyd & Jenny Gillespie	Supports No-Build - Concerns regarding lower property value and thinks, retaining wall takes a lot of backyard. Makes my driveway a public road. (Green Springs connector to Trinity Lane) Plans not clear whether Trinity Lane is left opened or closed. Prefer Trinity be kept as a dead end.
Blanche Fillers	Opposes 4-lane - Need better stripping and signing of lanes in transition areas. No need for bike lanes, need wider lanes and shoulders. 4-lane would only encourage students leaving school to speed and cause more accidents.
Allan & Carol Newland	Supports 4-lane - Residents in Indian Springs over whelmingly voiced their support for 4-lane, eliminating sidewalks and bike lanes on section between cemetery and Tavern. Please provide road that stimulates growth and provides easier access.
Keith Johnson	Supports Project - No preference, just wants the road improved.
Jolly Hill	Concerned about Trinity Lane Connector. Wants clarification on whether Trinity Lane is to be closed or left open before project is designed.
Terry Larkin	Project adds no value from Center St. to Old Stage Rd. The high cost is overkill. Rather see improvement from Old Stage Rd to Interstate which is greatly needed.
Paul Castille	Concerned previous work on John B. Dennis exit ramp made it worse. Change it back to what it was.
Rep. Tony Shipley	Supports 4-lane - 4-lane with sidewalks, bike lanes and 12' grass median is excessive. Suggest minimal 4-lane no grassy median only a center barrier to seperate lanes, no sidewalk, no bike lanes and possibly no curb and gutter. 4-lane should be further compressed between cemetery and Tavern. Wants to know the difference in feet of a minimum 4-lane as described and Modified B.
Fix 126 right.com	Supports 4-lane (See Letters)
Diane Somers	Supports 4-lane (See Letter)
Judy Murray	Opposes 4-lane (See Letter)
Arthur Ellis	Concerned about the impact the road would have on the landscape and scenic beauty of the area.

Summary of Public Hearing Comments

Emails and Fix126.com

Name	Comment
Cathy Dunn	Oppose 4-lane - 4-lane is to expensive, will increase speed, will depreciated historic and cultural attributes of region suggest camera to catch speeders (generate revenue). Add turn lanes in area that need it.
Kurt Larkin	Stated that he has not seen the road as congested as shown in the (Level of Service example) photos. Would like to know when work will begin and how long the project will last.
Paul Castille	TDOT already made John B. Demnis exit ramp worse, need to change it back.
Al Price	Stated that he owns land on SR 126 at Shuler Dr. Wants to know if the project will affect his land.
John Hurt	For 4-lane - Accidents will continue if 4-lane not built. Drivers speed and talk on cell phones and do not pay attention. Road is to crooked in places and to narrow in others. How much longer do we have to endure this.
John Trent	No Build - Do not waste anymore money, traffic enforcement is what is needed.
Chad Austin	(Shoulders) - Any incidents on this road are caused by inattentive drivers, fatalities are not caused by road but by the drivers. Wider shoulders is what's needed. If the project is built it will lead to increased speeds.
Sue Nichols	No Stated Prefence - Need safer highway as soon as possible. Existing road is dangerous (curves, single lanes)
John Pollak	Not sure 4-lane will work due to topography, but turn lanes will alleviate a lot of problems, since TN has no turn signal requirements.
Allan Newland	Favors 4-lane - Due to lack of improvements of SR 126 has resulted in loss of businesses. Improved safety main concern, but improved business conditions should be considered.
Randal English	3-lanes - Business owner involved in two accidents trying to enter property. Curve in road restricts vision, hard to see on-coming traffic. Need 3-lanes and lowering of speed limit.
Fix 126	Summary Feedback email - For 4-lane; Concerns safety and future development
Keith Johnston	Wants road improved in the immediate future Lives in Indian Springs Community
Delores York	(Shoulders) - This road is dangerous, we need shoulders to help drivers not familiar with this winding road.
Jerry Case	Concerned about dangerous intersection at Fall Creek Rd. and SR 126. Suggest traffic light to control traffic through the intersection.
Jennifer Krull	No Build - Suggest leaving road alone and cut back some slope bank to improve site distance. (Not a fan of Ms. Sommers)
John Townsend	4-lane all the way - It will serve future needs and will be much safer than the "other way". Do not put in 2, 3, and 4-lane option.
Jan Nichols	4-lane - 4-lanes with less curves and more visibility and safer highway all around.
Keith Elton	The only problem with this road is distracted drivers. Deaths are caused by reckless drivers. 4-lanes will lead to increased traffic and higher speeds. Suggest using money to hire more THP to enforce speed and educate drivers.
Crystal Dots	We need to do something NOW. Road is to dangerous, people speed, pass school buses. It is difficult to get out of driveway at times.
Phillip Bridges	4-lanes - Fix the road right the first time or you always have a dangerous road
Larry Landis	(Shoulders) Careless drivers on road causes accidents. Road needs shoulders.
Willis Wagner	Wants the road improved as soon as we can.
John W. Dotson	Opposed to moving graves - Please find a way to improve the road without disturbing cemetery.
Janrose Dotson Hall	Opposed to moving graves - Speeders need to slow down and given tickets or take their driving rights away. Do not disturb graves.

Summary of Public Hearing Comments

Vickie Jones	Oppose grave removal - Does not feel widening the road is the answer. Control texting and phone use while driving would be a huge help. Do not move any graves.
Arnold Dixon	Favor 2-lanes with a 3-lane for turning. If road is not patrolled by officers or cameras fatalities will still occur.
Lesley Kilgore	Enforce the speed limit, need shoulders and street lights, bike lanes and walking lanes are a waste of money. Do not impact cemetery or Yancy's Tavern. Adding 3-4 lanes and back to 2 will cause more reckless driving (people trying to pass)
Scott Williams	More asphalt means more upkeep and funding - Determine where most accidents occur and concentrate on making those areas safe. Wider roads usually mean increased speed, distraction from cell phone use that lead to more accidents.
Lisa Burchell	Roadway needs better lighting all the way to I-81. Need red lights at intersections, poor visibility makes it hard to get on and off highway. 3-laning or 4-laning would only increase truck traffic and speeding. THP and local police should patrol area more often to discourage speeding.
Dr. La-Verne & Lois Ready	Concerned about noise associated with new highway. What type of barriers are being considered.
Patricia Richards Dellinger	Opposed to moving graves.
Angela Tipton	Opposed to moving graves.

Summary of Public Hearing Comments

Kingsport Civic Center

Name	Comment
Ernest Brookman	Stated no preference - Would like to see more coordination between City and TDOT on the alignment of the road. Need to fix Kite Street. Recognized construction limitations.
Ellen Sims	Generally Supports Project - Representing Long Island Chapter of the National Society Daughters of American Revolution. Concerned about visual and physical impact of the proposed project on Yancy's Tavern and along Chestnut Ridge. Blasting and Road construction will change the landscape causing a negative impact both physical and visually to Yancy's Tavern and associated properties. NSDAR is concerned about safety and building a road efficiently and effectively and respecting the communities values. Do not over build.
Nathan Vaughn	(Former Rep.) Recognized the work of the CSS team and is concerned TDOT is looking at an option not sanctioned by the CSS group and using different selection process. He is concerned about traffic counts not accurately reflecting the volumes on SR 126. Wants the project to reflect the values of the community.
Tim Bledsoe	No Alt. Prefence - Concerned about moving family graves. Opposed to moving graves. Move the Tavern.
Tom Gatti	Oppose 4-lane - Opposed to 4-lane cutting through Chestnut Ridge and Indian Springs. B modified takes care of some safety issues, will have visual problems and road connecting issues. Not in favor of straight road it tempts people to drive faster. Ask if sidewalks had to be ADA compliant.
Judy Murray	Served on CSS team that came up with original alternatives and feels the spirit of CSS is being honored. She felt TDOT was listening to the community.
Wendy Gordon	Generally Supports Project - Thanked TDOT for the work on this project.
Tony Grills	Concerned about compensation of property that maybe used for roadway as well as zoning and tax issues. He was referred to the ROW representative present at the meeting. Also questioned how removing asbestos would be paid for, the owner or TDOT. Also asked about statue of limitations mentioned in EIS.
Frank Castleberry	Favors 4-lane - Concerned Indian Springs will be shortchanged in a 4-lane is not constructed. Limits future growth. More the Tavern back up the hill and build a parking lot.
Mr. Vaulx	Opposed to moving graves. Concerned that the historic site (Yancy's Tavern) is going to be on a retaining wall over looking a multi-lane highway and that will be an adverse visual impact. He further state an MOA would be required to complete the requirements of Section 106, of the National Historic Preservation Act. Favors leaving 2-lane and shoulders, ruble strip and turn lean into Cooks Valley Rd. Wants a safe road.
Charlotte Ellis	Would like to see community and its assets protected as well as having a safe road. (Rural Indian Springs). Protect Chestnut Ridge, historic sites and cemetery.
Kathleen Beine	Concerned about safety issues, beauty and historic preservation. Concerned about 4-lane widening through Chestnut Ridge. The road needs to be improved. Concerned about miles and miles of 5-lane road and increased accidents. Concerned about sidewalks and bike lanes adding to the highway impact on the landscape.
Mark Bowery	Favors taking the 4-lane to 3-lane to 2-lane and the 4-lane would go all the way to Cooks Valley. Use design options to avoid Yancy's and Cemetery.
Dorothy Houser	She has lived in her home 87 years and does not want to move. Do anything you can to keep this from happening.
Eugene DeBaker	Opposes closing Holiday Hills Rd. out of her subdivision. There needs to be another alternative or stop lights.
Betty Tribble	Take my house to save a life.
Mark Tribble	(Speaking on behalf of his mother Betty) - She is an elderly widow and all alternatives impact her. Concerned about run-off caused by the roadway and flooding. Take my mothers home for her safety. Blind spot when you pull out of the driveway.

Summary of Public Hearing Comments

Chris Lacey	Concerned about sight distance problems pulling out of his business onto SR 126. Previous work on the road has impacted his property causing a drop off that is dangerous for his customers. Would like the access fixed to his property, as well as the sight distance improved at his business.
Susan Nodal	(Local) - Concerned about planned median in front of her property prohibiting her from turning left out of her driveway, forcing her to use the dangerous Orebank Rd intersection. This is the only viable access to our property. Request that two historic stone pillars be relocated up into her yard. An access point in the median would also serve a business next door.
Dan Cheek	B Modified - (Former member of CSS team) I originally supported a 4-lane roadway, but now feel a less invasive plan is needed. A 4-lane would destroy Indian Springs. The B modified plan it is very much consistent with what our team came up with.
Scott George	4-lane - 4-lane is needed fix it now, fit it correctly. Safety is the biggest concern; no shoulders, no recovery area exist.
Dewey Harless	Feels we are only building part of what is needed. Quit making 2-lane bottlenecks. Build 4-lane, don't need sidewalks, curbs and gutters is sufficient. I's rather have a safe road even though it impacts my property.

Summary of Public Hearing Comments

Sullivan Co. High School

Name	Comment
Scott Mendenhall	Questioned why project was taking so long. Believes if road had already been improved, his wife may still be living today. Pointed out that it has been 10 years since the project began and wants to know how the Department is going to speed up the process. Plan B should be eliminated and A could be a little bit more improvement on that part.
Charlotte Dade	Five concerns; safety, historical, environmental, aesthetical and personal. Certainly improvements need to be made a 4 or 5-lane roadway is not necessary. Modified B concerned about preserving heritage for future generations. Aesthetic quality of Chestnut Ridge is important. Do not want to destroy beauty of area. Our property has historical valve (Exchange Places). Wants to know what will happen to the springs and the serenity of the woods behind her home. We want to save lives and hope the plans make continued improvements and consider the historical, aesthetical and environmental issues.
Cathy Dean	Favors B Modified - Opposed to moving graves.
Danny Moody	Opposed to 3-lane roadway; for 4-lane people using turn-lane do not know where to yield to anybody.
Erwin Holman	Concerned about closing off Gravel Top Rd. access point. It will increase response time for emergency vehicles, increase mail delivery route. School buses will have to use cul-de-sac at end of road. It will close off a detour route around SR 126 when accident occurs or bad weather closes roadway. Fix geometry of road and leave both entrances open.
Tim McCoy	Modified B - Modified B addresses our concerns and still gives us a nice safe road.
Paul Bodenweiser	Modified B - Modified B is far and away the smartest one rumble strips have made a difference, we need to improve the lines of sight, add guardrail, and shoulders.
Henry Somers	Safety is a huge issue; CSS team after 2 years of study recommended 4-lane to Cooks Valley Rd. We need a bare bones, minimum 4-lane to accommodate future traffic. We need to eliminate the grassy medium, sidewalks, and curb and gutter. Basic 4-lane will be very similar to 3-lane with sidewalk. Nobody wants a big cut, future traffic will need extra lanes. A 4-lane from East Center St. is possible and is needed for safe travel. There is 47' from white-line to white-line at Yancy's Tavern, we know a minimum 4-lane can be done. We need interim improvements we can't wait another 8-10 years.
Vance Ramsey	Modified B - Lines on section of SR 126 that has seen many accidents. Believe drivers not the road caused accidents (Speed, drinking). The road needs improving, straighten curves, and shoulders, need turn lanes at major intersection. Oppose 4-lane do not want to destroy scenic value of Chestnut Ridge or destroy the communities of Sunnyside, Birdwell Height and Indian Springs. Do not want to remove graves. Made reference to petition with over 1200 signatures opposing 4-lane and whether or not TDOT had a copy.
Kerney Timmons	Modified B - is reasonable avoids cemetery and historical property. Likes a 4-lane and 3-lane. Leave the sidewalk off the 3-lane and make it 4-lane. The lanes are to narrow, rumble strip has kept me on my side of the roadway.
Donna McCoy	Modified B - Son was killed on highway, opposed to 4-lanes, 2-lanes in each directions raises the possibility of more accidents. It will allow people to drive faster. Concerned about increase in truck traffic.
Thomas Moore	Concerned about driveway connections, poor sight distance is a hazard. Requested TDOT to fix his driveway (no action by State) wants the roadway (Fall Creek) either up to SR 126 or cut back down to improve site distance make the road safe take out curves and bumps in the road to improve the line of sight.
Kathy Dunn	Disagrees with 4-lane, straight through because it will simple increase speed. Grass medians will be a maintenance issue MPO and State traffic numbers don't agree, let get calculation right. Not willing to see ridiculous speeding for a continuous 4-lane.

Summary of Public Hearing Comments

Don Cole	Family member in East Lawn Cemetery, Alt. A & B upset me. Road needs to be improved. Alcohol, drugs and telephones distract drivers. I can live with Alternative B.
Gene Bledsoe	Concerned about traffic lights and wants to know if there will be red lights at intersection. Concerned about the 3-lanes merging to 2-lane near Lacy's Insurance and wants to know if there will be better merging with the project. Questioned recent traffic analysis showing a reduction in traffic. Concerned about property value between being above the road or below the road. Last meeting at Sunnyside, they shot down the 4-lane nobody wants a truck route between Center St. and I-81. Wants to know when project will begin. Its been ten years in the making.
Wendy Niebruegge	I like the rumble strips, I think we can make improvements by adding shoulders and cutting out banks to improve sight distance. Realigning driveways. Can make improvements without 4-laning entire route.
Joe Smith	Lets make sure we are building a road to handle the traffic, do no under build the road.
Jim Fuller	The road is unforgiving and has resulted in fatalities. Do what you have to get between Tavern and cemetery, lets make a safe road.
Kenneth Pate	The existing road is narrow and dangerous, people speed to get around you. We need 4-lane all the way. The best option it would be a much safer road.
Allan Newland	In favor of 4-lane, lack of improvements on SR 126 have resulted in a loss of businesses. It will not be built all at once but need to get started and 4-lane all the way to Cooks Valley Rd.
Jay Schlag	Concerned about traffic during construction and the impact it will have on other local roads. Travel the road frequently it is not a dangerous road drivers on it are dangerous.
Wendy Gordon	People want a safer road and assume a 4-lane divided road is safer. Non limited access 4-lane are not safer. More fatalities happen there than do on 2-lanes.
Dave Dots	4-lane, no sidewalks - I am in favor of Alt. A (4-lane) but think we can do away with sidewalks. Install traffic lights at major intersection to slow down truck traffic (Cooks Valley, Lemay, Stage Coach, Briarwood, Island, Harr Town, Overhill, and Carolina Pottery). We need to look at the growth in the next 30 to 40 years. We need a 4-lane and straightening the road as much as possible.
Mr. Vaulx	For Modified B - Owner of Yancy's Tavern; you can buy and demolish National Register property you just can't use federal funds to do it. Your not supposed to adversely impact an historic site. I like missing the cemetery, but don't overbuild the road. I favor the Modified B
Rena Robinette	Not in favor of road widening if it going to impact the cemetery. The previously proposed Stone Dr. to the Airport would alleviate some of the traffic on SR 126 and should be reconsidered.
Betty Feathers	Thank you for lowering the speed limit to 45 mph.
Scott Mendenhall	Favor 4-lane all the way because of accidents.
Keith Elton	Suggest instead of closing Shuler Ave. and SR 126 close Shuler Ave. at the other end where it comes off Cooks Valley Rd. Shuler DR. and Lemay and Peers St. are overwhelmed now with traffic coming off Cooks Valley Rd. SR 126 is a perfectly good road. The problem is drivers not paying attention.
Tom Floyd	(Trinity Lane Connector) - On Alt. B Modified it is no clear to me why the Trinity Lane connector is taking land off my property.
Erwin Holman	Want to make sure I continue to have access to SR 126 (Gravel Top Rd.).
Fred Johnson	Make the road for the living not the dead.

Appendix C
Concurrence Point 3
Agency Comments and Responses

CONCURRENCE POINT 3 AGENCY COMMENTS AND RESPONSES

The following comments were received from TESA participating agencies in response to the Concurrence Point 3 Package. Responses were distributed on October 19, 2011.

U.S. ARMY CORPS OF ENGINEERS, NASHVILLE DISTRICT
Date of Comment September 9, 2011

Comment: We have reviewed the draft EIS document and concur with the information in the Preliminary DEIS. Also, enclosed is a signed concurrence document form.

Response: N/A

TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION
Date of Comment September 19, 2011

Division of Air Pollution Control
Comment: This project is in an area designated as attainment/unclassified for the National Ambient Air Quality Standards (NAAQS); therefore, a transportation conformity determination is not required.

Response: A statement to this effect will be included in the Air Quality Section of the DEIS.

Comment: The agency's other interests concern the control of fugitive dust and equipment exhaust emissions during the construction phase, and the assurance that any structures requiring demolition are asbestos free, as per the requirements of Chapter 1200-3-11, Hazardous Materials. The open burning regulations have changed dramatically. Before burning any wood waste, please refer to Chapter 12-3-4, Open Burning Rules. We also suggest contacting other regulatory agencies.

Response: TDOT will adhere to the most recent applicable Federal and State rules and regulations as they relate to Hazardous Materials and open burning and will include the applicable citations in the construction contract.

Division of Solid Waste Management
Comment: English Cabinets located at 5236 Memorial Blvd., is a possible area of interest that has not been addressed.

Response: English Cabinets will be evaluated as a potential hazardous waste site prior to submittal of the Final EIS.

Division of Underground Storage Tanks
Comment: The DEIS does not list the Division of Underground Storage Tanks (DUST) as having responded to CP 1 and CP 2. *(Note: No DUST comments were received in association with CP1 and CP2. DUST comments received in response to CP3 have been addressed in the DEIS.)*

Response: DUST comments have been received and are being investigated.

Comment: A new underground storage tank (UST) facility, People's Food Store Facility ID #1-820631, located at 3104 Memorial Blvd,; Kingsport, TN 37660, has become active since CP 1 and CP 2 were reviewed.

Response: People's Food Store will be evaluated as a potential hazardous waste site prior to submittal of the Final EIS.

Comment: CP 3 does not address the following UST facilities included in the review of CP 1 and CP 2:

Former Amoco Station (ID #1-820435), 3101 Memorial Blvd., Kingsport, TN 37664: Tanks Permanently out of Service (POS).

Former Garden Basket Convenience Center (ID #1-820144), 3177 Memorial Blvd., Kingsport, TN 37660: Tanks POS; Contamination case closed 2/2/2011.

Former Chevron Facility #49739 (ID #1-820538), 3801 Memorial Blvd., Kingsport, TN 37660: Tanks POS; Contamination case closed 7/20/2011.

Former Cherokee Food Store #13 (ID #1-820029), 5703 Memorial Blvd., Kingsport, TN 37660: Tanks POS; Contamination case close 5/17/2009.

Sunbridge Care and Rehabilitation (ID #1-820516), Dba Hillside Manor 3641 Memorial Blvd., Kingsport, TN 37664.

Richard Chadbourne property (ID #1-829003), 5340 Memorial Blvd., Kingsport, TN 37660

Response: All of the UST listed facilities are among the 111 sites investigated in the Phase I Survey but the Richard Chadbourne Site. They were not identified within the 1000-foot study corridor as impacted and were not recommended for further review. A copy of the Phase I Site Assessment is on file at TDOT.

The Richard Chadbourne Site was not on the original UST site list and will be evaluated prior to the FEIS. It is however, currently listed as Permanently Out of Service (POS).

Division of Water Pollution Control
Comment: An impaired stream (Booher Creek) is near the intersection of SR 126 and I-81. The cause of the impairment is Escherichia coli due to livestock grazing in the riparian or shoreline zones. There are no known Exceptional Tennessee Waters (ETW) within the project study area. Streams may be assessed during the permitting process if the proposed activity is determined to be degradation. If these streams are found to be ETW or impaired due to habitat alteration, in-system mitigation may be required.

Response: The impact to Booher Creek will be evaluated prior to submittal of the FEIS.

TENNESSEE WILDLIFE RESOURCES AGENCY
Date of Comment September 23, 2011

Comment: On page vii, Section S.4.6 entitled "Protected Species" of the summary section, the following statement is made: "The proposed project will not impact any federally listed, threatened, or endangered species or critical habitat". It is our understanding that bat surveys have not been completed to determine potential impact to the Indiana bat. It is our opinion that the sentence should be reworded to read: "The proposed project is not likely to affect any federally listed, threatened, or endangered species or critical habitat."

Response: The requested revision will be made.

Comment: On page xi, Section S.9.1, entitled "Water Quality Impact Minimization/Mitigation", the statement is made: "Best Management Practices will include but not limited to:" and then lists some broad practices. We would like to see more specific language regarding compensatory stream mitigation for impacts to these resources; such as "Stream mitigation will be compliant with the 'Stream Mitigation Guidelines for the State of Tennessee' by the Tennessee Department of Environment and Conservation, Division of Water Pollution Control, Natural Resources Section and regulations of the U.S. Army Corps of Engineers.

Response: This section has been removed at the request of FHWA. The greensheets now only reflect project specific Environmental Commitments, and not requirements that pertain to all construction projects and are handled in the permitting process.

Comment: On page 117 in Chapter 3, Section 3.5.3, entitled "Federally Listed and Proposed Threatened and Endangered Species", it lists the Bald Eagle (*Haliaeetus leucocephalus*) as a federally threatened species, which is inaccurate. Bald eagles are state listed as "Wildlife-In-Need-Of-Management."

Response: The status of the Bald Eagle will be corrected.

Comment: On page 117 in Chapter 3, Section 3.5.4, entitled "State Listed Species", it is stated: "Efforts have been made to identify Federal and State-listed species in the project impact area." It is our opinion that a description of the "efforts" should be included in this section of the final Environmental Impact Statement for this proposed project.

Response: This is addressed in the separate Ecological Study and will be summarized in this section.

Comment: On page 121 in Chapter 3, the title of TABLE 3.5.2: entitled "ANIMALS IDENTIFIED WITHIN SULLIVAN COUNTY BY TWRA (1 OF 2)" should be reworded to read "ANIMALS IDENTIFIED WITHIN SULLIVAN COUNTY BY TWRA AND TDEC (1 OF 2)", since this information was provided to TDOT by TDEC and since TWRA does not have regulatory authority of the Stonefly (*Allocapnia brooksi*), the Cherokee Clubtail Dragonfly (*Gomphus consanguis*), the Cave Spider (*Nesticus paynei*), and the Diana Fritillary (*Speyeria Diana*). We also request that the state status of "Wildlife-In-Need-Of-Management" be included in the table for the following species" Tangerine Darter

(*Percina aurantiaca*), Blotchside Logperch (*Percina burtoni*), Bald Eagle (*Haliaeetus leucocephalus*) Swainson's Warbler (*Limnothlypis swainsonii)*, Common Barn Owl (*Tyto alba*), Hairy-tailed Mole (*Parascalops breweri*), Smoky Shrew (*Sorex fumeus*) and the Meadow Jumping Mouse (*Zapus hudsonius*). The Sharphead Darter (*Etheostoma acuticeps*), the Tennessee Dace (*Phoxinus tennesseensis*), and the Least Weasel (*Mustela nivalis*) have no Tennessee Wildlife Resources Agency state status. The state status for the Longhead Darter (*Percina macrocephala*) is threatened.

Response: The suggested changes will be made.

Comment: On page 139 in Chapter 4, Section 4.0.1 Terrestrial Ecology, second paragraph, second to last sentence, the statement is made "As habitats are encroached upon most wildlife will adjust to changes in their environment. Displaced wildlife species will move to similar habitats in nearby areas for refuge. The proposed project will have a minor impact on local mammals and birds." It is the opinion of the Tennessee Wildlife Resources Agency that as available habitat is reduced due to the construction of this road project, the carrying capacity and/or necessary specie niche requirements may not be met resulting in loss of local wildlife. We would also prefer to see the statement, "The proposed project will result in minimal loss of wildlife habitat and local wildlife populations." Instead of the statement "The proposed project will have a minor impact on local mammals and birds." that currently exists in the document.

Response: The suggested revision will be made.

U.S. FISH AND WILDLIFE SERVICE
Date of comment September 21, 2011

Comment: Our office concurred with the adequacy of a bat study proposal for this project dated July 14, 2011. Although the study was likely completed during the 2011 survey season, we have yet to see the results and have not provided our concurrence on TDOT's effect determination for the Indiana Bat (*Myotis sodalis*). We withhold our Section 7 comments until this species has been properly coordinated.

Response: The Bat Study was sent to FHWA on 10/21/11 for their review and submittal to USFWS. TDOT will include USFWS Section 7 comments when received in the NEPA document and take appropriate action as necessary. (*Note: Since CP3, USFWS on November 17, 2011 concurred with TDOT's finding of "not likely to adversely affect" the Indiana Bat.*)

Comment: We note that Section 4.9.2, Mitigation Measures for Impacted Streams, estimates costs for stream mitigation based on "the U.S. Army Corps of Engineers ratio of 1.5:1 linear feet." Currently, there is no sanctioned stream banking instrument in Tennessee and the only approved State in-lieu fee program is the Tennessee Stream Mitigation Program. They require a 1:1 mitigation ratio at $200/linear foot for all stream loss if total impacts to a stream exceed 200 linear feet. Furthermore, all linear feet of riprap must be mitigated at a 0.75:1 ratio or $150/linear foot if the riprapped channel extends beyond 50 linear feet. We recommend that the currently sanctioned ratios and values be applied to estimate stream mitigation costs for this project and that the EIS reflect this correction.

Response: TDOT will implement the current sanctioned ratios and values. Section 4.9.2 will be revised.

Comment: In a May 26, 2005 public meeting, a petition was presented to the project management team to make improvements to but maintain the highway as a 2-lane facility (DEIS, p. 196). This petition included 1,124 individual signatures concerned with the potential for increase and severity of traffic accidents with a 4-lane facility design and for impact to the community from destruction of homes and businesses. For all intents and purposes, Alternative B is the only build alternative under review as it is a refined Alternative A (Section 2.1, last paragraph). Even with the inclusion of a 3-lane section, this project would result in substantial numbers of residential and business displacements which, according to section 4.4.2, the local market is not capable of supporting. Furthermore, grave relocations would be necessary with either alternative (Table A) and would be viewed unfavorably by the community. Given these constraints, constructing along a new alignment might be a better option.

Response: During the Context Sensitive Solutions (CSS) process, a Community Resource Team consisting of local citizens and the local planning organization was organized to assist TDOT with the development of alternatives to be evaluated in the DEIS. The alternatives in the DEIS, as well as the cross-sections were based on recommendations by the Community Resource Team. A new location alternative was not suggested by the team.

Appendix D
June 11, 2013
SHPO Response Letter for Yancey's Tavern

SR-126

TENNESSEE HISTORICAL COMMISSION
DEPARTMENT OF ENVIRONMENT AND CONSERVATION
2941 LEBANON ROAD
NASHVILLE, TN 37243-0442
(615) 532-1550

June 11, 2013

Ms. Martha Carver
Tennessee Department of Transportation
505 Deaderick St/900
Nashville, Tennessee, 37243-0349

RE: FHWA, EFFECT DETERMINATION, ALTERNATIVE B MODIFIED/SR-126 IMPVTS./PIN# 105467.00, KINGSPORT, SULLIVAN COUNTY

Dear Ms. Carver:

Pursuant to your request, received on Wednesday, June 5, 2013, this office has reviewed documentation concerning the above-referenced undertaking. This review is a requirement of Section 106 of the National Historic Preservation Act for compliance by the participating federal agency or applicant for federal assistance. Procedures for implementing Section 106 of the Act are codified at 36 CFR 800 (Federal Register, December 12, 2000, 77698-77739)

Based on the information provided, we find that the project area contains a cultural resource eligible for listing in the National Register of Historic Places: Yancey's Tavern. We further find that the project as currently proposed will not adversely affect this resource. Unless project plans change, this office has no objection to the implementation of this project. Should project plans change, please contact this office to determine what additional action, if any, is necessary.

I wish to take this opportunity to commend your on-going good work and that of Ms. Tammy Sellers in bringing this case to successful completion of Section 106 review. You both deserve great credit in melding the mission of your agency with that of historic preservation. Often, this is a difficult task, and you both accomplished it with remarkable diligence and fortitude. As Tennessee SHPO, I want you both to know how much I appreciate it.

Sincerely,

E. Patrick McIntyre, Jr.
Executive Director and
State Historic Preservation Officer

EPM/jyg

Appendix E
November 17, 2011
USFWS Letter regarding the Indiana Bat

United States Department of the Interior

FISH AND WILDLIFE SERVICE
446 Neal Street
Cookeville, TN 38501

November 17, 2011

Ms. Leigh Ann Tribble
Federal Highway Administration
Tennessee Division Office
404 BNA Drive, Suite 508
Nashville, Tennessee 37217

Subject: FWS #12-CPA-0072. Proposed construction to State Route 126 (Memorial Boulevard) from Center Street to Interstate 81; PIN# 105467.00, P.E. 82085-1225-14, Sullivan County, Tennessee.

Dear Ms. Tribble:

Thank you for your letter dated October 26, 2011, transmitting acoustic and mist netting survey results for the proposed construction to State Route 126 from Center Street to Interstate 81 in Sullivan County, Tennessee. At the request of our office, surveys were conducted along the proposed corridor to determine if the area is being utilized as summer roosting habitat by the federally endangered Indiana bat (*Myotis sodalis*). Personnel of the U.S. Fish and Wildlife Service have reviewed the information provided and offer the following comments.

Joint mist netting and acoustical studies were performed from August 3 through August 10, 2011, at six sites determined to contain suitable habitat for the Indiana bat. The acoustical study resulted in the recording of 883 bat calls, of which none were identified as Indiana bats. The mist netting efforts resulted in the capture of 26 bats, of which two individuals were federally endangered gray bats *(Myotis grisescens)*. The Tennessee Division Office agrees with the determination made by the Tennessee Department of Transportation (TDOT) that the project is "not likely to adversely affect" the Indiana bat because none were observed during surveys.

Due to negative Indiana bat surveys, we concur with TDOT's finding of "not likely to adversely affect" for the Indiana bat. Although it is likely that this project would have an insignificant effect on the Indiana bat, we would appreciate consideration given to the removal of trees with a DBH (diameter at breast height) of five inches or greater from October 15 through March 31 to further minimize potential for harm to the Indiana bat. Based on the best information available at this time, we believe that the requirements of section 7 of the Endangered Species Act of 1973, as amended, are fulfilled. Obligations under the Act must be reconsidered if (1) new information reveals impacts

of the proposed action that may affect listed species or critical habitat in a manner not previously considered, (2) the proposed action is subsequently modified to include activities which were not considered during this consultation, or (3) new species are listed or critical habitat designated that might be affected by the proposed action.

The capture of two gray bats during survey efforts would indicate that this species utilizes the area streams as travel/feeding corridors. Our database indicates that the nearest gray bat cave is Morrell Cave, approximately 10 miles east of the project. We are unaware of any caves that would be impacted by the project and are concerned mainly for water quality along travel/feeding corridors. Best management practices, to include stringent erosion and sediment control measures, should be implemented throughout the project to minimize potential for harm to the gray bat.

If you have any questions regarding our comments, please contact John Griffith of my staff at 931/525-4995 or by email at john_griffith@fws.gov.

Sincerely,

Mary E. Jennings
Field Supervisor

APPENDIX I – CONCEPTUAL LAYOUTS

COUNTY	SHEET NO.
Sullivan	1

BEGIN PROJECT

EAST CENTER ST.

TENTATIVE CONSTRUCTION LIMITS

WOODSIDE DR.

OREBANK RD.

WARPATH DR.

MILLER ST.

CENTRAL ST.

CONWAY DR.

SR 126

EDENS RIDGE RD.

TENTATIVE CONSTRUCTION LIMITS

SHIPLEY-JARVIS HOUSE (HISTORIC) TO BE AVOIDED

MATCH LINE STA. SEE SHEET 2

Legend

- PROPOSED ROADWAY
- TENTATIVE CONSTRUCTION LIMITS
- ALTERNATIVE CONSTRUCTION LIMITS
- EXISTING ROADWAY TO BE REMOVED
- PROPOSED SIDEWALK
- PARCEL BOUNDARIES
- RETAINING WALL

SR 126 Improvement Project
From East Center Street to I-81
Sullivan County, Tennessee
PREFERRED ALTERNATIVE

0′ 200′ 400′

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

Sheet 1

COUNTY	SHEET NO.
Sullivan	2

MATCH LINE STA. SEE SHEET 1

MATCH LINE STA. SEE SHEET 3

N

TENTATIVE CONSTRUCTION LIMITS

FIRE STATION

HEATHER LN.

HAWTHORNE ST.

BEVERLY HILL ST.

BUSBEE ST.

KENT ST.

HILLCREST DR.

SR126

SR 93 (JOHN B. DENNIS HWY.)

STRATFORD RD.

END FOUR LANE SECTION
BEGIN FIVE LANE SECTION

KITE ST.

Legend

- PROPOSED ROADWAY
- TENTATIVE CONSTRUCTION LIMITS
- ALTERNATIVE CONSTRUCTION LIMITS
- EXISTING ROADWAY TO BE REMOVED
- PROPOSED SIDEWALK
- PARCEL BOUNDARIES
- RETAINING WALL

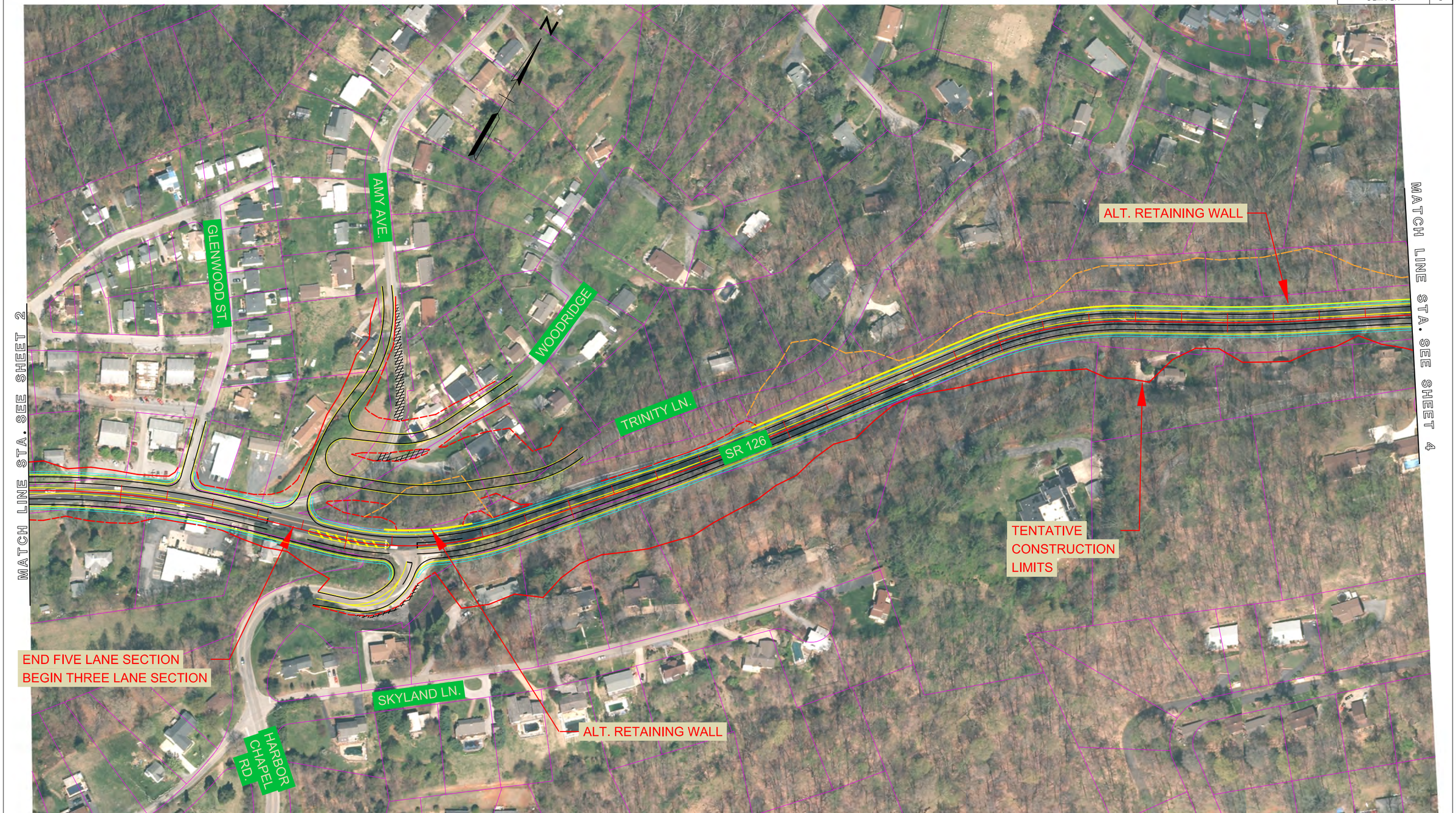
SR 126 Improvement Project
From East Center Street to I-81
Sullivan County, Tennessee
PREFERRED ALTERNATIVE

0′ 200′ 400′

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

Sheet 2

COUNTY	SHEET NO.
Sullivan	3



Legend

- PROPOSED ROADWAY
- TENTATIVE CONSTRUCTION LIMITS
- ALTERNATIVE CONSTRUCTION LIMITS
- EXISTING ROADWAY TO BE REMOVED
- PROPOSED SIDEWALK
- PARCEL BOUNDARIES
- RETAINING WALL

SR 126 Improvement Project
From East Center Street to I-81
Sullivan County, Tennessee
PREFERRED ALTERNATIVE

0′ 200′ 400′

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

Sheet 3

COUNTY	SHEET NO.
Sullivan	4

N

MATCH LINE STA. SEE SHEET 3

MATCH LINE STA. SEE SHEET 5

TANGLEWOOD RD.

OLD STAGE RD.

SR 126

BRIARWOOD RD.

TENTATIVE CONSTRUCTION LIMITS

ALT. RETAINING WALL

Legend

- PROPOSED ROADWAY
- TENTATIVE CONSTRUCTION LIMITS
- ALTERNATIVE CONSTRUCTION LIMITS
- EXISTING ROADWAY TO BE REMOVED
- PROPOSED SIDEWALK
- PARCEL BOUNDARIES
- RETAINING WALL

SR 126 Improvement Project
From East Center Street to I-81
Sullivan County, Tennessee
PREFERRED ALTERNATIVE

0′ 200′ 400′

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

Sheet
4

COUNTY	SHEET NO.
Sullivan	5

OLD STAGE RD.

TENTATIVE CONSTRUCTION LIMITS

ETHEL DR.

SR 126

HOLIDAY RD.

ALT. RETAINING WALL

MATCH LINE STA. SEE SHEET 4

MATCH LINE STA. SEE SHEET 6

MATCH LINE

Legend

- PROPOSED ROADWAY
- TENTATIVE CONSTRUCTION LIMITS
- ALTERNATIVE CONSTRUCTION LIMITS
- EXISTING ROADWAY TO BE REMOVED
- PROPOSED SIDEWALK
- PARCEL BOUNDARIES
- RETAINING WALL

SR 126 Improvement Project
From East Center Street to I-81
Sullivan County, Tennessee
PREFERRED ALTERNATIVE

0′ 200′ 400′

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

Sheet 5

COUNTY	SHEET NO.
Sullivan	6

EDENS VIEW RD.

YANCEY'S TAVERN HISTORIC BOUNDARY - TO BE AVOIDED

CHESTNUT RIDGE RD.

TENTATIVE CONSTRUCTION LIMITS

MATCH LINE STA. SEE SHEET 5

MATCH LINE STA. SEE SHEET 7

SR 126

EAST LAWN MEMORIAL GARDENS CEMETERY

LEMAY DR.

SHULER DR.

PARKER ST. CONNECTOR

Legend

- PROPOSED ROADWAY
- TENTATIVE CONSTRUCTION LIMITS
- ALTERNATIVE CONSTRUCTION LIMITS
- EXISTING ROADWAY TO BE REMOVED
- PROPOSED SIDEWALK
- PARCEL BOUNDARIES
- RETAINING WALL

SR 126 Improvement Project
From East Center Street to I-81
Sullivan County, Tennessee
PREFERRED ALTERNATIVE

0′ 200′ 400′

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

Sheet
6

COUNTY	SHEET NO.
Sullivan	7

YANCEY'S TAVERN HISTORIC BOUNDARY - TO BE AVOIDED

YANCEY'S TAVERN

4' HAND CUT STONE BOX CULVERT

PROP. RETAINING WALL

CHESTNUT RIDGE RD.

FISCHER DR.

TENTATIVE CONSTRUCTION LIMITS

SR 126

MATCH LINE STA. SEE SHEET 6

PROP. RETAINING WALL

EAST LAWN MEMORIAL GARDENS CEMETERY

COOKS VALLEY RD

MATCH LINE STA. SEE SHEET 8

N

Legend

- PROPOSED ROADWAY
- TENTATIVE CONSTRUCTION LIMITS
- ALTERNATIVE CONSTRUCTION LIMITS
- EXISTING ROADWAY TO BE REMOVED
- PROPOSED SIDEWALK
- PARCEL BOUNDARIES
- RETAINING WALL

SR 126 Improvement Project
From East Center Street to I-81
Sullivan County, Tennessee
PREFERRED ALTERNATIVE

0′ 200′ 400′

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

Sheet 7

COUNTY	SHEET NO.
Sullivan	8



Legend

- PROPOSED ROADWAY
- TENTATIVE CONSTRUCTION LIMITS
- ALTERNATIVE CONSTRUCTION LIMITS
- EXISTING ROADWAY TO BE REMOVED
- PROPOSED SIDEWALK
- PARCEL BOUNDARIES
- RETAINING WALL

SR 126 Improvement Project
From East Center Street to I-81
Sullivan County, Tennessee
PREFERRED ALTERNATIVE

0′ 200′ 400′

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

Sheet 8

COUNTY	SHEET NO.
Sullivan	9

MATCH LINE STA. SEE SHEET 8

N

SR 126

COUNTRY DR.

TENTATIVE CONSTRUCTION LIMITS

FALL CREEK RD.

CREE ST.

MATCH LINE STA. SEE SHEET 10

Legend

- PROPOSED ROADWAY
- TENTATIVE CONSTRUCTION LIMITS
- ALTERNATIVE CONSTRUCTION LIMITS
- EXISTING ROADWAY TO BE REMOVED
- PROPOSED SIDEWALK
- PARCEL BOUNDARIES
- RETAINING WALL

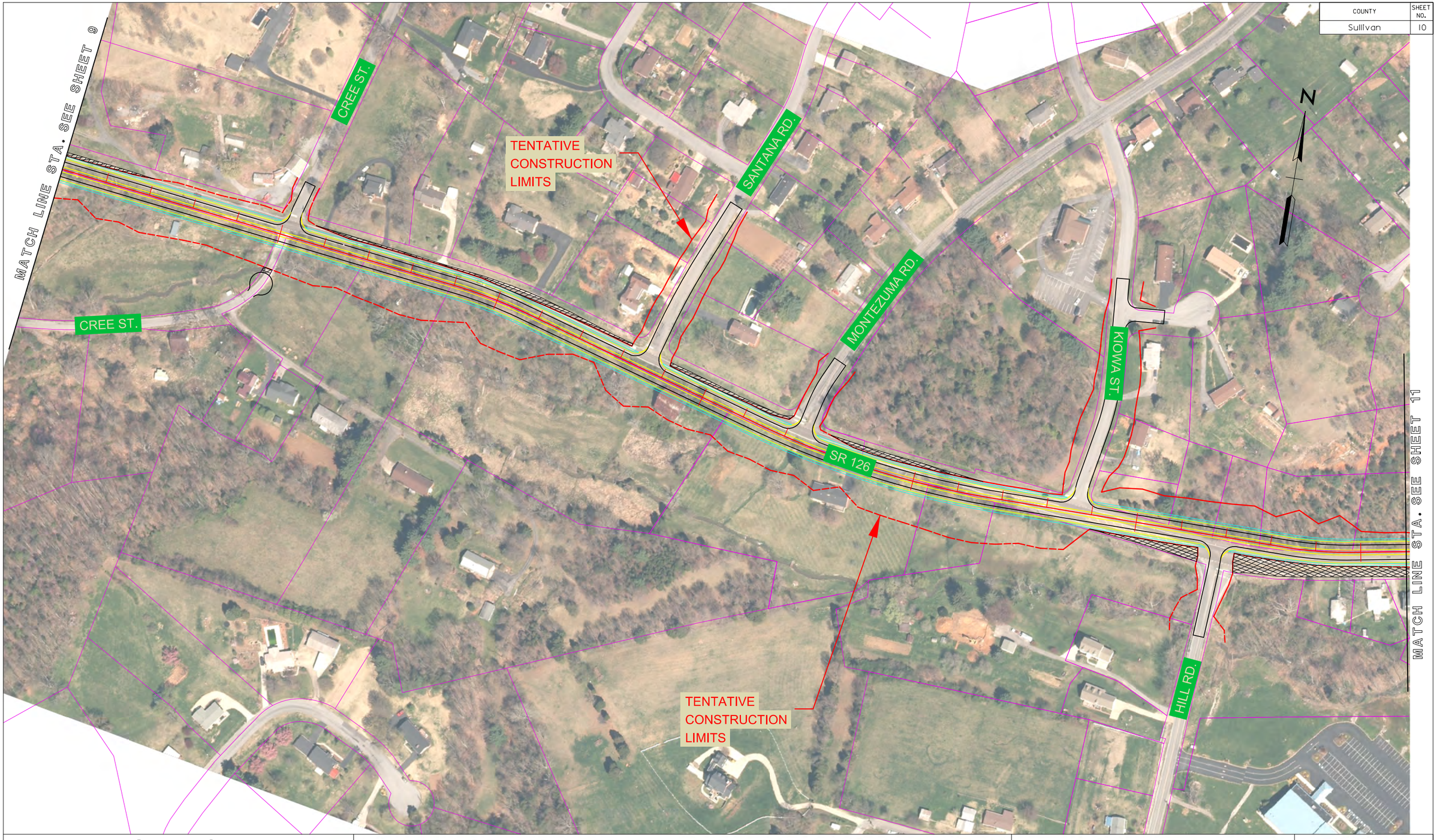
SR 126 Improvement Project
From East Center Street to I-81
Sullivan County, Tennessee
PREFERRED ALTERNATIVE

0′ 200′ 400′

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

Sheet 9

COUNTY	SHEET NO.
Sullivan	10



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- TENTATIVE CONSTRUCTION LIMITS
- ALTERNATIVE CONSTRUCTION LIMITS
- EXISTING ROADWAY TO BE REMOVED
- PROPOSED SIDEWALK
- PARCEL BOUNDARIES
- RETAINING WALL

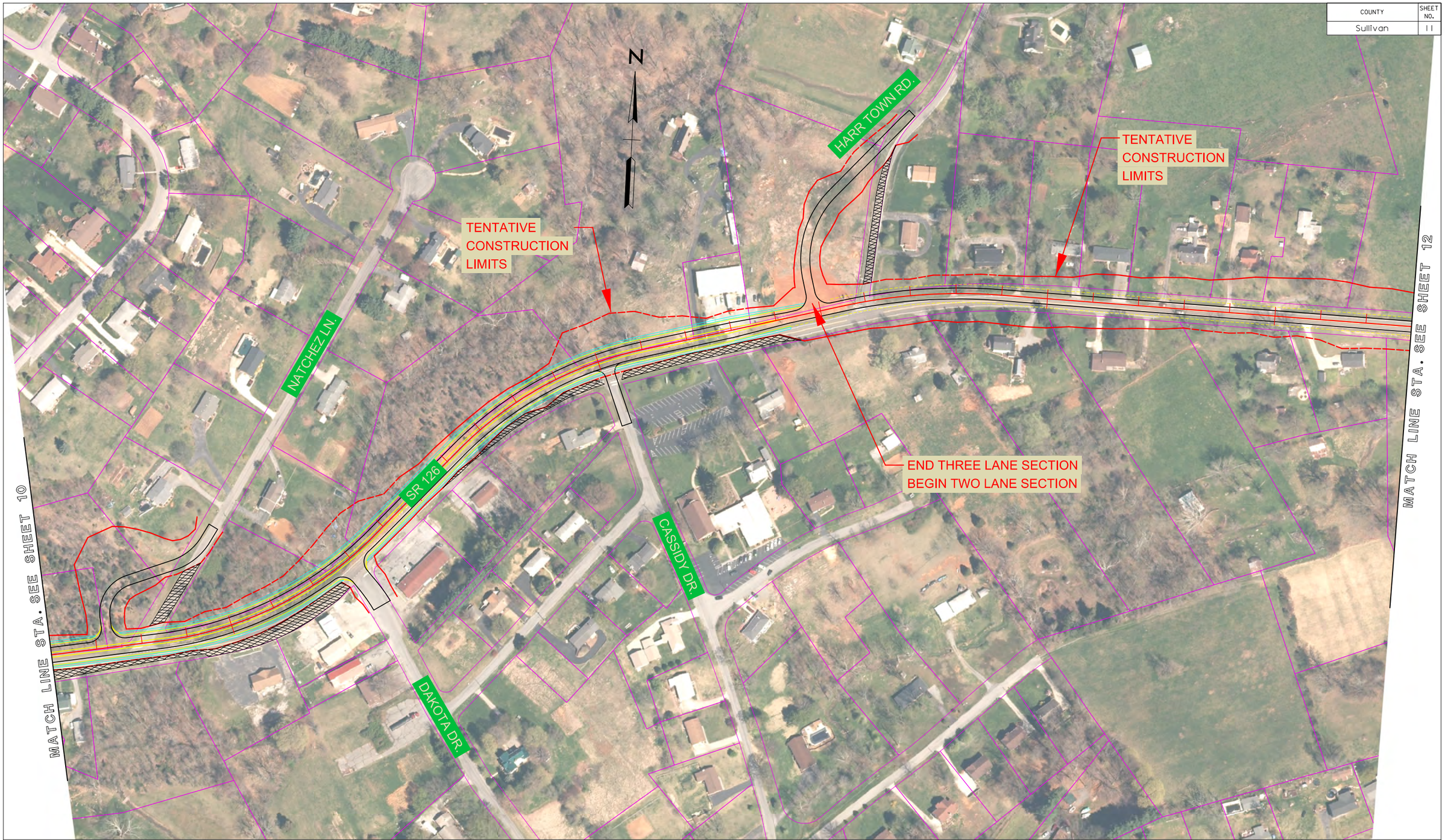
SR 126 Improvement Project
From East Center Street to I-81
Sullivan County, Tennessee
PREFERRED ALTERNATIVE

0′ 200′ 400′

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

Sheet 10

COUNTY	SHEET NO.
Sullivan	11



Legend

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- TENTATIVE CONSTRUCTION LIMITS
- ALTERNATIVE CONSTRUCTION LIMITS
- EXISTING ROADWAY TO BE REMOVED
- PROPOSED SIDEWALK
- PARCEL BOUNDARIES
- RETAINING WALL

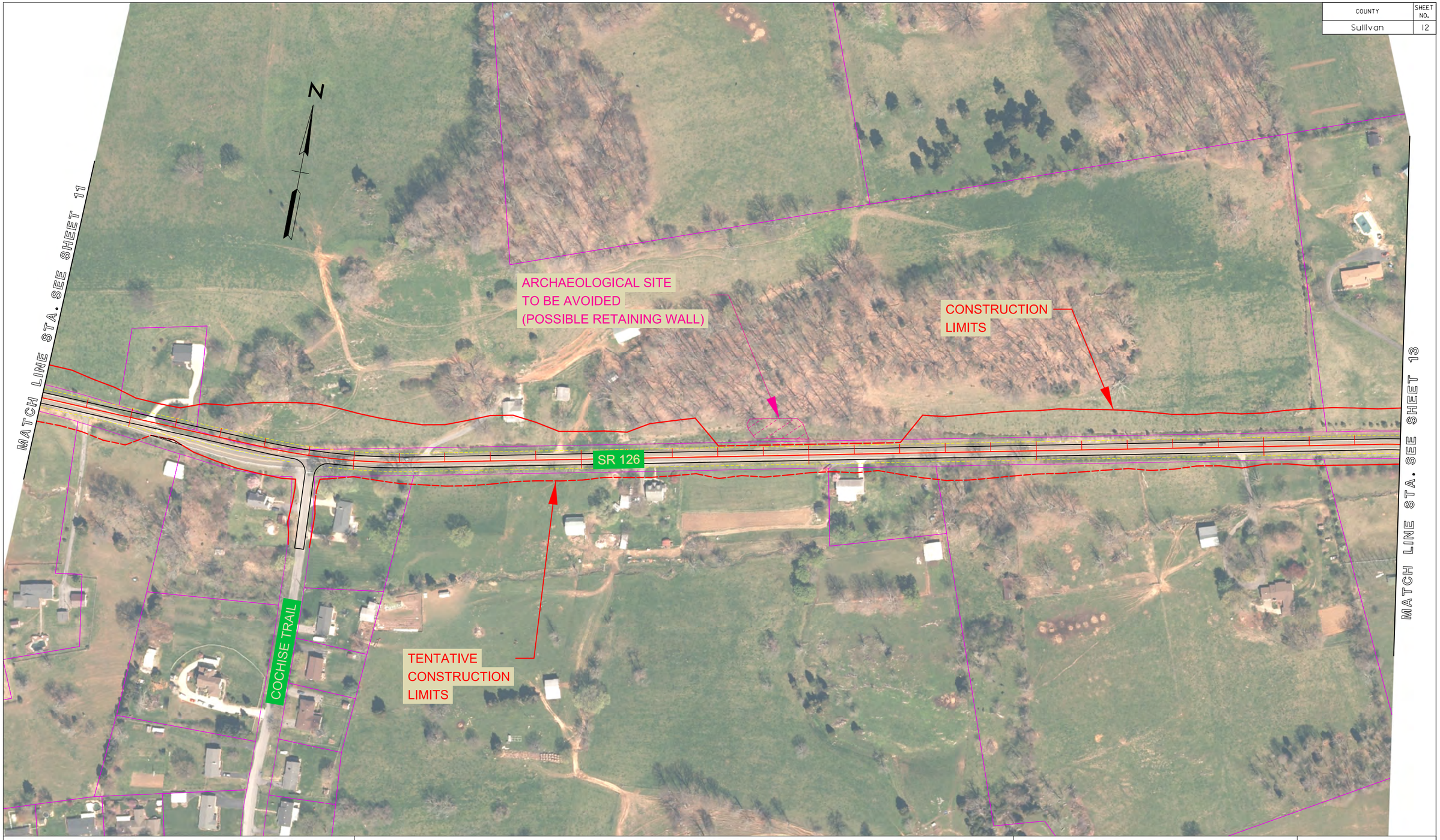
SR 126 Improvement Project
From East Center Street to I-81
Sullivan County, Tennessee
PREFERRED ALTERNATIVE

0′ 200′ 400′

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

Sheet
11

COUNTY	SHEET NO.
Sullivan	12



Legend

- PROPOSED ROADWAY
- TENTATIVE CONSTRUCTION LIMITS
- ALTERNATIVE CONSTRUCTION LIMITS
- EXISTING ROADWAY TO BE REMOVED
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- PARCEL BOUNDARIES
- RETAINING WALL

SR 126 Improvement Project
From East Center Street to I-81
Sullivan County, Tennessee
PREFERRED ALTERNATIVE

0′ 200′ 400′

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

Sheet
12

COUNTY	SHEET NO.
Sullivan	13

N

TENTATIVE CONSTRUCTION LIMITS

ADAMS ST.

GRAVEL TOP RD.

GRAVEL TOP RD.

SR 126

MATCH LINE STA. SEE SHEET 14

MATCH LINE STA. SEE SHEET 12

ARCHAEOLOGICAL SITES TO BE AVOIDED

SAMLOLA RD.

TENTATIVE CONSTRUCTION LIMITS

Legend

- PROPOSED ROADWAY
- TENTATIVE CONSTRUCTION LIMITS
- ALTERNATIVE CONSTRUCTION LIMITS
- EXISTING ROADWAY TO BE REMOVED
- PROPOSED SIDEWALK
- PARCEL BOUNDARIES
- RETAINING WALL

SR 126 Improvement Project
From East Center Street to I-81
Sullivan County, Tennessee
PREFERRED ALTERNATIVE

0′ 200′ 400′

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

Sheet
13

COUNTY	SHEET NO.
Sullivan	14

MATCH LINE STA. SEE SHEET 13

GRAVEL TOP RD

SR 126

TENTATIVE CONSTRUCTION LIMITS

N

OVERHILL DR

END PROJECT

TENTATIVE CONSTRUCTION LIMITS

CAROLINA POTTERY DR.

INTERSTATE 81

Legend

- PROPOSED ROADWAY
- TENTATIVE CONSTRUCTION LIMITS
- ALTERNATIVE CONSTRUCTION LIMITS
- EXISTING ROADWAY TO BE REMOVED
- PROPOSED SIDEWALK
- PARCEL BOUNDARIES
- RETAINING WALL

SR 126 Improvement Project
From East Center Street to I-81
Sullivan County, Tennessee
PREFERRED ALTERNATIVE

0′ 200′ 400′

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

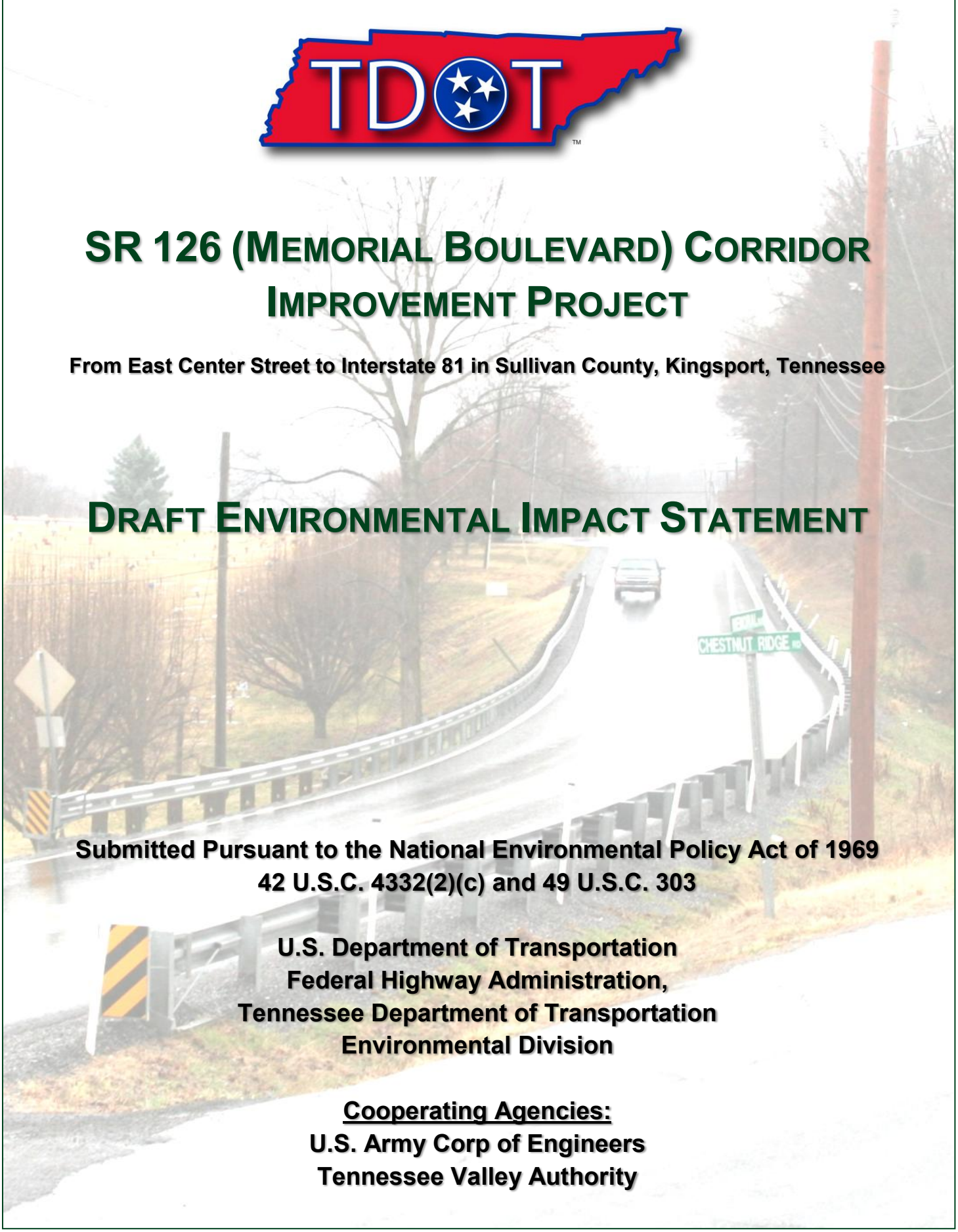
Sheet
14

APPENDIX J – 2012 DRAFT ENVIRONMENTAL IMPACT STATEMENT (INCLUDING ATTACHMENTS AND APPENDICES)

SR 126 (MEMORIAL BOULEVARD) CORRIDOR IMPROVEMENT PROJECT

From East Center Street to Interstate 81 in Sullivan County, Kingsport, Tennessee

DRAFT ENVIRONMENTAL IMPACT STATEMENT



Submitted Pursuant to the National Environmental Policy Act of 1969
42 U.S.C. 4332(2)(c) and 49 U.S.C. 303

U.S. Department of Transportation
Federal Highway Administration,
Tennessee Department of Transportation
Environmental Division

Cooperating Agencies:
U.S. Army Corp of Engineers
Tennessee Valley Authority

SR 126 (MEMORIAL BOULEVARD) CORRIDOR IMPROVEMENT PROJECT

From East Center Street to Interstate 81 in Sullivan County, Kingsport, Tennessee

DRAFT ENVIRONMENTAL IMPACT STATEMENT

Submitted Pursuant to the National Environmental Policy Act of 1969
42 U.S.C. 4332(2)(c) and 49 U.S.C. 303

U.S. Department of Transportation
Federal Highway Administration,
Tennessee Department of Transportation
Environmental Division

Cooperating Agencies:
U.S. Army Corp of Engineers
Tennessee Valley Authority

The State Route 126 (Memorial Boulevard) improvement project is a joint effort between the Tennessee Department of Transportation (TDOT) and the Federal Highway Administration (FHWA). The limits of the 8.4 mile long project extend from East Center Street, within the City of Kingsport's City Limits, east to Interstate 81 (I-81) in Sullivan County, Tennessee. Two Build Alternatives and the No-Build Alternative are currently under consideration for this project.

1/5/2012
Date

Pamela Kordenbrock
Federal Highway Administration, TN Division
Division Administrator

1/9/2012
Date

Suzanne Herron
Tennessee Department of Transportation

For additional information concerning this document contact:

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Planning and Program Management
Team Leader
Federal Highway Administration
Tennessee Division Office
404 BNA Drive Suite 508
Nashville, TN 37217
(615) 781-5770

Ms. Suzanne Herron
Director
Environmental Division
Tennessee Department of Transportation
505 Deaderick Street, Suite 900
Nashville,TN 37243
(615) 741-2612

Summary



SUMMARY

S.1 GENERAL PROJECT DESCRIPTION

The Tennessee Department of Transportation (TDOT), in cooperation with the Federal Highway Administration (FHWA), is proposing to improve State Route (SR) 126. The limits of the 8.4 mile long project extend from East Center Street, within the City of Kingsport's City Limits, east to Interstate 81 (I-81) in Sullivan County, Tennessee. SR 126 is also known as Memorial Boulevard within the study limits.

SR 126 (Memorial Boulevard) is primarily a two-travel lane facility (one travel lane in each direction) throughout the study corridor. Each travel lane is approximately eleven feet wide. The existing right-of-way varies from approximately sixty feet to three hundred feet wide. The speed limit varies from thirty-five to fifty miles per hour. Many sharp curves and steep grades along the route are signed with supplemental speed plaques advising lower safe travel speeds than the posted speed limit. Many roadside hazards are located in close proximity to the travel lanes. Narrow shoulders are present along the majority of the route. Sidewalks are present along approximately 0.1 mile (1%) of the 8.4 mile long corridor. Curbs are located sporadically along the route, with the majority of the corridor having roadside ditches.

Two Build Alternatives and the No-Build Alternative are currently under consideration for this project. The Build Alternatives improve SR 126 (Memorial Boulevard) to a four-lane facility (two travel lanes in each direction) within the commercial and residential areas of the western half of the study corridor. The eastern half of the study corridor, which is rural in nature, will remain a two-travel lane facility. Improved shoulders will be provided along the entire corridor and sidewalks will be extended to the majority of the commercial and residential areas.



S.2 PURPOSE AND NEED OF THE PROPOSED ACTION

The purpose of the project is to provide a safe, efficient route for local traffic between the City of Kingsport and I-81. Improvements should be sensitive to the context of the different land uses along the corridor. Specifically, the improvements along the western half of the project, which is more commercial and residential, should provide improved access to adjacent businesses and homes and improved pedestrian and bicycle connectivity. The improvements along the eastern half of the project should complement the rural nature of the area.

The needs of the project can be summarized as follows:

- The safety of the route needs to be improved. The crash rates observed along the entire SR 126 (Memorial Boulevard) study corridor exceeded the statewide average crash rates for similar roadway segments.
- The width of the roadway generally needs to be improved. Most of the existing roadway includes 11-foot wide lanes with narrow shoulders.
- The width of the shoulders needs to be improved. The shoulders along the route are typically no wider than 2 feet and often not paved. The narrow shoulders, along with other existing geometric deficiencies, contribute to the high crash rates and create a less than desirable route for pedestrians and bicyclists.
- The geometry of the roadway needs to be improved. Numerous horizontal and vertical curves along the route are inadequate for the posted speed limit.
- Improved access management is needed along the commercial areas of the route. The public cited access onto SR 126 (Memorial Boulevard) as a major problem. Difficulty entering or exiting business parking lots was identified as a significant problem because of uncontrolled access to businesses along the roadway. Many of the access points are located near or within substandard curves or hills that limit sight distance for drivers attempting to turn into or out of the businesses.
- Improved response time for emergency vehicles is needed. With improvements, emergency vehicles would be able to respond more efficiently to emergencies within and near the project corridor. Wider shoulders would enable motorists to pull over and allow the emergency vehicles to pass through to their intended destinations. Current conditions along SR 126 (Memorial Boulevard) do not feature many areas for vehicles to pull over.
- Improved access for mail delivery is needed. Current geometric conditions along SR 126 (Memorial Boulevard) create bottlenecks during mail delivery. Wider shoulders would enable delivery vehicles to depart the travel lane and motorists pass more safely.
- Improved access for school busses is needed. Current geometric conditions along SR 126 (Memorial Boulevard) make it difficult for school busses to make turns. Wider paved roadway widths would improve accessibility for the school busses along the corridor.
- Improved traffic operations are needed along the route.

S.3 ALTERNATIVES

In selecting reasonable alternatives to meet the purpose and need of the project, TDOT consulted with local, state and federal officials and agencies, identified environmentally sensitive areas and held several public involvement meetings in the project corridor. The SR 126 (Memorial Boulevard) project was the initial Context Sensitive Solutions (CSS) Project for

Tennessee. The CSS Process included a Community Resource Team (CRT) that assisted with the development of alternatives. The No-Build and two Build Alternatives are currently under consideration for this project. The final selection of the preferred alternative will not be made until after the impacts of the No-Build and Build Alternatives, comments on the Draft EIS, and the comments from the NEPA Public Hearing have been fully evaluated.

Both of the Build Alternatives were recommended by the Citizens Resource Team (CRT).

S.3.1 No-Build

The No-Build Alternative would leave SR 126 (Memorial Boulevard) between East Center Street and I-81 in its current configuration with no improvements to the roadway other than routine maintenance.

S.3.2 Build Alternative A

Several different typical cross sections are proposed along the SR 126 (Memorial Boulevard) corridor. Build Alternative A improves SR 126 (Memorial Boulevard) to a four-lane facility (two travel lanes in each direction) within the commercial and residential areas of the western half of the study corridor. The eastern half of the study corridor, which is rural in nature, will remain a two-travel lane facility. Improved shoulders will be provided along the entire corridor and sidewalks will be extended to 54% of the corridor within the commercial and residential areas. The wider shoulders and additional sidewalks will promote bicycle and pedestrian usage of the facility. Deficient horizontal and vertical curves will be improved. Additional right-of-way will be required along the entire corridor to accommodate the proposed improvements. **Chapter 2** describes the proposed roadway cross-sections in detail.

The proposed alignment of Alternative A generally follows the existing alignment. The proposed alignment shifts from side to side to minimize impacts, reduce earthwork volumes, simplify constructability, and improve the curvature of the roadway. Despite the effort to minimize impacts, considerable additional right-of-way will be required and many residences and businesses will need to be relocated. Numerous gravesites will also need to be relocated.

In addition to the SR 126 (Memorial Boulevard) roadway typical cross section and alignment improvements, several side road intersection approaches to SR 126 (Memorial Boulevard) are improved. Many of these minor connections intersect SR 126 (Memorial Boulevard) at skewed angles. Realigning side road approaches to intersect to as close to 90 degrees as possible has proven visibility and safety benefits.

Additionally, several intersections are proposed to be closed along SR 126 (Memorial Boulevard). These minor connections to SR 126 (Memorial Boulevard) will be rerouted to connect via improved intersections on neighboring roads. Closing these intersections will improve access control and safety along the route due to the reduction of conflict points.

S.3.3 Build Alternative B

Alternative B is a refinement of Alternative A. Alternative B utilizes the same proposed typical roadway cross sections as Alternative A, but the length of the four-travel lane section is reduced by approximately ½ of a mile. As with Alternative A, improved shoulders will be provided along the entire corridor. Sidewalks will be extended to 59% of the corridor within the commercial and

residential areas. The wider shoulders and additional sidewalks will promote bicycle and pedestrian usage of the facility. Deficient horizontal and vertical curves will be improved. Retaining walls will be utilized with Alternative B in the vicinity of historic Yancey's Tavern and East Lawn Memorial Gardens Cemetery. These modifications were made to minimize impacts to Yancey's Tavern and the East Lawn Memorial Gardens Cemetery located on opposing sides of SR 126 (Memorial Boulevard). It should be noted that numerous gravesites will still need to be relocated with Alternative B. Additional changes incorporated into Alternative B include minor modifications of the proposed centerline to minimize excavation and fill impacts and improve maintenance of traffic during construction. Alternative B subsequently requires less additional right-of-way and impacts fewer residences and businesses than Alternative A. **Chapter 2** describes the proposed roadway cross-sections in detail.

As with Alternative A, in addition to the SR 126 (Memorial Boulevard) roadway typical cross section and alignment improvements, several side road intersection approaches to SR 126 (Memorial Boulevard) are improved or closed. These side road modifications improve the safety and access control along SR 126 (Memorial Boulevard). The side road approaches modified in Alternative B are the same as those in Alternative A. Both of the Build Alternatives were recommended by the Citizens Resource Team (CRT).

S.4 ENVIRONMENTAL IMPACTS

S.4.1 Land Use Impacts

Land use will change as land currently in agricultural, residential, commercial, open farmland, or other uses, is converted to highway right-of-way. Secondary development resulting from the proposed project is likely to occur in the surrounding neighborhoods. Numerous gravesites will be impacted by the Build Alternatives.

The indirect and cumulative impacts to land use involves the conversion of land from agricultural use and open space to residential, and commercial uses, as well as converting commercial uses to residential uses. This conversion is already occurring at various locations in the project area. Based on a review of land use plans prepared by the surrounding communities, as the population rate increases and job opportunities increase, it is likely that the need for more residential and commercial development will continue for decades. These land use changes will result in the loss of wildlife habitat, wetlands, forested areas, farmland, as well as impact the floodplains of the surrounding rivers and streams. The number of acres of potential loss cannot be accurately determined at this time.

S.4.2 Relocation Impacts

Alternative A will result in an estimated two hundred and forty-one (241) residential relocations, forty-three (43) business displacements, and one (1) non-profit displacement. Alternative B will result in one hundred and sixty-two (162) residential relocations, thirty (30) business displacements, and one (1) non-profit displacement.

A study of the real estate market in the project area indicates a market not capable of supporting the one hundred and sixty-two (162) to two hundred and forty-one (241) residential displacements within the immediate project area. Expanding the study beyond the immediate project area reveals a market that can support this large number of relocations, but not easily. It

will be difficult to adequately address the varying needs of all those displaced by this project. Numerous, substantial Last Resort Housing Payments could be expected.

A study of the real estate market in the project area reveals that it is unlikely that the thirty (30) to forty-three (43) business displacees can relocate in the immediate project area. Successful relocation will require many of the businesses to expand their search area beyond the immediate project area.

This project is expected to cause one (1) non-profit displacement (a Kingsport volunteer fire department station) with either alternate. Due to the nature of the non-profit displacement, it will need to relocate in close proximity to its current location. Based on a study of the local real estate market, it is believed that suitable replacement sites do exist, but not in great numbers. This is complicated by the large number of businesses displaced by the project.

S.4.3 Economic Impacts

There will be long-term adverse economic impacts due to the construction of Alternative A or B. Permanent loss of tax revenue would result if a business closes or moves out of the project area due to the thirty (30) (Alternative B) or forty-three (43) (Alternative A) business displacements. The associated residential displacements of one hundred sixty-two (162) for Alternative B and two hundred forty-one (241) for Alternative A will also impact tax revenues.

S.4.4 Environmental Justice

Executive Order 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low Income Populations*, February 11, 1994, requires that the evaluation of federal actions identify and address disproportionately high and adverse human health and environmental impacts on low income and minority populations. The evaluation of the Build Alternatives has revealed no concentration of low-income or minority populations along the corridor. The Build Alternatives will not change the basic social arrangement or character of the project area and would not create a barrier to social interaction.

S.4.5 Hazardous Materials

A number of potential hazardous material sites have been identified within the proposed right-of-way. Additional studies are recommended at three (3) sites within the proposed right-of-way to determine the contents and extent of materials and the specific impacts they may possess to the surrounding community. In the event that hazardous substances or wastes are encountered within the proposed right-of-way of the Build Alternatives, their disposition shall be subject to the applicable sections of the Federal Resources Conservation and Recovery Act (RCRA), as amended, the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), as amended, and the Tennessee Hazardous Waste Management Act of 1983.

The Build Alternatives will involve the removal of buildings and has the potential for encountering friable asbestos. Pursuant to the TDOT Standard Specifications for Road and Bridge Construction (March 2006), the construction contractor must notify the Tennessee Department of Environment and Conservation (TDEC) prior to the demolition of any building in accordance with TDEC policy and regulations. All structures containing friable asbestos must be demolished in accordance with these regulations and policies.

S.4.6 Protected Species

The proposed project is not likely to affect any federally listed, threatened, or endangered species or critical habitat. Although the Indiana Bat is not known to occur in the project area, at the request of the United States Fish and Wildlife Service (USFWS), a bat survey was conducted. Mist nets and field reviews were conducted in the project impact area. No Indiana Bats were located. A copy of the *Indiana Bat (Myotis sodalis) Mist Net Survey*, dated October 2011, is on file at the TDOT Environmental Division Office in Nashville, TN. Based on the best information available at this time, the requirements of section 7 of the Endangered Species Act of 1973, as amended, are fulfilled. Correspondence with the USFWS can be found in **Appendix C**.

S.4.7 Historic Impacts

The goal of **Section 106** is to identify historic properties potentially affected by a Federal undertaking, assess the undertakings effects, and seek ways to avoid, minimize, or mitigate any adverse effects on historic properties.

Two properties protected under Section 106 of the National Historic Preservation Act of 1966 are located in the project area. The Shipley-Jarvis House is eligible for listing in the National Register of Historic Places (NRHP). The house is located on the south side of SR 126 (Memorial Boulevard) near the beginning of the project. No land will be acquired from this site. The second site, Yancey's Tavern, is listed in the NRHP. It is located on the north side of SR 126 (Memorial Boulevard) on Chestnut Ridge Road. SR 126 (Memorial Boulevard) is proposed to be widened to the south side of the roadway. However, it has been determined that widening the roadway will have an "Adverse Visual Effect" on this property. In compliance with 36 CFR 800, a Memorandum of Agreement (MOA) between the SHPO and FHWA to address the adverse effect finding to Yancey's Tavern will be executed prior to approval of the Final Environmental Impact Statement. A more detailed explanation can be found in **Chapter 4**, Historical Impacts.

S.4.8 Archaeological Impacts

A Phase I Cultural Resource Survey identified four archaeological sites in the project area (40SL412, 40SL413, 40SL419, and 40SL421). The proposed Build Alternatives have been modified to avoid impacting these sites. It was determined based on the field survey that no historic archaeological properties would therefore be impacted by the project and no further investigations were needed. The SHPO has concurred in this finding. The SHPO letter can be found in **Appendix B**.

If archaeological materials are uncovered during construction, all construction work in the area of the find will cease. The Tennessee Division of Archaeology (615-741-1588) and the recognized Native American Tribes previously coordinated with will be immediately contacted so a representative of their office may have the opportunity to examine and evaluate the materials.

S.4.9 Section 4(f) Evaluation

As described in **Section S.4.7**, there are two historic properties, one listed and one eligible for listing in the National Register of Historic Places located along the project corridor. The widening of SR 126 (Memorial Boulevard) will not require taking land from these two historic properties. There are no parks, recreation areas, waterfowls or wildlife refuges in the project impact area. No properties protected under Section 4 (f) of the US Department of Transportation Act of 1966 will be impacted in the project area.

The purpose of **Section 4(f)** is to preserve publicly owned land from a public park, recreation area, wildlife or waterfowl refuge, or significant historic site from being used for a transportation project. It requires consideration of avoidance or mitigation of damages.

S.4.10 Executive Order 11990 Wetland Impacts

There are no State or Federal jurisdictional wetlands in the project impact area.

S.5 PERMITS NEEDED

The Build Alternatives will require both State and Federal Water Quality Permits for stream crossings. Section 404 permits from the USACE, National Pollutant Discharge Elimination System (NPDES) permits, and Tennessee Water Quality Permits will be needed. A Section 26a permit or letter of no objection from the Tennessee Valley Authority is also required. TDOT will coordinate any mitigation efforts with Federal and State regulatory agencies before preparing final mitigation plans and submitting permit applications. It is during the permitting process phase that the appropriate compensatory mitigation for the unavoidable impacts of this project will be determined.

S.6 AREAS OF CONTROVERSY AND UNRESOLVED ISSUES

The primary areas of concern related to the Build Alternatives include:

- The displacement of ninety (90) to three hundred and fifty (350) graves, dependent upon which Build Alternative is selected.
- The displacement of one hundred and sixty two (162) to two hundred and forty one (241) residential relocations, dependent upon which Build Alternative is selected.
- The displacement of thirty (30) to forty-three (43) business displacements, dependent upon which Build Alternative is selected.

S.7 STATUTE OF LIMITATIONS ON FILING CLAIMS

The Federal Highway Administration (FHWA) may publish a notice in the Federal Register, pursuant to 23 USC § 139 (I), indicating that one or more Federal agencies have taken final action on permits, licenses, or approvals for this project. If such notice is published, claims seeking judicial review of those Federal agency actions will be barred unless such claims are filed within 180 days after the date of publication of the notice, or written such that a shorter time period as is specified in the Federal laws pursuant to which judicial review of the Federal agency action is allowed. If no notice is published, then the periods of time that otherwise are provided by the Federal laws governing such claims will apply.

S.8 OTHER MAJOR FEDERAL ACTIONS

There are no other major transportation improvement actions proposed by TDOT, FHWA, or other government agencies near the project study area.

TABLE A: SUMMARY OF PROJECT DATA & ESTIMATED IMPACTS

Summary of Project Data & Estimated Impacts for SR 126 (Memorial Boulevard)				
Item		No-Build	Build Alternative A	Build Alternative B
Functional Classification		Minor Arterial	Minor Arterial	Minor Arterial
Length (Miles)		8.4	8.4	8.4
Cross Sections (feet)[1]				
From:	To:			
East Center St.	Hillcrest Drive	60	160	160
Hillcrest Drive	SR 93	100	160	160
SR 93	SR 93	160	160	160
SR 93	Heather Lane	120	160	160
Heather Lane	Old Stage Road	120	160	160
Old Stage Road	Lemay Drive	120	200	200
Lemay Drive	Cooks Valley Road	120	200	120
Cooks Valley Road	Harr Town Road	120	120	120
Harr Town Road	Cochise Trail	120	160	160
Cochise Trail	Carolina Pottery Drive	60	160	160
Carolina Pottery Drive	I-81	160	300	300
I-81	I-81	300	300	300
Year 2013 AADT		8,450 - 25,800	8,450 - 25,800	8,450 - 25,800
Year 2033 AADT		13, 520 - 33,540	13, 520 - 33,540	13, 520 - 33,540
Percent Trucks		6%	6%	6%
Estimated Right-of-Way Acquisition (Acres)		0	239	121
Residential Displacements		0	241	162
Business Displacements		0	43	30
Non-Profit Displacements (Volunteer Fire Sta.)		0	1	1
Air Quality/Noise Impacts Requiring Mitigation		0	0	0
Archaelogical Sites Impacted		0	0	0
Historic Sites Impacted[2]		0	1	1
Section 4(f) Properties Impacted		0	0	0
Gravesites Impacted		0	350	90
Wetlands Impacted (Acres)		0	0	0
Stream Crossings (Linear Feet)		0	4863	3107
Floodplains Impacts (Acres)		0	4	3.2
Forest Land Acquired (Acres)[3]		0	75	54.8
Threatened/Endangered Species Impacts		0	0	0
Hazardous Material Sites Impacted (Parcels)		0	2	3
Farmland Impacted (Acres)		0	15	5
Estimated Right-of-Way Cost		$ -	$ 60,000,000	$ 48,000,000
Estimated Utility Cost		$ -	$ 5,316,000	$ 4,565,000
Estimated Construction Cost		$ -	$ 55,000,000	$ 47,000,000
Total Estimated Project Cost		$ -	$ 120,316,000	$ 99,565,000

1. The estimated ROW width is reported and based upon the typical width needed for each typical section. Actual proposed ROW widths will vary throughout the project based upon the use of slope easements, total versus partial property acquisitions, uneconomicremnants, etc.
2. Adverse visual impact
3. Includes all forest land impacted within the estimated construction limits, which may be within slope easements and outside of the ROW limits

S.9 ENVIRONMENTAL COMMITMENTS

Throughout this Environmental Impact Statement (EIS), measures are detailed to avoid, minimize, or mitigate the impacts of the proposed project on the human and natural environments. Unique commitments, outside of the normal or standard requirements of a federally funded project, including Federal and State laws, regulations, policy, best practice, and TDOT's Standard Specifications, are summarized as follows:

S.9.1 Hazardous Materials

The following three (3) sites will be evaluated as potential hazardous waste sites prior to submittal of the Final EIS.

- English Cabinets (5236 Memorial Boulevard, Kingsport, TN)
- People's Food Store (3104 Memorial Boulevard, Kingsport, TN)
- Richard Chadbourne Property (5340 Memorial Boulevard, Kingsport, TN)

A Phase II Environmental Site Investigation will be performed on the following three (3) parcels identified in the Phase I Hazardous Materials Survey Report.

- Fuel and Convenience Store (4001 Memorial Boulevard, Kingsport, TN)
- Dry Cleaning Service (3200 Memorial Boulevard, Kingsport, TN)
- Fuel and Convenience Store (5121 Memorial Boulevard)

S.9.2 Protected Species

The United States Fish and Wildlife Service (USFWS) has concurred with a "not likely to adversely affect" finding concerning the federally endangered Indiana Bat (Myotis sodalis). However, to further minimize potential for harm to the Indiana Bat, trees with a diameter at breast height of five inches or greater will not be removed from October 15 through March 31.

S.9.3 Historical

The State Historic Preservation Office (SHPO) has reviewed the project and in a letter dated November 3, 2008 stated that an adverse visual effect to Yancey's Tavern would occur if either Build Alternative was selected. Supporting documentation along with the final Memorandum of Agreement (MOA), developed in consultation with the SHPO, and any other consulting parties, must be filed with the Advisory Council on Historic Preservation (ACHP) in accordance with 36 CFR 800.6(b)(1)(iv) and Section 106 of the National Historic Preservation Act. The MOA will be prepared and signed prior to approval of the Final Environmental Impact Statement.

S.9.4 Archaeological

Four archaeological sites are located in the project area (40SL412, 40SL413, 40SL419, and 40SL421). The proposed Build Alternatives have been modified to avoid impacting these sites. However, if archaeological materials are uncovered during construction, all construction work in the area of the find will cease. The Tennessee Division of Archaeology (615-741-1588) and the recognized Native American Tribes previously coordinated with will be immediately contacted so a representative of their office may have the opportunity to examine and evaluate the materials. Any sites identified during construction of the proposed project will be monitored during construction activities to ensure that the areas are avoided and not utilized as equipment staging areas or otherwise impacted by the construction of the project.

Since the initial consultation with the Native American Tribes, two (2) additional tribes have been recognized, The Cherokee Nation and the Shawnee Tribe. Consultation with these additional Native American Tribes will be completed prior to submittal of the FEIS.

S9.5 Miscellaneous

TDOT will comply with the Tennessee State Burial Law: TCA 46-4-101-104 (Termination of land use as cemetery) for the relocation of any grave sites.

A volunteer fire department station (Number Four) will be acquired and relocated with either Build Alternative A or B. The relocation process will be carried out in such a manner as to ensure no interruption of service occurs to area residents.
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ACRONYMS

ADA	Americans with Disabilities Act
ACHP	Advisory Council on Historic Preservation
ADT	Average Daily Traffic
AADT	Average Annual Daily Traffic
APE	Area of Potential Effect
APR	Advanced Planning Report
ARAP	Aquatic Resources Alterations Permit
BMPs	Best Management Practices
C&G	Curb and Gutter
CAAA	Clean Air Act Amendment
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFR	Code of Federal Regulations
CO	Carbon Monoxide
CRT	Community Resource Team
CSS	Context Sensitive Solutions
db	Decibels
dBA	A-weighted sound levels in decibels
DEIS	Draft Environmental Impact Statement
EIS	Environmental Impact Statement
EPA	Environmental Protection Agency
ESA	Environmental Site Assessment
ETW	Exceptional Tennessee Waters
FEMA	Federal Emergency Management Agency
FHWA	Federal Highway Administration
Ft.	Foot
GPS	Global Positioning System
HC	Hydrocarbons
HCM	Highway Capacity Manual
HCS	Highway Capacity Software
I	Interstate
KATS	Kingsport Area Transit Service
Leq	Equivalent continuous sound level
L.M.	Log Mile
LOS	Level of Service
LUST	Leaking Underground Storage Tank
LRTP	Long Range Transportation Plan
MOE	Measures of Effectiveness
MPO	Metropolitan Planning Organization
MSL	Mean Sea Level
NAAQS	National Ambient Air Quality Standards
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NHS	National Highway System
NO	Nitrogen Oxides
NPDES	National Pollution Discharge Elimination System
NRCS	Natural Resources Conservation Service
NRHP	National Register of Historic Places

NWI	National Wetland Inventory
O3	Ozone
ONRW	Outstanding Natural Resource Waters
PE	Preliminary Engineering or Professional Engineer
pH	Level of acidity of water
PIN	Project Identification Number
PM	Particulate matter
RCRA	Resource Conservation and Recovery Act
ROW	Right-of-Way
RSAR	Road Safety Audit Report
SHPO	State Historic Preservation Office
Sox	Sulfur Oxides
SR	State Route
SWPPP	Storm Water Pollution Prevention Plan
TCA	Tennessee Codes Annotated
TDEC	Tennessee Department of Environment and Conservation
TDOT	Tennessee Department of Transportation
TIP	Transportation Improvement Program
TPR	Transportation Planning Report
TSM	Transportation Systems Management
TVA	Tennessee Valley Authority
TWLTL	Two Way Left Turn Lane
TWRA	Tennessee Wildlife Resources Agency
USACE	U.S. Army Corps of Engineers
USFWS	U.S. Fish and Wildlife Services
US	United States
USC	United States Codes
UST	Underground Storage Tank
v/c	Volume to Capacity Ratio
VOC	Volatile Organic Compound

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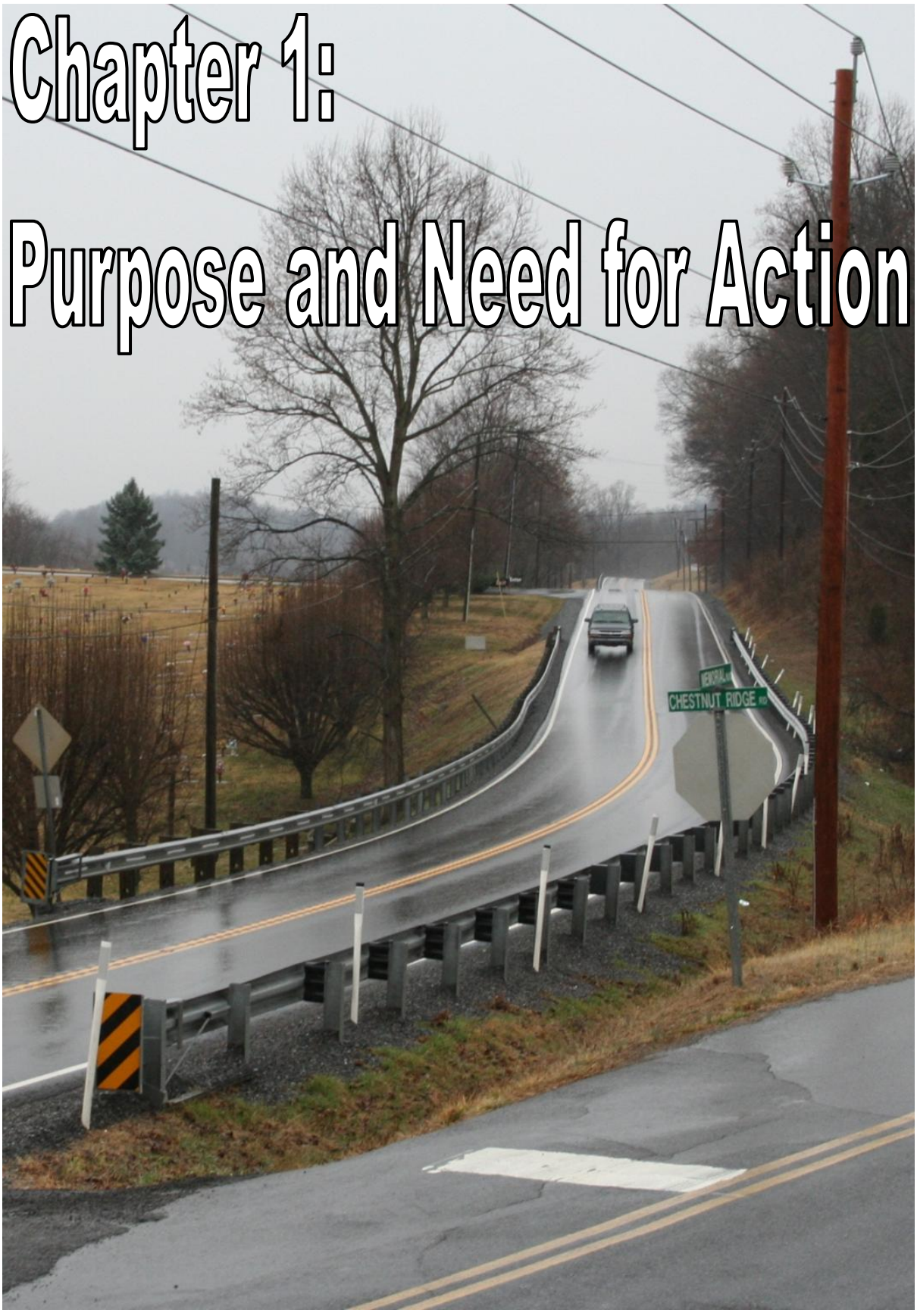
Chapter 1:

Purpose and Need for Action



1.0 PURPOSE AND NEED FOR ACTION

1.1 INTRODUCTION

The State Route (SR) 126 improvement project is a joint effort between the Tennessee Department of Transportation (TDOT) and the Federal Highway Administration (FHWA). The limits of the 8.4 mile long project extend from East Center Street, within the City of Kingsport's City Limits, east to Interstate 81 (I-81) in Sullivan County, Tennessee. SR 126 is also known as Memorial Boulevard within the study limits.

SR 126 (Memorial Boulevard) is primarily a two-travel lane facility (one travel lane in each direction) throughout the study corridor. Two Build Alternatives and the No-Build Alternative are currently under consideration for this project. The Build Alternatives improve SR 126 (Memorial Boulevard) to a four-lane facility (two travel lanes in each direction) within the commercial and residential areas of the western half of the study corridor. The eastern half of the study corridor, which is rural in nature, will remain a two-travel lane facility. Improved shoulders will be provided along the entire corridor and sidewalks will be extended to the majority of the commercial and residential areas. The existing roadway conditions and the Build Alternatives are discussed in more detail in **Section 1.2** and **Chapter 2** of this document, respectively. Conceptual Layouts of the Build Alternatives are provided in **Appendix D**.

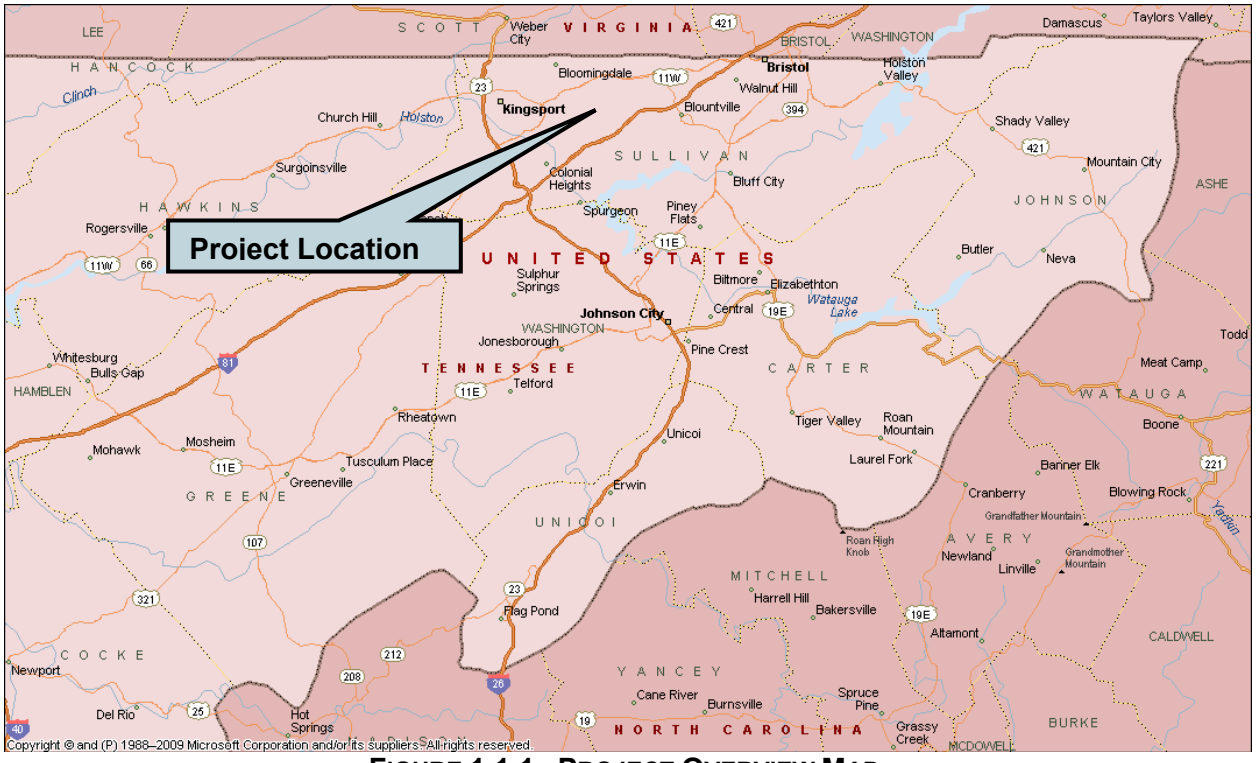


FIGURE 1.1.1: PROJECT OVERVIEW MAP

The proposed SR 126 (Memorial Boulevard) improvement project is located within the Kingsport Area Metropolitan Planning Organization's (MPO) jurisdiction. In 1977 the Kingsport Area MPO was created by federal legislation and organized by the Tennessee Department of Transportation (TDOT) and the Virginia Department of Transportation (VDOT) to develop efficient and safe street and highway networks and other transportation modes. Of utmost

importance was to approach transportation problems in highly populated areas without dividing the planning area up according to jurisdiction; the idea being that transportation systems cross jurisdictional lines. The Kingsport MPO is comprised of the following jurisdictional members; in Tennessee – TDOT, City of Kingsport, Town of Mount Carmel, Town of Church Hill, Hawkins County, and Sullivan County; representatives in Virginia include the Virginia Department of Transportation, Weber City, Gate City, and Scott County. Additional members who are in an advisory role include the Federal Transit Administration, Federal Highway Administration, First Tennessee Development District, the Tennessee Office of Local Planning (representing Church Hill and Mount Carmel), and the LENOWSICO Virginia Planning District Commission (representing Gate City and Weber City). Improvements along SR 126 (Memorial Boulevard) are included in the *Kingsport Metropolitan Area 2030 Transportation Plan*, dated June 14, 2007 and amended January 10, 2008. The plan addresses the future transportation needs within the MPO boundary.

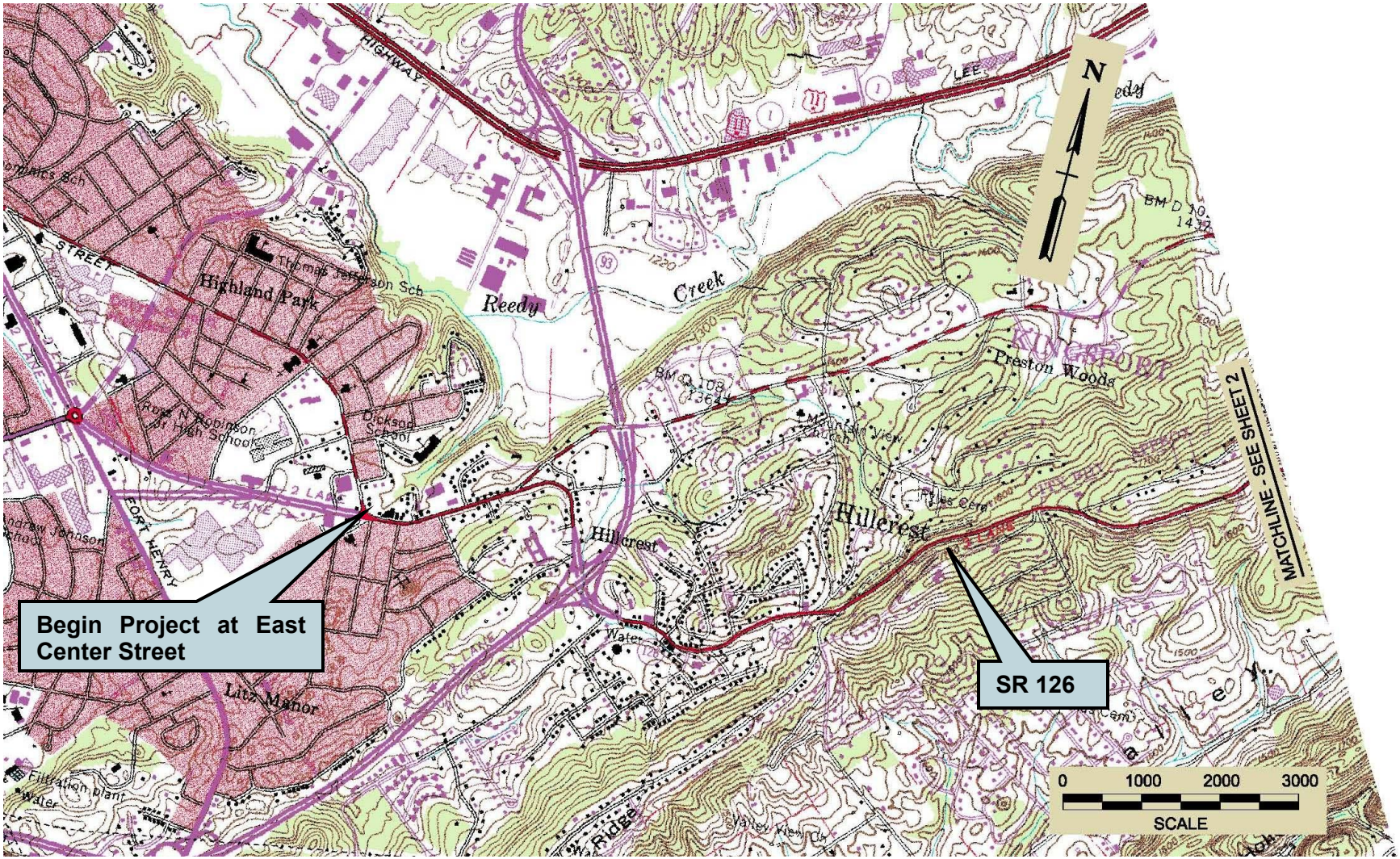


FIGURE 1.1.2: PROJECT LOCATION MAP (1 OF 3)
USGS Indian Springs and Kingsport Quad Maps

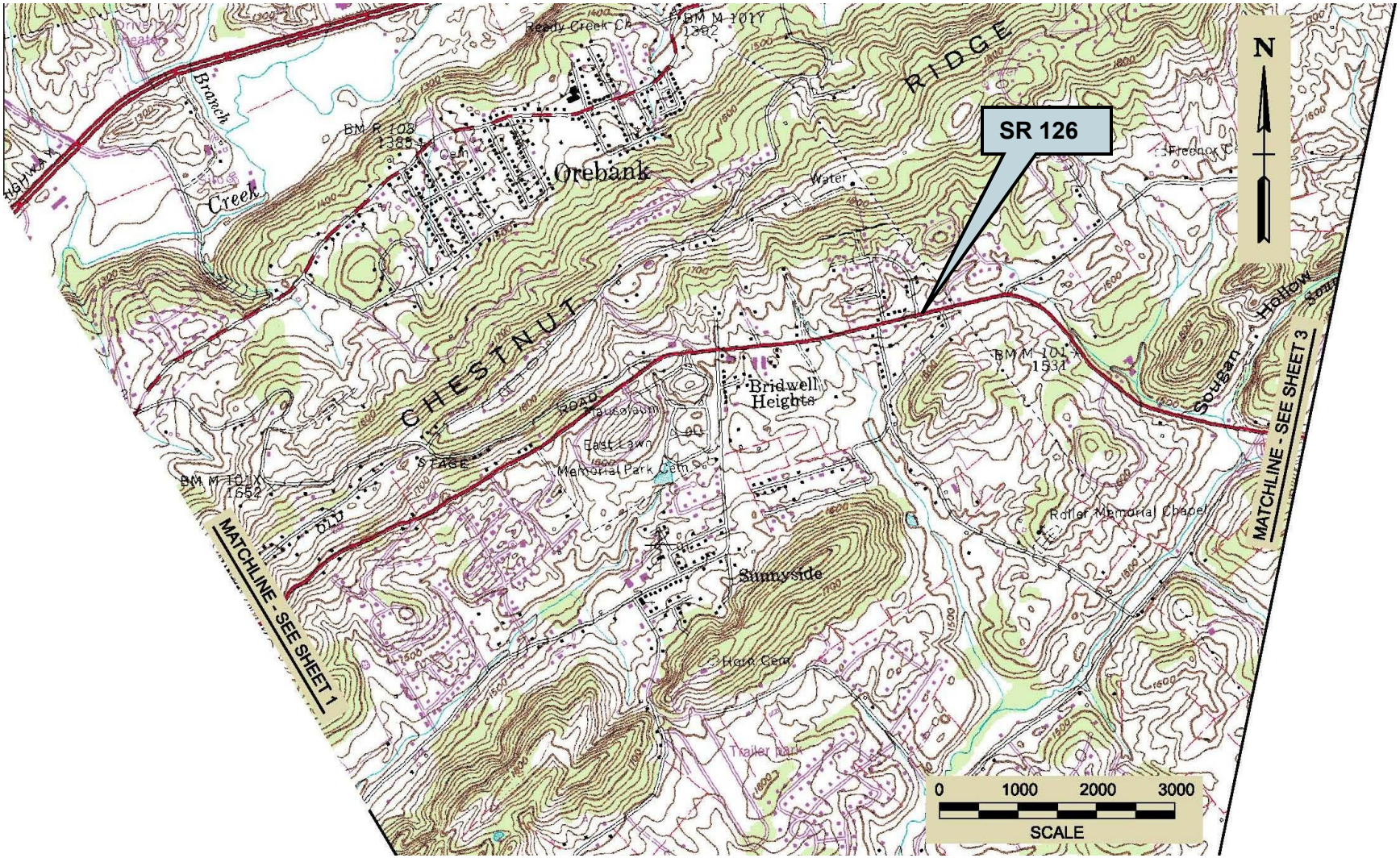


FIGURE 1.1.2: PROJECT LOCATION MAP (2 OF 3)
USGS Indian Springs and Kingsport Quad Maps

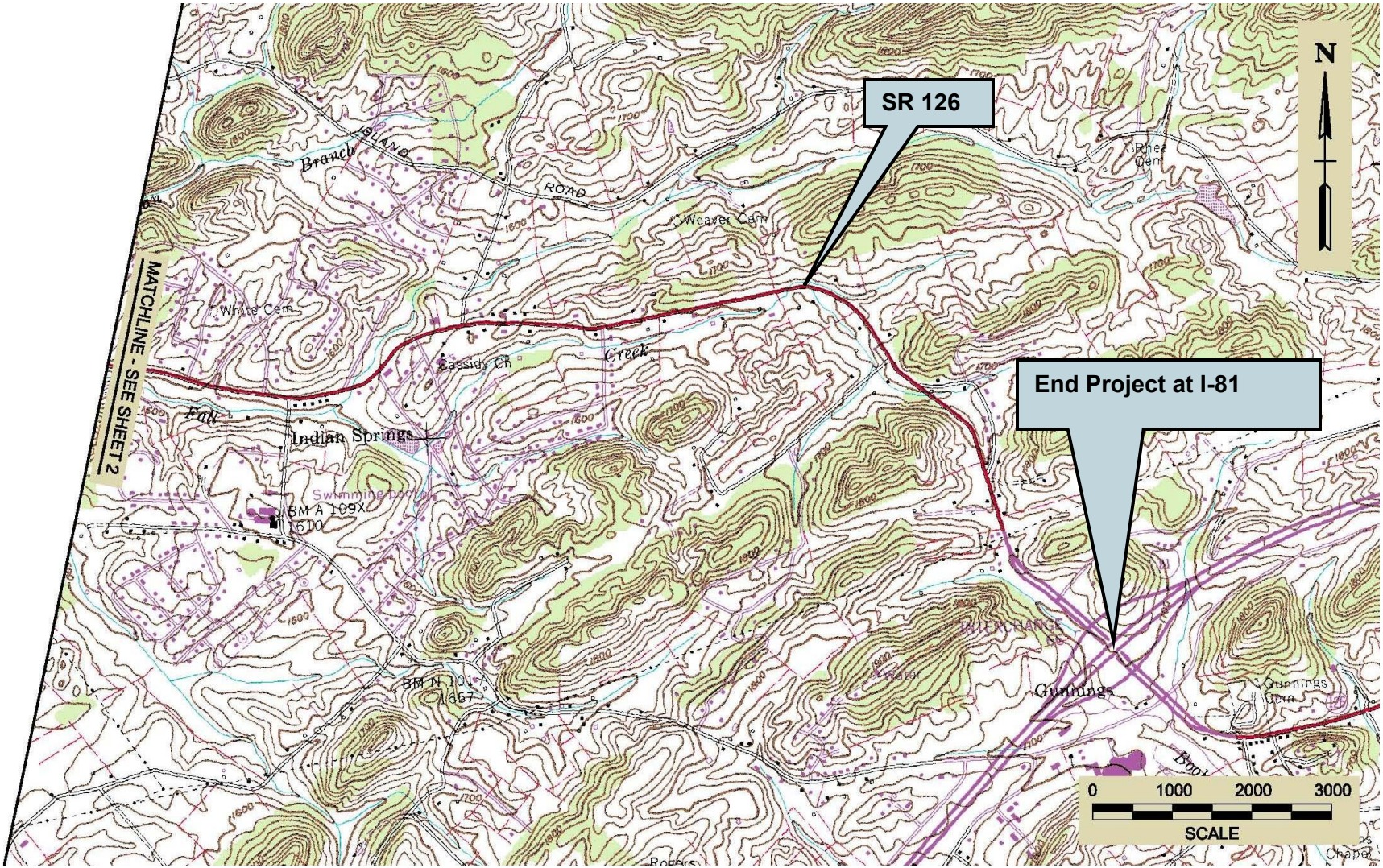


FIGURE 1.1.2: PROJECT LOCATION MAP (3 OF 3)
USGS Indian Springs and Kingsport Quad Maps



FIGURE 1.1.3: PROJECT LOCATION MAP – STREET DETAILS (1 OF 4)
(Log Mile 3.72 to Log Mile 5.7)

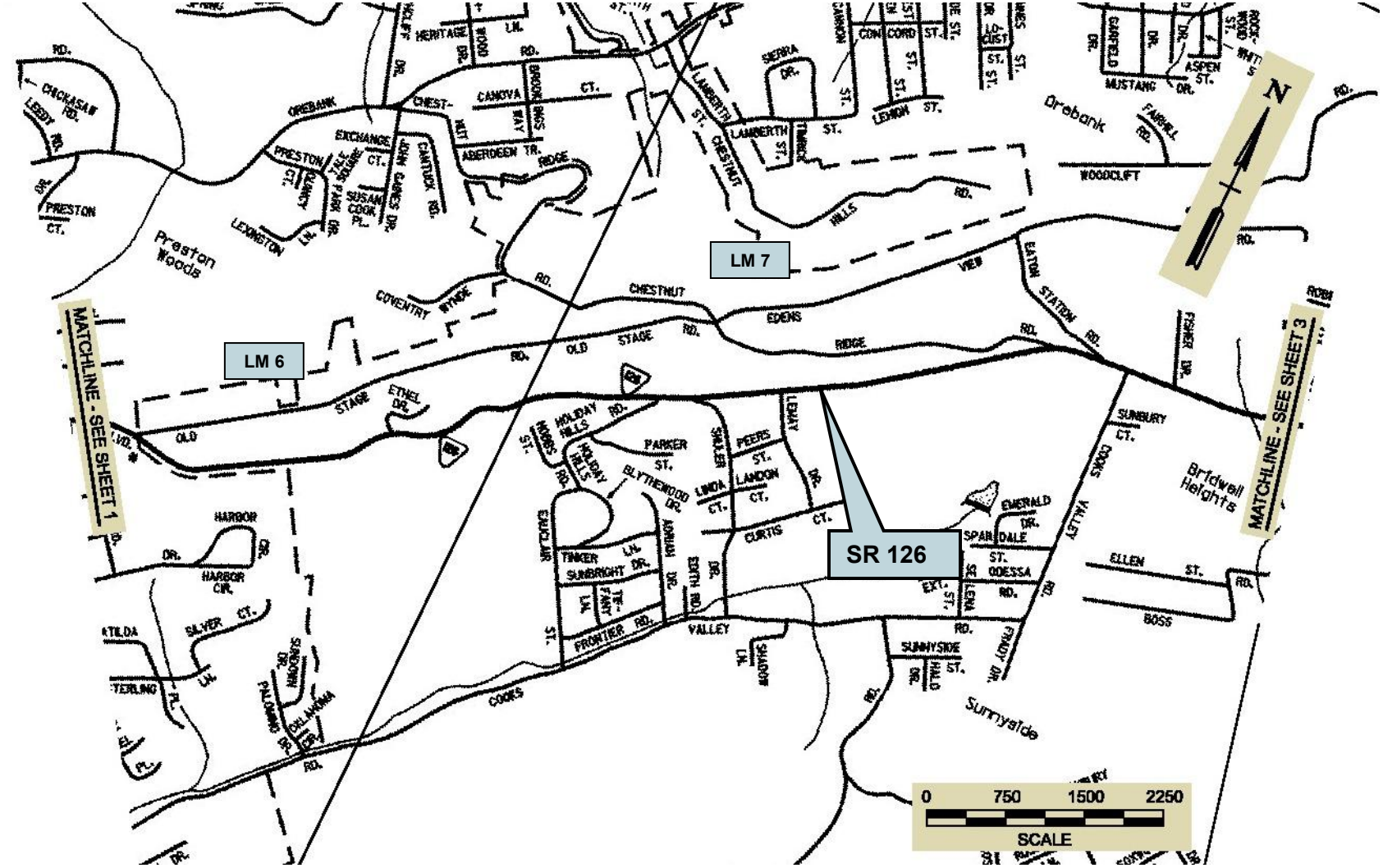


FIGURE 1.1.3: PROJECT LOCATION MAP – STREET DETAILS (2 OF 4)
(Log Mile 5.7 to Log Mile 7.99)

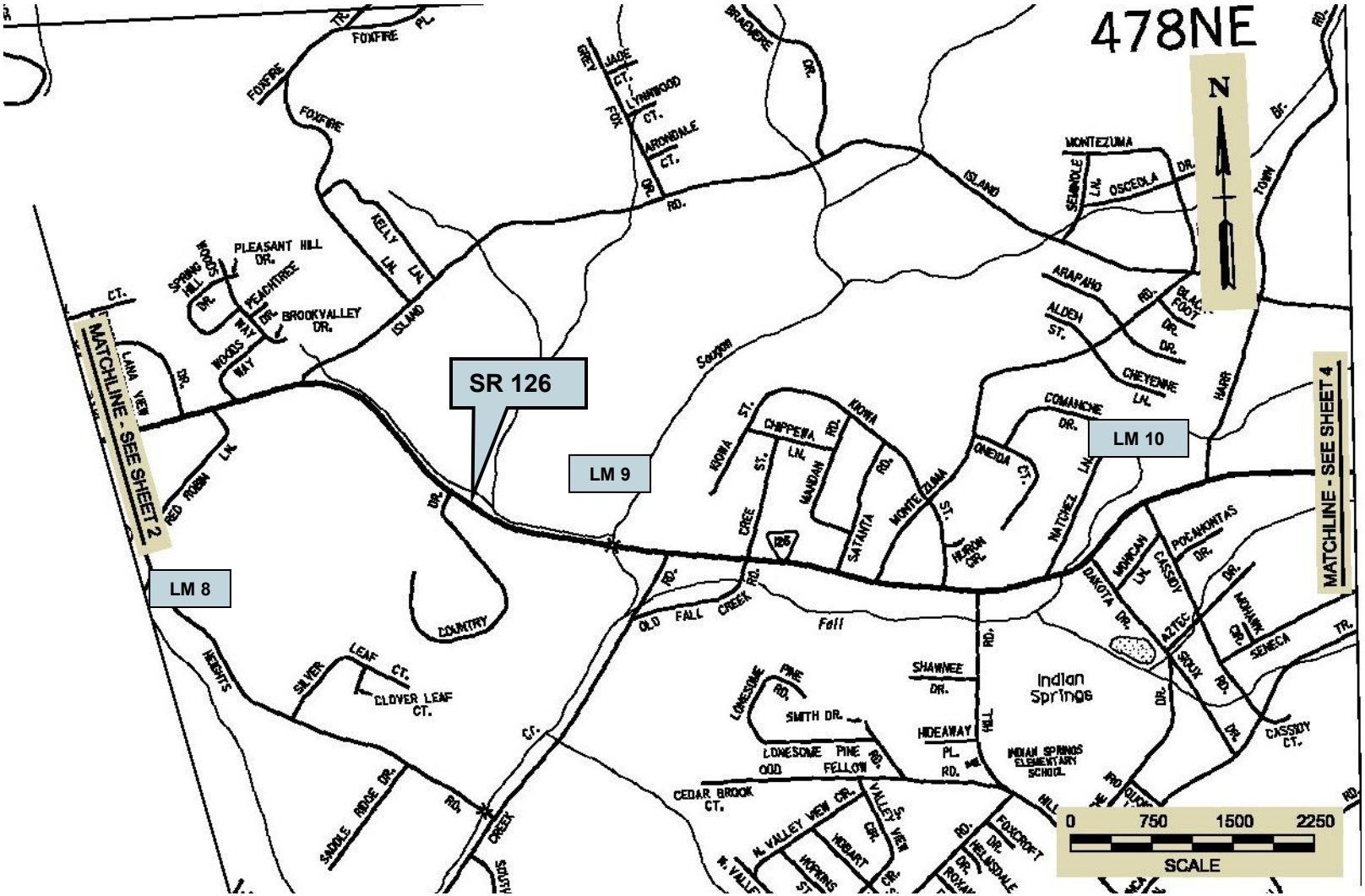


FIGURE 1.1.3: PROJECT LOCATION MAP – STREET DETAILS (3 OF 4)
(Log Mile 7.99 to Log Mile 10.37)

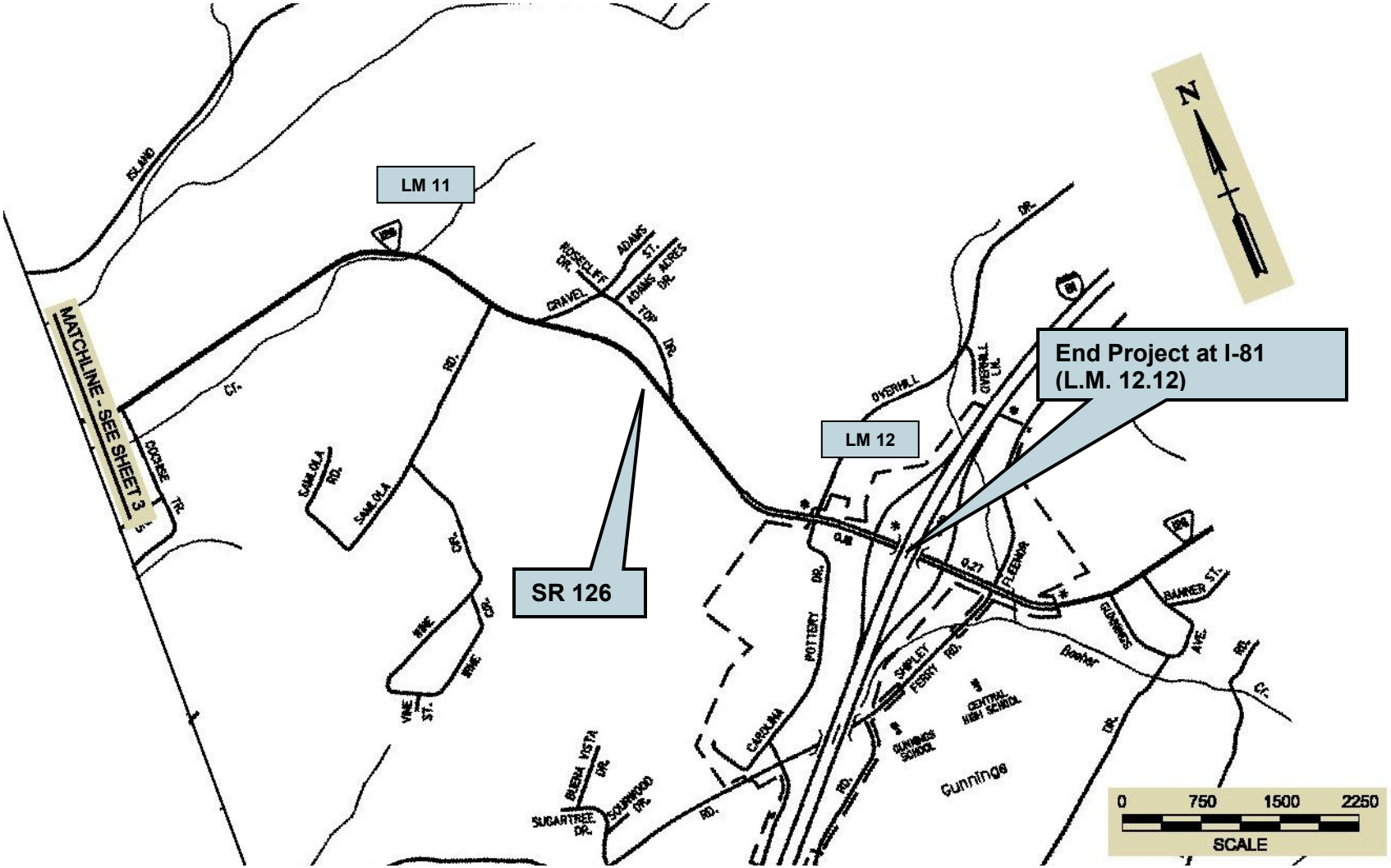


FIGURE 1.1.3: PROJECT LOCATION MAP – STREET DETAILS (4 OF 4)
(Log Mile 10.37 to Log Mile 12.12)

1.2 DESCRIPTION OF THE STUDY CORRIDOR

1.2.1 Description of the Adjacent Community

The terrain is rolling within the 8.4 mile long study limits between East Center Street and I-81. Due to the terrain, many side roads intersect SR 126 (Memorial Boulevard) at skewed angles. Steep side-slopes and guardrail are prevalent along many segments of the corridor. The corridor contains a mixture of land uses, including commercial, residential, and rural or agricultural. Poor access control is prevalent in the commercial areas, with many businesses having their entire frontage paved adjacent to the roadway. A few community resources, including those of historic significance, are located adjacent to the roadway. These resources include the Shipley-Jarvis House, which is deemed eligible for listing on the National Register of Historic Places (NRHP), Yancey's Tavern, which is listed on the NRHP, and the East Lawn Memorial Gardens Cemetery.

A mixture of residential and commercial land use is present from the corridor's western terminus at East Center Street (Log Mile 3.72) east to Beverly Hill Street (Log Mile 4.91). Within this approximately 1.19 mile long segment, the commercial land uses are generally small privately owned stores, restaurants, car lots, gas stations, and other service businesses. The residential land use is generally single family housing. The Shipley-Jarvis House is located adjacent to the northbound lanes near Woodside Drive at Log Mile (L.M.) 3.97 in this segment.

The land use is generally single family residential for the next 1.13 miles, from Beverly Hill Street (L.M. 4.91) to near Ethel Drive (L.M. 6.04).

The land use is primarily rural for the final 6.08 miles of the corridor, from near Ethel Drive (L.M. 6.04) to I-81 (L.M. 12.12). There are some areas of commercial development within this segment. The commercial land uses are generally small privately owned stores, restaurants, car lots, gas stations, and other service businesses. Yancey's Tavern and the East Lawn Memorial Gardens Cemetery are located on either side of SR 126 (Memorial Boulevard) near Chestnut Ridge Road at L.M. 7.55 in this segment.



FIGURE 1.2.1: PAVED FRONTAGE EXAMPLE 1



FIGURE 1.2.3: SHIPLEY-JARVIS HOUSE



FIGURE 1.2.2: PAVED FRONTAGE EXAMPLE 2



FIGURE 1.2.4: CEMETERY (LT), YANCEY'S TAVERN (RT.)

1.2.2 Description of the Existing Roadway

Within the 8.4 mile long study limits between East Center Street and I-81, SR 126 (Memorial Boulevard) is functionally classified as a minor arterial on the State Highway System. The roadway primarily has two travel lanes (one in each direction). Each travel lane is approximately eleven feet wide. The existing right-of-way varies from approximately sixty feet to three hundred feet wide. The speed limit varies from thirty-five to fifty miles per hour. Many sharp curves and steep grades along the route are signed with supplemental speed plaques advising lower safe travel speeds than the posted speed limit. Many roadside hazards are located in close proximity to the travel lanes. Narrow shoulders are present along the majority of the route. Sidewalks are present along approximately 0.1 mile of the 8.4 mile long corridor. Curbs are located sporadically along the route, with the majority of the corridor having roadside ditches. Four traffic signals are present, all of which are located within the first 1.5 miles of the corridor. The average daily traffic (ADT) in 2013 is estimated to range between 8,450 and 25,800 vehicles per day along the corridor. In the year 2033, the design year of the project, the traffic is projected to increase to between 13,520 and 33,540 vehicles per day.

Several different typical cross sections are utilized along the existing SR 126 (Memorial Boulevard) corridor. The following describes the existing roadway cross-sections. The existing roadway characteristics are also summarized in **Figure 1.2.5** and **Tables 1.2.1** through **1.2.3**.

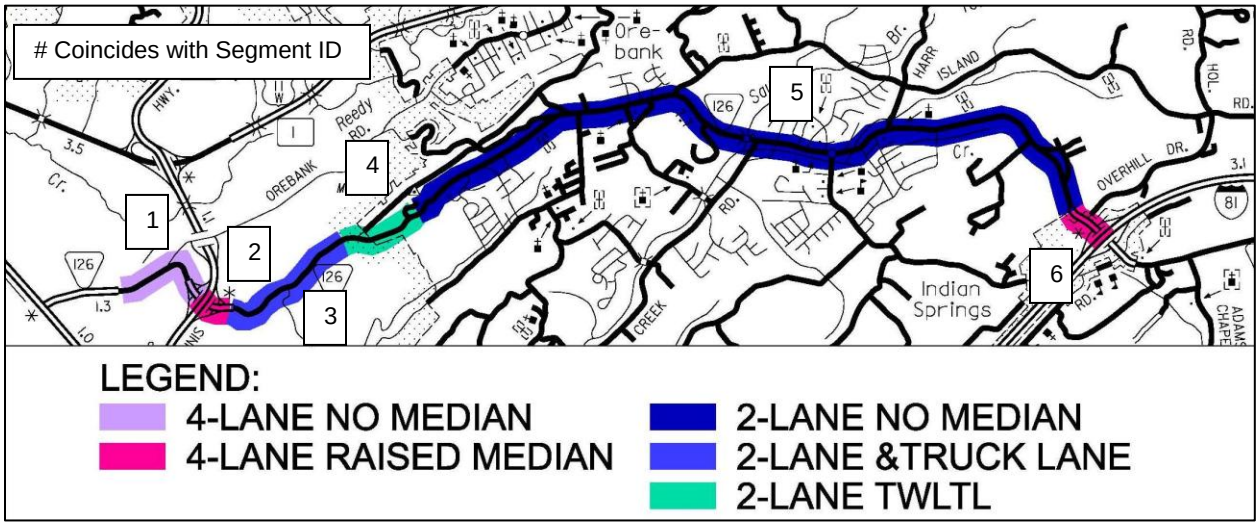


FIGURE 1.2.5: EXISTING ROADWAY CROSS SECTION LEGEND

1. East Center Street (L.M. 3.72) to west of Hillcrest Drive (L.M. 4.33)

SR 126 (Memorial Boulevard) has four travel lanes (two in each direction) along this 0.61 mile long segment. No median is present. The shoulders are two feet or less in width. The posted speed limit is thirty-five miles per hour. The existing right-of-way varies from approximately sixty to ninety feet wide. Ditches are generally located adjacent to the roadway, but curb and gutter with sidewalks are present for approximately one-tenth of a mile in the Orebank Road/Edens Ridge Road area. A traffic signal is located at East Center Street. **Figure 1.2.6**, taken at Log Mile (L.M.) 4.15, provides a photograph of the typical roadway characteristics of this first segment of the study corridor.



FIGURE 1.2.6: SEGMENT 1 PHOTOGRAPH

2. West of Hillcrest Drive (L.M. 4.33) to between Stratford Road and Heather Lane (L.M. 4.60)

SR 126 (Memorial Boulevard) has four travel lanes (two in each direction) along this 0.27 mile long segment. Unlike the first segment, a median is present that ranges in width from approximately twenty to twenty-eight feet wide. The median is generally a raised grass median. In some areas the median is depressed and within the SR 93 (John B. Dennis Highway) Interchange, the median is flush with a concrete barrier separating the opposing travel lanes. The shoulders range from five to sixteen feet in width and are generally gravel. The posted speed limit is thirty-five miles per hour. The existing right-of-way varies from approximately one hundred to one hundred and sixty feet wide. Ditches are generally located adjacent to the roadway, but curb and gutter is present for approximately one-tenth of a mile in the SR 93/Stratford Road/Heather Lane area. No sidewalks are present. Two traffic signals are located within the SR 93 (John B. Dennis Highway) Interchange. **Figure 1.2.7**, taken at Log Mile (L.M.) 4.34, provides a photograph of the typical roadway characteristics of this second segment of the study corridor.



FIGURE 1.2.7: SEGMENT 2 PHOTOGRAPH

3. Between Stratford Road and Heather Lane (L.M. 4.60) to between Trinity Lane and Tanglewood Road (L.M. 5.50)

SR 126 (Memorial Boulevard) has one westbound travel lane and two eastbound travel lanes (one of which is a truck climbing lane) along this 0.90 mile long segment. No median is present. The shoulders are approximately one-foot wide. The posted speed limit is forty-five miles per hour. The existing right-of-way is approximately sixty feet wide. Ditches are located adjacent to the roadway, with no curb and gutter or sidewalks. One traffic signal is located at Harbor Chapel Road. **Figure 1.2.8**, taken at Log Mile (L.M.) 4.90, provides a photograph of the typical roadway characteristics of this third segment of the study corridor.



FIGURE 1.2.8: SEGMENT 3 PHOTOGRAPH

4. Between Trinity Lane and Tanglewood Road (L.M. 5.50) to between Old Stage Road and Ethel Drive (L.M. 6.00)

SR 126 (Memorial Boulevard) has two travel lanes (one in each direction) along this 0.50 mile long segment. A center two-way left turn lane (TWLTL) is present. The shoulders are approximately two feet wide. The posted speed limit is forty-five miles per hour. The existing right-of-way is approximately sixty feet wide. Ditches are located adjacent to the roadway, with no curb and gutter or sidewalks. No traffic signals are present in this segment. **Figure 1.2.9**, taken at Log Mile (L.M.) 5.76, provides a photograph of the typical roadway characteristics of this fourth segment of the study corridor.



FIGURE 1.2.9: SEGMENT 4 PHOTOGRAPH

5. Between Old Stage Road and Ethel Drive (L.M. 6.00) and west of Carolina Pottery Drive (L.M. 11.90)

SR 126 (Memorial Boulevard) has two travel lanes (one in each direction) along this 5.90 mile long segment. In general, no median is present and the shoulders are two feet in width. There is a 0.16 mile long segment near Kiowa Street and Natchez Lane that has a two way left turn lane and six-foot wide shoulders. The posted speed limit is fifty miles per hour. The existing right-of-way is approximately sixty feet wide. Ditches are located adjacent to the roadway, with no curb and gutter or sidewalks present. No traffic signals are located in this segment. **Figure 1.2.10**, taken at Log Mile (L.M.) 6.65, provides a photograph of the typical roadway characteristics of this fifth segment of the study corridor.



FIGURE 1.2.10: SEGMENT 5 PHOTOGRAPH

6. West of Carolina Pottery Drive (L.M. 11.90) to I-81 (L.M. 12.12)

SR 126 (Memorial Boulevard) has four travel lanes (two in each direction) along this 0.22 mile long segment. A twenty-nine foot wide raised grass median is present. The shoulders are paved and generally twelve feet in width. The posted speed limit is forty miles per hour. The existing right-of-way is approximately three hundred feet wide. Ditches are located adjacent to the roadway, with no curb and gutter or sidewalks present. No traffic signals are located in this segment. **Figure 1.2.11**, taken at Log Mile (L.M.) 12.01, provides a photograph of the typical roadway characteristics of this sixth and final segment of the study corridor.



FIGURE 1.2.11: SEGMENT 6 PHOTOGRAPH

1.2.3 Existing Roadway Cross Section Summary

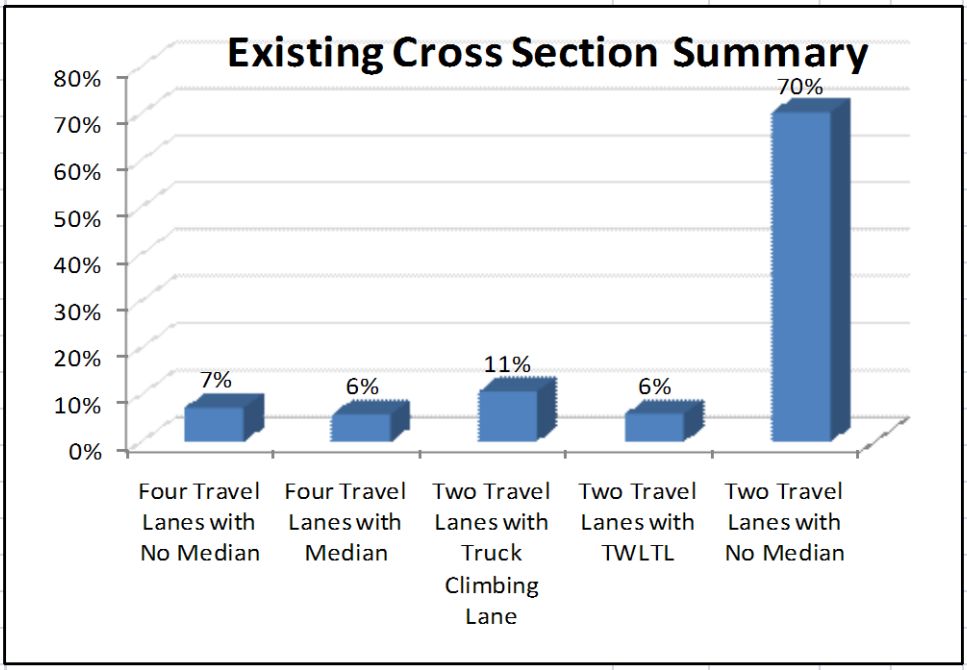
Four travel lanes are present along 13% of the corridor at the eastern and western termini. The middle 87% of the corridor has two travel lanes (including where a 0.90 mile long truck climbing lane is provided). Sidewalks are present along 1% of the corridor. A shoulder width equal to or greater than four feet, which is generally regarded as the minimum safe width for bicyclists, is present along 8% of the corridor.

TABLE 1.2.1: EXISTING SIDEWALK AND SHOULDER SUMMARY

Cross Section Description	Existing Roadway Description		
	Seg. ID	Length (Miles)	%
Sidewalks Present	1	0.1	1%
Sidewalks Not Present	1, 2, 3, 4, 5, 6	8.3	99%
Total		8.4	
Shoulders less than Four Feet Wide	1, 3, 4, 5	7.8	92%
Shoulders equal to or greater than Four Feet Wide	2, 5, 6	0.7	8%
Total		8.4	

TABLE 1.2.2: EXISTING ROADWAY SUMMARY

Cross Section Description	Existing Roadway Description			
	Seg. ID	Length (Miles)	%	
Four Travel Lanes with No Median	1	0.6	7%	13%
Four Travel Lanes with Median	2, 6	0.5	6%	
Two Travel Lanes with Truck Climbing Lane	3	0.9	11%	87%
Two Travel Lanes with TWLTL	4	0.5	6%	
Two Travel Lanes with No Median	5	5.9	70%	
Total		8.4		



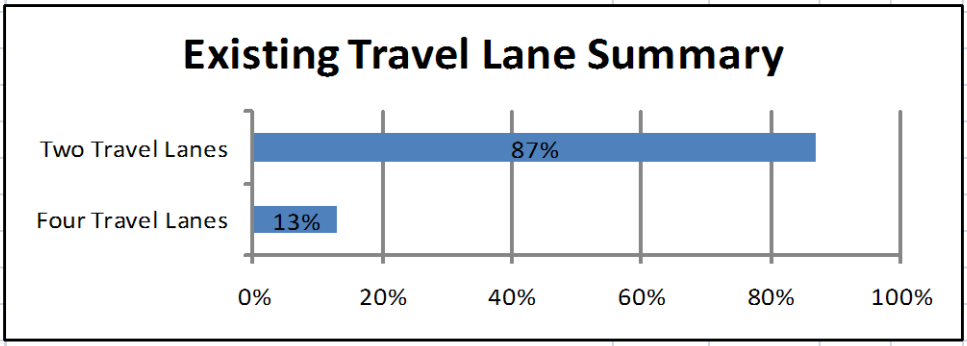


TABLE 1.2.3: EXISTING ROADWAY DESCRIPTION

SR 126 (Memorial Boulevard) Existing Roadway Description													
Segment		Posted Speed	From		To		Length	Travel Lanes		Median Desc.	Shld.	Ditch/ C&G ?	Side-walk?
ID	Dist.	Limit	LM	Description	LM	Description	(Miles)	No.	Width				
1	0.61	35	3.72	Center Street	3.78	between Center and Central Streets	0.06	4	11	Left Turn Lane	2 Ft. Paved	Ditch	No
			3.78	between Center and Central Streets	4.16	between Orebank and Edens Ridge Roads	0.38	4	11	None	1 Ft. Paved	Ditch	No
			4.16	between Orebank and Edens Ridge Roads	4.22	Edens Ridge Road	0.06	4	11.5	None	None	C&G	Yes
			4.22	Edens Ridge Road	4.25	east of Edens Ridge Road	0.03	4	11.25	None	1 Ft. Gravel/ None	Ditch/ C&G	Yes
			4.25	east of Edens Ridge Road	4.33	west of Hillcrest Drive	0.08	4	11	None	1 Ft. Gravel	Ditch	No
2	0.27	35	4.33	west of Hillcrest Drive	4.42	within the SR 93 Interchange	0.09	4	11	20 Ft. Raised Grass	5 Ft. Gravel/ 8 Ft.	Ditch	No
			4.42	within the SR 93 Interchange	4.51	within the SR 93 Interchange	0.09	4	12	28 Ft. with Barrier at Bridge	8 Ft. Gravel	Ditch	No
			4.51	within the SR 93 Interchange	4.55	Stratford Road	0.04	4	12	23 Ft. Depressed Grass	8 Ft. Gravel/ 18 Ft.	Ditch/ Curb	No
			4.55	Stratford Road	4.60	between Stratford Road and Heather Lane	0.05	4	12	22 Ft. Raised Grass	8 Ft. Gravel/ 16 Ft.	Ditch/ Curb	No

SR 126 (Memorial Boulevard) Existing Roadway Description (Continued)													
Segment		Speed Limit	From		To		Length	Travel Lanes		Median Desc.	Shld.	Ditch/ C&G ?	Side-walk?
ID	Dist.		LM	Description	LM	Description	(Miles)	No.	Width				
3	0.90	45	4.60	between Stratford Road and Heather Lane	5.50	between Trinity Lane and Tanglewood Road	0.90	3	11	None	1 Ft. Paved	Ditch	No
4	0.50	45	5.50	between Trinity Lane and Tanglewood Road	5.72	Briarwood Road	0.22	2	11	11 Ft. TWLTL	2 Ft. Paved	Ditch	No
			5.72	Briarwood Road	5.80	Old Stage Road	0.08	2	11	11 Ft. TWLTL	2 Ft. Soil	Ditch	No
			5.80	Old Stage Road	6.00	between Old Stage Road and Ethel Drive	0.20	2	11	10 Ft. TWLTL	2 Ft. Gravel	Ditch	No
5	5.90	50	6.00	between Old Stage Road and Ethel Drive	9.56	west of Kiowa Street	3.56	2	12	None	2 Ft. Gravel	Ditch	No
			9.56	west of Kiowa Street	9.72	west of Natchez Lane	0.16	2	12	12 Ft. TWLTL	6 Ft. Paved	Ditch	No
			9.72	west of Natchez Lane	11.82	west of Carolina Pottery Drive	2.10	2	12	None	2 Ft. Soil	Ditch	No
			11.82	west of Carolina Pottery Drive	11.90	west of Carolina Pottery Drive	0.08	Transition					No
6	0.22	40	11.90	west of Carolina Pottery Drive	12.12	I-81 Overpass	0.22	4	12	29 Ft. Raised Grass	12 Ft. Paved	Ditch	No
		42.5	= Weighted Average			Σ =	8.40						

1.3 PROJECT BACKGROUND AND STATUS

SR 126 (Memorial Boulevard) was initially constructed in 1926. The roadway was originally eighteen feet wide and constructed of concrete. The roadway was widened in 1950 to twenty-two feet wide and overlaid with asphalt. Existing SR 126 (Memorial Boulevard) follows the original 1926 alignment.

Since the early 1990s, improvements for SR 126 (Memorial Boulevard) have been discussed that would facilitate improved traffic and safety conditions for the route. The Executive Board and Executive Staff of the Kingsport Metropolitan Planning Organization (MPO) passed a resolution requesting the preparation of an Advanced Planning Report for SR 126 (Memorial Boulevard) in March 2003. In April 2003, a copy of this resolution was sent by the Mayor of Kingsport to TDOT. A response from TDOT was provided May 2003 acknowledging Kingsport's efforts and needs. The response was forwarded to the TDOT Planning Division with instructions to initiate a new Advance Planning Report, and in September 2003, TDOT responded by naming the SR 126 (Memorial Boulevard) project the initial Context Sensitive Solutions (CSS) Project for Tennessee.

The purpose of the CSS Project was to study and prepare a concept plan recommendation for improving SR 126 (Memorial Boulevard). A Community Resource Team (CRT) was assembled for the SR 126 (Memorial Boulevard) CSS project. The CRT met thirteen times for meetings, training, and workshops and conducted three series of Public Involvement Sessions between October 2003 and May 2005. Public opinion was surveyed at each Public Involvement Session and the results of those surveys were reviewed and discussed by the CRT. The final *Context Sensitive Solutions Report for State Route 126 (Memorial Boulevard)* is on file at the TDOT Environmental Division Office in Nashville, TN.

The CSS Project determined several "common ground" recommendations, for which there was unanimous support among the CRT members. Following is a list of items that the CRT unanimously agreed were important considerations for the SR 126 (Memorial Boulevard) project.

<u>CSS Common Ground Recommendation: Safety</u>

- Safety is the number one priority on this project
- Wide shoulders are desirable
- Improve sight distance and address geometric deficiencies at all intersections of side streets
- Provide left turn lanes at major intersections
- Provide right turn lanes at major intersections
- Consider using center line and shoulder rumble strips and reflective thermal markings where appropriate
- Special attention should be given to intersection improvements at the intersection of Carolina Pottery and Overhill Road to improve safety
- Plan development needs to be mindful of pedestrian safety and connectivity, providing a safe and separate walkway for pedestrians where feasible.

Specific areas where sidewalks are desired include East Center Street to Old Stage Road (within the City limits) and within the Indian Springs Community.

- Use side facing mailbox placement along SR 126 to improve safety for residents
- The CRT would like to avoid a "one size fits all" solution for SR 126

CSS Common Ground Recommendation: Points of Interest to the Community

The CRT wants to minimize impacts to and protect the integrity of community treasures in the SR 126 study area. Sites that are considered community treasures include:

- Cherry Point Animal Hospital
- White House at the corner of Satana Road and SR 126
- East Lawn Cemetery
- Old Indian Springs Post Office
- Chestnut Ridge view shed
- Anything within the historic boundary of Yancey's Tavern, including the tavern, barn, and trace of Old Island Road
- Shipley Mansion (near East Center Street)

CSS Common Ground Recommendation: Enhancements

The CRT supports the incorporation of the following enhancement features in the design plans for SR 126:

- Use of natural elements for retaining and buffering walls
- Landscaping to a human scale with native plant species
- Decorative guardrail where appropriate
- Use of decorative lighting where appropriate with sensitivity to residential areas
- Underground utilities instead of overhead
- Use of mast arms rather than span wire where traffic signals are installed
- Use of Texas rail instead of Jersey barrier type railing on bridges
- Bridge design needs to be an enhancement and fit within the context of the community
- Include irrigation with major landscaping
- Landscape design that is appropriate to the speed limit
- Inclusion of a roundabout at the intersection of SR 126 and East Center Street if adequate capacity can be provided for forecasted traffic volumes

CSS Common Ground Recommendation: Other Issues

- Where roadway widening is undertaken, use as much of the existing roadway as possible
- ·Where the roadway is widened from two to four lanes, consider leaving the existing road in place and constructing the new lanes to one side (asymmetrical widening)
- ·The CRT identified two major benefits of asymmetrical widening: improved traffic flow during construction, and enhanced constructability
- ·Asymmetrical widening should not preclude making improvements to horizontal and vertical alignment deficiencies

Concept plans for three distinct proposals and one blended proposal were prepared by the CSS Project's consultant team, with input from the CRT. The concepts were originally presented to the public at the November 2004 Public Involvement Session. Revised concepts were presented to the public for review and comment at the May 2005 Public Involvement Session. The majority of the CRT members supported a blend of roadway cross sections along the corridor. Proposed Build Alternative A in this document represents the majority decision of the CRT.

Additionally, the CSS document includes three minority objection statements that were prepared for specific sections of the project study area by members of the CRT. Proposed Alternative B of this document was developed to address the minority objection statement to minimize impacts to Yancey's Tavern and the East Lawn Memorial Gardens, which are located on opposite sides of SR 126 (Memorial Boulevard) near Cooks Valley Road.

In March of 2006 TDOT issued a Road Safety Audit Review (RSAR) recommending safety improvements at the intersection of Carolina Pottery Drive/Overhill Drive with SR 126 (Memorial Boulevard). This intersection is located near the I-81 Interchange. The safety improvements were warranted due to the crash rate of this intersection being over four times the critical crash rate for similar intersections. The improvements recommended in the RSAR have been constructed. The improvements included realigning the left turn lanes along SR 126 (Memorial Boulevard) to improve sight distance, improving signing and striping at the intersection, and cutting vegetation to improve sight distance.

In December of 2008 The City of Kingsport Planning MPO Office developed the *Draft State Route 126/Memorial Boulevard (Sullivan County) Safety Improvements Project* report. The report notes recommended major and minor improvements to be constructed. It notes that many of the proposed safety improvements such as intersection improvements and upgrading the S-curves on Chestnut Ridge will become an integral part of the future final upgrade of the highway. The report was issued "due to the excessive length of time to complete the highway upgrade and the urgent need to provide immediate safety enhancements."

In June of 2009 another RSAR was issued by TDOT, this time recommending safety improvements along the entire study corridor from East Center Street to I-81. This RSAR utilized input from the CSS Project and the City of Kingsport's safety study. The RSAR notes that the crash rate along the entire corridor is higher than the statewide average crash rates for similar roadway segments. The RSAR identified short-term safety solutions that would correct critical areas of concern. Example improvements include signing and striping improvements,

the implementation of rumble strips/stripes, and minor shoulder improvements. The recommendations in the RSAR were completed in 2010.

Each of these safety studies demonstrates a documented need for safety improvements along the study corridor. These past efforts to improve the safety of the roadway have involved relatively inexpensive improvements for spot locations along the route. These efforts attempt to mitigate locations with high crash rates. A corridor-wide improvement is needed to improve the roadway characteristics of SR 126 (Memorial Drive).

1.4 PURPOSE AND NEED OF THE PROPOSED ACTION

1.4.1 Purpose of the Proposed Action

The purpose of the project is to provide a safe, efficient route for local traffic between the City of Kingsport and I-81. Improvements should be sensitive to the context of the different land uses along the corridor. Specifically, the improvements along the western half of the project, which is more commercial and residential, should provide improved access to adjacent businesses and homes and improved pedestrian and bicycle connectivity. The improvements along the eastern half of the project should complement the rural nature of the area.

1.4.2 Need of the Proposed Action

The needs of the project can be summarized as follows:

- The safety of the route needs to be improved. The crash rates observed along the entire SR 126 (Memorial Boulevard) study corridor exceeded the statewide average crash rates for similar roadway segments.
- The width of the roadway generally needs to be improved. Most of the existing roadway includes 11 foot wide lanes with narrow shoulders.
- The width of the shoulders needs to be improved. The shoulders along the route are typically no wider than 2 feet and often not paved. The narrow shoulders, along with other existing geometric deficiencies, contribute to the high crash rates and create a less than desirable route for pedestrians and bicyclists.
- The geometry of the roadway needs to be improved. Numerous horizontal and vertical curves along the route are inadequate for the posted speed limit.
- Improved access management is needed along the commercial areas of the route. The public cited access onto SR 126 (Memorial Boulevard) as a major problem. Difficulty entering or exiting business parking lots was identified as a significant problem because of uncontrolled access to businesses along the roadway. Many of the access points are located near or within substandard curves or hills that limit sight distance for drivers attempting to turn into or out of the businesses.
- Improved response time for emergency vehicles is needed. With improvements, emergency vehicles would be able to respond more efficiently to emergencies within and near the project corridor. Wider shoulders would enable motorists to pull over and allow the emergency vehicles to pass through to their intended destinations. Current conditions along SR 126 (Memorial Boulevard) do not feature many areas for vehicles to pull over.

- Improved access for mail delivery is needed. Current geometric conditions along SR 126 (Memorial Boulevard) create bottlenecks during mail delivery. Wider shoulders would enable delivery vehicles to depart the travel lane and motorists pass more safely.
- Improved access for school busses is needed. Current geometric conditions along SR 126 (Memorial Boulevard) make it difficult for school busses to make turns. Wider paved roadway widths would improve accessibility for the school busses along the corridor.
- Improved traffic operations are needed along the route.

1.5 DISCUSSION OF NEEDS OF THE PROPOSED ACTION

1.5.1 System Linkage

Kingsport is served by two United States (US) Highways, US 23 and US 11W; two Interstates, I-26 and I-81; and four State Routes, SR 93, SR 92A, SR 126, and SR 136. SR 126 (Memorial Boulevard) provides a direct link between the City of Kingsport and I-81 and continues east to Bristol. SR 126 (Memorial Boulevard) is generally parallel to US 11W and I-81 within the study limits. SR 126 (Memorial Boulevard) primarily services local traffic and provides access to these higher type facilities that are utilized for longer distance travel. It is also a popular commuter route between adjacent communities and the City of Kingsport.

The termini for this project meet the requirements of being logical and displaying independent utility. This longstanding route has connected Kingsport to communities, including Indian Hills and Bridwell Heights, for decades (this route was the original US 11W, constructed in 1926); and to I-81 since the 1970s. Improvements and reconstruction of portions of the roadway will allow this route to remain open in a safer, more efficient manner.

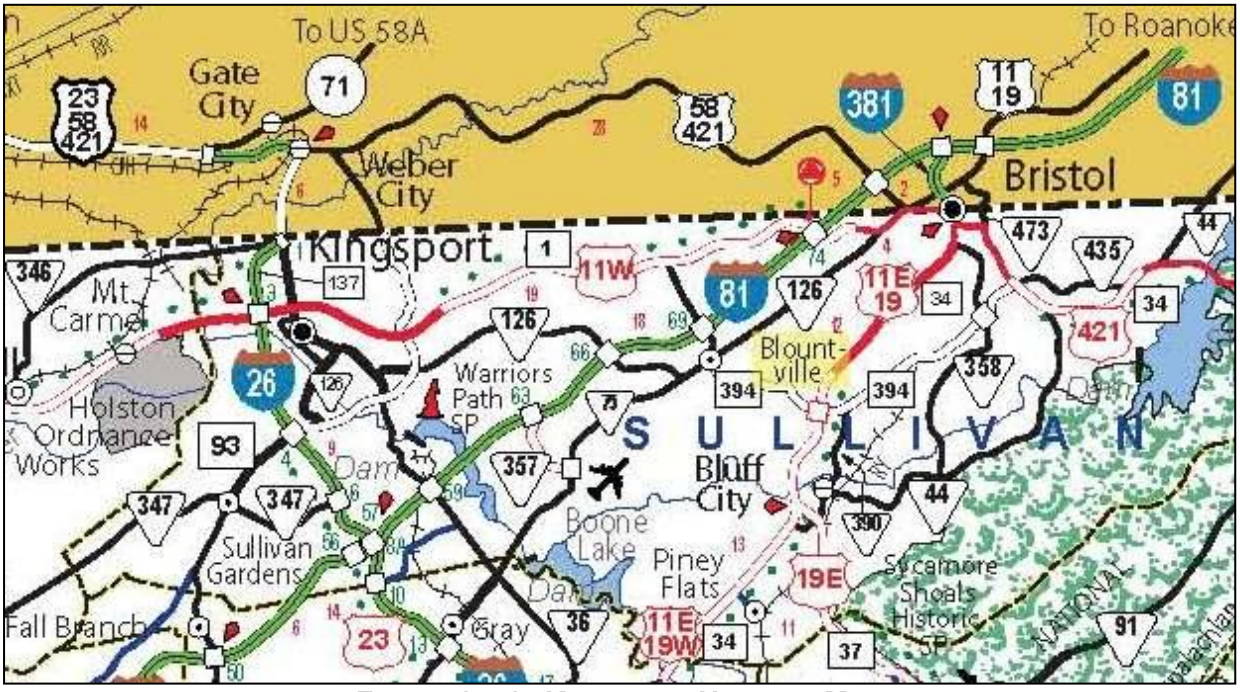


FIGURE 1.5.1: KINGSPORT HIGHWAY MAP

1.5.2 Existing Roadway Deficiencies

The existing roadway features inadequate lane widths, a lack of shoulders, and an unforgiving roadside with steep side slopes and roadside hazards. Additionally, substandard horizontal and vertical curves were identified by the public and by the Community Resource Team as a major concern on SR 126 (Memorial Boulevard). These concerns were validated by engineering field studies. Following is a summary of the identified deficiencies for horizontal and vertical curves within the study area.

Horizontal Curve Evaluation

Horizontal alignment is comprised of the straight lines and curves that make up the side to side elements of a roadway. A horizontal curve is what most people refer to as a curve or bend in the roadway. The speed at which a reasonable and prudent driver traverses a curve should be consistent with the amount of sight distance provided in the curve to allow for the driver to respond to the roadway conditions ahead. The design speed of horizontal curves should be consistent with the overall design speed of the roadway, and where it is not consistent, advisory or warning speed limits should be posted.

Along the study section of SR 126 (Memorial Boulevard), approximately 41% (20 out of 49) of the horizontal curves are substandard for the posted speed limit. **Table 1.5.1** identifies the location and severity of each deficient curve. The table also notes whether or not an advisory speed warning is posted in advance of the curve.

TABLE 1.5.1: HORIZONTAL CURVES WITH SUBSTANDARD DESIGN SPEEDS

Location	Curve Design Speed	Posted Speed Limit	Advisory Speed Warning
East of Orebank Road	25 mph	35 mph	
At Kite Street	30 mph	35 mph	
East side of Kent Street	30 mph	35 mph	
At Harbor Chapel Road	35 mph	45 mph	
East of Old Stage Road	30 mph	45 mph	30 mph
On Chestnut Ridge	35 mph	50 mph	35 mph
On Chestnut Ridge	40 mph	50 mph	35 mph
On Chestnut Ridge	40 mph	50 mph	35 mph
On Chestnut Ridge	25 mph	50 mph	35 mph
On Chestnut Ridge	30 mph	50 mph	35 mph
On Chestnut Ridge	45 mph	50 mph	35 mph
At Chestnut Ridge Road	45 mph	50 mph	
East side of Island Road	45 mph	50 mph	
At Shadowtown Road	45 mph	50 mph	
Between Natchez Lane & Dakota Drive	35 mph	50 mph	
West side of Cassidy Drive	45 mph	50 mph	
West side of Cochise Trail	45 mph	50 mph	
West of Samlola Road	40 mph	50 mph	
West of Samlola Road	45 mph	50 mph	
West of Overhill Drive	40 mph	50 mph	35 mph

Vertical Curve Evaluation

Vertical alignment is comprised of the straight lines and curves that make up the up and down elements of a roadway. A vertical curve is what most people refer to as a hill or valley. The design speed of a vertical curve is intended to prevent the driver's travel speed from exceeding his or her line of sight, thus allowing the driver ample time to respond to the roadway conditions ahead. A flatter curve allows the driver to see a greater distance, allowing a higher speed limit.

Data from a controlled aerial survey was used to develop a centerline profile for the project area of SR 126 (Memorial Boulevard). The curvature of the profile was examined to identify vertical curves that are substandard for the posted speed limit. **Table 1.5.2** lists 42 vertical curves by location that have a design speed less than the posted speed limit.

TABLE 1.5.2: VERTICAL CURVES WITH SUBSTANDARD DESIGN SPEEDS

Location	Type of Curve	Design Speed	Posted Speed	Curve Length
East of Trinity Lane	sag	35 mph	45 mph	183’
East of Trinity Lane	crest	40 mph	45 mph	214’
Between Trinity Lane & Tanglewood Road	crest	40 mph	45 mph	241’
Between Trinity Lane & Tanglewood Road	sag	40 mph	45 mph	257’
East of Old Stage Road	crest	40 mph	45 mph	273’
East of Old Stage Road	crest	40 mph	50 mph	176’
On Chestnut Ridge	sag	20 mph	50 mph	178’
On Chestnut Ridge	crest	45 mph	50 mph	379’
On Chestnut Ridge	sag	40 mph	50 mph	192’
On Chestnut Ridge	sag	45 mph	50 mph	168’
On Chestnut Ridge	crest	45 mph	50 mph	103’
On Chestnut Ridge	sag	35 mph	50 mph	164’
On Chestnut Ridge	crest	40 mph	50 mph	316’
East of Shuler Road	crest	35 mph	50 mph	346’
At Lemay Drive	crest	40 mph	50 mph	410’
East of Lemay Drive	crest	40 mph	50 mph	483’
East of Lemay Drive	sag	20 mph	50 mph	207’
West of Chestnut Ridge Road	crest	40 mph	50 mph	294’
West of Chestnut Ridge Road	sag	35 mph	50 mph	240’
East of Chestnut Ridge Road	crest	40 mph	50 mph	310’
Between Cooks Valley Road & Fisher Drive	sag	35 mph	50 mph	271’
East of Fisher Drive	crest	40 mph	50 mph	175’
Between Fisher Drive & Bridwell Heights	sag	30 mph	50 mph	271’
Between Bridwell Heights & Lana View Road	crest	40 mph	50 mph	316’
Between Lana View Road & Wembeck Drive	sag	35 mph	50 mph	295’
At Island Road	crest	40 mph	50 mph	271’
At Country Drive	crest	45 mph	50 mph	204’
West of Fall Creek Road	sag	35 mph	50 mph	219’
At Fall Creek Road	crest	40 mph	50 mph	340’
West of Cree Street	sag	35 mph	50 mph	387’
Between Cree Street & Santanta Road	crest	40 mph	50 mph	264’
At Montezuma Road	sag	40 mph	50 mph	318’
East of Natchez Lane	sag	45 mph	50 mph	600’
West of Cochise Trail	sag	35 mph	50 mph	429’
East of Cochise Trail	crest	40 mph	50 mph	291’
East of Cochise Trail	sag	45 mph	50 mph	324’
East of Cochise Trail	crest	45 mph	50 mph	350’
Between Cochise Trail & Samlola Road	crest	45 mph	50 mph	186’
Between Samlola Road & Gravel Top Road (west)	crest	45 mph	50 mph	525’
East of Gravel Top Road (east)	crest	40 mph	50 mph	390’
West of I-81 westbound ramp	sag	45 mph	50 mph	240’
West of I-81 westbound ramp	sag	40 mph	50 mph	296’

1.5.3 Modal Interrelationships

There are currently few modal interrelationships along the SR 126 (Memorial Boulevard) corridor. Narrow shoulders and lane widths, along with other existing geometric deficiencies, create a less than desirable route for pedestrians and bicyclists. Only approximately 1% of the corridor has sidewalks, limiting the facility's usage by pedestrians. Transit service is available along the far western segment of the corridor, and does not access the vast majority of the project study area east of Stratford Road.

1.5.4 Safety

A safety analysis was conducted for the project. Crash data from 1999 through 2007 was utilized in the safety analysis. The analysis demonstrates that the actual crash rates observed along the entire SR 126 (Memorial Boulevard) study corridor exceeded the statewide average crash rates for similar roadway segments (see **Table 1.5.3**).

TABLE 1.5.3: CRASH RATE SUMMARY FOR SR 126

Section Limits or Intersection Description	Typical Section	Total Crashes	Injury Crashes	Fatal Crashes	Actual Crash Rate	Statewide Average Rate
E. Center Street to Sun Bridge Rehab	4-lane undivided	130	37	0	4.014	3.3920
Sun Bridge Rehab to east of Stratford Rd.	4-lane divided	150	33	0	11.487	2.0112
East of Stratford Rd. to east of Old Stage Rd.	2-lane + climb	208	58	2	4.818	2.4188
East of Old Stage Rd. to west of Overhill Rd.	2-lane	436	137	13	2.906	1.6565
SR 126 intersection with Carolina Pottery Drive / Overhill Road	N/A	51	26	1	1.91	0.2193

Several intersections along SR 126 (Memorial Boulevard) were also identified as having high numbers of crashes. Those intersections include (with the number of crashes in parentheses):

- Overhill Road/Carolina Pottery Drive (74)
- Stratford Road (49)
- SR 93 (John B. Dennis Highway) Southbound Ramps (35)
- Harbor Chapel Road (26)
- Fall Creek Road (34)
- Amy Avenue (31)
- East Center Street (25)

Sixteen fatal crashes were reported between 1999 and 2007. Their location, date, time, and type of crash are listed in **Table 1.5.4**. As can be seen in the table, the majority of the fatal crashes were either lane departure crashes or head on crashes. These types of crashes are generally associated with high travel speeds, poor roadside design/lack of shoulders, and narrow lanes.

Table 1.5.5 lists the fatal crash rates along the SR 126 (Memorial Boulevard) Study Corridor. As can be seen in the table, the actual fatal crash rate along SR 126 (Memorial Boulevard) from Stratford Road to Overhill Road is between two to eight times higher than the statewide fatal crash rate for similar roadway segments. The area between Stratford Road and Overhill Road is 7.4 miles long and accounts for 88% of the 8.4 mile long study corridor.

TABLE 1.5.4: FATALITY CRASH LOCATIONS

Location Description	Date	Time	Type of Crash
Culvert between East Lawn Cemetery and Chestnut Ridge Road	3/27/99	21:25	The vehicle ran off the road and overturned.
Overhill Road / Carolina Pottery	6/5/00	15:13	Angle collision between two vehicles
East of Cochise Trail	6/7/00	6:18	Head-on collision between two vehicles
Between Chestnut Ridge Road and Old Stage Road	5/20/02	18:35	The vehicle ran off the road and hit a fixed object.
Between Trinity Lane and Tanglewood Road	8/26/02	14:58	The vehicle ran off the road and overturned.
Between Island Road and Country Acres Drive	7/16/03	1:40	The vehicle ran off the road and hit a fixed object.
Between Old Stage Road and Cooks Valley Road	7/18/03	16:15	Head-on collision between two vehicles
Between Chestnut Ridge Road and Old Stage Road	1/13/03	6:25	Angle collision between two vehicles
Between Trinity Lane and Tanglewood Road	1/16/04	18:25	Vehicle was sideswiped by an on-coming vehicle
Between LeMay Drive and Chestnut Ridge Road	8/9/04	5:00	Single car crash; vehicle encountered an animal
Between Cree Street and Satanta Road	3/25/04	23:55	The vehicle ran off the road and hit a fixed object.
At the SR 126 intersection with Satanta Road	9/28/04	17:45	The vehicle ran off the road and hit a fixed object.
Near the SR 126 intersection with Cochise Trail	11/24/04	12:00	Vehicle collided with a utility pole
Between Old Stage Road and Holliday Hills Road	12/20/05	10:58	Head-on collision between two vehicles
Between Old Stage Road and Holliday Hills Road	12/12/06	14:00	Angle collision between two vehicles
Between Old Stage Road and Holliday Hills Road	10/6/06	20:35	Vehicle ran off the road to avoid colliding with another vehicle

TABLE 1.5.5: FATAL CRASH RATE SUMMARY FOR SR 126

Section Description	Fatal Crash Rates	
	SR 126	TN Average
East Center Street to Sun Bridge Rehab	0.0000	0.02
Sun Bridge Rehab to east of Stratford Road	0.0000	0.01
East of Stratford Road to east of Old Stage Road	0.0463	0.02
East of Old Stage Road to west of Overhill Rd.	0.0867	0.01

1.6 LEVEL OF SERVICE ANALYSIS

1.6.1 Traffic

Traffic projections were created by TDOT during the Context Sensitive Solutions Process to assist with determining the needed improvements. The traffic volumes are summarized in **Table 1.5.6: SR 126 Traffic Volumes**. Annual Average Daily Traffic (AADT) mainline volumes are reported for the Build and Design Years of 2013 and 2033.

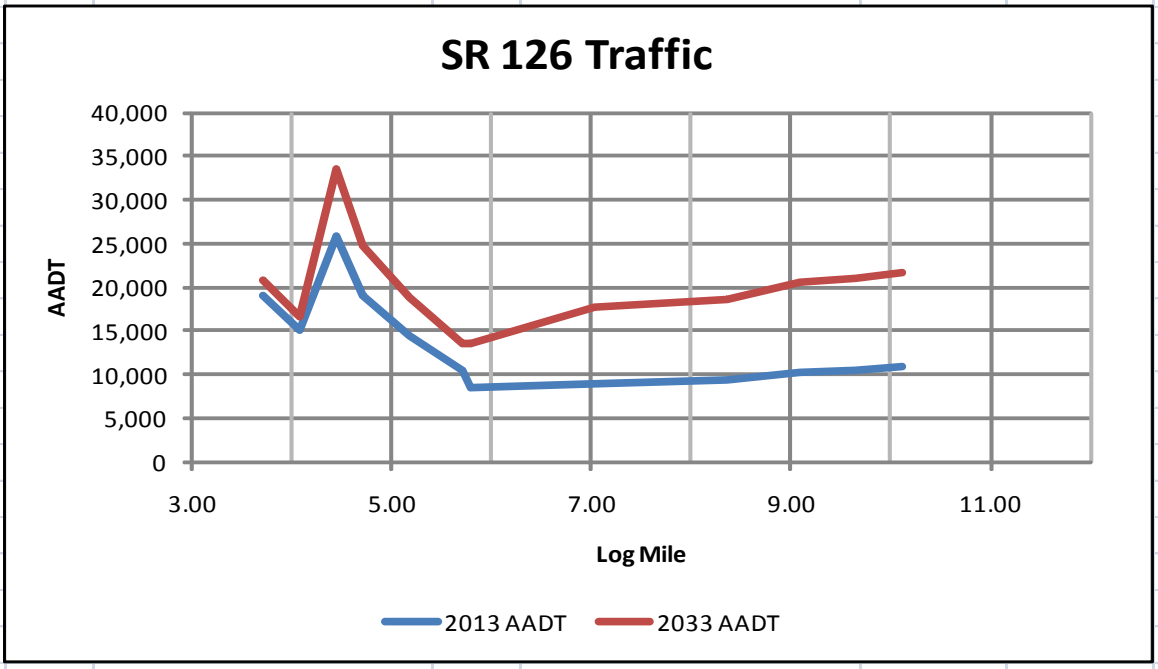
The Build Year Traffic (2013) utilized four TDOT count stations within the study corridor, historical data within the study corridor, and calibrated turning movement counts. The Design Year Traffic (2033) was calculated utilizing four zones segmented by the TDOT count stations, with respect to variance in growth rates provided from the Kingsport MPO model. The growth rates were as follows:

- 0.5% per year between East Center Street and SR 93 (John B. Dennis Highway)
- 1.5% per year between SR 93 (John B. Dennis Highway) and Old Stage Road
- 3.0% per year between Old Stage Road and Shuler Drive
- 5.0% per year between Shuler Drive and I-81 and Shuler Drive

As can be seen in **Table 1.5.6**, the traffic is heaviest at the western terminus of the study corridor, peaking in the SR 93 (John B. Dennis Highway) Interchange area. The land use in this area is mixed commercial and residential. The traffic then gradually decreases until it reaches Lemay Drive. Lemay Drive is located near Kingsport's City Limits in a residential area. The land use east from Lemay Drive changes from residential to rural. East from Lemay Drive, the traffic volumes are lighter, but increase gradually until reaching the study corridor's eastern terminus at I-81.

TABLE 1.5.6: SR 126 TRAFFIC VOLUMES

SR 126 Existing and Future Traffic Volumes					
From		To		2013	2033
L.M.	Cross Road	L.M.	Cross Road	AADT	AADT
3.72	East Center Street	4.09	Orebank Road	18,960	20,860
4.09	Orebank Road	4.44	SR 93	15,100	16,700
4.44	SR 93	4.71	Hawthorne Street	25,800	33,540
4.71	Hawthorne Street	5.18	Harbor Chapel Road	19,080	24,800
5.18	Harbor Chapel Road	5.72	Briarwood Road	14,500	18,850
5.72	Briarwood Road	5.80	Old Stage Road	10,430	13,560
5.80	Old Stage Road	7.04	Lemay Road	8,450	13,520
7.04	Lemay Road	8.37	Island Road	8,920	17,840
8.37	Island Road	9.10	Fall Creek Road	9,360	18,720
9.10	Fall Creek Road	9.65	Hill Road	10,260	20,520
9.65	Hill Road	10.11	Harr Town Road	10,550	21,100
10.11	Harr Town Road	12.12	I-81	10,830	21,660



1.6.2 Capacity Analysis Results

Several measures of effectiveness (MOE) are utilized in this document to assess the operational conditions of SR 126 (Memorial Boulevard) for the No-Build and two Build Alternatives. These measures of effectiveness are level of service, volume to capacity ratio, and average travel speed. A definition of these measures is provided in the following text. A detailed discussion of the No-Build Alternative and two Build Alternative's MOE are also provided. A summary of the No-Build and Build Alternative's Design Year (2033) MOE are provided in **Figure 1.6.1: SR 126 Design Year (2033) LOS**, **Figure 1.6.2: SR 126 Alternative Design Year (2033) MOE Comparison**, and **Figure 1.6.3: SR 126 Alternative Design Year (2033) Travel Speed Comparison**. The Level of Service calculations can be found on file at the TDOT Environmental Division Office in Nashville, TN.

Without improvements (No-Build), the corridor will experience LOS ranging from C to F in the design year and a corresponding average travel speed of 24 mph.

With improvements (Build Alternatives), the LOS will be improved to a range of B to F with an average travel speed of up to 34 mph.

Level of Service

Level of Service (LOS) is a quality measure describing operational conditions within a traffic stream, generally in terms of such service measures as speed and travel time, freedom to maneuver, traffic interruptions, and comfort and convenience. LOS range from A to F, with LOS A representing the best operating conditions and LOS F the worst. Each LOS represents a range of operating conditions and the driver's perception of those conditions. Please refer to **Table 1.6.1: LOS Table** for a description of each LOS.

The quality of service was assessed utilizing the methodology outlined in the *Highway Capacity Manual 2000* (HCM) *Two-Lane Highways* and *Multilane Highways* Chapters. The Level of Service (LOS) Calculations were performed with the Highway Capacity Software (HCS+T7F Version 5.3). HCS+ is developed and maintained as an implementation of the HCM procedures. HCS+ calculations assign a LOS along route segments with similar geometric and traffic characteristics.

Volume to Capacity Ratio & Congestion Reduction

Unlike LOS, which is a qualitative measure, the volume to capacity ratio (v/c) is a quantitative measure. The v/c ratio is reported to demonstrate the magnitude of congestion for the options included in this document. The v/c ratio demonstrates how much reserve capacity along a roadway segment is available, or how much the segment is overcapacity. A v/c ratio near or above "1" indicates a roadway experiences congestion.

Average Travel Speed

Average travel speed is calculated in the LOS analysis. Speed is an important measure of congestion and the quality of the traffic service provided to the motorist.

TABLE 1.6.1: LOS TABLE

LOS	Traffic Flow Conditions	Representative Photo
A	Free flow operations. Vehicles are almost completely unimpeded in their ability to maneuver with the traffic stream. The general level of physical and psychological comfort provided to the driver is high.	
B	Reasonable free flow operations. The ability to maneuver within the traffic stream is only slightly restricted and the general level of physical and psychological comfort provided to the driver is still high.	
C	Flow with speeds at or near free flow speeds. Freedom to maneuver within the traffic stream is noticeably restricted and lane changes require more vigilance on the part of the driver. The driver notices an increase in tension.	
D	Speeds decline with increasing traffic. Freedom to maneuver within the traffic stream is more noticeably limited. The driver experiences reduced physical and psychological comfort levels.	
E	At lower boundary, the facility is at capacity. Operations are volatile because there are virtually no gaps in the traffic stream. There is little room to maneuver. The driver experiences poor levels of physical and psychological comfort.	
F	Breakdowns in traffic flow. The number of vehicles entering the highway section exceed the capacity or ability of the highway to accommodate that number of vehicles. There is little room to maneuver. The driver experiences poor levels of physical and psychological comfort.	

No-Build Alternative

The No-Build Alternative makes no improvements to SR 126 (Memorial Boulevard) other than scheduled maintenance activities. The existing roadway characteristics of the No-Build Alternative are discussed in **Section 1.2.2**.

For the No-Build Alternative, the Highway Capacity Software (HCS) analysis calculates Levels of Service (LOS) ranging from C to F along SR 126 (Memorial Boulevard) through the year 2033 during peak hour conditions. Eighty-seven percent (87%) of the route is calculated to operate with a deficient LOS of E or F by 2033. A summary of the LOS calculations for the No-Build Alternative is provided in **Table 1.6.2**. The LOS are reported for the years 2013 and 2033.

For the No-Build Alternative in the year 2013, the volume to capacity ratio (v/c) of SR 126 (Memorial Boulevard) is calculated to range from 0.27 to 0.76, with a weighted average of 0.47. In 2033, the v/c ranges from 0.54 to 0.99 with a weighted average of 0.81. The average was weighted based upon the length of each segment analyzed. A v/c ratio near or above "1" indicates a roadway experiences congestion. A summary of the v/c calculations for the No-Build Alternative is provided in **Table 1.6.2**. The v/c are reported for the years 2013 and 2033.

The speed limit ranges from 35 to 50 mph along SR 126 (Memorial Boulevard). For the No-Build Alternative in the year 2013, travel speeds along the corridor are calculated by the HCS to range from 21 mph to 42 mph, with a weighted average of 32 mph. In 2033, the travel speed ranges from 15 mph to 42 mph with a weighted average of 24 mph. The average was weighted based upon the length of each segment analyzed. The weighted average of the speed limit along the route is 47 mph. The calculated average route speed is 68% and 51% of the posted speed limit in the years 2013 and 2033, respectively. A summary of the travel speed calculations for the No-Build Alternative is provided in **Table 1.6.2**. The travel speeds are reported for the years 2013 and 2033.

The existing SR 126 (Memorial Boulevard) Corridor (No-Build Alternative) between East Center Street to the west and I-81 to the east is 8.4 miles in length. For the No-Build Alternative in the year 2013, the travel time along the corridor is calculated to be 16 minutes. In 2035, the travel time is calculated to be 21 minutes.

Build Alternative A

Build Alternative A improves SR 126 (Memorial Boulevard) to a four-lane facility (two travel lanes in each direction) within the commercial and residential areas of the western half of the study corridor. The eastern half of the study corridor, which is rural in nature, will remain a two-travel lane facility. Improved shoulders will be provided along the entire corridor and sidewalks will be extended to the majority of the commercial and residential areas. Build Alternative A is discussed in more detail in **Chapter 2**.

For Build Alternative A, the Highway Capacity Software (HCS) analysis calculates Levels of Service (LOS) ranging from B to F along SR 126 (Memorial Boulevard) through the year 2033 during peak hour conditions. Fifty-four percent (54%) of the route is calculated to operate with a deficient LOS of E or F by 2033. A summary of the LOS calculations for Build Alternative A is provided in **Table 1.6.3**. The LOS are reported for the years 2013 and 2033.

For Build Alternative A in the year 2013, the volume to capacity ratio (v/c) of SR 126 (Memorial Boulevard) is calculated to range from 0.24 to 0.70, with a weighted average of 0.38. In 2033, the v/c ranges from 0.31 to 0.91 with a weighted average of 0.64. The average was weighted

based upon the length of each segment analyzed. A v/c ratio near or above "1" indicates a roadway experiences congestion. A summary of the v/c calculations for Build Alternative A is provided in **Table 1.6.3**. The v/c are reported for the years 2013 and 2033.

The speed limit of Alternative A will likely range from 35 to 50 mph along SR 126 (Memorial Boulevard). For Build Alternative A in the year 2013, travel speeds along the corridor are calculated by the HCS to range from 31 mph to 43 mph, with a weighted average of 38 mph. In 2033, the travel speed also ranges from 31 mph to 43 mph, but the weighted average decreases to 34 mph. The average was weighted based upon the length of each segment analyzed. The weighted average of the proposed speed limit along the route is 44 mph. The calculated average route speed is 86% and 77% of the posted speed limit in the years 2013 and 2033, respectively. A summary of the travel speed calculations for Build Alternative A is provided in **Table 1.6.3**. The travel speeds are reported for the years 2013 and 2033.

The existing SR 126 (Memorial Boulevard) Corridor (No-Build Alternative) between East Center Street to the west and I-81 to the east is 8.4 miles in length. The length of Build Alternative A will be similar. For Build Alternative A in the year 2013 the travel time along the corridor is calculated to be 13 minutes. In 2033, the travel time is calculated to be 15 minutes.

Build Alternative B

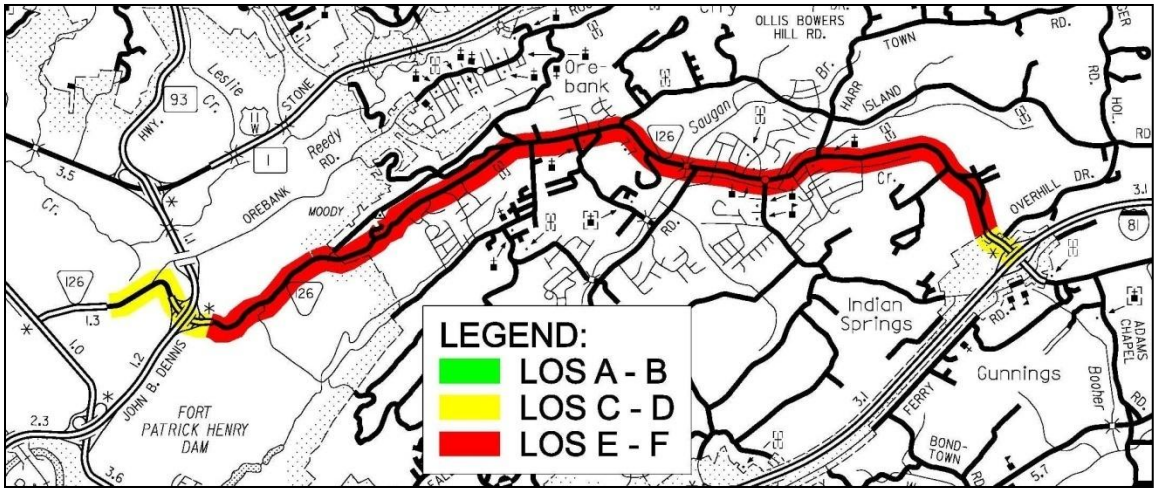
Build Alternative B is similar to Build Alternative A. The length of the four-lane improvement is reduced by approximately 0.46 mile in Build Alternative B to reduce impacts to East Lawn Memorial Gardens while avoiding impacts to Yancey's Tavern. These environmentally sensitive properties are located on either side of SR 126 (Memorial Boulevard) near Eaton Station Road. Build Alternative B is discussed in more detail in **Chapter 2**.

For Build Alternative B, the Highway Capacity Software (HCS) analysis calculates Levels of Service (LOS) ranging from B to F along SR 126 (Memorial Boulevard) through the year 2033 during peak hour conditions. Fifty-nine percent (59%) of the route is calculated to operate with a deficient LOS of E or F by 2033. A summary of the LOS calculations for Build Alternative B is provided in **Table 1.6.4**. The LOS are reported for the years 2013 and 2033.

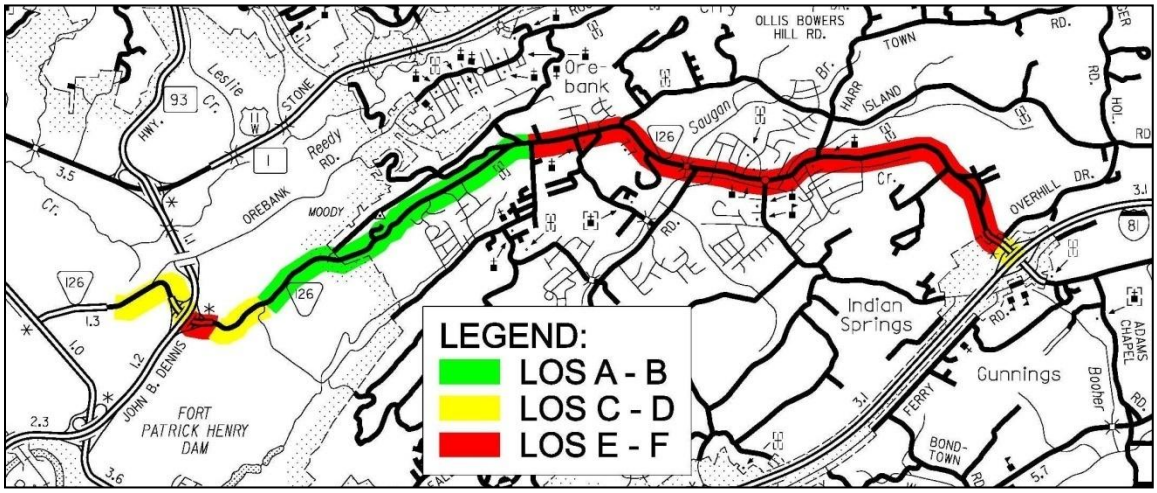
For Build Alternative B in the year 2013, the volume to capacity ratio (v/c) of SR 126 (Memorial Boulevard) is calculated to range from 0.24 to 0.70, with a weighted average of 0.39. In 2033, the v/c ranges from 0.31 to 0.91 with a weighted average of 0.67. The average was weighted based upon the length of each segment analyzed. A v/c ratio near or above "1" indicates a roadway experiences congestion. A summary of the v/c calculations for Build Alternative B is provided in **Table 1.6.4**. The v/c are reported for the years 2013 and 2033.

The speed limit of Alternative B will likely range from 35 to 50 mph along SR 126 (Memorial Boulevard). For Build Alternative B in the year 2013, travel speeds along the corridor are calculated by the HCS to range from 31 mph to 43 mph, with a weighted average of 38 mph. In 2033, the travel speed also ranges from 31 mph to 43 mph, but the weighted average decreases to 33 mph. The average was weighted based upon the length of each segment analyzed. The weighted average of the proposed speed limit along the route is 44 mph. The calculated average route speed is 86% and 75% of the posted speed limit in the years 2013 and 2033, respectively. A summary of the travel speed calculations for Build Alternative B is provided in **Table 1.6.4**. The travel speeds are reported for the years 2013 and 2033.

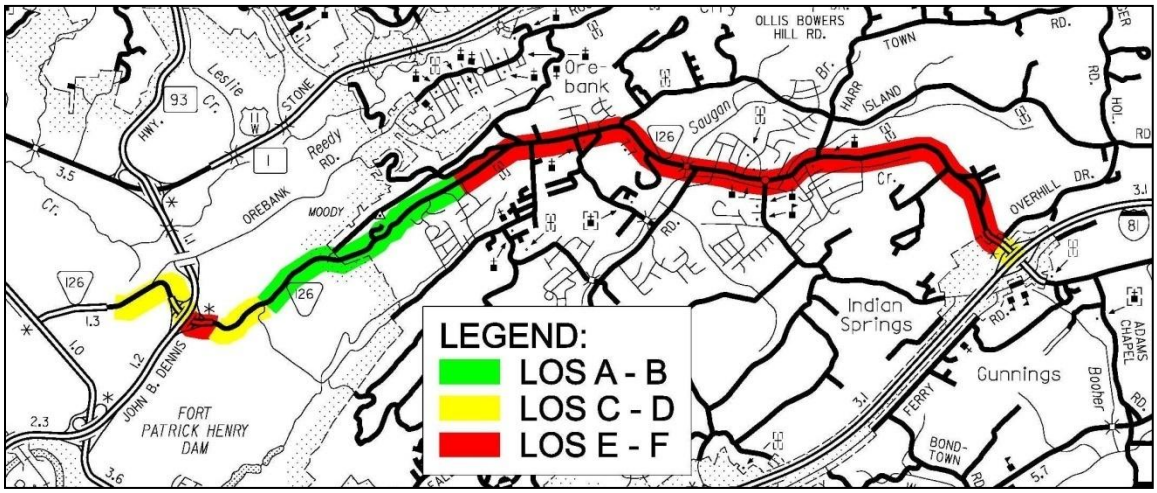
The existing SR 126 (Memorial Boulevard) Corridor (No-Build Alternative) between East Center Street to the west and I-81 to the east is 8.4 miles in length. The length of Build Alternative B will be similar. For Build Alternative B in the year 2013 the travel time along the corridor is calculated to be 13 minutes. In 2033, the travel time is calculated to be 15 minutes.



No-Build



Build Alternative A



Build Alternative B

FIGURE 1.6.1: SR 126 DESIGN YEAR (2033) LOS

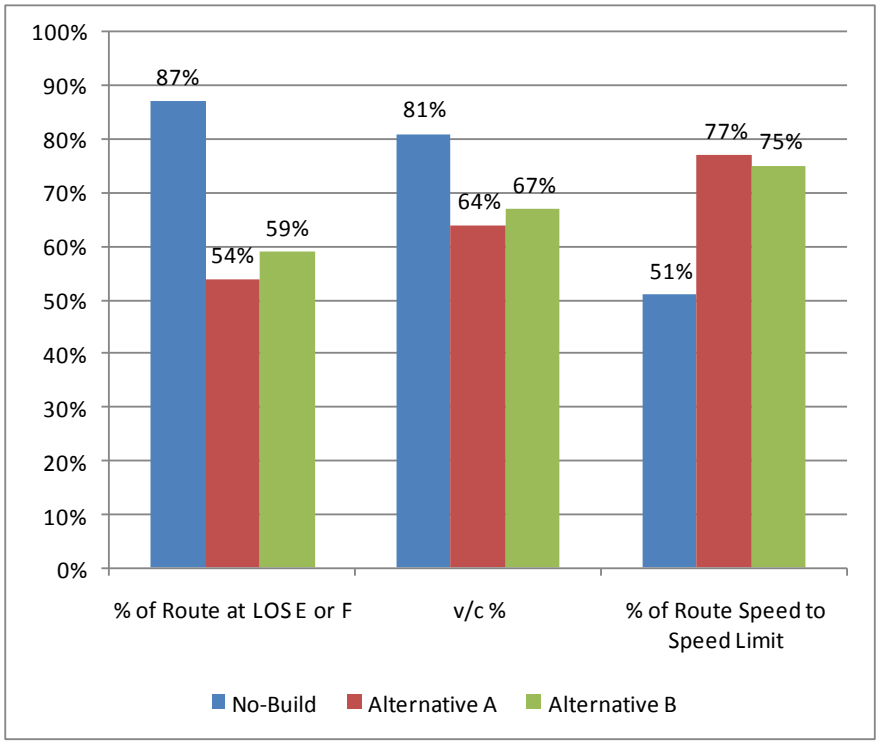


FIGURE 1.6.2: SR 126 ALTERNATIVE DESIGN YEAR (2033) MOE COMPARISON

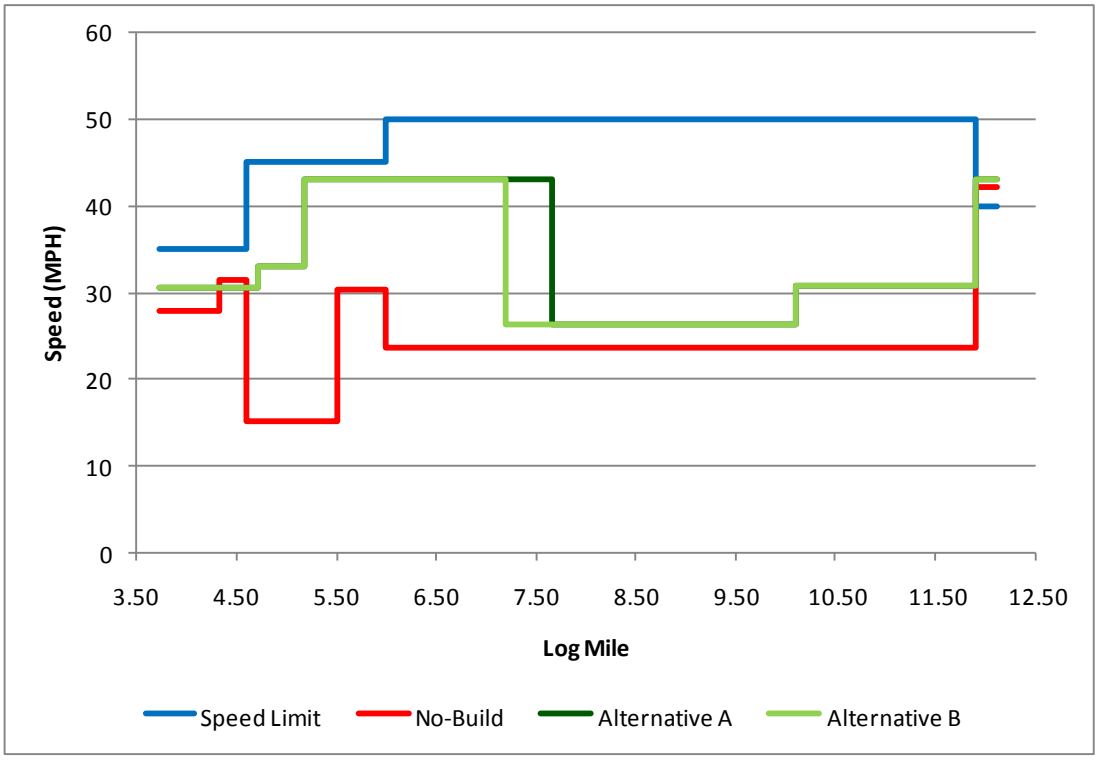


FIGURE 1.6.3: SR 126 ALTERNATIVE DESIGN YEAR (2033) TRAVEL SPEED COMPARISON

TABLE 1.6.2: NO-BUILD ALTERNATIVE LOS

ID	From		To		Dist.	Cross Section	Speed	2013				2033			
	L.M.	Desc.	L.M.	Desc.			Limit	AADT	LOS	Speed	v/c	AADT	LOS	Speed	v/c
1	3.72	Center St.	4.33	Hillcrest Dr.	0.61	4-Lanes with No Median and Narrow Shoulders	35	18,960	C	28	0.51	20,860	C	28	0.56
2	4.33	Hillcrest Dr.	4.60	Heather Ln.	0.27	4-Lanes with a Raised Grass Median and Wide Shoulders	35	25,800	D	32	0.70	33,540	D	32	0.91
3	4.60	Heather Ln.	5.50	Tangle-wood Rd.	0.9	2-Lanes Eastbound, 1-Lane Westbound with No Median and Narrow Shoulders	45	19,080	E	21	0.76	24,800	F	15	0.99
4	5.50	Tangle-wood Rd.	6.00	Ethel Dr.	0.5	2-Lanes with TWLTL and Narrow Shoulders	45	10,430	E	33	0.42	13,560	E	30	0.54
5	6.00	Ethel Dr.	11.90	Carolina Pottery Dr.	5.9	2-Lanes with No Median and Narrow Shoulders	50	10,550	E	33	0.42	21,100	F	24	0.84
6	11.90	Carolina Pottery Dr.	12.12	I-81	0.22	4-Lanes with a Raised Grass Median and Wide Shoulders	40	10,830	B	42	0.27	21,660	C	42	0.55
				Σ =	**8.4**	**Weighted Average =**	**47**			**32**	**0.47**			**24**	**0.81**

TABLE 1.6.3: BUILD ALTERNATIVE A LOS

ID	From		To		Dist.	Cross Section	Speed	2013				2033			
	L.M.	Desc.	L.M.	Desc.			Limit	AADT	LOS	Speed	v/c	AADT	LOS	Speed	v/c
1a	3.72	Center St.	4.44	SR 93	0.72	4-Lanes with a Raised Grass Median and 4 Ft. Shoulders	35	18,960	C	31	0.51	20,860	C	31	0.56
1b	4.44	SR 93	4.71	Haw-thorne St.	0.27	4-Lanes with a Raised Grass Median and 4 Ft. Shoulders	35	25,800	D	31	0.70	33,540	E	31	0.91
2	4.71	Haw-thorne St.	5.18	Harbor Chapel Rd.	0.47	4-Lanes with a TWLTL and 4 Ft. Shoulders	35	19,080	C	33	0.52	24,800	D	33	0.67
3	5.18	Harbor Chapel Rd.	7.66	Cooks Valley Rd.	2.48	4-Lanes with a Raised Grass Median and 4-8 Ft. Shoulders	45	10,430	A	43	0.24	13,560	B	43	0.31
4	7.66	Cooks Valley Rd.	10.11	Harr Town Rd.	2.45	2-Lanes with a TWLTL and 6 Ft. Shoulders	45	10,260	E	36	0.41	20,520	E	26	0.82
5	10.11	Harr Town Rd.	11.90	Carolina Pottery Rd.	1.79	2-Lanes with No Median and 10 Ft. Shoulders	50	10,830	D	41	0.43	21,660	F	31	0.86
6	11.90	Carolina Pottery Rd.	12.12	I-81	0.22	4-Lanes with a Raised Grass Median and 12 Ft. Shoulders	40	10,830	B	43	0.27	21,660	C	43	0.55
				Σ =	**8.4**	**Weighted Average =**	**44**			**38**	**0.38**			**34**	**0.64**

TABLE 1.6.4: BUILD ALTERNATIVE B LOS

ID	From		To		Dist.	Cross Section	Speed	2013				2033			
	L.M.	Desc.	L.M.	Desc.			Limit	AADT	LOS	Speed	v/c	AADT	LOS	Speed	v/c
1a	3.72	Center St.	4.44	SR 93	0.72	4-Lanes with a Raised Grass Median and 4 Ft. Shoulders	35	18,960	C	31	0.51	20,860	C	31	0.56
1b	4.44	SR 93	4.71	Haw-thorne St.	0.27	4-Lanes with a Raised Grass Median and 4 Ft. Shoulders	35	25,800	D	31	0.70	33,540	E	31	0.91
2	4.71	Haw-thorne St.	5.18	Harbor Chapel Rd.	0.47	4-Lanes with a TWLTL and 4 Ft. Shoulders	35	19,080	C	33	0.52	24,800	D	33	0.67
3	5.18	Harbor Chapel Rd.	7.20	Lemay Dr.	2.02	4-Lanes with a Raised Grass Median and 4-8 Ft. Shoulders	45	10,430	A	43	0.24	13,560	B	43	0.31
4	7.20	Lemay Dr.	10.11	Harr Town Rd.	2.91	2-Lanes with a TWLTL and 6 Ft. Shoulders	45	10,260	E	36	0.41	20,520	E	26	0.82
5	10.11	Harr Town Rd.	11.90	Carolina Pottery Rd.	1.79	2-Lanes with No Median and 10 Ft. Shoulders	50	10,830	D	41	0.43	21,660	F	31	0.86
6	11.90	Carolina Pottery Rd.	12.12	I-81	0.22	4-Lanes with a Raised Grass Median and 12 Ft. Shoulders	40	10,830	B	43	0.27	21,660	C	43	0.55
				Σ =	**8.4**	**Weighted Average =**	**44**			**38**	**0.39**			**33**	**0.67**

1.7 CONSISTENCY WITH EXISTING TRANSPORTATION PLANS

The project is included in the Kingsport Metropolitan Planning Organization's (MPO) *Transportation Improvement Program, Fiscal Years 2011 through 2014*, adopted October 20th, 2010. The project is listed in *Section A, Previous Projects*. The projects in Section A are major projects carried over from the previous (2008-2011) Transportation Improvement Program (TIP). The project is listed on page 12 of the 2011-2014 TIP. The project description is provided in **Table 1.7.1: TIP Listing**.

This project is also included in the *Kingsport Metropolitan Area 2030 Transportation Plan*, dated June 14, 2007 and amended January 10, 2008. The plan addresses the future transportation needs within the MPO boundary. The project is listed on pages 119 and 120 of the amended plan. The project description is provided in **Table 1.7.2: Transportation Plan Listing**.

TABLE 1.7.1: TIP LISTING

ID	Project Location	Description	Status
TN-5 PIN 105467.00	SR 126 from Center St. to I-81	Reconstructing/widening improvements	Currently in PE Phase

TABLE 1.7.2: TRANSPORTATION PLAN LISTING

Project No.	Jurisdiction	Project Name (not Prioritized)	Location (To and From)	Functional Classification	Project Purpose	Type Project	General Improvements	Additional Information	Estimated Cost
MNA-20a	Kingsport Sullivan County	Memorial Blvd./State Route 126	Center Street to Cook's Valley Road	Minor Arterial	Safety and Related Congestion Relief	Major Reconstruction	Reconstruct to 4 lanes with grass median	Apply context sensitive solutions concepts	$22,867,800
MNA-20b	Kingsport Sullivan County	Memorial Blvd./State Route 126	Cook's Valley Road to I-81	Minor Arterial	Safety and Related Congestion Relief	Major Reconstruction	Reconstruct to 3 lanes and wide shoulder/clear zones, soften curbs	3 lanes/2 lanes/widen shoulders	$17,150,850

1.8 SUMMARY

Based on the above discussion, it has been determined that there is a need for the proposed project. SR 126 (Memorial Boulevard) provides a direct link between the City of Kingsport and I-81. SR 126 (Memorial Boulevard) is generally parallel to US 11W and I-81 within the study limits. SR 126 (Memorial Boulevard) primarily services local traffic and provides access to these higher type facilities that are utilized for longer distance travel. It is also a popular commuter route between adjacent communities and the City of Kingsport. SR 126 (Memorial Boulevard) has documented safety and geometric deficiencies that need to be improved. The existing roadway allows no safe modal choice except for automobiles due to the narrow shoulders and lack of sidewalks. The project has logical termini, is of sufficient length to address environmental matters on a broad scope, has independent utility, and will not restrict consideration of alternatives for other foreseeable transportation improvements.

Chapter 2: Alternatives



2.0 ALTERNATIVES

This chapter of the Draft Environmental Impact Statement (DEIS) describes the alternatives under consideration for the 8.4 mile-long SR 126 (Memorial Boulevard) Corridor improvement project. In selecting reasonable alternatives to meet the purpose and need of the project, TDOT consulted with local, state and federal officials and agencies, identified environmentally sensitive areas and held several public involvement meetings in the project corridor. The No-Build and two Build Alternatives are currently under consideration for this project. Background concerning how these alternatives were determined is provided in **Section 2.1**. The geometric features of the existing roadway, which are consistent with the No-Build Alternative, were discussed in detail in **Chapter 1, Section 1.2**. The two Build Alternatives (Build Alternative A and Build Alternative B) are described in detail in **Sections 2.3** and **2.4.** The No-Build and two Build Alternatives are compared in **Section 2.5**, along with how each alternative addresses the purpose and need of the project. Conceptual Layouts of Alternatives A and B are provided in **Appendix D**. The alternatives that were considered but eliminated from further study are described and the reason for their elimination are summarized in **Section 2.6**. The final selection of the preferred alternative will not be made until after the impacts of the No-Build and Build Alternatives, comments on the Draft EIS, and the comments from the NEPA Public Hearing have been fully evaluated.

2.1 BACKGROUND IN DETERMINING REASONABLE ALTERNATIVES TO INCLUDE IN THE DEIS

The SR 126 (Memorial Boulevard) project was the initial Context Sensitive Solutions (CSS) Project for Tennessee. A Community Resource Team (CRT) was assembled for the SR 126 (Memorial Boulevard) CSS project. The CRT met thirteen times for meetings, training, and workshops and conducted three series of Public Involvement Sessions between October 2003 and May 2005.

A continuous four-travel lane alternative with a divided median was considered and discussed beginning in the planning stages of the project and through the CSS phase. Although some support was noted for this alternative, there was considerable opposition, in part, due to the increased right-of-way requirements, which would require a higher number of family and business relocations, adverse impacts to the historic Yancey's Tavern property, and additional grave relocations within the East Lawn Memorial Gardens Cemetery located directly across the roadway from the tavern. The continuous four-travel lane alternative would also require higher areas of encroachment into floodplains, greater lengths of channel changes to streams, and potentially additional hazardous material impacts. The public expressed concerns about potential diminished visual and rural aesthetics, accelerated development and increased traffic speed in the corridor if a continuous four-lane alignment was constructed.

In the CSS Process, the public expressed preferences for the blending of four-, three-, and two-lane sections of the roadway. They also expressed a preference for maintaining fewer travel lanes and lower speed limits in portions of the project area to minimize potential increases in land use changes adjacent to the project area.

Concept plans were presented at the public involvement meetings associated with the CSS Process. The concept plans were not fully developed alternatives. They were presented as tables with options (i.e., landscaped median or center turn lane), and presented to the public for discussion. Three main concepts, A, B, and C, were presented during the Public Involvement

Session that occurred at Sunnyside Baptist Church on May 26, 2005. The Summary of Cross Section Elements for these conceptual alternatives is included in **Appendix E**.

A detailed preference survey was included at the end of handout material distributed during the May 2005 Public Involvement Session. In the survey, citizens were asked to express a preference for Concept A, B, C, or the "No-Build" Alternative along various segments of the study corridor. The public comments favored Concept C by 1102 of the 2424 responses collected. Concept C incorporates the public's expressed preference for the blending of four-, three-, and two-lane sections of the roadway along the corridor. Concepts A and B were dismissed by the CRT and TDOT based on public lack of support for a four-lane section in the portion of the project between Cooks Valley Road and I-81. Concept C was carried forward for further consideration in the design process. Concept C has been renamed Build Alternative A in this document. Build Alternative B in this document is a refinement of Build Alternative A. Build Alternative B incorporates the public's desire to minimize adverse impacts to the historic Yancey's Tavern property and additional grave relocations within the East Lawn Memorial Gardens Cemetery, located directly across the roadway from the tavern.

2.2 NO-BUILD ALTERNATIVE

The No-Build, or No Action, Alternative makes no improvements to SR 126 (Memorial Boulevard) other than scheduled maintenance activities. There are several advantages to the No-Build Alternative. One is that present travel patterns would not be temporarily disrupted by the construction of this project. Noise and construction impacts would not occur. There would be no impacts to wildlife, cultural resources, or farmland. There would be no family or business relocations. The No-Build Alternative would have no direct impacts on the environment.

There are, however, several disadvantages to the No-Build Alternative. It would not improve vehicular, pedestrian, or bicyclist mobility. It would not correct existing geometric deficiencies along the route. It would not improve safety. It does not meet the Purpose and Need of the project.

2.3 BUILD ALTERNATIVE A

Build Alternative A improves SR 126 (Memorial Boulevard) to a four-lane facility (two travel lanes in each direction) within the commercial and residential areas of the western half of the study corridor. The eastern half of the study corridor, which is rural in nature, will remain a two-travel lane facility. Either a raised median or two way left turn lane (TWLTL) will be provided along the majority of the route. Improved shoulders will be provided along the entire corridor and sidewalks will be extended to the majority of the commercial and residential areas.

Several different typical cross sections are proposed along the SR 126 (Memorial Boulevard) corridor. Additional right-of-way will be required along the entire corridor to accommodate the proposed improvements. **Section 2.3.1** describes the proposed roadway cross-sections in detail. The proposed roadway characteristics are also summarized in **Figures 2.3.1** through **2.3.20** and **Table 2.3.1**. Additionally, Conceptual Layouts of Build Alternative A are provided in **Appendix D**.

The proposed alignment of Alternative A generally follows the existing alignment. The proposed alignment shifts from side to side to minimize impacts, reduce earthwork volumes, simplify constructability, and improve the curvature of the roadway. Despite the effort to minimize

impacts, considerable additional right-of-way will be required and many residences and businesses will need to be relocated. Numerous gravesites will also need to be relocated.

In addition to the SR 126 (Memorial Boulevard) roadway typical cross section and alignment improvements, several side road intersection approaches to SR 126 (Memorial Boulevard) are improved. Many of these minor connections intersect SR 126 (Memorial Boulevard) at skewed angles. Realigning side road approaches to intersect to as close to 90 degrees as possible has proven visibility and safety benefits. Conceptual Layouts of Build Alternative A, which include the proposed side road approach realignments, are provided in **Appendix D**. Side Road approaches to SR 126 (Memorial Boulevard) to be realigned include:

- Warpath Drive
- Miller Street
- Orebank Road
- John B. Dennis Exit Ramp
- Heather Lane
- Old Stage Road
- Eaton Station Road
- Woods Way
- Island Road
- Natchez Lane
- Harr Town Road
- Adams Street

Several intersections are proposed to be closed along SR 126 (Memorial Boulevard). These minor connections to SR 126 (Memorial Boulevard) will be rerouted to connect via improved intersections on neighboring roads. Closing these intersections will improve access control and safety along the route due to the reduction of conflict points. Conceptual Layouts of Build Alternative A, which include the proposed intersection closings, are provided in **Appendix D**. Intersections to be closed along SR 126 (Memorial Boulevard) include:

- Edens Ridge Road
- Hawthorne Street
- Kent Street
- Amy Avenue
- Trinity Lane
- Tanglewood Road
- Holiday Road
- Shuler Drive
- Chestnut Ridge Road
- Red Robin Lane
- Gravel Top Road

2.3.1 Build Alternative A Typical Proposed Roadway Cross Sections

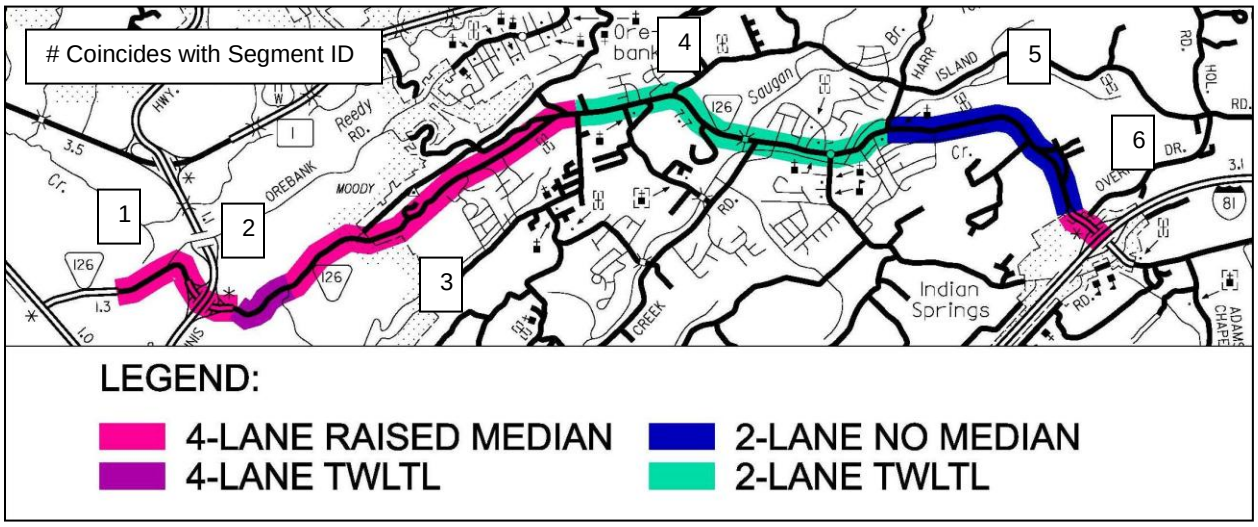


FIGURE 2.3.1: BUILD ALTERNATIVE A CROSS SECTION LEGEND

1. East Center Street (L.M. 3.72) to west of Hawthorne Street (L.M. 4.71)

On the first 1.0 mile long segment from East Center Street to west of Hawthorne Street, the proposed cross section includes four travel lanes (two in each direction), a raised grass median, four-foot wide paved shoulders, and curb and gutter. Sidewalks will be located on both sides of the roadway. The travel lanes will be eleven feet wide. The four-foot wide shoulders will accommodate bicyclists. The design speed of this segment is 35 miles per hour. Please refer to **Figure 2.3.2** for a depiction of the proposed typical section of this segment. Renderings of the existing and proposed typical sections in this segment are provided in **Figures 2.3.3** and **2.3.4**.

A roundabout is proposed at the five legged intersection of SR 126 (Memorial Boulevard), East Center Street, Warpath Drive, and Miller Street located at the corridor's western terminus. A roundabout is a type of circular road intersection where traffic enters a one-way stream around a central island. Statistically, roundabouts are safer than traditional intersections. While a roundabout is the preferred improvement option at this intersection, a second option, which would maintain the existing traffic signal, is still under consideration.

Additional features in this section include realigning the Orebank Road Intersection to connect to SR 126 (Memorial Boulevard) at an improved skew, closing the Edens Ridge Road Intersection, and reducing the skew and improving the channelization of the northbound John B. Dennis exit ramp to eastbound SR 126 (Memorial Boulevard). These features will improve the safety and access control along SR 126 (Memorial Boulevard).

The Shipley-Jarvis House is located adjacent to the northbound lanes near Woodside Drive in this segment. The Shipley-Jarvis House is deemed eligible for listing on the National Register of Historic Places (NRHP). The improvements will be constructed along the southbound lanes to avoid impacting the Shipley-Jarvis House.

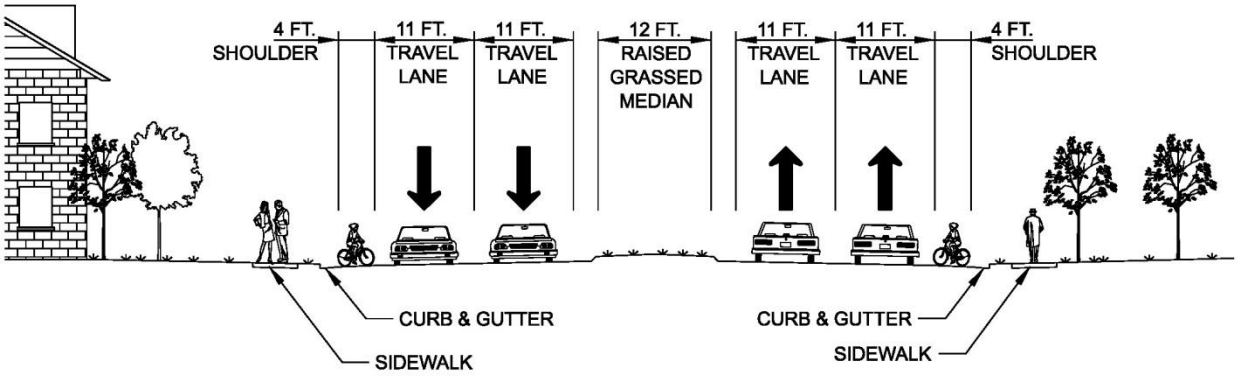


FIGURE 2.3.2: SEGMENT 1 PROPOSED TYPICAL SECTION



FIGURE 2.3.3: SEGMENT 1 EXISTING TYPICAL SECTION



FIGURE 2.3.4: SEGMENT 1 PROPOSED TYPICAL SECTION
4-Lane, Raised Median, Shoulders, Curb & Gutter, & Sidewalks

2. West of Hawthorne Street (L.M. 4.71) to Harbor Chapel Road (L.M. 5.18)

The proposed cross section of this 0.5 mile long segment of SR 126 (Memorial Boulevard) from west of Hawthorne Street to Harbor Chapel Road includes four travel lanes (two in each direction), four-foot wide paved shoulders, and curb and gutter. The median in this section will consist of a two-way left turn lane, instead of the raised grass median proposed in Segment 1. Sidewalks will be located on both sides of the roadway. The travel lanes will be eleven feet wide. The four-foot wide shoulders will accommodate bicyclists. The design speed of this segment is 35 miles per hour. Please refer to **Figure 2.3.5** for a depiction of the proposed typical section of this segment. Renderings of the existing and proposed typical sections in this segment are provided in **Figures 2.3.6** and **2.3.7**.

Additional features in this section include intersection realignments and closings. Hawthorne Street's intersection with the south side of SR 126 (Memorial Boulevard) will be closed. Access to SR 126 (Memorial Boulevard) will be provided via Kite Street. In addition, the Kent Street intersection with SR 126 (Memorial Boulevard) will be closed, with access to SR 126 (Memorial Boulevard) also being provided via Kite Street. The Amy Avenue/Woodridge Avenue intersection with SR 126 (Memorial Boulevard) will be closed and realigned to intersect with Glenwood Street. Heather Lane's approach to SR 126 (Memorial Parkway) will be realigned to improve the skew of the intersection. These features will improve the safety and access control along SR 126 (Memorial Boulevard).

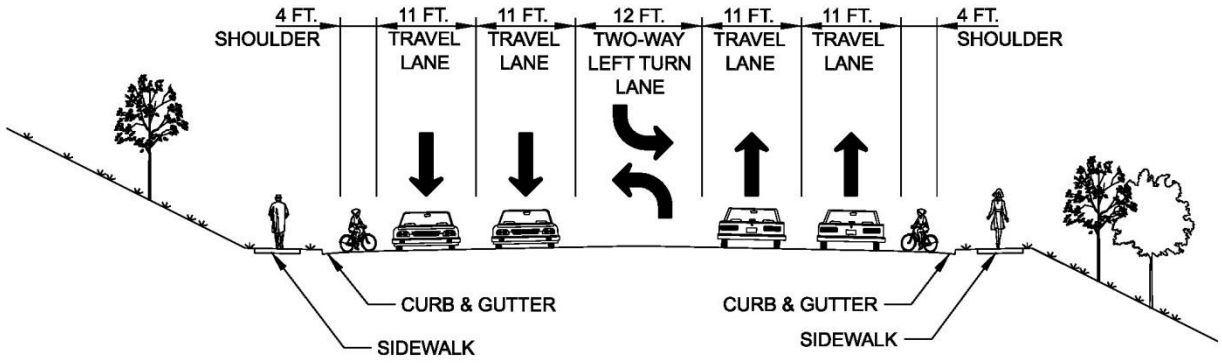


FIGURE 2.3.5: SEGMENT 2 PROPOSED TYPICAL SECTION



FIGURE 2.3.6: SEGMENT 2 EXISTING TYPICAL SECTION



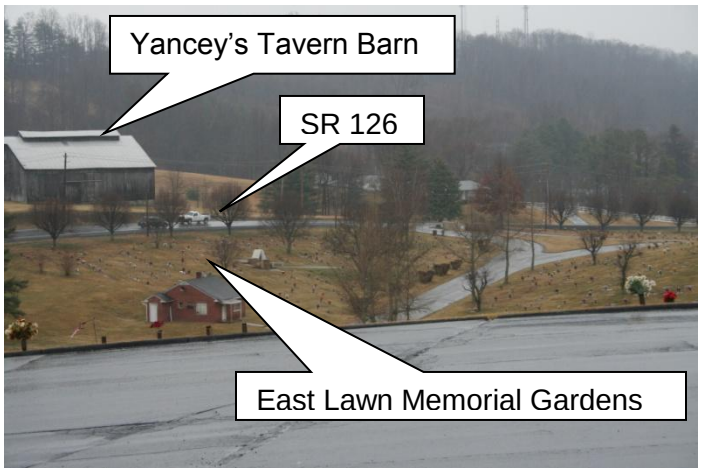
FIGURE 2.3.7: SEGMENT 2 PROPOSED TYPICAL SECTION
4-Lane, TWLTL, Shoulders, Curb & Gutter, & Sidewalks

3. Harbor Chapel Road (L.M. 5.18) to Cooks Valley Road (L.M. 7.66)

The proposed cross section of this 2.5 mile long segment of SR 126 (Memorial Boulevard) from Harbor Chapel Road to Cooks Valley Road includes four travel lanes (two in each direction), and a raised grass median. The first 0.6 mile of this segment from Harbor Chapel Road to east of Old Stage Road includes four-foot wide paved shoulders, curb and gutter, and sidewalks on both sides of the roadway. The next 1.9 miles of this segment from east of Old Stage Road to Cooks Valley Road will not have curb and gutter, and instead will have roadside ditches for drainage. The shoulders will be eight feet wide, six feet of which will be paved. No sidewalks will be provided along this 1.9 mile segment between Old Stage Road and Cooks Valley Road due to the lack of properties fronting SR 126 (Memorial Boulevard). The travel lanes throughout the entire 2.5 mile long segment will be eleven feet wide. The four to six-foot wide paved shoulders will accommodate bicyclists. The design speed of this segment is 45 miles per hour. Please refer to **Figures 2.3.8** and **2.3.9** for a depiction of the proposed typical sections of this segment. Renderings of the existing and proposed typical sections in this segment are provided in **Figures 2.3.10** through **2.3.12**.

Additional features in this section include intersection realignments and closings. Trinity Lane's intersection with SR 126 (Memorial Boulevard) will be closed. Access to SR 126 (Memorial Boulevard) will be provided via a new connection to Amy Avenue and Glenwood Street. Tanglewood's intersection with SR 126 (Memorial Boulevard) will be closed. Access to SR 126 (Memorial Boulevard) will be provided via a new connection to Briarwood Road. Old Stage Road's approach to SR 126 (Memorial Boulevard) will be realigned to improve the skew of the intersection. Holiday Road's intersection with SR 126 (Memorial Boulevard) will be closed. Access to SR 126 (Memorial Boulevard) will be provided via a new connection between Parker Street and Old Parker Drive. The new connection will provide access to Peers Street and Lemay Drive. Shuler Drive's Intersection with SR 126 (Memorial Boulevard) will also be closed. Access to SR 126 (Memorial Drive) will be provided via Peers Street and Lemay Drive. Chestnut Ridge Road's intersection with SR 126 (Memorial Boulevard) will be closed. Access to SR 126 (Memorial Boulevard) will be provided via Old Stage Road and Eaton Station Road. Eaton Station Road's approach to SR 126 (Memorial Parkway) will be realigned to improve the skew of the intersection. These features will improve the safety and access control along SR 126 (Memorial Boulevard).

Two community resources are located on either side of SR 126 (Memorial Boulevard) in this segment: Yancey's Tavern and the East Lawn Memorial Gardens Cemetery. Yancey's Tavern is listed on the National Register of Historic Places. To avoid direct impacts to the Yancey's Tavern property, it is proposed to widen SR 126 (Memorial Boulevard) to the south. The roadway improvements will impact the East Lawn Memorial Gardens Cemetery. Yancey's Tavern and East Lawn Memorial Gardens are discussed in more detail in **Chapters 3** and **4**.



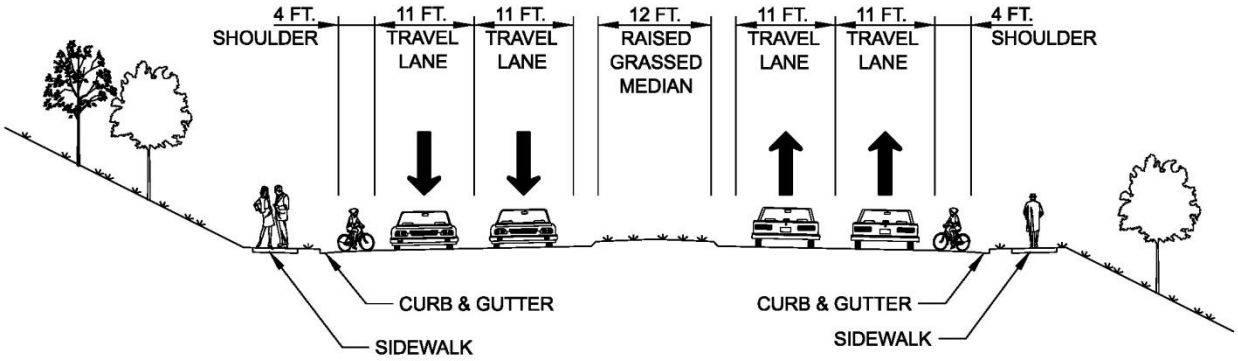


FIGURE 2.3.8: SEGMENT 3A PROPOSED TYPICAL SECTION

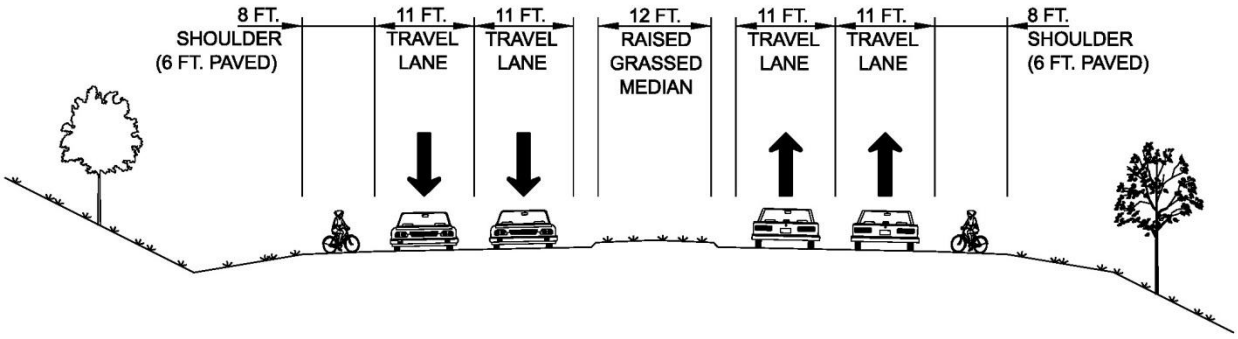


FIGURE 2.3.9: SEGMENT 3B PROPOSED TYPICAL SECTION



FIGURE 2.3.10: SEGMENT 3 EXISTING TYPICAL SECTION



FIGURE 2.3.11: SEGMENT 3A PROPOSED TYPICAL SECTION
4-Lane, Raised Median, Shoulders, Curb & Gutter, & Sidewalks



FIGURE 2.3.12: SEGMENT 3B PROPOSED TYPICAL SECTION
4-Lane, Raised Median, Shoulders, Roadside Ditches

4. Cooks Valley Road (L.M. 7.66) to Harr Town Road (L.M. 10.11)

The proposed cross section of this 2.5 mile long segment of SR 126 (Memorial Boulevard) from Cooks Valley Road to Harr Town Road includes two travel lanes (one in each direction), six-foot wide paved shoulders, and curb and gutter. The median in this section will consist of a two-way left turn lane. Sidewalks will be located on both sides of the roadway. The travel lanes will be eleven feet wide. The six-foot wide shoulders will accommodate bicyclists. The design speed of this segment is 45 miles per hour. Please refer to **Figure 2.3.13** for a depiction of the proposed typical section of this segment. Renderings of the existing and proposed typical sections in this segment are provided in **Figures 2.3.14** and **2.3.15**.

Additional features in this section include intersection realignments and closings. Red Robin Lane's intersection with SR 126 (Memorial Boulevard) will be closed. Access to SR 126 (Memorial Boulevard) will be provided via Bridwell Heights Road. The side road approaches of Woods Way, Island Road, Natchez Lane, and Harr Town Road to SR 126 (Memorial Boulevard) will be realigned to improve the skews of the intersections. These features will improve the safety and access control along SR 126 (Memorial Boulevard).

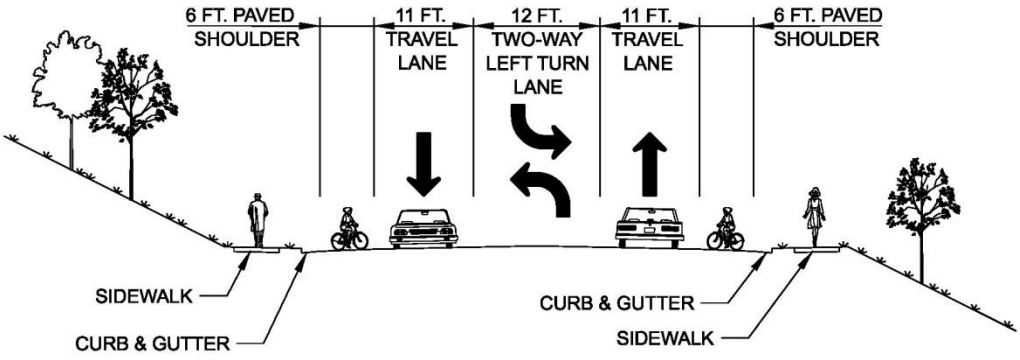


FIGURE 2.3.13: SEGMENT 4 PROPOSED TYPICAL SECTION



FIGURE 2.3.14: SEGMENT 4 EXISTING TYPICAL SECTION



FIGURE 2.3.15: SEGMENT 4 PROPOSED TYPICAL SECTION
2-Lane, TWLTL, Shoulders, Curb & Gutter, & Sidewalks

5. Harr Town Road (L.M. 10.11) to west of Carolina Pottery Drive (L.M. 11.90)

The proposed cross section of this 1.8 mile long segment of SR 126 (Memorial Boulevard) from Harr Town Road to west of Carolina Pottery Drive includes two travel lanes (one in each direction) with no median. This section will not have curb and gutter, and instead will have roadside ditches for drainage. The shoulders will be ten feet wide, eight feet of which will be paved. No sidewalks will be provided due to the rural nature of the surrounding community. The travel lanes will be twelve feet wide. Rumble strips will be provided along the centerline of the roadway to deter drivers from crossing into the opposing lane. Rumble strips will also be provided along the shoulders. The shoulder rumble strips will include ten-foot gaps between thirty-foot rumble strip segments to accommodate bicyclists. The design speed of this segment is 45 miles per hour. Please refer to **Figure 2.3.16** for a depiction of the proposed typical section of this segment. Renderings of the existing and proposed typical sections in this segment are provided in **Figures 2.3.16** and **2.3.17**.

Additional features in this section include intersection realignments and closings. The side road approache of Adams Street to SR 126 (Memorial Boulevard) will be realigned to improve the skews of the intersections. Gravel Top Road's intersection with SR 126 (Memorial Boulevard) will be closed. Access to SR 126 (Memorial Boulevard) will be provided via the improved Adams Street Intersection. These features will improve the safety and access control along SR 126 (Memorial Boulevard).

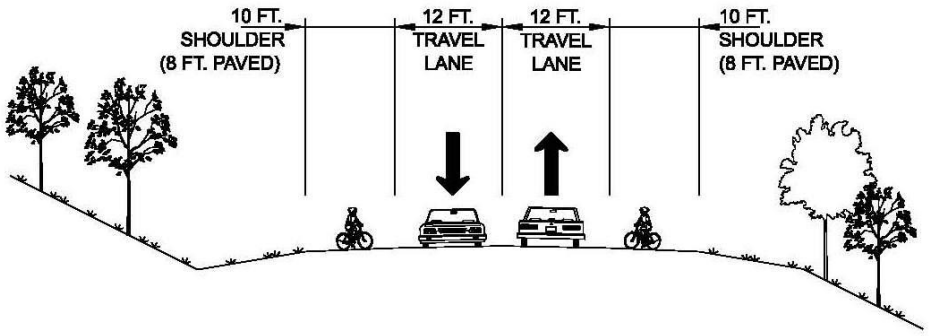


FIGURE 2.3.16: SEGMENT 5 PROPOSED TYPICAL SECTION



FIGURE 2.3.16: SEGMENT 5 EXISTING TYPICAL SECTION



FIGURE 2.3.17: SEGMENT 5 PROPOSED TYPICAL SECTION
2-Lane, No Median, Shoulders, Roadside Ditches

6. West of Carolina Pottery Drive (L.M. 11.90) to I-81 (L.M. 12.12)

The proposed cross section of this 0.2 mile long segment of SR 126 (Memorial Boulevard) from west of Carolina Pottery Drive to I-81 includes four travel lanes (two in each direction), and a raised grass median. This segment will not have curb and gutter, and instead will have roadside ditches for drainage. The shoulders will be twelve feet wide and paved. No sidewalks will be provided along this segment due to the rural nature of the surrounding community. The travel lanes will be twelve feet wide. The twelve-foot wide paved shoulders will accommodate bicyclists. The design speed of this segment is 45 miles per hour. Please refer to **Figure 2.3.18** for a depiction of the proposed typical section of this segment. Renderings of the existing and proposed typical sections in this segment are provided in **Figures 2.3.19** and **2.3.20**.

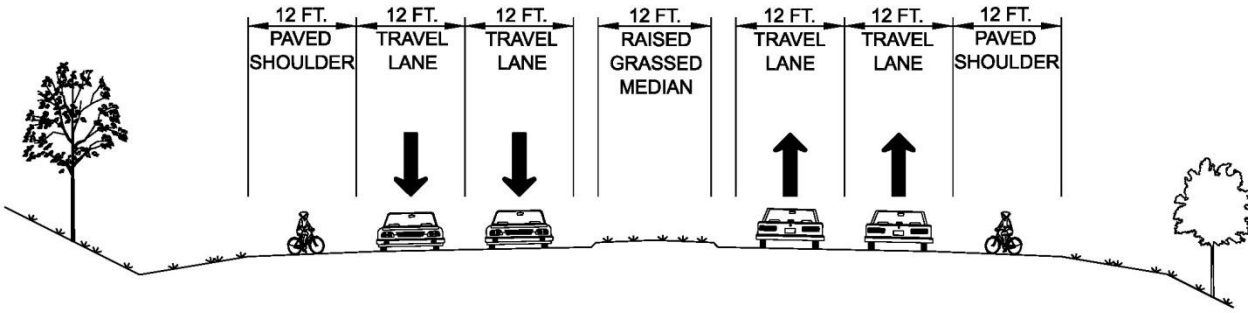


FIGURE 2.3.18: SEGMENT 6 PROPOSED TYPICAL SECTION



FIGURE 2.3.19: SEGMENT 6 EXISTING TYPICAL SECTION



FIGURE 2.3.20: SEGMENT 6 PROPOSED TYPICAL SECTION
4-Lane, Raised Median, Shoulders, Roadside Ditches

TABLE 2.3.1: BUILD ALTERNATIVE A DESCRIPTION

SR 126 (Memorial Boulevard) Alternative A Roadway Description												
Segment		Design Speed	From		To		Travel Lanes		Median Desc. (Typical)	Shld.	Ditch/ C&G ?	Side-walk?
ID	Dist.		LM	Description	LM	Description	No.	Width				
1	1.0	35	3.72	Center Street	4.71	west of Hawthorne Street	4	11	12 Ft. Raised Grass	4 Ft. Paved	C&G	Yes
2	0.47	35	4.71	west of Hawthorne Street	5.18	Harbor Chapel Road	4	11	12 Ft. Paved TWLTL	4 Ft. Paved	C&G	Yes
3	2.48	45	5.18	Harbor Chapel Road	5.80	east of Old Stage Road	4	11	12 Ft. Raised Grass	4 Ft. Paved	C&G	Yes
			5.80	east of Old Stage Road	7.66	Cooks Valley Road	4	11	12 Ft. Raised Grass	6 Ft. Paved/ 8 Ft. Total	Ditch	No
4	2.45	45	7.66	Cooks Valley Road	10.11	Harr Town Road	2	11	12 Ft. Paved TWLTL	6 Ft. Paved	C&G	Yes
5	1.79	45	10.11	Harr Town Road	11.90	west of Carolina Pottery Drive	2	12	None w/ Rumble Strip	8 Ft. Paved/10 Ft. Total	Ditch	No
6	0.22	45	11.90	west of Carolina Pottery Drive	12.12	I-81	4	12	12 Ft. Raised Grass	12 Ft. Paved	Ditch	No
Σ =	8.40	43.3	= Weighted Average									

2.4 BUILD ALTERNATIVE B

Alternative B is a refinement of Alternative A. Alternative B utilizes the same proposed typical roadway cross sections as Alternative A, but the length of the four-travel lane section of Segment 3 is reduced. As a result, the two-travel lane section of Segment 4 begins further west, near Lemay Drive, and is longer than in Alternative A. Retaining walls will also be utilized in the vicinity of historic Yancey's Tavern and East Lawn Memorial Gardens Cemetery. These modifications were made to minimize impacts to Yancey's Tavern and the East Lawn Memorial Gardens Cemetery located on opposing sides of SR 126 (Memorial Boulevard) in Segment 4. It should be noted that numerous gravesites will still need to be relocated with Alternative B. Additional changes incorporated into Alternative B include minor modifications of the proposed centerline to minimize excavation and fill impacts and improve maintenance of traffic during construction. Alternative B subsequently requires less additional right-of-way and impacts fewer residences and businesses than Alternative A.

Section 2.4.1 describes the proposed SR 126 (Memorial Boulevard) roadway cross-sections, along with side road improvements, in detail. The proposed roadway characteristics are also summarized in **Figures 2.4.1** through **2.4.8** and **Table 2.4.1**. Additionally, Conceptual Layouts of Build Alternative B are provided in **Appendix D**.

In addition to the SR 126 (Memorial Boulevard) roadway typical cross section and alignment improvements, several side road intersection approaches to SR 126 (Memorial Boulevard) are improved or closed. These side road modifications improve the safety and access control along SR 126 (Memorial Boulevard). The side road approaches modified in Alternative B are the same as those in Alternative A. For a list of the affected side roads, please refer to **Section 2.3**.

2.4.1 Build Alternative B Typical Proposed Roadway Cross Sections

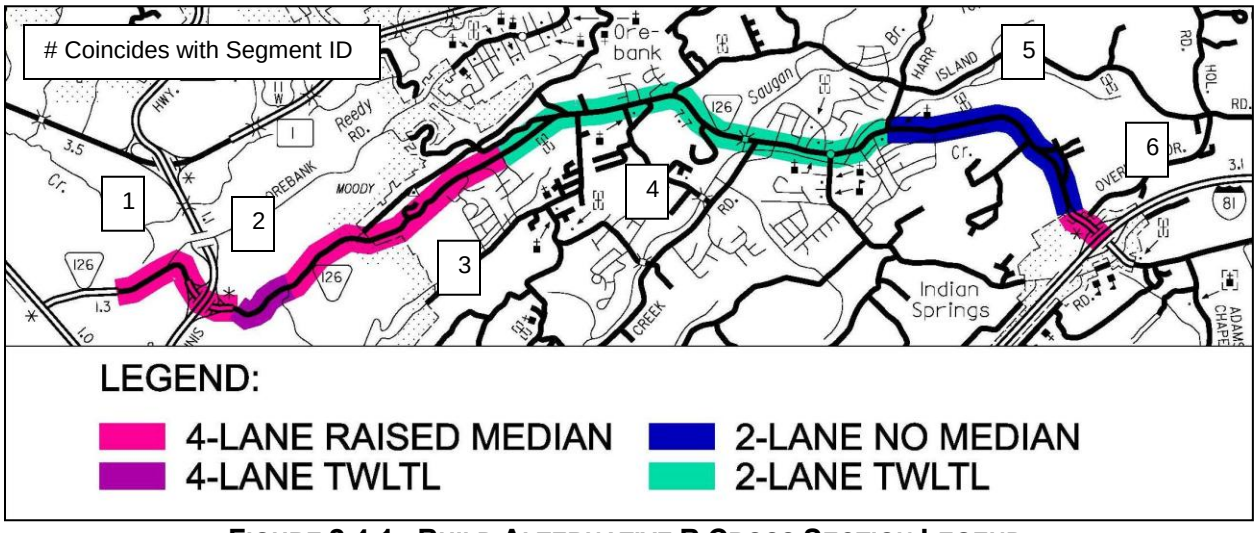


FIGURE 2.4.1: BUILD ALTERNATIVE B CROSS SECTION LEGEND

1. East Center Street (L.M. 3.72) to west of Hawthorne Street (L.M. 4.71)

On the first 1.0 mile long segment from East Center Street to west of Hawthorne Street, the proposed cross section includes four travel lanes (two in each direction), a raised grass median, four-foot wide paved shoulders, and curb and gutter. Sidewalks will be located on both sides of the roadway. The travel lanes will be eleven feet wide. The four-foot wide shoulders will accommodate bicyclists. The design speed of this segment is 35 miles per hour. Please refer to **Figure 2.4.2** for a depiction of the proposed typical section of this segment.

A roundabout is proposed at the five legged intersection of SR 126 (Memorial Boulevard), East Center Street, Warpath Drive, and Miller Street located at the corridor's western terminus. A roundabout is a type of circular road intersection where traffic enters a one-way stream around a central island. Statistically, roundabouts are safer than traditional intersections. While a roundabout is the preferred improvement option at this intersection, a second option, which would maintain the existing traffic signal, is still under consideration.

Additional features in this section include realigning the Orebank Road Intersection to connect to SR 126 (Memorial Boulevard) at an improved skew, closing the Edens Ridge Road Intersection, and reducing the skew and improving the channelization of the northbound John B. Dennis exit ramp to eastbound SR 126 (Memorial Boulevard). These features will improve the safety and access control along SR 126 (Memorial Boulevard).

The Shipley-Jarvis House is located adjacent to the northbound lanes near Woodside Drive in this segment. The Shipley-Jarvis House is deemed eligible for listing on the National Register of Historic Places (NRHP). The improvements will be constructed along the southbound lanes to avoid impacting the Shipley-Jarvis House.

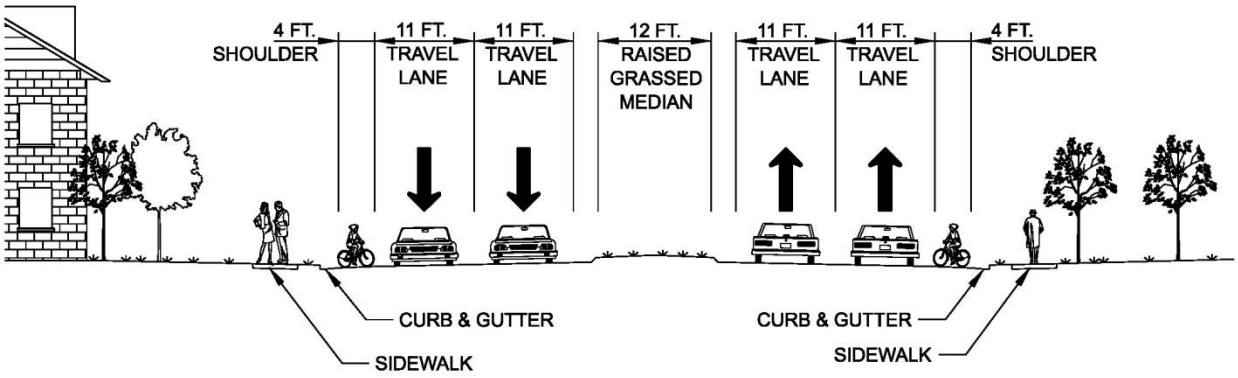


FIGURE 2.4.2: SEGMENT 1 PROPOSED TYPICAL SECTION

2. West of Hawthorne Street (L.M. 4.71) to Harbor Chapel Road (L.M. 5.18)

The proposed cross section of this 0.5 mile long segment of SR 126 (Memorial Boulevard) from west of Hawthorne Street to Harbor Chapel Road includes four travel lanes (two in each direction), four-foot wide paved shoulders, and curb and gutter. The median in this section will consist of a two-way left turn lane, instead of the raised grass median proposed in Segment 1. Sidewalks will be located on both sides of the roadway. The travel lanes will be eleven feet wide. The four-foot wide shoulders will accommodate bicyclists. The design speed of this

segment is 35 miles per hour. Please refer to **Figure 2.4.3** for a depiction of the proposed typical section of this segment.

Additional features in this section include intersection realignments and closings. Hawthorne Street's intersection with the south side of SR 126 (Memorial Boulevard) will be closed. Access to SR 126 (Memorial Boulevard) will be provided via Kite Street. In addition, the Kent Street intersection with SR 126 (Memorial Boulevard) will be closed, with access to SR 126 (Memorial Boulevard) also being provided via Kite Street. The Amy Avenue/Woodridge Avenue intersection with SR 126 (Memorial Boulevard) will be closed and realigned to intersect with Glenwood Street. Heather Lane's approach to SR 126 (Memorial Parkway) will be realigned to improve the skew of the intersection. These features will improve the safety and access control along SR 126 (Memorial Boulevard).

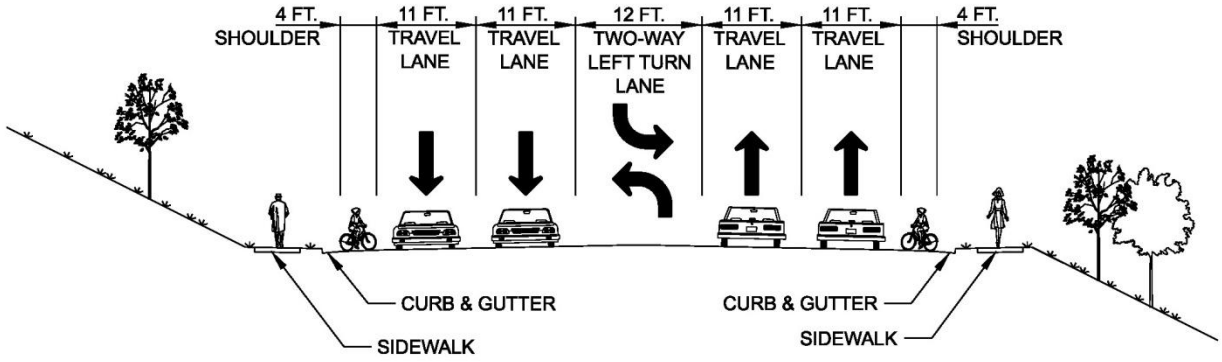


FIGURE 2.4.3: SEGMENT 2 PROPOSED TYPICAL SECTION

3. Harbor Chapel Road (L.M. 5.18) to east of Lemay Drive (L.M. 7.20)

The proposed cross section of this 2.0 mile long segment of SR 126 (Memorial Boulevard) from Harbor Chapel Road to Cooks Valley Road includes four travel lanes (two in each direction), and a raised grass median. This section is 0.5 miles shorter than in Alternative A. The first 0.6 mile of this segment from Harbor Chapel Road to east of Old Stage Road includes four-foot wide paved shoulders, curb and gutter, and sidewalks on both sides of the roadway. The next 1.4 miles of this segment from east of Old Stage Road to Cooks Valley Road will not have curb and gutter, and instead will have roadside ditches for drainage. The shoulders will be eight feet wide, six feet of which will be paved. No sidewalks will be provided along this 1.4 mile segment between Old Stage Road and Cooks Valley Road due to the lack of properties fronting SR 126 (Memorial Boulevard). The travel lanes throughout the entire 2.5 mile long segment will be eleven feet wide. The four to six-foot wide paved shoulders will accommodate bicyclists. The design speed of this segment is 45 miles per hour. Please refer to **Figures 2.4.4** and **2.4.5** for a depiction of the proposed typical sections of this segment.

Additional features in this section include intersection realignments and closings. Trinity Lane's intersection with SR 126 (Memorial Boulevard) will be closed. Access to SR 126 (Memorial Boulevard) will be provided via a new connection to Amy Avenue and Glenwood Street. Tanglewood's intersection with SR 126 (Memorial Boulevard) will be closed. Access to SR 126 (Memorial Boulevard) will be provided via a new connection to Briarwood Road. Old Stage Road's approach to SR 126 (Memorial Boulevard) will be realigned to improve the skew of the intersection. Holiday Road's intersection with SR 126 (Memorial Boulevard) will be closed.

Access to SR 126 (Memorial Boulevard) will be provided via a new connection between Parker Street and Old Parker Drive. The new connection will provide access to Peers Street and Lemay Drive. Shuler Drive's Intersection with SR 126 (Memorial Boulevard) will also be closed. Access to SR 126 (Memorial Drive) will be provided via Peers Street and Lemay Drive. These features will improve the safety and access control along SR 126 (Memorial Boulevard).

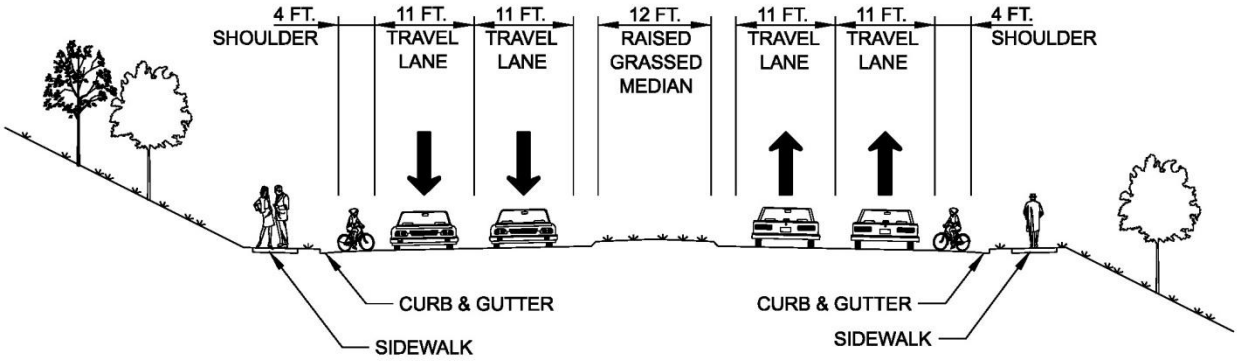


FIGURE 2.4.4: SEGMENT 3A PROPOSED TYPICAL SECTION

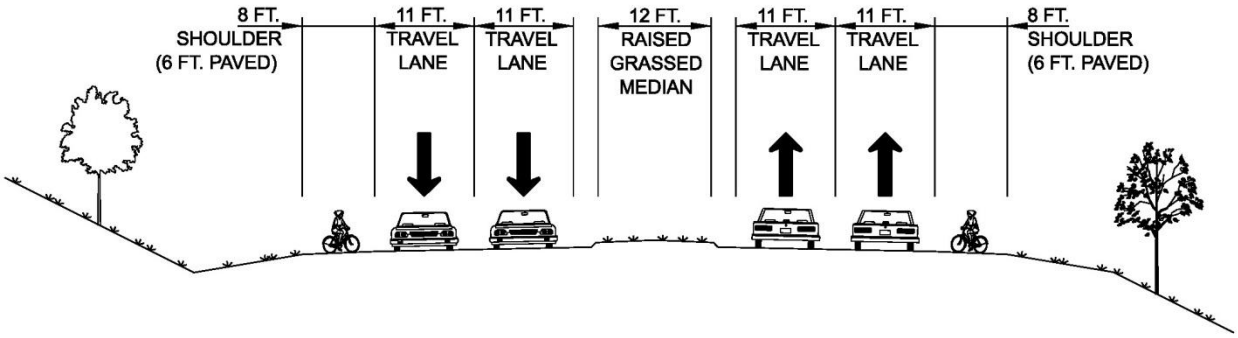


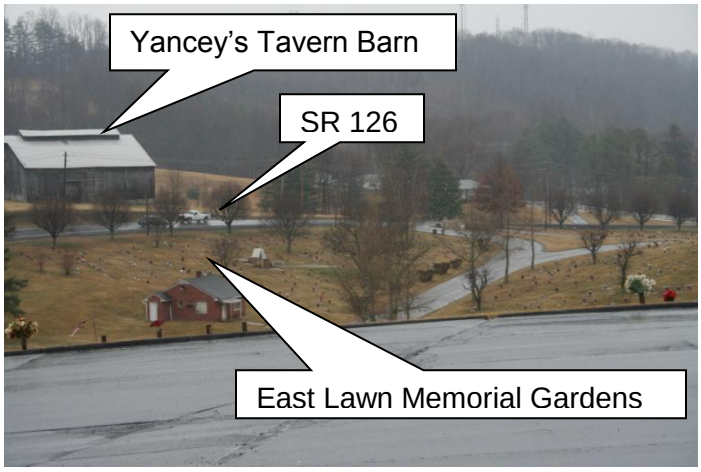
FIGURE 2.4.5: SEGMENT 3B PROPOSED TYPICAL SECTION

4. East of Lemay Drive (L.M. 7.20) to Harr Town Road (L.M. 10.11)

The proposed cross section of this 2.9 mile long segment of SR 126 (Memorial Boulevard) from east of Lemay Drive to Harr Town Road includes two travel lanes (one in each direction), six-foot wide paved shoulders, and curb and gutter. The median in this section will consist of a two-way left turn lane. Sidewalks will be located on both sides of the roadway. The travel lanes will be eleven feet wide. The six-foot wide shoulders will accommodate bicyclists. The design speed of this segment is 45 miles per hour. This section is 0.5 miles longer than in Alternative A. Please refer to **Figure 2.4.6** for a depiction of the proposed typical section of this segment.

Additional features in this section include intersection realignments and closings. Chestnut Ridge Road's intersection with SR 126 (Memorial Boulevard) will be closed. Access to SR 126 (Memorial Boulevard) will be provided via Old Stage Road and Eaton Station Road. Red Robin

Lane's intersection with SR 126 (Memorial Boulevard) will be closed. Access to SR 126 (Memorial Boulevard) will be provided via Bridwell Heights Road. The side road approaches of Eaton Station Road, Woods Way, Island Road, Natchez Lane, and Harr Town Road to SR 126 (Memorial Boulevard) will be realigned to improve the skews of the intersections. These features will improve the safety and access control along SR 126 (Memorial Boulevard).



Two community resources are located on either side of SR 126 (Memorial Boulevard) in this segment: Yancey's Tavern and the East Lawn Memorial Gardens Cemetery. Yancey's Tavern is listed on the National Register of Historic Places. To avoid direct impacts to the Yancey's Tavern property, it is proposed to widen SR 126 (Memorial Boulevard) to the south. The roadway improvements will impact the East Lawn Memorial Gardens Cemetery. In order to minimize the impacts, the roadway cross section is reduced to two travel lanes in this section of Alternative B, compared to four travel lanes in Alternative A. This will minimize the visual impacts to Yancey's Tavern and reduce the number of gravesites which must be relocated in the East Lawn Memorial Gardens Cemetery. Retaining walls will also be utilized in this area to further reduce impacts to the cemetery. Yancey's Tavern and East Lawn Memorial Gardens are discussed in more detail in **Chapters 3** and **4**.

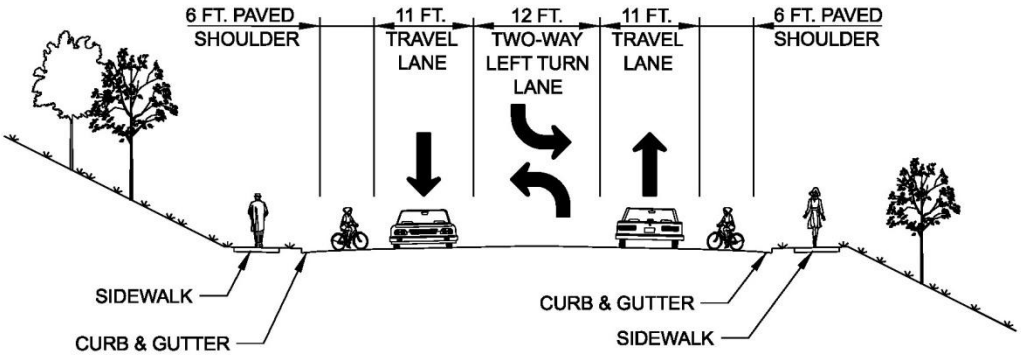


FIGURE 2.4.6: SEGMENT 4 PROPOSED TYPICAL SECTION

5. Harr Town Road (L.M. 10.11) to west of Carolina Pottery Drive (L.M. 11.90)

The proposed cross section of this 1.8 mile long segment of SR 126 (Memorial Boulevard) from Harr Town Road to west of Carolina Pottery Drive includes two travel lanes (one in each direction) with no median. This section will not have curb and gutter, and instead will have roadside ditches for drainage. The shoulders will be ten feet wide, eight feet of which will be paved. No sidewalks will be provided due to the rural nature of the surrounding community. The travel lanes will be twelve feet wide. Rumble strips will be provided along the centerline of the roadway to deter drivers from crossing into the opposing lane. Rumble strips will also be provided along the shoulders. The shoulder rumble strips will include ten-foot gaps between thirty-foot rumble strip segments to accommodate bicyclists. The design speed of this segment is 45 miles per hour. Please refer to **Figure 2.4.7** for a depiction of the proposed typical section of this segment.

Additional features in this section include intersection realignments and closings. The side road approache of Adams Street to SR 126 (Memorial Boulevard) will be realigned to improve the skews of the intersections. Gravel Top Road's intersection with SR 126 (Memorial Boulevard) will be closed. Access to SR 126 (Memorial Boulevard) will be provided via the improved Adams Street Intersection. These features will improve the safety and access control along SR 126 (Memorial Boulevard).

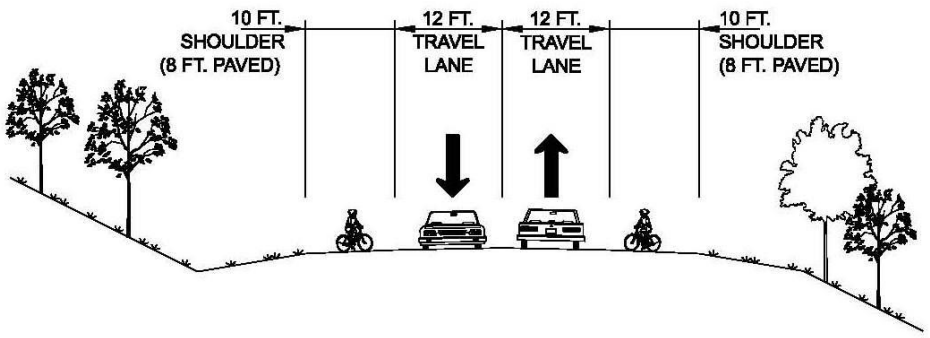


FIGURE 2.4.7: SEGMENT 5 PROPOSED TYPICAL SECTION

6. West of Carolina Pottery Drive (L.M. 11.90) to I-81 (L.M. 12.12)

The proposed cross section of this 0.2 mile long segment of SR 126 (Memorial Boulevard) from west of Carolina Pottery Drive to I-81 includes four travel lanes (two in each direction), and a raised grass median. This segment will not have curb and gutter, and instead will have roadside ditches for drainage. The shoulders will be twelve feet wide and paved. No sidewalks will be provided along this segment due to the rural nature of the surrounding community. The travel lanes will be twelve feet wide. The twelve-foot wide paved shoulders will accommodate bicyclists. The design speed of this segment is 45 miles per hour. Please refer to **Figure 2.4.8** for a depiction of the proposed typical section of this segment.

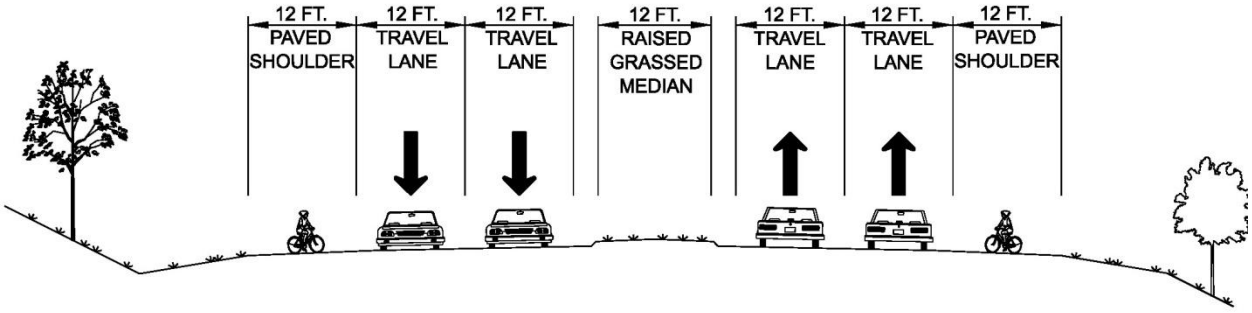


FIGURE 2.4.8: SEGMENT 6 PROPOSED TYPICAL SECTION

TABLE 2.4.1: BUILD ALTERNATIVE B DESCRIPTION

SR 126 (Memorial Boulevard) Alternative B Roadway Description												
Segment		Design Speed	From		To		Travel Lanes		Median Desc. (Typical)	Shld.	Ditch/ C&G ?	Side-walk?
ID	Dist.		LM	Description	LM	Description	No.	Width				
1	1.0	35	3.72	Center Street	4.71	west of Hawthorne Street	4	11	12 Ft. Raised Grass	4 Ft. Paved	C&G	Yes
2	0.47	35	4.71	west of Hawthorne Street	5.18	Harbor Chapel Road	4	11	12 Ft. Paved TWLTL	4 Ft. Paved	C&G	Yes
3	2.02	45	5.18	Harbor Chapel Road	5.80	east of Old Stage Road	4	11	12 Ft. Raised Grass	4 Ft. Paved	C&G	Yes
			5.80	east of Old Stage Road	7.20	East of Lemay Drive	4	11	12 Ft. Raised Grass	6 Ft. Paved/ 8 Ft. Total	Ditch	No
4	2.91	45	7.20	East of Lemay Drive	10.11	Harr Town Road	2	11	12 Ft. Paved TWLTL	6 Ft. Paved	C&G	Yes
5	1.79	45	10.11	Harr Town Road	11.90	west of Carolina Pottery Drive	2	12	None w/ Rumble Strip	8 Ft. Paved/10 Ft. Total	Ditch	No
6	0.22	45	11.90	west of Carolina Pottery Drive	12.12	I-81	4	12	12 Ft. Raised Grass	12 Ft. Paved	Ditch	No
Σ =	8.40	43.3	= Weighted Average									

2.5 ALTERNATIVES COMPARISON

The No-Build and two Build Alternatives are currently under consideration for this project. The No-Build, or No Action, Alternative makes no improvements to SR 126 (Memorial Boulevard) other than scheduled maintenance activities. Build Alternative A improves SR 126 (Memorial Boulevard) to a four-lane facility (two travel lanes in each direction) within the commercial and residential areas of the western half of the study corridor. The eastern half of the study corridor, which is rural in nature, will remain a two-travel lane facility. Improved shoulders will be provided along the entire corridor and sidewalks will be extended to the majority of the commercial and residential areas. Alternative B is a refinement of Alternative A. Alternative B utilizes the same proposed typical roadway cross sections as Alternative A, but the length of the four-travel lane section is reduced to minimize environmental impacts.

As can be seen in **Table 2.5.1**, the project corridor is 8.4 miles long. The No-Build Alternative will have no impacts to wildlife, cultural resources, or farmland and there would be no residential or business relocations. The No-Build Alternative would not impact any gravesites and has no construction costs. Alternative A has considerable residential and business relocations and will impact a large number of gravesites. While Alternative B reduces the impacts associated with Alternative A, the number of residential, business, and gravesite relocations are still considerable. The alternatives' affected environment and environmental consequences are discussed in **Chapters 3** and **4.**

Figure 2.5.1 and **Tables 2.5.2** and **2.5.3** summarizes the different roadway cross sections utilized in each alternative. The No-Build Alternative utilizes a four-travel lane cross section along 13% of the study corridor. Build Alternative A utilizes a four-travel lane cross section along 50% of the corridor. Alternative B utilizes a four-travel lane cross section along 44% of the corridor. The remainder of the corridor for all three alternatives will be two travel lanes.

Figure 2.5.2 and **Table 2.5.4** summarizes the location of sidewalks along each alternative. The No-Build Alternative has sidewalks along 1% of the study corridor. Alternative A extends sidewalks to 54% of the study corridor, while Alternative B extends sidewalks to 59% of the study corridor. The sidewalks in Alternatives A and B are located in residential and commercial areas, and not provided along the more rural areas.

The No-Build Alternative has shoulders equal to or greater than four feet in width along 8% of the study corridor. Build Alternatives A and B have shoulders equal to or greater than four feet in width along the entire study corridor.

2.5.1 Do the Alternatives Meet the Project's Purpose and Need?

The No-Build Alternative does not meet the purpose and need of the project. The No-Build Alternative does not create a safer, more efficient route for local traffic between the City of Kingsport and I-81. The existing narrow lane and shoulder widths would not be improved. The numerous deficient horizontal and vertical curves would not be improved. These existing geometric deficiencies lead to the observed high crash rate along the route. The narrow shoulders and lack of sidewalks limit bicycle and pedestrian usage of the facility. The No-Build Alternative does not improve access management along the route. The existing poor access management contributes to poor traffic operations and higher crash rates. The No-Build Alternative does not improve traffic operations or travel times for commuters or emergency response vehicles.

Build Alternatives A and B both meet the purpose and need of the project. Both Build Alternatives create a safer, more efficient route between the City of Kingsport and I-81. Lane widths and shoulder widths will be improved along the corridor. Deficient horizontal and vertical curves will be improved. These geometric improvements will create a safer, more efficient route. The addition of wider shoulders along the entire corridor and sidewalks along commercial and residential areas will promote bicycle and pedestrian usage of the facility. Access management will be improved along the commercial areas of the corridor through the use of raised grass medians and curb and gutter. Throughout the entire study corridor access management will be improved by closing or realigning many side road intersections with SR 126 (Memorial Boulevard). Improved access management will improve the safety and efficiency of the route. Both Build Alternatives improve traffic operations and travel times for both commuters and emergency response vehicles. Both Build Alternatives A and B provide these improvements in a context sensitive design, preserving the rural nature of the eastern half of the study corridor.

TABLE 2.5.1: SUMMARY OF PROJECT DATA & ESTIMATED IMPACTS

Summary of Project Data & Estimated Impacts for SR 126 (Memorial Boulevard)				
Item		No-Build	Build Alternative A	Build Alternative B
Functional Classification		Minor Arterial	Minor Arterial	Minor Arterial
Length (Miles)		8.4	8.4	8.4
Cross Sections (feet)[1]				
From:	To:			
East Center St.	Hillcrest Drive	60	160	160
Hillcrest Drive	SR 93	100	160	160
SR 93	SR 93	160	160	160
SR 93	Heather Lane	120	160	160
Heather Lane	Old Stage Road	120	160	160
Old Stage Road	Lemay Drive	120	200	200
Lemay Drive	Cooks Valley Road	120	200	120
Cooks Valley Road	Harr Town Road	120	120	120
Harr Town Road	Cochise Trail	120	160	160
Cochise Trail	Carolina Pottery Drive	60	160	160
Carolina Pottery Drive	I-81	160	300	300
I-81	I-81	300	300	300
Year 2013 AADT		8,450 - 25,800	8,450 - 25,800	8,450 - 25,800
Year 2033 AADT		13, 520 - 33,540	13, 520 - 33,540	13, 520 - 33,540
Percent Trucks		6%	6%	6%
Estimated Right-of-Way Acquisition (Acres)		0	239	121
Residential Displacements		0	241	162
Business Displacements		0	43	30
Non-Profit Displacements (Volunteer Fire Sta.)		0	1	1
Air Quality/Noise Impacts Requiring Mitigation		0	0	0
Archaelogical Sites Impacted		0	0	0
Historic Sites Impacted[2]		0	1	1
Section 4(f) Properties Impacted		0	0	0
Gravesites Impacted		0	350	90
Wetlands Impacted (Acres)		0	0	0
Stream Crossings (Linear Feet)		0	4863	3107
Floodplains Impacts (Acres)		0	4	3.2
Forest Land Acquired (Acres)[3]		0	75	54.8
Threatened/Endangered Species Impacts		0	0	0
Hazardous Material Sites Impacted (Parcels)		0	2	3
Farmland Impacted (Acres)		0	15	5
Estimated Right-of-Way Cost		$ -	$ 60,000,000	$ 48,000,000
Estimated Utility Cost		$ -	$ 5,316,000	$ 4,565,000
Estimated Construction Cost		$ -	$ 55,000,000	$ 47,000,000
Total Estimated Project Cost		$ -	$ 120,316,000	$ 99,565,000

1. The estimated ROW width is reported and based upon the typical width needed for each typical section. Actual proposed ROW widths will vary throughout the project based upon the use of slope easements, total versus partial property acquisitions, uneconomicremnants, etc.
2. Adverse visual impact
3. Includes all forest land impacted within the estimated construction limits, which may be within slope easements and outside of the ROW limits

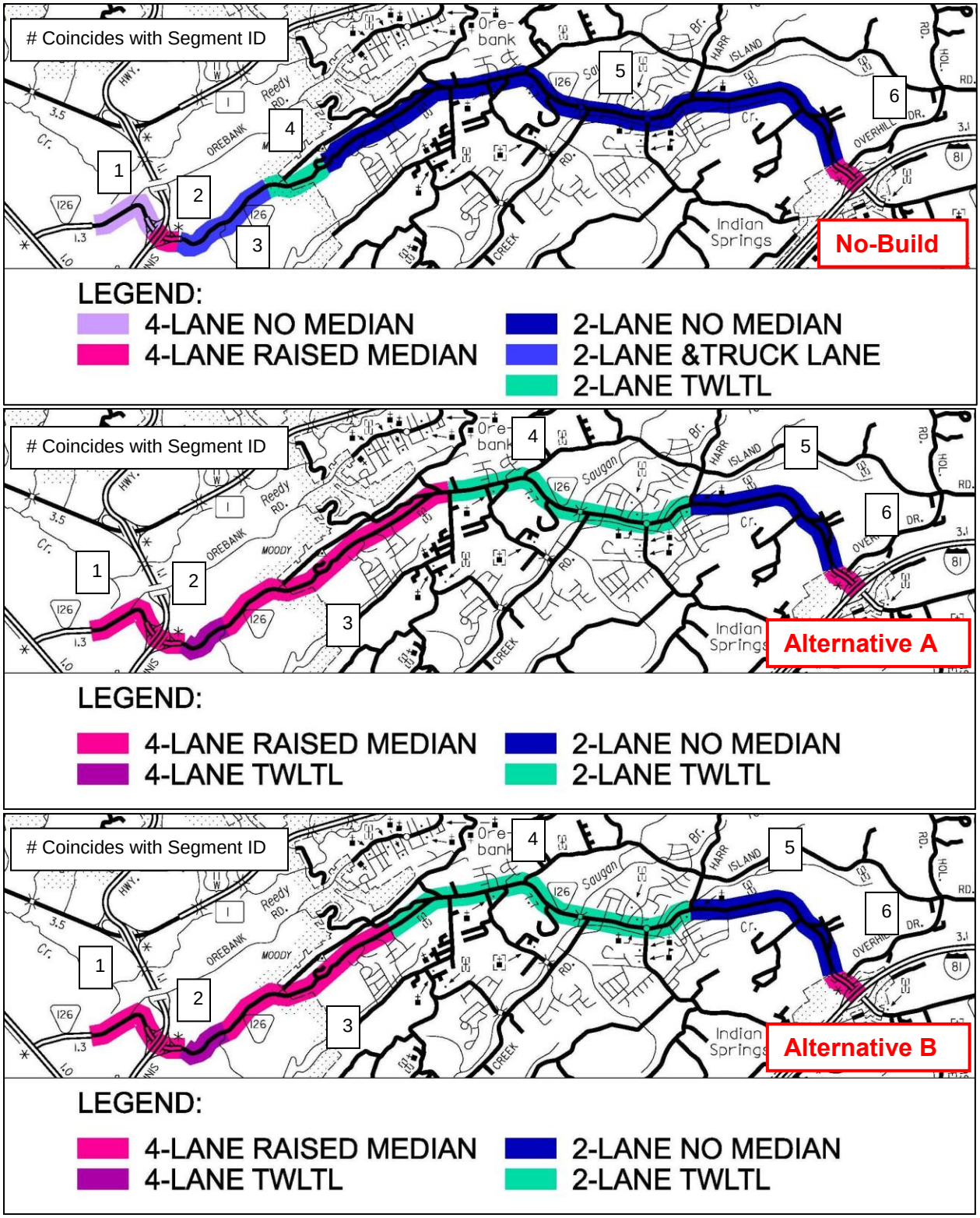
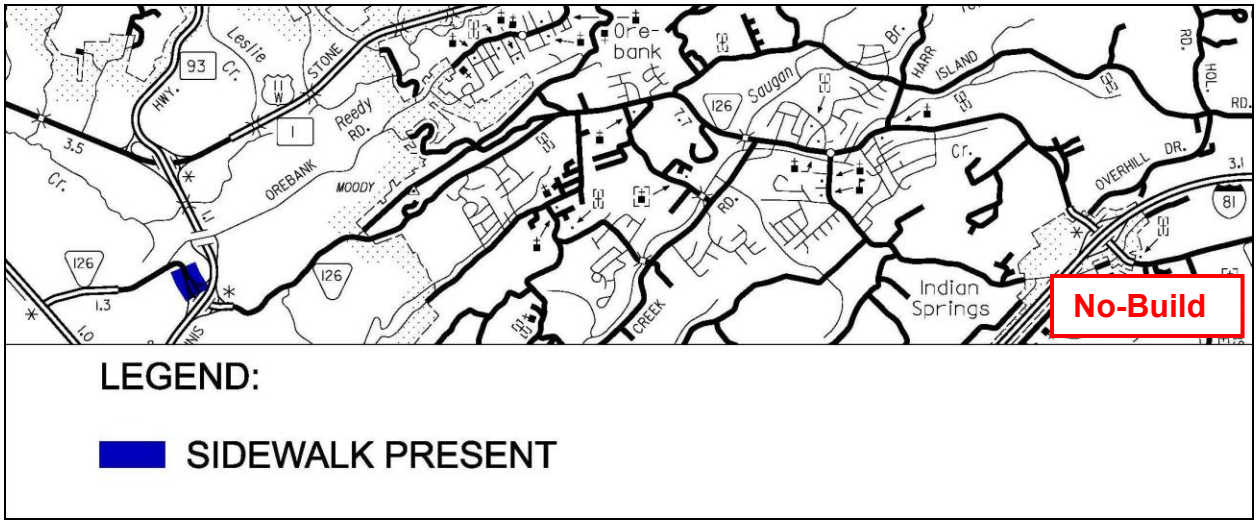
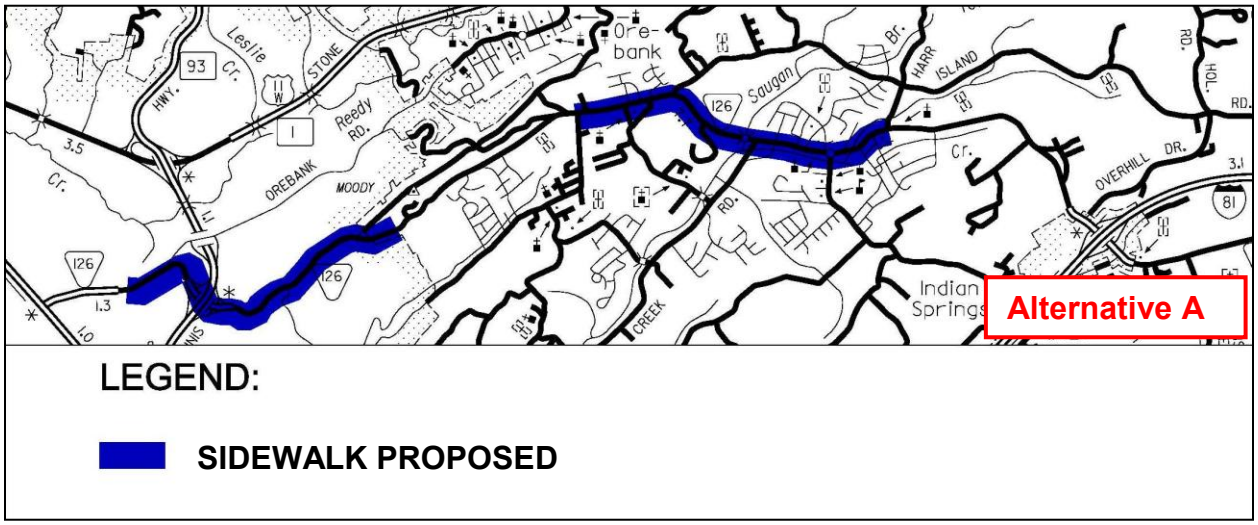


FIGURE 2.5.1: CROSS SECTION COMPARISON





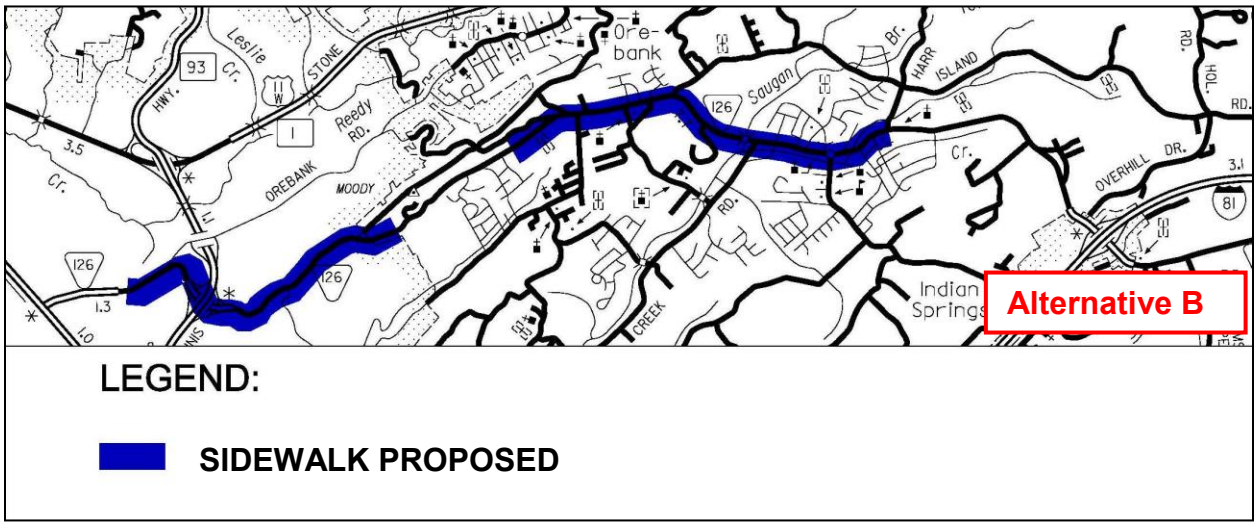


FIGURE 2.5.2: SIDEWALK COMPARISON

TABLE 2.5.2: TRAVEL LANE COMPARISON

Travel Lane Summary			
	No-Build	Alternative A	Alternative B
Four Travel Lanes	13%	50%	44%
Two Travel Lanes	87%	50%	56%

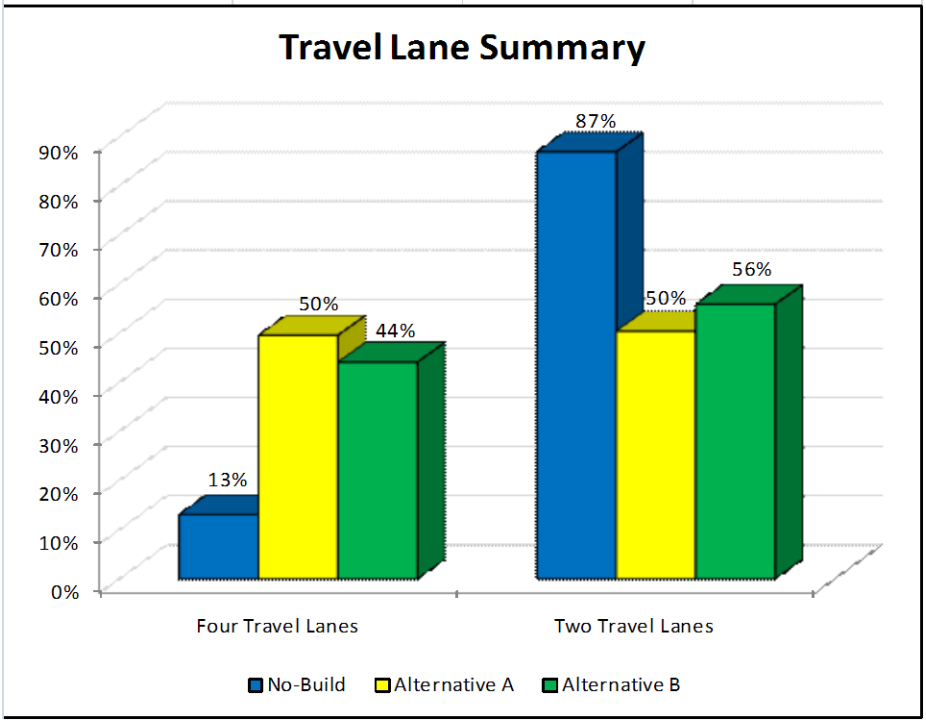


TABLE 2.5.3: CROSS SECTION COMPARISON

Cross Section Description	Alternative											
	No-Build				Alternative A				Alternative B			
	Seg. ID	Length (Miles)	%		Seg. ID	Length (Miles)	%		Seg. ID	Length (Miles)	%	
Four Travel Lanes with No Median	1	0.6	7%		n/a	0.0	0%		n/a	0.0	0%	
Four Travel Lanes with Median	2, 6	0.5	6%	13%	1, 3, 6	3.7	44%	50%	1, 3, 6	3.2	39%	44%
Four Travel Lanes with TWLTL	n/a	0.0	0%		2	0.5	6%		2	0.5	6%	
Two Travel Lanes with Truck Climbing Lane	3	0.9	11%		n/a	0.0	0%		n/a	0.0	0%	
Two Travel Lanes with TWLTL	4	0.5	6%	87%	4	2.5	29%	50%	4	2.9	35%	56%
Two Travel Lanes with No Median	5	5.9	70%		5	1.8	21%		5	1.8	21%	
Total		8.4				8.4				8.4		

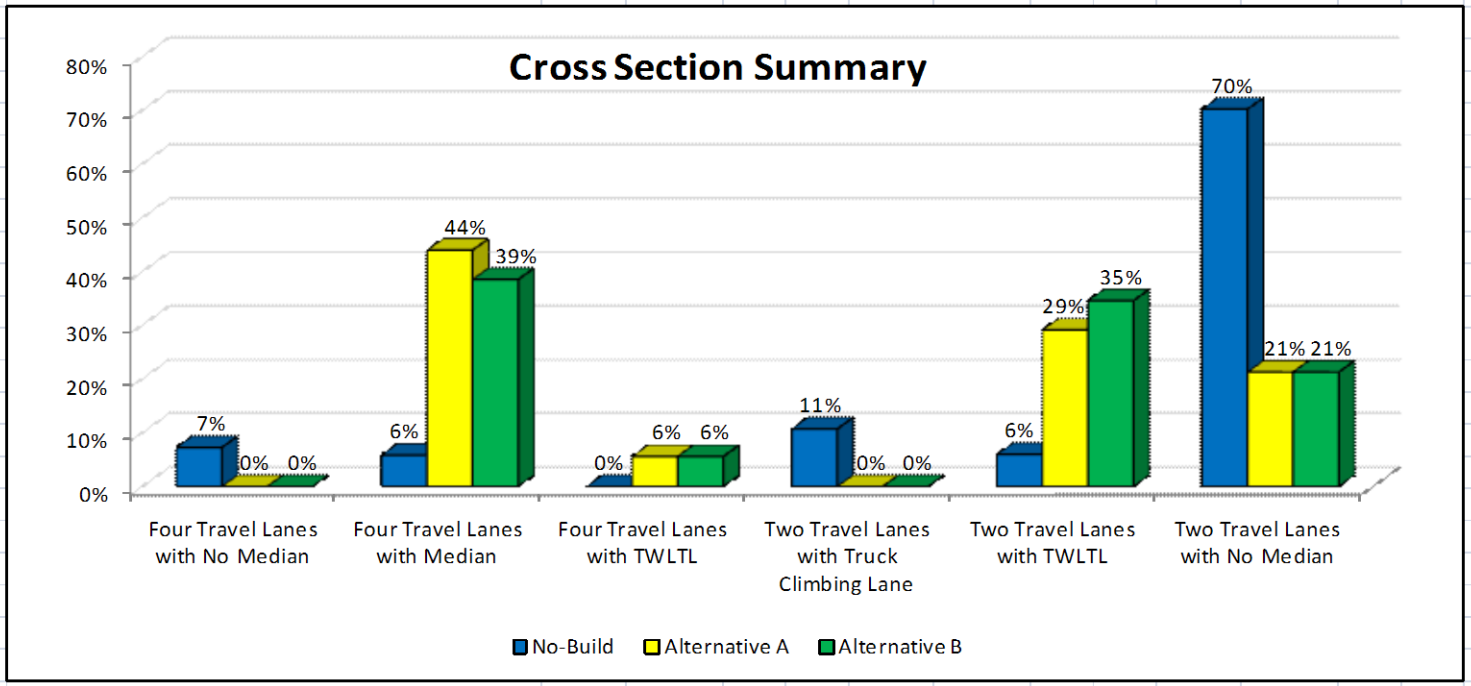


TABLE 2.5.4: SIDEWALK AND SHOULDER COMPARISON

Cross Section Description	Alternative								
	No-Build			Alternative A			Alternative B		
	Seg. ID	Length (Miles)	%	Seg. ID	Length (Miles)	%	Seg. ID	Length (Miles)	%
Sidewalks Present	1	0.1	1%	1, 2, 3, 4	4.5	54%	1, 2, 3, 4	5.0	59%
Sidewalks Not Present	1, 2, 3, 4, 5, 6	8.3	99%	3, 5, 6	3.9	46%	3, 5, 6	3.4	40%
Total		8.4			8.4			8.4	
Shoulders less than Four Feet Wide	1, 3, 4, 5	7.8	92%	-	0.0	0%	-	0.0	0%
Shoulders equal to or greater than Four Feet Wide	2, 5, 6	0.7	8%	1, 2, 3, 4, 5, 6	8.4	100%	1, 2, 3, 4, 5, 6	8.4	100%
Total		8.4			8.4			8.4	

2.6 ALTERNATIVES PREVIOUSLY CONSIDERED BUT ELIMINATED

In addition to the Build Alternatives, other transportation policy alternatives were considered for this project. The alternatives included a Four-Travel Lane Option, a Transportation Systems Management Alternative and a Mass Transit Alternative. The Four-Travel Lane Option was eliminated in the public involvement/Context Sensitive Solution process discussed in **Section 2.1**. Neither The TSM nor Mass Transit Alternatives alone can serve the purpose and need for this project, and were therefore not carried forward in this document. However, elements of each of these transportation policy alternatives are provided in the Build Alternatives.

2.6.1 Four-Travel Lane Option

As discussed in **Section 2.1**, a continuous four-travel lane alternative with a divided median was considered and discussed beginning in the planning stages of the project and through the CSS phase. Although some support was noted for this alternative, there was considerable opposition, in part, due to the increased right-of-way requirements, which would require a higher number of relocations, adverse impacts to the historic Yancey's Tavern property, and additional relocations within the East Lawn Memorial Gardens Cemetery located directly across the roadway from the tavern. The continuous four-travel lane alternative would also require higher areas of encroachment into floodplains, greater lengths of channel changes to streams, and potential hazardous materials impacts would also have been required. The public expressed concerns about potential diminished visual and rural aesthetics, accelerated development and increased traffic speed in the corridor if a continuous four-lane alignment was constructed. Due to the lack of public support, a continuous four-travel lane option was not carried forward in this document.

2.6.1 TSM Alternative

Transportation Systems Management (TSM) is an integrated approach to optimize the performance of the existing transportation infrastructure through the implementation of systems, services, and projects designed to preserve capacity and improve security, safety, and reliability. The goal of TSM is to improve the efficiency of existing transportation facilities while minimizing the need for major construction/reconstruction projects.

TSM strategies alone cannot serve the purpose and need for this project, which includes correcting existing roadway deficiencies and improving access management. Therefore TSM alternatives as the only improvements were not carried forward in this document. Common TSM strategies, along with their effects to this project, are listed in **Table 2.6.1**.

TABLE 2.6.1: TSM STRATEGIES

TSM Strategy #1: Ridesharing	
Tools:	Carpooling, vanpooling, alternative work hours, guaranteed ride home, telecommuting, paratransit services, park and ride facilities
Effect on the Study Area:	The effects of ridesharing strategies are regional in nature, and not corridor specific. The effect of ridesharing strategies in the mostly rural setting of the project corridor would be expected to be minimal. Advances in technology have enabled many to work from home. However, the potential impact of telecommuting on the transportation system is difficult to ascertain, and should be considered minimal. Paratransit services are presently handled as a demand-response service in Kingsport's City Limits. Paratransit services are a benefit to those unable to drive, but generally have minimal impact on traffic. Park and ride facilities are provided for motorists to park and transfer to public transit, carpool or vanpool. No park and ride facilities are located in the project study area and public transit is only offered in the far eastern area of the study area. Additional park and ride facilities may compliment roadway improvements, but without expanded transit availability would not significantly improve congestion in the area or meet the purpose and need of the project.
TSM Strategy #2: Roadway Improvements	
Tools:	Intersection improvements, channelization, traffic surveillance and control systems, traffic control centers, computerized signal systems
Effect on the Study Area:	Intersection improvements and improved channelization are included in the Build Alternatives. Only Four traffic signals are present along the 8.4 mile long study corridor, all of which are located within the first 1.5 miles. While improving traffic surveillance and control systems would be beneficial, it would not impact the majority of the project.
TSM Strategy #3: Dedicated Laneage	
Tools:	HOV lanes, HOV and bus bypass lanes, bus bypass ramps
Effect on the Study Area:	These tools are generally applied to freeway facilities and are not applicable to the study corridor.

TSM Strategy #4: Bicycle and Pedestrian Facilities	
Tools:	Provide bicycle and pedestrian facilities.
Effect on the Study Area:	The Build Alternative will provide shoulders wide enough to accommodate bicyclists and will provide sidewalks along most residential and commercial segments of the corridor. These facilities will compliment the roadway improvements. Bicycle and pedestrian facilities alone would not meet the purpose and need of the project or noticeably reduce congestion along the corridor. Furthermore, constructing bicycle and pedestrian facilities would incur high costs due to the narrow existing right-of-way, surrounding terrain, and adjacent development.
TSM Strategy #5: Transit Improvements	
Tools:	Transit service enhancement or expansion, transit traffic signal preemption, transit information services, exclusive transit ROW, and mode change facilities
Effect on the Study Area:	Transit improvements are discussed in **Section 2.6.2 Mass Transit Alternative**.
TSM Strategy #6: Intelligent Transportation Systems	
Tools:	Intelligent transportation systems and advanced public transportation system technology, incident management, and motorist information systems
Effect on the Study Area:	These systems are primarily applied to freeway facilities. Many non freeway ITS strategies, including dynamic message signs and improved personal GPS systems that provide congestion alerts, provide value. However, quantitative estimates of their benefits are not yet available since many of these strategies are relatively new. ITS improvements alone would not be expected to significantly improve traffic operations along the corridor and would not meet the purpose and need of the project.

TSM Strategy #7: General Purpose Lanes	
Tools:	Add additional general purpose lanes
Effect on the Study Area:	The addition of general purpose lanes is included in the Build Alternatives. This strategy has the potential to have the most impact on congestion relief. It also will likely have the highest cost and will tend to negatively impact vehicle miles traveled and, in some cases, emissions. Therefore, the addition of general purpose lanes was considered only after all of the other strategies had been evaluated and found to be ineffective.

2.6.2 Mass Transit Alternative

Fixed route mass transit service is offered within the City of Kingsport through the Kingsport Area Transit Service (KATS). KATS operates from 7:30 am until 5:30 pm, Monday through Friday, excluding holidays. Five routes are currently offered by KATS (see **Figure 2.6.1**). The cost to ride a KATS bus is $1.

Paratransit is also available within Kingsport's City Limits. KATS Paratransit is a curb-to-curb, origin-to-destination next day transportation service that is available to those individuals who reside in the City of Kingsport, and because of their disability or health-related condition, cannot independently board, ride and/or disembark from an accessible fixed-route transit bus or cannot get to/from a boarding or disembarking location. All KATS Paratransit eligible customers must be Americans with Disabilities Act (ADA) certified by the transit agency before scheduling a ride.

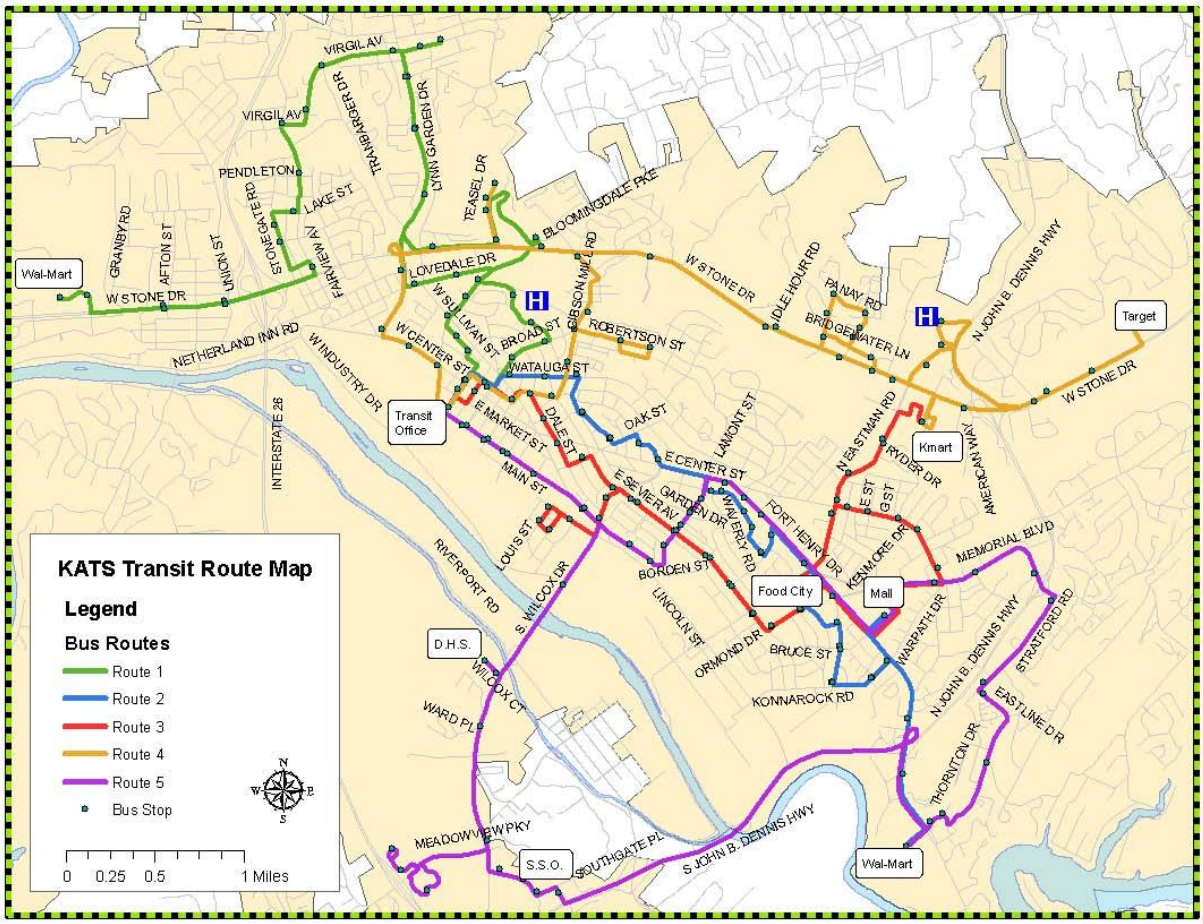


FIGURE 2.6.1: KATS TRANSIT ROUTES

Fixed route transit service is currently offered within the first 0.8 mile, or 10%, of the study corridor, between East Center Street and Stratford Road. Paratransit is offered within the Kingsport City Limits, which accounts for 2.1 miles, or 25%, of the study corridor. There are no known plans to extend transit service beyond these limits. The majority of the study corridor is rural in nature with low population densities, which is unfavorable for transit ridership. Furthermore, improvements to the mass transit system alone do not serve the purpose and need for this project, which includes improving the safety of the route and relieving congestion. Therefore, a Mass Transit Alternative was not carried forward in this document.

It should be noted that if expanding transit service along the study corridor is ever warranted, the improvements in the Build Alternatives would be beneficial to the expansion. SR 126 (Memorial Boulevard) is primarily a two-lane roadway with limited capacity for future traffic growth. The majority of the route has a rural cross section with no shoulders or sidewalks. The narrow cross section width, lack of shoulders, and lack of sidewalks makes many segments of the corridor unfavorable for bus/transit service. There are few safe locations to locate bus stops, with poor pedestrian connectivity between potential stops and adjacent developments. The proposed improvements will correct these deficiencies along the route and provide a facility that is more acceptable for transit service.

Chapter 3: Affected Environment



3.0 AFFECTED ENVIRONMENT

This chapter provides an inventory of the natural and human environment within the project corridor. This includes existing neighborhoods, the income level of residents, racial populations, cultural and historic resources, aquatic and terrestrial species, streams, wetlands, and types of land uses.

3.1 LAND USE

3.1.1 Existing Land Use

Land use in the initial portion of the project area, from East Center Street in downtown Kingsport to the John B. Dennis Highway, is primarily commercial, but does include some residential land use. Commercial uses are a mix of services, including exercise facilities, a dry cleaning business, an auto repair business, a music store, and several convenience stores. The residential land use is mainly conventional framed-structure housing (40 years of age or older).

The land use transitions to mainly residential with very few commercial enterprises as SR 126 (Memorial Boulevard) crosses underneath the John B. Dennis Highway. Between the John B. Dennis Highway and Old Stage Road the land use is an urban residential composition that includes a mixture of older single family residential houses, apartments, and multiplex dwellings, with some businesses. The homes in this area are limited to road proximity by the slopes of the hill. They are either in a valley beneath SR 126 (Memorial Boulevard) or above the roadway on a ridge.

East of Old Stage Road, SR 126 (Memorial Boulevard) crests a ridge and begins to level off. The areas to the north and south of Memorial Boulevard become less severe in their slopes. In this area, the land use remains residential, although agricultural land use becomes more evident. The area between Stagecoach Road and Cook Valley Road also includes the East Lawn Memorial Park, a cemetery with numerous gravesites adjacent to the existing roadway, and Yancey's Tavern, a National Register of Historic Places listed property.

From the cemetery to Samlola Road, the land use on either side of Memorial Boulevard is a blend of residential and agricultural, with some commercial land use scattered lightly through the area. Within this segment, residences are more densely populated around Fall Creek Road, Lonesome Pine Road, Cochise Trail, and Chippewa Lane. Conversations with local officials indicated that residential development of over one hundred homes is ongoing adjacent to Island Road. The areas of commercial land use are concentrated around smaller communities. The Indian Hills area features a shopping center with a national chain discount store. In addition, a veterinary clinic and several small businesses exist in this area that includes the junction of SR 126 (Memorial Boulevard) and Island Road.

From Samlola Road to Overhill Drive, the area is less developed. Some homes exist, but farmland is more prevalent. The Overhill Drive area, Shadowtown Road, and Carolina Pottery Drive are all located in the vicinity around the SR 126 (Memorial Boulevard) Interchange with I-81, the eastern terminus of the project. This area is primarily highway commercial with some residential land use.

3.1.2 Land Use Plans and Regulatory Controls

Kingsport's City Limits include the western terminus of the study corridor at East Center Street and extend eastward to approximately the western terminus of Old Stagecoach Road. The area from Old Stagecoach Road eastward to the I-81 interchange is not within the Kingsport City Limits. Kingsport's City Limits also include the area around I-81 as a linear corridor. The Interchange of SR 126 (Memorial Boulevard) and I-81 is included in this linear corridor and is therefore within the city limits.

Reviews of the project area and zoning maps indicate that approximately half of the existing and planned development in the corridor within Kingsport's City Limits consists of residential land use. The predominant residential land use zoning is single family units, with some multi-unit dwellings (duplexes and apartments). These areas are shaded in yellow in **Figure 3.1.1**. Commercial land use zoning is predominantly at the western and eastern termini of the corridor. These areas are shaded in blue, pink, orange and red in **Figure 3.1.1**.

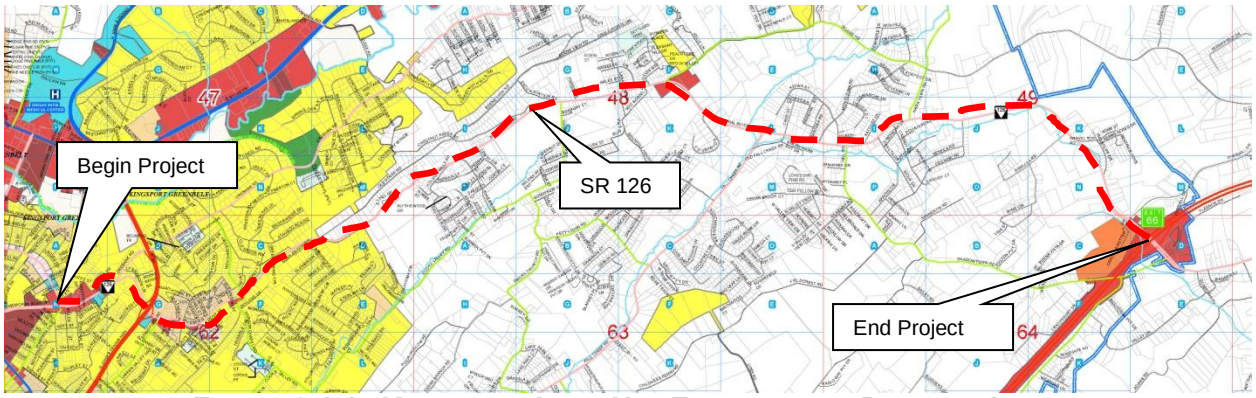


FIGURE 3.1.1: KINGSPORT LAND USE ZONING IN THE PROJECT AREA

Outside of Kingsport's City Limits, Sullivan County Planning regulates development. Reviews of the project area and zoning maps indicate that most of the existing and planned development in the corridor outside of Kingsport's City Limits consists of residential land use, mainly single family units, with some multi-unit dwellings (duplexes and apartments). These areas are shaded in yellow in **Figure 3.1.2**. Commercial land use zoning is scattered along the corridor. These areas are shaded in blue pink, orange and red in **Figure 3.1.2**. Agriculturally zoned areas exist along the study corridor and are shaded in green. Based on site observations, many residentially zoned areas are also utilized for agricultural use.

The *Sullivan County Regional Plan: A Guide for Future Land Use and Transportation Development, Planning Period 2006 – 2026* notes that like many counties in northeast Tennessee, the pattern of land use or development in Sullivan County has been significantly affected by natural factors, including extreme slopes and soil suitability. Slopes in Sullivan County, and within the SR 126 (Memorial Boulevard) Study Corridor, range from below 5 percent to nearly 50 percent. In areas greater than 20 percent slope, limitations to development are severe. Based on soils analysis, there is very little of Sullivan County that is considered suitable for urban development utilizing subsurface sewage disposal systems (septic tanks). Areas not serviced by sewer lines therefore have limited high density development potential.

Approximately half of the SR 126 (Memorial Boulevard) Corridor outside of Kingsport's City Limits, from Harr Town Road to I-81, is not serviced by sewer lines.

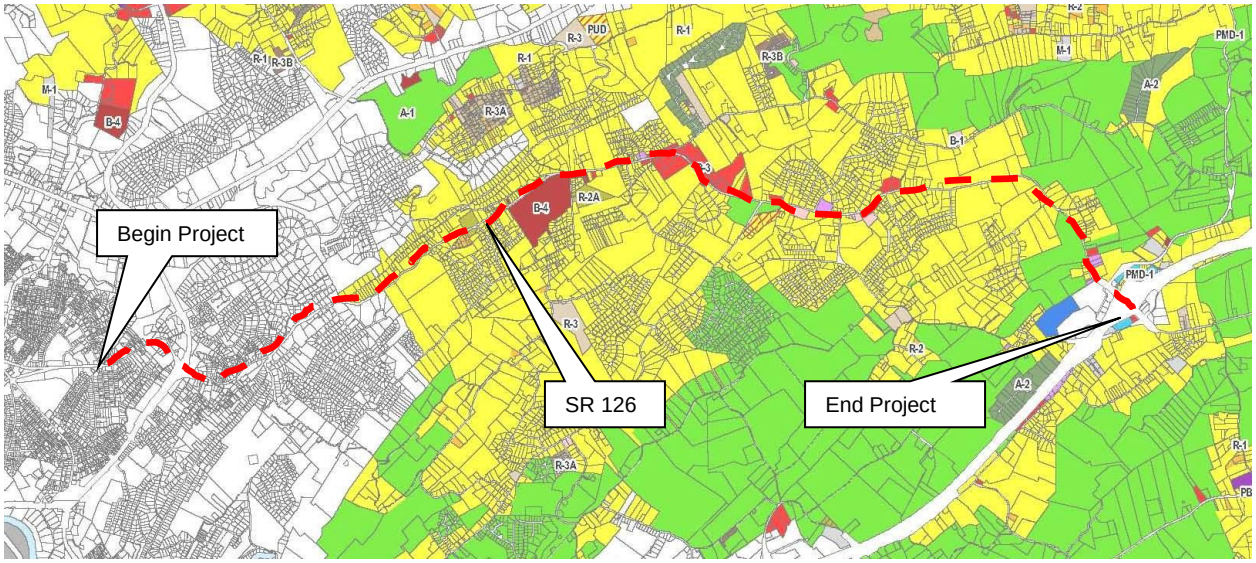


FIGURE 3.1.2: SULLIVAN COUNTY LAND USE ZONING IN THE PROJECT AREA

3.2 COMMUNITY SERVICES

3.2.1 Schools

The Sullivan County Department of Education serves over 13,000 students. The county currently has 25 schools which are distributed into 4 zones; North, South, East and Central. Each zone consists of a high school and several elementary and middle schools. In total there are four comprehensive high schools, seven middle schools, one intermediate school and 12 elementary schools. One school, Mary Hughes, combines grades Kindergarten through Eighth Grade. Indian Springs Elementary School is located approximately 300 yards south of SR 126 (Memorial Boulevard). Central High School is located just outside the eastern terminus of the study corridor, east of I-81. Sullivan County Schools are listed in **Table 3.2.1**. Schools that serve the project area with bus routes are represented in gray shading.

TABLE 3.2.1: SULLIVAN COUNTY SCHOOLS*

Bluff City Elementary	Kingsley Elementary	
Bluff City Middle	Mary Hughes Elementary & Middle Schools	Blountville Elementary
Brookside Elementary	Miller Perry Elementary	Blountville Middle
Cedar Grove Elementary	North High School	Central Heights Elementary
Colonial Heights Middle	Rock Springs Elementary	Central High School
East High School	South High School	Holston Valley Middle
Emmett Elementary	Sullivan Elementary	
	Sullivan Middle	
Holston Elementary		
Indian Springs Elementary	Weaver Elementary	
Ketron Intermediate		

* Source: Sullivan County School Board website (http://www.scde.k12.tn.us/metadot/index.pl?id=2167&isa=Category&op=show)

3.2.2 Fire, Medical Emergency, and Police Protection

The proposed project area includes one volunteer fire station, Kingsport Fire Department Station #4, which is located near the western terminus of the study area near Heather Lane. No other emergency service facilities are located within the project impact area.

3.2.3 Hospitals

Sullivan County has several hospitals, and three are located in Kingsport. They are described below. None are located within close proximity to the project corridor.

HealthSouth Rehabilitation Hospital of Kingsport is an acute inpatient rehabilitation hospital treating more than 1,000 patients annually from Southwest Virginia, Northeast Tennessee, Southeast Kentucky and Northwest North Carolina. The hospital offers care by physician specialists in physical medicine and rehabilitation, pulmonary care, neurology, gastroenterology, internal medicine, and family practice.

Indian Path Medical Center is a full range outpatient service acute care hospital with 261 beds. It is located in Kingsport off the John B. Dennis Highway. Services include an emergency department, a family-centered birthing center, and skilled nursing beds.

Holston Valley Medical Center is one of Tennessee's six Level I trauma centers, equipped to care for the most critically injured patients. This facility houses a Level III neonatal intensive care unit which cares for the region's most critically ill babies.

3.2.4 Utilities

Both Build Alternatives under consideration would be located adjacent to, and would replace portions of, the existing roadway. Conversations with local officials have indicated that the City of Kingsport has existing sewer lines and water lines within sections of the project area. Some lines will have to be moved, replaced, and/or repaired.

Coordination with the City's Public Works was done to determine possible future impacts on utilities and it was determined that there are no plans to add new water or sewer lines along SR 126 (Memorial Boulevard). Any additional sewer lines would be added along area creeks, and

additional water lines would be added along area roadways, but not SR 126 (Memorial Boulevard).

3.2.5 Multi-modal Transportation

Airports
The area is served by the Tri-Cities Regional Airport. This facility is owned by Johnson City, Kingsport and Bristol, TN, and Bristol, VA. It is centrally located to facilitate the needs of the Tri-City area, and is not located near the project area.

Rail
Rail freight is very light in Sullivan County, and according to the Kingsport Area MPO's 2030 Long Range Transportation Plan and the Sullivan County Regional Plan 2006-2026, future plans do not include increased usage of this form of transportation. Norfolk Southern serves the Industrial Park in Piney Flats, Bluff City and Bristol. None of these areas are within or adjacent to the project corridor. There are proposed plans by Kingsport to increase rail activities by CSX at its intermodal facility off Lincoln Street, which primarily accommodates the needs of the Eastman Chemical plant. No existing railways and no proposed railways are identified within the project corridor.

Bicycle Trails
SR 126 (Memorial Boulevard) is not listed as a Tennessee Bicycle Route. However, it is TDOT's Policy (Bicycle and Pedestrian Policy #530-01) that provisions for bicycles and pedestrians be integrated into new construction and reconstruction of roadway projects through design features appropriate for the context and function of the transportation facility.

3.3 SOCIAL AND ECONOMIC CHARACTERISTICS

Sullivan County is defined by 413.0 square miles of land area and a population density of 374.2 people per square mile. The average household size is 2.22 persons compared to a national average family size of 2.60 persons. The County population in 2010 was estimated to be 162,197. Owner-occupied homes totaled 47,531, while 17,430 residents occupied rented homes in Sullivan County.

Manufacturing was the largest of 20 major employment sectors in 2008, providing an average annual income of $68,124. Sullivan County's per capita income grew by 8.6% between 1996 and 2006 (adjusted for inflation).

TABLE 3.3.1: SUMMARY OF DEMOGRAPHICS, SULLIVAN COUNTY, TN

People & Income Overview (By Place of Residence)	Value	Industry Overview (2008) (By Place of Work)	Value
Population (2010)	162,197	**Covered Employment**	72,164
Growth (%) since 1990	6.9%	Manufacturing - % all jobs in County	23.2%
Households (2010)	64,961		
Labor Force (persons) (2009)	71,629	Transportation & Warehousing - % all jobs in County	3.1%
Unemployment Rate (2007)	10.9%		

3.3.1 Social Characteristics

Population Trends and Forecasts

The University of Tennessee (UT) Center for Business and Economic Research performs population projections for the state of Tennessee, including state, county, and city populations. County populations are based on data to determine the annual change in population (the change in population equals births minus deaths plus net migration).

Population Characteristics - TN & Sullivan County

Population projections for Tennessee and Sullivan County are shown in **Table 3.3.2**. Population growth for Sullivan County in the decades of, 2000, 2010, 2020, 2030, and 2040 are less than the population growth for the state. Sullivan County shows a growth rate (2.47%) between 2000 and 2010 that is 9.0 % below the projected growth rate for the state (11.5%). Projected growth rates for Sullivan County indicate a net growth in population through 2040 of 9.5% higher than the 2000 figure. The State of Tennessee is predicted to realize an increase in population of 42.5% between 2000 and 2040.

TABLE 3.3.2: POPULATION AND FORECAST GROWTH 2000-2040, TENNESSEE AND SULLIVAN COUNTY

Geographic Area	Population					
	2000	2010	2020	2030	2040	2000-2040 Change
Tennessee	5,689,283	6,346,105	6,841,868	7,489,809	8,106,583	2,417,300
Change	-	+11.5%	+7.8%	+9.5%	+8.2%	+42.5%
Sullivan County	153,048	156,823	159,551	163,795	167,599	14,551
Change	-	+2.5%	+1.7%	+2.7%	+2.3%	9.5%

Source: *UT Center for Business and Economic Research, 2010 and U.S. Census Bureau, 2010*

Population Characteristics - City of Kingsport

As shown in **Table 3.3.3**, the population totals for the City of Kingsport have remained steady when comparing estimates from 2005 through 2009. Between 2009 and 2010, the population increased by 7.7% due to a series of annexations. Projections and estimates for populations in Kingsport are not conducted by the U.T. Center for Business and Economic Research. The estimations below were provided by the U.S. Census Bureau. No projections into 2040 exist for the City of Kingsport.

TABLE 3.3.3: KINGSPORT COMPARATIVE POPULATIONS, 2005 - 2010

Kingsport Population by Year		Rate of Change in Percentages
2005	44,238	---
2006	44,259	+0.05%
2007	44,548	+0.65%
2008	44,610	+0.14%
2009	44,758	+0.33%
2010	48,205	+7.70%

Population Characteristics - Study Corridor

The project study corridor bisects seven U.S. Census tracts. However, many of these seven census tracts include large portions that are located outside of the immediate project area. Most of the SR 126 (Memorial Boulevard) project is situated within Census Tract 423. Lesser portions of the project are located within Census Tracts 408, 409, 410, 411, 422 and 424. These adjacent Census Tracts are provided in **Figure 3.3.1**.

The 2010 population within the immediate study corridor was 26,683. Census tracts 423 (6,780 persons), 410 (4,052 persons), and 408 (3,633 persons) had the largest populations. Senior adults, those 65 years of age and older, comprise a majority of the population in all tracts considered.. **Table 3.3.4** provides specific data for each of the Census Tracts in the study corridor.

TABLE 3.3.4: POPULATION AGE CHARACTERISTICS, CENSUS TRACTS FOR SULLIVAN COUNTY, 2010

Subject	Sullivan County Census Tracts							Total
Census Tracts	408	409	410	411	422	423	424	
TOTAL POPULATION	3,633	3,229	4,052	2,375	3,199	6,780	3,415	26,683
Under 5	208	203	204	106	152	335	173	1,381
5 – 14	420	418	564	270	393	850	375	3,290
15 – 24	399	380	363	230	384	680	415	2,851
25 – 34	408	322	385	243	281	615	343	2,597
35 – 44	436	388	551	297	453	964	493	3,582
45 – 54	461	431	654	335	525	1062	536	4,004
55 – 64	433	421	571	343	429	1064	485	3,746
65 and over	868	666	760	551	582	1210	595	5,232
Median age	43.9	42.6	44.3	46.5	43.8	44.3	43.4	

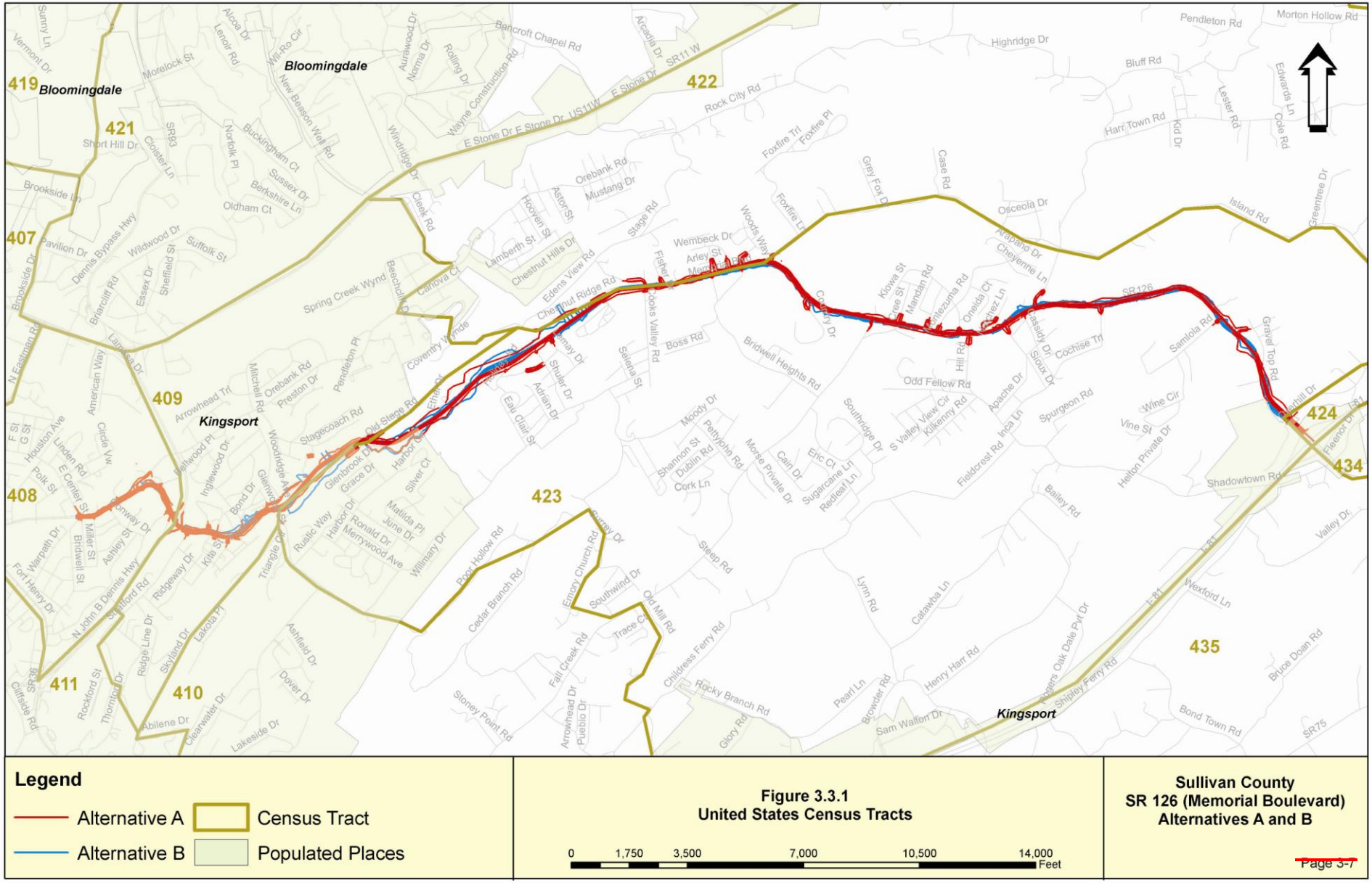


FIGURE 3.3.1: U.S. CENSUS TRACTS IN PROJECT CORRIDOR

Social Groups - Sullivan County & Study Corridor

The majority of Sullivan County's population is white. As seen in **Table 3.3.5**, the Census Tracts for the study corridor also reflect a majority white population. The largest minority group in Sullivan County is comprised of African American citizens. African-Americans account for 92.3% of the minority population in Sullivan County.

TABLE 3.3.5: RACIAL CHARACTERISTICS BY CENSUS TRACTS, SULLIVAN COUNTY, 2010*

Subject	Sullivan County Census Tracts							Total
	408	409	410	411	422	423	424	
RACE								
Total Population	3,633	3,229	4,052	2,375	3,199	6,780	3,415	26,683
One Race*	3,573	3,152	4,020	2,325	3,161	6,711	3,385	26,327
White	3,371	3,008	3,936	2,204	3,105	6,593	3,325	25,542
African-American	123	82	25	62	13	36	20	361
American Indian/Alaskan	19	5	7	12	7	14	5	69
Asian	12	40	39	21	12	42	13	179
Native Hawaiian	1	1	1	0	0	4	1	8
Some other race	47	16	12	26	24	22	21	168
Two or more races*	60	77	32	50	38	69	30	356
Hispanic/Latino (of any race)	94	40	40	50	45	60	39	368

*Beginning in 2000, the U.S. Census Bureau allowed individuals to identify one or more races to indicate their racial identity.

Educational Characteristics - TN, Sullivan County

Sullivan County has a lower percentage of residents who are high school graduates or equivalent (85.1%) than the State of Tennessee (88.3%). Sullivan County also has a lower percentage of residents who have attained a Bachelor's Degree or higher (18.5%) than the State of Tennessee (26.7%).

TABLE 3.3.6: EDUCATIONAL ATTAINMENT PERCENTAGES, TENNESSEE AND SULLIVAN COUNTY, 2010

AREA	Percentage of Population High School Graduate or Higher	Percentage of Population Bachelor's Degree or Higher
Tennessee	88.3%	26.7%
Sullivan County	85.1%	18.5%

Urban/Rural Population Distribution - Sullivan County

The urban and rural distribution of residents within Sullivan County indicates that most residents live within the populated areas of Kingsport and Bristol. The study corridor is located primarily within a rural area. A small portion of the project within the city limits is urban. The U.S. Census 2000 figures estimate that 73.5% of the county's residents are classified as living in urban areas, and the remaining 26.5% reside in rural areas. The 2010 data for urban/rural distribution of residents is currently unavailable. Table **3.3.7** provides total population counts and percentages for these categories in Sullivan County.

TABLE 3.3.7: URBAN/RURAL REPRESENTATION OF SULLIVAN COUNTY

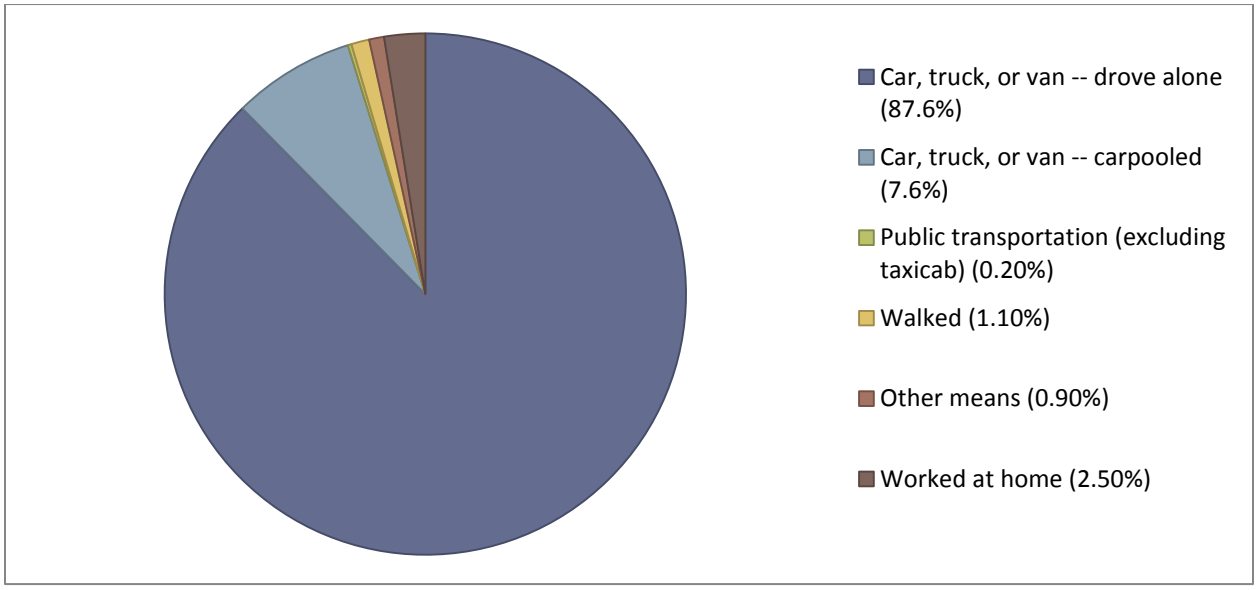
Classification Type	Population Total	Percentage of Population within Classification
2000 Total Urban Population inside urbanized areas.	112,474	73.5%
2000 Total Rural	40,574	26.5%

*The 2010 Census Data for Urban/Rural representation is not currently available

Commuting Patterns - Sullivan County

Commuting patterns are important in establishing modes of transportation and length of time commuting to and from work. These statistics can indicate the level of alternative means of transportation that are utilized. A great majority of the residents in Sullivan County choose the most common method of driving to and from work; driving by car (87.6% with a single occupant). Carpooling is the second choice (7.6% with two or more vehicle occupants). Very few residents utilize buses, taxis, bicycles or walking when commuting to work. **Table 3.3.8** includes a graphic which represents the means of transportation to work based on figures from the 2010 U.S. Census.

TABLE 3.3.8: COMMUTING PATTERNS



Housing – TN, Sullivan County, & Study Corridor

Interviews were conducted with local officials at the Kingsport MPO and with a local real estate agent, and the Multiple Listing database was reviewed for Kingsport and Sullivan County. The discussions and research indicate that the area has not experienced drastic declines in activities during the economic downturn between 2008 and 2009. Sales prices and home sales volumes showed that home values remained steady between 2006 and 2009 for Kingsport and the Tri-City region of Kingsport, Bristol and Johnson City. Annual sales volumes for the same years declined, but activities in 2010 are indicating an increase will be realized by the end of the year.

Tables 3.3.9A and 3.3.9B provides U.S. Census 2010 information on the number of tenants and the type of homes they occupy. As seen in the table, 8,595 of the 11,091 housing units in the study corridor (77.5 percent) were owner-occupied, with the remaining 22.5% of housing units being occupied by renters. Census Tracts 408 (42.1 percent) and 409 (29.4 percent) had the highest percentages of renter-occupied housing units, while Census Tract 410 (11.3 percent) and Census Tract 422 (16.0 percent) had the lowest percentages.

TABLE 3.3.9A: COMPARATIVE HOUSING DATA FOR SULLIVAN COUNTY AND TENNESSEE, 2010 CENSUS

	Total Project Area*	Sullivan County	Tennessee
Total:	11,091	73,825	2,815,087
Owner Occupied	8,595	47,531	1,662,768
Percentage	77.5%	73.2%	68.1%
Renter Occupied	2,496	17,430	777,895
Percentage	22.5%	26.8%	31.9%

TABLE 3.3.9B: COMPARATIVE HOUSING DATA FOR PROJECT AREA CENSUS TRACTS, 2010 CENSUS

	Census Tract 408, Sullivan County, Tennessee	Census Tract 409, Sullivan County, Tennessee	Census Tract 410, Sullivan County, Tennessee	Census Tract 411, Sullivan County, Tennessee	Census Tract 422, Sullivan County, Tennessee	Census Tract 423, Sullivan County, Tennessee	Census Tract 424, Sullivan County, Tennessee
Total:	1,569	1,388	1,599	1,103	1,284	2,725	1,423
Owner occupied	908	980	1,418	803	1,078	2,284	1,124
Percentage	57.9	70.6	88.7	72.8	84	83.8	79
Renter occupied	661	408	181	300	206	441	299
Percentage	42.1	29.4	11.3	27.2	16	16.2	21

***** These figures resulted from totaling the values of the seven Census Tract Areas

Poverty – TN, Sullivan County, City of Kingsport, & Study Corridor

This project is located mainly within rural areas that are transitioning to suburban land use. The initial portion of the project is within the city limits of Kingsport in an urban setting. An additional portion of the project, along the I-81 corridor near and at the eastern terminus, is also within the city limits. The U.S. Census Bureau reported in its 2007 estimations that Kingsport had a higher poverty level than Sullivan County or the State of Tennessee. This concentration of low income residents is consistent with most towns and cities.

A total of 7.4 percent of Kingsport's residents were estimated in 2007 to be living below the poverty level, which is almost one percent higher than the State of Tennessee's total. The area along the project corridor does not feature concentrations of socially interdependent family clusters. The area consists primarily of subdivisions and larger tracts of land with homes. Some apartments and multiplex buildings exist within or adjacent to the project limits, but these rental structures are not occupied by a largely minority or low-income groups. **Table 3.3.10** compares poverty levels on statewide, county, and city levels. **Table 3.3.11** compares poverty levels within the project's Census Tracts. Updated poverty levels estimates are not available for the adjacent Census Tracts.

TABLE 3.3.10: RESIDENTS WITH INCOME BELOW THE POVERTY LEVEL IN 2007*

Kingsport	20.2%
Sullivan County	15.0%
Tennessee	15.9%

* U.S. Census Bureau, Quickfacts2007

TABLE 3.3.11: U.S. CENSUS TRACT HOUSEHOLD INCOME, 2000

Subject	Sullivan County Census Tracts							Total
	408	409	410	411	422	423	424	
INCOME IN 1999								
Households	1,636	1,274	1,379	1,137	1,185	2,592	1,326	10,529
Median household income ($)	25,522	36,757	43,651	33,512	39,694	45,889	27,833	
Families	965	917	1,082	732	918	2,032	1,006	7,652
Median family income ($)	31,715	49,712	50,833	41,279	44,844	52,132	33,393	
Below poverty families	144	90	29	93	59	74	127	616
Percent of all families below poverty*	14.9	9.8	2.7	12.7	6.4	3.6	12.6	8.1
Below poverty individuals	652	402	167	342	260	297	527	2,647

* U.S. Census Bureau, 2000 (2010 Dataset is not available)

Personal Income – TN & Sullivan County

The Tennessee Advisory Commission on Intergovernmental Relations (TACIR) provides selected statistical information for Counties and compares them to State data. In 2007 the per capita personal income of Sullivan County was $32,141. This is less than the State's per capita personal income of $33,395 and ranks 11th out of Tennessee's 95 counties.

In 2008 the median household income of Sullivan County was $41,115. This is less than the State's median household income of $43,610 and ranks 27th out of Tennessee's 95 counties.

3.3.2 Economic Characteristics

Table **3.3.12** provides labor force characteristics for Sullivan County and the State of Tennessee. Sullivan County had a lower unemployment rate (10.9%) compared to Tennessee's statewide rate of 11.3%.

TABLE 3.3.12: LABOR FORCE CHARACTERISTICS FOR SULLIVAN COUNTY, 2010*

AREA	Total Labor Force(2010)		Total/Percentage of Unemployment Rate(2010)
	Labor Force	Employment	Unemployment
Tennessee	3,081,522	2,733,310	348,212 / 11.3%
Sullivan County	71,269	63,500	7,769 / 10.9%

*2010 Labor Force Data were not available for Kingsport or the Adjacent Census Tracts.

The highest numbers of employees throughout the study corridor's census tracts, and in total, are located in the sectors of manufacturing, educational, health and social services, and in retail trade (See **Table 3.3.13**). The immediate project area features mainly retail, agricultural, and other service industries. The majority of the retail located within the project area is in the East Center Street area, and also at the interchange with I-81.

TABLE 3.3.13: ECONOMIC CHARACTERISTICS, SULLIVAN COUNTY CENSUS TRACTS, 2000*

Subject Industry Employees	Sullivan County Census Tracts							Total
	408	409	410	411	422	423	424	
Agriculture, forest, fishing and hunting, and mining	6	0	11	0	6	18	22	63
Construction	149	70	94	63	144	197	202	919
Manufacturing	218	245	388	188	238	636	349	2,262
Wholesale trade	52	93	49	49	31	133	65	472
Retail trade	216	135	171	163	282	483	120	1,570
Transportation and warehousing, and utilities	29	20	84	17	71	96	68	385
Information	16	25	54	21	12	113	18	259
Finance, insurance, real estate, and rental and leasing	48	92	84	38	70	162	27	521
Educational, health and social services	217	217	373	200	257	734	181	2,179
Professional, scientific, management, administrative, and waste management services	63	41	130	74	116	178	88	690
Arts, entertainment, recreation, accommodation and food services	112	138	103	74	80	218	169	894
Other services (except public administration)	104	63	83	62	45	126	151	634
Public administration	33	24	39	37	46	110	5	294

*2010 Data not available

3.3.3 Summary of Socioeconomic Characteristics

The City of Kingsport has remained somewhat steady in its population for the past few years as more residents move into the county than the city. In part, the topography limits development within many areas of the city limits. Many residents of the City of Kingsport and Sullivan County are senior adults that retired from the Eastman Kodak plant and have remained in the area. The vast majority of residents in the county and city are white, middle class, and own their own homes.

The unemployment rate of the area, reflective of those across the nation, increased in the latter part of 2008 and through 2009 due to the national economic recession. Sullivan County has a lower percentage of residents who are high school graduates or equivalent (85.1%) than the State of Tennessee (88.3%). Sullivan County also has a lower percentage of residents who

have attained a Bachelor's Degree or higher (18.5%) than the State of Tennessee (26.7%). The poverty rate of Sullivan County (15.0%) is comparable to the poverty rate for Tennessee (15.9%). Higher poverty rates are present within Kingsport's City Limits (20.2%).

3.4 NATURAL ENVIRONMENT

3.4.1 Geology

Topography and Geology

The project is located in Sullivan County, along the eastern limits of the City of Kingsport to its interchange with I-81. This area of Sullivan County features undulating to rolling valleys with rounded hills. The project area is situated within the Valley and Ridge physiographic region. In Tennessee, the Valley and Ridge is sometimes referred to as the Valley of East Tennessee, a rolling lowland formed on highly folded limestone, dolomite, and shale. Fertile valleys separated by wooded ridges make up this area. The eastern escarpment of the Cumberland Plateau and the Blue Ridge subdivision mark the boundaries of this region.

The Valley and Ridge is an area comprised of Ordovician and Ordovician-Cambrian age limestone, dolomite, shale, chert, siltstone, sandstone, and clay. Numerous elongated ridges and intervening valleys, all trending in a northeast-southwest direction, characterize this physiographic region. As a general rule the major ridges are formed by prominent quartzitic sandstone. Subordinate ridges consist of Lower Devonian sandstone and various sandstones of the Upper Devonian. The valleys and lower flanks of major ridges are underlain by shale and limestone. Valley floors contain rolling hills. Hills formed of shale are generally well rounded and smooth; those formed of limestone are somewhat irregular. Streams generally follow the narrow valley floors or cut across the strike of the ridges. The Tennessee River flows southwest through the region. Principal feeders from the north are the Clinch, French Broad, and Holston Rivers. Major tributaries from the east are the Hiwassee and Little Tennessee Rivers.

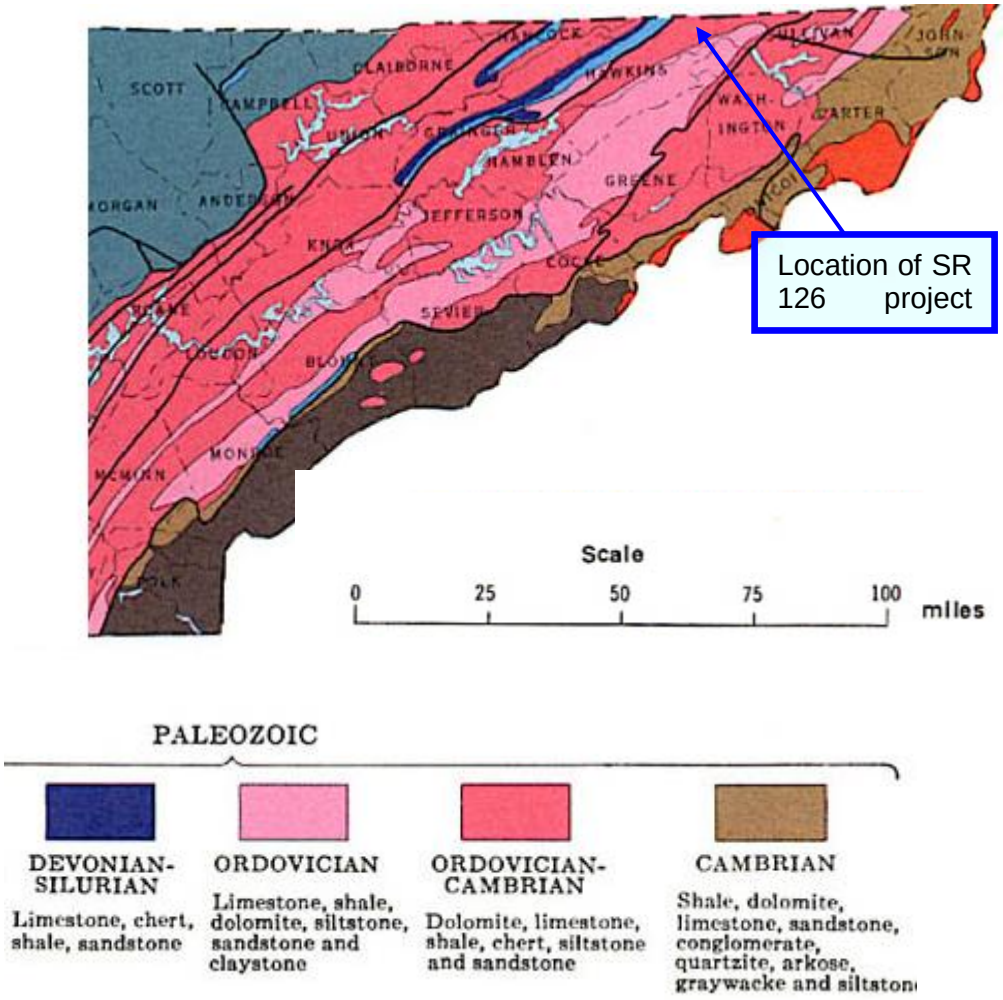


FIGURE 3.4.1: GENERALIZED GEOLOGIC MAP OF EAST TENNESSEE

Karst Features

Karst is an area of irregular limestone in which erosion has produced fissures (cracks), sinkholes, underground streams, and caverns.

Although karst topography is present within the project area, very few sinkholes have been mapped in the greater project region, and no significant sinkholes, if any, are being indicated within the project limits. Field trips also did not result in the identification of sinkholes within or adjacent to the project limits. The underlying geologic formations, particularly the Knox Group and the Honaker Dolomite group, are susceptible to sinkhole development due to their carbonate (limestone and dolostone) composition. Sinkhole development or discovery of developing sinkholes could occur at any time, but were not evident in areas where recent development has occurred in the areas surrounding SR 126 (Memorial Boulevard).

Other Geological Issues

TDOT conducted a preliminary geologic investigation that was submitted on June 29, 2009. The varying topography ranges throughout the project from nearly level areas to steeply rolling terrain. A copy of the Preliminary Geologic Report is on file at the TDOT Environmental Division Office in Nashville, TN.

Pyritic material is not expected to be encountered on the proposed project, and there does not appear to be any significant geological issues that cannot be addressed during the design or construction phase.

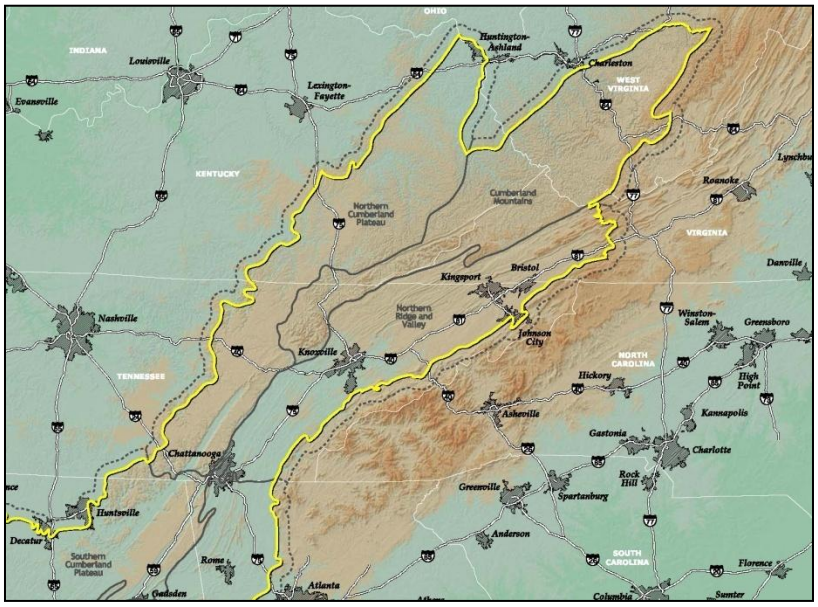
A possible old borrow site was observed just west of Holiday Hills Road adjacent to the westbound lane of existing SR 126 (Memorial Boulevard). The surrounding ground and backslope appeared stable, with no curvature being noted in the large diameter trees at the top of the slope. No geotechnical concerns were noted with regard to this area.

The observations made during the field trip and reviews of topographic mapping anticipate the majority of roadway improvements would require shifting into the existing hill slopes. This would result in a greater number of constructed cut slopes than embankment fills. The greatest cuts are expected in areas with steeper terrain such as the Sougan Hollow vicinity and the southern flank of Chestnut Ridge. Moderate to steep cuts could occur throughout the project, with less steep cuts being anticipated in areas of more gentle topography. Other areas along creek bottoms or in areas where the roadway is not shifted into the hill slopes could encounter minor to moderate fills.

3.5 NATURAL RESOURCES

3.5.1 Terrestrial Habitat

The project area is within the EPA Level III ecoregion termed the “Ridge and Valley Ecoregion.” This northeast-southwest trending, relatively low-lying, but diverse ecoregion is sandwiched between generally higher, more rugged mountainous regions with greater forest cover. **Figure 3.5.1** provides a location of the project in relation to the Ridge and Valley Ecoregion.



The Ridge & Valley Ecoregion (yellow outline in the figure above) includes the project area.

FIGURE 3.5.1: RIDGE AND VALLEY ECOREGION

Springs and caves are relatively numerous. Present-day forests cover about 50% of the region. The ecoregion has a diversity of aquatic habitats and species of fish. Natural plant communities in this area of the ecoregion are Appalachian oak forest (mixed oaks, hickory, pine, poplar, birch, maple); bottomland oak and mesophytic forests; and cedar barrens.

Field studies and records reviews indicate that two main types of forests, mixed mesophytic and upper hardwood, exist in the project area. The mixed mesophytic habitat is found in the more sheltered ravines of the lower elevations and is dominated by woody species of White Basswood (*Tilia heterophylla*), American Beech (*Fagus grandifolia*), Yellow Buckeye (*Aesculus octandra*), Sugar Maple (*Acer saccharum*), Red Oak (*Quercus rubra*), Fraser Magnolia (*Magnolia fraseri*), conifers such as White Pine (*Pinus strobus),* Eastern Hemlock (*Tsuga canadensis*), and White Ash (*Fraxinus americana*). The under-story vegetation includes successional species such as Flowering Dogwood (*Cornus florida*), Eastern Redbud (*Cercis canadensis*), Eastern Red Cedar (*Juniperus virginiana*) and Sassafras (*Sassafras albidum*). Rhododendron (*Rhododendron maximum*) and Mountain Laurel (*Kalmia latifolia*) dominate the slopes and stream sides. The upper hardwood habitat is found mainly at the higher elevations. The tree species are often stunted or broken due to exposure to strong winds. Species include Red Oak, American Beech, Sugar Maple, American Elm, and Virginia Pine.

Some open land does exist in the project area. Areas such as cemeteries, abandoned farmland, hay fields, utility right-of-ways, etc., exhibit early-successional, grass-shrub habitat with the dominant plants being cool-season grasses (fescue, timothy, and orchard grass), and a vast assortment of forbs (a broad-leaf herb other than a grass, growing in a field or meadow), and shrubs such as blackberry and honeysuckle. Reviews of aerial photographs of the project corridor over the past sixty years indicate that the amount of trees in the area has increased. This can be attributed to the loss of small farmland, which has reverted to fallow fields. **Figure**

3.5.2 shows the extensive forest fragmentation in the project area due to urban, residential, and agricultural land usage.

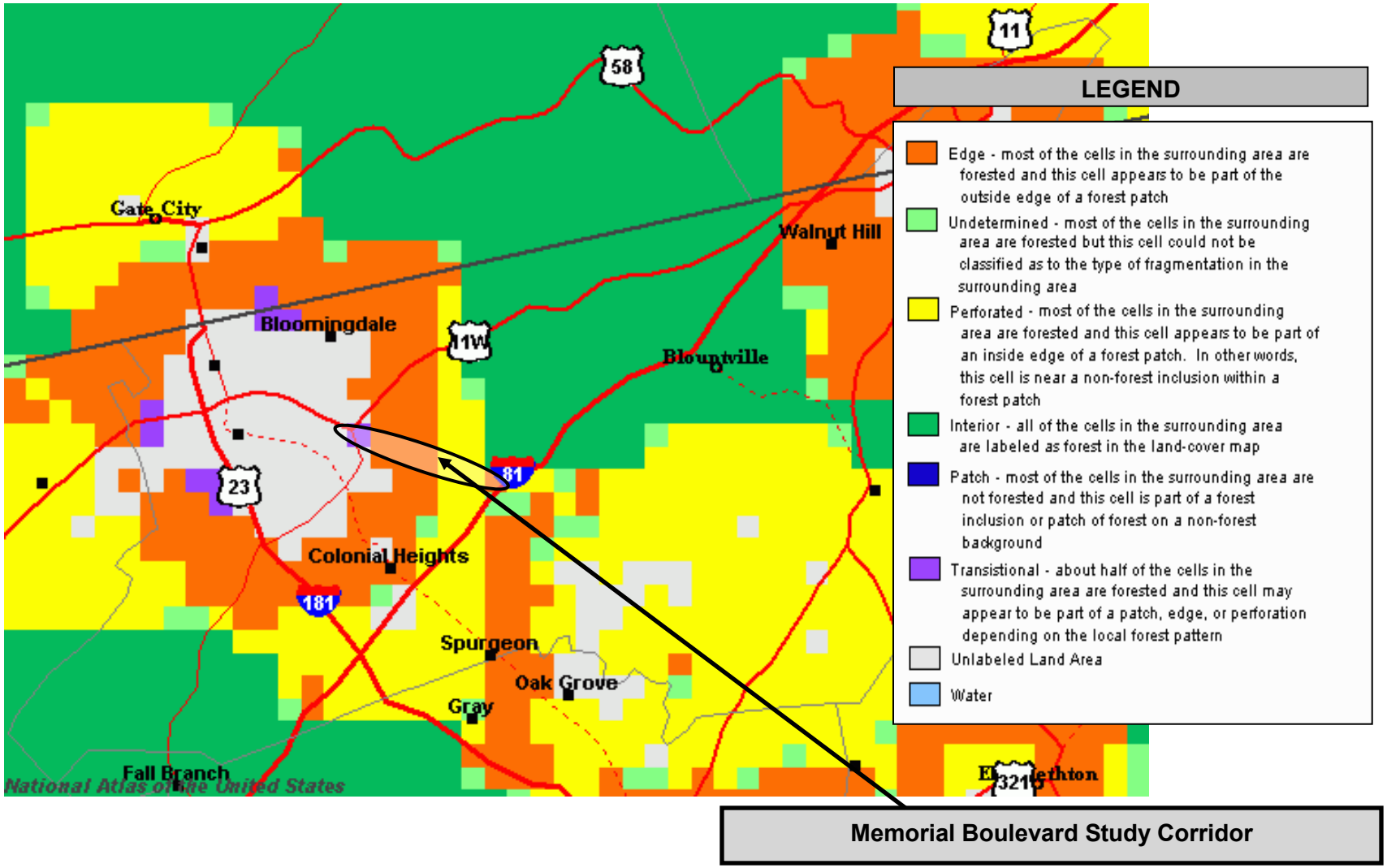


FIGURE 3.5.2: FOREST FRAGMENTATION OF THE STUDY CORRIDOR AND SULLIVAN COUNTY

3.5.2 Aquatic Resources

Surface Waters

Five streams are identified within the project corridor. Three are perennial streams: Sougans Branch, Fall Creek, and an unnamed tributary of Sougans Branch. Two streams are intermittent streams: An unnamed tributary of Fall Creek and an unnamed tributary of Reedy Creek. None of the five streams are listed as Tennessee Exceptional Waters within the project impact area, and none are impaired to the degree that they have been placed upon the Tennessee 303(d) list of impaired streams published by the Tennessee Department of Conservation's (TDEC) Division of Water Quality Control. Habitat quality of each of the streams was investigated, and all five streams scored in the below-average range. Stream impacts are discussed in **Chapter 4**.

Floodplains

Reviews of Federal Emergency Management Agency (FEMA) maps that show the historic 100-year floodplains indicated that floodplains are evident within and near the SR 126 (Memorial Boulevard) project corridor. The floodplains are associated with two streams, the Fall Creek and Sougans Branch of Fall Creek, which are currently crossed by the existing SR 126 (Memorial Boulevard). Floodplain impacts are discussed in **Chapter 4**.

Jurisdictional Wetlands

Surveys were conducted within the project impact area of the project. In addition, National Wetland Inventory maps, topographical maps, and coordination with state and federal agencies were conducted to locate the presence of these resources. No wetlands were located within the corridor. No impacts are anticipated to these resources.

Conservation Areas and Targeted Conservation Sites

The Nature Conservancy published a report (The Nature Conservancy, 2003) that evaluated the significant ecological features within the ecological region that coincides with the project area. These areas within the region are designated as "Conservation Areas" (**See Figure 3.5.3**). The Conservation Areas are noted as brown horizontally striped areas for terrestrial sites, and blue vertically striped areas for aquatic sites. No Conservation Areas coincide with the project.

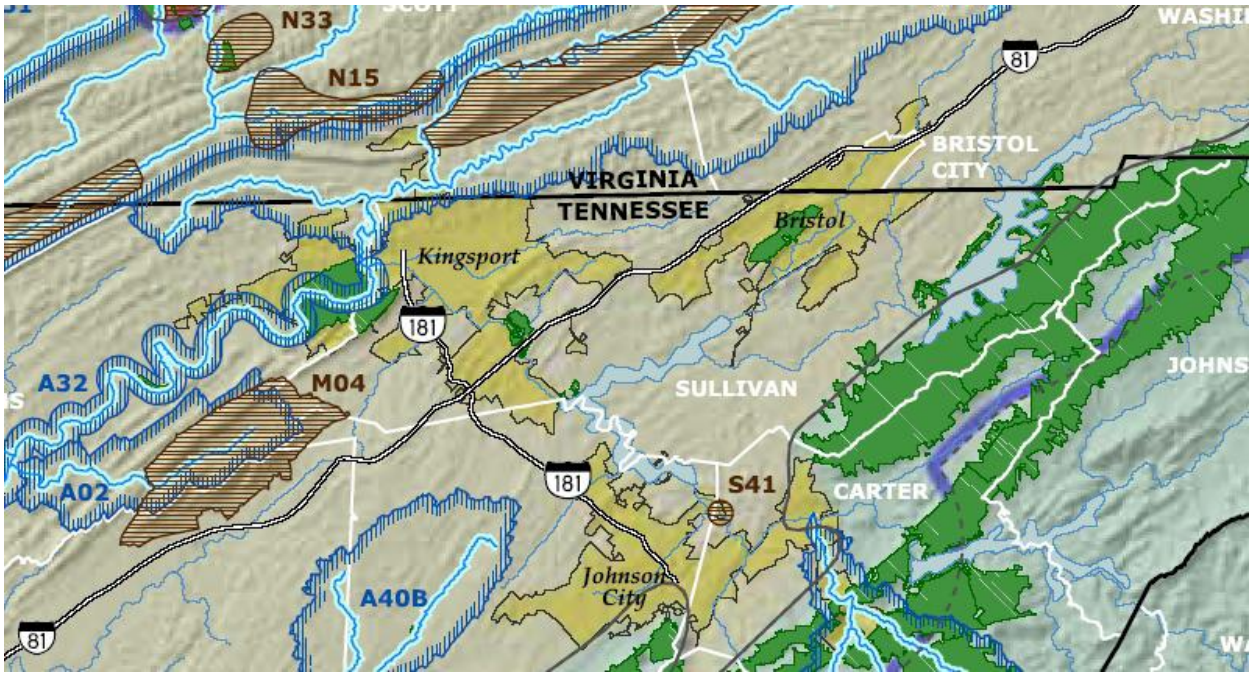


FIGURE 3.5.3: CONSERVATION AREAS

3.5.3 Federally Listed and Proposed Threatened and Endangered Species

There are eleven (11) species federally listed as threatened or endangered in Sullivan County, Tennessee. The threatened species are; Spotfin chub (*Erimonax monachus*), and American Hart's tongue fern (*Phyllitis scolopendrium var Americana*). The endangered species include; Gray bat (*Myotis grisescens*), Tubercled-blossom pearlymussel (*Epioblasma torulosa torulosa*), Shiny pigtoe (*Fusconaia edgariana*), Fine-rayed pigtoe pearlymussel (*Fusconaia cuneolus*), Tan riffle shell (*Epioblasma walkeri*), Cumberland monkeyface pearlymussel (*Quadrula intermedia*), Green-blossom pearlymussel (*Epioblasma torulosa gubernaculum*), Littlewing pearlymussel (*Pegias fabula*), and the Duskytail darter (*Etheostoma percnurum*). An ecological survey was conducted for the project area and the results are discussed in **Chapter 4**.

Although the Indiana Bat is not known to occur in the project area, at the request of the United States Fish and Wildlife Service (USFWS), a bat survey for this federally listed endangered species was conducted. Mist nets and field reviews were conducted in the project impact area. No Indiana Bats were located. A copy of the *Indiana Bat (Myotis sodalis) Mist Net Survey*, dated October 2011, is on file at the TDOT Environmental Division Office in Nashville, TN.

3.5.4 State Listed Species

A review of the TDEC Threatened and Endangered Species File was conducted in July 2009. The identified species have been compiled into lists of plants and animals. The identified state listed species in Sullivan County are listed in **Tables 3.5.1 (Plants)** and **3.5.2 (Animals)**.

Field studies and records research have been conducted to identify Federal and State-listed species or habitat in the project impact area. None were evident in this area of Sullivan County.

No known populations of Federal and State-listed species were identified within the project area.

3.5.5 Invasive Species

Invasive species pose perhaps the biggest threat to native ecosystems. Exotic invasive species are those that have evolved within one ecosystem and were introduced, either intentionally or accidentally, to another ecosystem. Because exotic species evolved elsewhere, they encounter few or no natural control mechanisms in their new location allowing them to spread easily and quickly. Exotic plants exhibit a particularly dangerous hazard due to their capacity to reproduce rapidly. As they broaden their range, invasive plants disrupt available nutrients, occupy space, and out-compete native plants. Some exotic species introduce pathogens or insect pests that can suddenly devastate an ecosystem, while the exotic species remains relatively immune to its effects. Exotic plants are often used in an ornamental setting but cross-over into an uncontrollable habitat. Some exotic plants, such as leafy spurge (*Euphorbia esula*) may be poisonous to wildlife and livestock. Others, like Chinese chestnut (*Castanea mollisima*), don't offer quite the nutritional value of their native counterparts (*Castanea dentata*). All of these alterations negatively affect the ecosystem, often dramatically. Revegetating disturbed areas with woody native vegetation can minimize the potential impacts. Ecological impacts are further discussed in **Chapter 4**.

TABLE 3.5.1: PLANTS IDENTIFIED WITHIN SULLIVAN COUNTY BY TDEC (1 OF 2)

Scientific Name	Common Name	Status – Habitat Information
Allium burdickii	Narrow-leaf Ramps	Threatened and Commercially Exploited – This plant is found in rich woods.
Berberis canadensis	American Barberry	Special Concern – This perennial shrub is found on rocky woods and river bars. According to the Nature Conservancy, American barberry was formerly found in fire-maintained habitats which kept the canopy open, *i.e*., it was an inhabitant of savannas and open woodlands, and fire suppression has significantly restricted its habitat to sites with shallow soil (such as glades and cliffs) or areas with mowing or other canopy-clearing activities (such as powerline corridors, railroad/road rights-of-way and riverbanks).
Botrychium matricariifolium	Chamomile Grapefern	Special Concern - This fern is found in mountain woods and thickets.
Buckleya distichophylla	Piratebush	Threatened - A large shrub which is found in rocky mountain woods. The plants can be found scattered among host trees within openings of hemlock forests, but habitats also include south-facing slopes and chestnut oak forests. It was thought that *B. distichophylla* was host specific to hemlocks, but subsequent investigations have shown otherwise.
Cimicifuga rubifolia	Appalachian Bugbane	Threatened - Occupied habitat in Tennessee includes rich soil on river bluffs, north-facing hillsides and talus slopes, moist dolomite ledges in ravines, as well as rocky and shady woods below limestone bluffs.
Cymophyllus fraserianus	Fraser's Sedge	Special Concern - This herbaceous plant is found in mixed mesophytic forests.
Cypripedium acaule	Pink Lady's-slipper	Special Concern and Commercially Exploited - This herbaceous plant is found in piney woods.
Draba ramosissima	Branching Whitlow-grass	Special Concern - This herbaceous plant is found on dry, calcareous rocky cliffs.
Dryopteris cristata	Crested Shield-fern	Threatened - This herbaceous plant is found in bogs.
Gentiana austromontana	Appalachian Gentian	Special Concern - This herbaceous plant is found in high elevation open woods.
Goodyera repens	Dwarf Rattlesnake-plantain	Special Concern - This herbaceous plant is found in cool, moist, mountainous forest usually in proximity to conifers.
Hexastylis virginica	Virginia Heartleaf	Special Concern - This herbaceous plant is found in sandy or rocky woods.
Hydrastis Canadensis	Goldenseal	Special Concern and Commercially Exploited - This herbaceous plant grows best in rich, mesic hardwood forest, especially those underlain by limestone or alkaline soils.
Hydrophyllum virginianum	Appalachian Waterleaf	Threatened - This herbaceous plant grows in rich moist woods.
Juglans cinerea	Butternut	Threatened - This tree is found in rich woods and hollows.
Lonicera dioica	Mountain Honeysuckle	Special Concern - This herbaceous plant grows in moist mountain woods and thickets.
Magnolia virginiana	Sweetbay Magnolia	Threatened - This tree is found in forested acidic wetlands

TABLE 3.5.1: PLANTS IDENTIFIED WITHIN SULLIVAN COUNTY BY TDEC (2 OF 2)

Scientific Name	Common Name	Status – Habitat Information
Maianthemum stellatum	Starflower False Solomon's-seal	Endangered - This herbaceous plant is found on moist streambanks, floodplains, and sandy woods.
Meehania cordata	Heartleaf Meehania	Threatened - This herbaceous plant is found on wooded mountain slopes.
Panax quinquefolius	American Ginseng	Special Concern and Commercially Exploited – This plant occurs primarily in rich, cool, moist hardwood-dominated or mixed woods, under a closed canopy, especially on slopes or ravines and often over a limestone or marble parent material on soil with a good humus component.
Platanthera flava var. herbiola	Tubercled Rein-orchid	Threatened - This plant occurs in swamps and floodplains.
Platanthera grandiflora	Large Purple Fringed Orchid	Endangered - This plant occurs in wet meadows and along streams.
Platanthera orbiculata	Large Round-leaved Orchid	Threatened - This plant is found in mid-elevation mesic forests.
Pyrola Americana	American Wintergreen	Endangered - This plant occurs in moist woods and bogs.
Scutellaria saxatilis	Rock Skullcap	Threatened - This plant occurs in rocky woods and moist cliffs.
Silene caroliniana ssp. Pensylvanica	Carolina Pink	Threatened - This plant is found in sandy, dry and open woodlands and rocky bluffs.
Streptopus amplexifolius	White Mandarin	Threatened - This plant occurs in wet cliffs and mesophytic mountain woods.
Symplocarpus foetidus	Skunk-cabbage	Endangered - This plant occurs in swamps and bogs.
Thuja occidentalis	Northern White Cedar	Special Concern - This tree is found on calcareous rocky seeps and cliffs.
Trientalis borealis	Northern Starflower	Threatened - This plant occurs in mountain mesophytic hardwood forests.
Tsuga caroliniana	Carolina Hemlock	Threatened - This plant is found on dry ridges.
Vitis rupestris	- Sand Grape	Endangered - This plant occurs on sandy, rocky riverbanks.
Woodsia scopulina ssp. Appalachiana	Alleghany Cliff-fern	Special Concern - This fern occurs on mountain cliffs.

TABLE 3.5.2: ANIMALS IDENTIFIED WITHIN SULLIVAN COUNTY BY TWRA AND TDEC (1 OF 2)

Scientific Name	Common Name	Status – Habitat Information
Allocapnia brooksi	Stonefly	Endangered – This aquatic invertebrate occurs in streams.
Gomphus consanguis	Cherokee Clubtail Dragonfly	Special Concern - Larvae of this aquatic invertebrate are usually found in small first- and second-order streams with silty pool bottoms; occupied streams are often spring-fed. Adults utilize these same habitats during the breeding season, but are also found in nearby fields and other areas of open habitat.
Nesticus paynei	A Cave Spider	Special Concern - S
Speyeria Diana	Diana Fritillary	Special Concern – This species occurs in woodlands.
Helicodiscus notius specus	Land Snail	Special Concern – This snail is found in caves.
Io fluvialis	Spiny Riversnail	Special Concern – This snail occurs in medium to large rocky streams with sandy substrate.
Percina aurantiaca	Tangerine Darter	Wildlife-In-Need-Of-Management – This fish occurs in medium sized streams to moderate rivers, with adults typically occupying the deeper, smooth-surfaced areas with moderately swift currents adjacent to shallow riffles. Smaller individuals are usually found along the shoreline of pools.
Percina burtoni	Blotchside Darter	Wildlife-In-Need-Of-Management
Percina macrocephala	Longhead Darter	Threatened
Phoxinus tennesseensis	Tennessee Dace	Wildlife-In-Need-Of-Management
Haliaeetus leucocephalus	Bald Eagle	Wildlife-In-Need-Of-Management – This species requires miles of shoreline along unpolluted water with high perching and lookout points, and tall, often dead, trees for nests.
Limnothlypis swainsonii	Swainson's Warbler	Wildlife-In-Need-Of-Management – In the mountains of east Tennessee, this bird occurs in rhododendron or mountain laurel tangles, generally in ravines in hardwood or mixed forests.
Corvus corax	Common Raven	Threatened – This bird prefers mountainous (elevation usually above 3000 feet), hilly areas with open and spottily wooded lowlands. It is usually found far from humans.
Tyto alba	Common Barn Owl	Wildlife-In-Need-Of-Management – Owls prefer areas of idle or lightly grazed grassland. Reduction in number of buildings and silos that can still be accessed for nesting, but remain out of reach of increasing raccoon populations, is a major contributing factor to the decrease in the population of barn owls.
Rallus limicola	Virginia Rail	Special Concern – This is a bird of marshes and wetlands.
Parascalops breweri	Hairy-tailed Mole	Wildlife-In-Need-Of-Management – This species is not restricted to any one habitat type, and is found in secondary hardwood forest, open fields, old pastures, cultivated fields, and along roadsides.

TABLE 3.5.2: ANIMALS IDENTIFIED WITHIN SULLIVAN COUNTY BY TWRA AND TDEC(1 OF 2)

Scientific Name	Common Name	Status – Habitat Information
Sorex fumeus	Smoky Shrew	Wildlife-In-Need-Of-Management – This species is apparently confined to mountains, and the preferred habitat is damp deciduous-coniferous forest around stumps, under mossy logs and rocks and near streams.
Sorex longirostris	Southeastern Shrew	Wildlife-In-Need-Of-Management – This species is most common in moist to wet areas usually bordering swamps, marshes or rivers. It is also found in old fields, dry upland hardwoods, and planted pine plots. In all habitats, this species is associated with heavy ground cover of grasses, sedges, rushes, blackberry, Japanese honeysuckle, and/or thick mats of decaying leaves.
Synaptomys cooperi	Southern Bog Lemming	Wildlife-In-Need-Of-Management – This small mammal appears to have a broad range of habitats, ranging from moist meadows, marsh borders, dry field thickets, eastern red cedar woodland, and moist woodlands.
Zapus hudsonius	Meadow Jumping Mouse	Wildlife-In-Need-Of-Management – They are found in grasslands, orchards, meadow and old fields. It prefers areas with numerous shrubs, and areas with herbaceous ground cover. They are sometimes taken in wooded areas when herbaceous cover is adequate. Impatiens (touch-me-not) is apparently a good habitat indicator.

3.6 CULTURAL RESOURCES

Section 106 of the National Historic Preservation Act of 1966 (NHPA) requires federal agencies to take into account the effects of their undertakings on historic properties, and afford the Advisory Council on Historic Preservation a reasonable opportunity to comment. The historic preservation review process mandated by Section 106 is outlined in regulations issued by the Council and referred to as "Protection of Historic Properties" (36 CFR Part 800).

Surveys of potential historic/archaeological sites were performed in accordance with Section 106 guidelines outlined in 36 CFR 800. The purpose of these studies was to determine the presence of resources listed, or eligible for listing, in the National Register of Historic Places (NRHP) within the Area of Potential Effect (APE). The APE is defined as the geographic area or areas within which an undertaking may directly or indirectly cause alterations in the character or use of historic properties, if any such properties exist.

The NRHP criteria of eligibility outlined in 36 CFR 60.4 were applied to all surveyed resources. Those criteria are as follows:

- Criterion A – Sites that are associated with events that have made an important contribution to the broad patterns of our history; or
- Criterion B - Sites associated with the lives of persons of considerable importance in our past; or
- Criterion C – Sites that embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a noteworthy and distinguishable entity whose components may lack individual distinction; or

- Criterion D – Sites that have yielded, or may be likely to yield, information important in history or prehistory.

3.6.1 Architectural/Historic Resources

The APE was established as being 1,500 feet in distance from either side of the existing SR 126 (Memorial Boulevard) centerline. TDOT identified two properties within the APE that are eligible for, or listed on, the National Register of Historic Places (NRHP). The properties are the Shipley-Jarvis House, located at 3309 Memorial Boulevard (SR 126), and Yancey's Tavern, located on SR 126 (Memorial Boulevard) at its intersection with Chestnut Ridge Road. The properties are described below, and their status on the NRHP is included. See **Figure 3.6.1** for a map of the APE.

Shipley-Jarvis House

This site, located on the south side of SR 126 (Memorial Boulevard) in a residential and commercial section of East Kingsport, exemplifies the adaptation of nineteenth century dwellings to conform to twentieth century architectural tastes. Its architectural features continue to illustrate both mid-nineteenth century building methods and twentieth-century stylistic changes. TDOT deemed this site eligible for listing in the NRHP under Criterion C for its architectural style. The Shipley-Jarvis House is located on a 1.6 acre tract near the project's East Center Street terminus. See **Figure 3.6.2A** for a map of the site.



Yancey's Tavern



This property was listed in the NRHP in 1972 under Criterion A for its significance in the early settlement of Sullivan County. According to the NRHP listing, the tavern was constructed in 1782 as a double log house with a dogtrot. Underneath the present façade remain the logs used to construct the house. Hand fired brick replaced the original chimneys which were constructed of stone. Bricks have also replaced some of the original stone foundation. Brick was used in recent years to completely enclose the cellar, but the framing of the door and window openings leading into the cellar are from a much earlier time period. Front and back porches were later additions to the structure. The back wing of the house includes a fireplace with simple mantel suggesting an early date, though it is not part of the original structure. The location of a back chimney suggests that this area was once a small distance of open area between the kitchen and the main structure. Openings for windows and doors pre-date the 20th century, but are not original materials. See **Figure 3.6.2B** for a map of the site.

The interior of Yancey's Tavern is simple with three plain, well-executed mantels on the first floor. The two second-story rooms are accessed by separate stairways. The construction of the dogtrot is visible on the second floor because this portion of the house has not been finished for use.

The Yancey's Tavern property includes various outbuildings such as a barn, a wash house, spring house, chicken house, and a corn crib, which all are associated with the late 19th/early 20th centuries. The frame granary which features a shingled roof and stone foundation is considerably earlier according to the NRHP narrative.

The NRHP also states that Yancey's Tavern was a crucial stopping point along Island Road, which was a major artery in East Tennessee. This allowed the tavern to figure prominently in the development of the area, and attracted notable visitors, including John Sevier and William Blount. The tavern also served as headquarters for local businesses including meetings of the Sullivan County court. Island Road predates the tavern, being completed in September 1761, and is the first road constructed in Tennessee, and also to the southwest. Island Road connected Chillhowie, Virginia, to the Long Island of the Holston River. Part of Island Road later was renamed the "Great Stage Road." The Tennessee section of Island Road supported connection between three forts, including Eaton's Fort which in the early 1770s was a portion of Amos Eaton's 'corn rights' land. Eaton sold a portion of his land near the fort in 1779 to James Hollis, who ultimately sold 900 acres to John Yancey, Sr. in 1782. It cannot be determined if the structure now known as Yancey's Tavern was constructed prior to the sale of the land to Yancey, but the tavern became operable shortly after the real estate transaction was completed. The Yancey heirs maintained the property until the last half of the 19th century. The property changed ownership several times until it was purchased in 1889 by John R. Spahr, whose descendants owned the property into the 20th century. The property was purchased by the current owner, Rann L. Vaulx, at auction.

The project impact to these two NRHP resources is discussed in **Chapter 4**.

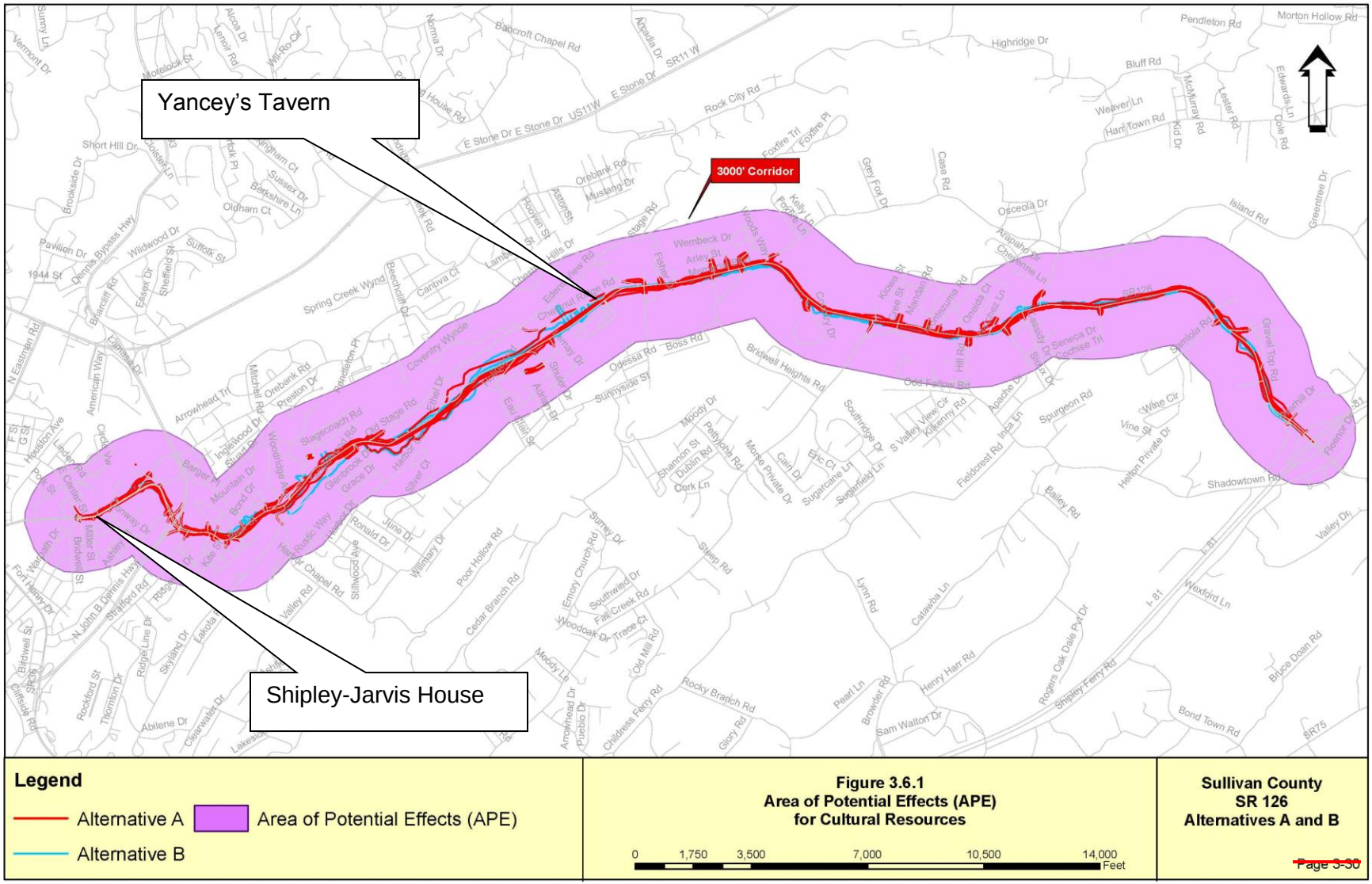


FIGURE 3.6.1: APE FOR CULTURAL RESOURCES

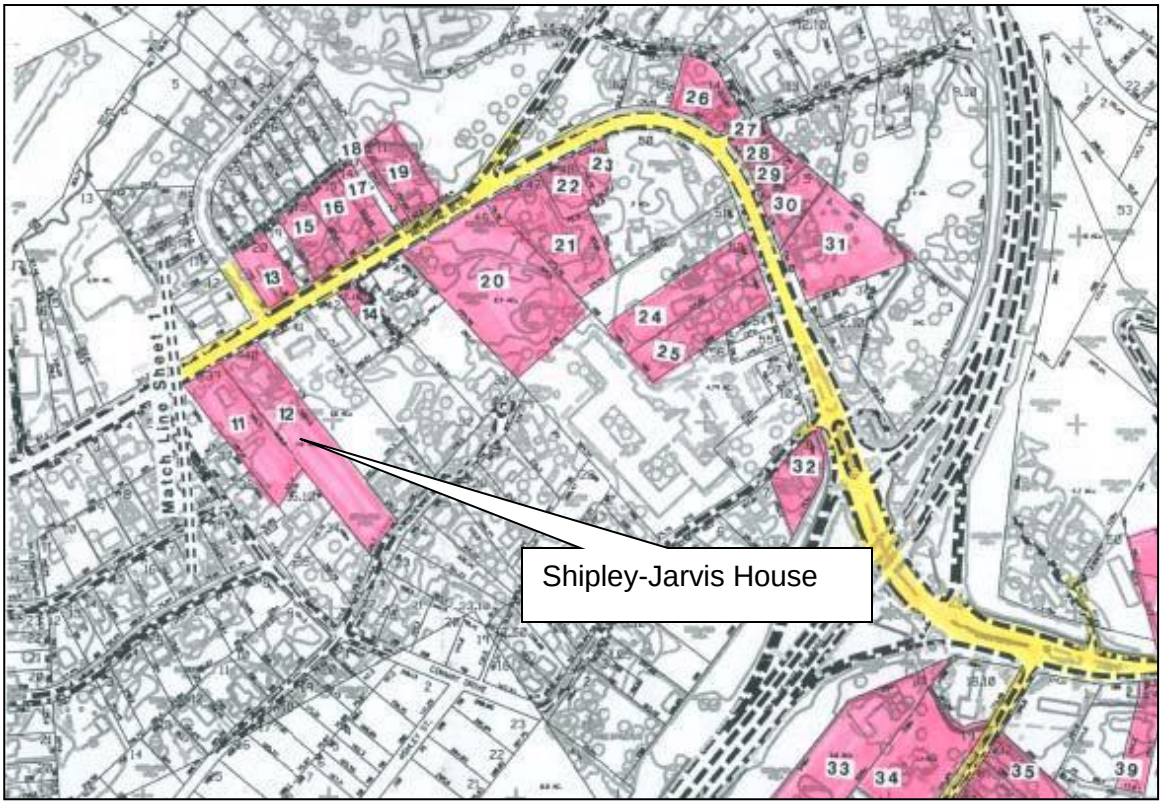


FIGURE 3.6.2A: SHIPLEY-JARVIS HOUSE

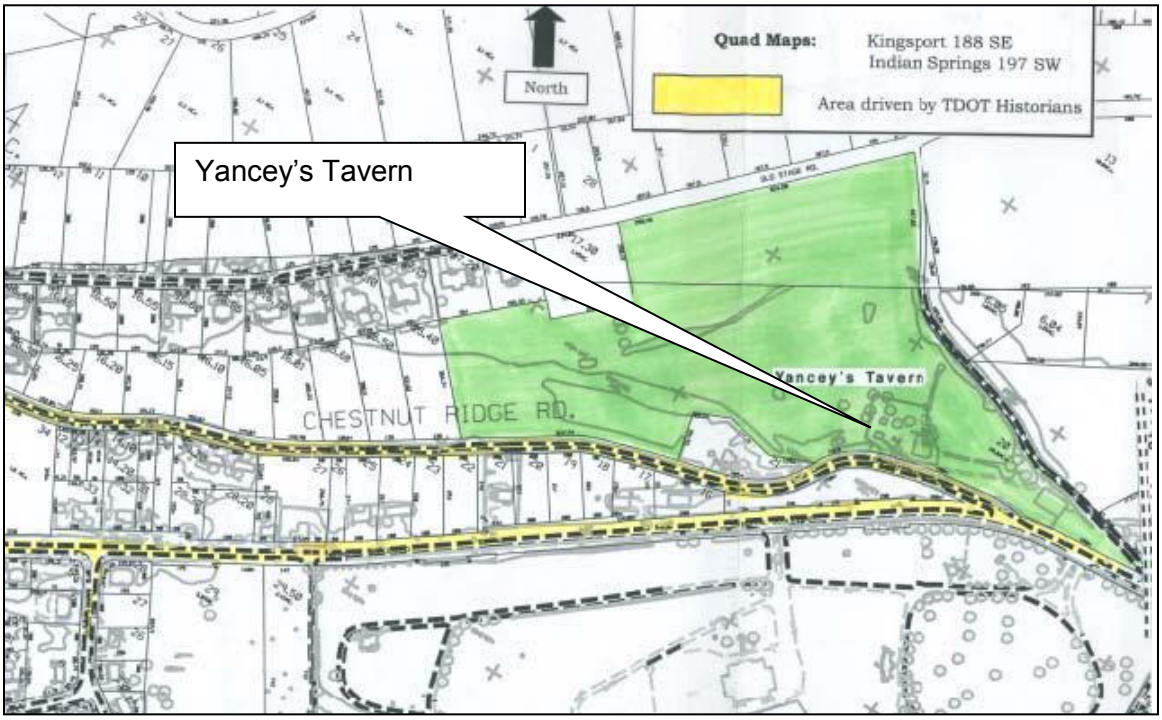


FIGURE 3.6.2B: YANCEY'S TAVERN

3.6.2 Archaeological Resources

Beginning in October 2001, investigations were conducted to provide information on the distribution of important archaeological properties within the project area. This information was used to make informed management decisions relating to the design, improvements, and construction of SR 126 (Memorial Boulevard).

These investigations were conducted in two phases. Phase 1a consisted of a literature and records search for the areas surrounding the proposed alternatives. This phase of the investigation addressed three objectives; (1) to identify all previously recorded archaeological and historical properties within the study area, (2) to develop an environmental, cultural and historical context for the study area, and, (3) to develop a model to predict site locations within the various topographic regions included within the study area.

Phase 1b, the second phase of the investigation, consisted of a systematic pedestrian survey of high-probability areas resulting from the predictive model for archaeological resources within the proposed alternatives. Goals and methods employed during the pedestrian survey were based upon criteria outlined in the *Scope of Work for TDOT Phase 1 Archaeological Assessments* (Kline 1999). The objective of the survey was to identify and record all cultural resources within or adjacent to the proposed highway corridor that are listed, eligible for listing, or potentially eligible for listing on the NRHP pursuant to criteria set forth in 36 CFR 60.4. The archaeological assessment is discussed in **Chapter 4**.

3.7 RECREATIONAL RESOURCES

The project corridor was visited, maps of the area were reviewed, and conversations were conducted with local officials to determine if resources, including public and private parks, wildlife refuge areas, and other forms of recreation might exist. No recreational resources were identified within or near the project corridor.

3.8 VISUAL RESOURCES

The project begins in an urbanized segment of Kingsport, and as it moves eastward, climbs a hill, and transitions into an agricultural/scattered residential area. The urban area is in a relatively flat area with numerous houses and businesses densely situated along the existing roadway and surrounding areas. As the project climbs out of the urbanized area, homes become less densely aggregated. Most of the homes are along the existing SR 126 (Memorial Boulevard) or along feeder roads. Farmland becomes more evident as the project area moves eastward. Reviews of land use maps on file at the TDOT Environmental Division Office in Nashville, TN, which span a fifty-year period, show that many areas now have more trees within the area in relation to the initial photographs from the 1950s. Most of the areas with trees are in the rural area, and indicate the loss of smaller farms as lack of agricultural activity allows for re-growth. Some additional wooded areas are located in neighborhoods that have been established for several decades.

In addition to becoming more rural in nature, the project terrain becomes more mountainous and rolling. Vegetation is predominately a mix of agricultural lands and scattered forests in the eastern two-thirds of the project. The western third of the project contains mainly manicured lawns or is covered by impermeable surfaces in the urban section of the project. Local and

commuter traffic generally use the existing SR 126 (Memorial Boulevard) on a daily basis, and view the surrounding landscape from their vehicles.

Viewers of the road are comprised of residents and businesses occupying the areas, and vary in frequency based upon whether they are located in an urban or rural setting. These numbers range from high in Kingsport to low in the middle portion of the project. The view of SR 126 (Memorial Boulevard) within town includes heavier traffic scenarios, especially in peak commute hours, while those areas along the agricultural sections experience lower numbers of vehicles traveling at higher speeds. A variance exists along the intersection of SR 126 (Memorial Boulevard) at I-81. A higher number of vehicles are experienced in this area and consist of commuters, some local traffic, and long-range travelers using the interchange for rests, fueling, and overnight stays.

Throughout the Context Sensitive Solutions process, the Community Resource Team expressed concerns on behalf of the public regarding any action that would diminish the scenic attributes of the hillsides that comprise a great portion of the project. The hills and rural nature of the greater portion of the project are important to residents of the immediate area, and to residents of Kingsport and Sullivan County.

Chapter 4: Environmental Consequences



4.0 ENVIRONMENTAL CONSEQUENCES

This chapter describes the direct environmental impacts of the No-Build and Build Alternatives, as well as the indirect and cumulative impacts of the proposed project. The following resource categories were determined to be appropriate for this study and are consistent with the general guidelines set forth by the FHWA.

1. Land Use Impacts
2. Farmland Impacts
3. Social Impacts
4. Relocation Impacts
5. Environmental Justice
6. Economic Impacts
7. Pedestrians and Bicyclists Impacts
8. Soils and Geologic Impacts
9. Ecological Impacts
10. Air Quality Impacts
11. Noise Impacts
12. Historical Impacts
13. Archaeological Impacts
14. Section 4(f) Evaluation
15. Section 6(f) Evaluation
16. Hazardous Material Impacts
17. Visual Impacts
18. Wild & Scenic Rivers and Tennessee Scenic Rivers
19. Energy Impacts
20. Construction Impacts
21. Short Term Impacts vs. Long Term Benefits
22. Irreversible and Irretrievable Commitments of Resources
23. Indirect and Cumulative Impacts

Table 4.1 provides a summary of the primary environmental impacts of the Build Alternatives. All known environmental impacts of the project are discussed in detail in **Sections 4.1** through **4.23** of this document.

TABLE 4.1 ENVIRONMENTAL IMPACTS MATRIX

Alternative	Residential Relocations	Business/Non-Profit Relocations	Employees Affected	Gravesites Impacted	Wetlands Impacts (Acres)	Floodplains Impacts (Acres)	Forest Land Acquired (Acres)	Stream Crossings	Stream Impacts (Linear Ft)	Hazardous Materials Sites	Adverse Visual Impacts to Historical Sites	Impacts to Archaeological Sites	Farmland Impacts (Acres)	Farms Segmented or Totally Acquired	Threatened and Endangered Species	Section 4(f)/ Section 6(f) Impacts	Air Quality/Noise Impacts Requiring Mitigation
A	241	43/1	125 to 175	350	0	4.0	75.0	5	4,863	2	1	0	15	0	0	0/0	0/0
B	162	30/1	75 to 125	90	0	3.2	54.8	5	3,107	3	1	0	5	0	0	0/0	0/0

4.1 LAND USE IMPACTS

The land use along the project corridor is a mixture of residential, commercial, and agricultural. The widening of the roadway will result in the conversion of these land uses (121-239 acres) to roadway right-of-way. Indirect and cumulative impacts are expected to occur with the project study corridor and are discussed further in **Section 4.23 Indirect and Cumulative Impacts**.

4.1.1 East Lawn Memorial Gardens

A large cemetery, East Lawn Memorial Gardens, is located on the south side of State Route 126 and abuts the existing right-of-way. There are several thousand grave sites in this cemetery. It is estimated that 350 currently occupied gravesites would be impacted by Alternative A. It is estimated Alternative B would impact 90 currently occupied gravesites. The proposed Alternative B cross-section reduces the number of travel lanes through this area to reduce the impact to the cemetery. A review of the cemetery plat indicated that there are numerous sites available for relocation of the affected grave sites. TDOT will comply with the Tennessee State Burial Law: TCA 46-4-101-104 (Termination of land use as cemetery) for the relocation of any grave sites.

For both Alternatives A and B, the proposed alignment was shifted to the south side of the roadway to avoid impacting the National Register of Historic Places listed Yancey's Tavern property. The taking of land from the Yancey's Tavern tract would have resulted in an Adverse Affect under Section 106 of the National Historic Preservation Act of 1966. The use of the land would have also resulted in a Section 4(f) finding under the provisions of Section 4(f) of the National Transportation Act of 1966.

4.2 FARMLAND IMPACTS

The Federal Farmland Protection Act was passed in 1981. The purpose of the Act is to prevent the conversion of farmlands to non-agricultural uses by minimizing the impacts that federal programs have on farmlands. Before farmland can be used for a project utilizing federal funds, an assessment must be completed to determine if prime, unique or statewide or locally important farmlands would be converted to non-agricultural uses.

The Natural Resource Conservation Service (NRCS) characterizes eligible farmlands as prime, unique, or of statewide or local significance. The designations are based on NRCS soil type and are protected by federal legislation.

Prime farmland is land that has the best combination of physical and chemical characteristics for producing food, feed, fiber, forage, or oil-seed and other agricultural crops with minimum input of fuel, fertilizer, pesticides, and labor without intolerable soil erosion. Prime farmland includes land that possesses the above characteristics and may include land currently used as cropland, pastureland, rangeland or forestland. Prime farmland does not include land already in or committed to urban development or water storage.

Unique farmland is land other than prime farmland that is used for production of specific high-value food and fiber crops. It has the special combination of soil quality, location, growing

season and moisture supply needed to economically produce high quality or high yields of specific crops when treated and managed according to acceptable farming methods.

Statewide or locally important farmland is land that has been designated of state or local importance for the production of food, feed, fiber, forage or oil-seed crops but is not of national significance.

The impacts of the proposed project on farmland were determined through coordination with NRCS, which included an evaluation using the US Department of Agriculture's (USDA) Farmland Conversion Impact Rating Form (see coordination letter from NRCS in **Appendix A**). The form was completed in accordance with 7 CFR, Part 658 of the *National Farmland Protection Policy Act.* The site assessment criteria (part VI on the form) are designed to assess important factors other than the agricultural value of the land. The ten assessment criteria used for transportation and other corridor-like studies consider not only the land currently being farmed, but also the land use around the project area and whether or not that land use is urban, non-urban or in transition. The criteria also determine the following:

- Whether the conversion of the proposed agricultural site would eventually cause the conversion of neighboring farmland;
- Whether there are adequate support facilities, activities and industry to keep the farms in business;
- The extent to which local and state government and private programs have made efforts to protect farmland from conversion;
- Relative amount of on-farm investment; and
- Whether there are agriculturally related activities, businesses or jobs dependent on the site staying in agricultural production

Each factor is assigned a score relative to its importance. Sites that receive a total site assessment score of 160 points or less are given a minimal level of consideration for protection. Sites with a total site assessment score of 161 points or more would require the consideration of alternative project alignments that would serve the proposed purpose but convert either fewer acres of farmland or other farmland that has a relatively lower value.

The site assessment score for the alternatives under consideration was 82 points, indicating that consideration of alternative project alignments that would serve the proposed purpose but convert either fewer acres of farmland or other farmland that has a relatively lower value is not necessary. The completed USDA Farmland Conversion Impact Rating form is included in **Appendix A**.

TABLE 4.2.1: FARMLAND CONVERSION TOTALS

Alternative	Total Acres in 2000-foot Study Corridor	Total Acres Prime & Unique Farmland Required by Alternative	Total Acres of Land to be Converted to Roadway ROW	Total Farmland Impact Rating Score
A	2,100	15	239	82
B	2,100	5	121	82

The No-Build Alternative would have no effect on farming operations since existing conditions would remain unchanged.

Construction of the Build Alternatives will result in the direct conversion of between 5 and 15 acres of farmland to a transportation facility.

4.3 SOCIAL IMPACTS

4.3.1 Schools

Construction of the proposed project will not directly impact any school property. Accessibility to and from area schools will be enhanced by improvements to SR 126 (Memorial Boulevard). SR 126 (Memorial Boulevard) is the main route for students traveling to schools from areas east of Kingsport. Indian Springs Elementary serves students in the immediate project area. Several Sullivan County bus routes use portions of SR 126 (Memorial Boulevard) or its connecting roads to distribute students between home and school. The improved roadway will provide shoulders and sidewalks that will create a safer environment for bus riders.

4.3.2 Fire and Police

A volunteer fire department station (Number Four) will be acquired and relocated with either Build Alternative A or B. The volunteer fire department is a non-profit organization and is located along SR 126 (Memorial Boulevard) at the intersection with Heather Lane. It is not occupied full time, but is used during emergencies and includes a garage and a small office/organization area. The relocation process will be carried out in such a manner as to ensure no interruption of service occurs to area residents. No other police, fire, or emergency services facilities will be displaced.

The proposed improvements will improve emergency response time for police and emergency service. The additional lanes and shoulders will provide safer travel conditions for emergency vehicles and the general public.

4.3.3 Hospitals

The project will improve traffic flow on SR 126 (Memorial Boulevard) to four immediate area hospitals. None of the services provided by these facilities will be impaired by the proposed alternative.

4.3.4 Utilities

Relocation of utilities will be required, however; no long-term utility impacts are anticipated. Temporary service disruptions could result during project construction. Utility relocation will require coordination with local service providers, which will minimize, if not avoid, disruptions.

4.4 RELOCATION IMPACTS

Displacements are a potential adverse environmental effect associated with any proposed project. A Conceptual State Relocation Plan (CSRP) has been prepared to assess the effects of displacements and to determine the probability of successful relocation. On April 8, 2010, a

CSRP was completed for this project. A copy of the CSRP is on file in the TDOT Environmental Division Office in Nashville, TN. Alternative A will result in an estimated 241 residential relocations, 43 business displacements, and 1 non-profit displacement. Alternative B will result in 162 residential relocations, 30 business displacements, and 1 non-profit displacement. A summary of relocation impacts is provided in the **Table 4.4.1**.

TABLE 4.4.1: RELOCATION IMPACTS FOR BUILD ALTERNATIVES

	Alternative A	Alternative B
Single Family Homes	102	90
Multi-Family Units	135	69
Mobile Homes	4	3
Annual Income Range of Affected Households	$25,000 to >$100,000	$25,000 to >$100,000
Homes occupied by low-income residents	Less than 5	Less than 5
Homes with Minority Occupants	None evident	None evident
Homes with Elderly Occupants	50 to 60	40 to 50
Households with 5 or more residents	15 to 20	10 to 15
Homes with disabled residents	20 to 25	20 to 25
Family or Social Clusters	0	0
Businesses	43	30
Number of Employees Affected	125 to 175	75 to 125
Non-Profit Organizations	1	1
Community Institutions	0	0

4.4.1 Specific Information for each Build Alternative

Alternative A

Alternative A will result in an estimated relocation of 102 occupied conventional single family residences and 135 multiple family units. It is estimated that 75% of the conventional houses have 2 to 3 bedrooms, 20% have 1 to 2 bedrooms, and 5% have 3 to 4 bedrooms. The estimated price range for the affected houses is from $60,000 to over $400,000. Most of the homes (approximately 70%) are in good condition, 10% of the homes are in very good condition, 15% of the homes are in fair condition, and the remaining 5% are estimated to be in poor condition. Ages of the conventional homes range from new to over 100 years old, with most being between 25 and 49 years of age. A total of 4 mobile/pre-constructed homes will be relocated. The mobile homes appear to be between 10 and 35 years in age. The homes are in fair to good condition. Each appears to have 2 to 3 bedrooms. The value of the mobile homes ranges between $25,000 and $40,000. No neighborhoods will be bisected, and no divisive or disruptive impacts to minority or ethnic neighborhoods are anticipated.

Forty-three (43) businesses and one (1) non-profit organization will be relocated by Alternative A. The non-profit organization, a volunteer fire department station, would be acquired and moved. It is not occupied full time, but is used during emergencies and includes a garage and a small office/organization area. The relocation process will be carried out in such a manner as to ensure no interruption of service occurs to area residents.

The Conceptual Stage Relocation Plan found that no schools or churches will be partially or totally acquired by Alternative A.

Although no neighborhoods will be split or bisected, traffic patterns will change for some residences with the closing of some streets that currently have direct access to SR 126 (Memorial Boulevard). The street closings are proposed to improve access control along SR 126 (Memorial Boulevard) and to improve safety. Access will be available to SR 126 (Memorial Boulevard) via other nearby streets.

Alternative B

Alternative B will require the relocation of 90 occupied conventional single family residences and 69 multiple family units. It is estimated that 20% of the houses have 1 to 2 bedrooms, 75% of the houses have 2 to 3 bedrooms, and 5% have 3 or more bedrooms. The estimated price range for the affected houses is from $60,000 to over $400,000. Most of the homes (approximately 70%) are in good condition, 10% of the homes are in very good condition, 25% of the homes are in fair condition, and the remaining 5% are estimated to be in poor condition. Ages of the conventional homes range from new to over 100 years old, with most being between 25 and 49 years of age. A total of three mobile/pre-constructed homes would be required to be relocated. It is estimated that the mobile homes have 2 or 3 bedrooms. The mobile homes are in fair to good condition. The mobile homes are between 10 and 25 years of age. It is believed the mobile homes are occupied by their owners. No neighborhoods will be bisected, and no divisive or disruptive impacts to minority or ethnic neighborhoods are anticipated for Alternative B.

Thirty (30) businesses and one (1) non-profit organization will be relocated by Alternative B. The non-profit organization, a volunteer fire department station, would be acquired and moved. It is not occupied full time, but is used during emergencies and includes a garage and a small office/organization area. The relocation process will be carried out in such a manner as to ensure no interruption of service occurs to area residents.

The Conceptual Stage Relocation Plan found that no schools or churches will be partially or totally acquired by Alternative B.

Although no neighborhoods will be split or bisected, traffic patterns will change for some residences with the closing of some streets that currently have direct access to SR 126 (Memorial Boulevard). The street closings are proposed to improve access control along SR 126 (Memorial Boulevard) and to improve safety. Access will be available to SR 126 (Memorial Boulevard) via other nearby streets.

4.4.2 Relocation Assistance

The Tennessee Department of Transportation will make relocation assistance available to all eligible persons impacted by this project, including residences, businesses, farm operations, non-profit organizations, and those requiring special services or assistance in accordance with provisions in Title VI of the Civil Rights Act of 1964. Title VI prohibits discrimination on the basis of race, color, and national origin in programs and activities receiving federal financial assistance. The Regional Relocation Staff will administer the relocation program under the rules, policies, and procedures set forth in the Federal Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 as amended, the Uniform Relocation Assistance Act of 1972, implementing federal regulations, TCA 13-11-101 through 119, The State of Tennessee

Relocation Assistance Brochure and Chapter Nine of the State of Tennessee, Department of Transportation, Right-of-Way Manual.

Relocation resources are available to all the displaced without discrimination. Relocation impacts to the displaced would include possible loss of neighbors, adjustment to new surroundings, and moving inconveniences. Although the impacts associated with project displacements are adverse, they would be short-term in duration. The provisions of suitable and acceptable replacement housing, combined with adequate relocation payments, can be expected to minimize relocation impacts. If any situation should exist where decent, safe, and sanitary housing within the financial means of the displacees is not available, such housing will be made available under the replacement housing of last resort provisions.

At least one relocation agent is assigned to each highway project to carry out the relocation assistance payments program. A relocation agent will contact each person to be relocated to determine individual needs and desires, to provide information, answer questions, and aid in finding replacement property.

The Department provides advance notification of impending right-of-way acquisition and before acquiring right-of-way has all properties appraised on the basis of comparable sales and land values in the area. Owners of property to be acquired will be offered fair market value for their property. Relocation services and payment are provided without regard to race, color, religion, sex, or national origin.

Brochures that describe in detail the right-of-way acquisition program and relocation assistance and payments program are distributed at all public hearings and are made available upon request to any interested person.

Implementation of the proposed project will not substantially change the basic social arrangement or character of the project area. The proposed project will not split neighborhoods or separate residence from community facilities. Although no neighborhoods will be split or bisected, traffic patterns will change for some residences with the closing of some streets that currently have direct access to SR 126 (Memorial Boulevard). The street closings are proposed to improve access control along SR 126 (Memorial Boulevard) and to improve safety. Access will be available to SR 126 (Memorial Boulevard) via other nearby streets.

Residential Relocation Information

A study of the real estate market in the project area indicates a market not capable of supporting the one hundred and sixty two (162) to two hundred and forty one (241) residential displacements within the immediate project area. Expanding the study beyond the immediate project area reveals a market that can support this large number of relocations, but not easily. It will be difficult to adequately address the varying needs of all those displaced by this project. Numerous, substantial Last Resort Housing Payments could be expected.

Last Resort Housing is used when there is no comparable housing available for sale or rent within TDOT's current limitations. Should Last Resort Housing become necessary, supplemental payments or other housing options, as determined by TDOT, can be implemented through procedures provided for in the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970. The displacees will be interviewed on an individual basis during the acquisition phase and more specific solutions will be made at the time all the facts are gathered.

No person lawfully occupying real property will be required to move without at least 90 days written notice of the intended vacating date, and no occupant of a residential property will be required to move until decent, safe, and sanitary replacement housing is made available. "Made available" means that either the affected person has by themselves obtained and has the right of possession of replacement housing or the Department has offered the relocatee decent, safe, and sanitary housing that is within their financial means and available for immediate occupancy.

Business Relocation Information

A study of the real estate market in the project area reveals that it is unlikely that the thirty (30) to forty-three (43) business displacees can relocate in the immediate project area. Successful relocation will require many of the businesses to expand their search area beyond the immediate project area.

Non-Profit Relocation Information

This project is expected to cause one (1) non-profit displacement (a Kingsport volunteer fire department station) with either alternate. Due to the nature of their "business", they will need to relocate in close proximity to their current location. Based on a study of the local real estate market, it is believed that suitable replacement sites do exist, but not in great numbers. This is complicated by the large number of businesses displaced by the project.

4.5 ENVIRONMENTAL JUSTICE

Executive Order 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low Income Populations,* requires that the evaluation of Federal actions identify and address disproportionately high and adverse human health and environmental impacts on low income and minority populations. The majority of the residents in the project area based on 2010 census data are non-minority.

The Build Alternatives are not anticipated to have any disproportionate or adverse effects to minority or low-income populations and no neighborhoods or communities would be bisected.

The Kingsport MPO conducted a study to identify Environmental Justice areas or neighborhoods within its boundaries. The efforts are documented in the MPO's 2030 Long Range Transportation Plan (amended January 10, 2008) study. A copy of a map which details these areas is provided in **Figure 4.5.1**. Although areas have been identified in the region, the areas surrounding the proposed project were not identified as containing areas of concern.

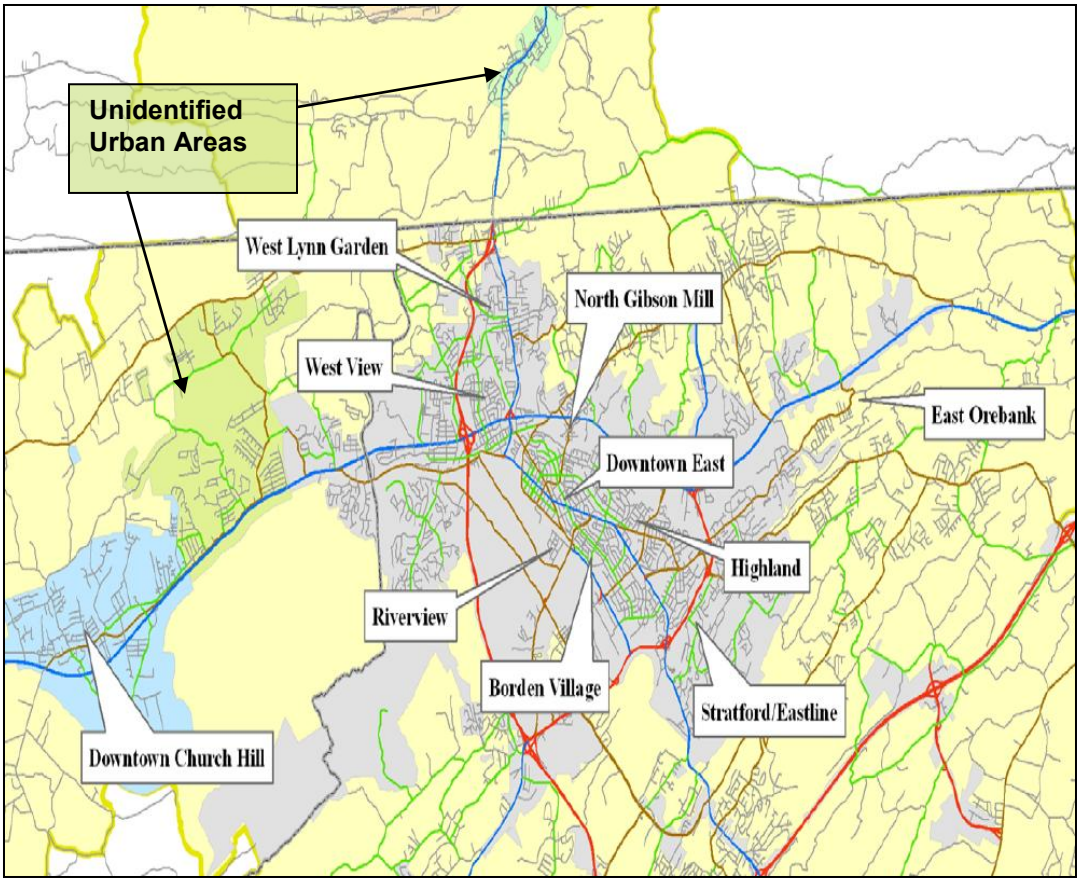


FIGURE 4.5.1: IDENTIFIED ENVIRONMENTAL JUSTICE AREAS, KINGSPORT MPO

Note: The yellow shaded portions of the map denote the Kingsport MPO area. The gray shaded area indicates the City Limits of Kingsport. The light blue area is common to Downtown Church Hill. Two other populated areas are noted in green and an aqua color, but do not bear names. The project area has been highlighted in blue. The various flags indicating names such as "North Gibson Mill" or "Stratford/Eastline" are areas that have been identified by the MPO study as areas of Environmental Justice concern.

The proposed project will not have an adverse or disproportionately high impact for minority populations and low income populations. All people in the area, including special interest groups, will share equally in the benefits of the proposed project.

4.6 ECONOMIC IMPACTS

There will be long-term adverse economic effects due to the construction of Alternative A or B. With Alternative A, there will be 241 residential relocations and 43 business relocations involved. With Alternative B there will be 162 residential relocations and 30 business relocations involved. The results of the Conceptual Stage Relocation Plan indicate a market not capable of supporting the large number of anticipated residential or business displacements within the immediate project area. Expanding the study beyond the immediate project area reveals a market that can support this large number of relocations, but not easily. Some of the businesses may choose to go out of business or move out of the project area, causing a loss of

tax revenues. Also, the buying of additional right-of-way by the government will decrease the area property tax base. Due in part to both Build Alternatives not adding travel lanes to approximately half of the study corridor, implementation of the improved facility would likely not result in an increase in land use development pace, nor would it be likely to induce a change in the types of land uses (i.e. shifting to industrial development from residential development and light commercial development). No industrial sites are located within or adjacent to the proposed project's limits. No impacts would be imposed upon these resources by the project.

4.7 PEDESTRIANS AND BICYCLISTS IMPACTS

The lack of sufficient shoulders or sidewalks creates an unsafe environment for bicycles and pedestrians along SR 126 (Memorial Blvd.). The proposed Build Alternatives will provide shoulders along the entire route, sidewalks where appropriate, and improve sight distances. Although the shoulders will not be marked for bicycles and pedestrians, the paved shoulders will be wide enough to accommodate bicycles and pedestrians. (See Cross-Section schematics **Chapter 2**)

4.8 SOILS AND GEOLOGIC IMPACTS

The varied topography encountered throughout the project area will require a range of minor to possibly considerable cuts and fills. A subsurface investigation program with core drilling will be conducted prior to construction.

The potential for slope stability problems within both soil and rock areas will require a detailed evaluation of the actual slope conditions, particularly within the cut slopes of steep and rocky terrain. This evaluation will be conducted to determine the actual stability and slope geometry. Any slope stability problems that might be determined will be addressed in either the design or construction phase of the project.

Karst topography, though present in the area, was not identified within or adjacent to the project limits. The underlying geologic formations are susceptible to the formation of sinkholes, and early development of these features could occur during construction. If sinkholes are discovered, the appropriate permits and mitigation treatments would be implemented before completion of the construction phase.

A copy of the *Geologic Report* for SR 126 (Memorial Boulevard) is on file in the TDOT Environmental Division Office in Nashville, TN.

4.9 ECOLOGICAL IMPACTS

An ecological study was conducted in December 2008 to characterize the existing terrestrial and aquatic habitat within the proposed Build Alternatives and to identify jurisdictional water resources including wetlands, streams, springs, sinkholes, etc. as well as the potential for the presence of any threatened and/or endangered species and their critical habitat. The ecological study also reviewed water quality impacts, floodplain benefit impacts, and geology within the proposed Build Alternative corridor and evaluated potential environmental impacts to these resources. The complete Ecology Report is on file in the TDOT Environmental Division Office in Nashville, TN.

4.9.1 Terrestrial Ecology

The improvements to SR 126 (Memorial Boulevard) will result in minimal impacts to local wildlife and plant communities in the area. The existing roadway will be widened, requiring additional land beyond the current right-of-way.

Roads and highways affect wildlife in many ways; both directly as roadkill, and indirectly through the degradation, fragmentation, and loss of habitat. Construction of the proposed project will result in the loss of habitat for small mammals and birds. Forested habitat is minimal in the project area, and the area within the corridor is comprised mainly of existing roadway, housing and commercial land use within the city limits, and scattered housing and agricultural use with a small amount of commercial land use in the rural section of the project. Most of the land has been converted to agricultural and residential/commercial use over the past century. The proposed project will result in minimal loss of wildlife habitat and local wildlife populations.

Construction of the proposed project in previously undisturbed areas will also impact native vegetation. Mitigation measures for the disturbances of the floral community will include revegetating the areas with native plants as soon as possible. Leaving soil exposed to the elements for a prolonged period of time will increase the likelihood of invasion of the area by invasive/exotic plant species and could potentially cause erosion and sedimentation problems in nearby area streams. Plants chosen for the site will be compatible with the hydrology, geology, and land use of the surrounding landscape. Due to the fact the proposed project is along an existing facility, the majority of any removal of native vegetation will occur along the shoulders and will remain minimal.

Various successional vegetative stages will be considered when replacing native species to prevent the landscape from converting into a monoculture state, thereby decreasing floral diversity. Since the proposed project is along an existing facility, absent of extensive forested areas, the impacts to terrestrial plants and animals will be minimal and extensive mitigation measures are not necessary.

Direct impacts to the terrestrial environment are anticipated to be minimal. Alternative A will result in 75 acres of scattered forested habitat to be converted to right-of-way, and Alternative B will require 54.8 acres of scattered forested habitat.

4.9.2 Aquatic Ecology

Five (5) streams were identified within the project corridor. Three (3) are perennial streams: Sougans Branch, Fall Creek, and an unnamed tributary of Sougans Branch. Two (2) streams are intermittent streams: An unnamed tributary of Fall Creek and an unnamed tributary of Reedy Creek. Habitat quality of each of the streams was investigated, and all five (5) streams scored in the below-average range. **Figure 4.9.1** identifies the location of these streams.

A **perennial stream** has flowing water year-round during a typical year. The water table is located above the stream bed for most of the year. Groundwater is the primary source of water for stream flow. Runoff from rainfall is a supplemental source of water for stream flow.

An **intermittent stream** has flowing water during certain times of the year, when groundwater provides water for stream flow. During dry periods, intermittent streams may not have flowing water. Runoff from rainfall is a supplemental source of water for stream flow.

Source: www.nap.usace.army.mil/cenap-op/regulatory/definitions.html

Impacts to a stream during road construction activities are primarily destruction of habitat and sedimentation. Habitat destruction will directly impact portions of the stream located within the project's right-of-way limits. Sedimentation is associated with construction activities. Sedimentation impacts are usually temporary and can impact a stream for hundreds of feet downstream. These impacts include reduced levels of oxygen in the stream, and interference with the ability of fish, aquatic insects, mussels and other aquatic organisms to utilize oxygen from the water. Temperature patterns and water flow patterns can be altered. Siltation increases turbidity (cloudiness from dust and other disturbed particles) which can slow photosynthesis, clog gills in fish and other aquatic life, and covers macroinvertebrates and fish egg-laying substrates (streambed layers). This can result in long term negative impacts to streams. Siltation can redistribute itself to increase flooding events, loss of storage capacity in reservoirs, and potential economic impacts associated with increased water treatment costs. Organic chemicals and metals can be reintroduced into the water columns that were previously contaminated.

Nonpoint source pollution in the project area is related primarily to agricultural practices. In addition, urban runoff, sewage and construction activities contribute to nonpoint source pollution. These pollutants include deicing compounds, weed, rodent, and insect control products, surface runoff of pollutants coming from vehicular operations (oil, grease, asbestos and rubber), toxic chemical spills by trucks into a water supply system, and contamination of surface and groundwater supplies by polluted fill materials. Deicing and herbicide/pesticide uses are seasonal, and typically result in short term increases in area waters. Surface runoffs associated with vehicles are unavoidable, but the quantities of these pollutants are typically small which would result in negligible impacts. Accidental spills are not predictable, but emergency procedures are in place that report, contain, and clean up hazardous materials. The impacts to area streams will be minimized by strict adherence to the Standard Specification for soil erosion and sediment control.



FIGURE 4.9.1: IMPACTED STREAMS

Alternative A Stream Impacts

Five (5) streams will be impacted by Alternative A; three (3) are perennial and two (2) are intermittent streams. None of the five (5) have been listed as Tennessee Exceptional Waters within the project impact area, and none were impaired to the degree that they have been placed upon the Tennessee 303(d) list of impaired streams published by TDEC Division of Water Pollution Control. Habitat quality of each of the streams was investigated, and all five streams scored in the below-average range. The total amount of stream channel impacted will be determined after final project plans become available (i.e., alternative selected), but impacts have been estimated based upon preliminary plans for Alternative A. No bridges will be required; all stream crossings will consist of culverts or pipes. Alternative A would require a total of 1,278 feet of culverts to be constructed. A total of 3,585 feet of stream would be relocated within the project's proposed right-of-way. Table **4.9.1** and Table **4.9.2** illustrates stream impacts anticipated in association with Alternative A. TDOT considered shifting the alignment to avoid these resources, but this would not have been feasible. The shifts would result in additional relocations of residents and greater impacts to floodplains.

Alternative B Stream Impacts

The same five (5) streams as previously mentioned will be impacted by Alternative B. The total amount of stream channel impacted will be determined after final project plans become available (i.e., alternative selected), but impacts have been estimated based upon preliminary plans. No bridges will be required; all stream crossings will consist of culverts or pipes. Alternative B would require a total of 846 feet of culverts to be constructed. A total of 2,261 feet of stream would be relocated within the project's proposed right-of-way. **Table 4.9.1** and Table **4.9.2** illustrates stream impacts anticipated in association with Alternative B. TDOT considered shifting the alignment to avoid these resources, but this would not have been feasible. The shifts would result in additional relocations of residents and greater impacts to floodplains.

TABLE 4.9.1: LINEAR FEET OF STREAM IMPACT BY IMPACT TYPE, SR 126, SULLIVAN COUNTY, TENNESSEE FOR SELECTED ALTERNATIVES A AND B

Item	Total Linear Feet Impacted	Culverts/Pipes (ft)	Crossing / Bridge (ft)	Relocation (ft)
Alternative A	4,863	1,278	NA	3,585
Alternative B	3,107	846	NA	2,261

TABLE 4.9.2: COMPARISONS OF STREAM IMPACTS IN LINEAR FEET FOR ALTERNATIVE A AND ALTERNATIVE B

Streams Impacted	Drainage Area (acres)	Flow Regime	Alternative A: Linear Feet Impacted	Alternative B: Linear Feet Impacted
U.T Reedy Creek	113	Intermittent	428	174
U.T. Fall Creek	53	Intermittent	192	92
U.T. Sougan Branch	439	Perennial	2,506	1,868
Sougan Branch	1,574	Perennial	93	99
Fall Creek	2,032	Perennial	1,644	874
			Total: 4,863	**Total: 3,107**

Mitigation Measures for Impacted Streams

To protect water quality and aquatic species it is necessary that stream crossings be designed perpendicular to the direction of flow. The construction of culverts should be staged during the drier times of the year when stream flows have been reduced. The culverts will not be constructed immediately following rain events. Locations of these structures will be determined during final design and prior to submission of federal and state permit applications.

Where culverts penetrate the existing embankment, they will be lengthened so that the existing drainage function would be preserved. Therefore, there will be no additional flooding upstream of the existing berm. Additional culvert improvements would be made during final design, if necessary, based on a hydraulic capacity analysis. Culverts will also be wide enough to pass high flows and should be placed so as not to restrict the movement of aquatic vertebrates within the streams.

Mitigation is required for all stream impacts which do not meet requirements for general TDEC Division of Water Aquatic Resources Alterations permits (ARAP) and for certain Nationwide Section 404 permits (U.S. Army Corps of Engineers; TDOT 2004).

Coordination with TDEC Division of Water Pollution Control for a potential Water Quality Certification (401) prior to disturbance of streams is required. A 401 Water Certification states that a discharge into surface waters must comply with the aquatic protection requirements of the State of Tennessee. The *Status of Water Quality in Tennessee Year 2000 305 (b) Report* states "As a general rule, the Division prefers bridging of streams or even relocation of streams as an alternative to culverting." Furthermore, large projects where culverting is unavoidable may require an in lieu fee for compensatory mitigation. Aquatic life cannot be maintained in a culverted body of water. Altered stream flow consists of layers of water that do not mix. Hence, there is limited mixing of nutrients and dissolved oxygen. Additionally, the smooth bottom of the culvert eliminates refuge, feeding and egg-laying sites for aquatic organisms associated with natural stream substrates.

A Section 404 Dredge and Fill Permit will be required from the USACE prior to any construction work on the proposed project. Permittees must meet all conditions, restrictions, and notification procedures required prior to work under any said permit.

Unavoidable impacts to waters of the U.S. could still occur after all appropriate avoidance and minimization measures have been taken. Compensatory mitigation is likely to be required to offset any unavoidable impacts to waters of the U.S. TDOT will implement the current sanctioned stream mitigation compensation, as necessary, at the time of attaining permits.

TDOT Standard Specifications, Section 6-290.00, Sediment Control and Erosion Prevention, would be followed to minimize impacts to the five streams. To minimize potential run-off impacts to streams (and subsequent wildlife that utilize those streams) during and after construction, all appropriate BMP's in accordance with the FHWA will be implemented to control sedimentation and debris within contributing drainages.

Minimization of Stream Impacts

The Build Alternatives will be designed to avoid major impacts to waters of the State/U.S. to the extents practicable. Efforts to further minimize impacts will continue throughout the design,

permitting, and construction processes. Unavoidable impacts will be mitigated as required by applicable laws and regulations. In an effort to minimize sedimentation impacts, erosion prevention and sediment control plans will be included in the project construction plans. TDOT will also implement its *Standard Specifications for Road and Bridge Construction* and the *Statewide Storm Water Management Plan (SSWMP)*, which includes erosion prevention and sediment control standards for use during construction. The State of Tennessee sets water quality criteria for waters of the state; these standards must be met during construction of the project.

Erosion control devices should limit any adverse effects to area streams. Such devices include filter rings and siltation traps. Maintaining the vegetated buffer zone between the roadway and the streams will minimize the impact of non-point source pollution to the streams. Also, drainage ditches should direct runoff into appropriate areas to allow the non-point source pollutants to filter out of the drainage. To minimize potential runoff impacts to the project streams, all appropriate Best Management Practices will be implemented to ensure water quality in the project area is not adversely impacted during construction. Exact measures will be developed and coordinated with the appropriate permit agencies later in the design phase.

Along streams it is important to leave mature canopy when possible and allow establishment of a dense herbaceous layer of native species. Re-vegetating disturbed areas as soon as possible with native floral species should diminish erosion impacts. Using native species will improve habitats by adding diversity and discouraging invasive species growth. Riparian zones will provide habitat for existing species and attract the lower food chain organisms that may draw fish and invertebrates indigenous to the area.

Heavy equipment will not be allowed directly in the stream. Where possible, diversion channels will be constructed to keep surface flow away from the construction site or to direct flow from the construction site into appropriate sediment control services. Seeding with temporary vegetation to help control sediment runoff will be considered. Construction will not take place immediately following rain storm events.

If these mitigation measures are utilized, there should be no cumulative impacts to streams as a result of the construction of this project.

Water Quality Impacts/Minimization

Potential environmental impacts other than direct alteration of the streams consists of sediment laden stormwater run-off due to construction of the project. In order to minimize the impacts to water quality as a result of construction activities, erosion prevention and sediment control (EPSC) “Best Management Practices” (BMPs) will be utilized. Some of the BMPs that should be utilized include the following:

- Preservation of roadside vegetation beyond the limits of construction where possible
- Early re-vegetation of disturbed areas to hold soil movement to a minimum
- The use of detention/retention structures, surface, subsurface, and cross drains designed to protect the water quality of both groundwater and surface waters
- Inclusion of BMPs in the construction plans, specifications, and contract pay items as specified in TDOT *Standard Specification for Road and Bridge Construction as well as the Drainage Manual*

- Prohibiting the release of chemicals, fuels, lubricants, bitumens, raw sewage, or harmful waste into or alongside of streams or impoundments, or into natural or manmade channels that lead to same

Wetland Impacts

No wetlands under the provisions of Executive Order 11990 were identified in the project impact area. The build alternative will have no direct impact on State or Federal jurisdictional wetlands.

Floodplain Impacts

Executive Order 11988, Floodplain Management, addresses concerns associated with encroachment upon floodplains. Federal agencies must avoid significant impacts to floodplains if a practical alternative exists. Longitudinal encroachments will be minimized on this project. One longitudinal crossing would occur with both Build Alternatives. There are no practical alternatives that would avoid longitudinal crossings of floodplains, and total avoidance was not possible. The selection or location of other build alternatives in other areas of the corridor would cause greater impacts by encroachment and greater right-of-way acquisition associated with wider typical sections and new construction.

Reviews of Floodplain Insurance Rate Maps supplied by FEMA indicate that Alternative A and Alternative B each cross two floodplains within the project area. The floodplains are associated with Fall Creek and the Sougans Branch of Fall Creek. Table **4.9.3** shows the floodplain acreage impacted by each Alternative. These floodplains are located adjacent to SR 126 (Memorial Boulevard) in the eastern sections of the project as identified in **Figure 4.9.2**. The total number of acres impacted is less than five acres. Encroachments upon the floodplains have been minimized by remaining as close to the existing roadway as possible.

TABLE 4.9.3: FLOODPLAIN IMPACTS

Area	Alternative A	Alternative B
Total Area of land within the 2,000-foot Corridor	2100 acres	2100 acres
Impacted Floodplains within the Corridor	4.0 acres	3.2 acres

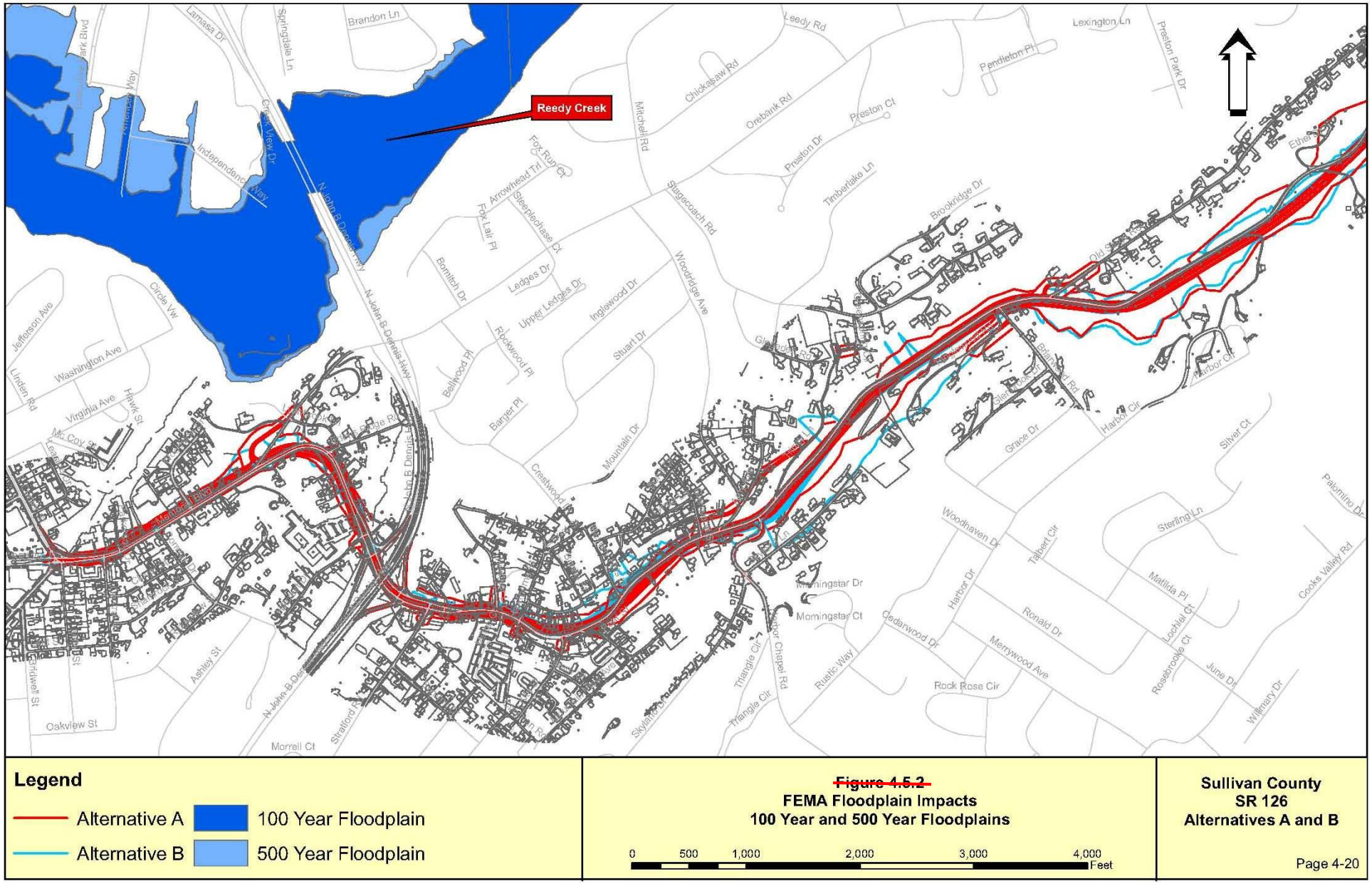


FIGURE 4.9.2: FEMA FLOODPLAINS (1 OF 2)

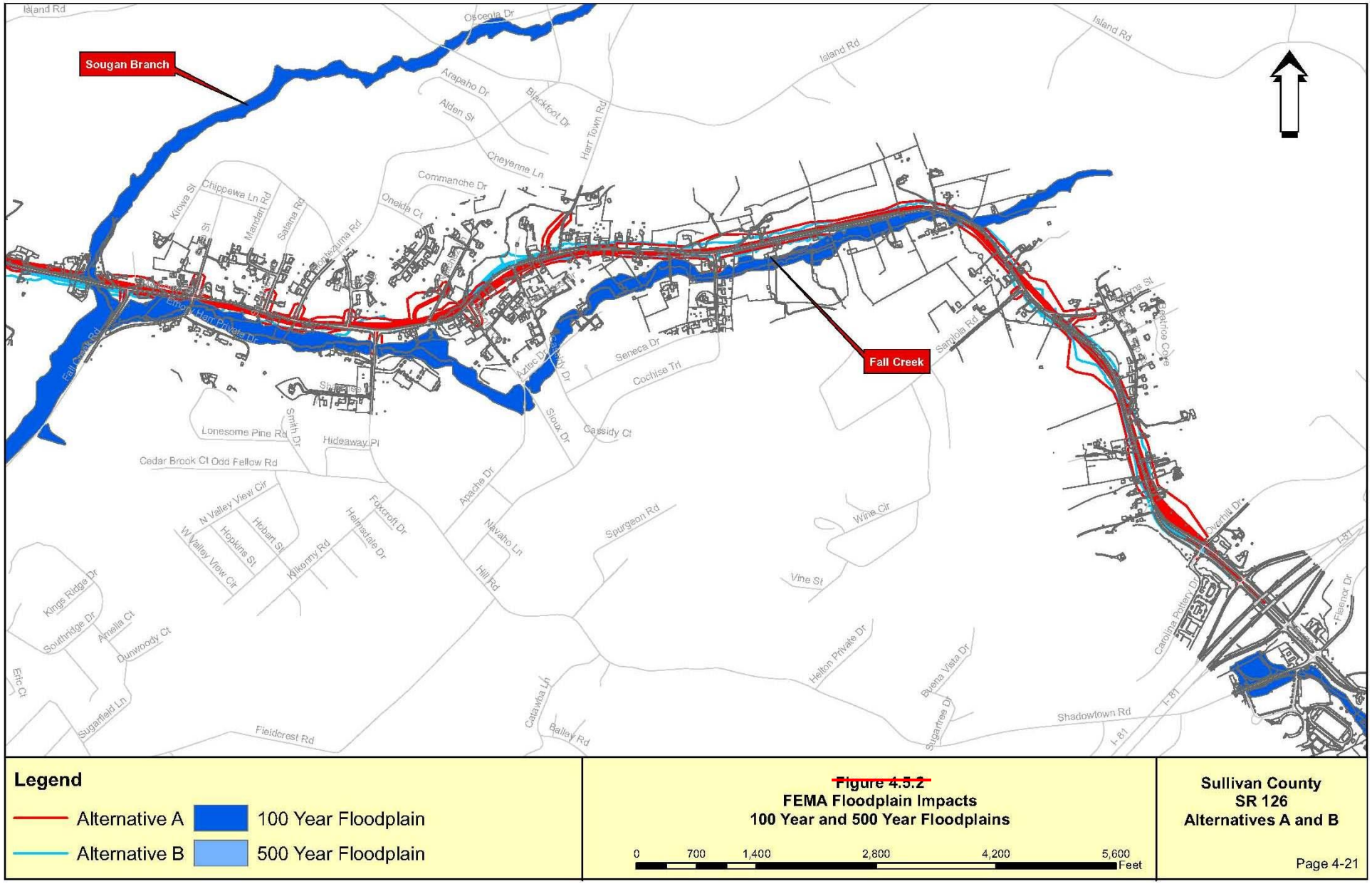


FIGURE 4.9.2: FEMA FLOODPLAINS (2 OF 2)

Minimization of Floodplain Impacts

The project will be designed to minimize floodplain impacts as required by the Federal Highways Administration procedures in 23 CFR 650A. Impacts will be minimized through the use of a perpendicular roadway design aimed at reducing fill and/or structures within the floodplain. The floodplain crossing will be designed so that the following criteria are met:

- There is no potential for interruption or termination of the transportation facility that is needed for emergency vehicles or provides the communities' only evacuation route due to the construction of the project
- The water crossings will convey floodwaters so there will be no increase in flooding due to the encroachment in the floodplain
- The Build Alternatives will have no substantial adverse impacts on the natural and beneficial floodplain values

The proposed project will not have a substantial impact on the 100 year floodplain.

Water Quality Permits

Alteration Permitting:

Entities that propose to construct projects that alter a stream, river, or lake must first obtain a water quality permit. Physical alterations to properties of waters of the State require an Aquatic Resource Alteration Permit (ARAP) or a Section 401 Water Quality Certification. Alterations to waters of the U.S. require either a Section 404 Nationwide or Individual Permit from the U.S. Army Corps of Engineers (USACE) and, where applicable, a 26a permit or letter of no objection from the Tennessee Valley Authority (TVA).

State Permits Required for Stream Impacts:

A *General NPDES Permit for Discharges of Stormwater Associated with Construction Activities* will be required for the proposed project. This permit is issued by the Tennessee Department of Environment & Conservation (TDEC), Division of Water Pollution Control pursuant to the federally-promulgated National Pollutant Discharge Elimination System (NPDES) program. The permit requires a Stormwater Pollution Prevention Plan (SWPPP) detailing the erosion prevention and sediment control practices designed to minimize sediment-laden stormwater run-off during precipitation events. One or more Aquatic Resource Alteration Permits (ARAP) under Section 401 of the Clean Water Act will be required for the proposed project. The stream crossings will require either a General Permit or Individual Permit under the ARAP program administered by TDEC. The type of permit issued will be determined after the significance of the impacts to the streams is reviewed by TDEC.

Federal Permits Required for Stream Impacts:

One or more permits under Section 404 of the Clean Water Act will be required for the proposed project. The crossing of streams will require either a Nationwide Permit or Individual Permit under the federal permit program administered by the U.S. Army Corps of Engineers (USACE). The type of permit issued will be determined after the significance of the impacts to the streams is reviewed by the USACE. A Tennessee Valley Authority Section 26a Permit will be required for the proposed stream crossing in Sullivan County

4.9.3 Impacts to Threatened and Endangered Species

Reviews of records, surveys, and responses received from federal and state agencies that monitor the status of threatened and endangered species have indicated that no such species would be impacted by the proposed project.

Although the Indiana Bat is not known to occur in the project area, at the request of the United States Fish and Wildlife Service (USFWS), a bat survey was conducted for this federally listed endangered species. Mist nets and field reviews were conducted in the project impact area. No Indiana Bats were located. A copy of the *Indiana Bat (Myotis sodalis) Mist Net Survey*, dated October 2011, is on file at the TDOT Environmental Division Office in Nashville, TN. The USFWS has concurred with a "not likely to adversely affect" finding concerning the Indiana Bat. However, to further minimize potential for harm to the Indiana Bat, trees with a diameter at breast height of five inches or greater will not be removed from October 15 through March 31.

Based on the best information available at this time, the requirements of Section 7 of the Endangered Species Act of 1973, as amended, are fulfilled. The USFWS response letters are contained in **Appendix C**.

Additional Protective Acts for Migratory Birds:

During the research of potential threatened and endangered species for the project corridor, bald eagles were cited as a species known to exist in Sullivan County. Field surveys did not identify either bald eagles or nests. If this species was to locate within the project APE at any time, including the construction phase, they would be protected under the US Migratory Bird Treaty Act (MBTA) and the US Bald and Golden Eagle Protection Act.

The MBTA (1918) was implemented for the protection of birds migrating between the U.S. and Canada. Under the Act, it is illegal for people to "take" migratory birds, their eggs, feathers or nests. A migratory bird is any species or family of birds that live, reproduce or migrate within or across international borders at some point during their annual life cycle. "Take" is defined in the MBTA "to include by any means or in any manner, any attempt at hunting, pursuing, wounding, killing, possessing or transporting any migratory bird, nest, egg, or part thereof."

The US Bald and Golden Eagle Protection Act offers additional protection to all bald and golden eagles. Bald eagles may not be taken for any purpose unless the Secretary of the Interior issues a permit prior to the taking. At this time, no mitigation measures are required. A copy of the Ecological Study prepared for this project is on file at TDOT's Environmental Division Office in Nashville, TN.

Impacts to State-Listed Species:

Reviews of records, field trips and responses from state agencies that monitor the status of state-listed species of plants and animals indicate that no impacts are anticipated for listed species in Sullivan County. The species list is contained in **Chapter 3**. The species of concern have been identified historically in Sullivan County, but no recent identifications are evident in the project area.

Invasive Species Impacts:

Executive Order 13112 was enacted to prevent the introduction of invasive species and provide for their control, and to minimize the economic, ecological, and human health impacts that invasive species cause.

The potential for introducing additional exotic or invasive species to the natural and farmed plant communities in the project area is remote. Habitat fragmentation has already resulted in the establishment of these organisms in the region. Additional fragmentation of habitat and soil disturbance could create more favorable conditions for the existing non-native species. These impacts will be minimized by planting native vegetation on cut and fill slopes and in the medians of the selected Build Alternatives.

4.10 AIR QUALITY IMPACTS

SR 126 (Memorial Boulevard) in Sullivan County is in an attainment area according to EPA for mobile source air pollutants. The project is included in Section A of the Kingsport Metropolitan Planning Organization's (MPO) 2011-2014 Transportation Improvement Program (TIP), as adopted October 2010. The project was previously included in the conforming 2008-2011 TIP.

According to the Tennessee Department of Environment and Conservation, Division of Air Pollution Control, this project is in an area designated as attainment/unclassified for the National Ambient Air Quality Standards (NAAQS), therefore, a transportation conformity determination is not required.

Based upon the analysis of highway projects with similar meteorological conditions and traffic volumes, the carbon monoxide (CO) levels of the subject project will be well below the National Ambient Air Quality Standard (35ppm one-hour and 9ppm eight-hour). Since the project will have levels below this standard and is located in a region of air quality conformity, it was determined that there will be no CO impact on the air quality of the area from the proposed project. This project qualifies as a "project with low potential MSAT effects" in accordance with FHWA's guidance.

A copy of the *Highway Traffic Noise and Air Quality Analysis* Report, as updated in October of 2011, is on file in the TDOT Environmental Division Office in Nashville, TN.

4.10.1 Mobile Source Air Toxics (MSAT)

On February 3, 2006, the FHWA released "*Interim Guidance on Air Toxic Analysis in NEPA Documents.*"[1] This guidance was superseded on September 30, 2009 by FHWA's "*Interim Guidance Update on Air Toxic Analysis in NEPA Documents.*"[2] The purpose FHWA's guidance is to advise on when and how to analyze Mobile Source Air Toxics (MSATs) in the NEPA

[1] *Interim Guidance on Air Toxic Analysis in NEPA Documents*, FHWA, February 3, 2006. http://www.fhwa.dot.gov/environment/airtoxic/020306guidmem.htm

[2] *Interim Guidance Update on Air Toxic Analysis in NEPA Documents*, FHWA, September 30, 2009. http://www.fhwa.dot.gov/environment/airtoxic/100109guidmem.htm

process for highways. This guidance is interim, because MSAT science is still evolving. As the science progresses, FHWA will update the guidance.

The qualitative analysis presented below provides a basis for identifying and comparing the potential differences among MSAT emissions, if any, from the various alternatives. The assessment is derived in part from a study conducted by the FHWA entitled *"A Methodology for Evaluating Mobile Source Air Toxic Emissions Among Transportation Project Alternatives."*[3] Additional information regarding MSATs is provided at the end of this section.

FHWA's Interim Guidance groups projects into the following categories:

- Exempt Projects and Projects with no Meaningful Potential MSAT Effects;
- Projects with Low Potential MSAT Effects; and,
- Projects with Higher Potential MSAT Effects.

FHWA's Interim Guidance provides examples of "Projects with Low Potential MSAT Effects." These projects include minor widening projects and new interchanges, such as those that replace a signalized intersegment on a surface street or where design year traffic projections are less than 140,000 to 150,000 AADT.

The Build Alternatives include the widening of SR 126 (Memorial Boulevard). The highest projected design year 2033 AADT on SR 126 is 33,540 and substantially lower than the FHWA criterion. Therefore, the project meets the criteria for a "Project with Low Potential MSAT Effects."

For both the No-Build and Build Alternatives, the amount of MSATs emitted would be proportional to the vehicle miles traveled, or VMT, assuming that other variables such as fleet mix are the same for each alternative. The estimated VMT for the Build Alternatives are essentially the same as the VMT for the No-Build Alternative. Therefore, it is expected that there would be no appreciable difference in overall MSAT emissions between the No-Build and Build Alternatives.

Additionally, travel speeds for the Build Alternatives are expected to be higher than for the No-Build Alternative. According to EPA's MOBILE6 emissions model, emissions of all of the priority MSATs except for diesel particulate matter decrease as speed increases. The extent to which these speed-related emissions decreases will offset VMT-related emissions increases cannot be reliably projected due to the inherent deficiencies of technical models.

Also, regardless of the alternative chosen, emissions will likely be lower than present levels in the design year as a result of EPA's national control programs that are projected to reduce MSAT emissions by 72 percent between 1999 and 2050. Local conditions may differ from these national projections in terms of fleet mix and turnover, VMT growth rates, and local control measures. However, the magnitude of the EPA-projected reductions is so great (even after accounting for VMT growth) that MSAT emissions in the study area are likely to be lower in the future in nearly all cases.

[3] Claggett, M., et. al., "*A Methodology for Evaluating Mobile Source Air Toxic Emissions Among Transportation Project Alternatives,"* Federal Highway Administration, Resource Center.

The additional travel lanes contemplated for the Build Alternatives will have the effect of moving some traffic closer to nearby residences and other sensitive uses; therefore, under the Build Alternatives there may be localized areas where ambient concentrations of MSATs could be higher than under the No-Build Alternative. However, as discussed above, the magnitude and the duration of these potential increases compared to the No-Build Alternative cannot be reliably quantified due to incomplete or unavailable information in forecasting project-specific MSAT health impacts.

In sum, when a highway is widened, the localized level of MSAT emissions for the Build Alternatives could be higher relative to the No Build Alternative, but this could be offset due to increases in speeds and reductions in congestion (which are associated with lower MSAT emissions). Also, MSAT will be lower in other locations when traffic shifts away from them. However, on a regional basis, EPA's vehicle and fuel regulations, coupled with fleet turnover, will over time cause substantial reductions that, in almost all cases, will cause region-wide MSAT levels to be significantly lower than today.

Substantial construction-related MSAT emissions are not anticipated for this project as construction is not planned to occur over an extended building period. However, construction activity may generate temporary increases in MSAT emissions in the project area.

MSATs Background

Controlling air toxic emissions became a national priority with the passage of the Clean Air Act Amendments (CAAA) of 1990, whereby Congress mandated that the U.S. Environmental Protection Agency (EPA) regulate 188 air toxics, also known as hazardous air pollutants. The EPA has assessed this expansive list in their latest rule on the Control of Hazardous Air Pollutants from Mobile Sources (Federal Register, Vol. 72, No. 37, page 8430, February 26, 2007) and identified a group of 93 compounds emitted from mobile sources that are listed in their Integrated Risk Information System (IRIS) (http://www.epa.gov/ncea/iris/index.html). In addition, EPA identified seven compounds with significant contributions from mobile sources that are among the national and regional-scale cancer risk drivers from their 1999 National Air Toxics Assessment (NATA) (http://www.epa.gov/ttn/atw/nata1999/). These are acrolein, benzene, 1,3-butadiene, diesel particulate matter plus diesel exhaust organic gases (diesel PM), formaldehyde, naphthalene, and polycyclic organic matter. While FHWA considers these the priority mobile source air toxics, the list is subject to change and may be adjusted in consideration of future EPA rules.

The 2007 EPA rule mentioned above requires controls that will dramatically decrease MSAT emissions through cleaner fuels and cleaner engines. According to an FHWA analysis using EPA's MOBILE6.2 model, even if vehicle activity (vehicle-miles travelled, VMT) increases by 145 percent as assumed, a combined reduction of 72 percent in the total annual emission rate for the priority MSAT is projected from 1999 to 2050, as shown in **Figure 4.10.1**.

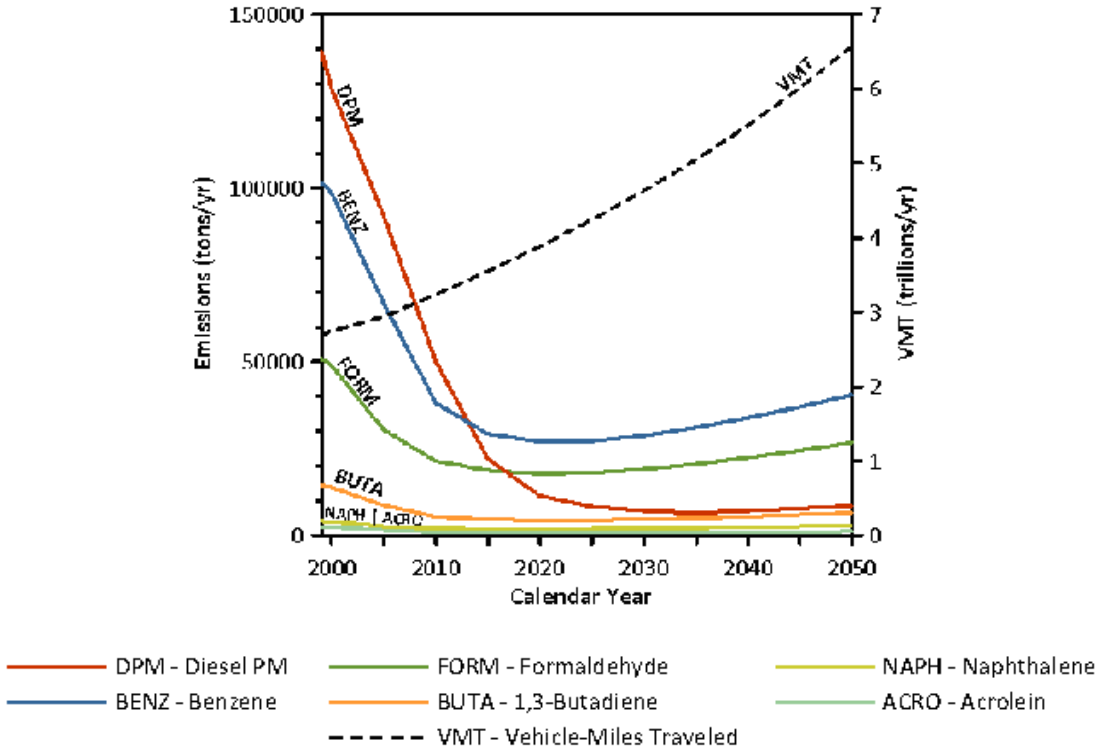


FIGURE 4.10.1: NATIONAL MSAT EMISSION TRENDS 1999 – 2050
FOR VEHICLES OPERATING ON ROADWAYSUSING EPA's MOBILE6.2 MODEL

Note:
(1) Annual emissions of polycyclic organic matter are projected to be 561 tons/yr for 1999, decreasing to 373 tons/yr for 2050.
(2) Trends for specific locations may be different, depending on locally derived information representing vehicle-miles travelled, vehicle speeds, vehicle mix, fuels, emission control programs, meteorology, and other factors
Source: U.S. Environmental Protection Agency. MOBILE6.2 Model run 20 August 2009.

Air toxics analysis is a continuing area of research. While much work has been done to assess the overall health risk of air toxics, many questions remain unanswered. In particular, the tools and techniques for assessing project-specific health outcomes as a result of lifetime MSAT exposure remain limited. These limitations impede the ability to evaluate how the potential health risks posed by MSAT exposure should be factored into project-level decision-making within the context of the National Environmental Policy Act (NEPA).

Nonetheless, air toxics concerns continue to be raised on highway projects during the NEPA process. Even as the science emerges, we are duly expected by the public and other agencies to address MSAT impacts in our environmental documents. The FHWA, EPA, the Health Effects Institute, and others have funded and conducted research studies to try to more clearly define potential risks from MSAT emissions associated with highway projects. The FHWA will continue to monitor the developing research in this emerging field.

Unavailable Information for Project Specific MSAT Impact Analysis

In FHWA's view, information is incomplete or unavailable to credibly predict the project-specific health impacts due to changes in MSAT emissions associated with a proposed set of highway alternatives. The outcome of such an assessment, adverse or not, would be influenced more by the uncertainty introduced into the process through assumption and speculation rather than any

genuine insight into the actual health impacts directly attributable to MSAT exposure associated with a proposed action.

The U.S. Environmental Protection Agency (EPA) is responsible for protecting the public health and welfare from any known or anticipated effect of an air pollutant. They are the lead authority for administering the Clean Air Act and its amendments and have specific statutory obligations with respect to hazardous air pollutants and MSAT. The EPA is in the continual process of assessing human health effects, exposures, and risks posed by air pollutants. They maintain the Integrated Risk Information System (IRIS), which is "a compilation of electronic reports on specific substances found in the environment and their potential to cause human health effects" (EPA, http://www.epa.gov/ncea/iris/index.html). Each report contains assessments of non-cancerous and cancerous effects for individual compounds and quantitative estimates of risk levels from lifetime oral and inhalation exposures with uncertainty spanning perhaps an order of magnitude.

Other organizations are also active in the research and analyses of the human health effects of MSAT, including the Health Effects Institute (HEI). Two HEI studies are summarized in Appendix D of FHWA's Interim Guidance Update on Mobile source Air Toxic Analysis in NEPA Documents. Among the adverse health effects linked to MSAT compounds at high exposures are cancer in humans in occupational settings; cancer in animals; and irritation to the respiratory tract, including the exacerbation of asthma. Less obvious is the adverse human health effects of MSAT compounds at current environmental concentrations (HEI, http://pubs.healtheffects.org/view.php?id=282) or in the future as vehicle emissions substantially decrease (HEI, http://pubs.healtheffects.org/view.php?id=306).

The methodologies for forecasting health impacts include emissions modeling; dispersion modeling; exposure modeling; and then final determination of health impacts - each step in the process building on the model predictions obtained in the previous step. All are encumbered by technical shortcomings or uncertain science that prevents a more complete differentiation of the MSAT health impacts among a set of project alternatives. These difficulties are magnified for lifetime (i.e., 70 year) assessments, particularly because unsupportable assumptions would have to be made regarding changes in travel patterns and vehicle technology (which affects emissions rates) over that time frame, since such information is unavailable. The results produced by the EPA's MOBILE6.2 model, the California EPA's Emfac2007 model, and the EPA's DraftMOVES2009 model in forecasting MSAT emissions are highly inconsistent. Indications from the development of the MOVES model are that MOBILE6.2 significantly underestimates diesel particulate matter (PM) emissions and significantly overestimates benzene emissions.

Regarding air dispersion modeling, an extensive evaluation of EPA's guideline CAL3QHC model was conducted in an NCHRP study (http://www.epa.gov/scram001/dispersion_alt.htm#hyroad), which documents poor model performance at ten sites across the country - three where intensive monitoring was conducted plus an additional seven with less intensive monitoring. The study indicates a bias of the CAL3QHC model to overestimate concentrations near highly congested intersections and underestimate concentrations near uncongested intersections. The consequence of this is a tendency to overstate the air quality benefits of mitigating congestion at intersections. Such poor model performance is less difficult to manage for demonstrating compliance with National Ambient Air Quality Standards for relatively short time frames than it is for forecasting individual exposure over an entire lifetime, especially given that some information needed for estimating 70-year lifetime exposure is unavailable. It is particularly difficult to reliably forecast MSAT

exposure near roadways, and to determine the portion of time that people are actually exposed at a specific location.

There are considerable uncertainties associated with the existing estimates of toxicity of the various MSAT, because of factors such as low-dose extrapolation and translation of occupational exposure data to the general population, a concern expressed by HEI (http://pubs.healtheffects.org/view.php?id=282). As a result, there is no national consensus on air dose-response values assumed to protect the public health and welfare for MSAT compounds, and in particular for diesel PM. The EPA (http://www.epa.gov/risk/basicinformation.htm#g) and the HEI (http://pubs.healtheffects.org/getfile.php?u=395) have not established a basis for quantitative risk assessment of diesel PM in ambient settings.

There is also the lack of a national consensus on an acceptable level of risk. The current context is the process used by the EPA as provided by the Clean Air Act to determine whether more stringent controls are required in order to provide an ample margin of safety to protect public health or to prevent an adverse environmental effect for industrial sources subject to the maximum achievable control technology standards, such as benzene emissions from refineries. The decision framework is a two-step process. The first step requires EPA to determine a "safe" or "acceptable" level of risk due to emissions from a source, which is generally no greater than approximately 100 in a million. Additional factors are considered in the second step, the goal of which is to maximize the number of people with risks less than 1 in a million due to emissions from a source. The results of this statutory two-step process do not guarantee that cancer risks from exposure to air toxics are less than 1 in a million; in some cases, the residual risk determination could result in maximum individual cancer risks that are as high as approximately 100 in a million. In a June 2008 decision, the U.S. Court of Appeals for the District of Columbia Circuit upheld EPA's approach to addressing risk in its two step decision framework. Information is incomplete or unavailable to establish that even the largest of highway projects would result in levels of risk greater than safe or acceptable.

Because of the limitations in the methodologies for forecasting health impacts described, any predicted difference in health impacts between alternatives is likely to be much smaller than the uncertainties associated with predicting the impacts. Consequently, the results of such assessments would not be useful to decision makers, who would need to weigh this information against project benefits, such as reducing traffic congestion, accident rates, and fatalities plus improved access for emergency response, that are better suited for quantitative analysis.

4.10.2 Climate Change

Climate change, also referred to as global warming, is an increase in the overall average atmospheric temperature of the earth due to the trapping of heat in the atmosphere by greenhouse gases. The primary greenhouse gas emitted by human activities in the US is carbon dioxide (CO_2), which represents approximately 85 percent of total greenhouse gas emissions.

Transportation sources contribute to global warming through the burning of petroleum-based fuel. According to the FHWA, transportation sources are responsible for approximately one-quarter of the greenhouse gas emissions in the US. Automobiles and light-duty trucks account for almost two-thirds of emissions from the transportation sector and emissions have steadily grown since 1990.

Emissions from transportation sources depend on the number of trips or miles traveled by each type of vehicle per year, which are, in turn, influenced by larger economic trends and consumer behavior. Over the long term, changes in vehicle fuel efficiency, driving behavior, and fuel type will influence the level of emissions.

Under the Clean Air Act, the EPA has the authority to establish motor vehicle emissions standards for CO_2 and other greenhouse gases although such standards have not yet been established.

FHWA is actively involved in efforts to initiate, contact, and disseminate climate-change-related research and to provide technical assistance to stakeholders. The FHWA is also involved in climate change initiatives with the USDOT Center for Climate Change and Environmental Forecasting.

Climate change and related effects are complex and global in nature. As a result, the impacts of any single transportation project cannot be effectively estimated in terms of global warming effect. However, the emissions changes due to individual projects are very small compared to global emissions.

Once standards are established and guidance for assessing the potential greenhouse gas effects of transportation projects becomes available, a more in-depth assessment rate may be possible.

4.11 NOISE IMPACTS

The noise evaluation for this project was conducted in accordance with Federal guidance for handling noise impacts and abatement contained in 23 Code of Federal Regulations (CFR) Part 772, "Procedures for Abatement of Highway Traffic Noise and Construction Noise" and the Tennessee Department of Transportation's Policy on Highway Traffic Noise Abatement, effective July 13, 2011. A copy of the *Highway Traffic Noise and Air Quality Analysis Report* (updated October 2011) for SR 126 (Memorial Boulevard) is on file in the TDOT Environmental Division Office in Nashville, TN.

4.11.1 Fundamentals of Sound and Noise

The intensity or loudness of sound is measured in units called decibels (dB). However, because the human ear does not hear sound waves of different frequencies at the same subjective loudness, an adjustment or weighting of the high-pitched and low-pitched sounds is made to approximate how an average person hears sounds. When such adjustments to the sound levels are made, they are called "A-weighted levels" and are labeled "dBA." **Figure 4.11.1** shows some common indoor and outdoor sound levels.

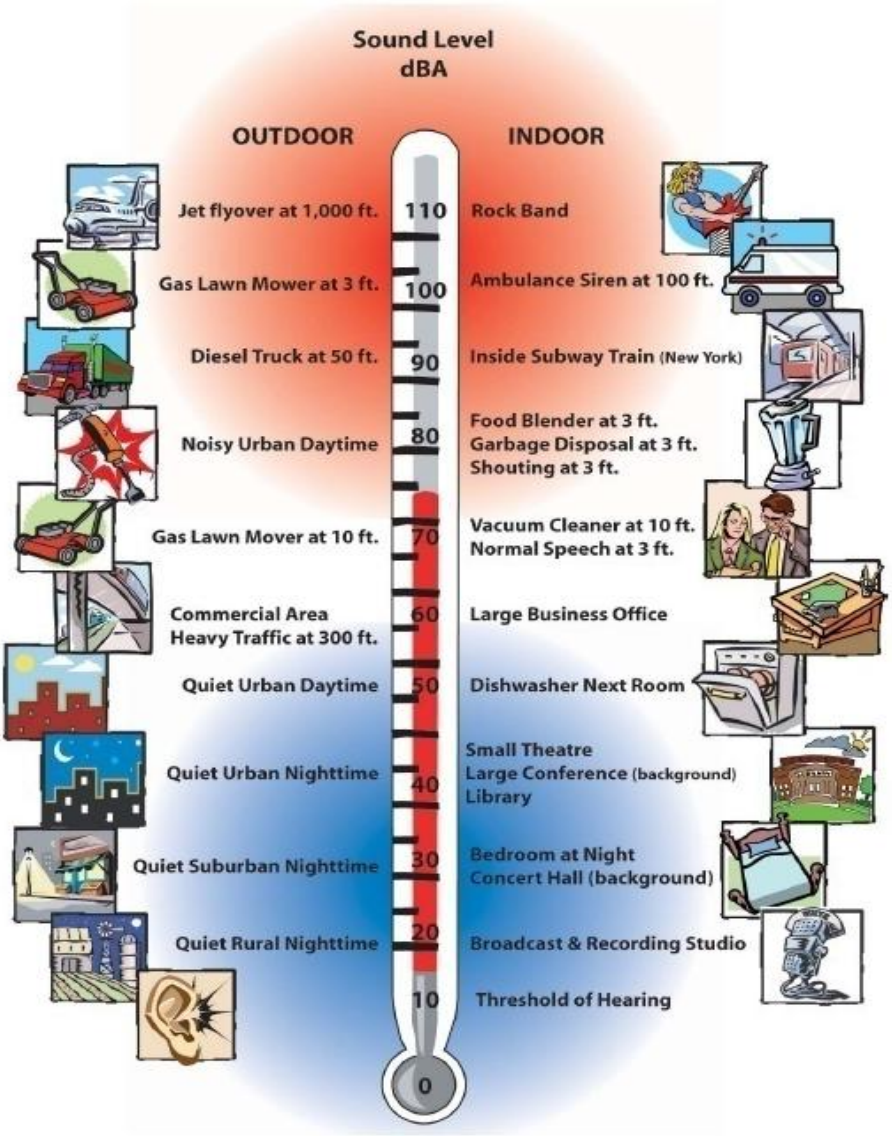


FIGURE 4.11.1: COMMON INDOOR AND OUTDOOR NOISE LEVELS

Noise is defined as unwanted sound. Since highway traffic sound is normally unwanted, it is usually called highway traffic noise. The level of highway traffic noise is never constant; therefore, it is necessary to use a statistical descriptor to describe the varying traffic noise levels. The equivalent continuous sound level (L_{eq}) is the statistical descriptor used in a noise impact analysis. The L_{eq} sound level is the steady A-weighted sound level, which would produce the same A-weighted sound energy over a stated period of time.

4.11.2 Criteria for Determining Impacts

FHWA regulations establish Noise Abatement Criteria (NAC) that must be used by states to determine if noise-sensitive land uses will be impacted by a project.

The regulations state that noise mitigation should be evaluated for any receptor or group of receptors where predicted traffic noise levels, using future traffic volumes and roadway conditions, approach or exceed the NAC shown in **Table 4.11.1.**

Traffic noise is considered to "approach" a criterion at a level of 1 dBA less than the criterion (e.g., 66 dBA for Category B receptors).

The FHWA regulations and TDOT's noise policy also define impacts to occur if there is a substantial increase in design year sound levels over existing sound levels. **Table 4.11.2** presents TDOT's criteria to define substantial noise increase.

4.11.3 Determination of Existing Sound Levels

Noise measurements were conducted at several noise-sensitive land uses in the project area to characterize the existing noise environment. Existing peak hour sound levels at the measurement locations range from 44 to 66 dBA.

4.11.4 Determination of Future Sound Levels

Sound levels for the No-Build Alternative are predicted to be 1 to 3 dB higher than existing sound levels depending on location.

Noise modeling of Build Alternatives A and B was completed using the FHWA Traffic Noise Model (TNM 2.5) computer program. The program calculated design year 2033 sound levels at the noise-sensitive land uses in the project area.

4.11.5 Noise Impact Evaluation

As noted previously, a location is impacted if 1) the predicted worst hour noise level approaches or exceeds the NAC or 2) there is a substantial increase in design year noise levels above existing noise levels.

TABLE 4.11.1. FHWA NOISE ABATEMENT CRITERIA IN 23 CFR 772

Activity Category	L_{Aeq} (1h)	Evaluation Location	Activity Description
A	57	Exterior	Lands on which serenity and quiet are of extraordinary significance and serve an important public need and where the preservation of those qualities is essential if the area is to continue to serve its intended purpose.
B(1)	67	Exterior	Residential.
C(1)	67	Exterior	Active sport areas, amphitheaters, auditoriums, campgrounds, cemeteries, day care centers, hospitals, libraries, medical facilities, parks, picnic areas, places of worship, playgrounds, public meeting rooms, public or nonprofit institutional structure, radio stations, recording studios, recreation areas, Section 4(f) sites, schools, television studios, trails, and trail crossings.
D	52	Interior	Auditoriums, day care centers, hospitals, libraries, medical facilities, places of worship, public meeting rooms, public or nonprofit institutional structure, radio studios, recording studios, schools, and television studios.
E(1)	72	Exterior	Hotels, motels, offices, restaurants/bars, and other developed lands, properties or activities not included in A-D, or F.
F	---	---	Agriculture, airports, bus yards, emergency services, industrial, logging, maintenance facilities, manufacturing, mining, rail yards, retail facilities, shipyards, utilities (water resources, water treatment, electrical), and warehousing.
G	---	---	Undeveloped lands that are not permitted.

(1) Includes undeveloped lands permitted for this activity category.

TABLE 4.11.2: SUBSTANTIAL NOISE LEVEL INCREASE

Existing Noise Level (dBA) (1)	Subjective Descriptor
42 or less	15 or more
43	14 or more
44	13 or more
45	12 or more
46	11 or more
47 or more	10 or more

Design year sound levels for the Build Alternative are predicted to be 1 dB to 8 dB higher than existing sound levels. These increases are not substantial in accordance with TDOT's Noise Policy. Therefore, none of the land uses are predicted to be impacted by a substantial increase in sound level.

Design year sound levels at most receivers are predicted to be less than the NAC for both Alternatives A and B. However, 35 residences are predicted to be impacted under Alternative A with design year sound levels of 66 dBA or higher. Similarly, 45 residences are predicted to be impacted under Alternative B.

The increased number of impacts under Alternative B is primarily the results of fewer takes under Alternative B due to a narrower right-of-way. The taking of fewer properties leaves some residences in close proximity to SR 126 (Memorial Boulevard).

A copy of the *Highway Traffic Noise and Air Quality Analysis Report* (updated October 2011) for SR 126 (Memorial Boulevard) is on file in the TDOT Environmental Division Office in Nashville, TN.

4.11.6 Noise Abatement Evaluation

Abatement is generally evaluated when impacts are predicted to occur. Noise barriers were evaluated to reduce sound levels for impacted land uses. In order for noise barriers to be included in a project, they must be determined to be both feasible and reasonable in accordance with TDOT's Noise Policy.

Feasibility means that the construction of a barrier would not be anticipated to pose any major design, construction, maintenance, or safety problems that the barrier would reduce traffic noise levels for the majority of the impacted first-row receptors.

SR 126 (Memorial Boulevard) is not a limited access facility. In fact, of the 35 impacted residences under Alternative A, 29 have direct driveway access to SR 126 (Memorial Boulevard). Similarly, of the 45 impacted residences under Alternative B, 40 have direct driveway access to SR 126 (Memorial Boulevard). Noise barriers are not feasible to mitigate impacts at these residences because a noise barrier would limit access from these properties and adjacent properties.

The remaining impacted residences under both Alternatives are isolated from other impacted residences. Noise barriers for these residences would not be reasonable since the required area per benefited residence will greatly exceed the allowable area for benefited residence.

As a result, noise barriers were determined not to be feasible or reasonable for this project.

4.11.7 Information for Local Officials

There are tracts of undeveloped land adjacent to SR 126 (Memorial Boulevard). TDOT encourages the local governments with jurisdiction over these lands, as well as potential developers of these lands to practice noise compatibility planning in order to avoid future noise impacts. The following language is included in TDOT's noise policy:

> *"Highway traffic noise should be reduced through a program of shared responsibility. Local governments should use their power to regulate land development in such a way that noise-sensitive land uses are either prohibited from being located adjacent to a highway or that the developments are planned, designed and constructed in such a way that noise impacts are minimized."*

Two guidance documents on noise compatible land use planning are available from FHWA and can be found at: http://www.fhwa.dot.gov/environment/audible/index.htm and http://www.fhwa.dot.gov/environment/noise/quietzon.

Table 4.11.3 presents design year sound levels for areas along SR 126 where vacant and possibly developable lands exist. Noise predictions were made at distances between 100 and 400 feet from the centerline of the closest travel lane for the design year. As indicated, sound levels within approximately 100 feet of the centerline of the closest travel lane of SR 126 will approach or exceed the NAC of 66 dBA. Noise-sensitive land uses should generally not be constructed in these areas unless noise mitigation measures are provided.

TABLE 4.11.3: DESIGN YEAR 2033 SOUND LEVELS FOR UNDEVELOPED LANDS

Distance from SR 126 [(1)]	L_{eq} (1h) (dBA)[(2)]
100 feet	66
200 feet	62
300 feet	57
400 feet	53

(1) Perpendicular distance to the center of near lane. (2) At-grade scenario.

These values do not represent predicted levels at every location at a particular distance back from the roadway. Sound levels will vary with changes in terrain and will be affected by the shielding of objects such as buildings. This information is being included to make local officials and planners aware of anticipated highway noise levels so that future development will be compatible with these levels.

Finally, TDOT currently has an active Type II Noise Barrier Program to facilitate the construction of "retrofit" noise barriers along existing highways. To be eligible for a Type II noise barrier, an area must meet the following criteria:

- The neighborhood must be located along a limited-access roadway;
- The neighborhood must be primarily residential;
- The majority (more than 50%) of residences in the neighborhood near the highway pre-dated the initial highway construction;
- A noise barrier for the neighborhood must not have been previously determined to be not reasonable or not feasible as part of a new highway construction or through-lane widening study (Type I project);
- Existing noise levels measured in the neighborhood must be above the Noise Abatement Criteria (NAC) of 66 dBA;
- A barrier must be feasible to construct and will provide substantial noise reduction; and,

- A barrier must be reasonable (barrier cost per benefitted residence) in accordance with TDOT's noise policy. A residence is considered "benefitted" if the noise barrier will reduce the traffic noise by at least 5 dB.

4.11.8 Construction Noise

It is expected that TDOT's construction specifications will apply to this project. As a result, construction procedures shall be governed by the *Standard Specifications for Road and Bridge Construction* as issued by TDOT and as amended by the most recent applicable supplements. The contractor will be bound by Section 107.01 of the Standard Specifications to observe any noise ordinance in effect within the project limits. Detoured traffic shall be routed during construction so as to cause the least practicable noise impact on noise-sensitive areas.

4.12 HISTORIC IMPACTS

In compliance with the requirements of Section 106 of the National Historic Preservation Act of 1966 and the implementing regulations 36 CFR 800, the Cultural Resource survey conducted for the project identified one National Register of Historic Places (NRHP) listed property and one NRHP eligible property within the established Area of Potential Effect (APE).

Yancey's Tavern is located on the northern side of State Route 126 (Memorial Boulevard) on Chestnut Ridge Road (See **Figure 4.12.1**). Yancey's Tavern was listed in the NRHP in 1972 under Criterion A for its significance in the early settlement of Sullivan County. It was an important stop along the Island Road, the major artery in upper East Tennessee. A five acre boundary surrounding the Tavern was established in 1972.

The current alignment of State Route 126 (Memorial Boulevard) is located south of Yancey's Tavern and is separated from the main roadway by land and Chestnut Ridge Road. With Alternative A, the proposed widening from two lanes to four lanes with a median, curbs and gutters, and sidewalks will not take any land from the Yancey's Tavern property. However, the widening will introduce a roadway that is out of scale with the historic setting and will introduce an adverse visual impact to the historic property. Alternative B also does not take any land from the Yancey's Tavern Property. Alternative B includes retaining walls and a narrower roadway cross section with fewer lanes in this area in an effort to minimize impacts to Yancey's Tavern and East Lawn Memorial Gardens Cemetery, which is located across SR 126 (Memorial Boulevard) from the tavern. The State Historic Preservation Office (SHPO) has reviewed the project and in a letter dated November 3, 2008 stated that an adverse visual effect to Yancey's Tavern would occur if either Build Alternative was selected (SHPO letter is contained in **Appendix B**). On February 26, 2010 the SHPO advised that, under 36 CFR 800, the Advisory Council on Historic Preservation (ACHP) should be consulted regarding this adverse effect.

Upon receiving written notification and information regarding the adverse affect to Yancy's Tavern, the ACHP responded that there is no need for their participation to resolve the adverse effect. The ACHP correspondence, dated February 18, 2011, also noted that supporting documentation along with the final Memorandum of Agreement (MOA), developed in consultation with the SHPO, and any other consulting parties, must be filed with the ACHP in accordance with 36 CFR 800.6(b)(1)(iv) and Section 106 of the National Historic Preservation Act. The MOA will be prepared and signed prior to approval of the Final Environmental Impact Statement. The ACHP correspondence is located in **Appendix B**.

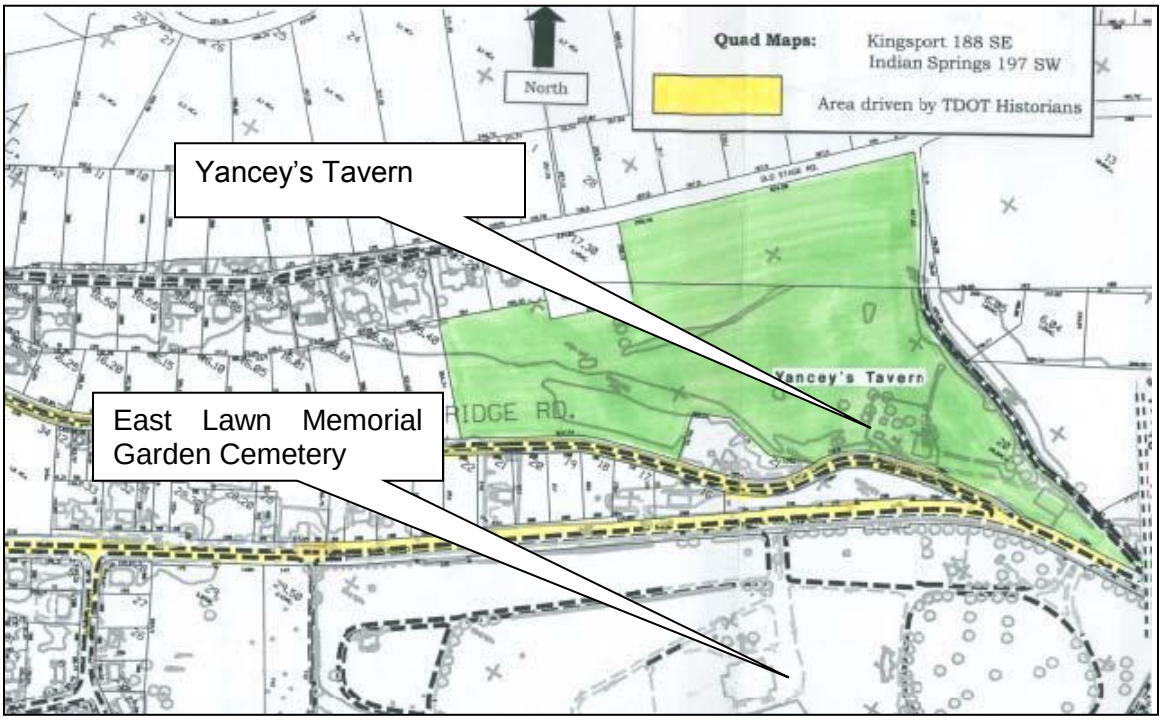


FIGURE 4.12.1: YANCEY'S TAVERN

A second historic property, the Shipley-Jarvis House, is located on the south side of SR 126 (Memorial Boulevard) near the beginning of the project in a residential and commercial sector of Kingsport. The Shipley-Jarvis House has been determined to be eligible for listing in the National Register of Historic Places.

The Shipley-Jarvis House exemplifies the adaptation of nineteenth century dwellings to conform to twentieth century architectural tastes. The house is in excellent condition and is a good example of Colonial Revival Architecture. The Colonial Revival style was popularized in the 1880's and became the dominant style for domestic building for the first half of the twentieth century.

The Shipley-Jarvis House is a good example of the evolution of architectural styles that blends early styles with modern feature. Its architectural features continue to illustrate both ninetieth century building methods and twentieth century stylistic changes. The Shipley-Jarvis House was determined eligible for listing in the NRHP under Criterion C for its architectural style.

The proposed widening of the roadway in front of the Shipley-Jarvis House will not acquire any right-of-way from the property. It has been determined that the proposed project will have an effect that is not adverse to this property. No mitigation is required. The SHPO concurred in this finding in a letter dated November 3, 2008 (SHPO letter is contained in **Appendix B**.)

To learn more about these listed or eligible National Register properties, facts about Section 106 of the National Historic Preservation Act, and National Register Criteria, copies of the Historical and Architectural Survey and Documentation for Effect Under 36 CFR 800 Evaluation reports are available for viewing in TDOT's Environmental Division Office in Nashville.

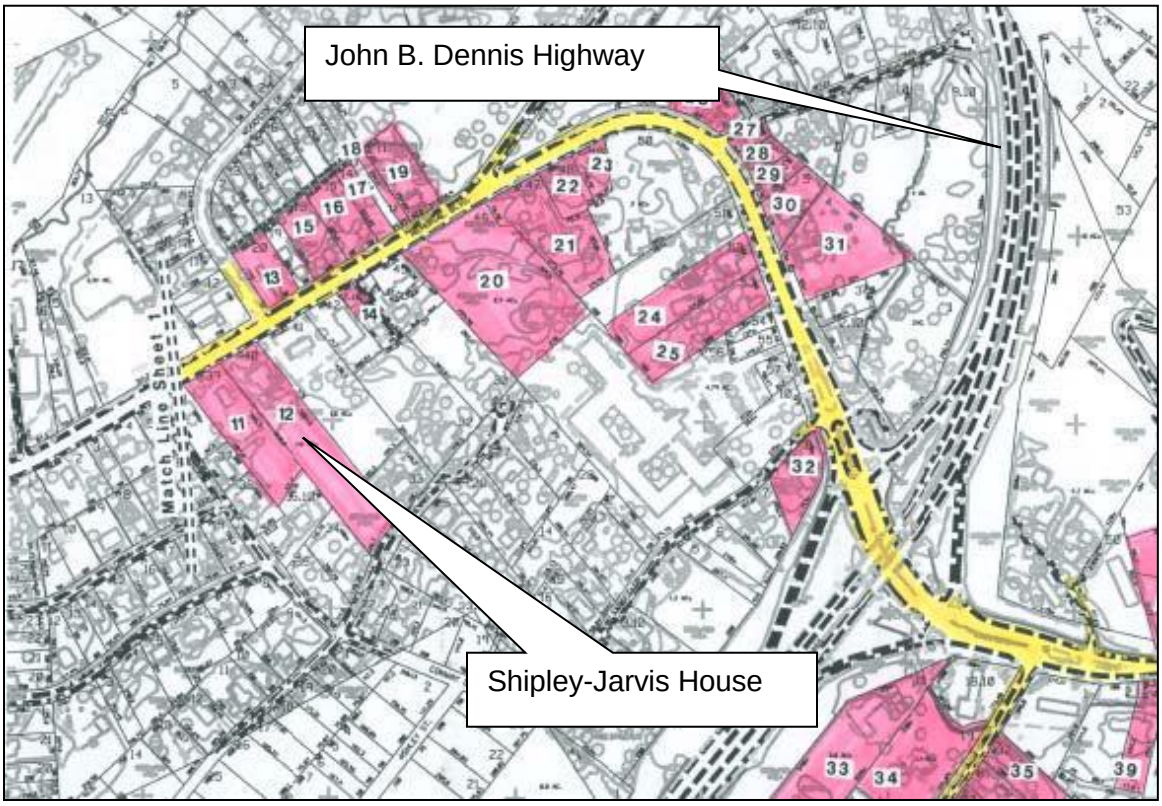


FIGURE 4.11.2: SHIPLEY-JARVIS HOUSE

4.13 ARCHAEOLOGICAL ASSESSMENT

A Phase I Cultural Resources Survey for the proposed improvements to SR 126 (Memorial Boulevard) has been completed. The purpose of the archaeological survey was: to identify and evaluate any archaeological resources (excluding standing structures) located within the area of potential effect that were listed or potentially eligible for listing on the National Register of Historic Places (NRHP) pursuant to the criteria set forth in 36 CFR 60.4; to assess the effects of the proposed construction on such resources; and to provide recommendations for further archaeological resource management decisions in compliance with Section 106 of the National Historic Preservation Act.

The results of the archaeological surveys identified four sites within or adjacent to the proposed build alternatives.

40SL412 is a late 19th-early 20th century farmstead site with a small prehistoric component. The site contains information that could be important to understanding life in rural Sullivan County in the late 19th-early 20th centuries.

40SL413 is a prehistoric lithic scatter that has a high potential for intact deposits below the plowzone. Since there are not many prehistoric sites along the corridor, the SHPO agreed this one is potentially eligible.

40SL419 is the archaeological component of the already NR-listed Yancey's Tavern property, including both historic and prehistoric components. The historic component was determined eligible and the prehistoric component was determined potentially eligible. The prehistoric component lies inside the area of the barn, Eaton Station Road, and SR 126 (Memorial Boulevard).

40SL421 is a small historic house site with a surviving stone-lined cellar and a brick-lined cistern, both situated on a rocky rise between the current SR 126 (Memorial Boulevard) and one of its earlier roadbeds. Probable dates for the structure range from between 1854 and 1939.

The proposed Build Alternatives have been modified to avoid impacting these sites. The SHPO has reviewed the revised project area, and in a letter dated July 14, 2010 stated the project as presently proposed contains no archaeological resources eligible for listing in the National Register of Historic Places. (SHPO letter is included in **Appendix B**)

Native American Consultation

A Section 106 consultation notice was sent to the following federally recognized tribes for Sullivan County. An asterisk indicates a response was returned. No culturally sensitive or sacred sites were identified. Each responding tribe requested to be notified in the event of an inadvertent find.

- Eastern Shawnee Tribe of Oklahoma*
- Muscogee (Creek) Nation*
- Eastern Band of Cherokee Indians*
- Chickasaw Nation
- Choctaw Nation of Oklahoma
- Seminole Nation of Oklahoma
- United Keetowah Band of Cherokees
- Quapaw Tribe of Oklahoma
- Thlopthlocco Tribal Town, Oklahoma

Since the initial consultation with the Native American Tribes, two (2) additional tribes have been recognized, The Cherokee Nation and the Shawnee Tribe. Consultation with these additional Native American Tribes will be completed prior to submittal of the FEIS.

If archeological material is uncovered during construction, all construction will cease in that area and the Tennessee Division of Archaeology and the recognized Native American Tribes will be contacted so a representative can have the opportunity to examine and evaluate the material. A copy of the Archaeological Survey is on file at TDOT Environmental Division office in Nashville.

4.14 SECTION 4(F) EVALUATION

4.14.1 Section 4(f) Finding

Section 4(f) of the United States Department of Transportation (USDOT) Act of 1966 Section 6009, requires federal aid projects to include special efforts to preserve the natural beauty of the countryside, public park and recreation lands, wildlife and waterfowl refuges, and historic sites. Approval of projects that have the potential to impact any of these resources can be made only if the following conditions are met:

1. There is no feasible or prudent alternative to the use of land from the property; and
2. The action includes all possible planning to minimize harm to the property resulting from use.

The purpose of **Section 4(f)** is to preserve publicly owned land from a public park, recreation area, wildlife or waterfowl refuge, or significant historic site from being used for a transportation project. It requires consideration of avoidance or mitigation of damages.

There are two historic sites within the project study corridor. The Build Alternatives as presently proposed will not take property from either site. There are no public parks, recreation lands, wildlife or waterfowl refuges in the project impact area. No Section 4(f) resources will be impacted by the proposed Build Alternatives.

4.15 SECTION 6(F) LAND AND WATER CONSERVATION ACT

No Section 6(f) funds have been appropriated in the project impact area.

4.16 HAZARDOUS MATERIAL IMPACTS

Hazardous materials are substances that have, or will have when combined with other materials, a harmful effect on the human and natural environment. Hazardous materials are primarily regulated under the Federal Resource Conservation and Recovery Act (RCRA) of 1976, as amended, the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) of 1980; and the Superfund Amendments and Reauthorization Act (SARA) of 1986.

A broad hazardous materials study was conducted for this project in 2007/2008. The results of the study were based on visual inspection and documentation of state and federal agencies. Agencies whose records were reviewed included the U.S. Environmental Protection Agency (EPA) and the Tennessee Department of Environment and Conservation, Division of Underground Storage Tanks (DUST) and Division of Solid and Hazardous Waste Management.

The National Priorities List (NPL) is a federal list of sites subject to cleanup directed by the EPA. These sites are part of the national Superfund program. The NPL revealed no NPL in the proposed project impact area.

The Comprehensive Environmental Response and Liability Act Information System (CERCLIS) is also part of the national Superfund program. Inclusion in CERCLIS is the first step in the ranking of potentially hazardous sites to determine whether they meet the criteria for inclusion in the NPL. There are no active CERCLIS sites within the project area.

Superfund also has an archive designation. The "archive status" means that assessment at a site has been completed and the EPA has determined no steps will be taken to designate the site as a priority by listing it on the NPL. There are no super fund sites in the project impact area.

4.16.1 Hazardous Materials

A Phase I Environmental Site Assessment (ESA) was conducted in accordance with the scope and limiting conditions set forth in the American Society for Testing and Materials (ASTM) practice 1527. Recognized Environmental Conditions (RECs) were identified for properties within, or adjacent to, the proposed right-of-way limits of the Build Alternatives under consideration in this document.

The goal of this Assessment was to determine the potential presence of aboveground and/or underground storage tanks, hazardous wastes or materials, solid and special wastes and areas of potential hazardous waste concerns which may pose a threat to human health and/or the environment. The results of the Phase I ESA were utilized to determine the need for Phase II Site Assessments.

The project team worked within a two thousand (2,000) foot wide corridor, one thousand (1,000) feet from either side of the existing centerline of SR 126 (Memorial Boulevard). A total of one hundred and eleven (111) sites were investigated in this Phase I ESA. Records searches and field inspections were combined to determine the existence of underground storage tanks (USTs), above ground storage tanks (ASTs) and other known and unknown sources of potentially hazardous materials.

In the Phase I ESA, a state and federal database search was conducted in March, 2008 and identified a total of nine (9) potentially Recognized Environmental Conditions (pRECs) located in the two thousand (2,000) foot wide study corridor of the proposed project. After a thorough review of the files, an on-site field reconnaissance, literature search, and conversations with officials from TDEC in Nashville and Johnson City, it was determined that three (3) sites were of sufficient concern to warrant a recommendation for Phase II testing.

4.16.2 Properties with Potentially Recognized Environmental Concerns

1. Station 5-0111; 3717 Memorial Boulevard, Kingsport, TN 37663

This site, just north of John B. Dennis Parkway, is currently not a hazardous waste concern. It was reported in 1991 to have had a leaking underground storage tank (LUST). The site is currently active, but past concerns appear to have been mitigated. No further environmental concerns appear to exist.

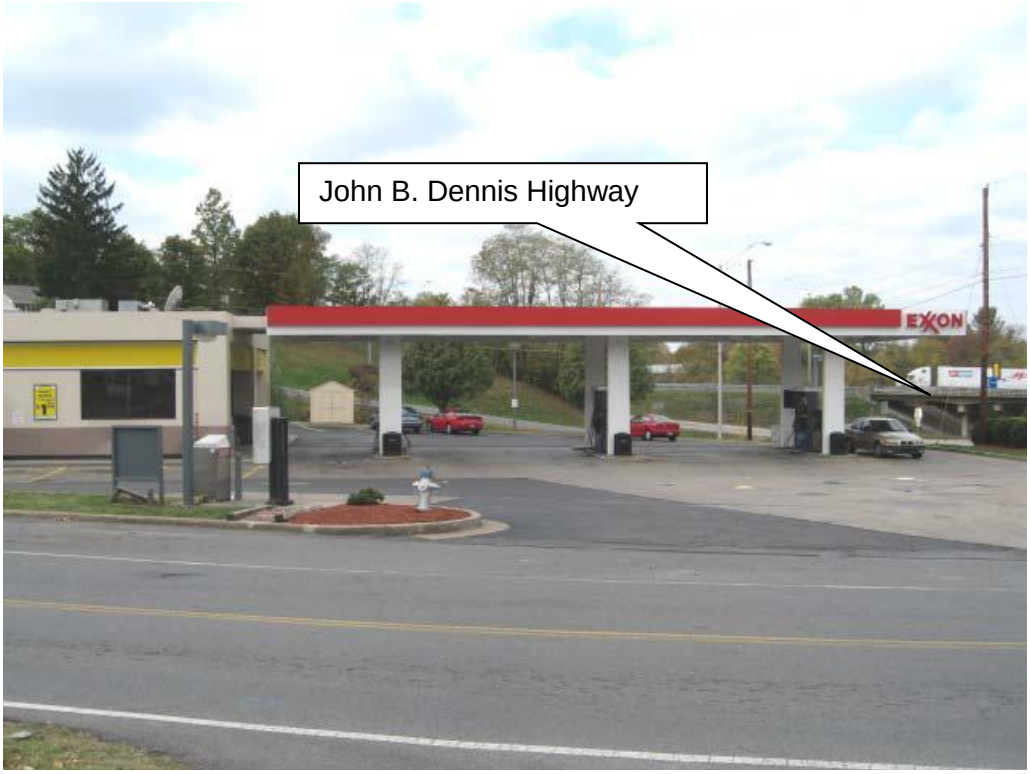


FIGURE 4.16.1: GAS STATION NEAR THE JOHN B. DENNIS HIGHWAY

2. Fuel and Convenience Store; 4001 Memorial Boulevard, Kingsport, TN 37664

This UST site is an active gasoline/convenience mart. A total of five gasoline tanks are located at this site. Two are in use and three are permanently out of use. The three inactive tanks showed no signs of leakage via stains, oil sheens or odors during field visits. The database records search indicates that no tank or pipe leakages have been reported.

The site's two active 12,000 gallon fuel tanks feature composite construction of steel with FRP. No leakages were evident during the visual walkthrough and none were reported in the database records search. An automotive tank gauge is used for inventory control and piping is flexible plastic.

Although the field visit and the search results indicate that no environmental concerns were evident, it is recommended that a detailed Environmental Site Assessment be conducted. This will ensure that no leakages of the out of service tanks are occurring or will occur prior to construction of the project.

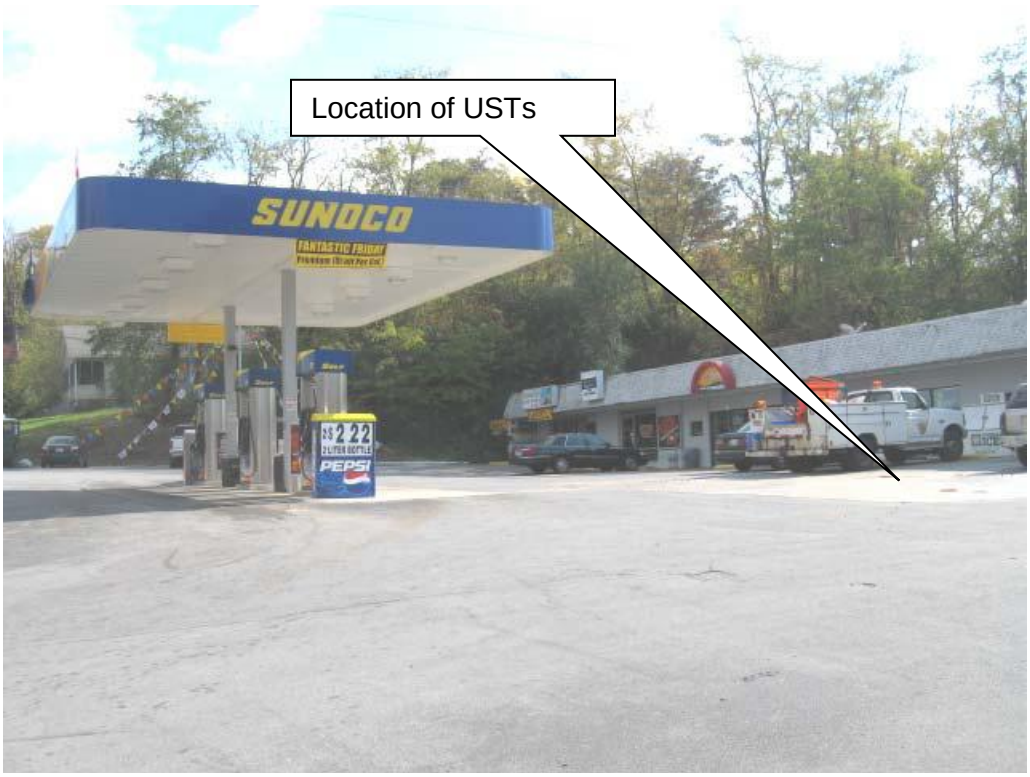


FIGURE 4.16.2: GAS STATION AT 4001 MEMORIAL BOULEVARD

3. Pool and Spa Supplies Store; 3933 Memorial Boulevard, Kingsport, TN 37664

This UST-reported site is currently occupied by a retail Pool and Spa store. An interview was conducted with the owner in November 2007 during the field trips. The project construction limits do not require a total acquisition of this site. The search indicated that a 1000 gallon UST for gasoline was once located on this site. Tank leak detection was listed in the report. Conversations with the owner indicate that the tank was removed approximately 20 years ago. Paperwork documenting the removal is located at this site. No vent pipes or other signs associated with gasoline USTs were evident at this site.

4. Gas Station; 5001 Memorial Boulevard, Kingsport, TN

This inactive UST site is located adjacent to SR 126 (Memorial Boulevard). The search indicated that three USTs are located on the site. Tank leak detection is listed for all three of the tanks. However an interview with the current owner indicated that the tanks were removed.

The current business occupying the site is an upholstery and fabric store. An interview with the Director of the Sullivan County Emergency Management Agency, confirmed that the tanks have been removed. According to the current occupant the tanks were removed approximately 25 years ago.

Although the site does not appear to present an environmental concern in relation to the project, a vent pipe was detected in the front, right corner of the building. If a Build Alternative requires partial or full acquisition of this property, it is recommended that further investigations be conducted to ensure that proper removal has been completed at the site.



FIGURE 4.16.3: FORMER GAS STATION AT 5001 MEMORIAL BOULEVARD – EVIDENCE OF TANK REMOVAL

5. Dry Cleaning Service; 3200 Memorial Boulevard, Kingsport, TN 37660

This site was identified as a Resource Conservation and Recovery Act (RCRA), and FINDS (Facility Index System) site. Drycleaners produce ignitable waste. The Tennessee Department of Environment and Conservation (TDEC) records database indicated that there are no concerns associated with this site.

Any substances used for dry cleaning are contained within the building. The walking inspection of the site indicated no leakages or stains, and no odors were evident. This site is located near the western terminus of the project in an urban setting. The removal of the dry cleaning facility could pose a minor environmental concern due to ignitable waste and warrants further evaluation.

6. Pipe & Muffler Repair Service; 3310 Memorial Boulevard, Kingsport, TN 37664

This automobile repair facility is a former full service gasoline station. Conversations with the owner indicate that the gasoline tanks have been removed. At this time, the site does not appear to present environmental concerns for the project. The field visit did not indicate the presence of ASTs, USTs, hazardous waste, stains or signs of leakage on the premises. No environmental concerns appear to exist for this site.

7. Market and Deli; 5121 Memorial Boulevard, Kingsport, TN 37664

This is an active site. Database reports and field visits indicate that two gasoline tanks are located on this site and both are currently in use. Each tank is a fiber reinforced plastic tank, asphalt coated and the interiors are lined. The pipe materials also consist of nonpressurized fiberglass reinforced plastic material. No leaks have been detected and no environmental concerns have been reported in relation to this site.

An inactive kerosene tank was reported as leaking in the past. A fourth tank, a 2000 gallon diesel tank, was identified, but no tank leaks were reported or evident. The field trip did not reveal any stains, oil slicks or other visual signs of contamination associated with leaks. The site is located east of any anticipated construction activities. Further investigation is recommended if future alignments shift to the east to ensure that the kerosene leak has either been mitigated or is avoided.



FIGURE 4.16.4: MARKET AND DELI AT 5121 MEMORIAL BOULEVARD

8. Unnamed Construction Site; SR 126 (Memorial Boulevard adjacent to 5234 Memorial Blvd.), Kingsport, TN 37664

This is an unreported site. Reviews of the project plans indicate that only a portion of the property near the front would be affected by the project. This area does not appear to be included in the area where debris was noticed.

Field visits revealed that tires, vehicles, and junk are scattered throughout most of the site, but not the front area. Trucks and construction equipment are visible, and conversations with area residents indicated that a potential landfill exists. The materials in the fill could include tires and potential automotive fluids including fuel, oil and other materials associated with vehicles. The site was chained and inspections were limited to views from a property on the eastern perimeter of the property and from the roadway.

If alignment changes are made and the proposed new roadway is shifted to the north, minor environmental concerns for the project might occur. Information pertaining to the owner is available and was provided for TDOT in the Hazardous Materials/Underground Storage Tank technical study; however, the speculative nature of the materials at the site means that photographs that would identify the site and specific information will not be published in this document.

9. Auto Repair; 5637 Memorial Boulevard, Blountville, TN 37617

This is a former gasoline station that has re-opened since the field study was conducted. It currently provides automobile service, but does not supply automobile fuel. Current plans indicate that a partial acquisition of the property would avoid all areas associated with hazardous materials. If the plans change or a total acquisition is required, this site might present environmental concerns, and a Phase II ESA investigation could be necessary.

The field visit and walking inspection of the site revealed three rusting 55 gallon drums labeled "used antifreeze" in the side lot on the west side of the building. The drums were sealed, almost filled, and no leakage was evident in the gravel underneath the drums or on the surfaces of the drums themselves. An above ground storage tank (AST) was detected on the back side of the building. The partially filled AST is connected to the structure via a PVC pipe. This AST stored used motor oil. Some spillage was evident on the tank and immediately underneath the tank. A kerosene AST is located on the east side of the building and appeared to still contain some of the kerosene. No leakage was evident.

The garage area has two hydraulic lifts which show evidence of some leakage of hydraulic fluids on the lift posts and the floor area immediately surrounding the posts. It appears that two UST tanks could remain in the ground in the area between the front of the building and SR 126 (Memorial Boulevard), and a vent pipe was detected at the entrance to the facility. In the area just west of the three drums, a small crater was noticed. Next to the small crater was a broken vent pipe. Although no stains were evident, it is likely that an UST could have been removed from this area.

It is likely that one or two USTs are located between the canopies and the area of the property adjacent to the existing state right-of-way limits along SR 126 (Memorial Boulevard). Further investigations were recommended for Build Alternatives A and B. The Johnson City TDEC Environmental Field Offices Petroleum Underground Storage Tank Facilities Division conducted a follow-up investigation in the spring of 2010. The three drums containing antifreeze liquid were removed, and no fuel tanks remain in the ground. The site was cleared of concerns in relation to the proposed project by TDEC.



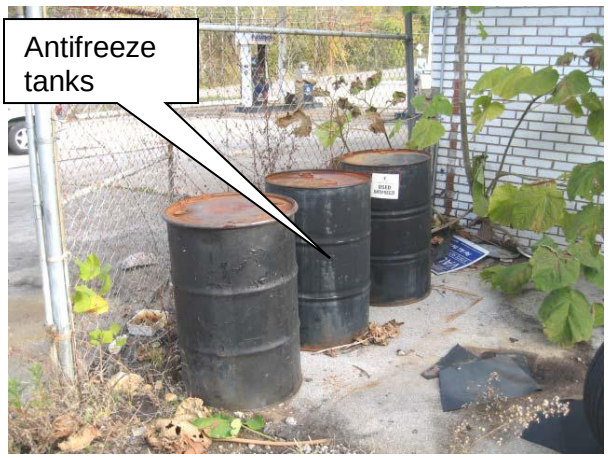




FIGURE 4.16.5: AUTO REPAIR; 5637 MEMORIAL BOULEVARD

4.16.3 Sites Recommended for Phase II Investigations

Site 2 – Fuel and Convenience Store (4001 Memorial Boulevard, Kingsport, TN)

This site is an active store that sells gasoline. A total of five fuel tanks are located at this site. Two are in use and three are permanently out of use. None of the tanks have been reported to leak, and no visual signs of leakage are evident (stains, oil sheens or odors). Both Alternative A and Alternative B would require acquisition of the property requiring removal of the tanks. If a Build Alternative is selected, a scope of work will be written by TDOT and bid packages will be assembled for removal of the A&B, the USTs, product lines, and vent pipes prior to site demolition. The UST removal will be conducted under TDEC Division of Underground Storage Tanks (DUST) rules, but without seeking DUST fund reimbursement. An access agreement, if necessary, will be sought with the site owner prior to removal activities. The UST removal project will be conducted by TDOT.

Site 5 – Dry Cleaning Service (3200 Memorial Boulevard, Kingsport, TN)

Site 5 will be impacted by both Build Alternative A and B. All substances are contained within the building. Site investigations did not indicate leakages or stains and no odors were evident. Since this business contains ignitable substances, further evaluation is needed prior to removing the structure. The disposition of any chemicals will comply with both Federal and State rules and regulations.

Site 7 – Fuel and Convenience Store (5121 Memorial Boulevard)

This active site indicated that two gasoline fuel tanks are located and currently in use. Each tank is a fiber reinforced plastic tank, asphalt coated, and the interiors are lined. No leaks have been detected, and field trips confirmed this site during a visual inspection of the grounds. An inactive kerosene tank was reported as leaking in the past, but appears to be corrected. A fourth tank, a 2000 gallon diesel tank, was identified, but no leaks have been reported or were evident during the site visit. Alternative A would avoid the site, but Alternative B would impact the site requiring removal of all tanks. If Alternative B is selected, a scope of work will be written by TDOT and bid packages will be assembled for removal of the A&B, the USTs, product lines, and vent pipes prior to site demolition. The UST removal will be conducted under TDEC

Division of Underground Storage Tanks (DUST) rules, but without seeking DUST fund reimbursement. An access agreement, if necessary, will be sought with the site owner prior to removal activities. The UST removal project will be conducted by TDOT.

TABLE 4.16.4: SUMMARY OF UST AND HAZARDOUS MATERIALS IMPACTS

Alternative	Site	Site	Site	Total Sites
A	#2	#5	NA	**2**
B	#2	#5	#7	**3**

Site 2 and 5 would be impacted by Alternative A, while Sites 2, 5, and 7 would be impacted by Alternative B. **Figure 4.16.5** provides a comprehensive map of identified hazardous materials sites.

The majority of the properties associated with the proposed Build Alternatives have low or no potential for environmental impact. Three (3) sites have the potential to contain hazardous material. A Phase II Environmental Site Investigation will be performed on these parcels prior to commencement of construction activities. A Phase II Environmental Site Investigation consists of soil and/or groundwater sampling to determine the extent of potential or know contamination.

In the event hazardous substances/wastes are encountered within the proposed right-of-way prior to or during construction activities, the appropriate authorities will be notified, permits will be secured, and cleanup activities will take place. Their disposition shall be subject to the applicable sections of the Federal Resource Conservation and Recovery Act (RCRA), as amended; the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), as amended; and the Tennessee Hazardous Waste Management Act of 1983. A copy of the Phase I Preliminary Site Investigation is on file in the TDOT Environmental Division Office in Nashville.

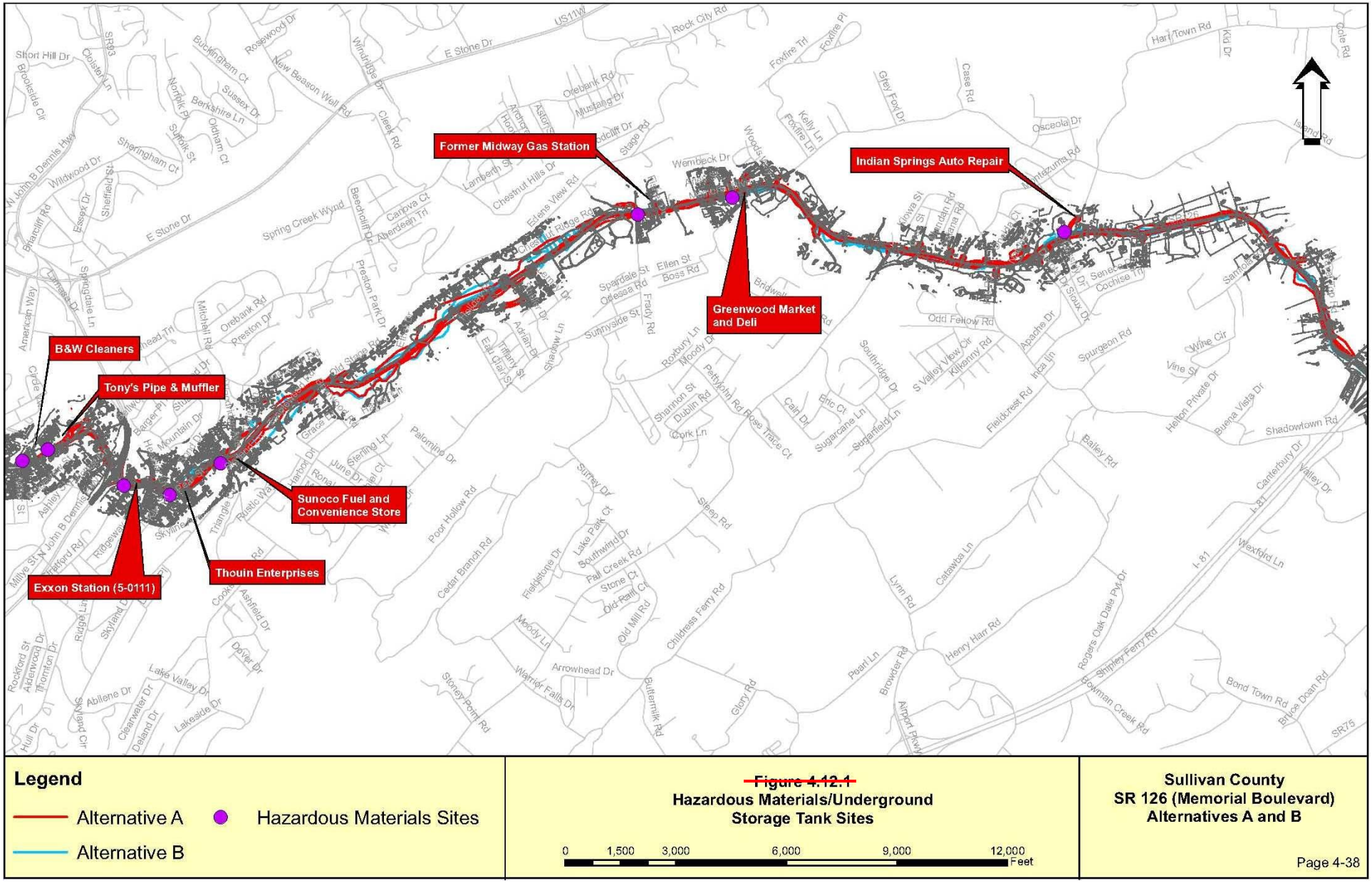


FIGURE 4.16.5 HAZARDOUS MATERIALS/UST SITES

4.17 VISUAL IMPACTS

A visual impact assessment was conducted to evaluate the affects of the project on the area's visual resources. The SR 126 (Memorial Boulevard) project was the initial Context Sensitive Solutions (CSS) Project for Tennessee. A Community Resource Team (CRT) was assembled for the SR 126 (Memorial Boulevard) CSS project. During the CSS Project, the public expressed concerns about diminished visual and rural aesthetics in the corridor if a continuous four-lane roadway was constructed. As a result, the CRT expressed preferences for blending four-, three-, and two-lane sections of the roadway. The Build Alternatives incorporate these preferences.

Visual impacts can be defined as changes to the visual landscape. Visual impacts can be categorized as minimal, moderate or high. Minimal impacts generally occur when existing transportation facilities are already part of the viewshed, the view has few or no visually sensitive resources and the proposed project would introduce few, if any noticeable changes to the viewshed. Moderate visual impacts occur when changes to the existing viewshed would be noticeable, but not substantial and/or there are visually sensitive resources that would undergo a noticeable change in view. High visual impact occurs when substantial changes are made to the existing viewshed that would result in a greatly changed view and/or there are visually sensitive resources that would undergo a substantial change in view.

Viewer groups in the project area fall into two categories; persons with a view of the surrounding area from the existing roadway and person with a view of the existing roadway from the surrounding area. The proposed project passes through commercial, residential, and agricultural areas. The western portion of the Build Alternatives, extending from East Center Street to SR 93 (John B. Dennis Highway), follows existing SR 126 (Memorial Boulevard). The dominant visual elements in this area are buildings. The development is typical of built up areas found around cities and does not indicate visual sensitivity or unique visual importance. Few changes other than widening shoulders and providing some additional sidewalk will occur in this area; therefore, no adverse visual impact is anticipated.

Beginning at SR 93 (John B. Dennis Highway) and extending to east of Old Stage Road, the proposed project will widen existing SR 126 (Memorial Boulevard) from two to four lanes. The widening of the roadway through this area will cause a minimal impact to moderate impact since there is an existing facility in place. The dominant visual element through this area is predominantly commercial developments with scattered residential developments.

In the last segment of the Build Alternatives, from near Old Stage Road to the end of the project, the dominant visual element through this segment is predominantly residential with some commercial and agricultural property and the local cemetery. The widening of the existing roadway will cause a minimum to moderate impact on the visual environment since an existing facility is in place. The viewshed will change with the adding of additional lanes, shoulders and sidewalks. The visual effect would generally not be adverse. However, The State Historic Preservation Office has reviewed the project and in a letter dated November 3, 2008 stated that an adverse visual effect to the historic Yancey's Tavern would occur if either Build Alternative was selected (See **Appendix B** from SHPO letter). Please refer to **Section 4.12 Historic Impacts** for a more detailed discussion of the impacts to Yancey's Tavern.

4.18 WILD & SCENIC RIVERS

4.18.1 Wild & Scenic River Legislation

The Wild & Scenic Rivers Act established a National Wild & Scenic Rivers System in 1968 for the protection of certain selected rivers of the Nation which, with their immediate environments, possess "outstandingly remarkable scenic, recreational, geologic, fish and wildlife, historic, cultural or other similar values." These rivers are to be preserved in free-flowing condition and their immediate environments are to be protected for the benefit and enjoyment of present and future generations.

The Obed River and its two main tributaries, Clear Creek and Daddys Creek, located in Cumberland County and Morgan County, is the only federally designated Wild & Scenic River in the State of Tennessee.

4.18.2 Impacts to Wild & Scenic Rivers

There are no rivers or streams in the project impact area designated as Wild or Scenic Rivers. No impacts to federally-designated Wild & Scenic Rivers will occur as a result of the proposed project.

4.19 ENERGY IMPACTS

Construction of the Build Alternatives will involve the commitment of energy resources both during the short-term construction period and throughout the long-term operation of the facility. The energy requirements of the Build Alternatives are greater than the energy requirements of the No-Build Alternative.

The energy used by the Build Alternatives can be characterized as follows:

Construction: Energy would be used for the manufacturing and transport of the construction components and by the heavy equipment utilized for roadway and bridge construction.

Maintenance: The project would require routine maintenance that could result in energy use for the maintenance actives. Traffic delays could accompany the maintenance activities and could result in temporary increases in energy use.

Motor Vehicle Use: Improved traffic flow and reduced travel time could result in a decrease from existing energy use.

In summary, the amount of energy required to construct a roadway project of this type is substantial, but temporary in nature, and generally leads to reduced operating cost once the project is completed. A reduction in cost and energy use could come from improved access, reduced travel time and increased safety (i.e. less accidents on local roads that hold up traffic and require emergency services).

4.20 CONSTRUCTION IMPACTS

A major construction project, public or private, will likely inconvenience or disturb residents, businesses and business customers. In the case of improvements to an existing highway,

inconvenience to highway users also occurs. The maintenance of traffic and access to properties adjoining the road and utility relocations are particular construction-related impact issues that must be addressed with this project.

Without proper planning and implementation of controls, traffic disruption, loss of access and utility relocation could adversely affect the comfort and daily life of residents and disrupt the flow of customers, employees and material/supplies to and from businesses. Construction impact controls would be integrated into the project's contract specifications and traffic control plans. The Build Alternative would have physical construction-related impacts, but with implementation of appropriate controls, no cumulative or secondary impacts are foreseeable. The following construction issues are addressed below:

- Maintenance of Traffic and access
- Economic benefits
- Waste disposal
- Utility relocation
- Discovery of unknown archaeological sites
- Erosion control
- Air quality
- Noise

Maintenance of Traffic and Access: Traffic will be maintained on existing roadways during construction or detours will be developed. Access to all properties will be maintained during construction.

Economic: The construction activities may result in short-term economic benefits to the local area that would include increased revenue to local businesses through the sale of construction supplies and material and retail/service purchases by construction personnel. Construction jobs also could be available for persons residing in the area. These short-term revenues and jobs are not expected to be significant locally or regionally.

Construction could result in adverse economic impacts to the local businesses along the corridor that are not relocated as a result of the project due to some motorists avoiding the corridor during construction, thus lessening the potential number of customers for some businesses. The construction related adverse impacts would be minimal and short-term.

Waste Disposal: Solid waste will be generated by project construction (i.e. through removal of structures that cannot be relocated). The quantity of disposed waste would represent a negligible proportion of the total load directed toward local landfills.

Any toxic and hazardous materials would be handled and used in accordance with package labels and manufacturer's directions. Wastes would be segregated, labeled and stored in a manner that would prevent their release into the environment from an accident or spill. The contractor would dispose of these materials and their containers in accordance with applicable state and federal regulations.

Disposal of excess material would be the responsibility of the contractor, who will be contractually required to handle and dispose of the material in accordance with the TDOT *Standard Specification for Road and Bridge Construction.* These specifications require that the contractor comply with open burning regulations and be supervised by a competent watchman; that material is disposed of in accordance with all applicable laws and ordinance and that material disposed on private property have a signed agreement with the property owner.

Utility Relocation: The relocation of utilities will be included in final design plans. As appropriate, TDOT and the City of Kingsport will coordinate with the appropriate officials to avoid or minimize damage or disruption of existing service.

Discovery of Unknown Archaeological Sites: If archaeological materials are uncovered during construction, all construction work in the area of the find will cease. The Tennessee Division of Archaeology (615-741-1588) and the recognized Native American Tribes previously coordinated with will be immediately contacted so a representative of their office may have the opportunity to examine and evaluate the materials.

Borrow Pits: Should earth fill be required for this project, the applicable TDOT borrow provisions will be followed.

Erosion Control: The Build Alternatives will disturb land that has a tendency to erode when disturbed. The contractor will be required to employ FHWA Best Management Practices for Erosion and Sediment Control (1995) to minimize the impacts of point and non-point source pollution resulting from increased siltation and highway runoff. A sediment control plan will be formulated in accordance with the TDOT *Standard Specifications for Road and Bridge Construction* and will include the following measures:

- Temporary erosion control devices, such as silt fences, straw bales, burlap, jute matting, grading, seeding and sodding will be used to minimize erosion and sedimentation.
- Removal of vegetation will be minimized.
- Fill slopes should be constructed and stabilized during the growing season through the establishment of non-invasive vegetation.
- The planting of native woody and herbaceous vegetation should be encouraged.

Air Quality: Even though the National Ambient Air Quality Standards (NAAQS) are not exceeded in the design year, all phases of construction operations could temporarily contribute to air pollution. Particulates would increase slightly along the project as dust from construction activities collects in the air surrounding the project. The construction equipment would temporarily produce slight amounts of exhaust emissions. The emission of air pollutants would be reduced by the use of properly maintained equipment and the use of tarp covers on trucks transporting refuse and construction waste products.

Any burning of wastes and control of dust will be the responsibility of the construction contractor. The contractor must meet the burning and dust control requirements of TDOT's *Standard Specifications for Road and Bridge Construction* and is required to comply with applicable state and local laws, ordinances and regulations regarding these emissions.

Construction Noise Abatement: Temporary noise impacts will occur within the immediate vicinity of the construction activities. The exact noise levels cannot be predicted because the specific types of construction equipment, methods and schedule are unknown at this time.

The following noise abatement measures will be incorporated into the contract plans and specifications in order to prevent adverse construction noise impact in the vicinity of the proposed project:

- The contractor shall comply with all state and local sound control and noise level rules, regulations and ordinances that apply to any work performed pursuant to the contract.
- Each internal combustion engine used for any purpose on work related to the project shall be equipped with a muffler of a type recommended by the manufacturer. No internal combustion engine shall be operated on the project without such muffler.

4.21 SHORT-TERM IMPACTS VERSUS LONG-TERM BENEFITS

Short-term impacts related to highway improvements will occur during construction operations. Some interruption to vehicular traffic flow is inevitable; however, appropriate maintenance of traffic phasing will be employed to minimize inconvenience. Traffic control plans will be developed to minimize congestion and delays during construction.

Temporary air impacts from dust and exhaust fumes, and noise associated with construction operations cannot be avoided. Every effort will be made to minimize these effects by using best management practices.

Many long-term benefits are anticipated to result from the proposed project, such as a decrease in travel time and traffic congestion and an improved level of service. Accidents along segments of existing highways may also decrease over the long term. Elimination of congestion is expected to result in more efficient use of energy. In the long term, the construction of the roadway through the area will provide a better modal connection and could provide an economic benefit through establishment of new businesses along the corridor.

4.22 IRREVERSIBLE AND IRRETRIEVABLE COMMITMENTS OF RESOURCES

Irretrievable resources necessary to build the proposed roadway include energy (fossil fuel), concrete, aggregate and steel. None of these materials are in short supply. Implementation of the proposed project involves a commitment of a range of natural, physical, human and fiscal resources. Land used in the construction of the proposed facility is considered an irreversible commitment during the time period that the land is used for a highway facility. However, if the highway facility is no longer needed, the land can be converted to another use.

Considerable amounts of fossil fuels, labor and roadway construction materials such as cement, aggregate and bituminous materials will be expended. Additionally, large amounts of labor and natural resources will be used in the fabrication and preparation of construction materials. These materials are generally not retrievable. However, they are not in short supply and their use will not have an adverse effect upon continued availability of these resources. Construction will require a one-time expenditure of both state and federal funds, which are not retrievable.

The commitment of these resources is based on the concept that residents in the immediate area, state and region will benefit by the improved quality of the transportation system. These benefits will consist of improved accessibility and safety, savings in time and greater availability of quality services that are anticipated to outweigh the commitment of these resources.

4.23 INDIRECT AND CUMULATIVE IMPACTS

The purpose of an Indirect and Cumulative Impacts Assessment is to present an evaluation of the reasonably foreseeable potential indirect and cumulative impacts expected as a result of this project. By United States Code of Federal Regulations (CFR) definition, *direct effects (or*

impacts) are caused by the action and occur at the same time and place (40 CFR § 1508.8). *Indirect effects (or impacts)*, are caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable. Indirect effects may include growth-inducing effects and other effects related to induced changes in the pattern of land use, population density or growth rate, and related effects on air and water and other natural systems, including ecosystems (40 CFR § 1508.8). *Cumulative effects (or impacts)* are impacts on the environment which result from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time (40 CFR § 1508.7).

Indirect and Cumulative Impacts for the Human and Natural Environments associated with the SR 126 (Memorial Boulevard) project include:

- Land Use
- Farmland Conversion
- Terrestrial Habitat
- Aquatic Habitat
- Historic Resources
- Archaeological Resources.

Reviews of project area mapping were conducted using aerial photographs from the 1950s through 2006. The maps have been combined with field visits, and with conversations in the company of local officials to determine the types of growth that have been experienced in East Kingsport and Sullivan County. The area of potential effect was defined as the area circumscribed by US 11, SR 126 at East Center Street, Falls Creek Road and the intersection of SR 126 with I-81. This area has experienced steady residential growth throughout a fifty-year period. Additionally, residential development is ongoing throughout the area. Neighborhoods between SR 126 (Memorial Boulevard) and Falls Creek Road are currently adding an estimated 100 to 125 new homes in the area. Local officials indicate that this rate of growth and type of development will continue whether the improvements to SR 126 (Memorial Boulevard) are implemented using either Build Alternative, or if the No-Build Alternative is selected.

Due in part to both Build Alternatives not adding travel lanes to approximately half of the study corridor, implementation of the improved facility would likely not result in an increase in land use development pace, nor would it be likely to induce a change in the types of land uses (i.e. shifting to industrial development from residential development and light commercial development).

When reviewing the historic aerial maps and combining the lack of measurable growth around the I-81 Interchange, it is evident that development activities in the eastern portions of this project are minimal and not expected to substantially increase in the next 20 to 25 years. Overall the area is either already saturated with business and residential land use or is converting at a steady and sustained rate. The implementation of an improved SR 126 (Memorial Boulevard) with additional lanes and new shoulders will not measurably increase or decrease the current patterns.

It can be safely concluded by the age of the structures, and by reviewing the historic aerial maps on file at the TDOT Environmental Division Office in Nashville, TN, that the residential growth that has occurred in the area began several decades ago. This growth has been continual over the fifty-year period. Conversations with the local officials indicate that the improvements to SR 126 (Memorial Boulevard) are in response to the increased traffic

throughout the project area. Most of the surrounding neighborhoods, communities, and scattered farm residences between US 11W and Falls Creek Road use SR 126 (Memorial Boulevard) as their main roadway for accessing shopping, work and government service needs in Kingsport, and to I-81. As residential development continues in this area, traffic is anticipated to continue to increase causing additional burdens on the existing facility. The established land use changes from agricultural to residential applications and improvements to the existing SR 126 (Memorial Boulevard) facility indicate that very little indirect or cumulative impacts are anticipated for the human or natural environments within the area served by the project area. The roadway itself is not, nor would be, a major influence of land use patterns, but is more of a solution to changing conditions of the land uses. It would not result in a measurable change of impacts for either of the two Build Alternatives, A or B.

The residential and agricultural activities in the area have already displaced forested areas, natural habitat areas and farmland. These rates will not appreciably change, whether the new road is constructed or the No-Build Alternative is selected. Therefore additional pressures to animals, plants, wetlands and streams are not expected to substantially increase. Impacts to the human environment will improve due to reduced accidents and more efficient facility for transportation within the corridor. However, no substantial increase to the current rate of land use transition from agricultural to residential applications is anticipated. Commercial applications in the rural sections of the corridor are very lightly represented; many occupy older structures, such as an upholstery shop that has occupied a former gas/market company. Other older structures also are occupied by gas/food marts. Those sites not relocated by the project will be better served with the increased efficiency and improved safety conditions of a new roadway.

Many of the sites are geographically dependent. This means that they provide a variety of services, including convenience/gasoline businesses, groceries, veterinary services, clothing, and auto repairs to the smaller communities that are situated within the Area of Potential Effect. These sites will continue these services with some interruption from the construction of the improved facility, and they will experience some business losses from the improvements to SR 126 (Memorial Boulevard) or due to land use changes associated with an improved roadway in this area of Sullivan County.

It is believed that land use changes will continue even if the No-Build Alternative is selected. The difference of impact on land use change would likely be immeasurable. If a Build Alternative is selected, losses of floral and faunal habitat, degradation of water quality in streams, conversion of farmland, and potential impacts to historic and archaeological resources in the area are not anticipated to experience additional cumulative or indirect pressures from proposed action.

In general roadway projects most commonly result in indirect impacts to land use, farmland, community and economic resources, water quality, wetland and terrestrial ecology. Future construction activities along the corridor may result in a decline in the local wildlife populations due to the removal of habitat. Increased noise levels may also affect wildlife populations in the vicinity.

The cumulative impacts to land use in the study area as a result of past and future transportation and infrastructure projects has been anticipated by local governments for many years. Local land use plans have identified areas for future growth and local services. The Build Alternatives, as previously discussed in this document, are located mostly along the existing roadway. Future land use changes in the project impact area would be influenced by

other factors in addition to the proposed project. Changes in the local economy, changes in land use by local jurisdictions and other infrastructure changes can all affect how, when, and to what degree land is developed and redeveloped. A positive cumulative effect in transportation service to the surrounding area will occur with the proposed improvements to SR 126 (Memorial Boulevard). The project will provide a safer, less congested roadway for local travelers. As well as a safer environment for pedestrians and bicyclist.

Chapter 5:

Public Input and Agency Coordination



5.0 PUBLIC INPUT AND AGENCY COORDINATION

This section describes the agency coordination process and public involvement activities that were conducted for this project. In addition, the key issues that have been identified through those efforts are included in this section of the DEIS.

5.1 AGENCY COORDINATION

5.1.1 Initial Coordination

The initial coordination for the SR 126 (Memorial Boulevard) project was initiated with a package describing the project area, and sent to approximately 45 federal, state, and local agencies in December 2008. The initial package included a description of the proposed improvements to SR 126 (Memorial Boulevard) and goals of the project. A project data summary was attached along with an overview map of the area showing the project location that is under study, a data summary (which provided a description of the project and a list of potential environmental, economic and social concerns associated with the construction of the project), and a Coordination Plan. The agencies were invited to cooperate, participate or provide comments relative to the project and their appropriate levels of participations. The package included a letter requesting the recipient's review and comments on the project.

The following is a list of those agencies, officials, and organizations receiving the initial coordination package. An asterisk indicates a response was returned to TDOT. Local government representatives were also asked to contact any local, social or civic groups that might be concerned with the project. **Section 5.2** provides summaries of each response received during the initial coordination process, and the Letters of Response are provided in **Appendix A**, Initial Coordination.

5.1.2 Federal Agencies

Appalachian Regional Commission
Environmental Protection Agency
Federal Emergency Management Agency
Federal Energy Regulatory Commission
Federal Railroad Administration, Office of Economic Analysis
Federal Aviation Administration*
Tennessee Valley Authority, Environmental Services and Programs*
U.S. Army Corps of Engineers, Nashville District*
U.S. Department of Agriculture;
- Natural Resources Conservation Service*
- Wetland Reserve Program,

U.S. Department of the Interior;
- National Parks Service
- Office of Surface Mining*
- U.S. Fish and Wildlife Service*
- Water Resources Division, District Chief, Nashville, TN

U.S. Geological Survey, National Center, Reston, VA

5.1.3 State of Tennessee Agencies

Tennessee Department of Agriculture
Tennessee Department of Economic and Community Development
Tennessee Department of Education*
Tennessee Historical Commission, State Historic Preservation Office*
Tennessee Wildlife Resources Agency*
Tennessee Department of Environment and Conservation;
- Division of Air Pollution Control
- Division of Natural Heritage
- Division of Groundwater Protection
- Division of Solid/Hazardous Waste Management
- Division of Water Pollution Control
- Division of Water Supply

Tennessee Housing Development Agency

5.1.4 Local Agencies

City of Kingsport;
- Mayor Dennis Phillips, City of Kingsport

Kingsport MPO*;
- William Albright and Chris Campbell

Sullivan County*;
- County Mayor Steve Godsey, Sullivan County, TN
- Ambre Torbett, Director of Planning

Local and Regional Organizations:
- First Tennessee Development District
- Sullivan County Industrial Board
- Sierra Club, Knoxville
- The Nature Conservancy

5.2 SUMMARIES AND DISPOSITION OF COMMENTS

5.2.1 Federal Agencies

Federal Aviation Administration

Comment: *We have reviewed the proposed study area and found no issue or concerns that could affect the nearest airport (Tri-Cities Regional Airport) in that area. We feel, from your proposal, that this project will have no environmental impact for future airport development nor is this project located within Airport Clear Zones. We would like to be notified if changes should occur from the original studies.*

Response: None required.

Tennessee Valley Authority

Comment: *TVA is pleased to participate as a cooperating agency in the development of the Environmental Impact Statement for this road project. Depending on the final alignment, the proposed highway improvements may require a TVA Section 26a permit.*

As a cooperating agency under SAFETEA-LU and the Tennessee Environmental Streamlining Agreement, we would be pleased to work with you on defining the purpose and need, range of alternatives, and environmental analysis needs. We are not aware of unusual or unique environmental resources in the project area that should be addressed in the environmental review.

Response: TDOT will continue to coordinate with TVA throughout the project development process.

U.S. Army Corps of Engineers, Nashville District

Comment: *Based on the information provided and a brief explanation of the Kingsport, TN and Indian Springs, TN/VA USGS quadrangle maps, we anticipate that Sougan Branch, Fall Creek and other unnamed tributaries to the South Fork Holston River (SFHR) would be impacted by the construction of the Build Alternative. Impacts could result from culvert extensions and/or new road crossings.*

The regulatory authorities and responsibilities of the Corps of Engineers (Corps) are based mainly on two laws: Section 404 of the Clean Water Act (33 USC 1344) and Section 10 of the Rivers and Harbors Act of 1899 (33 USC 403). Section 404 requires a Corps permit for any discharge of dredged or fill material into waters of the United States. Section 10 prohibits the obstruction or alteration of navigable waters of the United States without a Corps permit. Sougan Branch, Fall Creek, and other unnamed tributaries to the SFHR are considered navigable waters of the US. No navigable waters of the US exist within the project study area. We do not have enough information at this time to estimate whether jurisdictional wetlands are present and would be affected by this proposal.

Our specific permitting requirements for construction of road crossings over jurisdictional waters would depend on the specific installation methods and associated impacts. Road crossings that would not involve substantial aquatic habitat alternation may qualify for authorization under our Nationwide Permit (NWP) program (33 CFR 330). Activities that do not qualify for NWP authorization would require approval under a Standard Department of the Army (DA) permit.

Finally, our permit review would include application of the Section 404(b) (1) Guidelines (40 CFR 230). The Guidelines require that no discharge of dredged or fill material may be permitted if there is a practicable alternative to the proposed discharge that would have less adverse impact on the aquatic ecosystem, so long as the alternative does not have other significant adverse environmental consequences.

Response: All applicable State and Federal permits will be acquired prior to project construction. No wetlands were identified within the project corridor during field surveys or reviews of NWI maps. No navigable waters are located in the project impact area.

U.S. Department of Agriculture, Natural Resources Conservation Service, Knoxville.

Comment: *This information was compiled using a corridor of 1,000 ft. on either side of existing SR 126 as specified in the information you sent. This project will result in the conversion of 132 acres of Prime Farmland as defined in the Farmland Protection Policy Act. Form AD-1006 is attached to this letter to document this determination. Prime farmland is land that has the best combination of physical and chemical characteristics, growing season, and moisture supply for producing agricultural crops. Generally, land may be pasture, forestland, or cropland but may not be urban built-up land or waterways. Additionally, construction within an existing right-of-way purchased on or before August 4, 1984, is not subject to the Farmland Protection Policy Act.*

Concerning Hydric Soils, there are 54 map units of Bloomingdale silty clay loam, 0 to 2 percent slopes, occasionally flooded within the corridor. These 4 map units occupy about 47 acres of the total 2,100 acres. Hydric soil criteria is only one of the 3 factors used in determining a wetland. Areas of hydric soils may or may not meet all of the requirements of a wetland.

Response: The farmland impacts will be included in the Draft DEIS.

U.S. Department of the Interior, Office of Surface Mining

Comment: *As a coal regulatory agency, our area of interest is generally limited to the coalfields of East Tennessee and this project lies well outside the coalfield area. This in combination with the fact that mineable coal is not known to exist in the Sullivan County area, and the fact that Federal regulations at 30 CFR Section 707 provide for a broadly based exemption from complying with Federal mining regulations for coal extraction incident to government financed highway construction, make it unlikely that our agency would have any jurisdiction or authority with respect to this proposed project. As such, we must decline your invitation to participate.*

Response: None required.

U.S. Department of the Interior, Fish and Wildlife Service

Comment: *We have reviewed the project summary and the possible role that our agency would have in the development of the State Route 126 improvement project. We accept the invitation to be a participating agency in the development of this project. We have also reviewed our existing database for any records of federally listed species near the proposed project. Our collection of records does (sic) not indicate that federally listed or proposed endangered or threatened species occur within the proposed study area of the project. We note, however, that collection records available to the Service may not be all-inclusive. Our data base is a compilation of collection records made available by various individuals and resource agencies. This information is seldom based on comprehensive surveys of all potential habitat and thus does not necessarily provide conclusive evidence that protected species are present or absent at a specific locality.*

Response: An ecology study has been completed and is on file at TDOT's Environmental Division Office in Nashville, TN. No threatened or endangered species have been identified in the project impact area.

5.2.2 State of Tennessee Agencies

The Tennessee Department of Education

Comment: *The Department of Education does not intend to submit comments on the project pertaining to the, from East Center Street in Kingsport, to Interstate 81 in Sullivan County, TN. P.I.N. 105467.00.*

Response: None Required.

Tennessee Historical Commission (State Historic Preservation Office)

Comment: *Considering available information, we find, after applying the Criteria of Adverse Effect codified at 36 CFR Part 800, that the project as currently proposed will ADVERSELY AFFECT YANCEY'S TAVERN, A PROPERTY THAT IS ELIGIBLE FOR LISTING ON THE NATIONAL REGISTER OF HISTORIC PLACES. You should now, through FHWA, inform the Advisory Council on Historic Preservation of this adverse effect determination and begin immediate consultation with our office. Please enclose a copy of this determination in your notification to the Council as delineated at 36 CFR Part 800. Until you have received a final comment on this project from this office and the Council, you have not completed the Section 106 review process. Please direct questions and comments to Joe Garrison, (615) 532-1550-103. We appreciate your cooperation.*

Response: TDOT initiated and is continuing the Section 106 process as communicated by the TN SHPO. The adverse visual impacts have been included in **Chapter 4**. An MOA between FHWA and the SHPO will be prepared prior to approval of the FEIS. Letters received from the SHPO are included in the Cultural **Appendix B** at the end of the DEIS.

Tennessee Wildlife Resources Agency

Comment: *The Tennessee Wildlife Resources Agency had received and reviewed the information your office provided to us regarding the invitation to be a participating agency for State Route 126 (Memorial Boulevard) from East Center Street, in Kingsport (sic), to Interstate 81 in Sullivan County, Tennessee. Our current concerns are potential environmental impacts associated with potential stream and wetland impacts due to the construction of this project. We accept the invitation to participate in this process and encourage continued consultation with our agency in future phases of this project to further reduce impacts to fish and wildlife resources.*

Response: TDOT will continue to coordinate with TWRA throughout the project development process.

5.2.3 Local Agencies

Kingsport Metropolitan Planning Organization

Comment: *We are in receipt of your letter to us concerning the initiation of an Environmental Impact Statement of the CSS-based State Route 126 project within the City of Kingsport and Sullivan County. Please note the City of Kingsport, in cooperation with the Kingsport MPO, enthusiastically agrees to, and accept, your invitation to become a participating agency in this process and will work to provide staff time and/or any input you may need from our resources to complete the review. This includes, but is not limited to, providing early input in determining the range of alternatives for improvements to SR 126, and participation in coordination meetings and joint field reviews.*

As we look forward to working with your agency on this phase, we also want to express our appreciation for your willingness to advance one of the MPO's priority projects. In addition, if you need further information or have additional questions concerning this matter, please feel free to call our offices.

Response: TDOT will continue to coordinate with the Kingsport MPO throughout the project development process.

Sullivan County Offices of Land Use, Department of Planning, Zoning & GIS

Comment: *As a previous member of the Local Resource Team on the SR 126/Memorial Blvd. study, representing Sullivan County, I would like to continue my service on this project. I am the county's Director of Planning, and would be happy to continue to serve on this city-county-state planning project.*

Response: TDOT will continue to coordinate with the Sullivan County Department of Planning throughout the project development process.

5.3 TENNESSEE ENVIRONMENTAL STREAMLINING AGREEMENT, CONCURRENCE POINTS 1 AND 2

The Tennessee Department of Transportation (TDOT) has implemented the *Tennessee Environmental Streamlining Agreement* (TESA) to facilitate understanding and interagency participation throughout the NEPA process. TESA is a four-step process that allows the participating and coordinating agencies on federal, state and local levels to review and participate in the decision making process. The four steps of TESA review process are:

1. Project Purpose and Need;
2. Evaluation of Alternatives;
3. Preliminary Draft Environmental Impact Statement;
4. Preferred Alternative and Preliminary Mitigation.

The TESA Process for SR 126 (Memorial Boulevard) was initiated by combining Steps 1 and 2, Project Purpose and Need and Evaluation of Alternatives. These steps were combined

because the project and its public involvement/stakeholders involvement participation was begun prior to the implementation of TESA process.

A field trip was conducted in June 2009 and a package summarizing the conditions, the surrounding environment, and options for alternatives were reviewed and discussed. Results of these efforts supported the decision to include two Build Alternatives, A and B, for review and comparison in the DEIS.

The TESA package for Concurrence Steps 1 and 2 was mailed in February 2009, to all agencies who requested to participate in or coordinate on this project asking for their comments and their concurrences with the project's purpose and need, and for alternatives to be evaluated.

The TESA package for Concurrence Step 3 was sent electronically in August 2011 to all agencies who requested to participate in or coordinate on this project asking for their comments and their concurrences with the Preliminary DEIS. Comments were received from the participating agencies and responses were sent to the agencies in October 2011.

Concurrence Step 4 will be completed prior to completion of the FEIS.

5.4 SECTION 106 COORDINATION

Section 106 of the National Historic Preservation Act requires federal agencies or applicants for federal assistance to consult with the appropriate State Historic Preservation Office (SHPO) before they carry out their proposed undertakings. Consultation letters with the Tennessee Historical Commission's SHPO are provided in **Appendix B, Cultural Resources**.

Pursuant to Section 106, a letter and project data summary were sent to Native American Groups and local officials inviting these parties to be a Section 106 consulting party for the project. The letter was sent on November 19, 2003. The following is a list of those Native American Groups receiving the Section 106 coordination package. An asterisk indicates a response was returned to TDOT. **Section 5.4.1** provides summaries of each response received during the Section 106 Coordination, and the Letters of Response are provided in **Appendix B, Cultural Resources**.

The following parties were invited to be Section 106 consulting parties for the project:

- Eastern Shawnee Tribe of Oklahoma*
- Muscogee (Creek) Nation*
- Eastern Band of Cherokee Indians*
- Chickasaw Nation
- Choctaw Nation of Oklahoma
- Seminole Nation of Oklahoma
- United Keetowah Band of Cherokees
- Quapaw Tribe of Oklahoma
- Thlopthlocco tribal town of east-central Oklahoma

On March 16, 2008, TDOT mailed a copy of the Architectural Assessment to each of the owners of surveyed properties and local groups with historic interests. Listed below are the property owners of sites that are listed in or eligible for the National Register. TDOT mailed a copy of the

Documentation of Effect Report to the two property owners whose sites are either listed in or eligible for the National Register.

Jack and Shirley Jarvis
NRE Shipley-Jarvis House
3309 Memorial Boulevard
Kingsport, TN 37664

Rann Vaulx
NRL Yancey's Tavern
405 Wine Circle
Blountville, TN 37617

The Environmental Division of TDOT prepared a list by counties of historic groups and similar organizations that might be interested in the proposed project. This list was compiled using the following sources:

- The State Historic Preservation Office's list of current county historians;
- The State Historic Preservation Office's list of Historic Sites and Museums;
- The State Historic Preservation Office's list of Historical Societies;
- The National Trust for Historic Preservation's list of member organizations in Tennessee, the American Association for State and Local History *Directory of Historical Societies and Agencies in the United States and Canada* (Twelfth Edition, 1982);
- Interested State Review Board Members;
- A questionnaire mailed to each of Tennessee's 95 County Executives

County Executives
- Steve M. Godsey, County Mayor, Sullivan County, TN

Mayor
- Dennis Phillips, Mayor, Kingsport

The following parties with identified historic preservation interests were also sent a letter and information package asking for their comments on the proposed project's potential effects to cultural resources:

- Mr. Sam Stuffle, Sullivan County Historical Society
- Mr. Ken Weems, CLG/Historic Commission, City of Kingsport
- Dr. Tom Maher, Tennessee Valley Authority, Cultural Resources
- Dr. Dale Royalty, East Tennessee State University, Department of History
- Ms. Claudia Moody, Northeast Heritage Tourism Area
- Ms. Deborah Montanti, The Heritage Alliance of Northeast TN & Southeast VA.
- Ms. Shelia Hunt, Sullivan County Historian, Department of Archives & History

5.4.1 Section 106 Responses

Section 106 Consultation letters are provided in **Appendix B, Cultural Resources**.

Advisory Council on Historic Preservation (ACHP)

Comment: *Based upon the information you provided, we have concluded that Appendix A, Criteria for Council Involvement in Reviewing Individual Section 106 Cases, of our regulations, "Protection of Historic Properties" (36 CFR Part 800), does not apply to this undertaking. Accordingly, we do not believe that our participation in the consultation to resolve adverse effects is needed.*

Response: None required.

Eastern Shawnee Tribe of Oklahoma

Comment: *Consult only if there is an inadvertent find.*

Response: None required.

Muscogee (Creek) Nation

Comment: *Consult only if there is an inadvertent find.*

Response: None required.

Eastern Band of Cherokee Indians

Comment: *Consult only if there is an inadvertent find.*

Response: None required.

Since the initial consultation with the Native American Tribes, two (2) additional tribes have been recognized, The Cherokee Nation and the Shawnee Tribe. Consultation with these additional Native American Tribes will be completed prior to submittal of the FEIS.

5.5 PUBLIC INVOLVEMENT, CONTEXT SENSITIVE SOLUTIONS PROCESS

This section documents and provides information on public, FHWA, TDOT, and local official efforts which led to the development of a concept for SR 126 (Memorial Boulevard) based on concerns, conditions, and early information. This synopsis is based on the culmination of a 21-month effort composed of meetings, field trips, and discussions between the various agencies and the public.

The Context Sensitive Solutions (CSS) Process

In September 2003, data collection such as gathering of mapping, traffic data, geometric features, and traffic accident reports initiated the CSS process. While the technical data gathered for the project provided an important piece of the information needed, it was not

completed until context was received by the local community. The CSS process requires that additional considerations be given to non-technical information and viewpoints. TDOT asked the City and County Mayors to appoint a community resource team to assist the project management team, people who reside in the local community, in gathering and understanding local concerns. This resulted in the assembly of a team of individuals from the community who provided insights and assistance throughout the project as a Community Resource Team (CRT).

The CRT was comprised of elected officials, City and County staff, and citizens who live in the study area. Since they were assembled specifically for this project and had not worked together previously as a team, it was necessary to begin with education. TDOT provided a two-day team building workshop facilitated by a professional team building consultant. This resulted in the definition of the study area boundary for the SR 126 (Memorial Boulevard) project.

Throughout the project, the CRT assisted the project managers with collection of information relative to citizen characteristics, concerns, and values. These subjective data were obtained through a combination of public involvement techniques. These techniques included surveys, one-on-one conversations, workshops, a focus group, and public involvement sessions. The community resource team served a valuable purpose by voicing local concerns for consideration by the project team.

Throughout the project, the basic process for gathering and evaluating data included a feedback loop. The project management team reviewed information, identified problems or issues, checked the validity of those conclusions by engaging the local team or community, revisited understandings, developed proposals, presented those proposals to the local team or community, and made modifications as necessary prior to final presentation.

CSS Process Overview

The process followed by TDOT and the project management team for this project was based on open communication, inclusion, and flexibility. This allowed the project management team freedom to try new things and develop a workable procedure.

The SR 126 (Memorial Boulevard) project was led by a project management team, which was assisted throughout the project by the CRT which provided local knowledge and guidance to the project management team. The CRT was consulted before any major project decisions were made.

Throughout the project the public was given information through a variety of outreach techniques that included: a project newsletter, website, postcards, local media, and three series of public involvement sessions. The public was encouraged to provide input to the project management and Community Resource Team through surveys, a toll free phone line, email, question and answer sessions, and face-to-face discussions.

The primary objectives of the Context Sensitive Solutions process that was followed for SR 126 (Memorial Boulevard) were:

- Provide multiple opportunities and methods for gathering community input
- Work closely with leaders and citizens from the local community
- Gather information to identify community values and concerns
- Build trust through listening and responding with integrity
- Maintain open, two-way communication
- Facilitate the Community Resource Team's ability to prepare a recommendation for improving SR 126 (Memorial Boulevard)

Summary of Community Resource Team (CRT) Recommendations

During the 21-month study process there was unanimous support among the members of the CRT for a large number of "Common Ground" recommendations. Majority decisions were made regarding design elements and roadway cross sections. Public opinion was surveyed at each Public Involvement Session, and the results of those surveys were reviewed and discussed by the CRT and used to guide their decision making.

This process resulted in the development of "Alternative A," which is one of the two Build Alternatives being evaluated and compared in the Environmental Impact Statement. It was developed by TDOT and its consultants during the Context Sensitive Solutions phase of the project based on the public input and concerns. Alternative B is a refinement of Alternative A, and was developed to further minimize impacts, and to provide a more feasible maintenance of traffic plan while remaining respective to the public's concerns in the project corridor.

CRT recommended:

The CRT provided ten (10) safety improvements, seven (7) points of interest to the community, eleven (11) enhancement features in the design plan, as well as four (4) other special issues. A summary of the considerations is provided below.

Safety Improvements:

1. Safety is the number one priority on this project.
2. Wide Shoulders are desirable
3. Improve sight distance and address geometric deficiencies at all intersections of side streets
4. Provide left turn lanes at major intersections:
    a. Orebank Road
    b. Harbor Chapel Road
    c. Stratford Road
    d. Old Stage Road
    e. Amy Avenue /Glenwood Street
    f. Cooks Valley Road
    g. Island Road
    h. Fall Creek Road
    i. Hill Road
5. Provide right turn lanes at major intersections:
    a. Cooks Valley Road
    b. Fall Creek Road
    c. Hill Road

6. Consider using center line and shoulder rumble strips and reflective thermal markings where appropriate
7. Special attention should be given to intersection improvements at the intersection of Carolina Pottery and Overhill Road to improve safety
8. Plan development needs to be mindful of pedestrian safety and connectivity, providing a safe and separate walkway for pedestrians where feasible. Specific areas where sidewalks are desired include East Center Street to Old Stage Road (within the City limits) and within the Indian Springs community
9. Use side facing mailbox placement along SR 126 (Memorial Boulevard) to improve safety for residents
10. The CRT would like to avoid a "one size fits all" solution for SR 126 (Memorial Boulevard)

Points of Interest to the Community

The CRT wants to minimize impacts to and protect the integrity of community treasures in the SR 126 study area. Sites that are considered treasures include:

1. Cherry Point Animal Hospital
2. White House at the corner of Santana Road and SR 126 (Memorial Boulevard)
3. East Lawn Cemetery
4. Old Indian Springs Post Office
5. Chestnut Ridge view shed
6. Anything within the historic boundary of Yancey's Tavern, including the tavern, barn, and trace of Old Island Road
7. Shipley Mansion (near East Center Street)

Enhancements

The CRT support the incorporation of the following enhancement features in the design plans for SR 126

1. Use of natural elements for retaining and buffering walls
2. Landscaping to a human scale with native plant species
3. Decorative guardrail where appropriate
4. Use of decorative lighting where appropriate with sensitivity to residential areas
5. Underground utilities instead of overhead
6. Use of mast arms rather than span wire where traffic signals are installed
7. Use of Texas rail instead of Jersey barrier type of railing on bridges
8. Bridge design needs to be an enhancement and fit within the context of the community
9. Include irrigation with major landscaping
10. Landscape design that is appropriate to the speed limit
11. Inclusion of a roundabout at the intersection of SR 126 and East Center Street if adequate capacity can be provided for forecasted traffic volumes.

Other Issues

1. Where roadway widening is undertaken, use as much of the existing roadway as possible.
2. Where the roadway is widened from two to four lanes, consider leaving the existing road in place and constructing the new lanes to one side (asymmetrical widening)
3. The CRT identified two major benefits of asymmetrical widening: improved traffic flow during construction, and enhanced constructability.

4. Asymmetrical widening should not preclude making improvements to horizontal and vertical alignment deficiencies.

Working together, the CRT developed recommendations for roadway cross sections. The recommendations are divided into eight sections, identified by intersecting cross streets.

- For five of the eight sections, the CRT developed consensus design recommendations.
- For three of the eight sections, the CRT developed design recommendations that were supported by a majority of team members.

Consensus design recommendations include:

- Improve these segments to a four-lane median divided facility with curb, gutter and sidewalks
  - Segment 1 West – East Center Street to Orebank Road
  - Segment 1 East – Orebank Road to West of Hawthorne Street
  - Segment 3 West – Harbor Chapel Road to east of Old Stage Road
- Improve this section to four travel lanes and a center turn lane with curb and gutter and sidewalks
  - Segment 2 – West of Hawthorne Street to Harbor Chapel Road
- Provide an improved two-lane roadway with paved shoulders, wide centerline, and rumble strips
  - Segment 4 East – Harrtown Road to Cochise Trail

Majority design recommendations with minority objection statements include:

- Improve this segment to a four-lane median divided facility with shoulders
  - Segment 3 East – East of Old Stage Road to Cooks Valley Road
- Improve this segment to provide two travel lanes and a center turn lane with curb, gutter and sidewalks
  - Segment 4 West – Cooks Valley Road to Harrtown Road
- Provide an upgraded two-lane roadway with paved shoulders, wide centerline, and rumble strips
  - Segment 5 – Cochise Trail to I-81

Community Character & Values

A sampling of residents highly value the following:

- The scenic quality
- Quiet neighborhoods
- A feeling of safety and security within the neighborhoods
- Historic aspects
- Nearby family recreation and sports opportunities

A sampling of residents highly value the following visual characteristics:

- The rural setting (pastures, woodlands)
- Trees, shrubs and landscaping
- Historic houses, barns and other structures

Road Safety

- Accident rates exceed statewide averages for similar roads
- The public ranked the following safety concerns in order of importance
  - Limited sight distance
  - Dangerous curves
  - Speeding traffic
  - Difficulty turning left
  - Unsafe for bicycles and pedestrians
- The following problems and roadway deficiencies were identified:
  - Varied travel speeds that increase conflict between vehicles
  - Travel speeds that exceed the posted speed limits and/or design speed
  - Substandard horizontal and vertical curves (inadequate sight distance)
  - Lack of turn lanes at major intersections
  - Skewed intersection angles
  - Substandard superelevation in sharp curves
- Local resource team members identified additional problems such as:
  - Very narrow shoulder widths.

Access Management

- The public also ranked access onto SR 126 (Memorial Boulevard) as a major concern.
- Difficulty entering or exiting business parking lots was identified as a significant problem, i.e., uncontrolled access to businesses along the roadway.
- School busses have difficulty maneuvering and turning onto side streets while on SR 126 (Memorial Boulevard), and turning onto SR 126 (Memorial Boulevard) from side streets.

Modal Interrelationship

- Need for safe pedestrian mobility and bikeways

CSS Process Chronology

Table 5.5.1 provides a summary of major tasks and meetings that were conducted during the CSS phase of the project. After the table, more detailed information is provided concerning milestone events.

TABLE 5.5.1: CHRONOLOGICAL SUMMARY OF THE CSS PROJECT (1 OF 2)

Date	Task
September 2003	Project Kickoff Meeting - Presentation of Consultants to Kingsport / Sullivan County
	Identification of Local Resource Team members by Mayors Blazier and Venable
October 2003	First Team Meeting (TDOT/Local Resource Teams)
	Complete Stakeholder Identification
	Establish a mailing list for households in the project area
	Issued Team Roles & Responsibilities document for review
	Define methods of communication and protocols
October/November 2003	Collect & review information of record
November 2003	Stakeholder Kick-off Meeting • Introduce CSS process • Dialogue about the community & desires for Memorial Boulevard
	Team Building in Kingsport Defined study area boundary
	CSS Training at TDOT
December 2003	Collect speed data on SR 126 Analyze traffic accident data from TRIMS
January 2004	Analyze horizontal and vertical curve data
	Requested information of record from environmental specialists
	CSS Training in Kingsport Consultant conducted field review and meetings with utility providers
	Team Meeting
February 2004	Consultant investigated local contacts with low income and minority population groups
February & March 2004	Preparation of traffic forecasts Capacity analyses Tabulation of additional traffic accident data
February 2004 through February 2005	Weekly Telephone Conference Calls (held on most Fridays)
February 20, 2005	Requested controlled aerial survey
March 2004	Team Meeting (TDOT/Local Resource Teams)
	Team Meeting
April 2004	Letter to Elected Officials
	Issued Press Release
May 2004	Project Website activated
	Postcard announcement of First Public Involvement Session mailed
	First Public Involvement Sessions

TABLE 5.5.1: CHRONOLOGICAL SUMMARY OF THE CSS PROJECT (2 OF 2)

Date	Task
June 2004	Postcard thank you mailed with summary of First Public Involvement Session
July 23, 2004	Team Meeting (TDOT/Local Resource Teams)
October 2004	Team Meeting – Design Charette (TDOT/Local Teams)
	Newsletter #2
November 2004	Second Public Involvement Sessions
December 2004	Team Meeting (TDOT/Local Teams)
January 2005	Team Meeting (Local Team)
February 2005	Team Meeting (Local Team)
March 2005	Team Meeting – Plan Review Workshop (TDOT/Local)
April 2005	Focus Group
May 2005	Third Public Involvement Sessions
June 2005	Team Meeting – Team Recommendation Workshop
August 2005	Website updated with Team Recommendation
	Road Safety Audit training course in Kingsport
	Draft Context Sensitive Solutions Report submitted to TDOT for review
October 2005	TDOT Comments on Draft Report sent to consultant
	Demonstration of digital video & radar speed enforcement equipment on SR 126
	Announcement by Governor Bredesen & Commissioner Nicely accepting the Community Resource Team Recommendation
	Website Updated with interim improvements list, project timeline, Public Involvement Session summary from May 2005, and press release
February 2006	Final Context Sensitive Solutions Report submitted to TDOT

Community & Technical Resource Teams (September 2003)
Appointment of the Community Resource Team was made by the Mayors of Kingsport and Sullivan County. Appointed members included various members of the local governments and citizens. Additional team members included TDOT and consultant project managers.

In addition to the Community Resource team, TDOT assembled a Technical Resource Team to provide expertise and assistance.

Project Website (activated April 2004)
A project website was prepared and hosted on TDOT's main website. Content for the website was prepared by the project management team with input from the Community Resource Team.

Team Recommendation Meeting (June 21 and 22, 2005)
A two-day meeting was held for the Community Resource Team at the Renaissance Center in Kingsport to facilitate the development of a team recommendation.

- Public input and survey results from the May 2005 Public Involvement Sessions were reviewed and discussed.
- Team members turned in individual scoring of an evaluation matrix for compilation.

- Composite team scores from the evaluation matrix were reviewed and discussed. It was determined that the scoring did not provide enough variation between the different concept plans to be useful to the team.
- Team members discussed and agreed upon a list of "common ground" recommendations that were supported by all team members.
- The consultant facilitated the team's discussion of each roadway segment and development of either a consensus or majority recommendation for each segment.
- Team members who opposed a majority recommendation were given the opportunity to write a minority opinion statement.
- Group decisions and minority reports were reviewed, and all team members were asked to sign a statement of support for the team recommendation with objections noted by the minority reports.

Concepts A, B, and C were presented to the public at the November 2004 Public Involvement Session. Citizens were asked to express a preference for one concept or "no build" in each of the five segments. Concepts A, B, and C are a combination of various cross section options along the corridor. Concepts A, B, and C are listed in **Appendix E CSS Alternatives**.

Concepts A, B, and C were revised after the November 2004 public involvement session based on comments from the public and the Community Resource Team. These revisions were presented to the team at a design review workshop in March 2004, and were later refined again to incorporate the team's comments. The plans were shaded and color coded to make them more easily understood by the public. The revised and reformatted plans were presented to the public at the May 2005 Public Involvement Sessions. Visualizations of existing and future conditions with each concept plan were provided for four locations: Orebank Road, Harbor Chapel Road, Old Stage Road, and Island Road. Typical cross sections, reformatted to a consistent scale and color coded to match the concept plans, were also presented. The public was asked to complete a preference survey to indicate which of the concept plans they preferred in each of the eight segments of the corridor.

Public Preferences for the Concept Plans

At the May 2005 Public Involvement Sessions, a detailed preference survey was included at the end of the handout material. Each person who signed the attendance roster upon entering the sessions was asked to view the concept plans, review the handout material, listen to a formal presentation, and then complete the preference survey.

The preference survey began by asking questions concerning the adequacy of information provided at the Public Involvement Sessions and the level of comfort that citizens felt in expressing a preference. Citizens were then asked to express a preference for one of the concept plans (A, B, or C) or the No-Build alternative in each of eight project sections. The concept plans A, B, and C retained the same center-line. The plans varied in cross-section design. The cross sections for each concept plan The preferences are included in **Table 5.5.2**.

During the question and answer session of the Public Involvement Session that occurred at Sunnyside Baptist Church on May 26, 2005, a petition was presented by a citizen from the study area to the project management team. The petition was accepted and entered into the official transcript. It included a total of 1,167 signatures, of which 43 were duplicates. The total number of unique signatures on the petition was 1,124. The petition included the following statement:

"We, as citizens who live on and/or use SR-126, do not want the 2-lane section of the highway to become a 4-lane highway. We firmly believe a 4-lane highway would increase the number

and severity of accidents. It would destroy the community with the loss of most of the houses, apartments, and businesses along the highway. We support improvements to make the highway safer. We offer our signatures as a vote to support keeping the 2-lane section."

TABLE 5.5.2: PREFERENCE MATRIX
Preference Survey Results from Public Involvement Sessions, May 2005

SEGMENT	Concept A	Concept B	Concept C	No-Build	No Response	Other	Total Comments
Section 1 West **E Center to Orebank**	40	71	157	23	12		303
Section 1 East **Orebank to west of Hawthorne**	42	63	159	24	15		303
Section 2 **Hawthorne to Harbor Chapel**	48	35	181	21	16	2	303
Section 3 West **Harbor Chapel to Old Stage Rd**	59	50	161	20	13		303
Section 3 East **Old Stage to Cooks Valley Rd**	92	60	126	15	9	1	303
Section 4 West **Cooks Valley to Harr Town**	87	76	111	17	10	2	303
Section 4 East **Harr Town to Cochise Trail**	109	65	101	15	13		303
Section 5 **Cochise Trail to I-81**	118	48	106	16	15		303
TOTALS	**595**	**468**	**1102**	**151**	**103**	**5**	**2424**

Announcement of a Recommended Alternative for SR 126 (Memorial Boulevard)
On October 27, 2005, TDOT announced the CSS defined "Concept C" as the Recommended Alternative for the SR 126 project. Concept C has been renamed "Alternative A" for the NEPA documentation process. As mentioned throughout the DEIS, Alternative B is a refinement of Alternative A. Alternative B has been developed to minimize impacts associated with Alternative A, and with regard for the CSS recommendations. These recommendations include community concerns and comments for both an improved facility and the least amount of impact associated with a Build Alternative, preservation to the greatest extent possible of the viewshed, and improved safety and travel efficiency.

Chapter 6: References



6.0 REFERENCES

Haworth, Meyer and Boleyn (HMB) Professional Engineers, Inc.

2008 Phase I Site Assessment of Underground Storage Tanks and Hazardous Material Sites. SR 126 (Memorial Boulevard), Sullivan County, Tennessee. March 2008.

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2009 Traffic Analysis Report Addendum. SR 126 (Memorial Boulevard), Sullivan County, Tennessee.

Sain & Associates/PBS&J

2006 Context Sensitive Solutions Report for State Route 126 (Memorial Boulevard), in the City of Kingsport/Sullivan County.

Tennessee Department of Transportation

2010 Phase 1a and 1b Archaeological Survey of the Proposed SR 126 (Memorial Boulevard), Sullivan County, Tennessee. March 2010.

2008 Historical and Architectural Survey and documentation for effect under 36 CFR 800 evaluation. SR 126 (Memorial Boulevard), Sullivan County, Tennessee. October 2008

2010 Conceptual Relocation Plan for SR 126 (Memorial Boulevard), Sullivan County, Tennessee, March 2010.

2008 TDOT Design Division Roadway Design Guidelines, Design Division, August 2008.

Kingsport/Sullivan County

2006 Sullivan County Regional Plan: A Guide for Future Land Use and Transportation Development, Planning Period 2006 – 2026.

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2008 Kingsport Area Transportation Improvement Program, Fiscal Years 2008 through 2011, January 2008.

2010 Kingsport Area Transportation Improvement Program, Fiscal Years 2011 through 2014, October 2010.

American Association of State Highway and Transportation Officials

2001 A Policy on Geometric Design of Highways and Streets, Fourth Edition

Transportation Research Board

2000 Highway Capacity Manual

United States Bureau of Census

2010 Profiles for Census Tracts 408, 409, 410, 411, 422, 423, 424

Chapter 7: List of Preparers



7.0 LIST OF PREPARERS

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APPENDIX A INITIAL CORRESPONDENCE LETTERS

U.S. Department
of Transportation
**Federal Aviation
Administration**

Memphis Airports District Office
2862 Business Park Dr, Bldg G
Memphis, TN 38118-1555

Phone: 901-322-8180

January 22, 2009

Mr. Tom Love
Transportation Manager
State of Tennessee Department of Transportation
Suite 900, James K. Polk Bld.
505 Deaderick Street
Nashville, TN 37243-0334

Re: Coordination Package and Invitation to be a Participating Agency for State Route 126 (Memorial Boulevard) for State Route 126 (Memorial Boulevard) from East Center Street, in Kingsport, to Interstate 81, Sullivan County, Tennessee

Dear Mr. Love:

We have reviewed the proposed study and found no issue or concerns that could affect the nearest airport (Tri-Cities Regional Airport) in that area. We feel, from your proposal, that this project will have no environmental impact for future airport development nor is this project located within Airport Clear Zones. We would like to be notified if any changes should occur from the original studies.

Thank you for considering our opinion in your study and if you have any question feel free to call our office.

Sincerely,

James H. Williams
Program Manager

Tennessee Valley Authority, 400 West Summit Hill Drive, Knoxville, Tennessee 37902-1401

January 13, 2009

Mr. Tom Love
Tennessee Department of Transportation
Suite 900, James K. Polk Building
505 Deaderick Street
Nashville, Tennessee 37243-0334

Dear Mr. Love:

SUBJECT: COORDINATION PACKAGE AND INVITATION TO BE A COOPERATING AND PARTICIPATING AGENCY FOR STATE ROUTE 126 (MEMORIAL BOULEVARD) FROM EAST CENTER STREET, IN KINGSPORT, TO INTERSTATE 81, SULLIVAN COUNTY, TENNESSEE

In response to your letter of December 15, 2008, TVA is pleased to participate as a cooperating agency in the development of the Environmental Impact Statement for this road project. Depending on the final alignment, the proposed highway improvements may require a TVA Section 26a permit.

As a cooperating agency under SAFETEA-LU and the Tennessee Environmental Streamlining Agreement, we would be pleased to work with you on defining the purpose and need, range of alternatives, and environmental analysis needs. We are not aware of unusual or unique environmental resources in the project area that should be addressed in the environmental review.

Sincerely,

Charles P. Nicholson
Program Manager
NEPA Resources
Environmental Services and Programs

Printed on recycled paper

DEPARTMENT OF THE ARMY
NASHVILLE DISTRICT, CORPS OF ENGINEERS
Regulatory Branch
3701 Bell RD
Nashville, TN 37214

January 13, 2009

Regulatory Branch

SUBJECT: File No. 200900048; Proposed Improvements to State Route (SR) 126 (Memorial Boulevard) from East Center Street, in Kingsport, to Interstate 81, in Sullivan County, Tennessee

Mr. Tom Love
Transportation Manager
Tennessee Department of Transportation
Environmental Division
Suite 900, James K. Polk Building
Nashville, Tennessee 37243-0334

Dear Mr. Love:

We gladly accept the Participating Agency role with TDOT and FHWA in the development of the EIS for the subject project. Our participating agency responsibilities are explained in Section 6002 of SAFETEA-LU. In addition, we agree to be a Cooperating Agency in the preparation of the EIS in accordance with our CEQ responsibilities for implementing NEPA.

The Project Data Summary, EIS Coordination Plan for Agency and Public Involvement, maps, and other information submitted indicate that TDOT plans to improve an approximate eight-mile segment of SR-126 east of Kingsport, in Sullivan County, Tennessee. The project has logical termini at existing East Center Street and I-81. The current road would be improved and/or widened to segments of two to four lanes of traffic throughout the proposed planning length. The submittal states that the proposal would improve pedestrian/vehicle safety, emergency response times, and connectivity with eastern Sullivan county areas. In addition, the work would reduce travel delays for through traffic and complement regional and local economic development efforts.

Residential, undeveloped (woodlands, open fields, and active farmlands), and pockets of commercial and industrial land uses exist along the project study area. Alternatives being considered for evaluation include No Build, Transportation System Management, Mass Transit System, and a Build alternative developed through the Context Sensitive Solutions process. The Build alternative consists of improvements to the existing roadway following the existing alignment.

Based on the information provided and a brief examination of the Kingsport-TN and Indian Springs-TN/VA USGS quadrangle maps, we anticipate that Sougan Branch, Fall Creek, and other unnamed

tributaries to the South Fork Holston River (SFHR) would be impacted by the construction of the Build alternative. Impacts could result from culvert extensions and/or new road crossings.

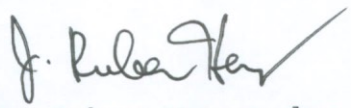
The regulatory authorities and responsibilities of the Corps of Engineers (Corps) are based mainly on two laws: Section 404 of the Clean Water Act (33 USC 1344) and Section 10 of the Rivers and Harbors Act of 1899 (33 USC 403). Section 404 requires a Corps permit for any discharge of dredged or fill material into waters of the United States (WUS). Section 10 prohibits the obstruction or alteration of navigable waters of the United States (NWUS) without a Corps permit. Sougan Branch, Fall Creek, and other unnamed tributaries to the SFHR are considered WUS. No NWUS exist within the project study area. We do not have enough information at this time to estimate whether jurisdictional wetlands are present and would be affected by this proposal.

Our specific permitting requirements for construction of road crossings over jurisdictional waters would depend on the specific installation methods and associated impacts. Road crossings that would not involve substantial aquatic habitat alteration may qualify for authorization under our Nationwide Permit (NWP) program (33 CFR 330). Activities that do not qualify for NWP authorization would require approval under a standard Department of the Army (DA) permit.

Finally, our permit review would include application of the Section 404(b)(1) Guidelines (40 CFR 230). The Guidelines require that no discharge of dredged or fill material may be permitted if there is a practicable alternative to the proposed discharge that would have less adverse impact on the aquatic ecosystem, so long as the alternative does not have other significant adverse environmental consequences.

If you have any questions or wish to discuss DA permit requirements for the project in more detail, please contact me at 615/369-7519 or jose.r.hernandez@usace.army.mil.

Sincerely,



J. Ruben Hernandez
Project Manager
Operations Division

United States Department of Agriculture

NRCS
Natural Resources Conservation Service
675 U.S. Courthouse
801 Broadway
Nashville, Tennessee 37203

December 22, 2008

Mr. Tom Love
Tennessee Department of Transportation
Suite 900, James K. Polk Bldg.
505 Deaderick Street
Nashville, TN 37243-0334

Dear Mr. Love:

We received your request for Environmental assessment and FPPA information for the State Route 126 highway project from East Center Street in Kingsport to Interstate 81, Sullivan County, TN

Your request for information related to environmental impacts is being forwarded to the Tennessee NRCS National Environmental Policy Act (NEPA) Coordinator to review and coordinate with other NRCS specialists for any comments or recommendations they may have pertaining to this project.

The following NRCS specialist will supply a Farmland Conversion Impact Rating based upon information you submitted on Form CPA-106 and accompanying documents:
Livingston, Richard L, RESOURCE SOIL SCI
KNOXVILLE SERVICE CENTER
9737 COGDILL RD
KNOXVILLE, TN 37918
(865) 671-3830 x 3

Some other items in your request are outside of the authority of our agency or we do not have the expertise to provide that type of information for your organization.

Our soil survey information can also be found online at http://websoilsurvey.nrcs.usda.gov. This website will provide you with all of our most current soil survey data and interpretations including prime farmland and hydric soils.

The Natural Resources Conservation Service provides leadership in a partnership effort to help people conserve, maintain, and improve our natural resources and environment.

An Equal Opportunity Provider and Employer

Please feel free to call me at (615) 277-2550, or e-mail me at doug.slabaugh@tn.usda.gov, if you have questions about this request, or if you need assistance with accessing our soils information on the web and any other needs that may arise for Tennessee Soil Survey products or information.

Sincerely,



J. DOUGLAS SLABAUGH
State Soil Scientist

Cc: (w/enclosures)
Rick Livingston, NRCS Resource Soil Scientist, Knoxville, TN
Carol Chandler, NRCS NEPA Coordinator, Nashville, TN

NRCS:SS:JD Slabaugh::12/22/08

United States Department of Agriculture

NRCS

Natural Resources Conservation Service
9737 Cogdill Road, Suite 152C
Knoxville, TN 37932
Phone 865-671-3830 x. 112

January 12, 2009

Mr. Tom Love
Tennessee Department of Transportation
Suite 900, James K. Polk Building
505 Deaderick Street
Nashville, TN 37243-0334

Project: State Route 126 (Memorial Blvd.) from East Center St. in Kingsport to I-81 Sullivan County, TN

Dear Mr. Love,

The request for soils information that was sent to Mr. Kevin Brown forwarded to me. I will be addressing the portion of the request concerning the Farmland Protection Policy and hydric soils

This information was compiled using a corridor of 1,000 ft. on either side of existing S.R. 126 as specified in the information you sent. This project will result in the conversion of 132 acres of Prime Farmland as defined in the Farmland Protection Policy Act. Form AD-1006 is attached to this letter to document this determination. Prime farmland is land that has the best combination of physical and chemical characteristics, growing season, and moisture supply for producing agricultural crops. Generally, land may be pasture, forestland, or cropland but may not be urban built-up land or waterways. Additionally, construction within an existing right-of-way purchased on or before August 4, 1984 is not subject to the Farmland Protection Policy Act.

Concerning Hydric Soils, there are 54 map units of Bloomingdale silty clay loam, 0 to 2 percent slopes, occasionally flooded within the corridor. These 4 map units occupy about 47 acres of the total 2,100 acres. Hydric soil criteria is only one of the 3 factors used in determining a wetland. Areas of hydric soils may or may not meet all of the requirements of a wetland.

Much of our soils information is available on-line at http://websoilsurvey.nrcs.usda.gov/app/
Additional information on Prime Farmland may be obtained at our websites
www.tn.nrcs.usda.gov/technical/soils/fppa.html or www.nrcs.usda.gov/programs/fppa/ .

Feel free to contact me if I may be of further assistance.
Sincerely,

Richard Livingston
Resource Soil Scientist

Enclosure

Helping People Help the Land

An Equal Opportunity Provider and Employer

U.S. DEPARTMENT OF AGRICULTURE **Form AD-1006**

FARMLAND CONVERSION IMPACT RATING

PART 1 ***(To be completed by Federal Agency)***	1. Date of Land Evaluation Request **December 12, 2008**	2. Sheet 1 of 1
3. Name of Project **SR 126, Memorial Boulevard**	4. Federal Agency Involved **US Department of Transportation, Federal Highway Administration**	
5. Proposed Land Use **Improved Highway Corridor**	6. County and State **Sullivan County, TN**	7. Type of Project: Corridor **X** Other ☐
PART II ***(To be completed by NRCS)***	1. Date Request Received by NRCS	2. Person Completing the NRCS parts of this form
3. Does the site or corridor contain prime, unique ,statewide or local important farmland? Yes X No ☐ (If no, the FPPA does not apply - Do not complete additional parts of this form)	4. Acres Irrigated **NA**	5. Average Farm Size **120 acres**
6. Major Crop(s) **Corn**	7. Farmable Land in Government Jurisdiction Acres: **97,375** **35%**	8. Amount of Farmland As Defined in FPPA Acres: **16,623** **6 %**
9. Name of Land Evaluation System Used LESA	10. Name of Local Site Assessment System None	11. Date Land Evaluation Returned by NRCS January 12, 2009

PART III ***(To be completed by Federal Agency)***	**Alternative Site Rating**			
	Alternate A	**Alternate B**		
A. Total Acres To Be Converted Directly	**239 acres**	**121 acres**		
B. Total Acres To Be Converted Indirectly, Or To Receive Services				
C. Total Acres in Site	**239 acres**	**121 acres**		
PART IV ***(To be completed by NRCS) Land Evaluation Information***				
A. Total Acres Prime and Unique Farmland	**132.0**	**132.0**		
B. Total Acres Statewide and Local Important Farmland	**15**	**5**		
C. Percentage of Farmland in County or Local Govt. Unit to be Converted	**0.01**	**0.01**		
D. Percentage of Farmland in Govt. Jurisdiction with Same or Higher Relative Value	**80%**	**80%**		
PART V ***(To be completed by NRCS) Land Evaluation Criterion Relative Value of Farmland to be Serviced or Converted (Scale of 0 - 100 Points)***	**18**	**18**		
PART VI ***(To be completed by Federal Agency) Corridor or Site Assessment Criteria (These criteria are explained in*** **7 CFR 658.5(b & c))**	**Max. Points Corridor**			
1. Area in Nonurban Use	15	9	9	
2. Perimeter in Nonurban Use	10	7	7	
3. Percent of Site Being Farmed	20	12	12	
4. Protection Provided by State and Local Government	20	5	5	
5. Distance from Urban Built-up area	0	NA	NA	
6. Distance to Urban Support Services	0	NA	NA	
7. Size of Present Farm Unit Compared to Average	10	8	8	
8. Creation of Non-Farmable Farmland	25	1	1	
9. Availability of Farm Support Services	5	5	5	
10. On-Farm Investments	20	10	10	
11. Effects of Conversion on Farm Support Services	25	2	2	
12. Compatibility with Existing Agricultural Use	10	5	5	
TOTAL CORRIDOR OR SITE ASSESSMENT POINTS	160	64	64	
PART VII ***(To be completed by Federal Agency)***				
Relative Value of Farmland (from Part V above)	100	18	18	
Total Corridor or Site Assessment (From Part VI above or a local site assessment)	160	64	64	
TOTAL POINTS ***(Total of above 2 lines)***	260	82	82	

PART VIII ***(To be completed by Federal Agency after final alternative is chosen)***

1. Corridor or Site Selected: Improvements to SR 126, Memorial Blvd. from East Center Street to Interstate 81 in Kingsport, TN.	2. Date of Selection: NA	3. Was A Local Site Assessment Used? Yes X No ☐

4. Reason For Selection:

Selection has not been made – This is a comparison of the two proposed Build Alternatives.

Signature of person completing the Federal Agency parts of this form:

Sullivan County
State Route 126
Memorial Boulevard
LESA Site Assessment

United States Department of the Interior

OFFICE OF SURFACE MINING
Reclamation and Enforcement
710 Locust Street, Second Floor
Knoxville, TN 37902

January 9, 2009

Mr. Tom Love
Tennessee Department of Transportation
Environmental Division
Suite 900, James K. Polk Building
505 Deaderick Street
Nashville, Tennessee 37243-0334

Subject: Invitation to be a Participating Agency in Development of an Environmental Impact Statement for Proposed Improvements to State Route 126 (Memorial Boulevard) from East Center Street in Kingsport to Interstate 81, Sullivan County, Tennessee

Dear Mr. Love:

Thank you for your correspondence of December 12, 2008, concerning development of an environmental impact statement (EIS) for the above proposed improvement. The Office of Surface Mining Reclamation and Enforcement's Knoxville Field Office appreciates your invitation to be a participating agency in the development of the EIS. As a coal regulatory agency, our area of interest is generally limited to the coalfields of East Tennessee and this project lies well outside the coalfield area. This in combination with the fact that mineable coal is not known to exist in the Sullivan County area, and the fact that Federal regulations at 30 CFR Section 707 provide for a broadly based exemption from complying with Federal mining regulations for coal extraction incident to government financed highway construction, make it unlikely that our agency would have any jurisdiction or authority with respect to this proposed project. As such, we must decline your invitation to participate. Again thank you for providing this opportunity and we look forward to working with you on future projects.

Sincerely,

Earl Bandy, Director
Knoxville Field Office

TAKE PRIDE IN AMERICA

United States Department of the Interior

FISH AND WILDLIFE SERVICE
446 Neal Street
Cookeville, TN 38501

January 30, 2009

Mr. Tom Love
Tennessee Department of Transportation
Environmental Planning and Permits Division
Suite 900, James K. Polk Building
505 Deaderick Street
Nashville, Tennessee 37243-0334

Re: Initial Coordination for State Route 126 Improvements from East Center Street to Interstate 81, Sullivan County, Tennessee

Dear Mr. Love:

The Tennessee Department of Transportation (TDOT), in cooperation with the Federal Highway Administration (FHWA), is initiating an Environmental Impact Statement (EIS) for proposed improvements to State Route 126 in Sullivan County, Tennessee. The proposed project is considered necessary to improve and complete system linkages; enhance regional and local mobility for the general public, as well as, emergency vehicles; improve traffic capacity and safety conditions; and enhance regional and local economic development opportunities.

TDOT and the FHWA have requested that the U.S. Fish and Wildlife Service (Service) be a participating agency with the development of the EIS. Acceptance of this request does not imply that the Service supports the proposal or has any special expertise with respect to the evaluation of the project.

We have reviewed the project summary and the possible role that our agency would have in the development of the State Route 126 improvement project. We accept the invitation to be a participating agency in the development of this project. We have also reviewed our existing database for any records of federally listed species near the proposed project. Our collection records do not indicate that federally listed or proposed endangered or threatened species occur within the proposed study area of the project. We note, however, that collection records available to the Service may not be all-inclusive. Our data base is a compilation of collection records made available by various individuals and resource agencies. This information is seldom based on comprehensive surveys of all potential habitat and thus does not necessarily provide conclusive evidence that protected species are present or absent at a specific locality.

If you have any questions regarding the information which we have provided, please contact Robbie Sykes of my staff at 931/528-6481, extension 209.

Sincerely,

Lee A. Barclay, Ph.D.
Field Supervisor

RECEIVED
JAN 02 2009
TDOT-Environmental Division

December 30, 2008

TENNESSEE HISTORICAL COMMISSION
DEPARTMENT OF ENVIRONMENT AND CONSERVATION
2941 LEBANON ROAD
NASHVILLE, TN 37243-0442
(615) 532-1550

Mr. Charles Bush
Tennessee Dept. of Transportation
Suite 700/J. K. Polk Bldg.
Nashville, Tennessee, 37243-0349

RE: FHWA, SR-126/E. CENTER ST. TO I-81, KINGSPORT, SULLIVAN COUNTY

Dear Mr. Bush:

In response to your request, received on Monday, December 22, 2008, we have reviewed the documents you submitted regarding your proposed undertaking. Our review of and comment on your proposed undertaking are among the requirements of Section 106 of the National Historic Preservation Act. This Act requires federal agencies or applicant for federal assistance to consult with t he a ppropriate S tate H istoric P reservation O ffice bef ore t hey c arry o ut their p roposed undertakings. The Advisory Council on Historic Preservation has codified procedures for carrying out Section 106 review in 36 CFR 800. You may wish to familiarize yourself with these procedures (Federal Register, December 12, 2000, pages 77698-77739) if you are unsure about the Section 106 process. You may also find additional information concerning the Section 106 process and the Tennessee SHPO's documentation requirements at http://www.tennessee.gov/environment/hist/federal/sect106.shtml

Considering available information, we find, after applying the Criteria of Adverse Effect codified at 36 CFR Part 800, that the project as currently proposed will ADVERSELY AFFECT YANCEY'S TAVERN, A PROPERTY THAT IS ELIGIBLE FOR LISTING IN THE NATIONAL REGISTER OF HISTORIC PLACES. You should now, through FHWA, inform the Advisory Council on Historic Preservation of this adverse effect determination and begin immediate consultation with our office. Please enclose a copy of this determination in your notification to the Council as delineated at 36 CFR Part 800. Until you have received a final comment on this project from this office and the Council, you have not completed the Section 106 review process. Please direct questions and comments to Joe Garrison (615) 532-1550-103. We appreciate your cooperation.

Sincerely,

E. Patrick McIntyre, Jr.
Executive Director and
State Historic Preservation Officer

EPM/jyg

TENNESSEE WILDLIFE RESOURCES AGENCY

ELLINGTON AGRICULTURAL CENTER
P. O. BOX 40747
NASHVILLE, TENNESSEE 37204

January 20, 2009

RECEIVED
JAN 26 2009
TDOT-Environmental Division

Charles Bush
State of Tennessee
Department of Transportation
Environmental Division
Suite 900, James K. Polk Building
505 Deaderick Street
Nashville, TN 37243-0334

Re: Invitation to be a Participating Agency for State Route 126 (Memorial Boulevard) from East Center Street, in Kingston, to Interstate 81 in Sullivan County, Tennessee

Dear Mr. Bush:

The Tennessee Wildlife Resource Agency has received and reviewed the information your office provided to us regarding the invitation to be a participating agency for State Route 126 (Memorial Boulevard) from East Center Street, in Kingston, to Interstate 81 in Sullivan County, Tennessee. Our current concerns are potential environmental impacts associated with potential stream and wetland impacts due to the construction of this project. We accept the invitation to participate in this process and encourage continued consultation with our agency in future phases of this project to further reduce impacts to fish and wildlife resources.

We thank you for the opportunity to comment during the initial coordination process and look forward to working with TDOT personnel in the future to reduce potential impacts to fish and wildlife resources associated with this project.

Sincerely,

Robert M. Todd

Robert M. Todd
Fish and Wildlife Environmentalist

cc: Rob Lindbom, Region IV Habitat Biologist
Bob Nichols, Region IV Manager

KINGSPORT METROPOLITAN PLANNING ORGANIZATION

TENNESSEE: KINGSPORT, SULLIVAN COUNTY, HAWKINS COUNTY, MOUNT CARMEL, CHURCH HILL
VIRGINIA: SCOTT COUNTY, WEBER CITY, GATE CITY

January 16, 2009

Tom Love
Transportation Manager I
TDOT- Environment Division
Suite 900, James K. Polk Building
505 Deaderick Street
Nashville, TN 37243

Dear Tom:

We are in receipt of your letter to us concerning the initiation of an Environmental Impact Statement on the CSS-based State Route 126 project within the City of Kingsport and Sullivan County. Please note the City of Kingsport, in cooperation with the Kingsport MPO, enthusiastically agrees to, and accepts, your invitation to become a participating agency in this process and will work to provide staff time and/or any input you may need from our resources to complete the review. This includes, but is not limited to, providing early input in determining the range of alternatives for improvements to SR 126, and participation in coordination meetings and joint field reviews.

As we look forward to working with your agency on this phase, we also want to express our appreciation for your willingness to advance one of the MPO's priority projects. In addition, if you need further information or have additional questions concerning this matter, please feel free to call our offices at (423) 224-2677 or (423) 229-9400.

Sincerely,

William A. Albright,
Transportation Planning Manager – Kingsport MPO

CC: John Campbell, City of Kingsport
Jeff Fleming, City of Kingsport
Ray Hensen, TDOT
Steve Allen, TDOT

225 West Center Street – Kingsport, Tennessee 37660-4237 – Phone (423) 229-9400 Fax (423) 224-2590
www.ci.kingsport.tn.us

SULLIVAN COUNTY

Offices of Land Use

Department of Planning, Zoning & GIS

3411 Hwy. 126, Suite 30
Blountville, TN 37617
Telephone (423) 323-6440
Fax (423) 279-2886

Building Commission
Planning and Zoning
Solid Waste
G. I. S.
Health and Safety

RECEIVED
JAN 09 2009
TDOT-Environmental Division

January 7, 2009

Charles E. Bush, Transportation Manager 2
TDOT – Environmental Division
Suite 900 James K. Polk Building
505 Deaderick Street
Nashville, TN 37243-0334

RE: Participation in the SR126/Memorial Blvd. Planning Committee

Dear Mr. Bush,

As a previous member of the Local Resource Team on the SR126/Memorial Blvd. study, representing Sullivan County, I would like to continue my service on this project. Lucian Lawson, Director of Land Use for Sullivan County, received the package of material from you dated December 15, 2008 instructing him to confirm in writing his participation in this transportation planning project. Please note, Mr. Lawson was not previously involved with the Local Resource Committee. His title can be misleading to some, as he serves as director of sanitation, solid waste, sewer expansions and the recycling programs for Sullivan County. I am the county's Director of Planning and would be happy to continue to serve on this city-county-state planning project.

Please accept this confirmation for my participation on behalf of Sullivan County. Thank you for your continued interest and service with Sullivan County's transportation needs.

Warm regards,

A. Torbett

Ambre M. Torbett, AICP
director

copy: Mayor, Steve Godsey
Lucian Lawson, Sanitation Director
Bill Albright, Kingsport MPO

APPENDIX B CULTURAL RESOURCES

Preserving America's Heritage

February 18, 2011

Ms. Leigh Ann Tribble
Environmental Program Engineer
FHWA – Tennessee Division
404 BNA Drive, Suite 508
Nashville, TN 37217

Ref: *Proposed Improvements to SR-126 (Memorial Boulevard) from East Center Street to I-81 Kingsport, Sullivan County, Tennessee*

Dear Ms. Tribble:

On February 7, 2011, the Advisory Council on Historic Preservation (ACHP) received your notification and supporting documentation regarding the adverse effects of the referenced undertaking on a property or properties listed or eligible for listing in the National Register of Historic Places. Based upon the information you provided, we have concluded that Appendix A, *Criteria for Council Involvement in Reviewing Individual Section 106 Cases*, of our regulations, "Protection of Historic Properties" (36 CFR Part 800), does not apply to this undertaking. Accordingly, we do not believe that our participation in the consultation to resolve adverse effects is needed. However, if we receive a request for participation from the State Historic Preservation Officer (SHPO), Tribal Historic Preservation Officer, affected Indian tribe, a consulting party, or other party, we may reconsider this decision. Additionally, should circumstances change, and you determine that our participation is needed to conclude the consultation process, please notify us.

Pursuant to 36 CFR §800.6(b)(1)(iv), you will need to file the final Memorandum of Agreement (MOA), developed in consultation with the Tennessee State Historic Preservation Office (SHPO), and any other consulting parties, and related documentation with the ACHP at the conclusion of the consultation process. The filing of the MOA, and supporting documentation with the ACHP is required in order to complete the requirements of Section 106 of the National Historic Preservation Act.

Thank you for providing us with your notification of adverse effect. If you have any questions or require further assistance, please contact Ms. Najah Duvall-Gabriel at 202-606-8585 or at ngabriel@achp.gov.

Sincerely,

LaShavio Johnson

LaShavio Johnson
Historic Preservation Technician
Office of Federal Agency Programs

ADVISORY COUNCIL ON HISTORIC PRESERVATION

1100 Pennsylvania Avenue NW, Suite 803 • Washington, DC 20004
Phone:202-606-8503 • Fax: 202-606-8647 • achp@achp.gov • www.achp.gov

TENNESSEE HISTORICAL COMMISSION
DEPARTMENT OF ENVIRONMENT AND CONSERVATION
2941 LEBANON ROAD
NASHVILLE, TN 37243-0442
(615) 532-1550

March 22, 2005

Ms. Martha Carver
Tennessee Department of Transportation
505 Deaderick St/900
Nashville, Tennessee, 37243-0349

RE: FHWA, ARCHITECTURAL SURVEY REPORT, SR-126/E, CENTER ST. TO I-81, KINGSPORT, SULLIVAN COUNTY

Dear Ms. Carver:

In response to your request, received on Thursday, March 17, 2005, we have reviewed the documents you submitted regarding your proposed undertaking. Our review of and comment on your proposed undertaking are among the requirements of Section 106 of the National Historic Preservation Act. This Act requires federal agencies or applicant for federal assistance to consult with the appropriate State Historic Preservation Office before they carry out their proposed undertakings. The Advisory Council on Historic Preservation has codified procedures for carrying out Section 106 review in 36 CFR 800. You may wish to familiarize yourself with these procedures (Federal Register, December 12, 2000, pages 77698-77739) if you are unsure about the Section 106 process.

Considering the information provided, we find that the area of potential effect contains one architectural resources eligible for listing in the National Register of Historic Places that may be affected by this undertaking, the Shipley-Jarvis House. We further find that the area of potential effect contains one architectural resources listed in the National Register of Historic Places that may be affected by this undertaking, Yancey's Tavern. You should notify interested persons and make the documentation associated with this finding available to the public.

All borrow areas outside proposed rights-of-way will require separate certification as specified under Section 107.06-Federal Aid Provisions. If your agency proposes any modifications in current project plans or discovers any archaeological remains during the ground disturbance or construction phase, please contact us to determine what further action, if any, will be necessary to comply with Section 106 of the National Historic Preservation Act.

This office appreciates your cooperation.

Sincerely,

Herbert L. Harper
Executive Director and
Deputy State Historic
Preservation Officer

HLH/jyg

TENNESSEE HISTORICAL COMMISSION
DEPARTMENT OF ENVIRONMENT AND CONSERVATION
2941 LEBANON ROAD
NASHVILLE, TN 37243-0442
(615) 532-1550

November 3, 2008

Ms. Martha Carver
Tennessee Department of Transportation
505 Deaderick St/900
Nashville, Tennessee, 37243-0349

RE: FHWA, DOCUMENTATION OF EFFECT, SR-126 IMPVTS./E. CENTER ST. TO I-81, KINGSPORT, SULLIVAN COUNTY

Dear Ms. Carver:

In response to your request, received on Wednesday, October 22, 2008, we have reviewed the documents you submitted regarding your proposed undertaking. Our review of and comment on your proposed undertaking are among the requirements of Section 106 of the National Historic Preservation Act. Based on the information provided, we concur with your agency's determination that the area of potential effects contains the Yancey's Tavern that is eligible for listing in the National Register of Historic Places.

This office further concurs with TDOT's finding of project adverse impact on the Yancey's Tavern. You should notify interested persons and make the documentation associated with this finding available to the public as defined at 36 CFR 800 and seek the comments of the Advisory Council on Historic Preservation.

If project plans are changed or archaeological remains are discovered during construction, please contact this office to determine what further action, if any, will be necessary to comply with Section 106 of the National Historic Preservation Act. Your cooperation is appreciated.

Sincerely,

E. Patrick McIntyre, Jr.
Executive Director and
State Historic Preservation Officer

EPM/jyg

February 26, 2010

TENNESSEE HISTORICAL COMMISSION
DEPARTMENT OF ENVIRONMENT AND CONSERVATION
2941 LEBANON ROAD
NASHVILLE, TN 37243-0442
(615) 532-1550

Mr. Tom Love
TDOT Environmental Division
505 Deadrick Ave./900
Nashville, Tennessee, 37243-0334

RE: FHWA, SR-126/E. CENTER ST. TO I-81, UNINCORPORATED, SULLIVAN COUNTY

Dear Mr. Love:

In response to your request, received on Tuesday, February 16, 2010, we have reviewed the documents you submitted regarding your proposed undertaking. Our review of and comment on your proposed undertaking are among the requirements of Section 106 of the National Historic Preservation Act. This Act requires federal agencies or applicant for federal assistance to consult with t he a ppropriate S tate H istoric P reservation O ffice bef ore t hey c arry o ut their p roposed undertakings. The Advisory Council on Historic Preservation has codified procedures for carrying out Section 106 review in 36 CFR 800. You may wish to familiarize yourself with these procedures (Federal Register, December 12, 2000, pages 77698-77739) if you are unsure about the Section 106 process. You may also find additional information concerning the Section 106 process and the Tennessee SHPO's documentation requirements at http://www.tennessee.gov/environment/hist/federal/sect106.shtml

Considering available information, we find, after applying the Criteria of Adverse Effect codified at 36 CFR Part 800, that the project as currently proposed will ADVERSELY AFFECT PROPERTIES THAT ARE ELIGIBLE FOR LISTING IN THE NATIONAL REGISTER OF HISTORIC PLACES. You should now, through FHWA, inform the Advisory Council on Historic Preservation of this adverse effect determination and begin immediate consultation with our office. Please enclose a copy of this determination in your notification to the Council as delineated at 36 CFR Part 800. Until you have received a final comment on this project from this office and the Council, you have not completed the Section 106 review process. Please direct questions and comments to Joe Garrison (615) 532-1550-103. We appreciate your cooperation.

Sincerely,

E. Patrick McIntyre, Jr.
Executive Director and
State Historic Preservation Officer

EPM/jyg

TENNESSEE HISTORICAL COMMISSION
DEPARTMENT OF ENVIRONMENT AND CONSERVATION
2941 LEBANON ROAD
NASHVILLE, TN 37243-0442
(615) 532-1550

July 14, 2010

Mr. Gerald Kline
Tennessee Department of Transportation
Environmental Division
Suite 900, James K. Polk Building
505 Deaderick Street
Nashville, Tennessee 37243-0334

RE: FHWA, ARCHAEOLOGICAL AVOIDANCE PLAN, SR-126/NORTH CENTER ST. TO I-81, UNINCORPORATED, SULLIVAN COUNTY, TN

Dear Mr. Kline:

At your request, our office has reviewed the above-referenced archaeological avoidance plan in accordance with regulations codified at 36 CFR 800 (Federal Register, December 12, 2000, 77698-77739). Based on the information provided, we find that the revised project area contains no archaeological resources eligible for listing in the National Register of Historic Places.

If project plans are changed or archaeological remains are discovered during construction, please contact this office to determine what further action, if any, will be necessary to comply with Section 106 of the National Historic Preservation Act.

Your cooperation is appreciated.

Sincerely,

E. Patrick McIntyre, Jr.
Executive Director and
State Historic Preservation Officer

EPM/jmb

EASTERN SHAWNEE TRIBE
OF OKLAHOMA

P.O. Box 350 · Seneca, MO 64865 · (918) 666-2435 · FAX (918) 666-3325

November 24, 2003

Department of Transportation
Environmental Planning & Permitting Division
Suite 900, James K. Polk Building
505 Deaderick Street
Nashville, Tennessee 37243-0334

Re: See Attached

To Whom It May Concern:

Thank you for notice of the referenced project(s). The Eastern Shawnee Tribe of Oklahoma is currently unaware of any documentation directly linking Indian Religious Sites to the proposed construction. In the event any items falling under the Native American Graves Protection and Repatriation Act (NAGPRA) are discovered during construction, the Eastern Shawnee Tribe request notification and further consultation.

The Eastern Shawnee Tribe has no objection to the proposed construction. However, if any human skeletal remains and/or any objects falling under NAGPRA are uncovered during construction, the construction should stop immediately, and the appropriate persons, including state and tribal NAGPRA representatives contacted.

Sincerely,

Charles Enyart

Charles Enyart, Chief
Eastern Shawnee Tribe of Oklahoma

1. 7. Site 1: Culvert Improvements over westbound ramp of I-40 at Log Mile 12.23
   Site 2: Bridge repair at the I-40 bridge over State Route 58 at Log Mile 12.34

2. Section 106 initial coordination for proposed improvements to State Route 126 (Memorial Blvd.) from E. Center St. in Kingsport to I-81, Sullivan County, Tennessee 2003190

3. Section 106 initial coordination for proposed bridge improvements to Yarnell Road (E516) over Little Dismal Creek, LM 0.96, Anderson County, Tennessee 2003194

4. Section 106 initial coordination for proposed bridge improvements to Ella West Road (A092) over East Fork Lynn Creek, LM 2.42, Giles County, Tennessee 2003192

5. Section 106 initial coordination for proposed bridge improvements to Earl Townsend Road (A372) over West Fork Shoal Creek, LM 0.07, Giles County Tennessee 2003191

6. Section 106 initial coordination for proposed bridge improvements to Martin Luther King Drive (A584) over Branch, LM 0.08, Madison County, Tennessee 2003193

7. Section 106 initial coordination for proposed bridge improvements to Binkley Acres Road (E488) over Brushy Fork Creek, LM 0.06, Anderson County, Tennessee 2003195

8. Section 106 initial coordination for proposed bridge improvements to Beech Road (A045) over Morgan's Creek, LM 2.79, Overton County, Tennessee 2003197

9. Section 106 initial coordination for proposed bridge improvements to Beech Road (A045) over Bryan's Fork Creek, LM 0.93, Overton County, Tennessee 2003196

10. Section 106 initial coordination for proposed bridge improvements to Trentham Hollow Road over Clear Creek, LM 2.95, Cocke County, Tennessee 2001120

Creek Nation of Oklahoma

Cultural and Historic Preservation

December 11, 2003

Gerald Kline
State of Tennessee-Department of Transportation
Environmental Planning and Permits Division
Suite 900, James K. Polk Building
505 Deaderick Street
Nashville, Tennessee 37243-0334

Subjects: SEE ATTACHED

Dear Mr. Kline:

In keeping with a government-to-government relationship and in compliance with 36CFR800, the Muscogee (Creek) Nation appreciates the invitation to participate as a consulting party.

At this time, we are unaware of any cultural or archaeological sites in the above project area that would be eligible for inclusion in the National Register.

In the event that human remains or culturally significant artifacts are inadvertently discovered during construction, please contact me at (918) 732-7732.

Respectfully,

Tim Thompson
Research Specialist
Muscogee Creek Nation

jj

Creek Nation Tribal Complex · Highway 75 & Loop 56 · P.O. Box 580 · Okmulgee, Oklahoma 74447 · 918/756-8700 · Fax 918/756-291

SUBJECTS:

Section 106 Initial Coordination for Proposed Bridge Improvements to Ella West Road (A092) over East Fork Lynn Creek, LM 2.42, Giles County, Tennessee 2003192

Section 106 Initial Coordination for Proposed Bridge Improvements to Earl Townsend Road (A372) over West Fork Shoal Creek, LM 0.07, Giles County, Tennessee 2003191

Section 106 Initial Coordination for Proposed Bridge Improvements to Martin Luther King Drive (A584) over Branch, LM 0.08, Madison County, Tennessee 2003193

Section 106 Initial Coordination for Proposed Bridge Improvements to Binkley Acres Road (E488) over Brushy Fork Creek, LM 0.06, Anderson County, Tennessee 2003195

Section 106 Initial Coordination for Proposed Bridge Improvements to Beach Road (A045) over Morgan's Creek, LM 2.79, Overton County, Tennessee 2003197

Section 106 Initial Coordination for Proposed Bridge Improvements to Beech Road (A045) over Bryan's Fork Creek, LM 0.93, Overton County, Tennessee 2003196

Section 106 Initial Coordination for Proposed Bridge Improvements to Trentham Hollow Road over Clear Creek, LM 2.95, Cocke County, Tennessee 2001124

X Section 106 Initial Coordination for Proposed Bridge Improvements to State Route 126 (Memorial Blvd) from E. Center St. in Kingsport to I-81, Sullivan County, Tennessee 2003190

Section 106 Initial Coordination for Proposed Bridge Improvements to Yarnell Road (E516) over Little Dismal Creek, LM 0.96, Anderson County, Tennessee 2003194

Section 106 Initial Coordination for Proposed Bridge Improvements to State Route 70 over Nolichucky River, LM 8.51, Green County, Tennessee 980579

The Eastern Band of Cherokee Indians
Tribal Historic Preservation Office
P.O. Box 455, Cherokee, NC 28719
(828) 488-0237 / Fax (828) 497-1590

3/19/09

RE: PFH-306(7)-Polk Co
Petty Lane (A571) over Carter Creek, LM 2.32, Maury Co 2003207
Fitzgerald Rd (A088) over Snow Creek, LM 2.98, Maury Co 2005205
Cane Creek Church Rd (A130) over Cane Creek, LM 0.06, Perry Co 2003211
State Route 141 (N) at State Route 10/25, Trousdale Co 2043207
State Route 245 (Campbellsville Pike) and Indian Camp Springs Rd, Maury Co 2003
Roaring Fork Creek (A845) over Roaring Fork Creek, LM 0.01, Sevier Co 2001
Bridge Improvements to SR 56 over Piney Creek, LM 20.56, Grundy Co 2002
Bridge Improvements to SR 56 over Barren Fork, LM 7.7, Warren Co 2001
" " " SR 286 " " " LM 2.54, " " 2001
Bridg Improvements to Trentham Hollow Rd over Clear Creek LM 2.95, Rock 2001

The Eastern Band of Cherokee Indians appreciates the invitation to participate as a consulting party in compliance with 36CFR800 on the above referenced project(s). According to the information you provided, the EBCI THPO is unaware of any known cultural resources or archaeological sites in the project area significant to our Tribe. However, should any cultural resources or human remains be encountered during the proposed project's activities, work should cease and this office should be contacted immediately.

As a consulting party we request that you send all information pertaining to cultural resources within the above-referenced project(s) area of potential effect (APE) for our review and comment. If you have any questions, please direct them to me at (828) 488-0237.

Sincerely,

MH

Michelle Hamilton
Tribal Historic Preservation Specialist
Eastern Band of Cherokee Indians
(828) 488-0237
michhami@nc-cherokee.com

PS: Sorry for the delay - working through a backlog

- Bridge Improvements to Earl Townsend Rd (A372) over West Fork Shoal Creek, LM 0.07, Giles Co 2003191

- Bridge Improvements to MLK Dr. (A584) over Branch LM 0.08, Madison Co 20031[illegible]

- Bridge Improvements to Binkley Acres Rd (E488) over Brushy Fork Creek LM 0.06 2003190 Anderson Co

- Bridge Imp. to Beech Rd (A045) over Morgan's Creek LM 2.79, Overton Co 20031[illegible]

- Bridge Imp. to Beech Rd (A045) over Bryan's Fork Creek, LM 0.93, Overton Co 200319[illegible]

- Bridge Imp. to Ella West Rd (A042) over East Fork Lynn Creek LM 2.42, Giles 2003190

- Bridge Imp. to Yarnell Rd (E516) over Little Dismal Creek, LM 0.96, Anderson Co 2003194

- Bridge Imp. to SR 70 over Nolichucky R, LM 8.51, Greene Co 98059

- Imp. to SR 126 (Memorial Blvd) from E. Center St in Kingsport to I-81, Sull[illegible] 20031[illegible]

- Imp in Roane Co 1) Culvert Imp over westbound ramp of I-40 @ LM 12.23, 2) Bridge repair at I-40 Bridge over SR 58 @ LM 12.34 2003204 2003203

- Imp in Marion Co 1) Rehab drainage on SR 2 @ LM 26.93, 2) Rehab drainage on SR 2 @ LM 27.78, 3) Replace drainage on SR 283 @ LM 5.40

- Imp SR 96 (Murfreesboro Rd) and Royal Oaks Blvd, Williamson Co 2003018

- Bridge Imp to West 9th St Bridge over CSX Railroad LM 0.01, Maury Co 2000187

- Bridge Imp to Kennys Bend Rd (A230) over Lost Creek LM 1.23, Smith Co 200301[illegible]

- Bridge Imp to Harris Hollow Rd (A047) over Defeated Creek, LM 0.14, Smith Co 20031[illegible]

- Bridge Imp to SR 247 over Carters Creek LM 15.78, Maury Co 2000120

- Bridge Imp to SR 1 (Kingston Pike) over Norfolk Southern Railroad, LM 15.17, Kno[illegible] 200[illegible]

- Bridge Imp to SR 33 (E. Broadway) over Bown Creek, LM 12.51, Blount Co 200001[illegible]

- Bridge Imp to Rock Branch Rd over Hanging Rock Creek, LM 0.78, Macon Co 200318

- Bridge Imp to Carr Branch Rd over Carr Creek LM 0.89, Macon Co 2003179

- Bridge Imp to W. Wixtown Rd over West Fork Long Creek, LM 1.00, Macon Co 200318

- Bridge Imp to Trammel Creek Rd over Big Trammel Creek, LM 0.81, Macon Co 2003[illegible]

- Imp to SR 15 (US 64) at SR 117, McNairy Co > NOT IN TERRITORY! 200318

- Bridge Imp to SR 269 over Knob Creek, LM 11.10, Bedford Co 2001071

- Imp to SR 416-A, Two segments of Birds Creek Rd, Sevier Co 2003164

- Imp to By-Pass Rd from SR 16 to Georgia Crossing Rd, Georgia Crossing Rd from By-pass Road to East of Greenview Dr in Franklin Co 2003168

- Bridge Imp to SR 127 over I-24, LM 3.74, Coffee Co 2002015
- Imp at SR 336 and Blackhawk Rd, Blount Co 2003185
- Imp to SR 400 Bridge over Brush Creek @ LM 4.99, Washington Co 2002011
- Imp to SR1 over Southern Railroad @ LM 19.47, Knox Co 2003009
- Bridge Imp to SR 2 over Duck River, LM 12.72, Coffee Co 2002016
- Bridge Imp to Hawkins Rd over Big Trammel Creek, LM 0.82, Macon Co 2001156
- Bridge Imp to SR 107 over Indian Creek, LM 8.69, Unicoi Co 2000154
- Bridge Imp to SR 37 (US 19E) over Doe River, LM 6.65, Carter Co 2002008
- Bridge Imp to Sycamore Rd over Sycamore Creek, LM 7.32, Cannon Co 2001
- Imp to SR 30 (White St) to near Davidson Rd, McMinn Co 2004005
- Bridge Imp to I-24 over Elk River @ LM 1.25 and over Potts ~~Creek~~ Creek @ LM 1.57, Grundy Co 2003200

APPENDIX C ECOLOGY

United States Department of the Interior

FISH AND WILDLIFE SERVICE
446 Neal Street
Cookeville, TN 38501

November 17, 2011

Ms. Leigh Ann Tribble
Federal Highway Administration
Tennessee Division Office
404 BNA Drive, Suite 508
Nashville, Tennessee 37217

Subject: FWS #12-CPA-0072. Proposed construction to State Route 126 (Memorial Boulevard) from Center Street to Interstate 81; PIN# 105467.00, P.E. 82085-1225-14, Sullivan County, Tennessee.

Dear Ms. Tribble:

Thank you for your letter dated October 26, 2011, transmitting acoustic and mist netting survey results for the proposed construction to State Route 126 from Center Street to Interstate 81 in Sullivan County, Tennessee. At the request of our office, surveys were conducted along the proposed corridor to determine if the area is being utilized as summer roosting habitat by the federally endangered Indiana bat (*Myotis sodalis*). Personnel of the U.S. Fish and Wildlife Service have reviewed the information provided and offer the following comments.

Joint mist netting and acoustical studies were performed from August 3 through August 10, 2011, at six sites determined to contain suitable habitat for the Indiana bat. The acoustical study resulted in the recording of 883 bat calls, of which none were identified as Indiana bats. The mist netting efforts resulted in the capture of 26 bats, of which two individuals were federally endangered gray bats *(Myotis grisescens)*. The Tennessee Division Office agrees with the determination made by the Tennessee Department of Transportation (TDOT) that the project is "not likely to adversely affect" the Indiana bat because none were observed during surveys.

Due to negative Indiana bat surveys, we concur with TDOT's finding of "not likely to adversely affect" for the Indiana bat. Although it is likely that this project would have an insignificant effect on the Indiana bat, we would appreciate consideration given to the removal of trees with a DBH (diameter at breast height) of five inches or greater from October 15 through March 31 to further minimize potential for harm to the Indiana bat. Based on the best information available at this time, we believe that the requirements of section 7 of the Endangered Species Act of 1973, as amended, are fulfilled. Obligations under the Act must be reconsidered if (1) new information reveals impacts

of the proposed action that may affect listed species or critical habitat in a manner not previously considered, (2) the proposed action is subsequently modified to include activities which were not considered during this consultation, or (3) new species are listed or critical habitat designated that might be affected by the proposed action.

The capture of two gray bats during survey efforts would indicate that this species utilizes the area streams as travel/feeding corridors. Our database indicates that the nearest gray bat cave is Morrell Cave, approximately 10 miles east of the project. We are unaware of any caves that would be impacted by the project and are concerned mainly for water quality along travel/feeding corridors. Best management practices, to include stringent erosion and sediment control measures, should be implemented throughout the project to minimize potential for harm to the gray bat.

If you have any questions regarding our comments, please contact John Griffith of my staff at 931/525-4995 or by email at john_griffith@fws.gov.

Sincerely,

Mary E. Jennings
Field Supervisor

PROFESSIONAL ENGINEERS, INC

3 HMB Circle
U.S. 460
Frankfort, KY 40601
Office: (502) 695-9800
Fax: (502) 695-9810

FA-0168

RECEIVED
NOV 14 2007
By

November 8, 2007

Lee Barclay, Field Supervisor
U.S. Fish and Wildlife Service
Cookeville Field Office
446 Neal Street
Cookeville, TN 38501

Subject: Aquatic and Terrestrial Technical Study
Project: State Route 126 (Memorial Boulevard)
Sullivan County, Tennessee

Dear Mr. Barclay:

The Tennessee Department of Transportation has contracted with HMB Professional Engineers, Inc. to conduct a technical study for the proposed improvement of State Route 126 in Sullivan County, TN. The study will provide an assessment of the aquatic and terrestrial environment from Hermitage Drive in Kingsport, to Interstate 81 near Overhill Drive. The study corridor would include 1000 feet to either side of the existing SR 126.

HMB Professional Engineers, Inc. and the Tennessee Department of Transportation are requesting information concerning possible stream and wetland impacts, and potential impacts to threatened and endangered species that may occur within the area of this project.

Please review the enclosed information and provide any comments and concerns that might be associated with the proposed action. The USGS 7.5 minute quadrangle mapping which applies to the project has been included, and a copy of the project corridor has been included.

Thank you for your prompt attention to this request. If you have any questions or need further information, please contact John W. Brown, HMB Environmental Project Manager, or myself at (502) 695-9800 or at either of the following email addresses: srice@hmbpe.com or jwbrown@hmbpe.com.

No significant adverse impacts to wetlands or federally listed endangered or threatened species are anticipated from this proposal.

Lee R Barclay 12/7/07
Field Supervisor Date
U. S. Fish and Wildlife Service
Cookeville, TN 38501

Highway Engineering
Structural Engineering
Water & Wastewater
Site Development
Master Planning
Environmental Planning
Surveying
Project Management
Cost Estimation
Construction Inspection
Aviation Services
Environmental Remediation

United States Department of the Interior

FISH AND WILDLIFE SERVICE
446 Neal Street
Cookeville, TN 38501

March 25, 2010

Mr. Tom Love
Tennessee Department of Transportation
Environmental Planning and Permits Division
Suite 900, James K. Polk Building
505 Deaderick Street
Nashville, Tennessee 37243-0334

Subject: Concurrence points I and II. Proposed construction to State Route 126 (Memorial Boulevard), Sullivan County, Tennessee.

Dear Mr. Love:

The Tennessee Department of Transportation (TDOT), in cooperation with the Federal Highway Administration (FHWA), is initiating National Environmental Policy Act (NEPA) documentation and analysis for the proposed construction to approximately 8.4 miles of State Route 126 between East Center Street and Interstate 81 (I-81) in Sullivan County, Tennessee. The purpose of this project is to improve the existing two-lane roadway, reduce the crash rates, and enhance travel and emergency response times from East Center Street in Kingsport to I-81. TDOT, the City of Kingsport, and local citizens conducted a Context Sensitive Solutions process which documents the majority decisions made by a Community Resource Team regarding design elements, roadway cross sections, and components of the project's purpose and need.

The *Purpose and Need and Study Area/ Alternatives to be Evaluated Package* was developed by TDOT to justify this project and outline the preferred build alternatives and their potential impacts in accordance with the National Environmental Policy Act and the Tennessee Environmental Streamlining Agreement (TESA). In accordance with TESA, TDOT has requested that the U.S. Fish and Wildlife Service review and provide concurrence (or non concurrence) on concurrence points 1 and 2, *Purpose and Need and Study Area/ Alternatives to be Evaluated Package*.

We have reviewed the *Purpose and Need and Study Area/ Alternatives to be Evaluated Package* and **concur** that it is adequate and that TDOT should proceed to Concurrence Point 3, *Draft Environmental Assessment*. Endangered species collection records available to the Service do not indicate that federally listed or proposed endangered or threatened species occur within the impact area of the project. We note, however, that collection records available to the Service may not be all-inclusive. Our data base is a compilation of collection records made available by

various individuals and resource agencies. This information is seldom based on comprehensive surveys of all potential habitat and thus does not necessarily provide conclusive evidence that protected species are present or absent at a specific locality. However, based on the best information available at this time, we believe that the requirements of section 7 of the Endangered Species Act of 1973, as amended, are fulfilled. Obligations under section 7 of the Act must be reconsidered if (1) new information reveals impacts of the proposed action that may affect listed species or critical habitat in a manner not previously considered, (2) the proposed action is subsequently modified to include activities which were not considered during this consultation, or (3) new species are listed or critical habitat designated that might be affected by the proposed action. The signed TESA concurrence points 1 and 2 package for this project is attached.

If you have any questions regarding our comments, please contact John Griffith of my staff at 931/528-6481 (ext. 228) or by email at john_griffith@fws.gov.

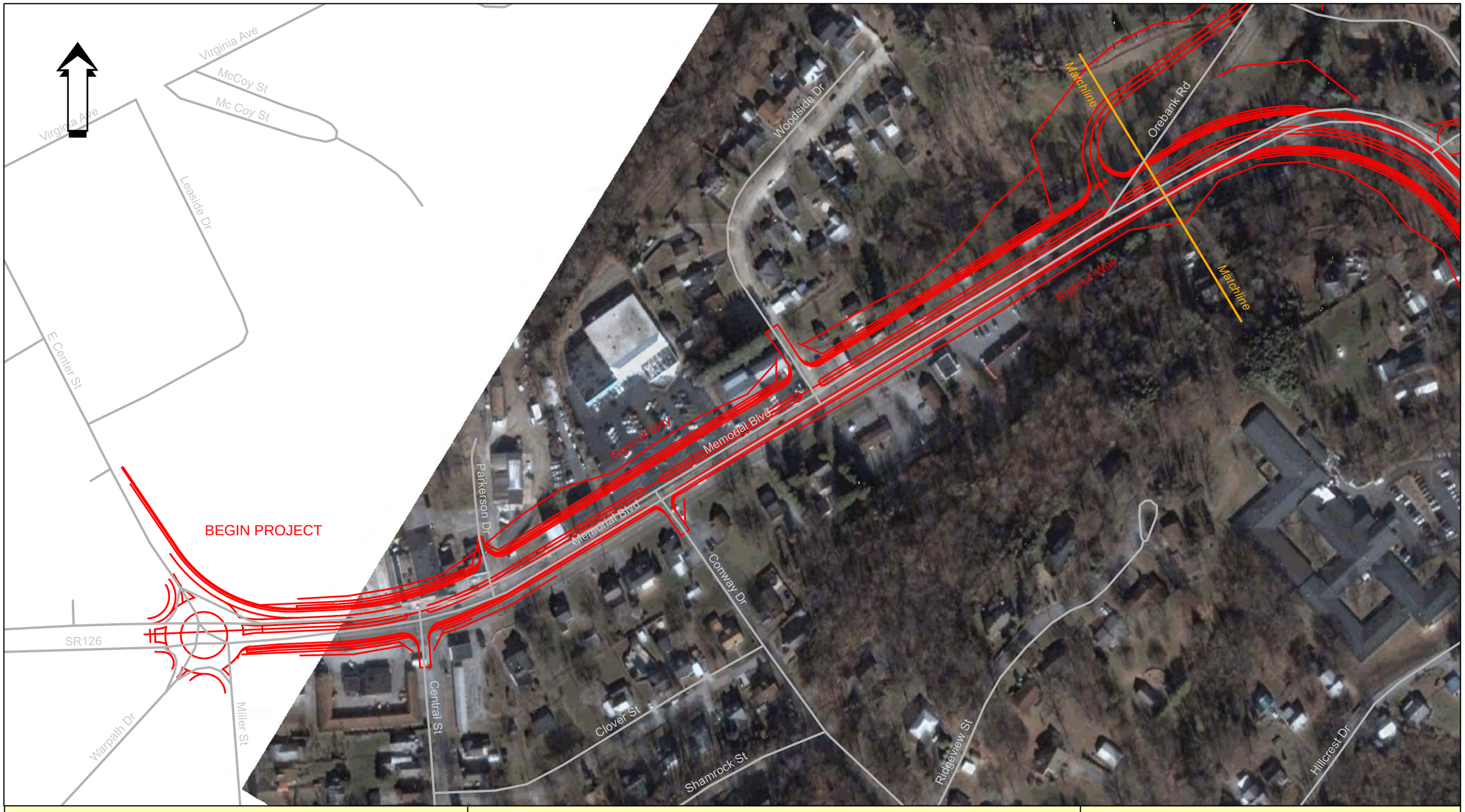
Sincerely,

Mary E. Jennings

Mary E. Jennings
Field Supervisor

Enclosure

APPENDIX D BUILD ALTERNATIVES CONCEPTUAL LAYOUTS



Legend

Alternative A

Alternative A on Aerial Photography

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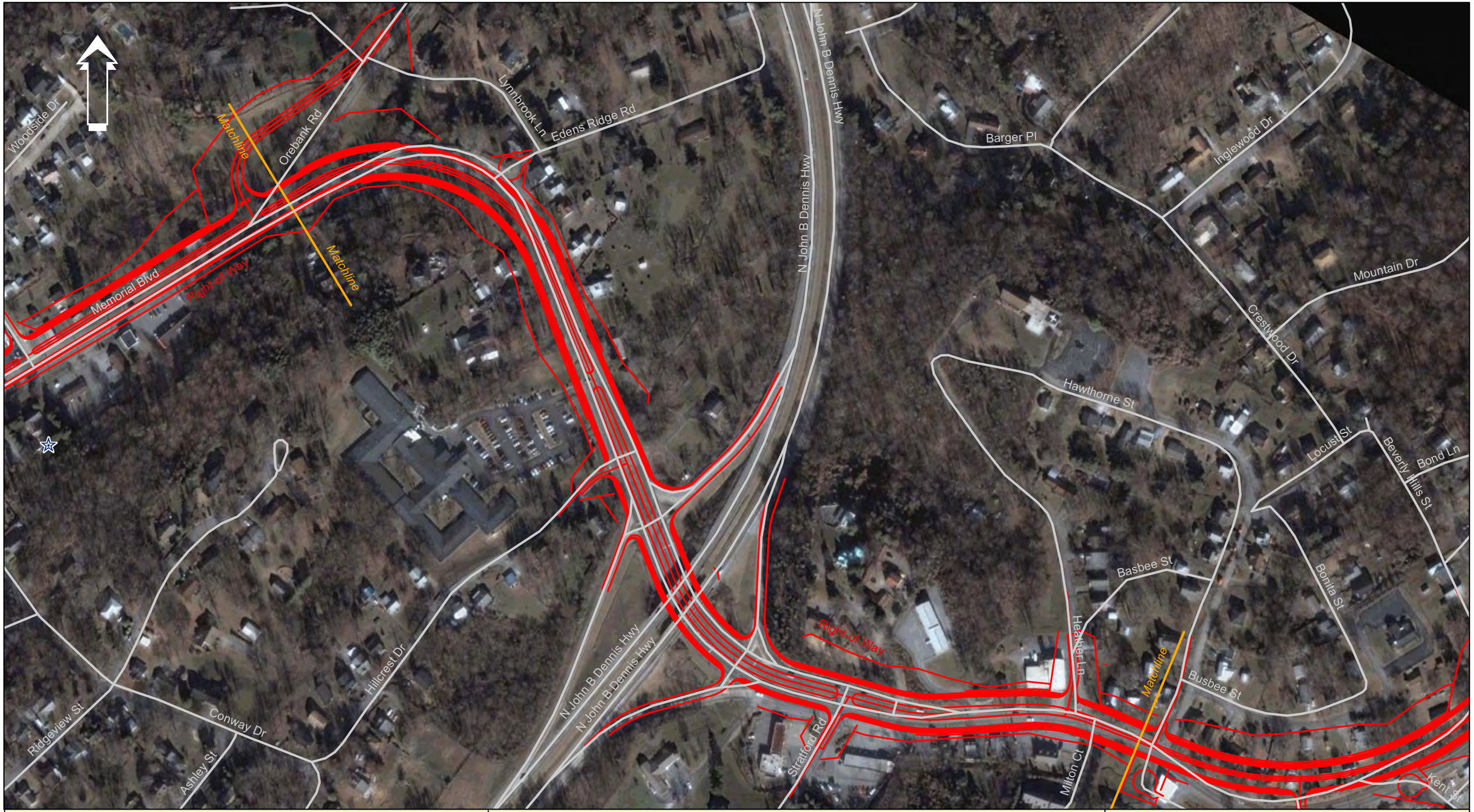
Sullivan County
SR 126 (Memorial Boulevard)
Alternative A

A.1



Legend

Alternative A

Alternative A on Aerial Photography

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Sullivan County
SR 126 (Memorial Boulevard)
Alternative A

A.2



Legend

Alternative A

Alternative A on Aerial Photography

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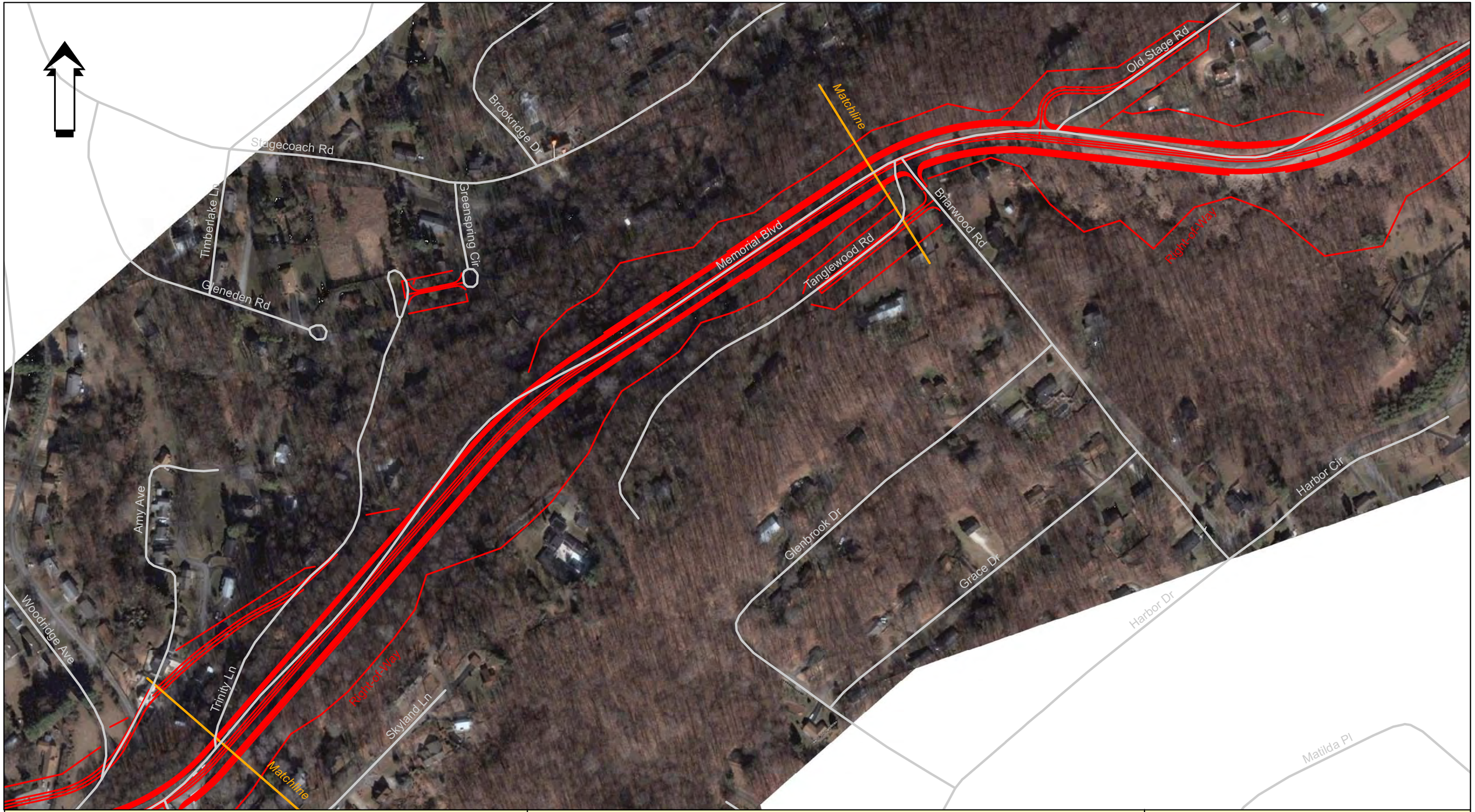
Sullivan County
SR 126 (Memorial Boulevard)
Alternative A

A.3



Legend

Alternative A

Alternative A on Aerial Photography

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Sullivan County
SR 126 (Memorial Boulevard)
Alternative A

A.4



Legend

Alternative A

Alternative A on Aerial Photography

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Sullivan County
SR 126 (Memorial Boulevard)
Alternative A

A.5



Legend

Alternative A

Alternative A on Aerial Photography

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Sullivan County
SR 126 (Memorial Boulevard)
Alternative A



Legend

Alternative A

Alternative A on Aerial Photography

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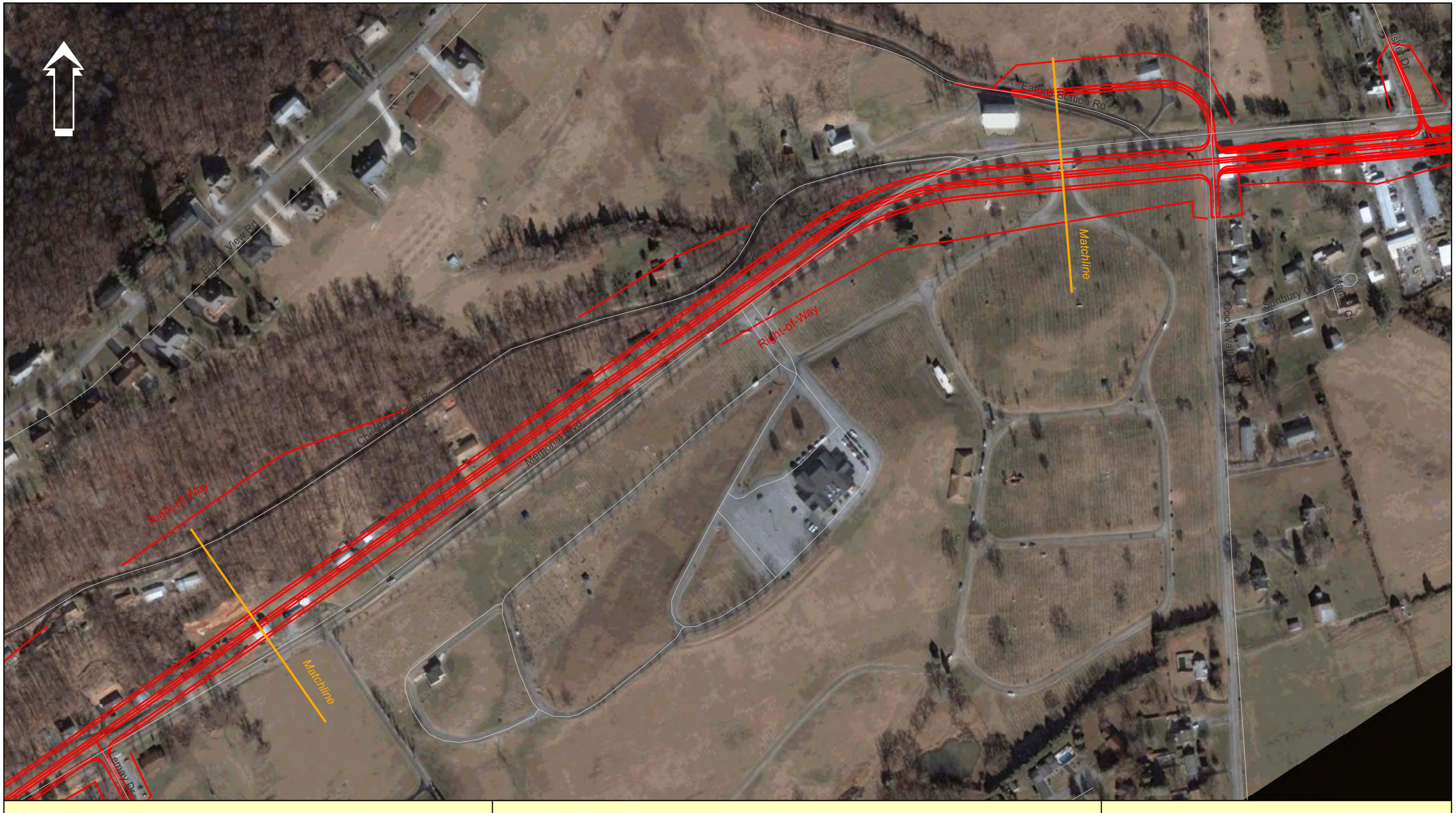
Sullivan County
SR 126 (Memorial Boulevard)
Alternative A

A.7



Legend

Alternative A

Alternative A on Aerial Photography

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Sullivan County
SR 126 (Memorial Boulevard)
Alternative A



Legend

Alternative A

Alternative A on Aerial Photography

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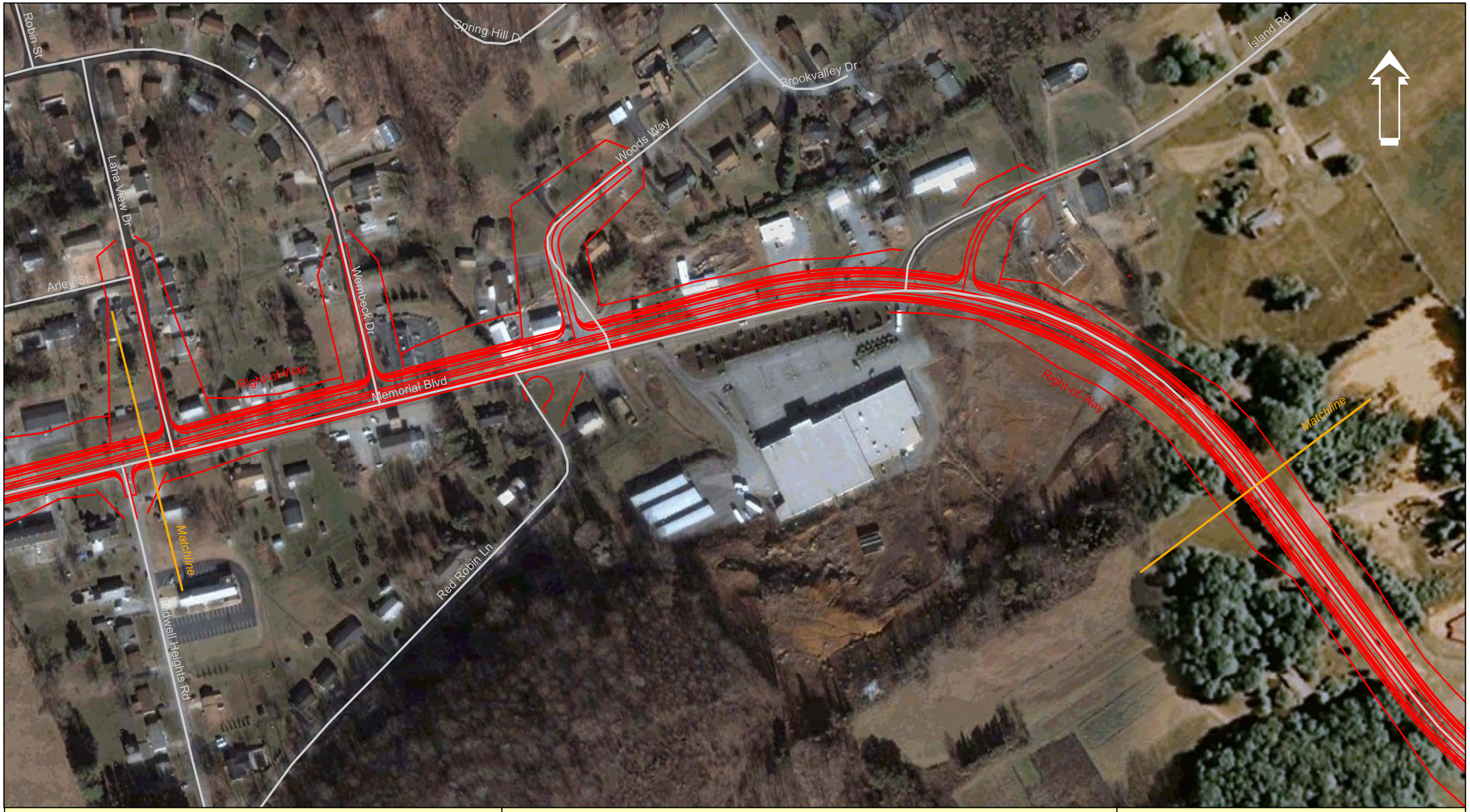
Sullivan County
SR 126 (Memorial Boulevard)
Alternative A



Legend

Alternative A

Alternative A on Aerial Photography

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Sullivan County
SR 126 (Memorial Boulevard)
Alternative A

A.10



Legend

Alternative A

Alternative A on Aerial Photography

0 145 290 580 870 1,160 Feet

Sullivan County
SR 126 (Memorial Boulevard)
Alternative A

A.11



Legend

Alternative A

Alternative A on Aerial Photography

0 145 290 580 870 1,160 Feet

Sullivan County
SR 126 (Memorial Boulevard)
Alternative A



Legend

Alternative A

Alternative A on Aerial Photography

0 145 290 580 870 1,160 Feet

Sullivan County
SR 126 (Memorial Boulevard)
Alternative A



Legend

Alternative A

Alternative A on Aerial Photography

0 145 290 580 870 1,160 Feet

Sullivan County
SR 126 (Memorial Boulevard)
Alternative A

A.14



Legend

Alternative A

Alternative A on Aerial Photography

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Sullivan County
SR 126 (Memorial Boulevard)
Alternative A

A.15



Legend

Alternative A

Alternative A on Aerial Photography

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Sullivan County
SR 126 (Memorial Boulevard)
Alternative A



Legend

Alternative A

Alternative A on Aerial Photography

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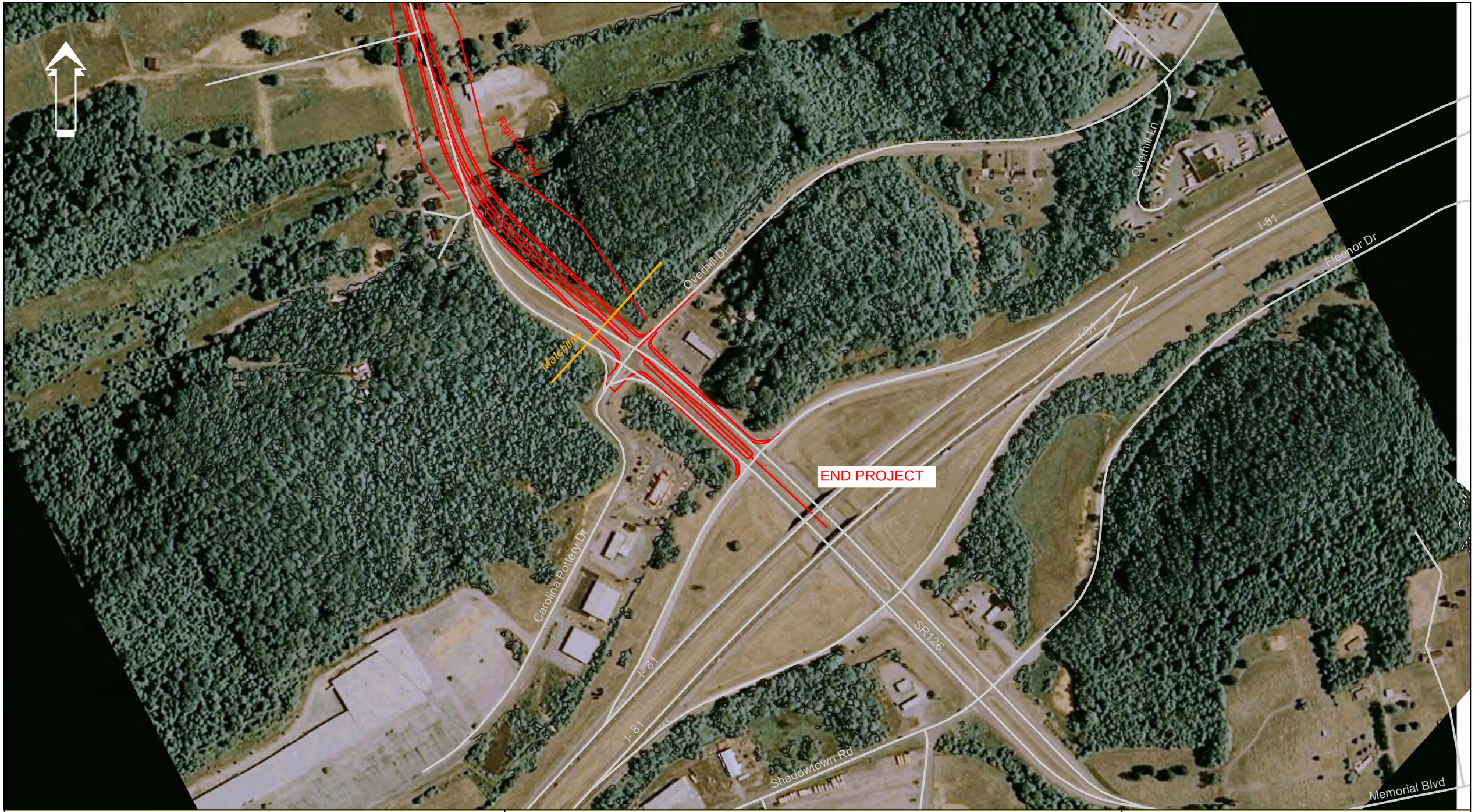
Sullivan County
SR 126 (Memorial Boulevard)
Alternative A



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Alternative A

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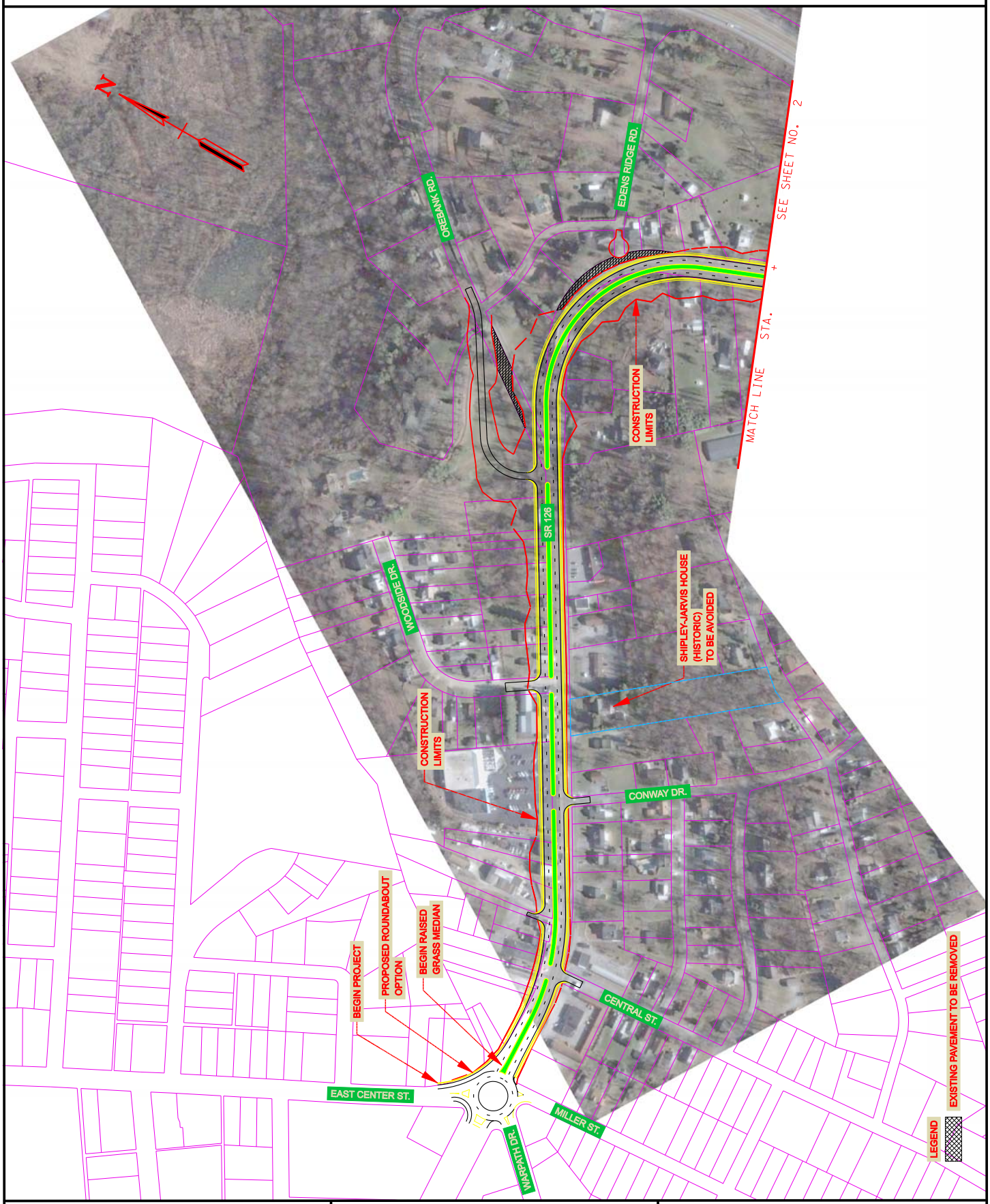
Sullivan County
SR 126 (Memorial Boulevard)
Alternative A



0 150 300 450

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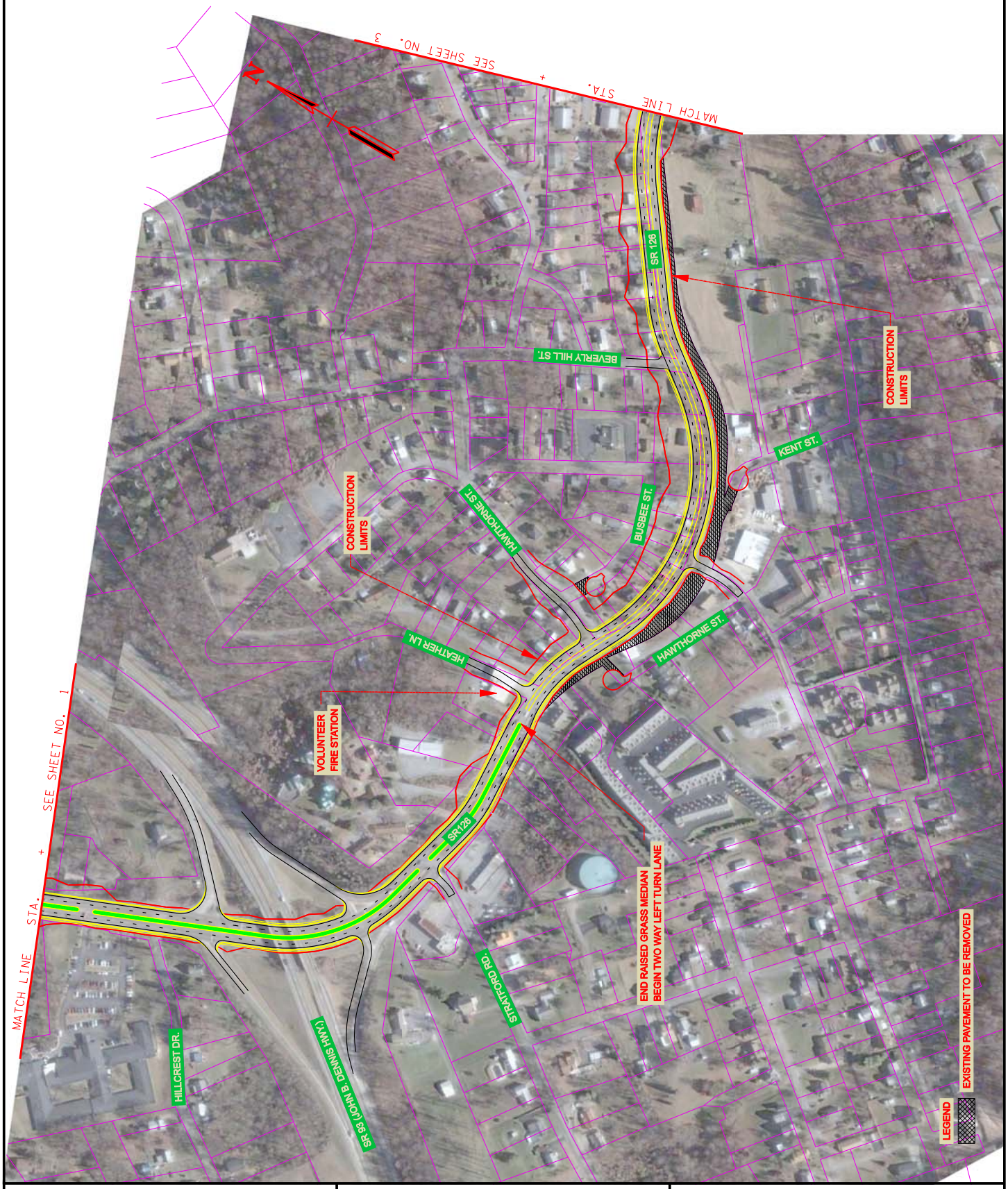
SR 126 Improvement Project
From East Center Street to I-81
Sullivan County, Tennessee

PROJECT LOCATION MAP
ALTERNATIVE B
SHEET 1



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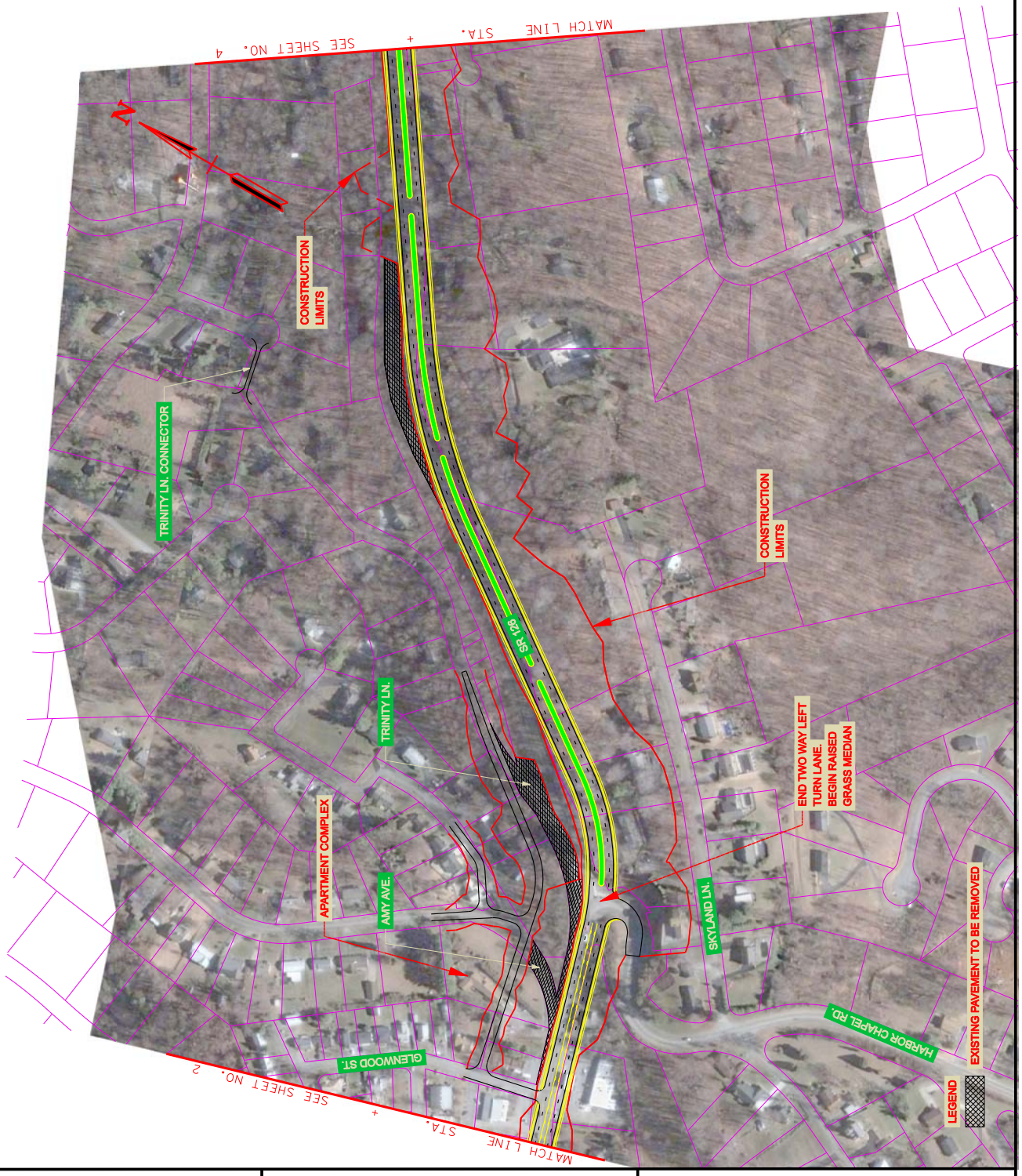
SR 126 Improvement Project
From East Center Street to I-81
Sullivan County, Tennessee

PROJECT LOCATION MAP
ALTERNATIVE B
SHEET 2



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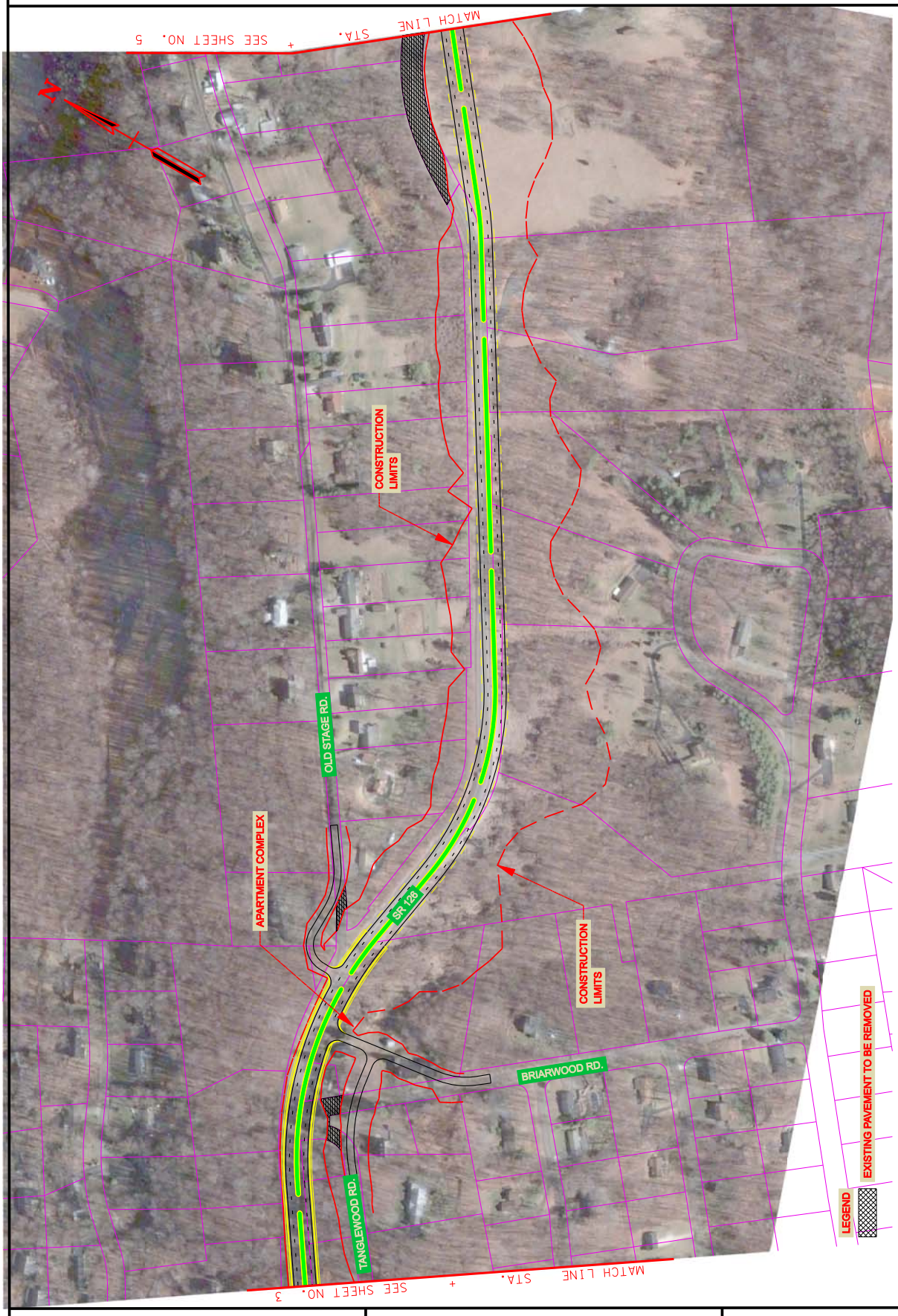
SR 126 Improvement Project
From East Center Street to I-81
Sullivan County, Tennessee

PROJECT LOCATION MAP
ALTERNATIVE B
SHEET 3



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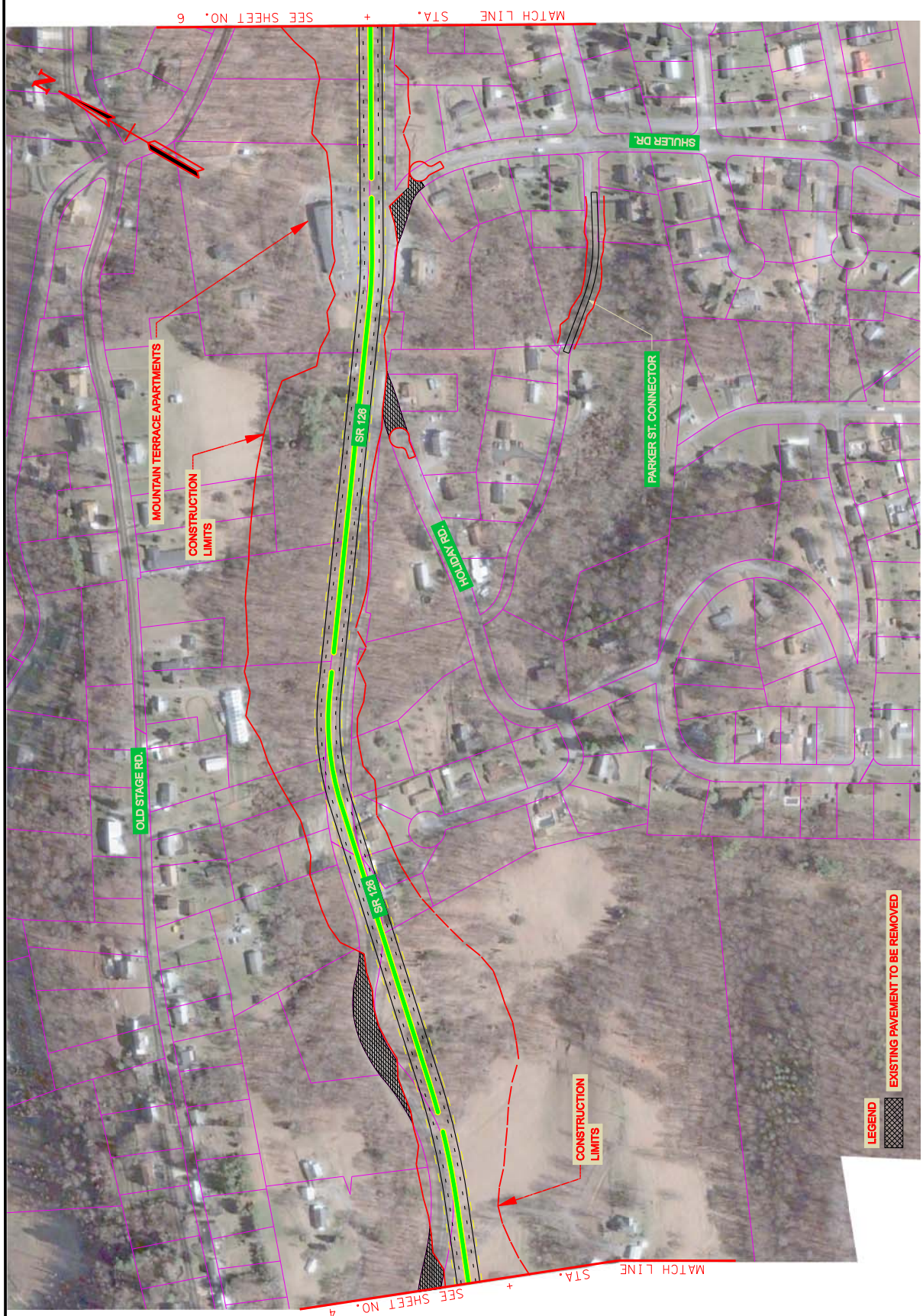
SR 126 Improvement Project
From East Center Street to I-81
Sullivan County, Tennessee

PROJECT LOCATION MAP
ALTERNATIVE B
SHEET 4



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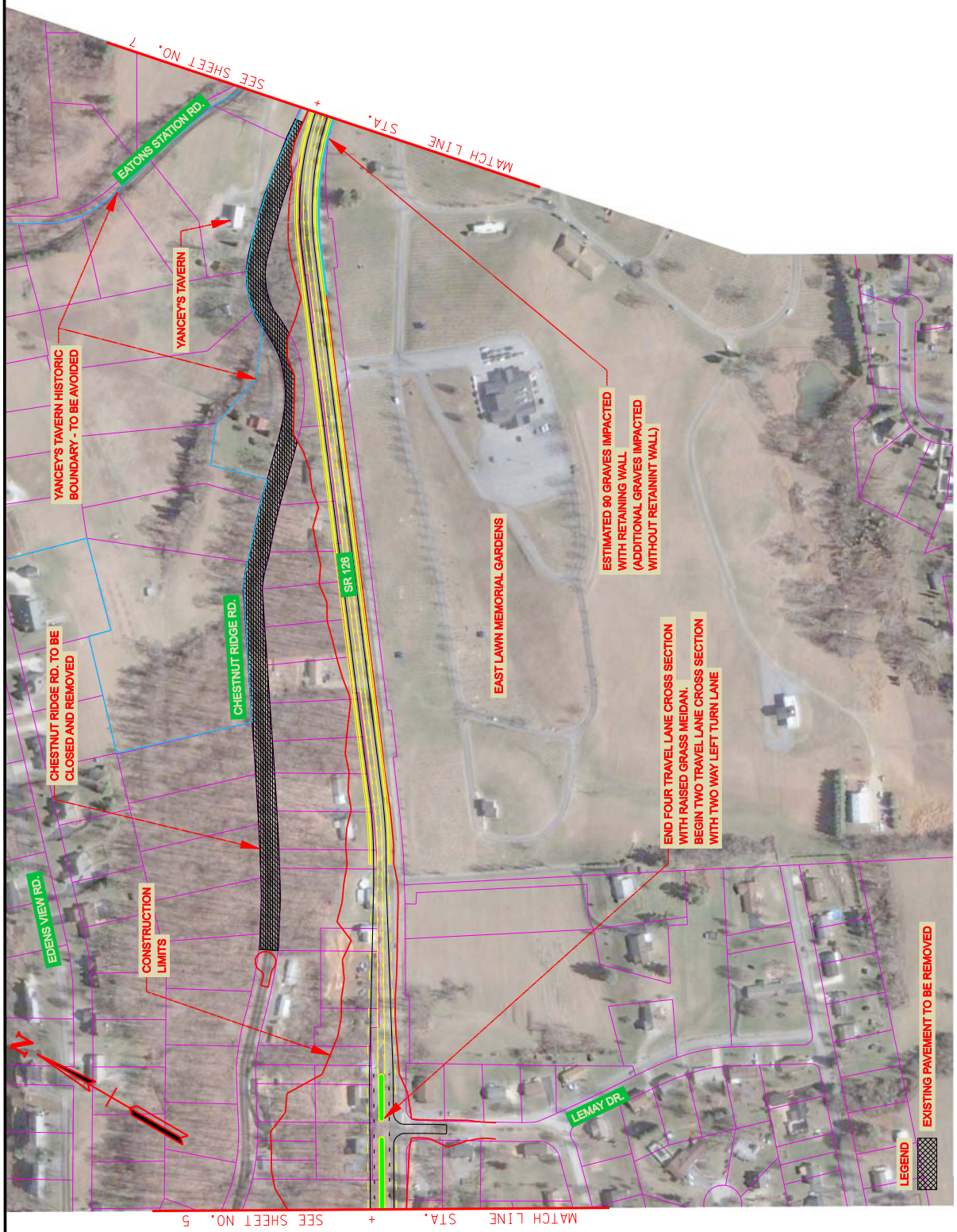
SR 126 Improvement Project
From East Center Street to I-81
Sullivan County, Tennessee

PROJECT LOCATION MAP
ALTERNATIVE B
SHEET 5



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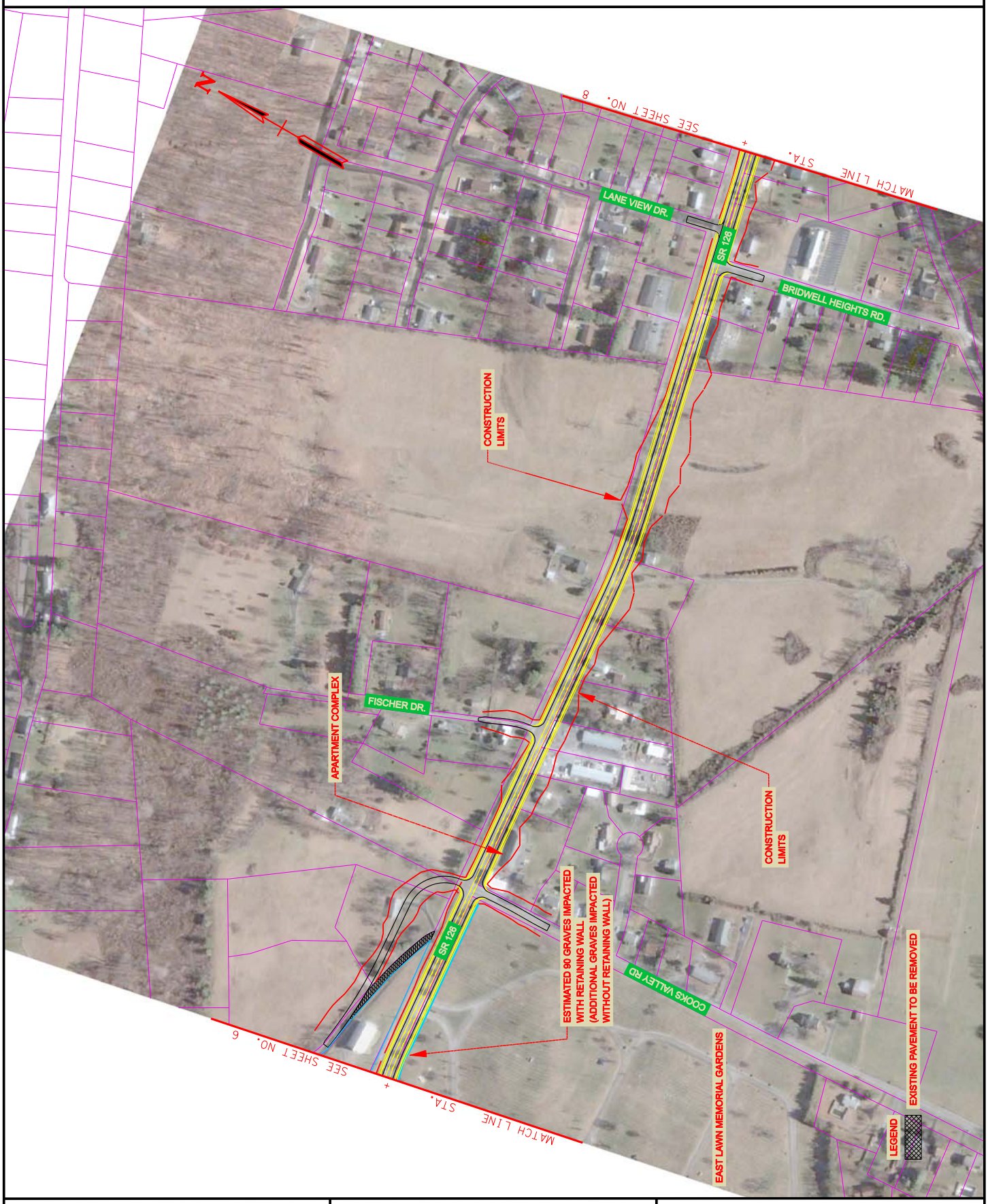
SR 126 Improvement Project
From East Center Street to I-81
Sullivan County, Tennessee

PROJECT LOCATION MAP
ALTERNATIVE B
SHEET 6



0 150 300 450

SCALE: 1 IN. = 400 FT.

SR 126 Improvement Project
From East Center Street to I-81
Sullivan County, Tennessee

PROJECT LOCATION MAP
ALTERNATIVE B
SHEET 7



0 150 300 450

SCALE: 1 IN. = 400 FT.

SR 126 Improvement Project
From East Center Street to I-81
Sullivan County, Tennessee

PROJECT LOCATION MAP
ALTERNATIVE B
SHEET 8

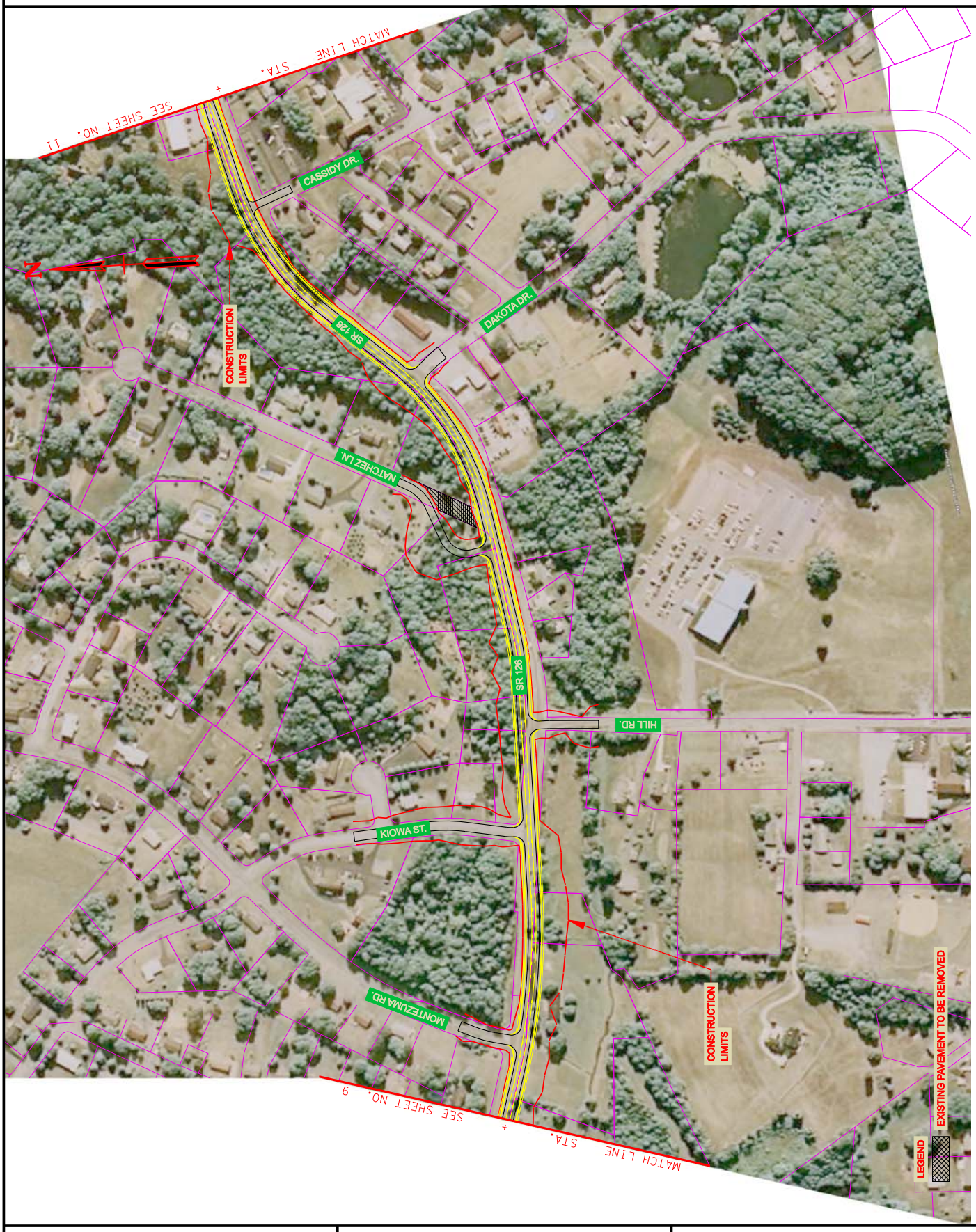


0 150 300 450

SCALE: 1 IN. = 400 FT.

SR 126 Improvement Project
From East Center Street to I-81
Sullivan County, Tennessee

PROJECT LOCATION MAP
ALTERNATIVE B
SHEET 9



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SR 126 Improvement Project
From East Center Street to I-81
Sullivan County, Tennessee

PROJECT LOCATION MAP
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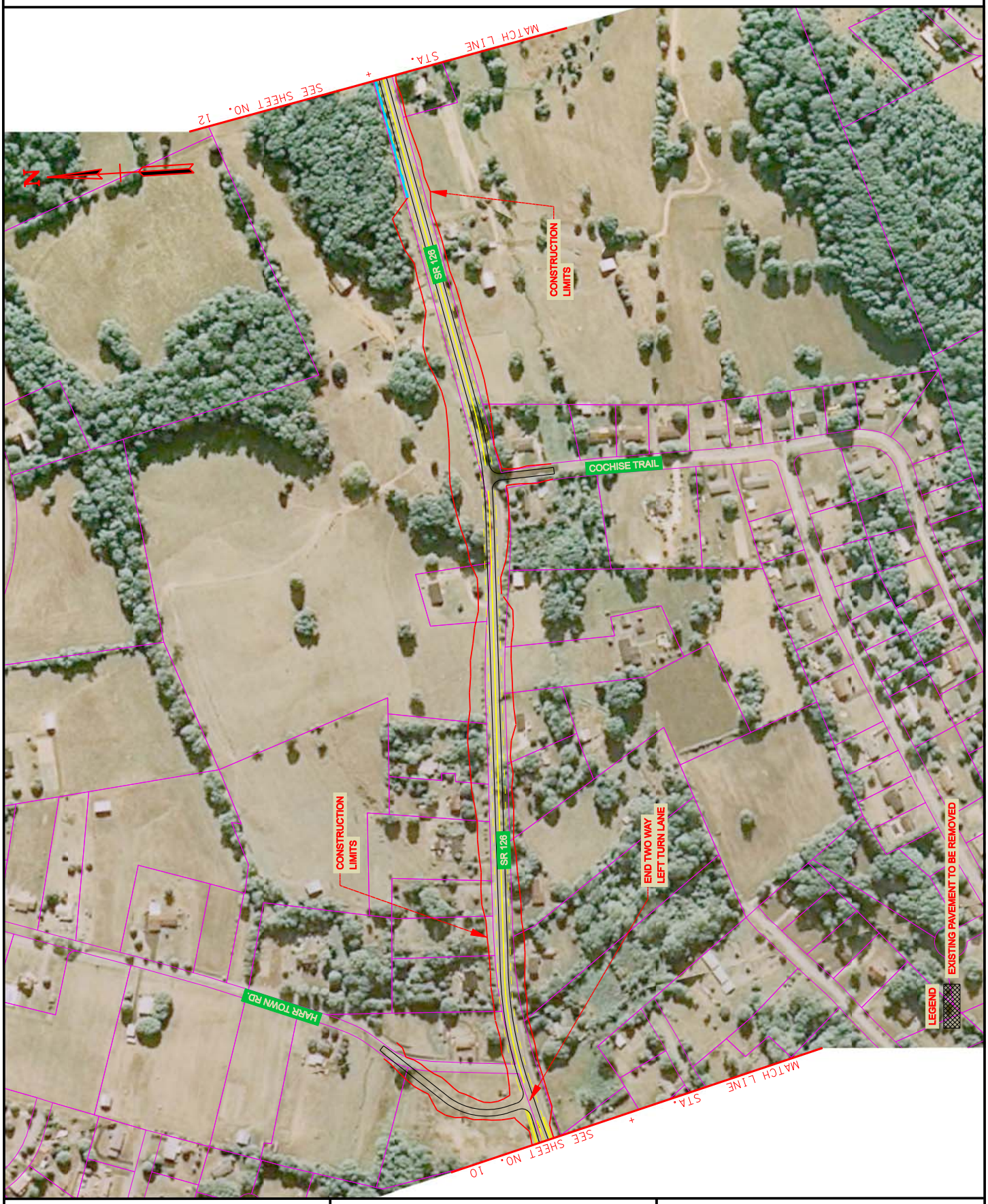

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SR 126 Improvement Project
From East Center Street to I-81
Sullivan County, Tennessee

PROJECT LOCATION MAP
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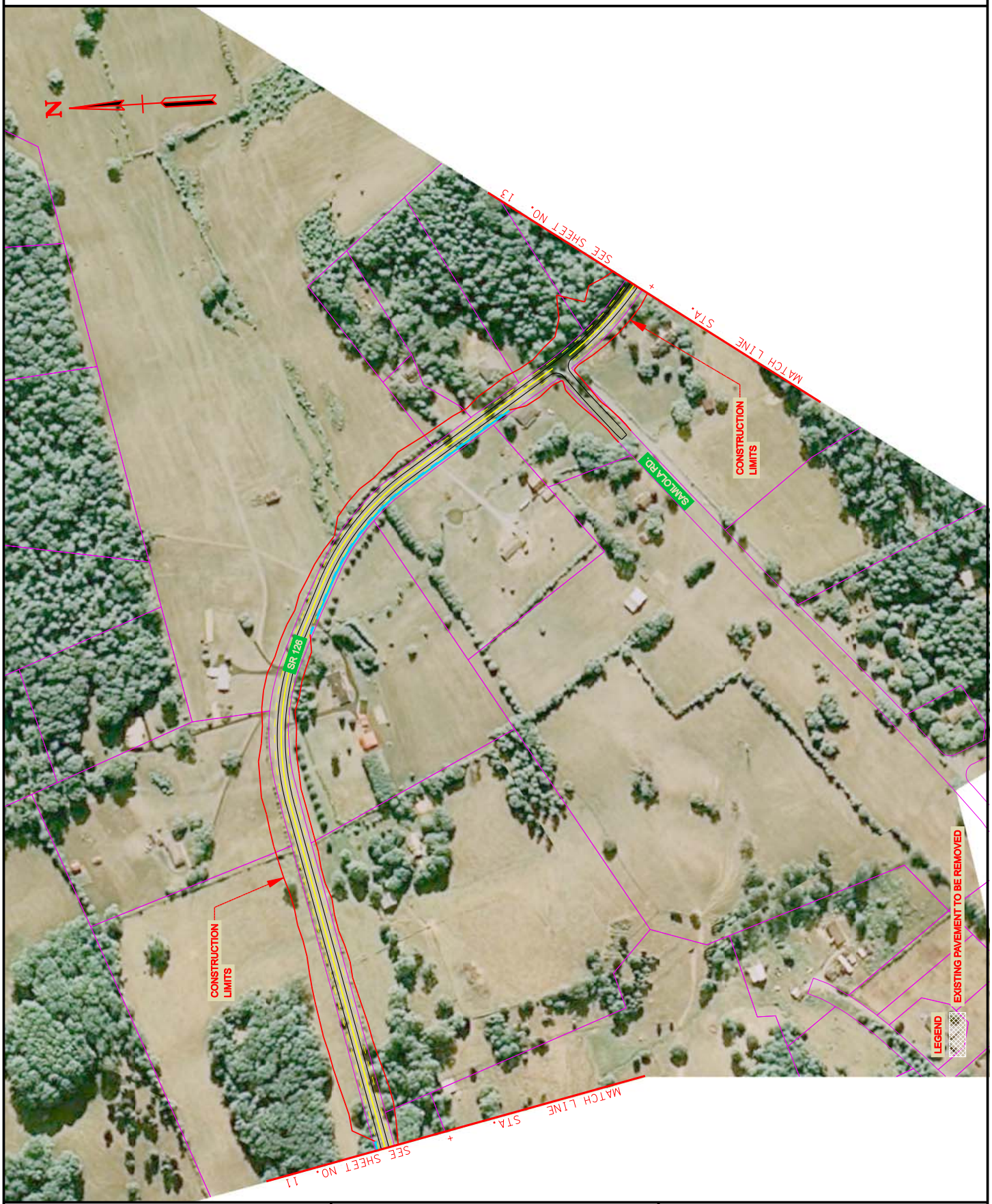

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SR 126 Improvement Project
From East Center Street to I-81
Sullivan County, Tennessee

PROJECT LOCATION MAP
ALTERNATIVE B
SHEET 12



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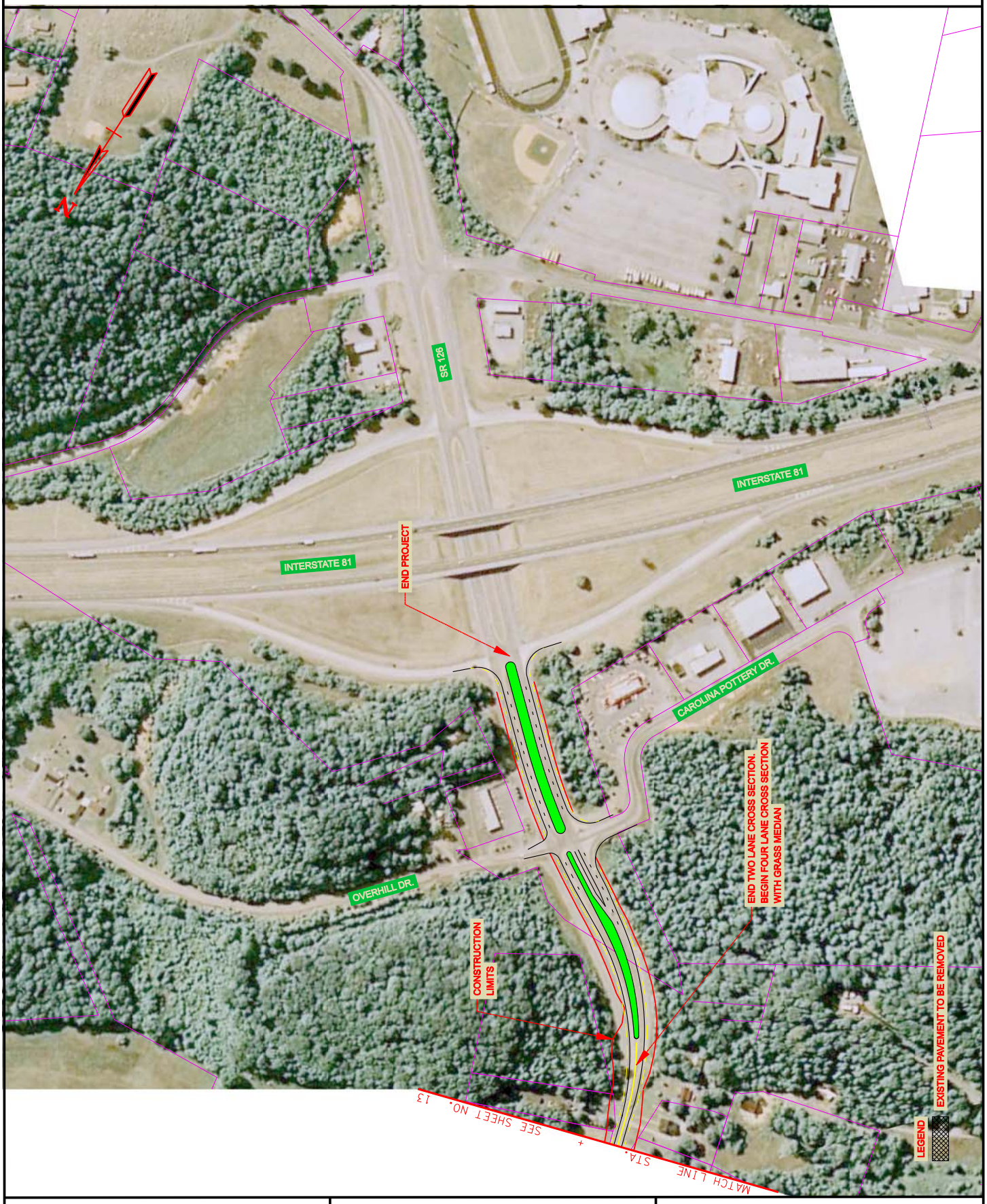
SR 126 Improvement Project
From East Center Street to I-81
Sullivan County, Tennessee

PROJECT LOCATION MAP
ALTERNATIVE B
SHEET 13



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SR 126 Improvement Project
From East Center Street to I-81
Sullivan County, Tennessee

PROJECT LOCATION MAP
ALTERNATIVE B
SHEET 14

APPENDIX E CONTEXT SENSITIVE SOLUTIONS CONCEPTUAL ALTERNATIVES

Summary of Cross Section Elements from Concepts A, B, & C

Section 1 West -- East Center Street to Orebank Road

	Concept A	Concept B	Concept C
Design speed	35	35	35
Travel lanes	1 eastbound and 1 westbound (14' each)	2 eastbound and 2 westbound (11' each)	2 eastbound and 2 westbound (11' each)
Median	Raised landscaped	Center turn lane	Raised landscaped
Bikeways	Share travel lane	4' shoulder	4' shoulder
Sidewalks	Yes	Yes	Yes
Curb and Gutter	Yes	Yes	Yes
Special features	One-lane roundabout at East Center Street		Roundabout with flared right turns at East Center Street (alternate option is signalized intersection)
Access Notes	Median openings and turn lanes at Central Street, Conway Drive, Woodside Drive, and Orebank Road	No access restrictions	Median openings and turn lanes at Central Street, Conway Drive, Woodside Drive, and Orebank Road

Section 1 East -- Orebank Road to West of Hawthorne Street

	Concept A	Concept B	Concept C
Design speed	35	35	35
Travel lanes	2 eastbound and 2 westbound	2 eastbound and 2 westbound	2 eastbound and 2 westbound
Median	Raised landscaped	Center turn lane	Raised landscaped
Bikeways	4' shoulder	4' shoulder	4' shoulder
Sidewalks	Yes	Yes	Yes
Curb and Gutter	Yes	Yes	Yes
Special Features	None	none	none
Access Notes	Median opening at eastern driveway for Sun Bridge Hillside Care and Rehab	No access restrictions	Median opening at eastern driveway for Sun Bridge Hillside Care and Rehab

Section 2 -- West of Hawthorne Street to Harbor Chapel Road

	Concept A	Concept B	Concept C
Design speed	35	35	35
Travel lanes	2 eastbound and 1 westbound	1 eastbound and 1 westbound	2 eastbound and 2 westbound
Median	No	Center turn lane	Center turn lane
Bikeways	4' shoulder	4' shoulder	4' shoulder
Sidewalks	Yes	Yes	Yes
Curb and Gutter	Yes	Yes	Yes
Special Features	None	none	none
Access Notes	None	none	none

Section 3 West -- Harbor Chapel Road to East of Old Stage Road

	Concept A	Concept B	Concept C
Design speed	35	45	45
Travel lanes	2 eastbound and 1 westbound, west of Briarwood Road; 1 eastbound and 1 westbound, east of Briarwood Road	1 eastbound and 1 westbound	2 eastbound and 2 westbound
Median	None west of Briarwood Road; a center turn lane east of Briarwood	Center turn lane	Raised landscaped
Bikeways	4' shoulder on both sides	4' shoulder on north side 10' stabilized (8' paved) shoulder on south side	8' stabilized (6' paved) shoulder on both sides
Sidewalks	Yes	Yes on north side only	Pedestrians use shoulder
Curb and Gutter	Yes	Yes on north side only	No
Special Features	None	none	none
Access Notes	None	none	none

Section 3 East -- East of Old Stage Road to Cooks Valley Road

	Concept A	Concept B	Concept C
Design speed	45	45	45
Travel lanes	1 eastbound and 1 westbound	1 eastbound and 1 westbound	2 eastbound and 2 westbound
Median	Centerline rumble strip	Center turn lane or raised barrier	Raised landscaped
Bikeways	8' stabilized (6'paved) shoulder on both sides	4' shoulder on north side 10' stabilized (8' paved) shoulder on south side	8' stabilized (6' paved) shoulder on both sides
Sidewalks	Pedestrians use shoulder	Yes on north side only	Pedestrians use shoulder
Curb and Gutter	No	Yes on north side only	No
Special Features	None	none	none
Access Notes	None	none	none

Section 4 -- Cooks Valley Road to Cochise Trail

	Concept A	Concept B	Concept C
Design speed	45	45	45
Travel lanes	1 eastbound and 1 westbound	1 eastbound and 1 westbound	2 eastbound and 2 westbound
Median	Centerline rumble strip	Center turn lane	Raised landscaped
Bikeways	8' stabilized (6'paved) shoulder on both sides	6' shoulder on both sides	8' stabilized (6' paved) shoulder on both sides
Sidewalks	Pedestrians use shoulder	Yes	Pedestrians use shoulder
Curb and Gutter	No	Yes	No
Special Features	None	none	none
Access Notes	None	none	none

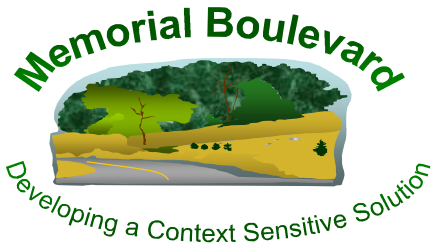
Section 5 -- Cochise Trail to Interstate 81

	Concept A	Concept B	Concept C
Design speed	45	45	45
Travel lanes	1 eastbound and 1 westbound	1 eastbound and 1 westbound	2 eastbound and 2 westbound
Median	Centerline rumble strip	Center turn lane	Raised landscaped
Bikeways	8' stabilized (6'paved) shoulder on both sides	10' stabilized (8' paved) shoulder on both sides	8' stabilized (6' paved) shoulder on both sides
Sidewalks	Pedestrians use shoulder	Pedestrians use shoulder	Pedestrians use shoulder
Curb and gutter	No	No	No
Special Features	Modify the two to four-lane transition area near Overhill Drive to provide longer tapers and better advance warning and sight distance	Modify the two to four-lane transition area near Overhill Drive to provide longer tapers and better advance warning and sight distance	Correct deficient curve west of Overhill Road and narrow existing median width at Overhill Road / Carolina Pottery intersection to improve safety
Access Notes	None	none	none

Context Sensitive Solutions Report

for

State Route 126 (Memorial Boulevard)



in the
City of Kingsport / Sullivan County

Prepared by
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&
PBS&J

Prepared for the
Tennessee Department of Transportation
Planning Division

VOLUME 1

sain associates

TDOT Go.

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PREFACE

This report presents a detailed chronology of the process followed, data collected, analyses conducted, and recommendations developed during the planning phase of the State Route 126 (Memorial Boulevard) project in Kingsport and Sullivan County, Tennessee. This was Tennessee's first Context Sensitive Solutions project to begin with the planning phase. In addition to recording the results of this project, this document is intended to serve as a reference tool for future CSS projects by detailing the process that was used. Questions specifically addressed in this report include:

- Why was the project initiated?
- What conditions of concern exist on SR 126?
- What is the purpose and need for the project?
- How was the project team selected?
- How did the team do their work?
- What struggles did the team encounter, and how were they resolved?
- How was public input gathered and considered?
- How were the principles of CSS used during the planning stage of this project?
- What improvements are recommended for SR 126?

This report is divided into seven major sections:

- Executive Summary
- SR 126 History and Background Information
- Process
- Project Data
- Solutions Development
- Team Recommendations
- Support Documentation

The State Route 126 study area is depicted on Figure 1. The project limits extend from the intersection of State Route 126 and East Center Street in the City of Kingsport to the interchange of SR 126 and Interstate 81 in Sullivan County.

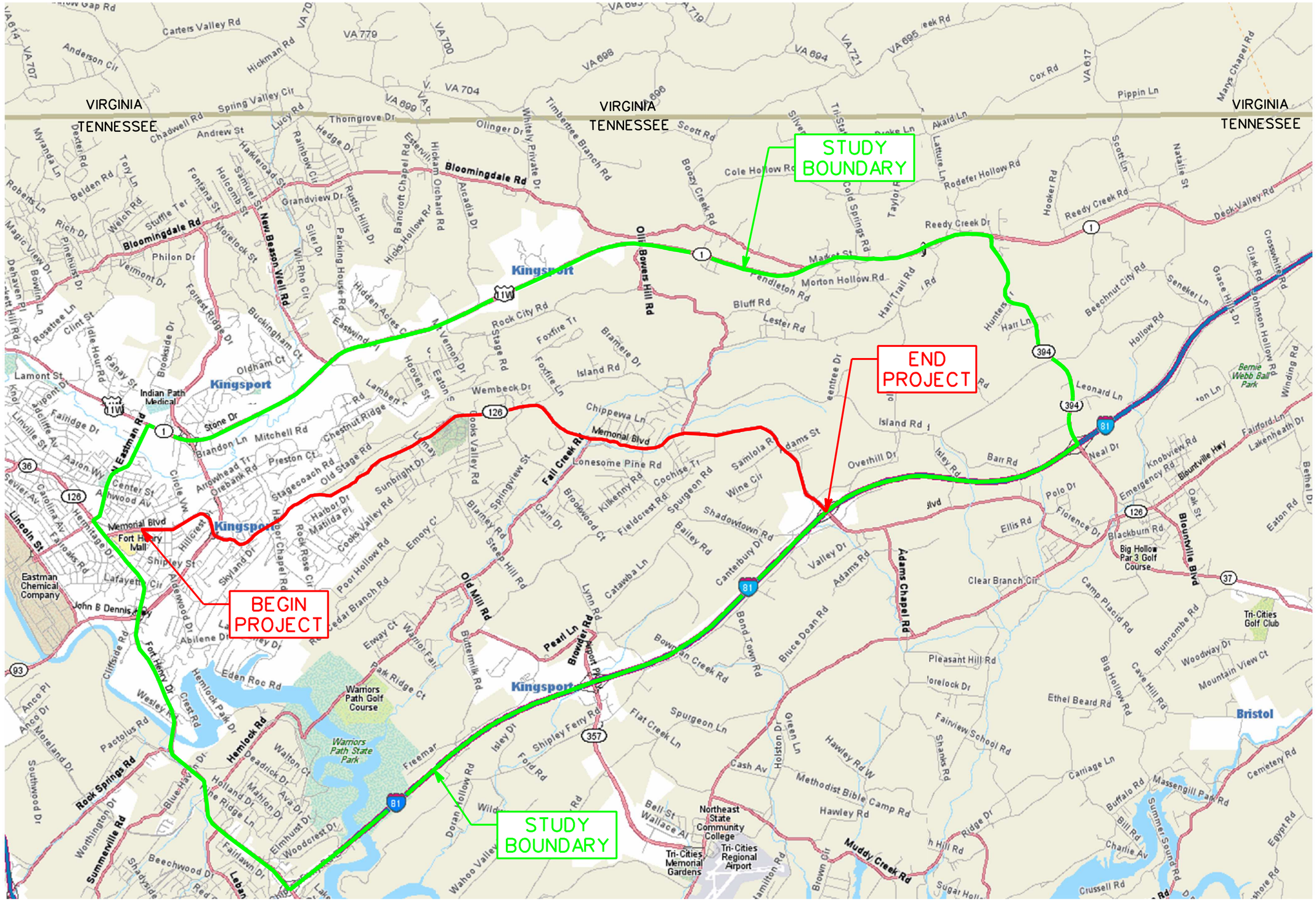


FIGURE 1
PROJECT STUDY AREA

EXECUTIVE SUMMARY

Summary of Community Resource Team (CRT) Recomendations

During the 21-month study process there was unanimous support among the CRT members for a large number of "Common Ground" recommendations. Majority decisions were made regarding design elements and roadway cross sections. Public opinion was surveyed at each Public Involvement Session, and the results of those surveys were reviewed and discussed by the CRT and used to guide their decision making.

- CRT unanimously agreed upon:
    - 11 Enhancement Features in the Design Plan
    - 10 Safety Improvements, with safety stated as the number one priority for SR 126
    - 7 Points of Interest to the Community
    - 4 Other Special Issues

Working together, the CRT developed recommendations for roadway cross sections. The recommendations are divided into eight sections, identified by intersecting cross streets.

- For five of the eight sections, the CRT developed consensus design recommendations.
- For three of the eight sections, the CRT developed design recommendations that were supported by a majority of team members.
- Figure 2 shows a graphic depiction of the CRT's recommendation for number of travel lanes on SR 126.

Consensus design recommendations include:

- Improve these segments to a four-lane median divided facility with curb, gutter and sidewalks
    - Segment 1 West – East Center Street to Orebank Road
    - Segment 1 East – Orebank Road to West of Hawthorne Sreet
    - Segment 3 West – Harbor Chapel Road to east of Old Stage Road
- Improve this section to four travel lanes and a center turn lane with curb and gutter and sidewalks
    - Segment 2 – West of Hawthorne Street to Harbor Chapel Road
- Provide an improved two-lane roadway with paved shoulders, wide centerline, and rumble strips
    - Segment 4 East – Harrtown Road to Cochise Trail

Majority design recommendations with minority objection statements include:

- Improve this segment to a four-lane median divided facility with shoulders
    - Segment 3 East – East of Old Stage Road to Cooks Valley Road
- Improve this segment to provide two travel lanes and a center turn lane with curb, gutter and sidewalks
    - Segment 4 West – Cooks Valley Road to Harrtown Road
- Provide an upgraded two-lane roadway with paved shoulders, wide centerline, and rumble strips
    - Segment 5 – Cochise Trail to Interstate 81

HWY 126 PROJECT LOCATION MAP



Figure 2
Community Resource Team Recommendation for SR 126

Purpose & Need Statement

Historical Perspective

The Memorial Boulevard (S.R. 126) corridor literally evolved over time from an animal and wagon trail to eventually become U.S. Highway 11-W in 1926. It was built as an 18-foot wide concrete highway and currently follows the original alignment. It was widened to 22 feet overall around 1950 and topped with asphalt.



Although the roadway was "piecemealed" through the years, it proved to be a futile attempt to accommodate highway traffic. Eventually the decision was made to construct an entirely new by-pass for U.S. 11-W (known locally as Stone Drive).

When the new four-lane divided U.S. 11-W was opened in the 1960's the old route became a County road for a few years. It was then adopted by the State of Tennessee and designated as State Route 126 that extends from Kingsport through the county seat of Blountville, and on to Bristol, Tennessee-Virginia.

Presently, the remnants of the old highway remain virtually unchanged since it lost its designation as a U.S. highway in the 1960's. As the roadway's purpose changed from a U.S. highway to a State route, the roadway's new role needs to be evaluated in a comprehensive, context sensitive fashion.

Project Status

The need for improvement of Memorial Boulevard (S.R. 126) was identified by the City of Kingsport in the 1990s, and an application for a study of the facility was made in the City's 1992 annual state legislative funding request.

In 2003 the Kingsport MPO requested an Advance Planning Report for Memorial Boulevard (S.R.126) as the result of the primary recommendation of the East Kingsport Comprehensive Land Use and Transportation Study. The 8-mile project, which runs east-west from East Center Street within the City of Kingsport to Interstate 81 in Sullivan County, was chosen to be the state's first Context Sensitive Solutions project.

The roadway is an urban minor arterial route linking downtown Kingsport with residential communities to the east including Hillcrest, Cooks Valley, Bridwell Heights, Indian Springs and Gunnings. Residential development in the Memorial Boulevard (S.R. 126) corridor has steadily grown at about 1% per year over the past four decades.

On the western edge of the study area, Memorial Boulevard (S.R. 126) is a 4-lane undivided roadway (with no turn lanes) for a half-mile between Center Street to a point just west of John B. Dennis Highway (S.R. 93). It widens briefly to a 4-lane divided facility for a quarter-mile where it passes through two (2) signalized intersections at the ramps to John B. Dennis Highway (S.R. 93). It then changes to 3-lanes with an outbound climbing lane (presumably leftover from

its previous life as U.S. 11-W where slow-moving trucks needed to climb over the ridge) for one and one-third miles. After passing over Chestnut Ridge and leaving the city limits, it narrows back to a 2-lane facility for a distance of five and three-quarter miles. It then widens again to a 4-lane divided facility for less than a fifth-mile at its intersection with I-81 (which is the eastern terminus of the study area) in order to provide access to the interstate and interstate-related commercial establishments.

Although two-thirds of the route is currently in the County, it has been identified as an urban route because it lies within the Kingsport Urban Growth Boundary.

Existing (2003 / 2004) traffic volumes on Memorial Boulevard (S.R. 126) ranged from 18,060 vehicles immediately east of East Center Street to a high of 22,440 vehicles near the John B. Dennis Highway (S.R. 93) interchange to a low of 6,700 vehicles between Shadowtown Road and Harr Town Road. The projected 2028 traffic volumes for these same locations are estimated to be 18,060 (no growth is projected for Memorial Boulevard (S.R. 126) west of John B. Dennis Highway), an increase of 1.048% per year to 28,570 east of John B. Dennis Highway, and an increase of 1.048% per year to 8,440 between Shadowtown Road and Harr Town Road.

Outdated design on difficult terrain with many intersecting accesses dictates that the primary need on Memorial Boulevard (S.R. 126) is for improved safety and correction of roadway deficiencies.

Corridor Description

Terrain

The terrain is typical of the ridge & valley system that is common throughout East Tennessee. Kingsport is located in a basin framed by Bays Mountain (2,400') and Chestnut Ridge (1,940'). The study area is located in the "heights" above the city, 110'-735' higher than Downtown. The study area itself varies greatly in terrain. Beginning at Center Street, the roadway rises 380' to its crossing of Chestnut Ridge before descending 95' to its intersection with Cooks Valley Road and again rising 100' to I-81.

1,205 Broad at Center (in Downtown Kingsport)
1,315' Memorial (S.R.126) at Center Street (western terminus of study area)
1,695' Memorial (S.R. 126) at Old Stage (crossing Chestnut Ridge)
1,940' Highest point on Chestnut Ridge
1,600' Memorial (S.R. 126) at Cook's Valley Road
1,700' Memorial (S.R. 126) at I-81
2,400' Highest point in Kingsport (Bays Mountain Fire Tower)

Land Use

The west end consists of higher density single and multi-family residential. There are several small businesses along the west end that have very shallow setbacks and zero-lot line side yards. The middle section consists of low-density suburban-style single family residential with an elementary school, churches and neighborhood retail uses. 77% of the housing units are single family detached. Farmland and woodlands are focused along the steeper slopes, creek bottoms and adjacent valleys. A shopping center and high school are located at the intersection of I-81. There are numerous churches and historic sites along the corridor.

Economic Development
Roadway improvements are not intended to introduce additional commercial or industrial development to the non-City corridor, rather it is intended to support a sustainable business climate by improving access from developing residential areas to existing commercial areas.

Community Character & Values

Residents assign the highest values to:

- The scenic quality
- Quiet neighborhoods
- A feeling of safety and security within the neighborhoods
- Historic aspects
- Nearby family recreation and sports opportunities

Residents highly value the following visual characteristics:

- The rural setting (pastures, woodlands)
- Trees, shrubs and landscaping
- Historic houses, barns and other structures

Problems to be Solved

Road Safety

- Accident rates exceed statewide averages for similar roads
- The public ranked the following safety concerns in order of importance
    - Limited sight distance
    - Dangerous curves
    - Speeding traffic
    - Difficulty turning left
    - Unsafe for bicycles and pedestrians
- The consultants identified the following problem conditions and roadway deficiencies
    - Varied travel speeds that increase conflict between vehicles
    - Travel speeds that exceed the posted speed limits and/or design speed
    - Substandard horizontal and vertical curves (inadequate sight distance)
    - Lack of turn lanes at major intersections
    - Skewed intersection angles
    - Substandard superelevation in sharp curves
- Local resource team members identified additional problems such as:
    - Very narrow shoulder widths

Access Management

- The public also ranked access onto Memorial Boulevard (S.R. 126) as a major problem
- Difficulty entering or exiting business parking lots was identified as a significant problem, i.e. uncontrolled access to businesses along the roadway

Modal Interrelationship

- Need for safe pedestrian mobility and bikeways

Process Overview

The process followed by TDOT and the project management team for this project was one based upon open communication, inclusion, and flexibility. The process was not prescriptive, because this was TDOT's first attempt at using a Context Sensitive Solutions model for a planning study. The project management team was given a great deal of freedom to try new things and develop a workable procedure. The risk of being the first project team in Tennessee to implement a CSS process was that mistakes would inevitably be made along the way. TDOT recognized and accepted this risk, giving the SR 126 team its full support.

The SR 126 project was led by a project management team consisting of two TDOT staff members and three consultants. Among the consultant staffers, one served as the overall project manager with responsibility for schedules, budgets, leading meetings, managing team communications, and project documentation. The second consultant led the design efforts for the project and was responsible for overseeing all plan preparation. The third consultant staffer was responsible for leading all public involvement efforts.

The project management team was assisted throughout the project by a Community Resource Team that was appointed by the local City and County Mayors. The Community Resource Team provided local knowledge and guidance to the project management team and was consulted before any major project decisions were made.

Throughout the project the public was given information through a variety of outreach techniques that included: a project newsletter, website, postcards, local media, and three series of public involvement sessions. The public was encouraged to provide input to the project management and Community Resource Team through surveys, a toll free phone line, email, question and answer sessions, and face-to-face discussions.

The primary objectives of the Context Sensitive Solutions process that was followed for SR 126 were:

- To provide multiple opportunities and methods for gathering community input
- Work closely with leaders and citizens from the local community
- Gather information to identify community values and concerns
- Build trust through listening and responding with integrity
- Maintain open, two-way communication
- Facilitate the Community Resource Team's ability to prepare a recommendation for improving SR 126.

SR 126 HISTORY AND BACKGROUND INFORMATION

Attempts to improve SR 126 (Memorial Boulevard) have been under discussion since the early 1990s. In 1992, the Tennessee Department of Transportation (TDOT) completed an Advance Planning Report (APR). At the same time, the City of Kingsport included SR 126 (Memorial Boulevard) on its transportation priority list as part of its annual state legislative funding request process.

Several years later the APR was updated and the corridor was divided into three phases in an attempt to increase funding opportunities. Phase 1 extended from Center Street to Shuler Drive, Phase 2 extended from Shuler Drive to Hill Road, and Phase 3 extended from Hill Road to I-81. The city of Kingsport and the Kingsport Urban Area Metropolitan Planning Organization (MPO) again requested that TDOT develop an APR using this three-phase approach.

In March 2003, the Executive Board and Executive Staff of the Kingsport MPO passed a resolution requesting an APR for SR 126 (Memorial Boulevard). In April 2003, a copy of the resolution was included in a letter from Kingsport Mayor Jeanette Blazier to TDOT Commissioner Gerald Nicely. The letter detailed the history of the city's efforts to improve SR 126 (Memorial Boulevard). In May 2003, Commissioner Nicely responded, acknowledging Kingsport's efforts and directed TDOT's Planning Division to initiate a new APR. By September 2003, TDOT had committed to make SR 126 (Memorial Boulevard) the State's pilot Context Sensitive Solutions project.

TDOT selected a consultant and in September 2003 a Context Sensitive Solution presentation was made in Kingsport to an invited audience. This audience included the Mayors of Kingsport and Sullivan County, local state representatives, city and county staffs, citizens, and TDOT staff.

Principles of Context Sensitive Solutions

The SR 126 (Memorial Boulevard) project was designed to incorporate the principles of Context Sensitive Solutions. This is a process endorsed by the Federal Highway Administration, and is defined by it as "a collaborative, interdisciplinary approach that involves all stakeholders to develop a transportation facility that fits its physical setting and preserves scenic, aesthetic, historic and environmental resources, while maintaining safety and mobility." A stakeholder is defined as a person or group affected by and/or with an interest in the outcome of the project. Stakeholders in the SR 126 (Memorial Boulevard) project include:

- Citizens who live, work and/or travel along SR 126 (Memorial Boulevard) within the project area;
- City, County and state government elected and appointed officials;
- Groups with environmental, economic, or other concerns; and,
- The Tennessee Department of Transportation.

The Context Sensitive Solutions process has 15 guiding principles that have been divided into two groups and are documented on the Federal Highway Administration's website (http://www.fhwa.dot.gov/csd/qualities.htm). The first seven guiding principles deal with qualities of excellence in transportation design:

1. The project satisfies the purpose and needs as agreed to by a full range of stakeholders. This agreement is forged in the earliest phase of the project and amended, as warranted, as the project develops.
2. The project is a safe facility for both the user and the community.
3. The project is in harmony with the community, and it preserves environmental, scenic, aesthetic, historic, and natural resource values of the area, i.e. exhibits context sensitive design.
4. The project exceeds the expectations of both designers and stakeholders and achieves a level of excellence in people's minds.
5. The project involves efficient and effective use of the resources (time, budget, community) of all involved parties.
6. The project is designed and built with minimal disruption to the community.
7. The project is seen as having added lasting value to the community.

The next eight guiding principles deal with process characteristics that contribute to excellence:

8. Communication with all stakeholders is open, early, and continuous.
9. A multidisciplinary team is established early, with disciplines based on the needs of the specific project, and with the inclusion of the public.
10. A full range of stakeholders is involved with transportation officials in the scoping phase. The purposes of the project are clearly defined, and consensus on the scope is forged before proceeding.
11. The highway development process is tailored to meet the circumstances. This process should examine multiple alternatives that will result in a consensus of approach methods.
12. A commitment to the process from top agency officials and local leaders is secured.
13. The public involvement process, which includes informal meetings, is tailored to the project.
14. The landscape, the community, and valued resources are understood before engineering design is started.
15. A full range of tools for communication about project alternatives is used (e.g. visualization).

PROCESS

Beginning in September 2003, data collection such as gathering of mapping, traffic data, geometric features, and traffic accident reports began. The primary source for this data was TDOT, with the local Metropolitan Planning Organization providing additional support material.

While the technical data gathered for the project provided a significant piece of the information needed, it was not complete without the context that is provided by the local community. The CSS process demands that additional considerations be given to non-technical information and viewpoints. In order for the project management team --- people who do not reside in the local community --- to gather and understand local concerns, it was necessary to assemble a team of individuals from the community for assistance throughout the project. Recognizing the need for this, TDOT asked the City and County Mayors to appoint a community resource team.

The community resource team was comprised of elected officials, City and County staff, and citizens who live in the study area. Because the team members were unfamiliar with the CSS process and roadway planning, and since they were assembled specifically for this project and had not worked together previously as a team, it was necessary to begin with education. TDOT provided a two-day team building workshop that was facilitated by a professional team building consultant. One of the items that was accomplished during the team building sessions was the definition of the study area boundary. Following the team building, a one-day training session in the principles of Context Sensitive Solutions was conducted for the team by the Kentucky Transportation Center.

Throughout the project, the community resource team assisted the project managers with collection of information relative to citizen characteristics, concerns, and values. These subjective data were obtained through a combination of public involvement techniques. These techniques included surveys, one-on-one conversations, workshops, a focus group, and public involvement sessions. The community resource team served a valuable purpose by voicing local concerns for consideration by the project team.

Throughout the project, the basic process for gathering and evaluating data included a feedback loop. The project management team reviewed information, identified problems or issues, checked the validity of those conclusions by engaging the local team or community, revisited understandings, developed proposals, presented those proposals to the local team or community, and made modifications as necessary prior to final presentation.

Data Collection Methods

The following paragraphs present a summary of the information collected from TDOT and the community, individually and through the community resource team.

Mapping & Roadway Data

- At the project outset, TDOT provided the consultant team with two dimensional aerial photography. These aerial photos were useful for evaluating the horizontal curvature of SR 126 and for identifying structures and other features along the project route. The aerials were

also useful for mapping traffic accident data, design speed data for horizontal curves, and for visual presentations to the public.

- Mapping was obtained from the local Metropolitan Planning Organization's geographic information system which proved to be of limited use to the team.
- Data from TDOT's Traffic and Roadway Information Management System (TRIMS), was utilized to inventory geometric features and traffic control, view photographs of the roadway and roadside development, identify areas with sight distance deficiencies, establish base photos of existing conditions for future visualizations of concept recommendations, and evaluation of vertical curvature. After completion of the vertical curve analysis from TRIMS data, it was determined from a field review that the data was inaccurate and not suitable for curve analysis.
- After consideration of the tremendous planning challenges presented by the mountainous topography in the study area, the project team requested that TDOT provide controlled aerial survey with digital terrain model information. The controlled aerial surveys were completed during the summer of 2004, approximately nine months after the project began. The aerial survey allowed the consultants to prepare concept plans with sufficient detail to estimate construction impacts for cut and fill areas, produce an accurate centerline profile, identify deficient vertical curves, and establish centerline files in GEOPAK, and engineering design software, that can be utilized for roadway design in a subsequent phase of the project.

Traffic Volume Data

- TDOT provided traffic forecasts (ADT and DHV) for 2008 and 2028, that included volumes for thirteen segments on SR 126 throughout the project study area and turning movement volumes for four intersections: SR 126 and East Center Street, SR 126 and the two ramp terminal intersections of John B. Dennis Highway, as well as SR 126 and Harbor Chapel Road.
- A planning level analysis of capacity was conducted with the traffic forecast data to evaluate level of service for existing and future conditions.
- Objections were raised by members of the team concerning the methodology used by TDOT to produce the future traffic forecasts. TDOT had used a single growth rate for the entire project corridor based on historic traffic data from selected traffic count stations that were believed to have reliable data. Count stations with data showing zero or negative growth had been eliminated from the sample. Team members who objected to the TDOT projections argued that the complete set of data points should be used and that Kingsport had, in fact, seen a reduction in traffic volumes over the past ten years. A compromise was reached in which TDOT agreed to revise the traffic forecasts, using the complete set of data with two different growth rates. A zero growth rate was agreed to for traffic west of John B. Dennis Highway, and a growth rate of 1.048% per year was used for the rest of SR 126 east of John B. Dennis Highway. (See traffic forecast report dated August 26, 2004 and memo from Steve Allen dated August 19, 2004 in the appendix.) This early concession to members of the resource team remained a point of contention among TDOT staff and later with some members of the community. The compromise deviated from standard TDOT traffic forecasting practices.

Traffic Accident Data

- TDOT provided traffic accident data from TRIMS for the years 1999 through 2001, the most recent years available at the time of project initiation (July 2003).
- The consultant team prepared maps on aerial photos showing the location of every traffic accident within the TRIMS database. (TRIMS includes all accidents reported to TDOT except for property damage only with a value of less than $400 or accidents occurring on private property. This was not understood by the consultant team at the time.) The maps were presented to the resource team in January 2004 at a team meeting for their review and comment. The community resource team requested that the database be expanded to include data from 2002 and 2003 because of recent fatalities. Local team members offered to coordinate assembly of accident reports from City, County, and State law enforcement. After receiving accident reports from these local agencies, the consultant team created a new traffic accident database. The new database revealed that the data set from TRIMS for 1999 through 2001 was incomplete in that it did not include all traffic accident reports that had been on file at the local law enforcement agencies. The resource team was made aware of the discrepancies and the project management team made a decision to move forward with the expanded database for 1999 through 2003.
- Using the expanded database of traffic accident data, the consultant team revised the aerial photo mapping to show traffic accident locations for 1999 through 2003.
- Aerial photo maps of the traffic accident locations were presented at the Public Involvement Sessions in May 2004. Citizens were asked for comments on the accident data. Specifically, the project management team asked for local perspectives on the cause of accidents at the Carolina Pottery / Overhill Road intersection for which no obvious cause could be identified.
- Consultants calculated accident rates based upon the expanded traffic accident data set. After review of the accident rate calculations, TDOT requested that the rates be revised to eliminate accidents with property damage only less than $400 as well as any accident that occurred on private property. This change in the data set was required in order to keep the rate calculation process consistent with standard TDOT procedures.

Speed Data

- During an initial field review the consultant team noted locations of regulatory and advisory speed limits along SR 126. These were compared with the design speeds that were determined from the horizontal curve analysis conducted with the aerial photography. A comparison revealed that there are several horizontal curves along the project route where the existing design speed is inconsistent with regulatory and/or advisory speed signage. These discrepancies were noted on aerial mapping that was displayed at the January 2004 Resource Team Meeting and the May 2004 Public Involvement Sessions.
- To supplement the design speed and signage data, the project management team requested supplemental speed data be collected by TDOT to identify existing travel speeds at specific locations where there are horizontal curves. The speed data was summarized and presented at the January 2004 Resource Team Meeting and the May 2004 Public Involvement Sessions. The speed data validated a concern that had been expressed by local citizens that travel speeds on SR 126 exceed posted speed limits.

Historic and Archaeological Areas of Potential Concern

- As part of the project, TDOT initiated a historical survey of the SR 126 corridor to identify any historic properties that might be affected by the project. At the January 2004 team meeting, the team was told that one property, Yancey's Tavern, was listed on the National Register of Historic Places in 1972. Yancey's Tavern is located on Old Stage Road across SR 126 from East Lawn Cemetery.
- A complete historic survey of the study area was prepared by TDOT in draft form prior to the Design Review Workshop on March 30 and 31, 2005. Based on that draft report, the consultant added to the project concept plans a boundary identification for Shipley mansion, a National Register eligible property located near East Center Street.
- The TDOT Archeologist assigned to the technical resource team identified an area of potential concern in the vicinity of Eaton's Fort near Bridwell Heights Road. This information was presented at the Resource Team meeting in January 2004.
- The TDOT Ecologist assigned to the technical resource team reported in January 2004 that numerous streams would be of concern to the U.S. Army Corps of Engineers.

Meeting Location and Day of Week / Time of Day Preferences

- Meeting times and location preferences were surveyed on a postcard that was sent with the first newsletter in March 2004.
- Public Involvement Sessions were scheduled based upon the information gleaned from the postcard survey. Each time that Public Involvement was scheduled, two identical sessions were provided: a Wednesday mid-day session and an evening session that was held either on Tuesday or on Thursday. The Wednesday session was always held in downtown Kingsport at the Civic Auditorium in order to be convenient to those who work downtown and could attend a meeting during their lunch hour, those who work evening shift, and to retirees and others who prefer daytime meetings. The Tuesday or Thursday session was always held in the residential portion of Sullivan County at Sunnyside Baptist Church in order to be convenient to the majority of residents, including those in low income neighborhoods, and those who are unable to attend a meeting during the work day.

Areas of Concern and Qualities Valued on SR 126

- The postcard that was sent with the first newsletter in March 2004 also asked citizens to provide information about problem areas along SR 126.
- The postcard responses were summarized and presented at the first Public Involvement Sessions in May 2004. Over 700 postcard responses were received.
- At the May 2004 Public Involvement Sessions, a written survey was used to gather more detailed information about public perceptions of SR 126. Citizens were asked to rank in order of importance several types of travel or safety concerns. Nine questions were asked in the survey:
    1. Do you drive in the Memorial Boulevard / SR 126 study area (east of Center Street, south of 11W/Stone Drive, and north of Interstate 81)?
    2. How many round trips per week do you make using Memorial Boulevard / SR 126 between Interstate 81 and East Center Street?
    3. What is the average length (in miles), one-way, that you take on Memorial Boulevard / SR 126 between Interstate 81 and East Center Street?
    4. Do you have any travel problems or safety concerns along this route? If yes, rank those that apply in order of importance from 1 to 5, with 5 being the most important and 1 being the least important.

5. What intersections on Memorial Boulevard / SR 126 create problems for you? (circle all that apply)
6. If you live along or near the Memorial Boulevard / SR 126 corridor, what qualities do you value about your community and the surroundings? (circle all that apply)
7. What visual characteristics of the Memorial Boulevard / SR 126 corridor do you value? (circle all that apply)
8. What buildings, areas, or views along the corridor do you consider to be significant and worthy of protection?
9. Do you have any other comments regarding transportation problems and/or community values along the Memorial Boulevard / SR 126 corridor?

- A summary of the survey results was included in the second newsletter and was presented at the second series of Public Involvement Sessions in November 2004. A tabulation of the results is included in the background data section of this report.

Process Chronology

Table 1 presents a summary of major tasks and meetings that were conducted during the SR 126 project. After the table, more detailed information is provided about the project milestone events.

Table 1
Chronological Summary of the Project

Date	Task
September 18, 2003	Project Kickoff Meeting - Presentation of Consultants to Kingsport / Sullivan County
September 2003	Identification of Local Resource Team members by Mayors Blazier and Venable
October 1, 2003	First Team Meeting (TDOT/Local Resource Teams)
October 10, 2003	Complete Stakeholder Identification
October 15, 2003	Establish a mailing list for households in the project area
October 21, 2003	Issued Team Roles & Responsibilities document for review
October 31, 2003	Define methods of communication and protocols
October & November 2003	Collect & review information of record
Early November 2003	Stakeholder Kick-off Meeting • Introduce CSS process • Dialogue about the community & desires for Memorial Boulevard
November 5 & 6, 2003	Team Building in Kingsport Defined study area boundary
November 19 & 20, 2003	CSS Training at TDOT
December 2003	Collect speed data on SR 126 Analyze traffic accident data from TRIMS
January 2004	Analyze horizontal and vertical curve data
January 14, 2004	Requested information of record from environmental specialists
January 22, 2004	CSS Training in Kingsport Consultant conducted field review and meetings with utility providers
January 23, 2004	Team Meeting
February 2004	Consultant investigated local contacts with low income and minority population groups

February & March 2004	Preparation of traffic forecasts Capacity analyses Tabulation of additional traffic accident data
February 2004 through February 2005	Weekly Telephone Conference Calls (held on most Fridays)
February 20, 2005	Requested controlled aerial survey
March 2, 2004	Team Meeting (TDOT/Local Resource Teams)
March 25, 2004	Team Meeting
March 31, 2004	Letter to Elected Officials
April 2, 2004	Issued Press Release
April 8, 2004	Project Website activated
March 2003	Newsletter #1
May 7, 2004	Team Meeting (TDOT/Local Resource Teams)
May 2004	Postcard announcement of First Public Involvement Session mailed
May 24 & 25, 2004	First Public Involvement Sessions
June 2004	Postcard thank you mailed with summary of First Public Involvement Session
July 23, 2004	Team Meeting (TDOT/Local Resource Teams)
October 6 & 7, 2004	Team Meeting – Design Charette (TDOT/Local Teams)
October 2004	Newsletter #2
November 3 & 4, 2004	Second Public Involvement Sessions
December 3, 2004	Team Meeting (TDOT/Local Teams)
January 21, 2005	Team Meeting (Local Team)
February 7, 2005	Team Meeting (Local Team)
February 24 & 25, 2005	Team Meeting (Local Team)
March 30 & 31, 2005	Team Meeting – Plan Review Workshop (TDOT/Local)
April 18, 2005	Focus Group
May 2005	Newsletter #3
May 25 & 26, 2005	Third Public Involvement Sessions
June 21 & 22, 2005	Team Meeting – Team Recommendation Workshop
August 9, 2005	Website updated with Team Recommendation
August 10 & 11, 2005	Road Safety Audit training course in Kingsport
August 2005	Draft Context Sensitive Solutions Report submitted to TDOT for review
October 2005	TDOT Comments on Draft Report sent to consultant
October 21, 2005	Demonstration of digital video & radar speed enforcement equipment on SR 126
October 27, 2005	Announcement by Governor Bredesen & Commissioner Nicely accepting the Community Resource Team Recommendation
October 28, 2005	Website Updated with interim improvements list, project timeline, Public Involvement Session summary from May 2005, and press release
February 2006	Final Context Sensitive Solutions Report submitted to TDOT
February 2006	Newsletter #4

Additional information about some of the activities noted in the process chronology is provided below.

Project Kickoff Meeting (September 18, 2003)

- Consultant team presented an overview of Context Sensitive Solutions.
- Consultant team and TDOT project management staff were introduced to attendees.
- The meeting included City of Kingsport and Sullivan County elected officials and staff, local business owners, residents and citizen interest groups, Tennessee General Assembly members, TDOT staff, and consultants.

Community & Technical Resource Teams (September 2003)

Appointment of the Community Resource Team was made by Mayor Jeanette Blazier (Kingsport) and Mayor Richard Venable (Sullivan County). Appointed members included:

- Bill Albright, Kingsport Sullivan County MPO
- Allan Andrews*, Citizen Representative
- Jeanette Blazier, Mayor of Kingsport
- Tom Carroll, Citizen Representative
- Dan Cheek, Citizen Representative
- Humberto Collazo****, Citizen Representative and Spanish language provider
- Jeff Fleming, Kingsport Assistant City Manager
- Ray Griffin, Kingsport City Manager
- Larry Hall, Sullivan County Commissioner
- Forrest Koder***, City of Kingsport Landscape Architect
- Ken Marsh, Kingsport Alderman
- Judy Murray, Citizen Representative
- Wallace Putnam**, Citizen Representative
- Edwin Quinn*, Citizen Representative
- Dave Ruller, Kingsport City Engineer
- Roy Settle, Citizen Representative
- Diane Somers**, Citizen Representative
- Michael Surgenor*, Sullivan County Commissioner
- Ambre Torbett, Sullivan County Planner
- Nathan Vaughn, Tennessee State Representative
- Richard Venable, Sullivan County Mayor

*Original member who resigned
**Replacement member
***Member added for professional expertise in landscape architecture
****Member added for Spanish language skills and cultural sensitivity

- Additional team members included TDOT and consultant project managers: Elizabeth Smith, Jerry Moorhead, Becky White, and Anne Morris

TDOT assembled a Technical Resource Team to provide expertise and assistance to the Community Resource Team. The Technical Resource Team included:

- Michael Agnew, design
- Tammy Allison, historian
- Keven Brown, ecologist
- Ed Cole, environmental planning and permits
- Brandon Darks, traffic

- Doug Delaney, environmental planning and permits
- Charles Graves, design
- Bill Hart, planning
- Jeff Jones, design
- Lori Kirby, civil rights
- Paul Lane, planning
- Alan Longmire, archaeology
- Tom Love, environmental planning and permits
- Mike Phillips, right-of-way
- Nancy Sartor, research
- Judy Steele, community relations
- Derrick Tibbs, public involvement
- Leigh Ann Tribble (Federal Highway Administration), environmental
- Cammie Woodle, civil rights
- Jerry Yuknavage, environmental planning and permits

Team Building Workshop (November 5 and 6, 2003)
A team building workshop was conducted by a professional team trainer retained by TDOT. The workshop was held in Kingsport at the Meadowview Marriott Hotel and Convention Center. All local resource team members were invited to participate. Items accomplished at the workshop included:

- Team members became acquainted with one another through group exercises.
- Personality typing gave insight into individual values, concerns, and preferences.
- The team worked together to define the study area for the SR 126 project.

Context Sensitive Solutions Training (January 22, 2004)
A one-day workshop was held in Kingsport for Community Resource Team members at the Meadowview Marriott Hotel and Convention Center. The workshop was led by staff from the Kentucky Transportation Center. A Community Resource Team meeting was held the following day at the Renaissance Center in Kingsport..

Telephone Conference Calls (February 2004 through February 2005)

- Conference calls were held on Fridays as needed to discuss project management issues, schedules, and deliverables.
- During the first month, calls included only the project management staff (TDOT & consultants).
- During the second month, a representative of the local resource team was added to the conference.
- By April 2004, the call was opened up to local team members to join at their discretion.
- When concerns arose about whether team decisions were being made in the conference calls without a team quorum, the Friday conference calls were discontinued.

Newsletter #1 and Postcard (March 2004)

- Approximately 5,000 newsletters were bulk mailed to residences and businesses in the study area. Mailing labels were addressed to specific occupants.
- Enclosed with the newsletter was a postcard asking for preferences regarding day of week and time of day for meetings and problems encountered on SR 126. These postcards were

addressed for return to the public involvement consultant and included a first class stamp. Over 700 postcards were returned.

- The mailing list was provided by the City of Kingsport based upon records from the property tax assessor. Some problems were encountered with the mailing list. These are documented in the Lessons Learned report.
- Approximately 400 additional copies of the newsletter were provided to the City of Kingsport for distribution at City Hall, libraries, and locations in the study area that accepted food stamps. Members of the Community Resource Team also distributed newsletters to local service clubs and churches.
- A Spanish translation was provided and distributed via The Latino Club and Saint Dominic's Catholic Church.

Project Website (activated April 2004)

A project website was prepared and hosted on TDOT's main website. Content for the website was prepared by the project management team with input from the Community Resource Team. The website address (www.tennessee.gov/tdot/sr126) was referenced in all project newsletters. When initially activated, the project website contained a project overview, information on context sensitive solutions planning, a project location map, project photos, a list of resource team members, a project timeline, and answers to frequently asked questions. Throughout the project, the website was updated with copies of the project newsletters, announcements of upcoming meetings, and summaries of comments from the public involvement sessions. In response to comments from a few citizens, a project library was added to the website in early 2005 with copies of the project's public involvement plan, team member roles, and focus group information.

Postcard Announcement of Public Involvement Sessions (May 2004)

- A postcard was mailed in mid-May, prior to the first Public Involvement Sessions, to announce the date, time, and location of each session.
- Postcards were printed on green card stock to make them more visible in mailboxes.
- Approximately 5,000 postcards were mailed.

First Public Involvement Sessions

- Tuesday, May 25, 2004 from 7:00-9:00 p.m. at Sunnyside Baptist Church
- Wednesday, May 26, 2004 from 11:00-1:00 p.m. at Kingsport Civic Auditorium
- Citizens were asked to indicate where they lived by affixing a dot to a map of the study area.
- Handouts provided at each session included:
    - Agenda
    - Description of Context Sensitive Solutions
    - Project map
    - Preference survey questionnaire of features valued and problems with SR 126
- Displays shown at each session included:
    - Traffic accidents from 1999 through 2003 by location and type shown on aerial photography
    - Existing 2003 average daily traffic (ADT) volume data on a map of the study area
    - Aerial photographs that showed posted speed limits, design speed for all horizontal curves, and deficient horizontal curves
- Techniques used to gather citizen input included:
    - Public was given sticky notes and encouraged to write comments on the maps.

- A formal presentation was given.
- Open microphone question and answer session followed the formal presentation.
- Notes were taken on a flipchart during the question and answer session to record comments from citizens.
- Court recorder was available throughout the session to take individual comments, providing privacy for those who felt uncomfortable speaking before a group.
- Spanish interpreter was provided, but no interpretations were requested.
- Citizens were asked to complete a preference survey and return it at the end of the session or return it by mail.
- Resource team members wore bright green T-shirts to make them more visible and identifiable to citizens.

Third Postcard Mailout (June 2004)

- Approximately 5,200 postcards were mailed after the first Public Involvement Sessions.
- The purpose was to thank those who had returned the first postcard and those who had attended the Public Involvement Session.
- The postcard explained what would be done with the public input that had been collected and listed the next steps in the project.
- Safety was identified as the common theme expressed in most public comments.

Design Charette (October 6 and 7, 2004)

A design charette (workshop) was hosted by the project management team to facilitate development of improvement ideas from the Community Resource Team. The purpose of the charette was to review public input from May 2004 and develop concepts for improving SR 126.

- Information obtained from the first Public Involvement Sessions was summarized and displayed to focus attention on community concerns during concept development.
- A roadway profile drawing of the study corridor was displayed for reference.
- The consultant team provided the Community Resource Team members with educational information concerning basic roadway design principles, such as functional classification, design speed, clear zones, and minimum performance standards.
- Community Resource Team members were divided into 4 small groups to develop their improvement concept ideas. (The four concepts were later synthesized into three by the consultant team due to similarities and common features.)
- TDOT and consultant engineers were available throughout the charette to provide guidance regarding design issues.
- A photo log from TRIMS was displayed with a computer projector so that team members could refresh their memories of the project route.
- Consultant engineers set up a computer workstation with Microstation and GEOPAK. The consultants used a computer projector to show design images that the team could view as a group. The engineers had already created centerline files for SR 126 and were able to show team members how different cross section widths might impact the area and how differing design speeds influenced curve radii.
- At the end of the second day's session, each group presented their concept ideas to the whole team. Notes were taken by the consultant team to carefully document the features of each group's concept plan.
- The charette was open to the public to attend as observers.

Newsletter #2 (October 2004)

- Approximately 5,200 newsletters were bulk mailed to residences and businesses in the study area. Mailing labels were addressed to specific occupants or to "current resident" if sent to an apartment or mobile home.
- Approximately 400 additional copies of the newsletter were provided to the City of Kingsport for distribution at City Hall, libraries, and locations in the study area that accepted food stamps. Members of the Community Resource Team also distributed newsletters to local service clubs and churches.
- The newsletter provided summaries of the post card survey and the Public Involvement Session questionnaire from May 2004. It also described the Community Resource Team's design charette.
- It announced the dates, times and locations for the second series of Public Involvement Sessions.

Second Public Involvement Sessions

- Wednesday, November 3, 2004 from 11:00-1:00 p.m. at Kingsport Civic Auditorium
- Thursday, November 4, 2004 from 7:00-9:00 p.m. at Sunnyside Baptist Church
- Handouts provided at each session included:
    - Agenda
    - Comment Sheet
    - Worksheet for taking notes
- Displays shown at each session included:
    - Three concept plans (A, B, and C) for the study area, each divided into five segments
    - Typical Cross Sections for each concept and segment (not at the same scale throughout)
    - Located to the right of each concept segment was a paper on which citizens could affix a sticker to indicate their concept preference.
- Techniques used to gather citizen input included:
    - A formal presentation was given.
    - An open microphone question and answer session followed the formal presentation.
    - A court recorder prepared a transcript of the question and answer session.
    - After the question and answer period, each member of the public was given five dots numbered 1 through 5 and asked to return to the aerial photographs to express their preference for one concept in each segment. Concepts included A, B, C, and No Build.
    - Citizens were give one triangle and were asked to place it on the aerial photographs at a location where they would like to see before and after visualizations.
    - The public was given sticky notes and encouraged to write comments on the maps.
    - A court recorder was available throughout the session to take individual comments, providing privacy for those who felt uncomfortable speaking before a group.
    - Resource team members wore bright green T-shirts to make them more visible and identifiable to citizens.

Plan Review Workshop (March 30 and 31, 2005)

A workshop was held for the Community Resource Team in order to facilitate refinement of the concept plans in preparation for public involvement. The consultants and TDOT project managers facilitated the meeting with support from TDOT design engineers.

- The Team reviewed concept plans that had been revised by the consultant team based upon team and citizen input since November 2004.
- The Team took a bus tour of the project route to look at specific areas of concern.
- Suggestions were given for further refinement of the three concept plans.
- The Team created Concept D, a plan that mixed features and cross sections from the three root concepts (A, B, and C). The rationale for Concept D was to provide an example to the public that would demonstrate how the roadway cross section could vary throughout the project limits, as opposed to a "one size fits all" cross section. The team chose to use diminishing traffic volumes as the guiding factor for narrowing the cross section of Concept D as SR 126 moves eastward to Interstate 81.
- A revised "Accident Analysis Summary" was distributed to the team.
- Safety issues on SR 126 were discussed and a representative of the Governor's Highway Safety Office spoke to the team.
- The Team requested that the next public involvement sessions be longer than the previously held sessions in order to provide more time for the public to view mapping and allow for a longer comment period.
- The Plan review workshop was open to the public to attend as observers. At the end of each day's session, a 30-minute public comment period was provided.

Focus Group (April 18, 2005)

A Focus Group was held with citizens from the project study area at the Renaissance Center in Kingsport. The purpose of the Focus Group was to provide a small group setting for interviewing citizens and preparing a progress report card on the project and the team's performance. Need for the Focus Group was prompted by process concerns that had been raised by several citizens.

- Twelve (12) citizens were invited to participate. They were chosen randomly from a list of those who had attended both of the two previous Public Involvement Sessions.
- Thirteen (13) citizens participated in the Focus Group because one citizen showed up uninvited and asked to participate.
- Among others, the participating citizens included:
    - Four (4) who live on or own a business on SR 126
    - Four (4) who live on streets that directly intersect SR 126
- The meeting was held at the Renaissance Center from 6:30-8:30 p.m. on April 18.
- Dinner was provided through a local caterer.
- Two TDOT representatives from the project management team were present to observe, provide background information, and answer questions.
- A neutral, professional facilitator was retained to lead the Focus Group and provide a summary of the discussion.
- Feedback from the Focus Group included the following items (a complete report is included in the appendix):
    - Create a large print version of the newsletter
    - Citizens appreciated the opportunities to provide feedback at each Public Involvement Sessions and through the Focus Group
    - Need for more information and explanation of maps, plans, process, and impacts
    - Publicity for the project and meetings was good
    - Maps of the concept plans needed to be revised to be more easily understood
    - Property owners needed more information about right-of-way acquisition
    - Citizens would like another opportunity to express concept preferences

    - Overall, the project process was good
- At the request of the Focus Group, a summary of the discussion was provided to the public at the third Public Involvement Sessions and was included on the project website.

Newsletter #3 (May 2005)

- Approximately 5,300 newsletters were first class mailed to residences and businesses in the study area. All mailing labels were addressed to "current resident".
- Approximately 400 additional copies of the newsletter were provided to the City of Kingsport for distribution at City Hall, libraries, and locations in the study area that accepted food stamps. Members of the Community Resource Team also distributed newsletters to local service clubs and churches.
- The newsletter provided a summary of the second Public Involvement Session, the team's Plan Review Workshop, and the Focus Group.
- It provided a detailed summary of revised concept plans (A, B, and C) and an explanation of Concept D.
- It announced the dates, times and locations for the third series of Public Involvement Sessions with an explanation of extended hours that would be provided.

Third Public Involvement Sessions

- Wednesday, May 25, 2005 from 10:00 a.m. -2:00 p.m. at Kingsport Civic Auditorium
- Thursday, May 26, 2005 from 5:00-9:30 p.m. at Sunnyside Baptist Church
- Handouts provided at each session included:
    - Agenda
    - Detailed summary of concept plans with tradeoffs (11 pages)
    - Summary of Focus Group
    - Preference Survey
    - Large print edition of the newsletter
- Displays shown at each session included:
    - Maps depicting existing 2003 and Future 2028 average daily traffic (ADT) volumes
    - Four concept plans (A, B, C, and D), each divided into eight segments
    - Typical Cross Sections for each Concept and segment (all at same scale and color coded to match concept plan colors)
    - Before & After Visualizations
- Techniques used to gather citizen input included:
    - A formal presentation was given.
    - Judy Walton, from Region 3 Right-of-Way, made a presentation and provided pamphlets on the TDOT process used for right-of-way acquisition.
    - An open microphone question and answer session followed the formal presentation.
    - A court recorder prepared a transcript of the question and answer session.
    - A court recorder was available throughout the session to take individual comments, providing privacy for those who felt uncomfortable speaking before a group.
    - Citizens were asked to complete a preference survey and return it prior to leaving the session.
    - Resource team members wore bright green T-shirts to make them more visible and identifiable to citizens.

Team Recommendation Meeting (June 21 and 22, 2005)
A two-day meeting was held for the Community Resource Team at the Renaissance Center in Kingsport to facilitate the development of a team recommendation.

- Public input and survey results from the May 2005 Public Involvement Sessions was reviewed and discussed.
- Team members turned in individual scoring of an evaluation matrix for compilation.
- Composite team scores from the evaluation matrix were reviewed and discussed. It was determined that the scoring did not provide enough variation between the different concept plans to be useful to the team.
- Team members discussed and agreed upon a list of "common ground" recommendations that were supported by all team members.
- The consultant facilitated the team's discussion of each roadway segment and development of either a consensus or majority recommendation for each segment.
- Team members who opposed a majority recommendation were given the opportunity to write a minority opinion statement.
- Group decisions and minority reports were reviewed, and all team members were asked to sign a statement of support for the team recommendation with objections noted by the minority reports.

Road Safety Audit Training Course (August 2005)
Federal Highway Administration's Leigh Ann Tribble, a member of the Community Resource Team, arranged for FHWA to fund two sessions of the National Highway Institute's Road Safety Audit training course. The course was conducted on August 10 and 11, 2005 at East Tennessee State University in Kingsport and CRT members Bill Albright and Mike Thompson of the City of Kingsport participated. A second session was conducted on August 16 and 17, 2005 at FHWA's office in Nashville, and CRT member Liz Smith of TDOT attended.

Demonstration of Digital Video and Radar Technology (October 2005)
Sullivan County law enforcement personnel and others attended the national Governors' Highway Safety Life Savers conference in October 2005. As a result of their attendance, Sullivan County was selected to participate in a 30-day trial of new digital video and radar technology for speed enforcement. On October 21, 2005 the technology was demonstrated on SR 126.

Announcement by Governor Bredesen and Commissioner Nicely (October 27, 2005)
In a press release, the Governor and Commissioner publicly announced their support for the Community Resource Team's Recommendation for SR 126

Newsletter #4 (Anticipated in August 2005)

- Approximately 5,300 newsletters were first class mailed to residences and businesses in the study area. All mailing labels were addressed to "current resident".
- The newsletter provided a summary of activities that had occurred since May 2005 and a comparison of the Community Resource Team Recommendation and the concept preference survey results from the May 2005 public involvement sessions.
- The newsletter also gave a status update on a centerline rumble strip safety improvement project and a summary of the next steps for the SR 126 CSS project.

Demographic Survey

A demographic analysis was conducted for the SR 126 project area to determine the characteristics of the study area's population. This was initiated in order to design a public involvement plan that would address the abilities and constraints of all populations to participate. Environmental Justice populations (African American, Hispanic, Asian/Pacific Islanders, Native American/Alaskan Natives, and low income), the elderly, disabled, transportation dependent (occupied units having no vehicles), and those with limited English proficiency (those speaking a non-English language at home) were included in this analysis.

Information relative to the demographic analysis was obtained from the following 2000 Census tables:

- General Demographic Characteristics (SF1, DP-1);
- General Housing Characteristics (SF1, QT-H1);
- Profile of Selected Economic Characteristics (SF3, DP-3);
- Profile of Selected Social Characteristics (SF3, DP-2); and,
- Profile of Selected Housing Characteristics (SF3, DP-4).

In the 2000 Census, the study area, shown in Figure 3, included all or parts of seven census tracts – 408, 409, 410, 411, 422, 423, and 424. It should be pointed out that the census tract boundaries did not match exactly the study area boundary. In most cases, the census tracts included areas outside the study area boundaries. Therefore, the information provided below addresses an area larger than the actual study area. The majority of SR 126 was located in census tract 423, with smaller portions within census tracts 407 and 409.

Tables 2, 3, 4, 5 and 6 provide detailed information extracted from the 2000 Census for tracts 408, 409, 410, 411, 422, 423, and 424. This information was provided to the Community Resource Team in January 2004. Following is a summary of general findings that were verbally communicated to the team.

Population Characteristics

The population within the study area was 25,417. Census tracts 423 (6,505 persons), 408 (3,615 persons), and 410 (3,540 persons) had the largest populations.

Age Characteristics

Those 65 years old and over accounted for 16.6 percent (4,229 persons) of the study area's population. Census tracts with the highest number of elderly were 408 (1,028 persons), 423 (729 persons), and 409 (614 persons). The median age of the study area ranged from 37.5 years in census tract 424 to 45.9 years in census tract 408. In general, the older populations tended to be located within the City of Kingsport at the western end of the project study area.

Racial and Ethnic Characteristics

Whites accounted for 98.0 percent (24,720 persons) of the study area's population, while African Americans composed 1.1 percent (281 persons). African Americans were located predominantly in census tracts 408 (75 persons), 409 (65 persons) and 411 (67 persons). Hispanics accounted for 0.9 percent (230 persons) of the study area population, and were located predominantly in census tracts 423 and 411 (43 persons each), 410 (38 persons), and 408 (35 persons).

Housing Characteristics

Of the 11,359 housing units in the study area, 92.5 percent (10,512 units) were occupied. Of the 10,512 occupied units, 78.6 percent (8,258 units) were owner-occupied and 21.4 percent (2,254 units) were renter-occupied. Census tracts 408 (35.5 percent), 409 (27.3 percent), and 411 (26.6 percent) had the highest percents of renter-occupied housing units, while census tract 410 (13.2 percent) had the lowest percent. The race of 97.7 percent of the householders in occupied units was White. Of those who occupied housing units, 25.8 percent were 65 years old and older.

Between 1990 and March 2000, 1,835 units (16.2 percent) were constructed in the study area. This number is consistent with construction between 1980 and 1989 (1,620 units), between 1970 and 1979 (2,005 units), and between 1960 and 1969 (1,780 units). Most of the construction between 1990 and March 2000 occurred in census tracts 423 (587 units), 424 (317 units), and 410 (311 units).

Of the 10,512 occupied units, 56.8 percent (5,971 units) of the householders had moved into their units between 1990 and March 2000. This is a substantially greater percent than between 1980 and 1989 (15.9 percent), and between 1970 and 1979 (12.4 percent).

Single-family detached units accounted for 76.9 percent (8,735 units) of all structures within the study area. Census tracts 423 (2,191 units), 408 (1,425 units), and 410 (1,277 units) had the most single-family detached units. Mobile homes accounted for 9.9 percent (1,130 units) of all structures. The majority of mobile homes were found in census tracts 424 (582 units), 422 (224 units), and 423 (200 units). In addition, there were 755 structures with five or more units in them. Census tracts 409 (250 structures), 423 (171 structures), and 408 (135 structures) had the most structures with five or more units within them.

Within the study area, 576 occupied units (5.5 percent) had no vehicle.

Economic Characteristics

Unemployment, as a percent of the civilian labor force, was 3.4 percent in the study area. It ranged from 1.9 percent in census tract 424 to 7.8 percent in census tract 408. Census tract 408 (7.8 percent), 409 (5.1 percent) and 411 (3.0 percent) had the highest unemployment in the study area. Of those 16 years old and older, 42.8 percent were not in the labor force. Census tracts 408 (54.7 percent), 409 (48.2 percent), and 411 (49.2 percent) had the highest percents of those not in the labor force.

Within the study area, 88.4 percent of those who commuted to work drove alone and 8.4 percent carpooled. The mean travel time to work ranged from 15.4 minutes (census tract 409) to 26.1 minutes (census tract 424). Those living closest to Kingsport had shorter commutes and those living further from Kingsport had longer commutes.

Median household incomes within the study area ranged from $45,889 (census tract 423) to $25,522 (census tract 408). Those families living below poverty accounted for 8.1 percent of all families in the study area. The percent of all families living below poverty ranged from 14.9 percent (census tract 408) to 2.7 percent (census tract 410).

Social Characteristics

Of those 25 years old and older in the study area, 20.2 percent (3,663 persons) did not complete high school, 30.9 percent (5,614 persons) completed high school, and 48.9 percent (8,865 persons) completed more than high school. Of special concern were the 8.3 percent (1,497 persons) who did not finish the 9th grade.

Disability status among civilians is divided into three age groups. Of those 5 – 20 years old 8.7 percent were disabled (425 persons); of those 21-64 years old 20.9 percent were disabled (3,075 persons), and of those 65 years old and older 45.5 percent were disabled (1,830 persons). Census tracts 408 (455 persons), 423 (335 persons), and 411 (277 persons) had the highest number of those 65 years old and older that were disabled. Census tracts 423 (782 persons), 424 (520 persons), and 408 (480 persons) had the highest number of those between 21 and 64 years old that were disabled.

Within the study area, 1.8 percent (421 persons) of those 5 years old and older spoke a language other than English at home. Census tracts 423 (106 persons), 409 (102 persons), and 408 (73 persons) had the highest numbers of those that spoke a language other than English at home.

Summary Conclusions

- The number of elderly located within the City of Kingsport suggested that a meeting location in Kingsport would be appropriate to meet the convenience needs of those elderly citizens. The much smaller number of elderly persons in the area outside of Kingsport suggested that a second meeting in a location here would also be appropriate. If two meetings were provided, they could be held at different times. One meeting should be during daylight hours to accommodate the elderly. Large print information may be appropriate.
- The limited number of Hispanics in the study area, and the small number of those who speak a language other than English suggested that materials should not be translated into Spanish. Instead, a minister at a church that provides Spanish services, or a member of an Hispanic group in the area could be retained to provide translated information to this small group, and interpretation services at public involvement meetings.
- Those living in mobile homes and large apartment complexes could be difficult to reach. It was determined that the tax assessor information should be checked to see if there is an owner of the mobile home park and apartments, or whether each unit has a distinct address.
- The census information on commute time indicated that very few of the residents have employment outside of the greater Kingsport area and would be available to attend meetings during the day and in the evening. It was noted that information should be obtained from Eastman Chemical about shift times for their employees.
- The majority of those living in occupied units have vehicles and would be able to access a meeting.
- Low literacy does not appear to be a problem.
- The number of disabled would require that any meeting place adhere to the standards set forth in the Americans with Disabilities Act.

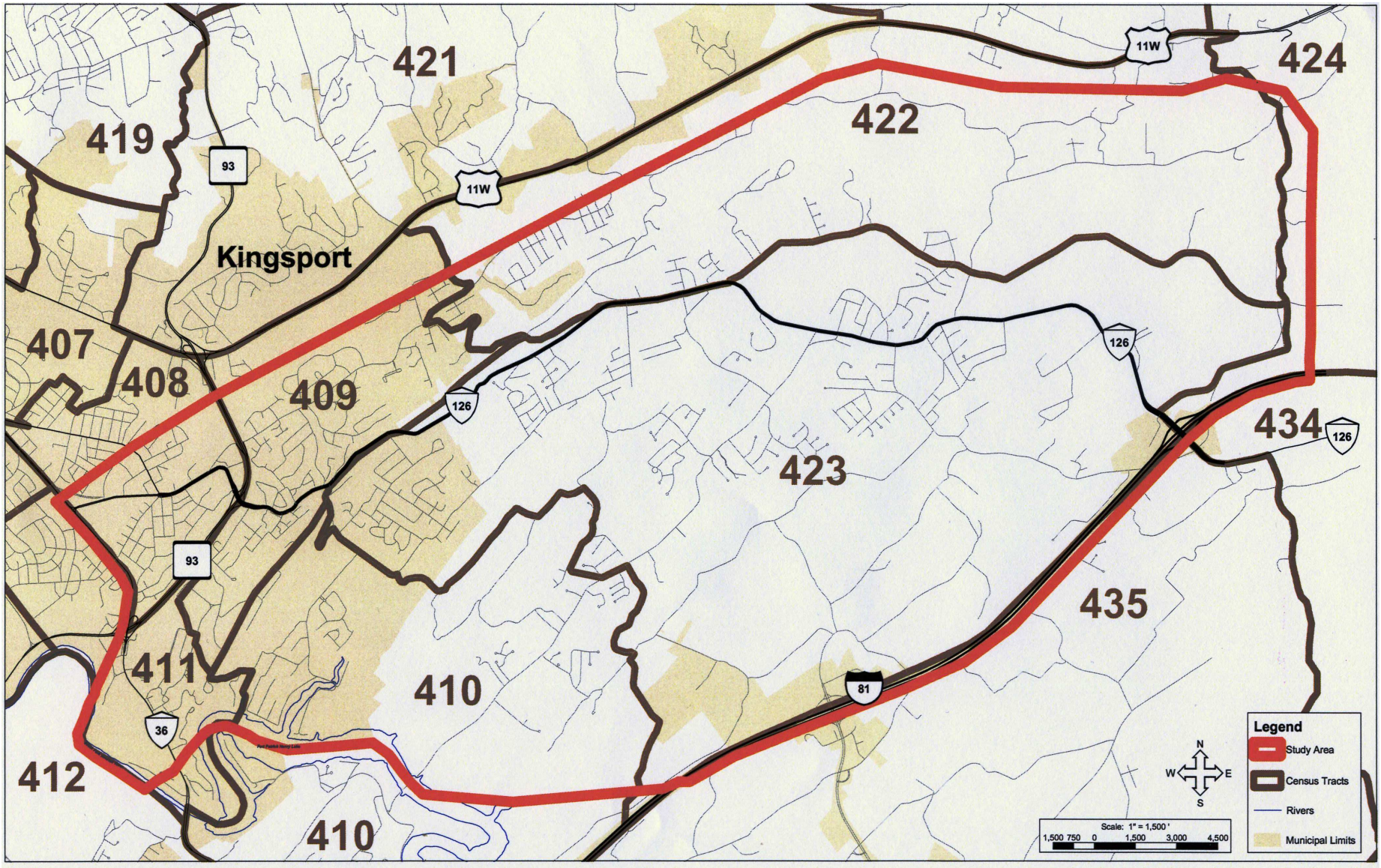


Figure 3
Census Tracts in Study Area Boundary

Table 2
General Demographic Characteristics (SF1, DP-1) 2000 Census

Subject	Census Tracts							Total
	408	409	410	411	422	423	424	
TOTAL POPULATION	3,615	2,987	3,540	2,448	3,031	6,505	3,291	25,417
Under 5	155	205	234	141	196	375	224	1,530
5 – 14	380	367	475	278	428	830	449	3,207
15 – 24	355	307	325	237	303	706	358	2,591
25 – 34	420	318	435	262	416	815	486	3,152
35 – 44	460	407	619	340	482	1,048	552	3,908
45 – 54	428	439	524	339	452	1,108	464	3,754
55 – 64	389	330	371	280	400	894	382	3,046
65 and over	1,028	614	557	571	354	729	376	4,229
Median age	45.9	42.8	40.1	44.2	38.8	40.4	37.5	
RACE								
One Race	3,584	2,959	3,522	2,426	3,007	6,458	3,277	25,233
White	3,478	2,853	3,470	2,321	2,976	6,379	3,243	24,720
African-American	75	65	20	67	16	28	10	281
American Indian/Alak	1	19	3	7	5	6	10	51
Asian	12	14	19	14	5	25	9	98
Native Hawaiian	0	1	0	5	0	0	0	6
Some other race	18	7	10	12	5	20	5	77
Two or more races	31	28	18	22	24	47	14	184
HISPANIC OR LATINO								
Hispanic/Latino (of any race)	35	26	38	43	17	43	28	230
Not Hispanic or Latino	3,580	2,961	3,502	2,405	3,014	6,462	3,263	25,187
White alone	3,468	2,835	3,445	2,290	2,964	6,357	3,220	24,579
HOUSEHOLDS BY TYPE								
Total Households	1,615	1,298	1,376	1,126	1,186	2,588	1,323	10,512
Family Households	942	929	1,081	725	908	2,029	995	7,609
Nonfamily Households	673	369	295	401	278	559	328	2,903
Householder living alone	608	326	271	367	250	507	283	2,612
65 years old and older	369	141	114	192	92	156	110	1,174
RELATIONSHIP								
In Households	3,395	2,974	3,503	2,448	3,031	6,505	3,291	25,147
In Group Quarters	220	13	37	0	0	0	0	270
Institutionalized	177	0	37	0	0	0	0	214
Noninstitutionalized	43	13	0	0	0	0	0	56

Table 3
General Housing Characteristics (SF1, QT-H1) 2000 Census

Subject	Census Tracts							Total
	408	409	410	411	422	423	424	
OCCUPANCY STATUS								
Total housing units	1,792	1,416	1,439	1,269	1,262	2,743	1,438	11,359
Occupied housing units	1,615	1,298	1,376	1,126	1,186	2,588	1,323	10,512
Vacant housing units	177	118	63	143	76	155	115	847
TENURE								
Occupied housing units	1,615	1,298	1,376	1,126	1,186	2,588	1,323	10,512
Owner-occupied	1,042	943	1,195	826	1,000	2,164	1,088	8,258
Renter-occupied	573	355	181	300	186	424	235	2,254
RACE OF HOUSEHOLDER								
Occupied housing units	1,615	1,298	1,376	1,126	1,186	2,588	1,323	10,512
One race	1,603	1,293	1,368	1,119	1,179	2,573	1,315	10,450
White	1,566	1,252	1,353	1,082	1,167	2,551	1,303	10,274
African-American	27	26	7	28	7	12	4	111
American Indian/Alak	1	7	2	1	1	1	2	15
Asian	4	4	4	7	2	5	5	31
Native Hawaiian	0	1	0	1	0	0	0	2
Some other race	5	3	2	0	2	4	1	17
Two or more races	12	5	8	7	7	15	8	62
HISPANIC OR LATINO HOUSEHOLDER								
Hispanic/Latino (of any race)	10	8	8	7	3	11	10	57
Not Hispanic or Latino	1,605	1,290	1,368	1,119	1,183	2,577	1,313	10,455
White alone	1,563	1,248	1,346	1,076	1,166	2,545	1,293	10,237
AGE OF HOUSEHOLDER								
Occupied housing units	1,615	1,298	1,376	1,126	1,186	2,588	1,323	10,512
15 - 24	60	70	23	36	26	79	55	349
25 - 34	196	169	194	122	186	380	230	1,477
35 - 44	259	225	322	188	250	542	300	2,086
45 - 54	237	245	291	209	250	609	260	2,101
55 - 64	225	200	216	179	233	514	217	1,784
65 and over	638	389	330	392	241	464	261	2,715
65 - 74	275	206	178	170	151	266	148	1,394
75 - 84	271	161	122	190	69	158	84	1,055
85 and over	92	22	30	32	21	40	29	266

Table 4
Profile of Selected Social Characteristics (SF3, DP-2) 2000 Census

Subject	Census Tracts							Total
	408	409	410	411	422	423	424	
EDUCATIONAL ATTAINMENT								
Population 25 years old and older	2,733	2,103	2,534	1,827	2,114	4,569	2,262	18,142
Less than 9th grade	466	115	135	139	207	131	304	1,497
9th to 12th grade, no diploma	494	209	93	280	318	319	453	2,166
High School graduate	879	497	792	537	710	1,466	733	5,614
Some college, no degree	442	407	494	371	424	984	539	3,661
Associate degree	96	122	163	99	114	378	113	1,085
Bachelor's degree	246	545	577	267	198	898	85	2,816
Graduate or professional degree	110	208	280	134	143	393	35	1,303
DISABILITY STATUS CIVILIANS								
Population less than 5 years old	115	205	234	141	196	375	224	1,490
Populations 5 - 20 years	616	598	686	436	608	1,348	668	4,960
With a disability	64	92	62	27	47	90	43	425
Population 21 - 64 years	1,810	1,576	2,048	1,291	1,870	4,069	2,018	14,682
With a disability	490	328	276	271	408	782	520	3,075
Populations 65 years and older	846	620	516	576	353	731	376	4,018
With a disability	455	216	184	277	161	335	202	1,830
RESIDENCE IN 1995								
Population 5 years old and older	3,460	2,802	3,311	2,307	2,831	6,148	3,068	23,927
Same house in 1995	2,057	1,713	1,927	1,215	1,890	3,759	2,058	14,619
Different house in the US in 1995	1,392	1,086	1,353	1,080	941	2,376	1,010	9,238
Same county	1,056	729	790	655	625	1,402	697	5,954
Different county	336	357	563	425	316	974	313	3,284
Same state	141	114	182	219	166	386	57	1,265
Different state	195	243	381	206	150	588	256	2,019
Elsewhere in 1995	11	3	31	12	0	13	0	70
LANGUAGE SPOKEN AT HOME								
Population 5 years old and older	3,460	2,802	3,311	2,307	2,831	6,148	3,068	23,927
English only	3,387	2,700	3,253	2,295	2,795	6,042	3,034	23,506
Language other than English	73	102	58	12	36	106	34	421

Table 5
Profile of Selected Economic Characteristics (SF3, DP-3) 2000 Census

Subject	Census Tracts							Total
	408	409	410	411	422	423	424	
EMPLOYMENT STATUS								
16 years and over	3,023	2,381	2,793	2,007	2,383	5,252	2,595	20,434
In labor force	1,370	1,233	1,726	1,020	1,433	3,301	1,602	11,685
Civilian labor force	1,370	1,225	1,702	1,016	1,433	3,301	1,596	11,643
employed	1,263	1,163	1,663	986	1,398	3,204	1,565	11,242
unemployed	107	62	39	30	35	97	31	401
% of civilian labor force	7.8	5.1	2.3	3.0	2.4	2.9	1.9	3.4
Armed Forces	0	8	24	4	0	0	6	42
Not in labor force	1,653	1,148	1,067	987	950	1,951	993	8,749
COMMUTING TO WORK								
Workers 16 years old and older	1,251	1,158	1,658	985	1,384	3,141	1,555	11,132
Drove alone	1,042	1,006	1,471	878	1,212	2,847	1,383	9,839
Carpooled	146	131	109	67	159	221	110	943
Public transport	5	0	0	0	0	0	0	5
Walked	19	6	4	20	7	27	21	104
Other means	8	7	0	0	0	0	4	19
Worked at home	31	8	74	20	6	46	37	222
Mean travel time to work (min)	17.1	15.4	19.5	20.9	24.4	18.7	26.1	
OCCUPATION								
Employed civilian population 16 years and over	1,251	1,163	1,663	986	1,398	3,204	1,565	11,230
Management, professional, and related occupations	347	435	768	263	402	1,368	288	3,871
Service occupations	216	169	127	113	146	282	264	1,317
Sales and office occupations	369	315	433	347	409	835	336	3,044
Farming, fishing, and forestry occupations	0	11	7	0	0	0	8	26
Construction, extraction, and maintenance occupations	119	76	151	98	204	332	276	1,256
Production, transportation, and material moving occupations	212	157	177	165	237	387	393	1,728

Table 5 continued
Profile of Selected Economic Characteristics (SF3, DP-3) 2000 Census

Subject	Census Tracts							Total
	408	409	410	411	422	423	424	
INDUSTRY								
Agriculture, forest, fishing and hunting, and mining	6	0	11	0	6	18	22	63
Construction	149	70	94	63	144	197	202	919
Manufacturing	218	245	388	188	238	636	349	2,262
Wholesale trade	52	93	49	49	31	133	65	472
Retail trade	216	135	171	163	282	483	120	1,570
Transportation and warehousing, and utilities	29	20	84	17	71	96	68	385
Information	16	25	54	21	12	113	18	259
Finance, insurance, real estate, and rental and leasing	48	92	84	38	70	162	27	521
Educational, health and social services	217	217	373	200	257	734	181	2,179
Professional, scientific, management, administrative, and waste management services	63	41	130	74	116	178	88	690
Arts, entertainment, recreation, accommodation and food services	112	138	103	74	80	218	169	894
Other services (except) public administration)	104	63	83	62	45	126	151	634
Public Administration	33	24	39	37	46	110	5	294
INCOME IN 1999								
Households	1,636	1,274	1,379	1,137	1,185	2,592	1,326	10,529
Median household income ($)	25,522	36,757	43,651	33,512	39,694	45,889	27,833	
Families	965	917	1,082	732	918	2,032	1,006	7,652
Median family income ($)	31,715	49,712	50,833	41,279	44,844	52,132	33,393	
Below poverty families	144	90	29	93	59	74	127	616
Percent of all families	14.9	9.8	2.7	12.7	6.4	3.6	12.6	8.1
Below poverty individuals	652	402	167	342	260	297	527	2,647

Table 6
Profile of Selected Housing Characteristics (SF3, DP-4) 2000 Census

Subject	Census Tracts							Total
	408	409	410	411	422	423	424	
UNITS IN STRUCTURE								
Total housing units	1,792	1,416	1,439	1,269	1,262	2,743	1,438	11,359
1-unit, detached	1,425	1,059	1,277	977	997	2,191	809	8,735
1-unit, attached	73	61	33	76	12	33	6	294
2 units	49	5	19	36	0	8	6	123
3 or 4 units	74	27	0	60	0	140	12	313
5 to 9 units	42	196	31	41	20	62	17	409
10 to 19 units	6	5	15	39	0	73	0	138
20 or more	87	49	0	30	0	36	6	208
Mobile home	36	14	64	10	224	200	582	1,130
Boat, RV, van, etc.	0	0	0	0	9	0	0	9
YEAR STRUCTURE BUILT								
1999 - March 2000	7	8	10	40	15	115	40	235
1995 - 1998	12	82	183	65	94	311	166	913
1990 - 1994	23	124	118	40	110	161	111	687
1980 - 1989	156	118	146	94	191	538	377	1,620
1970 - 1979	112	266	213	84	260	757	313	2,005
1960 - 1969	137	302	276	188	185	551	141	1,780
1940 - 1959	1,003	445	457	675	309	187	184	3,260
1939 or earlier	342	71	36	83	98	123	106	859
YEAR HOUSEHOLDER MOVED INTO UNIT								
Total occupied units	1,615	1,298	1,376	1,126	1,186	2,588	1,323	10,512
1999 - March 2000	271	223	201	146	142	439	197	1,619
1995 - 1998	344	282	373	381	291	722	310	2,703
1990 - 1994	279	260	216	128	194	320	252	1,649
1980 - 1989	209	179	151	168	199	536	232	1,674
1970 - 1979	167	154	209	115	193	320	146	1,304
1969 or earlier	345	200	226	188	167	251	186	1,563
VEHICLES AVAILABLE								
None	210	85	10	79	46	63	83	576
1	672	404	269	469	292	545	391	3,042
2	498	586	750	366	484	1,096	502	4,282
3 or more	235	223	347	212	364	884	347	2,612

Roadway Characteristics

The SR 126 project area is approximately 8.4 miles in length, beginning at East Center Street in Kingsport and ending at Interstate 81 in unincorporated Sullivan County. Within the project area, the number of travel lanes and other roadway feature varies from four lanes with and without a center median to two lanes. Following is a detailed discussion of the various cross sections along project route, beginning at the western termini and moving eastward to Interstate 81.

East Center Street to just west of SR 93 (John B. Dennis Highway)

The western section of SR 126 begins at East Center Street and extends for 0.62 miles to just west of SR 93 (Log Mile 3.72 to Log Mile 4.34). This section contains four travel lanes with no left turn lanes or median. The posted speed limit is 35 miles per hour. There is an existing traffic signal at the intersection of SR 126 and East Center Street. The average daily traffic (ADT) volume on this section of SR 126 was 18,060 west of Orebank Road and 14,460 east of Orebank Road in 2003. The percent of trucks as a portion of the ADT varied in 2003 from 3% west of Orebank Road to 4% east of Orebank Road. Development in this section of the project is mainly commercial and single family residential.

West of SR 93 (John B. Dennis Highway) to Stratford Drive

This section of SR 126 extends for a distance of 0.26 mile (Log Mile 4.34 to Log Mile 4.6) through a grade separated interchange with SR 93. In this section there are four travel lanes with a concrete median that separates opposing traffic. Both of the SR 93 ramp terminal intersections with SR 126 are signalized. The posted speed limit is 35 miles per hour. The 2003 ADT for SR 126 on the east side of SR 93 was 22,440 with 2% trucks. Land uses surrounding the interchange are primarily commercial, with an assisted living / rehabilitation center located on the southwest quadrant of the interchange.

Stratford Drive to just east of Old Stage Road

Immediately east of Stratford Drive the center median on SR 126 ends and the roadway transitions to provide two eastbound travel lanes and one westbound travel lane with no center turn lane or median. This section extends for a distance of 1.44 miles up Chestnut Ridge and through the curve just east of Old Stage Road (Log Mile 4.6 to Log Mile 6.04). The second eastbound travel lane functions as a climbing lane to allow faster drivers to bypass slower moving vehicles as they travel uphill onto the ridge. The posted speed limit is 35 miles per hour for most of the section, but increases to 45 miles per hour on top of the ridge west of Old Stage Road.

Within this section there are numerous intersections that provide access to residential areas off of SR 126. There is a major intersection with Harbor Chapel Road that had historically been very congested and which was signalized during December 2004. The 2003 ADT in this section of SR 126 varied from 16,800 west of Harbor Chapel Road to 10,870 at Old Stage Road. The percent of trucks as a portion of the ADT was 2% at all count stations. This area contains both residential and commercial land uses.

East of Old Stage Road to West of Overhill Drive / Carolina Pottery

This two-lane section of SR 126 extends from just east of Old Stage Road, where the eastbound climbing lane terminates, to a point west of Overhill Drive near Interstate 81. This section is approximately 5.78 miles long (Log Mile 6.04 to Log Mile 11.82). This portion of SR126 contains two travel lanes with no center medians. Left turn lanes are provided at only a few intersections. The speed limit along this section of SR 126 is posted at 50 miles per hour, however there are advisory speeds posted at several curves as low as 30 miles per hour. The ADT counts in this section are listed below along with the year that the data was collected.

- 8,360 with 1% trucks east of Old Stage Road (2003)
- 8,950 with 1 % trucks between Cooks Valley Road and Island Road (2004)
- 9,270 with 2% trucks between Island Road and Fall Creek Road (2003)
- 8,900 with 2% trucks between Fall Creek Road and Shadowtown Road (2004)
- 6,700 with 2% trucks between Shadowtown Road and Harr Town Road (2004)

Land uses in this section of SR 126 vary from multi-family and single family residential to commercial, institutional, and agricultural. Most of the commercial land uses are concentrated in an area around Island Road.

West of Overhill Drive to I-81 Interchange

The final section of SR 126 examined in this project is a short 0.25-mile section beginning just west of Overhill Drive and continuing through the interchange at Interstate 81 (Log Mile 11.82 to 12.07). This area contains 4 travel lanes with a center grassed median separating opposing lanes of traffic. The posted speed limit is 50 miles per hour. The Overhill Drive intersection is a four-way, side street stop controlled intersection that provides access, on one side, to a shopping center and a McDonald's restaurant. The Interstate 81 ramp terminal intersections on SR 126 are also stop sign controlled. The 2003 ADT in this section was 7,220 with 2% trucks. There is some commercial roadside development as well as large tracts of undeveloped property.

Geometric Deficiencies

Substandard horizontal and vertical curves were identified by the public and by the Community Resource Team as a major concern on SR 126. These concerns were validated by engineering field studies conducted by the project consultants. Following is a summary of the identified deficiencies for horizontal and vertical curves within the study area.

Horizontal Curve Evaluation

Horizontal alignment is comprised of the straight lines and curves that make up the side to side elements of a roadway. A horizontal curve is what most people refer to as a curve or bend in the roadway. The speed at which a reasonable and prudent driver traverses a curve should be consistent with the amount of sight distance provided in the curve to allow for the driver to respond to the roadway conditions ahead. The design speed of horizontal curves should be consistent with the overall design speed of the roadway, and where it is not consistent then advisory or warning speeds limits should be posted.

Along the study section of SR 126 approximately 41% (20 out of 49) of the horizontal curves are substandard for the posted speed limit. Table 7 identifies the location and severity of each deficient curve. The table also notes whether or not an advisory speed warning is posted in

advance of the curve. The appendix to this report includes maps that diagram the location of each horizontal curve and all speed signage along SR 126. These maps were presented to the public at the May 2004 Public Involvement Sessions and were also used by the Community Resource Team at the October 2004 Design Charette.

Table 7
Horizontal Curves with Substandard Design Speeds

Location	Curve Design Speed	Posted Speed Limit	Advisory Speed Warning
East of Orebank Road	25 mph	35 mph	
At Kite Street	30 mph	35 mph	
East side of Kent Street	30 mph	35 mph	
At Harbor Chapel Road	35 mph	45 mph	
East of Old Stage Road	30 mph	45 mph	30 mph
On Chestnut Ridge	35 mph	50 mph	35 mph
On Chestnut Ridge	40 mph	50 mph	35 mph
On Chestnut Ridge	40 mph	50 mph	35 mph
On Chestnut Ridge	25 mph	50 mph	35 mph
On Chestnut Ridge	30 mph	50 mph	35 mph
On Chestnut Ridge	45 mph	50 mph	35 mph
At Chestnut Ridge Road	45 mph	50 mph	
East side of Island Road	45 mph	50 mph	
At Shadowtown Road	45 mph	50 mph	
Between Natchez Lane & Dakota Drive	35 mph	50 mph	
West side of Cassidy Drive	45 mph	50 mph	
West side of Cochise Trail	45 mph	50 mph	
West of Samlola Road	40 mph	50 mph	
West of Samlola Road	45 mph	50 mph	
West of Overhill Drive	40 mph	50 mph	35 mph

Vertical Curve Evaluation

Vertical alignment is comprised of the straight lines and curves that make up the up and down elements of a roadway. A vertical curve is what most people refer to as a hill or valley. The design speed of a vertical curve is intended to prevent the driver's travel speed from exceeding his or her line of sight, thus allowing the driver ample time to respond to the roadway conditions ahead. A flatter curve allows the driver to see a greater distance, allowing a higher speed limit.

Data from the controlled aerial survey was used to develop a centerline profile for the project area of SR 126. The curvature of the profile was examined to identify vertical curves that are substandard for the posted speed limit. Table 8 lists 42 vertical curves by location that have a design speed less than the posted speed limit and a curve length of greater than 150'. Deficient curves that are shorter than 150' were not included in the list since they are not generally discernable to the driver.

Table 8
Vertical Curves with Substandard Design Speeds

Location	Type of Curve	Design Speed	Posted Speed	Curve Length
East of Trinity Lane	sag	35 mph	45 mph	183’
East of Trinity Lane	crest	40 mph	45 mph	214’
Between Trinity Lane & Tanglewood Road	crest	40 mph	45 mph	241’
Between Trinity Lane & Tanglewood Road	sag	40 mph	45 mph	257’
East of Old Stage Road	crest	40 mph	45 mph	273’
East of Old Stage Road	crest	40 mph	50 mph	176’
On Chestnut Ridge	sag	20 mph	50 mph	178’
On Chestnut Ridge	crest	45 mph	50 mph	379’
On Chestnut Ridge	sag	40 mph	50 mph	192’
On Chestnut Ridge	sag	45 mph	50 mph	168’
On Chestnut Ridge	crest	45 mph	50 mph	103’
On Chestnut Ridge	sag	35 mph	50 mph	164’
On Chestnut Ridge	crest	40 mph	50 mph	316’
East of Shuler Road	crest	35 mph	50 mph	346’
At Lemay Drive	crest	40 mph	50 mph	410’
East of Lemay Drive	crest	40 mph	50 mph	483’
East of Lemay Drive	sag	20 mph	50 mph	207’
West of Chestnut Ridge Road	crest	40 mph	50 mph	294’
West of Chestnut Ridge Road	sag	35 mph	50 mph	240’
East of Chestnut Ridge Road	crest	40 mph	50 mph	310’
Between Cooks Valley Road & Fisher Drive	sag	35 mph	50 mph	271’
East of Fisher Drive	crest	40 mph	50 mph	175’
Between Fisher Drive & Bridwell Heights	sag	30 mph	50 mph	271’
Between Bridwell Heights & Lana View Road	crest	40 mph	50 mph	316’
Between Lana View Road & Wembeck Drive	sag	35 mph	50 mph	295’
At Island Road	crest	40 mph	50 mph	271’
At Country Drive	crest	45 mph	50 mph	204’
West of Fall Creek Road	sag	35 mph	50 mph	219’
At Fall Creek Road	crest	40 mph	50 mph	340’
West of Cree Street	sag	35 mph	50 mph	387’
Between Cree Street & Santanta Road	crest	40 mph	50 mph	264’
At Montezuma Road	sag	40 mph	50 mph	318’
East of Natchez Lane	sag	45 mph	50 mph	600’
West of Cochise Trail	sag	35 mph	50 mph	429’
East of Cochise Trail	crest	40 mph	50 mph	291’
East of Cochise Trail	sag	45 mph	50 mph	324’
East of Cochise Trail	crest	45 mph	50 mph	350’
Between Cochise Trail & Samlola Road	crest	45 mph	50 mph	186’
Between Samlola Road & Gravel Top Road (west)	crest	45 mph	50 mph	525’
East of Gravel Top Road (east)	crest	40 mph	50 mph	390’
West of I-81 westbound ramp	sag	45 mph	50 mph	240’
West of I-81 westbound ramp	sag	40 mph	50 mph	296’

Speed Data

Travel speed (too fast and too slow) on SR 126 was noted as a concern on many of the surveys completed by the public for this project. In addition to this local concern about travel speeds, the consultant team noted in their field investigations that there are a number of horizontal curves where the design speed of the curve is as much as 20 miles per hour less than the posted speed limit. Some of these curves have advisory speed warnings and some do not. Concern for travel speeds on the corridor, particularly in curvy areas, prompted TDOT to gather speed data along the route. Five locations were chosen based on their proximity to horizontal curves. Speed data was collected for a 24-hour period in each direction at each location. The following table summarizes the speed data that was collected at each location.

Table 9
Travel Speed Data on SR 126

Station #	# of Lanes	Travel Direction	Posted Speed Limit	Advisory Speed Warning	Average Speed	85th Percentile Speed*
1 – near Orebank Road	2	Eastbound	35 mph	None	39.4, 43.4	44.7, 50.0
	2	Westbound	35 mph	None	40.6, 40.1	46.7, 46.4
2 – between Beverly Hill St. and Glenwood St.	2	Eastbound	45 mph	None	40.6, 41.1	45.2, 46.6
	1	Westbound	35 mph	None	39.2	43.9
3 – between Old Stage Rd. and Holiday Rd.	1	Eastbound	50 mph	35 mph	44.8	51.9
	1	Westbound	50 mph	35 mph	46.3	52.9
4 – west of Island Rd. near shopping center	1	Eastbound	50 mph	None	42.8	49.6
	1	Westbound	50 mph	None	42.0	48.7
5 – west of Samlola Rd.	1	Eastbound	50 mph	None	49.3	54.5
	1	Westbound	50 mph	None	52.3	58.5

*85th percentile travel speed is the speed at or below which 85% of the vehicles traveled. Average and 85th percentile speed is noted for each travel lane.

The 85th percentile travel speeds at most of the surveyed locations were within 5 miles per hour of the posted speed limit. The notable exceptions were at station #1, near Orebank Road, and at station #5, west of Samlola Road. The design speed for the curve at station #1 is 25 miles per hour and the posted speed limit is 35 miles per hour. The curve at station #5 is a compound curve made up of two curves with a straight section in between. The design speed of the two individual curves at station # 5 are 40 miles per hour and 45 miles per hour with a posted speed limit of 50 miles per hour.

The collected speed data verifies comments made by the public that travel speeds are higher than desirable in certain areas of SR 126. Particularly noteworthy is the confirmed concern that travel speeds are higher in curved areas than is prudent for the existing curve design speeds. The geometric and speed data evaluations confirmed in the minds of the Project Management Team and Community Resource Team that whatever improvements are ultimately recommended for SR 126, it is imperative that the vertical and horizontal curvature be corrected to match a consistent and logical design speed.

Accident Data

As noted in a previous section of this report, traffic accident data for SR 126 was gathered from several sources: TDOT's Traffic and Roadway Information Management System (TRIMS), the City of Kingsport, Sullivan County, and the Tennessee Highway Patrol. Data was collected for the years from 1999 through 2003. Per standard TDOT practice, the database was filtered to remove any traffic accidents that occurred on private property or involved only property damage with a value less than $400. Maps were prepared to graphically show the locations and type of traffic accidents that had occurred on SR 126. These maps, included in the appendix of this report, were presented at the Public Involvement Sessions in May 2004.

In addition to preparing a graphic summary of the traffic accident data, the consultants calculated accident rates for SR 126 using a standard TDOT methodology. Accident rates were calculated for various sections of SR 126 based upon the existing roadway cross sections. The resultant rates for SR 126 and a comparison with statewide average rates are shown in Table 10.

The traffic accident rate summary table includes information on the total number of traffic accidents, number of accidents that produced an injury, and the number of accidents that resulted in a fatality. Also noted are statewide average accident rates for similar facilities in Tennessee and calculated accident rates for various sections of SR 126. The actual traffic accident rate noted in the table is determined by dividing the number of accidents that occur at a given location in a specified time period by the amount of vehicular exposure at that location. Exposure is measured in number of vehicle-miles of travel or in number of entering vehicles. Statewide averages for accident rates on comparable roadway segments are provided in the table for comparison. The critical accident rate reflects a statistical control that provides a means of evaluating actual accident rates. If an actual accident rate is higher than the critical accident rate, one can conclude that the accident pattern is most likely not due to chance but to some unfavorable characteristic of the local conditions. The severity index is an expression of the ratio of fatal and injury accidents to the total number of accidents at a given location. The higher the severity index, the more hazardous the location.

In addition to the accident rate summary table, the following pages include tables that summarize locations with 20 or more accidents from 1999 through 2003, locations of accidents that resulted in a fatality and the type of collision, and fatal accident rates for various sections of SR 126 compared to statewide averages for similar roadways in Tennessee.

Table 10
Accident Rate Summary for SR 126 - 1999 through 2003

Section	Type	Total Accidents	Injury Accidents	Fatal Accidents	Statewide Average Rate	Actual Accident Rate	Critical Accident Rate	Severity Index
E. Center Street to Sun Bridge Rehab	4-lane undivided	71	26	0	3.72	6.49	5.12	0.37
Sun Bridge Rehab to east of Stratford Road	4-lane divided	87	18	0	2.33	8.71	3.5	0.21
East of Stratford Road to east of Old Stage Road	3-lane (climbing lane)	128	33	1	3.72	2.87	4.4	0.26
East of Old Stage Road to west of Overhill Road	2-lane	253	94	6	2.89	2.68	3.3	0.52

Intersection	Type	Total Accidents	Injury Accidents	Fatal Accidents	Statewide Average Rate	Actual Accident Rate	Critical Accident Rate	Severity Index
SR 126 @ Overhill Road / Carolina Pottery	4-lane divided urban	51	27	1	0.29	2.21	0.57	0.55

Table 11
Locations with 20 or More Accidents - 1999 through 2003

Location	Log Mile	Total Accidents	Injury Accidents	Fatal Accidents
at Overhill Road / Carolina Pottery	11.96	45	25	1
at Stratford Road	4.55	27	3	0
at SR 93 southbound ramps	4.41	26	7	0
at Harbor Chapel Road	5.18	20	7	0
at Fall Creek Road	9.1	20	7	0
at Amy Avenue	5.11	16	5	0
at East Center Street	3.72	15	5	0

Table 12
Fatality Locations - 1999 through 2003

Location	Log Mile	Date	Time	Type of Accident
Culvert between East Lawn Cemetery & Chestnut Ridge Road	7.5	3/27/1999	21:25	Vehicle ran off road & overturned
Overhill Road / Carolina Pottery	11.96	6/5/2000	15:13	Angle collision between 2 vehicles
east of Cochise Trail	10.96	6/7/2000	6:18	Head on collision between 2 vehicles
between Chestnut Ridge Road and Old Stage Road	7.56	5/20/2002	18:35	Vehicle ran off road & hit fixed object
between Trinity Lane and Tanglewood Road	5.46	8/26/2002	14:58	Vehicle ran off road & overturned
between Island Road and Country Acres Drive	8.5	7/16/2003	1:40	Vehicle ran off road & hit fixed object
between Old Stage Road and Cooks Valley Road	7.64	7/18/2003	16:15	Head on collision between 2 vehicles
between Chestnut Ridge Road and Old Stage Road	7.58	1/13/2003	6:25	Angle collision between 2 vehicles

Table 13
Fatal Accident Rate Comparison - 1999 through 2003

Section	Total Accident Rates		Fatal Accident Rates	
	SR 126	TN Average	SR 126	TN Average
E. Center Street to Sun Bridge Rehab	6.49	3.72	0.00	0.02
Sun Bridge Rehab to east of Stratford Road	8.71	2.33	0.00	0.01
East of Stratford Road to east of Old Stage Road	2.87	2.87	0.02	0.02
East of Old Stage Road to west of Overhill Road	2.68	2.89	0.06	0.01

Intersection	Total Accident Rates		Fatal Accident Rates	
	SR 126	TN Average	SR 126	TN Average
SR 126 @ Overhill Road / Carolina Pottery	2.21	0.29	0.04	0.00

Field Review of Accident Locations

After examining the traffic accident data, the consultants conducted a field review of the project route to identify any observable deficiencies that might contribute to the frequency of traffic accidents along SR 126. The following list summarizes items noted in the field review:

- In the commercial area of SR 126 between East Center Street and Orebank Road, the lack of turn lanes and poor access control at driveways is likely a contributing factor to rear-end and angle collisions.
- The intersection of Orebank Road and SR 126 has an acute angle and no main street turn lanes which contribute to the preponderance of rear-end collisions.
- On westbound SR 126 there is limited sight distance of the traffic signal at the intersection of SR 126 and the southbound ramps of John B. Dennis Highway (SR 93). Restricted sight distance at this intersection could be contributing to the number of rear-end and angle collisions.
- Poor access control creates too many conflict points in the area surrounding the Stratford Drive intersection. This area has multiple angle collisions.
- All of the intersections, except Kent Street, along SR 126 between Hawthorne Street and Amy Avenue have a sight distance restriction in at least one direction that is caused by the vertical or horizontal curvature of the roadway. These sight distance restrictions contribute to both angle and rear-end collisions.
- The acute angle of Amy Avenue at its intersection with SR 126 appears to contribute to the occurrence of westbound rear-end collisions.
- There is a sight distance deficiency at the intersection of Briarwood Road that may contribute to angle and rear-end collisions.
- In the vicinity of Lemay Drive, there are vertical curves that restrict sight distance.
- There is a sight distance restriction looking west from Cooks Valley Road.
- Sight distance is limited in both directions for drivers exiting Island Road onto SR 126. This intersection is located in a sharp horizontal curve. The traffic accidents at this location are predominantly angle collisions with some rear-end collisions.
- The intersection of Fall Creek Road is located at the crest of a vertical curve that restricts sight distance for drivers on SR 126. Accidents at this intersection include a both rear-end and angle collisions.
- There is a sight distance restriction looking east from Old Fall Creek Road.
- Sight distance is limited in both directions for drivers exiting Montezuma Road. This location has mostly rear-end collisions.
- There is a severe sight distance restriction looking to the west along SR 126 from the Cassidy Drive intersection.
- At the Harr Town Road intersection, sight distance is limited looking to the east from Harr Town Road and looking east from SR 126. The poor sight distance contributes to rear-end and angle collisions.
- The compound horizontal curve west of Samlola Road needs improved super elevation. This curve has been the site of several run off the road accidents.
- Sight distance is limited looking west from the western end of Gravel Top Road (west). At the eastern end of Gravel Top Road, sight distance is limited looking to the east.
- In the horizontal curve west of Overhill Drive, the transition from a normal crown to super elevation needs correction.

- There is a preponderance of right angle collisions at the intersection of Overhill Drive / Carolina Pottery and SR 126. These collisions occur mostly between drivers traveling in the southbound and eastbound directions. It appears that the wide median may be a factor in angle collisions at this intersection causing drivers to misjudge the amount of time needed to cross over SR 126 from the side street. Since this intersection had the highest number of traffic accidents within the study area limits and due to its proximity to Sullivan County High School, the Community Resource Team and public expressed a great deal of concern for the safety of this intersection. Many postulated that the high accident rate is due, at least in part, to a disproportionately high number of young and inexperienced drivers traveling through it on a daily basis. According to the accident records tabulated for this study, approximately half of the 'at fault' drivers were age 21 or younger.

Driver Contributing Factors Evaluation

In response to questions raised by the Community Resource Team concerning the impacts and frequency of driver error or influence of alcohol on traffic accidents along SR 126, the consultants conducted a review of contributing factors listed on the collision reports for one of the sample years, 2003. Following is a table that presents data from the 2003 collision reports concerning driver condition and contributing factors. This table was provided to the Community Resource Team for review along with some general conclusions suggested by the data:

- In 2003 there were two fatalities, one of which involved alcohol. This is consistent with national data from the National Highway Traffic Safety Administration (NHTSA) that shows a 40% alcohol involvement rate in highway fatalities nationwide in 2003.
- The most frequent driver errors or contributing factors listed in the collision reports were failure to yield right of way (marked in 42% of **total** accidents for 2003), curve (26%), failure to keep in the proper lane or run off road (14%), and following too closely (12%). For comparison: The NHTSA statistics for nationwide **fatal** accidents in 2003 lists failure to keep in the proper lane or run off road as the most frequently occurring driver factor (32%) in fatal accidents. Speed was the second most frequently occurring factor in the NHTSA data (21%). Failure to yield was listed at 8% in the NHTSA fatal accident statistics. This is a general comparison because the NHTSA data is only for fatal accidents whereas the SR 126 summary is for total accidents.
- It appears that the frequency of driver error or contributing factors on SR 126 is consistent with other roadways. What makes SR 126 dangerous is its unforgiving nature --- inadequate clear zones, no shoulders, lack of turn lanes, etc. While engineering improvements to SR 126 cannot eliminate driver error they can create a more forgiving roadway in which the total number of accidents could be reduced.

Table 14
Contributing Factors Evaluation - 2003 Traffic Accident Data

	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Accident Total	**11**	**13**	**6**	**11**	**10**	**10**	**7**	**7**	**17**	**12**	**15**	**13**	**132**
Injury Accidents	3	6	3	4	5	1	2	2	6	4	5	4	45
People Injured	3	11	7	7	5	1	2	2	9	5	9	7	68
Fatalities	-	-	-	1*	-	-	1**	-					2
Driver Condition													
Alcohol				1*									0
Drugs													0
Illegal Drugs/Alcohol	1***												0
Unknown (see footnote)	2	1		1			1**	1	2	2	1	1	11
Illness		1											1
Reaction to Drugs or Meds				1									1
Fatigue									1				1
Driver Actions or Contributing Factors													
Speeding	1			1			1	1	1	1			6
Curve	4	3	2	4	3	2		2	5	2	5	3	35
Failure to keep in proper lane or Run Off Road	3	2		3	1		2	1	4		1	1	18
Inattentive	1		1							1	2	1	6
Driving Left of Center	2				1	1		1					5
Failure to Yield Right of Way	4	6	3	4	5	5	2	4	8	4	4	6	55
Improper Turn			1		1								2
Following too Closely	1	2	1	1	1	2	2			3		3	16
Telephone		1											1
Overcorrecting		1		1					1				3
Vision Obstructed		1			1								2
Failure to Obey Traffic Controls		1								1			2
Failure to use Lights				1									1
Improperly Towing Vehicle				1									1
Careless or Erratic Driving					1	1		1					3
Failure to Signal Intentions					1								1
Driver Inexperience						1							1
Failure to Comply with License Restrictions						1							1
Reckless or Negligent						2		1					3
Improper Lane Change									1				1

*This fatality involved alcohol and a failure to keep in proper lane in a curve. It resulted in a head-on collision and three injured persons.

**This fatality did not involve alcohol or drugs. It was a one car collision. The driver was 17.

***This alcohol related accident resulted in one injury and was caused by driving left of the center line in a curve.

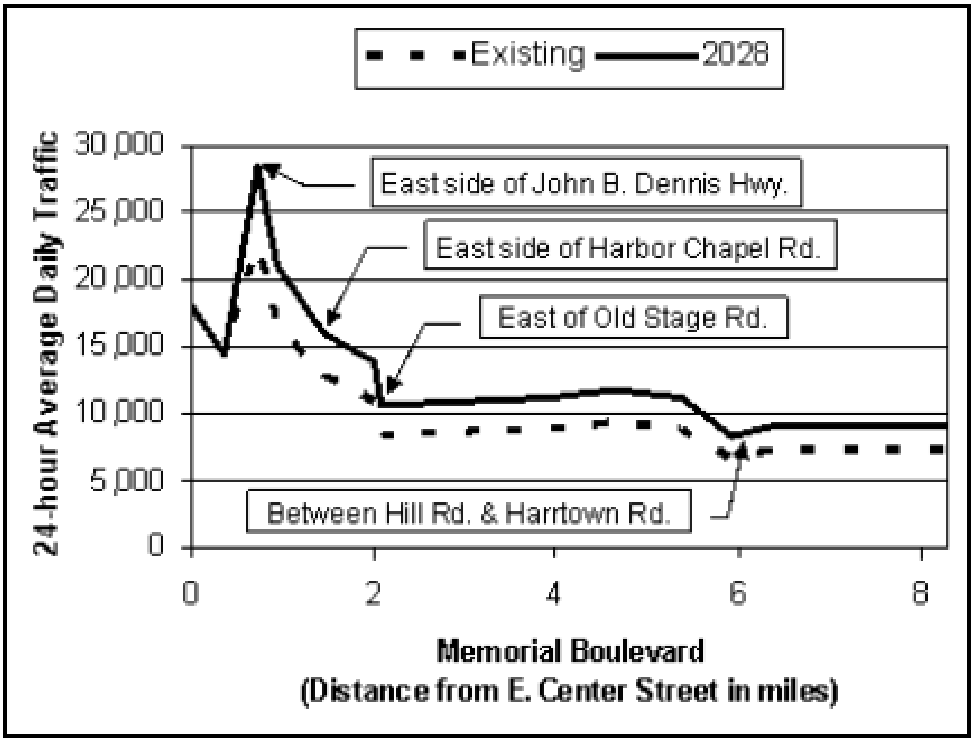
Driver Condition unknown…this was marked on the accident report in hit-and run accidents, reports taken over the phone, instances where alcohol and/or drug tests were administered but the results were not known at the time the report was written, and in a few instances when no test was administered.

Traffic Volumes and Capacity

Traffic volume forecasts for this project were developed by TDOT for base year 2008 and future year 2028. Average daily traffic (ADT) and design hour volumes (DHV) were prepared for the thirteen segments on SR 126 throughout the project study area. Figures 5 and 6 illustrate the ADT and DHV volume estimates for the study area. Intersection turning movement volumes were projected for four intersections: SR 126 and East Center Street, SR 126 and the two ramp terminal intersections of John B. Dennis Highway, and SR 126 and Harbor Chapel Road. (see appendix for intersection volumes).

Based upon input from the Community Resource Team, the forecasted traffic volumes for SR 126 include a zero growth rate for traffic west of John B. Dennis Highway, and a growth rate of 1.048% per year for traffic east of John B. Dennis Highway. (See traffic forecast report dated August 26, 2004 and memo from Steve Allen dated August 19, 2004 in the appendix.) The highest traffic volumes within the corridor occur immediately east of John B. Dennis Highway (SR 93). The following graph, which was included in the handout material from the third set of Public Involvement Sessions, shows how forecasted 2028 traffic volumes vary along the SR 126 corridor.

Figure 4
Average Daily Traffic Volumes Graph



SULLIVAN COUNTY

S.R. - 126 (MEMORIAL BLVD)

500 - 2003 ADT

▲500 - 2004 ADT

500 - 2008 ADT

(500) - 2028 ADT

[2] - ADT TRUCK %

NOT TO SCALE

* ZERO GROWTH (WEST OF SR-93) REPRESENTS 2003-2008 ADT.

1.048% PER YEAR GROWTH (EAST OF SR-93)

FIGURE 5

AVERAGE DAILY TRAFFIC VOLUMES ON SR 126

SULLIVAN COUNTY

S.R. - 126 (MEMORIAL BLVD)

*DHV 2008 - 2028

2008 DHV - 000

2028 DHV - (000)

11% - DHV

NOT TO SCALE

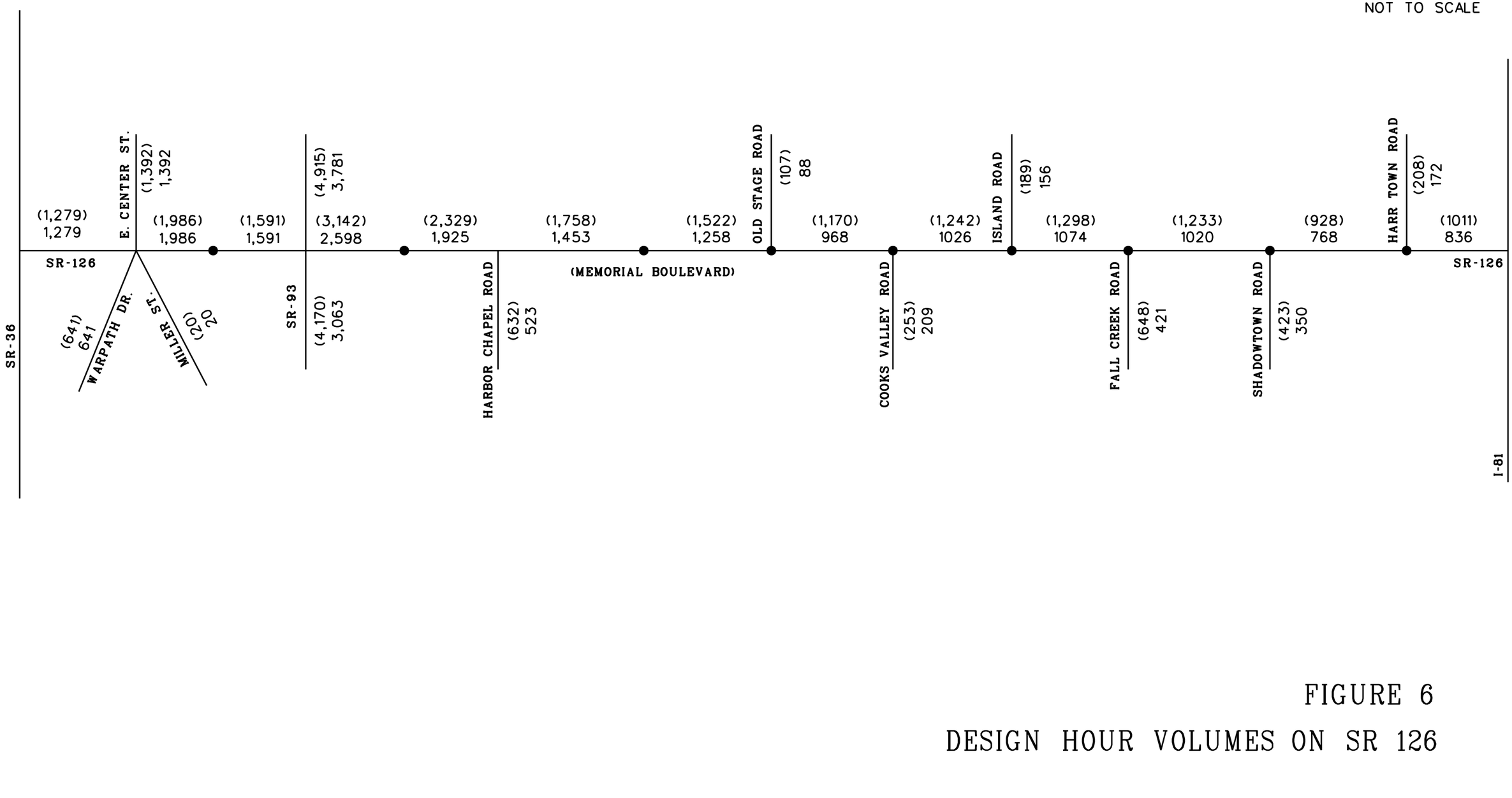


FIGURE 6

DESIGN HOUR VOLUMES ON SR 126

The traffic volume data was used to identify areas along SR 126 that have existing capacity deficiencies or constraints, as well as areas with the potential for future capacity concerns. Capacity is defined in terms of "level of service" which is rated in descending order from "A" to "F". Typically for roadway planners, a level of service "C" is considered the desirable minimum performance standard. Often, however, a level of service "D" is considered acceptable for urban areas where motorists are more willing to tolerate some peak hour congestion. In the case of SR 126, the Community Resource Team set a minimum performance standard of "D" for all sections of SR 126.

Capacity analyses for SR 126 were performed in stages throughout the project development process. Initially, the consultants prepared level of service estimates for the base year and future traffic volumes with the existing roadway section. This was, at first, a planning level analysis based solely upon traffic volumes and the number of travel lanes provided. That analysis was later refined to account for various geometric features such as lane and shoulder widths. The results of the capacity analysis of existing geometry is summarized in the table entitled "Capacity Analysis Results with Existing Geometry".

After the concept plans A, B, and C were fully developed, capacity analyses of each concept plan were prepared for year 2028 traffic volumes. Levels of service were estimated for each concept plan. The results of the concept plan capacity analyses were shared with the Community Resource Team in June 2005, in preparation for the team recommendation meeting. The level of service results for Concepts A, B, and C are shown on tables after the levels of service for existing geometry.

Table 15
Capacity Analysis Results with Existing Geometry

Arterial with Free Flow Speed < or = 45 mph

Analysis is for segments between signalized intersections. LOS is governed by intersection operations.

		2008 AM		2028 AM	
Road Segment	**Existing Cross Section**	**Direction**	**LOS**	**Direction**	**LOS**
Between E. Center Street & SR 93 Southbound Ramps	4-lane undivided	Eastbound	C	Eastbound	C
		Westbound	C	Westbound	D
Between SR 93 Southbound Ramps & SR 93 Northbound Ramps	4-lane divided	Eastbound	D	Eastbound	D
		Westbound	D	Westbound	D

		2008 PM		2028 PM	
Road Segment	**Existing Cross Section**	**Direction**	**LOS**	**Direction**	**LOS**
Between E. Center Street & SR 93 Southbound Ramps	4-lane undivided	Eastbound	C	Eastbound	C
		Westbound	F	Westbound	F
Between SR 93 Southbound Ramps & SR 93 Northbound Ramps	4-lane divided	Eastbound	C	Eastbound	C
		Westbound	D	Westbound	E

Signalized Intersections

	2008		2028	
Intersection	**AM**	**PM**	**AM**	**PM**
SR 126 @ E. Center Street / Warpath Sr.	D	F	D	F
SR 126 @ SR 93 Southbound Ramps	D	F	F	F
SR 126 @ SR 93 Northbound Ramps	B	F	C	F
SR 126 @ Harbor Chapel	D	B	F*	E*

* With modified signal timing, LOS improves to D for AM & C for PM.

Note: With improvement to intersection operations, the above arterial levels of service would improve.

Table 15 continued
Capacity Analysis Results with Existing Geometry

Segment Capacity Analysis for 2-Lane Highway

		2008 DHV		2028 DHV	
Road Segment	**Existing Cross Section**	**Volume**	**LOS**	**Volume**	**LOS***
Stratford Drive to Harbor Chapel (Eastbound)	2 lanes eastbound	1,925	C	2,329	C
Stratford Drive to Harbor Chapel (Westbound)	1 lane westbound	1,925	E	2,329	E
Harbor Chapel to Briarwood Road (Eastbound)	2 lanes eastbound	1,453	C	1,758	C
Harbor Chapel to Briarwood Road (Westbound	1 lane westbound	1,453	D	1,758	E
Briarwood Road to Old Stage Road (Eastbound)	2 lanes eastbound	1,258	C	1,522	C
Briarwood Road to Old Stage Road (Westbound)	1 lane westbound	1,258	D	1,522	D
Old Stage Road to Cooks Valley Road	2-lane undivided	968	D	1,170	D
Cooks Valley Road to Island Road	2-lane undivided	1,026	D	1,242	D
Island Road to Fall Creek Road	2-lane undivided	1,074	D	1,298	D
Fall Creek Road to Shadowtown Road	2-lane undivided	1,020	D	1,233	D
Shadowtown Road to Harr Town Road	2-lane undivided	768	C	928	D
Harr Town Road to I-81	2-lane undivided	836	D	1,011	D
Harr Town Road to I-81	4-lane divided	836	A	1,101	A

LOS stands for Level of Service, a measure of the amount of delay and congestion on a roadway. LOS ranges from A to F with A representing free-flow conditions and F representing severe congestion.

The LOS results reported in these tables were derived with the Highway Capacity Software 2000 and from Synchro6.

Table 16
Capacity Analysis Results for Concept A

Urban Arterial

Road Segment	Cross Section	Direction	LOS*
			Based on 2028 ADT
Between E. Center Street & Orebank Road	2-lane divided	Eastbound	E
		Westbound	E
Between Orebank & Stratford Dr.	4-lane divided	Eastbound	B
		Westbound	B

Segment Capacity Analysis for 2-Lane Highway

Road Segment	Cross Section	2028 DHV Volume	LOS*
Stratford Dr. to Harbor Chapel (Eastbound)	2 lanes eastbound	2,329	C
Stratford Dr. to Harbor Chapel (Westbound)	1 lane westbound	2,329	E
Harbor Chapel to Briarwood Rd. (Eastbound)	2 lanes eastbound	1,758	C
Harbor Chapel to Briarwood Rd. (Westbound)	1 lane westbound	1,758	E
Briarwood Rd. to Old Stage Road	2-lane with center turn lane	1,522	D
Old Stage Rd to Cooks Valley Rd	2-lane undivided	1,170	D
Cooks Valley Rd to Island Rd	2-lane undivided	1,242	D
Island Rd to Fall Creek Rd	2-lane undivided	1,298	D
Fall Creek Rd to Shadowtown Rd	2-lane undivided	1,233	D
Shadowtown Rd to Harr Town Rd	2-lane undivided	928	D
Harr Town Rd to west of Overhill Road	2-lane undivided	1,011	D
west of Overhill Road to I-81	4-lane divided	1,011	A

LOS stands for Level of Service, a measure of the amount of delay and congestion on a roadway. LOS ranges from A to F with A representing free-flow conditions and F representing severe congestion.

The LOS results reported in these tables were derived with the Highway Capacity Software 2000 and from TDOT's . generalized table "Daily Service Volumes Related to Level of Service".

Table 17
Capacity Analysis Results for Concept B

Urban Arterial

			Based on 2028 ADT	
Road Segment	**Cross Section**		**Direction**	**LOS***
Between E. Center Street & Orebank Road	4-lane + center turn lane		Eastbound	C
			Westbound	C
Between Orebank & Stratford Dr.	4-lane + center turn lane		Eastbound	B
			Westbound	B

Segment Capacity Analysis for 2-Lane Highway + center turn lane

			2028 DHV	
Road Segment	**Cross Section**		**Volume**	**LOS***
Stratford Dr. to Harbor Chapel	2-lane with center turn lane		2,329	E
Harbor Chapel to Briarwood Rd.	2-lane with center turn lane		1,758	D
Briarwood Rd. to Old Stage Road	2-lane with center turn lane		1,522	C
Old Stage Rd to Cooks Valley Rd	2-lane with center turn lane		1,170	B
Cooks Valley Rd to Island Rd	2-lane with center turn lane		1,242	B
Island Rd to Fall Creek Rd	2-lane with center turn lane		1,298	C
Fall Creek Rd to Shadowtown Rd	2-lane with center turn lane		1,233	B
Shadowtown Rd to Harr Town Rd	2-lane with center turn lane		928	B
Harr Town Rd to west of Overhill Road	2-lane with center turn lane		1,011	B
west of Overhill Rd to I-81	4-lane divided		1,011	A

LOS stands for Level of Service, a measure of the amount of delay and congestion on a roadway. LOS ranges from A to F with A representing free-flow conditions and F representing severe congestion.

The LOS results reported in these tables were derived with the Highway Capacity Software 2000 and from TDOT's generalized table "Daily Service Volumes Related to Level of Service".

Table 18
Capacity Analysis Results for Concept C

Urban Arterial

Road Segment	Cross Section	Direction	LOS*
			Based on 2028 ADT
Between E. Center Street & Orebank Road	4-lane + median	Eastbound	C
		Westbound	C
Between Orebank & Stratford Dr.	4-lane + median	Eastbound	B
		Westbound	B

Segment Capacity Analysis for 4-Lane Highway + median

Road Segment	Cross Section	2028 DHV Volume	LOS*
Stratford Dr. to Harbor Chapel	4-lane divided	2,329	C
Harbor Chapel to Briarwood Rd.	4-lane divided	1,758	B
Briarwood Rd. to Old Stage Road	4-lane divided	1,522	B
Old Stage Rd to Cooks Valley Rd	4-lane divided	1,170	A
Cooks Valley Rd to Island Rd	4-lane divided	1,242	A
Island Rd to Fall Creek Rd	4-lane divided	1,298	A
Fall Creek Rd to Shadowtown Rd	4-lane divided	1,233	A
Shadowtown Rd to Harr Town Rd	4-lane divided	928	A
Harr Town Rd to I-81	4-lane divided	1,011	A

LOS stands for Level of Service, a measure of the amount of delay and congestion on a roadway. LOS ranges from A to F with A representing free-flow conditions and F representing severe congestion.

The LOS results reported in these tables were derived with the Highway Capacity Software 2000 and from TDOT's generalized table "Daily Service Volumes Related to Level of Service".

Historic, Archaeological, & Ecological Areas of Concern

With the exception of a historic survey, detailed environmental studies were not conducted as a part of this Context Sensitive Solutions planning study. The project resource team did, however, include representatives from the environmental planning section of TDOT to provide general guidance to the team. Team members included a historian, an ecologist, an archaeological specialist, and environmental permit specialists. The following is a summary of information provided to the Community Resource Team by these technical specialists. Detailed reports and correspondence pertaining to these environmental concerns are included in the Appendix to this report.

Historic Properties

As part of the project, TDOT initiated a historical survey of the SR 126 corridor to identify any historic properties that might be affected by the project. Preliminary information from the survey was provided to the Community Resource Team in January 2004 and results from the completed survey were shared with the team meeting in March 2005. Significant findings from the historic survey include:

- Yancey's Tavern
  A property located on Old Stage Road, across SR 126 from East Lawn Cemetery, is listed on the National Register of Historic Places (listed in 1972) for its significance in the early settlement of Sullivan County. The National Register boundary for Yancey's Tavern was described as five acres including the tavern and associated outbuildings.
- Shipley Mansion
  The historical survey identified a residence known as Shipley Mansion, located on the south side of SR 126 east of East Center Street, as a National Register eligible property.

Archaeological Concerns

Archaeological surveys have not been conducted to determine the presence or absence of archaeological sites within the SR 126 project limits. In September 2004, the archaeological specialist noted that there were a couple of previously recorded sites in the Cooks Valley area at Yancey's tavern and Eaton's Station that would likely be of significance to the project. The location of Yancey's Tavern is noted above in the historic survey discussion. Eton's Station is located near Bridwell Heights Road. Detailed archaeological surveys will be required once a preferred alignment corridor is defined.

Ecological Concerns

The TDOT Ecologist assigned to the technical resource team reported in January 2004 that numerous streams would be of concern to the U.S. Army Corps of Engineers.

Sites of Local Significance and Value

In addition to the properties identified in the historic survey, the Community Resource Team identified several sites that they considered to be of local significance and thus worthy of protection under the guidelines of Context Sensitive Solutions planning. The noted sites are:

- Cherry Point Animal Hospital
  Locally known as the Barger House, this structure contains a veterinary clinic. It is located at the intersection of Island Road and SR 126. A letter describing the local

significance of the Barger House and photographs are included in the Appendix to this report.

- White House at the corner of Satanta Road and SR 126
  Although not historic, this house is considered a treasure by the community for its architecture and age. Photographs of the house are included in the Appendix.

- East Lawn Cemetery
  East Lawn is a large cemetery located on the south side of SR 126 adjacent to Cooks Valley Road. Protection of the cemetery was noted as a concern by many citizens during the public involvement process.

- Old Indian Springs Post Office
  This structure is currently barely visible from the shoulder of SR 126. It is located on the south side of the roadway, east of Hill Road. Photographs are included in the Appendix to this report.

- Chestnut Ridge view shed
  Throughout the public involvement process, citizens stated that the view of and view from Chestnut Ridge was a valuable asset to the community that should be preserved.

Community Values and Safety Concerns

The public was formally surveyed on two occasions to gather input regarding safety concerns on SR 126 and community values. These surveys were conducted by the first postcard that was mailed with the first newsletter and in a detailed preference survey that was conducted at the first Public Involvement Sessions.

Responses to the first postcard indicated concerns with such things as overall safety, problem intersections, the need for traffic signals, poor sight distance, drivers going too fast or too slow, and traffic volumes. The problem intersection mentioned most frequently was the intersection of Harbor Chapel Road. Other intersections of concern included Island Road, Chestnut Ridge and Fall Creek Road.

The detailed preference survey conducted at the first Public Involvement Sessions asked specific questions about access to SR 126, problem intersections, and community values. On the following page is a tabulation of those survey results.

In the first Public Involvement Sessions, citizens were invited to write comments on the aerial maps or attach a sticky note to the maps with questions or comments. In the second Public Involvement Sessions, citizens were invited to use sticky notes for comments about the concept plans. After each public session, these handwritten comments and notes were assembled and typed for the project record and for consideration by the Community Resource Team. The appendix includes full reports of these public comments.

TENNESSEE DEPARTMENT OF TRANSPORTATION

MEMORIAL BOULEVARD/SR 126 PROJECT

FIRST PUBLIC INVOLVEMENT SERIES

QUESTIONNAIRE

Please complete this questionnaire and either place it in the questionnaire box at the sign-in table, or return it by mail.

Do you live in the Memorial Boulevard/SR 126 study area (east of Center Street, south of 11W/Stone Drive, and north of Interstate 81)? **232 Yes** 17 No

Number responding shown in parenthesis.

How many round trips per week do you make using Memorial Boulevard/SR 126 between Interstate 81 and East Center Street? (circle one answer)

A. 1-2 **(15)**
B. 3-5 **(23)**
C. 5-10 **(61)**
D. 10-20 **(69)**
E. More than 20 **(83)**
F. Do not travel on Memorial Boulevard **(0)**

What is the average length (in miles), one-way, that you take on Memorial Boulevard/SR 126 between Interstate 81 and East Center Street? (circle one answer)

A. 1-2 miles **(34)**
B. 3-5 miles **(93)**
C. 6-8 miles **(122)**
D. Do not travel on Memorial Boulevard **(1)**

Do you have any travel problems or safety concerns along this route? **(252)** Yes ___ No

If Yes, rank those that apply in order of importance from 1 to 5, with 5 being the most important and 1 being the least important.

___ A. Difficulty in getting onto Memorial Boulevard/SR 126

1(Least) – 17
2---------- 15
3---------- 28
4----------24
5(Most)---96
Total------180

___ B. Difficulty turning left when getting off Memorial Boulevard/SR 126

1(Least) – 23
2---------- 19
3---------- 17
4----------32
5(Most)----58
Total-------149

___ C. Difficulty entering or exiting business parking lots

1(Least) – 17
2---------- 22
3---------- 24
4----------29
5(Most)----38
Total-------130

Travel Problems Cont.

___ D. Limited ability to see on-coming traffic
1(Least) – 10
2---------- 16
3---------- 36
4----------39
5(Most)----79
Total------180

___ E. Speeding traffic
1(Least) – 16
2---------- 15
3---------- 31
4----------33
5(Most)---74
Total------169

___ F. Slow traffic
1(Least) – 23
2---------- 18
3---------- 15
4----------14
5(Most)----24
Total-------94

___ G. Dangerous curves
1(Least) – 24
2---------- 15
3---------- 24
4----------28
5(Most)---82
Total------173

___ H. Unsafe for bicycles and pedestrians
1(Least) – 21
2---------- 12
3---------- 11
4----------8
5(Most)---70
Total------122

___ I. Other___School Bus Safety_____
1(Least) – -0
2---------- 1
3---------- 1
4----------0
5(Most)----2
Total------4

Travel Problems Cont.

___ J. Other___Narrow Roads_____
1(Least) – 1
2---------- 0
3---------- 0
4----------1
5(Most)---4
Total------6

___ K. Other____Dangerous Lane Merges__
1(Least) – 0
2---------- 1
3---------- 0
4----------2
5(Most)---1
Total------4

What intersections on Memorial Boulevard/SR 126 create problems for you? (circle all that apply)

A. Orebank Road **(65)**
B. John B. Dennis **(36)**
C. Stratford Road **(20)**
D. Center Street **(18)**
E. Harbor Chapel Road **(123)**
F. Briarwood Road **(23)**
G. Old Stage Road **(58)**
H. Island Road **(67)**
I. Cooks Valley Road **(58)**
J. Fall Creek Road **(64)**

K-Z. (Others) -
Hawthorne **(6)**
Eaton Station **(2)**
Garden Center **(2)**
Conway **(3)**
Harrtown **(11)**
Shuler **(4)**
Chestnut Ridge **(8)**
Holiday **(3)**
Dakota **(3)**
Hill Road **(4)**
Cree **(4)**
Cochise **(3)**
Cassidy **(3)**
Amy **(6)**
Trinity **(3)**
Milton Court **(6)**

If you live along or near the Memorial Boulevard/SR 126 corridor, what qualities do you value about your community and the surroundings? (circle all that apply)

A. Scenic quality **(174)**
B. Historic aspects **(85)**
C. Quiet neighborhoods **(166)**
D. Sense of community with nearby churches, schools, special events **(121)**
E. Feeling of safety and security **(152)**

Qualities Valued cont.

F. Nearby State Park, family recreation and sports opportunities **(78)**
G. Nearby golf course **(19)**
H. Other__Personal property **(2)**_
I. Other_ Location **(3)**

What visual characteristics of the Memorial Boulevard/SR 126 corridor do you value? (circle all that apply)

A. Rural setting (pastures, woodlands) **(161)**
B. The way the road winds through Sullivan County **(62)**
C. Trees, shrubs and other landscaping **(122)**
D. Historic houses, barns and other structures **(107)**
E. Views of the adjacent neighborhoods **(50)** F. Other_View From The Road **(3)**_____
G. Other_Local Cemetery **(2)**_____ H. Other_____

What buildings, areas or views along the corridor do you consider to be significant and worthy of protection?

A. The "S" Curves **(5)**
B. Chestnut Ridge view **(19)**
C. Cooks Valley view **(13)**
D. East Lawn Cemetery **(20)**
E. Yancy Tavern **(10)**
F. Greenwood Market **(5)**
G. Family/personal property **(5)**
H. Eaton's Fort **(2)**
I. Exchange Place **(3)**
J. White Inn **(3)**
K. Cherry Point **(4)**
L. Model City Motel **(3)**

Do you have any other comments regarding transportation problems and/or community values along the Memorial Boulevard/SR 126 corridor?

A. Not enough turn lanes **(10)**
B. Want wider shoulders **(4)**
C. Traffic control / more stop lights **(27)**
D. Want to lower the speed limit **(5)**
E. Law enforcement / speed control **(16)**
F. Bike Lane **(19)**
G. In favor of widening the road **(24)**
H. Sidewalks **(4)**
I. Straightening and leveling **(25)**
J. Litter problem **(2)**
K. Concerned about thru traffic **(5)**
L. Want the road to remain the same **(12)**
M. Inadequate traffic flow **(4)**
N. Community integrity / property value **(10)**
O. Drainage needed **(4)**
P. Tree Trimming **(2)**

Immediate Safety Improvements

As a result of public input, TDOT recognized that there were opportunities to make some immediate safety improvements within the project corridor. These safety improvements included the following:

- Installing a traffic signal at Harbor Chapel Road
- Removal of roadside vegetation that obstructs sight distance
- Replacement of damaged guardrail at selected locations
- Addition of gravel to stabilize shoulders in selected areas
- Installation of reflectors in selected areas to improve nighttime visibility of the roadway edge, and
- Increased speed limit enforcement.

The traffic signal installation for Harbor Chapel Road had been under consideration by the City of Kingsport for some time because of citizen complaints about traffic access to SR 126 from Harbor Chapel Road. Installation had been delayed because of uncertainties pertaining to a previous Advance Planning Report that had been conducted by TDOT that, if implemented, would have significantly altered SR 126 near the Harbor Chapel Road intersection. In addition, Kingsport had been without a City Traffic Engineer until the summer of 2004. Based upon the overwhelming identification of Harbor Chapel Road as the number one concern of citizens who responded to the postcard and preference survey, TDOT pledged to support and expedite a permit for construction of a traffic signal at the intersection of SR 126 and Harbor Chapel Road. The new City Traffic Engineer prepared a design plan for the traffic signal and the permit was approved by November 2004. The signal was installed during December 2004.

Maintenance issues were raised many times at the May 2004 Public Involvement Sessions. As a result, the TDOT project managers contacted the TDOT Region office's maintenance staff, providing them with a list of maintenance issues reported by the public and asked for help in addressing them. Similarly, requests for increased speed limit enforcement were relayed to both City police and the Tennessee Highway Patrol. Both law enforcement agencies increased patrols and radar enforcement.

In an effort to address other safety concerns, TDOT convened a meeting of personnel from the Region office in Knoxville, local maintenance staff, the City of Kingsport Traffic Engineer, a representative from the Kingsport Metropolitan Planning Organization, and representatives from the Governor's Highway Safety Office to discuss problem areas and explore solutions. It was decided that the City of Kingsport and Sullivan County could request optional safety funds from TDOT to implement some innovative techniques to address the safety concerns. The funding request was assembled and approved to cover items such as:

- Centerline rumble strips
- Additional reflectors and raised pavement markers, and
- High visibility pavement markings.

Long-Range Improvements

After gathering input from the community concerning the problems they perceived on SR 126 and the characteristics they valued, the process of long term solutions development began. In order to be true to the ideals of Context Sensitive Solutions it was important that improvement ideas come from the community itself. The process of developing criteria and ideas for improvement of the roadway was initiated at the Design Charette held in October 2004 and attended by the Community Resource Team with support from TDOT technical staff and the project management team.

The Design Charette was hosted and facilitated by the project management team for the purpose of assisting the Community Resource Team with creating their interpretations of an improved SR 126. The charette began with a review of information obtained from the public. The project engineers and management team led a discussion of the principles of CSS and good roadway design. The team then worked together to establish minimum and optimal design criteria as well as performance standards for level of service. Team members were then divided into four groups and asked to interpret the aforementioned standards and criteria into a concept vision for the corridor. Tools supplied to the groups included the following:

- Aerial photos
- Markers and drafting equipment
- Tracing paper
- Typical roadway widths in plan view drawn to the same scale as the aerial photos and reproduced on clear plastic
- Reference books
- TRIMS photo log of the project corridor, and
- Engineering expertise and appropriate software.

At the conclusion of the charette, each of the four groups presented their concept vision to the whole team. Notes were made to document the specifics of each concept so that the details of each vision could be translated by the project engineers into workable concept plans. After examining the four concept visions, it became clear that for every segment there were commonalities in two of the groups visions. This made it possible to combine the four groups visions into a total of three concept plans.

Three concept plans (A, B, and C) were prepared for the corridor using aerial topographic photography with digital terrain information. The topographic data allowed the engineers to prepare plans with GEOPAK, so that a zone of construction impact could be estimated and shown on the concept drawings. The construction impact information helped the Community Resource Team understand the impact implications of various cross sections. In all concepts, the same centerline was used so that the variations shown were due solely to differences in cross section. The disadvantage of maintaining consistent centerlines was that the plans did not show an optimal choice for widening of the roadway based upon the particular cross section. The advantage of maintaining a consistent centerline is that comparison of the impacts of each concept's cross section was simplified and plan production was expedited. Given that this was the planning phase, and no environmental technical studies had been authorized other than the historic survey, it was not prudent to incorporate centerline variations between concepts.

Concepts A, B, and C were presented to the public at the November 2004 Public Involvement Session. Citizens were asked to express a preference for one concept or "no build" in each of the five segments. (A summary of the preferences from November 2004 is provided in the appendix.)

After the November 2004 sessions, Concepts A, B, and C were revised based on public comments and additional comments from the Community Resource Team. These revisions were presented to the team at a design review workshop in March 2004 and were later refined again to incorporate the team's comments. At the design review workshop, the Community Resource Team created a fourth concept (Concept D) which combined elements of Concepts A, B, and C and reflected a philosophy of narrowing the roadway cross section as traffic volumes decrease on the corridor. Concept D was developed solely to serve as an example in order to show the public how various cross sections could be combined within the study corridor.

The following the design review workshop, plans were prepared for Concept D and the previously drawn plans for Concepts A, B, and C were revised. All plans were shaded and color coded to make them more easily understood by the public. The revised and reformatted plans were presented to the public at the May 2005 Public Involvement Sessions. Visualizations of existing and future conditions with each concept plan were provided for four locations: Orebank Road, Harbor Chapel Road, Old Stage Road, and Island Road. Typical cross sections, reformatted to a consistent scale and color coded to match the concept plans, were also presented. The public was asked to complete a preference survey to indicate which of the concept plans they preferred in each of the eight segments of the corridor.

A table is included on the following pages that provides a comparative description by segment of the concept plans that were presented to the public in May 2005. When the concept plans were presented in May 2005, a handout was provided to each person that included detailed information about the tradeoffs of each concept plan and the differences and similarities in the concept plans. A copy of the handout material that was provided to the public at the May 2005 sessions is included in the appendix.

Table 19
Summary of Cross Section Elements from Concepts A, B, & C

Section 1 West -- East Center Street to Orebank Road

	Concept A	Concept B	Concept C
Design speed	35	35	35
Travel lanes	1 eastbound and 1 westbound (14' each)	2 eastbound and 2 westbound (11' each)	2 eastbound and 2 westbound (11' each)
Median	Raised landscaped	Center turn lane	Raised landscaped
Bikeways	Share travel lane	4' shoulder	4' shoulder
Sidewalks	Yes	Yes	Yes
Curb and Gutter	Yes	Yes	Yes
Special features	One-lane roundabout at East Center Street		Roundabout with flared right turns at East Center Street (alternate option is signalized intersection)
Access Notes	Median openings and turn lanes at Central Street, Conway Drive, Woodside Drive, and Orebank Road	No access restrictions	Median openings and turn lanes at Central Street, Conway Drive, Woodside Drive, and Orebank Road

Section 1 East -- Orebank Road to West of Hawthorne Street

	Concept A	Concept B	Concept C
Design speed	35	35	35
Travel lanes	2 eastbound and 2 westbound	2 eastbound and 2 westbound	2 eastbound and 2 westbound
Median	Raised landscaped	Center turn lane	Raised landscaped
Bikeways	4' shoulder	4' shoulder	4' shoulder
Sidewalks	Yes	Yes	Yes
Curb and Gutter	Yes	Yes	Yes
Special Features	None	none	none
Access Notes	Median opening at eastern driveway for Sun Bridge Hillside Care and Rehab	No access restrictions	Median opening at eastern driveway for Sun Bridge Hillside Care and Rehab

Section 2 -- West of Hawthorne Street to Harbor Chapel Road

	Concept A	Concept B	Concept C
Design speed	35	35	35
Travel lanes	2 eastbound and 1 westbound	1 eastbound and 1 westbound	2 eastbound and 2 westbound
Median	No	Center turn lane	Center turn lane
Bikeways	4’ shoulder	4’ shoulder	4’ shoulder
Sidewalks	Yes	Yes	Yes
Curb and Gutter	Yes	Yes	Yes
Special Features	None	none	none
Access Notes	None	none	none

Section 3 West -- Harbor Chapel Road to East of Old Stage Road

	Concept A	Concept B	Concept C
Design speed	35	45	45
Travel lanes	2 eastbound and 1 westbound, west of Briarwood Road; 1 eastbound and 1 westbound, east of Briarwood Road	1 eastbound and 1 westbound	2 eastbound and 2 westbound
Median	None west of Briarwood Road; a center turn lane east of Briarwood	Center turn lane	Raised landscaped
Bikeways	4’ shoulder on both sides	4’ shoulder on north side 10’ stabilized (8’ paved) shoulder on south side	8’ stabilized (6’ paved) shoulder on both sides
Sidewalks	Yes	Yes on north side only	Pedestrians use shoulder
Curb and Gutter	Yes	Yes on north side only	No
Special Features	None	none	none
Access Notes	None	none	none

Section 3 East -- East of Old Stage Road to Cooks Valley Road

	Concept A	Concept B	Concept C
Design speed	45	45	45
Travel lanes	1 eastbound and 1 westbound	1 eastbound and 1 westbound	2 eastbound and 2 westbound
Median	Centerline rumble strip	Center turn lane or raised barrier	Raised landscaped
Bikeways	8’ stabilized (6’paved) shoulder on both sides	4’ shoulder on north side 10’ stabilized (8’ paved) shoulder on south side	8’ stabilized (6’ paved) shoulder on both sides
Sidewalks	Pedestrians use shoulder	Yes on north side only	Pedestrians use shoulder
Curb and Gutter	No	Yes on north side only	No
Special Features	None	none	none
Access Notes	None	none	none

Section 4 -- Cooks Valley Road to Cochise Trail

	Concept A	Concept B	Concept C
Design speed	45	45	45
Travel lanes	1 eastbound and 1 westbound	1 eastbound and 1 westbound	2 eastbound and 2 westbound
Median	Centerline rumble strip	Center turn lane	Raised landscaped
Bikeways	8’ stabilized (6’paved) shoulder on both sides	6’ shoulder on both sides	8’ stabilized (6’ paved) shoulder on both sides
Sidewalks	Pedestrians use shoulder	Yes	Pedestrians use shoulder
Curb and Gutter	No	Yes	No
Special Features	None	none	none
Access Notes	None	none	none

Section 5 -- Cochise Trail to Interstate 81

	Concept A	Concept B	Concept C
Design speed	45	45	45
Travel lanes	1 eastbound and 1 westbound	1 eastbound and 1 westbound	2 eastbound and 2 westbound
Median	Centerline rumble strip	Center turn lane	Raised landscaped
Bikeways	8' stabilized (6'paved) shoulder on both sides	10' stabilized (8' paved) shoulder on both sides	8' stabilized (6' paved) shoulder on both sides
Sidewalks	Pedestrians use shoulder	Pedestrians use shoulder	Pedestrians use shoulder
Curb and gutter	No	No	No
Special Features	Modify the two to four-lane transition area near Overhill Drive to provide longer tapers and better advance warning and sight distance	Modify the two to four-lane transition area near Overhill Drive to provide longer tapers and better advance warning and sight distance	Correct deficient curve west of Overhill Road and narrow existing median width at Overhill Road / Carolina Pottery intersection to improve safety
Access Notes	None	none	none

Table 20
Summary of Cross Section Elements of Concept D

Section	Root Concept
1 West E. Center Street to Orebank Road	Same as C 2 lane each direction with raised landscaped median
1 East Orebank Rd. to west of Hawthorne St.	Same as C 2 lanes each direction with raised landscaped median
2 west of Hawthorne St. to Harbor Chapel	Same as C 2 lanes each direction plus center turn lane
3 West Harbor Chapel Rd. to west of cemetery	Same as C 2 lanes each direction with raised landscaped median
3 East west of cemetery to Cooks Valley Rd.	Same as B 1 lane each direction with center turn lane
4 West Cooks Valley Rd. to Harrtown Rd.	Same as B 1 lane each direction plus center turn lane Add auxiliary passing lanes in each direction for straight section west of Fall Creek Road
4 East Harrtown Rd. to Cochise Trail	Same as A 1 lane in each direction, but with shoulders widened to 10'
5 Cochise Trail to I-81	Same as A 1 lane in each direction, but with shoulders widened to 10'

Public Preferences for the Concept Plans

At the May 2005 Public Involvement Sessions, a detailed preference survey was included at the end of the handout material. Each person who signed the attendance roster upon entering the sessions was asked to view the concept plans, review the handout material, listen to a formal presentation, and then complete the preference survey. A copy of the survey is included in the Appendix to this report.

The preference survey began by asking questions concerning the adequacy of information provided at the Public Involvement Sessions and the level of comfort that citizens felt in expressing a preference. The following questions were asked in the survey:

- Q1 Do you understand that you are not limited to one concept throughout the entire project, but can choose a different concept for each segment?
- Q2 Is the information provided in the handout understandable?
- Q3 Do you feel that you were provided with the information necessary for you to register a preference?

Following is a summary of the answers given to the above questions on the survey:

Table 21
Survey Responses to Questions of Information Adequacy

	Q1	Q2	Q3
Yes	285	270	262
No		8	16
No Response	18	23	23
"Mostly/Fair/etc."		2	2
TOTALS	303	303	303

After addressing the adequacy of information questions, citizens were asked to express a preference for one of the concept plans (A, B, or C) or the "no build" alternative in each of eight project sections. Table 22 provides a summary of the concept preferences expressed by those who attended the May 2005 Public Involvement Sessions.

During the question and answer session of the Public Involvement Session that occurred at Sunnyside Baptist Church on May 26, 2005, a petition was presented by a citizen from the study area to the project management team. The petition was accepted and entered into the official transcript. It included a total of 1,167 signatures, of which 43 were duplicates. The total number of unique signatures on the petition was 1,124. The petition included the following statement:

> "We, as citizens who live on and/or use SR-126, do not want the 2-lane section of the highway to become a 4-lane highway. We firmly believe a 4-lane highway would increase the number and severity of accidents. It would destroy the community with the loss of most of the houses, apartments, and businesses along the highway. We support improvements to make the highway safer. We offer our signatures as a vote to support keeping the 2-lane section."

Table 22
Preference Survey Results from Public Involvement Sessions - May 2005

PREFERENCE MATRIX							
SEGMENT	CONCEPT A	CONCEPT B	CONCEPT C	NO BUILD	NO RESPONSE	OTHER *	
Section 1 West **E Center to Orebank**	40	71	157	23	12		303
Section 1 East **Orebank to west of Hawthorne**	42	63	159	24	15		303
Section 2 **Hawthorne to Harbor Chapel**	48	35	181	21	16	2	303
Section 3 West **Harbor Chapel to Old Stage Rd**	59	50	161	20	13		303
Section 3 East **Old Stage to Cooks Valley Rd**	92	60	126	15	9	1	303
Section 4 West **Cooks Valley to Harr Town**	87	76	111	17	10	2	303
Section 4 East **Harr Town to Cochise Trail**	109	65	101	15	13		303
Section 5 **Cochise Trail to I-81**	118	48	106	16	15		303
TOTALS	**595**	**468**	**1102**	**151**	**103**	**5**	**2424**

OTHER*		
Section #2 - liked A and B	Section #3 East - Concept A or No Build	
Section #2 - liked A or "No Build"	Section #4 West - A or B only	Section #4 West - C to A

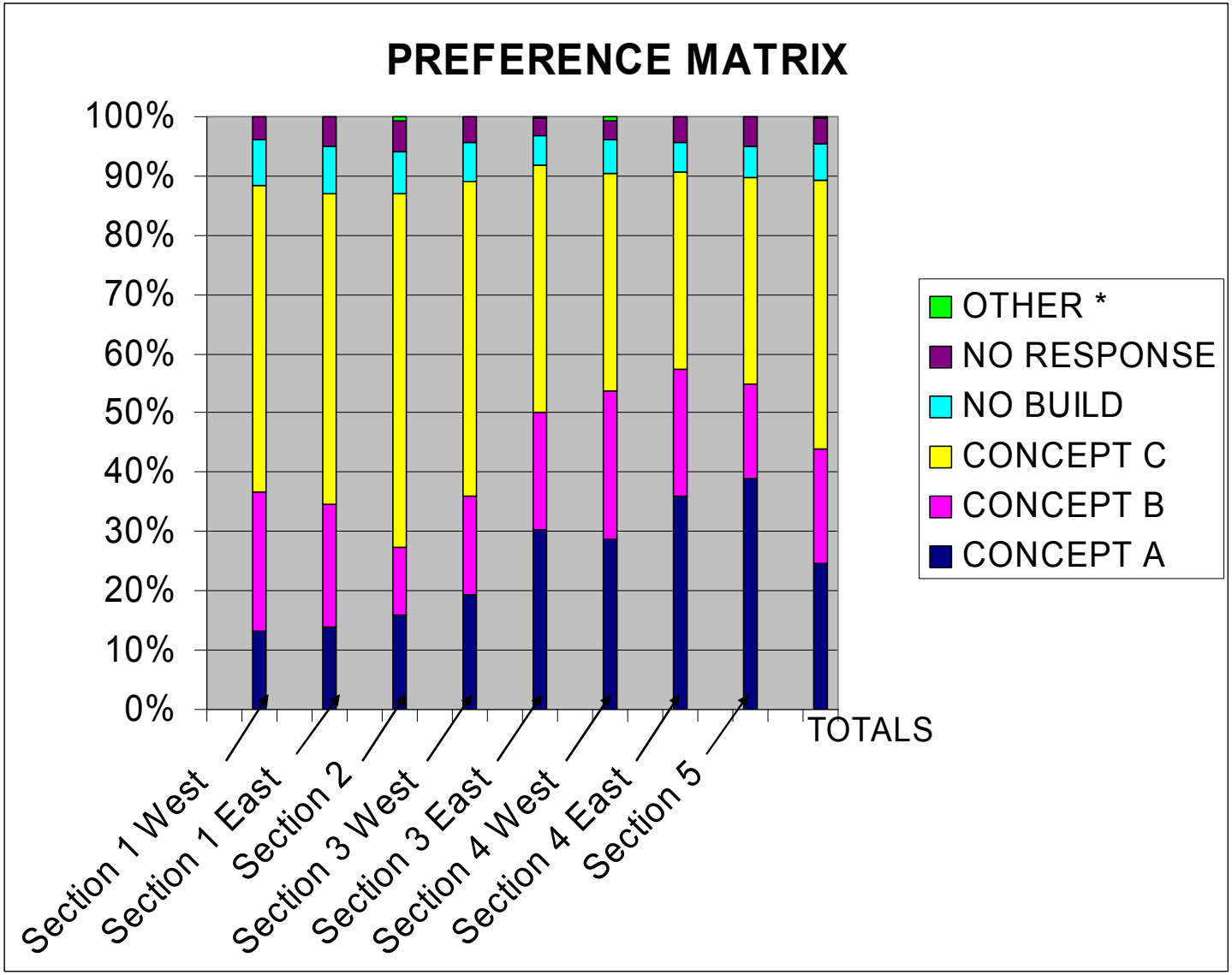


Figure 7
Graph of Preference Survey Results

Development of a Team Recommendation

On June 21 and 22, 2005, the Community Resource Team met with the project management team to discuss the public responses to the surveys conducted at the third Public Involvement Sessions in May and to formulate recommendations for TDOT. The group began with an exercise to evaluate each concept plan based upon a set of criteria that had been previously established by the team. An Evaluation Matrix was completed by team members and the results tabulated and averaged to produce a group score. A copy of the scored evaluation matrix is included in the Team Workshops section of the Appendix. After review of the team's composite scores, it was decided that the evaluation matrix had limited benefit for helping the team develop a recommendation because the scores for the various concept plans did not have enough variation. The matrix had been helpful in the sense that it compelled team members to consider all of the evaluative criteria that influence roadway decision making, rather than focusing only on the issues that are of personal concern.

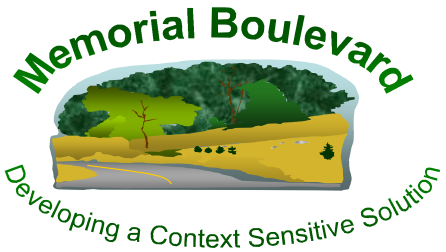
After discussing the limitations of the evaluation matrix, the Community Resource Team proceeded with a facilitated discussion of the merits of each concept plan in light of the public preferences and concerns that had been heard at the Public Involvement Sessions. The facilitated discussion began with a dialogue concerning common ground issues, or items that everyone on the team could agree to support. After completing a list of common ground recommendations, the group worked through a process of discussing and developing consensus or majority agreements concerning concept recommendations for each section of SR 126.

During the process of group discussion and compromise, the team agreed to make minor modifications to the cross sections for three of the roadway segments. These modifications included extending a curb and gutter section with sidewalks from Harbor Chapel Road to Old Stage Road in place of stabilized shoulders, and widening the travel lanes and shoulders and adding special pavement markings in the sections from Harr Town Road to Cochise Trail and from Cochise Trail to Interstate 81. The curb and gutter extension to Old Stage Road was agreed upon in order to provide a consistent pedestrian accommodation in the form of sidewalks throughout the portion of SR 126 that falls within the City limits of Kingsport. The modifications in lane and shoulder width and pavement markings from Harr Town Road to I-81 were agreed upon in order to make the recommended two-lane sections safer for motorists by allowing more width for evasive maneuvers in the case of emergency. The final team recommendation is documented in the next section of this report.

TEAM RECOMMENDATIONS

The recommendations of the Community Resource Team were developed at a team workshop held in Kingsport on June 21 and 22, 2005. After that work session, the project managers compiled the team's recommendations into a formal document that was then submitted to TDOT's senior management for review and consideration. The team recommendation was presented to TDOT Commissioner Gerald Nicely on August 9, 2005. After careful consideration and discussion, Mr. Nicely agreed to support the team's recommendation and provide funding for the next stage of the project which is the preparation of an environmental assessment.

The following pages of this report are the formal team recommendation document that was reviewed and approved by TDOT.



Memorial Boulevard State Route 126

Community Resource Team Recommendation June 22, 2005

The Community Resource Team (CRT) for the State Route 126 (Memorial Boulevard) CSS project has worked together since October 2003 to study and prepare a concept plan recommendation for improving SR 126 in Kingsport and Sullivan County. The project study area extends from East Center Street to Interstate 81, a distance of approximately 8 miles. During the 21-month study process, the CRT met together thirteen times for meetings, training, and workshops and conducted three series of Public Involvement Sessions in Kingsport. Public opinion was surveyed at each Public Involvement Session and the results of those surveys were reviewed and discussed by the CRT. Concept plans for three distinct proposals (Concepts A, B, and C) and one blended proposal (Concept D) were prepared by the project's consultant team. Concepts A, B, and C were originally presented to the public at the November 2004 Public Involvement Session. Revised Concepts A, B, and C, along with Concept D, were presented to the public for review and comment at the May 2005 Public Involvement Session.

This document summarizes the collective recommendations of the SR 126 CRT. Included first are "common ground" recommendations, for which there was unanimous support among the CRT members. Following the common ground issues, is a summary of the team's recommendations concerning roadway cross sectional elements. These cross section recommendations are supported by a majority of CRT members. Finally, this document includes three minority objection statements that were prepared for specific sections of the project study area by members of the CRT. The minority objections clarify the diversity of opinion within the team.

TDOT Go.

sain associates PBS&J

COMMON GROUND RECOMMENDATIONS

Following is a list of items that the CRT unanimously agreed were important considerations for the SR 126 project.

Safety

- Safety is the number one priority on this project.
- Wide shoulders are desirable
- Improve sight distance and address geometric deficiencies at all intersections of side streets
- Provide left turn lanes at major intersections (even with two-lane Concept A):
  - Orebank Road
  - Harbor Chapel Road
  - Stratford Road
  - Old Stage Road
  - Amy Avenue /Glenwood Street
  - Cooks Valley Road
  - Island Road
  - Fall Creek Road
  - Hill Road
- Provide right turn lanes at major intersections (even with two-lane Concept A):
  - Cooks Valley Road
  - Fall Creek Road
  - Hill Road
- Consider using center line and shoulder rumble strips and reflective thermal markings where appropriate
- Special attention should be given to intersection improvements at the intersection of Carolina Pottery and Overhill Road to improve safety
- Plan development needs to be mindful of pedestrian safety and connectivity, providing a safe and separate walkway for pedestrians where feasible. Specific areas where sidewalks are desired include East Center Street to Old Stage Road (withing the City limits) and within the Indian Springs community
- Use side facing mailbox placement along SR 126 to improve safety for residents
- The CRT would like to avoid a "one size fits all" solution for SR 126

Points of Interest to the Community

The CRT wants to minimize impacts to and protect the integrity of community treasures in the SR 126 study area. Sites that are considered community treasures include:

- Cherry Point Animal Hospital
- White House at the corner of Satana Road and SR 126
- East Lawn Cemetery
- Old Indian Springs Post Office
- Chestnut Ridge view shed
- Anything within the historic boundary of Yancey's Tavern, including the tavern, barn, and trace of Old Island Road
- Shipley Mansion (near East Center Street)

Enhancements

The CRT supports the incorporation of the following enhancement features in the design plans for SR 126:

- Use of natural elements for retaining and buffering walls
- Landscaping to a human scale with native plant species
- Decorative guardrail where appropriate
- Use of decorative lighting where appropriate with sensitivity to residential areas
- Underground utilities instead of overhead
- Use of mast arms rather than span wire where traffic signals are installed
- Use of Texas rail instead of Jersey barrier type railing on bridges
- Bridge design needs to be an enhancement and fit within the context of the community
- Include irrigation with major landscaping
- Landscape design that is appropriate to the speed limit
- Inclusion of a roundabout at the intersection of SR 126 and East Center Street if adequate capacity can be provided for forecasted traffic volumes

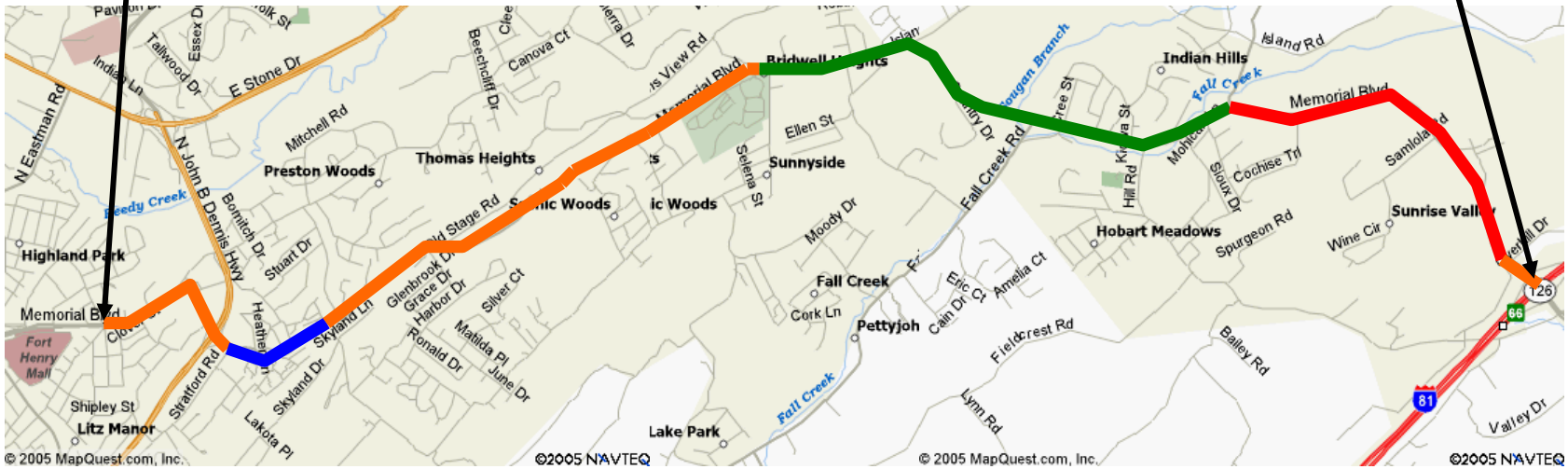
Other Issues

- Where roadway widening is undertaken, use as much of the existing roadway as possible.
- Where the roadway is widened from two to four lanes, consider leaving the existing road in place and constructing the new lanes to one side (asymmetrical widening).
- The CRT identified two major benefits of asymmetrical widening: improved traffic flow during construction, and enhanced constructability.
- Asymmetrical widening should not preclude making improvements to horizontal and vertical alignment deficiencies.

HWY 126 PROJECT LOCATION

Begin Project

End Project



- 4 lane cross section with landscaped raised median
- 4 lane cross section with center turn lane
- 2 lane cross section with center turn lane
- 2 lane cross section

CROSS SECTION RECOMMENDATIONS

Following is a summary of recommendations for roadway cross sections agreed upon by a majority of the CRT. The recommendations are divided into eight sections, identified by intersecting cross streets. For three of the eight sections, minority objections were documented within the CRT. The sections with minority objections are noted in the cross section descriptions and a detailed description of each minority opinion is included at the end of this report.

Section 1 West – East Center Street to Orebank Road

Preferred Concept - Concept C
Design speed - 35
Travel lanes - 2 eastbound and 2 westbound (11' each)
Median - Raised landscaped
Bikeways - 4' shoulder
Sidewalks – Yes, on both sides
Curb and Gutter - Yes
Special features:

Roundabout with flared right turns at East Center Street. (An alternate option is to maintain the existing traffic signal, but a roundabout is preferred.)

Access Notes:

Median openings and turn lanes at Central Street, Conway Drive, Woodside Drive, and Orebank Road

Intersection and Geometric Improvements:

- Realign Orebank Road to 90 degree angle plus turn lanes

Section 1 East – Orebank Rd to West of Hawthorne St.

Preferred Concept - Concept C
Design speed - 35
Travel lanes - 2 eastbound and 2 westbound (11' each)
Median - Raised landscaped
Bikeways - 4' shoulder
Sidewalks – Yes, on both sides
Curb and Gutter - Yes
Access Notes:

Median opening at eastern driveway for Sun Bridge Hillside Care and Rehab

Intersection and Geometric Improvements:

- Improve curve at Orebank Road / Edens Ridge Road
- Close Edens Ridge Road intersections (access to Memorial Boulevard via Orebank Road)
- Improve northbound entrance ramp to John B. Dennis Highway
- Remove right turn yield condition from northbound John B. Dennis exit ramp to eastbound SR 126 in order to reduce vehicle conflicts; make right turns use the traffic signal

Section 2 – West of Hawthorne St to Harbor Chapel Road

Preferred Concept - Concept C
Design speed - 35
Travel lanes - 2 eastbound and 2 westbound (11' each)
Median – Center Turn Lane
Bikeways - 4' shoulder
Sidewalks – Yes, on both sides
Curb and Gutter - Yes
Intersection and Geometric Improvements:

- Close Milton Court (condominium access) intersection to SR 126 and provide alternate access via Stratford and Kite Street
- Close Hawthorne Street intersection on the south side of SR 126
- Close Kent Street intersection with SR 126 (access SR 126 via Kite Street)
- Improve side road sight distance at Hawthorne Street and Beverly Hills Street
- Correct deficient curves at Kite Street and Beverly Hills Street
- Close Amy Avenue / Woodridge Avenue intersection and tie Amy / Woodridge into Glenwood Street
- Close Trinity Lane and provide alternate access via a new connection near the cemetery (access to SR 126 via Orebank Road)

Section 3 West – Harbor Chapel Rd to east of Old Stage Rd

Preferred Concept - Concept C Modified to include curb & gutter and sidewalks
Design speed - 45
Travel lanes - 2 eastbound and 2 westbound (11' each)
Median – Raised Landscape
Bikeways – 4' shoulder
Sidewalks – Yes, on both sides
Curb and Gutter - Yes
Intersection and Geometric Improvements:

- Close off intersection of Tanglewood Road and tie Tanglewood into Briarwood Road
- Realign Old Stage Road to create a 90 degree intersection and decrease steepness of Old Stage Road

Section 3 East – East of Old Stage Rd to Cooks Valley Rd

Preferred Concept - Concept C
Design speed - 45
Travel lanes - 2 eastbound and 2 westbound (11' each)
Median – Raised Landscape
Bikeways – 8' stabilized (6' paved shoulder on both sides)
Sidewalks – Pedestrians use shoulder
Curb and Gutter - No
Intersection and Geometric Improvements:

- Correct deficient "S" curves on Chestnut Ridge
- Connect Holiday Hills Road to Shuler Drive via Parker Street

Section 3 East continued

- Close Shuler Drive intersection with SR 126 and redirect traffic to Lemay Drive
- Realign Chestnut Ridge Road to the west
- Realign Eaton Station Road to tie in opposite Cooks Valley Road
- Provide a left turn lane onto Cooks Valley Road and Eaton Station Road

*NOTE: A minority objection statement is documented for this section.

Section 4 West – Cooks Valley Rd to Harrtown Rd

Preferred Concept - Concept B
Design speed - 45
Travel lanes - 1 eastbound and 1 westbound (11' each)
Median – Center Turn Lane
Bikeways – 6' stabilized shoulder (does not include gutter pan) on both sides
Sidewalks – Yes, on both sides
Curb and Gutter - Yes
Intersection and Geometric Improvements:

- Close Red Robin Lane intersection (access to SR 126 via Bridwell Heights Road)
- Realign Woodsway Drive to a 90 degree intersection
- Realign Island Road and improve sight distance
- Realign Natchez Lane intersection
- Relocate Harrtown Road intersection further west to reduce steepness
- Correct deficient curves between Hill Road and Harrtown Road

*NOTE: A minority objection statement is documented for this section.

Section 4 East - Harrtown Rd to Cochise Trail

Preferred Concept - Concept A Modified
Design speed - 45
Travel lanes - 1 eastbound and 1 westbound (12' each)
Median – None
Bikeways – 8' paved and 2' stabilized shoulder on both sides
Sidewalks – No
Curb and Gutter - No
Special features:

- Use an 18" center line crossover deterrent consisting of a rumble strip with appropriate striping. The travel lane width shall be reduced to accommodate the deterrent.
- Include rumble strips between the travel lane and the shoulder

Access Notes:

- Require turn lane construction by future developers

Section 5 - Cochise Trail to Interstate 81

Preferred Concept - Concept A Modified
Design speed - 45
Travel lanes - 1 eastbound and 1 westbound (12' each)
Median – None
Bikeways – 8' paved and 2' stabilized shoulder on both sides
Sidewalks – No
Curb and Gutter - No
Special features:

- Use an 18" center line crossover deterrent consisting of a rumble strip with appropriate striping. The travel lane width shall be reduced to accommodate the deterrent.
- Include rumble strips between the travel lane and the shoulder
- Design passing zones by correcting vertical curves and improving sight distance
- Design better transition area from 4 lanes at I-81

Access Notes:

- Require turn lane construction by future developers

Intersection and geometric improvements:

- Correct deficient curves west and east of Samlola Road
- Realign Gravel Top Road (west) intersection
- Close Gravel Top Road (east) intersection

*NOTE: A minority objection statement is documented for this section.

Minority Report for Section 3 East
Of State Route 126 in Sullivan County

Basic concept for this segment:

Old Stage Road to Cooks Valley Road: Concept A with a right turn lane onto Lemay Drive.

Statement of Purpose:

We find ourselves in fundamental opposition to the exhumation of human remains or the destruction of an historical treasure (Yancey's Tavern property) while a viable alternative is available that fulfills the agreed upon requirements for the project. Further, with respect to the preservation of Chestnut Ridge, we also are unable to accept a solution or concept that is more destructive with respect to the original contours and appearance of the ridge than is required, while a viable alternative exists that, again, fulfills the agreed upon requirements for the project.

Rationale:

- Safety
    - Has eight foot shoulders, guard rails, improved sight distances, and improved horizontal and vertical curves.
    - Has centerline & shoulder rumble strips to minimize lane departure (as recommended in State of Tennessee Strategic Highway Safety Plan, p. 8, 11/17/04)
    - Designated right turn lane into Lemay Drive provides greater safety for new traffic generated by adjacent road closures. Also allows eastbound traffic to continue while vehicles make right turn.
- Community Impacts
    - Concept A has the least impact to Chestnut Ridge both environmentally and visually.
    - Concept A has the smallest number of impacts to residences.
    - Best preserves the community wishes of maintaining the scenic beauty of Chestnut Ridge.
- Cost Justification
    - B & C are not justified by actual and projected traffic counts through 2028.
    - B & C are not justified by turning needs (few driveways & minimal left turns to side roads since most traffic is westbound in the morning and eastbound in the evening)

- There is a lack of consideration of cost in this section in light of the lack of potential benefits that might be realized by the community.

- Public Response
  - 58% of those surveyed in Public Session III chose an option other than a 4-lane, i.e. Concept C, in the section.
  - Additionally, a petition with 1100+ names expressed a preference for a two lane road in this section.
  - Eleven foot travel lanes minimize the road footprint.
  - Concept A impacts East Lawn Cemetery the least of all concepts.
  - Concept A protects the historic Yancey tavern and barn, as well as remnants of Old Island Road and the surrounding site. The history of this area predates the American Revolution.

- Mobility
  - Right turn lane increases capacity in Concept A.
  - Traffic counts have drastically fallen east of Old Stage Road.

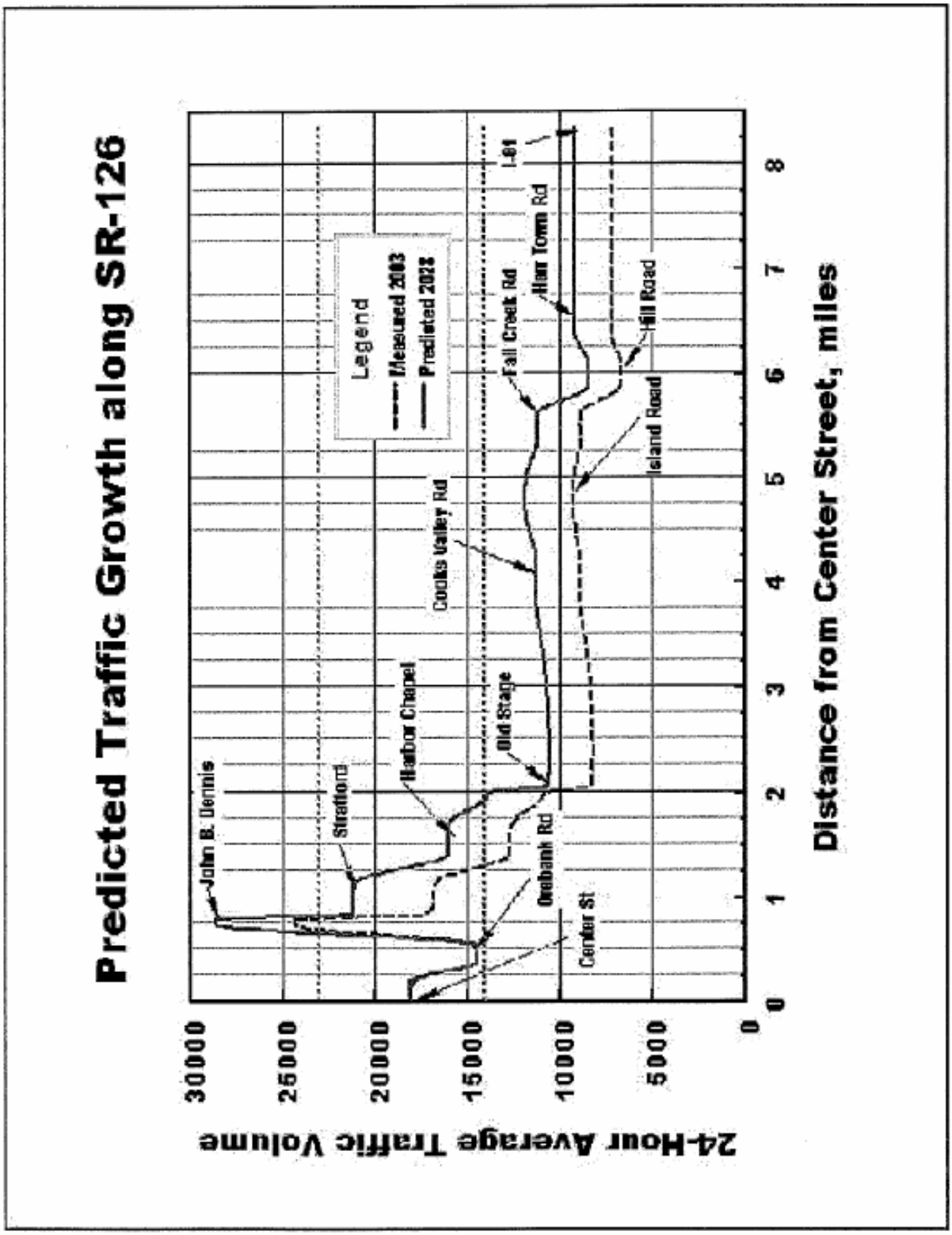
June 22, 2005

State Representative Nathan Vaughn

Larry Hall, Member of the Sullivan County Board of Commissioners, District 6

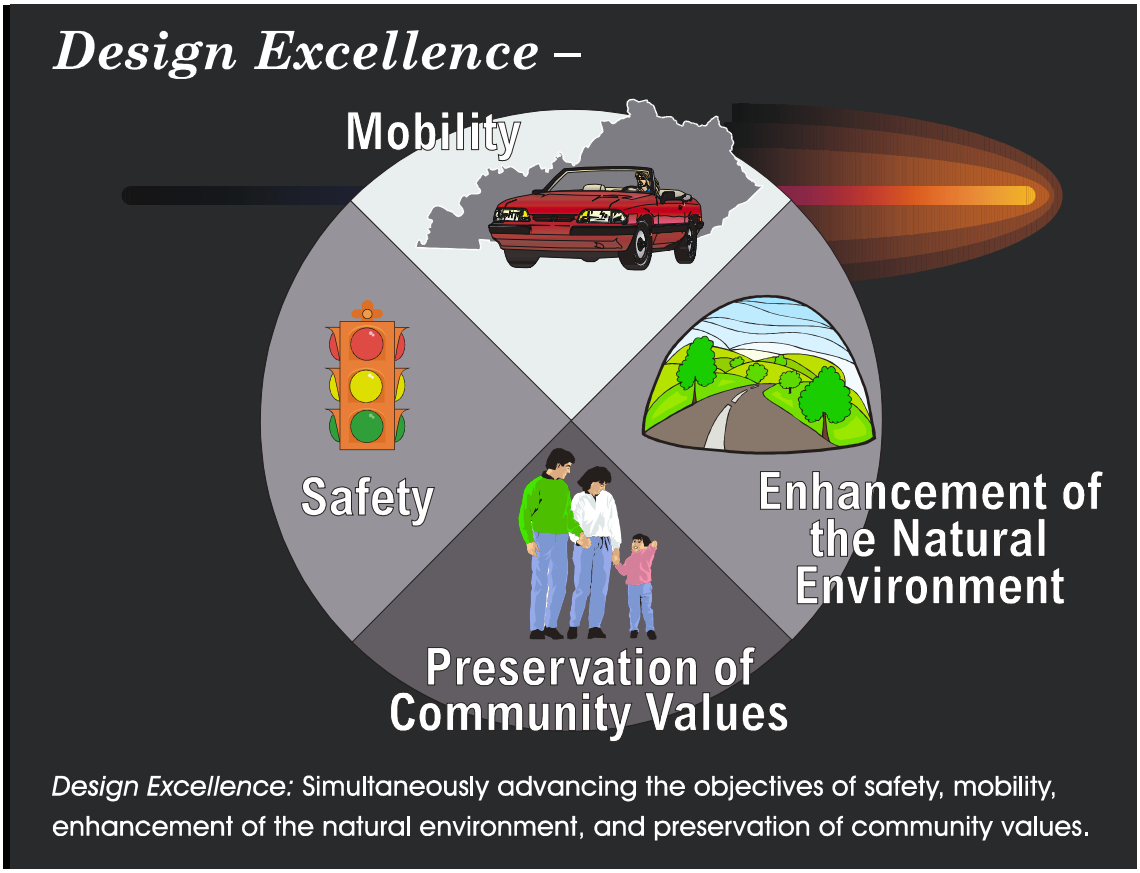
Judith Murray, Citizen Representative

Dan Cheek, Citizen Representative


Predicted Traffic Growth along SR-126
24-Hour Average Traffic Volume
30000
25000
20000
15000
10000
5000
0
Distance from Center Street, miles
0
1
2
3
4
5
6
7
8
Legend
Measured 2003
Predicted 2023
John B. Dennis
Stratford
Harbor Chapel
Old Stage
Cooks Valley Rd
Owlbank Rd
Center St
Fall Creek Rd
Ham Town Rd
I-81
Hill Road
Island Road

What is Context-Sensitive Design?

- Addresses purpose and need
- Addresses equally:
  - Safety
  - Mobility
  - Preservation of scenic, esthetic, historic, environmental, and community values



Minority Objection

for

Section 4 West – Cooks Valley Road to Harrtown Road

Tennessee State Route 126

June 22, 2005

We, whose names are listed below, strongly believe that Concept B is an inappropriate and unjustified recommendation for improving Section 4 West, Cooks Valley Road to Harrtown Road, a portion of the Tennessee State Route 126 project. The following statements describe our concerns:

Public Preference

- **Concept B (three-lane)** goes against the public's preference for **Concept C (four-lane divided)** as expressed in the two separate votes of November 2004 (98 vs. 22) and May 2005 (111 vs.76).
- Of the three concept choices, Concept B received the least number of favorable responses from the May 2005 public meetings.

Every member of the community has had equal opportunity to have their preference reflected in the hard numbers obtained from these two public input sessions. We believe these responses most accurately measures the public's desire.

Growth

- Concept B does not address the strong potential for growth along the 126 corridor.
- As of June 22, 2005, 344 family residential units are under development east of Cooks Valley Road that will feed traffic directly onto SR 126 and increase traffic west into Kingsport. (These are: Yancey's Tavern – 18 sites; Sugarwood – 74 units; near Old Island Rd – 100 apartment units; Rose Mary Villas – 13 units with more planned at Crockett Ridge Golf Course; Pectol property – 19 sites; Shadowtown Rd. – 120 units.) All but one of these developments are located within Section 4 West.
- In addition, Crockett Ridge Golf Course/Old Island residential development is under new ownership. Owners recently completed a new clubhouse and have received approval for rezoning of their development for condominiums, patio homes, and single home dwellings. This alone will significantly increase traffic volumes entering SR 126 from Island Road and Harrtown Road both of which are east of Cooks Valley Road and within Section 4 West.
- Concept B ignores additional strong growth potential in the areas as sewers are extended in 2005-2006 to the greater Indian Springs area.
- The Cooks Valley Road station for 2003-04 ADT is 8,950 with a projected 2028 ADT of 11,290 indicates expected growth of 2,340 ADT. The 344 family units listed above, in themselves, with an average of two autos per unit making one round trip daily to Kingsport **significantly** exceeds the 2008 projected ADT.
- ***We believe the projected traffic volumes furnished to the SR 126 Resource Team were inappropriately reduced from TDOT's original projections and do not accurately reflect future traffic volumes***.

- Concept B provides for a very limited increase over current traffic capacity and will not adequately address future capacity needs.
- One lane in each direction does not provide adequate mobility as requested by the public.

We recommend that Concept C be extended east from Section 3 East (Old Stage Road) to Hill Road rather than to Harrtown Road. This will adequately accommodate the large volume of traffic to and from Indian Springs School, most of which originates west of Hill Road.

Safety

- Concept B does not provide for safe passing opportunities as the public requested.
- Concept B promotes driver conflicts due to the inability to pass slow drivers.
- Concept B will encourage unsafe passing with the use of the center turn lane being used for that purpose.

Impact

- The physical impact of Concept C is essentially equal to that of Concept B.
- Issues concerning the cemetery and Yancey's Tavern/barn should be "fully" addressed during this project to accommodate future needs and not postponed, thus making it necessary to revisit the problem again in the near future. A proper solution should be implemented before future development has taken place thereby further complicating the issue.

In summary, TDOT has invested much time and money into the CSS process in providing information to the public and then asking the public for their preference. The public has responded, and the desires of the greater population should be honored. In addition, we strongly feel that Concept B is an ill-advised and extremely shortsighted plan for improving Section 4 West of SR 126 and will result in an immediate need for an additional upgrade.

Tom Carroll, Citizen Representative
Diane Somers, Citizen Representative
Wallace Putnam, Citizen Representative
Ray Griffin, Kingsport City Manager
Ken Marsh, Kingsport Alderman and Kingsport Planning Commission

Minority Objection Statement
for
Section 5 - Cochise Trail to Interstate 81

The preference of the Resource Team, after several votes promulgated by "modifications" to each concept, was Alternate A Modified. Alternate A Modified provides 2 lanes originally with no separation, was later adjusted to include centerline striping and/or skips that establish an 18 inch center space. An 18 inch median or space simply does not provide adequate separation for 2-way "unseparated" traffic. With safety an utmost priority, inadequate separation will continue to create potential for ongoing safety incidences (head-ons, close calls) or motorists crossing the center line causing more accidents. Additionally, and of utmost important, left turn conflicts will continue to exist, causing rear-end collisions, other accidents, and other close calls. Left turn inhibitions will also create additional traffic flow problems, with two way traffic passing "opportunities" becoming passing "hazards". With a grass median or center turn lane, passing in Section 5 will be prohibited; a much better scenario than affording a dangerous passing environment. A wide median with two lanes reduces vehicular conflicts, provides for greater visibility for motorists to see the road and see each other, and offers a chance for motorists to recover from either their mistakes or avoid the mistake of others – it is much more "forgiving" of driver error.

Section 5 has much more open/undeveloped properties alongside the existing roadway. In this section, because widening to 3 lanes (or grass median) can be flexible, the ability to move the centerline lessens the impact on homes and properties. Consequently, adding a median and turn lanes can be accommodated much easier with much less impact. Additionally, with the impacts being similar with all 3 concepts, why would TDOT and/or the local community want to put back a roadway that could potentially continue to entice head-on collisions and/or other incidences caused by 2-way traffic, when we could do and get a better quality roadway ??

Bill Albright
Tom Carroll
Diane Somers

We, the State Route 126 Resource Team, request that the Tennessee Department of Transportation accept and carry forward the improvements described in this document for State Route 126 from East Center Street to Interstate 81. Included in this document are objection statements for ~~two~~ three sections of the roadway that clarify diversity in opinion within this resource team. We appreciate the opportunity provided by TDOT to participate in this CSS process and we further recommend that the department continue to involve local participation in this project as it moves forward through subsequent stages.

Mayor Jeanette Blazier

Mayor Richard Venable

Representative Nathan Vaughn

Alderman Ken Marsh

Commissioner Larry Hall

Ray Griffin, City Manager

Jeff Fleming, Assistant City Manager

Bill Albright

Tom Carroll

Dan Cheek

Forrest Koder

Anne Morris, Consultant

Judy Murray

Wallace Putnam several

Elizabeth Smith, TDOT

Diane Somers

Ambre Torbett

Becky White, Consultant

The following team members were unavailable to participate in preparation of the team recommendations: Humberto Collazo, David Ruller, Roy Settle.

PROJECT MANAGEMENT TEAM

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COST ESTIMATE

A preliminary cost estimate was prepared for the recommended plan in order to provide TDOT with a general estimate of construction costs that could be expected if the recommendation is implemented as envisioned by the Community Resource Team. It is important to note that this cost estimate was prepared only for the purposes of this report. At no time during the planning stages of the SR 126 project were construction costs estimated for the various concepts under consideration. No cost estimates were shared with the public or with the Community Resource Team. The decision to postpone cost estimating was made due to sensitivity to perceptions that the public might have concerning accuracy of cost figures. At this stage of project planning, it is very difficult to correctly estimate construction costs since environmental studies and detailed engineering design have not been undertaken.

Based on the information available to date, the following are preliminary construction cost estimates for the recommended plan:

Section 1- East Center Street to west of Hawthorne Street	$ 9,045,000
Section 2 – west of Hawthorne Street to Harbor Chapel Road	$ 6,535,000
Section 3 – Harbor Chapel Road to Cooks Valley Road	$38,150,000
Section 4 – Cooks Valley Road to Cochise Trail	$16,200,000
Section 5 – Cochise Trail to Interstate 81	$15,225,000
Project Total	**$85,155,000**

APPENDIX: SUPPORT DOCUMENTATION

Correspondence
- Letters
- Conversation Logs
- Disc with Team and Citizen emails

Agendas & Minutes
- Meeting Minutes
- Slides from January 23, 2004 Team Meeting
- Photographs from Team Meetings

Team Workshops
- Photographs from Team Building Workshop
- Agenda for CSS Workshop
- Photographs from CSS Workshop
- Agenda from Plan Review Workshop
- Notes from Plan Review Workshop
- Photographs from Plan Review Workshop
- Agenda from the Team Recommendation Workshop
- Evaluation Matrix with Team Average Scores
- Photographs from Team Recommendation Workshop

Design Charette
- Design 101 document from Charette
- Summary of Team Concepts
- Consensus Decisions
- Slides from Design Charette
- Photographs

Public Involvement
- Public Involvement Plan
- Newsletters
- Samples of all surveys, postcards, handouts, etc.
- Copies of slides from PIS presentations
- Transcripts from PIS
- Typed reports of the sticky note and handwritten comments on maps
- Photographs from PIS
- Letters from Citizens
- Focus Group report

Roadway Data
- Photographs from Field Reviews
- Horizontal & Vertical curve analysis
- Maps of horizontal curve locations

Traffic Accidents
- Maps of traffic accident locations
- Accident rate calculation worksheets

Traffic Forecasts
- Traffic Forecast Report
- August 19, 2004 traffic methodology memo from Steve Allen

Environmental
- Historic Survey
- Other correspondence regarding environmental issues
- Documentation from public concerning sites of local significance
- Photographs from sites of local significance

Concept Plans
- Concept plans

Recommended Plan
- Concept plans

Cost Estimate
- Backup data for cost estimates

TRAFFIC ANALYSIS

LOS Summary Tables
2013 No Build Alternative – HCS Calculation Data and Reports
2033 No Build Alternative – HCS Calculation Data and Reports
2013 Build Alternative A & B – HCS Calculation Data and Reports
2033 Build Alternative A & B – HCS Calculation Data and Reports

LOS Summary Tables

No Build LOS

ID	From		To		Dist.	Cross Section	Speed Limit	2013				2033			
	L.M.	Desc.	L.M.	Desc.				AADT	LOS	Speed	v/c	AADT	LOS	Speed	v/c
1	3.72	Center St.	4.33	Hillcrest Dr.	0.61	4-Lanes with No Median and Narrow Shoulders	35	18,960	C	28	0.51	20,860	C	28	0.56
2	4.33	Hillcrest Dr.	4.60	Heather Ln.	0.27	4-Lanes with a Raised Grass Median and Wide Shoulders	35	25,800	D	32	0.70	33,540	D	32	0.91
3	4.60	Heather Ln.	5.50	Tangle-wood Rd.	0.9	2-Lanes Eastbound, 1-Lane Westbound with No Median and Narrow Shoulders	45	19,080	E	21	0.76	24,800	F	15	0.99
4	5.50	Tangle-wood Rd.	6.00	Ethel Dr.	0.5	2-Lanes with TWLTL and Narrow Shoulders	45	10,430	E	33	0.42	13,560	E	30	0.54
5	6.00	Ethel Dr.	11.90	Carolina Pottery Dr.	5.9	2-Lanes with No Median and Narrow Shoulders	50	10,550	E	33	0.42	21,100	F	24	0.84
6	11.90	Carolina Pottery Dr.	12.12	I-81	0.22	4-Lanes with a Raised Grass Median and Wide Shoulders	40	10,830	B	42	0.27	21,660	C	42	0.55
				Σ =	**8.4**	**Weighted Average =**	**47**			**32**	**0.47**			**24**	**0.81**

Build Alternative A LOS

ID	From		To		Dist.	Cross Section	Speed Limit	2013				2033			
	L.M.	Desc.	L.M.	Desc.				AADT	LOS	Speed	v/c	AADT	LOS	Speed	v/c
1a	3.72	Center St.	4.44	SR 93	0.72	4-Lanes with a Raised Grass Median and 4 Ft. Shoulders	35	18,960	C	31	0.51	20,860	C	31	0.56
1b	4.44	SR 93	4.71	Haw-thorne St.	0.27	4-Lanes with a Raised Grass Median and 4 Ft. Shoulders	35	25,800	D	31	0.70	33,540	E	31	0.91
2	4.71	Haw-thorne St.	5.18	Harbor Chapel Rd.	0.47	4-Lanes with a TWLTL and 4 Ft. Shoulders	35	19,080	C	33	0.52	24,800	D	33	0.67
3	5.18	Harbor Chapel Rd.	7.66	Cooks Valley Rd.	2.48	4-Lanes with a Raised Grass Median and 4-8 Ft. Shoulders	45	10,430	A	43	0.24	13,560	B	43	0.31
4	7.66	Cooks Valley Rd.	10.11	Harr Town Rd.	2.45	2-Lanes with a TWLTL and 6 Ft. Shoulders	45	10,260	E	36	0.41	20,520	E	26	0.82
5	10.11	Harr Town Rd.	11.90	Carolina Pottery Rd.	1.79	2-Lanes with No Median and 10 Ft. Shoulders	50	10,830	D	41	0.43	21,660	F	31	0.86
6	11.90	Carolina Pottery Rd.	12.12	I-81	0.22	4-Lanes with a Raised Grass Median and 12 Ft. Shoulders	40	10,830	B	43	0.27	21,660	C	43	0.55
				Σ =	**8.4**	**Weighted Average =**	**44**			**38**	**0.38**			**34**	**0.64**

Build Alternative B LOS

ID	From		To		Dist.	Cross Section	Speed Limit	2013				2033			
	L.M.	Desc.	L.M.	Desc.				AADT	LOS	Speed	v/c	AADT	LOS	Speed	v/c
1a	3.72	Center St.	4.44	SR 93	0.72	4-Lanes with a Raised Grass Median and 4 Ft. Shoulders	35	18,960	C	31	0.51	20,860	C	31	0.56
1b	4.44	SR 93	4.71	Haw-thorne St.	0.27	4-Lanes with a Raised Grass Median and 4 Ft. Shoulders	35	25,800	D	31	0.70	33,540	E	31	0.91
2	4.71	Haw-thorne St.	5.18	Harbor Chapel Rd.	0.47	4-Lanes with a TWLTL and 4 Ft. Shoulders	35	19,080	C	33	0.52	24,800	D	33	0.67
3	5.18	Harbor Chapel Rd.	7.20	Lemay Dr.	2.02	4-Lanes with a Raised Grass Median and 4-8 Ft. Shoulders	45	10,430	A	43	0.24	13,560	B	43	0.31
4	7.20	Lemay Dr.	10.11	Harr Town Rd.	2.91	2-Lanes with a TWLTL and 6 Ft. Shoulders	45	10,260	E	36	0.41	20,520	E	26	0.82
5	10.11	Harr Town Rd.	11.90	Carolina Pottery Rd.	1.79	2-Lanes with No Median and 10 Ft. Shoulders	50	10,830	D	41	0.43	21,660	F	31	0.86
6	11.90	Carolina Pottery Rd.	12.12	I-81	0.22	4-Lanes with a Raised Grass Median and 12 Ft. Shoulders	40	10,830	B	43	0.27	21,660	C	43	0.55
				Σ =	**8.4**	**Weighted Average =**	**44**			**38**	**0.39**			**33**	**0.67**

Multilane Highways Capacity Analysis Tables

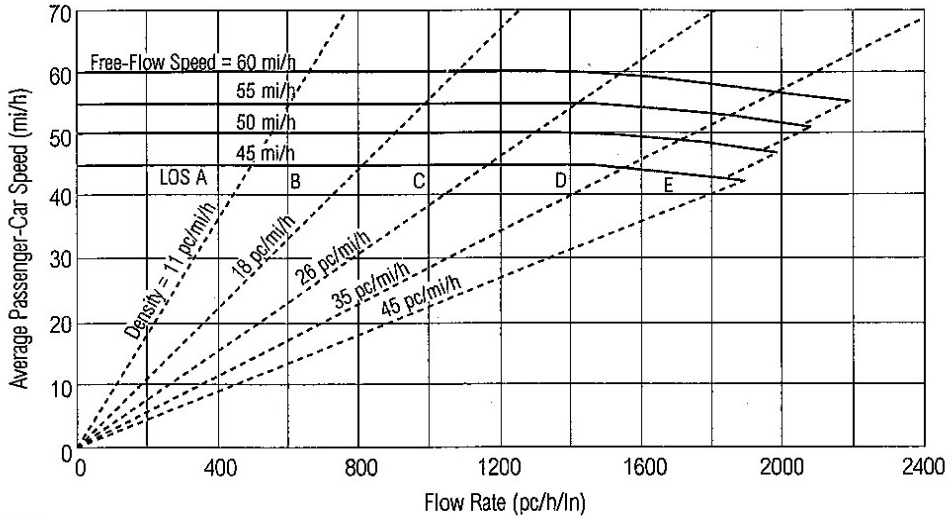
Tables 21-2 and 21-3 from the HCM were utilized to extrapolate LOS

EXHIBIT 21-2. LOS CRITERIA FOR MULTILANE HIGHWAYS

		LOS				
Free-Flow Speed	Criteria	A	B	C	D	E
60 mi/h	Maximum density (pc/mi/ln)	11	18	26	35	40
	Average speed (mi/h)	60.0	60.0	59.4	56.7	55.0
	Maximum volume to capacity ratio (v/c)	0.30	0.49	0.70	0.90	1.00
	Maximum service flow rate (pc/h/ln)	660	1080	1550	1980	2200
55 mi/h	Maximum density (pc/mi/ln)	11	18	26	35	41
	Average speed (mi/h)	55.0	55.0	54.9	52.9	51.2
	Maximum v/c	0.29	0.47	0.68	0.88	1.00
	Maximum service flow rate (pc/h/ln)	600	990	1430	1850	2100
50 mi/h	Maximum density (pc/mi/ln)	11	18	26	35	43
	Average speed (mi/h)	50.0	50.0	50.0	48.9	47.5
	Maximum v/c	0.28	0.45	0.65	0.86	1.00
	Maximum service flow rate (pc/h/ln)	550	900	1300	1710	2000
45 mi/h	Maximum density (pc/mi/ln)	11	18	26	35	45
	Average speed (mi/h)	45.0	45.0	45.0	44.4	42.2
	Maximum v/c	0.26	0.43	0.62	0.82	1.00
	Maximum service flow rate (pc/h/ln)	490	810	1170	1550	1900

Note:
The exact mathematical relationship between density and volume to capacity ratio (v/c) has not always been maintained at LOS boundaries because of the use of rounded values. Density is the primary determinant of LOS. LOS F is characterized by highly unstable and variable traffic flow. Prediction of accurate flow rate, density, and speed at LOS F is difficult.

EXHIBIT 21-3. SPEED-FLOW CURVES WITH LOS CRITERIA



Note:
Maximum densities for LOS E occur at a v/c ratio of 1.0. They are 40, 41, 43, and 45 pc/mi/ln at FFS of 60, 55, 50, and 45 mi/h, respectively. Capacity varies by FFS. Capacity is 2,200, 2,100, 2,000, and 1,900 pc/h/ln at FFS of 60, 55, 50, and 45 mi/h, respectively.
For flow rate (v_p), v_p > 1400 and

2013 No Build Alternative – HCS Calculation Data and Reports

2013 No Build LOS Calculation Data

										For Multi-Lane Analysis			
ID	AADT	K	D	2-Way DHV	DDHV	Truck %	Shoulder Width	% No Passing	Access Points	Flow Rate (Capacity)	Flow Rate (Calc)	v/c	Diff. Speed
1	18960	0.11	0.65	2090	1360	6%	1	n/a	30	1600	823	0.51	12.1
2	25800	0.11	0.65	2840	1850	6%	8	n/a	30	1600	1120	0.7	8.4
3	19080	0.11	0.65	2100	1370	6%	1	90	20	1900	n/a	n/a	n/a
4	10430	0.11	0.65	1150	750	6%	2	90	8	1900	n/a	n/a	n/a
5	10550	0.11	0.65	1160	750	6%	2	90	8	2000	n/a	n/a	n/a
6	10830	0.11	0.65	1190	770	6%	12	n/a	8	1700	466	0.27	2.9

Notes:

Access Points from HCM Exhbit 12-4 (Default Values)

Flow Rate (Capacity) extrapolated from Exhibit 21-3

Multilane analysis in HCS not designed for free flow speeds under 45 mph. The calculations rely on concepts in the HCM & Exhibit 21-2 Primarily, the v/c ratio.

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OPERATIONAL ANALYSIS

Analyst:	JHS
Agency/Co:	F&H
Date:	2/18/2011
Analysis Period:	2013
Highway:	SR 126
From/To:	Center St to Hillcrest
Jurisdiction:	
Analysis Year:	
Project ID:	Segment 1

FREE-FLOW SPEED

Direction	1		2	
Lane width	11.0	ft	12.0	ft
Lateral clearance:				
Right edge	1.0	ft	6.0	ft
Left edge	6.0	ft	6.0	ft
Total lateral clearance	7.0	ft	12.0	ft
Access points per mile	30		0	
Median type	Undivided			
Free-flow speed:	Base		Measured	
FFS or BFFS	60.0	mph	60.0	mph
Lane width adjustment, FLW	1.9	mph	0.0	mph
Lateral clearance adjustment, FLC	1.1	mph	0.0	mph
Median type adjustment, FM	1.6	mph	0.0	mph
Access points adjustment, FA	7.5	mph	0.0	mph
Free-flow speed	47.9	mph	60.0	mph

VOLUME

Direction	1		2	
Volume, V	1360	vph	0	vph
Peak-hour factor, PHF	0.90		0.90	
Peak 15-minute volume, v15	378		0	
Trucks and buses	6	%	0	%
Recreational vehicles	0	%	0	%
Terrain type	Rolling		Level	
Grade	0.00	%	0.00	%
Segment length	0.00	mi	0.00	mi
Number of lanes	2		2	
Driver population adjustment, fP	1.00		1.00	
Trucks and buses PCE, ET	2.5		1.5	
Recreational vehicles PCE, ER	2.0		1.2	
Heavy vehicle adjustment, fHV	0.917		1.000	
Flow rate, vp	823	pcphpl	0	pcphpl

RESULTS

Direction	1		2	
Flow rate, vp	823	pcphpl	0	pcphpl
Free-flow speed, FFS	47.9	mph	60.0	mph
Avg. passenger-car travel speed, S	47.9	mph	60.0	mph
Level of service, LOS	B		A	
Density, D	17.2	pc/mi/ln	0.0	pc/mi/ln

Overall results are not computed when free-flow speed is less than 45 mph.

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OPERATIONAL ANALYSIS

Analyst:	JHS
Agency/Co:	F&H
Date:	2/18/2011
Analysis Period:	2013
Highway:	SR 126
From/To:	Hillcrest to Heather
Jurisdiction:	
Analysis Year:	
Project ID:	Segment 2

FREE-FLOW SPEED

Direction	1		2	
Lane width	12.0	ft	12.0	ft
Lateral clearance:				
Right edge	6.0	ft	6.0	ft
Left edge	2.0	ft	6.0	ft
Total lateral clearance	8.0	ft	12.0	ft
Access points per mile	30		0	
Median type	Divided			
Free-flow speed:	Base		Measured	
FFS or BFFS	60.0	mph	60.0	mph
Lane width adjustment, FLW	0.0	mph	0.0	mph
Lateral clearance adjustment, FLC	0.9	mph	0.0	mph
Median type adjustment, FM	0.0	mph	0.0	mph
Access points adjustment, FA	7.5	mph	0.0	mph
Free-flow speed	51.6	mph	60.0	mph

VOLUME

Direction	1		2	
Volume, V	1850	vph	0	vph
Peak-hour factor, PHF	0.90		0.90	
Peak 15-minute volume, v15	514		0	
Trucks and buses	6	%	0	%
Recreational vehicles	0	%	0	%
Terrain type	Rolling		Level	
Grade	0.00	%	0.00	%
Segment length	0.00	mi	0.00	mi
Number of lanes	2		2	
Driver population adjustment, fP	1.00		1.00	
Trucks and buses PCE, ET	2.5		1.5	
Recreational vehicles PCE, ER	2.0		1.2	
Heavy vehicle adjustment, fHV	0.917		1.000	
Flow rate, vp	1120	pcphpl	0	pcphpl

RESULTS

Direction	1		2	
Flow rate, vp	1120	pcphpl	0	pcphpl
Free-flow speed, FFS	51.6	mph	60.0	mph
Avg. passenger-car travel speed, S	51.6	mph	60.0	mph
Level of service, LOS	C		A	
Density, D	21.7	pc/mi/ln	0.0	pc/mi/ln

Overall results are not computed when free-flow speed is less than 45 mph.

HCS+: Two-Lane Highways Release 5.5

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Two-Way Two-Lane Highway Segment Analysis

Analyst	jhs
Agency/Co.	F&H
Date Performed	2/21/2011
Analysis Time Period	2013
Highway	SR 126
From/To	Heather Ln to Tanglewood
Jurisdiction	
Analysis Year	
Description	Segment 3

Input Data

Highway class	Class 1				
Shoulder width	1.0	ft	Peak-hour factor, PHF	0.90	
Lane width	11.0	ft	% Trucks and buses	6	%
Segment length	0.9	mi	% Recreational vehicles	0	%
Terrain type	Rolling		% No-passing zones	90	%
Grade: Length		mi	Access points/mi	20	/mi
Up/down		%			

Two-way hourly volume, V	2100	veh/h	
Directional split	65 / 35	%	

Average Travel Speed

Grade adjustment factor, fG	0.99	
PCE for trucks, ET	1.5	
PCE for RVs, ER	1.1	
Heavy-vehicle adjustment factor,	0.971	
Two-way flow rate,(note-1) vp	2428	pc/h
Highest directional split proportion (note-2)	1578	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	50.0	mi/h
Adj. for lane and shoulder width, fLS	4.7	mi/h
Adj. for access points, fA	5.0	mi/h
Free-flow speed, FFS	40.3	mi/h
Adjustment for no-passing zones, fnp	1.0	mi/h
Average travel speed, ATS	20.5	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.0	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	1.000	
Two-way flow rate,(note-1) vp	2333	pc/h
Highest directional split proportion (note-2)	1516	
Base percent time-spent-following, BPTSF	87.1	%
Adj.for directional distribution and no-passing zones, fd/np	3.5	
Percent time-spent-following, PTSF	90.7	%

Level of Service and Other Performance Measures

Level of service, LOS	E	
Volume to capacity ratio, v/c	0.76	
Peak 15-min vehicle-miles of travel, VMT15	525	veh-mi
Peak-hour vehicle-miles of travel, VMT60	1890	veh-mi
Peak 15-min total travel time, TT15	25.7	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

HCS+: Two-Lane Highways Release 5.5

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Two-Way Two-Lane Highway Segment Analysis

Analyst	jhs
Agency/Co.	F&H
Date Performed	2/21/2011
Analysis Time Period	2013
Highway	SR 126
From/To	Tanglewood to Ethel
Jurisdiction	
Analysis Year	
Description	Segment 4

Input Data

Highway class	Class 1				
Shoulder width	2.0	ft	Peak-hour factor, PHF	0.90	
Lane width	11.0	ft	% Trucks and buses	6	%
Segment length	0.5	mi	% Recreational vehicles	0	%
Terrain type	Rolling		% No-passing zones	90	%
Grade: Length		mi	Access points/mi	8	/mi
Up/down		%			

Two-way hourly volume, V	1150	veh/h	
Directional split	65 / 35	%	

Average Travel Speed

Grade adjustment factor, fG	0.99	
PCE for trucks, ET	1.5	
PCE for RVs, ER	1.1	
Heavy-vehicle adjustment factor,	0.971	
Two-way flow rate,(note-1) vp	1329	pc/h
Highest directional split proportion (note-2)	864	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	50.0	mi/h
Adj. for lane and shoulder width, fLS	3.0	mi/h
Adj. for access points, fA	2.0	mi/h
Free-flow speed, FFS	45.0	mi/h
Adjustment for no-passing zones, fnp	1.7	mi/h
Average travel speed, ATS	33.0	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.0	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	1.000	
Two-way flow rate,(note-1) vp	1278	pc/h
Highest directional split proportion (note-2)	831	
Base percent time-spent-following, BPTSF	67.5	%
Adj.for directional distribution and no-passing zones, fd/np	9.2	
Percent time-spent-following, PTSF	76.7	%

Level of Service and Other Performance Measures

Level of service, LOS	E	
Volume to capacity ratio, v/c	0.42	
Peak 15-min vehicle-miles of travel, VMT15	160	veh-mi
Peak-hour vehicle-miles of travel, VMT60	575	veh-mi
Peak 15-min total travel time, TT15	4.9	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

HCS+: Two-Lane Highways Release 5.5

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Two-Way Two-Lane Highway Segment Analysis

Analyst	jhs
Agency/Co.	F&H
Date Performed	2/21/2011
Analysis Time Period	2013
Highway	SR 126
From/To	Ethel to Carolina Pottery
Jurisdiction	
Analysis Year	
Description	Segment 5

Input Data

Highway class	Class 1				
Shoulder width	2.0	ft	Peak-hour factor, PHF	0.90	
Lane width	12.0	ft	% Trucks and buses	6	%
Segment length	0.5	mi	% Recreational vehicles	0	%
Terrain type	Rolling		% No-passing zones	90	%
Grade: Length		mi	Access points/mi	8	/mi
Up/down		%			

Two-way hourly volume, V	1160	veh/h	
Directional split	65 / 35	%	

Average Travel Speed

Grade adjustment factor, fG	0.99	
PCE for trucks, ET	1.5	
PCE for RVs, ER	1.1	
Heavy-vehicle adjustment factor,	0.971	
Two-way flow rate,(note-1) vp	1341	pc/h
Highest directional split proportion (note-2)	872	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	50.0	mi/h
Adj. for lane and shoulder width, fLS	2.6	mi/h
Adj. for access points, fA	2.0	mi/h
Free-flow speed, FFS	45.4	mi/h
Adjustment for no-passing zones, fnp	1.7	mi/h
Average travel speed, ATS	33.3	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.0	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	1.000	
Two-way flow rate,(note-1) vp	1289	pc/h
Highest directional split proportion (note-2)	838	
Base percent time-spent-following, BPTSF	67.8	%
Adj.for directional distribution and no-passing zones, fd/np	9.1	
Percent time-spent-following, PTSF	76.9	%

Level of Service and Other Performance Measures

Level of service, LOS	E	
Volume to capacity ratio, v/c	0.42	
Peak 15-min vehicle-miles of travel, VMT15	161	veh-mi
Peak-hour vehicle-miles of travel, VMT60	580	veh-mi
Peak 15-min total travel time, TT15	4.8	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

HCS+: Multilane Highways Release 5.5

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OPERATIONAL ANALYSIS

Analyst:	JHS
Agency/Co:	F&H
Date:	2/18/2011
Analysis Period:	2013
Highway:	SR 126
From/To:	Carolina Pottery to I-81
Jurisdiction:	
Analysis Year:	
Project ID:	Segment 6

FREE-FLOW SPEED

Direction	1		2	
Lane width	12.0	ft	12.0	ft
Lateral clearance:				
Right edge	6.0	ft	6.0	ft
Left edge	2.0	ft	6.0	ft
Total lateral clearance	8.0	ft	12.0	ft
Access points per mile	8		0	
Median type	Divided			
Free-flow speed:	Base		Measured	
FFS or BFFS	60.0	mph	60.0	mph
Lane width adjustment, FLW	0.0	mph	0.0	mph
Lateral clearance adjustment, FLC	0.9	mph	0.0	mph
Median type adjustment, FM	0.0	mph	0.0	mph
Access points adjustment, FA	2.0	mph	0.0	mph
Free-flow speed	57.1	mph	60.0	mph

VOLUME

Direction	1		2	
Volume, V	770	vph	0	vph
Peak-hour factor, PHF	0.90		0.90	
Peak 15-minute volume, v15	214		0	
Trucks and buses	6	%	0	%
Recreational vehicles	0	%	0	%
Terrain type	Rolling		Level	
Grade	0.00	%	0.00	%
Segment length	0.00	mi	0.00	mi
Number of lanes	2		2	
Driver population adjustment, fP	1.00		1.00	
Trucks and buses PCE, ET	2.5		1.5	
Recreational vehicles PCE, ER	2.0		1.2	
Heavy vehicle adjustment, fHV	0.917		1.000	
Flow rate, vp	466	pcphpl	0	pcphpl

RESULTS

Direction	1		2	
Flow rate, vp	466	pcphpl	0	pcphpl
Free-flow speed, FFS	57.1	mph	60.0	mph
Avg. passenger-car travel speed, S	57.1	mph	60.0	mph
Level of service, LOS	A		A	
Density, D	8.2	pc/mi/ln	0.0	pc/mi/ln

Overall results are not computed when free-flow speed is less than 45 mph.

2033 No Build Alternative – HCS Calculation Data and Reports

2033 No Build LOS Calculation Data

										For Multi-Lane Analysis			
ID	AADT	K	D	2-Way DHV	DDHV	Truck %	Shoulder Width	% No Passing	Access Points	Flow Rate (Capacity)	Flow Rate (Calc)	v/c	Diff. Speed
1	20,860	0.11	0.65	2290	1490	6%	1	n/a	30	1600	902	0.56	12.1
2	33,540	0.11	0.65	3690	2400	6%	8	n/a	30	1600	1453	0.91	8.5
3	24,800	0.11	0.65	2730	1770	6%	1	90	20	1900	n/a	n/a	n/a
4	13,560	0.11	0.65	1490	970	6%	2	90	8	1900	n/a	n/a	n/a
5	21,100	0.11	0.65	2320	1510	6%	2	90	8	2000	n/a	n/a	n/a
6	21,660	0.11	0.65	2380	1550	6%	12	n/a	8	1700	938	0.55	2.9

Notes:

Access Points from HCM Exhbit 12-4 (Default Values)

Flow Rate (Capacity) extrapolated from Exhibit 21-3

Multilane analysis in HCS not designed for free flow speeds under 45 mph. The calculations rely on concepts in the HCM & Exhibit 21-2 Primarily, the v/c ratio.

HCS+: Multilane Highways Release 5.5

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OPERATIONAL ANALYSIS

Analyst: JHS
Agency/Co: F&H
Date: 2/18/2011
Analysis Period: 2033
Highway: SR 126
From/To: Center to Hillcrest
Jurisdiction:
Analysis Year:
Project ID: Segment 1

FREE-FLOW SPEED

Direction	1		2	
Lane width	11.0	ft	12.0	ft
Lateral clearance:				
Right edge	1.0	ft	6.0	ft
Left edge	6.0	ft	6.0	ft
Total lateral clearance	7.0	ft	12.0	ft
Access points per mile	30		0	
Median type	Undivided			
Free-flow speed:	Base		Measured	
FFS or BFFS	60.0	mph	60.0	mph
Lane width adjustment, FLW	1.9	mph	0.0	mph
Lateral clearance adjustment, FLC	1.1	mph	0.0	mph
Median type adjustment, FM	1.6	mph	0.0	mph
Access points adjustment, FA	7.5	mph	0.0	mph
Free-flow speed	47.9	mph	60.0	mph

VOLUME

Direction	1		2	
Volume, V	1490	vph	0	vph
Peak-hour factor, PHF	0.90		0.90	
Peak 15-minute volume, v15	414		0	
Trucks and buses	6	%	0	%
Recreational vehicles	0	%	0	%
Terrain type	Rolling		Level	
Grade	0.00	%	0.00	%
Segment length	0.00	mi	0.00	mi
Number of lanes	2		2	
Driver population adjustment, fP	1.00		1.00	
Trucks and buses PCE, ET	2.5		1.5	
Recreational vehicles PCE, ER	2.0		1.2	
Heavy vehicle adjustment, fHV	0.917		1.000	
Flow rate, vp	902	pcphpl	0	pcphpl

RESULTS

Direction	1		2	
Flow rate, vp	902	pcphpl	0	pcphpl
Free-flow speed, FFS	47.9	mph	60.0	mph
Avg. passenger-car travel speed, S	47.9	mph	60.0	mph
Level of service, LOS	C		A	
Density, D	18.8	pc/mi/ln	0.0	pc/mi/ln

Overall results are not computed when free-flow speed is less than 45 mph.

HCS+: Multilane Highways Release 5.5

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OPERATIONAL ANALYSIS

Analyst:	JHS
Agency/Co:	F&H
Date:	2/18/2011
Analysis Period:	2033
Highway:	SR 126
From/To:	Hillcrest to Heather
Jurisdiction:	
Analysis Year:	
Project ID:	Segment 2

FREE-FLOW SPEED

Direction	1		2	
Lane width	12.0	ft	12.0	ft
Lateral clearance:				
Right edge	6.0	ft	6.0	ft
Left edge	2.0	ft	6.0	ft
Total lateral clearance	8.0	ft	12.0	ft
Access points per mile	30		0	
Median type	Divided			
Free-flow speed:	Base		Measured	
FFS or BFFS	60.0	mph	60.0	mph
Lane width adjustment, FLW	0.0	mph	0.0	mph
Lateral clearance adjustment, FLC	0.9	mph	0.0	mph
Median type adjustment, FM	0.0	mph	0.0	mph
Access points adjustment, FA	7.5	mph	0.0	mph
Free-flow speed	51.6	mph	60.0	mph

VOLUME

Direction	1		2	
Volume, V	2400	vph	0	vph
Peak-hour factor, PHF	0.90		0.90	
Peak 15-minute volume, v15	667		0	
Trucks and buses	6	%	0	%
Recreational vehicles	0	%	0	%
Terrain type	Rolling		Level	
Grade	0.00	%	0.00	%
Segment length	0.00	mi	0.00	mi
Number of lanes	2		2	
Driver population adjustment, fP	1.00		1.00	
Trucks and buses PCE, ET	2.5		1.5	
Recreational vehicles PCE, ER	2.0		1.2	
Heavy vehicle adjustment, fHV	0.917		1.000	

Flow rate, vp	1453	pcphpl	0	pcphpl

RESULTS

Direction	1		2	
Flow rate, vp	1453	pcphpl	0	pcphpl
Free-flow speed, FFS	51.6	mph	60.0	mph
Avg. passenger-car travel speed, S	51.5	mph	60.0	mph
Level of service, LOS	D		A	
Density, D	28.2	pc/mi/ln	0.0	pc/mi/ln

Overall results are not computed when free-flow speed is less than 45 mph.

HCS+: Two-Lane Highways Release 5.5

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Two-Way Two-Lane Highway Segment Analysis

Analyst	jhs
Agency/Co.	F&H
Date Performed	2/21/2011
Analysis Time Period	2033
Highway	SR 126
From/To	Heather Ln to Tanglewood
Jurisdiction	
Analysis Year	
Description	Segment 3

Input Data

Highway class	Class 1				
Shoulder width	1.0	ft	Peak-hour factor, PHF	0.90	
Lane width	11.0	ft	% Trucks and buses	6	%
Segment length	0.9	mi	% Recreational vehicles	0	%
Terrain type	Rolling		% No-passing zones	90	%
Grade: Length		mi	Access points/mi	20	/mi
Up/down		%			

Two-way hourly volume, V	2730	veh/h	
Directional split	65 / 35	%	

Average Travel Speed

Grade adjustment factor, fG	0.99	
PCE for trucks, ET	1.5	
PCE for RVs, ER	1.1	
Heavy-vehicle adjustment factor,	0.971	
Two-way flow rate,(note-1) vp	3156	pc/h
Highest directional split proportion (note-2)	2051	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	50.0	mi/h
Adj. for lane and shoulder width, fLS	4.7	mi/h
Adj. for access points, fA	5.0	mi/h
Free-flow speed, FFS	40.3	mi/h
Adjustment for no-passing zones, fnp	0.7	mi/h
Average travel speed, ATS	15.1	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.0	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	1.000	
Two-way flow rate,(note-1) vp	3033	pc/h
Highest directional split proportion (note-2)	1971	
Base percent time-spent-following, BPTSF	93.0	%
Adj.for directional distribution and no-passing zones, fd/np	3.1	
Percent time-spent-following, PTSF	96.1	%

Level of Service and Other Performance Measures

Level of service, LOS	F	
Volume to capacity ratio, v/c	0.99	
Peak 15-min vehicle-miles of travel, VMT15	683	veh-mi
Peak-hour vehicle-miles of travel, VMT60	2457	veh-mi
Peak 15-min total travel time, TT15	45.1	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

HCS+: Two-Lane Highways Release 5.5

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Two-Way Two-Lane Highway Segment Analysis

Analyst	jhs
Agency/Co.	F&H
Date Performed	2/21/2011
Analysis Time Period	2033
Highway	SR 126
From/To	Tanglewood to Ethel
Jurisdiction	
Analysis Year	
Description	Segment 4

Input Data

Highway class	Class 1				
Shoulder width	2.0	ft	Peak-hour factor, PHF	0.90	
Lane width	11.0	ft	% Trucks and buses	6	%
Segment length	0.5	mi	% Recreational vehicles	0	%
Terrain type	Rolling		% No-passing zones	90	%
Grade: Length		mi	Access points/mi	8	/mi
Up/down		%			

Two-way hourly volume, V	1490	veh/h	
Directional split	65 / 35	%	

Average Travel Speed

Grade adjustment factor, fG	0.99	
PCE for trucks, ET	1.5	
PCE for RVs, ER	1.1	
Heavy-vehicle adjustment factor,	0.971	
Two-way flow rate,(note-1) vp	1722	pc/h
Highest directional split proportion (note-2)	1119	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	50.0	mi/h
Adj. for lane and shoulder width, fLS	3.0	mi/h
Adj. for access points, fA	2.0	mi/h
Free-flow speed, FFS	45.0	mi/h
Adjustment for no-passing zones, fnp	1.3	mi/h
Average travel speed, ATS	30.4	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.0	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	1.000	
Two-way flow rate,(note-1) vp	1656	pc/h
Highest directional split proportion (note-2)	1076	
Base percent time-spent-following, BPTSF	76.7	%
Adj.for directional distribution and no-passing zones, fd/np	6.3	
Percent time-spent-following, PTSF	83.0	%

Level of Service and Other Performance Measures

Level of service, LOS	E	
Volume to capacity ratio, v/c	0.54	
Peak 15-min vehicle-miles of travel, VMT15	207	veh-mi
Peak-hour vehicle-miles of travel, VMT60	745	veh-mi
Peak 15-min total travel time, TT15	6.8	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

HCS+: Two-Lane Highways Release 5.5

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Two-Way Two-Lane Highway Segment Analysis

Analyst	jhs
Agency/Co.	F&H
Date Performed	2/21/2011
Analysis Time Period	2033
Highway	SR 126
From/To	Ethel to Carolina Pottery
Jurisdiction	
Analysis Year	
Description	Segment 5

Input Data

Highway class	Class 1				
Shoulder width	2.0	ft	Peak-hour factor, PHF	0.90	
Lane width	12.0	ft	% Trucks and buses	6	%
Segment length	0.5	mi	% Recreational vehicles	0	%
Terrain type	Rolling		% No-passing zones	90	%
Grade: Length		mi	Access points/mi	8	/mi
Up/down		%			

Two-way hourly volume, V	2320	veh/h	
Directional split	65 / 35	%	

Average Travel Speed

Grade adjustment factor, fG	0.99	
PCE for trucks, ET	1.5	
PCE for RVs, ER	1.1	
Heavy-vehicle adjustment factor,	0.971	
Two-way flow rate,(note-1) vp	2682	pc/h
Highest directional split proportion (note-2)	1743	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	50.0	mi/h
Adj. for lane and shoulder width, fLS	2.6	mi/h
Adj. for access points, fA	2.0	mi/h
Free-flow speed, FFS	45.4	mi/h
Adjustment for no-passing zones, fnp	0.9	mi/h
Average travel speed, ATS	23.7	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.0	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	1.000	
Two-way flow rate,(note-1) vp	2578	pc/h
Highest directional split proportion (note-2)	1676	
Base percent time-spent-following, BPTSF	89.6	%
Adj.for directional distribution and no-passing zones, fd/np	3.1	
Percent time-spent-following, PTSF	92.8	%

Level of Service and Other Performance Measures

Level of service, LOS	F	
Volume to capacity ratio, v/c	0.84	
Peak 15-min vehicle-miles of travel, VMT15	322	veh-mi
Peak-hour vehicle-miles of travel, VMT60	1160	veh-mi
Peak 15-min total travel time, TT15	13.6	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

HCS+: Multilane Highways Release 5.5

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OPERATIONAL ANALYSIS

Analyst:	JHS
Agency/Co:	F&H
Date:	2/18/2011
Analysis Period:	2033
Highway:	SR 126
From/To:	Carolina Pottery to I-81
Jurisdiction:	
Analysis Year:	
Project ID:	Segment 6

FREE-FLOW SPEED

Direction	1		2	
Lane width	12.0	ft	12.0	ft
Lateral clearance:				
Right edge	6.0	ft	6.0	ft
Left edge	2.0	ft	6.0	ft
Total lateral clearance	8.0	ft	12.0	ft
Access points per mile	8		0	
Median type	Divided			
Free-flow speed:	Base		Measured	
FFS or BFFS	60.0	mph	60.0	mph
Lane width adjustment, FLW	0.0	mph	0.0	mph
Lateral clearance adjustment, FLC	0.9	mph	0.0	mph
Median type adjustment, FM	0.0	mph	0.0	mph
Access points adjustment, FA	2.0	mph	0.0	mph
Free-flow speed	57.1	mph	60.0	mph

VOLUME

Direction	1		2	
Volume, V	1550	vph	0	vph
Peak-hour factor, PHF	0.90		0.90	
Peak 15-minute volume, v15	431		0	
Trucks and buses	6	%	0	%
Recreational vehicles	0	%	0	%
Terrain type	Rolling		Level	
Grade	0.00	%	0.00	%
Segment length	0.00	mi	0.00	mi
Number of lanes	2		2	
Driver population adjustment, fP	1.00		1.00	
Trucks and buses PCE, ET	2.5		1.5	
Recreational vehicles PCE, ER	2.0		1.2	
Heavy vehicle adjustment, fHV	0.917		1.000	
Flow rate, vp	938	pcphpl	0	pcphpl

RESULTS

Direction	1		2	
Flow rate, vp	938	pcphpl	0	pcphpl
Free-flow speed, FFS	57.1	mph	60.0	mph
Avg. passenger-car travel speed, S	57.1	mph	60.0	mph
Level of service, LOS	B		A	
Density, D	16.4	pc/mi/ln	0.0	pc/mi/ln

Overall results are not computed when free-flow speed is less than 45 mph.

2013 Build Alternative A & B– HCS Calculation Data and Reports

Note: The HCS reports apply to both Build Alternative A & B. For each segment, the same roadway cross section and traffic volumes used is applicable to both alternatives. Only the length of the segments varied between Build Alternative A and Build Alternative B.

2013 Build Alternative A LOS Calculation Data

										For Multi-Lane Analysis			
ID	AADT	K	D	2-Way DHV	DDHV	Truck %	Shoulder Width	% No Passing	Access Points	Flow Rate (Capacity)	Flow Rate (Calc)	v/c	Diff. Speed
1a	18960	0.11	0.65	2090	1360	6%	4	n/a	30	1600	823	0.51	9.4
1b	25800	0.11	0.65	2840	1850	6%	4	n/a	30	1600	1120	0.7	9.4
2	19080	0.11	0.65	2100	1370	6%	4	n/a	20	1600	829	0.52	6.9
3	10430	0.11	0.65	1150	750	6%	8	n/a	20	1900	454	0.24	6.9
4	10260	0.11	0.65	1130	730	6%	6	90	8	1900	n/a	n/a	n/a
5	10830	0.11	0.65	1190	770	6%	10	90	8	2000	n/a	n/a	n/a
6	10830	0.11	0.65	1190	770	6%	12	n/a	8	1700	466	0.27	2

Notes:
Access Points from HCM Exhbit 12-4 (Default Values)
Flow Rate (Capacity) extrapolated from Exhibit 21-3
Multilane analysis in HCS not designed for free flow speeds under 45 mph. The calculations rely on concepts in the HCM & Exhibit 21-2
Primarily, the v/c ratio.

2013 Build Alternative B LOS Calculation Data

										For Multi-Lane Analysis			
ID	AADT	K	D	2-Way DHV	DDHV	Truck %	Shoulder Width	% No Passing	Access Points	Flow Rate (Capacity)	Flow Rate (Calc)	v/c	Diff. Speed
1a	18960	0.11	0.65	2090	1360	6%	4	n/a	30	1600	823	0.51	9.4
1b	25800	0.11	0.65	2840	1850	6%	4	n/a	30	1600	1120	0.7	9.4
2	19080	0.11	0.65	2100	1370	6%	4	n/a	20	1600	829	0.52	6.9
3	10430	0.11	0.65	1150	750	6%	8	n/a	20	1900	454	0.24	6.9
4	10260	0.11	0.65	1130	730	6%	6	90	8	1900	n/a	n/a	n/a
5	10830	0.11	0.65	1190	770	6%	10	90	8	2000	n/a	n/a	n/a
6	10830	0.11	0.65	1190	770	6%	12	n/a	8	1700	466	0.27	2

Notes:

Access Points from HCM Exhbit 12-4 (Default Values)

Flow Rate (Capacity) extrapolated from Exhibit 21-3

Multilane analysis in HCS not designed for free flow speeds under 45 mph. The calculations rely on concepts in the HCM & Exhibit 21-2 Primarily, the v/c ratio.

HCS+: Multilane Highways Release 5.5

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OPERATIONAL ANALYSIS

Analyst:	JHS
Agency/Co:	F&H
Date:	2/22/2011
Analysis Period:	2013
Highway:	SR 126
From/To:	Center to SR 93
Jurisdiction:	
Analysis Year:	
Project ID:	Build Alternatives - Seg 1a

FREE-FLOW SPEED

Direction	1		2	
Lane width	11.0	ft	12.0	ft
Lateral clearance:				
Right edge	6.0	ft	6.0	ft
Left edge	6.0	ft	6.0	ft
Total lateral clearance	12.0	ft	12.0	ft
Access points per mile	30		0	
Median type	Divided			
Free-flow speed:	Base		Measured	
FFS or BFFS	60.0	mph	60.0	mph
Lane width adjustment, FLW	1.9	mph	0.0	mph
Lateral clearance adjustment, FLC	0.0	mph	0.0	mph
Median type adjustment, FM	0.0	mph	0.0	mph
Access points adjustment, FA	7.5	mph	0.0	mph
Free-flow speed	50.6	mph	60.0	mph

VOLUME

Direction	1		2	
Volume, V	1360	vph	0	vph
Peak-hour factor, PHF	0.90		0.90	
Peak 15-minute volume, v15	378		0	
Trucks and buses	6	%	0	%
Recreational vehicles	0	%	0	%
Terrain type	Rolling		Level	
Grade	0.00	%	0.00	%
Segment length	0.00	mi	0.00	mi
Number of lanes	2		2	
Driver population adjustment, fP	1.00		1.00	
Trucks and buses PCE, ET	2.5		1.5	
Recreational vehicles PCE, ER	2.0		1.2	
Heavy vehicle adjustment, fHV	0.917		1.000	
Flow rate, vp	823	pcphpl	0	pcphpl

RESULTS

Direction	1		2	
Flow rate, vp	823	pcphpl	0	pcphpl
Free-flow speed, FFS	50.6	mph	60.0	mph
Avg. passenger-car travel speed, S	50.6	mph	60.0	mph
Level of service, LOS	B		A	
Density, D	16.3	pc/mi/ln	0.0	pc/mi/ln

Overall results are not computed when free-flow speed is less than 45 mph.

HCS+: Multilane Highways Release 5.5

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OPERATIONAL ANALYSIS

Analyst: JHS
Agency/Co: F&H
Date: 2/22/2011
Analysis Period: 2013
Highway: SR 126
From/To: SR 93 to Hawthorne
Jurisdiction:
Analysis Year:
Project ID: Build Alternatives - Seg 1b

FREE-FLOW SPEED

Direction	1		2	
Lane width	11.0	ft	12.0	ft
Lateral clearance:				
Right edge	6.0	ft	6.0	ft
Left edge	6.0	ft	6.0	ft
Total lateral clearance	12.0	ft	12.0	ft
Access points per mile	30		0	
Median type	Divided			
Free-flow speed:	Base		Measured	
FFS or BFFS	60.0	mph	60.0	mph
Lane width adjustment, FLW	1.9	mph	0.0	mph
Lateral clearance adjustment, FLC	0.0	mph	0.0	mph
Median type adjustment, FM	0.0	mph	0.0	mph
Access points adjustment, FA	7.5	mph	0.0	mph
Free-flow speed	50.6	mph	60.0	mph

VOLUME

Direction	1		2	
Volume, V	1850	vph	0	vph
Peak-hour factor, PHF	0.90		0.90	
Peak 15-minute volume, v15	514		0	
Trucks and buses	6	%	0	%
Recreational vehicles	0	%	0	%
Terrain type	Rolling		Level	
Grade	0.00	%	0.00	%
Segment length	0.00	mi	0.00	mi
Number of lanes	2		2	
Driver population adjustment, fP	1.00		1.00	
Trucks and buses PCE, ET	2.5		1.5	
Recreational vehicles PCE, ER	2.0		1.2	
Heavy vehicle adjustment, fHV	0.917		1.000	
Flow rate, vp	1120	pcphpl	0	pcphpl

RESULTS

Direction	1		2	
Flow rate, vp	1120	pcphpl	0	pcphpl
Free-flow speed, FFS	50.6	mph	60.0	mph
Avg. passenger-car travel speed, S	50.6	mph	60.0	mph
Level of service, LOS	C		A	
Density, D	22.1	pc/mi/ln	0.0	pc/mi/ln

Overall results are not computed when free-flow speed is less than 45 mph.

HCS+: Multilane Highways Release 5.5

Florence & Hutcheson
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Phone: (615) 399-9090 Fax: (615) 399-9049

OPERATIONAL ANALYSIS

Analyst:	JHS
Agency/Co:	F&H
Date:	2/22/2011
Analysis Period:	2013
Highway:	SR 126
From/To:	Hawthorne to Harbor Chapel
Jurisdiction:	
Analysis Year:	
Project ID:	Build Alternatives - Seg 2

FREE-FLOW SPEED

Direction	1		2	
Lane width	11.0	ft	12.0	ft
Lateral clearance:				
Right edge	6.0	ft	6.0	ft
Left edge	6.0	ft	6.0	ft
Total lateral clearance	12.0	ft	12.0	ft
Access points per mile	20		0	
Median type	Divided			
Free-flow speed:	Base		Measured	
FFS or BFFS	60.0	mph	60.0	mph
Lane width adjustment, FLW	1.9	mph	0.0	mph
Lateral clearance adjustment, FLC	0.0	mph	0.0	mph
Median type adjustment, FM	0.0	mph	0.0	mph
Access points adjustment, FA	5.0	mph	0.0	mph
Free-flow speed	53.1	mph	60.0	mph

VOLUME

Direction	1		2	
Volume, V	1370	vph	0	vph
Peak-hour factor, PHF	0.90		0.90	
Peak 15-minute volume, v15	381		0	
Trucks and buses	6	%	0	%
Recreational vehicles	0	%	0	%
Terrain type	Rolling		Level	
Grade	0.00	%	0.00	%
Segment length	0.00	mi	0.00	mi
Number of lanes	2		2	
Driver population adjustment, fP	1.00		1.00	
Trucks and buses PCE, ET	2.5		1.5	
Recreational vehicles PCE, ER	2.0		1.2	
Heavy vehicle adjustment, fHV	0.917		1.000	
Flow rate, vp	829	pcphpl	0	pcphpl

RESULTS

Direction	1		2	
Flow rate, vp	829	pcphpl	0	pcphpl
Free-flow speed, FFS	53.1	mph	60.0	mph
Avg. passenger-car travel speed, S	53.1	mph	60.0	mph
Level of service, LOS	B		A	
Density, D	15.6	pc/mi/ln	0.0	pc/mi/ln

Overall results are not computed when free-flow speed is less than 45 mph.

HCS+: Multilane Highways Release 5.5

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OPERATIONAL ANALYSIS

Analyst:	JHS
Agency/Co:	F&H
Date:	2/22/2011
Analysis Period:	2013
Highway:	SR 126
From/To:	Harbor Chapel to Cooks Valley
Jurisdiction:	
Analysis Year:	
Project ID:	Build Alternatives - Seg 3

FREE-FLOW SPEED

Direction	1		2	
Lane width	11.0	ft	12.0	ft
Lateral clearance:				
Right edge	6.0	ft	6.0	ft
Left edge	6.0	ft	6.0	ft
Total lateral clearance	12.0	ft	12.0	ft
Access points per mile	20		0	
Median type	Divided			
Free-flow speed:	Base		Measured	
FFS or BFFS	60.0	mph	60.0	mph
Lane width adjustment, FLW	1.9	mph	0.0	mph
Lateral clearance adjustment, FLC	0.0	mph	0.0	mph
Median type adjustment, FM	0.0	mph	0.0	mph
Access points adjustment, FA	5.0	mph	0.0	mph
Free-flow speed	53.1	mph	60.0	mph

VOLUME

Direction	1		2	
Volume, V	750	vph	0	vph
Peak-hour factor, PHF	0.90		0.90	
Peak 15-minute volume, v15	208		0	
Trucks and buses	6	%	0	%
Recreational vehicles	0	%	0	%
Terrain type	Rolling		Level	
Grade	0.00	%	0.00	%
Segment length	0.00	mi	0.00	mi
Number of lanes	2		2	
Driver population adjustment, fP	1.00		1.00	
Trucks and buses PCE, ET	2.5		1.5	
Recreational vehicles PCE, ER	2.0		1.2	
Heavy vehicle adjustment, fHV	0.917		1.000	
Flow rate, vp	454	pcphpl	0	pcphpl

RESULTS

Direction	1		2	
Flow rate, vp	454	pcphpl	0	pcphpl
Free-flow speed, FFS	53.1	mph	60.0	mph
Avg. passenger-car travel speed, S	53.1	mph	60.0	mph
Level of service, LOS	A		A	
Density, D	8.5	pc/mi/ln	0.0	pc/mi/ln

Overall results are not computed when free-flow speed is less than 45 mph.

HCS+: Two-Lane Highways Release 5.5

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Two-Way Two-Lane Highway Segment Analysis

Analyst	JHS
Agency/Co.	F&H
Date Performed	2/22/2011
Analysis Time Period	2013
Highway	SR 126
From/To	Cooks Valley to Harr Town
Jurisdiction	
Analysis Year	
Description	Build Alternative Segment 4

Input Data

Highway class	Class 1				
Shoulder width	6.0	ft	Peak-hour factor, PHF	0.90	
Lane width	11.0	ft	% Trucks and buses	6	%
Segment length	2.5	mi	% Recreational vehicles	0	%
Terrain type	Rolling		% No-passing zones	90	%
Grade: Length		mi	Access points/mi	8	/mi
Up/down		%			

Two-way hourly volume, V	1130	veh/h	
Directional split	65 / 35	%	

Average Travel Speed

Grade adjustment factor, fG	0.99	
PCE for trucks, ET	1.5	
PCE for RVs, ER	1.1	
Heavy-vehicle adjustment factor,	0.971	
Two-way flow rate,(note-1) vp	1306	pc/h
Highest directional split proportion (note-2)	849	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	50.0	mi/h
Adj. for lane and shoulder width, fLS	0.4	mi/h
Adj. for access points, fA	2.0	mi/h
Free-flow speed, FFS	47.6	mi/h
Adjustment for no-passing zones, fnp	1.8	mi/h
Average travel speed, ATS	35.7	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.0	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	1.000	
Two-way flow rate,(note-1) vp	1256	pc/h
Highest directional split proportion (note-2)	816	
Base percent time-spent-following, BPTSF	66.8	%
Adj.for directional distribution and no-passing zones, fd/np	9.5	
Percent time-spent-following, PTSF	76.3	%

Level of Service and Other Performance Measures

Level of service, LOS	E	
Volume to capacity ratio, v/c	0.41	
Peak 15-min vehicle-miles of travel, VMT15	785	veh-mi
Peak-hour vehicle-miles of travel, VMT60	2825	veh-mi
Peak 15-min total travel time, TT15	22.0	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

HCS+: Two-Lane Highways Release 5.5

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Two-Way Two-Lane Highway Segment Analysis

Analyst	JHS
Agency/Co.	F&H
Date Performed	2/22/2011
Analysis Time Period	2013
Highway	SR 126
From/To	Harr Town to Carolina Pottery
Jurisdiction	
Analysis Year	
Description	Build Alternative Segment 5

Input Data

Highway class	Class 1				
Shoulder width	10.0	ft	Peak-hour factor, PHF	0.90	
Lane width	12.0	ft	% Trucks and buses	6	%
Segment length	2.5	mi	% Recreational vehicles	0	%
Terrain type	Rolling		% No-passing zones	90	%
Grade: Length		mi	Access points/mi	8	/mi
Up/down		%			

Two-way hourly volume, V	1190	veh/h	
Directional split	65 / 35	%	

Average Travel Speed

Grade adjustment factor, fG	0.99	
PCE for trucks, ET	1.5	
PCE for RVs, ER	1.1	
Heavy-vehicle adjustment factor,	0.971	
Two-way flow rate,(note-1) vp	1376	pc/h
Highest directional split proportion (note-2)	894	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	55.0	mi/h
Adj. for lane and shoulder width, fLS	0.0	mi/h
Adj. for access points, fA	2.0	mi/h
Free-flow speed, FFS	53.0	mi/h
Adjustment for no-passing zones, fnp	1.6	mi/h
Average travel speed, ATS	40.7	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.0	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	1.000	
Two-way flow rate,(note-1) vp	1322	pc/h
Highest directional split proportion (note-2)	859	
Base percent time-spent-following, BPTSF	68.7	%
Adj.for directional distribution and no-passing zones, fd/np	8.8	
Percent time-spent-following, PTSF	77.5	%

Level of Service and Other Performance Measures

Level of service, LOS	D	
Volume to capacity ratio, v/c	0.43	
Peak 15-min vehicle-miles of travel, VMT15	826	veh-mi
Peak-hour vehicle-miles of travel, VMT60	2975	veh-mi
Peak 15-min total travel time, TT15	20.3	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

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OPERATIONAL ANALYSIS

Analyst:	JHS
Agency/Co:	F&H
Date:	2/22/2011
Analysis Period:	2013
Highway:	SR 126
From/To:	Carolina Pottery to I-81
Jurisdiction:	
Analysis Year:	
Project ID:	Build Alternatives - Seg 3

FREE-FLOW SPEED

Direction	1		2	
Lane width	12.0	ft	12.0	ft
Lateral clearance:				
Right edge	6.0	ft	6.0	ft
Left edge	6.0	ft	6.0	ft
Total lateral clearance	12.0	ft	12.0	ft
Access points per mile	8		0	
Median type	Divided			
Free-flow speed:	Base		Measured	
FFS or BFFS	60.0	mph	60.0	mph
Lane width adjustment, FLW	0.0	mph	0.0	mph
Lateral clearance adjustment, FLC	0.0	mph	0.0	mph
Median type adjustment, FM	0.0	mph	0.0	mph
Access points adjustment, FA	2.0	mph	0.0	mph
Free-flow speed	58.0	mph	60.0	mph

VOLUME

Direction	1		2	
Volume, V	770	vph	0	vph
Peak-hour factor, PHF	0.90		0.90	
Peak 15-minute volume, v15	214		0	
Trucks and buses	6	%	0	%
Recreational vehicles	0	%	0	%
Terrain type	Rolling		Level	
Grade	0.00	%	0.00	%
Segment length	0.00	mi	0.00	mi
Number of lanes	2		2	
Driver population adjustment, fP	1.00		1.00	
Trucks and buses PCE, ET	2.5		1.5	
Recreational vehicles PCE, ER	2.0		1.2	
Heavy vehicle adjustment, fHV	0.917		1.000	
Flow rate, vp	466	pcphpl	0	pcphpl

RESULTS

Direction	1		2	
Flow rate, vp	466	pcphpl	0	pcphpl
Free-flow speed, FFS	58.0	mph	60.0	mph
Avg. passenger-car travel speed, S	58.0	mph	60.0	mph
Level of service, LOS	A		A	
Density, D	8.0	pc/mi/ln	0.0	pc/mi/ln

Overall results are not computed when free-flow speed is less than 45 mph.

2033 Build Alternative A & B– HCS Calculation Data and Reports

Note: The HCS reports apply to both Build Alternative A & B. For each segment, the same roadway cross section and traffic volumes used is applicable to both alternatives. Only the length of the segments varied between Build Alternative A and Build Alternative B.

2033 Build Alternative A LOS Calculation Data

										For Multi-Lane Analysis			
ID	AADT	K	D	2-Way DHV	DDHV	Truck %	Shoulder Width	% No Passing	Access Points	Flow Rate (Capacity)	Flow Rate (Calc)	v/c	Diff. Speed
1a	20,860	0.11	0.65	2290	1490	6%	4	n/a	30	1600	902	0.56	9.4
1b	33,540	0.11	0.65	3690	2400	6%	4	n/a	30	1600	1453	0.91	9.5
2	24,800	0.11	0.65	2730	1770	6%	4	n/a	20	1600	1071	0.67	6.9
3	13,560	0.11	0.65	1490	970	6%	8	n/a	20	1900	587	0.31	6.9
4	20,520	0.11	0.65	2260	1470	6%	6	90	8	1900	n/a	n/a	n/a
5	21,660	0.11	0.65	2380	1550	6%	10	90	8	2000	n/a	n/a	n/a
6	21,660	0.11	0.65	2380	1550	6%	12	n/a	8	1700	938	0.55	2

Notes:
Access Points from HCM Exhbit 12-4 (Default Values)
Flow Rate (Capacity) extrapolated from Exhibit 21-3
Multilane analysis in HCS not designed for free flow speeds under 45 mph. The calculations rely on concepts in the HCM & Exhibit 21-2
Primarily, the v/c ratio.

2033 Build Alternative B LOS Calculation Data

										For Multi-Lane Analysis			
ID	AADT	K	D	2-Way DHV	DDHV	Truck %	Shoulder Width	% No Passing	Access Points	Flow Rate (Capacity)	Flow Rate (Calc)	v/c	Diff. Speed
1a	20,860	0.11	0.65	2290	1490	6%	4	n/a	30	1600	902	0.56	9.4
1b	33,540	0.11	0.65	3690	2400	6%	4	n/a	30	1600	1453	0.91	9.5
2	24,800	0.11	0.65	2730	1770	6%	4	n/a	20	1600	1071	0.67	6.9
3	13,560	0.11	0.65	1490	970	6%	8	n/a	20	1900	587	0.31	6.9
4	20,520	0.11	0.65	2260	1470	6%	6	90	8	1900	n/a	n/a	n/a
5	21,660	0.11	0.65	2380	1550	6%	10	90	8	2000	n/a	n/a	n/a
6	21,660	0.11	0.65	2380	1550	6%	12	n/a	8	1700	938	0.55	2

Notes:

Access Points from HCM Exhbit 12-4 (Default Values)

Flow Rate (Capacity) extrapolated from Exhibit 21-3

Multilane analysis in HCS not designed for free flow speeds under 45 mph. The calculations rely on concepts in the HCM & Exhibit 21-2 Primarily, the v/c ratio.

HCS+: Multilane Highways Release 5.5

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OPERATIONAL ANALYSIS

Analyst:	JHS
Agency/Co:	F&H
Date:	2/22/2011
Analysis Period:	2033
Highway:	SR 126
From/To:	Center to SR 93
Jurisdiction:	
Analysis Year:	
Project ID:	Build Alternatives - Seg 1a

FREE-FLOW SPEED

Direction	1		2	
Lane width	11.0	ft	12.0	ft
Lateral clearance:				
Right edge	6.0	ft	6.0	ft
Left edge	6.0	ft	6.0	ft
Total lateral clearance	12.0	ft	12.0	ft
Access points per mile	30		0	
Median type	Divided			
Free-flow speed:	Base		Measured	
FFS or BFFS	60.0	mph	60.0	mph
Lane width adjustment, FLW	1.9	mph	0.0	mph
Lateral clearance adjustment, FLC	0.0	mph	0.0	mph
Median type adjustment, FM	0.0	mph	0.0	mph
Access points adjustment, FA	7.5	mph	0.0	mph
Free-flow speed	50.6	mph	60.0	mph

VOLUME

Direction	1		2	
Volume, V	1490	vph	0	vph
Peak-hour factor, PHF	0.90		0.90	
Peak 15-minute volume, v15	414		0	
Trucks and buses	6	%	0	%
Recreational vehicles	0	%	0	%
Terrain type	Rolling		Level	
Grade	0.00	%	0.00	%
Segment length	0.00	mi	0.00	mi
Number of lanes	2		2	
Driver population adjustment, fP	1.00		1.00	
Trucks and buses PCE, ET	2.5		1.5	
Recreational vehicles PCE, ER	2.0		1.2	
Heavy vehicle adjustment, fHV	0.917		1.000	
Flow rate, vp	902	pcphpl	0	pcphpl

RESULTS

Direction	1		2	
Flow rate, vp	902	pcphpl	0	pcphpl
Free-flow speed, FFS	50.6	mph	60.0	mph
Avg. passenger-car travel speed, S	50.6	mph	60.0	mph
Level of service, LOS	B		A	
Density, D	17.8	pc/mi/ln	0.0	pc/mi/ln

Overall results are not computed when free-flow speed is less than 45 mph.

HCS+: Multilane Highways Release 5.5

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OPERATIONAL ANALYSIS

Analyst: JHS
Agency/Co: F&H
Date: 2/22/2011
Analysis Period: 2033
Highway: SR 126
From/To: SR 93 to Hawthorne
Jurisdiction:
Analysis Year:
Project ID: Build Alternatives - Seg 1b

FREE-FLOW SPEED

Direction	1		2	
Lane width	11.0	ft	12.0	ft
Lateral clearance:				
Right edge	6.0	ft	6.0	ft
Left edge	6.0	ft	6.0	ft
Total lateral clearance	12.0	ft	12.0	ft
Access points per mile	30		0	
Median type	Divided			
Free-flow speed:	Base		Measured	
FFS or BFFS	60.0	mph	60.0	mph
Lane width adjustment, FLW	1.9	mph	0.0	mph
Lateral clearance adjustment, FLC	0.0	mph	0.0	mph
Median type adjustment, FM	0.0	mph	0.0	mph
Access points adjustment, FA	7.5	mph	0.0	mph
Free-flow speed	50.6	mph	60.0	mph

VOLUME

Direction	1		2	
Volume, V	2400	vph	0	vph
Peak-hour factor, PHF	0.90		0.90	
Peak 15-minute volume, v15	667		0	
Trucks and buses	6	%	0	%
Recreational vehicles	0	%	0	%
Terrain type	Rolling		Level	
Grade	0.00	%	0.00	%
Segment length	0.00	mi	0.00	mi
Number of lanes	2		2	
Driver population adjustment, fP	1.00		1.00	
Trucks and buses PCE, ET	2.5		1.5	
Recreational vehicles PCE, ER	2.0		1.2	
Heavy vehicle adjustment, fHV	0.917		1.000	
Flow rate, vp	1453	pcphpl	0	pcphpl

RESULTS

Direction	1		2	
Flow rate, vp	1453	pcphpl	0	pcphpl
Free-flow speed, FFS	50.6	mph	60.0	mph
Avg. passenger-car travel speed, S	50.5	mph	60.0	mph
Level of service, LOS	D		A	
Density, D	28.8	pc/mi/ln	0.0	pc/mi/ln

Overall results are not computed when free-flow speed is less than 45 mph.

HCS+: Multilane Highways Release 5.5

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OPERATIONAL ANALYSIS

Analyst:	JHS
Agency/Co:	F&H
Date:	2/22/2011
Analysis Period:	2033
Highway:	SR 126
From/To:	Hawthorne to Harbor Chapel
Jurisdiction:	
Analysis Year:	
Project ID:	Build Alternatives - Seg 2

FREE-FLOW SPEED

Direction	1		2	
Lane width	11.0	ft	12.0	ft
Lateral clearance:				
Right edge	6.0	ft	6.0	ft
Left edge	6.0	ft	6.0	ft
Total lateral clearance	12.0	ft	12.0	ft
Access points per mile	20		0	
Median type	Divided			
Free-flow speed:	Base		Measured	
FFS or BFFS	60.0	mph	60.0	mph
Lane width adjustment, FLW	1.9	mph	0.0	mph
Lateral clearance adjustment, FLC	0.0	mph	0.0	mph
Median type adjustment, FM	0.0	mph	0.0	mph
Access points adjustment, FA	5.0	mph	0.0	mph
Free-flow speed	53.1	mph	60.0	mph

VOLUME

Direction	1		2	
Volume, V	1770	vph	0	vph
Peak-hour factor, PHF	0.90		0.90	
Peak 15-minute volume, v15	492		0	
Trucks and buses	6	%	0	%
Recreational vehicles	0	%	0	%
Terrain type	Rolling		Level	
Grade	0.00	%	0.00	%
Segment length	0.00	mi	0.00	mi
Number of lanes	2		2	
Driver population adjustment, fP	1.00		1.00	
Trucks and buses PCE, ET	2.5		1.5	
Recreational vehicles PCE, ER	2.0		1.2	
Heavy vehicle adjustment, fHV	0.917		1.000	
Flow rate, vp	1071	pcphpl	0	pcphpl

RESULTS

Direction	1		2	
Flow rate, vp	1071	pcphpl	0	pcphpl
Free-flow speed, FFS	53.1	mph	60.0	mph
Avg. passenger-car travel speed, S	53.1	mph	60.0	mph
Level of service, LOS	C		A	
Density, D	20.2	pc/mi/ln	0.0	pc/mi/ln

Overall results are not computed when free-flow speed is less than 45 mph.

HCS+: Multilane Highways Release 5.5

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OPERATIONAL ANALYSIS

Analyst:	JHS
Agency/Co:	F&H
Date:	2/22/2011
Analysis Period:	2033
Highway:	SR 126
From/To:	Harbor Chapel to Cooks Valley
Jurisdiction:	
Analysis Year:	
Project ID:	Build Alternatives - Seg 3

FREE-FLOW SPEED

Direction	1		2	
Lane width	11.0	ft	12.0	ft
Lateral clearance:				
Right edge	6.0	ft	6.0	ft
Left edge	6.0	ft	6.0	ft
Total lateral clearance	12.0	ft	12.0	ft
Access points per mile	20		0	
Median type	Divided			
Free-flow speed:	Base		Measured	
FFS or BFFS	60.0	mph	60.0	mph
Lane width adjustment, FLW	1.9	mph	0.0	mph
Lateral clearance adjustment, FLC	0.0	mph	0.0	mph
Median type adjustment, FM	0.0	mph	0.0	mph
Access points adjustment, FA	5.0	mph	0.0	mph
Free-flow speed	53.1	mph	60.0	mph

VOLUME

Direction	1		2	
Volume, V	970	vph	0	vph
Peak-hour factor, PHF	0.90		0.90	
Peak 15-minute volume, v15	269		0	
Trucks and buses	6	%	0	%
Recreational vehicles	0	%	0	%
Terrain type	Rolling		Level	
Grade	0.00	%	0.00	%
Segment length	0.00	mi	0.00	mi
Number of lanes	2		2	
Driver population adjustment, fP	1.00		1.00	
Trucks and buses PCE, ET	2.5		1.5	
Recreational vehicles PCE, ER	2.0		1.2	
Heavy vehicle adjustment, fHV	0.917		1.000	
Flow rate, vp	587	pcphpl	0	pcphpl

RESULTS

Direction	1		2	
Flow rate, vp	587	pcphpl	0	pcphpl
Free-flow speed, FFS	53.1	mph	60.0	mph
Avg. passenger-car travel speed, S	53.1	mph	60.0	mph
Level of service, LOS	B		A	
Density, D	11.1	pc/mi/ln	0.0	pc/mi/ln

Overall results are not computed when free-flow speed is less than 45 mph.

HCS+: Two-Lane Highways Release 5.5

Florence & Hutcheson
1321 Murfreesboro Road
Suite 325
Nashville, TN 37217
Phone: (615) 399-9090 Fax: (615) 399-9049

Two-Way Two-Lane Highway Segment Analysis

Analyst	JHS
Agency/Co.	F&H
Date Performed	2/22/2011
Analysis Time Period	2033
Highway	SR 126
From/To	Cooks Valley to Harr Town
Jurisdiction	
Analysis Year	
Description	Build Alternative Segment 4

Input Data

Highway class	Class 1				
Shoulder width	6.0	ft	Peak-hour factor, PHF	0.90	
Lane width	11.0	ft	% Trucks and buses	6	%
Segment length	2.5	mi	% Recreational vehicles	0	%
Terrain type	Rolling		% No-passing zones	90	%
Grade: Length		mi	Access points/mi	8	/mi
Up/down		%			

Two-way hourly volume, V	2260	veh/h	
Directional split	65 / 35	%	

Average Travel Speed

Grade adjustment factor, fG	0.99	
PCE for trucks, ET	1.5	
PCE for RVs, ER	1.1	
Heavy-vehicle adjustment factor,	0.971	
Two-way flow rate,(note-1) vp	2613	pc/h
Highest directional split proportion (note-2)	1698	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	50.0	mi/h
Adj. for lane and shoulder width, fLS	0.4	mi/h
Adj. for access points, fA	2.0	mi/h
Free-flow speed, FFS	47.6	mi/h
Adjustment for no-passing zones, fnp	0.9	mi/h
Average travel speed, ATS	26.4	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.0	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	1.000	
Two-way flow rate,(note-1) vp	2511	pc/h
Highest directional split proportion (note-2)	1632	
Base percent time-spent-following, BPTSF	89.0	%
Adj.for directional distribution and no-passing zones, fd/np	3.2	
Percent time-spent-following, PTSF	92.2	%

Level of Service and Other Performance Measures

Level of service, LOS	E	
Volume to capacity ratio, v/c	0.82	
Peak 15-min vehicle-miles of travel, VMT15	1569	veh-mi
Peak-hour vehicle-miles of travel, VMT60	5650	veh-mi
Peak 15-min total travel time, TT15	59.5	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

HCS+: Two-Lane Highways Release 5.5

Florence & Hutcheson
1321 Murfreesboro Road
Suite 325
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Phone: (615) 399-9090 Fax: (615) 399-9049

Two-Way Two-Lane Highway Segment Analysis

Analyst	JHS
Agency/Co.	F&H
Date Performed	2/22/2011
Analysis Time Period	2033
Highway	SR 126
From/To	Harr Town to Carolina Pottery
Jurisdiction	
Analysis Year	
Description	Build Alternative Segment 5

Input Data

Highway class	Class 1				
Shoulder width	10.0	ft	Peak-hour factor, PHF	0.90	
Lane width	12.0	ft	% Trucks and buses	6	%
Segment length	2.5	mi	% Recreational vehicles	0	%
Terrain type	Rolling		% No-passing zones	90	%
Grade: Length		mi	Access points/mi	8	/mi
Up/down		%			

Two-way hourly volume, V	2380	veh/h	
Directional split	65 / 35	%	

Average Travel Speed

Grade adjustment factor, fG	0.99	
PCE for trucks, ET	1.5	
PCE for RVs, ER	1.1	
Heavy-vehicle adjustment factor,	0.971	
Two-way flow rate,(note-1) vp	2751	pc/h
Highest directional split proportion (note-2)	1788	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	55.0	mi/h
Adj. for lane and shoulder width, fLS	0.0	mi/h
Adj. for access points, fA	2.0	mi/h
Free-flow speed, FFS	53.0	mi/h
Adjustment for no-passing zones, fnp	0.9	mi/h
Average travel speed, ATS	30.8	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.0	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	1.000	
Two-way flow rate,(note-1) vp	2644	pc/h
Highest directional split proportion (note-2)	1719	
Base percent time-spent-following, BPTSF	90.2	%
Adj.for directional distribution and no-passing zones, fd/np	3.1	
Percent time-spent-following, PTSF	93.3	%

Level of Service and Other Performance Measures

Level of service, LOS	F	
Volume to capacity ratio, v/c	0.86	
Peak 15-min vehicle-miles of travel, VMT15	1653	veh-mi
Peak-hour vehicle-miles of travel, VMT60	5950	veh-mi
Peak 15-min total travel time, TT15	53.7	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

HCS+: Multilane Highways Release 5.5

Florence & Hutcheson
1321 Murfreesboro Road
Suite 325
Nashville, TN 37217
Phone: (615) 399-9090 Fax: (615) 399-9049

OPERATIONAL ANALYSIS

Analyst:	JHS
Agency/Co:	F&H
Date:	2/22/2011
Analysis Period:	2033
Highway:	SR 126
From/To:	Carolina Pottery to I-81
Jurisdiction:	
Analysis Year:	
Project ID:	Build Alternatives - Seg 3

FREE-FLOW SPEED

Direction	1		2	
Lane width	12.0	ft	12.0	ft
Lateral clearance:				
Right edge	6.0	ft	6.0	ft
Left edge	6.0	ft	6.0	ft
Total lateral clearance	12.0	ft	12.0	ft
Access points per mile	8		0	
Median type	Divided			
Free-flow speed:	Base		Measured	
FFS or BFFS	60.0	mph	60.0	mph
Lane width adjustment, FLW	0.0	mph	0.0	mph
Lateral clearance adjustment, FLC	0.0	mph	0.0	mph
Median type adjustment, FM	0.0	mph	0.0	mph
Access points adjustment, FA	2.0	mph	0.0	mph
Free-flow speed	58.0	mph	60.0	mph

VOLUME

Direction	1		2	
Volume, V	1550	vph	0	vph
Peak-hour factor, PHF	0.90		0.90	
Peak 15-minute volume, v15	431		0	
Trucks and buses	6	%	0	%
Recreational vehicles	0	%	0	%
Terrain type	Rolling		Level	
Grade	0.00	%	0.00	%
Segment length	0.00	mi	0.00	mi
Number of lanes	2		2	
Driver population adjustment, fP	1.00		1.00	
Trucks and buses PCE, ET	2.5		1.5	
Recreational vehicles PCE, ER	2.0		1.2	
Heavy vehicle adjustment, fHV	0.917		1.000	
Flow rate, vp	938	pcphpl	0	pcphpl

RESULTS

Direction	1		2	
Flow rate, vp	938	pcphpl	0	pcphpl
Free-flow speed, FFS	58.0	mph	60.0	mph
Avg. passenger-car travel speed, S	58.0	mph	60.0	mph
Level of service, LOS	B		A	
Density, D	16.2	pc/mi/ln	0.0	pc/mi/ln

Overall results are not computed when free-flow speed is less than 45 mph.

SECTION A

Previous Projects
Listed below are major projects from the previous TIP

ID	Project Location	Description	Status
TN-1	Fordtown Rd	Realignment	PE and ROW completed
TN-2	I-26 Welcome Center	Welcome Center and interchange	PE and ROW underway
TN-3 PIN# 103725	Intersection of US 11W/Indian Trail Dr	Install new signal and add median work at approaches	Construction complete, awaiting final voucher
TN-4 PIN# 101552.00	Netherland Inn Bridge	Bridge replacement	Construction complete
TN-5 PIN# 105467.00	SR 126 from Center St to I-81	Reconstruction/widening improvements	Currently in PE Phase
TN-7 PIN# 105528.00	SR 126 from Center St to I-81	Safety improvements along SR 126 using Optional Safety funds	Complete
TN-8 PIN #109896.00 & 109896.01	Intersection of SR 93 and Pavilion Dr	Install new signal and geometric improvements	Construction in Summer of 2010, awaiting final voucher
TN-9	Watauga Roundabout	Construct roundabout at 5 legged intersection with local funds	Complete
TN-10	Eastman Rd/Ryder Dr	Signalization with local funds	Complete
TN-11	Gibson Mill / W Ravine Rd	Realignment and relocation project funded by local/private partnership	W Ravine Rd extension complete; Gibson Mill realignment construction underway
TN-12 PIN# 030627.00	Adjacent to Netherland Inn	Construct Historic Transportation Museum using Enhancement funds	Construction complete, awaiting final voucher
TN-13	Warriors Path State Park	Park amenities	Construction complete, awaiting final voucher
TN-14 PIN# 030629.01	Sections of the Greenbelt	Construct multi-modal pathway	Section from Sullivan St to Center St Completed, section

Table 26: Recommended Street and Highway Improvement Projects									
Project No.	**Jurisdiction**	**Project Name (not prioritized)**	**Location (To and From)**	**Functional Classification**	**Project Purpose**	**Type Project**	**General Improvements**	**Additional Information**	**Estimated Cost**
MNA-12	Hawkins County	Hammond Avenue (Mt. Carmel)	Main Street to Valley Crest	Minor Arterial	Congestion Relief Access/Travel Time	Major Reconstruction	Reconstruct railroad overpass near Main Street, reconstruct to 3 lanes with wide shoulder	Center turn lane through railroad overpass to Valley Crest	$4,001,865
MNA-13	Sullivan County	Hemlock Road	SR 36 (Fort Henry Dr.) to Warriors Park	Minor Arterial	Safety and Related Economic Development	Minor Reconstruction	Widen shoulders and add bike lanes- selected locations	To serve Warriors Path State Park, at Fort Henry Dr. extend left turn lane, correct geometry at selected locations	$343,017
MNA-14	Hawkins County	Independence Avenue (Mount Carmel)	Intersections with Walnut, Tranbarger and Redwood	Minor Arterial	Safety and Related	Minor Reconstruction	Add left turn lanes at designated intersections	Widen shoulders at selected locations	$171,508
MNA-15	Kingsport	Industry Drive	Lincoln Street to Cherokee Street	Minor Arterial	Access/Travel Time	Minor Reconstruction	Improve transitions to Lincoln Street	Coordinate connections to Cherokee Street	$571,695
MNA-16	Sullivan County	Lebanon Road	Intersection of SR 36 (Fort Henry Dr.)	Minor Arterial	Congestion Relief	Minor Reconstruction	Extend left turn lane	Left turn lane length determined by queuing study	$114,339
MNA-17	Hawkins County	Main Street (Church Hill)	North Goshen Valley Road	Minor Arterial	Access/Travel Time Safety and Related	Major Reconstruction	Reconstruct railroad overpass	Replace antiquated railroad structure	$2,286,780
MNA-18	Hawkins County	Main Street (Mount Carmel)	Intersections with Laurel, Independence, Hammond, Englewood, Dover, Belmont	Minor Arterial	Safety and Related Congestion Relief	Intersection Improvements	Restrict turning movements with islands and pavement markings	Coordinate a traffic flow from U.S. 11W	$85,754
MNA-19	Sullivan County	McKellar Drive/State Route 75	State Route 36 to State Route 357	Minor Arterial	Congestion Relief Economic Development	Major Reconstruction	Reconstruct to 4 lanes with separated median	In current TDOT planning process	$28,584,749
MNA-20a	Kingsport Sullivan County	Memorial Blvd./State Route 126	Center Street to Cook's Valley Road	Minor Arterial	Safety and Related Congestion Relief	Major Reconstruction	Reconstruct to 4 lanes with grass median	Apply context sensitive solutions concepts	$22,867,800

Table 26: Recommended Street and Highway Improvement Projects									
Project No.	**Jurisdiction**	**Project Name (not prioritized)**	**Location (To and From)**	**Functional Classification**	**Project Purpose**	**Type Project**	**General Improvements**	**Additional Information**	**Estimated Cost**
MNA-20b	Kingsport Sullivan County	Memorial Blvd./State Route 126	Cooks Valley Road to I-81	Minor Arterial	Safety and Related Congestion Relief	Major Reconstruction	Reconstruct to 3 lanes and wide shoulder/clear zones, soften curbs	3 lanes/2 lanes/widen shoulders	$17,150,850
MNA-21	Kingsport	Moreland Drive	SR 93 (John B. Dennis Highway) and Jarrod Drive	Minor Arterial	Safety and Related	Minor Reconstruction	Improve and reconstruct approaches to John B. Dennis	Interchange improvements previously completed on ramps	$343,017
MNA-22	Kingsport	Netherland Inn Road	SR 36 (Center St.) to Ridgefields Road	Minor Arterial	Congestion Relief Economic Development	Major Reconstruction	Reconstruct to install 3rd/center turning lane	Coordinate with proposed roundabout	$1,143,390
MNA-23	Sullivan County	Orebank Road	Intersections with Woodbridge and Chestnut Ridge	Minor Arterial	Safety and Related	Minor Reconstruction	Add turning lanes to selected intersections	Widen shoulders at specified locations	$114,339
MNA-24	Kingsport	Ravine Road	Holston Valley Drive to Cassell Drive	Minor Arterial	Access/Travel Time	Major Reconstruction	Reconstruct transition area to new Stone Drive / Hospital Connector	Part of redevelopment corridors proposal for improved access to Holston Valley Drive	$343,017
MNA-25	Kingsport	Reservoir Road (Meadowview Parkway)	I-26 to Saratoga Rd	Minor Arterial	Economic Development	Major Reconstruction	Reconstruct to 3 lanes	Includes center turning lane and widened shoulders	$343,017
MNA-26a	Kingsport	Riverport Road	Holston River Sluice bridge to SR 126 (Wilcox Drive)	Minor Arterial	Safety and Related	Minor Reconstruction	Widen shoulders and clear zones	Include bike lane (part of bikeway system)	$571,695
MNA-26b	Kingsport	Riverport Road	Ridgefields Road to Holston River Sluice Bridge	Minor Arterial	Safety and Related	Major Reconstruction	Reconstruct to 3 lanes (center turning lane)	Coordinate with potential bikeway route	$571,695
MNA-27	Kingsport Sullivan County	Rock Springs Road / State Route 347	SR 36 (Ft Henry) to Moreland Dr I-26 to Snapps Ferry Road	Minor Arterial	Safety and Related Congestion Relief Access / Travel Time	Major Reconstruction	Widen Shoulders and improve clear zones Widen to 3 lanes and widen shoulders	Potential Phase I of further improvements to corridor leading to Exit 56 of I-81	$3,430,170
MNA-28	Kingsport	Sullivan Street, West	Charlemont to SR 36 (Lynn Garden Drive)	Minor Arterial	Congestion Relief Economic Development	Major Reconstruction	Reconstruct to 3 lanes (continuous turning lane)	Consider adding separated bike lane	$2,286,780

HISTORICAL LAND USE MAPS OF SULLIVAN COUNTY; 1953, 1976, AND 2006

Note: The initial map is a “reference mosaic” of the entire project area. SR 126 is outlined in red.

Six panels that include the project area are represented for the years 1953, 1976, and 2006 to provide a visual reference of land density changes in the project area.

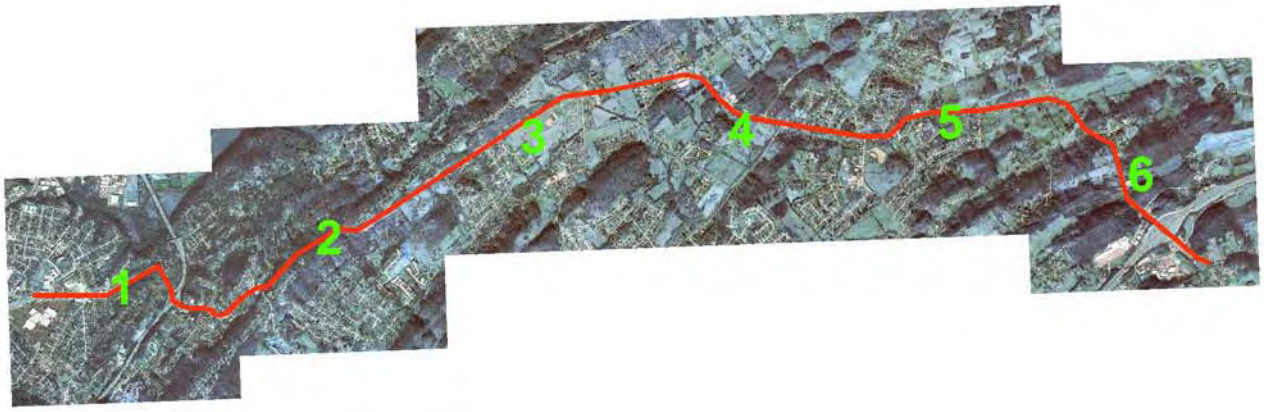
These maps have been placed in historic sequence by the six panels from E. Center St. to the area at Interstate 81. This allows the reader to view changes within the immediate area.

Environmental FirstSearch

Historical Aerial

2006 - Reference Mosaic

SR 126 , KINGSPORT TN 37664



Source:
Target Site (Latitude: 36.539471 Longitude: -82.454432)
Quad Name: Indian Springs
Date: 2006 - Reference Mosaic

Approximate Scale: 1 inch equals 6,667 feet

Legend

Target Area

1-6 Index Numbers

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Historical Aerial

1953 - 1

SR 126 , KINGSPORT TN 37664



Source:
Target Site (Latitude: 36.539471 Longitude: -82.454432)
Quad Name: Indian Springs
Date: 1953 - 1

Approximate Scale: 1 inch equals 1,125 feet

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Historical Aerial

1976 - 1

SR 126 , KINGSPORT TN 37664



Source:
Target Site (Latitude: 36.539471 Longitude: -82.454432)
Quad Name: Indian Springs
Date: 1976 - 1

Approximate Scale: 1 inch equals 1,125 feet

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Historical Aerial

2006 - 1

SR 126 , KINGSPORT TN 37664



Source:
Target Site (Latitude: 36.539471 Longitude: -82.454432)
Quad Name: Indian Springs
Date: 2006 - 1

Approximate Scale: 1 inch equals 1,108 feet

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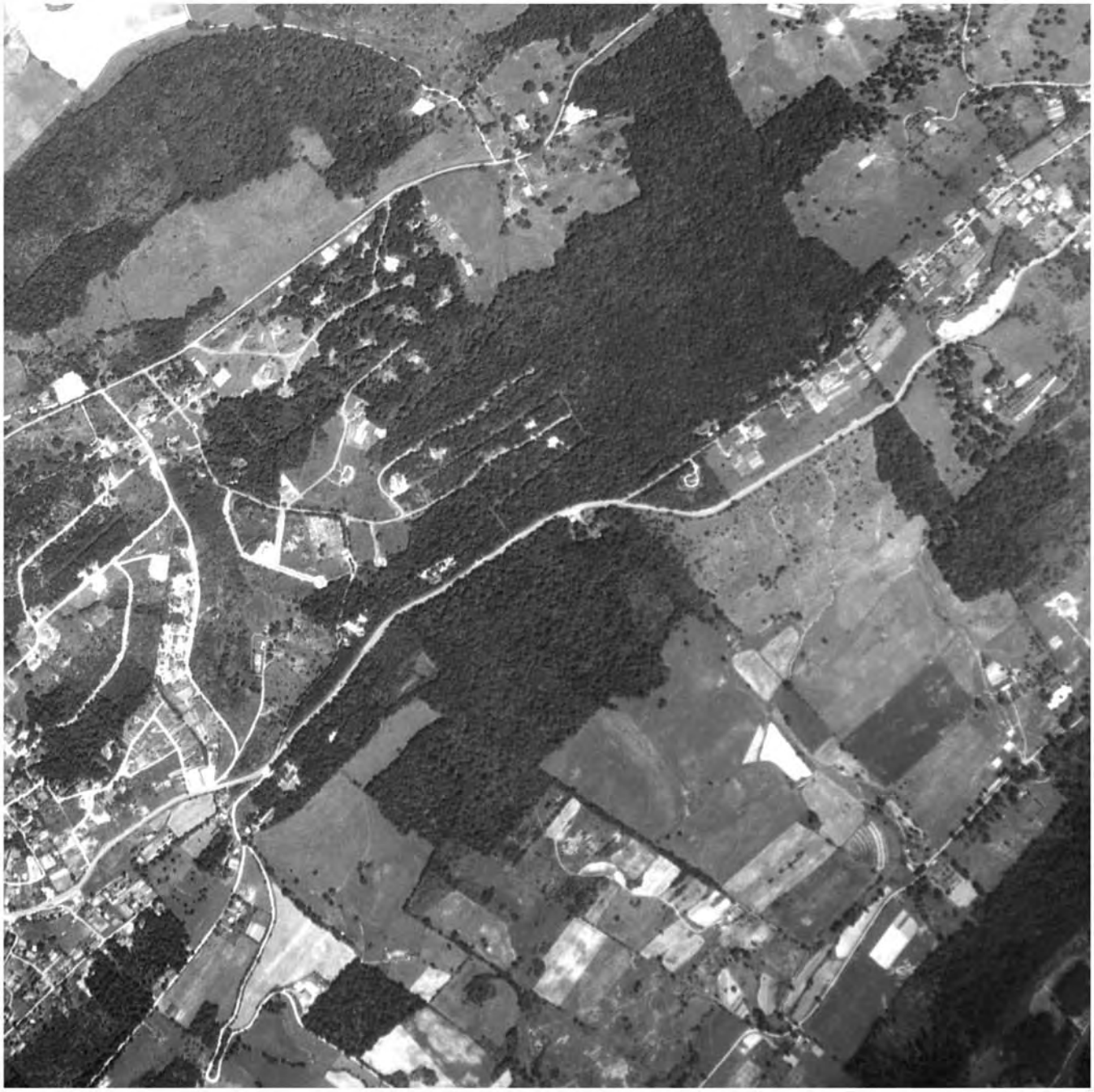
Historical Aerial

1953 - 2

SR 126 , KINGSPORT TN 37664



Source:
Target Site (Latitude: 36.539471 Longitude: -82.454432)
Quad Name: Indian Springs
Date: 1953 - 2

Approximate Scale: 1 inch equals 1,125 feet

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Historical Aerial

1976 - 2

SR 126 , KINGSPORT TN 37664



Source:
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Quad Name: Indian Springs
Date: 1976 - 2

Approximate Scale: 1 inch equals 1,125 feet

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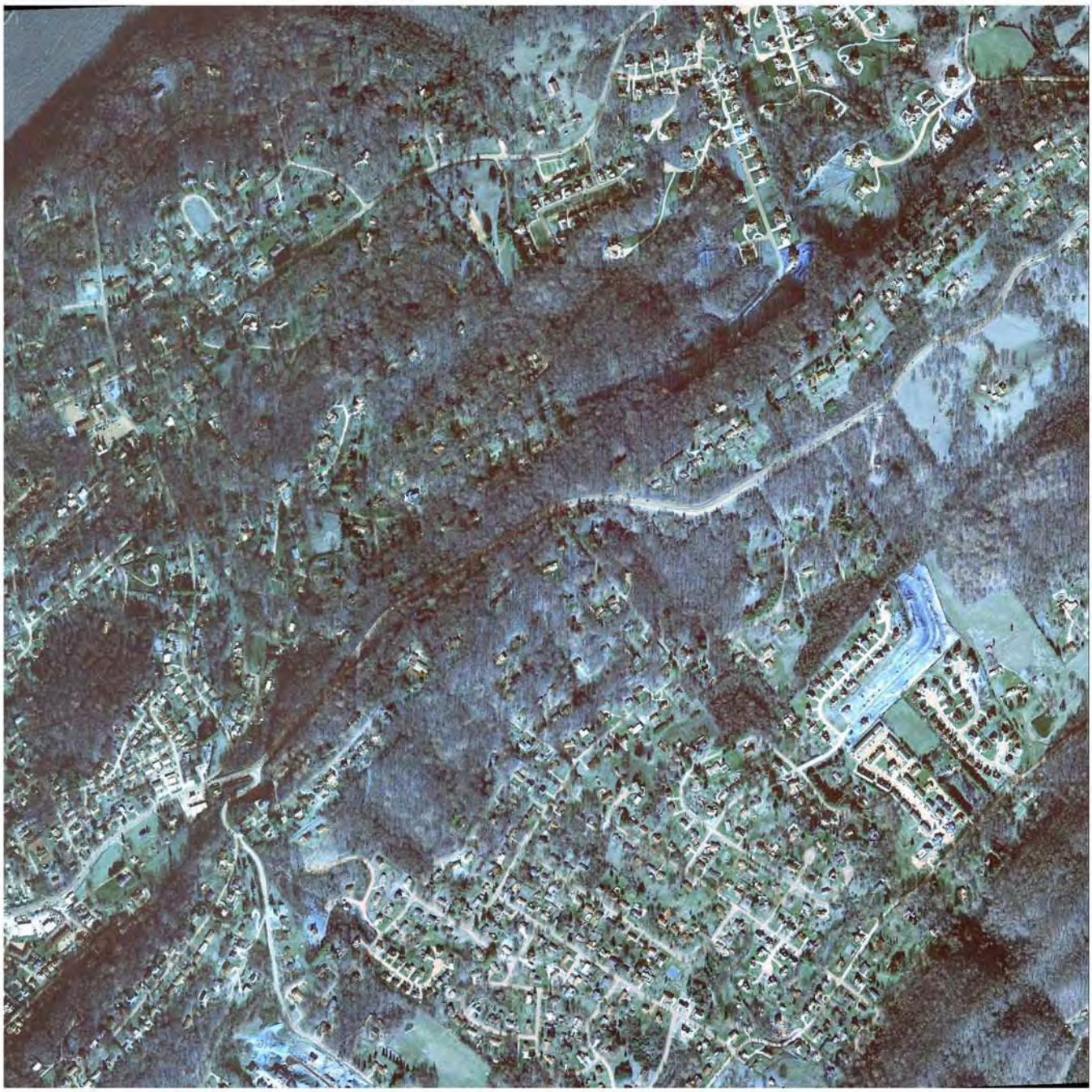
Historical Aerial

2006 - 2

SR 126 , KINGSPORT TN 37664



Source:
Target Site (Latitude: 36.539471 Longitude: -82.454432)
Quad Name: Indian Springs
Date: 2006 - 2

Approximate Scale: 1 inch equals 1,108 feet

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Historical Aerial

1953 - 3

SR 126 , KINGSPORT TN 37664



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Target Site (Latitude: 36.539471 Longitude: -82.454432)
Quad Name: Indian Springs
Date: 1953 - 3

Approximate Scale: 1 inch equals 1,125 feet

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Historical Aerial

1976 - 3

SR 126 , KINGSPORT TN 37664



Source:
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Quad Name: Indian Springs
Date: 1976 - 3

Approximate Scale: 1 inch equals 1,125 feet

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Historical Aerial

2006 - 3

SR 126 , KINGSPORT TN 37664



Source:
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Quad Name: Indian Springs
Date: 2006 - 3

Approximate Scale: 1 inch equals 1,108 feet

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Historical Aerial

1953 - 4

SR 126 , KINGSPORT TN 37664



Source:
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Quad Name: Indian Springs
Date: 1953 - 4

Approximate Scale: 1 inch equals 1,125 feet

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Historical Aerial

1976 - 4

SR 126 , KINGSPORT TN 37664



Source:
Target Site (Latitude: 36.539471 Longitude: -82.454432)
Quad Name: Indian Springs
Date: 1976 - 4

Approximate Scale: 1 inch equals 1,125 feet

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Historical Aerial

2006 - 4

SR 126 , KINGSPORT TN 37664



Source:
Target Site (Latitude: 36.539471 Longitude: -82.454432)
Quad Name: Indian Springs
Date: 2006 - 4

Approximate Scale: 1 inch equals 1,108 feet

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Historical Aerial

1953 - 5

SR 126 , KINGSPORT TN 37664



Source:

Target Site (Latitude: 36.539471 Longitude: -82.454432)
Quad Name: Indian Springs
Date: 1953 - 5

Approximate Scale: 1 inch equals 1,125 feet

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Historical Aerial

1976 - 5

SR 126 , KINGSPORT TN 37664



Source:
Target Site (Latitude: 36.539471 Longitude: -82.454432)
Quad Name: Indian Springs
Date: 1976 - 5

Approximate Scale: 1 inch equals 1,125 feet

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Historical Aerial

2006 - 5

SR 126 , KINGSPORT TN 37664



Source:
Target Site (Latitude: 36.539471 Longitude: -82.454432)
Quad Name: Indian Springs
Date: 2006 - 5

Approximate Scale: 1 inch equals 1,108 feet

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Historical Aerial

1953 - 6

SR 126 , KINGSPORT TN 37664



Source:
Target Site (Latitude: 36.539471 Longitude: -82.454432)
Quad Name: Indian Springs
Date: 1953 - 6

Approximate Scale: 1 inch equals 1,125 feet

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Historical Aerial

1976 - 6

SR 126 , KINGSPORT TN 37664



Source:
Target Site (Latitude: 36.539471 Longitude: -82.454432)
Quad Name: Indian Springs
Date: 1976 - 6

Approximate Scale: 1 inch equals 1,125 feet

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Historical Aerial

2006 - 6

SR 126 , KINGSPORT TN 37664



Source:
Target Site (Latitude: 36.539471 Longitude: -82.454432)
Quad Name: Indian Springs
Date: 2006 - 6

Approximate Scale: 1 inch equals 1,108 feet

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
RIGHT OF WAY DIVISION
SUITE 600, JAMES K. POLK BUILDING
NASHVILLE, TENNESSEE 37243-0337

GERALD F. NICELY
COMMISSIONER

PHIL BREDESEN
GOVERNOR

CONCEPTUAL STAGE RELOCATION PLAN

Sullivan Co.
Project No. 82085-1225-14; STP-126(10)
PIN NO. 105467.00

State Route 126 from East Center Street to I-81

GENERAL AREA AND PROJECT INFORMATION

The Tennessee Department of Transportation is proposing to improve State Route 126 from East Center Street in Kingsport to Interstate 81. The project proposes to improve the existing two (2) lane roadway which currently suffers from substandard geometry and sight distance issues.

Sullivan County is located in northeast Tennessee and has a population of 153,048 (2000 census data). Kingsport, where the project begins, has a population of 44,905 (2000 census data).

DISPLACEMENTS

RELOCATIONS	A	B
SINGLE-FAMILY UNITS	102	90
MULTI-FAMILY UNITS	135	69
MOBILE HOMES	4	3
BUSINESSES	43	30
NON PROFIT	1	1

DISPLACEMENT EFFECTS AND ANALYSIS

RESIDENTIAL:

This project is expected to cause either one hundred and sixty two (162) or two hundred forty one (241) residential displacements depending on the alternate chosen. The displacements are as follows:

Alternate A is expected to cause two hundred forty one (241) residential displacements consisting of one hundred two (102) single family residences, one hundred thirty five (135) units in multi-family housing, and four (4) mobile homes. A majority of the single family residences and mobile homes are believed to be owner occupied. All multi-family units are believed to be tenant occupied.

Alternate B is expected to cause one hundred sixty two (162) residential displacements consisting of ninety (90) single family residences, sixty nine (69) units in multi-family housing, and three (3) mobile homes. A majority of the single family residences and mobile homes are believed to be owner occupied. All multi-family units are believed to be tenant occupied.

A study of the real estate market in the project area indicates a market not capable of supporting the one hundred and sixty two (162) to two hundred forty one (241) residential displacements within the immediate project area. Expanding the study beyond the immediate project area reveals a market that can support this large number or relocations, but not easily. It will be difficult to adequately address the varying needs of all those displaced by this project. Numerous, substantial last resort housing payments could be expected.

BUSINESS:

This project is expected to cause either forty three (43) or thirty (30) non-residential displacements depending on the alternate chosen. The displacements are as follows:

Alternate A is expected to cause forty three (43) non-residential displacements.

Alternate B is expected to cause thirty (30) non-residential displacements.

The displaced businesses represent a variety of service and retail operations, including service stations, a lawn & garden center, restaurants, a health/fitness club, a dry cleaner, and retail sales. The above counts also include numerous apartment buildings that will likely be categorized as displaced businesses, as well as, a few vacant buildings that could be occupied prior to offers being made. All displaced businesses are believed to employ fifteen (15) or fewer.

A study of the real estate market in the project area reveals that it is unlikely that such a large number of business displacees can relocate in the immediate project area. Successful relocation will require many of the businesses to expand their search area beyond the immediate project area.

NON-PROFIT:

This project is expected to cause one (1) non-profit displacement on either alternate, Kingsport Fire Department, Station #3. The station employs fewer than ten (10) with three (3) per shift. Some difficulty is anticipated in relocating this station. Due to the nature of their "business", they will need to relocate in close proximity to their current location. Based on a study of the local real estate market, it believed that suitable replacement sites do exist but not in great numbers. This is complicated by the large number of businesses displaced by the project.

FARM:

This project is not expected to cause any farm displacements.

ASSURANCES

The Tennessee Department of Transportation will make relocation assistance available to all eligible persons impacted by this project, including residences, businesses, farm operations, non-profit organizations, and those requiring special services or assistance. The Regional Relocation Staff will administer the relocation program under the rules, policies, and procedures set forth in the Federal Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 as amended, the Uniform Relocation Assistance Act of 1972, implementing federal regulations, TCA 13-11-101 through 119, The State of Tennessee Relocation Assistance Brochure and Chapter Nine of the State of Tennessee, Department of Transportation, Right-of-Way Manual. TDOT's relocation program is practical and will allow for the efficient relocation of all eligible displaced persons in accordance with State and Federal guidelines.

Prepared By:

Gale Wagner – Transportation Manager 1 Date: 4/8/10

Approved By:

Joe Shaw – Transportation Manager 2 Date: 4/8/10

STATE OF TENNESSEE
TENNESSEE DEPARTMENT OF TRANSPORTATION
GEOTECHNICAL ENGINEERING SECTION
6601 CENTENNIAL BOULEVARD
NASHVILLE, TENNESSEE 37243-0360

June 29, 2009

Mr. Thomas Love, Trans. Mgr. 1
Environmental Planning Office
9th Floor - James K. Polk Building
505 Deaderick Street
Nashville, TN 37243

RE: Project No. 82085-1225-14
PIN No. 105467.00
Preliminary Site Location Study State Route 126 (Memorial Boulevard) Improvements from East Center Street to I-81
Sullivan County

Dear Mr. Love:

Enclosed is the Geotechnical Report on the above project.

If additional information is needed, please advise.

Sincerely,

M. Leonard Oliver, P.E.
Civil Engineering Manager 2

MLO:CJW
Enclosure

GES File No. 8212608

GEOTECHNICAL ENGINEERING

DIVISION OF MATERIALS AND TESTS

TDOT

GEOLOGIC REPORT

PRELIMINARY SITE LOCATION STUDY
STATE ROUTE 126 (MEMORIAL BOULEVARD)
IMPROVEMENTS
FROM EAST CENTER STREET TO I-81
STATE PROJECT NO. 82085-1225-14
PIN NO. 105467.00
SULLIVAN COUNTY

N



FILE NO 8212608

PRELIMINARY GEOLOGIC REPORT
SR 126 (MEMORIAL BOULEVARD)
FROM EAST CENTER STREET TO I-81
SULLIVAN COUNTY

PROJECT NO. 82085-1225-14
GES FILE NO. 8212608
PIN 105467.00

EXECUTIVE SUMMARY

A Preliminary Geologic Report has been prepared to address the proposed State Route 126 Memorial Boulevard improvement project in Sullivan County. The improvements will affect the boulevard, which connects East Center Street with Interstate 81. Limited field inspections of the Boulevard Route were conducted by driving reconnaissance in April and May 2009. Functional plans and various maps were also referenced during the desktop phase of the study.

Topography varies considerably throughout the project site, ranging from nearly level to steeply rolling terrain, and will require the implementation of cut slopes and fill embankments where appropriate in order to construct the proposed roadway. The cuts and fills will require specific consideration upon selection of the final alignment. They are assumed to be generally minor to moderate in height and thickness, respectively, although more substantial and possibly considerable cuts are expected in the steepest terrain.

Based on the results of the preliminary geologic study, pyritic material is not expected to be encountered on the proposed project. There do not appear to be any significant geotechnical issues that can not be addressed during the design or construction phases of the proposed project.

PRELIMINARY GEOLOGIC REPORT
SR 126 (MEMORIAL BOULEVARD)
FROM EAST CENTER STREET TO I-81
SULLIVAN COUNTY

PROJECT NO. 82085-1225-14
GES FILE NO. 8212608
PIN 105467.00

INTRODUCTION AND BACKGROUND

Pursuant to a request received by the Geotechnical Engineering Section from the Environmental Planning Office, the Preliminary Geologic Report presented herein has been prepared to address the proposed State Route 126 Memorial Boulevard improvement project. Limited field inspections of the proposed roadway improvement were conducted by driving reconnaissance in April and May 2009. Functional plans and geologic and topographic maps were utilized as sources of information. The existing route of SR 126 appears to follow that of old US 11W. A figure illustrating the improvement route is provided as an attachment.

Topography varies considerably throughout the project site, ranging from nearly level to hilly terrain, and will require the implementation of cut slopes and fill embankments where appropriate in order to construct the proposed improvements. The cuts and fills will require specific consideration upon selection of the final alignment. They are assumed to be generally minor to moderate in height and thickness, respectively, although more substantial and possibly considerable cuts are expected in the steepest terrain.

Numerous roadways and entrances intersect the proposed roadway improvement, and the roadway crosses several minor streams. A figure illustrating the proposed route of improvement, as provided to our office, is included as an attachment.

GEOLOGY AND SITE CONDITIONS

The proposed project site is located within the varied topography of the Valley and Ridge Physiographic Province, in the northwestern portion of Sullivan County. The regional topography is dominated by alternating linear valleys and ridges that trend generally northeast to southwest. Topography along the project area ranges from relatively flat to rolling to hilly terrain, and from nearly level to steep slopes. Varying degrees of residential and commercial development are present throughout the project.

Geologic data were derived from the site investigation and from review of available geologic maps. Geologic mapping indicates that the proposed project vicinity geology is relatively complex and varies across the project. The site vicinity is generally underlain by variable limestone, dolostone, and calcareous shale to clastic shale bedrock units of three primary geologic formations: Knox Group, Honaker Dolomite, and Conasauga Group, respectively. The geologic structure is largely controlled by gently to steeply dipping thrust faults that trend similarly to the valleys and ridges, and which result in the repetition of the aforementioned geologic formations at the ground surface.

Although karst topography is present within the project area, very few sinkholes have been mapped in the greater project region, with no significant sinkholes (if any) being indicated within the project limits. However, the underlying geologic formations, particularly the Knox Group and Honaker Dolomite, are susceptible to sinkhole development due to their carbonate (limestone and dolostone) composition, and sinkhole development or discovery of incipient sinkholes could occur at any time.

Based on observations made during the driving reconnaissance and from review of geologic mapping, pyritic material is not expected to be encountered on the proposed project.

Residual soils developed from weathering of the underlying geologic parent materials range in thickness from a thin mantle cover to a relatively thick layer of several feet or more. The typical residual soil, especially within the Knox Group and Honaker Dolomite formations, appears generally to be silty clay with variable amounts of chert and carbonate rock fragments. The residual soil derived from the Conasauga Group in the project region appears to contain much greater amounts of weathered shale fragments than the other formations, resulting in generally clayey silt soils.

A possible old borrow area was observed just west of Holiday Hills Road, adjacent to the westbound traffic lane. The surrounding ground and backslope appeared stable, with no curvature being noted in the large diameter trees at the top of the slope. No geotechnical concerns were noted with regard to this limited area.

Vegetation along the alignment ranges from grass cover to densely wooded areas. Several small streams are located along the alignment, with generally shallow to moderately steep banks and ranging from lightly to moderately vegetated to rock covered banks.

Based on observations made during the driving reconnaissance and from review of topographic mapping, it is anticipated that the majority of roadway improvements will require shifting into existing hillslopes, resulting in a greater number of constructed cut slopes than embankment fills. The greatest cuts are expected in areas with steeper terrain (for example, Sougan Hollow vicinity and the southern flank of Chestnut Ridge). Moderate to steep cuts may be encountered throughout the project, with less steep cuts being anticipated in areas of more gentle topography. Minor to moderate fills are also to be expected throughout the project, with deeper fill embankments being necessary along creek bottoms or in areas where the roadway is not shifted into the hillslopes.

Selected photographs conveying typical existing slope and soil conditions are provided in an attachment to this report.

RECOMMENDATIONS

The topography encountered along the alignment is varied, and a range of minor to possibly considerable cuts and fills are anticipated. A subsurface investigation program with auger drilling and potential core drilling should be conducted once the project is finalized.

Although no specific areas of unstable ground were observed, there is always the potential for slope stability problems to exist throughout the project, both within soil and within rock. Detailed evaluation of the actual slope conditions, particularly within cut slopes in steep or rocky terrain, will be necessary prior to determination of actual stability analyses and slope geometry. However, it appears that any slope stability problems, should they exist, may be addressed either during the design phase or the construction phase of the finalized project. Cut slopes in soil and rock that are anticipated to be higher than about 30 feet should be considered as candidate slopes for benching.

As mentioned, karst topography is present within the project area. However, very few sinkholes have been mapped in the greater project region, with no significant sinkholes (if any) being indicated within the project limits. The underlying geologic formations are susceptible to sinkhole development due to their composition, and sinkhole development or discovery of incipient sinkholes could occur during construction activities or at any other time.

Several small streams were observed throughout the alignment and will require consideration during the design and construction phases of the project. The impact from the streams will be greatest in areas of embankment fill along low-lying areas.

If further information is needed regarding the soil and geologic conditions along the roadway alignment, please contact the Region I Geotechnical Engineering Office.

George E. Sutton, Jr., PG
Geologist 3

Harry Moore, PG
Transportation Manager 1

M. Leonard Oliver, PE
Civil Engineering Manager 2

GS:kw
June 3, 2009
Attachment

ATTACHMENT

FIGURES

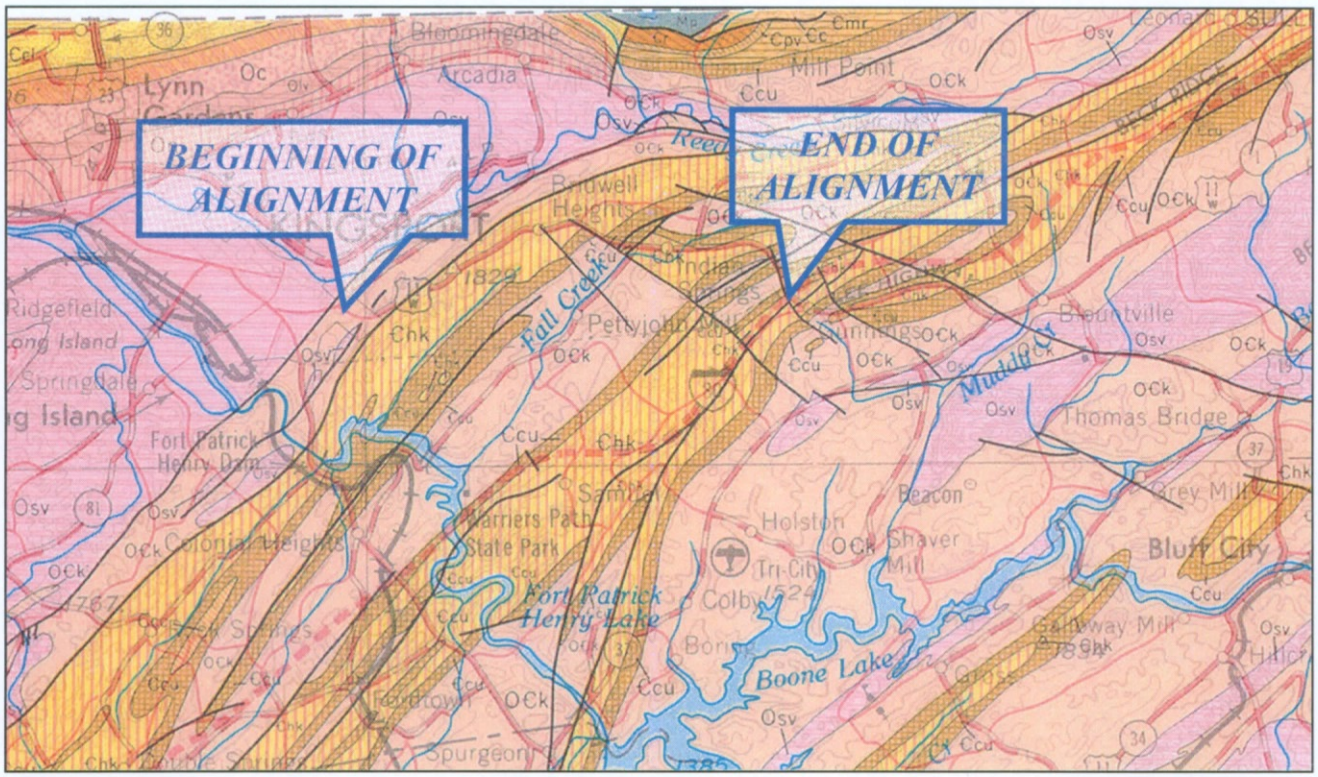

Figure 2: Geology Overview of the greater Project vicinity.

FIGURES



Figure 3: Viewing westbound from I-81.



Figure 4: Weathered cut slope at I-81.

FIGURES



Figure 5: Close-up of weathered cut slope material.



Figure 6: Close-up of weathered cut slope material.

FIGURES



Figure 7: Cut slope near beginning of project.



Figure 8: Typical topography with cut and fill areas.

FIGURES



Figure 9: Typical cut slope.



Figure 10: Typical sidehill cut section.

Aquatic and Terrestrial Ecology Technical Report

State Route 126

Memorial Boulevard from Center Street to I-81

Kingsport, TN



December 2008

Prepared for: TDOT Go.

Prepared by: HMB Professional Engineers, Inc

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Appendices
Appendix 1- Stream Photos, Stream Data Forms
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Appendix 3- Aerial Mapping showing Land Use Changes over Time

Exhibits
Exhibit 1- Stream Crossings displayed on a Topographic Map
Exhibit 2- Stream Crossings displayed on Aerial Photographs

1.0 Purpose and Need

The purpose and need of the proposed action to Memorial Blvd. (SR 126) seeks to improve road safety, provide better access to existing businesses, offer areas for safe non-motorized travel, and facilitate growth.

The improvements to Memorial Boulevard (SR 126) will include two-lane and four-lane segments as noted in Figure 1.0. The project distance is approximately 8.8 miles. The Tennessee Department of Transportation (TDOT) is administering the project. The Federal Highways Administration (FHWA) is designated as the lead federal agency.



Figure 1.0 – State Route 126 (Memorial Boulevard) Project Corridor

1.1 Existing Facility

The Memorial Boulevard is an urban minor arterial roadway linking downtown Kingsport, TN with residential communities to the east including Hillcrest, Cooks Valley, Bridwell Heights, Indian Springs and Gunnings. On the western edge of the project area, Memorial Blvd. is a 4 lane undivided roadway (without turn lanes) for a half-mile between Center St to a point just west of John B. Dennis Highway (SR 93) It briefly widens to a 4-lane divided road for a quarter mile where it passes through two signalized intersections at the ramp of SR 93. It then changes to 3-lanes with an outbound climbing lane (for slow moving trucks ascending the hill). After passing over Chestnut Ridge, and leaving the city limits, it narrows back to a 2-lane facility for a distance of 5 and three-quarter miles. It then widens again to a 4 lane divided facility for less than a fifth-mile at its intersection with I-81 (the eastern terminus of the project area) in order to provide access to the interstate and interstate related commercial establishments. Although two-thirds of the route is currently in the County, it has been identified as an urban route because it lies within the Kingsport Urban Growth Boundary.

The terrain within the project area is typical of the ridge and valley system that is common throughout East Tennessee. Kingsport is located in a basin framed by Bays

Mountain (2,400 ft) and Chestnut Ridge (1,940 ft). Most of the project area is located in the "heights" above the city, 110-375 ft higher than downtown.

2.0 Environmental Setting

These sections present the physical and environmental characteristics of the project area in reference to topography, geology, agricultural soil associations, and hydrogeology. This data has been collected from available literature and observations made during field investigations.

2.1 Topography, Soils, and Geology

Through coordination with the USDA (National Resources Conservation Service) soil survey data for Sullivan County, Tennessee was obtained and utilized to assess the soils in the area. The project area is situated in East Tennessee within the Ridge and Valley physiographic region. The area is comprised of Ordovician and Ordovician-Cambrian age limestone, dolomite, shale, chert, siltstone, sandstone and clay.

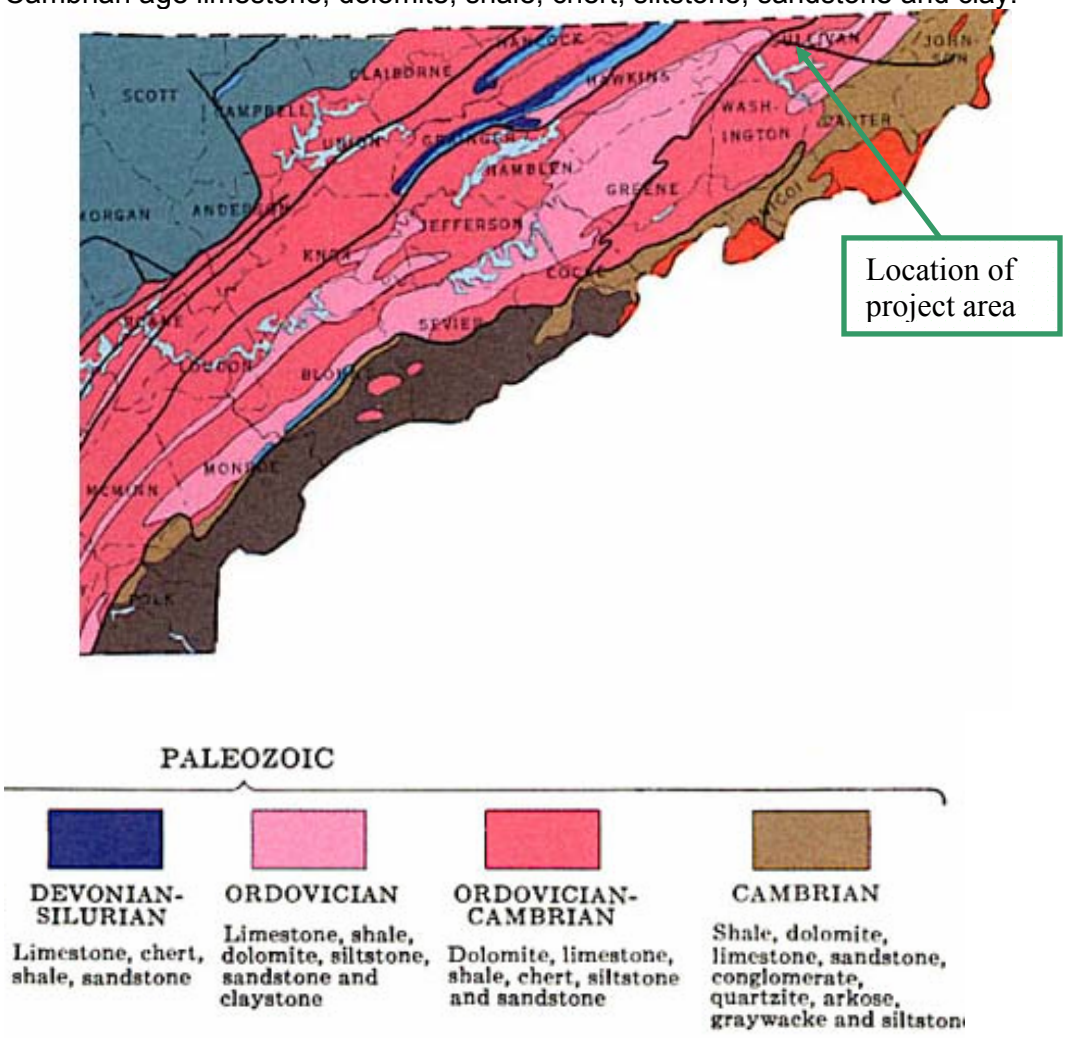


Figure 2.0 - Generalized Geologic Map of East Tennessee

Sullivan County is located in the northeastern portion of Tennessee. It is bordered on the north by Virginia, the south by Washington and Carter Counties, on the west by Hawkins County and on the east by Carter and Johnson Counties. Sullivan County is divided from east to west by the Holston River and the South Holston, Boone, and Fort Patrick Henry Reservoirs. The county is in two major land resource areas, the Southern Appalachian Ridges and Valleys and the Blue Ridge.

The project is located in west and central Sullivan County between the eastern limits of Kingsport and Interstate 81. This area of Sullivan County features rolling upland topography. Soils in the region include the Holston-Bellamy, Talbott-Bradyville, Collegedale-Etowah, and the Montevallo-Collegedale associations. Following are descriptions of the soil associations located within the project area.

Holston Bellamy
This soils association features moderately steep, well drained and moderately well drained areas that have loamy subsoil. The soils are located on high and low terraces in the Southern Appalachian Ridges and Valleys area. The slope and hazard of erosion are the major management concerns. Slopes range from 2 to 20 percent.

Talbott-Bradyville
This soils association feature moderately steep and steep, well drained soils that have clayey subsoil. They are intermingled with outcrops of limestone bedrock, and are located on limestone hills and uplands in the Southern Appalachian Ridges and Valleys area. The hazard of erosion, and the rock outcrops are the major management concerns. Slopes range from 12 to 35 percent and are typically smooth and convex.

Collegedale-Etowah
This soils association features moderately sloping to steep, well drained soils that have clayey and lumpy subsoil. They are situated on uplands and high terraces in the Southern Appalachian Ridges and Valleys area of Tennessee. Most of this association has been cleared and is used for pasture or hay land. Some row crops, such as corn, are evident. The slope and hazard of erosion are major management concerns in this association. Slopes range from 5 to 35 percent.

Montevallo-Collegedale
This soils association features moderately steep to extremely steep and well drained soils that have loamy, clayey subsoil. They are located on shale ridges and the adjacent limestone uplands in the Southern Appalachian Ridges and Valleys area. A few areas on the lower side slopes have been cleared and are used as pasture land. Much of the area of land within this association is wooded. The slope, the depth to bedrock, and the hazard of erosion are major management concerns. Slopes range from 12 to 80 percent.

2.2 Land Use

Land use in the east end of Sullivan County is transitioning from agricultural and scattered residential to higher density single and multi-family residential uses. Several areas feature low-density, suburban style family residences, an elementary school, churches and neighborhood retail uses.

The western portion of the project is located in an urban area that is heavily developed. The initial section from Center Street to the area just east of the John B. Dennis Highway near Stratford Road, is a blend of residential and commercial land use. From Stratford Road, residential development is located on both sides of SR 126 with scattered farmland until the Indian Hills area near Fall Creek. From Indian Hills to Overhill Drive, scattered residential land use exists with occasional commercial land uses. The area between Overhill Drive and the intersection of SR 126 with I-81 is a mix of commercial and residential land use. As the project moves east, and away from Kingsport, farm areas and the sizes of farms increase. The steeper slopes along the corridor are dominated by woodlands and farmland in the valleys. A shopping center and high school are located at the intersection of I-81. There are numerous churches and historic sites along the corridor.

Over the last 50 years Kingsport has experienced growth indicative of many rural communities in East Tennessee. Some land has been converted to residential, some to agriculture and some has been left to revert back to open-land and forest. A series of aerial photographs from 1953, 1976 and 2006 are in Appendix—3, and they provide an accurate depiction of the land use changes that have occurred over the last five decades.

2.3 Climate

Kingsport, TN climate is warm during summer when temperatures tend to be in the 70's and very cold during winter when temperatures tend to be in the 30's. The warmest month of the year is July with an average maximum temperature of 86.90 degrees Fahrenheit, while the coldest month of the year is January with an average minimum temperature of 26.20 degrees Fahrenheit. Temperature variations between night and day tend to be moderate during summer with a difference that can reach 22 degrees Fahrenheit, and moderate during winter with an average difference of 20 degrees Fahrenheit. The annual average precipitation at Kingsport is 44.44 inches. Rainfall in East Tennessee is fairly evenly distributed throughout the year. The wettest month of the year is July with an average rainfall of 4.64 inches.

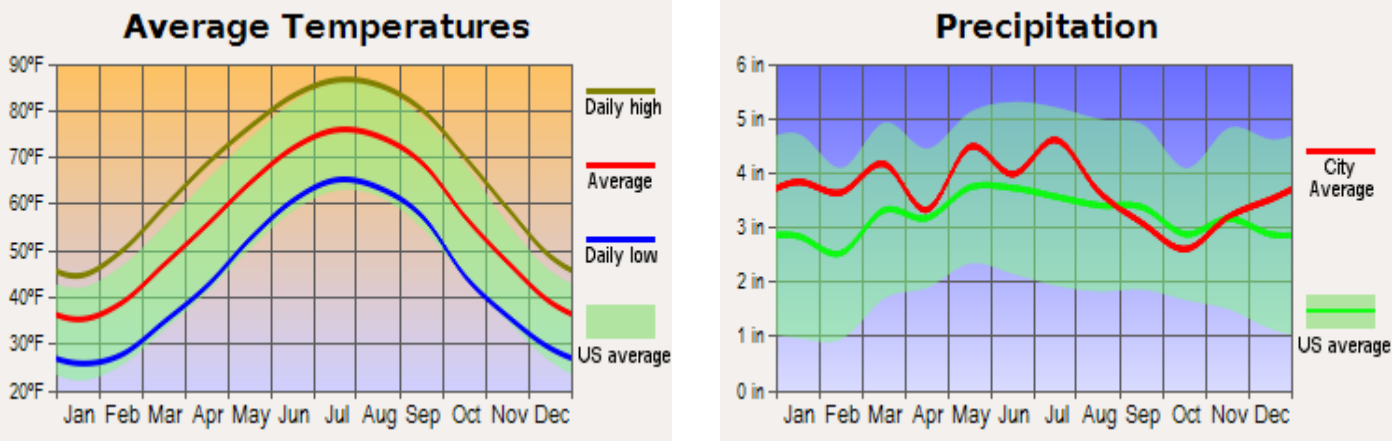


Fig 3.0- Average Temperature and Average Precipitation for Kingsport, TN

2.4 Watershed

The Holston River Watershed is located in East Tennessee and includes parts of Grainger, Hamblen, Hawkins, Jefferson, Knox, Sevier, Sullivan, and Union Counties (Figure 4.0).



Figure 4.0- General Location of the Holston River Watershed

The Holston River Watershed, designated 06010104 by the USGS, is approximately 999 square miles and drains to the Tennessee River. There are 16 dams inventoried by TDEC Division of Water Supply in the Holston River Watershed. As part of the Tennessee River drainage basin, the watershed includes 1,175.6 stream miles and 6,499 lake acres. Two designated state natural areas, two state parks, and three wildlife management areas are located in the watershed. Fifty-six rare plant and animal species have been documented in the watershed, including eight rare fish species, eleven rare mussel species, and one rare snail species. A portion of one stream in the Holston River Watershed is listed in the National Rivers Inventory as having one or more outstanding natural or cultural values. The three major forks of the Holston (its North, Middle, and South Forks) rise in southwestern Virginia and have their confluence near Kingsport, TN. From there the river flows roughly southwestward until it reaches its confluence with the French Broad River just east of downtown Knoxville, TN. This confluence is considered to be the headwaters of the Tennessee River.

2.5 Floral Community

The two main types of forests that exist in the project area are mixed mesophytic and upper hardwood. The mixed mesophytic habitat is found in the more sheltered ravines of the lower elevations and is dominated by woody species of White Basswood (*Tilia heterophylla*), American Beech (*Fagus grandifolia*), Yellow Buckeye (*Aesculus octandra*), Sugar Maple (*Acer saccharum*), Red Oak (*Quercus rubra*), Fraser Magnolia (*Magnolia fraseri*), conifers such as White Pine (*Pinus strobus*) and Eastern Hemlock (*Tsuga canadensis*), and White Ash (*Fraxinus americana*). The under-story vegetation includes successional species such as Flowering Dogwood (*Cornus florida*), Eastern Redbud (*Cercis canadensis*), Eastern Red Cedar (*Juniperus virginiana*) and Sassafras (*Sassafras albidum*). Rhododendron (*Rhododendron maximum*) and Mountain Laurel (*Kalmia latifolia*) dominate the slopes and stream sides. The upper hardwood habitat is found mainly at the higher elevations. The tree species are often stunted or broken due to exposure to strong winds. Species include Red Oak, American Beech (*Fagus grandifolia*), Sugar Maple (*Acer saccharum*), American Elm (*Ulmus americana*), and Virginia Pine (*Pinus virginiana*).

Some open land does exist in the project area. Areas such as cemeteries, abandoned farmland, hay fields, utility right-of-ways, etc. exhibit early-successional, grass-shrub habitat with the dominant plants being cool-season grasses (fescue, timothy, and orchard grass), a vast assortment of forbs, and shrubs such as blackberry and honeysuckle.

3.0 Alternatives

The Memorial Boulevard project was guided by a Community Resource Team (CRT) in the early planning and study process. The CRT conducted several meetings throughout a 21-month process. Through this early public involvement process, the CRT identified a number of common-ground recommendations for the project and majority decisions were made concerning the design elements and roadway cross sections. At each public involvement session, public opinion was surveyed. The results of the survey were reviewed, discussed and incorporated into the CRT's decision making process.

The preferred alternative includes several lane configurations through the project corridor. The alternative as recommended by the CRT in the Context Sensitive Solutions (CSS) Report includes eight sections. Three of the eight sections met with minority objections, which are noted in the CSS report. The first section originates at the western terminus, East Center Street and proceeds to a point at Orebank Road. It includes four travel lanes, and each is 11' in width. A raised, landscaped median and a 4' shoulder for bicycles are included. Sidewalks will be featured on both sides of the new Memorial Boulevard. A curb and gutter will be included, and a roundabout with flared right turns at Central Street is preferred. A second option, which would maintain the existing traffic signal, is still under consideration, but the roundabout is the preferred option. This four-lane, raised median section would continue to the Orebank Road area of the project. The design speed is 35 miles per hour for this section.

From Orebank Road to West of Hawthorne Street, the project would continue as four 11-foot lanes with a raised, landscaped median. The 4-foot shoulder for bikes would remain, as would sidewalks on both sides. Curb and gutter features would continue. A median opening would be included for the Sun Bridge Hillside Care and Rehabilitation Facility. Additional features in this section include closing Edens Ridge Road intersections, improving northbound John B. Dennis exit ramp to eastbound SR 126 to reduce vehicle conflicts. Right turns would use a traffic signal. This configuration would continue to a point west of Hawthorne Street. The design speed remains at 35 mph for this section.

Between a point west of Hawthorne Street to Harbor Chapel Road, the four 11' foot lanes would continue, but the median will change to a center turn lane in place of the raised, landscaped median. The 4' bikeway shoulder, sidewalks on both sides, and the urban curb and gutter would remain on this section of the proposed improvements to SR 126. The design speed would remain at 35 mph. This section proposes to close the intersection of Milton Court and SR 126, providing alternate access via Stratford and Kite Streets. Hawthorne Street's intersection with the south side of SR 126 would be closed. In addition the Kent Street intersection with SR 126 would be closed with access being provided via Kite Street. The Amy Avenue/Woodridge Avenue intersection would be closed and tied in to Glenwood Street. Trinity Lane would be closed and alternate access would be provided via a new connection near the cemetery (access to SR 126 via Orebank Road). The design speed would remain at 35 mph for this section.

From Harbor Chapel Road to a point east of Old Stage Road, the project would continue as four 11' lanes, featuring a raised landscaped median, 4' shoulder for bikeways, two sidewalks and a curb and gutter. The design speed in this section increases to 45 mph. The intersection of Tanglewood with existing SR 126 would be closed with Tanglewood now tying into Briarwood Road. Old Stage Road would be realigned to create a 90 degree intersection, effectively decreasing the steepness of the existing Old State Road.

The project would continue from the point east of Old Stage Road to Cooks Valley Road as four 11' lanes with a raised, landscaped median, two 8' stabilized shoulders (6' of paved shoulder on each side), no sidewalks, curbs or gutters and a design speed of 45 mph. Pedestrians and bicyclists would be allowed to use the 6' shoulders. This section would connect Holiday Hills Road to Shuler Drive via Parker Street, close the Shuler Drive intersection with existing SR 126, and redirect the traffic to Lemay Drive. In addition Chestnut Ridge Road and Eaton Station Road would be realigned, and left turn lanes onto Cooks Valley Road and Eaton Station Road would be provided.*

From Cooks Valley Road to Harrtown Road, the proposed project would continue as two 11' travel lanes with a center turn lane. The design speed would remain at 45 mph. The 6' stabilized shoulders on both sides would remain, but would not include gutter pans. Bicyclists would still use the 6' shoulders, but pedestrians would be provided with sidewalks on both sides of the proposed improvement. A curb and gutter would also be featured in this section. Red Robin Lane would be closed with access being provided via Bridwell Heights Road. Woodsway Drive, Island Road and Natchez Lane would be realigned.*

From Harrtown Road to Cochise Trail, the project would continue as two lanes, but each lane would be expanded to 12' wide. No median would be included in this section. The shoulders would be expanded to 10' (8' paved and 2' stabilized) in width allowing

pedestrians and bicyclists access. No sidewalks, curbs or gutters are included in this section. An 18" center line crossover deterrent using a rumble strip and striping would be incorporated with a reduced travel lane to accommodate the deterrent. Rumble strips will also be included between the travel lane and the shoulder. The design speed would remain at 45 mph for this section.

From Cochise Trail to Interstate 81, the project would include two 12' travel lanes, but no median, sidewalks, curbs or gutters. The center line crossover deterrent would continue, and an improved transition area from the four-lane SR 126 area at Interstate 81 will be featured. The 10' shoulders (8' paved/2' stabilized) would continue through this section allowing pedestrians and bicyclists access. The design speed would remain at 45 mph for this section. The project would require turn lane construction by future developers throughout this section. Gravel Top Road would be realigned on the western intersection with SR 126 while it would be closed east of the intersection.*

*A minority objection statement was included for three sections. The objections are included in the CSS Report and will also be included in the Environmental Impact Statement.

4.0 Methodology

The following section will outline the methods used while conducting the aquatic and terrestrial surveys for Sullivan County, Tennessee for the proposed action to Memorial Boulevard (SR 126).

4.1 Streams and Wetlands

Prior to conducting field surveys qualified biologists reviewed aerial and topographic maps of the project area to assess the potential impacts proposed activities would have on the streams and wetlands located within the "disturbed limits" of the project corridor. These limits were determined by adding 1000 feet to either side of the proposed centerline (total of 2000 ft corridor). NWI (National Wetland Inventory) maps were reviewed to locate potential wetlands in the area.

Field surveys of streams and wetlands were conducted in March and May of 2008. Six streams will be impacted by the proposed actions to Memorial Boulevard (SR 126). Four of the streams are classified as perennial (water flows in the stream at least 90 percent of the time in a well defined channel) and the other two are classified as intermittent (flow generally occurs only during the wet season or approximately 50 percent of the time). In addition to classifying the streams as either intermittent or perennial the streams were also rated for their quality using a Habitat Assessment Field Data Sheet for High Gradient Streams. Streams were assigned numerical scores based on several parameters (epifaunal substrate, embeddedness, velocity/depth regime, etc.) Pictures of the streams and their accompanying stream forms can be found in Appendix 1.

Several potential wetlands were located on NWI maps within the disturbed limits and biologists surveyed the area to ground-truth their existence.

4.2 Endangered and Threatened Species

There are 12 species federally listed as threatened or endangered in Sullivan County, Tennessee. The threatened species are; Bald Eagle (*Haliaeetus leucocephalus*), Spotfin chub (*Erimonax monachus*), and American Hart's tongue fern (*Phyllitis scolopendrium var Americana*). The endangered species include; Gray bat (*Myotis grisescens*), Tubercled-blossom pearlymussel (*Epioblasma torulosa torulosa*), Shiny pigtoe (*Fusconaia edgariana*), Fine-rayed pigtoe pearlymussel (*Fusconaia cuneolus*), Tan riffle shell (*Epioblasma walkeri*), Cumberland monkeyface pearlymussel (*Quadrula intermedia*), Green-blossom pearlymussel (*Epioblasma torulosa gubernaculum*), Littlewing pearlymussel (*Pegias fabula*), and the Duskytail darter (*Etheostoma percnurum*).

Bald Eagle (*Haliaeetus leucocephalus*)



The bald eagle (*Haliaeetus leucocephalus*) was first placed under Federal protection in 1940 under what would be later named the Bald and Golden Eagle Protection Act. The eagle continued to be protected when the Endangered Species Act of 1973 was enacted (Palmer-Ball 1996). Bald eagles are found over most of North America, from Alaska and Canada to northern Mexico. About half of the world's 70,000 bald eagles live in Alaska (USFWS 2007). There are two subspecies of bald eagles. The "southern" bald eagle, *Haliaeetus leucocephalus leucocephalus,* is found in the gulf states from Texas and Baja California across to South Carolina and Florida, south of 40 degrees north latitude. The "northern" bald eagle, *Haliaeetus leucocephalus alascanus,* is found north of 40 degrees north latitude across the entire continent.

Distinguished by a white head and white tail feathers, bald eagles are powerful birds that may weigh up to 14 pounds and have a maximum wingspan of 8 feet. Bald eagles live near rivers, lakes, and marshes where they can find fish, their staple food. Bald eagles will also feed on waterfowl, turtles, rabbits, snakes, and other small animals and carrion. Bald eagles require an ample food base, perching areas and nesting sites in order to form a breeding population. Eagles mate for life, choosing the tops of tall trees to build nests, which they typically use and enlarge each year. Breeding bald eagles typically lay 1-3 eggs once a year, and they hatch after about 35 days. The young eagles fly within three months and are on their own after four months.

The first major decline of bald eagles probably began in the mid to late 1800's coinciding with the decline of waterfowl, shorebirds and other prey. Eagles, like most predators, were shot because it was thought they posed a threat to small livestock and other wildlife. Congress placed them under federal protection in 1940 and banned killing,

selling or possessing the species. Shortly after World War II, DDT was hailed as a new pesticide to control mosquitoes and other insects. However, DDT and its residues washed into nearby waterways, where aquatic plants and fish absorbed them. Bald eagles, in turn, were poisoned with DDT when they ate the contaminated fish. The chemicals interfered with the bird's ability to produce strong, thick, eggshells, sometimes causing them to break during incubation. In addition to DDT some eagles died as a result of lead poisoning, after feeding on waterfowl containing lead shot. By 1963, with only 417 nesting pairs of bald eagles remaining, the species was flirting with extinction (USFWS 2007).

The first step taken on the road to recovery for the bald eagle was the banning of DDT in 1972. Until 1995, the bald eagle had been listed as endangered under the Endangered Species Act in 43 of the 48 lower states, and listed as threatened in Wisconsin, Minnesota, Michigan, Washington and Oregon. Also aiding bald eagle recovery was a 5- year program implemented in 1991 by the U.S. Fish and Wildlife Service to phase out the use of lead shot for waterfowl hunting. In July of 1995, the US Fish and Wildlife Service upgraded the status of bald eagles in the lower 48 states to "threatened." On June 28, 2007 the Interior Department took the American bald eagle off the Endangered Species List. The bald eagle will still be protected by the Migratory Bird Treaty Act and the Bald and Golden Eagle Protection Act. Based on the recent population figures, the USFWS estimates that there are more than 9700 nesting pairs in the United States (USFWS 2007).

Spotfin Chub (*Cyprinella monacha)*



The spotfin chub was formerly referred to the genus *Hybopis* because of its barbel. It is readily distinguished from other *Cyprinella* species not only by its barbell but also by its' more than 50 lateral line scales (most other species in the genus have around 40 lateral line scales). The body form of *Cyprinella monacha* is elongate, and somewhat triangular in cross section. The head is triangular and small in side view, with a distinctly inferior mouth. Breeding males have a brilliant turquoise-royal blue color along the back, side of the head, and upper part of the sides. During peak nuptial activity, the fins are tipped with milky white. Adults reach sizes varying from 2.2 to 3.3 inches (55 to 85 mm).

The spotfin chub prefers clear, medium-sized upland rivers with moderate or swift current over boulder substrates. Adults are found in swift current, while juveniles are often found in slow current over gravel (Jenkins and Burkhead, 1984). The species feeds primarily on immature aquatic insects (such as midges, blackflies, mayflies, and caddisflies) and lives for more than three years. The spotfin chub reportedly reproduces from late May to August and is a fractional crevice spawner on rocks, logs, and other similar cover.

This species is endemic to the Tennessee River drainage in upland habitats of Alabama, Tennessee, Georgia, North Carolina, and Virginia, but it has not been found for some time in Alabama and Georgia. In any case, its occurrence is rare throughout its range. In Alabama it has been collected at only two locations: in Little Bear Creek near Tuscumbia, Colbert County (one specimen), and in Shoal Creek near Florence, Lauderdale County (three specimens). The Little Bear Creek collection was made in 1937, the Shoal Creek collection in 1884 – in both cases before the Tennessee Valley Authority impounded the Tennessee River.

American Hart's Tongue Fern (*Phyllitis scolopendrium var. Americana)*

This fern has glossy leaves that are 20-40 cm in length. It can be found in well shaded and moist area of deciduous forests, or on rocks with high magnesium content, such as moist Silurian limestone. This fern has been listed as threatened by federal government since 1993. It is threatened by trampling, habitat alteration, timber removal, quarrying, and residential development. It is found only in Tennessee, Georgia, New York, Michigan, and Maryland.



Gray Bat (Myotis grisescens)



The Gray Bat was listed as endangered on April 28, 1976. The Gray bat is a year-around resident of caves, but may migrate seasonally between hibernacula and maternity caves. Caves selected by gray bats must meet certain temperature and environmental criteria; thus all caves are not suitable habitat. The bats are extremely loyal to particular home territories. Maternity caves are typically located within a kilometer of streams or reservoirs. Summer colonies may occupy a traditional area with several roosting caves. Adult pregnant female gray bats give birth to a single young in late May to early June. During this time the lactating females and their young amass in one specific traditional maternity cave. Males and non-reproductive females cluster in other caves within the colony home range. The primary population centers for the Gray bat are the southern Appalachian and the Ozark areas. Gray bats occur nearly statewide in Kentucky.

Because gray bats are year-round residents of caves and often inhabit particular caves in large numbers, they are highly vulnerable to human disturbance. Major disturbance events at one major hibernacula or maternity colony could potentially impact a substantial percentage of the total population. The major cause of decline of gray bats appears to be disturbance of caves (both hibernacula and maternity sites) by humans. Accumulation of toxins ingested through feeding and drinking (particularly insecticides) has been shown to cause mortality in gray bats. (Tuttle 1986). Other probable negative impacts to gray bat populations are siltation and other pollution of streams, which affect a major food component (insects with aquatic larva), and destruction of foraging habitat.

Recovery efforts for the gray bat have been fairly successful. The protection of caves through the use of appropriately designed cave gates as well as reduction in cave disturbance through signs and education is largely credited with the recent increases in the gray bat population. (Tuttle 1986).

Tubercled-blossom pearlymussel (*Epioblasma torulosa torulosa)*



The tubercled blossom pearlymussel (Epioblasma torulosa torulosa) is a medium-sized freshwater mussel, reaching about 3.6 in (9.1 cm) in shell length. The shell is irregularly egg shaped or elliptical, slightly sculptured, and corrugated with distinct growth lines. The outer surface is smooth and shiny; tawny, yellowish-green, or straw colored; and usually has numerous green rays. The inner shell surface is white to salmon-red. Females are generally larger than males and display a large, rounded marsupial swelling, which is often a darker green than the rest of the shell. The male and female are different in shape, but both are yellowish-brown with green rays. It was granted protection on June 14, 1967.

This mussel can be found in large rivers, in shallow sand and gravel shoals with rapid current.

Reproduction requires a stable, undisturbed habitat and a sufficient population of host fish to complete the mussel's larval development. When the male discharges sperm into the current, females downstream siphon in the sperm in order to fertilize their eggs, which they store in their gill pouches until the larvae hatch. The females then expel the larvae. Those larvae that manage to attach themselves to the gills of a host fish grow into juveniles with shells of their own. At that point they detach from the host fish and settle into the streambed, ready for a long (possibly up to 50 years) life as an adult mussel.

This mussel was once quite abundant throughout all the major rivers of the eastern U.S. and southern Ontario. It was particularly numerous in the Ohio River Valley. Increased turbidity and siltation caused by deforestation, and the spread of intensive agriculture were major factors in the decline of this species. The last individual collected was a freshly dead one found below Kanawha Falls, West Virginia in 1969.

There have been no known sightings since. The species may well be extinct. Other factors that probably helped in the expiration of this mussel include the building of dams and reservoirs and pollution from agricultural and industrial runoff (USFWS, 2008)

Shiny pigtoe (*Fusconaia edgariana*)



The shiny pigtoe is a medium-sized species distinguished by very smooth and shiny periostracum with prominent dark green to blackish rays on a yellow to brown background. Shiny pigtoes are known to live as long as 25 years. Shiny pigtoes from the North Fork Holston River ranged from 12.8 mm in length (3 years) to 59.8 mm in length (20+ years). Individuals aged between 7 to 20 years dominated the majority of the population, with very few specimens less than 6 years of age. The shiny pigtoe is typically a riffle species, found along riffles, fords, and shoals of clear, moderate to fast-flowing streams and rivers with a stable substrate (USFWS, 1984). It does not inhabit deep pools, impounded waters, or other lentic habitats. The species is usually observed well buried in the sand and gravel substrate during most of the year, and is more readily visible in early summer (USFWS, 1984). Although this species occurs only in riverine habitats, it can be affected (through run-off) by land uses and treatments on surrounding areas and is therefore "associated" with other habitats within the upper Tennessee River basin. Fish of the family Cyprinidae have been found to be host fish. Species found naturally encysted with shiny pigtoe glochidia in the North Fork Holston River were *Notropis galacturus* (whitetail shiner), *N. cornutus* (common shiner), *N. coccigenus* (warpaint shiner), and *N. telescopus* (telescope shiner). The most severe limiting factor to the species continues to be habitat degradation, primarily from siltation due to poor mining practices and other land uses. Predation, especially from muskrats, may also be a significant limiting factor. At a site on the North Fork Holston River, researchers observed the loss of 25% of the mussel population to predation by muskrats - during only a 2 year period.

Fine-rayed pigtoe pearlymussel (*Fusconaia cuneolus)*



The fine-rayed pigtoe pearlymussel, is of medium size, up to 2.5 in (6.4 cm) in length. This Cumberlandian species is distinguished by the many fine green rays that radiate over the yellowish green to light brown background of its ovoid shell. The hinged end of the shell is rounded, while the front margin is straight. The shell surface has a smooth, satiny appearance and is

indistinctly patterned with growth lines. The inner shell surface is white.

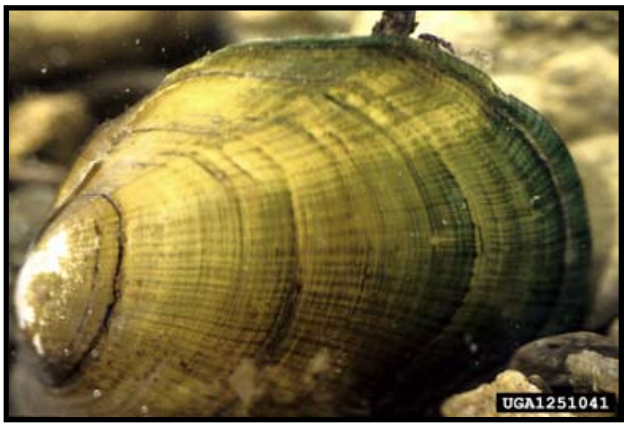
The fine-rayed pigtoe occupies shallow riffles and shoals of freshwater streams and rivers. It buries itself in the stream bottom in gravel or compacted sand but is rarely found in pools. It displays a higher tolerance for muddy bottoms than most other freshwater mussels.

Although this species was thought to have disappeared from its original collection site in the Holston River, four freshly dead specimens were collected along the river in 1982 at Cloud Ford, Tennessee. Industrial and chemical pollution from upstream at Saltville, Virginia, has severely degraded the water quality there. Live specimens have yet to be found but may indeed exist. Recent surveys in other upper Tennessee River tributaries, such as the Nolichucky, French Broad, Flint, and Buffalo Rivers, failed to locate specimens.

Construction of dams and multi-purpose reservoirs across the former range of the fine-rayed pigtoe has altered the free-flowing character of these rivers. Such impoundments produce siltation, fluctuating water temperatures, changes in water acidity, and lowered oxygen content. Impoundments also fragment the range of the species into isolated populations, which are then unable to interbreed.

Tan Riffleshell (*Epioblasma walkeri*)

The tan riffle shell is a medium sized mussel, seldom exceeding 60 mm in length. The shell is elliptical in shape with dull brownish or yellowish-green periostracum and numerous faint green rays evenly distributed over the valve surface. The tan riffle shell appears to occur in riffle or shoal areas of small to moderate-sized rivers with swift regular current and stable substrate of gravel and sand. It was collected in the Middle Fork Holston River in riffle habitat below a rock outcropping.



Destruction and alteration of habitat, and water quality degradation in the Tennessee and Cumberland River drainages are responsible for the decline and present status of the tan riffle shell. Dam construction appears to have had major impacts on populations of the tan riffle shell throughout its range. Cold water discharges have been, and continue to be, detrimental to mussel populations below dams. Dams on the Middle and South Forks of the Holston River have impounded those rivers in Sullivan Co., TN and Washington Co., VA, and eliminated habitat within its historic range. Closure of Wolf Creek Dam impounded the Cumberland River and the lower reaches of its major tributaries, including habitat of the tan riffle shell in Beaver Creek.

Cumberland monkeyface pearlymussel (*Quadrula intermedia*)



The Cumberland monkeyface pearlymussel is a medium-size bivalve with a greenish-yellow to yellowish-green shell that darkens with age. This species was listed as federally endangered in the U.S. in 1976 and a recovery plan created.

The cumberland monkeyface inhabits shallow riffle and shoal areas of headwater streams and bigger rivers. It prefers clean, fast-flowing water in shoal conditions, and has never been found in the deeper, pool-like, stretches of rivers, nor is it known from small streams. It has been found living in a sand and gravel substrate in 6 inches to 2 feet of water (Bogan and Parmalee, 1983).

Historically, this species was widespread in the upper Tennessee River system (Tennessee, Elk, Duck, Holston, north and south fork Holston, Nolichucky, French Broad, Tellico, Clinch, Powell Rivers) in Tennessee, Alabama, and Virginia, and possibly in the Cumberland River system (Cumberland, Big South Fork Cumberland, Caney Fork) where its former occurrence remains uncertain because the closely related *Quadrula tuberosa* was also reported there (USFWS, 1984). It was recently found alive in the Duck River in Tennessee. It appears to be extirpated from Alabama, although reintroduction efforts are underway (Mirarchi et al., 2004).

Green-blossom pearlymussel (*Epioblasma torulosa gubernaculum)*



The green-blossom pearlymussel (*Epioblasma torulosa gubernaculums*) is a compressed headwaters form of the tubercled-blossom pearlymussel (*E. torulosa torulosa*). It is a medium-sized Cumberlandian mussel with an irregularly elliptical shell, which is smooth and shiny, tawny or straw-colored, and patterned with numerous fine green rays. The shell surface is marked with distinct growth lines. The nacre (inner shell) color varies from white to salmon-red. The female's shell is generally larger than the male's and the posterior margin is more broadly rounded.

Green-blossom pearlymussels inhabit riffle and shoal areas in medium-sized (3-6 order) streams. Habitat is typically sand and gravel substrates with moderate to fast current (USFWS, 1983). This species does not occur in the impounded sections of rivers. It is apparently quite sedentary, appears to be intolerant of silt and pollution, and requires ample water flow and stable substrate for survival. The reproductive cycle of E. t. gubernaculum is presumed to be similar to other Epioblasma spp. The green-blossom pearlymussel is probably a long-term breeder (USFWS, 1983), spawning in late summer, retaining glochidia through fall and winter, and releasing glochidia the following spring/summer. The fish host(s) are unknown.

Coal waste from mining activities in southwestern Virginia has probably contributed to the decline of this species. Water pollution is another major factor that has apparently contributed to the decline of this species and other Epioblasma spp. Acid mine drainage in headwater tributaries of the Cumberland River has nearly eliminated the most diverse group of Epioblasma (USFWS, 1983). Numerous streams in the upper Tennessee drainage were polluted already by early twentieth century, and the mussel fauna was in a decline at that time (USFWS, 1983). The historic population in the Clinch River was likely affected by chemical spills in 1967 and 1970 at the APCO plant in Carbo, VA (Bates, 1978). All of the factors mentioned above (impoundments, siltation, coal mining, and water pollution) are still considered potential threats to the remaining population of E. t. gubernaculum. Other factors that may also be affecting this species include collecting by conchologists, invasion of the Asiatic clam (*Corbicula fluminea*), and the small gene pool which may be below minimum population size needed for sufficient genetic variation to respond to environmental changes.

Little-Wing Pearlymussel (*Pegias fabula*)



The little-wing pearlymussel was federally listed as endangered on November 14, 1988. This small freshwater mussel species has historically been reported to inhabit 27 river reaches in five states. The little-wing pearlymussel inhabits small to medium streams, having low turbidity, cool-water, and high to moderate gradient. It would typically be found near riffles on sand and gravel substrates or in sand pockets between rocks, cobbles, and boulders. The specific food habits of this species are unknown. The little-wing pearlymussel is a long-term brooder, holding glochidia from midsummer until the following spring. At least two fish species have been identified as glochidial hosts, greenside darter (*Etheostoma blennioides*) and emerald darter (*Etheostoma baileyi*). Two other fish species which are known to live in the habitat and range of the little-wing pearlymussel, and are suspected as glochidial hosts, are the sculpin (*Cottus carolinae*) and redline darter (*Etheostoma rufilineatum*).

Only a few small populations are known to survive in; Horse Lick Creek (Jackson and Rockcastle Counties, KY), Big South Fork Cumberland River (McCreary and Wayne Counties, KY), Little South Fork Cumberland River (McCreary and Wayne Counties, KY), and Cane Creek (Van Buren County, TN).

Duskytail Darter (*Etheostoma percnurum*)



The duskytail darter was listed as endangered on April 27, 1993. This small freshwater fish was once widespread throughout the middle reaches of the Cumberland River and the upper reaches of

the Tennessee River. The duskytail darter inhabits edges of gently flowing, shallow pools, eddy areas, and slow runs in clear waters of large creeks and medium sized rivers. Populations of the duskytail darter are believed to have greatly diminished such that only one known site on the Big South Fork of the Cumberland River has evidence of its inhabitance. Duskytail darter adults are 2.5 inches in length, typically dull in color, and classified as insectivores. Spawning season runs from April through May where the female will lay one cluster of 23- 200 eggs on the underside of a rock. The male duskytail darter protects and cares for the incubating eggs by cleaning them regularly. Population declines of the duskytail darter are due to poor water quality as a result of siltation and other pollutants.

4.3 Agency Coordination

Coordination with several federal and state agencies concerning the listed species, wetlands and streams, and critical habitats took place prior to any field surveys being conducted. HMB biologists sent coordination letters, maps and project descriptions to the following agencies; US Fish and Wildlife Service (Cookeville office), The Nature Conservancy (Nashville office), Tennessee Wildlife Resources Agency (Region 4 office), and Tennessee Dept. of Environment and Conservation (Johnson City Field Office) to determine if any direct or indirect impacts to endangered or threatened species could be foreseen by the proposed project. Information on the soils in the area of the proposed project was provided by the USDA-NRCS (Soil Survey of Sullivan County, TN CD-ROM). No correspondence with the United States Forest Service (USFS) or the National Park Service (NPS) was necessary, as the project area does not fall within the scope of either agency's purview. Please refer to Appendix 2 for federal and state agency coordination letters.

4.3.1 Agency Determinations

Correspondence with TWRA, USFWS, and TNC indicated no foreseen impacts to federally listed threatened or endangered species, and no wildlife management areas or critical habitats exist within the proposed project's corridor. In addition, no exemplary natural communities monitored by TDEC are within the project corridor. Additionally, TDEC listed no wild rivers, exceptional waters, special use waters, or wellhead protection areas that occur within the project's proposed corridor. No additional unique features were identified during fieldwork or during literature searches.

4.4 Invasive Species

Aside from habitat loss, invasive species pose perhaps the biggest threat to native ecosystems. Exotic invasive species are those that have evolved within one ecosystem and were introduced, either intentionally or accidentally, to another ecosystem. Because exotic species evolved elsewhere, they encounter few or no natural control mechanisms in their new location allowing them to spread easily and quickly. Exotic plants exhibit a particular dangerous hazard due to their capacity to reproduce rapidly. As they broaden their range, invasive plants disrupt available nutrients, occupy space, and out-compete native plants. Some exotic species introduce e pathogens or insect pests that can suddenly devastate an ecosystem, while the exotic species remains relatively immune to its effects. Oftentimes exotic plants are used in an ornamental setting but cross-over into an uncontrollable habitat. Some exotic plants, such as leafy spurge (*Euphorbia esula*)

may be poisonous to wildlife and livestock. Others, like Chinese chestnut (*Castanea mollisima*), don't offer quite the nutritional value of their native counterparts (*Castanea dentata*). All of these alterations negatively affect the ecosystem, often dramatically.

5.0 Results and Potential Impacts

5.1 Stream and Wetland Survey Results and Impacts

Qualified biologists surveyed the project area for perennial, intermittent and ephemeral streams that would be impacted by the proposed action to Memorial Boulevard (SR 126). The results of the survey were that six streams existed within the disturbed limits (1000 feet to either side of the proposed centerline) of the proposed action to Memorial Blvd. Two streams were classified as intermittent and four streams were classified as perennial. None of the streams surveyed received a Habitat Parameter score above 137, thus all were classified as "Poor" (RBP score ranging from 0-137) in quality.
It its likely that the impacts to these streams will be minimal. Culverts are already in place in areas where the streams cross SR 126. Extension of those culverts during construction is probable and will likely be the only measurable impacts. The proposed project does not impact any streams that are not already impacted by the existing facility. Conceptual construction limits will be included in the draft EIS for each build alternative. Impacts to the area streams and the appropriate levels of mitigation measures will be addressed, as appropriate in this final document.

Some cumulative and indirect impacts will likely result where the proposed corridor crosses the above-mentioned six tributaries. There will be a temporary loss of vegetation and increase in sedimentation from the exposed soil. In the areas of impact and, possibly, downstream, there may be increases in turbidity and a decrease in dissolved oxygen levels due to the loss of the stream's tree canopy. Construction activities within the stream channel could cause the temporary loss of in-stream habitat for aquatic flora and fauna. Changes to the stream channel can result in bank instability if the scouring process leads to degradation, or excessive sediment deposition results in aggradations (Rosgen 1996). Construction of this project will increase the potential traffic load of the road and the amount of pavement being maintained by TDOT. As such, streams could experience an increase in the amounts of chemical contaminants from maintenance activities such as de-icing agents and vehicle emissions. Petroleum byproducts, road salts, and heavy metals can detrimentally affect stream water quality. Maintaining a native vegetative buffer zone between the roadway and the streams or drainage ditches will alleviate some of the impacts to water resources in the area.

Indirect impacts as a result of this project could include an increase in downstream turbidity and a migration of aquatic species intolerant of major habitat alterations may occur.

Wetland surveys conducted in May 2008 yielded no jurisdictional wetlands within the disturbed limits of the proposed action to Memorial Blvd (SR 126). If further site visits are required based on alternatives presented in the draft EIS which reveal potential impacts to area wetlands, biologists will reassess their condition and proper mitigation will be taken to avoid any lasting adverse impacts.

5.2 Endangered and Threatened Species Survey Results and Impacts

Through coordination with several state and federal agencies it was concluded that no endangered or threatened species occur within the disturbed limits of the proposed action to Memorial Boulevard (SR 126) in Kingsport, TN and no foreseen impacts will occur to those species and their ecological communities (see Appendix 2 for coordination letters). Therefore, no extensive field surveys were required.

If during further field visits new or updated information is obtained concerning impacts to endangered and threatened species in the area, the proper agencies will be contacted and the project will be reassessed. If mitigation measures become necessary they will be included in the draft EIS.

Cumulative impacts to other wildlife in the area of the proposed action are present, but limited due to the fact that the majority of the proposed action occurs along an existing roadway. Mortality of wildlife may occur both during construction and highway operation, although roadway mortality is generally not believed to significantly affect wildlife populations under normal conditions (TDOT, 2004). Also increased noise could affect the utilization of habitats by wildlife (TDOT, 2004). Disruption of plant communities that occur along the proposed project's corridor could negatively impact local species by limiting available habitat for nesting and foraging. However, the majority of habitat loss usually occurs through the conversion of forested or open land to roadway, which in this case is very minimal since the proposed action is along an existing facility.

5.3 Invasive Species Results and Impacts

While conducting stream and wetland surveys and taking noise measurements along the corridor biologists took note of any invasive/exotic species that were present in the project area.

Invasive plants that have been identified in this project area include; Japanese honeysuckle (*Lonicera japonica*), mimosa/silk tree (*Albizia julibrissin*), kudzu (*Puereria montana*), Chinese privet (*Ligustrum sinense*), common privet (*Ligustrum vulgare*), multiflora rose (*Rosa multiflora*), tree of heaven (*Ailanthus altissima*), Queen Anne's lace/wild carrot (*Daucus carota*), paper mulberry (*Broussonetia papyifera*), cocklebur (*Xanthium strumarium*), bull-thistle (*Crisium vulgare*), Canada thistle (*Cirsium arvense*), ox-eye daisy (*Chrysanthemum leucathemum*), and fescue (*Festuca arundinacea*). Other exotic plant species are also likely to occur within the project area.

Field observations also noted the occurrence of several exotic animal species. Included in these were the Asian clam (*Corbicula fluminea*) and European Starlings (*Sturnus vulgaris*). Other exotic organisms are likely to be present within the project area, however, field surveys did not reveal their presence.

The potential of further damage to the existing natural community through the introduction of exotic or invasive species, beyond what is already present, is remote. Habitat fragmentation has already resulted in the establishment of these species in the

project area and surrounding region. Any potential impacts, by invasive species, can be minimized through the utilization of native, woody vegetation on cut and fill slopes. Additionally native, herbaceous forbs and grasses should be planted in the medians and along the shoulders of the Build Alternative that has been selected for construction.

5.4 Land Use Impacts

Aerial maps were reviewed between the 1950s and 2006 for the entire project area. The growth patterns and land use trends within the project corridor reflect a traditional outgrowth from a city. The densest growth remains close to the city and gradually lessens as distance increases along major roadways. Deviations to this trend are also traditional. In the case of the SR 126/Memorial Boulevard project, the one noticeable deviation is the limited commercial growth that has occurred at the interchange of SR 126 and I-81. A small area surrounding the interchange has transitioned from agricultural to highway-commercial and limited light industrial land use exists as well.

Land use in the initial 25 to 30 percent of the project corridor is located in the city of Kingsport and suburban areas on the perimeters of the city limits. This area is primarily urban in nature. No additional indirect or cumulative impacts are anticipated to measurably alter land uses in ways that would further impact aquatic and terrestrial species.

The remaining 70 to 75 percent of the project area has been slowly changing over from agricultural/rural land uses to primarily residential land use with a small percentage of commercial development. One concentrated area of commercial land use is located within the last 0.3 miles of the project within the area of the existing interchange of SR 126 with Interstate 81. Aerial maps were reviewed between the 1950s and 2006 to verify these land use trends. The John B. Dennis Highway was added in the 1970s in Kingsport. The aerial photographs also indicate that tree canopies have surprisingly increased in certain areas. When reviewing this situation it was concluded that farms within the area that were traditional, small family farms which have followed the national trend of failing to provide an adequate living for their occupants. As these agricultural fields have become fallow over the past fifty years, early-succesional tree species have reclaimed some of their previous areas. In addition, many of the neighborhoods that have arisen in the past have apparently chosen to keep as many trees as possible from being removed.

It is unlikely over the next 25 years that the project will accelerate development measurably beyond the current rate of changes due to efforts to keep the improved roadway within its existing alignment. These efforts, and the lack of direct impacts to threatened and endangered species and their habitats, indicate that indirect and cumulative impacts to the area are minimal.

6.0 Conclusions & Mitigation Measures

6.1 Aquatic Conclusions & Mitigation Measures

To protect water quality and aquatic species it is necessary stream crossings should be made perpendicular to the direction of flow, and culverts should be constructed wide enough to pass high flows and should be placed so as not to restrict the movement of

aquatic vertebrates within the stream. Mitigation will be required for all stream impacts which do not meet requirements for general TDEC-Division of Water Aquatic Resources Alternations permits (ARAP) and for certain Nationwide Section 404 permits (TDOT, 2004).

Coordination with TDEC Division of Water for a potential Water Quality Certification (401) prior to disturbance of streams is required. A 401 Water Certification states that any discharge into surface waters will comply with the aquatic protection requirements of the State.

A Section 404 Dredge and Fill permit will be required from the U.S. Army Corps of Engineers prior to any construction work on the proposed project. Permittees must meet all conditions, restrictions, and notification procedures required prior to any work on the proposed project.

Erosion control devices should limit any adverse effects to area streams. Maintaining the vegetated buffer zone between the roadway and the streams will minimize the impact of non-point source pollution to the streams. Also, drainage ditches should direct road-runoff into appropriate areas to allow the non-point source pollutants to filter out of the drainage. To minimize potential runoff impacts to the project streams, all appropriate Best Management Practices in accordance with the FHWA erosion control guidelines will be implemented to ensure that water quality in the project area is not adversely impacted during construction. Along stream corridors it is important to leave mature canopy when possible and allow establishment of a dense herbaceous layer of native species. Revegetating disturbed areas as soon as possible with native species should help contain erosion impacts as well as add diversity to the floral community and discourage invasive/exotic species growth.

If these mitigation measures are utilized, there should be no cumulative impacts to the aquatic communities in the project area as a result of the construction of this proposed project.

6.2 Terrestrial Conclusions & Mitigation Measures

6.2.1 Flora

Mitigation for the disturbances of the floral community should include revegetating the areas with native plants as soon as possible. Leaving soil exposed to the elements for a prolonged period of time will increase the likelihood of invasion of the area by invasive/exotic plant species and could potentially cause erosion and sedimentation problems in nearby area streams. Plants chosen for the site should be compatible with the hydrology, geology, and land use of the surrounding landscape. Due to the fact that the proposed project is along an existing facility the majority of any removal of native vegetation will occur along the shoulders and in the medians, and will remain minimal.

6.2.2 Wildlife

As habitats are encroached upon most wildlife will adjust to changes in their environment. Displaced wildlife species will move to habitats in nearby areas for refuge, therefore circumventing any adverse impacts to their habits and behavior. Although some measures can be taken to ensure wildlife aren't adversely affected.

Various successional vegetative stages should be considered when replacing native species to prevent the landscape from slipping into a monoculture state, thereby decreasing floral diversity. Since the proposed project is along an existing facility, absent of extensive forested areas, the impacts to wildlife will be minimal and extensive mitigation measures are not necessary.

Vegetative removal during fall and early winter months will prevent displacement of many species during their respective nesting seasons.

To minimize potential run-off impacts to streams (and subsequent wildlife that utilize those streams) during and after construction, all appropriate BMP's in accordance with the FHWA should be implemented to control sedimentation and debris within contributing drainages.

6.2.3 Threatened & Endangered Species

No threatened and endangered species were determined to exist within the project area and therefore none will be impacted by the proposed project. As a result no mitigation measures are required. If any threatened or endangered flora or fauna are located during future site visits or during construction immediate consultation with USFWS, TWRA and TDOT biologists will occur and protection of the species and their habitats will take place.

6.3 No Build Alternative

The No-build alternative would result in no adverse ecological impacts thereby eliminating any mitigation from taking place.

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Appendix 1- Stream Photos, Stream Data Forms



S01i



S02p



S03p



S04p



S05p



Spring flowing into S05p



S06i

HABITAT ASSESSMENT FIELD DATA SHEET—HIGH GRADIENT STREAMS (FRONT)
MODIFIED FOR USE WITH COE EASTERN KENTUCKY STREAM ASSESSMENT PROTOCOL

STREAM NAME S01i	LOCATION Sullivan Co. TN	
HWY STA #_____ SITE #_____	STREAM CLASS Int.	
LAT 36.5457 _____ LONG 82.4350 _____	RIVER BASIN	
PICTURE #	AGENCY	
INVESTIGATORS of HMB MTM, AL		
FORM COMPLETED BY MTM	DATE 3/21/08 TIME 9:15 AM PM	SPECIFIC CONDUCTIVITY 576
DOMINANT TREE SPECIES N/A		

Parameters to be evaluated in sampling reach

Habitat Parameter	Condition Category			
	Optimal	Suboptimal	Marginal	Poor
1. Epifaunal Substrate/ Available Cover	Greater than 70% of substrate favorable for epifaunal colonization and fish cover; mix of snags, submerged logs, undercut banks, cobble or other stable habitat and at stage to allow full colonization potential (i.e., logs/snags that are not new fall and not transient).	40-70% mix of stable habitat; well-suited for full colonization potential; adequate habitat for maintenance of populations; presence of additional substrate in the form of newfall, but not yet prepared for colonization (may rate at high end of scale).	20-40% mix of stable habitat; habitat availability less than desirable; substrate frequently disturbed or removed.	Less than 20% stable habitat; lack of habitat is obvious; substrate unstable or lacking.
SCORE	20 19 18 17 16	15 14 13 12 11	10 9 **X** 7 6	5 4 3 2 1 0
2. Embeddedness	Gravel, cobble, and boulder particles are 0-25% surrounded by fine sediment. Layering of cobble provides diversity of niche space.	Gravel, cobble, and boulder particles are 25-50% surrounded by fine sediment.	Gravel, cobble, and boulder particles are 50-75% surrounded by fine sediment.	Gravel, cobble, and boulder particles are more than 75% surrounded by fine sediment.
SCORE	20 19 18 17 16	15 14 13 12 11	10 **X** 8 7 6	5 4 3 2 1 0
3. Velocity/Depth Regime	All four velocity/depth regimes present (slow-deep, slow-shallow, fast-deep, fast-shallow). (Slow is < 0.3 m/s, deep is > 0.5 m.)	Only 3 of the 4 regimes present (if fast-shallow is missing, score lower than if missing other regimes).	Only 2 of the 4 habitat regimes present (if fast-shallow or slow-shallow are missing, score low).	Dominated by 1 velocity/ depth regime (usually slow-deep).
SCORE	20 19 18 17 16	15 14 13 12 11	10 9 8 7 **X**	5 4 3 2 1 0
4. Sediment Deposition	Little or no enlargement of islands or point bars and less than 5% of the bottom affected by sediment deposition.	Some new increase in bar formation, mostly from gravel, sand or fine sediment; 5-30% of the bottom affected; slight deposition in pools.	Moderate deposition of new gravel, sand or fine sediment on old and new bars; 30-50% of the bottom affected; sediment deposits at obstructions, constrictions, and bends; moderate deposition of pools prevalent.	Heavy deposits of fine material, increased bar development; more than 50% of the bottom changing frequently; pools almost absent due to substantial sediment deposition.
SCORE	20 19 18 17 16	15 14 13 12 11	10 **X** 8 7 6	5 4 3 2 1 0
5. Channel Flow Status	Water reaches base of both lower banks, and minimal amount of channel substrate is exposed.	Water fills >75% of the available channel; or <25% of channel substrate is exposed.	Water fills 25-75% of the available channel, and/or riffle substrates are mostly exposed.	Very little water in channel and mostly present as standing pools.
SCORE	20 19 18 17 16	15 14 13 12 **X**	10 9 8 7 6	5 4 3 2 1 0

COMMENTS: Flows along side existing SR126. Flows into S02p.□ Width-- 2' Depth--6-12".

HABITAT ASSESSMENT FIELD DATA SHEET—HIGH GRADIENT STREAMS (BACK)

Parameters to be evaluated broader than sampling reach

Habitat Parameter	Condition Category			
	Optimal	**Suboptimal**	**Marginal**	**Poor**
6. Channel Alteration	Channelization or dredging absent or minimal; stream with normal pattern.	Some channelization present, usually in areas of bridge abutments; evidence of past channelization, i.e., dredging, (greater than past 20 yr) may be present, but recent channelization is not present.	Channelization may be extensive; embankments or shoring structures present on both banks; and 40 to 80% of stream reach channelized and disrupted.	Banks shored with gabion or cement; over 80% of the stream reach channelized and disrupted. Instream habitat greatly altered or removed entirely.
SCORE	20 19 18 17 16	15 14 13 12 11	10 X 8 7 6	5 4 3 2 1 0
7. Frequency of Riffles (or bends)	Occurrence of riffles relatively frequent; ratio of distance between riffles divided by width of the stream <7:1 (generally 5 to 7); variety of habitat is key. In streams where riffles are continuous, placement of boulders or other large, natural obstruction is important.	Occurrence of riffles infrequent; distance between riffles divided by the width of the stream is between 7 to 15.	Occasional riffle or bend; bottom contours provide some habitat; distance between riffles divided by the width of the stream is between 15 to 25.	Generally all flat water or shallow riffles; poor habitat; distance between riffles divided by the width of the stream is a ratio of >25.
SCORE	20 19 18 17 16	15 14 13 12 11	X 9 8 7 6	5 4 3 2 1 0
8. Bank Stability (score each bank) Note: determine left or right side by facing downstream.	Banks stable; evidence of erosion or bank failure absent or minimal; little potential for future problems. <5% of bank affected.	Moderately stable; infrequent, small areas of erosion mostly healed over. 5-30% of bank in reach has areas of erosion.	Moderately unstable; 30-60% of bank in reach has areas of erosion; high erosion potential during floods.	Unstable; many eroded areas; "raw" areas frequent along straight sections and bends; obvious bank sloughing; 60-100% of bank has erosional scars.
SCORE ___ (LB)	Left Bank 10 9	8 X 6	5 4 3	2 1 0
SCORE ___ (RB)	Right Bank 10 9	8 X 6	5 4 3	2 1 0
9. Vegetative Protection (score each bank)	More than 90% of the streambank surfaces and immediate riparian zone covered by native vegetation, including trees, understory shrubs, or nonwoody macrophytes; vegetative disruption through grazing or mowing minimal or not evident; almost all plants allowed to grow naturally.	70-90% of the streambank surfaces covered by native vegetation, but one class of plants is not well-represented; disruption evident but not affecting full plant growth potential to any great extent; more than one-half of the potential plant stubble height remaining.	50-70% of the streambank surfaces covered by vegetation; disruption obvious; patches of bare soil or closely cropped vegetation common; less than one-half of the potential plant stubble height remaining.	Less than 50% of the streambank surfaces covered by vegetation; disruption of streambank vegetation is very high; vegetation has been removed to 5 centimeters or less in average stubble height.
SCORE ___ (LB)	Left Bank 10 9	8 7 X	5 4 3	2 1 0
SCORE ___ (RB)	Right Bank 10 9	8 7 X	5 4 3	2 1 0
10. Riparian Vegetative Zone Width (score each bank riparian zone)	Width of riparian zone >18 meters; human activities (i.e., parking lots, roadbeds, clear-cuts, lawns, or crops) have not impacted zone.	Width of riparian zone 12-18 meters; human activities have impacted zone only minimally.	Width of riparian zone 6-12 meters; human activities have impacted zone a great deal.	Width of riparian zone <6 meters: little or no riparian vegetation due to human activities.
SCORE ___ (LB)	Left Bank 10 9	8 7 6	5 4 3	2 1 X
SCORE ___ (RB)	Right Bank 10 9	8 7 6	5 4 3	2 1 X

Total Score 88

HABITAT ASSESSMENT FIELD DATA SHEET—HIGH GRADIENT STREAMS (FRONT)
MODIFIED FOR USE WITH COE EASTERN KENTUCKY STREAM ASSESSMENT PROTOCOL

STREAM NAME S02p	LOCATION Sullivan Co. TN	
HWY STA # ca ??+?? SITE #	STREAM CLASS Per.	
LAT 36.5454 LONG 82.4334	RIVER BASIN	
PICTURE #	AGENCY	
INVESTIGATORS of HMB MTM, AL		
FORM COMPLETED BY MTM	DATE 3/20/08 TIME 2:10 AM PM	SPECIFIC CONDUCTIVITY 567
DOMINANT TREE SPECIES Sycamore		

Parameters to be evaluated in sampling reach

Habitat Parameter	Condition Category			
	Optimal	**Suboptimal**	**Marginal**	**Poor**
1. Epifaunal Substrate/ Available Cover	Greater than 70% of substrate favorable for epifaunal colonization and fish cover; mix of snags, submerged logs, undercut banks, cobble or other stable habitat and at stage to allow full colonization potential (i.e., logs/snags that are not new fall and not transient).	40-70% mix of stable habitat; well-suited for full colonization potential; adequate habitat for maintenance of populations; presence of additional substrate in the form of newfall, but not yet prepared for colonization (may rate at high end of scale).	20-40% mix of stable habitat; habitat availability less than desirable; substrate frequently disturbed or removed.	Less than 20% stable habitat; lack of habitat is obvious; substrate unstable or lacking.
SCORE	20 19 18 17 16	15 14 **X** 12 11	10 9 8 7 6	5 4 3 2 1 0
2. Embeddedness	Gravel, cobble, and boulder particles are 0-25% surrounded by fine sediment. Layering of cobble provides diversity of niche space.	Gravel, cobble, and boulder particles are 25-50% surrounded by fine sediment.	Gravel, cobble, and boulder particles are 50-75% surrounded by fine sediment.	Gravel, cobble, and boulder particles are more than 75% surrounded by fine sediment.
SCORE	20 19 18 17 16	15 14 13 **X** 11	10 9 8 7 6	5 4 3 2 1 0
3. Velocity/Depth Regime	All four velocity/depth regimes present (slow-deep, slow-shallow, fast-deep, fast-shallow). (Slow is < 0.3 m/s, deep is > 0.5 m.)	Only 3 of the 4 regimes present (if fast-shallow is missing, score lower than if missing other regimes).	Only 2 of the 4 habitat regimes present (if fast-shallow or slow-shallow are missing, score low).	Dominated by 1 velocity/ depth regime (usually slow-deep).
SCORE	20 19 18 17 16	15 14 13 12 11	10 **X** 8 7 6	5 4 3 2 1 0
4. Sediment Deposition	Little or no enlargement of islands or point bars and less than 5% of the bottom affected by sediment deposition.	Some new increase in bar formation, mostly from gravel, sand or fine sediment; 5-30% of the bottom affected; slight deposition in pools.	Moderate deposition of new gravel, sand or fine sediment on old and new bars; 30-50% of the bottom affected; sediment deposits at obstructions, constrictions, and bends; moderate deposition of pools prevalent.	Heavy deposits of fine material, increased bar development; more than 50% of the bottom changing frequently; pools almost absent due to substantial sediment deposition.
SCORE	20 19 18 17 16	15 14 13 12 11	**X** 9 8 7 6	5 4 3 2 1 0
5. Channel Flow Status	Water reaches base of both lower banks, and minimal amount of channel substrate is exposed.	Water fills >75% of the available channel; or <25% of channel substrate is exposed.	Water fills 25-75% of the available channel, and/or riffle substrates are mostly exposed.	Very little water in channel and mostly present as standing pools.
SCORE	20 19 18 17 16	15 14 **X** 12 11	10 9 8 7 6	5 4 3 2 1 0

COMMENTS: Part of channel is rip rap. Width 4' depth 1'.

HABITAT ASSESSMENT FIELD DATA SHEET—HIGH GRADIENT STREAMS (BACK)

Parameters to be evaluated broader than sampling reach

Habitat Parameter	Condition Category			
	Optimal	**Suboptimal**	**Marginal**	**Poor**
6. Channel Alteration	Channelization or dredging absent or minimal; stream with normal pattern.	Some channelization present, usually in areas of bridge abutments; evidence of past channelization, i.e., dredging, (greater than past 20 yr) may be present, but recent channelization is not present.	Channelization may be extensive; embankments or shoring structures present on both banks; and 40 to 80% of stream reach channelized and disrupted.	Banks shored with gabion or cement; over 80% of the stream reach channelized and disrupted. Instream habitat greatly altered or removed entirely.
SCORE	20 19 18 17 16	15 14 13 12 11	X 9 8 7 6	5 4 3 2 1 0
7. Frequency of Riffles (or bends)	Occurrence of riffles relatively frequent; ratio of distance between riffles divided by width of the stream <7:1 (generally 5 to 7); variety of habitat is key. In streams where riffles are continuous, placement of boulders or other large, natural obstruction is important.	Occurrence of riffles infrequent; distance between riffles divided by the width of the stream is between 7 to 15.	Occasional riffle or bend; bottom contours provide some habitat; distance between riffles divided by the width of the stream is between 15 to 25.	Generally all flat water or shallow riffles; poor habitat; distance between riffles divided by the width of the stream is a ratio of >25.
SCORE	20 19 18 17 16	X 14 13 12 11	10 9 8 7 6	5 4 3 2 1 0
8. Bank Stability (score each bank) Note: determine left or right side by facing downstream.	Banks stable; evidence of erosion or bank failure absent or minimal; little potential for future problems. <5% of bank affected.	Moderately stable; infrequent, small areas of erosion mostly healed over. 5-30% of bank in reach has areas of erosion.	Moderately unstable; 30-60% of bank in reach has areas of erosion; high erosion potential during floods.	Unstable; many eroded areas; "raw" areas frequent along straight sections and bends; obvious bank sloughing; 60-100% of bank has erosional scars.
SCORE ___ (LB)	Left Bank 10 9	8 X 6	5 4 3	2 1 0
SCORE ___ (RB)	Right Bank 10 9	8 X 6	5 4 3	2 1 0
9. Vegetative Protection (score each bank)	More than 90% of the streambank surfaces and immediate riparian zone covered by native vegetation, including trees, understory shrubs, or nonwoody macrophytes; vegetative disruption through grazing or mowing minimal or not evident; almost all plants allowed to grow naturally.	70-90% of the streambank surfaces covered by native vegetation, but one class of plants is not well-represented; disruption evident but not affecting full plant growth potential to any great extent; more than one-half of the potential plant stubble height remaining.	50-70% of the streambank surfaces covered by vegetation; disruption obvious; patches of bare soil or closely cropped vegetation common; less than one-half of the potential plant stubble height remaining.	Less than 50% of the streambank surfaces covered by vegetation; disruption of streambank vegetation is very high; vegetation has been removed to 5 centimeters or less in average stubble height.
SCORE ___ (LB)	Left Bank 10 9	8 7 X	5 4 3	2 1 0
SCORE ___ (RB)	Right Bank 10 9	8 7 X	5 4 3	2 1 0
10. Riparian Vegetative Zone Width (score each bank riparian zone)	Width of riparian zone >18 meters; human activities (i.e., parking lots, roadbeds, clear-cuts, lawns, or crops) have not impacted zone.	Width of riparian zone 12-18 meters; human activities have impacted zone only minimally.	Width of riparian zone 6-12 meters; human activities have impacted zone a great deal.	Width of riparian zone <6 meters: little or no riparian vegetation due to human activities.
SCORE ___ (LB)	Left Bank 10 9	8 7 6	5 4 3	2 X 0
SCORE ___ (RB)	Right Bank 10 9	8 7 6	5 4 3	2 X 0

Total Score 88

HABITAT ASSESSMENT FIELD DATA SHEET—HIGH GRADIENT STREAMS (FRONT)
MODIFIED FOR USE WITH COE EASTERN KENTUCKY STREAM ASSESSMENT PROTOCOL

STREAM NAME S03p	LOCATION Sullivan Co. TN	
HWY STA # ca ??+?? SITE #	STREAM CLASS Per.	
LAT 36.4291 LONG 82.4291	RIVER BASIN	
PICTURE #	AGENCY	
INVESTIGATORS of HMB MTM, AL		
FORM COMPLETED BY MTM	DATE 3/20/08 TIME 1:50 AM PM	SPECIFIC CONDUCTIVITY 627
DOMINANT TREE SPECIES Sycamore, Boxelder		

Parameters to be evaluated in sampling reach

Habitat Parameter	Condition Category			
	Optimal	**Suboptimal**	**Marginal**	**Poor**
1. Epifaunal Substrate/ Available Cover	Greater than 70% of substrate favorable for epifaunal colonization and fish cover; mix of snags, submerged logs, undercut banks, cobble or other stable habitat and at stage to allow full colonization potential (i.e., logs/snags that are not new fall and not transient).	40-70% mix of stable habitat; well-suited for full colonization potential; adequate habitat for maintenance of populations; presence of additional substrate in the form of newfall, but not yet prepared for colonization (may rate at high end of scale).	20-40% mix of stable habitat; habitat availability less than desirable; substrate frequently disturbed or removed.	Less than 20% stable habitat; lack of habitat is obvious; substrate unstable or lacking.
SCORE	20 19 18 17 16	15 14 **X** 12 11	10 9 8 7 6	5 4 3 2 1 0
2. Embeddedness	Gravel, cobble, and boulder particles are 0-25% surrounded by fine sediment. Layering of cobble provides diversity of niche space.	Gravel, cobble, and boulder particles are 25-50% surrounded by fine sediment.	Gravel, cobble, and boulder particles are 50-75% surrounded by fine sediment.	Gravel, cobble, and boulder particles are more than 75% surrounded by fine sediment.
SCORE	20 19 18 17 16	15 14 13 12 11	10 **X** 8 7 6	5 4 3 2 1 0
3. Velocity/Depth Regime	All four velocity/depth regimes present (slow-deep, slow-shallow, fast-deep, fast-shallow). (Slow is < 0.3 m/s, deep is > 0.5 m.)	Only 3 of the 4 regimes present (if fast-shallow is missing, score lower than if missing other regimes).	Only 2 of the 4 habitat regimes present (if fast-shallow or slow-shallow are missing, score low).	Dominated by 1 velocity/ depth regime (usually slow-deep).
SCORE	20 19 18 17 16	15 14 13 12 11	10 **X** 8 7 6	5 4 3 2 1 0
4. Sediment Deposition	Little or no enlargement of islands or point bars and less than 5% of the bottom affected by sediment deposition.	Some new increase in bar formation, mostly from gravel, sand or fine sediment; 5-30% of the bottom affected; slight deposition in pools.	Moderate deposition of new gravel, sand or fine sediment on old and new bars; 30-50% of the bottom affected; sediment deposits at obstructions, constrictions, and bends; moderate deposition of pools prevalent.	Heavy deposits of fine material, increased bar development; more than 50% of the bottom changing frequently; pools almost absent due to substantial sediment deposition.
SCORE	20 19 18 17 16	15 14 13 12 11	10 9 8 **X** 6	5 4 3 2 1 0
5. Channel Flow Status	Water reaches base of both lower banks, and minimal amount of channel substrate is exposed.	Water fills >75% of the available channel; or <25% of channel substrate is exposed.	Water fills 25-75% of the available channel, and/or riffle substrates are mostly exposed.	Very little water in channel and mostly present as standing pools.
SCORE	20 19 18 **X** 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1 0

COMMENTS: Width 7' depth 1'-2'.

HABITAT ASSESSMENT FIELD DATA SHEET—HIGH GRADIENT STREAMS (BACK)

Parameters to be evaluated broader than sampling reach

Habitat Parameter	Condition Category			
	Optimal	Suboptimal	Marginal	Poor
6. Channel Alteration	Channelization or dredging absent or minimal; stream with normal pattern.	Some channelization present, usually in areas of bridge abutments; evidence of past channelization, i.e., dredging, (greater than past 20 yr) may be present, but recent channelization is not present.	Channelization may be extensive; embankments or shoring structures present on both banks; and 40 to 80% of stream reach channelized and disrupted.	Banks shored with gabion or cement; over 80% of the stream reach channelized and disrupted. Instream habitat greatly altered or removed entirely.
SCORE	20 19 18 17 **X**16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1 0
7. Frequency of Riffles (or bends)	Occurrence of riffles relatively frequent; ratio of distance between riffles divided by width of the stream <7:1 (generally 5 to 7); variety of habitat is key. In streams where riffles are continuous, placement of boulders or other large, natural obstruction is important.	Occurrence of riffles infrequent; distance between riffles divided by the width of the stream is between 7 to 15.	Occasional riffle or bend; bottom contours provide some habitat; distance between riffles divided by the width of the stream is between 15 to 25.	Generally all flat water or shallow riffles; poor habitat; distance between riffles divided by the width of the stream is a ratio of >25.
SCORE	20 19 18 17 16	**X**15 14 13 12 11	10 9 8 7 6	5 4 3 2 1 0
8. Bank Stability (score each bank) Note: determine left or right side by facing downstream.	Banks stable; evidence of erosion or bank failure absent or minimal; little potential for future problems. <5% of bank affected.	Moderately stable; infrequent, small areas of erosion mostly healed over. 5-30% of bank in reach has areas of erosion.	Moderately unstable; 30-60% of bank in reach has areas of erosion; high erosion potential during floods.	Unstable; many eroded areas; "raw" areas frequent along straight sections and bends; obvious bank sloughing; 60-100% of bank has erosional scars.
SCORE ___ (LB)	Left Bank 10 9	8 7 6	**X** 4 3	2 1 0
SCORE ___ (RB)	Right Bank 10 9	8 7 6	**X** 4 3	2 1 0
9. Vegetative Protection (score each bank)	More than 90% of the streambank surfaces and immediate riparian zone covered by native vegetation, including trees, understory shrubs, or nonwoody macrophytes; vegetative disruption through grazing or mowing minimal or not evident; almost all plants allowed to grow naturally.	70-90% of the streambank surfaces covered by native vegetation, but one class of plants is not well-represented; disruption evident but not affecting full plant growth potential to any great extent; more than one-half of the potential plant stubble height remaining.	50-70% of the streambank surfaces covered by vegetation; disruption obvious; patches of bare soil or closely cropped vegetation common; less than one-half of the potential plant stubble height remaining.	Less than 50% of the streambank surfaces covered by vegetation; disruption of streambank vegetation is very high; vegetation has been removed to 5 centimeters or less in average stubble height.
SCORE ___ (LB)	Left Bank 10 9	8 7 6	**X** 4 3	2 1 0
SCORE ___ (RB)	Right Bank 10 9	8 7 6	**X** 4 3	2 1 0
10. Riparian Vegetative Zone Width (score each bank riparian zone)	Width of riparian zone >18 meters; human activities (i.e., parking lots, roadbeds, clear-cuts, lawns, or crops) have not impacted zone.	Width of riparian zone 12-18 meters; human activities have impacted zone only minimally.	Width of riparian zone 6-12 meters; human activities have impacted zone a great deal.	Width of riparian zone <6 meters: little or no riparian vegetation due to human activities.
SCORE ___ (LB)	Left Bank 10 9	8 7 6	5 **X** 3	2 1 0
SCORE ___ (RB)	Right Bank 10 9	8 7 6	5 4 3	**X** 1 0

Total Score 88

HABITAT ASSESSMENT FIELD DATA SHEET—HIGH GRADIENT STREAMS (FRONT)
MODIFIED FOR USE WITH COE EASTERN KENTUCKY STREAM ASSESSMENT PROTOCOL

STREAM NAME S04p	LOCATION Sullivan Co. TN	
HWY STA # ca ??+?? SITE #	STREAM CLASS Per.	
LAT 36.5439 LONG 82.4193	RIVER BASIN	
PICTURE #	AGENCY	
INVESTIGATORS of HMB MTM, AL		
FORM COMPLETED BY MTM	DATE 3/20/08 TIME 6:45 AM PM	SPECIFIC CONDUCTIVITY 577
DOMINANT TREE SPECIES Sycamore, Tulip Poplar, Blue Beech		

Parameters to be evaluated in sampling reach

Habitat Parameter	Condition Category			
	Optimal	**Suboptimal**	**Marginal**	**Poor**
1. Epifaunal Substrate/ Available Cover	Greater than 70% of substrate favorable for epifaunal colonization and fish cover; mix of snags, submerged logs, undercut banks, cobble or other stable habitat and at stage to allow full colonization potential (i.e., logs/snags that are not new fall and not transient).	40-70% mix of stable habitat; well-suited for full colonization potential; adequate habitat for maintenance of populations; presence of additional substrate in the form of newfall, but not yet prepared for colonization (may rate at high end of scale).	20-40% mix of stable habitat; habitat availability less than desirable; substrate frequently disturbed or removed.	Less than 20% stable habitat; lack of habitat is obvious; substrate unstable or lacking.
SCORE	20 19 18 17 16	15 14 13 **X** 11	10 9 8 7 6	5 4 3 2 1 0
2. Embeddedness	Gravel, cobble, and boulder particles are 0-25% surrounded by fine sediment. Layering of cobble provides diversity of niche space.	Gravel, cobble, and boulder particles are 25-50% surrounded by fine sediment.	Gravel, cobble, and boulder particles are 50-75% surrounded by fine sediment.	Gravel, cobble, and boulder particles are more than 75% surrounded by fine sediment.
SCORE	20 19 18 17 16	15 14 13 12 11	10 9 8 **X** 6	5 4 3 2 1 0
3. Velocity/Depth Regime	All four velocity/depth regimes present (slow-deep, slow-shallow, fast-deep, fast-shallow). (Slow is < 0.3 m/s, deep is > 0.5 m.)	Only 3 of the 4 regimes present (if fast-shallow is missing, score lower than if missing other regimes).	Only 2 of the 4 habitat regimes present (if fast-shallow or slow-shallow are missing, score low).	Dominated by 1 velocity/ depth regime (usually slow-deep).
SCORE	20 19 18 17 16	15 14 13 12 11	10 9 **X** 7 6	5 4 3 2 1 0
4. Sediment Deposition	Little or no enlargement of islands or point bars and less than 5% of the bottom affected by sediment deposition.	Some new increase in bar formation, mostly from gravel, sand or fine sediment; 5-30% of the bottom affected; slight deposition in pools.	Moderate deposition of new gravel, sand or fine sediment on old and new bars; 30-50% of the bottom affected; sediment deposits at obstructions, constrictions, and bends; moderate deposition of pools prevalent.	Heavy deposits of fine material, increased bar development; more than 50% of the bottom changing frequently; pools almost absent due to substantial sediment deposition.
SCORE	20 19 18 17 16	15 14 13 12 11	**X** 9 8 7 6	5 4 3 2 1 0
5. Channel Flow Status	Water reaches base of both lower banks, and minimal amount of channel substrate is exposed.	Water fills >75% of the available channel; or <25% of channel substrate is exposed.	Water fills 25-75% of the available channel, and/or riffle substrates are mostly exposed.	Very little water in channel and mostly present as standing pools.
SCORE	20 19 18 17 16	15 14 **X** 12 11	10 9 8 7 6	5 4 3 2 1 0

COMMENTS: Width 4' depth 1'. 30% Canopy Cover.

HABITAT ASSESSMENT FIELD DATA SHEET—HIGH GRADIENT STREAMS (BACK)

Parameters to be evaluated broader than sampling reach

Habitat Parameter	Condition Category			
	Optimal	Suboptimal	Marginal	Poor
6. Channel Alteration	Channelization or dredging absent or minimal; stream with normal pattern.	Some channelization present, usually in areas of bridge abutments; evidence of past channelization, i.e., dredging, (greater than past 20 yr) may be present, but recent channelization is not present.	Channelization may be extensive; embankments or shoring structures present on both banks; and 40 to 80% of stream reach channelized and disrupted.	Banks shored with gabion or cement; over 80% of the stream reach channelized and disrupted. Instream habitat greatly altered or removed entirely.
SCORE	20 19 18 17 16	15 14 13 **X** 11	10 9 8 7 6	5 4 3 2 1 0
7. Frequency of Riffles (or bends)	Occurrence of riffles relatively frequent; ratio of distance between riffles divided by width of the stream <7:1 (generally 5 to 7); variety of habitat is key. In streams where riffles are continuous, placement of boulders or other large, natural obstruction is important.	Occurrence of riffles infrequent; distance between riffles divided by the width of the stream is between 7 to 15.	Occasional riffle or bend; bottom contours provide some habitat; distance between riffles divided by the width of the stream is between 15 to 25.	Generally all flat water or shallow riffles; poor habitat; distance between riffles divided by the width of the stream is a ratio of >25.
SCORE	20 19 18 17 16	15 14 13 12 11	**X** 9 8 7 6	5 4 3 2 1 0
8. Bank Stability (score each bank) Note: determine left or right side by facing downstream.	Banks stable; evidence of erosion or bank failure absent or minimal; little potential for future problems. <5% of bank affected.	Moderately stable; infrequent, small areas of erosion mostly healed over. 5-30% of bank in reach has areas of erosion.	Moderately unstable; 30-60% of bank in reach has areas of erosion; high erosion potential during floods.	Unstable; many eroded areas; "raw" areas frequent along straight sections and bends; obvious bank sloughing; 60-100% of bank has erosional scars.
SCORE ___ (LB)	Left Bank 10 9	8 7 6	5 **X** 3	2 1 0
SCORE ___ (RB)	Right Bank 10 9	8 7 6	5 **X** 3	2 1 0
9. Vegetative Protection (score each bank)	More than 90% of the streambank surfaces and immediate riparian zone covered by native vegetation, including trees, understory shrubs, or nonwoody macrophytes; vegetative disruption through grazing or mowing minimal or not evident; almost all plants allowed to grow naturally.	70-90% of the streambank surfaces covered by native vegetation, but one class of plants is not well-represented; disruption evident but not affecting full plant growth potential to any great extent; more than one-half of the potential plant stubble height remaining.	50-70% of the streambank surfaces covered by vegetation; disruption obvious; patches of bare soil or closely cropped vegetation common; less than one-half of the potential plant stubble height remaining.	Less than 50% of the streambank surfaces covered by vegetation; disruption of streambank vegetation is very high; vegetation has been removed to 5 centimeters or less in average stubble height.
SCORE ___ (LB)	Left Bank 10 9	8 7 6	5 4 3	**X** 1 0
SCORE ___ (RB)	Right Bank 10 9	8 7 6	5 4 3	**X** 1 0
10. Riparian Vegetative Zone Width (score each bank riparian zone)	Width of riparian zone >18 meters; human activities (i.e., parking lots, roadbeds, clear-cuts, lawns, or crops) have not impacted zone.	Width of riparian zone 12-18 meters; human activities have impacted zone only minimally.	Width of riparian zone 6-12 meters; human activities have impacted zone a great deal.	Width of riparian zone <6 meters: little or no riparian vegetation due to human activities.
SCORE ___ (LB)	Left Bank 10 9	8 7 6	5 4 3	**X** 1 0
SCORE ___ (RB)	Right Bank 10 9	8 7 6	5 4 3	**X** 1 0

Total Score 88

HABITAT ASSESSMENT FIELD DATA SHEET—HIGH GRADIENT STREAMS (FRONT)
MODIFIED FOR USE WITH COE EASTERN KENTUCKY STREAM ASSESSMENT PROTOCOL

STREAM NAME S05p	LOCATION Sullivan Co. TN
HWY STA # ca ??+?? SITE #	STREAM CLASS Per.
LAT 36.5466 LONG 82.4001	RIVER BASIN
PICTURE #	AGENCY
INVESTIGATORS of HMB MTM, AL	
FORM COMPLETED BY MTM	DATE 3/21/08 TIME 1030 AM PM / SPECIFIC CONDUCTIVITY 517
DOMINANT TREE SPECIES Water Maple, Evergreen	

Parameters to be evaluated in sampling reach

Habitat Parameter	Condition Category			
	Optimal	**Suboptimal**	**Marginal**	**Poor**
1. Epifaunal Substrate/ Available Cover	Greater than 70% of substrate favorable for epifaunal colonization and fish cover; mix of snags, submerged logs, undercut banks, cobble or other stable habitat and at stage to allow full colonization potential (i.e., logs/snags that are not new fall and not transient).	40-70% mix of stable habitat; well-suited for full colonization potential; adequate habitat for maintenance of populations; presence of additional substrate in the form of newfall, but not yet prepared for colonization (may rate at high end of scale).	20-40% mix of stable habitat; habitat availability less than desirable; substrate frequently disturbed or removed.	Less than 20% stable habitat; lack of habitat is obvious; substrate unstable or lacking.
SCORE	20 19 18 17 16	15 14 13 12 11	X 9 8 7 6	5 4 3 2 1 0
2. Embeddedness	Gravel, cobble, and boulder particles are 0-25% surrounded by fine sediment. Layering of cobble provides diversity of niche space.	Gravel, cobble, and boulder particles are 25-50% surrounded by fine sediment.	Gravel, cobble, and boulder particles are 50-75% surrounded by fine sediment.	Gravel, cobble, and boulder particles are more than 75% surrounded by fine sediment.
SCORE	20 19 18 17 16	15 14 13 12 11	10 X 8 7 6	5 4 3 2 1 0
3. Velocity/Depth Regime	All four velocity/depth regimes present (slow-deep, slow-shallow, fast-deep, fast-shallow). (Slow is < 0.3 m/s, deep is > 0.5 m.)	Only 3 of the 4 regimes present (if fast-shallow is missing, score lower than if missing other regimes).	Only 2 of the 4 habitat regimes present (if fast-shallow or slow-shallow are missing, score low).	Dominated by 1 velocity/ depth regime (usually slow-deep).
SCORE	20 19 18 17 16	15 14 13 12 11	10 X 8 7 6	5 4 3 2 1 0
4. Sediment Deposition	Little or no enlargement of islands or point bars and less than 5% of the bottom affected by sediment deposition.	Some new increase in bar formation, mostly from gravel, sand or fine sediment; 5-30% of the bottom affected; slight deposition in pools.	Moderate deposition of new gravel, sand or fine sediment on old and new bars; 30-50% of the bottom affected; sediment deposits at obstructions, constrictions, and bends; moderate deposition of pools prevalent.	Heavy deposits of fine material, increased bar development; more than 50% of the bottom changing frequently; pools almost absent due to substantial sediment deposition.
SCORE	20 19 18 17 16	15 14 13 12 11	10 9 8 7 X	5 4 3 2 1 0
5. Channel Flow Status	Water reaches base of both lower banks, and minimal amount of channel substrate is exposed.	Water fills >75% of the available channel; or <25% of channel substrate is exposed.	Water fills 25-75% of the available channel, and/or riffle substrates are mostly exposed.	Very little water in channel and mostly present as standing pools.
SCORE	20 19 18 17 16	15 14 13 12 11	10 X 8 7 6	5 4 3 2 1 0

COMMENTS: Width 2' depth 6-9". A stream dumps into S05p through a culvert. Across the road there is a pipe that comes from a well house that flows directly into the culvert. No channel across the road but there is a well house in the field.

HABITAT ASSESSMENT FIELD DATA SHEET—HIGH GRADIENT STREAMS (BACK)

Parameters to be evaluated broader than sampling reach

Habitat Parameter	Condition Category			
	Optimal	Suboptimal	Marginal	Poor
6. Channel Alteration	Channelization or dredging absent or minimal; stream with normal pattern.	Some channelization present, usually in areas of bridge abutments; evidence of past channelization, i.e., dredging, (greater than past 20 yr) may be present, but recent channelization is not present.	Channelization may be extensive; embankments or shoring structures present on both banks; and 40 to 80% of stream reach channelized and disrupted.	Banks shored with gabion or cement; over 80% of the stream reach channelized and disrupted. Instream habitat greatly altered or removed entirely.
SCORE	20 19 18 17 16	15 14 **X** 12 11	10 9 8 7 6	5 4 3 2 1 0
7. Frequency of Riffles (or bends)	Occurrence of riffles relatively frequent; ratio of distance between riffles divided by width of the stream <7:1 (generally 5 to 7); variety of habitat is key. In streams where riffles are continuous, placement of boulders or other large, natural obstruction is important.	Occurrence of riffles infrequent; distance between riffles divided by the width of the stream is between 7 to 15.	Occasional riffle or bend; bottom contours provide some habitat; distance between riffles divided by the width of the stream is between 15 to 25.	Generally all flat water or shallow riffles; poor habitat; distance between riffles divided by the width of the stream is a ratio of >25.
SCORE	20 19 18 17 16	15 14 13 12 **X**	10 9 8 7 6	5 4 3 2 1 0
8. Bank Stability (score each bank) Note: determine left or right side by facing downstream.	Banks stable; evidence of erosion or bank failure absent or minimal; little potential for future problems. <5% of bank affected.	Moderately stable; infrequent, small areas of erosion mostly healed over. 5-30% of bank in reach has areas of erosion.	Moderately unstable; 30-60% of bank in reach has areas of erosion; high erosion potential during floods.	Unstable; many eroded areas; "raw" areas frequent along straight sections and bends; obvious bank sloughing; 60-100% of bank has erosional scars.
SCORE ___ (LB)	Left Bank 10 9	8 7 6	**X** 4 3	2 1 0
SCORE ___ (RB)	Right Bank 10 9	8 7 6	**X** 4 3	2 1 0
9. Vegetative Protection (score each bank)	More than 90% of the streambank surfaces and immediate riparian zone covered by native vegetation, including trees, understory shrubs, or nonwoody macrophytes; vegetative disruption through grazing or mowing minimal or not evident; almost all plants allowed to grow naturally.	70-90% of the streambank surfaces covered by native vegetation, but one class of plants is not well-represented; disruption evident but not affecting full plant growth potential to any great extent; more than one-half of the potential plant stubble height remaining.	50-70% of the streambank surfaces covered by vegetation; disruption obvious; patches of bare soil or closely cropped vegetation common; less than one-half of the potential plant stubble height remaining.	Less than 50% of the streambank surfaces covered by vegetation; disruption of streambank vegetation is very high; vegetation has been removed to 5 centimeters or less in average stubble height.
SCORE ___ (LB)	Left Bank 10 9	8 **X** 6	5 4 3	2 1 0
SCORE ___ (RB)	Right Bank 10 9	8 **X** 6	5 4 3	2 1 0
10. Riparian Vegetative Zone Width (score each bank riparian zone)	Width of riparian zone >18 meters; human activities (i.e., parking lots, roadbeds, clear-cuts, lawns, or crops) have not impacted zone.	Width of riparian zone 12-18 meters; human activities have impacted zone only minimally.	Width of riparian zone 6-12 meters; human activities have impacted zone a great deal.	Width of riparian zone <6 meters: little or no riparian vegetation due to human activities.
SCORE ___ (LB)	Left Bank 10 9	8 7 6	5 4 3	2 **X** 0
SCORE ___ (RB)	Right Bank 10 9	8 7 6	5 4 3	2 1 **X**

Total Score 88

HABITAT ASSESSMENT FIELD DATA SHEET—HIGH GRADIENT STREAMS (FRONT)
MODIFIED FOR USE WITH COE EASTERN KENTUCKY STREAM ASSESSMENT PROTOCOL

STREAM NAME S06i	LOCATION Sullivan Co. TN	
HWY STA # ca ??+?? SITE #	STREAM CLASS Int.	
LAT 36.5426 LONG 82.3947	RIVER BASIN	
PICTURE #	AGENCY	
INVESTIGATORS of HMB MTM, AL		
FORM COMPLETED BY MTM	DATE 3/21/08 TIME 10:20 AM PM	SPECIFIC CONDUCTIVITY 596
DOMINANT TREE SPECIES Sycamore, Tulip Poplar		

Parameters to be evaluated in sampling reach

Habitat Parameter	Condition Category			
	Optimal	**Suboptimal**	**Marginal**	**Poor**
1. Epifaunal Substrate/ Available Cover	Greater than 70% of substrate favorable for epifaunal colonization and fish cover; mix of snags, submerged logs, undercut banks, cobble or other stable habitat and at stage to allow full colonization potential (i.e., logs/snags that are not new fall and not transient).	40-70% mix of stable habitat; well-suited for full colonization potential; adequate habitat for maintenance of populations; presence of additional substrate in the form of newfall, but not yet prepared for colonization (may rate at high end of scale).	20-40% mix of stable habitat; habitat availability less than desirable; substrate frequently disturbed or removed.	Less than 20% stable habitat; lack of habitat is obvious; substrate unstable or lacking.
SCORE	20 19 18 17 16	15 14 13 12 11	10 9 **X** 7 6	5 4 3 2 1 0
2. Embeddedness	Gravel, cobble, and boulder particles are 0-25% surrounded by fine sediment. Layering of cobble provides diversity of niche space.	Gravel, cobble, and boulder particles are 25-50% surrounded by fine sediment.	Gravel, cobble, and boulder particles are 50-75% surrounded by fine sediment.	Gravel, cobble, and boulder particles are more than 75% surrounded by fine sediment.
SCORE	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	**X** 4 3 2 1 0
3. Velocity/Depth Regime	All four velocity/depth regimes present (slow-deep, slow-shallow, fast-deep, fast-shallow). (Slow is < 0.3 m/s, deep is > 0.5 m.)	Only 3 of the 4 regimes present (if fast-shallow is missing, score lower than if missing other regimes).	Only 2 of the 4 habitat regimes present (if fast-shallow or slow-shallow are missing, score low).	Dominated by 1 velocity/ depth regime (usually slow-deep).
SCORE	20 19 18 17 16	15 14 13 12 11	10 9 8 **X** 6	5 4 3 2 1 0
4. Sediment Deposition	Little or no enlargement of islands or point bars and less than 5% of the bottom affected by sediment deposition.	Some new increase in bar formation, mostly from gravel, sand or fine sediment; 5-30% of the bottom affected; slight deposition in pools.	Moderate deposition of new gravel, sand or fine sediment on old and new bars; 30-50% of the bottom affected; sediment deposits at obstructions, constrictions, and bends; moderate deposition of pools prevalent.	Heavy deposits of fine material, increased bar development; more than 50% of the bottom changing frequently; pools almost absent due to substantial sediment deposition.
SCORE	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 **X** 0
5. Channel Flow Status	Water reaches base of both lower banks, and minimal amount of channel substrate is exposed.	Water fills >75% of the available channel; or <25% of channel substrate is exposed.	Water fills 25-75% of the available channel, and/or riffle substrates are mostly exposed.	Very little water in channel and mostly present as standing pools.
SCORE	20 19 18 17 16	15 14 13 12 11	10 9 8 7 **X**	5 4 3 2 1 0

COMMENTS: Width 4' depth .2-.3'.

HABITAT ASSESSMENT FIELD DATA SHEET—HIGH GRADIENT STREAMS (BACK)

Parameters to be evaluated broader than sampling reach

Habitat Parameter	Condition Category			
	Optimal	Suboptimal	Marginal	Poor
6. Channel Alteration	Channelization or dredging absent or minimal; stream with normal pattern.	Some channelization present, usually in areas of bridge abutments; evidence of past channelization, i.e., dredging, (greater than past 20 yr) may be present, but recent channelization is not present.	Channelization may be extensive; embankments or shoring structures present on both banks; and 40 to 80% of stream reach channelized and disrupted.	Banks shored with gabion or cement; over 80% of the stream reach channelized and disrupted. Instream habitat greatly altered or removed entirely.
SCORE	20 19 18 17 16	15 14 13 **X** 11	10 9 8 7 6	5 4 3 2 1 0
7. Frequency of Riffles (or bends)	Occurrence of riffles relatively frequent; ratio of distance between riffles divided by width of the stream <7:1 (generally 5 to 7); variety of habitat is key. In streams where riffles are continuous, placement of boulders or other large, natural obstruction is important.	Occurrence of riffles infrequent; distance between riffles divided by the width of the stream is between 7 to 15.	Occasional riffle or bend; bottom contours provide some habitat; distance between riffles divided by the width of the stream is between 15 to 25.	Generally all flat water or shallow riffles; poor habitat; distance between riffles divided by the width of the stream is a ratio of >25.
SCORE	20 19 18 17 16	15 14 13 12 11	10 9 **X** 7 6	5 4 3 2 1 0
8. Bank Stability (score each bank) Note: determine left or right side by facing downstream.	Banks stable; evidence of erosion or bank failure absent or minimal; little potential for future problems. <5% of bank affected.	Moderately stable; infrequent, small areas of erosion mostly healed over. 5-30% of bank in reach has areas of erosion.	Moderately unstable; 30-60% of bank in reach has areas of erosion; high erosion potential during floods.	Unstable; many eroded areas; "raw" areas frequent along straight sections and bends; obvious bank sloughing; 60-100% of bank has erosional scars.
SCORE ___ (LB)	Left Bank 10 9	8 7 6	**X** 4 3	2 1 0
SCORE ___ (RB)	Right Bank 10 9	8 7 6	**X** 4 3	2 1 0
9. Vegetative Protection (score each bank)	More than 90% of the streambank surfaces and immediate riparian zone covered by native vegetation, including trees, understory shrubs, or nonwoody macrophytes; vegetative disruption through grazing or mowing minimal or not evident; almost all plants allowed to grow naturally.	70-90% of the streambank surfaces covered by native vegetation, but one class of plants is not well-represented; disruption evident but not affecting full plant growth potential to any great extent; more than one-half of the potential plant stubble height remaining.	50-70% of the streambank surfaces covered by vegetation; disruption obvious; patches of bare soil or closely cropped vegetation common; less than one-half of the potential plant stubble height remaining.	Less than 50% of the streambank surfaces covered by vegetation; disruption of streambank vegetation is very high; vegetation has been removed to 5 centimeters or less in average stubble height.
SCORE ___ (LB)	Left Bank 10 9	8 7 6	5 **X** 3	2 1 0
SCORE ___ (RB)	Right Bank 10 9	8 7 6	5 **X** 3	2 1 0
10. Riparian Vegetative Zone Width (score each bank riparian zone)	Width of riparian zone >18 meters; human activities (i.e., parking lots, roadbeds, clear-cuts, lawns, or crops) have not impacted zone.	Width of riparian zone 12-18 meters; human activities have impacted zone only minimally.	Width of riparian zone 6-12 meters; human activities have impacted zone a great deal.	Width of riparian zone <6 meters: little or no riparian vegetation due to human activities.
SCORE ___ (LB)	Left Bank 10 9	8 7 6	5 4 3	**X** 1 0
SCORE ___ (RB)	Right Bank 10 9	8 7 6	5 4 3	**X** 1 0

Total Score 88

Appendix 2- Federal and State Agency Coordination Letters

November 8, 2007

Mr. David Brandenburg, Small Game Biologist
TWRA, Region 4 Office
3030 Wildlife Way
Morristown, TN 37814

Subject: Aquatic and Terrestrial Technical Study
Project: State Route 126 (Memorial Boulevard)
Sullivan County, Tennessee

Dear Mr. Brandenburg:

The Tennessee Department of Transportation has contracted with HMB Professional Engineers, Inc. to conduct a technical study for the proposed improvement of State Route 126 in Sullivan County, TN. The study will provide an assessment of the aquatic and terrestrial environment from Hermitage Drive in Kingsport, to Interstate 81 near Overhill Drive. The study corridor would include 1000 feet to either side of the existing SR 126.

HMB Professional Engineers, Inc. and the Tennessee Department of Transportation are requesting information concerning potential impacts to threatened and endangered species that may occur within the area of this project.

Please review the enclosed information and provide any comments and concerns that might be associated with the proposed action. The USGS 7.5 minute quadrangle mapping which applies to the project has been included, and a copy of the project corridor has been included.

Thank you for your prompt attention to this request. If you have any questions or need further information, please contact John W. Brown, HMB Environmental Project Manager, or myself at (502) 695-9800 or at either of the following email addresses: srice@hmbpe.com or jwbrown@hmbpe.com.

Sincerely,

Steve Rice
HMB Chief Biologist

Cc: Rich Dutton, HMB
John W. Brown, HMB

November 8, 2007

Mark Braswell, Field Office Director
TDEC, Johnson City Environmental Field Office
2305 Silverdale Road
Johnson City, TN 37601-2162

Subject: Aquatic and Terrestrial Technical Study
Project: State Route 126 (Memorial Boulevard)
Sullivan County, Tennessee

Dear Mr. Braswell:

The Tennessee Department of Transportation has contracted with HMB Professional Engineers, Inc. to conduct a technical study for the proposed improvement of State Route 126 in Sullivan County, TN. The study will provide an assessment of the aquatic and terrestrial environment from Hermitage Drive in Kingsport, to Interstate 81 near Overhill Drive. The study corridor would include 1000 feet to either side of the existing SR 126.

HMB Professional Engineers, Inc. and the Tennessee Department of Transportation are requesting information concerning possible stream and wetland impacts, and potential impacts to threatened and endangered species that may occur within the area of this project.

Please review the enclosed information and provide any comments and concerns that might be associated with the proposed action. The USGS 7.5 minute quadrangle mapping which applies to the project has been included, and a copy of the project corridor has been included.

Thank you for your prompt attention to this request. If you have any questions or need further information, please contact John W. Brown, HMB Environmental Project Manager, or myself at (502) 695-9800 or at either of the following email addresses: srice@hmbpe.com or jwbrown@hmbpe.com.

Sincerely,

Steve Rice
HMB Chief Biologist

Cc: Rich Dutton, HMB
John W. Brown, HMB

November 5, 2007

Ms. Katherine Sells
District Conservationist
USDA – NRCS
Blountville Field Office
3070-B Highway 126
Blountville, Tennessee 37617

Via fax: 423-323-8318

RE: Environmental Impact Statement for Proposed Improvement of State Route126 Project Wetlands Coordination

Dear Ms. Sells:

The Tennessee Department of Transportation (TDOT) has contracted HMB Professional Engineers, Inc. to prepare an Environmental Impact Statement on the proposed improvement of State Route 126. The Federal Highway Administration (FHWA) is the lead federal agency for this action and the Environmental Impact Statement is prepared in accordance with FHWA regulations and technical advisory. As part of this process, our staff will be investigating existing, farmed and prior converted wetlands. Wetlands information is important in determining the impacts from various alternatives and in discovering ways that may minimize or mitigate those impacts. The wetlands impact analysis, together with analyses on impacts to other environmental resources, is then reported in the Draft Environmental Impact Statement (DEIS). The DEIS is made available to regulating agencies and the general public for comments prior to a final transportation decision by TDOT and the FHWA.

Our staff utilizes soil survey maps and windshield surveys to determine the status of farmed and prior converted wetlands. In those instances where the hydrology on the property appears to be altered, it is our understanding that your office maintains wetland delineation forms and information on the status of these wetlands. As the agency with jurisdiction over farmed and prior converted wetlands, we would like to coordinate with your office for this information as we develop our wetlands analysis. We would also appreciate any additional guidance or suggestions along the way that would assist us in providing an analysis which meets your requirements.

Thank you for your assistance and guidance. If you have any questions concerning this project or our analysis, please feel free to contact Steve Rice, our Chief Biologist, or me at 502-695-9800. You may also contact Ms. Kelley Garrett, the Project Manager with TDOT, at 615-532-7229, or Mr. Tom Love, the Environmental Planning Manager with TDOT, at 615-741-5634.

Sincerely,

John W. Brown
Environmental Project Manager

Cc: Tom Love, TDOT
Kelley Garrett, TDOT
Rich Dutton, HMB
HMB Project Number 1135.00

November 8, 2007

Ms. Gabby Call, Associate State Director
The Nature Conservancy
2021 21st Avenue South
Suite C-400
Nashville, TN 37212

Subject: Aquatic and Terrestrial Technical Study
Project: State Route 126 (Memorial Boulevard)
Sullivan County, Tennessee

Dear Ms. Call:

The Tennessee Department of Transportation has contracted with HMB Professional Engineers, Inc. to conduct a technical study for the proposed improvement of State Route 126 in Sullivan County, TN. The study will provide an assessment of the aquatic and terrestrial environment from Hermitage Drive in Kingsport, to Interstate 81 near Overhill Drive. The study corridor would include 1000 feet to either side of the existing SR 126.

HMB Professional Engineers, Inc. and the Tennessee Department of Transportation are requesting information concerning potential impacts to threatened and endangered species that may occur within the area of this project.

Please review the enclosed information and provide any comments and concerns that might be associated with the proposed action. The USGS 7.5 minute quadrangle mapping which applies to the project has been included, and a copy of the project corridor has been included.

Thank you for your prompt attention to this request. If you have any questions or need further information, please contact John W. Brown, HMB Environmental Project Manager, or myself at (502) 695-9800 or at either of the following email addresses: srice@hmbpe.com or jwbrown@hmbpe.com.

Sincerely,

Steve Rice
HMB Chief Biologist

Cc: Rich Dutton, HMB
John W. Brown, HMB

November 8, 2007

Lee Barclay, Field Supervisor
U.S. Fish and Wildlife Service
Cookeville Field Office
446 Neal Street
Cookeville, TN 38501

Subject: Aquatic and Terrestrial Technical Study
Project: State Route 126 (Memorial Boulevard)
Sullivan County, Tennessee

Dear Mr. Barclay:

The Tennessee Department of Transportation has contracted with HMB Professional Engineers, Inc. to conduct a technical study for the proposed improvement of State Route 126 in Sullivan County, TN. The study will provide an assessment of the aquatic and terrestrial environment from Hermitage Drive in Kingsport, to Interstate 81 near Overhill Drive. The study corridor would include 1000 feet to either side of the existing SR 126.

HMB Professional Engineers, Inc. and the Tennessee Department of Transportation are requesting information concerning possible stream and wetland impacts, and potential impacts to threatened and endangered species that may occur within the area of this project.

Please review the enclosed information and provide any comments and concerns that might be associated with the proposed action. The USGS 7.5 minute quadrangle mapping which applies to the project has been included, and a copy of the project corridor has been included.

Thank you for your prompt attention to this request. If you have any questions or need further information, please contact John W. Brown, HMB Environmental Project Manager, or myself at (502) 695-9800 or at either of the following email addresses: srice@hmbpe.com or jwbrown@hmbpe.com.

Sincerely,

Steve Rice
Chief Biologist

Cc: Rich Dutton, HMB
John W. Brown, HMB

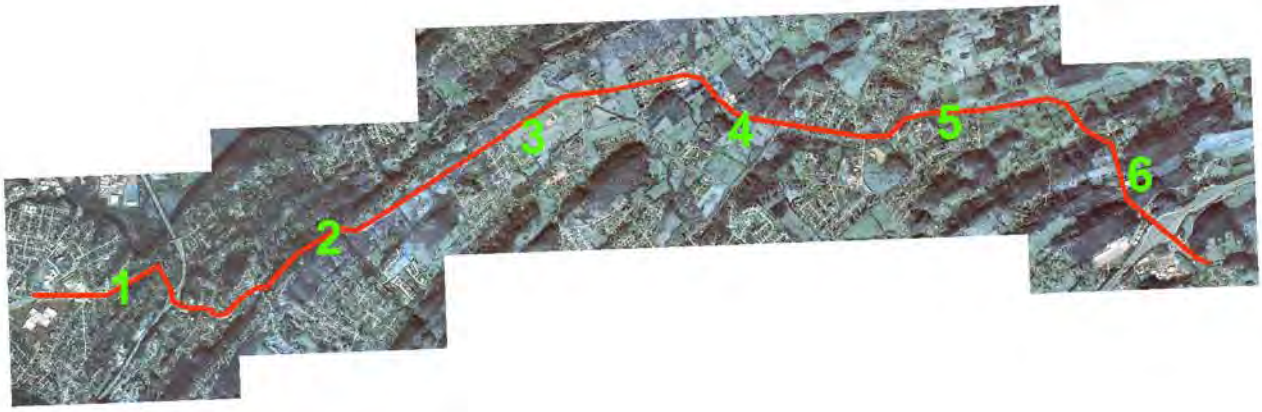
Appendix 3- Aerial Photographs from 1953, 1976 and 2006 showing Land Use Changes over Time in Kingsport, Tennessee along Memorial Boulevard (SR126)

Environmental FirstSearch

Historical Aerial

2006 - Reference Mosaic

SR 126 , KINGSPORT TN 37664



Source:
Target Site (Latitude: 36.539471 Longitude: -82.454432)
Quad Name: Indian Springs
Date: 2006 - Reference Mosaic

Approximate Scale: 1 inch equals 6,667 feet

Legend

Target Area

1-6 Index Numbers

COPYRIGHT: MICRODOT, INC

Environmental FirstSearch

Historical Aerial

1953 - 1

SR 126 , KINGSPORT TN 37664



Source:
Target Site (Latitude: 36.539471 Longitude: -82.454432)
Quad Name: Indian Springs
Date: 1953 - 1

Approximate Scale: 1 inch equals 1,125 feet

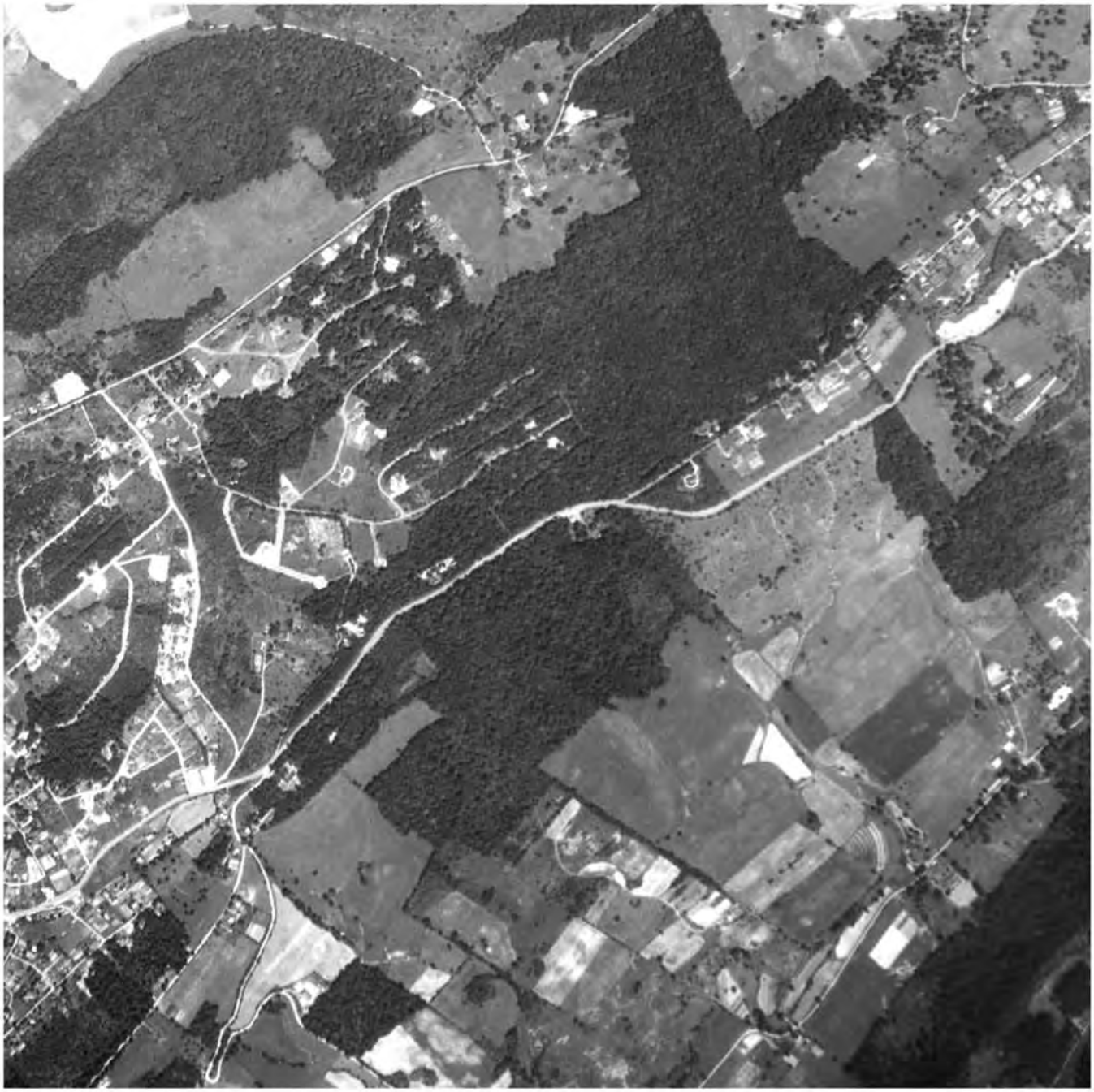
COPYRIGHT: MICRODOT, INC

Environmental FirstSearch

Historical Aerial

1953 - 2

SR 126 , KINGSPORT TN 37664



Source:
Target Site (Latitude: 36.539471 Longitude: -82.454432)
Quad Name: Indian Springs
Date: 1953 - 2

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Historical Aerial

1953 - 3

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Quad Name: Indian Springs
Date: 1953 - 3

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1953 - 4

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1953 - 5

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1953 - 6

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Historical Aerial

1976 - 1

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2006 - 1

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2006 - 2

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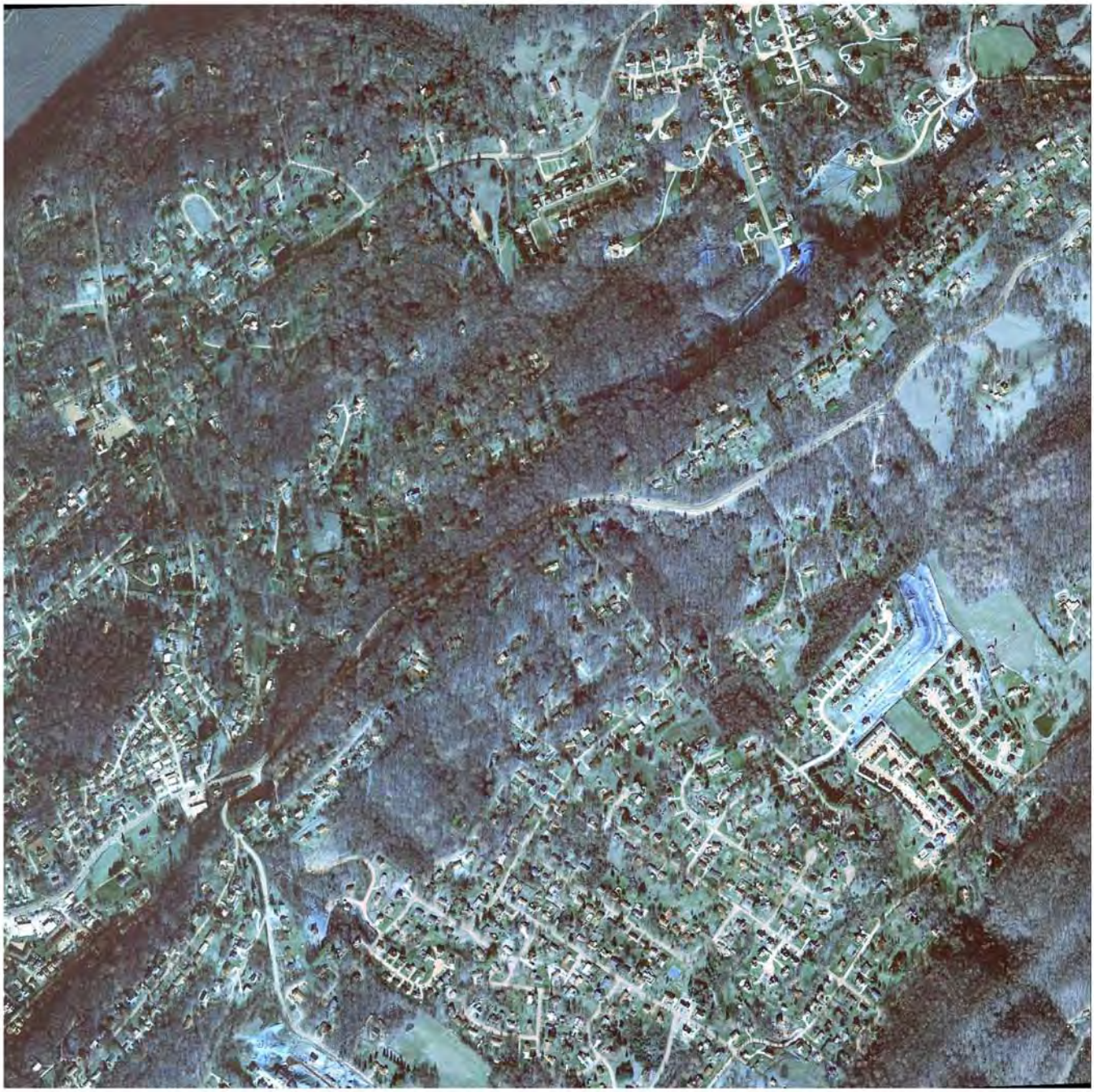

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Target Site (Latitude: 36.539471 Longitude: -82.454432)
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Date: 2006 - 2

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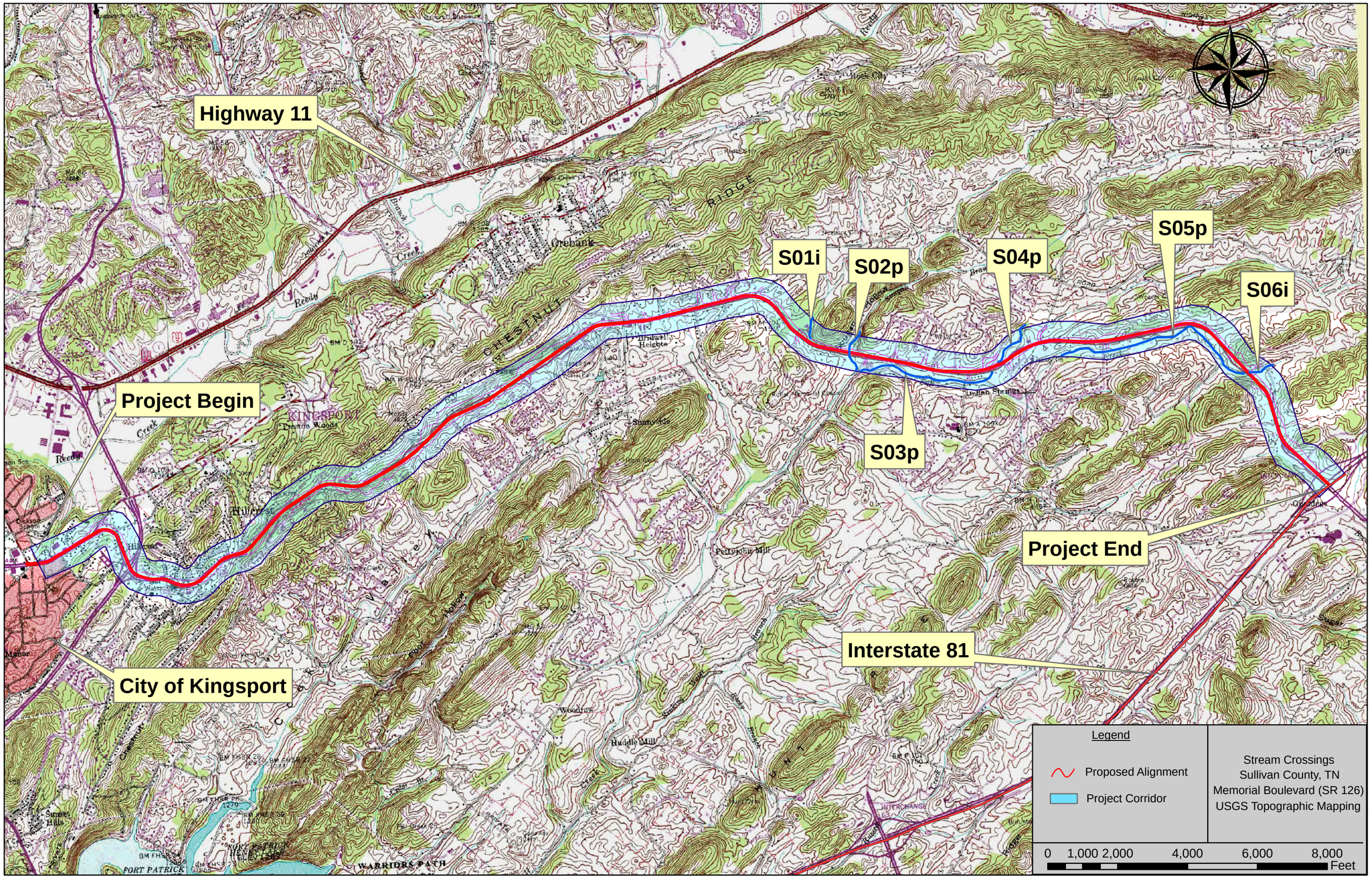
Highway 11
Project Begin
City of Kingsport
S01i
S02p
S03p
S04p
S05p
S06i
Project End
Interstate 81
Legend
Proposed Alignment
Project Corridor
Stream Crossings
Sullivan County, TN
Memorial Boulevard (SR 126)
USGS Topographic Mapping
0 1,000 2,000 4,000 6,000 8,000
Feet

Highway 11

Project Begin

City of Kingsport

S01i

S02p

S03p

S04p

S05p

S06i

Project End

Interstate 81

Legend

Proposed Alignment

Project Corridor

Stream Crossings
Sullivan County, TN
Memorial Boulevard (SR 126)
Aerial Photography

0 1,050 2,100 4,200 6,300 8,400
Feet

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
OFFICE OF ENVIRONMENTAL PLANNING AND PERMITS
SUITE 900, JAMES K. POLK BUILDING
505 DEADERICK STREET
NASHVILLE, TENNESSEE 37243-0334

October 14, 2011

Ms. Leigh Ann Tribble
Environmental Program Eng.
Federal Highway Administration
Tennessee Division Office
404 BNA Dr., Suite 508
Nashville, TN 37217

Subject: Indiana Bat Clearance
SR-126 (Memorial Blvd.) from Center Street to I-81,
Sullivan County, Tennessee
PIN: 105467.00 P.E. #82085-1225-14

Dear Ms. Tribble:

Enclosed is a report that will serve as the Biological Assessment for the subject project. The initial response received from the U. S. Fish and Wildlife Service dated January 30, 2009 gave no species for consideration. Since that time, there has been a significant concern regarding potential project impacts to the federally listed endangered Indiana bat – *Myotis sodalis.*

This report has been prepared pursuant to Section 7(c) of the Endangered Species Act of 1973, as amended, and addresses potential project related impacts to the Indiana bat. Based on the information in the attached report, it is our conclusion that the proposed project is **not likely to adversely affect** the Indiana bat.

The TDOT requests that you forward this report to the USFWS with a request for their concurrence or other opinion for the finding of **not likely to adversely affect** for the Indiana bat. We also request that any subsequent correspondence relative to this report include the entire project name and termini as stated in the subject line of this letter.

Thank you for your assistance in this project. Please address any questions specific to the report to Keven Brown at (865) 594-2437.

Sincerely,

Keven Brown
Biologist, TDOT Region 1
Ecology Section

KB:kab

Copy: Mr. John Hewitt
Mr. David Thompson
Mr. Rob Todd – TWRA
Mr. Bo Baxter – TVA
Project File

Indiana Bat (*Myotis sodalis*) Mist Net Survey for Proposed SR-126 (Memorial Boulevard) from East Center Street to I-81, Sullivan County, Tennessee (PIN No.: 105467.00; P.E. No.: 82085-0233-04)

Tennessee Department of Transportation, Nashville, Tennessee

Prepared by: James D. Kiser & James A. Evans (Stantec Consulting Services)

October 2011

Prepared for: Tennessee Department of Transportation
Suite 900 – James K. Polk Building
505 Deaderick Street
Nashville, TN 37243-0334

TDOT SR-126 ROAD PROJECT
INDIANA BAT (*MYOTIS SODALIS*) MIST NET SURVEY
SULLIVAN COUNTY, TENNESSEE

Executive Summary

Tennessee Department of Transportation (TDOT) is preparing to improve 8.4 miles of SR-126 (Memorial Boulevard) from East Center Street, within the Kingsport City Limits, east to Interstate 81 (I-81) in Sullivan County Tennessee (Appendix A). Construction of roadway improvements will impact urban and residential areas, agricultural land, and some forested stands including some smaller streams and their adjacent riparian zones. Due to the presence of potential Indiana bat (*Myotis sodalis*) summer habitat within the forested stands within the SR-126 corridor, TDOT was requested by U.S. Fish and Wildlife Service (USFWS) to conduct a mist net survey to determine the presence or probable absence of the Indiana bat within the project area. Stantec Consulting Services (Stantec) was retained by TDOT to conduct surveys for the Indiana bat. The project area is located on the Indian Springs and Kingsport U.S.G.S Topographic Quadrangles.

The objective of this survey was to assess the presence, or probable absence, of Indiana bats using summer habitat within the proposed SR-126 corridor. To effectively investigate the project area, we used guidelines recommended by the draft Indiana Bat Recovery Plan (2007) as well as the Indiana bat survey guidance for Kentucky dated May 19, 2010. Weather restrictions were also followed, as well as conducting mist netting in areas with potentially suitable habitat for the Indiana bat. The deciduous hardwood forests within the project area provided potentially suitable habitat for Indiana bats. The mist net locations near the proposed SR-126 corridor were in the best areas available where bats were likely to be found traveling, foraging, or both. All forested habitats in the project area were similar in form and generally provided some large trees and snags (>16 inches dbh) for maternity roosts, a moderate-to-open subcanopy clutter and moderate to closed canopy closure. Although subcanopy clutter was not ideal, canopy closure was generally moderate to open (ideal = open subcanopy clutter and open canopy closure), making the habitat sufficient to support Indiana bats.

No Federally-endangered Indiana bats were captured during this 2011 summer mist net survey. A total of 26 bats, representing three species, were captured during summer mist net surveys conducted on 3 – 10 August, 2011**.** No endangered Indiana bats were captured, however two federally endangered gray bats (*Myotis grisescens*) were captured. The most common species captured was the big brown bat [*Eptesicus fuscus* (n=19)] representing 73 percent of the bat captures. Other species captured include the federally endangered gray bat [*Myotis grisescens* (n=2)] and the eastern red bat [*Lasiurus borealis* (n=5)].

A total of two gray bats were captured during survey efforts. Both of the gray bats were captured at MS-04, in a mist net erected across a driveway adjacent to Fall Creek Road, next to a small stream flowing into Fall Creek. Both streams provided a drinking water source and likely an adequate aquatic insect emergence for foraging. As gray bats are known to feed heavily on aquatic insects including Trichoptera, Plecoptera and Ephemeroptera (LaVal and LaVal, 1980), it is likely that bats were traveling along the driveway River corridor foraging on the aquatic

insects emerging from the smaller stream. Since the gray bat is almost always a cave obligate species and because no large caves or cave-like structures (i.e. storm sewers, hollow dams, abandoned mines) are known to occur within the project area, the proposed project is not likely to affect the roosting habitat of this species. Since the capture site is well outside of the construction limits of the SR-126 corridor and because all of the streams within the impact area are much smaller, or more cluttered with vegetation, the project may not even affect foraging habitat for the gray bat. However, if gray bats use the non-riparian habitats for foraging then the project corridor contains other available foraging opportunities.

Based on the data collected during mist net surveys following USFWS approved guidelines, the apparent absence of the Indiana bat, and the apparent absence of any structures that could provide summer or winter habitat for the gray bat within the project corridor, a May Affect – Not Likely to Adversely Affect determination is anticipated from the USFWS's Tennessee Field Office.

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1.0 Introduction

Tennessee Department of Transportation (TDOT) is preparing to improve 8.4 miles of SR-126 (Memorial Boulevard) from East Center Street, within the Kingsport City Limits, east to Interstate 81 (I-81) in Sullivan County Tennessee (Figure 1 - Appendix A). Construction of the Build Alternatives will improve SR-126 to a four-lane facility (two travel lanes in each direction) within the commercial and residential areas of the western half of the corridor. The eastern half of the corridor, which is rural in nature, will remain a two-travel lane facility. Improved shoulders will be provided along the entire corridor and sidewalks will be extended to the majority of commercial and residential areas. As mentioned above the construction of roadway improvements will impact urban and residential areas, agricultural land, and some forested stands including some smaller streams and their adjacent riparian zones. Due to the presence of potential Indiana bat (*Myotis sodalis*) summer habitat within the forested stands within the SR-126 corridor, TDOT was requested by U.S. Fish and Wildlife Service (USFWS) to conduct a mist net survey to determine the presence or probable absence of the Indiana bat within the project area. Stantec Consulting Services (Stantec) was retained by TDOT to conduct surveys for the Indiana bat.

1.1 PROJECT SETTING

The proposed project is located in north-central Sullivan County Tennessee. It is shown on the Indian Springs and Kingsport USGS 7.5 minute topographic quadrangles (Figure 1 – Appendix A). This portion of the county is within the Valley and Ridges physiographic region, just west of the border of the Blue Ridge Mountains physiographic region (Miller 1974), and is characterized by long and even ridges with long continuous valleys in between. The project is in the Reedy Creek watershed. Land use in the project area consists of residential and commercial, agricultural (cow pastures, hayfields, etc.) and forested (floodplain/riparian) (Figure 2 – Appendix A).

1.2 REGULATORY SETTING

The federal Endangered Species Act (ESA) [16 U.S.C. 1531 *et seq*.] became law in 1973. This law provides for the listing, conservation, and recovery of endangered and threatened species of plants and wildlife. Under the Act, the U.S. Fish and Wildlife Service (USFWS) strives to protect and monitor the numbers and populations of listed species. Many states enacted similar laws.

Section 7(a)(2) of ESA states that each federal agency shall insure that any action they authorize, fund, or carry out is not likely to jeopardize the continued existence of a listed species or result in destruction or adverse modification of designated critical habitat. Federal actions include (1) expenditure of federal funds for roads, buildings, or other construction projects, and (2) approval of a permit or license, and the activities resulting from such permit or license. This

is true regardless of whether involvement is apparent, such as issuance of a Federal permit, or less direct, such as Federal oversight of a state-operated program.

Section 9 of ESA prohibits the take of listed species. Take is defined by ESA as "*to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect.*" The definition of harm includes adverse habitat modification. Actions of federal agencies that do not result in jeopardy or adverse modification, but that could result in a take, must be addressed under Section 7.

1.3 PURPOSE OF REPORT

The purpose of this report is to provide a scientifically-defensible report detailing the mist netting effort for TDOT for their use in consultation with USFWS. The report includes a description of methods, results and summarized data, a discussion, and conclusion in regards to the survey. Data sheets are provided as an appendix in the report. Maps, representative photographs of site locations, and illustrations are also included. This report will also be used by Stantec for annual coordination of our federal permit activities. Data will also be provided to the Tennessee Wildlife Resources Agency (TWRA).

2.0 Indiana Bat (*Myotis sodalis*) Species Description

2.1 SPECIES STATUS

Because of the Indiana bat's strong resemblance to the little brown bat (*Myotis lucifugus*), it was not described as a separate species until 1928 (Miller and Allen, 1928) from a specimen collected in Wyandotte Cave, Crawford County, Indiana. The Indiana bat can be distinguished from other larger *Myotis*, particularly the little brown bat, by its short, inconspicuous toe hairs, by its smaller foot (9 mm instead of 10 mm long), by its keeled calcar, by its more uniform colored fur, and its pinkish colored pug-nose (Whitaker and Hamilton, 1998). Albino and partially white bats are rarely encountered, but may occur in large hibernacula (Brack et al., 2005). Since its description as a separate species, the Indiana bat has suffered drastic population declines, primarily from human-induced alterations of winter habitat. Commercialization and mining of "saltpeter" at significant caves have created environments, especially warmer temperatures, which are unsuitable or marginal for hibernating Indiana bats.

The USFWS listed the Indiana bat as an endangered species on March 11, 1967. However, the bat did not receive any protection until the Endangered Species Act (ESA) was instated in 1973 (Public Law 93-205). Several years following its listing, an Indiana bat recovery plan was developed by biologists (i.e., the recovery team), which outlined habitat requirements, critical habitat, potential causes for declines, and recovery objectives. The recovery plan was reviewed and published by the USFWS in 1983. On April 16, 2007 the notice of availability for review and

comment on an updated "Draft Indiana Bat Recovery Plan, First Revision and Draft Survey Protocol" was published in the Federal Register (72 FR 19015 – 19016). This updated document provides an extensive literature review of historical and recent species information, and the revised plan lists three new fundamental recovery objectives. These objectives are to: (1) obtain permanent protection of 80% of Priority One hibernacula, (2) maintain a minimum overall population equal to the 2005 estimate (457,000 individuals), and (3) document a positive population growth rate over five sequential survey periods. However, the plan says "if identified research on summer habitat characteristics and requirements indicates the quality and quantity of maternity habitat is threatening recovery of the species, the Service will amend these objectives" (USFWS, 2007).

2.2 DISTRIBUTION AND POPULATION

The range of the Indiana bat includes much of the eastern United States. It occurs from Iowa, Oklahoma and Wisconsin, northeast to Vermont, and south to northwestern Florida and northern Arkansas (Barbour and Davis, 1969). The majority of the wintering population occurs within the limestone cave region of Indiana, Kentucky, and Missouri. Recently however, large colonies have been found in some abandoned underground mines in Illinois, Ohio, New Jersey, and New York. According to the USFWS (1999), more than 85 % of the range-wide population is found in nine Priority One hibernacula. Indiana, Kentucky, and Missouri, each contain three Priority One hibernacula. Due to sampling methodology and inaccurate counts, Clawson (2002) determined that Dixon Cave in Kentucky and Pilot Knob Mine in Missouri should no longer be considered Priority One sites. In the 2007 revised Indiana bat recovery plan, Priority One hibernacula was changed and now includes 16 total sites with seven in Indiana, two each in Kentucky, Missouri, and New York, and one each in Illinois, Tennessee, and West Virginia. As of 2007 surveying period, 468,184 Indiana bats were estimated range-wide, and hibernacula that contained these occurred in 15 states, including Alabama, Arkansas, Illinois, Indiana, Kentucky, Michigan, Missouri, New Jersey, New York, Ohio, Pennsylvania, Tennessee, Vermont, Virginia, and West Virginia (USFWS, 2008). Currently, critical winter habitat is established and includes 11 caves and two non-coal mines, including six in Missouri, two each in Indiana and Kentucky; and one each in Illinois, Tennessee, and West Virginia (USFWS, 2007).

Summer distribution of the Indiana bat occurs throughout a wider geographic area than winter distribution. The core summer range includes southern Iowa, northern Missouri, northern Illinois, northern Indiana, southern Michigan, and western Ohio. However, population distribution during summer is poorly known because of wide gaps between the known maternity colonies and unknown amount of movement between roost sites. Summer colonies of Indiana bats occur as far north as Michigan, New York, and Vermont, and as far south as Alabama, Missouri, and Tennessee, and as far west as Iowa. Britzke et al. (2003) found that Indiana bat maternity colonies were less frequently encountered in mountainous terrain, and were usually smaller in size. Britzke et al. (2003) found three maternity colony sites in the mountains of western North Carolina and eastern Tennessee, but failed to relocate the colonies at the same roost sites the following year. In non-mountainous terrain in Michigan and Vermont, researchers have been

tracking the same colonies for more than five consecutive years and the bats seem to show some degree of site fidelity to a given area (Kurta, 2004; Scott Darling, unpublished data), and many of these colonies often exceed several hundred individuals.

2.3 LIFE HISTORY

The Indiana bat hibernates from late October/early November to middle of April with emergence dependent upon location and weather. Typically, the Indiana bat forms dense clusters on cave and mine ceilings and walls where winter temperatures are 3.0 - 7.2° C. Sites containing populations where temperatures are outside this range have shown population declines (Tuttle and Kennedy, 2002). Stable low temperatures allow Indiana bats to maintain a low rate of metabolism and conserve fat reserves through the winter until spring emergence when outside temperatures have increased and insects (food) are more abundant (Humphrey, 1978; Richter et al., 1993). As with cave temperature, relative humidity in the cave also determines hibernation site suitability for Indiana bats. According to Hall (1962), Humphrey (1978), and LaVal et al. (1976), humidity at roost sites during hibernation is usually above 74%, but below saturation. Cave configurations determines internal environments and larger more complex cave systems having multiple entrances are more likely to provide suitable habitat for the Indiana bat (Tuttle and Stevenson, 1978; LaVal and LaVal, 1980). Depending on cave environments, the Indiana bat may hibernate near the entrance where cool air seeps in from outside or deeper in the cave where cold air is trapped in a sink.

Although some bats may awaken during the winter and exit hibernacula early, the majority of individuals start exiting hibernacula early to mid-April. Female Indiana bats leave the hibernacula earlier in spring than males. Peak departure from hibernacula is in late April through early May. This period is often referred to as spring staging. Some males may remain near the hibernacula throughout the year, move short distances to other caves or mines, or migrate to distant areas (Whitaker and Brack, 2002). When female Indiana bats emerge they may migrate only a few miles, or up to 288 miles (465 km) from their hibernacula to summer habitat. Winhold et al. (2005) reported a female traveling 288 miles from a summer colony near Norvell, Michigan to a hibernaculum near Frenchburg, Kentucky. Conversely, Indiana bats tracked from an abandoned mine in New York only flew between 9 and 24 miles (14.6 to 40.0 km) from the foothills of the Adirondack Mountains to roost trees scattered throughout the Lake Champlain Valley (Britzke et al., 2006). Based on a combination of aerial and ground tracking, Indiana bats tracked from a hibernaculum in Pennsylvania flew almost a straight line to their roost trees 83 and 92 miles (135 and 148 km) away in Maryland (Butchkoski et al., 2006).

Little effort has been focused on spring roost trees of the Indiana bat. Britzke et al. (2006) found female bats roosting primarily in live shagbark hickory (*Carya ovata*) and roost changing was much lower than during the summer. Live shagbark hickory provides more shelter to roosting bats than does sloughing bark on dead trees. Such differences may have been associated with unpredictable spring weather in the northeast because summer bats and males during the spring, switch roosts every one to three days (Menzel et al., 2001; Gumbert et al., 2002; Kurta et al., 1996, 2002). According to Britzke et al. (2006), spring roost trees used in Lake Champlain Valley were similar in structure (e.g., sloughing bark, solar exposure) to trees used throughout the species range. Trees used during the spring included shagbark hickory, American elm

(*Ulmus americana*), quaking aspen (*Populus tremuloides*), sugar maple (*Acer saccharum*), black locust (*Robinia pseudoacacia*), white ash (*Fraxinus americana*), American beech (*Fagus grandifolia*), yellow birch (*Betula alleghaniensis*), eastern hemlock (*Tsuga canadensis*), and red maple (*Acer rubrum*).

Based on Britzke et al.'s (2006) work, some of the spring roosting activity occurs within the same area where maternity roosts have been found. Female Indiana bats form maternity roosts under exfoliating bark of dead, dying and live trees in both upland and riparian habitats. A single maternity colony typically consists of 25 to 100 bats, but can contain as many as 384 individuals (Kiser et al., 2002). Over 30 species of tree have been documented as maternity roosts, but 87% of these are various ashes (*Fraxinus* spp.), elms (*Ulmus* spp.), hickories (*Carya* spp.), maples (*Acer* spp.), poplars (*Populus* spp.), and oaks (*Quercus* spp.) (Kurta, 2004). Most trees used by reproductive females are deciduous, but eastern hemlock and pitch pine (*Pinus rigida*) have been used in western North Carolina and eastern Tennessee, and white pine has been used in Vermont (Britzke et al., 2003; J. Kiser, pers. obs., 2004).

Roost trees used by Indiana bats vary in size. The minimum tree size (dbh) reported for a male roost is 6.4 cm (Gumbert, 2001) and 11 cm for an individual female roost (Britzke, 2003). Primary maternity roosts are always found in larger diameter trees usually greater than 22 cm dbh (Kurta, 2004). Larger diameter trees provide thermal advantages to reproductive females and their pups and give them more room to move around while locating appropriate temperatures. Females are pregnant when they arrive at maternity roost and fecundity is low, only one pup per year. Pups are normally born in late June and early July and grow quickly becoming volant between early July and early August.

Indiana bats may travel several miles from day roosts to foraging areas. Gardner et al. (1991) found that individuals from an Illinois maternity colony traveled 2.5 miles to foraging areas. In fragmented habitat, bats will use hedge rows and other features on the landscape as travel ways between foraging areas and day roosts (Murray and Kurta, 2004). Rather than crossing open habitats (e.g., pasture land, open water, agricultural fields) Indiana bats increased their travel distance by 55% in Michigan to take advantage of the protective cover of tree-lines (Murray and Kurta, 2004). Indiana bats will forage in upland and floodplain forest (Brack, 1983; Humphrey et al., 1977; LaVal and LaVal, 1980; Gardner et al., 1991; Kiser and Elliott, 1996). Indiana bats are opportunistic foragers, feeding on a variety of small insects. The diet of Indiana bats vary between habitats, geographic locations, season, sex, and age of bats (Kurta and Whitaker, 1998; Brack and LaVal, 1985; Belwood, 1979). Sparks and Whitaker (2004) summarized food habit studies conducted over 30 years and determined that Indiana bat's diet consisted primarily of insects belonging to the orders Dipters (flies), Lepidoptera (moths) and Coleoptera (beetles), but when locally abundant, Trichoptera (caddisflies) and Hymenoptera (wasps and ants) may be the predominant food. Several pest species including mosquitoes (Diptera:Culicidae), Asiatic oak weevil (*Cyrtepistomus castaneus*), spotted cucumber beetle (*Diabrotica undecimpunctata*), and Hessian fly (*Mayetoila destructor*) (Sparks and Whitaker, 2004; Kurta and Whitaker, 1998; Kiser and Elliott, 1996) are also consumed by Indiana bats when locally abundant.

Foraging activity is usually interrupted by periods of rest, referred to as night roosting. Most Indiana bats apparently use trees as night roosts (Butchkoski and Hassinger, 2002; Murray and Kurta, 2004), although they do occasionally utilize bat boxes (Butchkoski and Hassinger, 2002),

and concrete bridges (Kiser et al., 2002). Night roosting is any time a bat stops flying during the night. The purpose of night roosts is to provide bats a resting place between foraging bouts, promote digestion and energy conservation, provide retreats from predators and inclement weather, provide places to ingest food transported from nearby feeding areas, function as feeding perches for sit-and-wait predators, and serve as a place to promote social interactions and information transfer (Ormsbee et al., 2007).

Indiana bats start arriving at hibernacula during late August and fly around the entrances in an attempt to find mates. This phenomenon is referred to as "swarming" and is typically a multispecies event (Cope and Humphrey, 1977). During swarming, Indiana bats day roost under sloughing bark of trees near the cave and travel to the entrance each night (Kiser and Elliott, 1996). Roost trees used during autumn, range from 11.75 to 66.0 cm in diameter at breast height (dbh) and occur primarily on ridge-tops and upper slopes (Kiser and Elliott, 1996). As with summer roosts, site fidelity to autumn roosting areas is exhibited by male Indiana bats (Gumbert et al., 2002). Male Indiana bats typically remain active longer during autumn than do females. Once arriving at hibernacula, females may only remain active for a few days where as males remain active, seeking mates, into late October and early November.

3.0 Gray Bat (*Myotis grisescens*) Species Description

3.1 SPECIES STATUS

The gray bat was described as a separate species in 1909 from specimens collected at Nickajack Cave, Marion County, Tennessee (Decher and Choate 1995). The gray bat can be distinguished from other smaller *Myotis* by its long forearm, typically 40 – 46 mm, the attachment of wing membrane to the ankle rather than on the foot, and by uniformly gray fur from base to tip of hair (Barbour and Davis, 1969; Barbour and Davis, 1974; USFWS, 1982; Sealander and Heidt, 1990). Apparently, gray bat declines began during the nineteenth century when exploitation of caves first began on a large scale from mining of saltpeter, onyx, and other cave minerals, but the rate of decline accelerated during the 1960's and 1970's, especially from growing popularity in spelunking (USFWS, 1982). Prior to these declines, individual hibernacula contained populations of gray bat, which ranged from 100,000 to 1,500,000 or more bats (USFWS, 1982). The gray bat suffered drastic population declines, primarily from visitation of critical wintering and summering caves, and human-induced alterations of habitat. According to the USFWS (1982), if gray bats had continued to decline at a rate of 54% every six years there should have only been 100,000 gray bats left in 2000. Such a decline did not occur and the population recovered to the point where biologists were discussing the potential of down-listing the species from endangered to threatened, prior to the arrival of white-nose syndrome (WNS).

The USFWS listed the gray bat as an endangered species on April 28, 1976 and the bat received protection under the Endangered Species Act (ESA), which was instated in 1973

(Public Law 93-205). Several years following its listing, a gray bat recovery plan was developed by biologists (i.e., the recovery team), which outlined habitat requirements, critical habitat, potential causes for declines, and recovery objectives. The recovery plan was reviewed and published by the USFWS in 1982.

3.2 DISTRIBUTION AND POPULATION

The gray bat is restricted in distribution to the limestone-karst areas of the eastern and southern United States (Hall, 1981; Hall and Wilson, 1966; USFWS, 1982). Major populations occur in Alabama, northern Arkansas, Kentucky, Missouri, and Tennessee, but a few smaller populations occur in northwestern Florida, western Georgia, southeastern Kansas, southern Indiana and Illinois, northeastern Oklahoma, northeastern Mississippi, and western Virginia (Barbour and Davis, 1969; Tuttle, 1979; USFWS, 1982). The majority of the wintering population occurs in only nine caves, primarily found in Arkansas, Kentucky, Missouri, and Tennessee. According to the USFWS (1982), approximately 95% of the range wide population is found in nine hibernacula with more than half in a single cave. Based on the 1982 Recovery Plan, 10 Priority One hibernacula are listed for the gray bat with three each in Missouri and Tennessee, and one each in Alabama, Arkansas, Florida, and Kentucky.

Even though gray bats require cave-like habitats during the summer, the species summer distribution occurs throughout a slightly larger geographic area than winter distribution. Gray bats can establish maternity and bachelor colonies in dams, under bridges and in storm sewers, which enables them to venture away from karst regions. According to the USFWS (1982), 30 different caves are listed as Priority One maternity colony sites with eight in Missouri, six each in Alabama and Tennessee, four in Kentucky, three in Florida, two in Arkansas, and one in Illinois.

3.3 LIFE HISTORY

The gray bat arrives at caves used as hibernacula during September and October each year. Ninety-five percent of the entire gray bat population hibernates in only nine caves in the limestone karst region of the eastern/southern United States (Lacki, 1994). These bats typically form dense clusters of up to several thousand individuals on cave ceilings and walls where cave temperatures range from 42.1° – 52.0° F (5.6° - 11.1°C) (Sealander and Heidt, 1990; Hall, 1962). Gray bats choose a slightly warmer temperature in the cave than do Indiana bats (Hall, 1962). Stable low temperatures allow gray bats to maintain a low rate of metabolism and conserve fat reserves through the winter until spring emergence when outside temperatures have increased and insects (food) are more abundant (Humphrey, 1978; Richter et al., 1993). Cave configuration determines internal environments and larger more complex cave systems, having multiple entrances, are more likely to provide suitable habitat for hibernating bats (Tuttle and Stevenson, 1978; LaVal and LaVal, 1980).

Copulation in gray bats occurs in late fall prior to hibernation (Sealander and Heidt, 1990; Barbour and Davis 1969). Once mating has occurred, the females immediately go into hibernation. Some mate and enter hibernation in early September, but all do so by early

October (USFWS, 1982). After mating, the males remain active for several weeks, during which time the fat reserves that were depleted during the mating season are replenished. While adult males and juveniles of both sexes tend to enter hibernation several weeks later than females, most are in hibernation by early November. These stored fat reserves must last six to seven months to ensure survival of the bats.

Adult female gray bats are the first to emerge from hibernation in late March and early April, followed by juveniles of both sexes and adult males (Tuttle, 1976). Most juveniles and adult males leave the hibernacula between mid-April and mid-May. Gray bats are known to disperse at distances of 17 – 525 km to summer locations (Sealander and Heidt, 1990; Tuttle, 1976). Hall and Wilson (1966) indicated that summer colonies scattered over an area of 10,500 square miles in Kentucky, southern Illinois, and Tennessee migrated to a single cave in Edmonson County, Kentucky. Gray bats are very loyal to their home range and to where they disperse after hibernation; most using the same roosting and foraging sites from year to year (USFWS, 1982). This dispersal period in early spring is hazardous because fat reserves and food supplies are low at that time, yielding a high adult mortality in late March and early April (Tuttle and Stevenson, 1978).

Summer maternity colonies of gray bats are generally found in large caves containing streams (Sealander and Heidt, 1990). These colonies range from a few hundred to several thousand individuals in large caves in the central part of the eastern United States. Undisturbed summer colonies in Tennessee and Alabama contain between 5,000 – 250,000 or more bats with most averaging 10,000 – 50,000 individuals (Tuttle, 1979). The relative humidity in these maternity caves ranges from 86 – 99% (Decher and Choate, 1995). Males and non-reproductive females form bachelor colonies in less suitable caves within 30 km of maternity sites (BCI, 1999).

Although mating occurs in late fall, female gray bats have delayed ovulation with fertilization occurring in late March to early April when they emerge from hibernation (Sealander and Heidt, 1990; Guthrie and Jeffers, 1938). Each female gives birth to a single young in late-May to mid-June. The young mature rapidly. Growth rate is faster in colonies with large number of bats due to the energy saved from decreased heat dissipation, which results from clustering behavior and the selection of roost in heat-trapping domes and related cave structures (Tuttle, 1975). Tuttle (1975) also states that the growth rate of nonvolant young is positively correlated with colony size. Increased numbers of bats roosting together reduce the thermoregulatory cost per individual (Herreid, 1963, 1967). Growth rates are also positively affected by higher ambient cave temperatures and porous or domed ceiling at roosts. The female generally leaves the young in the roost while foraging. The first flight of the young usually occurs 20 – 25 days after birth, but in colonies of reduced size this may increase to 30 – 35 days (Sealander and Heidt, 1990; Tuttle, 1975). For newly volant young, growth rates and survival are inversely proportional to the distance of their roost to the nearest available over-water foraging habitat (Tuttle, 1975). After the young are weaned, the maternity colony disperses. Most nursery caves are abandoned by August or early September.

As with most bats, gray bats emerge from caves or other roosts at dusk to forage for insects. Gray bats most often forage over bodies of water (reservoirs and streams), but do also forage in riparian vegetation and over land (Sealander and Heidt, 1990; LaVal et al, 1977). They indicated that gray bats usually forage below treetop height, sometimes as low as two meters or lower. LaVal et al, (1977) also suggested that while gray bats forage over even the smallest, permanently-flowing streams, larger numbers use larger streams. Tuttle (1979) estimated that a maternity colony of 250,000 bats may consume as much as a ton of insects each night. Decher and Choate (1995) stated that the main prey of gray bats consists of several genera and at least six species of mayflies (Ephemeroptera). Rabinowitz and Tuttle (1982) said that gray bats selected foraging areas with abundant mayflies. However, Ephemeroptera were less abundant in fecal pellet studies in Jessamine County, Kentucky (Lacki et al, 1995) and in Indiana (Whitaker et al, 2001). Decher and Choate (1995) suggest that fecal pellet studies are biased against Ephemeroptera because they are more digestible by the bat with less identifiable remains in the fecal pellets. This is especially true if the wings are culled by the bat prior to consumption (Rabinowitz and Tuttle, 1982). Based on food studies using fecal pellets, it appears that the gray bat is primarily an opportunistic feeder, feeding on the most abundant aquatic insects available at the time (Lacki et al, 1995; Whitaker et al, 2001). Orders of insect consumed include Diptera (primarily midges – Chironomidae), Trichoptera (caddisflies), Coleoptera (beetles), and Lepidoptera (moths). Whitaker et al (2001) found some chironomid pupae, indicating that the gray bat apparently picked it up by skimming the surface of the water during foraging. LaVal and LaVal (1980) indicated a dietary preference of Plecoptera (stoneflies), Ephemeroptera (mayflies) and Trichoptera (caddisflies), comprising up to 98% of insects consumed. They also suggested that types of insects consumed depended on the phase of the moon, with the light or dark affecting foraging location.

During peak insect abundance in early evening, many gray bats feed in slowly traveling groups; when insect numbers drop later in the evening, gray bats become more territorial (Tuttle, 1976). He indicates that territories seem to be controlled by reproductive females. Depending on prey abundance, these territories may be occupied by one to as many as fifteen or more individuals. During lactating, some females feed continually for more than seven hours in a single night. This helps them maintain higher body temperatures at their relatively cool roosts.

4.0 Methodology

4.1 MIST NETTING GUIDELINES

Surveys for endangered bats are difficult to standardize because of the great deal of variability that exists in a field situation. However, a number of practices used for summer surveys for Indiana bats have become relatively standardized through implementation of netting guidelines provided by USFWS in the most recent (2007 Agency Draft) revision of the Indiana Bat Recovery Plan[1]. Those guidelines, a summary of which follows, were employed for this survey.

[1] U.S. Fish and Wildlife Service. 2007. Indiana Bat (Myotis sodalis) Draft Recovery: U.S Fish and Wildife Service, Fort Snelling, MN. 258 pp.

Great care was observed to ensure USFWS netting requirements were met during the study as well as White-nose Syndrome Disinfectant Protocols (version 01.25.2011).

USFWS Netting Guidelines

1. **Netting Season**: 15 May to 15 August, when Indiana bats occupy summer habitat.
2. **Equipment** (Mist Nets): constructed of the finest, lowest visibility mesh commercially available – monofilament or black nylon – with the mesh size approximately 1½ inch (1¼ –1¾) (38 mm).
3. **Net Placement**: mist nets extend approximately from water or ground level to tree canopy and are bounded by foliage on the sides. Net width and height are adjusted for the fullest coverage of the flight corridor at each site. A "typical" net set consists of nets "stacked" on top of one another with heights from up to 8 m (30 ft); width may vary up to 18 m (60 ft).
4. **Net Site Spacing**:
   - Streams – one net site per 1 km (0.6 km)
   - Land Tracts – two net sites per 1 square km (250 acres)
5. **Minimum Level of Effort Per Net Site**:
   - Two net locations (sets) per net site, with locations (sets) at least 100 feet (30 m) apart
   - Two (calendar) nights of netting
   - At least four net–nights (1 net–night = 1 net set deployed for 1 night); typically, two net sets are deployed at one site for two nights, resulting in four net-nights
   - Sample Period: begin at dusk and net for 5 hours (approximately 0200h)
   - Nets are monitored at approximately 10-minute intervals
   - No disturbance near the nets between checks
6. **Weather Conditions**: net only if the following weather conditions are met:
   - No precipitation
   - Temperature $\geq$ 50°F (10°C)
   - No strong winds
7. **Moonlight**: avoid net sets with direct exposure to a moon ½ -full or greater – typically by utilizing forest canopy cover

4.2 MIST NET SITE SELECTION

Site selection was based upon an expectation of greatest bat activity and an effort to provide survey coverage of the project area. Net placement was based upon a variety of characteristics including canopy cover, presence of a flight corridor, water, and forest conditions near the site. Mist net site selection includes consideration of habitat characterizations described for the Indiana bat in current literature and Stantec personnel's extensive knowledge and experience with this species. General habitat types selected included the following characteristics:

- Large trees (>16 inches dbh) that can support primary maternity roosts

- An open canopy, allowing solar exposure for warming of roost sites
- An open, uncluttered understory, used for travel and foraging
- Stream corridor or other water source for drinking and prey production

Nets are typically set to maximize coverage of flight paths used by Indiana bats along suitable travel corridors. Riparian corridors often provide successful mist net sites. However, upland corridors (e.g., trails or logging roads) also provide suitable sites (Kiser and MacGregor, 2005). In upland areas, road ruts or other areas of standing water frequently facilitate capture of bats, including the Indiana bat. The actual location and orientation of each net was determined in the field.

4.3 BAT CAPTURE AND PROCESSING

All bats captured in the mist nets were carefully removed and placed individually in a disposable brown paper bag in order to keep bats isolated and reduce any risk of cross exposure to White-nose Syndrome (WNS) that may have been present on bats within the project area. This occurred for all bats regardless if they showed signs of WNS or not. After each paper bag was used they were disposed into a large plastic sealable bag as refuse. Disposable gloves were also worn for handling individual bats and hands were periodically washed with Purell®. Protocols for bat capture, handling, and equipment decontamination for WNS were followed at all mist net sites.

Bats were identified to the taxonomic level of species using a combination of morphological characteristics: ear and tragus, calcar, pelage, size/weight, length of right forearm, and overall appearance of the animal. The species, sex, reproductive condition, age, weight, length of right forearm, time and location, and net site of capture were recorded for all bats. Age (adult or juvenile) of bats was determined by examining ephiphyseal-diaphyseal fusion (calcification) of long bones in the wing. Weight was measured to 0.1 grams using a Pesola spring scale. Length of the right forearm of each bat was measured in millimeters using a field ruler. The reproductive condition of captured bats was classified as non-descended male, descended male, non-reproductive female, pregnant female (based on gentle abdominal palpation), lactating female, or post-lactating female.

Bat processing and data collection was typically completed within 30 minutes of the time the bat is removed from the net. Bats were caught live and released unharmed near the point of capture after processing. The survey was conducted under a USFWS approved Survey Plan, Federal Fish and Wildlife permit # TE38821A-0 and Tennessee Scientific Collection permit # 3640.

4.4 ACOUSTICAL SURVEY

As required by the Indiana bat survey guidance for Kentucky dated May 19, 2010, acoustical sampling equipment was used in conjunction with mist netting to provide presence/absence survey results that have a greater accuracy of documenting Indiana bat use in a project area. The detection of bat calls similar to Indiana bats using acoustical monitoring was only used as an indicator that additional mist netting was necessary at the location where the call was

recorded. Stantec conducted passive acoustic bat surveys using one Anabat II detector at each mist net site for two consecutive nights, resulting in two detector nights of sampling effort per site. Anabat II detectors were positioned at least 100 meters from net sites, in different habitat types, in order to maximize coverage of project area. Detectors sampled habitats that could not be sampled with mist nets (e.g. forest edges, large streams, large ponds, etc.).

Anabat II detectors (Titley Electronics Pty Ltd.) were used for acoustical data collection. Detectors were programmed to begin monitoring at one half hour before sunset each night. Detectors were removed at the end of mist netting activities each night, so acoustical data was only collected for a period of 30 minutes prior to dusk until five hours after dusk (approximately 0200 h). The audio sensitivity setting of each Anabat system was set between six and seven (on a scale of one to 10) to maximize sensitivity while limiting ambient background noise and interference. Detectors were powered by internal alkaline batteries. Since severe weather adversely affects the activity levels of bats, Stantec monitored temperature, rainfall, and wind conditions on those nights when acoustical sampling was conducted. Data was downloaded to a laptop computer in the field for subsequent analysis.

4.5 WEATHER AND TEMPERATURE

Weather conditions were monitored each night of the survey. Conditions recorded include: temperature, wind speed and direction, percent cloud cover, and moon phase (if visible). A standard digital thermometer was used to record temperature, wind speed was estimated by using the Beaufort wind scale, and cloud cover was visually estimated.

4.6 HABITAT ASSESSMENT

A habitat description and a sketch of each net location was completed. The emphasis of this description was habitat form: size and relative abundance of large trees and snags that may potentially serve as roost trees, canopy closure, understory clutter/openness, distance to water, stream or pond characteristics (if net was placed over them), and flight corridors. Habitat form is emphasized because the Indiana bat roosts in a great many species of trees. Tree species composition is included in the assessment, because it provides insight to edaphic conditions of each site.

Habitat characterization identifies components of the canopy and subcanopy layers. All trees that reach into the canopy are canopy trees, regardless of their diameter/size. As defined in the Indiana Bat Habitat Suitability Index Model (3D/Environmental 1995), dominant trees are the large trees in the canopy (> 16” dbh) that have the greatest likelihood of being used by maternity colonies of Indiana bats. Many smaller trees are often also found in the canopy, and in some situations, the canopy can be entirely composed of smaller-diameter trees.

The subcanopy, or understory, vegetation layer is well defined in classical ecological literature. It is that portion of the forest structure between the ground vegetation to approximately 2 feet (0.6 m) and the canopy layers, usually beginning at about 25 feet (7.6 m).

Vegetation in the understory may come from:

- Lower branches of overstory trees
- Young overstory trees
- Small trees and shrubs that are confined to the understory

The amount of vegetation in the understory is termed clutter. Many species of bats, including the Indiana bat, tend to avoid areas of high clutter.

5.0 Results

5.1 BAT CAPTURE

A total of 26 bats, representing three species, were captured during summer mist net surveys at the proposed SR-126 project in Sullivan County, Tennessee (Table 5.1). No endangered Indiana bats were captured, however two federally endangered gray bats were captured. Bats were captured at six mist net sites (MS-01 – MS-06) which were located along the proposed SR-35 corridor, near Kingsport, Tennessee. The most common species captured was the big brown bat [*Eptesicus fuscus* (n=19)] representing 73 percent of the bat captures. The second most common species captured was the eastern red bat [*Lasiurus borealis* (n=5)] representing 19.2 percent bat captures. The only other species captured during this survey was the federally endangered gray bat [*Myotis grisescens* (n=2)] (Table 5.1). Forty six percent of captures were adult males while 7.6 percent were juvenile males. Adult females representing two reproductive phases made up 19.2 percent of captures, while 15.3 percent were juvenile females. Bat Capture Data Sheets can be found in Appendix B.

Table 5.1. Bat capture by sex, reproductive condition, and age during 2011 summer mist netting at the SR-126 project, Sullivan County, Tennessee.

Species	Adult Male	Juvenile Male	Adult Female[1]				Juvenile Female	Escape[2]	Total
			P	L	PL	NR			
Gray bat *(Myotis grisescens)*	2	0	0	0	0	0	0	0	2
Big brown bat *(Eptesicus fuscus)*	9	2	0	0	1	2	2	3	19
Eastern red bat *(Lasiurus borealis)*	1	0	0	0	0	2	2	0	5
Total	12	2	0	0	1	4	4	3	26

[1] P = pregnant; L = lactating; PL = Post lactating; NR = non-reproductive
[2] Escape = escaped from net or hand before processing was complete

5.2 ACOUSTICAL SURVEY

Anabat detectors were deployed at each of the six mist net sites during both nights of sampling. Twelve (12) complete detector nights of acoustical data was collected (Table 5.2). A single detector (A48) deployed at MS-04 on 10 August recorded the most bat call files (n=274), accounting for 31 percent of all files. While a detector (A48) deployed on 5 August at MS-02 recorded the least amount of files (n=5). No files made it through the "MORENET" filter, thus no extra netting for Indiana bats was required.

Table 5.2. Acoustic data filtering results for 2011 summer mist netting at the SR-126 Project, Sullivan County, Tennessee.

Site	Detector	Date	Total # Files Recorded	# "NOISE"	# Passed "NOISE" Filter	# Passed "MORENET" Filter	
MS-01	A33	3-Aug	50	3	47	0	
	A33	4-Aug	45	4	41	0	
MS-02	A48	4-Aug	24	3	21	0	
	A48	5-Aug	9	4	5	0	
MS-03	A48	5-Aug	32	2	30	0	
	A48	6-Aug	161	36	125	0	
MS-04	A48	9-Aug	171	3	168	0	
	A48	10-Aug	276	2	274	0	
MS-05	A33	7-Aug	49	4	45	0	
	A33	8-Aug	66	7	59	0	
MS-06	A48	7-Aug	90	52	38	0	
	A48	8-Aug	32	2	30	0	

5.3 WEATHER AND TEMPERATURE

In general, weather was typical of early August in eastern Tennessee. Days were usually warm and humid with high temperatures ranging from the mid 80's to the mid 90's, while low temperatures ranged from the high 60's to the mid 70's. Weather conditions were favorable for surveying for Indiana bats during the survey period (03 and 10 August 2011) (Table 5.3), with no rain out nights occurring. Moon phase during the survey period ranged from Waxing Crescent to Waxing Gibbous, with the First Quarter falling on 6 August 2011.

5.4 HABITAT ASSESSMENT

The project consisted of six mist net sites. Overall, the project area was very urban in nature, consisting of existing roadways, parking lots, house lots with well-manicured lawns, driveways, a few small streams and some scattered forested stands of varying degrees of maturity. Photographs for each of the mist net sites can be found in Appendix C.

Forest canopy species ranged from 10 to 24 inches diameter at breast height (dbh), and consisted of tulip poplar (*Liriodendron tulipifera*), northern red oad (*Quercus rubra*), white oak (*Q. alba*), black locust (*Robinia pseudoacacia*), red maple (*Acer rubrum*), box elder (*A. negundo*), American elm (*Ulmus americana*), black walnut (*Juglans nigra*) and black cherry (*Prunus serotina*). Dominant subcanopy species consisted of redbud (*Cercis canadensis*), flowering dogwood (*Cornus florida*), sassafras (*Sassafras albidum*), red cedar (*Juniperus virginia*), red maple and saplings of the dominant canopy species. The canopy was generally closed to moderately open with an open to moderately open midstory and understory. Dominant shrub species included spicebush (*Lindera benzoin*), multiflora rose (*Rosa multiflora*), privet (*Ligustrum* spp.), redbud (*Cercis canadensis*), sassafras, and black locust saplings.

The potential for bat roosts consisted of both large trees and snags. Roost potential was considered moderate at the majority of sites based on clutter, size and conditions of trees and available water sources for both drinking and prey production.

Table 5.3. Temperatures, wind speed, and cloud cover per hour during 2011 summer mist netting at the SR-126 Project, Sullivan County, Tennessee.

Site	Date	Temp.°F			Wind Speed[1]			Cloud Cover %		
		2100h	0000h	0200h	2100h	0000h	0200h	2100h	0000h	0200h
MS-01	3-August-11	77.2	76.1	74.7	0	0	0	40%	100%	100%
MS-02	3-August-11	78.0	74.9	74.0	0	0	0	70%	0%	100%
MS-01	4-August-11	82.3	77.0	75.7	0	0	0	50%	0%	0%
MS-02	4-August-11	80.0	75.8	74.0	0	0	0	70%	0%	0%
MS-03	5-August-11	83.0	77.0	75.0	0	1-2	0	50%	20%	0%
MS-03	6-August-11	80.0	75.0	74.0	0	0	0	50%	0%	0%
MS-05	7-August-11	79.9	74.4	72.5	0	0	0	0%	10%	50%
MS-06	7-August-11	76.0	73.0	73.0	0	0	0	30%	0%	0%
MS-05	8-August-11	68.8	65.7	65.7	0	0	0	10%	0%	80%

MS-06	8-August-11	65.0	64.0	63.0	0	0	0	<5%	50%	100%
MS-04	9-August-11	74.0	67.0	68.0	0	0	0	0%	0%	0%
MS-04	10-August-11	74.0	70.0	70.0	0	0	0	100%	100%	100%

[1] Wind speed estimated using Beaufort Wind Scale

6.0 Discussion

No Federally-endangered Indiana bats were captured during this 2011 summer mist net survey in Sullivan County, Tennessee. The objective of this survey was to assess the presence, or probable absence, of Indiana bats using summer habitat within the SR-126 Road Project Area. To effectively investigate the project area, we used guidelines recommended by the draft Indiana Bat Recovery Plan (USFWS 2007). Mist netting was conducted during the summer Indiana bat maternity season (i.e. June, July, and August). Weather restrictions were also followed, as well as conducting mist netting in areas with potentially suitable habitat for the Indiana bat.

The deciduous hardwood forests within the project area provided potentially suitable habitat for Indiana bats. Mist net locations distributed throughout the project area were in the best locations within the project area where bats were likely to be found traveling, foraging, or both. All forested habitats in the project area were similar in form and generally provided some large trees and snags (>16 inches dbh) for maternity roosts, a moderate-to-open subcanopy clutter and moderate to closed canopy closure. Although subcanopy clutter was not ideal, canopy closure was generally moderate to closed (ideal = open subcanopy clutter and open canopy closure), making the habitat sufficient to support Indiana bats.

A total of two gray bats were captured during survey efforts. Both of the gray bats were captured at MS-04, in a mist net erected across a driveway adjacent to Fall Creek Road, next to a small stream flowing into Fall Creek. Both streams provided a drinking water source and likely an adequate aquatic insect emergence for foraging. As gray bats are known to feed heavily on aquatic insects including Trichoptera, Plecoptera and Ephemeroptera (LaVal and LaVal, 1980), it is likely that bats were traveling along the driveway River corridor foraging on the aquatic insects emerging from the smaller stream. Since the gray bat is almost always a cave obligate species and because no large caves or cave-like structures (i.e. storm sewers, hollow dams, abandoned mines) are known to occur within the project area, the proposed project is not likely to affect the roosting habitat of this species. Since the capture site is well outside of the construction limits of the SR-126 corridor and because all of the streams within the impact area are much smaller, or more cluttered with vegetation, the project may not even affect foraging habitat for the gray bat. However, if gray bats use the non-riparian habitats for foraging then the project corridor contains other available foraging opportunities.

Based on the data collected during mist net surveys following USFWS approved guidelines, the apparent absence of the Indiana bat, and the apparent absence of any structures that could provide summer or winter habitat for the gray bat within the project corridor, a May Affect – Not Likely to Adversely Affect determination is anticipated from the USFWS's Tennessee Field Office.

7.0 Literature Cited

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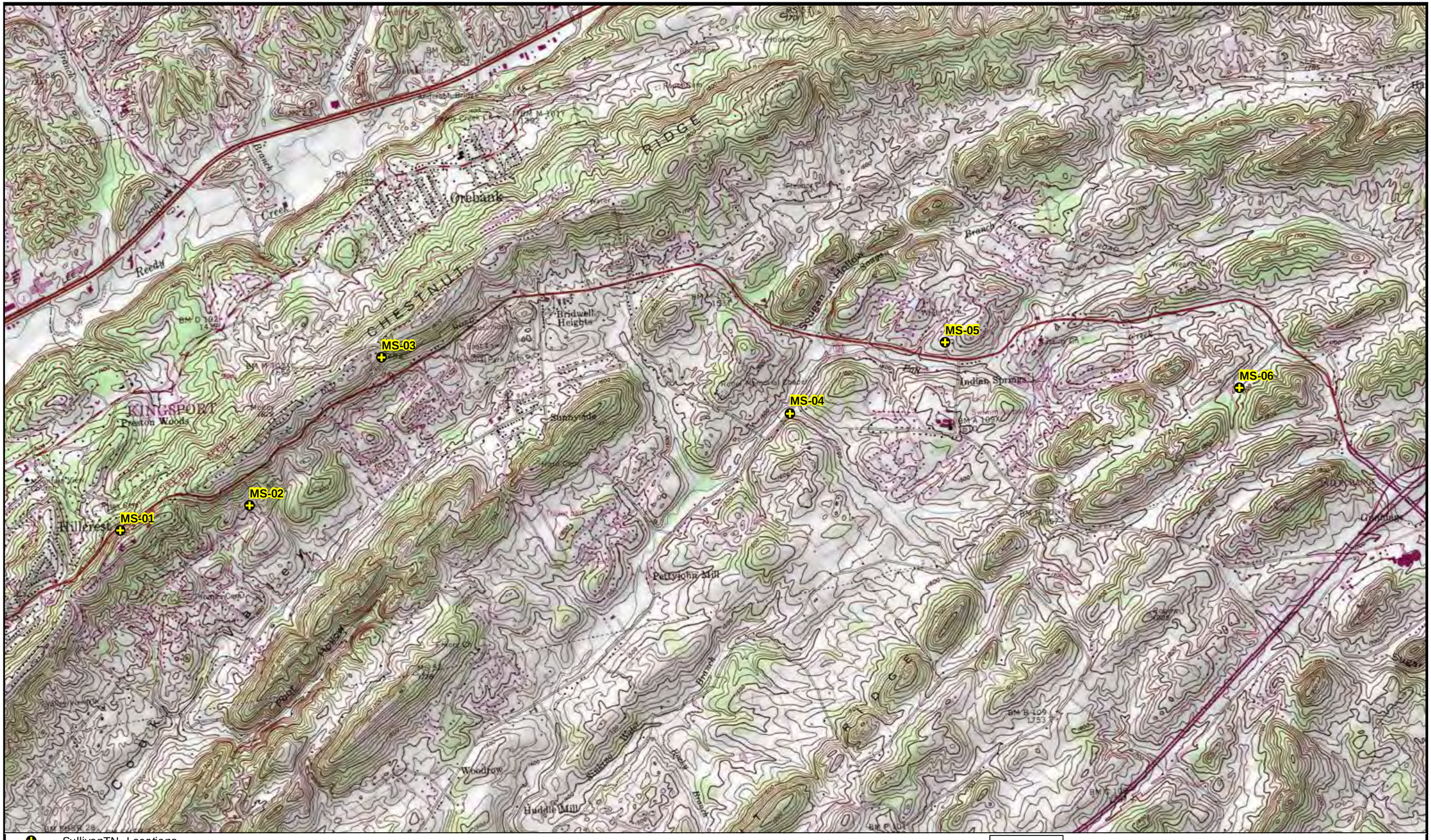
APPENDIX A

FIGURES



SullivanTN_Locations

Mist Net Sites

Mist Net Site Locations
SR-126 Bat Survey
Sullivan County, Tennessee

N

0 2,000 4,000 Feet

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MS-01
MS-02
MS-03
MS-04
MS-05
MS-06
E Stone Dr
Memorial Blvd
Bridwell Heights
Sunnyside
Preston Woods
Preston Forest
Crockett Ridge Golf Course
Pettyjohn Mill
Woodcrow
Huddle Mill
Rock City Rd
Cutshaw Ferry Rd
Cut Mill Rd
Shadowmead Rd
Catalpa Dr
Oakdale Dr
Oakview Dr
Golf Ridge Dr
Ridgetop Dr
Bluff Rd
Deer Town Rd
Oakwood Dr
Cedar Valley Rd
Rocky Branch Rd
Shadowlawn Rd
Hillcrest Rd
Oak Grove Rd
Cedar Creek Rd
Cedar Ridge Rd
Cedar Hollow Rd
Cedar Grove Rd
Cedar Hill Rd
Cedar Crest Rd
Cedar Bluff Rd
Cedar Lane Rd
Cedar Valley

APPENDIX B

BAT CAPTURE DATA SHEETS

Stantec

Bat Capture Data Sheet

Project Name/No.: TDOT-SR-126/172671051 **Date:** 03 August 2011 **Biologist(s):** James D. Kiser, Matt Boyer

Site Name/No.: Mr. Spivey's Driveway/MS-01 **State/County:** TN/Sullivan **Lat/Long:** N36°32'03.6" W82°29'22.1"

Quad:

~~**Projection:**~~ Kingsport **Nets Opened:** 2030h **Nets Closed:** 0200h **Moon Phase:** Waxing Crescent

Site Location: The site is located approx. miles east on SR-126 from the junction with SR-93 in Kingsport. It is approx 125m on Mr. Spivey's driveway from SR-126 at an elevation of 1730 feet.

Time	Temp	Wind	Cloud Cover
2030h	78.8°F	0	40%
2100h	77.2°F	0	75%
2200h	76.5°F	0	100%
2300h	76.0°F	0	90%
2400h	76.1°F	0	100%
0100h	75.6°F	0	100%
0200h	74.7°F	0	100%

Beaufort Wind Scale	
Scale	Wind Speed Indicators
0	Smoke rises vertically (<1 mph)
1	Wind direction shown by smoke drift (1-3 mph)
2	Wind felt on face; leaves rustle (4-7 mph)
3	Leaves, small twigs in constant motion (8-12 mph)
4	Dust rises; small branches move (13-18 mph)

Net	Length	Height	Road	Stream	Pond	Cave/ Portal	Other
A	9m	6m	✓				nearest SR-126
B	9m	6m	✓				nearest house
Anab at #33			along SR-126				

No.	Species	Time	Age	Sex	Repro.*	RFA (mm)	Wt (g)	Guano (Y/N)	Net/Location	WNS Wing Score
1	Eptesicus fuscus	2050h	A	M	↓	48	16.75	N	A/2m	WNS-Ø
2	Eptesicus fuscus	"	A	M	↓	47	13.75	N	B/4m	WNS-Ø
3	Eptesicus fuscus	↓	Escaped from Hand			—	—	—	B/4m	—
4	Eptesicus fuscus	2055h	A	M	↓	47	16.25	N	B/4m	WNS-Ø
5	Lasiurus borealis	2118h	J	F	NR	42	11.9	N	A/1m	WNS-Ø
6	Eptesicus fuscus	0030h	A	M	↓	47	16.1	N	A/2m	WNS-Ø

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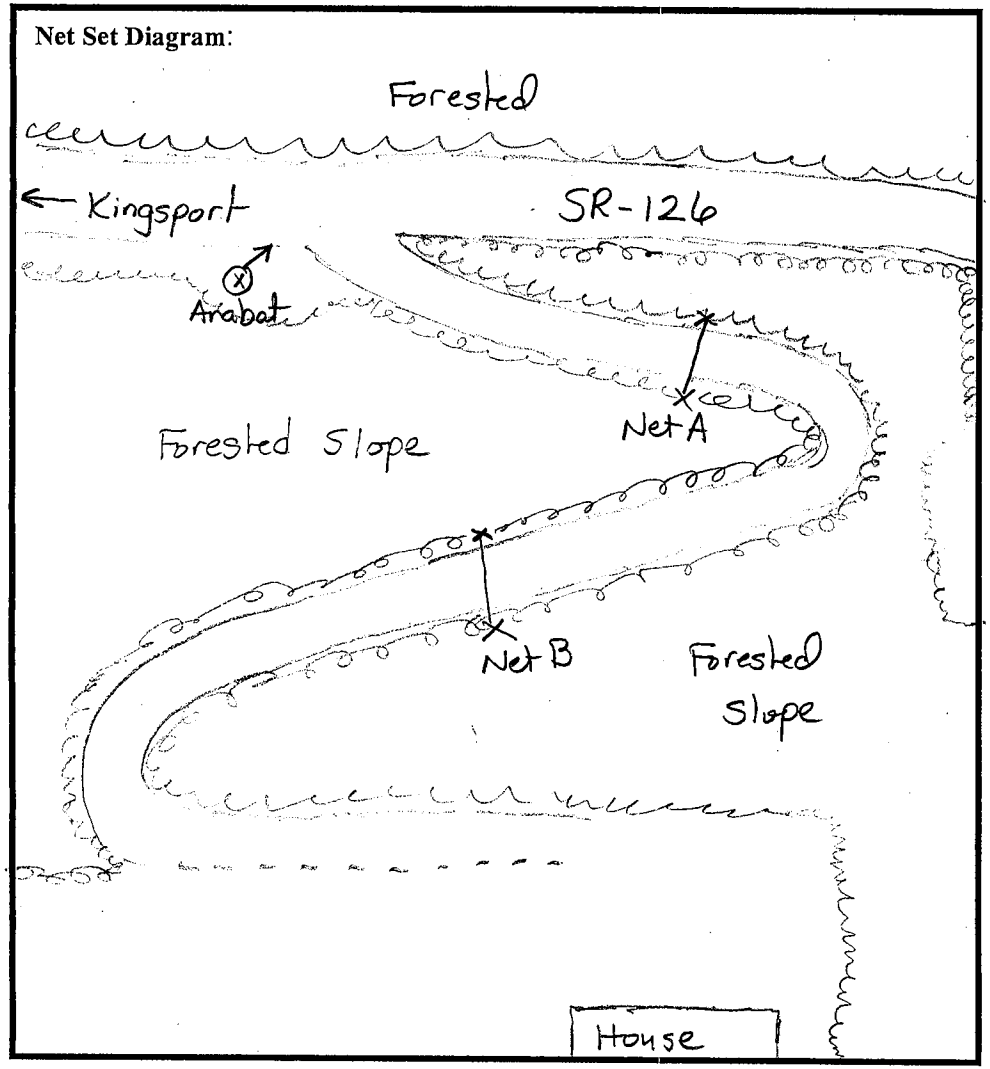
Bat Capture Data Sheet

NET SITE HABITAT DESCRIPTION

Net Set Diagram:



Comments: _____

Project Name/No.: TDOT- SR-126/ 172671051

Date: 03 August 2011 Site Name: Mr. Spivey's Driveway/MS-01

Other Wildlife Observations _____

STREAM CHARACTERISTICS

Bank Height: N/A Channel Width: N/A

Stream Width: N/A Riparian Width: (rt bank) N/A (lt bank) N/A

Avg. Water Depth: N/A % Canopy Cover 60%

% Substrate type: Bedrock N/A, Boulder N/A, Cobble N/A, Gravel N/A, Sand N/A, Fines N/A.

VEGETATION

Estimated Distance to Water Source: Unknown

Estimated Canopy Closure: closed (moderate) open

Dominant Sized Canopy Species (>16") Avg. DBH range 16-24"

1. N. Red Oak 2. Tuliptree 3. _____

Subdominant Sized Canopy Species (<16") Avg. DBH range 8-12"

1. Sassafrass 2. Red Maple 3. _____

Roost Tree Potential consists of: Large Trees Snags (Both)

Roost Tree Potential for Area: High (Moderate) Low

Subcanopy Species Avg. DBH range 4-8"

1. Sassafras 2. Red Maple 3. Tuliptree

Subcanopy Clutter: closed (moderate) open

Shrub Layer Species Avg. DBH range 0.5-3"

1. Maple seedlings 2. Sassafras 3. Red Cedar

4. Black Locust

Stantec

Bat Capture Data Sheet

Project Name/No.: TDOT-SR-126/172671051 **Date:** 04 August 2011 **Biologist(s):** James D. Kiser, Matt Boyer

Site Name/No.: Mr. Spivey's Driveway/MS-01 **State/County:** TN/Sullivan **Lat/Long:** N 36° 32' 03.6" W 82° 29' 22.1"

Quad: ~~Projection:~~ Kingsport **Nets Opened:** 2015h **Nets Closed:** 0200h **Moon Phase:** Waxing Crescent

Site Location: The site is located approx. miles east on SR-126 from the junction with SR-93 in Kingsport. It is approx 125m on Mr. Spivey's driveway from SR-126 at an elevation of 1730 feet.

Time	Temp	Wind	Cloud Cover
2030h	82.3°F	0	50%
2100h	81.16°F	0	100%
2200h	80.3°F	0	50%
2300h	78.3°F	0	25%
2400h	77.0°F	0	0%
0100h	76.1°F	0	0%
0200h	75.7°F	0	0%

Beaufort Wind Scale	
Scale	Wind Speed Indicators
0	Smoke rises vertically (<1 mph)
1	Wind direction shown by smoke drift (1-3 mph)
2	Wind felt on face; leaves rustle (4-7 mph)
3	Leaves, small twigs in constant motion (8-12 mph)
4	Dust rises; small branches move (13-18 mph)

Net	Length	Height	Road	Stream	Pond	Cave/ Portal	Other
A	9m	6m	✓				nearest SR-126
B	9m	6m	✓				nearest house
Anabat # 33			along SR-126				*

No.	Species	Time	Age	Sex	Repro.*	RFA (mm)	Wt (g)	Guano (Y/N)	Net/Location	WNS Wing Score
1	Eptesicus fuscus	2055h	Escaped from Net			—	—	—	B/2m	—
2	Eptesicus fuscus	2110h	A	M	↓	48	15.25	N	B/3.5m	WNS-Ø; Recapture from last night

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Bat Capture Data Sheet

NET SITE HABITAT DESCRIPTION

Net Set Diagram:

See Field Data Sheet from previous day (03 August 2011)

Comments: _____

Project Name/No.: TDOT-SR-126/172671051

Date: 04 August 2011 Site Name: Mr. Spivey's driveway/MS-01

Other Wildlife Observations _____

STREAM CHARACTERISTICS

Bank Height: N/A Channel Width: N/A

Stream Width: N/A Riparian Width: (rt bank) N/A (lt bank) N/A

Avg. Water Depth: N/A % Canopy Cover 60%

% Substrate type: Bedrock N/A, Boulder N/A, Cobble N/A, Gravel N/A, Sand N/A, Fines N/A.

VEGETATION

Estimated Distance to Water Source: Unknown

Estimated Canopy Closure: closed (moderate) open

Dominant Sized Canopy Species (>16") Avg. DBH range 16-24"

1. N. Red Oak 2. Tuliptree 3. —

Subdominant Sized Canopy Species (<16") Avg. DBH range 8-12"

1. Sassafras 2. Red Maple 3. —

Roost Tree Potential consists of: Large Trees Snags (Both)

Roost Tree Potential for Area: High (Moderate) Low

Subcanopy Species Avg. DBH range 4-8"

1. Sassafras 2. Red Maple 3. Tuliptree

Subcanopy Clutter: closed (moderate) open

Shrub Layer Species Avg. DBH range 0.5-3"

1. Maple Saplings 2. Sassafras 3. Red Cedar

4. black locust

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Bat Capture Data Sheet

Project Name/No.: TDOT-SR-126/172671051 **Date:** WEDNESDAY 3 AUG 2011 **Biologist(s):** Taylor & Sauge

Site Name/No.: Harbor Circle/MS-02 **State/County:** TN/Sullivan **Lat/Long:** N36°32'08.2" W82°28'44.8"

~~**Projection**~~ Quad!: Kingsport **Nets Opened:** 2055 **Nets Closed:** 0200 **Moon Phase:** Waxing Crescent

Site Location: 4638 Harbor Circle

Time	Temp	Wind	Cloud Cover
2100	78F	0	70
2200	76.3	0	20
2300	75.6	0	0*
0001	74.9	0	0
0100	74.7	0	80
0200	74.0	0	100

Beaufort Wind Scale	
Scale	Wind Speed Indicators
0	Smoke rises vertically (<1 mph)
1	Wind direction shown by smoke drift (1-3 mph)
2	Wind felt on face; leaves rustle (4-7 mph)
3	Leaves, small twigs in constant motion (8-12 mph)
4	Dust rises; small branches move (13-18 mph)

Net	Length	Height	Road	Stream	Pond	Cave/ Portal	Other
A	6	6	✓				DRIVEWAY
B	6	9	✓				
							*

No.	Species	Time	Age	Sex	Repro.*	RFA (mm)	Wt (g)	Guano (Y/N)	Net/Location	WNS Wing Score
*	BAT @ light feeding on moth @ 0135 hrs - 5x6 passes & gone. Only one seen									
	We have 2 street lights, one near the driveway set and one below the road set. We have not seen a single bat pass nor are there many insects around these lights.									

* briefly clouded between 2200-2300 AND sprinkled for a few minutes then cleared off by 2300

2-street lights near nets. No bugs to speak of AND no fly-bys by bats.

0001 - Storm clouds + lightening off in distance.

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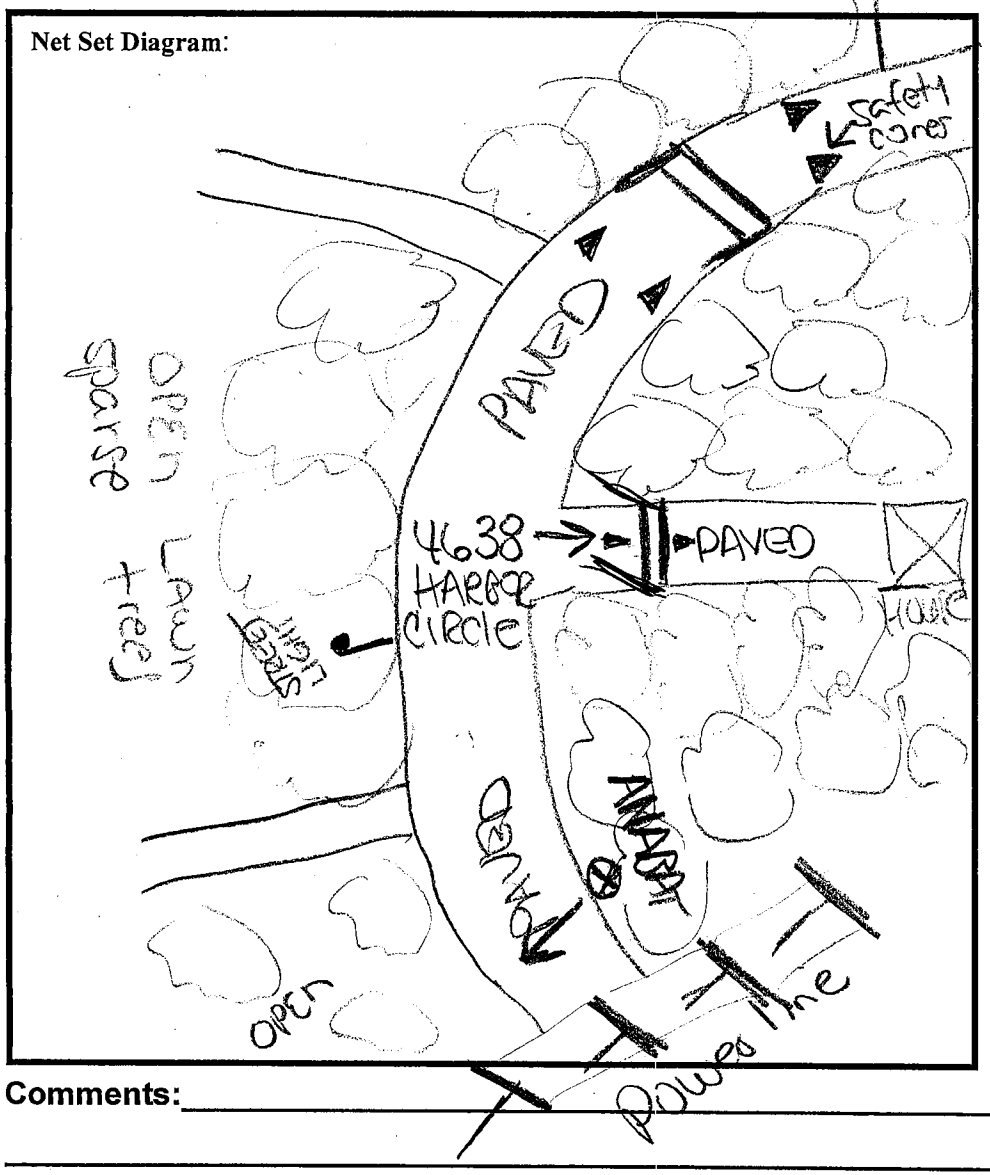
Bat Capture Data Sheet

NET SITE HABITAT DESCRIPTION

Net Set Diagram:



Comments:

Project Name/No.: TDOT-SR-126/172671051

Date: 3 August 201 /Site Name: Harbor Circle/MS-02

Other Wildlife Observations Screech owl (Otus asio) present virtually all night Opossum. PET CAT.

STREAM CHARACTERISTICS

Bank Height: N/A Channel Width: N/A

Stream Width: N/A Riparian Width: (rt bank) N/A (lt bank) N/A

Avg. Water Depth: N/A % Canopy Cover N/A

% Substrate type: Bedrock N/A, Boulder N/A, Cobble N/A, Gravel N/A, Sand N/A, Fines N/A.

VEGETATION

Estimated Distance to Water Source: Unknown

Estimated Canopy Closure: (closed) moderate open Over nets

Dominant Sized Canopy Species (>16") Avg. DBH range —

1. N/A → 2. Yard trees 3. —

Subdominant Sized Canopy Species (<16") Avg. DBH range 14-16"

1. Maple 2. Oaks wo+ro 3. Pine

Roost Tree Potential consists of: (Large Trees) Snags Both

Roost Tree Potential for Area: High (Moderate) Low

Subcanopy Species Avg. DBH range 6-8"

1. Sassafras 2. Dogwood 3. —

Subcanopy Clutter: closed (moderate to open)

Shrub Layer Species Avg. DBH range 1-4"

1. Redbud 2. Privet 3. —

Bat Capture Data Sheet

Stantec

Project Name/No.: TDOT-SR-126/172670.04 **Date:** THURSDAY 4 AUG 2011 **Biologist(s):** Taylor & Sauser

Site Name/No.: Harbor Circle/MS-02 **State/County:** TN/Sullivan **Lat/Long:** N36° 32' 08.2 W82° 28' 44.8"

~~Projection~~ Quad: Kingsport **Nets Opened:** 2055 **Nets Closed:** 0205 **Moon Phase:** Waxing Crescent

Site Location: 4688 Harbor Circle, Kingsport, TN

Time	Temp	Wind	Cloud Cover
2100	80.1	0	70
2200	79	0	90
2300	77.8	0	100
0001	75.8	0	0
0100	74.5	0	0

Beaufort Wind Scale	
Scale	Wind Speed Indicators
0	Smoke rises vertically (<1 mph)
1	Wind direction shown by smoke drift (1-3 mph)
2	Wind felt on face; leaves rustle (4-7 mph)
3	Leaves, small twigs in constant motion (8-12 mph)
4	Dust rises; small branches move (13-18 mph)

Net	Length	Height	Road	Stream	Pond	Cave/ Portal	Other
A	6	6	✓				DRIVEWAY
B	6	9	✓				
							*

No.	Species	Time	Age	Sex	Repro.*	RFA (mm)	Wt (g)	Guano (Y/N)	Net/Location	WNS Wing Score
1	Lasiurus borealis	2215	J	F	NON	41	12*	N	B/2M	0
	Yellow bulbs of nightwatch lights do not attract many bugs									

1-Bat observed flying @ 20' above road @ 2050 hrs.

*WT- belly full of bugs
Have not seen bats foraging at all. (MONGHT)

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Bat Capture Data Sheet

NET SITE HABITAT DESCRIPTION

Net Set Diagram:

SEE SAME

Project Name/No.: TDOT-SR-126-/172671051

Date: 4 August 2011 Site Name: Harbor Circle/MS-02

Other Wildlife Observations

Smelled Skunk. Heard Gray Fox barking.

STREAM CHARACTERISTICS

Bank Height: N/A Channel Width: N/A

Stream Width: N/A Riparian Width: (rt bank) N/A (lt bank) N/A

Avg. Water Depth: N/A % Canopy Cover N/A

% Substrate type: Bedrock N/A, Boulder N/A, Cobble N/A, Gravel N/A, Sand N/A, Fines N/A.

VEGETATION

Estimated Distance to Water Source: Unknown

Estimated Canopy Closure: (closed) moderate open

Dominant Sized Canopy Species (>16") Avg. DBH range ——

1. N/A 2. Yard Trees 3. ——

Subdominant Sized Canopy Species (<16") Avg. DBH range 14-16"

1. Maple 2. Oaks W/ 20 3. Pine

Roost Tree Potential consists of: (Large Trees) Snags Both

Roost Tree Potential for Area: High (Moderate) Low

Subcanopy Species Avg. DBH range 6-8"

1. Sassafras 2. Dogwood 3. ——

Subcanopy Clutter: closed (moderate) open

Shrub Layer Species Avg. DBH range 1-4"

1. Redbud 2. Privet 3. ——

Comments: ——

Stantec

Bat Capture Data Sheet

Project Name/No.: TDOT-SR-126/172671051 **Date:** FRIDAY 5 AUG 2011 **Biologist(s):** Boyer & Saugey

Site Name/No.: Chestnut Ridge Rd./MS-03 **State/County:** TN/Sullivan **Lat/Long:** N36° 32' 41.3" W082 28' 5.5"

~~Projection~~ Quad: Indian Springs **Nets Opened:** 2050 **Nets Closed:** 0210 **Moon Phase:** Waxing Crescent

Site Location:

Time	Temp F	Wind	Cloud Cover
2100	83	0	50
2200	80	1	50
2300	79	1	50
2400	77	1-2	20
0100	77	2	0
0200	75	0	0

Beaufort Wind Scale	
Scale	Wind Speed Indicators
0	Smoke rises vertically (<1 mph)
1	Wind direction shown by smoke drift (1-3 mph)
2	Wind felt on face; leaves rustle (4-7 mph)
3	Leaves, small twigs in constant motion (8-12 mph)
4	Dust rises; small branches move (13-18 mph)

Net	Length	Height	Road	Stream	Pond	Cave/ Portal	Other
A	6m	6m	✓				DRIVEWAY
B	6m	6m	✓				DRIVEWAY

No.	Species	Time	Age	Sex	Repro.*	RFA (mm)	Wt (g)	Guano (Y/N)	Net/Location	WNS Wing Score
1	Eptesicus fuscus	0100	A	F	NON	50	20	N	B/ 4m	0
2	Eptesicus fuscus	0100	J	F	NON	44	15	N	B/ 3m	0

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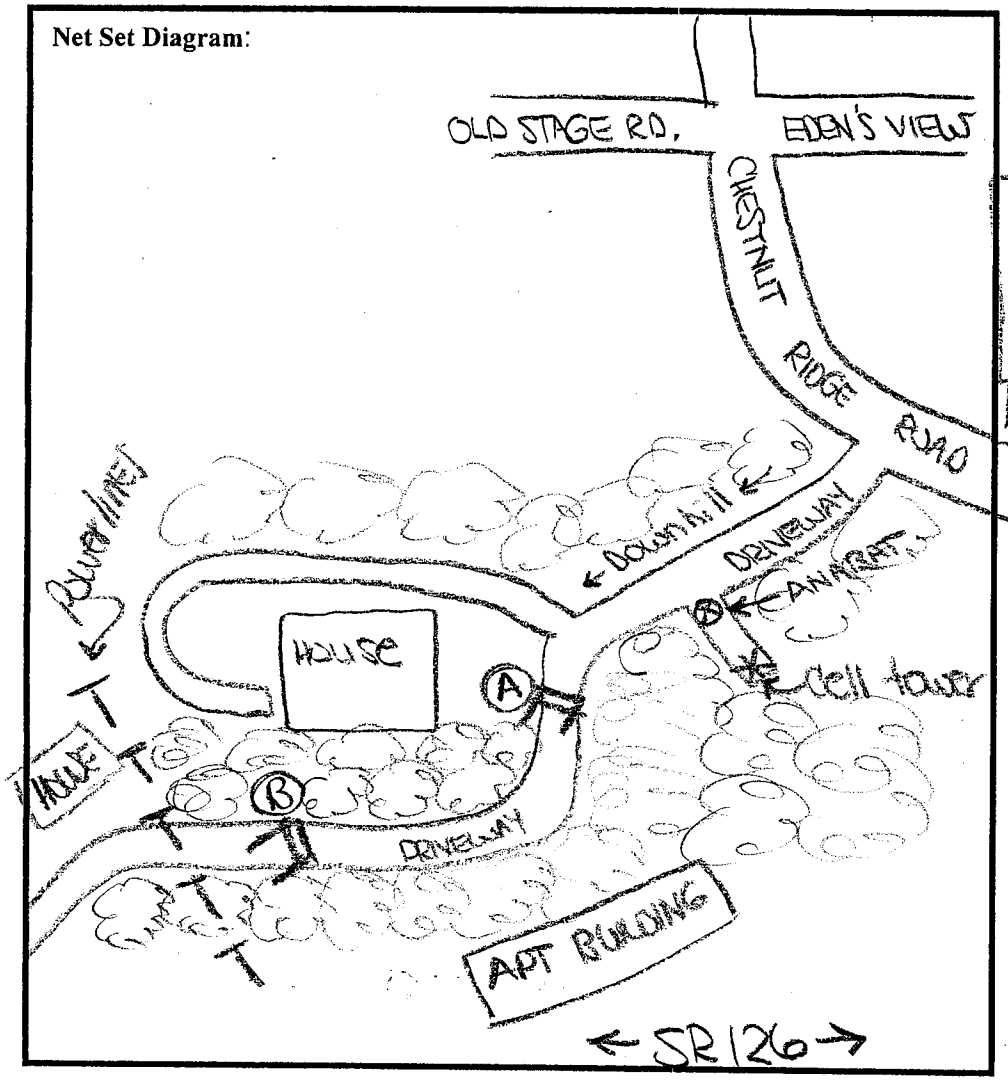
Bat Capture Data Sheet

NET SITE HABITAT DESCRIPTION

Net Set Diagram:



Comments: _____

Project Name/No.: TDOT-SR-126/172671051

Date: 5 August 2011 Site Name: Chestnut Ridge Rd./MS-03

Other Wildlife Observations Screech owls heard

STREAM CHARACTERISTICS

Bank Height: N/A Channel Width: N/A

Stream Width: N/A Riparian Width: (rt bank) N/A (lt bank) N/A

Avg. Water Depth: N/A % Canopy Cover N/A

% Substrate type: Bedrock N/A, Boulder N/A, Cobble N/A, Gravel N/A, Sand N/A, Fines N/A.

VEGETATION

Estimated Distance to Water Source: Unknown

Estimated Canopy Closure: closed (moderate) open

Dominant Sized Canopy Species (>16") Avg. DBH range 16+ (few trees)

1. Tulip poplar 2. _____ 3. _____

Subdominant Sized Canopy Species (<16") Avg. DBH range 10-12"

1. Tulip poplar 2. Cherry 3. _____

Roost Tree Potential consists of: Large Trees Snags (Both)

Roost Tree Potential for Area: High (Moderate to Low)

Subcanopy Species Avg. DBH range _____

1. Sassafras 2. Redbud 3. _____

Subcanopy Clutter: closed moderate open

Shrub Layer Species Avg. DBH range _____

1. Privet 2. Rose bushes 3. _____

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Bat Capture Data Sheet

Project Name/No.: TDOT-SR-126/172671051 **Date:** SATURDAY 6 AUG 2011 **Biologist(s):** Boyer & Sauge

Site Name/No.: Chestnut Ridge Rd./MS-03 **State/County:** TN/Sullivan **Lat/Long:** N36° 32' 41.3" W082° 23' 5.5"

~~Projection:~~ Quad: Indian Springs **Nets Opened:** 2045 **Nets Closed:** 0210 **Moon Phase:** First Quarter

Site Location:

Time	Temp F	Wind	Cloud Cover
2100	80	0	50
2200	77	0	20
2300	76	0	10
2400	75	0	0
0100	74	0	0
0200	74	0	0

Beaufort Wind Scale	
Scale	Wind Speed Indicators
0	Smoke rises vertically (<1 mph)
1	Wind direction shown by smoke drift (1-3 mph)
2	Wind felt on face; leaves rustle (4-7 mph)
3	Leaves, small twigs in constant motion (8-12 mph)
4	Dust rises; small branches move (13-18 mph)

Net	Length	Height	Road	Stream	Pond	Cave/ Portal	Other
A	6m	6m	✓				Driveway
B	6m	6m	✓				Driveway

No.	Species	Time	Age	Sex	Repro.*	RFA (mm)	Wt (g)	Guano (Y/N)	Net/Location	WNS Wing Score
1	Eptesicus fuscus	2240	A	M	SCR	47	14	N	A-2m	0
2	Lasiurus borealis	0130	J	F	NOR	42	11	N	A-2m	0

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Bat Capture Data Sheet

NET SITE HABITAT DESCRIPTION

Net Set Diagram:

SEE 5 AUG 11

Project Name/No.: TDOT-SR-126/172670-51

Date: 6 August 2011 **Site Name:** Chestnut Ridge Rd./MS-03

Other Wildlife Observations _____

STREAM CHARACTERISTICS

Bank Height: N/A **Channel Width:** N/A

Stream Width: N/A **Riparian Width:** (rt bank) N/A (lt bank) N/A

Avg. Water Depth: N/A **% Canopy Cover** N/A

% Substrate type: Bedrock N/A, Boulder N/A, Cobble N/A, Gravel N/A, Sand N/A, Fines N/A.

VEGETATION

Estimated Distance to Water Source: Unknown

Estimated Canopy Closure: closed (moderate) open

Dominant Sized Canopy Species (>16") **Avg. DBH range** 16+

1. Tulip poplar 2. _____ 3. _____

Subdominant Sized Canopy Species (<16") **Avg. DBH range** 10-12"

1. Tulip poplar 2. Cherry 3. _____

Roost Tree Potential consists of: Large Trees Snags (Both)

Roost Tree Potential for Area: High (Moderate to Low)

Subcanopy Species **Avg. DBH range** _____

1. Sassafras 2. Redbud 3. _____

Subcanopy Clutter: closed moderate open

Shrub Layer Species **Avg. DBH range** _____

1. Privet 2. Rose bushes 3. _____

Comments: _____

Burn's Driveway 289 Fall Creek Road

Bat Capture Data Sheet

Stantec

Project Name/No.: TDOT-SR-126/172671.01 **Date:** TUESDAY 9 AUG 11 **Biologist(s):** Ryer/Taylor/Saugy

Site Name/No.: Falls Creek Rd./Burns Driveway MS-01 **State/County:** TN, Sullivan **Lat/Long:** N 36° 32' 25.0 W 82° 26' 09.3"

~~Projection:~~ Quad: Indian Springs **Nets Opened:** 2045 **Nets Closed:** 0200 **Moon Phase:** WAXING GIBBOUS

Site Location: Site located on Fall Creek Rd., ~660 yards from SR-126 junction.

Time	Temp	Wind	Cloud Cover
2100	74	0	0
2200	70	0	0
2300	68	0	0
2400	67	0	0
0100	66	0	0
0200	68	0	0

Beaufort Wind Scale	
Scale	Wind Speed Indicators
0	Smoke rises vertically (<1 mph)
1	Wind direction shown by smoke drift (1-3 mph)
2	Wind felt on face; leaves rustle (4-7 mph)
3	Leaves, small twigs in constant motion (8-12 mph)
4	Dust rises; small branches move (13-18 mph)

Net	Length	Height	Road	Stream	Pond	Cave/ Portal	Other
A	6m	6m	✓				DRIVEWAY
B	6m	6m	✓				DRIVEWAY

No.	Species	Time	Age	Sex	Repro.*	RFA (mm)	Wt (g)	Guano (Y/N)	Net/Location	WNS Wing Score
1	Myotis grisescens	00:50	A	M	SCR	44	10	N	B/1m	0
2	M. grisescens	01:20	A	M	SCR	44	10.5		B/1m	0

Virtually no insects flying road corridor

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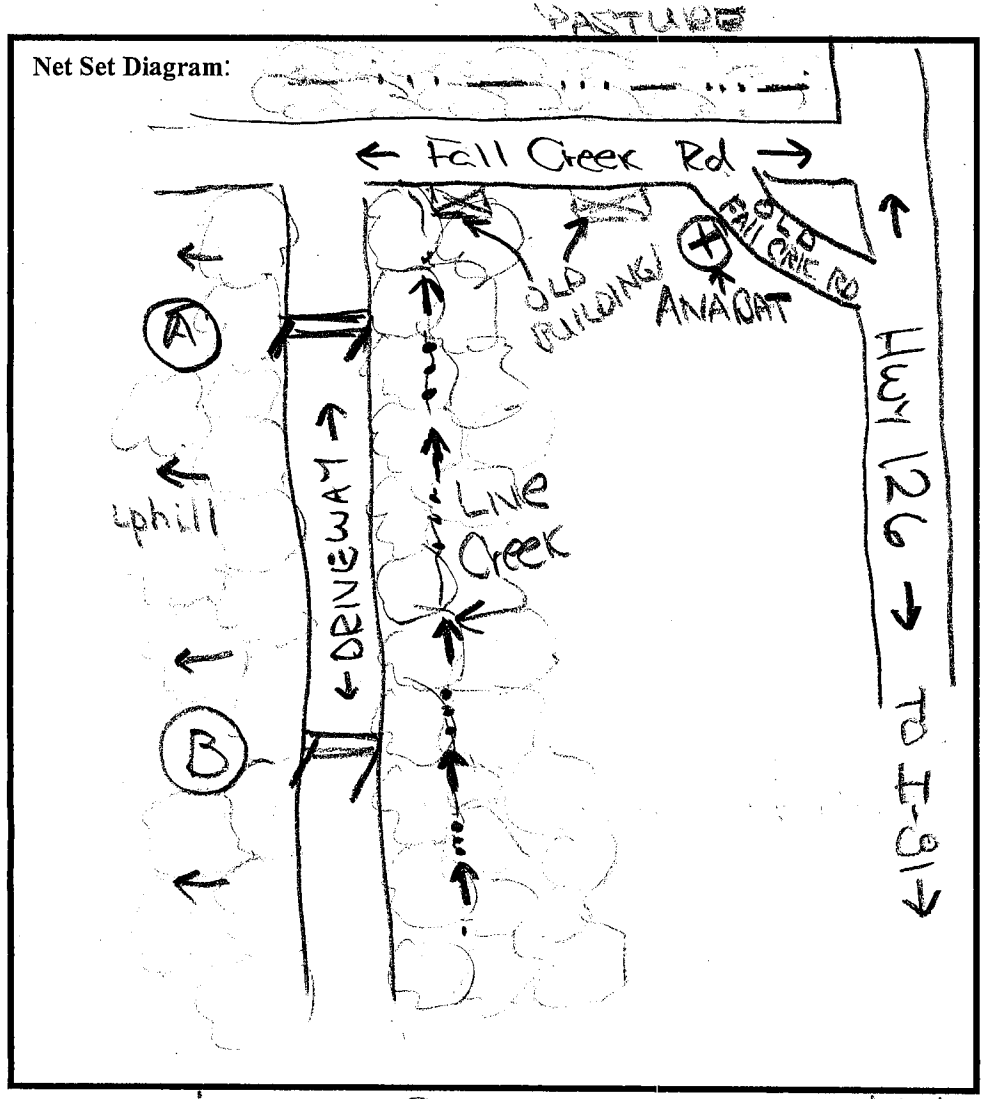
Bat Capture Data Sheet

NET SITE HABITAT DESCRIPTION

Net Set Diagram:



Project Name/No.: TDOT-SR-126/172671051

Date: 9 AUG 11 Site Name: Fall Creek Rd./Burns Driveway MS-04

Other Wildlife Observations _____

STREAM CHARACTERISTICS

Bank Height: ____ Channel Width: 3m

Stream Width: ____ Riparian Width: (rt bank) ____ (lt bank) ____

Avg. Water Depth: 6" % Canopy Cover Almost Covered

% Substrate type: ~~Bedrock~~, Boulder ____, Cobble ____, Gravel ____, Sand ____, Fines ____.

VEGETATION

Estimated Distance to Water Source: 20-30m

Estimated Canopy Closure: closed to moderate open

Dominant Sized Canopy Species (>16") Avg. DBH range 16-18in - Occasional Big Tree.

1. Beech 2. Walnut 3. ____

Subdominant Sized Canopy Species (<16") Avg. DBH range 10-14"

1. Walnut (lots) 2. Red Oak 3. ____

Roost Tree Potential consists of: Large Trees Snags Both

Roost Tree Potential for Area: High Moderate Low

Subcanopy Species Avg. DBH range 4-8

1. Tulip poplar 2. Cedar 3. Sassafras 4. Redbud

Subcanopy Clutter: closed moderate open

Shrub Layer Species Avg. DBH range 1-2"

1. Christmas Ferns 2. Seedlings of dom. Trees 3. ____

Comments: Line Crk 3M wide, some rocks but clear veg. Crayfish and small fish observed. Driveway typical 4+m wide

Bat Capture Data Sheet

Stantec

Project Name/No.: TDOT-SR-126/172671.05 **Date:** WEDNESDAY 10 AUG 2011 **Biologist(s):** Taylor & Sauce

Site Name/No.: Fall Creek Rd./Burns Driveway MS-04 **State/County:** TN/Sullivan **Lat/Long:** N36° 32' 25.0" W082° 26' 09.3"

~~Projection~~ Quad: Indian Springs **Nets Opened:** 2045 **Nets Closed:** 0210 **Moon Phase:** Waxing Gibbous

Site Location: 660 Meters from SR126 junction, on Fall Creek Rd.

Time	Temp	Wind	Cloud Cover
2100	74	0	100
2200	72	0	100
2300	72	0	100
2400	70	0	100
0100	70	0	100
0200	70	0	100

Beaufort Wind Scale	
Scale	**Wind Speed Indicators**
0	Smoke rises vertically (<1 mph)
1	Wind direction shown by smoke drift (1-3 mph)
2	Wind felt on face; leaves rustle (4-7 mph)
3	Leaves, small twigs in constant motion (8-12 mph)
4	Dust rises; small branches move (13-18 mph)

Net	Length	Height	Road	Stream	Pond	Cave/ Portal	Other
A	6m	6m	✓				
B	6m	6m	✓				

No.	Species	Time	Age	Sex	Repro.*	RFA (mm)	Wt (g)	Guano (Y/N)	Net/Location	WNS Wing Score
	Lasiurus borealis	0155	A	F	NOT	40	15.5	N	2m	0

Anabat located at OLD FALL CREEK & FALL CREEK ROADS

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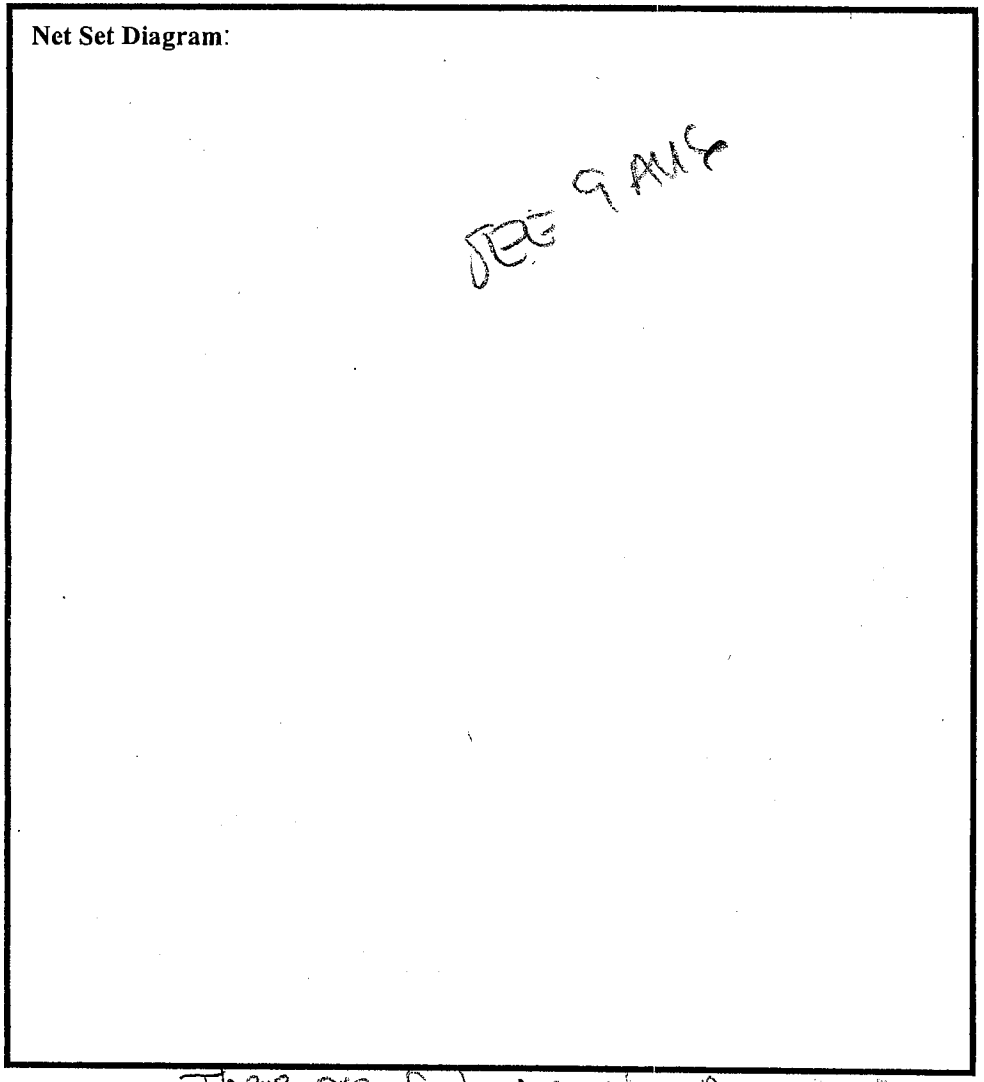
Bat Capture Data Sheet

NET SITE HABITAT DESCRIPTION

Net Set Diagram:

SEE 9 AUG



Project Name/No.: TDOT-SR-126/172671051

Date: 10 August 2011 Site Name: Fall Creek Rd./Burn's Driveway MS-04

Other Wildlife Observations Screech owls, barred owls

STREAM CHARACTERISTICS

Bank Height: — Channel Width: 3m

Stream Width: — Riparian Width: (rt bank) — (lt bank) —

Avg. Water Depth: 6" % Canopy Cover almost covered

% Substrate type: Bedrock, Boulder —, Cobble —, Gravel —, Sand —, Fines —.

Little to no flyway

VEGETATION

Estimated Distance to Water Source: 20-30m

Estimated Canopy Closure: closed to moderate open Adjacent to drive

Dominant Sized Canopy Species (>16") Avg. DBH range 16-18

1. Beech 2. Walnut 3. — occasional big trees

Subdominant Sized Canopy Species (<16") Avg. DBH range 10-14

1. Walnut (lots) 2. Red Oak 3. —

Roost Tree Potential consists of: Large Trees Snags Both

Roost Tree Potential for Area: High Moderate Low

Subcanopy Species Avg. DBH range 4-8

1. Tulip poplar 2. Cedar 3. Sassafras 4. Red Bud

Subcanopy Clutter: closed moderate open

Shrub Layer Species Avg. DBH range 1-2"

1. Christmas fern 2. SEEDLINGS of dominant trees 3. —

Comments: There are fish present. Numerous small CASCADES. BEDROCK substrate but not a good extensive flyway above.

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Bat Capture Data Sheet

Project Name/No.: TDOT-SR-126/172671051 **Date:** 07 August 2011 **Biologist(s):** James Kiser, Glenn Taylor

Site Name/No.: Kiowa St. Woodlot/MS-05 **State/County:** TN/Sullivan **Lat/Long:** N 36° 32' 40.0" W 82° 25' 24.2"

~~Projection~~ Quad: Indian Springs **Nets Opened:** 2015h **Nets Closed:** 0200h **Moon Phase:** Waxing Gibbous

Site Location: The site is located a junction of Kiowa St. and SR-126 in woodlot between Kiowa & Montezuma Rd. It is isolated by roads.

Time	Temp	Wind	Cloud Cover
2030h	81.3°F	0	30%
2100h	79.7°F	0	0%
2200h	76.7°F	0	50%
2300h	76.1°F	0	10%
2400h	74.4F	0	10%
0100h	73.4F	0	0%
0200h	72.5°F	0	50%

Beaufort Wind Scale	
Scale	Wind Speed Indicators
0	Smoke rises vertically (<1 mph)
1	Wind direction shown by smoke drift (1-3 mph)
2	Wind felt on face; leaves rustle (4-7 mph)
3	Leaves, small twigs in constant motion (8-12 mph)
4	Dust rises; small branches move (13-18 mph)

Net	Length	Height	Road	Stream	Pond	Cave/ Portal	Other
A	9m	6m	✓				
B	6m	6m					Forest Opening
Anabat #33 - roadside							*

No.	Species	Time	Age	Sex	Repro.*	RFA (mm)	Wt (g)	Guano (Y/N)	Net/Location	WNS Wing Score
	NO BATS									

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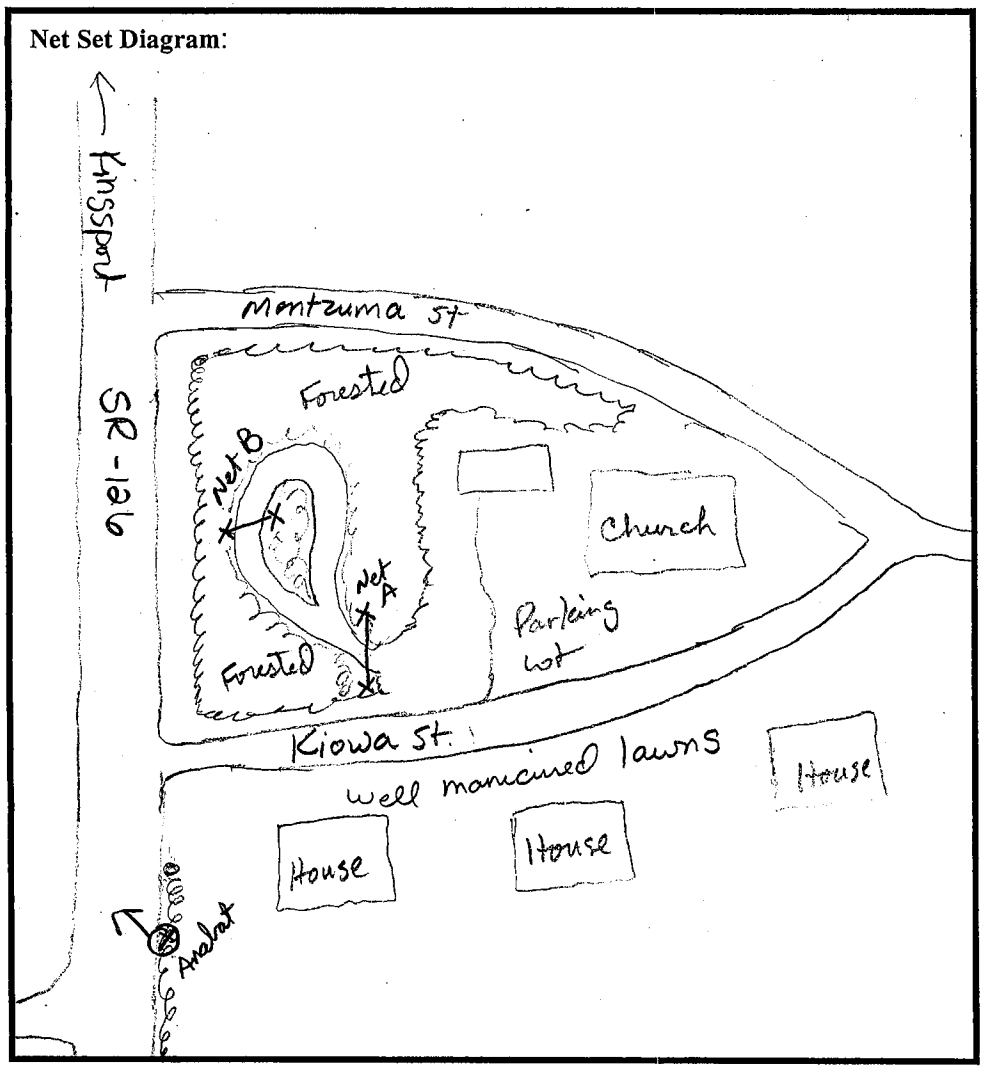
Bat Capture Data Sheet

NET SITE HABITAT DESCRIPTION

Net Set Diagram:



Comments: _____

Project Name/No.: TDOT-SR-126/172671051

Date: 07 August 2011 Site Name: Kiowa St. Woodlot/

Other Wildlife Observations Eastern Screech Owl (in our woodlot)

STREAM CHARACTERISTICS

Bank Height: N/A Channel Width: N/A

Stream Width: N/A Riparian Width: (rt bank) N/A (lt bank) N/A

Avg. Water Depth: N/A % Canopy Cover 50%

% Substrate type: Bedrock N/A, Boulder N/A, Cobble N/A, Gravel N/A, Sand N/A, Fines N/A.

VEGETATION

Estimated Distance to Water Source: Unknown – probably near swimming pool

Estimated Canopy Closure: closed (moderate) open

Dominant Sized Canopy Species (>16") Avg. DBH range 16" – few trees

1. Am. Elm 2. Red Maple 3. —

Subdominant Sized Canopy Species (<16") Avg. DBH range 10-14"

1. Box Elder 2. Tuliptree 3. black locust

Roost Tree Potential consists of: Large Trees (Snags) Both

Roost Tree Potential for Area: High Moderate (Low)

Subcanopy Species Avg. DBH range 6-8"

1. Red Cedar 2. Red Maple 3. _____

Subcanopy Clutter: closed (moderate) open

Shrub Layer Species Avg. DBH range 0.25"-1"

1. Privet 2. Rosa multiflora 3. Spicebush

4. Sapling Overstory trees

Stantec

Bat Capture Data Sheet

Project Name/No.: TDOT-SR-126/172671051 **Date:** 08 August 2011 **Biologist(s):** James Kiser, Glenn Taylor

Site Name/No.: Kiowa St. Woodlot/MS-05 **State/County:** TN/Sullivan **Lat/Long:** N 36° 32' 40.0" W 82° 25' 24.2"

~~Projection:~~ Quad: Indian Springs **Nets Opened:** 2015h **Nets Closed:** 0200h **Moon Phase:** Waxing Gibbous

Site Location: The site is located at junction of Kiowa St. and SR-126 in woodlot between Kiowa St. & Montezuma Rd. It is isolated by roads

Time	Temp	Wind	Cloud Cover
2030h	71.2°F	0	25%
2100h	68.8°F	0	10%
2200h	67.7°F	0	0%
2300h	67.7°F	0	0%
2400h	65.7°F	0	0%
0100h	65.7°F	0	80%
0200	65.7°F	0	80%

Beaufort Wind Scale	
Scale	**Wind Speed Indicators**
0	Smoke rises vertically (<1 mph)
1	Wind direction shown by smoke drift (1-3 mph)
2	Wind felt on face; leaves rustle (4-7 mph)
3	Leaves, small twigs in constant motion (8-12 mph)
4	Dust rises; small branches move (13-18 mph)

Net	Length	Height	Road	Stream	Pond	Cave/ Portal	Other
A	9m	6m	✓				
B	6m	6m					Forest Opening
Anabat #33 – roadside							

No.	Species	Time	Age	Sex	Repro.*	RFA (mm)	Wt (g)	Guano (Y/N)	Net/Location	WNS Wing Score
1	Lasiurus borealis	2100h	A	M	↑	41	11.9	N	A/3m	WNS-Ø

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Bat Capture Data Sheet

Project Name/No.: TDOT-SR-126/172671051 **Site Name/No.:** Kiowa Street, Woodlot/MS-05 **Date:** 8 August 2011

No.	Species	Time	Age	Sex	Repro.*	RFA (mm)	Wt (g)	Guano (Y/N)	Net/Location	Band and/or Specimen # (e.g., Hair, Wing Punch)

*Reproduction: P – Pregnant; L – Lactating; PL – Post Lactating; non - Testes Ascended; desc. - Testes Descended

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Property of Ron Porter 197 Samiola Rd Blountville, TN (423-323-4833)

Bat Capture Data Sheet

Stantec

Project Name/No.: TDOT-SR-126/172671051 **Date:** 7 AUG 2011 **Biologist(s):** Boyce & Sauger

Site Name/No.: Porter/MS-MS-06 **State/County:** TN/Sullivan **Lat/Long:** N36 32 27.82 W082 24 0.52

~~Projection~~ Quad: Indian Springs **Nets Opened:** 2045 **Nets Closed:** 0215 **Moon Phase:** Waxing Gibbous

Site Location: Worked area directly across from 210 Wine St. (Woods Road)

Time	Temp	Wind	Cloud Cover
2100	76F	1x	30
2200	74	0	30
2300	72	0	0
2400	73	0	0
0100	73	0	0
0200	73	0	0

Beaufort Wind Scale	
Scale	Wind Speed Indicators
0	Smoke rises vertically (<1 mph)
1	Wind direction shown by smoke drift (1-3 mph)
2	Wind felt on face; leaves rustle (4-7 mph)
3	Leaves, small twigs in constant motion (8-12 mph)
4	Dust rises; small branches move (13-18 mph)

Net	Length	Height	Road	Stream	Pond	Cave/ Portal	Other
A	9m	6m	✓				
B	12m	6m	✓				

No.	Species	Time	Age	Sex	Repro.*	RFA (mm)	Wt (g)	Guano (Y/N)	Net/Location	WNS Wing Score
1	~~E. fuscus~~	2145	A	M	SCR	47	17	N	B/3m	0
2	E. fuscus	00:45	J	M	SCR	46	15.5		B/5m	0
3	E. fuscus	01:15	A	M	SCR	48	17.5		B/1m	0
4	E. fuscus	01:30	A	M	SCR	47	15		A/3.5m	0
5	E. fuscus	01:35	A	F	PL	50	22		B/3.5m	0

Wind x - along road, 0 at net sites.

First bat flight observed (3 bats together) @ 2050 hrs over open lawn @ 30-40'

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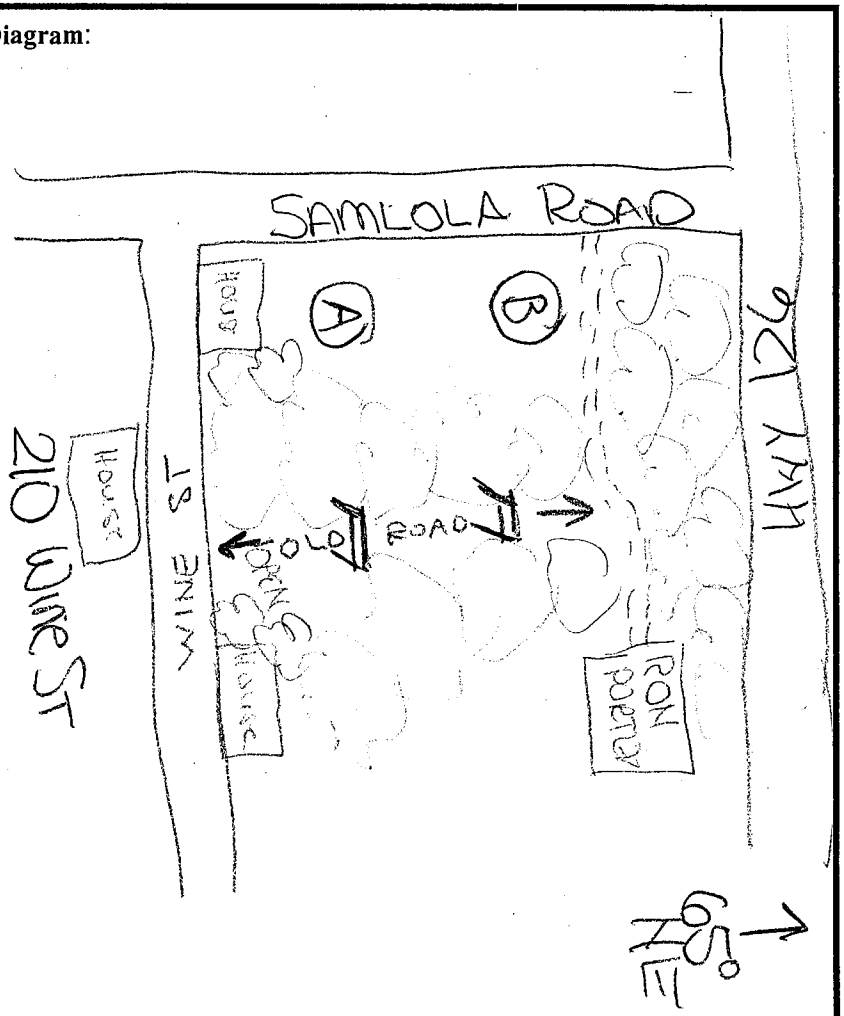
Bat Capture Data Sheet

NET SITE HABITAT DESCRIPTION

Net Set Diagram:



Comments: _____

Project Name/No.: TDOT-SR-126/172671051

Date: 7 August 2011 Site Name: Porter/MS-06

Other Wildlife Observations _____

STREAM CHARACTERISTICS

Bank Height: N/A Channel Width: N/A

Stream Width: N/A Riparian Width: (rt bank) N/A (lt bank) N/A

Avg. Water Depth: N/A % Canopy Cover N/A

% Substrate type: Bedrock N/A, Boulder N/A, Cobble N/A, Gravel N/A, Sand N/A, Fines N/A.

VEGETATION – Forest-field

Estimated Distance to Water Source: Unknown

Estimated Canopy Closure: closed (moderate) open

Dominant Sized Canopy Species (>16") Avg. DBH range 16+"

1. Tulip Poplar 2. Red Oak 3. White Oak

Subdominant Sized Canopy Species (<16") Avg. DBH range ____

1. Beech 2. Red Oak 3. Maple

Roost Tree Potential consists of: Large Trees Snags (Both)

Roost Tree Potential for Area: High (Moderate) Low

Subcanopy Species Avg. DBH range 2-4 in

1. Redbud 2. Sapling of above 3. Dogwood

Subcanopy Clutter: closed moderate open

Shrub Layer Species Avg. DBH range ____

1. few shrubs 2. occasional seedlings of trees 3. _____

Property of Ks. Porter 197 Samkola Rd. Blountville, TN

Stantec

Bat Capture Data Sheet

Project Name/No.: TDOT-SR-126/172671051 **Date:** 8 AUG 11 **Biologist(s):** Boyer & Saugg

Site Name/No.: Porter/MS-06 **State/County:** TN/Sullivan **Lat/Long:** N36°32' 27.02" W082°24' 0.52

~~Projection~~ Quad: Indian Springs **Nets Opened:** 2045 **Nets Closed:** 0200h **Moon Phase:** Waxing Gibbous

Site Location: Woods road in wooded lot across from 210 Wine St.

Time	Temp	Wind	Cloud Cover
2100	65F	0	<5%
2200	73	0	0
2300	68	0	0
2400	64	0	50
0100	63	0	100
0200			

Beaufort Wind Scale	
Scale	Wind Speed Indicators
0	Smoke rises vertically (<1 mph)
1	Wind direction shown by smoke drift (1-3 mph)
2	Wind felt on face; leaves rustle (4-7 mph)
3	Leaves, small twigs in constant motion (8-12 mph)
4	Dust rises; small branches move (13-18 mph)

Net	Length	Height	Road	Stream	Pond	Cave/ Portal	Other
A	12	6	✓				
B	9	6	✓				

No.	Species	Time	Age	Sex	Repro.*	RFA (mm)	Wt (g)	Guano (Y/N)	Net/Location	WNS Wing Score
1	Eptesicus fuscus	2210	A	F	None	49	17.5	N	A/5m	Ø
2	Lasiurus borealis	22:10	A	F	None	42	11.5		A/2.5	Ø
3	E. fuscus	22:10	Escape							Positive I.D. Escape
4	E. fuscus	22:20	J	M	SCR	48	15.5		A/4m	Ø

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Bat Capture Data Sheet

NET SITE HABITAT DESCRIPTION

Net Set Diagram:

See 7 AUG

Comments:

Project Name/No.: TDOT-SR-126/172671051

Date: 8 August 2011 Site Name: Porter / MS-06

Other Wildlife Observations

STREAM CHARACTERISTICS

Bank Height: N/A Channel Width: N/A

Stream Width: N/A Riparian Width: (rt bank) N/A (lt bank) N/A

Avg. Water Depth: N/A % Canopy Cover N/A

% Substrate type: Bedrock N/A, Boulder N/A, Cobble N/A, Gravel N/A, Sand N/A, Fines N/A.

VEGETATION

Estimated Distance to Water Source: Unknown

Estimated Canopy Closure: closed moderate open

Dominant Sized Canopy Species (>16") Avg. DBH range 16+ several of these large trees

1. Tulip poplar 2. RED OAK 3. WHITE OAK

Subdominant Sized Canopy Species (<16") Avg. DBH range

1. BEECH 2. RED OAK 3. Maple

Roost Tree Potential consists of: Large Trees Snags Both

Roost Tree Potential for Area: High Moderate Low

Subcanopy Species Avg. DBH range 2-4"

1. RED BUD 2. Saplings of above 3. Dogwood

Subcanopy Clutter: closed moderate open

Shrub Layer Species Avg. DBH range

1. few shrubs 2. occasional seedlings of trees 3. Very shady

Lots of poison ivy on ground / grasses / forbs

Cincinnati, OH 45241

APPENDIX C

PHOTOGRAPHS

TDOT SR-126 ROAD PROJECT
INDIANA BAT (*MYOTIS SODALIS*) MIST NET SURVEY
SULLIVAN COUNTY, TENNESSEE

MS-01, NET - A



MS-01, NET - B



TDOT SR-126 ROAD PROJECT
INDIANA BAT (*MYOTIS SODALIS*) MIST NET SURVEY
SULLIVAN COUNTY, TENNESSEE

MS-01, ANABAT



MS-02, NET – A

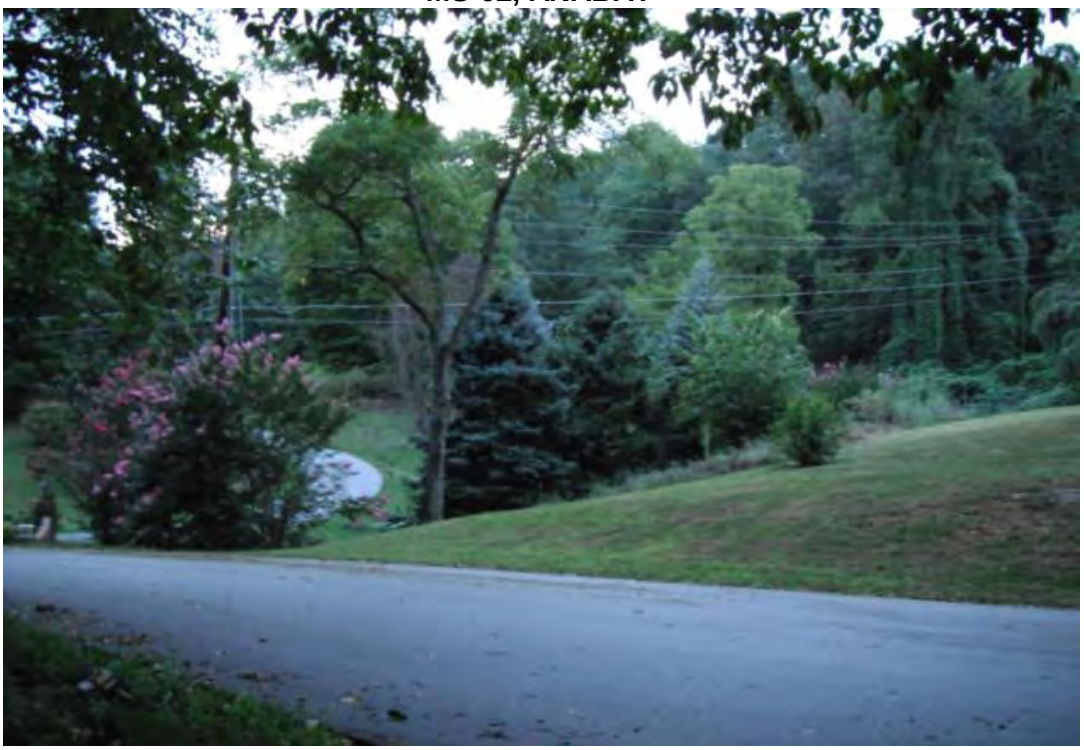


TDOT SR-126 ROAD PROJECT
INDIANA BAT (*MYOTIS SODALIS*) MIST NET SURVEY
SULLIVAN COUNTY, TENNESSEE

MS-02, NET – B



MS-02, ANABAT



MS-04, NET – A



MS-04, NET – B



TDOT SR-126 ROAD PROJECT
INDIANA BAT (*MYOTIS SODALIS*) MIST NET SURVEY
SULLIVAN COUNTY, TENNESSEE

MS-04, ANABAT



MS-05, NET – A



TDOT SR-126 ROAD PROJECT
INDIANA BAT (*MYOTIS SODALIS*) MIST NET SURVEY
SULLIVAN COUNTY, TENNESSEE

MS-05, NET – B



MS-05, ANABAT

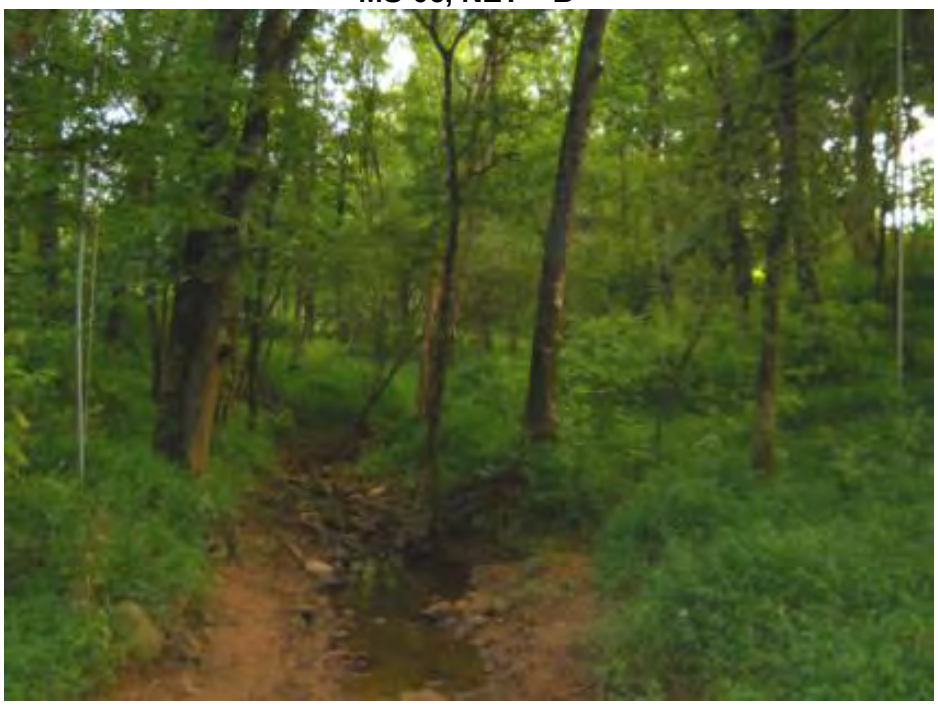


TDOT SR-126 ROAD PROJECT
INDIANA BAT (*MYOTIS SODALIS*) MIST NET SURVEY
SULLIVAN COUNTY, TENNESSEE

MS-06, NET – A



MS-06, NET – B

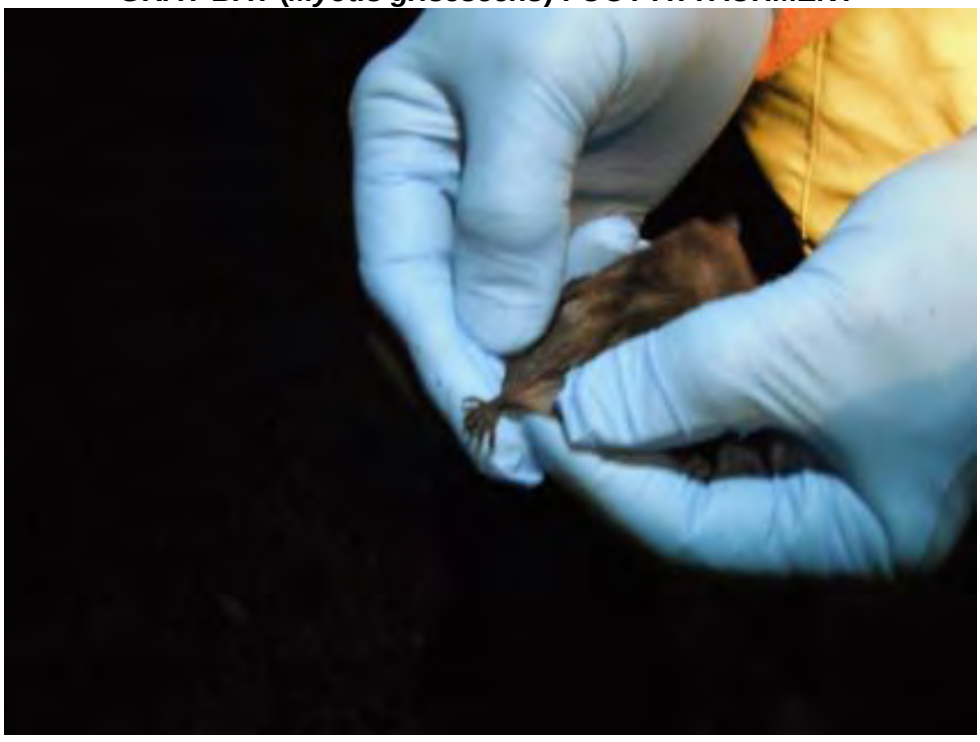


TDOT SR-126 ROAD PROJECT
INDIANA BAT (*MYOTIS SODALIS*) MIST NET SURVEY
SULLIVAN COUNTY, TENNESSEE

GRAY BAT (*Myotis grisescens*)



GRAY BAT (*Myotis grisescens*) FOOT ATTACHMENT



Stantec

TDOT SR-126 ROAD PROJECT
INDIANA BAT (*MYOTIS SODALIS*) MIST NET SURVEY
SULLIVAN COUNTY, TENNESSEE

EASTERN RED BAT (*Lasiurus borealis*)



Noise Evaluation Update
for
State Route 126 from East Center Street to Interstate 81
Sullivan County

PIN: 105467.00
Project: 82085-1225-14

Submitted to:



Prepared by:

Bowlby & Associates, Inc.
504 Autumn Springs Court, #11
Franklin, TN 37067

October 2011

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EXECUTIVE SUMMARY

The noise evaluation for this project was conducted in accordance with FHWA noise standards, *Procedures for Abatement of Highway Traffic and Construction Noise*, *23 CFR 772* and the Tennessee Department of Transportation's *Policy on Highway Traffic Noise Abatement* effective July 13, 2011.

The study determined that the project will create traffic noise impacts at 35 residences under Alternative A and at 45 residences under Alternative B. The increased number of impacts under Alternative B is primarily the results of fewer takes under Alternative B due to a narrower right-of-way. The taking of fewer properties under Alternative B leaves some residences in close proximity to SR 126.

Noise barriers were evaluated to mitigate the predicted noise impacts in accordance with TDOT's noise policy. In order for noise barriers to be included in a project, they must be determined to be both feasible and reasonable in accordance with TDOT's Noise Policy.

SR 126 is not a limited access facility. In fact, of the 35 impacted residences under Alternative A, 29 have direct driveway access to SR 126. Similarly, of the 45 impacted residences under Alternative B, 40 have direct driveway access to SR 126. Noise barriers are not feasible to mitigate impacts at these residences because a noise barrier would limit access from these properties and adjacent properties.

The remaining impacted residences under both Alternatives are isolated from other impacted residences. Noise barriers for these residences would not be reasonable since the required area per benefited residence will greatly exceed the allowable area for benefited residence.

As a result, noise barriers were determined not to be feasible or reasonable for this project.

1.0 INTRODUCTION

This report updates a previous noise report completed by HMB in October 2008 and updated by HMB in October 2010 [1] to comply with TDOT's current noise policy dated July 13, 2011. The HMB report is provided in Appendix A.

The project involves the widening and reconstruction of Memorial Boulevard (SR 126) from East Center Street to Interstate 81 (I-81) for a distance of approximately 8.3 miles. The project area is shown in Figure 1.

The No-Build Alternative and two Build Alternatives have been evaluated. Detailed project descriptions are provided in the Project Description section of the HMB report. Alternatives A and B are also shown in Figure 2.1 on the HMB report.

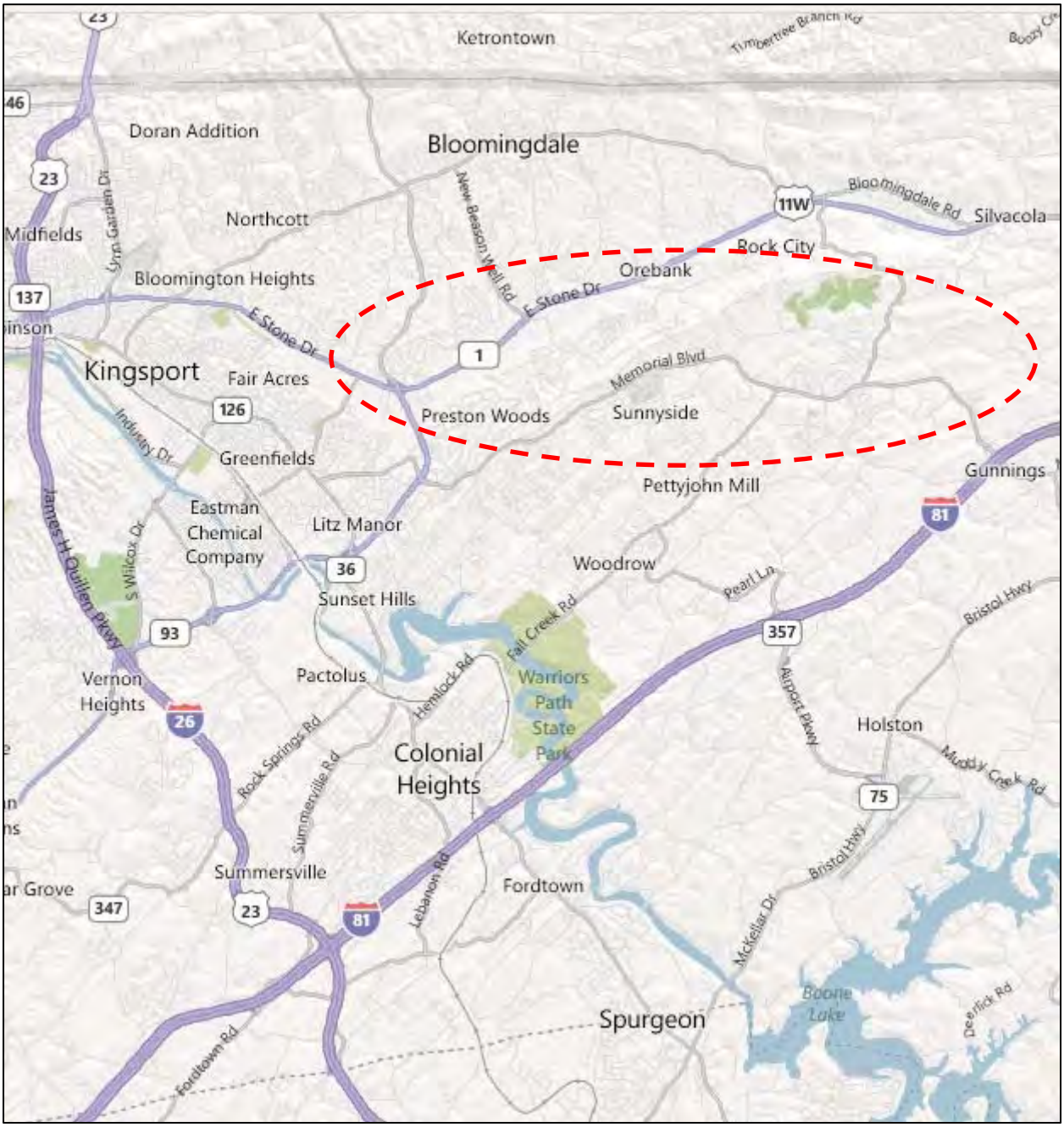

Figure 1: Project Area

2.0 NOISE EVALUATION

This study has been prepared in accordance with the FHWA noise standards, *Procedures for Abatement of Highway Traffic and Construction Noise*, *23 CFR 772* [1], and the Tennessee Department of Transportation's *Policy on Highway Traffic Noise Abatement* [2] and includes the following tasks:

- Identification of noise-sensitive land uses: Identification of existing land uses in the project area that are sensitive to highway traffic noise;
- Determination of existing sound levels: Measurement of existing sound levels at sensitive land uses to characterize the existing noise environment in the project area;
- Determination of future sound levels: Prediction of future, design year, worst-hour sound levels for the No-Build and Build Alternatives;
- Determination of traffic noise impacts: Determination of noise impacts based on the increase in existing sound levels, as well as design year sound levels;
- Noise abatement evaluation: Evaluation of noise abatement for areas determined to be impacted by the project;
- Discussion of construction noise; and,
- Coordination with local officials.

Each of these analysis steps is discussed below following a discussion of TDOT's criteria for determining noise impacts.

2.1 Criteria for Determining Impacts

2.1.1 Traffic Noise Terminology

Traffic noise levels are expressed in terms of the hourly, A-weighted equivalent sound level in decibels (dBA). A sound level represents the level of the rapid air pressure fluctuations caused by sources such as traffic that are heard as noise. A decibel is a unit that relates the sound pressure of a noise to the faintest sound the young human ear can hear.

The A-weighting refers to the amplification or attenuation of the different frequencies of the sound (subjectively, the pitch) to correspond to the way the human ear "hears" these frequencies. Generally, when the sound level exceeds the mid-60 dBA range, outdoor conversation in normal tones at a distance of three feet becomes difficult. Figure 2 shows some typical indoor and outdoor sound levels.

A 9-10 dB increase in sound level is typically judged by the listener to be twice as loud as the original sound while a 9-10 dB reduction is judged to be half as loud. Doubling the number of sources (i.e. vehicles) will increase the hourly equivalent sound level by approximately 3 dB, which is usually the smallest change in hourly equivalent A-weighted traffic noise levels that people can detect without specifically listening for the change.

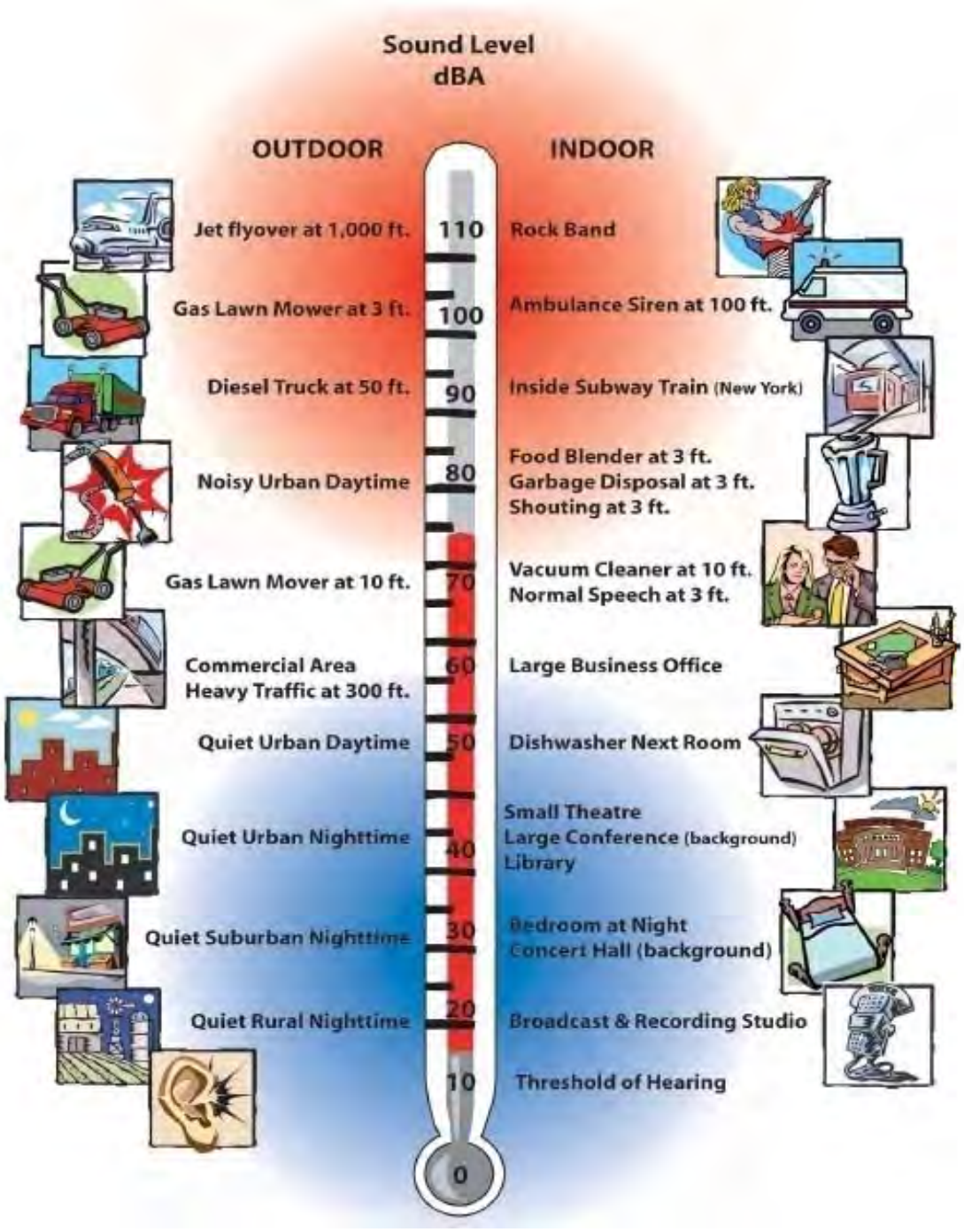

Figure 2: Typical Sound Levels

Because most environmental noise fluctuates from moment to moment, it is standard practice to condense data into a single level called the equivalent sound level (L_{eq}). The L_{eq} is a steady sound level that would contain the same amount of sound energy as the actual time-varying sound evaluated over the same time-period. The L_{eq} averages the louder and quieter moments, but gives much more weight to the louder moments in the averaging. For traffic noise assessment purposes, L_{eq} is typically evaluated over the worst one-hour period and is defined as L_{eq} (1h).

The term insertion loss (IL) is generally used to describe the reduction in L_{eq} (1h) at a location after a noise barrier is constructed. For example, if the L_{eq} (1h) at a residence before a barrier is constructed is 75 dBA and the L_{eq} (1h) after a barrier constructed is 65 dBA, then the insertion loss would be 10 dB.

2.1.2 Noise Abatement Criteria (NAC)

Noise impact is determined by comparing future project sound levels: (1) to a set of Noise Abatement Criteria (NAC) for a particular land use category, and (2) to existing sound levels.

The FHWA noise standards (contained in 23 CFR 772) and TDOT's noise policy state that traffic noise impacts require consideration of abatement when worst-hour sound levels approach or exceed the NAC listed in Table 1.

The FHWA noise standards and TDOT's noise policy also define impacts to occur if there is a substantial increase in design year sound levels. Table 2 presents TDOT's criteria to define substantial noise increase.

2.2 Identification of Noise-Sensitive Land Uses

Review of available electronic mapping revealed over 200 Category B residences adjacent to SR 126 that might be impacted by the project. These uses include both single-family homes and apartments.

A nursing home, a church, and the East Lawn Memorial Park cemetery are also located near SR 126 within the project limits. The nursing home, church and cemetery are classified as Category C land uses. For cemeteries, frequent human use areas include exterior areas where services are held on a regular basis does not include individual grave sites. Therefore, only the exterior of the cemetery building used for services was assessed for impacts.

As a result, the NAC for Activity Categories B and C apply. Noise impacts will be identified and noise abatement will be considered if design year sound levels are 66 dBA or higher or if there is a substantial increase in existing sound levels.

There are some Category F industrial and retail properties located within the project limits. As indicated in Table 1, these land uses are not noise-sensitive and do not have an NAC. Therefore, they have not been included in the noise study.

Table 1: Noise Abatement Criteria in 23 CFR 772

Activity Category	***L_{Aeq}(1h) dBA***	***Evaluation Location***	***Activity Description***
A	57	Exterior	Lands on which serenity and quiet are of extraordinary significance and serve an important public need and where the preservation of those qualities is essential if the area is to continue to serve its intended purpose.
B[(1)]	67	Exterior	Residential.
C[(1)]	67	Exterior	Active sport areas, amphitheaters, auditoriums, campgrounds, cemeteries, day care centers, hospitals, libraries, medical facilities, parks, picnic areas, places of worship, playgrounds, public meeting rooms, public or nonprofit institutional structure, radio stations, recording studios, recreation areas, Section 4(f) sites, schools, television studios, trails, and trail crossings.
D	52	Interior	Auditoriums, day care centers, hospitals, libraries, medical facilities, places of worship, public meeting rooms, public or nonprofit institutional structure, radio studios, recording studios, schools, and television studios.
E[(1)]	72	Exterior	Hotels, motels, offices, restaurants/bars, and other developed lands, properties or activities not included in A-D, or F.
F	–––	–––	Agriculture, airports, bus yards, emergency services, industrial, logging, maintenance facilities, manufacturing, mining, rail yards, retail facilities, shipyards, utilities (water resources, water treatment, electrical), and warehousing.
G	–––	–––	Undeveloped lands that are not permitted.

(1) Includes undeveloped lands permitted for this activity category.

Table 2: Substantial Noise Level Increase

Existing Noise Level (dBA) [(1)]	***Predicted Design Year Noise Level Increase (dB)*** [(2)]
42 or less	15 or more
43	14 or more
44	13 or more
45	12 or more
46	11 or more
47 or more	10 or more

(1) Worst hour noise level from the combination of natural and mechanical sources and human activity.
(2) Predicted design year noise level minus existing noise level.

Finally, there are some tracts of Activity Category G undeveloped lands that exist along the project. These undeveloped lands are not noise-sensitive and have not been included in the noise analysis. However, noise impacts could occur in the future if noise-sensitive land uses are constructed near SR 126. A discussion of future sound levels and the need for noise-compatible land use planning is provided later in this report.

It is important to note that numerous properties or portions of properties will be taken for the under each Alternative. Properties that are shown in the current plans to be taken have not been included in the noise analysis.

2.3 Determination of Existing Sound Levels

Noise measurements were conducted by HMB at several noise-sensitive land uses in the project area on April 30, March 20 and 21, and May 11, 2008 during peak travel times.

Table 3 summarizes the existing sound levels at the measurement locations. As shown, existing peak hour sound levels at the measurement locations range from 44 to 66 dBA.

Table 3: Existing Sound Levels at Measurement Locations

Location (Receiver in HMB Report)	*Distance to SR 126 (feet)(1)*	*Date*	*Period*	*Peak Hour L_{eq}(1h) (dBA)*
3213 Memorial Blvd (Rec 01)	35	3/21/2008	7:20-7:39 AM	63
3701 Memorial Blvd (Rec 03)	90	3/21/2008	8:10-8:29 AM	63
3996 Memorial Blvd (Rec 24)	60	5/11/2008	2:50-3:09 PM	66
4216 Skyland Lane (Rec 06)	180	3/20/2008	11:22-11:42 AM	59
4321 Trinity Lane (Rec 23)	150	5/11/2008	2:23-2:42 PM	60
4500 Old Stage Road (Rec 22)	100	5/11/2008	1:55-2:14 PM	62
4541 Old Stage Road (Rec 07)	375	3/20/2008	11:52-12:12 PM	44
4609 Old Stage Road (Rec 08)	420	3/20/2008	12:22-12:41 PM	44
4701 Memorial Blvd (Rec 21)	230	5/11/2008	1:28-1:49 PM	55
105 Hobbes Street (Rec 20)	285	5/11/2008	10:58-11:17 PM	49
6290 Chestnut Ridge (Rec 10)	150	3/20/2008	12:48-1:07 PM	58
143 Island Road (Rec 11)	290	3/20/2008	1:16-1:35 PM	58
5340 Memorial Blvd (Rec 17)	105	5/11/2008	8:55-9:14 AM	55
210 Old Fall Creek Road (Rec 12)	280	3/20/2008	1:42-2:01 PM	56
104 Natchez Lane (Rec 05)	205	4/30/2008	4:00-4:19 PM	57

(1) From proposed edge-of-pavement.
(2) Based on sound levels at reference microphone.

2.4 Determination of Future Sound Levels

TDOT developed traffic projections for the project for the design year 2033. These projections include traffic volumes for the "design hour" which represents a theoretical worst traffic condition. These design hour traffic projections were used for the noise analysis since they represent the highest number of vehicles expected to travel on SR 126 in a given hour and would, therefore, represent the worst noise hour. The design year traffic projections are summarized in Appendix B.

2.4.1 No-Build Alternative

Sound levels for the No-Build Alternative can be reasonably estimated by evaluating existing and future traffic volumes on SR 126.

As noted previously, doubling the traffic on a roadway would result in a 3 dB increase in the sound level at a given receiver assuming all other conditions remain the same. Design year 2033 traffic volumes on SR 126 are predicted to increase between 30% and 100% depending on location as summarized in Table 4.

Table 4: Year 2013 and 2033 Traffic Projections, SR 126

From	*To*	*Percent Increase in AADT*	*Sound Level Increase (dB)*
East Center Street	Old Stage Road	30%	1
Old Stage Road	Cooks Valley Road	60%	2
Cooks Valley Road	I-81	100%	3

These traffic increases would increase sound levels by 1 to 3 dB at nearby residences.

As a result, existing sound levels were increased by 1 to 3 dB depending on location to arrive at design year 2033 sound levels for the No-Build Alternative at the measurement locations shown in Figure 3.

2.4.2 Build Alternative

Noise modeling of the project area was completed using the FHWA Traffic Noise Model (TNM 2.5) computer program. The program calculated design hour equivalent sound levels in year 2033 for the noise-sensitive land uses in the project area including the measurement locations.

Microstation design files for the conceptual plan were used to develop the TNM runs. In developing the TNM files, the points of TNM objects, including roadways, receivers, barriers, terrain lines, and building rows, were first digitized into Microstation. Microstation's coordinate export features were then used to write these points to comma separated variable text files. The points from the text files were pasted into TNM. Finally, a DXF file was created with background text to ease the input of receiver name and elevation data into the TNM files.

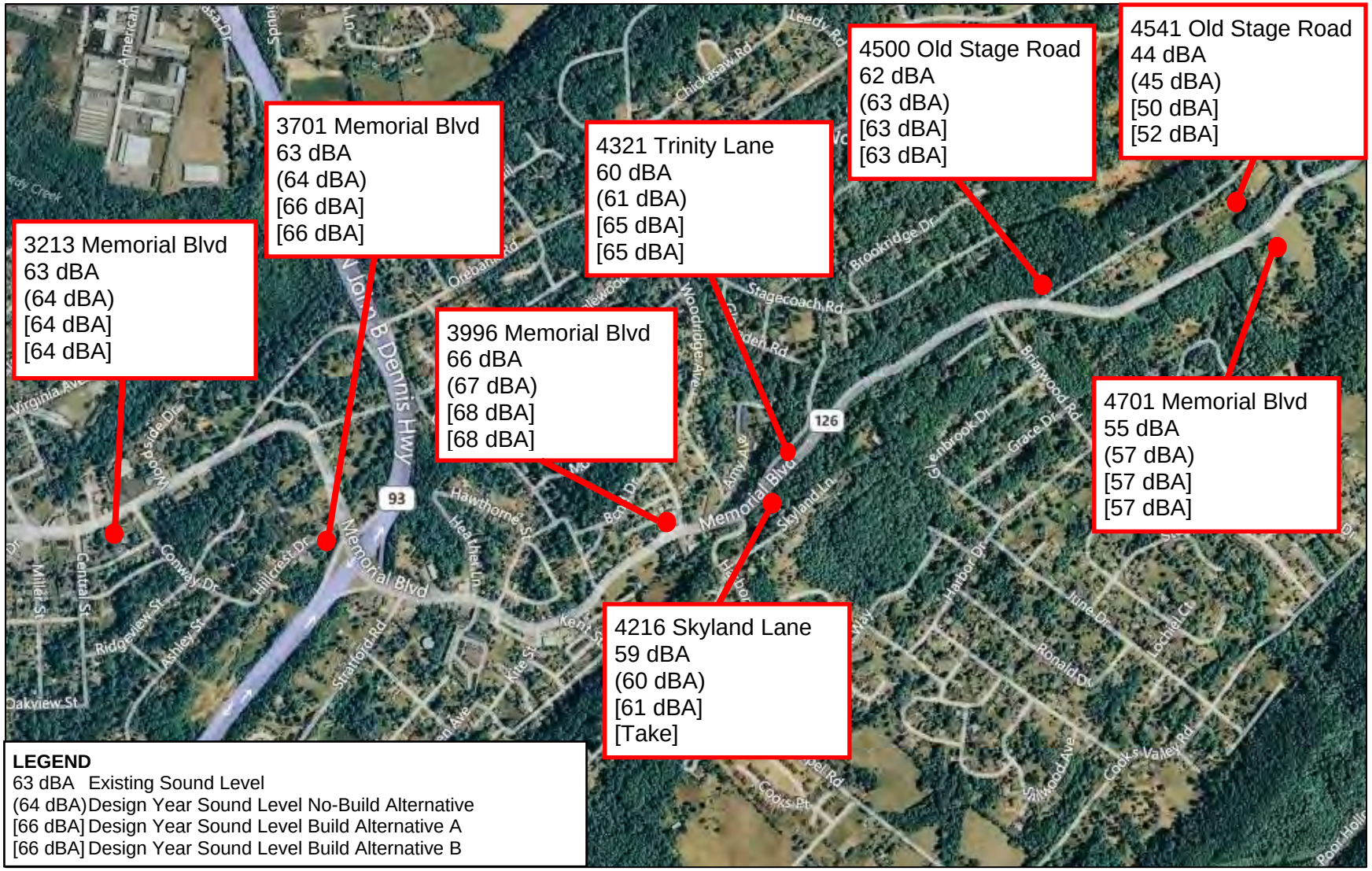

Figure 3: Existing and Design Year 2033 Sound Levels

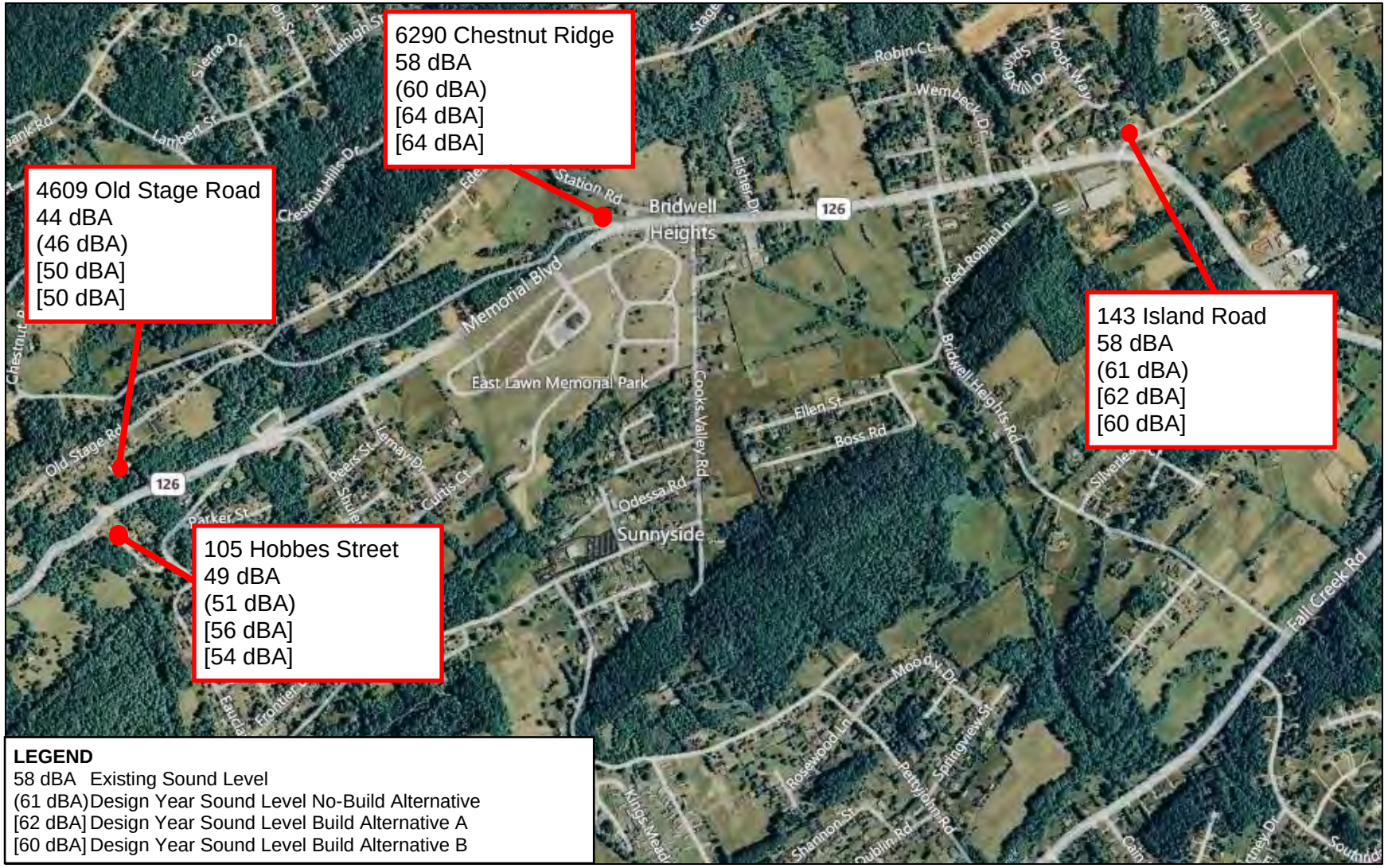

Figure 3: Existing and Design Year 2033 Sound Levels

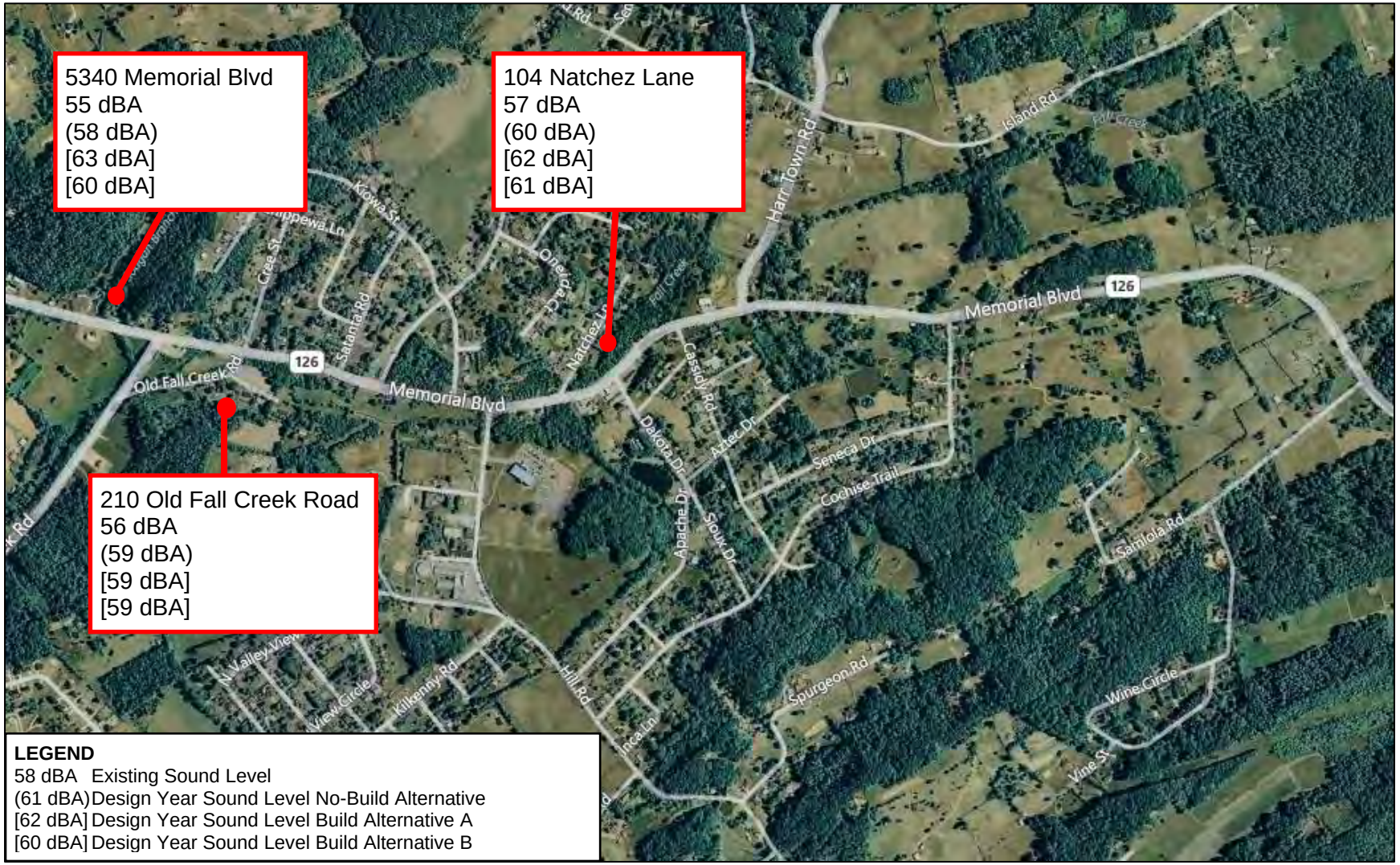

Figure 3: Existing and Design Year 2033 Sound Levels

As stated above, design year traffic projections provided by TDOT were used for the noise analysis. These projections indicated that 2% t to 4% of the design hour volumes on SR 126 are trucks, as shown in Appendix B. The proposed design speeds of 35 to 45 mph on each section of SR 126 were modeled.

The predicted design year sound levels for the modeled receivers are summarized in Table 5 and are discussed in the following section. TNM plan views showing all modeled TNM objects, including the locations of the modeled roadways and receivers, are provided in Appendix C. Tables showing the predicted sound levels at each modeled receiver are provided in Appendix D.

Table 5: Impact Determination Analysis, Design Year 2033, Build Alternatives

Alternative	Design Year Sound Levels (dBA)	Impacted based on NAC?	Number of Impacts
A	47 to 70 dBA	Yes	35
B	47 to 70 dBA	Yes	45

2.5 Impact Determination Analysis

As noted previously, a location is impacted if 1) the predicted worst hour noise level approaches or exceeds the NAC or 2) there is a substantial increase in design year noise levels above existing noise levels.

Design year sound levels for the Build Alternatives are predicted to between 1 and 8 dB higher than existing sound levels. These increases are not substantial in accordance with TDOT's Noise Policy. Therefore, none of the receivers are predicted to be impacted by a substantial increase in sound level.

As shown in the tables in Appendix D, design year sound levels at most receivers are predicted to be less below the NAC for both Alternatives A and B. However, 35 residences are predicted to be impacted under Alternative A with design year sound levels of 66 dBA or higher.

Similarly, 45 residences are predicted to be impacted under Alternative B.

The increased number of impacts under Alternative B is primarily the results of fewer takes under Alternative B due to a narrower right-of-way. The taking of fewer properties leaves some residences in close proximity to SR 126.

The nursing home, church and cemetery are not predicted to be impacted under either Alternative.

2.6 Noise Abatement Evaluation

Abatement is generally evaluated when impacts are predicted to occur. Noise barriers were evaluated to reduce sound levels for impacted land uses. In order for noise barriers to be included in a project, they must be determined to be both feasible and reasonable in accordance with TDOT's Noise Policy as discussed below.

Feasibility means that: (1) the construction of a barrier would not be anticipated to pose any major design, construction, maintenance, or safety problems; and, (2) the noise barriers will provide a noise reduction (or insertion loss) of 5 dB reduction in design year highway traffic noise levels for the majority of the impacted first-row receptors.

SR 126 is not a limited access facility. In fact, of the 35 impacted residences under Alternative A, 29 have direct driveway access to SR 126. Similarly, of the 45 impacted residences under Alternative B, 40 have direct driveway access to SR 126. Noise barriers are not feasible to mitigate impacts at these residences because a noise barrier would limit access from these properties and adjacent properties.

The remaining impacted residences under both Alternatives are isolated from other impacted residences. Noise barriers for these residences would not be reasonable since the required area per benefited residence will greatly exceed the allowable area for benefited residence.

As a result, noise barriers were determined not to be feasible or reasonable for this project.

2.7 Construction Noise

It is expected that TDOT's construction specifications will apply to this project. As a result, construction procedures shall be governed by the *Standard Specifications for Road and Bridge Construction* as issued by TDOT and as amended by the most recent applicable supplements. The contractor will be bound by Section 107.01 of the Standard Specifications to observe any noise ordinance in effect within the project limits. Detoured traffic shall be routed during construction so as to cause the least practicable noise impact on noise-sensitive areas.

2.8 Information for Local Officials

There are tracts of undeveloped land adjacent to SR126. TDOT encourages the local governments with jurisdiction over these lands, as well as potential developers of these lands to practice noise compatibility planning in order to avoid future noise impacts. The following language is included in TDOT's noise policy:

> *"Highway traffic noise should be reduced through a program of shared responsibility. Local governments should use their power to regulate land development in such a way that noise-sensitive land uses are either prohibited from being located adjacent to a highway or that the developments are planned, designed and constructed in such a way that noise impacts are minimized."*

Two guidance documents on noise compatible land use planning are available from FHWA. [3, 4]

Table 6 presents design year sound levels for areas along SR 126 where vacant and possibly developable lands exist. Noise predictions were made at distances between 100 and 400 feet from the centerline of the near lane for the design year 2033. As indicated, sound levels within approximately 100 feet of the centerline of the near lane of SR 126 will approach or exceed the NAC of 66 dBA. Noise-sensitive land uses should generally not be constructed in these areas unless noise mitigation measures are provided.

The values in Table 6 do not represent predicted levels at every location at a particular distance back from the roadway. Sound levels will vary with changes in terrain and will be affected by the shielding of objects such as buildings. This information is being included to make local officials and planners aware of anticipated highway noise levels so that future development will be compatible with these levels.

Table 6: Design Year 2033 Sound Levels for Undeveloped Lands

Distance from SR 126[(1)]	***L_{eq} (1h) (dBA)[(2)]***
100 feet	66
200 feet	62
300 feet	57
400 feet	53

(1) Perpendicular distance to the center of near lane.
(2) At-grade situation.

Finally, TDOT currently has an active Type II Noise Barrier Program to facilitate the construction of “retrofit” noise barriers along existing highways. To be eligible for a Type II noise barrier, an area must meet the following criteria:

- The neighborhood must be located along a limited-access roadway;
- The neighborhood must be primarily residential;
- The majority (more than 50%) of residences in the neighborhood near the highway pre-dated the initial highway construction;
- A noise barrier for the neighborhood must not have been previously determined to be not reasonable or not feasible as part of a new highway construction or through-lane widening study (Type I project);
- Existing noise levels measured in the neighborhood must be above the Noise Abatement Criteria (NAC) of 66 dBA;
- A barrier must be feasible to construct and will provide substantial noise reduction; and,
- A barrier must be reasonable (barrier cost per benefitted residence) in accordance with TDOT’s noise policy. A residence is considered “benefitted” if the noise barrier will reduce the traffic noise by at least 5 dB.

3.0 REFERENCES

[1] *Highway Traffic Noise and Air Quality Analysis, State Route 126 (Memorial Boulevard) from East Center Street in Kingsport to Interstate 81*, October 2008, Revised October 2010.

[2] *Policy on Highway Traffic Noise Abatement*, Tennessee Department of Transportation, July 13, 2011.

[3] *The Audible Landscape: A Manual for Highway Noise and Land Use*, FHWA, November, 1974. http://www.fhwa.dot.gov/environment/audible/index.htm

[4] *Entering the Quiet Zone: Noise Compatibility Land Use Planning*, FHWA, May, 2002. http://www.fhwa.dot.gov/environment/noise/quietzon

Appendix A
HMB SR 126 Noise Report

STATE ROUTE 126 (Memorial Boulevard)
FROM EAST CENTER STREET IN KINGSPORT,
TO INTERSTATE 81, SULLIVAN COUNTY, TN

HIGHWAY TRAFFIC NOISE AND AIR QUALITY ANALYSES

OCTOBER, 2008
REVISED OCTOBER, 2010



This document identifies and assesses the potential highway traffic noise and air quality impacts associated with the project to improve the existing State Route 126 (Memorial Boulevard) Roadway, beginning at East Center Street in Kingsport, east to Interstate 81 in Sullivan County. The project's total length for the proposed improvements is approximately 8.4 miles.

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Appendix D - Mobile Source Air Toxics

Appendix E - Glossary

1. Introduction

The highway generated noise impacts of this project have been analyzed in accordance with the "Highway Traffic Noise Analysis & Abatement, Policy and Guidelines," and Federal Register Regulation 23 CFR Part 772, "Procedures for Abatement of Highway Traffic Noise and Construction Noise."

These regulations set forth a five-step highway project noise analysis as follows: (1) Identify existing or planned land use activities that may be affected by highway noise; (2) Determine existing noise levels; (3) Predict future highway noise levels; (4) Determine impacts by comparing existing levels with predicted levels and criteria contained in 23 CFR Part 772; and (5) Consider and examine noise abatement measures for those impacts that have been identified. The following is a description of the noise analysis for the project.

2. Project Description

The proposed project is the widening and reconstruction of Memorial Boulevard (SR 126). The project is approximately 8.3 miles in length and is located east of Kingsport, TN. The project begins approximately 1500 feet from Fort Henry Drive and proceeds east, terminating in an interchange with Interstate 81. The location of the project corridor and the alternatives are shown in Figure 2.1 on pages 5-8.

3. Project Alternatives

3.1 The No-Build Alternative

The No-Build Alternative would involve no re-design and re-construction of SR 126, and it would leave the existing roadway in place as it now exists. Some minor improvements as recommended in the Road and Safety Audit Report (RSAR) have been completed. Only normal maintenance activities would occur.

This alternative does not meet the project's Purpose and Need. It would not provide improvements to provide traffic relief or improved safety conditions in eastern Kingsport and Sullivan County. Positive benefits associated with the No-Build Alternative include no relocations of residences, businesses and utilities. Temporary effects associated with construction, including construction noise, dust, and traffic delays would not be experienced with the No-Build Alternative. Negative impacts related to the No-Build Alternative would include continued safety problems; i.e., delayed response for emergency vehicles, lack of passing opportunities, crash rates that exceed state crash rate averages, and substandard LOS's.

3.2 Build Alternatives

3.2.1 Alternative A

Alternative A's western terminus would be located at the junction of SR 126 with East Center Street. This terminus would feature either a signalized intersection or a *roundabout* to facilitate safe, efficient movement of traffic without the need for traffic signals. A roundabout is a type of road intersection at which traffic enters a one-way stream around a central island.

From the western terminus, Alternative A would proceed to a point at Orebank Road. It would include four 11-foot travel lanes. A raised, landscaped median and a 4-foot paved shoulder for bicycles would be included. Sidewalks would be featured on both sides of the road. A curb and gutter would be included, and a roundabout with flared right turns at East Center Street is the preferred option. A second option, which would maintain the existing traffic signal at East Center Street, is still under consideration. This four-lane, raised median section would continue to the Orebank Road area of the project. The design speed is 35 mph.

From Orebank Road to West of Hawthorne Street, Alternative A would continue as four 11-foot lanes with a raised, landscaped median. The 4-foot shoulder for bikes would remain, as would sidewalks on both sides. Curb and gutter features would continue. A median opening would be included for the Sun Bridge Hillside Care and Rehabilitation Facility. Additional features in this section include closing Edens Ridge Road intersections, and improving northbound John B. Dennis exit ramp to eastbound SR 126 to reduce vehicle conflicts. Right turns would use a traffic signal. This configuration would continue to a point west of Hawthorne Street. The design speed remains at 35 mph.

From a point west of Hawthorne Street to Harbor Chapel Road, Alternative A's four 11-foot lanes would continue, but the median would change to a center turn lane in place of the raised, landscaped median. The 4-foot shoulder, sidewalks on both sides, and the urban curb and gutter would remain on this section of the proposed improvements to SR 126. The design speed would remain at 35 mph. This section proposes to close Milton Court at SR 126. Milton Court traffic would be provided alternate access via Stratford and Kite Streets. Hawthorne Street's intersection with the south side of SR 126 would be closed. In addition, the Kent Street intersection with SR 126 would be closed with access being provided via Kite Street. The Amy Avenue/Woodridge Avenue intersection would be closed and tied in to Glenwood Street. Trinity Lane would be closed and alternate access would be provided via a new connection near the cemetery (access to SR 126 via Orebank Road). The design speed would remain at 35 mph.

From Harbor Chapel Road to a point east of Old Stage Road, Alternative A would continue as four 11-foot lanes, featuring a raised landscaped median, two 4-foot shoulders, two sidewalks, curbs and gutters. The design speed in this section would increase to 45 mph. The intersection of Tanglewood with existing SR 126 would be closed, with Tanglewood now tying into Briarwood Road. Old Stage Road would be

realigned to create a 90 degree intersection, effectively decreasing the steepness of the existing Old State Road.

Alternative A would proceed from the point east of Old Stage Road to Cooks Valley Road as four 11-foot lanes with a raised, landscaped median, two 8-foot stabilized shoulders (6 feet of paved shoulder on each side), no sidewalks, curbs or gutters, and a design speed of 45 mph. Pedestrians and bicyclists would be allowed to use the 6-foot shoulders. This section would connect Holiday Hills Road to Shuler Drive via Parker Street. It is proposed to close the Shuler Drive intersection with existing SR 126, and redirect the traffic to Lemay Drive. In addition, Chestnut Ridge Road and Eaton Station Road would be realigned, with left turn lanes onto Cooks Valley Road and Eaton Station Road.

From Cooks Valley Road to Harrtown Road, Alternative A would feature two 11-foot travel lanes with a center turn lane. The design speed would remain at 45 mph. The 6-foot shoulders on both sides would remain, but would not include gutter pans. Bicyclists could still use the 6-foot shoulders, but pedestrians would be provided with sidewalks on both sides of the proposed improvement. A curb and gutter would also be featured in this section. Red Robin Lane would be closed with access being provided via Bridwell Heights Road. Woodsway Drive, Island Road and Natchez Lane would be realigned.

From Harrtown Road to Cochise Trail, the project would continue as two lanes, but each would be expanded to 12 feet in width. No median would be included in this section. The shoulders would be expanded to 10 feet in width allowing pedestrians and bicyclists access. No sidewalks, curbs or gutters are included in this section. An 18-inch center line crossover deterrent using a rumble strip and striping would be included to deter drivers from crossing into the opposing lane. Rumble strips would also be included between each of the two travel lanes and their shoulders to deter drivers from drifting out of the travel lanes. The design speed would remain at 45 mph.

From Cochise Trail to I-81, the project would include two 12-foot travel lanes, but no median, sidewalks, curbs or gutters. The center line crossover deterrent would continue, and an improved transition area from the four-lane SR 126 area at I-81 will be featured. The 10-foot shoulders would continue through this section allowing pedestrians and bicyclists access. The design speed would remain at 45 mph. The project would require turn lane construction by future developers throughout this section. Gravel Top Road would be realigned on the western intersection with SR 126 and it would be closed east of the intersection.

3.2.2 Alternative B

Alternative B begins at East Center Street at the same point as Alternative A. Alternative B is a refinement of Alternative A, with changes made to minimize impacts to Yancey's Tavern and the East Lawn Cemetery. It utilizes the same cross-sections as Alternative A, but the two-lane section begins further west of Yancey's Tavern and the cemetery, and minimizes visual impacts to the Yancey's Tavern and relocation of gravesites in the East Lawn Cemetery. The elevations of the proposed centerline of Alternative B were

changed to minimize excavation and fill impacts during the construction of the roadway. Portions of the alignment feature slight changes to provide an efficient maintenance-of-traffic plan.

Alternative B in the western area of the project is slightly widened, and a roundabout is proposed for the intersection with East Center Street. The proposed design speed for the urban portion of this project is 35 mph from East Center Street to Hawthorne Street. As Alternative B leaves the Hawthorne Street area, it would transition to a four-lane highway with a 45 mph design speed. As it approaches the Chestnut Ridge area, it would feature two driving lanes and a center turn lane. This would avoid acquisition of the Yancey's Tavern area. Alternative B would require no relocation of gravesites within the East Lawn Cemetery. The 45 mph design speed would be continued through this section.

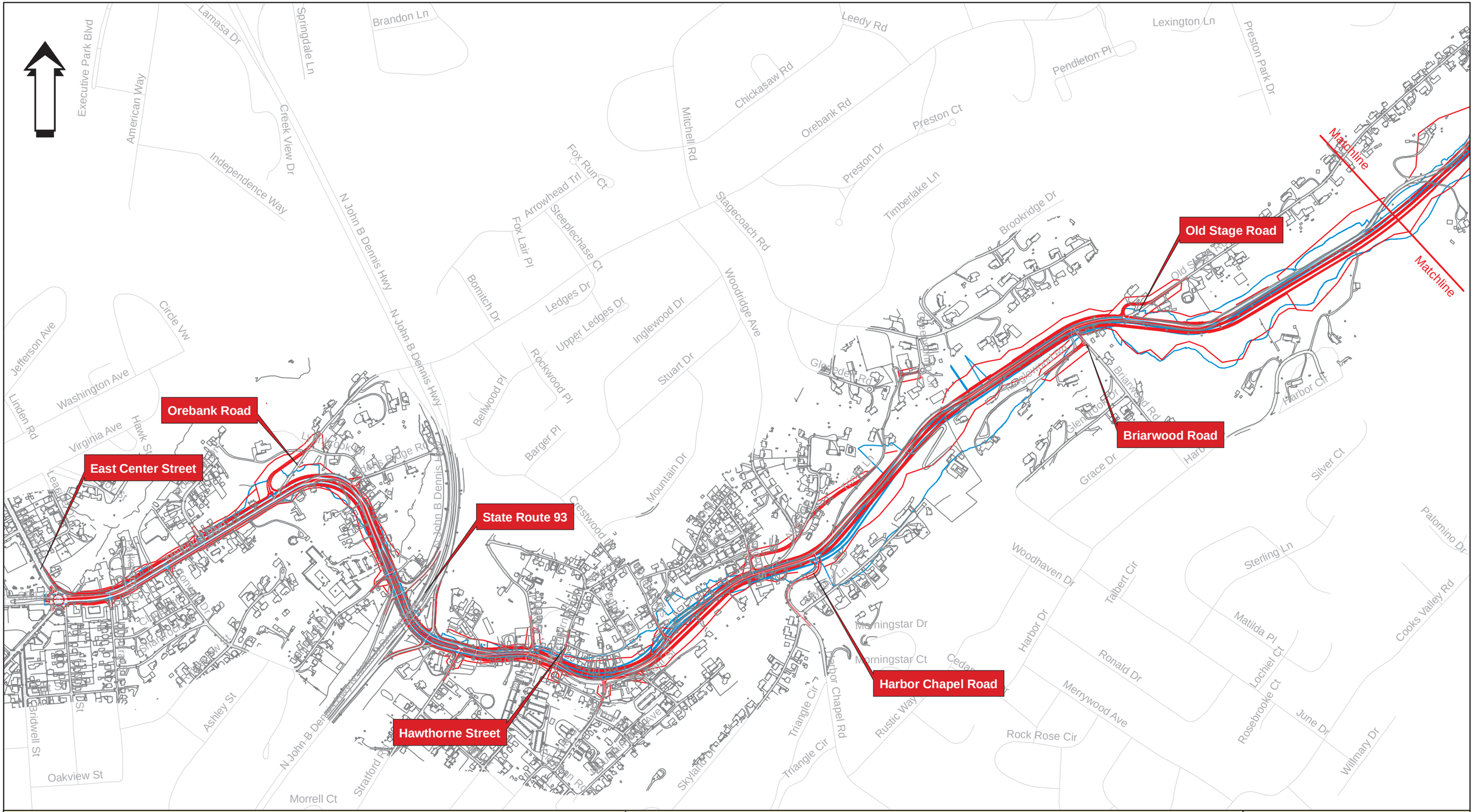
Alternative B would remain a three lane facility with a 45 mph design speed until it approaches Harrtown Road. At this point it would become a two-lane roadway until approaching a junction with Carolina Pottery Road and its intersection with I-81. In this area, it joins the existing four-lane configuration. The 45 miles-per-hour design speed is maintained until the project ends at I-81.

3.3 Design Features

The project would feature sections of four-, three- and two-lanes for traffic. It would also include sections that are urban roadways featuring sidewalks, curbs, and gutters. Other sections include rural features including wider lanes and paved shoulders. Table 3.3.1 compares the design features of the urban and rural sections of the proposed project.

Table 3.3.1 - Design Features

Design Feature	Urban Section	Rural Section
Roundabout	Yes	No
Driving Lanes	Varies 2 to 4 lanes @ 11 feet each	Varies at 2 to 4 lanes @ 11 to 12 feet each.
Shoulders	4 foot shoulders	Varies from 8 feet to 10 feet combined.
Curbs and Gutters	Yes	No
Median	Alternates between raised landscape median and 11 foot center turn lane	Only featured at area between Yancey's Tavern and East Lawn Cemetery
Retaining Walls	No	Only featured at area between Yancey's Tavern and East Lawn Cemetery
Maximum Grade	5%	7%
Access to Facility	Median openings as appropriate to various roads	Full Control
Design Speed	35 miles per hour	45 miles per hour



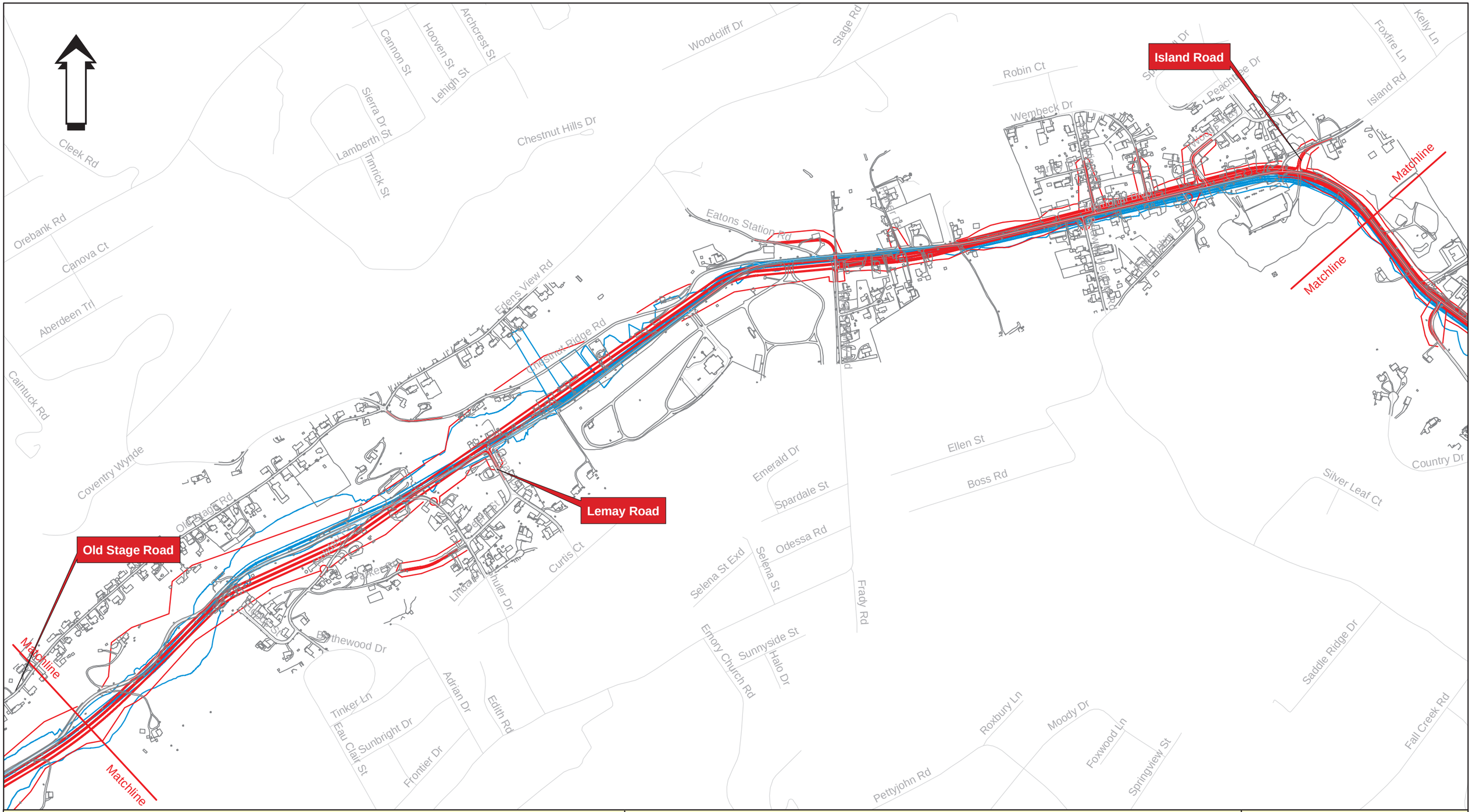
Legend

- Alternative A
- Alternative B

Figure 2.1
Project Overview
State Route 126
Sullivan County, Tennessee

0 500 1,000 2,000 3,000 4,000 Feet

Alternatives A & B with Road Segments



Legend

- Alternative A
- Alternative B

Figure 2.1
Project Overview
State Route 126
Sullivan County, Tennessee

0 500 1,000 2,000 3,000 4,000 Feet

Alternatives A & B with Road Segments

Island Road

Matchline

Matchline

Fall Creek Road

Harrtown Road

Matchline

Matchline

Shadow Town Road

Foxfire Ln
Kelly Ln
Island Rd
Osceola Dr
Seminole Ln
Arapaho Dr
Montezuma Rd
Alden St
Harr Town Rd
Island Rd
Cheyenne Ln
Commanche Dr
Kiowa St
Chippewa Ln
Mandan Rd
Satana Rd
Country Dr
Old Fall Creek Rd
Emory Harr Private Dr
Fall Creek Rd
Silver Leaf Ct
Bridwell Heights Rd
Saddle Ridge Dr
Southridge Dr
Southridge Dr
Lonesome Pine Rd
Smith Dr
Hideaway Pl
Cedar Brook Ct
Odd Fellow Rd
N Valley View Cir
S Valley View Cir
Hopkins St
Hobart St
Kilkenny Rd
Foxcroft Dr
Apache Dr
Navaho Ln
Spurgeon Rd
Wine Cir
Hall Rd
Cassidy Dr
Seneca Dr
Cochise Trl
Sioux Dr
Cassidy Ct
Samiola Rd

Legend

- Alternative A
- Alternative B

Figure 2.1
Project Overview
State Route 126
Sullivan County, Tennessee

0 500 1,000 2,000 3,000 4,000 Feet

Alternatives A & B with Road Segments



Legend

- Alternative A
- Alternative B

Figure 2.1
Project Overview
State Route 126
Sullivan County, Tennessee

0 500 1,000 2,000 3,000 4,000 Feet

Alternatives A & B with Road Segments

4. Highway Traffic Noise Analysis

4.1. Identification of Noise Receiver Sites

In selecting the noise receiver sites, an effort was made to develop an accurate appraisal of the entire project corridor with respect to the noise receivers. Measured (2008) noise levels were compared to modeled noise levels that utilized projected 2033 build and 2033 no-build traffic for 24 receivers, representing 159 additional receivers. The number of receivers represented at each site was determined by counting the receivers that were approximately the same distance from the ROW boundary as the analyzed receiver. The analyzed receiver was always the one nearest the proposed alternative. The number of represented receivers for each receiver is given in Table 4.2.1 on page 11.

Federal guidance for handling noise impacts and abatement are contained in 23 Code of Federal Regulations (CFR) Part 772, "Procedures for Abatement of Highway Traffic Noise and Construction Noise." Activity Category B (picnic areas, recreation areas, playgrounds, active sports areas, parks, residences, motels, hotels, schools, churches, libraries, and hospitals) is applicable to the receptors on this project. For Category B, the Noise Abatement Criteria (NAC) is 67 dBA. Table 4.1.1 provides description of the land use categories.

Table 4.1.1 - FHWA Noise Abatement Criteria Hourly A-Weighted Sound Levels*

Land Use Category	L_{eq}	Description
A	57 (Exterior)	Lands on which serenity and quiet are of extraordinary significance and serve an important public need and where the preservation of those qualities is essential if the area is to continue to serve its intended purpose.
B	67 (Exterior)	Picnic areas, recreation areas, playgrounds, active sports areas, parks, residences, motels, hotels, schools, churches, libraries, and hospitals.
C	72 (Exterior)	Developed lands, properties, or activities not included in categories A and B above.
D	---	Undeveloped lands.
E	52 (Interior)	Residences, motels, hotels, public meeting rooms, schools, churches, libraries, hospitals, and auditoriums.

***Source:FHWA, 23 CFR 772, Procedures for Abatement of Highway Traffic Noise and Construction Noise, FHWA, USDOT, April 1992**

4.2. Existing and Predicted Noise Levels

Field measurements were taken at representative sites throughout the SR 126 project area, located at or near existing areas of human use. These measurements were made at varying times. In accordance with TDOT's Noise Policy and Federal Regulations contained in 23 CFR 772, existing noise levels were taken at times that represented "worst hour" noise levels. Based on observations of traffic patterns in the project area, worst hour levels were determined to be from 7:30am – 10:30am, 3:00pm – 6:00pm (commuting times) and from 11:30am – 1:30pm (traditional lunch hour traffic).

Receptors where the predominant existing noise source was not SR 126 were considered "ambient" receivers and may have had existing readings taken outside these peak travel times. Field measurements were conducted for all of the sites during clear, dry weather conditions. The existing (ambient) noise levels were documented to establish baseline conditions to compare with the future build and no build conditions.

Ambient Noise levels for the receivers were measured on April 30, March 20 and 21, and May 11, 2008 during meteorologically acceptable periods. Measurements were conducted utilizing a Rion Model NL-20 Type II sound level meter that was set to update Leq (in dBA) ten times per second. Readings were taken for two, ten-minute periods and averaged.

Traffic noise level predictions for the build alternatives were made for the year 2033 using the FHWA Traffic Noise Model version 2.5 (TNM 2.5) computer model (FHWA Highway Traffic Noise Prediction Model, Report No. FHWA-PD-96-010). The model incorporates the design alternatives, as well as existing area roads that were determined to contribute appreciably to the existing and future noise levels. The 2033 No Build Alternative noise levels will increase from the existing noise levels due to additional traffic volumes in future years. The future No Build levels were estimated based on future traffic projections. East of Old Stage Road, future traffic volumes are approximately 20% higher than existing volumes. This would increase No Build levels 1 dBA over existing levels at receivers in this area (receivers 1-6, 23 and 24). West of Old Stage road, traffic volumes are predicted to approximately double, increasing No-Build levels by 3 dBA over existing levels (receivers 7-22). Noise Receiver Locations, and Existing and Predicted Noise Levels are indicated in Table 4.2.1, on the following page. The receivers exhibiting a highway traffic noise impact from one, or both, alternatives are highlighted in red. Figure 4.2.1, on page 12, provides location and existing and future noise levels of the noise receivers in the project area.

Table 4.2.1 - Noise Receivers with Existing and Predicted Noise Levels (dBA) [a]

Site ID	NAC Category	Number of Represented Receivers	2008 Existing	2033 Alternative A	2033 Alternative B	2033 No Build	Difference Between Existing and Build A|B		Distance to EOP* Existing (ft)	Distance to Nearest EOP* Build (ft)
1	B	6	63.2	65	65	64	2	2	34	36
2	B	10	60.1	65	65	61	5	5	77	30
3	B	7	63.0	66	66	64	3	3	92	90
4	B	10	73.1	70	69	74	-3	-4	40	23
5	B	5	57.2	66	64	60	9	7	205	140
6	B	12	58.9	64	67	60	5	8	181	78
7	B	14	43.8	57	57	47	13	13	375	380
8	B	14	43.6	55	55	47	11	11	420	421
9	B	8	61.2	64	62	64	3	1	96	79
10	B	4	57.8	64	64	61	6	6	152	124
11	B	5	58.2	62	61	61	4	3	289	286
12	B	6	54.9	60	60	58	5	5	280	256
13	B	9	60.2	66	66	63	6	6	94	68
14	B	4	69.9	66	68	73	-4	-2	44	35
15	B	2	65.2	66	67	68	1	2	43	51
16	B	6	62.4	68	66	65	6	4	67	35
17	B	7	55.3	69	65	58	14	10	103	64
18	B	8	67.1	68	65	70	1	-2	58	72
19	B	15	65.2	68	67	68	3	2	43	50
20	B	6	48.9	62	59	52	13	10	285	168
21	B	3	52.4	61	60	55	9	8	270	192
22	B	8	60.1	64	63	63	4	3	98	97
23	B	6	60.3	63	63	61	3	3	150	170
24	B	8	65.9	65	64	67	-1	-2	61	51

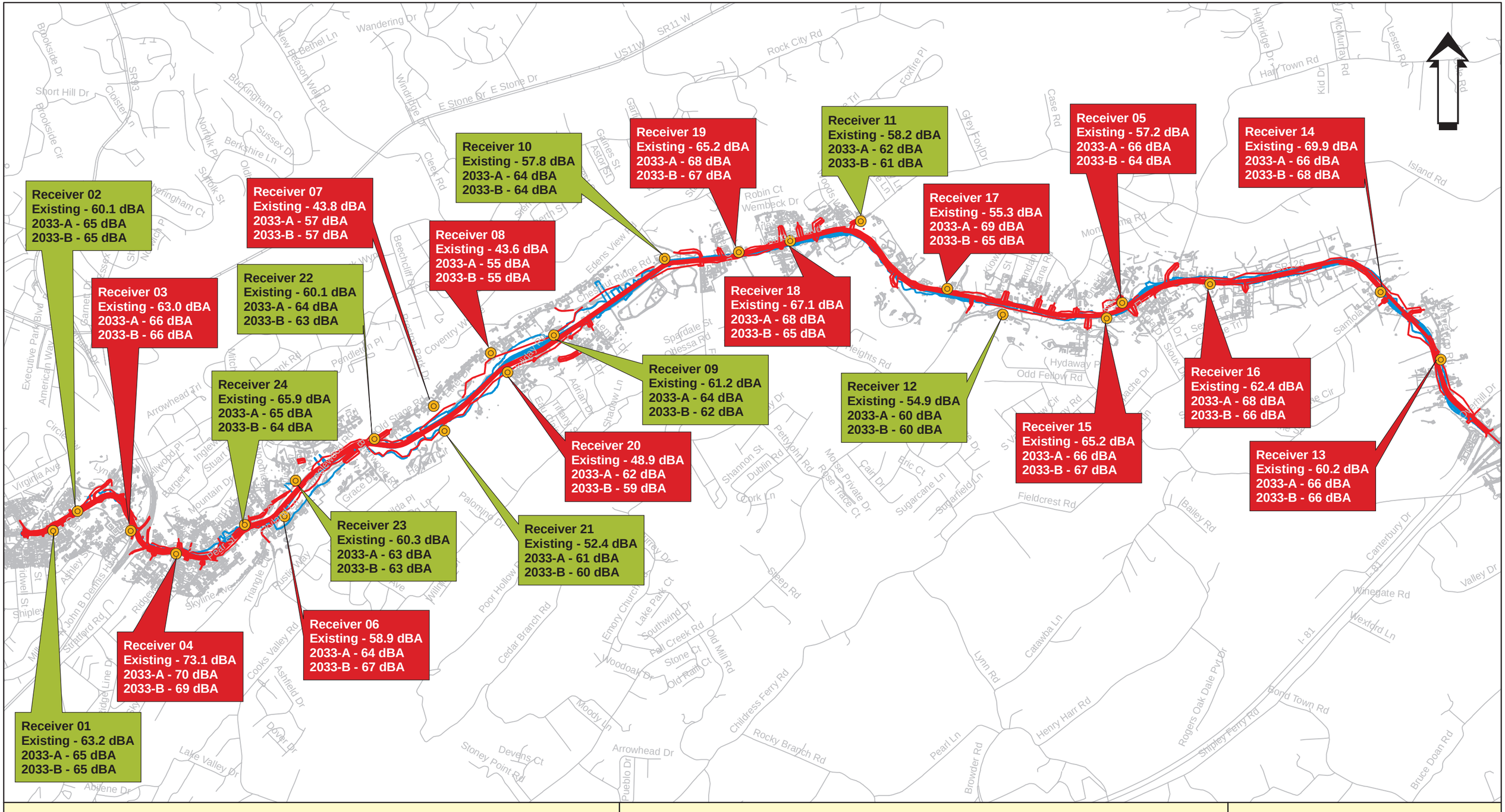
[a] The noise abatement criterion is 67 for all receivers.

4.3. Noise Impacts

In accordance with 23 CFR Part 772, the Federal Highway Administration (FHWA) Noise Abatement Criteria and the Tennessee Department of Transportation Traffic Noise Analysis and Abatement Policy and Guidance manual, the following criteria are utilized in determining the occurrence of traffic noise impacts:

1. When the predicted design year noise levels approach (defined as within one dBA) or exceed those values shown for the appropriate activity category of the NAC.

2. When the predicted design year noise levels "substantially exceed existing noise levels" (as defined), by 10 dBA or more.


Receiver 01
Existing - 63.2 dBA
2033-A - 65 dBA
2033-B - 65 dBA
Receiver 02
Existing - 60.1 dBA
2033-A - 65 dBA
2033-B - 65 dBA
Receiver 03
Existing - 63.0 dBA
2033-A - 66 dBA
2033-B - 66 dBA
Receiver 04
Existing - 73.1 dBA
2033-A - 70 dBA
2033-B - 69 dBA
Receiver 05
Existing - 57.2 dBA
2033-A - 66 dBA
2033-B - 64 dBA
Receiver 06
Existing - 58.9 dBA
2033-A - 64 dBA
2033-B - 67 dBA
Receiver 07
Existing - 43.8 dBA
2033-A - 57 dBA
2033-B - 57 dBA
Receiver 08
Existing - 43.6 dBA
2033-A - 55 dBA
2033-B - 55 dBA
Receiver 09
Existing - 61.2 dBA
2033-A - 64 dBA
2033-B - 62 dBA
Receiver 10
Existing - 57.8 dBA
2033-A - 64 dBA
2033-B - 64 dBA
Receiver 11
Existing - 58.2 dBA
2033-A - 62 dBA
2033-B - 61 dBA
Receiver 12
Existing - 54.9 dBA
2033-A - 60 dBA
2033-B - 60 dBA
Receiver 13
Existing - 60.2 dBA
2033-A - 66 dBA
2033-B - 66 dBA
Receiver 14
Existing - 69.9 dBA
2033-A - 66 dBA
2033-B - 68 dBA
Receiver 15
Existing - 65.2 dBA
2033-A - 66 dBA
2033-B - 67 dBA
Receiver 16
Existing - 62.4 dBA
2033-A - 68 dBA
2033-B - 66 dBA
Receiver 17
Existing - 55.3 dBA
2033-A - 69 dBA
2033-B - 65 dBA
Receiver 18
Existing - 67.1 dBA
2033-A - 68 dBA
2033-B - 65 dBA
Receiver 19
Existing - 65.2 dBA
2033-A - 68 dBA
2033-B - 67 dBA
Receiver 20
Existing - 48.9 dBA
2033-A - 62 dBA
2033-B - 59 dBA
Receiver 21
Existing - 52.4 dBA
2033-A - 61 dBA
2033-B - 60 dBA
Receiver 22
Existing - 60.1 dBA
2033-A - 64 dBA
2033-B - 63 dBA
Receiver 23
Existing - 60.3 dBA
2033-A - 63 dBA
2033-B - 63 dBA
Receiver 24
Existing - 65.9 dBA
2033-A - 65 dBA
2033-B - 64 dBA
Legend
Alternative A
Alternative B
Noise Receivers
No Noise Impact
Noise Impact
Figure 4.2.1
Highway Traffic Noise Analysis
Noise Receiver Locations and
Existing and Predicted Noise Levels
0
1,600
3,200
6,400
9,600
12,800
Feet
Sullivan County
SR 126
Alternatives A and B

4.3.1 Alternatives Impact Summary

Alternative A would impact 13 receivers, representing 107 residential properties. Alternative B would impact 12 receivers, representing 106 residential properties.

No Build levels will increase due to increased traffic volumes in 2033. West of Old Stage Road the future traffic volumes are predicted to be approximately 20% higher than existing levels. Due to this traffic increase, receivers west of Old Stage Road will see a future noise level increase of 1 dBA for the No Build Alternative. East of Old Stage Road the future traffic volumes are predicted to approximately double the existing levels. Receivers east of Old Stage Road will see a future noise level increase of 3 dBA for the No Build Alternative.

Receivers 4, 14, 18 and 24 already have existing levels that are above the NAC. Receivers 15 and 19 would have future No Build levels that would be above the NAC.

Due to build alternative shifts from the existing, the new road will be further away from some noise receivers. These receivers have future levels that are predicted to be lower than the existing or No Build noise levels.

4.4. Noise Abatement Measures

4.4.1 Reasonableness/Feasibility for Barrier Abatement

The construction of noise barriers for the impacted receivers along SR 126 is not feasible due to the numerous access points along the existing and proposed facility. These points provide access to residences and businesses along SR 126. Any constructed noise barrier would require gaps to maintain access, greatly reducing the noise reduction and cost-effectiveness of the noise barrier. For this reason, it is generally considered infeasible to construct a noise barrier on a portion of a roadway where access is necessary.

4.4.2 Alternative Abatement Measures

Alternatives to noise barrier construction were considered at the impacted receivers for Build Alternatives A and B, including:

- Traffic management measures (primarily restrictions on truck use) – The project is designed to be an urban minor arterial. Prohibiting or restricting usage of this facility by trucks or other vehicles was not considered to be practical and, therefore, was determined to be not reasonable as a method for mitigating highway traffic noise impacts.
- Alteration of horizontal and vertical alignments – The horizontal and vertical alignments of the build alternatives have been optimized to the extent practicable to minimize environmental impacts, while utilizing the existing facility location. Altering the horizontal and vertical alignment of the build alternatives to mitigate noise impacts was determined to be not reasonable.
- Acquisition of property (buffer zone) – Acquisition of property adjacent to the project for a buffer zone would result in acquisition of the residences receiving noise impacts, and would provide a buffer only for future development that would not be allowed within the buffer zone. Acquisition of property as a method for mitigating highway traffic noise impacts was determined to be not reasonable.
- Insulation of public buildings to meet interior standards – There were no public buildings identified as receiving noise impacts.

5. Construction Noise

Noise levels in the project area will be increased during construction. The sound levels resulting from construction activities at nearby noise-sensitive receivers will be a function of the types of equipment utilized, the duration of the activities, and the distances between construction activities and nearby land uses.

It is expected that TDOT's construction specifications will apply to this project. As a result, construction procedures shall be governed by the Standard Specifications for Road and Bridge Construction as issued by TDOT and as amended by the most recent applicable supplements. The contractor will be bound by Section 107.01 of the Standard Specifications to observe any noise ordinance in effect within the project limits. Detoured traffic shall be routed during construction so as to cause the least practicable noise impact upon noise-sensitive areas.

6. Noise Compatible Land Use Planning

TDOT encourages local communities and developers to practice noise compatible land use planning in order to avoid future noise impacts. The following language is included in TDOT's noise policy:

"Highway traffic noise should be reduced through a program of shared responsibility. Local governments should use their power to regulate land development in such a way that noise-sensitive land uses are either prohibited from being located adjacent to a highway or that the developments are planned, designed and constructed in such a way that noise impacts are minimized."

Two guidance documents on noise compatible land use planning are available from FHWA.[a, b]

Table 6.1 presents predicted design year 2033 sound levels for areas near the project where vacant and possibly developable lands exist. These values do not represent predicted levels at every location at a particular distance back from the roadway. Sound levels will vary by location and will be affected by the shielding of terrain features such as hills and the shielding by objects such as buildings.

Table 6.1 - Sound Levels for Undeveloped Lands

Distance (in feet)(1)	Leq (1h) (dBA)(2)
50	69
100	66
250	61
500	60

(1) Perpendicular distance to the center of near lane.
(2) At-grade situation.

This information is being included to make local officials and planners aware of anticipated highway noise levels so that future development will be compatible with these levels.

As mentioned previously, TDOT's noise policy states that "noise abatement will also not be considered reasonable for land uses constructed after the date of adoption of this noise policy (based upon local Assessor's records), except for projects involving construction of a roadway on a new alignment."

TDOT's noise policy was adopted in April, 2005. Development constructed after this date will not be eligible for noise abatement for future projects.

Finally, TDOT currently has an active Type II Noise Barrier Program to facilitate the construction of "retrofit" noise barriers along existing highways. To be eligible for a Type II noise barrier, an area must meet the following criteria:

- The neighborhood must be located along a limited-access roadway;
- The neighborhood must be primarily residential;
- The majority (more than 50%) of residences in the neighborhood near the highway pre-dated the initial highway construction;
- A noise barrier for the neighborhood must not have been previously determined to be not reasonable or not feasible as part of a new highway construction or through-lane widening study (Type I project);
- Existing noise levels measured in the neighborhood must be above the Noise Abatement Criteria (NAC) of 66 dBA;
- A barrier must be feasible to construct and will provide substantial noise reduction; and,
- A barrier must be reasonable (barrier cost per benefitted residence) in accordance with TDOT's noise policy. A residence is considered "benefitted" if the noise barrier will reduce the traffic noise by at least 5 dB.

a. The Audible Landscape: A Manual for Highway Noise and Land Use, FHWA, November, 1974. http://www.fhwa.dot.gov/environment/audible/index.htm
b. Entering the Quiet Zone: Noise Compatibility Land Use Planning, FHWA, May, 2002. http://www.fhwa.dot.gov/environment/noise/quietzone

7. Noise Abatement Conclusions

Based on the above considerations and analysis, noise abatement measures are not considered reasonable at the sites studied and are not recommended for this project.

8. Mobile Source Air Quality Analysis

8.1. Air Quality Impacts

SR 126 in Sullivan County is an attainment area according to EPA levels set for criteria mobile source air pollutants. The project is in the Kingsport Metropolitan Planning Organization's (MPO) planned projects, and is included in the conforming 2008-2011 Transportation Improvement Program (TIP). The project is also included in Kingsport MPO Draft 2011-2014 TIP, in Section A, which lists projects included in the previous TIP.

8.1.1. Carbon Monoxide

Based upon the analysis of highway projects with similar meteorological conditions and traffic volumes, the carbon monoxide levels of the subject project will be well below the National Ambient Air Quality Standard (35ppm one-hour and 9ppm eight-hour). Since the project will have levels below this standard and is located in a region of air quality conformity, it was determined that there will be no CO impact on the air quality of the area from the proposed project.

8.1.2. Mobile Source Air Toxics (MSAT)

Mobile Source Air Toxics are fully addressed in Appendix D. Air quality conformity status is not projected to be altered by the proposed SR 126 project. This project qualifies as a "project with low potential MSAT effects" in accordance with FHWA's guidance.

The purpose of the project is to improve safety, emergency response times, system linkage, traffic conditions, and efficiency between Kingsport at East Center Street and I-81 by constructing new lanes, widening existing lanes, and providing shoulders, as appropriate, between East Center Street and I-81. This project has been determined to generate minimal air quality impacts for CAAA criteria pollutants and has not been linked with any special MSAT concerns.

A review of potential mobile source air toxics (MSAT) impact from this project indicate that under the build alternatives in the design year (2033), the amount of MSAT emitted will be proportional to the Annual Average Daily Traffic (AADT) and vehicle miles traveled, or VMT, assuming that other variables such as fleet mix are the same for each alternative. The VMT for the build alternatives will be slightly higher than the no-build alternative in the build and design years because the additional capacity increases the efficiency of the roadway and attracts rerouted trips from elsewhere in the transportation network. This increase in VMT will lead to higher MSAT emissions for the alternatives along the highway corridor, along with a corresponding decrease in MSAT emissions along the parallel routes. The emissions increase is offset somewhat by lower MSAT emission rates due to increased speeds; according to EPA's MOBILE6.2 model, emissions of all of the priority MSAT except for diesel particulate matter decrease as speed increases. The extent to which these speed-related emissions decreases will offset VMT-related emissions increases cannot be reliably projected due to the inherent deficiencies of technical models. Because the estimated VMT under each of the

Alternatives are nearly the same it is expected there will be no appreciable difference in overall MSAT emissions among the various alternatives. Also, regardless of the alternative chosen, emissions will likely be lower than present levels in the design year as a result of EPA's national control programs that are projected to reduce annual MSAT emissions by 72 percent between 1999 and 2050. Local conditions may differ from these national projections in terms of fleet mix and turnover, VMT growth rates, and local control measures. However, the magnitude of the EPA-projected reductions is so great (even after accounting for VMT growth) that MSAT emissions in the study area are likely to be lower in the future in nearly all cases. The SR 126 project will not add substantial new capacity and therefore the facility will not generate meaningful increases in emissions of MSAT. See the MSAT discussion in Appendix D for more details, including the current state of MSAT research.

8.2. Climate Change

Climate change, also referred to as global warming, is an increase in the overall average atmospheric temperature of the earth due to the trapping of heat in the atmosphere by greenhouse gases. The primary greenhouse gas emitted by human activities in the US is carbon dioxide (CO_2), which represents approximately 85 percent of total greenhouse gas emissions.

Transportation sources contribute to global warming through the burning of petroleum-based fuel. According to the FHWA, transportation sources are responsible for approximately one-quarter of the greenhouse gas emissions in the US. Automobiles and light-duty trucks account for almost two-thirds of emissions from the transportation sector and emissions have steadily grown since 1990.

Emissions from transportation sources depend on the number of trips or miles traveled by each type of vehicle per year, which are, in turn, influenced by larger economic trends and consumer behavior. Over the long term, changes in vehicle fuel efficiency, driving behavior, and fuel type will influence the level of emissions.

Under the Clean Air Act, the EPA has the authority to establish motor vehicle emissions standards for CO_2 and other greenhouse gases although such standards have not yet been established.

FHWA is actively involved in efforts to initiate, contact, and disseminate climate-change-related research and to provide technical assistance to stakeholders. The FHWA is also involved in climate change initiatives with the USDOT Center for Climate Change and Environmental Forecasting.

Climate change and related effects are complex and global in nature. As a result, the impacts of any single transportation project cannot be effectively estimated in terms of global warming effect. However, the emissions changes due to individual projects are very small compared to global emissions.

Once standards are established and guidance for assessing the potential greenhouse gas effects of transportation projects becomes available, a more in-depth assessment rate may be possible.

9. Summary

Of the 24 identified noise receiver sites, 13 are predicted to be impacted by Alternative A and 12 are predicted to be impacted by Alternative B. Abatement considerations and mitigation for noise are not reasonable and/or feasible for the proposed project. Air quality conformity status it not projected to be altered by the proposed SR 126 project.

Appendix A
Noise Sampling Field Monitoring Data Sheets

Noise Sampling Field Monitoring Data

Rec# 01

Location (Street Address) 3213 Memorial Blvd. Time: 7:20 (AM)/PM Duration: 10 min. x2

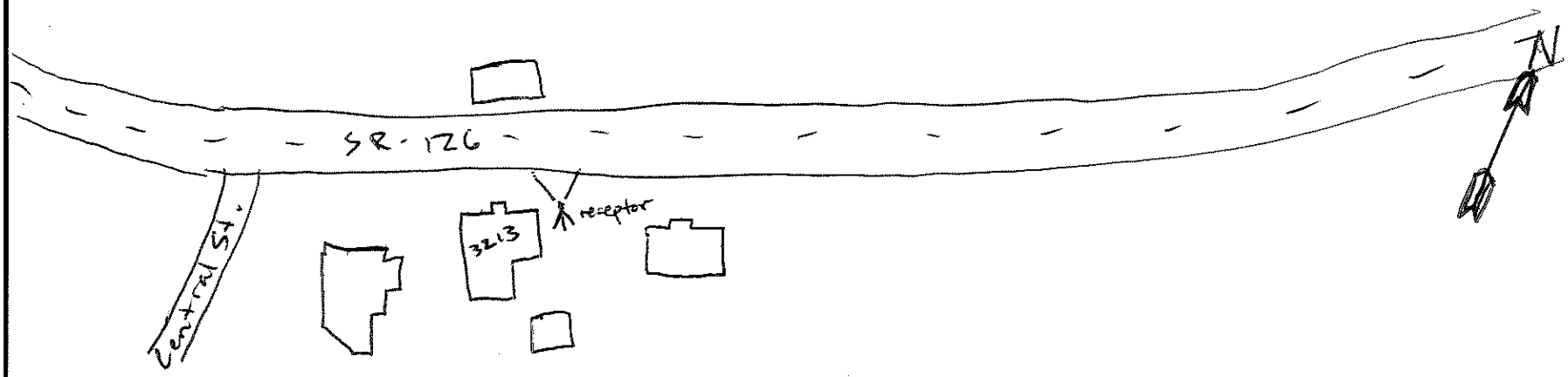
Date: 3/21/08 Temperature/Wind Speed: 9.1°C/4 mph Speed Limit 35 mph Noise Level: 63.3 dBA Leq

7:30 PM

= 63.1 dBA Leq

HMB PROFESSIONAL ENGINEERS, INC

Sketch Site Location (Include: street names, precise receptor locations and North arrow)



Segment	Direction	Cars/Light Trucks	Medium Trucks	Heavy Trucks
1				
2				
3				
4				

#2Date: _____ Temperature/Wind Speed: _____ Speed Limit _____ Noise Level: _____ dBA Leq

Segment	Direction	Cars/Light Trucks	Medium Trucks	Heavy Trucks
1				
2				
3				
4				

Additional Comments (e.g. Major intrusive events): _____

Noise Sampling Field Monitoring Data

Rx # 2

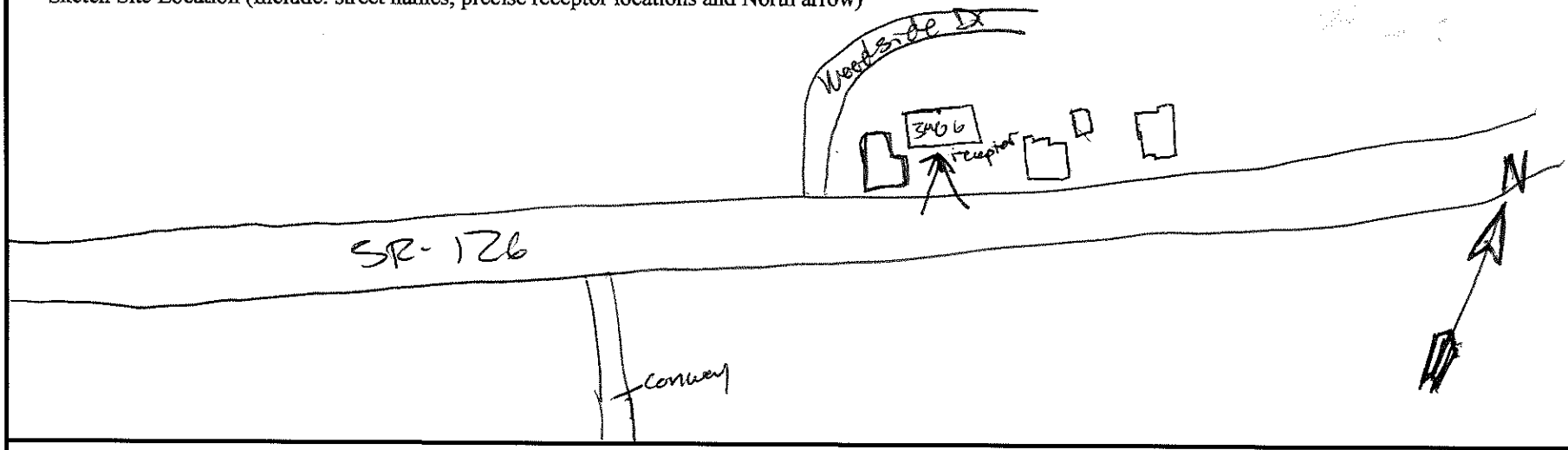
Location (Street Address) 3406 Memorial Blvd (SR-126) Time: 7:45 AM/PM Duration: 10 x 2 min. _____

Date: 3/21/08 Temperature/Wind Speed: 10.1°C/0 mph Speed Limit 35 mph Noise Level: 61.6 dBA Leq

7:55 AM

58.5 dBA Leq

Sketch Site Location (Include: street names, precise receptor locations and North arrow)



Segment	Direction	Cars/Light Trucks	Medium Trucks	Heavy Trucks
1				
2				
3				
4				

#2Date: _____ Temperature/Wind Speed: _____ Speed Limit _____ Noise Level: _____ dBA Leq

Segment	Direction	Cars/Light Trucks	Medium Trucks	Heavy Trucks
1				
2				
3				
4				

Additional Comments (e.g. Major intrusive events): _____

Noise Sampling Field Monitoring Data

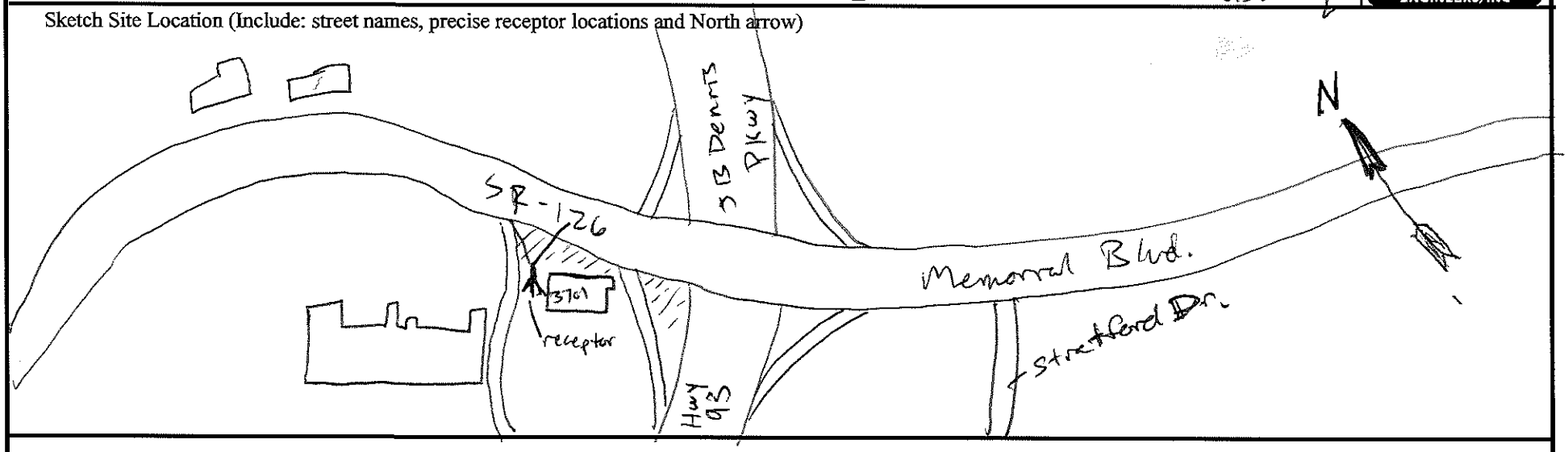
REC 03

Location (Street Address) 3701 Memorial Blvd. Time: 8:10 (8:20) AM/PM Duration: 10 min. x2

Date: 3/21/08 Temperature/Wind Speed: 9.9°C / 0 mph Speed Limit ~~50~~ 35 mph Noise Level: 62.8 (63.2) dBA Leq

PROFESSIONAL ENGINEERS, INC

Sketch Site Location (Include: street names, precise receptor locations and North arrow)



Segment	Direction	Cars/Light Trucks	Medium Trucks	Heavy Trucks
1				
2				
3				
4				

#2Date: _____ Temperature/Wind Speed: _____ Speed Limit _____ Noise Level: _____ dBA Leq

Segment	Direction	Cars/Light Trucks	Medium Trucks	Heavy Trucks
1				
2				
3				
4				

Additional Comments (e.g. Major intrusive events): Dashed lines represent slope

Noise Sampling Field Monitoring Data

Pg 1 of 4

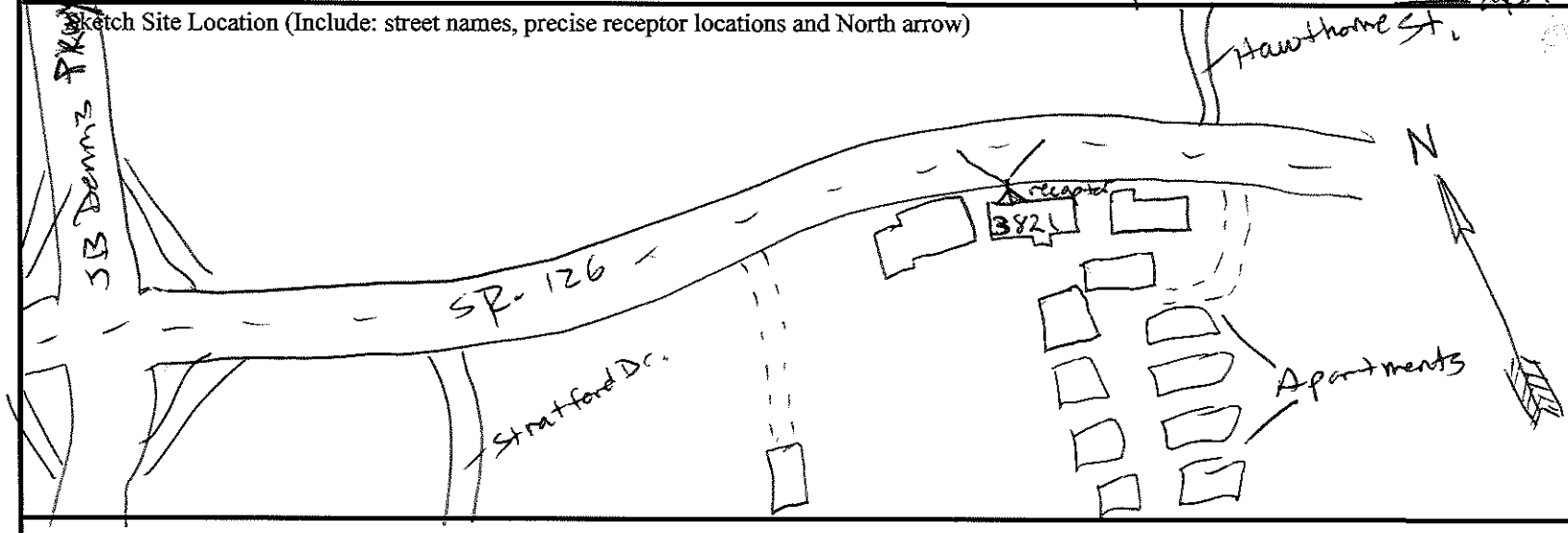
Location (Street Address) 3821 Memorial Blvd. Time: 8:35 (AM)/PM Duration: 10 min. X7

Date: 3/21/08 Temperature/Wind Speed: 9.8°C/0 mph Speed Limit ~~45~~ 35 mph Noise Level: 72.7 dBA Leq 73.5 dBA Leq

8:45 AM

PROFESSIONAL ENGINEERS, INC

Sketch Site Location (Include: street names, precise receptor locations and North arrow)



Segment	Direction	Cars/Light Trucks	Medium Trucks	Heavy Trucks
1				
2				
3				
4				

#2Date: _____ Temperature/Wind Speed: _____ Speed Limit _____ Noise Level: _____ dBA Leq

Segment	Direction	Cars/Light Trucks	Medium Trucks	Heavy Trucks
1				
2				
3				
4				

Additional Comments (e.g. Major intrusive events): _____

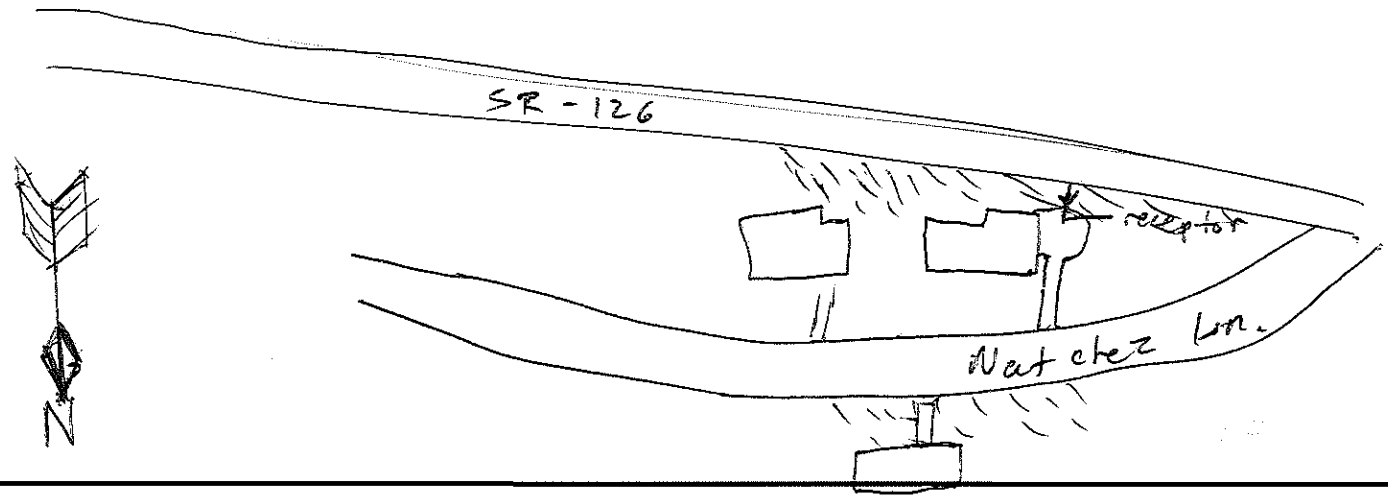
Noise Sampling Field Monitoring Data

REC 05

Location (Street Address) 104 Natchez Cn. Time: 4:00 AM/PM 4:10 PM Duration: 10 min. x 2

Date: 4/30/08 Temperature/Wind Speed: 72°/2 mph Speed Limit 50 mph Noise Level: 57.1 dBA Leq 57.5 dBA Leq

Sketch Site Location (Include: street names, precise receptor locations and North arrow)



Segment	Direction	Cars/Light Trucks	Medium Trucks	Heavy Trucks
1				
2				
3				
4				

#2Date: _____ Temperature/Wind Speed: _____ Speed Limit _____ Noise Level: _____ dBA Leq

Segment	Direction	Cars/Light Trucks	Medium Trucks	Heavy Trucks
1				
2				
3				
4				

Additional Comments (e.g. Major intrusive events): Dashed Lines represent slope

Noise Sampling Field Monitoring Data

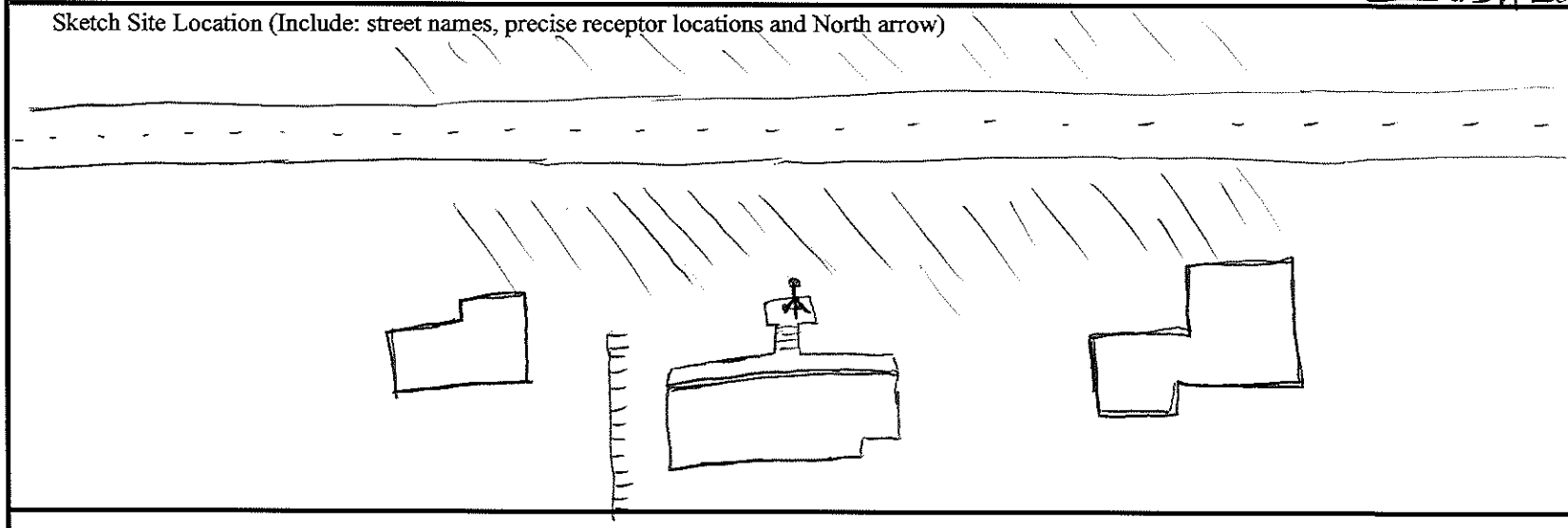
Ex 06

Location (Street Address) 4216 SKYLAND LN. Time: 1 11:22 AM/PM Duration: 10 min. x2

Date: 3/20/08 Temperature/Wind Speed: 8.8°C/2mph Speed Limit 45 mph Noise Level: 1 59.3 dBA Leq

2 11:33 AM 2 58.5 dBA Leq

Sketch Site Location (Include: street names, precise receptor locations and North arrow)



Segment	Direction	Cars/Light Trucks	Medium Trucks	Heavy Trucks
1				
2				
3				
4				

#2Date: _____ Temperature/Wind Speed: _____ Speed Limit _____ Noise Level: _____ dBA Leq

Segment	Direction	Cars/Light Trucks	Medium Trucks	Heavy Trucks
1				
2				
3				
4				

Additional Comments (e.g. Major intrusive events): Dash marks represent slope.

Noise Sampling Field Monitoring Data

Rz #7

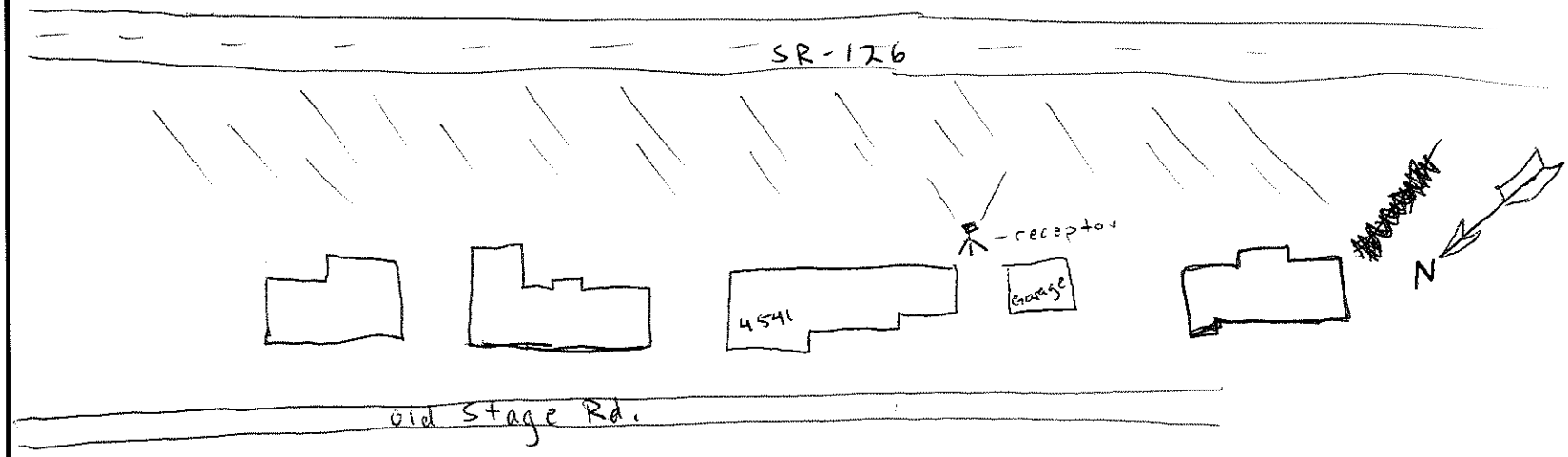
Location (Street Address) 4541 Old Stage Rd. Time: 1 11:52 (AM)/PM Duration: 10 min. x2

Date: 3/20/08 Temperature/Wind Speed: 12.8°C/1 mph Speed Limit 35 mph Noise Level: 1 43.4 dBA Leq

2 12:03 PM 2 44.1 dBA Leq

HMB PROFESSIONAL ENGINEERS, INC

Sketch Site Location (Include: street names, precise receptor locations and North arrow)



Segment	Direction	Cars/Light Trucks	Medium Trucks	Heavy Trucks
1				
2				
3				
4				

#2Date: _____ Temperature/Wind Speed: _____ Speed Limit _____ Noise Level: _____ dBA Leq

Segment	Direction	Cars/Light Trucks	Medium Trucks	Heavy Trucks
1				
2				
3				
4				

Additional Comments (e.g. Major intrusive events): Dash lines represent slope.

Noise Sampling Field Monitoring Data

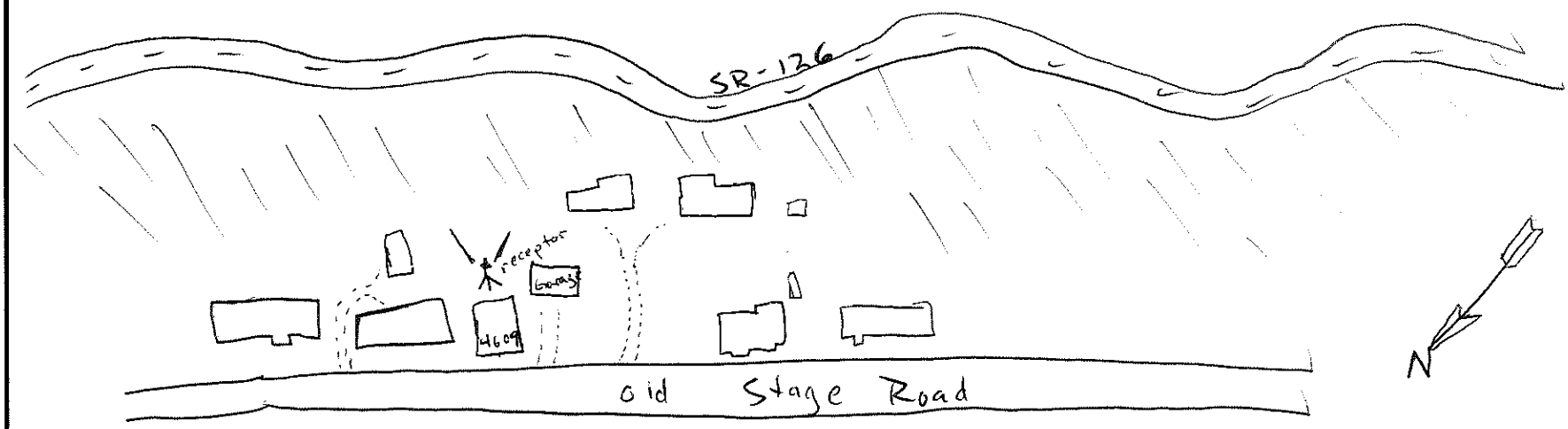
Rec 08

Location (Street Address) 4609 Old Stage Rd. Time: 12:22 AM/PM Duration: 10 min. x2

Date: 3/20/08 Temperature/Wind Speed: 16.1°C/1 mph Speed Limit 35 mph Noise Level: 44.1 dBA Leq

[2] 12:33 PM [2] 43.0 dBA Leq

Sketch Site Location (Include: street names, precise receptor locations and North arrow)



Segment	Direction	Cars/Light Trucks	Medium Trucks	Heavy Trucks
1				
2				
3				
4				

#2Date: _____ Temperature/Wind Speed: _____ Speed Limit _____ Noise Level: _____ dBA Leq

Segment	Direction	Cars/Light Trucks	Medium Trucks	Heavy Trucks
1				
2				
3				
4				

Additional Comments (e.g. Major intrusive events): Dash lines represent slope.

Noise Sampling Field Monitoring Data

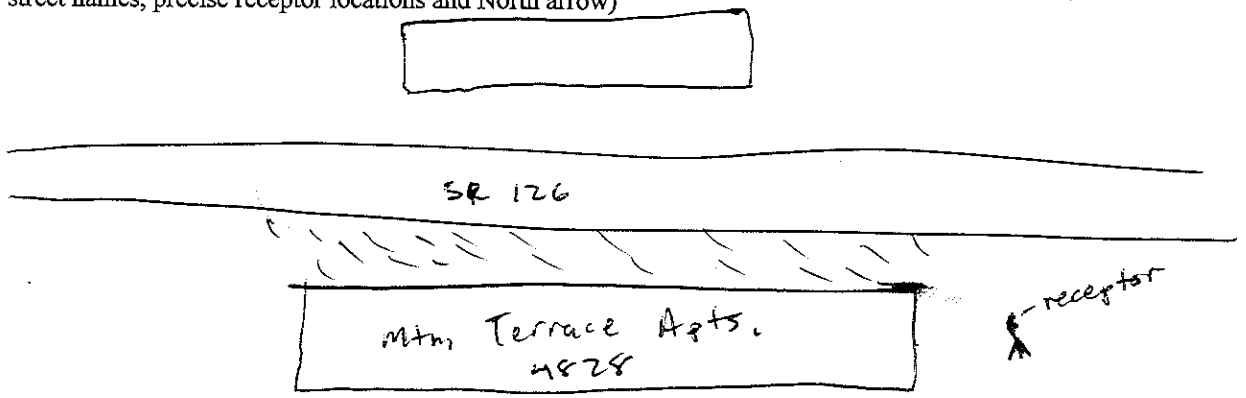
Rec #9

Location (Street Address) 4828 Memorial Blvd (126) Time: 4:35 4:45 PM AM/PM Duration: 10 min. x2

Date: 4/30/08 Temperature/Wind Speed: 72° / 2mph Speed Limit 55 mph Noise Level: 61.9 dBA Leq 60.4 dBA Leq

HMB PROFESSIONAL ENGINEERS, INC

Sketch Site Location (Include: street names, precise receptor locations and North arrow)



Segment	Direction	Cars/Light Trucks	Medium Trucks	Heavy Trucks
1				
2				
3				
4				

#2Date: _____ Temperature/Wind Speed: _____ Speed Limit _____ Noise Level: _____ dBA Leq

Segment	Direction	Cars/Light Trucks	Medium Trucks	Heavy Trucks
1				
2				
3				
4				

Additional Comments (e.g. Major intrusive events): Dashed Lines rep. slope

Noise Sampling Field Monitoring Data

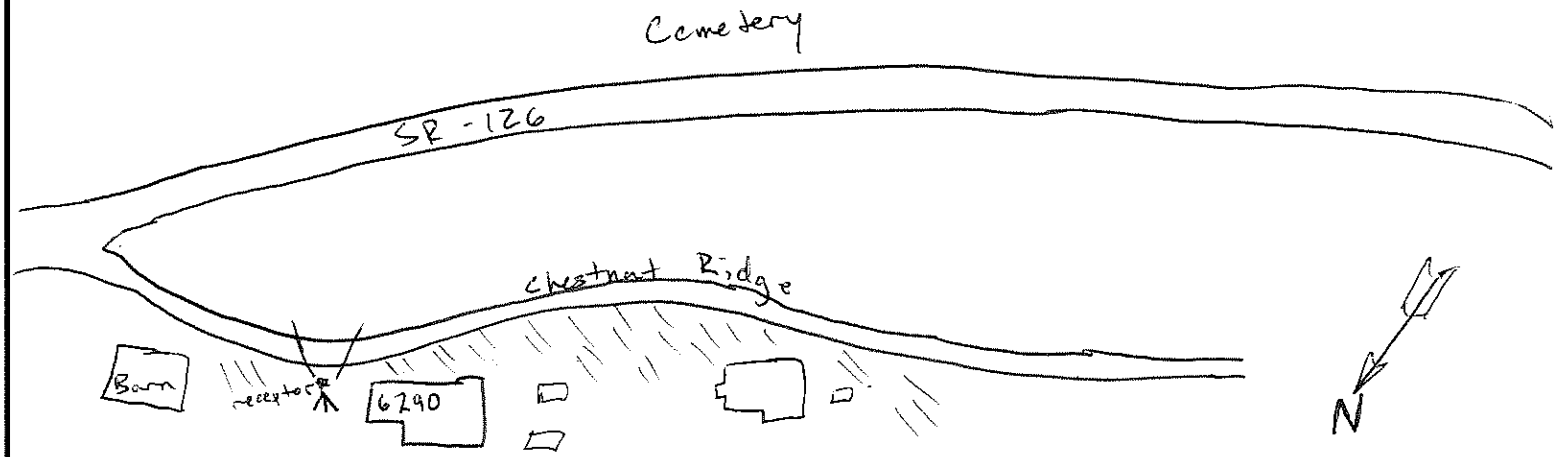
Rec 10

Location (Street Address) 6290 Chestnut Ridge Time: 12:48 AM/PM Duration: 10 min. x2

Date: 3/20/08 Temperature/Wind Speed: 16.5°C/.9 mph Speed Limit 50 mph Noise Level: 56.8 dBA Leq

[2] 12:58 PM [2] 58.7 dBA Leq

Sketch Site Location (Include: street names, precise receptor locations and North arrow)



Segment	Direction	Cars/Light Trucks	Medium Trucks	Heavy Trucks
1				
2				
3				
4				

#2Date: _____ Temperature/Wind Speed: _____ Speed Limit _____ Noise Level: _____ dBA Leq

Segment	Direction	Cars/Light Trucks	Medium Trucks	Heavy Trucks
1				
2				
3				
4				

Additional Comments (e.g. Major intrusive events): Dash lines represent Slope.

Noise Sampling Field Monitoring Data

REC # 11

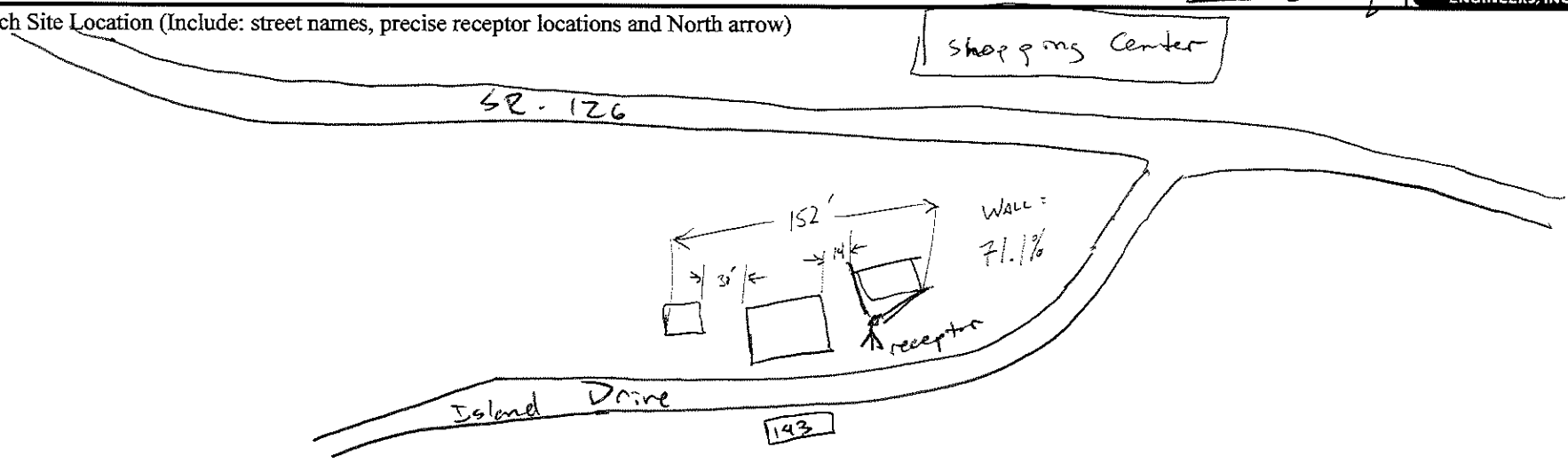
Location (Street Address) 143 Island Dr. Time: 1:16 AM/PM Duration: 10 min. x 2

Date: 3/20/08 Temperature/Wind Speed: 13.8°C/1.2 mph Speed Limit 50 mph Noise Level: 58.0 dBA Leq

2 58.3 dBA Leq

HMB PROFESSIONAL ENGINEERS, INC

Sketch Site Location (Include: street names, precise receptor locations and North arrow)



Segment	Direction	Cars/Light Trucks	Medium Trucks	Heavy Trucks
1				
2				
3				
4				

#2Date: _____ Temperature/Wind Speed: _____ Speed Limit _____ Noise Level: _____ dBA Leq

Segment	Direction	Cars/Light Trucks	Medium Trucks	Heavy Trucks
1				
2				
3				
4				

Additional Comments (e.g. Major intrusive events): _____

Noise Sampling Field Monitoring Data

REC# 12

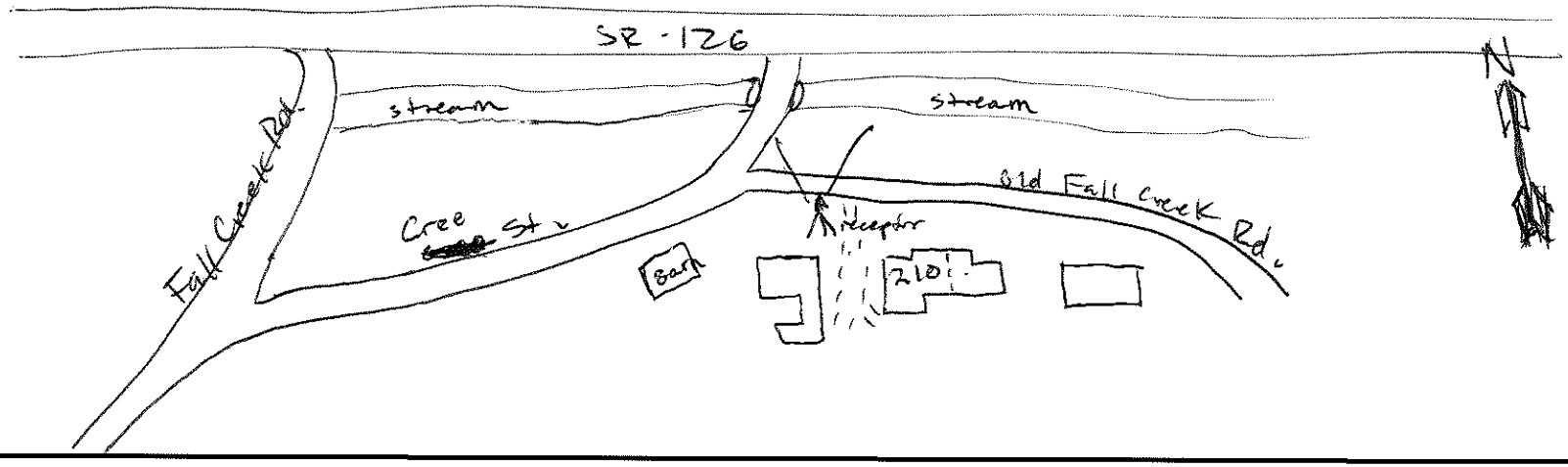
Location (Street Address) 210 Old Fall Creek Rd Time: 1:42 AM/PM Duration: 10 min. x2

Date: 3/20/08 Temperature/Wind Speed: 17.5°C / .8 mph Speed Limit 50 mph Noise Level: 54.1 dBA Leq

2:52 PM

255.7 dBA Leq

Sketch Site Location (Include: street names, precise receptor locations and North arrow)



Segment	Direction	Cars/Light Trucks	Medium Trucks	Heavy Trucks
1				
2				
3				
4				

#2Date: _____ Temperature/Wind Speed: _____ Speed Limit _____ Noise Level: _____ dBA Leq

Segment	Direction	Cars/Light Trucks	Medium Trucks	Heavy Trucks
1				
2				
3				
4				

Additional Comments (e.g. Major intrusive events): _____

Noise Sampling Field Monitoring Data

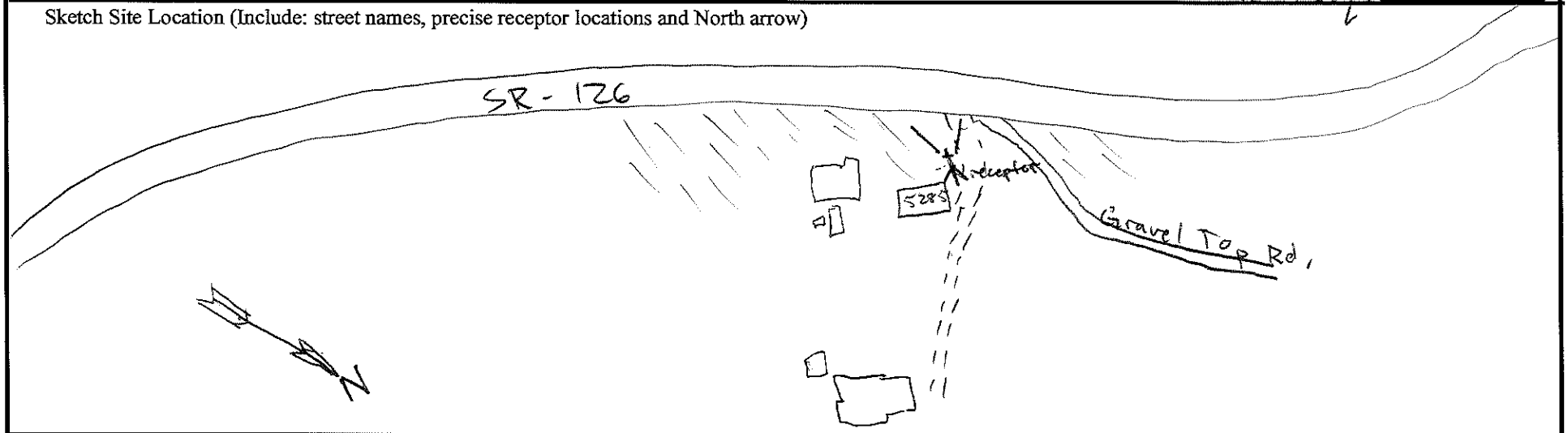
Rec 13

Location (Street Address) 5285 Memorial (SR-126) Time: 1 4:14 2 4:25 AM/PM PM Duration: 10 min. x 2

Date: 3/20/08 Temperature/Wind Speed: 17.4°C/2 mph Speed Limit 50 mph Noise Level: 1 59.8 dBA Leq 2 60.5 dBA Leq

HMB PROFESSIONAL ENGINEERS, INC

Sketch Site Location (Include: street names, precise receptor locations and North arrow)



Segment	Direction	Cars/Light Trucks	Medium Trucks	Heavy Trucks
1				
2				
3				
4				

#2Date: _____ Temperature/Wind Speed: _____ Speed Limit _____ Noise Level: _____ dBA Leq

Segment	Direction	Cars/Light Trucks	Medium Trucks	Heavy Trucks
1				
2				
3				
4				

Additional Comments (e.g. Major intrusive events): Dashed lines represent slope

Noise Sampling Field Monitoring Data

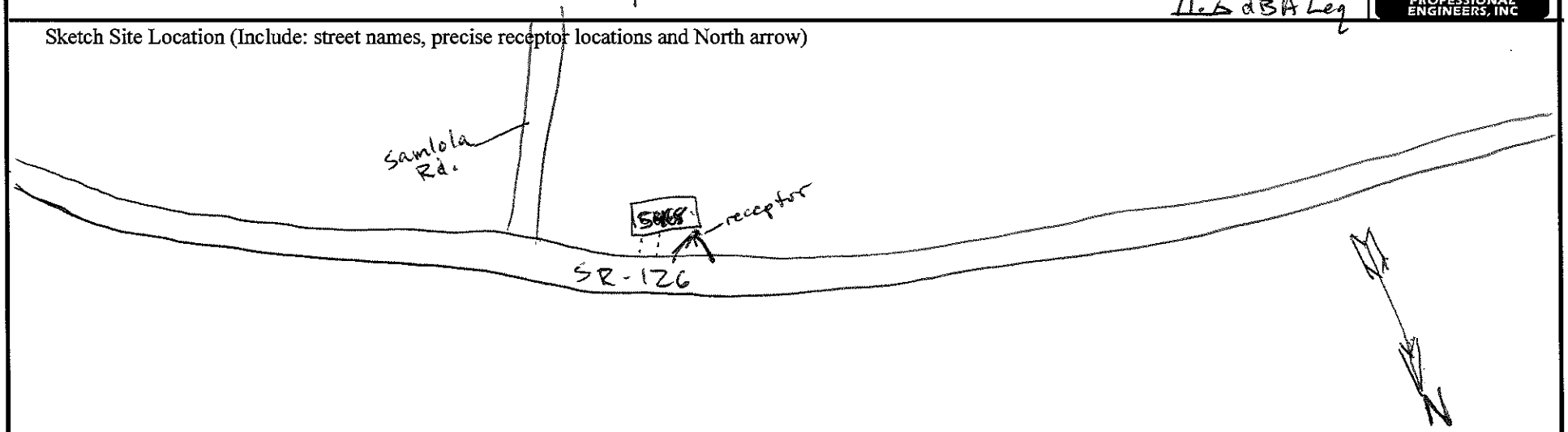
Rec 14

Location (Street Address) 5468 Memorial (SR-126) Time: 4:37 AM/PM 4:48 PM Duration: 10 min. x2

Date: 3/20/08 Temperature/Wind Speed: 15°C/1.9 mph Speed Limit 50 mph Noise Level: 68.5 dBA Leq 71.3 dBA Leq

HMB PROFESSIONAL ENGINEERS, INC

Sketch Site Location (Include: street names, precise receptor locations and North arrow)



Segment	Direction	Cars/Light Trucks	Medium Trucks	Heavy Trucks
1				
2				
3				
4				

#2Date: _____ Temperature/Wind Speed: _____ Speed Limit _____ Noise Level: _____ dBA Leq

Segment	Direction	Cars/Light Trucks	Medium Trucks	Heavy Trucks
1				
2				
3				
4				

Additional Comments (e.g. Major intrusive events): _____

Noise Sampling Field Monitoring Data

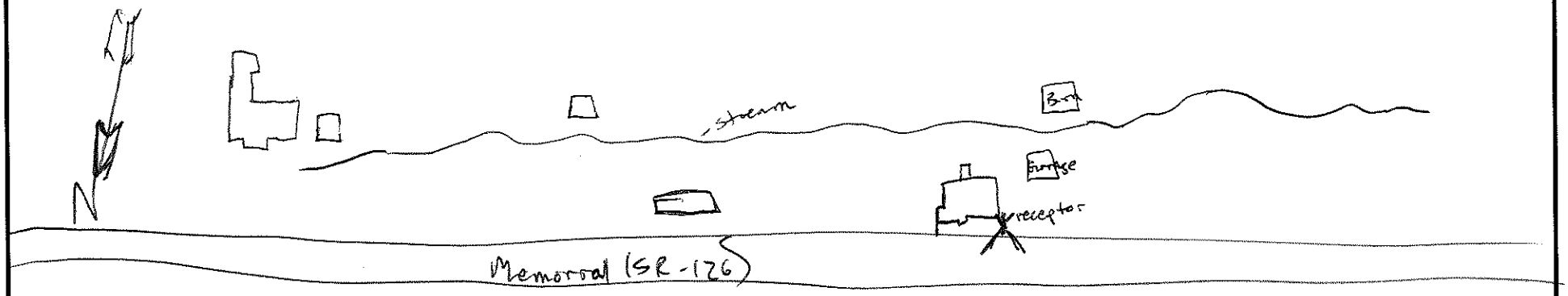
Rec 15

Location (Street Address) 5680 Memorial (SR-126) Time: 1 5:05 AM/PM 2 5:15 PM Duration: 10 min. x 2

Date: 3/20/08 Temperature/Wind Speed: 16.1°C/.9 mph Speed Limit 50 mph Noise Level: 1 65.3 dBA Leq 2 65.1 dBA Leq

HMB PROFESSIONAL ENGINEERS, INC

Sketch Site Location (Include: street names, precise receptor locations and North arrow)



Segment	Direction	Cars/Light Trucks	Medium Trucks	Heavy Trucks
1				
2				
3				
4				

#2Date: _____ Temperature/Wind Speed: _____ Speed Limit _____ Noise Level: _____ dBA Leq

Segment	Direction	Cars/Light Trucks	Medium Trucks	Heavy Trucks
1				
2				
3				
4				

Additional Comments (e.g. Major intrusive events): _____

Noise Sampling Field Monitoring Data

Rx 16

Location (Street Address) 5920 Memorial (SR-126) Time: 1 5:26 AM/PM Duration: 10 min. x2 _____

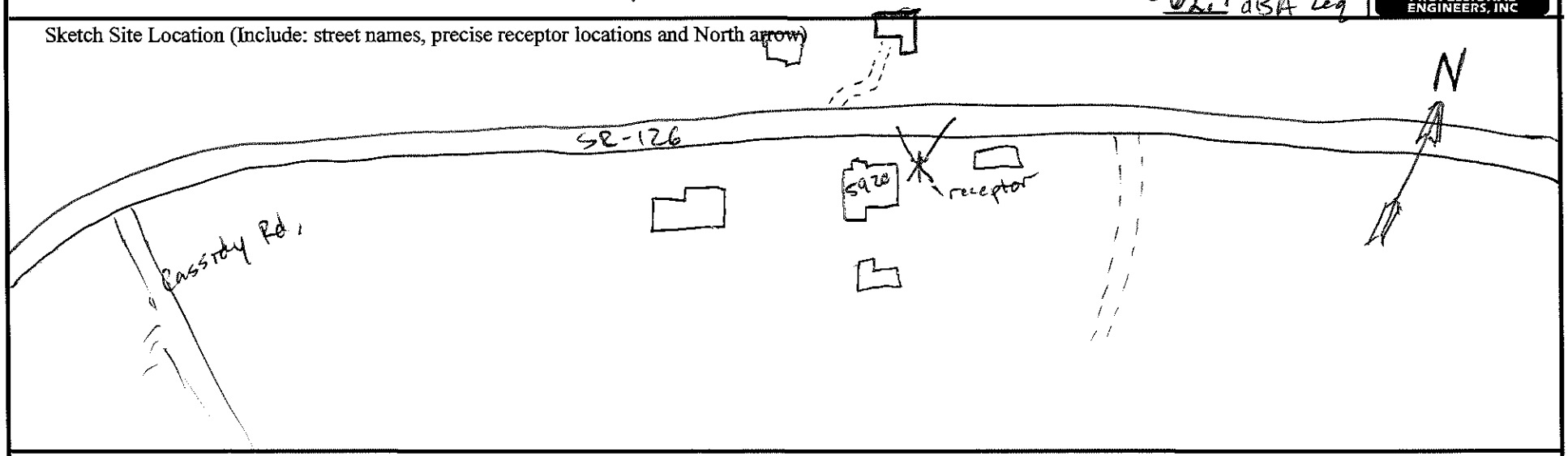
2 5:36 PM

Date: 3/28/08 Temperature/Wind Speed: 15°C/2.0 mph Speed Limit 50 mph Noise Level: 1 62.1 dBA Leq

2 62.7 dBA Leq

HMB PROFESSIONAL ENGINEERS, INC

Sketch Site Location (Include: street names, precise receptor locations and North arrow)



Segment	Direction	Cars/Light Trucks	Medium Trucks	Heavy Trucks
1				
2				
3				
4				

#2Date: _____ Temperature/Wind Speed: _____ Speed Limit _____ Noise Level: _____ dBA Leq

Segment	Direction	Cars/Light Trucks	Medium Trucks	Heavy Trucks
1				
2				
3				
4				

Additional Comments (e.g. Major intrusive events): _____

Noise Sampling Field Monitoring Data

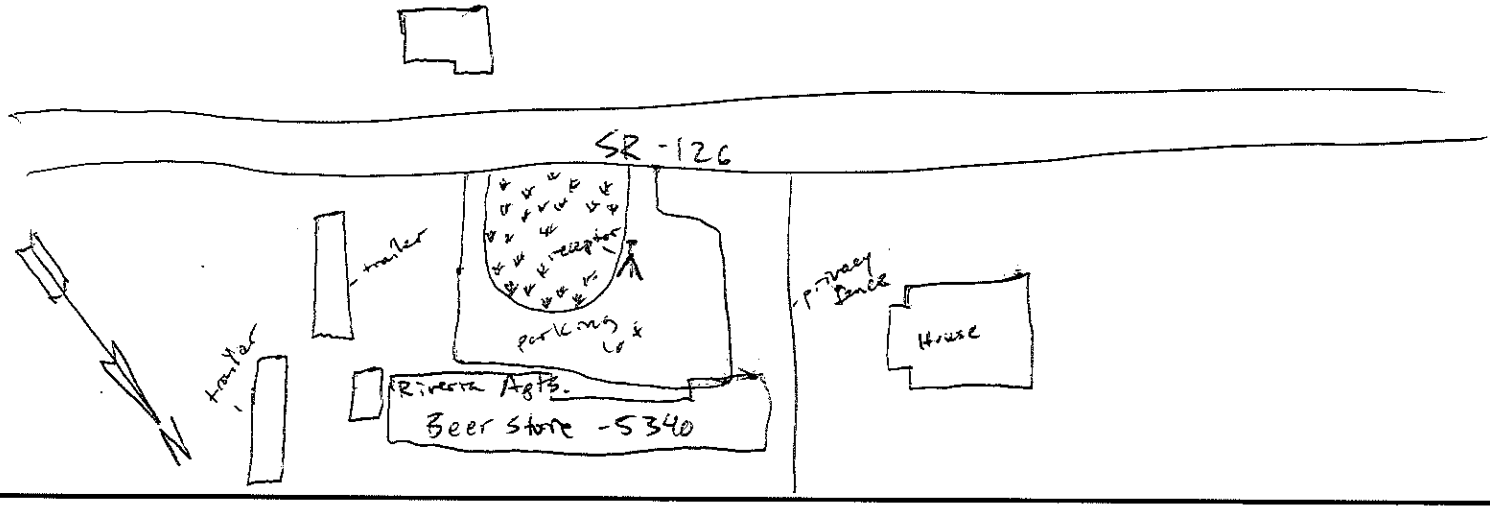
REC 17

Location (Street Address) 5340 Memorial (SR-126) Time: 8:55 (AM)/PM Duration: 10 min. x 2

Date: 5/1/08 Temperature/Wind Speed: 62°/0mph Speed Limit 55 mph Noise Level: 54.9 dBA Leq
55.6 dBA Leq

HMB PROFESSIONAL ENGINEERS, INC

Sketch Site Location (Include: street names, precise receptor locations and North arrow)



Segment	Direction	Cars/Light Trucks	Medium Trucks	Heavy Trucks
1				
2				
3				
4				

#2Date: _____ Temperature/Wind Speed: _____ Speed Limit _____ Noise Level: _____ dBA Leq

Segment	Direction	Cars/Light Trucks	Medium Trucks	Heavy Trucks
1				
2				
3				
4				

Additional Comments (e.g. Major intrusive events): _____

Noise Sampling Field Monitoring Data

Rec 18

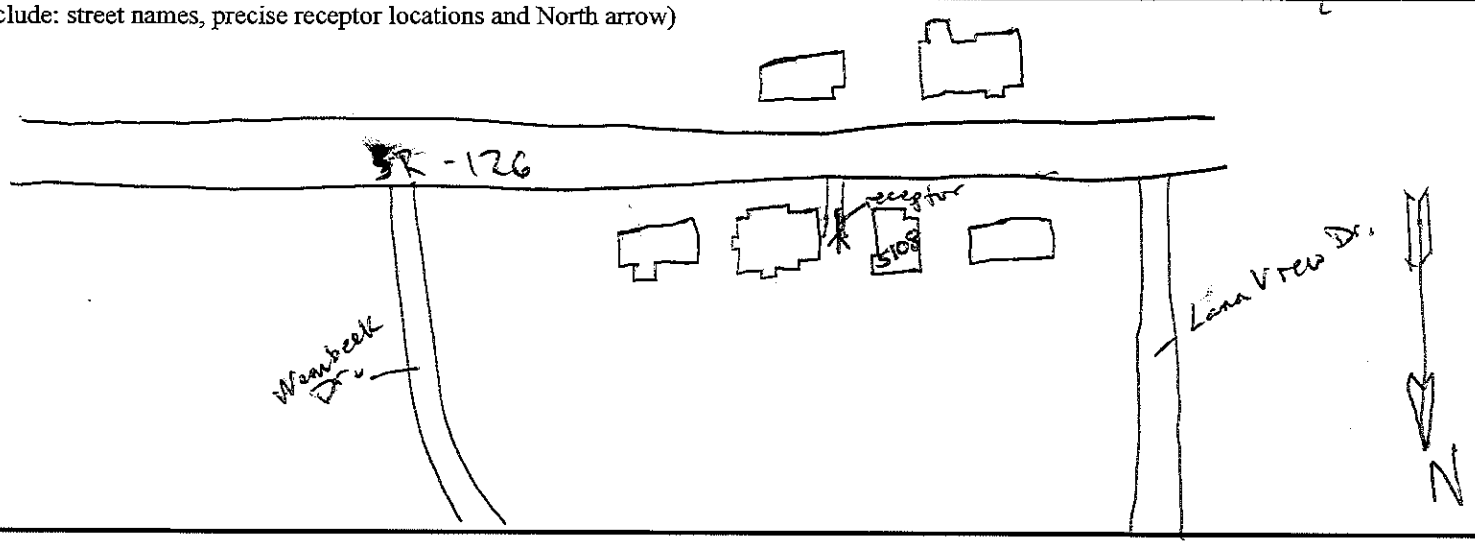
Location (Street Address) 5108 Memorial Blvd. (SR-126) Time: 9:56 (AM)/PM Duration: 10 min. x 2

Date: 5/1/08 Temperature/Wind Speed: 66/ mph Speed Limit 50 mph Noise Level: 67.5 dBA Leq

66.7 dBA Leq

PROFESSIONAL ENGINEERS, INC

Sketch Site Location (Include: street names, precise receptor locations and North arrow)



Segment	Direction	Cars/Light Trucks	Medium Trucks	Heavy Trucks
1				
2				
3				
4				

#2Date: _____ Temperature/Wind Speed: _____ Speed Limit _____ Noise Level: _____ dBA Leq

Segment	Direction	Cars/Light Trucks	Medium Trucks	Heavy Trucks
1				
2				
3				
4				

Additional Comments (e.g. Major intrusive events): _____

Noise Sampling Field Monitoring Data

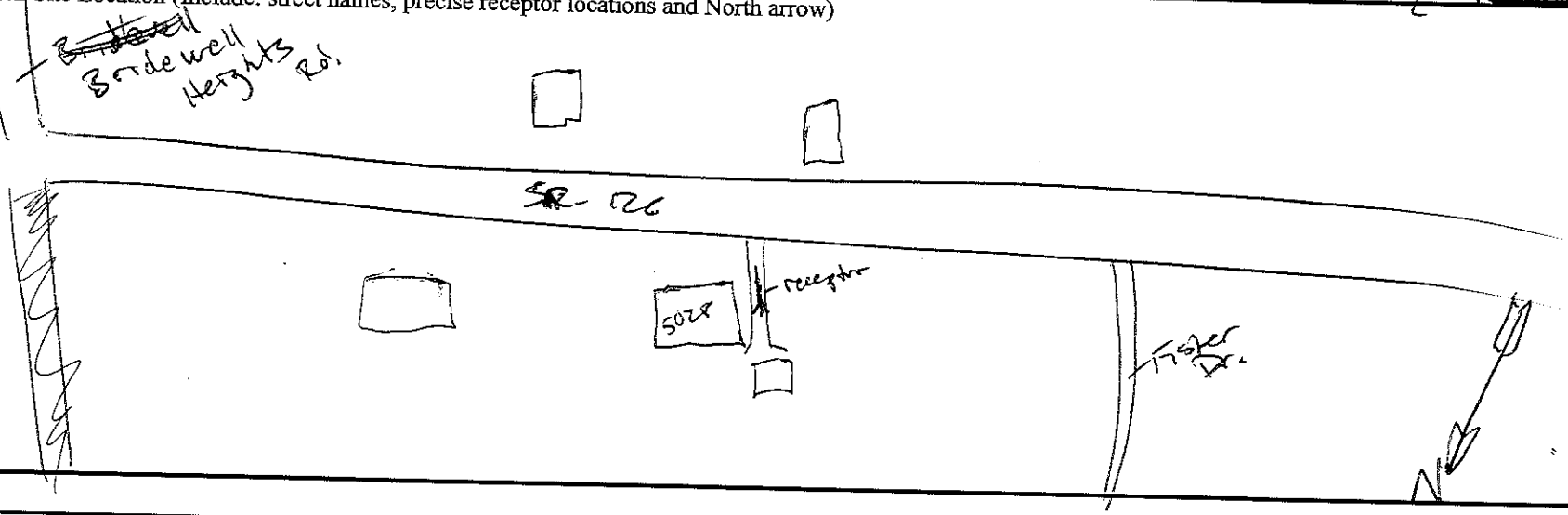
Dec 19

Location (Street Address) 5828 Memorial Blvd. (SR 126 Time: 10:30 AM/PM Duration: 10 min. #2

Date: 5/1/08 Temperature/Wind Speed: 66/ mph Speed Limit 55 mph Noise Level: 65.0 dBA Leq
65.3 dBA Leq

HMB PROFESSIONAL ENGINEERS, INC

Sketch Site Location (Include: street names, precise receptor locations and North arrow)



Segment	Direction	Cars/Light Trucks	Medium Trucks	Heavy Trucks
1				
2				
3				
4				

#2Date: _____ Temperature/Wind Speed: _____ Speed Limit _____ Noise Level: _____ dBA Leq

Segment	Direction	Cars/Light Trucks	Medium Trucks	Heavy Trucks
1				
2				
3				
4				

Additional Comments (e.g. Major intrusive events): _____

Noise Sampling Field Monitoring Data

Rec 20

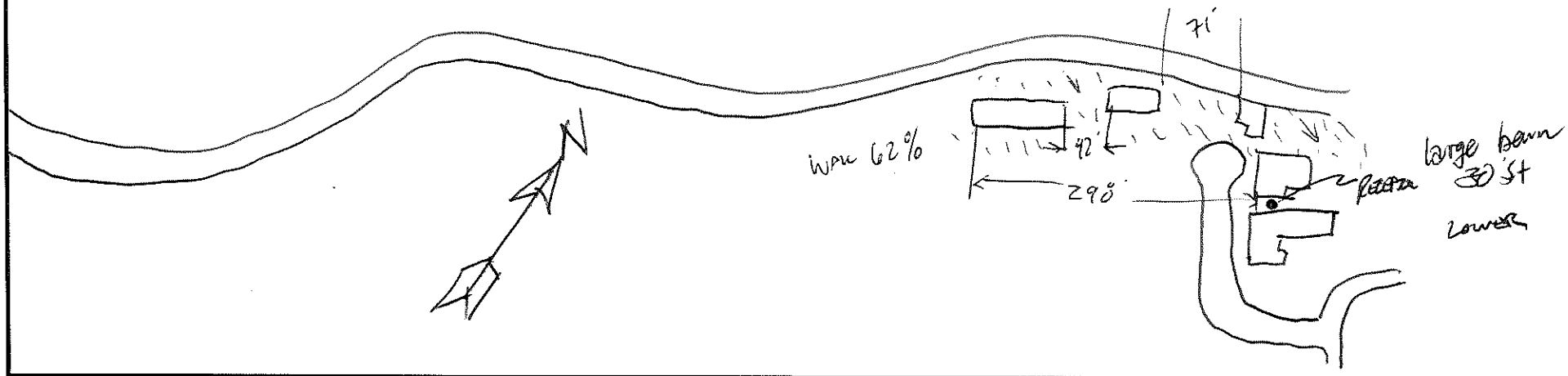
Location (Street Address) 105 Time: 10:58 AM/PM Duration: 10 min. x2

Date: 5/11/08 Temperature/Wind Speed: 68/1mph Speed Limit 50 mph Noise Level: 50.0 dBA Leq

47.8 " "

HMB PROFESSIONAL ENGINEERS, INC

Sketch Site Location (Include: street names, precise receptor locations and North arrow)



Segment	Direction	Cars/Light Trucks	Medium Trucks	Heavy Trucks
1				
2				
3				
4				

#2Date: _____ Temperature/Wind Speed: _____ Speed Limit _____ Noise Level: _____ dBA Leq

Segment	Direction	Cars/Light Trucks	Medium Trucks	Heavy Trucks
1				
2				
3				
4				

Additional Comments (e.g. Major intrusive events): _____

Noise Sampling Field Monitoring Data

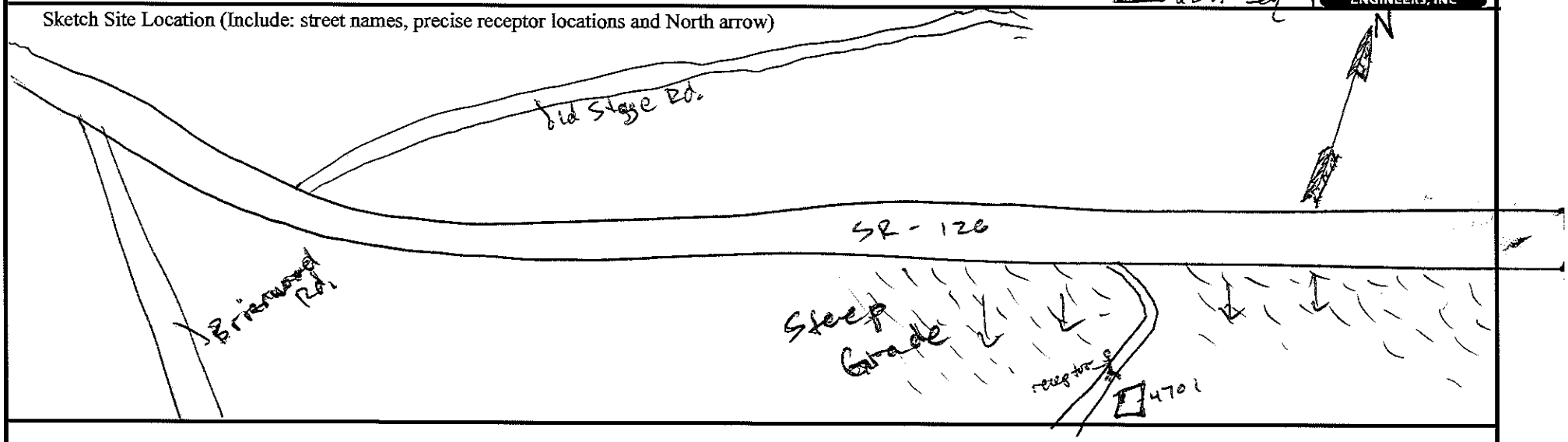
Rec 21

Location (Street Address) 4701 Memorial Blvd. (SR-126) Time: 1:28 AM/PM 1:40 PM Duration: 10 min. x2

Date: 5/1/08 Temperature/Wind Speed: 73/ mph Speed Limit 40 mph Noise Level: 49.9 dBA Leq 54.9 dBA Leq

HMB PROFESSIONAL ENGINEERS, INC

Sketch Site Location (Include: street names, precise receptor locations and North arrow)



Segment	Direction	Cars/Light Trucks	Medium Trucks	Heavy Trucks
1				
2				
3				
4				

#2Date: _____ Temperature/Wind Speed: _____ Speed Limit _____ Noise Level: _____ dBA Leq

Segment	Direction	Cars/Light Trucks	Medium Trucks	Heavy Trucks
1				
2				
3				
4				

Additional Comments (e.g. Major intrusive events): _____

Noise Sampling Field Monitoring Data

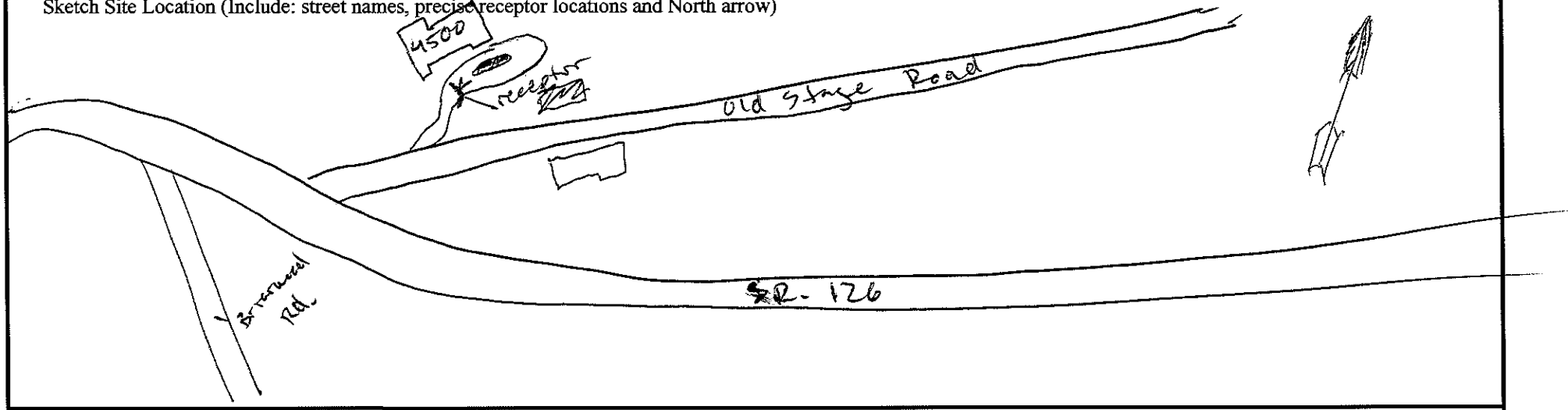
Rec 22

Location (Street Address) 4500 Old Stage Rd. Time: 1:55 AM/PM Duration: 10 min. x 2

Date: 5/1/08 Temperature/Wind Speed: 73/1 mph Speed Limit 50 mph Noise Level: 58.2 dBA Leq
62.0 dBA Leq

HMB PROFESSIONAL ENGINEERS, INC

Sketch Site Location (Include: street names, precise receptor locations and North arrow)



Segment	Direction	Cars/Light Trucks	Medium Trucks	Heavy Trucks
1				
2				
3				
4				

#2Date: _____ Temperature/Wind Speed: _____ Speed Limit _____ Noise Level: _____ dBA Leq

Segment	Direction	Cars/Light Trucks	Medium Trucks	Heavy Trucks
1				
2				
3				
4				

Additional Comments (e.g. Major intrusive events): _____

Noise Sampling Field Monitoring Data

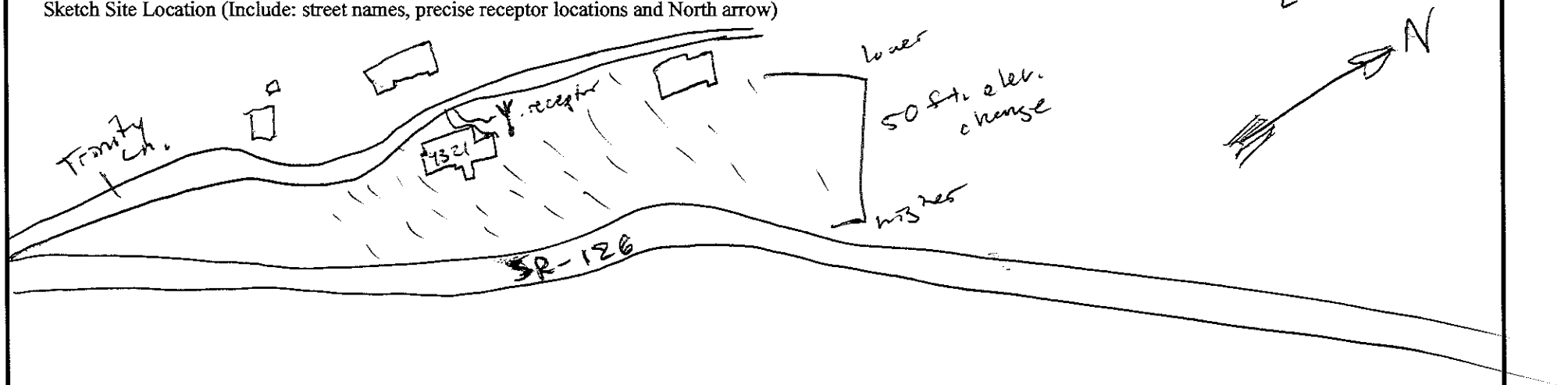
lot 23

Location (Street Address) 4321 Trinity Ln. Time: 2:23 AM/PM Duration: 10 min. x2

Date: 5/1/08 Temperature/Wind Speed: 74/1mph Speed Limit 40 mph Noise Level: 60.3 dBA Leq
56.7 dBA Leq

PROFESSIONAL ENGINEERS, INC

Sketch Site Location (Include: street names, precise receptor locations and North arrow)



Segment	Direction	Cars/Light Trucks	Medium Trucks	Heavy Trucks
1				
2				
3				
4				

#2Date: _____ Temperature/Wind Speed: _____ Speed Limit _____ Noise Level: _____ dBA Leq

Segment	Direction	Cars/Light Trucks	Medium Trucks	Heavy Trucks
1				
2				
3				
4				

Additional Comments (e.g. Major intrusive events): _____

Noise Sampling Field Monitoring Data

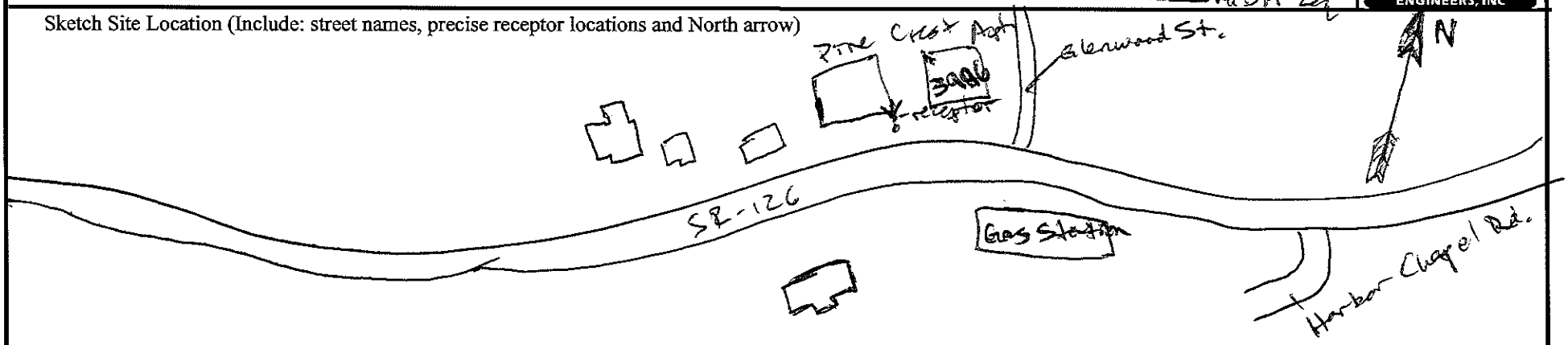
Rec 24

Location (Street Address) 3996 Memorial Blvd (126) Time: 2:50 AM/PM Duration: 10 min. x2

Date: 5/1/08 Temperature/Wind Speed: 74/1mph Speed Limit 40 mph Noise Level: 65.6 dBA Leq
66.2 dBA Leq

HMB PROFESSIONAL ENGINEERS, INC

Sketch Site Location (Include: street names, precise receptor locations and North arrow)



Segment	Direction	Cars/Light Trucks	Medium Trucks	Heavy Trucks
1				
2				
3				
4				

#2Date: _____ Temperature/Wind Speed: _____ Speed Limit _____ Noise Level: _____ dBA Leq

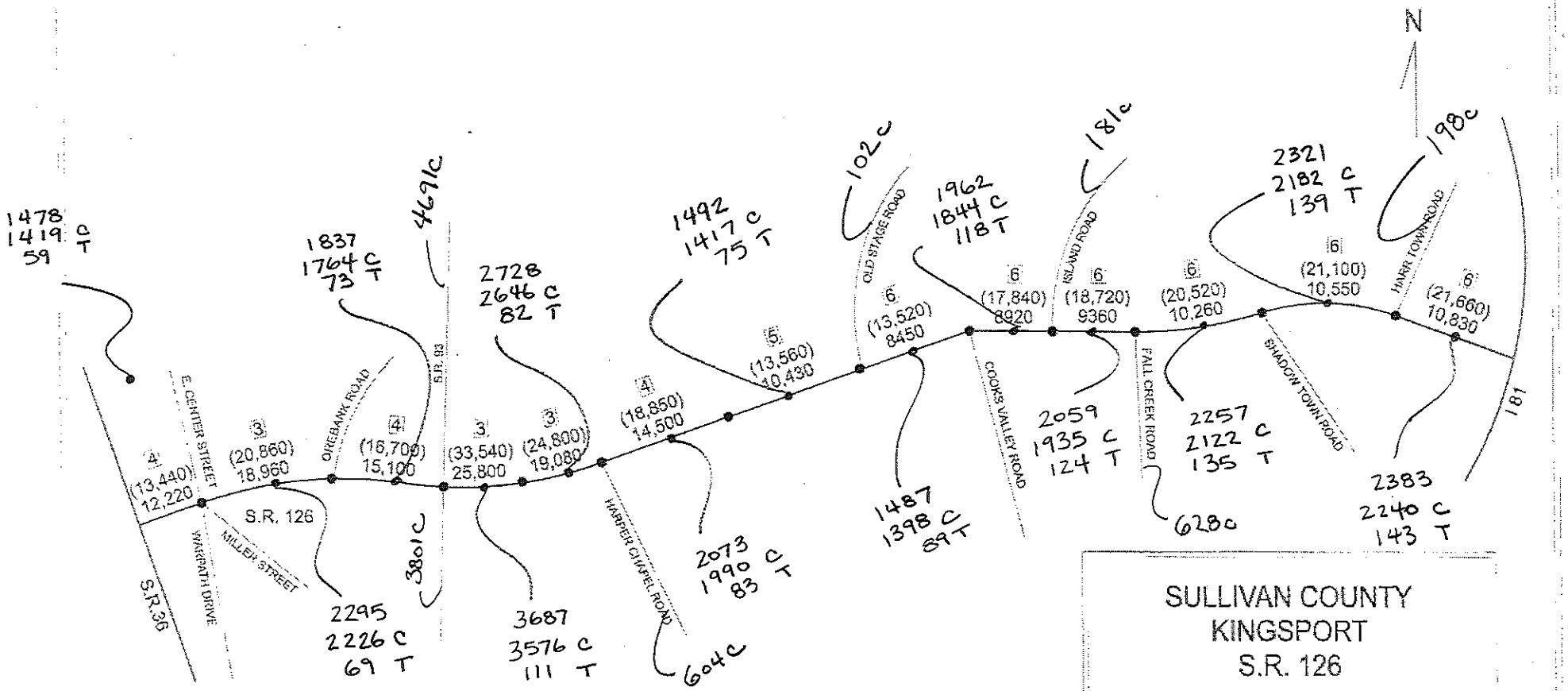
Segment	Direction	Cars/Light Trucks	Medium Trucks	Heavy Trucks
1				
2				
3				
4				

Additional Comments (e.g. Major intrusive events): _____

Appendix B
Traffic

HIGHWAY TRAFFIC NOISE

FUTURE FOR ALTERNATIVES A & B



SULLIVAN COUNTY
KINGSPORT
S.R. 126

2033 AADT - (000)
2013 AADT - 000
AADT Truck % - 0

9/16/2009
G. Dyer / B. Darks

NOT TO SCALE

K factor = 0.11

AADT * K = DHV

DHV * [0] = # HT (T)

DHV - HT = CARS (C)

Appendix C
TNM 2.5 Data Output

HMB 31 August 2010
mdg TNM 2.5
Calculated with TNM 2.5

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: 1135
RUN: SR 126 Memorial Blvd. Alternative A
BARRIER DESIGN: INPUT HEIGHTS
ATMOSPHERICS: 68 deg F, 50% RH

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

Receiver Name	No.	#DUs	Existing LAeq1h	No Barrier LAeq1h Calculated	Crit'n	Increase over existing Calculated	Crit'n Sub'l Inc	With Barrier Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Noise Reduction Goal	Noise Reduction Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
Receiver1	1	1	63.2	64.7	66	1.5	10	----	64.7	0.0	8	-8.0
Receiver2	2	1	60.1	64.9	66	4.8	10	----	64.9	0.0	8	-8.0
Receiver3	3	1	63.0	66.0	66	3.0	10	Snd Lvl	66.0	0.0	8	-8.0
Receiver4	4	1	73.1	69.7	66	-3.4	10	Snd Lvl	69.7	0.0	8	-8.0
Receiver5	5	1	57.2	65.9	66	8.7	10	----	65.9	0.0	8	-8.0
Receiver6	6	1	58.9	63.8	66	4.9	10	----	63.8	0.0	8	-8.0
Receiver7	7	1	43.8	56.7	66	12.9	10	Sub'l Inc	56.7	0.0	8	-8.0
Receiver8	8	1	43.6	54.8	66	11.2	10	Sub'l Inc	54.8	0.0	8	-8.0
Receiver9	9	1	61.2	63.5	66	2.3	10	----	63.5	0.0	8	-8.0
Receiver10	10	1	57.8	63.9	66	6.1	10	----	63.9	0.0	8	-8.0
Receiver11	11	1	58.2	61.6	66	3.4	10	----	61.6	0.0	8	-8.0
Receiver12	12	1	54.9	59.5	66	4.6	10	----	59.5	0.0	8	-8.0
Receiver13	13	1	60.2	65.5	66	5.3	10	----	65.5	0.0	8	-8.0
Receiver14	14	1	69.9	65.8	66	-4.1	10	----	65.8	0.0	8	-8.0
Receiver15	15	1	65.2	66.1	66	0.9	10	Snd Lvl	66.1	0.0	8	-8.0
Receiver16	16	1	62.4	67.6	66	5.2	10	Snd Lvl	67.6	0.0	8	-8.0
Receiver17	17	1	55.3	68.6	66	13.3	10	Both	68.6	0.0	8	-8.0
Receiver18	18	1	67.1	68.3	66	1.2	10	Snd Lvl	68.3	0.0	8	-8.0
Receiver19	19	1	65.2	68.0	66	2.8	10	Snd Lvl	68.0	0.0	8	-8.0
Receiver20	20	1	48.9	62.0	66	13.1	10	Sub'l Inc	62.0	0.0	8	-8.0
Receiver21	21	1	52.4	61.3	66	8.9	10	----	61.3	0.0	8	-8.0
Receiver22	22	1	60.1	64.3	66	4.2	10	----	64.3	0.0	8	-8.0
Receiver23	23	1	60.3	63.4	66	3.1	10	----	63.4	0.0	8	-8.0
Receiver24	24	1	65.9	64.8	66	-1.1	10	----	64.8	0.0	8	-8.0

Dwelling Units	# DUs	Noise Reduction		
		Min	Avg	Max
		dB	dB	dB
All Selected	24	0.0	0.0	0.0
All Impacted	10	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

HMB 31 August 2010
mdg TNM 2.5
Calculated with TNM 2.5

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: 1135
RUN: SR 126 Memorial Blvd. Alternative B
BARRIER DESIGN: INPUT HEIGHTS
ATMOSPHERICS: 68 deg F, 50% RH

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

Receiver Name	No.	#DUs	Existing LAeq1h	No Barrier LAeq1h Calculated	Crit'n	Increase over existing Calculated	Crit'n Sub'l Inc	With Barrier Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Noise Reduction Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
Receiver1	1	1	63.2	64.6	66	1.4	10	----	64.6	0.0	8	-8.0
Receiver2	2	1	60.1	65.0	66	4.9	10	----	65.0	0.0	8	-8.0
Receiver3	3	1	63.0	66.0	66	3.0	10	Snd Lvl	66.0	0.0	8	-8.0
Receiver4	4	1	73.1	68.7	66	-4.4	10	Snd Lvl	68.7	0.0	8	-8.0
Receiver5	5	1	57.2	64.1	66	6.9	10	----	64.1	0.0	8	-8.0
Receiver6	6	1	58.9	67.1	66	8.2	10	Snd Lvl	67.1	0.0	8	-8.0
Receiver7	7	1	43.8	56.5	66	12.7	10	Sub'l Inc	56.5	0.0	8	-8.0
Receiver8	8	1	43.6	55.2	66	11.6	10	Sub'l Inc	55.2	0.0	8	-8.0
Receiver9	9	1	61.2	61.8	66	0.6	10	----	61.8	0.0	8	-8.0
Receiver10	10	1	57.8	64.1	66	6.3	10	----	64.1	0.0	8	-8.0
Receiver11	11	1	58.2	60.7	66	2.5	10	----	60.7	0.0	8	-8.0
Receiver12	12	1	54.9	59.9	66	5.0	10	----	59.9	0.0	8	-8.0
Receiver13	13	1	60.2	65.7	66	5.5	10	----	65.7	0.0	8	-8.0
Receiver14	14	1	69.9	68.1	66	-1.8	10	Snd Lvl	68.1	0.0	8	-8.0
Receiver15	15	1	65.2	66.9	66	1.7	10	Snd Lvl	66.9	0.0	8	-8.0
Receiver16	16	1	62.4	66.4	66	4.0	10	Snd Lvl	66.4	0.0	8	-8.0
Receiver17	17	1	55.3	65.3	66	10.0	10	Sub'l Inc	65.3	0.0	8	-8.0
Receiver18	18	1	67.1	65.2	66	-1.9	10	----	65.2	0.0	8	-8.0
Receiver19	19	1	65.2	67.0	66	1.8	10	Snd Lvl	67.0	0.0	8	-8.0
Receiver20	20	1	48.9	59.4	66	10.5	10	Sub'l Inc	59.4	0.0	8	-8.0
Receiver21	21	1	52.4	59.8	66	7.4	10	----	59.8	0.0	8	-8.0
Receiver22	22	1	60.1	63.1	66	3.0	10	----	63.1	0.0	8	-8.0
Receiver23	23	1	60.3	62.9	66	2.6	10	----	62.9	0.0	8	-8.0
Receiver24	24	1	65.9	64.3	66	-1.6	10	----	64.3	0.0	8	-8.0

Dwelling Units	# DUs	Noise Reduction		
		Min	Avg	Max
		dB	dB	dB
All Selected	24	0.0	0.0	0.0
All Impacted	11	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

HMB 24 September 2010
mdg TNM 2.5
Calculated with TNM 2.5
RESULTS: SOUND LEVELS
PROJECT/CONTRACT: 1135
RUN: SR 126 Memorial Blvd. Alternative A
BARRIER DESIGN: INPUT HEIGHTS
ATMOSPHERICS: 68 deg F, 50% RH

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

Receiver Name	No.	#DUs	Existing LAeq1h	No Barrier LAeq1h Calculated	Crit'n	Increase over existing Calculated	Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Noise Reduction Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
50 feet	26	1	0.0	69.2	66	69.2	10	Snd Lvl	69.2	0.0	8	-8.0
100 feet	27	1	0.0	66.2	66	66.2	10	Snd Lvl	66.2	0.0	8	-8.0
250 feet	28	1	0.0	60.8	66	60.8	10	----	60.8	0.0	8	-8.0
500 feet	29	1	0.0	60.0	66	60.0	10	----	60.0	0.0	8	-8.0

Dwelling Units	# DUs	Noise Reduction Min	Avg	Max
		dB	dB	dB
All Selected	4	0.0	0.0	0.0
All Impacted	2	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

Appendix D
Mobile Source Air Toxics (MSAT) Analysis

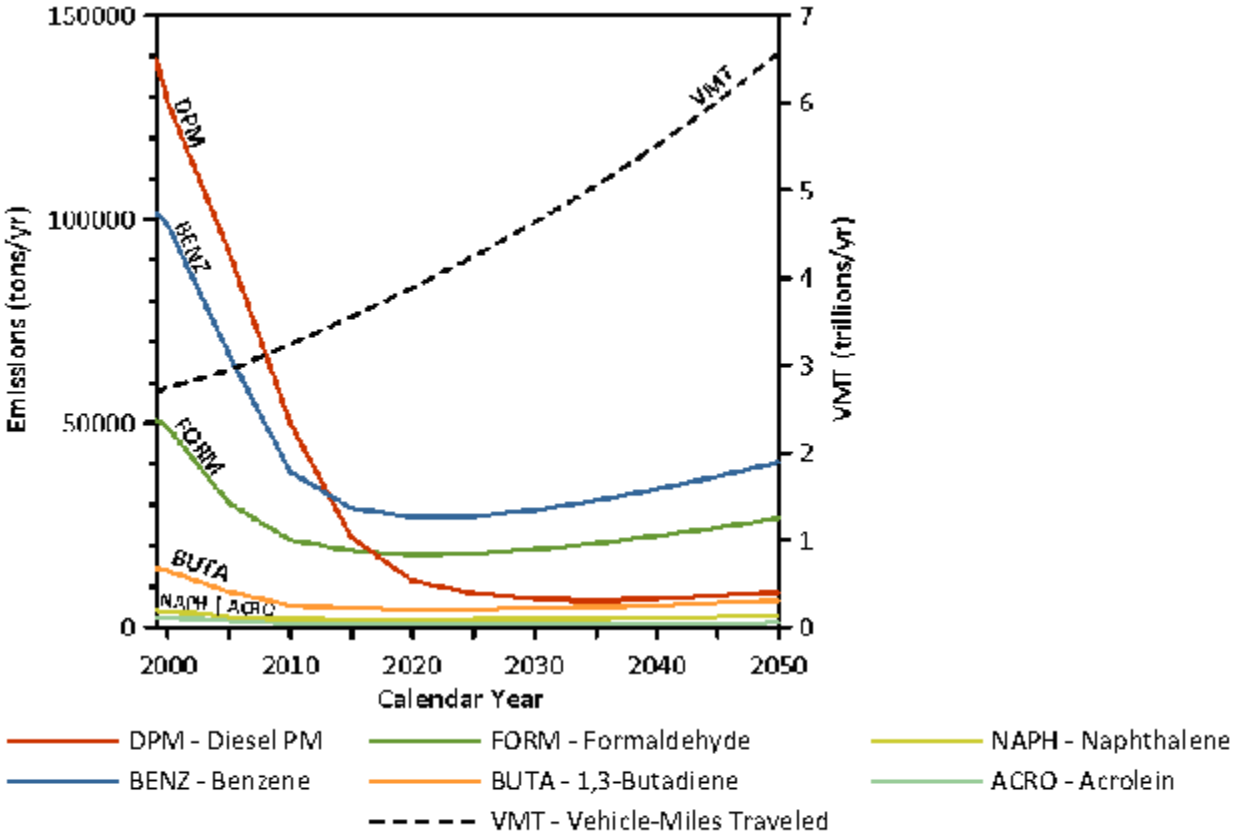
Mobile Source Air Toxics Discussion

Background

Controlling air toxic emissions became a national priority with the passage of the Clean Air Act Amendments (CAAA) of 1990, whereby Congress mandated that the U.S. Environmental Protection Agency (EPA) regulate 188 air toxics, also known as hazardous air pollutants. The EPA has assessed this expansive list in their latest rule on the Control of Hazardous Air Pollutants from Mobile Sources (Federal Register, Vol. 72, No. 37, page 8430, February 26, 2007) and identified a group of 93 compounds emitted from mobile sources that are listed in their Integrated Risk Information System (IRIS) (http://www.epa.gov/ncea/iris/index.html). In addition, EPA identified seven compounds with significant contributions from mobile sources that are among the national and regional-scale cancer risk drivers from their 1999 National Air Toxics Assessment (NATA) (http://www.epa.gov/ttn/atw/nata1999/). These are acrolein, benzene, 1,3-butadiene, diesel particulate matter plus diesel exhaust organic gases (diesel PM), formaldehyde, naphthalene, and polycyclic organic matter. While FHWA considers these the priority mobile source air toxics, the list is subject to change and may be adjusted in consideration of future EPA rules.

The 2007 EPA rule mentioned above requires controls that will dramatically decrease MSAT emissions through cleaner fuels and cleaner engines. According to an FHWA analysis using EPA's MOBILE6.2 model, even if vehicle activity (vehicle-miles traveled, VMT) increases by 145 percent as assumed, a combined reduction of 72 percent in the total annual emission rate for the priority MSAT is projected from 1999 to 2050, as shown in Figure 1.

Figure 1 National MSAT Emission Trends, 1999 – 2050, for Vehicles Operating on Roadways, Using EPA's MOBILE6.2 Model



Note: (1) Annual emissions of polycyclic organic matter are projected to be 561 tons/yr for 1999, decreasing to 373 tons/yr for 2050.

(2) Trends for specific locations may be different, depending on locally derived information representing vehicle-miles travelled, vehicle speeds, vehicle mix, fuels, emission control programs, meteorology, and other factors

Source: U.S. Environmental Protection Agency. MOBILE6.2 Model run 20 August 2009.

Air toxics analysis is a continuing area of research. While much work has been done to assess the overall health risk of air toxics, many questions remain unanswered. In particular, the tools and techniques for assessing project-specific health outcomes as a result of lifetime MSAT exposure remain limited. These limitations impede the ability to evaluate how the potential health risks posed by MSAT exposure should be factored into project-level decision-making within the context of the National Environmental Policy Act (NEPA).

Nonetheless, air toxics concerns continue to be raised on highway projects during the NEPA process. Even as the science emerges, we are duly expected by the public and other agencies to address MSAT impacts in our environmental documents. The FHWA, EPA, the Health Effects Institute, and others have funded and conducted research studies to try to more clearly define potential risks from MSAT emissions associated with highway projects. The FHWA will continue to monitor the developing research in this emerging field.

NEPA Context
The NEPA requires, to the fullest extent possible, that the policies, regulations, and laws of the Federal Government be interpreted and administered in accordance with its environmental protection goals. The NEPA also requires Federal agencies to use an interdisciplinary approach in planning and decision-making for any action that adversely impacts the environment. The NEPA requires and FHWA is committed to the examination and avoidance of potential impacts to the natural and human environment when considering approval of proposed transportation projects. In addition to evaluating the potential environmental effects, we must also take into account the need for safe and efficient transportation in reaching a decision that is in the best overall public interest. The FHWA policies and procedures for implementing NEPA is prescribed by regulation in 23 CFR § 771.

ANALYSIS of MSAT in NEPA Documents
The FHWA developed a tiered approach for analyzing MSAT in NEPA documents, depending on specific project circumstances. The FHWA has identified three levels of analysis:

1. No analysis for projects with no potential for meaningful MSAT effects;
2. Qualitative analysis for projects with low potential MSAT effects; or
3. Quantitative analysis to differentiate alternatives for projects with higher potential MSAT effects.

For projects warranting MSAT analysis, the seven priority MSAT should be analyzed.

(1) Projects with No Meaningful Potential MSAT Effects or Exempt Projects.
The types of projects included in this category are:

- Projects qualifying as a categorical exclusion under 23 CFR 771.117(c);
- Projects exempt under the Clean Air Act conformity rule under 40 CFR 93.126; or
- Other projects with no meaningful impacts on traffic volumes or vehicle mix.

For projects that are categorically excluded under 23 CFR 771.117(c), or are exempt from conformity requirements under the Clean Air Act pursuant to 40 CFR 93.126, no analysis or discussion of MSAT is necessary. Documentation sufficient to demonstrate that the project qualifies as a categorical exclusion and/or exempt project will suffice. For other projects with no or negligible traffic impacts, regardless of the class of NEPA environmental document, no MSAT analysis is required[1]. However, the project record should document the basis for the determination of "no meaningful potential impacts" with a brief description of the factors considered.

(2) Projects with Low Potential MSAT Effects
The types of projects included in this category are those that serve to improve operations of highway, transit or freight without adding substantial new capacity or without creating a facility that is likely to meaningfully increase MSAT emissions. This category covers a broad range of projects.

We anticipate that most highway projects that need an MSAT assessment will fall into this category. Any projects not meeting the criteria in subsection (1) or subsection (3) as follows should be included in this category. Examples of these types of projects are

minor widening projects; new interchanges, such as those that replace a signalized intersection on a surface street; or projects where design year traffic is projected to be less than 140,000 to 150,000 annual average daily traffic (AADT).

For these projects, a qualitative assessment of emissions projections should be conducted. This qualitative assessment would compare, in narrative form, the expected effect of the project on traffic volumes, vehicle mix, or routing of traffic and the associated changes in MSAT for the project alternatives, based on VMT, vehicle mix, and speed. It would also discuss national trend data projecting substantial overall reductions in emissions due to stricter engine and fuel regulations issued by EPA. Because the emission effects of these projects are low, we expect there would be no appreciable difference in overall MSAT emissions among the various alternatives. In addition, quantitative analysis of these types of projects will not yield credible results that are useful to project-level decision-making due to the limited capabilities of the transportation and emissions forecasting tools.

Appendix B includes example language for a qualitative assessment, with specific examples for four types of projects: (1) a minor widening project; (2) a new interchange connecting an existing roadway with a new roadway; (3) a new interchange connecting new roadways; and (4) minor improvements or expansions to intermodal centers or other projects that affect truck traffic. The information provided in Appendix B must be modified to reflect the local and project-specific situation.

(3) Projects with Higher Potential MSAT Effects

This category includes projects that have the potential for meaningful differences in MSAT emissions among project alternatives. We expect a limited number of projects to meet this two-pronged test. To fall into this category, a project must:

- Create or significantly alter a major intermodal freight facility that has the potential to concentrate high levels of diesel particulate matter in a single location; or
- Create new or add significant capacity to urban highways such as interstates, urban arterials, or urban collector-distributor routes with traffic volumes where the AADT is projected to be in the range of 140,000 to 150,000 [2] or greater by the design year;

And also

- Proposed to be located in proximity to populated areas.

Projects falling within this category should be more rigorously assessed for impacts. If a project falls within this category, you should contact the Office of Natural and Human Environment (HEPN) and the Office of Project Development and Environmental Review (HEPE) in FHWA Headquarters for assistance in developing a specific approach for assessing impacts. This approach would include a quantitative analysis to forecast local-specific emission trends of the priority MSAT for both Build Alternatives, to use as a basis of comparison. This analysis also may address the potential for cumulative impacts, where appropriate, based on local conditions. How and when cumulative impacts should be considered would be addressed as part of the assistance outlined above.

If the analysis for a project in this category indicates meaningful differences in levels of MSAT emissions, mitigation options should be identified and considered. You should also consult with HEPN and HEPE if you have a project that does not fall within any of the types of projects listed above, but you think has the potential to substantially increase future MSAT emissions. Although not required, projects with high potential for litigation on air toxics issues may also benefit from a more rigorous quantitative analysis to enhance their defensibility in court.

Qualitative Assessment of SR 126 MSAT

For Alternatives A and B in this analysis, the amount of MSAT emitted would be proportional to the vehicle miles traveled, or VMT, assuming that other variables such as fleet mix are the same for both alternatives. The VMT estimated for each of the Build Alternatives is slightly higher than that for the No Build Alternative, because the additional capacity increases the efficiency of the roadway and attracts rerouted trips from elsewhere in the transportation network. Refer to Table 1 on the following page. This increase in VMT would lead to higher MSAT emissions for the preferred action alternative along the highway corridor, along with a corresponding decrease in MSAT emissions along the parallel routes. The emissions increase is offset somewhat by lower MSAT emission rates due to increased speeds; according to EPA's MOBILE6.2 model, emissions of all of the priority MSAT except for diesel particulate matter decrease as speed increases. The extent to which these speed-related emissions decreases will offset VMT-related emissions increases cannot be reliably projected due to the inherent deficiencies of technical models. Because the estimated VMT under each of the Alternatives are the same, it is expected there would be no appreciable difference in overall MSAT emissions among the various alternatives. Also, regardless of the alternative chosen, emissions will likely be lower than present levels in the design year as a result of EPA's national control programs that are projected to reduce annual MSAT emissions by 72 percent between 1999 and 2050. Local conditions may differ from these national projections in terms of fleet mix and turnover, VMT growth rates, and local control measures. However, the magnitude of the EPA-projected reductions is so great (even after accounting for VMT growth) that MSAT emissions in the study area are likely to be lower in the future in nearly all cases.

The additional travel lanes contemplated as part of the project alternatives will have the effect of moving some traffic closer to nearby homes, schools, and businesses; therefore, under both alternatives there may be localized areas where ambient concentrations of MSAT could be higher under certain Build Alternatives than the No Build Alternative. The localized increases in MSAT concentrations would likely be most pronounced along the expanded roadway sections that would be built between SR 93 and Harbor Chapel Road, under Alternatives A and B. However, the magnitude and the duration of these potential increases compared to the No-Build alternative cannot be reliably quantified due to incomplete or unavailable information in forecasting project-specific MSAT health impacts. In sum, when a highway is widened, the localized level of MSAT emissions for the Build Alternative could be higher relative to the No Build Alternative, but this could be offset due to increases in speeds and reductions in congestion (which are associated with lower MSAT emissions). Also, MSAT will be lower in other locations when traffic shifts away from them. However, on a regional basis, EPA's vehicle and fuel regulations, coupled with fleet turnover, will over time cause substantial reductions that, in almost all cases, will cause region-wide MSAT levels to be significantly lower than today.

Table 1 - Estimated ADT and VMT for Current and Future Years

Roadway	Existing ADT/VMT	2033 Build ADT/VMT
Section II (8.4 miles)	18,060/151,704	33,540/281,736

As shown above, the proposed project has relatively low traffic volumes and VMT. Project level analyses are for MSAT effects are not required for projects with negligible traffic impacts. The proposed facility is designed as an upgrade to the existing SR 126 facility with lane and shoulder widening and, as such, would not generate additional capacity on the roadway. Without adding substantial new capacity the facility would not generate meaningful increases in emissions of MSAT.

Incomplete or Unavailable Information

When an agency is evaluating reasonably foreseeable significant adverse effects on the human environment in an environmental impact statement and there is incomplete or unavailable information, the agency shall always make clear that such information is lacking.

a. If the incomplete information relevant to reasonably foreseeable significant adverse impacts is essential to a reasoned choice among alternatives and the overall costs of obtaining it are not exorbitant, the agency shall include the information in the environmental impact statement.
b. If the information relevant to reasonably foreseeable significant adverse impacts cannot be obtained because the overall costs of obtaining it are exorbitant or the means to obtain it are not known, the agency shall include within the environmental impact statement:
    1. a statement that such information is incomplete or unavailable;
    2. a statement of the relevance of the incomplete or unavailable information to evaluating reasonably foreseeable significant adverse impacts on the human environment;
    3. a summary of existing credible scientific evidence which is relevant to evaluating the reasonably foreseeable significant adverse impacts on the human environment; and
    4. the agency's evaluation of such impacts based upon theoretical approaches or research methods generally accepted in the scientific community. For the purposes of this section, "reasonably foreseeable" includes impacts that have catastrophic consequences, even if their probability of occurrence is low, provided that the analysis of the impacts is supported by credible scientific evidence, is not based on pure conjecture, and is within the rule of reason.
c. The amended regulation will be applicable to all environmental impact statements for which a Notice to Intent (40 CFR 1508.22) is published in the Federal Register on or after May 27, 1986. For environmental impact statements in progress, agencies may choose to comply with the requirements of either the original or amended regulation.

Incomplete or Unavailable Information for Project Specific MSAT Health Impacts Analysis

In FHWA's view, information is incomplete or unavailable to credibly predict the project-specific health impacts due to changes in MSAT emissions associated with a proposed set of highway alternatives. The outcome of such an assessment, adverse or not, would be influenced more by the uncertainty introduced into the process through assumption and speculation rather than any genuine insight into the actual health impacts directly attributable to MSAT exposure associated with a proposed action.

The U.S. Environmental Protection Agency (EPA) is responsible for protecting the public health and welfare from any known or anticipated effect of an air pollutant. They are the lead authority for administering the Clean Air Act and its amendments and have specific statutory obligations with respect to hazardous air pollutants and MSAT. The EPA is in the continual process of assessing human health effects, exposures, and risks posed by air pollutants. They maintain the Integrated Risk Information System (IRIS), which is "a compilation of electronic reports on specific substances found in the environment and their potential to cause human health effects" (EPA, http://www.epa.gov/ncea/iris/index.html). Each report contains assessments of non-cancerous and cancerous effects for individual compounds and quantitative estimates of risk levels from lifetime oral and inhalation exposures with uncertainty spanning perhaps an order of magnitude.

Other organizations are also active in the research and analyses of the human health effects of MSAT, including the Health Effects Institute (HEI). Two HEI studies are summarized in Appendix D of FHWA's Interim Guidance Update on Mobile source Air Toxic Analysis in NEPA Documents. Among the adverse health effects linked to MSAT compounds at high exposures are cancer in humans in occupational settings; cancer in animals; and irritation to the respiratory tract, including the exacerbation of asthma. Less obvious is the adverse human health effects of MSAT compounds at current environmental concentrations (HEI, http://pubs.healtheffects.org/view.php?id=282) or in the future as vehicle emissions substantially decrease (HEI, http://pubs.healtheffects.org/view.php?id=306).

The methodologies for forecasting health impacts include emissions modeling; dispersion modeling; exposure modeling; and then final determination of health impacts - each step in the process building on the model predictions obtained in the previous step. All are encumbered by technical shortcomings or uncertain science that prevents a more complete differentiation of the MSAT health impacts among a set of project alternatives. These difficulties are magnified for lifetime (i.e., 70 year) assessments, particularly because unsupportable assumptions would have to be made regarding changes in travel patterns and vehicle technology (which affects emissions rates) over that time frame, since such information is unavailable. The results produced by the EPA's MOBILE6.2 model, the California EPA's Emfac2007 model, and the EPA's DraftMOVES2009 model in forecasting MSAT emissions are highly inconsistent. Indications from the development of the MOVES model are that MOBILE6.2 significantly underestimates diesel particulate matter (PM) emissions and significantly overestimates benzene emissions.

Regarding air dispersion modeling, an extensive evaluation of EPA's guideline CAL3QHC model was conducted in an NCHRP study (http://www.epa.gov/scram001/dispersion_alt.htm#hyroad), which documents poor model performance at ten sites across the country - three where intensive monitoring

was conducted plus an additional seven with less intensive monitoring. The study indicates a bias of the CAL3QHC model to overestimate concentrations near highly congested intersections and underestimate concentrations near uncongested intersections. The consequence of this is a tendency to overstate the air quality benefits of mitigating congestion at intersections. Such poor model performance is less difficult to manage for demonstrating compliance with National Ambient Air Quality Standards for relatively short time frames than it is for forecasting individual exposure over an entire lifetime, especially given that some information needed for estimating 70-year lifetime exposure is unavailable. It is particularly difficult to reliably forecast MSAT exposure near roadways, and to determine the portion of time that people are actually exposed at a specific location.

There are considerable uncertainties associated with the existing estimates of toxicity of the various MSAT, because of factors such as low-dose extrapolation and translation of occupational exposure data to the general population, a concern expressed by HEI (http://pubs.healtheffects.org/view.php?id=282). As a result, there is no national consensus on air dose-response values assumed to protect the public health and welfare for MSAT compounds, and in particular for diesel PM. The EPA (http://www.epa.gov/risk/basicinformation.htm#g) and the HEI (http://pubs.healtheffects.org/getfile.php?u=395) have not established a basis for quantitative risk assessment of diesel PM in ambient settings.

There is also the lack of a national consensus on an acceptable level of risk. The current context is the process used by the EPA as provided by the Clean Air Act to determine whether more stringent controls are required in order to provide an ample margin of safety to protect public health or to prevent an adverse environmental effect for industrial sources subject to the maximum achievable control technology standards, such as benzene emissions from refineries. The decision framework is a two-step process. The first step requires EPA to determine a "safe" or "acceptable" level of risk due to emissions from a source, which is generally no greater than approximately 100 in a million. Additional factors are considered in the second step, the goal of which is to maximize the number of people with risks less than 1 in a million due to emissions from a source. The results of this statutory two-step process do not guarantee that cancer risks from exposure to air toxics are less than 1 in a million;in some cases, the residual risk determination could result in maximum individual cancer risks that are as high as approximately 100 in a million. In a June 2008 decision, the U.S. Court of Appeals for the District of Columbia Circuit upheld EPA's approach to addressing risk in its two step decision framework. Information is incomplete or unavailable to establish that even the largest of highway projects would result in levels of risk greater than safe or acceptable.

Because of the limitations in the methodologies for forecasting health impacts described, any predicted difference in health impacts between alternatives is likely to be much smaller than the uncertainties associated with predicting the impacts. Consequently, the results of such assessments would not be useful to decision makers, who would need to weigh this information against project benefits, such as reducing traffic congestion, accident rates, and fatalities plus improved access for emergency response, that are better suited for quantitative analysis.

Due to the limitations cited, a discussion such as the example provided in this Appendix (reflecting any local and project-specific circumstances), should be included regarding

incomplete or unavailable information in accordance with Council on Environmental Quality (CEQ) regulations [40 CFR 1502.22(b)]. The FHWA Headquarters and Resource Center staff Victoria Martinez (787) 766-5600 X231, Shari Schaftlein (202) 366-5570, and Michael Claggett (505) 820-2047, are available to provide guidance and technical assistance and support.

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[1]The types of projects categorically excluded under 23 CFR 771.117(d) or exempt from certain conformity requirements under 40 CFR 93.127 does not warrant an automatic exemption from an MSAT analysis, but they usually will have no meaningful impact.

[2]Using EPA's MOBILE6.2 emissions model, FHWA staff determined that this range of AADT would be roughly equivalent to the Clean Air Act definition of a major hazardous air pollutant (HAP) source, i.e., 25 tons/yr for all HAPs or 10 tons/yr for any single HAP. Significant variations in conditions such as congestion or vehicle mix could warrant a different range for AADT; if this range does not seem appropriate for your project please consult with the contacts from HEPN and HEPE identified in this memorandum.

Appendix E
Glossary

23 CFR 772 (Title 23, Code of Federal Regulations, Part 772) "Procedures for Abatement of Highway Traffic Noise and Construction Noise": FHWA regulations for highway traffic noise analysis and abatement during the planning and design of federally aided highway projects.

Abatement: any positive action taken to reduce the impact of highway traffic noise.

Abatement Measures: measures that must be considered in a traffic noise analysis when a highway project will result in a noise impact. These measures include:
- Traffic management
- Alteration of horizontal and vertical alignments
- Acquisition of real property to serve as a buffer zone
- Insulation of public use or nonprofit institutional structures
- Construction of noise barriers

Average Daily Traffic (ADT): the average 24-hour traffic count (vehicles per day). Typically, the total amount of traffic during a stated period (normally one year) divided by the number of days in that period. The ADT is only used as the basis for determining the "Design Hourly Volume" (DHV). The DHV is used to model noise levels.

A-Weighting (dBA): an adjustment in sound meters and traffic noise modeling software to ensure sound levels are measured/calculated in a manner that approximates the sounds that can be heard by the human ear. This is accomplished by suppressing the low and very high frequencies that cannot be heard by the human ear.

Benefitted Receiver: a receiver is "benefitted" if an abatement measure reduces the noise level at the receiver by at least 5 dBA, regardless of whether or not the receiver was "impacted." The total number of benefitted receivers is used to evaluate the cost effectiveness of an abatement measure (see "Reasonable").

Cost Effectiveness: see "Reasonable."

Decibel (dB): the basic unit for measuring sound pressure levels.

Design Hourly Volume (DHV): the traffic count (vehicles per hour) determined by applying the "K-factor" to the "Average Daily Traffic." The DHV is used to model noise levels.

Feasible: one of two criteria (see "Reasonable") used to evaluate a noise abatement measure. Generally, pertains to the ability of a noise abatement measure to provide a "substantial reduction" (at least 5 dBA) in noise levels, and deals primarily with engineering considerations.

Impact: when predicted traffic noise reaches a level that requires a consideration of noise abatement.

L_{eq} (Equivalent Noise Level): the equivalent steady-state sound level that, in a given time period, contains the same acoustic energy as a time-varying sound level during the same period.

Noise Abatement Criteria (NAC): absolute sound levels, provided by FHWA, that are used to determine when a noise impact occurs. They are not used as a design goal for a noise abatement measure.

Noise Barrier: typically, a solid wall-like structure located between the noise source (traffic) and the impacted receiver (human activity area) to reduce noise levels. The construction of a noise barrier is one of the abatement measures that must be considered when a traffic noise analysis indicates that a highway project will result in a noise impact.

Reasonable: one of two criteria (see "Feasible") used to evaluate a noise abatement measure. Generally, pertains to the cost effectiveness of a noise abatement measure and the views/desires of the public.

Receiver: the specific location of an outdoor area where frequent human activity occurs that might be impacted by highway traffic noise and may benefit from reduced noise levels. If no outdoor location can be identified, an interior location may be used.

Appendix B
Design Year Traffic Data

TENNESSEE DEPARTMENT OF TRANSPORTATION
PROJECT PLANNING DIVISION

FILE COPY

PROJECT NO.: 82085-0225-14 ROUTE: SR-126 Memorial Blvd
COUNTY: Sullivan CITY:
PROJECT PIN NUMBER: 105467.00
PROJECT DESCRIPTION: From East Center Street to I-81

DIVISION REQUESTING:

MAINTENANCE	☐	PAVEMENT DESIGN	☐
PLANNING	☐	STRUCTURES	☐
PROG. DEVELOPMENT & ADM.	☐	SURVEY & DESIGN	☐
PUBLIC TRANS. & AERO.	☐	TRAFFIC SIGNAL DESIGN	☐
		OTHER Enviornmental	☒

YEAR PROJECT PROGRAMMED FOR CONSTRUCTION:
PROJECTED LETTING DATE:

TRAFFIC ASSIGNMENT:

BASE YEAR		DESIGN YEAR					DESIGN ROADWAY % TRUCKS		DESIGN AVERAGE DAILY LOADS	
AADT	YEAR	AADT	DHV	%	YEAR	DIR.DIST.	DHV	AADT	FLEX	RIGID
13,420	2013	19,620	1,766	9	2033	65-35	3	5		

REQUESTED BY: NAME Tom Love DATE 6/13/09
DIVISION Enviornmental
ADDRESS Suite 900 James K. Polk Bldg
Nashville, TN 37243

REVIEWED BY: TONY ARMSTRONG Tony Armstrong DATE 11-18-09
TRANSPORTATION MANAGER 1
SUITE 1000, JAMES K. POLK BUILDING

APPROVED BY: BILL HART Bill Hart DATE 11/18/09
TRANSPORTATION MANAGER 2
SUITE 1000, JAMES K. POLK BUILDING

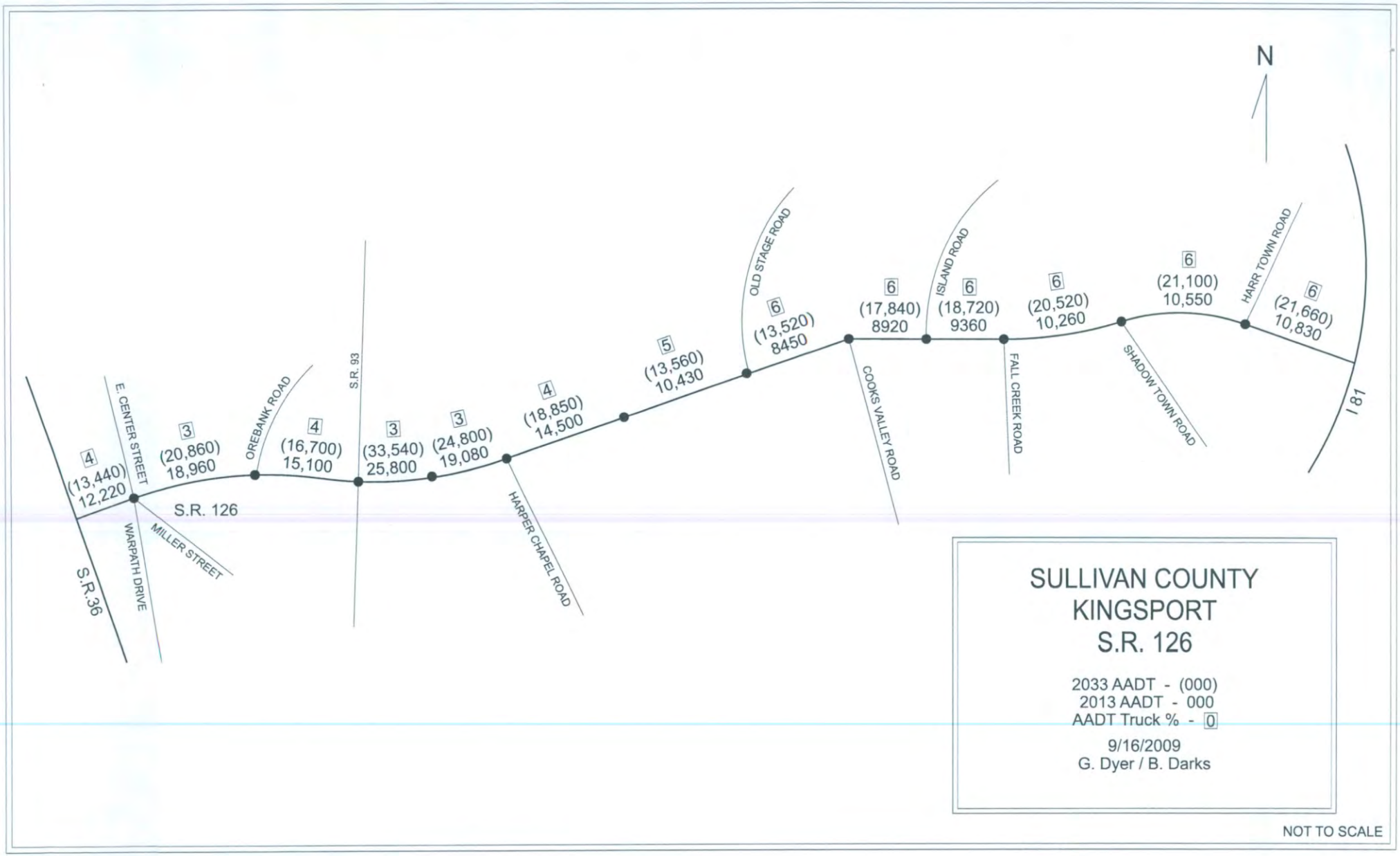
COMMENTS:

See attached project methodologies page.

DHV'S ARE NOT REQUIRED FOR SIDE ROADS LESS THAN 1000 AADT.

NOTE: FOR BRIDGE REPLACEMENT PROJECTS, ADLs ARE NOT REQUIRED FOR AADT's OF 1000 OR LESS AND PERCENTAGE OF TRUCKS OF 7% OR LESS.
SEE ATTACHMENTS FOR TURNING MOVEMENTS AND/OR OTHER DETAILS.

(REV. 9/20/07)



SULLIVAN COUNTY
KINGSPORT
S.R. 126

2033 AADT - (000)
2013 AADT - 000
AADT Truck % - 0

9/16/2009
G. Dyer / B. Darks

NOT TO SCALE

Project:

Mainline traffic for SR-126, from East Center Street to I-81.

Resources:

Previous Project – dated 8/19/2004

Cycle count stations located within the project limits – STA 37, 108, 167, 202

Classification Count, STA 560 located within the project limits– dated 5/6/2008

Kingsport MPO model

Process:

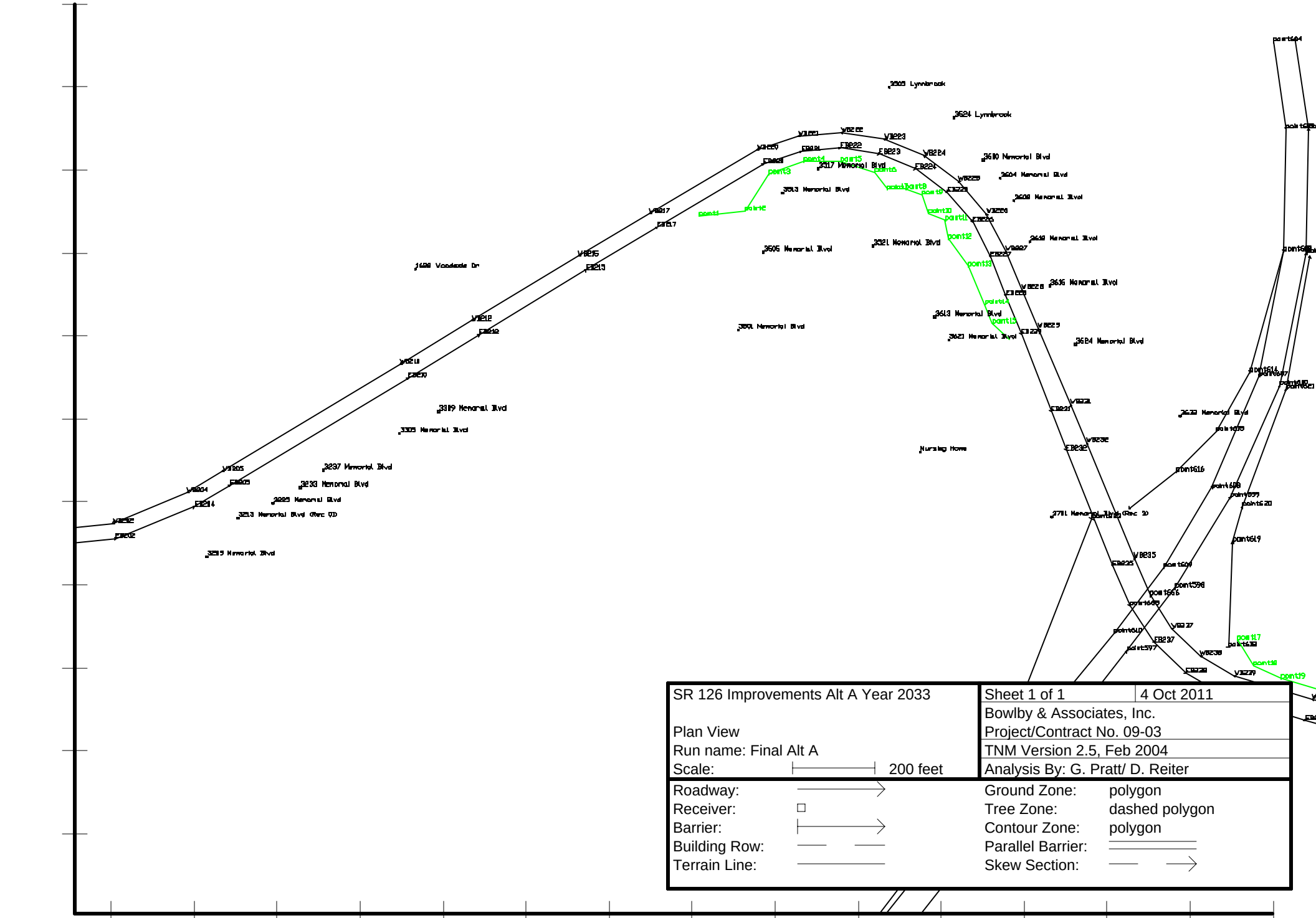
1. Calculating Base Year Traffic (2013)
    a. All TDOT count stations within the limits of the project were used.
    b. Historical data for all stations were used to forecast traffic throughout the project limits of SR-126.
    c. On file turning movement counts were also used in calibrating and justifying base year traffic.
2. Calculating Future Year Traffic (2033)
    a. Project was segmented into four areas due to the variance in growth rates from the Kingsport MPO model
    b. Areas and corresponding growth factors are:
        i. From I-81 to Shuler Dr - 5% per year,
        ii. From Shuler Dr to Old Stage Rd - 3% per year,
        iii. From Old Stage Rd to SR-93 - 1.5% per year, and
        iv. From SR-93 to East Center St - 0.5% per year.
    c. These separate growth factors were applied to their respective base year traffic volumes to determine the traffic for design year.
3. Calculating Truck %
    a. Classification count used to determine the percentage of trucks was conducted on the segment of SR-126 between Harbor Chapel Rd and SR-93.
    b. The actual number of trucks on this segment was calculated using the % trucks from the class count.
    c. Assuming that the number of trucks would remain unchanged, the relative percentages of trucks were calculated for the remaining road segments.
4. Title Sheet Traffic
    a. Base Year Traffic, Future Year Traffic, and Truck % were calculated by taking an average of all road segment traffic volumes within the project limits.

SR 126 Improvements, Sullivan County

Design Year 2033 Traffic Volumes

From	*To*	*AADT*	*AADT Trucks*	*DHV Trucks*	*Speed*	*DHV*			
						Total	*Autos*	*MTs*	*HTs*
East Center Street	Orebank Road	20,860	3.0%	2.0%	35	1,877	1,840	9	28
Orebank Road	SR 93	16,700	4.0%	2.7%	35	1,503	1,463	10	30
SR 93	Hawthorne Street	33,540	3.0%	2.0%	35	3,019	2,958	15	45
Hawthorne Street	Harbor Chapel Road	24,800	3.0%	2.0%	35	2,232	2,187	11	33
Harbor Chapel Road	Old Stage Road	18,850	4.0%	2.7%	45	1,697	1,651	11	34
Old Stage Road	Cooks Valley Road	13,520	6.0%	4.0%	45	1,217	1,168	12	37
Cooks Valley Road	Island Road	17,840	6.0%	4.0%	45	1,606	1,541	16	48
Island Road	Fall Creek Road	18,720	6.0%	4.0%	45	1,685	1,617	17	51
Fall Creek Road	Shadow Town Road	20,520	6.0%	4.0%	45	1,847	1,773	18	55
Shadow Town Road	Harr Town Road	21,100	6.0%	4.0%	45	1,899	1,823	19	57
Harr Town Road	I-81	21,660	6.0%	4.0%	45	1,949	1,871	19	58
Interchange Ramps (One-Lane) [1]		7,400	6.0%	4.0%	---	666	639	7	20
Interchange Ramps (Two-Lanes) [1]		14,900	6.0%	4.0%	---	1,341	1,287	13	40

Appendix C
TNM Plan Views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Sheet 1 of 1
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Project/Contract No. 09-03
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Analysis By: G. Pratt/ D. Reiter
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Receiver:
Barrier:
Building Row:
Terrain Line:
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Tree Zone: dashed polygon
Contour Zone: polygon
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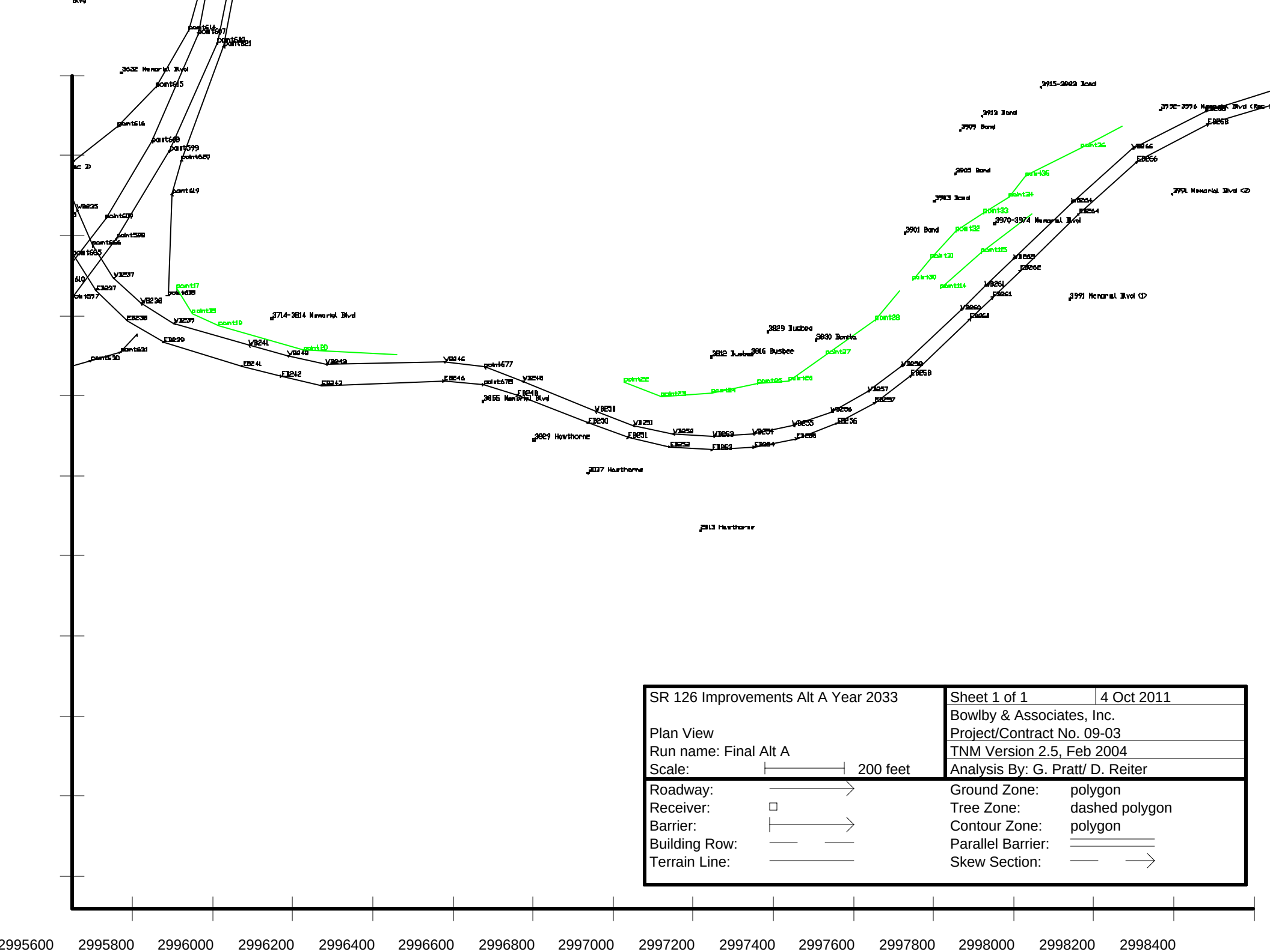

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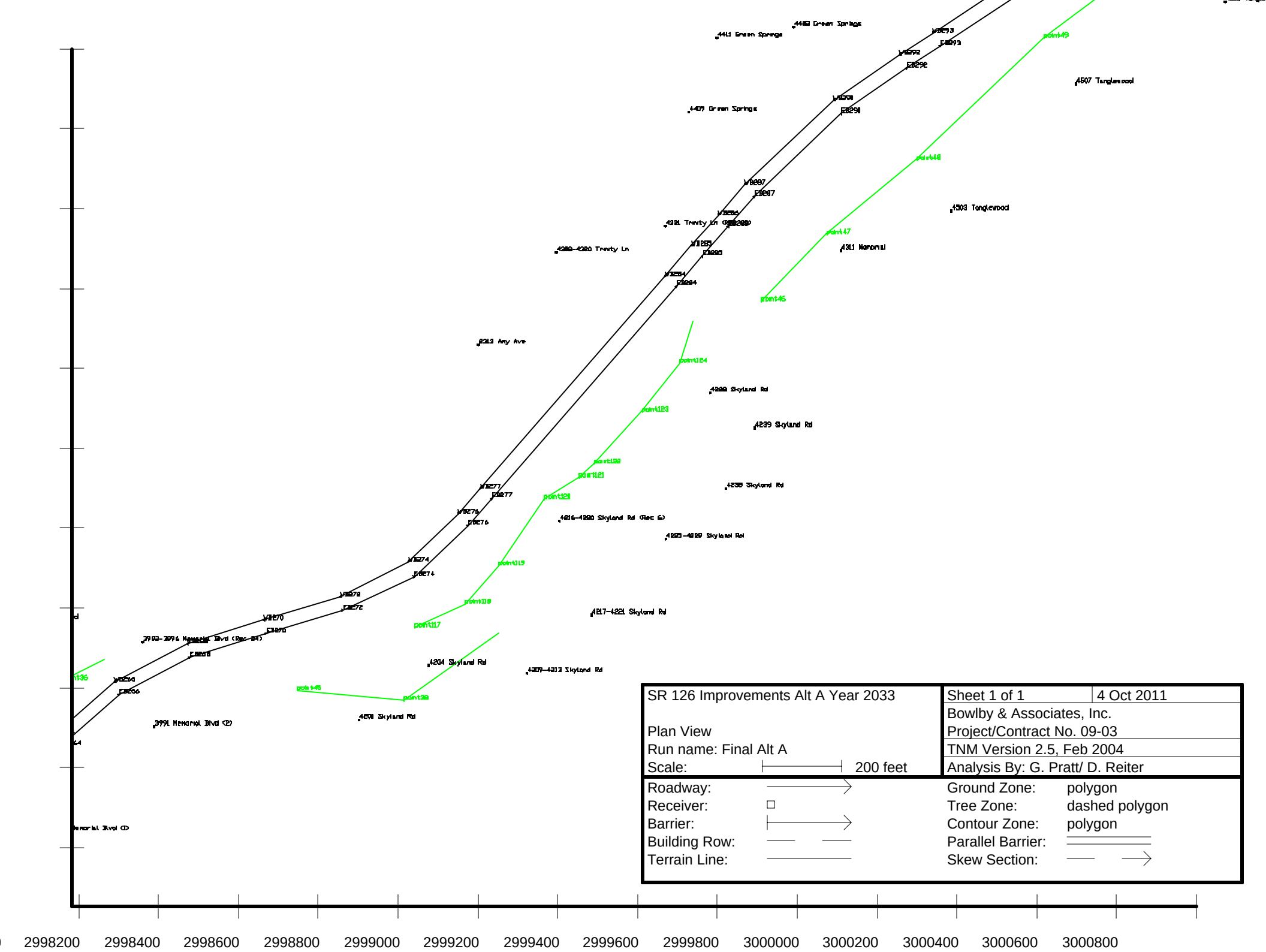

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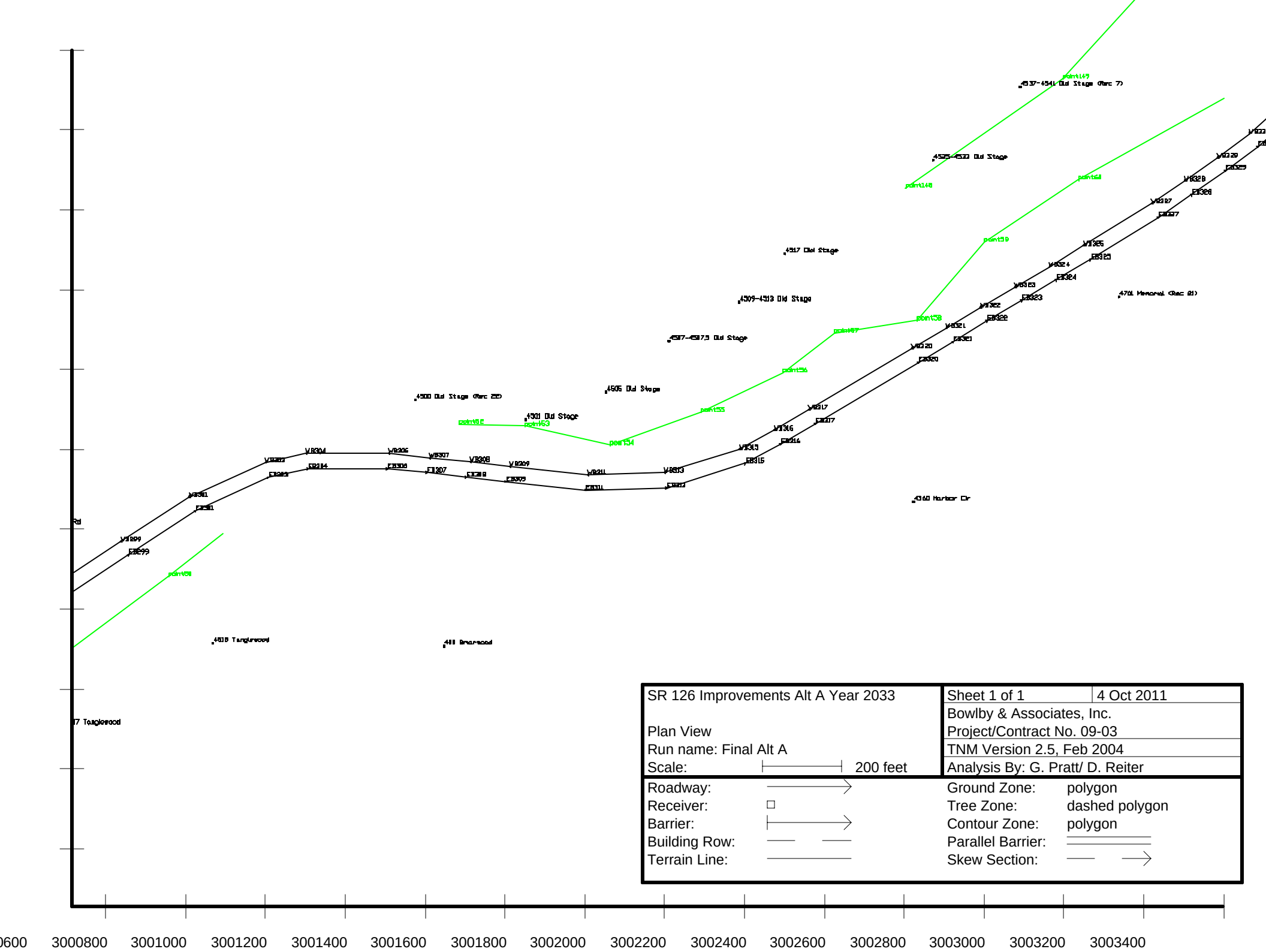

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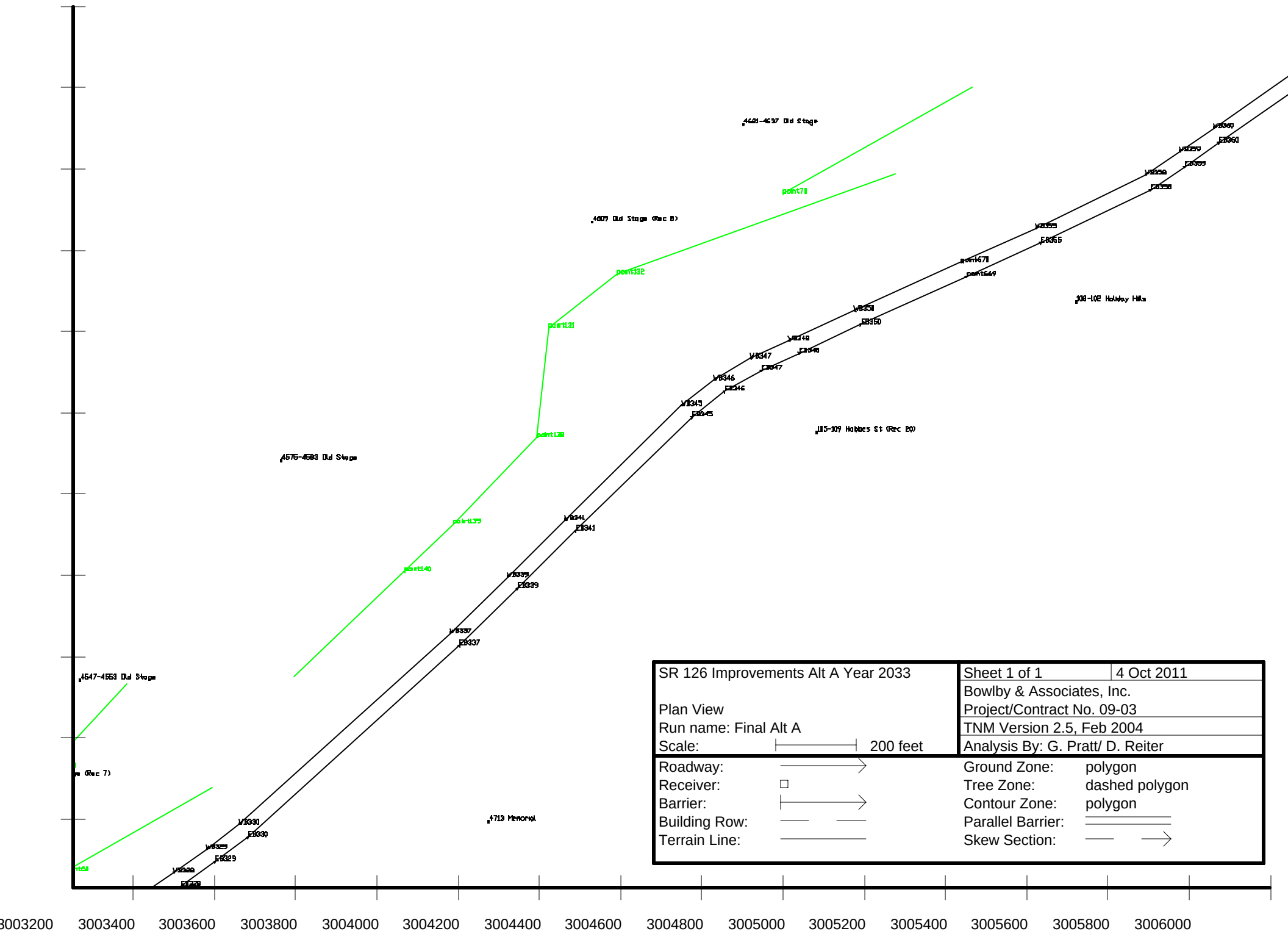

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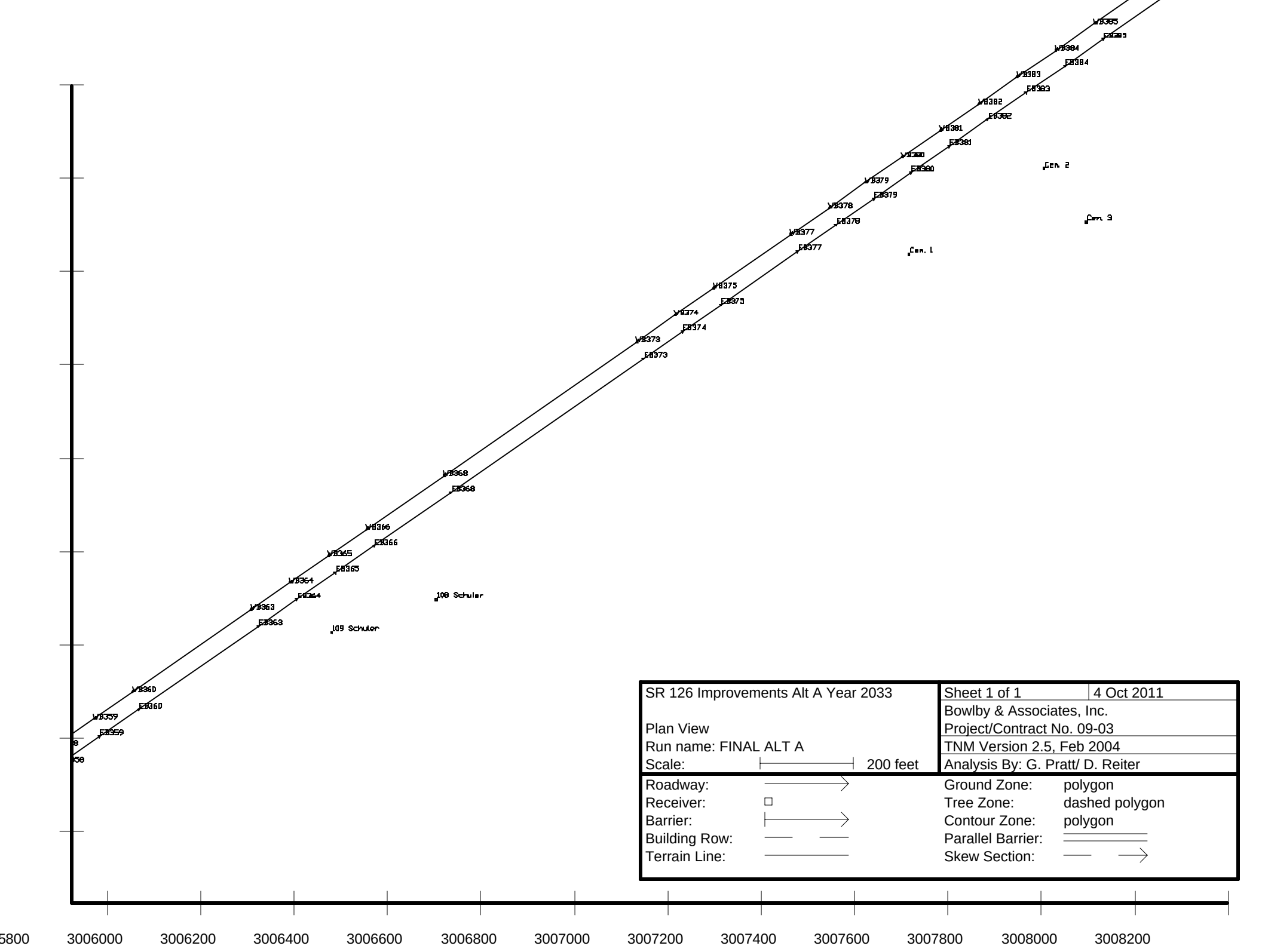

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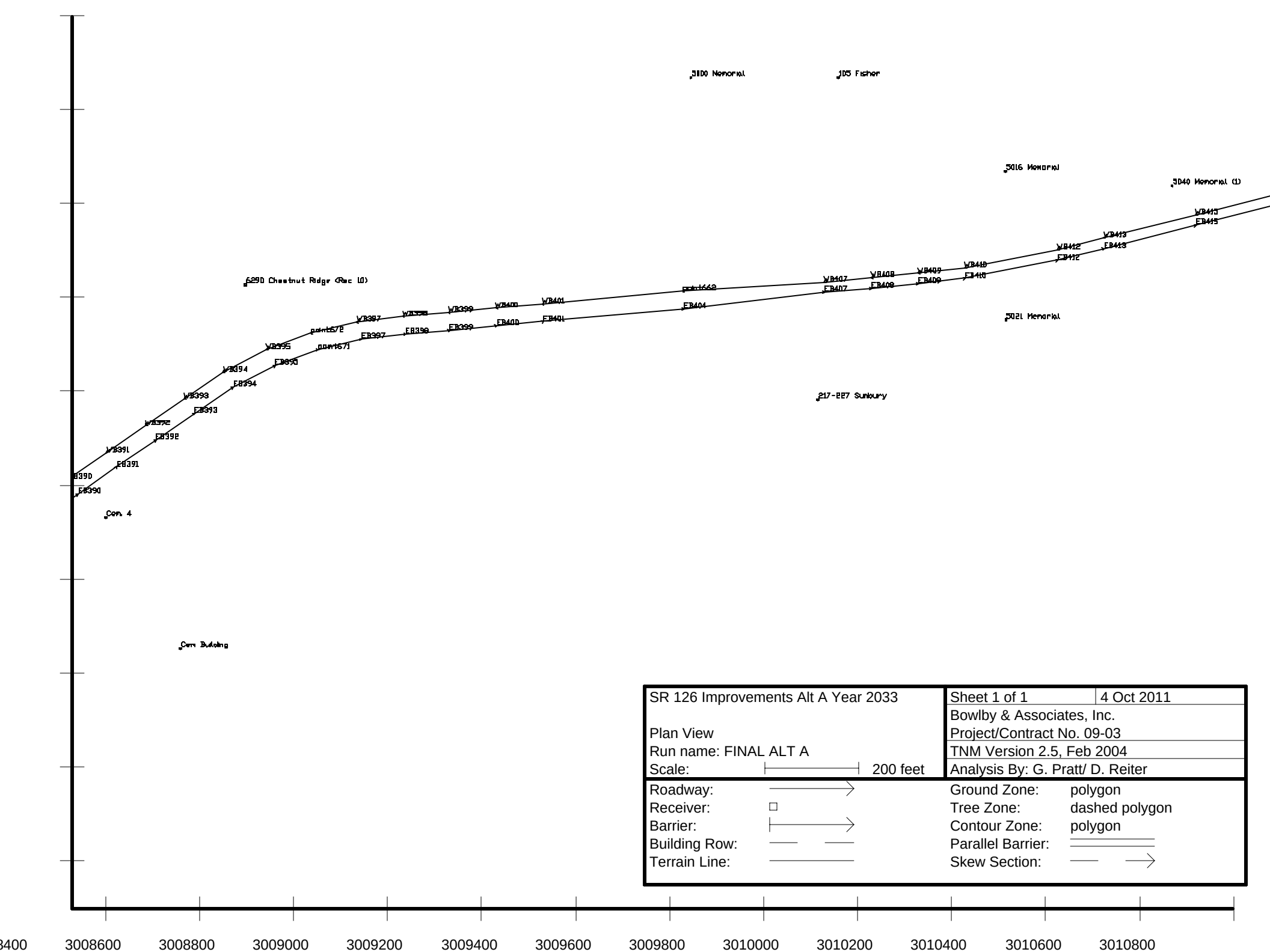

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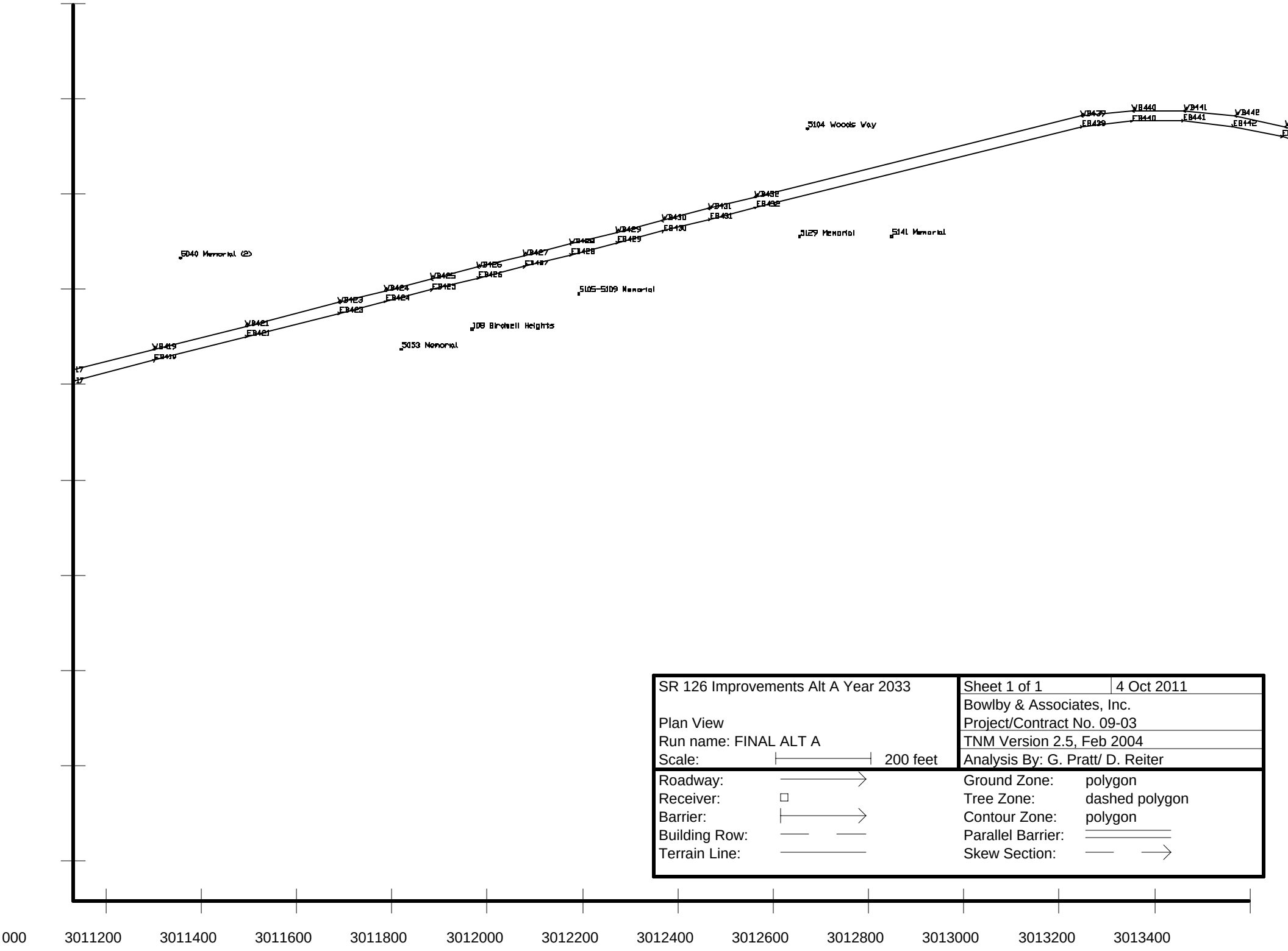

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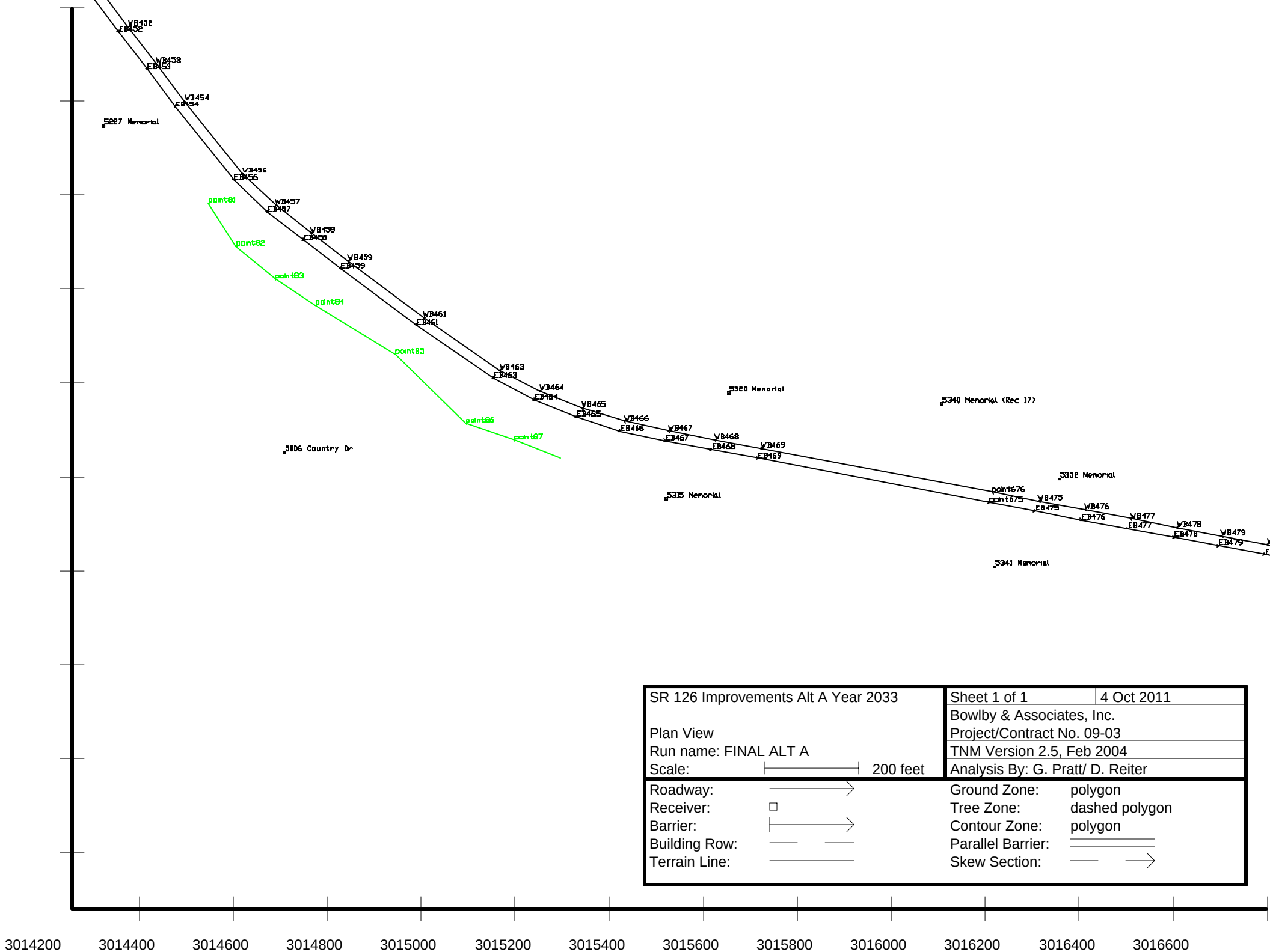

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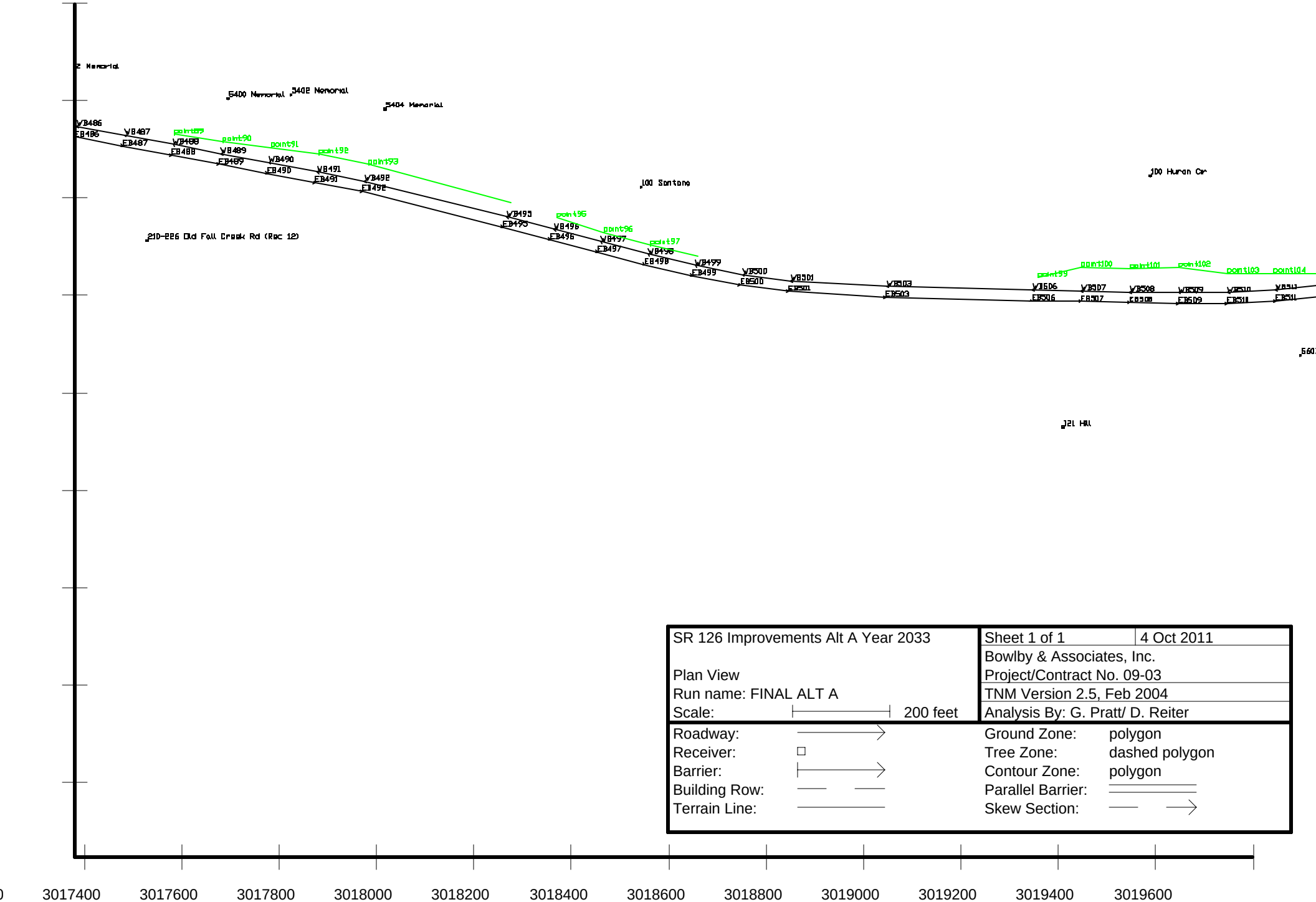

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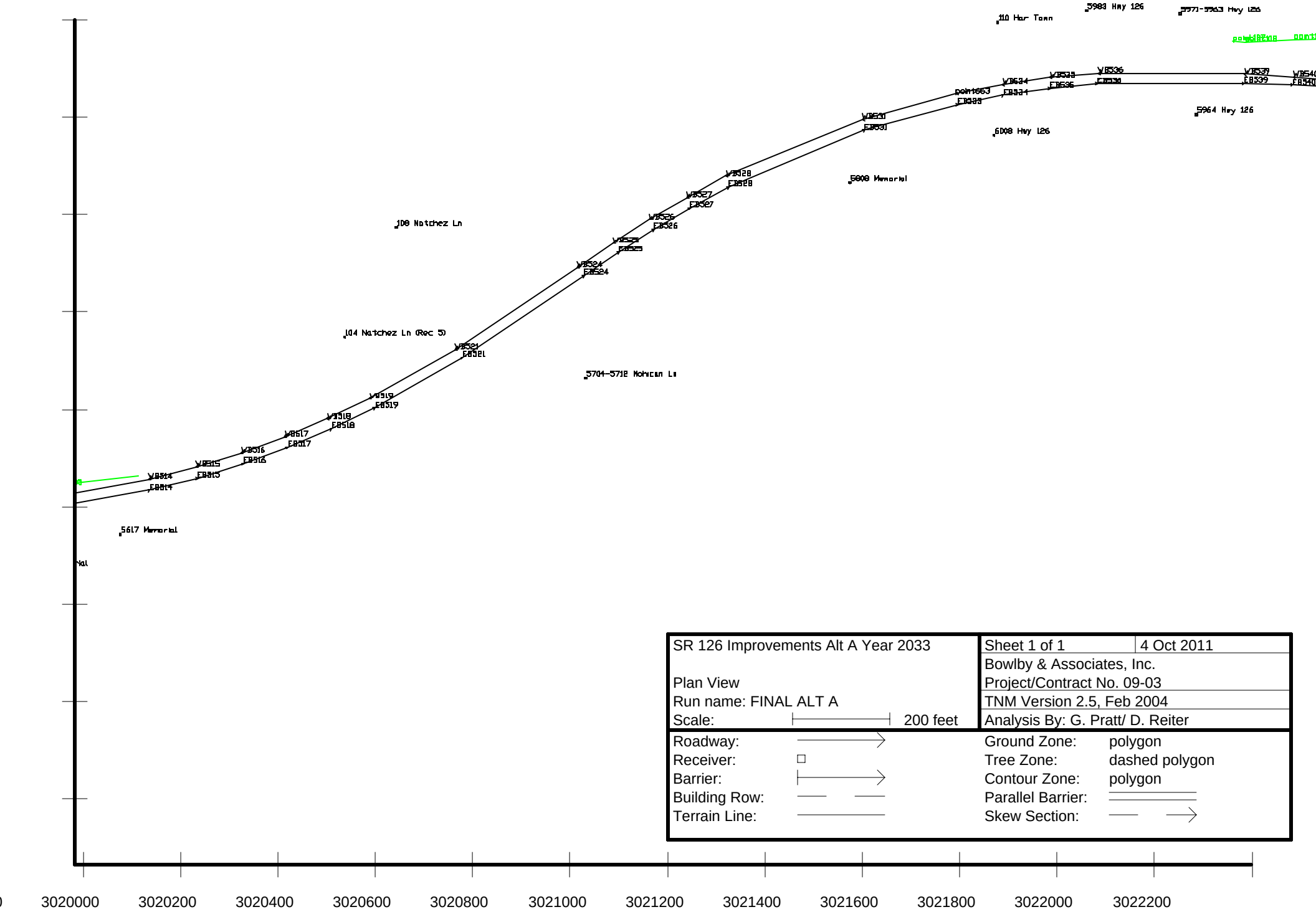

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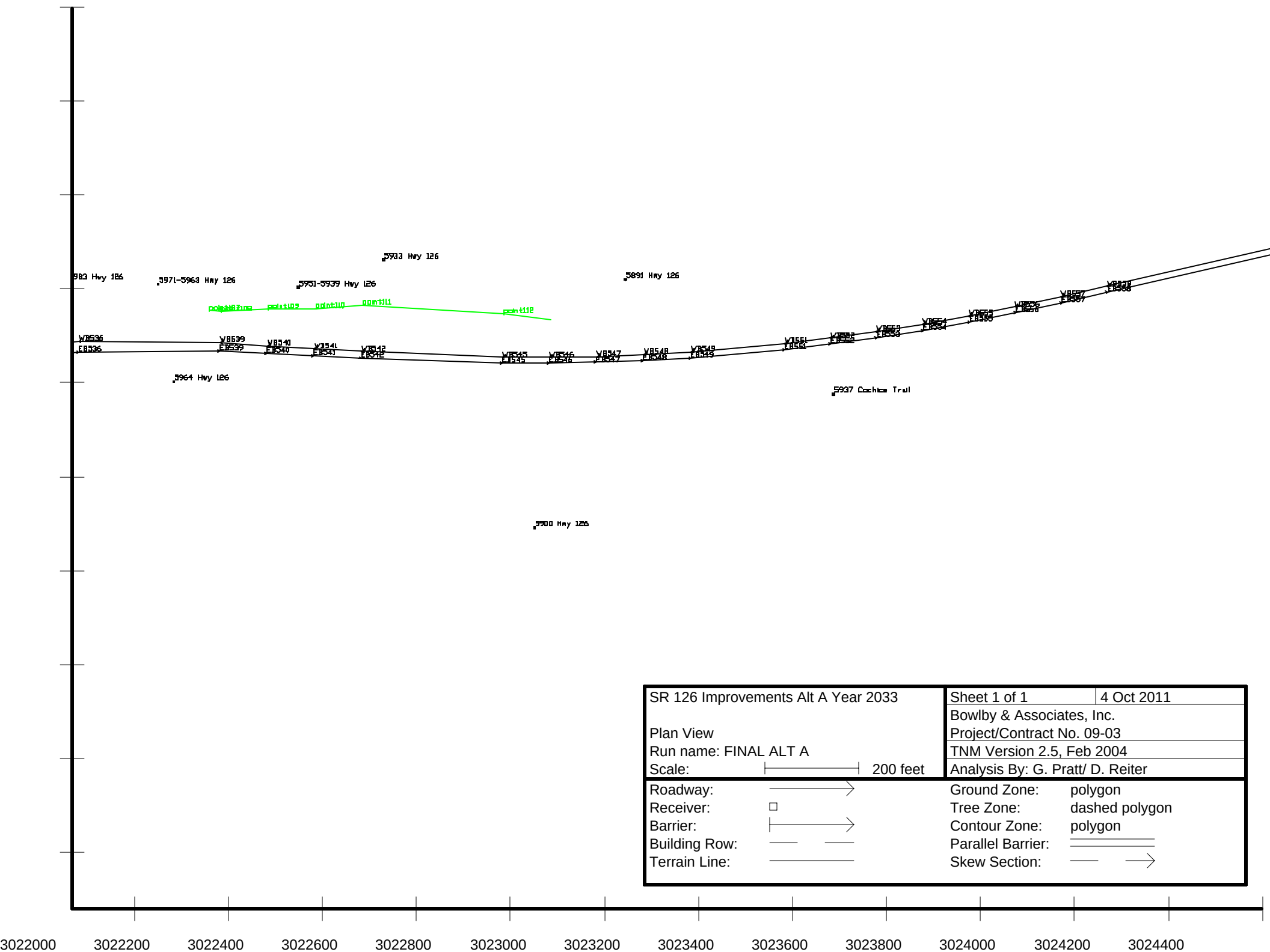
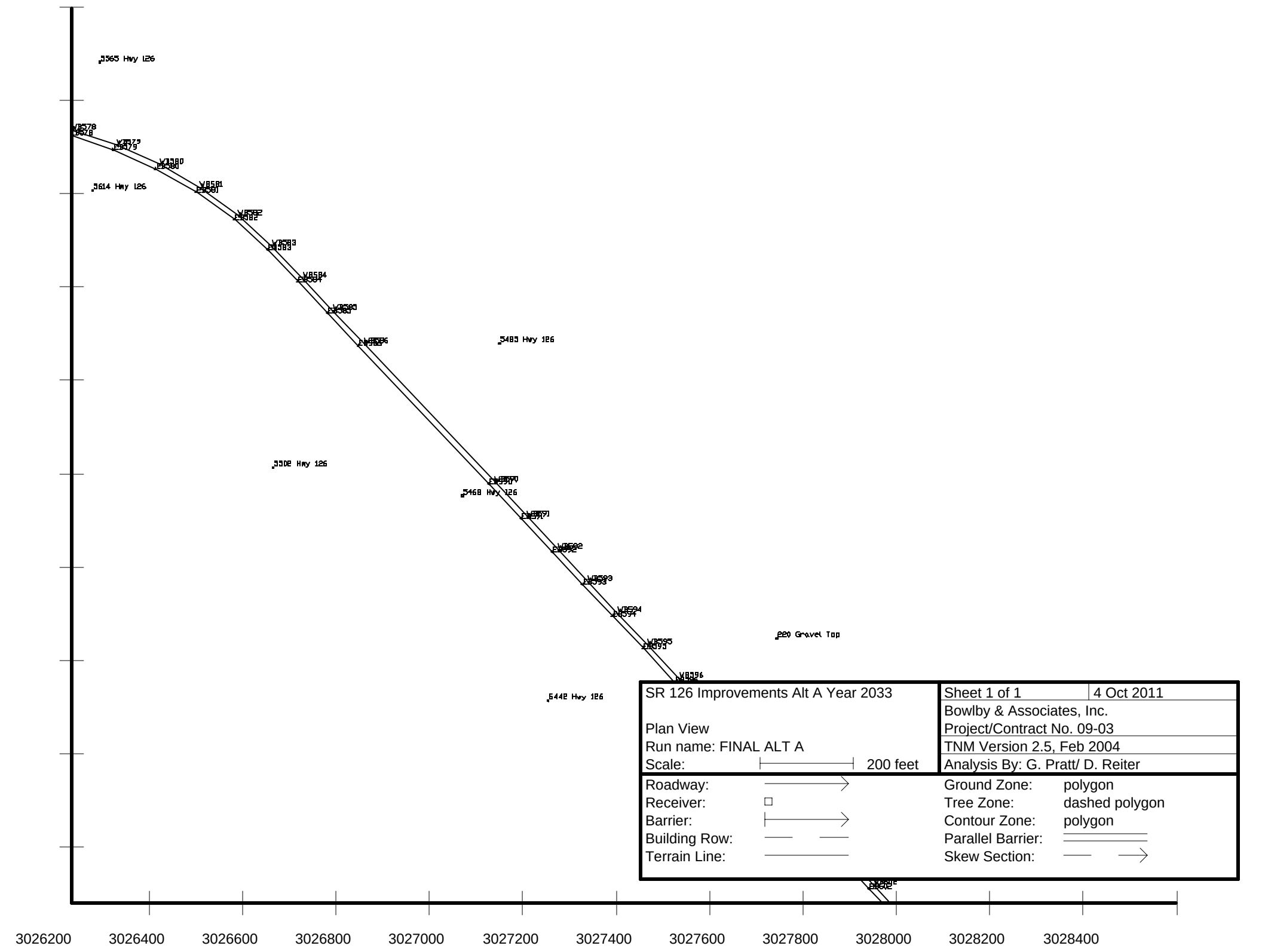
Building Row:		Parallel Barrier:	
Terrain Line:		Skew Section:	



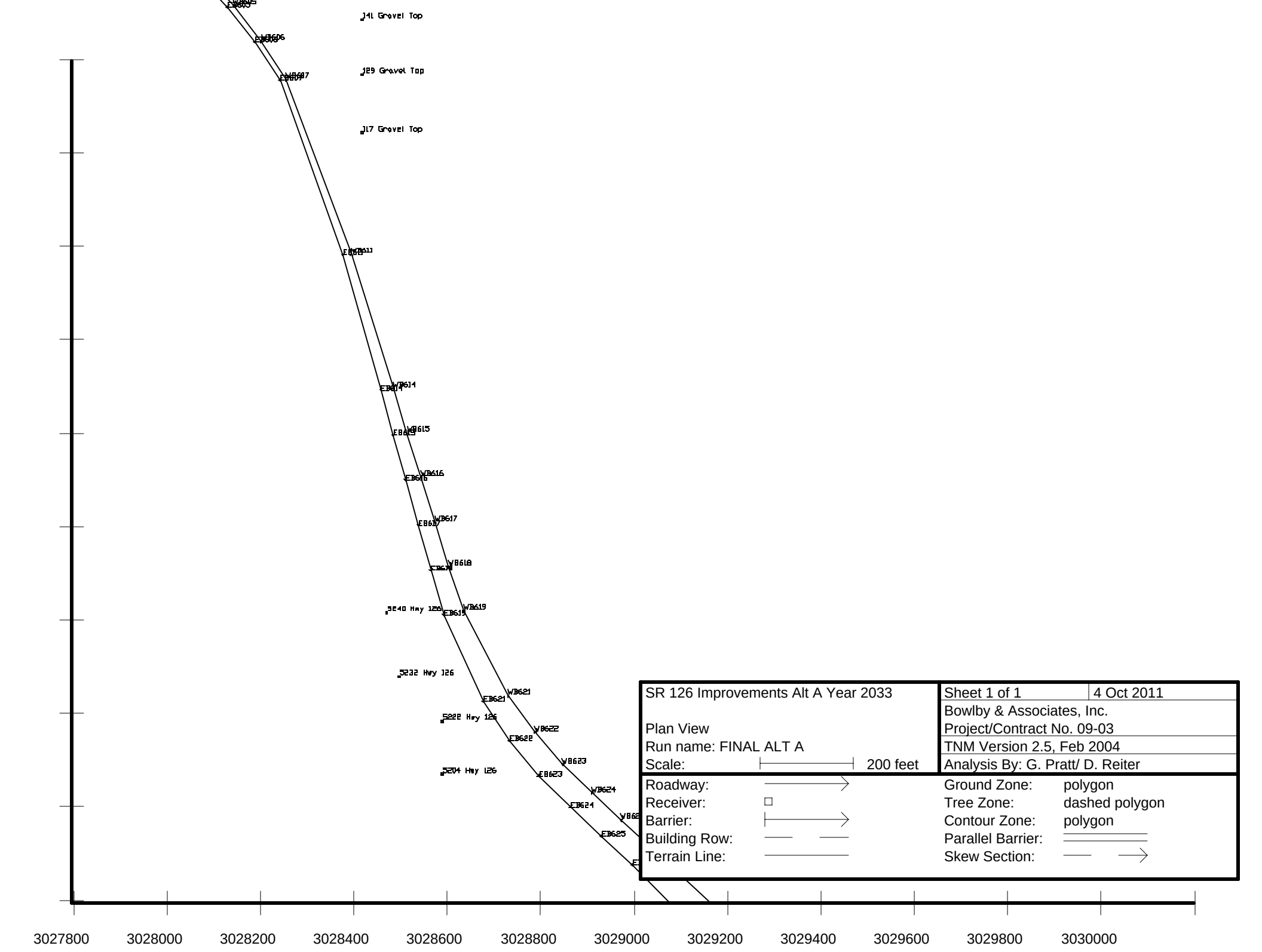
SR 126 Improvements Alt A Year 2033	Sheet 1 of 1 | 4 Oct 2011
	Bowlby & Associates, Inc.
Plan View	Project/Contract No. 09-03
Run name: FINAL ALT A	TNM Version 2.5, Feb 2004
Scale: 200 feet	Analysis By: G. Pratt/ D. Reiter

Roadway:		Ground Zone:	polygon
Receiver:		Tree Zone:	dashed polygon
Barrier:		Contour Zone:	polygon
Building Row:		Parallel Barrier:	
Terrain Line:		Skew Section:	



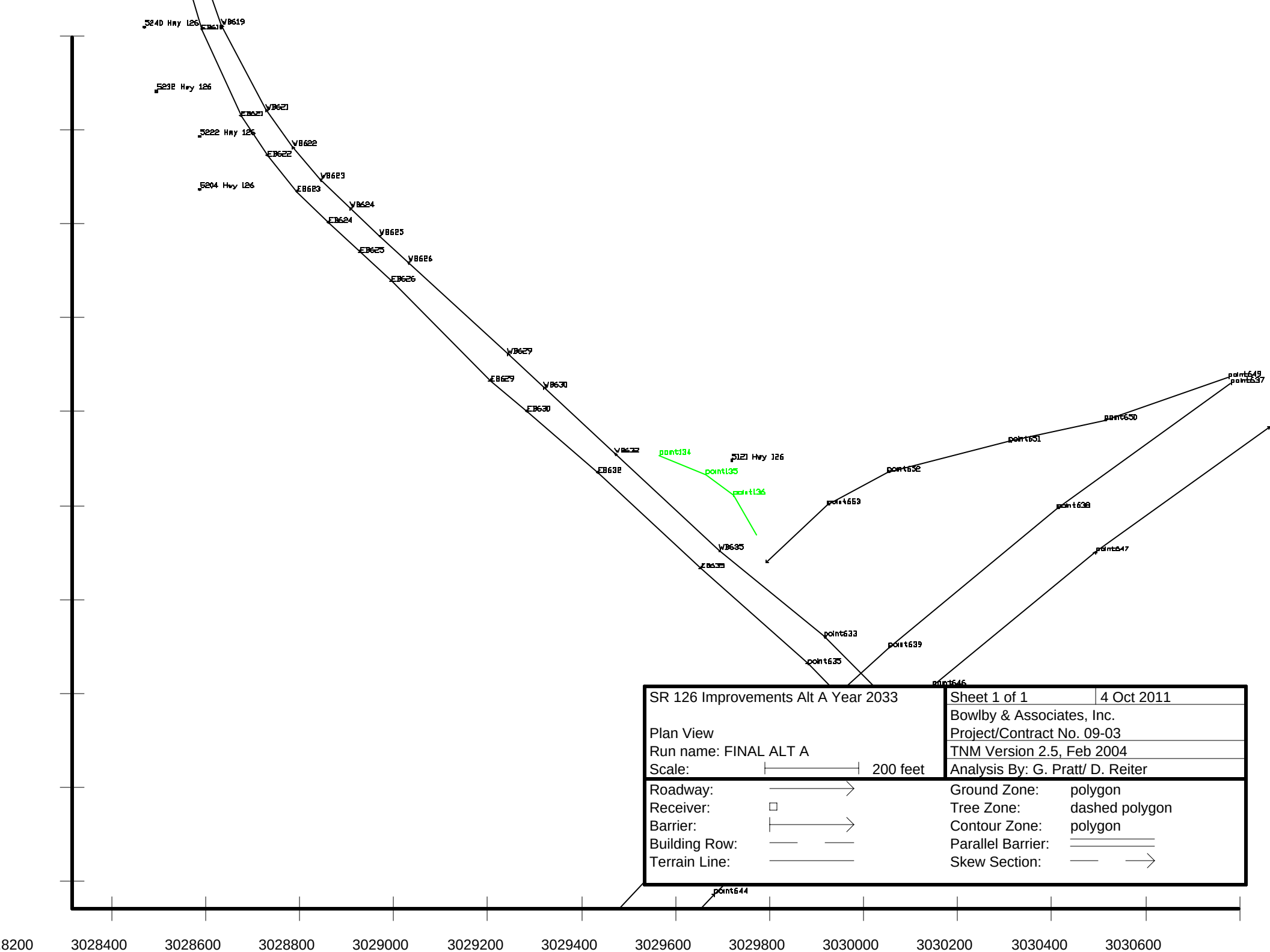
SR 126 Improvements Alt A Year 2033	Sheet 1 of 1 | 4 Oct 2011
	Bowlby & Associates, Inc.
Plan View	Project/Contract No. 09-03
Run name: FINAL ALT A	TNM Version 2.5, Feb 2004
Scale: 200 feet	Analysis By: G. Pratt/ D. Reiter

Roadway:		Ground Zone:	polygon
Receiver:	□	Tree Zone:	dashed polygon
Barrier:		Contour Zone:	polygon
Building Row:		Parallel Barrier:	
Terrain Line:		Skew Section:	



SR 126 Improvements Alt A Year 2033	Sheet 1 of 1 | 4 Oct 2011
	Bowlby & Associates, Inc.
Plan View	Project/Contract No. 09-03
Run name: FINAL ALT A	TNM Version 2.5, Feb 2004
Scale: 200 feet	Analysis By: G. Pratt/ D. Reiter

Roadway:		Ground Zone:	polygon
Receiver:	□	Tree Zone:	dashed polygon
Barrier:		Contour Zone:	polygon
Building Row:		Parallel Barrier:	
Terrain Line:		Skew Section:	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WB619
EB619
5232 Hwy 126
WB621
EB621
5222 Hwy 126
WB622
EB622
5204 Hwy 126
WB623
EB623
WB624
EB624
WB625
EB625
WB626
EB626
WB627
EB629
WB630
EB630
WB632
EB632
point134
point135
point136
5121 Hwy 126
WB635
EB635
point633
point635
point639
point644
point646
point647
point649
point650
point651
point652
point653
point638
point637
SR 126 Improvements Alt A Year 2033
Plan View
Run name: FINAL ALT A
Scale: 200 feet
Sheet 1 of 1
4 Oct 2011
Bowlby & Associates, Inc.
Project/Contract No. 09-03
TNM Version 2.5, Feb 2004
Analysis By: G. Pratt/ D. Reiter
Roadway:
Receiver:
Barrier:
Building Row:
Terrain Line:
Ground Zone: polygon
Tree Zone: dashed polygon
Contour Zone: polygon
Parallel Barrier:
Skew Section:
8200
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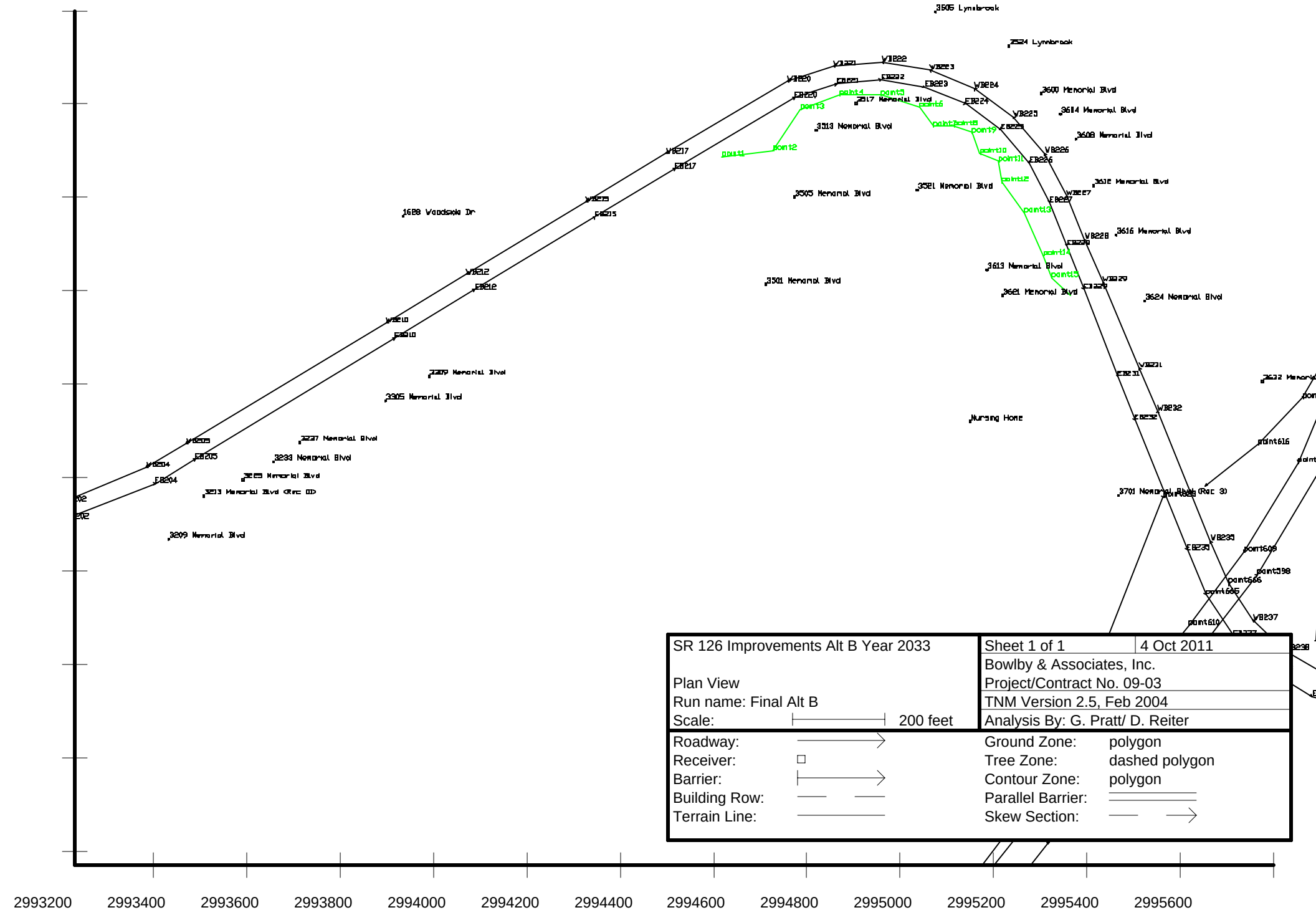
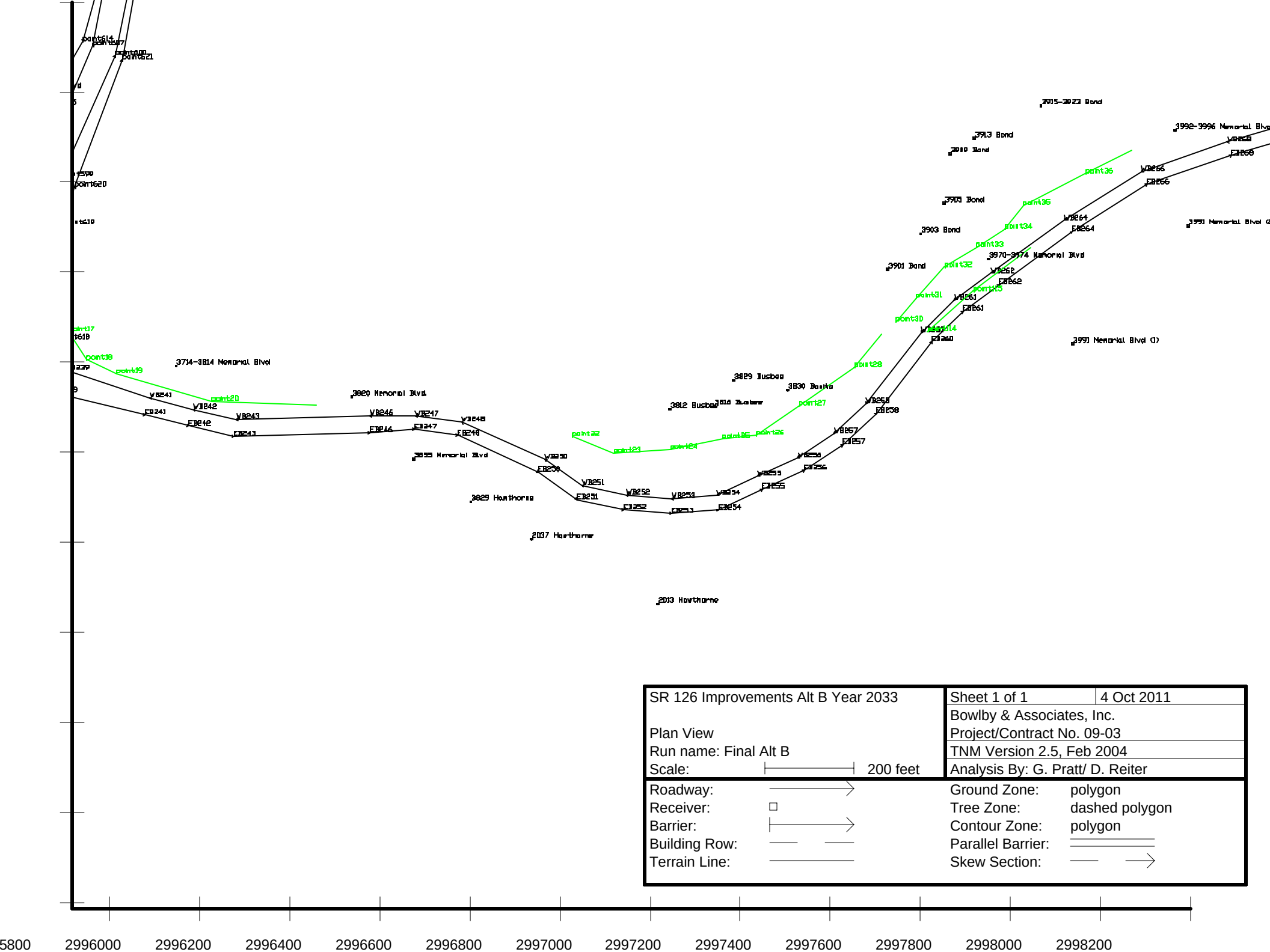
3028600
3028800
3029000
3029200
3029400
3029600
3029800
3030000
3030200
3030400
3030600



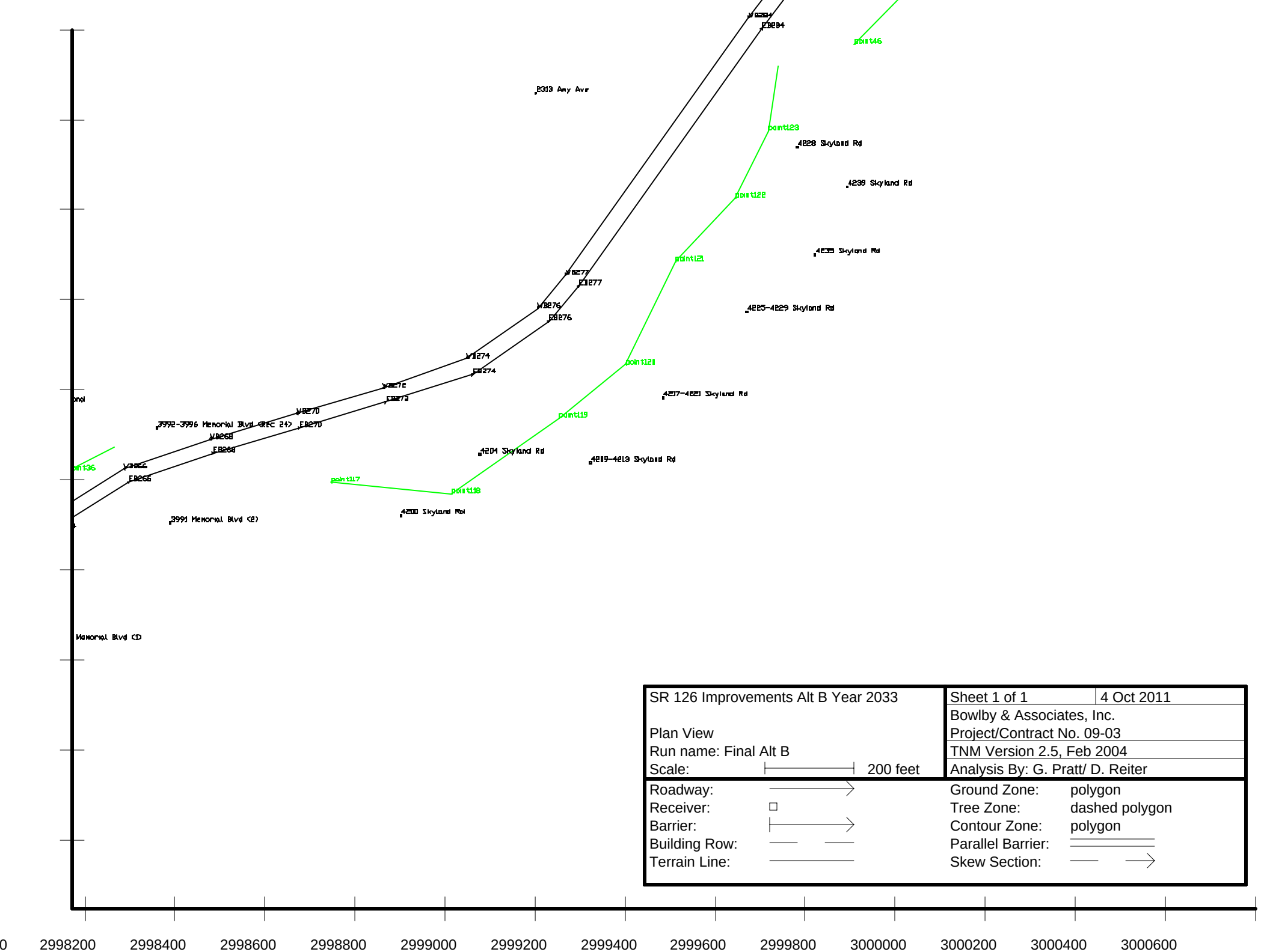
SR 126 Improvements Alt B Year 2033	Sheet 1 of 1 | 4 Oct 2011
	Bowlby & Associates, Inc.
Plan View	Project/Contract No. 09-03
Run name: Final Alt B	TNM Version 2.5, Feb 2004
Scale: 200 feet	Analysis By: G. Pratt/ D. Reiter

Roadway:		Ground Zone:	polygon
Receiver:	□	Tree Zone:	dashed polygon
Barrier:		Contour Zone:	polygon
Building Row:		Parallel Barrier:	
Terrain Line:		Skew Section:	

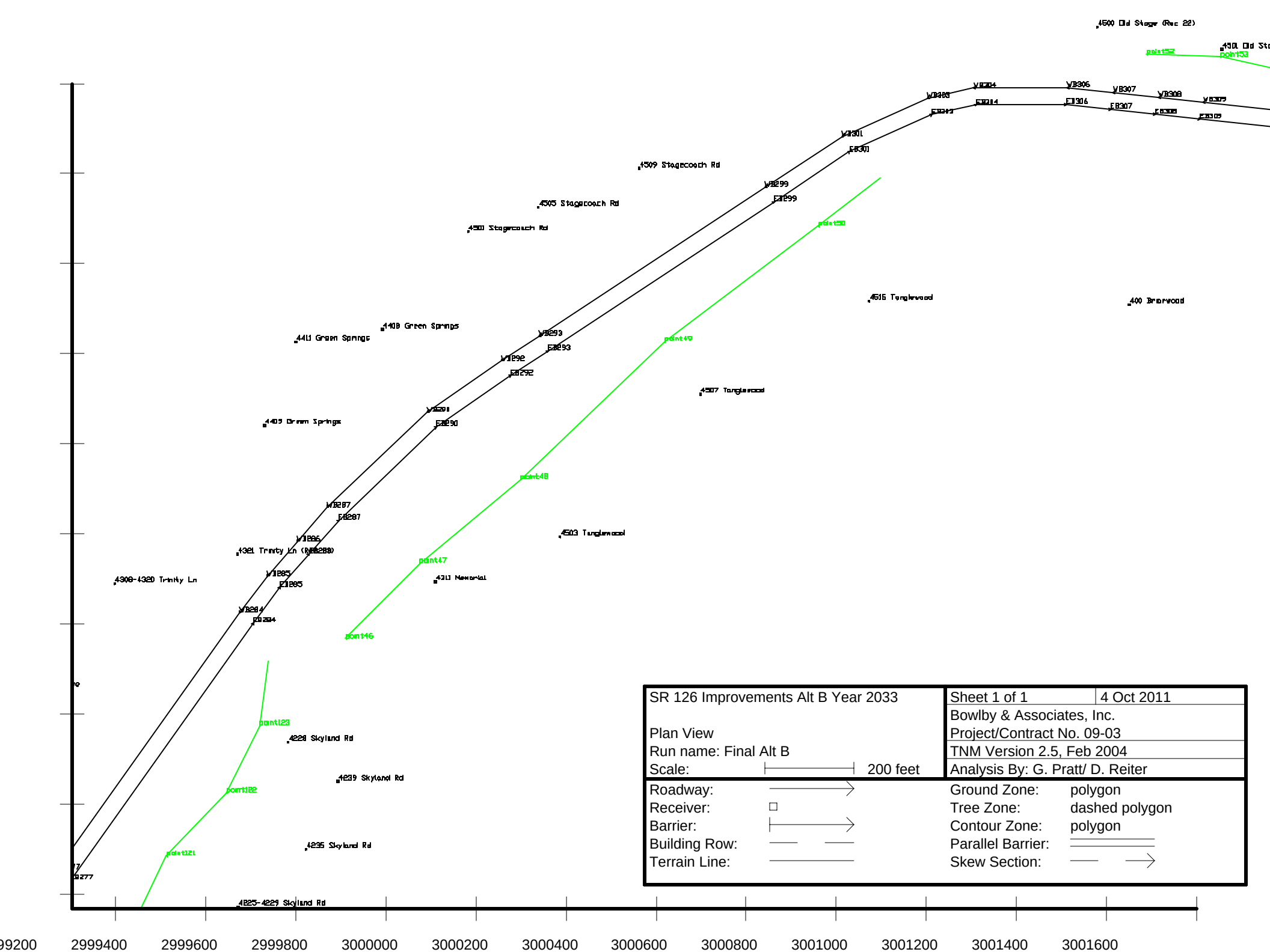


SR 126 Improvements Alt B Year 2033	Sheet 1 of 1 | 4 Oct 2011
	Bowlby & Associates, Inc.
Plan View	Project/Contract No. 09-03
Run name: Final Alt B	TNM Version 2.5, Feb 2004
Scale: 200 feet	Analysis By: G. Pratt/ D. Reiter

Roadway:		Ground Zone:	polygon
Receiver:		Tree Zone:	dashed polygon
Barrier:		Contour Zone:	polygon
Building Row:		Parallel Barrier:	
Terrain Line:		Skew Section:	

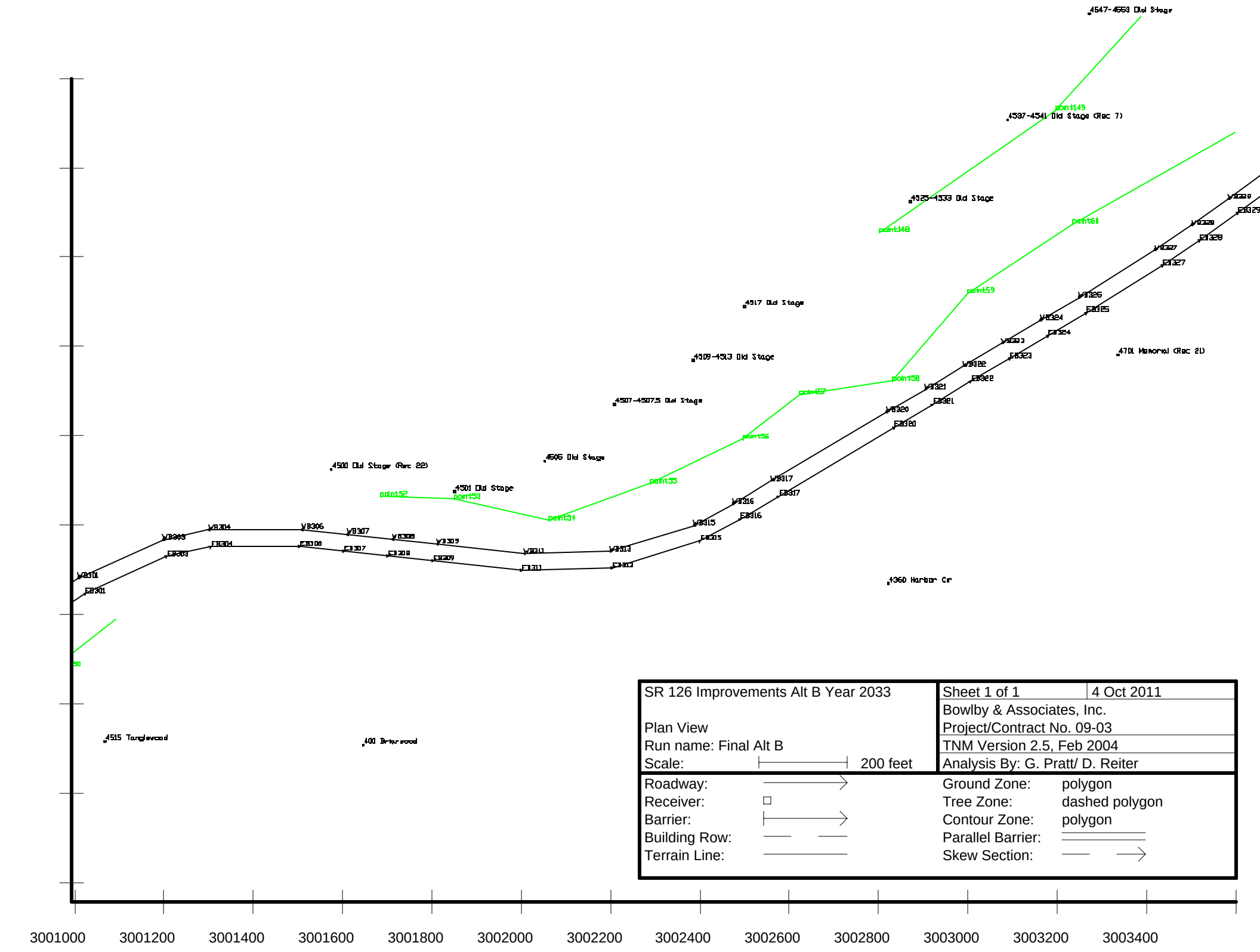


SR 126 Improvements Alt B Year 2033		Sheet 1 of 1	4 Oct 2011
		Bowlby & Associates, Inc.	
Plan View		Project/Contract No. 09-03	
Run name: Final Alt B		TNM Version 2.5, Feb 2004	
Scale:	200 feet	Analysis By: G. Pratt/ D. Reiter	
Roadway:		Ground Zone:	polygon
Receiver:		Tree Zone:	dashed polygon
Barrier:		Contour Zone:	polygon
Building Row:		Parallel Barrier:	
Terrain Line:		Skew Section:	



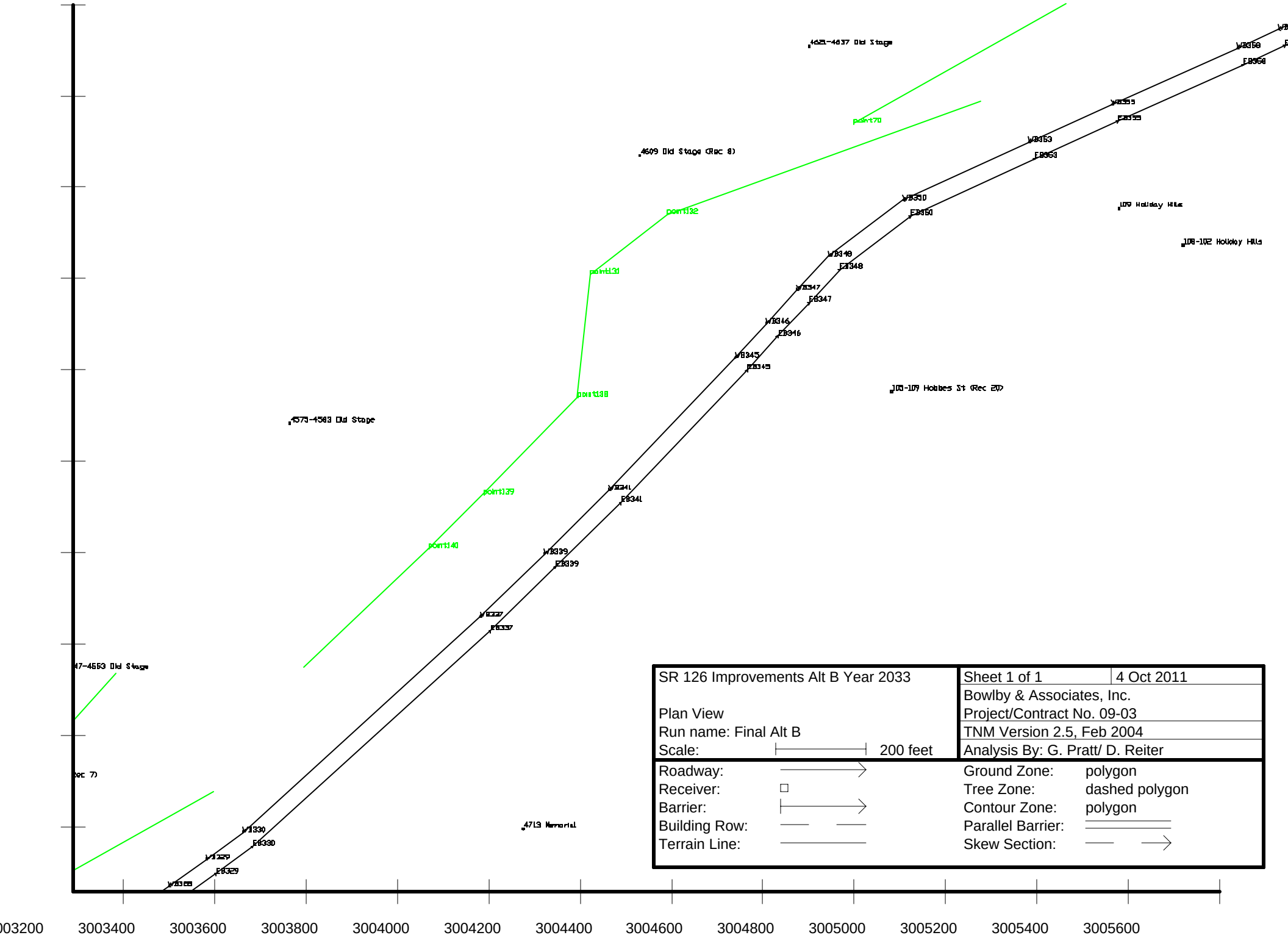
SR 126 Improvements Alt B Year 2033	Sheet 1 of 1 | 4 Oct 2011
	Bowlby & Associates, Inc.
Plan View	Project/Contract No. 09-03
Run name: Final Alt B	TNM Version 2.5, Feb 2004
Scale: 200 feet	Analysis By: G. Pratt/ D. Reiter

Roadway:		Ground Zone:	polygon
Receiver:		Tree Zone:	dashed polygon
Barrier:		Contour Zone:	polygon
Building Row:		Parallel Barrier:	
Terrain Line:		Skew Section:	



SR 126 Improvements Alt B Year 2033	Sheet 1 of 1 | 4 Oct 2011
	Bowlby & Associates, Inc.
Plan View	Project/Contract No. 09-03
Run name: Final Alt B	TNM Version 2.5, Feb 2004
Scale: 200 feet	Analysis By: G. Pratt/ D. Reiter

Roadway:		Ground Zone:	polygon
Receiver:		Tree Zone:	dashed polygon
Barrier:		Contour Zone:	polygon
Building Row:		Parallel Barrier:	
Terrain Line:		Skew Section:	


4621-4637 Old Stage
point70
4609 Old Stage (Rec 8)
point132
point131
point138
4573-4583 Old Stage
point139
point140
47-4563 Old Stage
ec 7)
4713 Memorial
109 Holiday Hills
108-102 Holiday Hills
103-109 Hobbes St (Rec 20)
WB350
EB350
WB349
EB349
WB348
EB348
WB347
EB347
WB346
EB346
WB345
EB345
WB341
EB341
WB339
EB339
WB337
EB337
WB330
EB330
WB329
EB329
WB328
EB328
WB353
EB353
WB355
EB355
WB358
EB358
SR 126 Improvements Alt B Year 2033
Plan View
Run name: Final Alt B
Scale: 200 feet
Sheet 1 of 1
4 Oct 2011
Bowlby & Associates, Inc.
Project/Contract No. 09-03
TNM Version 2.5, Feb 2004
Analysis By: G. Pratt/ D. Reiter
Roadway:
Receiver:
Barrier:
Building Row:
Terrain Line:
Ground Zone: polygon
Tree Zone: dashed polygon
Contour Zone: polygon
Parallel Barrier:
Skew Section:
003200
3003400
3003600
3003800
3004000
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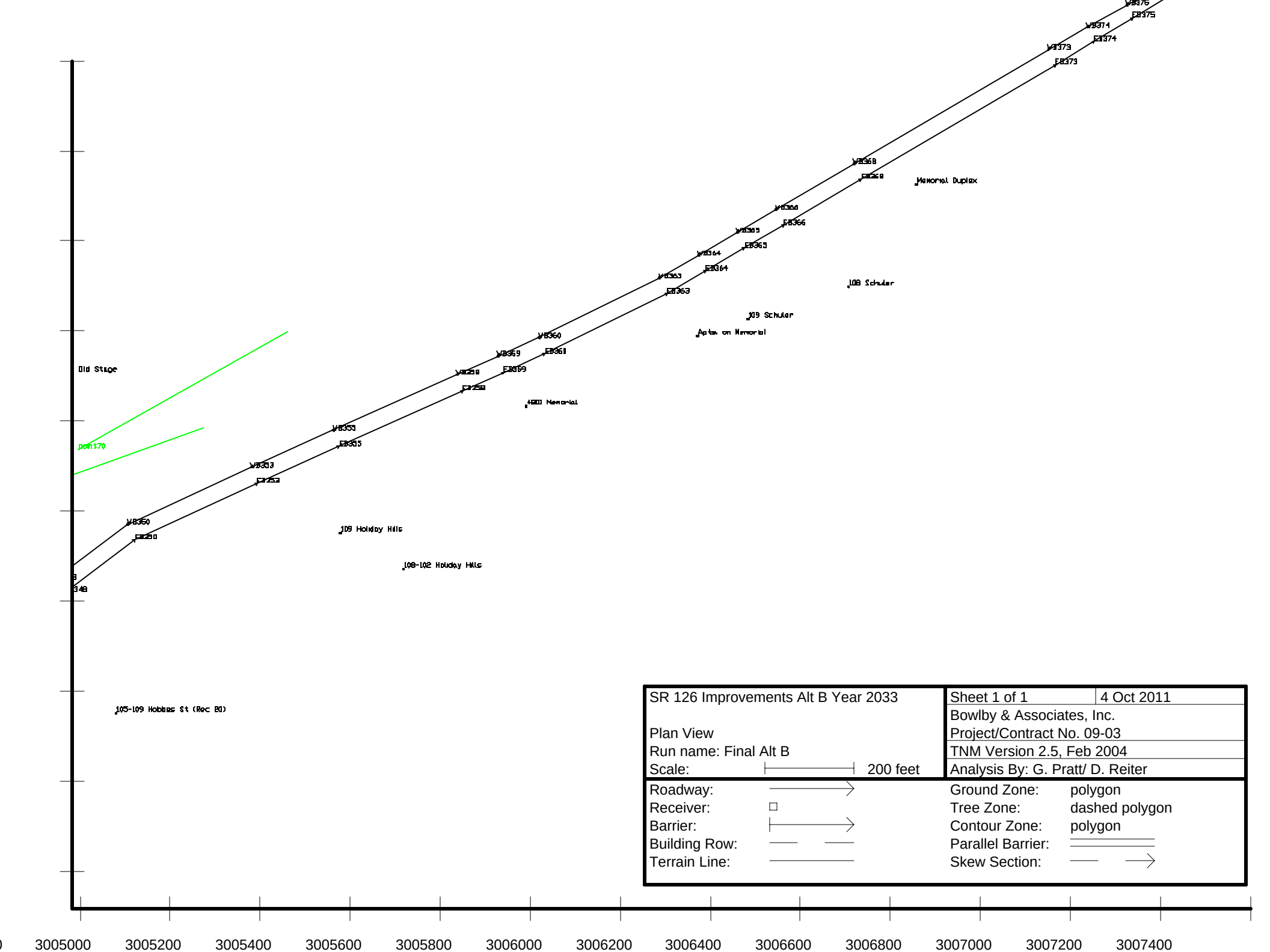
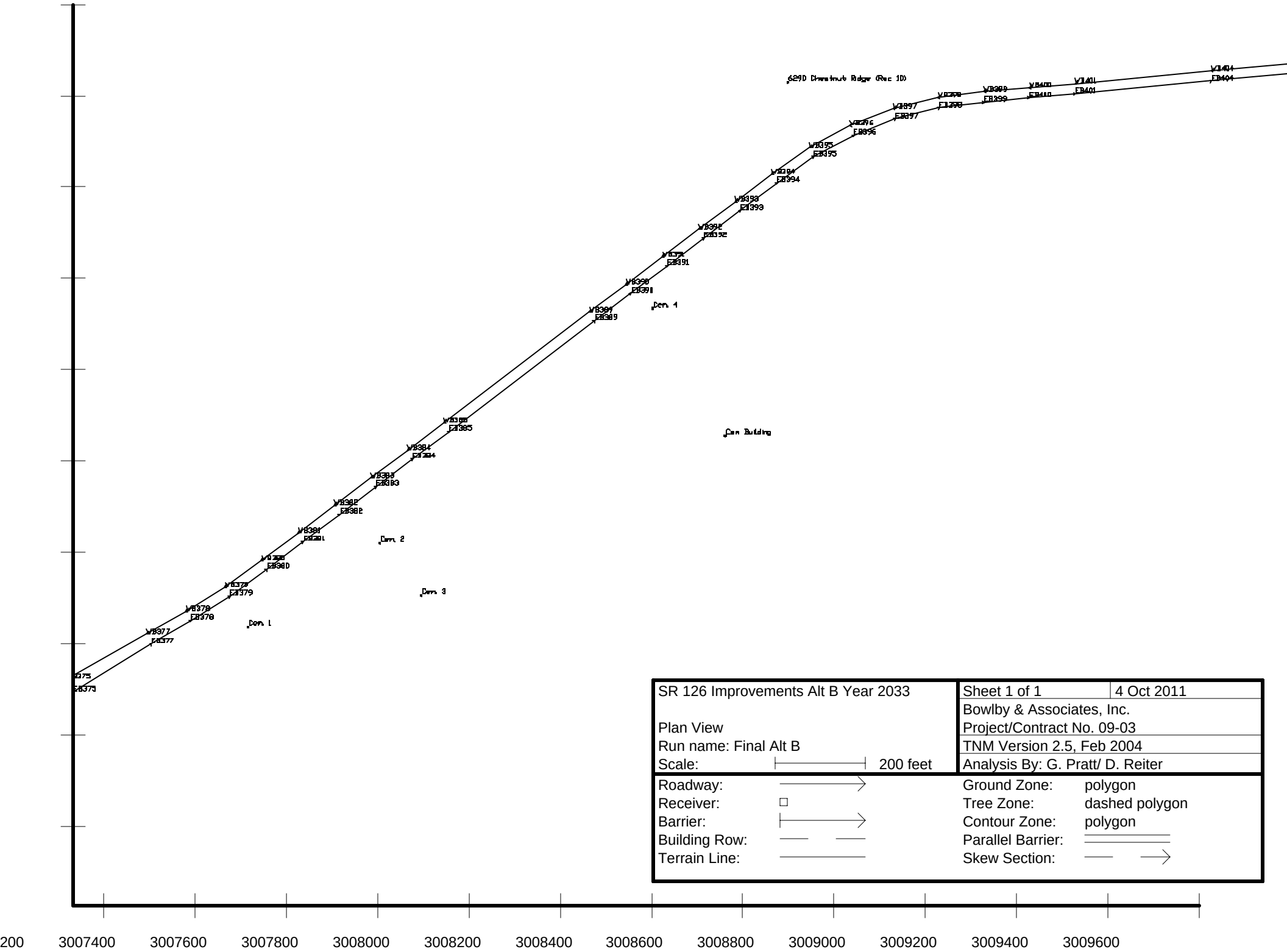
3004400
3004600
3004800
3005000
3005200
3005400
3005600



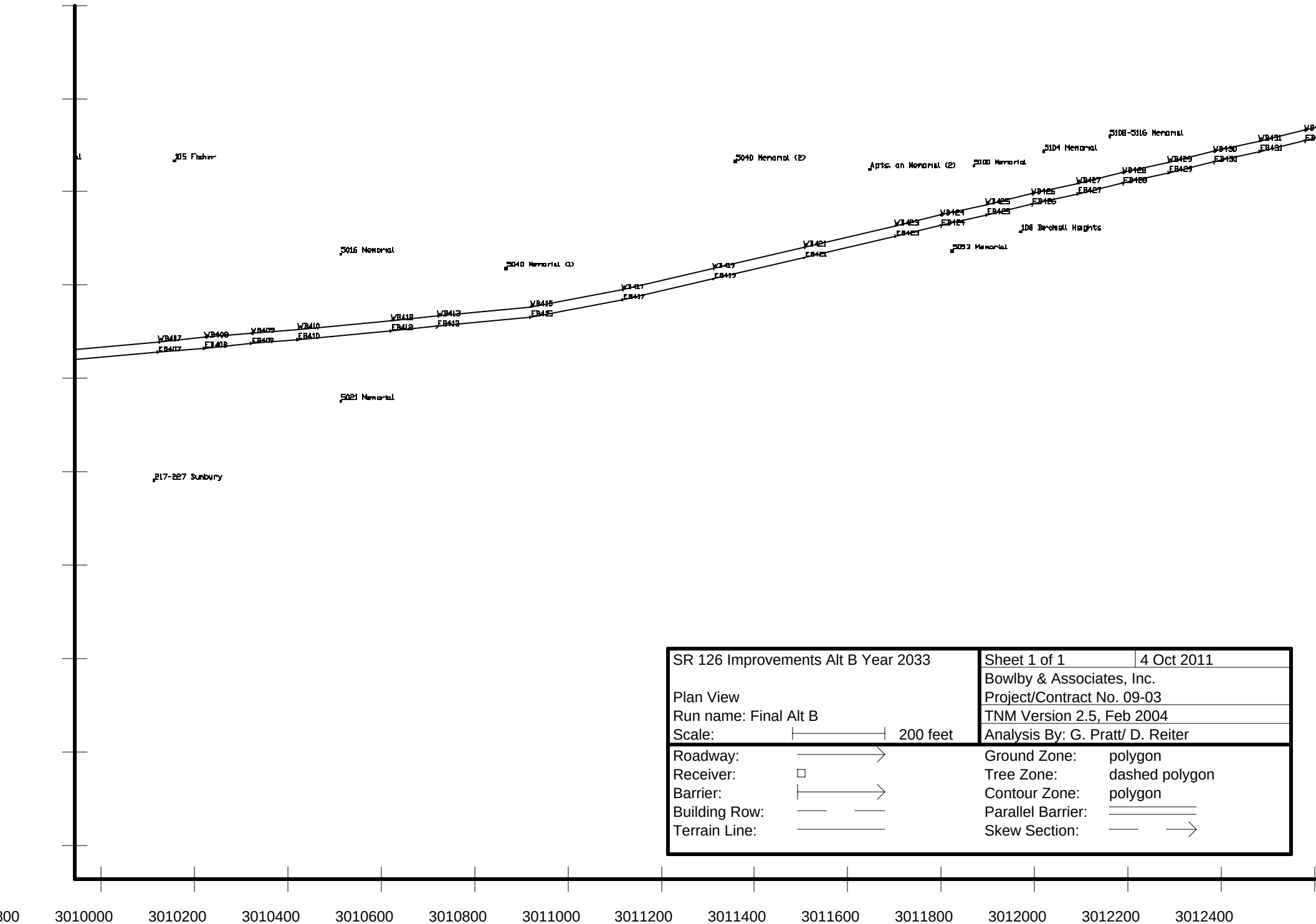
SR 126 Improvements Alt B Year 2033	Sheet 1 of 1 | 4 Oct 2011
	Bowlby & Associates, Inc.
Plan View	Project/Contract No. 09-03
Run name: Final Alt B	TNM Version 2.5, Feb 2004
Scale: 200 feet	Analysis By: G. Pratt/ D. Reiter

Roadway:		Ground Zone:	polygon
Receiver:	□	Tree Zone:	dashed polygon
Barrier:		Contour Zone:	polygon
Building Row:		Parallel Barrier:	
Terrain Line:		Skew Section:	



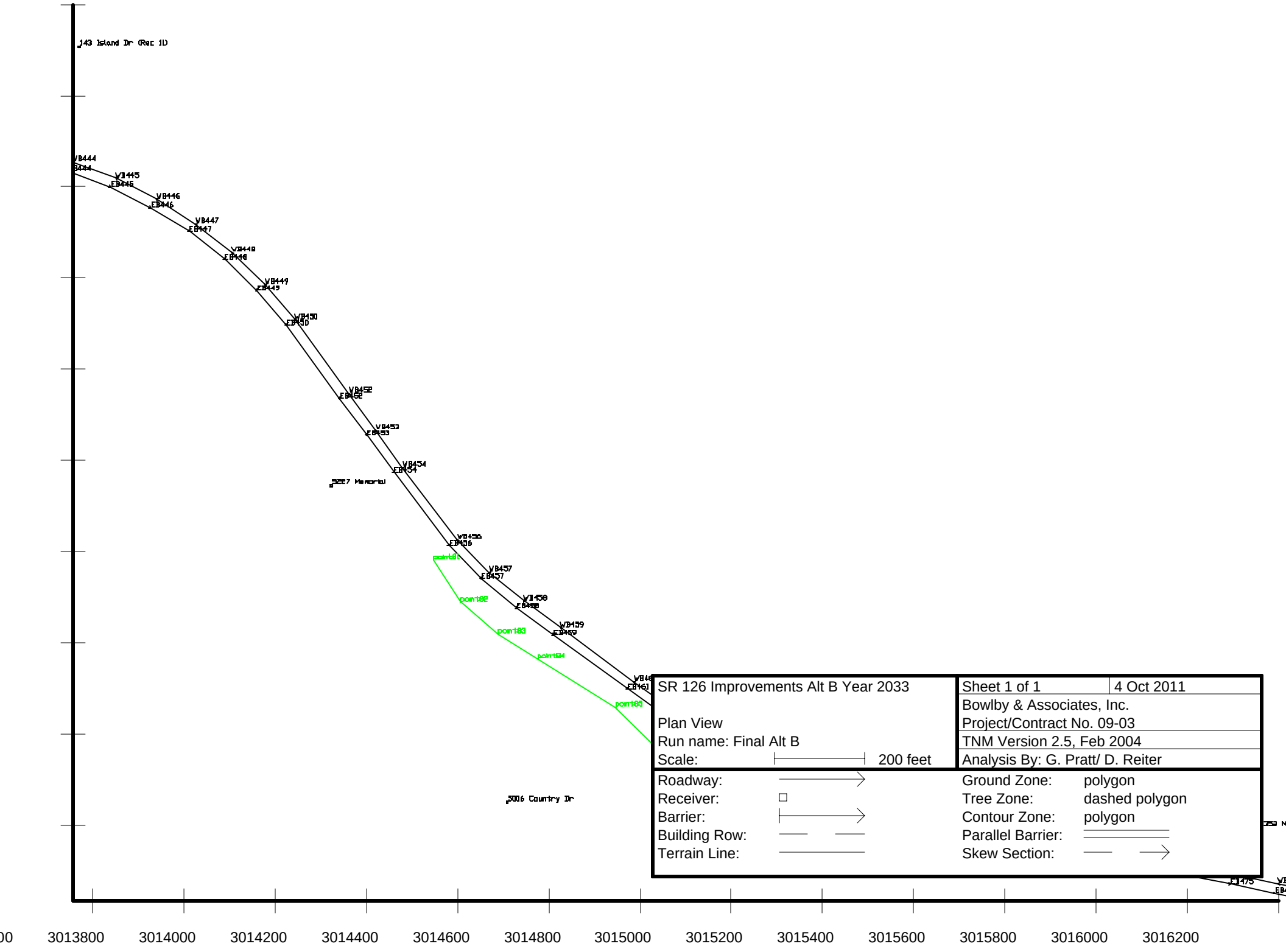
SR 126 Improvements Alt B Year 2033	Sheet 1 of 1 | 4 Oct 2011
	Bowlby & Associates, Inc.
Plan View	Project/Contract No. 09-03
Run name: Final Alt B	TNM Version 2.5, Feb 2004
Scale: 200 feet	Analysis By: G. Pratt/ D. Reiter

Roadway:		Ground Zone:	polygon
Receiver:	□	Tree Zone:	dashed polygon
Barrier:		Contour Zone:	polygon
Building Row:		Parallel Barrier:	
Terrain Line:		Skew Section:	

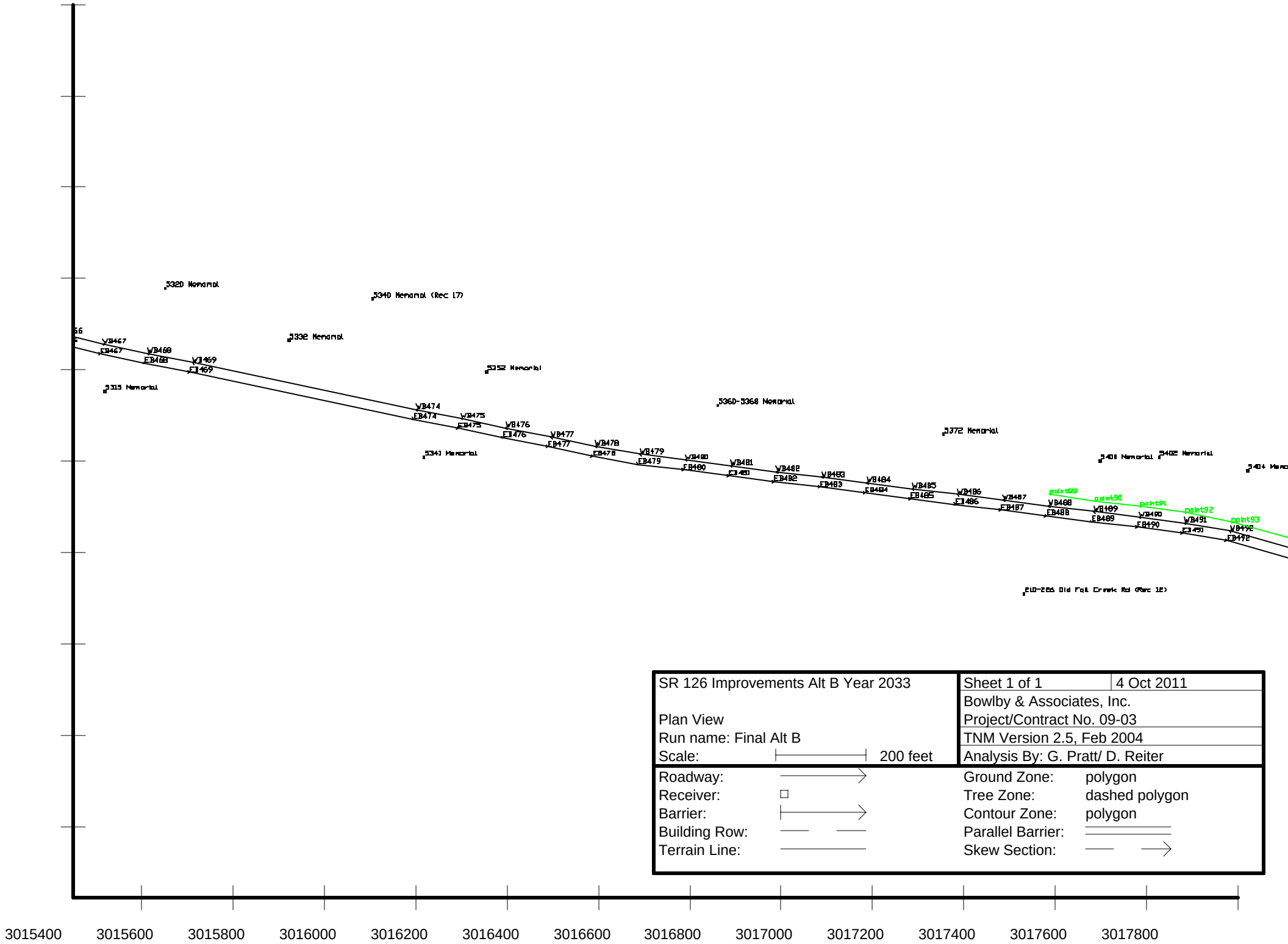


SR 126 Improvements Alt B Year 2033	Sheet 1 of 1 | 4 Oct 2011
	Bowlby & Associates, Inc.
Plan View	Project/Contract No. 09-03
Run name: Final Alt B	TNM Version 2.5, Feb 2004
Scale: 200 feet	Analysis By: G. Pratt/ D. Reiter

Roadway:		Ground Zone:	polygon
Receiver:		Tree Zone:	dashed polygon
Barrier:		Contour Zone:	polygon
Building Row:		Parallel Barrier:	
Terrain Line:		Skew Section:	

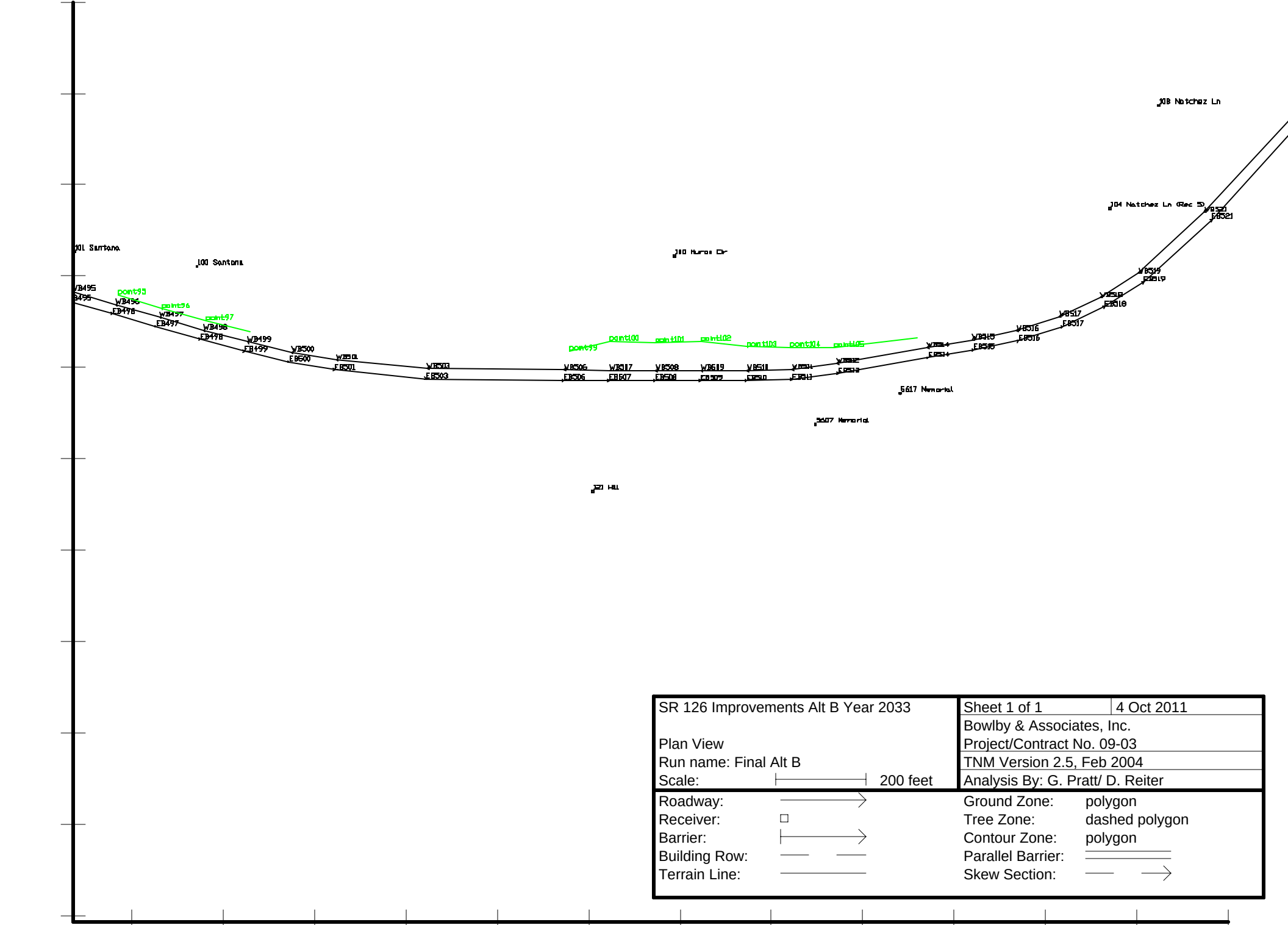


SR 126 Improvements Alt B Year 2033		Sheet 1 of 1	4 Oct 2011
		Bowlby & Associates, Inc.	
Plan View		Project/Contract No. 09-03	
Run name: Final Alt B		TNM Version 2.5, Feb 2004	
Scale:	200 feet	Analysis By: G. Pratt/ D. Reiter	
Roadway:		Ground Zone:	polygon
Receiver:		Tree Zone:	dashed polygon
Barrier:		Contour Zone:	polygon
Building Row:		Parallel Barrier:	
Terrain Line:		Skew Section:	



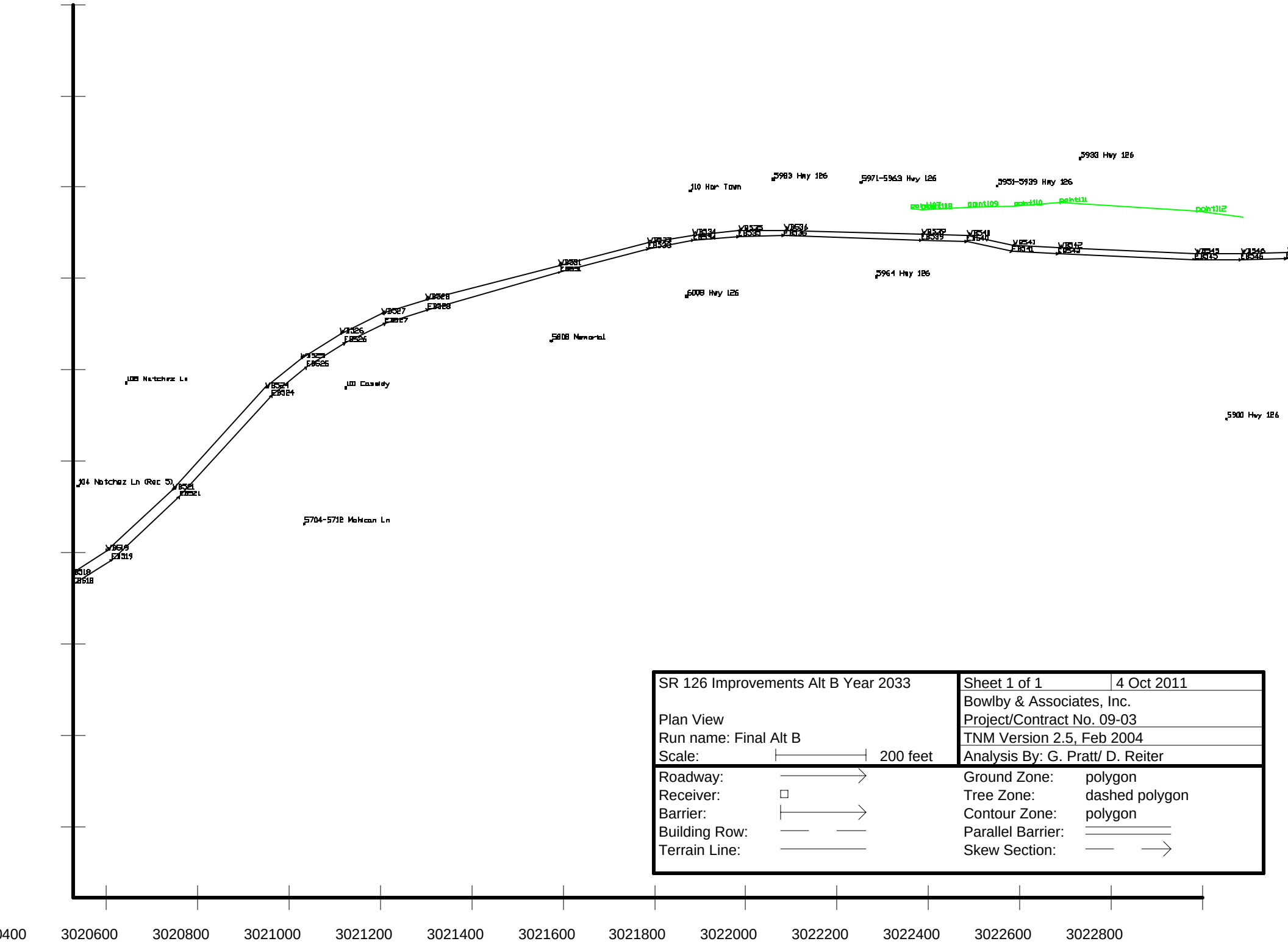
SR 126 Improvements Alt B Year 2033	Sheet 1 of 1 | 4 Oct 2011
	Bowlby & Associates, Inc.
Plan View	Project/Contract No. 09-03
Run name: Final Alt B	TNM Version 2.5, Feb 2004
Scale: 200 feet	Analysis By: G. Pratt/ D. Reiter

Roadway:		Ground Zone:	polygon
Receiver:		Tree Zone:	dashed polygon
Barrier:		Contour Zone:	polygon
Building Row:		Parallel Barrier:	
Terrain Line:		Skew Section:	



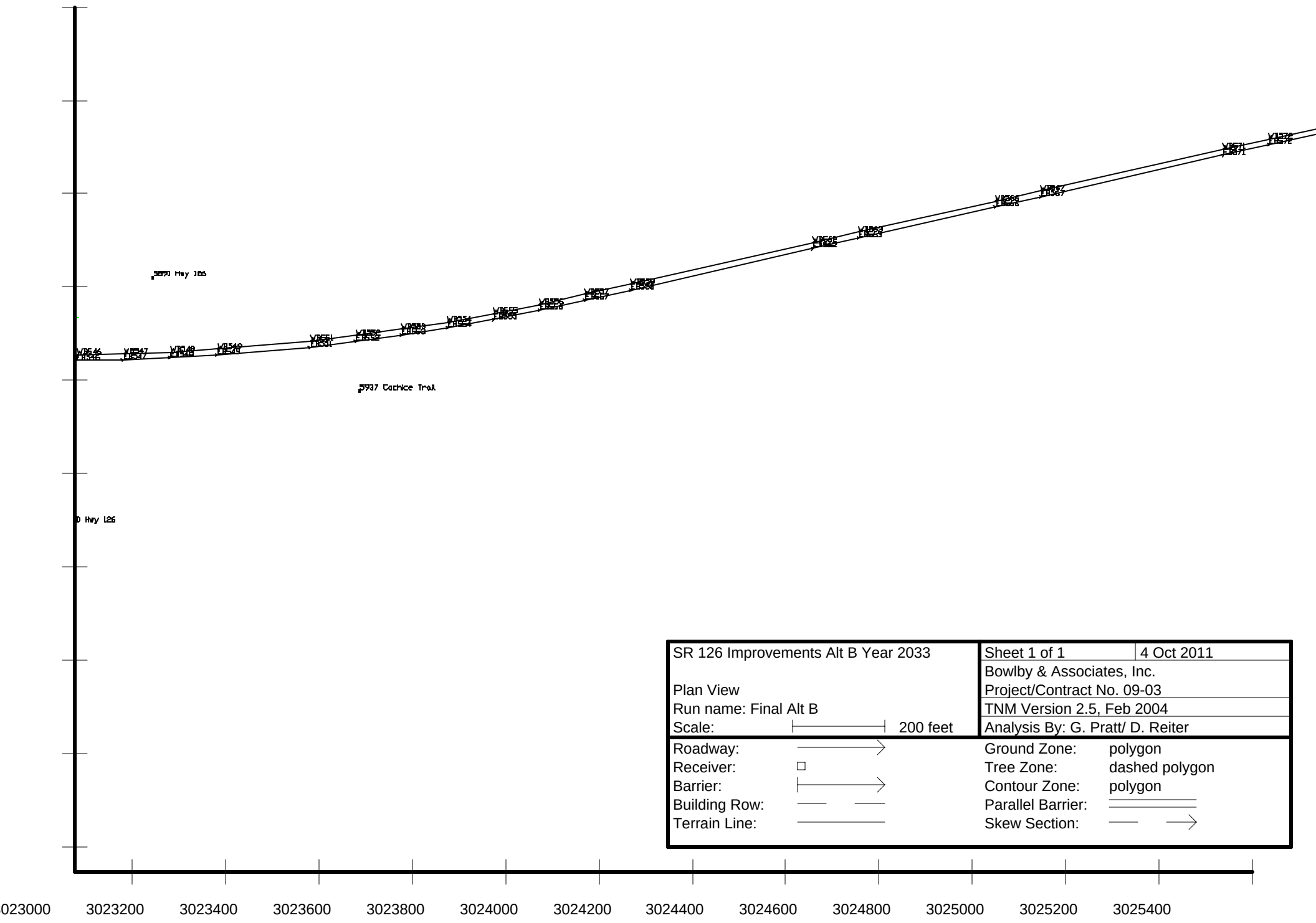
SR 126 Improvements Alt B Year 2033	Sheet 1 of 1 | 4 Oct 2011
	Bowlby & Associates, Inc.
Plan View	Project/Contract No. 09-03
Run name: Final Alt B	TNM Version 2.5, Feb 2004
Scale: 200 feet	Analysis By: G. Pratt/ D. Reiter

Roadway:		Ground Zone:	polygon
Receiver:	□	Tree Zone:	dashed polygon
Barrier:		Contour Zone:	polygon
Building Row:		Parallel Barrier:	
Terrain Line:		Skew Section:	

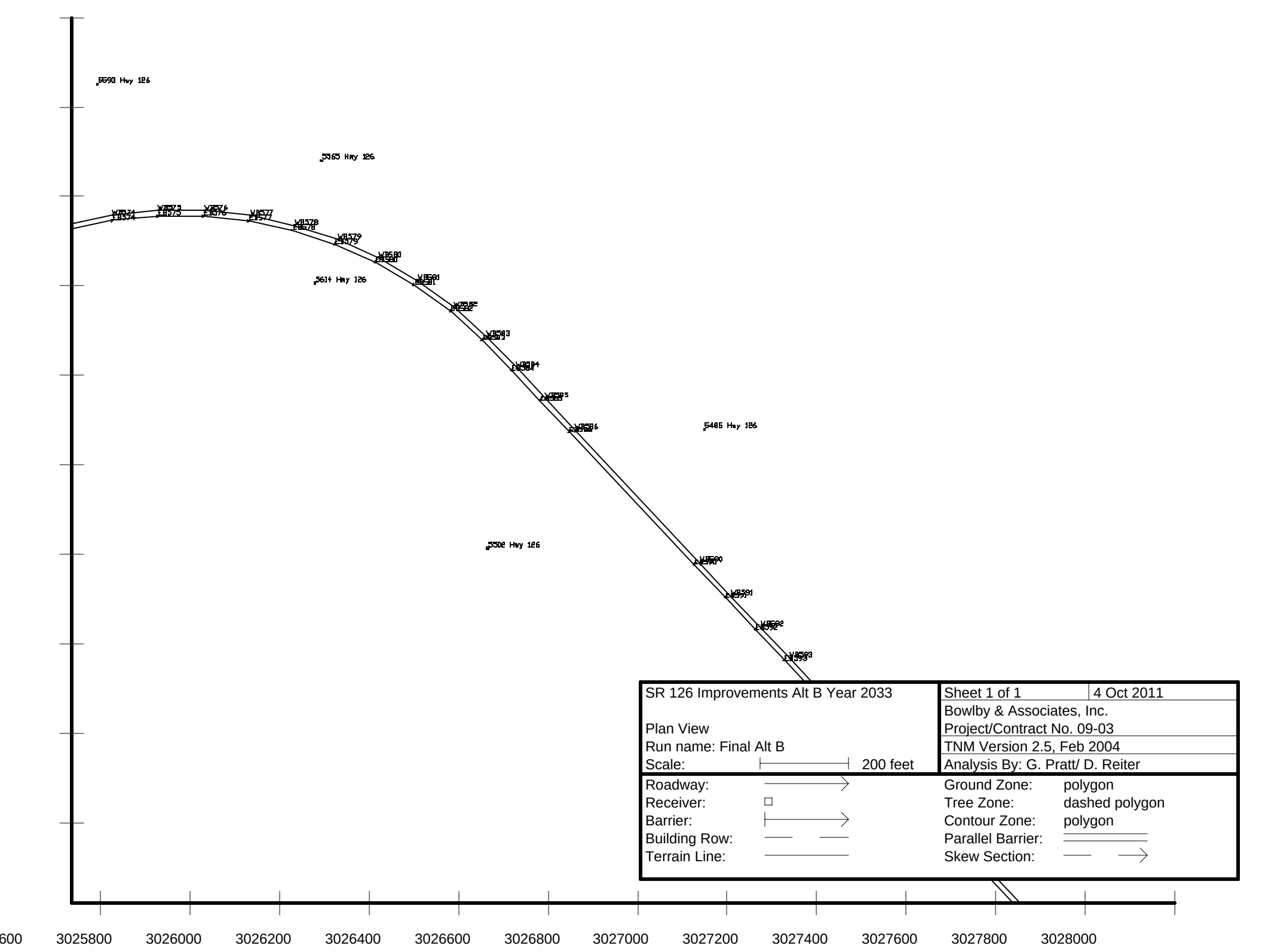


SR 126 Improvements Alt B Year 2033	Sheet 1 of 1 | 4 Oct 2011
	Bowlby & Associates, Inc.
Plan View	Project/Contract No. 09-03
Run name: Final Alt B	TNM Version 2.5, Feb 2004
Scale: 200 feet	Analysis By: G. Pratt/ D. Reiter

Roadway:		Ground Zone:	polygon
Receiver:		Tree Zone:	dashed polygon
Barrier:		Contour Zone:	polygon
Building Row:		Parallel Barrier:	
Terrain Line:		Skew Section:	



SR 126 Improvements Alt B Year 2033		Sheet 1 of 1	4 Oct 2011
		Bowlby & Associates, Inc.	
Plan View		Project/Contract No. 09-03	
Run name: Final Alt B		TNM Version 2.5, Feb 2004	
Scale:	200 feet	Analysis By: G. Pratt/ D. Reiter	
Roadway:		Ground Zone:	polygon
Receiver:		Tree Zone:	dashed polygon
Barrier:		Contour Zone:	polygon
Building Row:		Parallel Barrier:	
Terrain Line:		Skew Section:	


5593 Hwy 126
5365 Hwy 126
5614 Hwy 126
5486 Hwy 126
5502 Hwy 126
SR 126 Improvements Alt B Year 2033
Plan View
Run name: Final Alt B
Scale: 200 feet
Sheet 1 of 1
4 Oct 2011
Bowlby & Associates, Inc.
Project/Contract No. 09-03
TNM Version 2.5, Feb 2004
Analysis By: G. Pratt/ D. Reiter
Roadway:
Receiver:
Barrier:
Building Row:
Terrain Line:
Ground Zone: polygon
Tree Zone: dashed polygon
Contour Zone: polygon
Parallel Barrier:
Skew Section:
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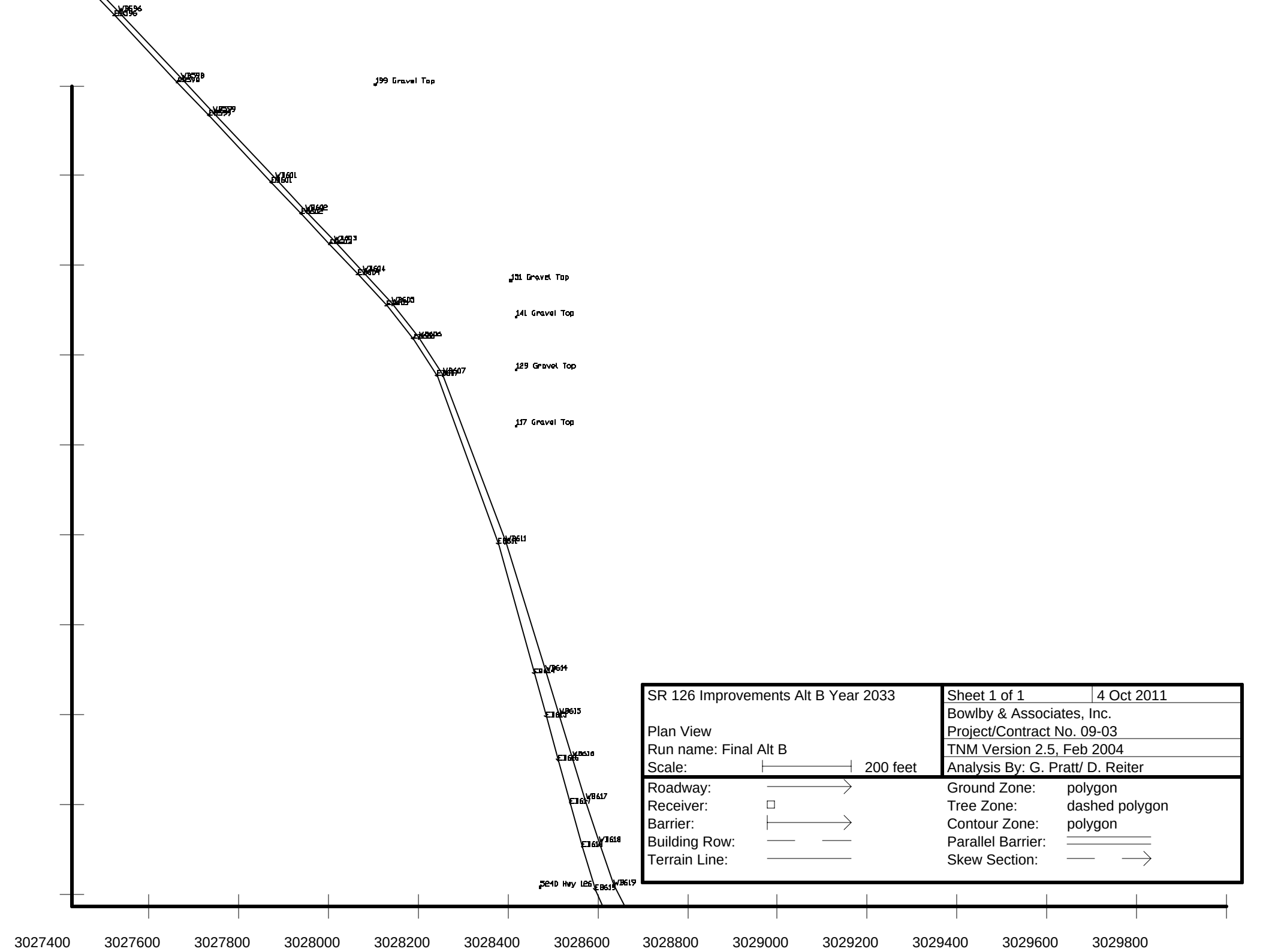
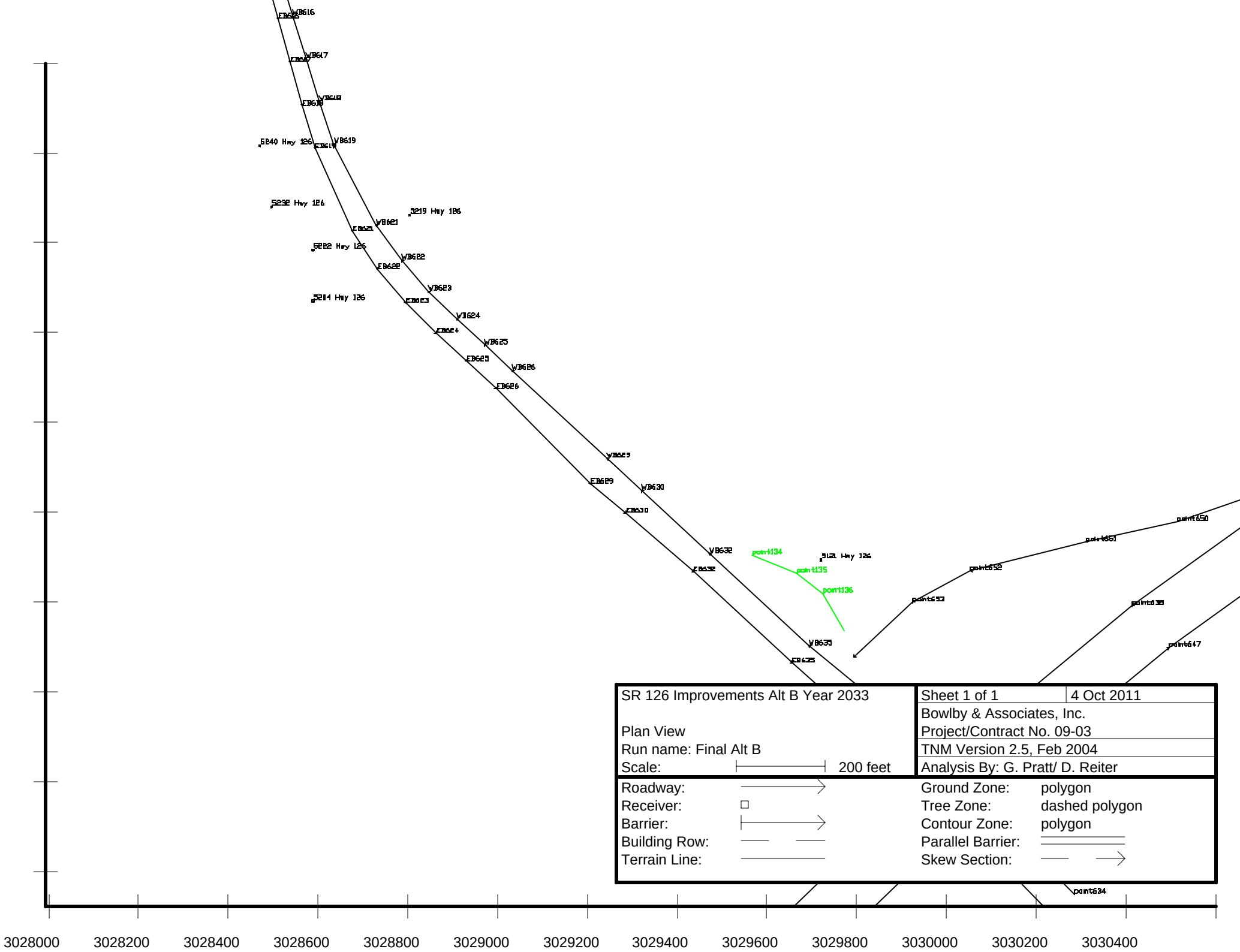


SR 126 Improvements Alt B Year 2033	Sheet 1 of 1 | 4 Oct 2011
	Bowlby & Associates, Inc.
Plan View	Project/Contract No. 09-03
Run name: Final Alt B	TNM Version 2.5, Feb 2004
Scale: 200 feet	Analysis By: G. Pratt/ D. Reiter

Roadway:		Ground Zone:	polygon
Receiver:	□	Tree Zone:	dashed polygon
Barrier:		Contour Zone:	polygon
Building Row:		Parallel Barrier:	
Terrain Line:		Skew Section:	


SR 126 Improvements Alt B Year 2033
Plan View
Run name: Final Alt B
Scale: 200 feet
Sheet 1 of 1
4 Oct 2011
Bowlby & Associates, Inc.
Project/Contract No. 09-03
TNM Version 2.5, Feb 2004
Analysis By: G. Pratt/ D. Reiter
Roadway:
Receiver:
Barrier:
Building Row:
Terrain Line:
Ground Zone: polygon
Tree Zone: dashed polygon
Contour Zone: polygon
Parallel Barrier:
Skew Section:
5240 Hwy 126
5232 Hwy 126
5219 Hwy 126
5222 Hwy 126
5214 Hwy 126
5121 Hwy 126
3028000
3028200
3028400
3028600
3028800
3029000
3029200
3029400
3029600
3029800
3030000
3030200
3030400

Appendix D
Design Year Sound Levels and Impacts

Project: SR 126 Improvements, Sullivan County
Scenario: Design Year 2033 Build Alternative A
Background Sound Level (dBA): 45

Receiver	Number of Residences	Design Hour Leq (dBA) Without Background	With Background	Impacted?	Impacted Residences	Access to SR 126?	Isolated Impact?
3209 Memorial Blvd	1	62	62	No	0		
3213 Memorial Blvd (Rec 01)	1	64	64	No	0		
3225 Memorial Blvd	1	63	63	No	0		
3233 Memorial Blvd	1	63	63	No	0		
3237 Memorial Blvd	1	64	64	No	0		
3305 Memorial Blvd	1	63	63	No	0		
3309 Memorial Blvd	1	63	63	No	0		
1628 Woodside Dr	1	56	56	No	0		
3501 Memorial Blvd	1	57	57	No	0		
3505 Memorial Blvd	1	59	59	No	0		
3513 Memorial Blvd	1	63	63	No	0		
3517 Memorial Blvd	***1***	***66***	***66***	***Yes***	***1***	***Yes***	***Yes***
3521 Memorial Blvd	1	58	58	No	0		
3505 Lynnbrook	1	59	59	No	0		
3524 Lynnbrook	1	59	59	No	0		
3600 Memorial Blvd	1	63	63	No	0		
3604 Memorial Blvd	1	63	63	No	0		
3608 Memorial Blvd	1	63	63	No	0		
3612 Memorial Blvd	1	64	64	No	0		
3613 Memorial Blvd	1	59	59	No	0		
3616 Memorial Blvd	1	65	65	No	0		
3621 Memorial Blvd	1	61	61	No	0		
3624 Memorial Blvd	1	63	63	No	0		
3632 Memorial Blvd	1	63	63	No	0		
Nursing Home	1	58	58	No	0		
3701 Memorial Blvd (Rec 3)	***1***	***66***	***66***	***Yes***	***1***	***No***	***Yes***
3714-3814 Memorial Blvd	1	63	63	No	0		
3855 Memorial Blvd	***1***	***69***	***69***	***Yes***	***1***	***Yes***	***Yes***
3829 Hawthorne	***1***	***66***	***66***	***Yes***	***1***	***Yes***	***Yes***
2037 Hawthorne	1	64	64	No	0		
2013 Hawthorne	1	56	57	No	0		
3812 Busbee	1	57	58	No	0		
3816 Busbee	1	56	56	No	0		
3829 Busbee	1	57	57	No	0		
3830 Bonita	1	61	61	No	0		
3901 Bond	1	60	61	No	0		
3903 Bond	1	58	58	No	0		
3905 Bond	1	59	59	No	0		
3909 Bond	1	58	58	No	0		
3913 Bond	1	57	57	No	0		
3915-3923 Bond	5	59	59	No	0		
3970-3974 Memorial Blvd	2	65	65	No	0		
3991 Memorial Blvd (1)	1	60	61	No	0		
3991 Memorial Blvd (2)	1	61	61	No	0		
3992-3996 Memorial Blvd (Rec 24)	***4***	***68***	***68***	***Yes***	***4***	***Yes***	***No***
4200 Skyland Rd	1	55	55	No	0		
4204 Skyland Rd	1	60	60	No	0		
4209-4213 Skyland Rd	2	49	51	No	0		
4216-4220 Skyland Rd (Rec 6)	2	61	61	No	0		
4217-4221 Skyland Rd	2	45	48	No	0		
4225-4229 Skyland Rd	2	47	49	No	0		
4228 Skyland Rd	1	59	59	No	0		
4235 Skyland Rd	1	47	49	No	0		
4239 Skyland Rd	1	50	51	No	0		

Project: SR 126 Improvements, Sullivan County
Scenario: Design Year 2033 Build Alternative A
Background Sound Level (dBA): 45

Receiver	Number of Residences	Design Hour Leq (dBA) Without Background	With Background	Impacted?	Impacted Residences	Access to SR 126?	Isolated Impact?
2313 Amy Ave	1	51	52	No	0		
4308-4320 Trinity Ln	2	51	52	No	0		
4321 Trinity Ln (Rec 23)	1	65	65	No	0		
4311 Memorial Blvd	1	57	57	No	0		
4503 Tanglewood	1	51	52	No	0		
4507 Tanglewood	1	60	60	No	0		
4515 Tanglewood	1	56	57	No	0		
4408 Green Springs	1	50	52	No	0		
4409 Green Springs	1	51	52	No	0		
4411 Green Springs	1	49	51	No	0		
4501 Stagecoach Rd	1	49	51	No	0		
4505 Stagecoach Rd	1	52	52	No	0		
4509 Stagecoach Rd	1	53	53	No	0		
400 Briarwood	1	50	51	No	0		
4500 Old Stage (Rec 22)	1	63	63	No	0		
4501 Old Stage	1	62	62	No	0		
4505 Old Stage	1	58	59	No	0		
4507-4507.5 Old Stage	2	56	56	No	0		
4509-4513 Old Stage	2	56	56	No	0		
4517 Old Stage	1	54	54	No	0		
4525-4533 Old Stage	2	48	50	No	0		
4537-4541 Old Stage (Rec 7)	2	50	52	No	0		
4547-4553 Old Stage	2	46	48	No	0		
4575-4583 Old Stage	3	44	47	No	0		
4609 Old Stage (Rec 8)	1	49	50	No	0		
4621-4637 Old Stage	4	48	49	No	0		
4360 Harbor Cir	1	48	50	No	0		
4701 Memorial Blvd(Rec 21)	1	57	57	No	0		
4713 Memorial Blvd	1	51	52	No	0		
105-109 Hobbes St (Rec 20)	1	55	56	No	0		
108-102 Holiday Hills	3	54	55	No	0		
109 Schuler	1	56	57	No	0		
108 Schuler	1	56	57	No	0		
Cem Building	0	55	55	No	0		
6290 Chestnut Ridge (Rec 10)	1	64	64	No	0		
5000 Memorial Blvd	1	53	53	No	0		
5016 Memorial Blvd	1	62	62	No	0		
5021 Memorial Blvd	1	63	63	No	0		
5040 Memorial Blvd (1)	***1***	***68***	***68***	***Yes***	***1***	***Yes***	***Yes***
5040 Memorial Blvd (2)	1	64	64	No	0		
5053 Memorial Blvd	***1***	***66***	***66***	***Yes***	***1***	***Yes***	***Yes***
217-227 Sunbury	2	57	57	No	0		
105 Fisher	1	53	54	No	0		
108 Birdwell Heights	***1***	***66***	***66***	***Yes***	***1***	***Yes***	***No***
5105-5109 Memorial Blvd	***2***	***67***	***67***	***Yes***	***2***	***Yes***	***No***
5129 Memorial Blvd	***1***	***67***	***67***	***Yes***	***1***	***No***	***Yes***
5141 Memorial Blvd	1	65	65	No	0		
5104 Woods Way	***1***	***66***	***66***	***Yes***	***1***	***No***	***Yes***
143 Island Dr (Rec 11)	1	62	62	No	0		
5227 Memorial Blvd	1	64	64	No	0		
5006 Country Dr	1	53	54	No	0		
5315 Memorial Blvd	***1***	***66***	***66***	***Yes***	***1***	***Yes***	***Yes***
5320 Memorial Blvd	***1***	***66***	***66***	***Yes***	***1***	***Yes***	***Yes***
5352 Memorial Blvd	***1***	***69***	***69***	***Yes***	***1***	***Yes***	***Yes***

Project: SR 126 Improvements, Sullivan County
Scenario: Design Year 2033 Build Alternative A
Background Sound Level (dBA): 45

Receiver	Number of Residences	Design Hour Leq (dBA) Without Background	With Background	Impacted?	Impacted Residences	Access to SR 126?	Isolated Impact?
5340 Memorial Blvd (Rec 17)	6	63	63	No	0		
5341 Memorial Blvd	1	65	65	No	0		
5372 Memorial Blvd	***1***	***67***	***67***	***Yes***	***1***	***Yes***	***Yes***
210-226 Old Fall Creek Rd (Rec 12)	3	59	59	No	0		
5400 Memorial Blvd	1	65	65	No	0		
5402 Memorial Blvd	1	64	64	No	0		
5404 Memorial Blvd	1	64	64	No	0		
100 Santana	***1***	***66***	***66***	***Yes***	***1***	***No***	***Yes***
121 Hill	1	57	57	No	0		
100 Huron Cir	1	57	57	No	0		
5607 Memorial Blvd	1	64	64	No	0		
5617 Memorial Blvd	***1***	***68***	***68***	***Yes***	***1***	***Yes***	***Yes***
104 Natchez Ln (Rec 5)	1	62	62	No	0		
108 Natchez Ln	1	56	56	No	0		
5704-5712 Mohican Ln	3	63	63	No	0		
5808 Memorial Blvd	***1***	***68***	***68***	***Yes***	***1***	***Yes***	***Yes***
110 Har Town	1	59	59	No	0		
6008 Hwy 126	***1***	***69***	***69***	***Yes***	***1***	***Yes***	***Yes***
5983 Hwy 126	1	62	62	No	0		
5971-5963 Hwy 126	***2***	***66***	***66***	***Yes***	***2***	***Yes***	***No***
5964 Hwy 126	***1***	***70***	***70***	***Yes***	***1***	***Yes***	***Yes***
5951-5939 Hwy 126	***2***	***65***	***65***	***Yes***	***2***	***Yes***	***No***
5933 Hwy 126	1	62	62	No	0		
5900 Hwy 126	1	55	55	No	0		
5891 Hwy 126	1	65	65	No	0		
5937 Cochice Trail	***1***	***65***	***65***	***Yes***	***1***	***No***	***Yes***
5614 Hwy 126	***1***	***66***	***66***	***Yes***	***1***	***Yes***	***Yes***
5593 Hwy 126	1	59	59	No	0		
5565 Hwy 126	1	65	65	No	0		
5502 Hwy 126	1	57	57	No	0		
5485 Hwy 126	1	62	62	No	0		
5468 Hwy 126	***1***	***70***	***70***	***Yes***	***1***	***Yes***	***Yes***
5442 Hwy 126	1	61	61	No	0		
220 Gravel Top	1	62	62	No	0		
199 Gravel Top	1	57	58	No	0		
151 Gravel Top	1	60	60	No	0		
141 Gravel Top	1	61	61	No	0		
129 Gravel Top	1	64	64	No	0		
117 Gravel Top	***1***	***67***	***67***	***Yes***	***1***	***No***	***Yes***
5240 Hwy 126	***1***	***66***	***66***	***Yes***	***1***	***Yes***	***Yes***
5232 Hwy 126	1	65	65	No	0		
5222 Hwy 126	***1***	***67***	***67***	***Yes***	***1***	***Yes***	***Yes***
5204 Hwy 126	1	63	63	No	0		
5121 Hwy 126	***1***	***68***	***68***	***Yes***	***1***	***Yes***	***Yes***
				Impacted Residences	***35***		
			Impacted Residences with Direct Access to SR 126		***29***		

Project: SR 126 Improvements, Sullivan County
Scenario: Design Year 2033 Build Alternative B
Background Sound Level (dBA): 45

Receiver	Number of Residences	Design Hour Leq (dBA) Without Background	With Background	Impacted?	Impacted Residences	Access to SR 126?	Isolated Impact?
3209 Memorial Blvd	1	62	62	No	0		
3213 Memorial Blvd (Rec 01)	1	64	64	No	0		
3225 Memorial Blvd	1	63	63	No	0		
3233 Memorial Blvd	1	63	63	No	0		
3237 Memorial Blvd	1	64	64	No	0		
3305 Memorial Blvd	1	63	63	No	0		
3309 Memorial Blvd	1	63	63	No	0		
1628 Woodside Dr	1	56	56	No	0		
3501 Memorial Blvd	1	57	57	No	0		
3505 Memorial Blvd	1	59	59	No	0		
3513 Memorial Blvd	1	63	63	No	0		
3517 Memorial Blvd	***1***	***66***	***66***	***Yes***	***1***	***Yes***	***Yes***
3521 Memorial Blvd	1	58	58	No	0		
3505 Lynnbrook	1	59	59	No	0		
3524 Lynnbrook	1	59	59	No	0		
3600 Memorial Blvd	1	63	63	No	0		
3604 Memorial Blvd	1	63	63	No	0		
3608 Memorial Blvd	1	63	63	No	0		
3612 Memorial Blvd	1	64	64	No	0		
3613 Memorial Blvd	1	59	59	No	0		
3616 Memorial Blvd	1	65	65	No	0		
3621 Memorial Blvd	1	61	61	No	0		
3624 Memorial Blvd	1	63	63	No	0		
3632 Memorial Blvd	1	63	63	No	0		
Nursing Home	1	58	58	No	0		
3701 Memorial Blvd (Rec 3)	***1***	***66***	***66***	***Yes***	***1***	***No***	***Yes***
3714-3814 Memorial Blvd	1	63	63	No	0		
3855 Memorial Blvd	***1***	***68***	***68***	***Yes***	***1***	***Yes***	***Yes***
3829 Hawthorne	1	64	64	No	0		
2037 Hawthorne	1	63	63	No	0		
2013 Hawthorne	1	56	57	No	0		
3812 Busbee	1	58	58	No	0		
3816 Busbee	1	57	57	No	0		
3829 Busbee	1	57	57	No	0		
3830 Bonita	1	62	62	No	0		
3901 Bond	1	62	62	No	0		
3903 Bond	1	59	59	No	0		
3905 Bond	1	60	60	No	0		
3909 Bond	1	58	58	No	0		
3913 Bond	1	58	58	No	0		
3915-3923 Bond	5	59	59	No	0		
3970-3974 Memorial Blvd	***2***	***70***	***70***	***Yes***	***2***	***Yes***	***Yes***
3991 Memorial Blvd (1)	1	58	58	No	0		
3991 Memorial Blvd (2)	1	61	61	No	0		
3992-3996 Memorial Blvd (Rec 24)	***4***	***68***	***68***	***Yes***	***4***	***Yes***	***No***
4200 Skyland Rd	1	55	56	No	0		
4204 Skyland Rd	1	62	62	No	0		
4209-4213 Skyland Rd	2	54	54	No	0		
4217-4221 Skyland Rd	2	49	50	No	0		
4225-4229 Skyland Rd	2	52	53	No	0		
4228 Skyland Rd	1	58	59	No	0		
4235 Skyland Rd	1	48	50	No	0		
4239 Skyland Rd	1	50	52	No	0		
2313 Amy Ave	1	51	52	No	0		
4308-4320 Trinity Ln	2	51	52	No	0		

Project: SR 126 Improvements, Sullivan County
Scenario: Design Year 2033 Build Alternative B
Background Sound Level (dBA): 45

Receiver	Number of Residences	Design Hour Leq (dBA) Without Background	With Background	Impacted?	Impacted Residences	Access to SR 126?	Isolated Impact?
4321 Trinity Ln (Rec 23)	1	65	65	No	0		
4311 Memorial	1	57	57	No	0		
4503 Tanglewood	1	51	52	No	0		
4507 Tanglewood	1	60	60	No	0		
4515 Tanglewood	1	56	57	No	0		
4408 Green Springs	1	50	51	No	0		
4409 Green Springs	1	51	52	No	0		
4411 Green Springs	1	49	51	No	0		
4501 Stagecoach Rd	1	49	51	No	0		
4505 Stagecoach Rd	1	52	52	No	0		
4509 Stagecoach Rd	1	53	53	No	0		
400 Briarwood	1	50	51	No	0		
4500 Old Stage (Rec 22)	1	63	63	No	0		
4501 Old Stage	1	62	62	No	0		
4505 Old Stage	1	58	59	No	0		
4507-4507.5 Old Stage	2	56	56	No	0		
4509-4513 Old Stage	2	56	56	No	0		
4517 Old Stage	1	54	54	No	0		
4525-4533 Old Stage	2	48	50	No	0		
4537-4541 Old Stage (Rec 7)	2	50	52	No	0		
4547-4553 Old Stage	2	46	48	No	0		
4575-4583 Old Stage	3	44	47	No	0		
4609 Old Stage (Rec 8)	1	48	50	No	0		
4621-4637 Old Stage	4	48	50	No	0		
4360 Harbor Cir	1	48	50	No	0		
4701 Memorial Blvd (Rec 21)	1	57	57	No	0		
4713 Memorial Blvd	1	51	52	No	0		
105-109 Hobbes St (Rec 20)	1	54	54	No	0		
108-102 Holiday Hills	3	53	54	No	0		
109 Schuler	1	57	57	No	0		
108 Schuler	1	56	56	No	0		
Cem Building	0	55	55	No	0		
6290 Chestnut Ridge (Rec 10)	1	64	64	No	0		
5000 Memorial Blvd	1	53	54	No	0		
5016 Memorial Blvd	1	63	63	No	0		
5021 Memorial Blvd	1	63	63	No	0		
5040 Memorial Blvd (1)	***1***	***67***	***67***	***Yes***	***1***	***Yes***	***Yes***
5040 Memorial Blvd (2)	1	60	61	No	0		
5053 Memorial Blvd	***1***	***69***	***69***	***Yes***	***1***	***Yes***	***Yes***
217-227 Sunbury	2	56	56	No	0		
105 Fisher	1	54	55	No	0		
108 Birdwell Heights	***1***	***70***	***70***	***Yes***	***1***	***Yes***	***No***
5104 Woods Way	1	62	62	No	0		
143 Island Dr (Rec 11)	1	59	60	No	0		
5227 Memorial Blvd	1	65	65	No	0		
5006 Country Dr	1	54	54	No	0		
5315 Memorial Blvd	***1***	***68***	***68***	***Yes***	***1***	***Yes***	***Yes***
5320 Memorial Blvd	1	65	65	No	0		
5352 Memorial Blvd	***1***	***66***	***66***	***Yes***	***1***	***Yes***	***Yes***
5340 Memorial Blvd (Rec 17)	6	60	60	No	0		
5341 Memorial Blvd	***1***	***68***	***68***	***Yes***	***1***	***Yes***	***Yes***
5372 Memorial Blvd	***1***	***66***	***66***	***Yes***	***1***	***Yes***	***Yes***
210-226 Old Fall Creek Rd (Rec 12)	3	59	59	No	0		
5400 Memorial Blvd	1	65	65	No	0		
5402 Memorial Blvd	1	64	64	No	0		

Project: SR 126 Improvements, Sullivan County
Scenario: Design Year 2033 Build Alternative B
Background Sound Level (dBA): 45

Receiver	Number of Residences	Design Hour Leq (dBA) Without Background	With Background	Impacted?	Impacted Residences	Access to SR 126?	Isolated Impact?
5404 Memorial Blvd	1	64	64	No	0		
100 Santana	***1***	***66***	***66***	***Yes***	***1***	***No***	***Yes***
121 Hill	1	57	57	No	0		
100 Huron Cir	1	56	57	No	0		
5607 Memorial Blvd	1	64	64	No	0		
5617 Memorial Blvd	***1***	***69***	***69***	***Yes***	***1***	***Yes***	***Yes***
104 Natchez Ln (Rec 5)	1	61	61	No	0		
108 Natchez Ln	1	56	57	No	0		
5704-5712 Mohican Ln	3	60	60	No	0		
5808 Memorial Blvd	1	65	65	No	0		
110 Har Town	1	60	60	No	0		
6008 Hwy 126	***1***	***67***	***67***	***Yes***	***1***	***Yes***	***Yes***
5983 Hwy 126	1	63	63	No	0		
5971-5963 Hwy 126	***2***	***67***	***67***	***Yes***	***2***	***Yes***	***No***
5964 Hwy 126	***1***	***68***	***68***	***Yes***	***1***	***Yes***	***Yes***
5951-5939 Hwy 126	***2***	***66***	***66***	***Yes***	***2***	***Yes***	***No***
5933 Hwy 126	1	62	62	No	0		
5900 Hwy 126	1	55	55	No	0		
5891 Hwy 126	1	65	65	No	0		
5937 Cochice Trail	***1***	***65***	***65***	***Yes***	***1***	***No***	***Yes***
5614 Hwy 126	***1***	***66***	***66***	***Yes***	***1***	***Yes***	***Yes***
5593 Hwy 126	1	59	59	No	0		
5565 Hwy 126	1	65	65	No	0		
5502 Hwy 126	1	57	57	No	0		
5485 Hwy 126	1	62	62	No	0		
5442 Hwy 126	1	61	61	No	0		
220 Gravel Top	1	62	62	No	0		
199 Gravel Top	1	57	58	No	0		
151 Gravel Top	1	60	60	No	0		
141 Gravel Top	1	62	62	No	0		
129 Gravel Top	1	64	64	No	0		
117 Gravel Top	***1***	***67***	***67***	***Yes***	***1***	***No***	***Yes***
5240 Hwy 126	***1***	***66***	***66***	***Yes***	***1***	***Yes***	***Yes***
5232 Hwy 126	1	65	65	No	0		
5222 Hwy 126	***1***	***67***	***67***	***Yes***	***1***	***Yes***	***Yes***
5204 Hwy 126	1	63	63	No	0		
5121 Hwy 126	***1***	***67***	***67***	***Yes***	***1***	***Yes***	***Yes***
3820 Memorial	***3***	***68***	***68***	***Yes***	***3***	***Yes***	***No***
109 Holiday Hills	1	55	55	No	0		
4801 Memorial Blvd	***1***	***61***	***61***	***No***	***0***	***Yes***	***Yes***
Apts. on Memorial Blvd	4	65	65	No	0		
Memorial Blvd Duplex	2	64	64	No	0		
Apts. on Memorial Blvd(2)	6	65	65	No	0		
5100 Memorial Blvd	***1***	***67***	***67***	***Yes***	***1***	***Yes***	***No***
5104 Memorial Blvd	***1***	***67***	***67***	***Yes***	***1***	***Yes***	***No***
5108-5116 Memorial Blvd	***3***	***67***	***67***	***Yes***	***3***	***Yes***	***No***
5332 Memorial Blvd	***1***	***67***	***67***	***Yes***	***1***	***Yes***	***Yes***
5360-5368 Memorial Blvd	***3***	***66***	***66***	***Yes***	***3***	***Yes***	***No***
101 Santana	***1***	***68***	***68***	***Yes***	***1***	***Yes***	***Yes***
101 Cassidy	***1***	***68***	***68***	***Yes***	***1***	***No***	***Yes***
5219 Hwy 126	***1***	***68***	***68***	***Yes***	***1***	***Yes***	***Yes***
				Impacted Residences	***45***		
			Impacted Residences with Direct Access to SR 126		***40***		

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
ENVIRONMENTAL DIVISION
505 DEADERICK STREET
SUITE 900, JAMES K. POLK BUILDING
NASHVILLE, TENNESSEE 37243-0349
615-741-3655

October 17, 2008

Mr. E. Patrick McIntyre
State Historic Preservation Office
Clover Bottom Mansion
2941 Lebanon Road
Nashville, TN 37243-0442

SUBJECT: Documentation of Effect for the proposed improvements to State Route 126 (Memorial Boulevard) from East Center Street to Interstate 81 in Kingsport, Sullivan County, Tennessee
Project #: 82085-0225-14 PIN#: 105467.00

Dear Mr. McIntyre:

In 2005, TDOT staff prepared an Architectural Assessment for the above-referenced project that identified one National Register listed property, Yancey's Tavern, and one National Register eligible property, the Shipley-Jarvis House. In a letter dated, March 22, 2005, the TN-SHPO concurred with TDOT's findings. Since 2005, TDOT officials have worked closely with local citizens through the Context Sensitive Solutions process in order to find an alternative that alleviates traffic issues along State Route 126 and that fits within the context of the area.

TDOT staff has prepared an effects assessment, enclosed, which addresses impacts to the two historic resources pursuant to regulations in 36 CFR 800. It is the opinion of TDOT, that the proposed project will have an adverse effect to the National Register listed Yancey's Tavern.

We look forward to your comments. Thank you for your help in this matter.

Sincerely,

Martha Carver

Martha Carver
Historic Preservation Manager

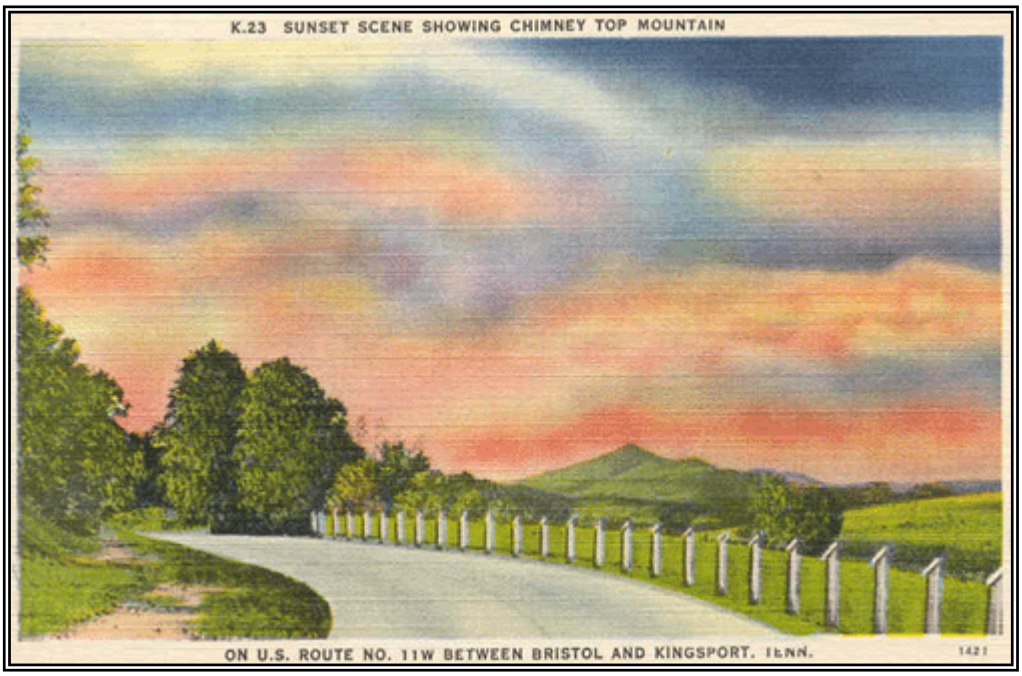
Enclosure
cc: Mr. Mwafaq Mohammed

TENNESSEE DEPARTMENT OF TRANSPORTATION

DOCUMENTATION OF EFFECT REPORT
PURSUANT TO 36 CFR 800

FOR
PROPOSED IMPROVEMENTS TO STATE ROUTE 126 (MEMORIAL BOULEVARD) FROM EAST CENTER STREET TO INTERSTATE 81

SULLIVAN COUNTY



September 2008

Prepared by
Tammy Sellers
Tennessee Department of Transportation
Environmental Division
Suite 900 James K. Polk Building
Nashville, TN 37243-0334
Phone: (615) 741-3655

DOCUMENTATION OF EFFECT REPORT
PURSUANT TO 36 CFR 800

PROPOSED IMPROVEMENTS TO
STATE ROUTE 126 (MEMORIAL BLVD.)
FROM EAST CENTER STREET TO I-81

SULLIVAN COUNTY

MANAGEMENT SUMMARY

The Tennessee Department of Transportation (TDOT) with funding made available through the Federal Highway Administration is proposing to improve State Route 126 (Memorial Boulevard) from East Center Street to Interstate 81 in Kingsport.

In 2004, TDOT historians surveyed the Area of Potential Effect and inventoried 96 properties. In a 2005 report, it was the opinion of TDOT that one property, Yancey's Tavern, is listed in the National Register of Historic Places and one additional property, the Shipley-Jarvis House, is eligible for listing in the National Register of Historic Places. In a letter dated, March 22, 2005, the TN-SHPO concurred with these findings. A copy of the TN-SHPO letter is included in Appendix F.

The proposed project is a pilot project for TDOT to illustrate the Context Sensitive Solutions (CSS) process. In 2004, TDOT assembled a multi-disciplinary team of stakeholders that included local government officials, residents living along State Route 126, and members of the motoring public that use State Route 126 regularly. As a result of this process, a consensus of the stakeholders helped determine the type of roadway being proposed.

Pursuant to 36 CFR 800.5, TDOT assessed effects the proposed improvements would have on the two historic properties. In the opinion of TDOT, the proposed project would have an adverse effect to the National Register listed Yancey's Tavern and would have an effect that is not adverse to the National Register eligible Shipley-Jarvis House.

Additionally, it is the opinion of TDOT that there will be no Section 4(f) use of a historic property.

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A. Fact Sheet on Section 106
B. National Register Criteria, 36 CFR 60.4
C. Criteria of Effect, 36 CFR 800.5
D. Fact Sheet on Section 4(f)
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F. TN-SHPO Letter

DOCUMENTATION OF EFFECT REPORT
PURSUANT TO 36 CFR 800

PROPOSED IMPROVEMENTS TO
STATE ROUTE 126 (MEMORIAL BOULEVARD)
FROM EAST CENTER STREET TO I-81

SULLIVAN COUNTY

STATEMENT OF DETERMINATION

The Tennessee Department of Transportation (TDOT) with funding made available through the Federal Highway Administration (FHWA) is proposing to improve State Route 126 (Memorial Boulevard) from East Center Street to Interstate 81 in Kingsport.

Federal laws require TDOT and FHWA to comply with Section 106 of the National Historic Preservation Act of 1966, as amended. Appendix A contains a fact sheet about Section 106. Regulations detailing the implementation of this act are codified at 36 CFR 800. This legislation requires TDOT and FHWA to identify any properties (either above-ground buildings, structures, objects, or historic sites or below ground archaeological sites) of historic significance. For the purposes of this legislation, historic significance is defined as those properties which are included in the National Register of Historic Places or which are eligible for inclusion in the National Register. Appendix B contains a copy of the National Register criteria, which are codified at 36 CFR 60.4. Once historic resources are identified, legislation requires these agencies to determine if the proposed project would affect the historic resource. Appendix C contains a copy of the Criteria of Effect as defined in 36 CFR 800.5. If the proposed project would have an adverse effect to a historic property, the legislation requires FHWA to provide the Advisory Council on Historic Preservation (an independent federal agency) an opportunity to comment on the effect.

The U.S. Department of Transportation Act of 1966, as amended, also requires FHWA to assess the applicability of Section 4(f). This law prohibits the Secretary of Transportation from approving any project which requires the "use" of a historic property unless there is no prudent and feasible alternative to that use and unless the project includes all possible planning to minimize harm to the historic resource. Appendix D contains a fact sheet about Section 4(f).

Pursuant to 36 CFR 800.4 which requires TDOT and FHWA to identify historic resources near its proposed projects, in 2004, staff from TDOT surveyed the area of potential environmental impact for the proposed project in an effort to identify any National Register included or eligible properties. TDOT historians identified one property listed in the National Register of Historic Places: Yancey's Tavern. In

addition, TDOT historians identified one National Register eligible property: the Shipley-Jarvis House.

Pursuant to 36 CFR 800.5, TDOT assessed effects the proposed improvements would have on the two historic properties. In the opinion of TDOT, the proposed project would have an adverse effect to the National Register listed Yancey's Tavern and would have an effect that is not adverse to the National Register eligible Shipley-Jarvis House.

This document has been prepared in consultation with the TN-SHPO and will be circulated to the TN-SHPO and local historians.

Figure 1: Project Location Map

State Route 126 from East Center Street to Interstate 81 in Kingsport

Sullivan County

Quad Maps: Kingsport 188 SE and Indian Springs 197 SW



PROJECT DESCRIPTION

The Tennessee Department of Transportation, with funding from the Federal Highway Administration, is proposing to improve State Route 126 (Memorial Boulevard) from East Center Street to Interstate 81 in Kingsport.

The CSS team met during a 21-month period and focused on a variety of design features/issues that could be recommended for the proposed improvements. In June of 2005, the Citizens Resource Team (CRT) recommended the following roadway cross-sections to TDOT Commissioner Nicely.

Consensus design recommendations include:

- Improve these sections to a four-lane median divided facility with curb, gutter and sidewalks
    - Section 1 West—East Center Street to Orebank Road
    - Section 1 East—Orebank Road to West of Hawthorne Street
    - Section 3 West—Harbor Chapel Road to east of Old Stage Road
- Improve this section to four travel lanes and a center turn lane with curb and gutter and sidewalks
    - Section 2—West of Hawthorne Street to Harbor Chapel Road
- Provide an improved two-lane roadway with paved shoulders, wide centerline, and rumble strips
    - Section 4 East—Harrtown Road to Cochise Trail

Majority design recommendations with minority objection statements include:

- Improve this section to a four-lane median divided facility with shoulders
    - Section 3 East—East of Old Stage Road to Cooks Valley Road
- Improve this section to provide two travel lanes and a center turn lane with curb, gutter and sidewalks
    - Section 4 West—Cooks Valley Road to Harrtown Road
- Provide an upgraded two-lane roadway with pave shoulders, wide centerline, and rumble strips
    - Section 5—Cochise Trail to Interstate 81

HWY 126 PROJECT LOCATION MAP

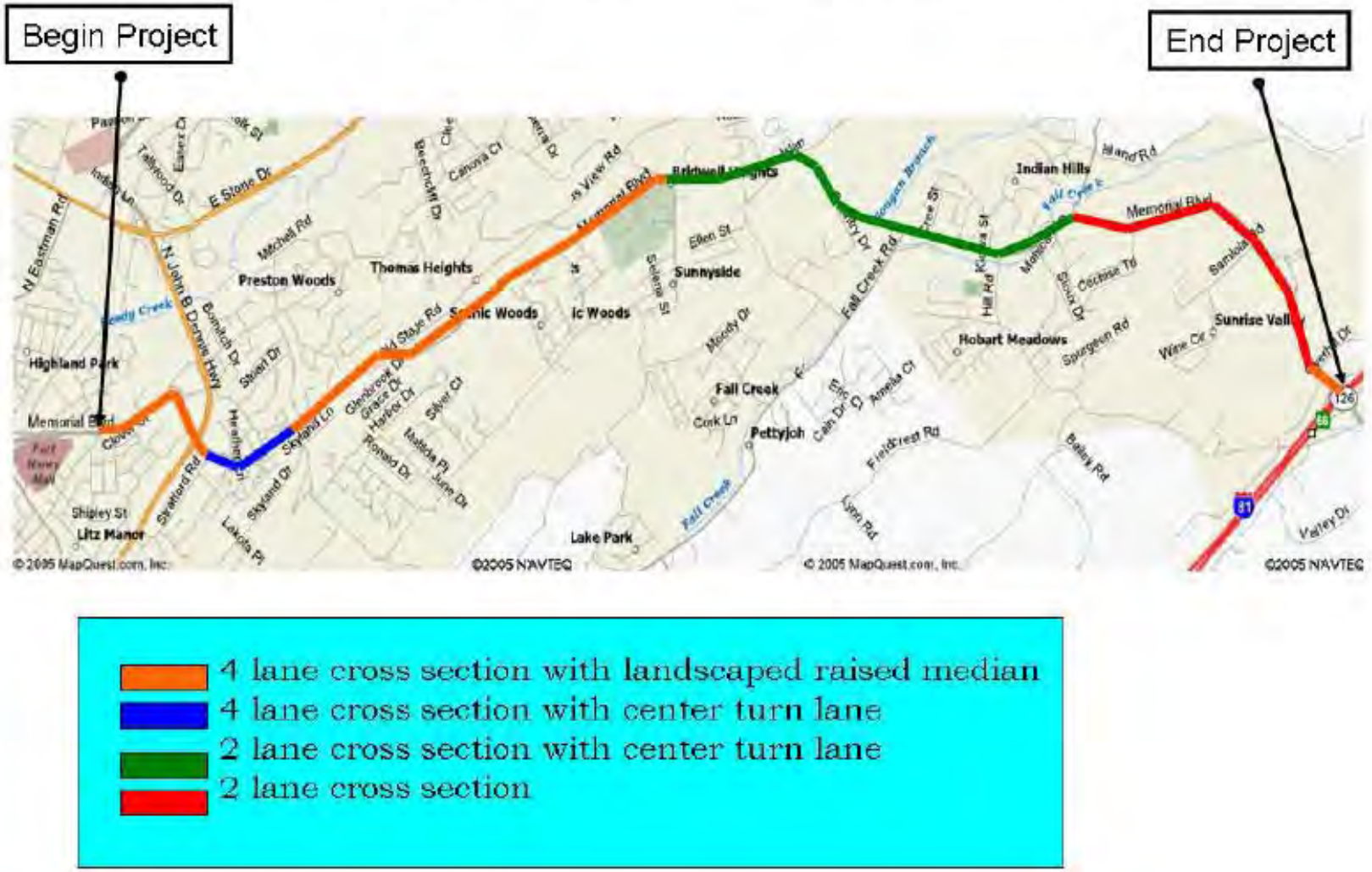


Figure 2: *Project Location Map showing the cross sections recommended by the CRT and accepted by TDOT*

PUBLIC PARTICIPATION

On November 19, 2003, TDOT mailed letters to the Sullivan County Mayor, Richard Venable and the Mayor of Kingsport. Jeanette Blazier, asking them to be participants in the historic review process as consulting parties. On December 10, 2003, Mayor Richard Venable responded and asked to be a consulting party. Mr. Venable is no longer the Sullivan County Mayor; however a copy of the report will be sent to the current mayor. Appendix F contains copies of this correspondence.

On November 19, 2003, TDOT mailed letters to nine groups or tribes representing Native American interests and asked them if they wished to participate in the historic review process as consulting parties (list below). To date, TDOT has not received any responses related to architectural resources. Appendix F contains a copy of the letter.

Mr. James Bird-THPO
Eastern Band of Cherokee Indians

Dr. Richard Allen
Research and Policy Analyst

Ms. Rena Duncan
Cultural Resources Director
Chickasaw Nation

Mr. Gregory E. Pyle
Choctaw Nation of Oklahoma

Mr. Tim Thompson;
Cultural Research Specialist
Muscogee (Creek) Nation

Mr. Emman Spain
Historic Preservation Specialist
Seminole Nation of Oklahoma

Mr. Archie Mouse, Chief
United Keetoowah Band of Cherokee

Mr. Charles D. Enyart
Eastern Shawnee Tribe Oklahoma

Ms. Carrie Wilson
Quapaw Tribe of Oklahoma

On March 16, 2005, TDOT mailed a copy of the Architectural Assessment to each of the owners of surveyed properties and local groups with historic interests. Listed below are the owners of properties that are either listed in or eligible for listing in the National Register. TDOT will mail a copy of the Documentation of Effect Report to the two property owners whose property is either listed in or eligible for listing in the National Register.

Jack and Shirley Jarvis
NRE Shipley-Jarvis House
3309 Memorial Blvd.
Kingsport, TN 37664

Rann Vaulx
NRL Yancey's Tavern
405 Wine Circle
Blountville, TN 37617

In the fall of 1986, the Environmental Planning Office of the Tennessee Department of Transportation prepared a list by counties of historic groups and other such

organizations which might be interested in proposed projects. This list was compiled using the following sources:

- the State Historic Preservation Office's list of current county historians,
- the State Historic Preservation Office's list of Historic Sites and Museums,
- the State Preservation Office's list of Historical Societies,
- the National Trust for Historic Preservation's list of member organizations in Tennessee, the American Association for State and Local History *Directory of Historical Societies and Agencies in the United States and Canada* (Twelfth Edition, 1982),
- interested State Review Board members, and
- a questionnaire mailed to each of Tennessee's ninety-five County Executives.

This list is regularly updated and refined. Organizations on this list will receive a copy of the Documentation of Effect Report.

Sam Stuffle
Sullivan County Historical Society
117 Stuffle Place
Kingsport, TN 37660

Ken Weems
CLG/Historic Commission
City of Kingsport
225 W. Center Street
Kingsport, TN 37660-4237

Dr. Tom Maher
Tennessee Valley Authority
Cultural Resources
400 West Summit Hill Drive
Knoxville, TN 37902

Dr. Dale Royalty
East Tennessee State University
Department of History
Box 70672
Johnson City, TN 37614-0672

Mr. Dennis Phillips
Mayor of Kingsport
225 Westt Center Street
Kingsport, TN 37660

Claudia Moody
Northeast Heritage Tourism Area
P. O. Box 375
Jonesborough, TN 37659

Steve M. Godsey
Sullivan County Mayor
3411 Highway 126, Suite 206
Blountville, TN 37617

Deborah Montanti
The Heritage Alliance of Northeast TN
& Southeast Virginia
212 East Sabin Drive
Jonesborough, TN 37659

Sheila Hunt
Sullivan County Historian
Dept of Archives & History
3425 Highway 126, Suite 100
Blountville, TN 37617

Environment and Land Use

The proposed project is located in Sullivan County in northeastern Tennessee. State Route 126 (Memorial Boulevard) is an east-west corridor that runs from Kingsport to Bristol in Sullivan County. The proposed 8.8 mile project runs from the city of Kingsport in a primarily urban residential section of the city to Interstate 81 in rural Sullivan County.

Sullivan County is located in the Unaka Mountain physiographic region of eastern Tennessee. With the area characterized by the rugged Unaka Mountains, early settlers were isolated from many of the changes sweeping across Tennessee. Natural resources in this physiographic region consist mainly of rock formations of granite, gneiss, slate, sandstone, and quartzite. In addition to geologic formations, the area is known for its natural beauty and plant life.[1]

The proposed project coincides with the goals of the Kingsport Metropolitan Planning Organization. Kingsport officials requested that TDOT perform studies to widen the road beginning in the early 1990s. The proposed project is located in a rapidly expanding section of Kingsport with each end of the project area characterized by urban use. The proposed project is likely to stimulate growth along State Route 126 (Memorial Boulevard), aiding the expansion of commercial industries and suburban residential development along the rural stretches of the roadway.

SURVEY METHODOLOGY

Pursuant to regulations set forth in 36 CFR 800 guidelines, TDOT historians field reviewed this project in April 2004. In October 2004, TDOT historians field reviewed this project with the National Register Coordinator of the TN-SHPO.

The purpose of this survey was to determine if any properties in the project impact area were either eligible for inclusion or are included in the National Register of Historic Places. A project's area of potential effects (APE) is defined in 36 CFR 800.16 (d) as

> the geographic area or areas within which an undertaking may directly or indirectly cause changes in the character or use of historic properties, if any such properties exist. The area of potential effects is influenced by the scale and nature of an undertaking and may be different for different kinds of effects caused by the undertaking.

[1] Stanley J. Folmsbee, Robert E. Corlew, and Enoch L. Mitchell. *Tennessee: A Short History* (Knoxville: University of Tennessee Press, 1969), 6 and 7.

The proposed project is along State Route 126 from east Center Street in Kingsport to Interstate 81 in Sullivan County. The specific project location and description will be determined through the Context Sensitive Solutions (CSS) process where local government officials, residents, and other interested parties work with representatives from TDOT. Since TDOT historians are working in the early planning stages while the CSS process is taking place, TDOT historians surveyed a wide corridor that would most likely include any area potentially impacted by the final placement of the road. However, if the CSS process concludes with a road corridor that shifts the alignment significantly from the existing location, TDOT historians will review the proposed project location to ensure the APE included all historic properties that might be impacted by the project.

The project area is a mixed use area of commercial and residential buildings. The western end of the project is located within the city limits of Kingsport and has structures typical of twentieth-century urban areas. Suburban growth characterizes the project area near the city of Kingsport and is reflected in the types of buildings found outside urban areas. The eastern end of the project remains mainly rural with structures that reflect Sullivan County's rural agricultural past.

The area of potential effect for this project includes the following:

1. A corridor approximately 1,500 feet from the proposed centerline of the proposed alternatives. Limitations to this corridor would be topographic features such as a hills or ridges that are between the proposed project and other resources in the 3,000-foot wide study corridor;

2. Areas within the nearby viewshed of the proposed project;

3. Areas within the potential noise impact area (up to 500 feet from the proposed improvements); and

TDOT checked the survey records of the Tennessee State Historic Preservation Office (TN-SHPO) to determine if previous surveys had identified any historic properties in the area. A partial survey of Sullivan County has been performed by the Tennessee Historic Commission. Survey records indicated that one property in the general project area was listed in the National Register of Historic Places, Yancey's Tavern. The remainder of the project area had not been surveyed by the Tennessee Historical Commission. TDOT historians surveyed 96 properties in the general project area.

Two properties that are either eligible or listed in the National Register will be addressed in this Effects Assessment pursuant to 36 CFR 800.5. Yancey's Tavern was listed in the National Register in 1972 and the Shipley-Jarvis House was

determined National Register eligible during the field survey for the proposed State Route 126 improvements.

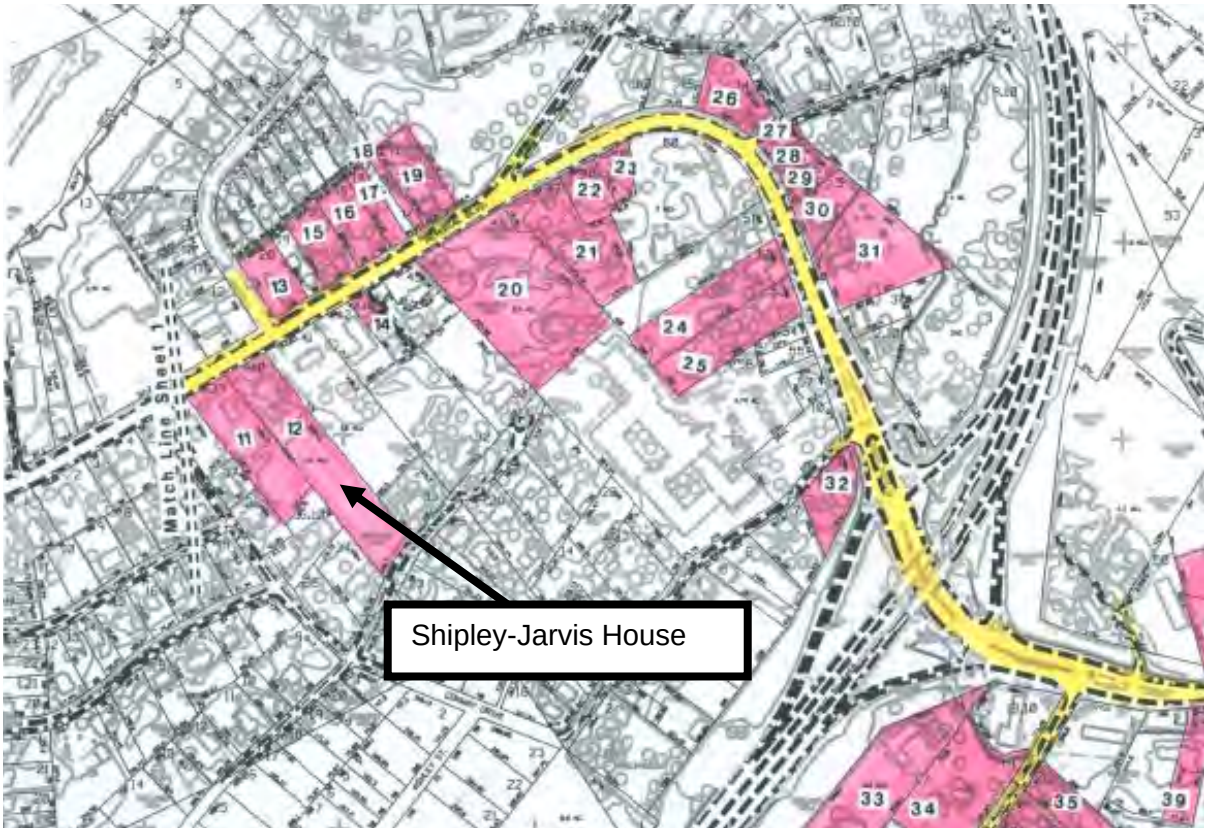
TDOT historians applied the Criteria of Effect as found in 36 CFR 800.5 (in compliance with Section 106 of the National Historic Preservation Act of 1966) to assess the impacts of the proposed improvements on the two National Register listed or eligible properties. It is the opinion of TDOT that the proposed improvements to State Route 126 would be an adverse visual impact to the National Register listed Yancey's Tavern. Additionally, it is TDOT's opinion that the proposed improvements would not adversely impact the National Register eligible Shipley-Jarvis House.

TDOT historians also evaluated the applicability of Section 4(f) pursuant to Section 4(f) requirements of the U.S. Department of Transportation Act of 1966. It is the opinion of TDOT that there will be no Section 4(f) involvement with a historic property.

Inventoried Properties

In 2005, TDOT historians submitted an architectural assessment to the TN-SHPO that identified one National Register listed property and one National Register eligible property in the area of potential effect for the proposed improvements to State Route 126. In a letter dated March 22, 2005, the TN-SHPO agreed with TDOT's findings for this project.

Both the National Register listed and National Register eligible properties are discussed in the following pages. The historical and architectural information was taken from the 2005 report and the assessment of effects is based on preliminary right-of-way plans provided to TDOT historians by a design consultant working with TDOT planners. A copy of the complete 2005 Architectural Assessment is on file with TDOT and the TN-SHPO. In addition, as discussed on page 5, TDOT mailed a copy of the Architectural Assessment to property owners and local historic groups in 2005.



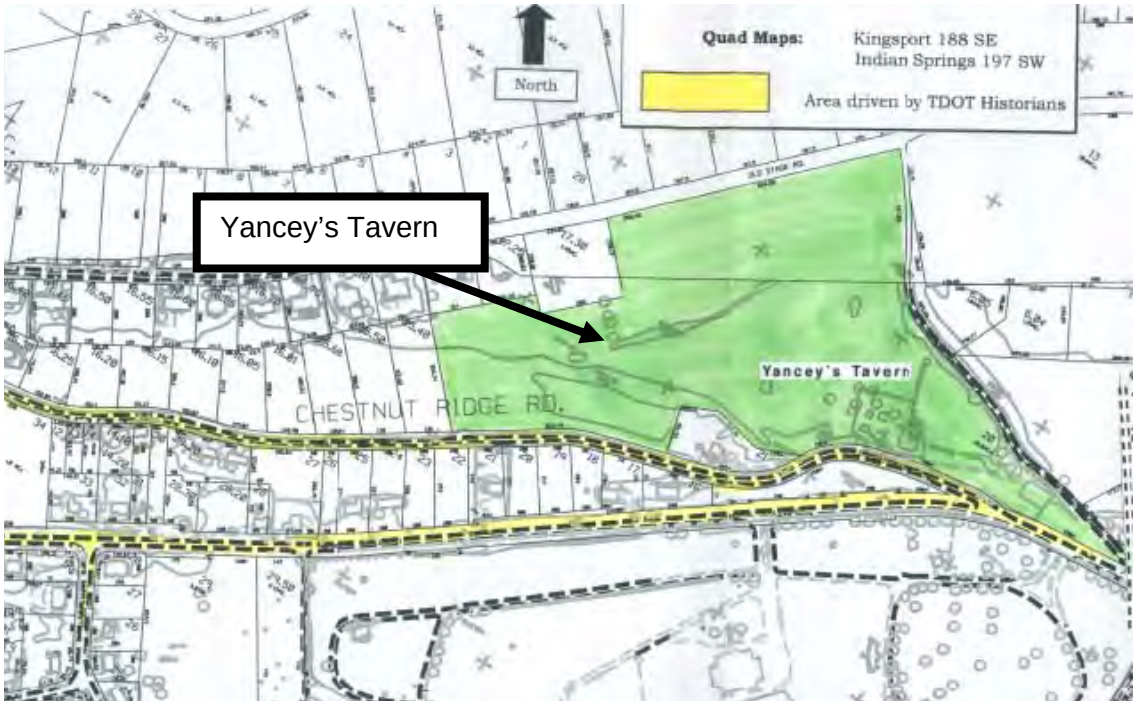


Figure 3: *Map of Inventoried Properties Discussed in the Effects Assessment*

Properties Listed in the National Register of Historic Places

Yancey's Tavern is located on the northern side of State Route 126 at the intersection of State Route 126 and Old Stage Road. In September 2004, Yancey's Tavern was sold at auction. [2]

Yancey's Tavern was listed in the National Register of Historic Places in 1972 under Criterion A for its significance in the early settlement of Sullivan County. The National Register nomination stated:

> Yancey's Tavern, built by 1782, was at one time, and remains so beneath its present covering, a double log house with a dogtrot. Handfired brick replaced the original stone chimneys and part of the stone foundation, probably sometime in the nineteenth century. More recently, brick was used to completely enclose the cellar area, although the framing of the door and window openings leading into the cellar are much earlier. Both front and back porches are later. The one-story back wing is not original to the house, although the fireplace with its simple mantel and crane suggests an early date. The placement of the back chimney also suggests the possibility that this area was once a small distance from the main structure and served as a kitchen. Window and door openings in the structure are not entirely original, but their location would pre-date the twentieth century.
>
> The interior of Yancey's Tavern is simple, with three plain but well-executed mantels on the first floor. Two second-story rooms are reached by separate stairways. On the upper floor, construction of the dogtrot is visible because this section of the house has not been finished for use.
>
> Miscellaneous frame outbuildings of varying dates surround the dwelling house. Most of the structures, including a barn, wash house, spring house, chicken house, and corncrib, date from the late nineteenth or early twentieth centuries. The frame granary with its shingle roof and stone foundation is considerably earlier.[3]

The nomination further stated:

> Yancey's Tavern was an important stop along the Island Road, the major artery in upper East Tennessee. As such, it figured prominently in the development of the area, attracting as its visitors such men as John Sevier

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[2] Clifford Jeffery, "Historic Yancey's Tavern Sold at Auction." *Kingsport Times-News*, 12 September 2004.

[3] Ellen Beasley, "Yancey's Tavern," *National Register of Historic Places Nomination*, 10 November 1972, On file with the Tennessee Historical Commission, Nashville, Tennessee.

and William Blount, and serving as headquarters for local business such as meetings of the Sullivan County court.

The Island Road predates Yancey's Tavern. Completed in September 1761, it was the first organized road to be built not only in Tennessee but also to the southwest, connecting Chilhowie, Virginia, to the Long Island of the Holston River. Although built for military purposes, it served as a route for settlers. Part of the Island Road later became known as the Great Stage Road.

Along the road in the Tennessee section were three forts, including Eaton's Fort. This fort was located on property which, by the early 1770s, was part of Amos Eaton's 'corn rights' lands. In 1779, Eaton sold a portion of his land near the fort to James Hollis, who in turn, sold 900 acres to John Yancey Sr., in 1782. It is not known if Yancey's purchase included a dwelling or if Yancey built the structure; however, within a short period, the tavern was in operation. Yancey's heirs maintained the property until the last half of the nineteenth century, when it changed ownership several times prior to being purchased in 1889 by John R. Spahr, whose descendents still own the place today.[4]



Figure 4: *Front elevation of the National Register listed Yancey's Tavern located on the Old Stage Road near the intersection with State Route 126. This photograph was taken in 2003. In September 2004, the area surrounding the historic property was broken into 16 tracts of land and sold at auction.*

[4] Ibid.



Figure 5: *Side elevation showing the exterior brick chimney that, according to the National Register nomination, replaced an earlier stone chimney.*

Figure 6: *Side elevation showing the Other brick chimney*





Figure 7: *Outbuildings associated with Yancey's Tavern*

Figure 8: *Barn near Yancey's Tavern adjacent to State Route 126*



National Register Boundary for Yancey's Tavern

In the early 1970s, the National Register program rarely required defined boundaries for historic properties. The National Register nomination for Yancey's Tavern was completed in 1972. The boundaries are defined as five acres. The following map shows the approximate 5 acre-National Register boundary recommended by the TN-SHPO.

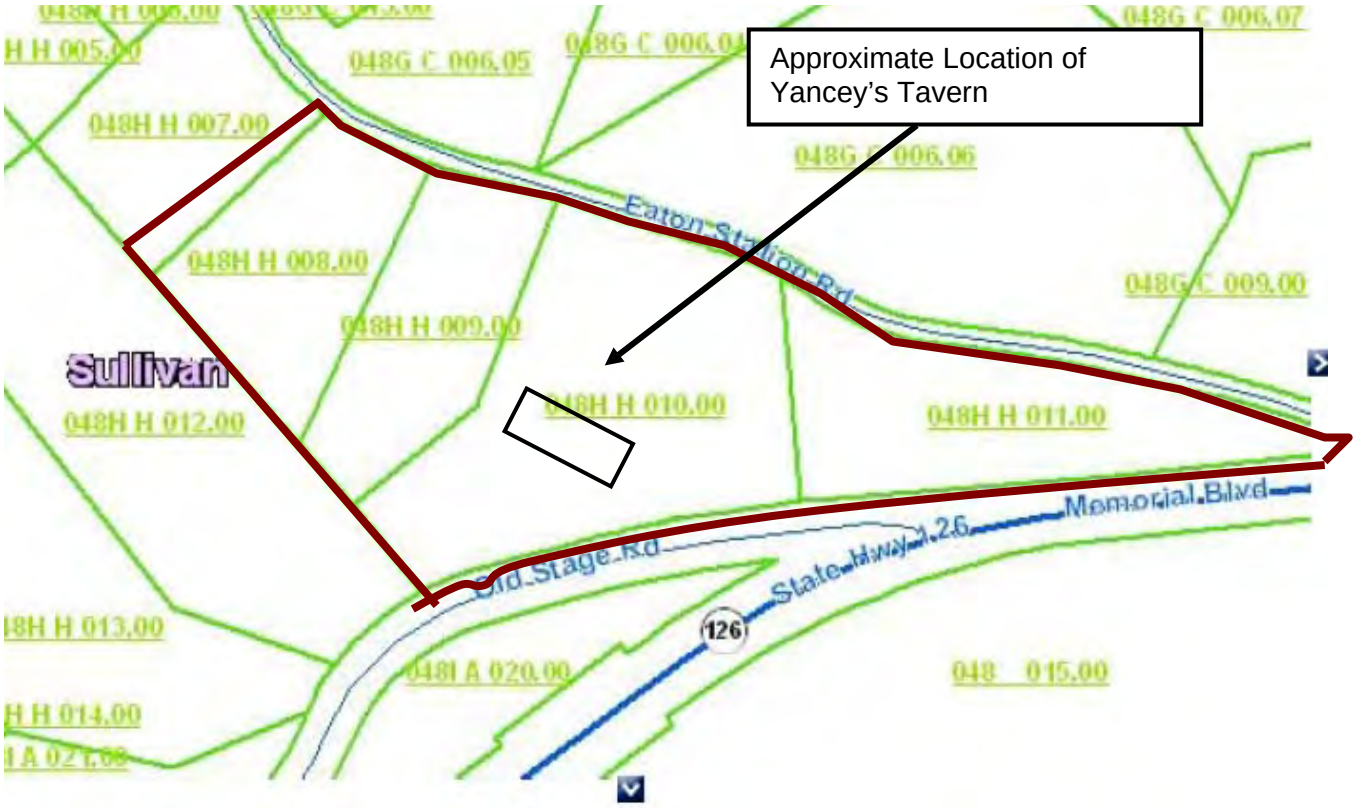

Figure 9: *Approximate 5 acre National Register Boundary for Yancey's Tavern is outlined in red*

Effects to Yancey's Tavern

TDOT is proposing to improve State Route 126 (Memorial Boulevard) from East Center Street to Interstate 81. According to preliminary plans, there will be a variety of cross-sections throughout the 8.8 mile project. However, the cross-section adjacent to the historic Yancey's Tavern will be a four-lane roadway with a median, curb, gutter, and sidewalks.

Figures 10 and 11 show the preliminary right-of-way plans adjacent to Yancey's Tavern.

Documentation of Effect

Pursuant to 36 CFR 800.5, TDOT applied the Criteria of Effect as found in 36 CFR 800.9 to the proposed roadway improvement project. It is the opinion of TDOT that the proposed project will have an effect that is adverse to Yancey's Tavern.

In the opinion of TDOT, there will not be Section 4(f) involvement with the historic property.

Section 106:

36CFR 800.5 (a) Apply Criteria of Adverse Effect

In consultation with the SHPO/THPO and any Indian tribe or Native Hawaiian organization that attaches religious and cultural significance to identified historic properties, the Agency Official shall apply the criteria of adverse effect to historic properties within the area of potential effects. The Agency Official shall consider any views concerning such effects, which have been provided by consulting parties and the public.

(a) (1) Criteria of Adverse Effect

An adverse effect is found when an undertaking may alter, directly or indirectly, any of the characteristics of a historic property that qualify the property for inclusion in the National Register in a manner that would diminish the integrity of the property's location, design, setting, materials, workmanship, feeling, or association. Consideration shall be given to all qualifying characteristics of a historic property, including those that may have been identified subsequent to the original evaluation of the property's eligibility for the National Register. Adverse effects may include reasonably foreseeable effects caused by the undertaking that may occur later in time, be farther removed in distance or be cumulative.

(b) (2) Examples of Adverse Effects

An undertaking is considered to have an Adverse Effect when the effect on a historic property may diminish the integrity of the property's location, design, setting, materials, workmanship, feeling, or association. Adverse effects on historic properties include, but are not limited to:

(i). Physical destruction of or damage to all or part of the property;

The proposed project would widen the existing State Route 126 to include four travel lanes with a median, curb, gutter, and sidewalks. According to preliminary plans, the right-of-way will not go beyond the current alignment for Chestnut Ridge Road that runs adjacent to Yancey's Tavern. (Figures 10 & 11 show the preliminary

right-of-way plans.) No land will be taken from the approximate five-acre National Register Boundary. Therefore in the opinion of TDOT, the proposed project would not cause physical destruction or damage to all or part of the historic property.

(ii) Removal of the property from its historic location

The proposed project would not result in the removal of the property from its historic location.

(iii) Change of the character of the property's use or physical features within the property's setting that contribute to its historic significance;

The current alignment of State Route 126 is located to the south of Yancey's Tavern and is separated from the main roadway by land and Chestnut Ridge Road, a two-lane road. The proposed project includes a four-lane, median divided roadway with curb-and-gutter and sidewalks. In order to accommodate the four-lane roadway, the alignment will require right-of-way to be taken from the north side of the current alignment of State Route 126 up to the northern edge of exiting Chestnut Ridge Road. Additional right-of-way can not be taken from the southern side of the existing State Route 126 because of the terrain that includes a sizable drop-off on the southern side. The widening of the roadway on essentially existing alignment will put the historic Yancey's Tavern adjacent to State Route 126. Part of Yancey's Tavern's history is its close association with the main east-west thoroughfare in the area. Although the proposed State Route 126 is four-lane median divided roadway, its location adjacent to Yancey's Tavern is a continuation of the property's historic past that so closely linked its use to the road itself. Therefore in the opinion of TDOT, the proposed project would not change the character of the property's use that contributes to its historic significance.

(iv) Introduction of visual, atmospheric, or audible elements that diminish the integrity of the property's significant historic features;

The current alignment of State Route 126 is located to the south of Yancey's Tavern and is separated from the main roadway by land and Chestnut Ridge Road, a two-lane road. The proposed project includes a four-lane, median divided roadway with curb-and-gutter and sidewalks. In order to accommodate the four-lane roadway, the alignment will require right-of-way to be taken from the north side of the current alignment of State Route 126 up to the northern edge of exiting Chestnut Ridge Road. Additional right-of-way can not be taken from the southern side of the existing State Route 126 because of the terrain that includes a sizable drop-off on the southern side. The widening of the roadway on essentially existing alignment will put the historic Yancey's Tavern adjacent to State Route 126. The proposed roadway, even with a median dividing the four traffic lanes, is essentially an urban roadway with a landscaped median, curb-and-gutter, and sidewalks. Although

Yancey's Tavern has been historically linked to the roadway, the proposed new State Route 126 will introduce a roadway that is out-of-scale with the historic setting. Therefore in the opinion of TDOT, the proposed roadway will introduce an adverse visual impact to the historic property.

(v) Neglect of a property which causes its deterioration, except where such neglect or deterioration are recognized qualities or a property of religious and cultural significance to an Indian tribe or Native Hawaiian organization; and

The property would not come under the jurisdiction of TDOT/FHWA during the course of the project and thus this does not apply.

Therefore, in the opinion of TDOT the proposed improvements will have an adverse effect to the National Register listed Yancey's Tavern.

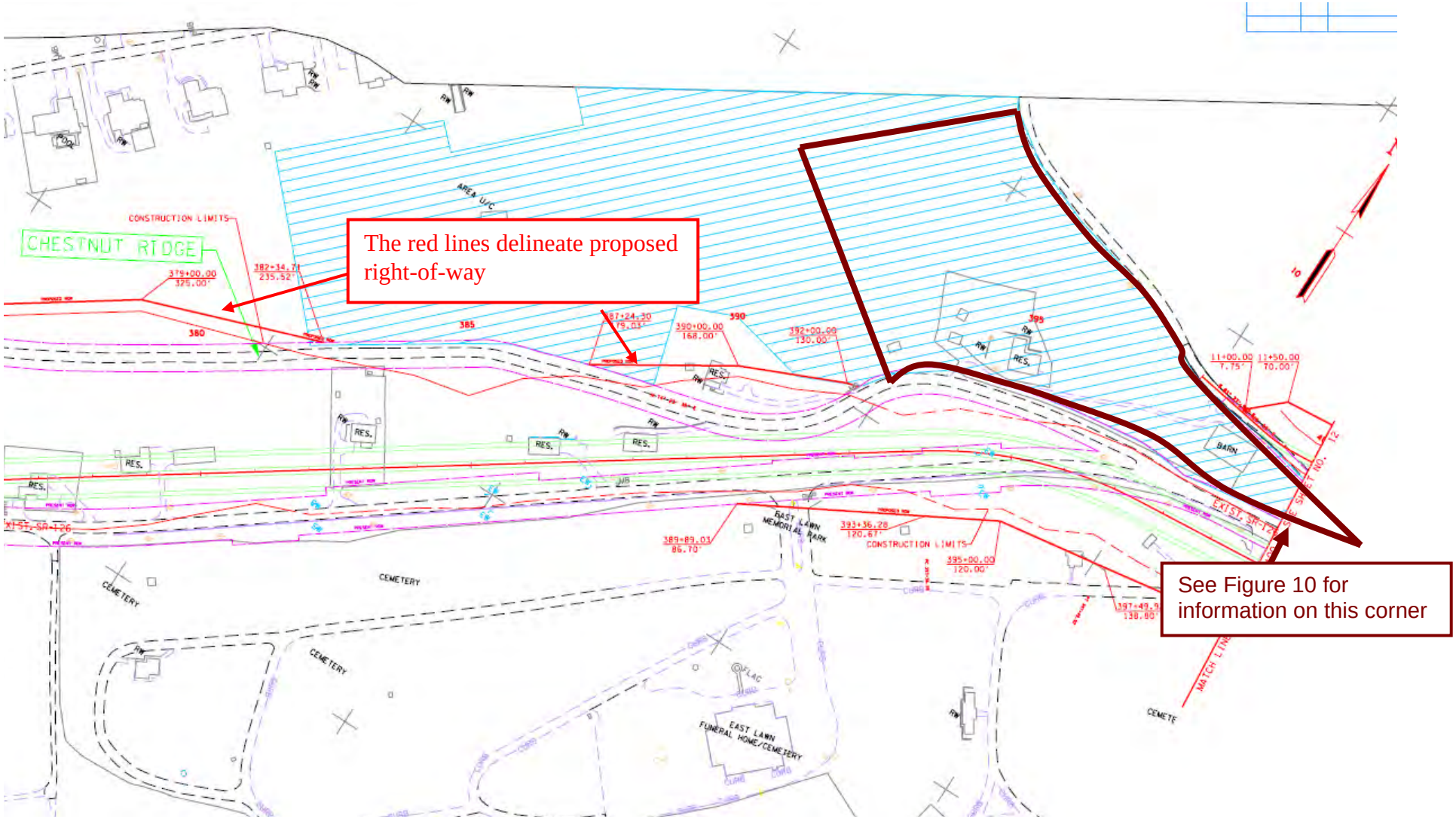

Figure 10: *Preliminary plans showing the approximate 5 acre National Register boundary for Yancey's Tavern*

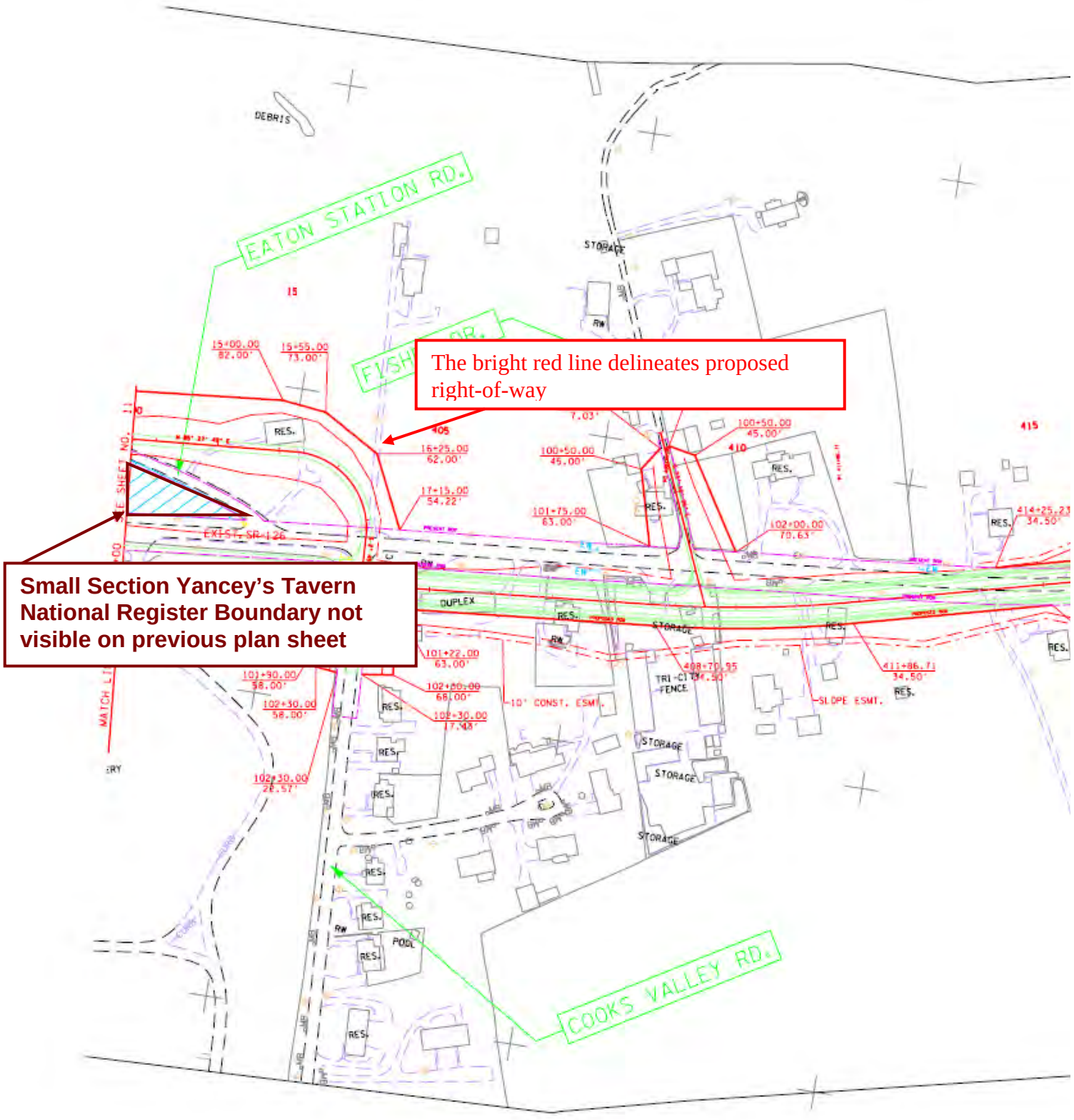

Figure 11: *Preliminary Plans showing the proposed alignment at Yancey's Tavern*

Applicability of Section 4(f)

Codified at 49 CFR 303, "Section 4(f)" refers to a section of the U.S. Department of Transportation Act (1966, as amended) that gives special consideration to the use of park and recreational lands, wildlife and waterfowl refuges, and historic sites by federally assisted transportation projects. To be considered "historic," a property must be either listed in the National Register of Historic Places or is determined eligible for such listing by the Keeper of the Register of the State Historic Preservation Officer, Section 4(f) applies only to those projects using federal funds from the U.S. Department of Transportation.

Federal laws state that the Secretary of the Department of Transportation may approve the use of land from a historic site only if:

1. there is no prudent or feasible alternative to using that land, and

2. the program or project includes all possible planning to minimize harm to the historic site resulting from the use (see Appendix D).

The Federal Highway Administration (FHWA) determines if the requirements of the Section 4(f) statute are met. The FHWA will approve the use of the Section 4(f) property only if the requirements are satisfied.

In the opinion of TDOT, there will not be a Section 4(f) use of a historic property.

National Register Eligible Property

Property # SL-12	Shipley-Jarvis House
Location/Address:	3309 Memorial Boulevard
Owner:	Jack and Shirley Jarvis

Located on the southern side of State Route 126 in a residential and commercial section of Kingsport, the Shipley-Jarvis House exemplifies the adaptation of nineteenth century dwellings to conform to twentieth century architectural tastes. The Shipley-Jarvis House is in excellent condition and is a good example of Colonial Revival architecture. On October 13, 2004, TDOT historians and the TN-SHPO field reviewed the proposed project and met with the property owners to see the interior of the house.

The Shipley-Jarvis House is situated on land allotted to Edmund Pendleton in a North Carolina land grant in 1750. In 1801, Pendleton sold his land grant to George Roller, Sr. for 300 pounds. In 1840, the heirs of George Roller sold a portion of the land to Enoch Shipley for $450.[5] In 1840, Enoch Shipley built the Shipley-Jarvis

[5] Muriel Spoden, *Historic Sites of Sullivan County* (Kingsport: Sullivan County Court, 1976), 76 and 77.

House, with Lucy Shipley, Enoch Shipley's wife, acting as the overseer of the project and directing slave laborers on the construction of the house. By the 1860s, the Shipley-Jarvis House had become a landmark on the Great Stage Road, with George Washington Shipley being known locally as "Brickhouse George."[6] Oral tradition indicates that the house was possibly used as a hospital during the Civil War, however these claims have not been substantiated. Conley and Emily Armstrong purchased the property, including approximately 4 acres of land, in 1935 and updated the exterior of the house to reflect Colonial Revival architectural trends of the 1930s. In 1977, Jack and Shirley Jarvis purchased the property and have maintained its 1935 Colonial Revival detailing.[7]

The 1935 alterations to the 1840 house included removing the front porch and replacing it with a small flat-roofed portico surrounding the front door, commonly found on examples of Colonial Revival architecture. Two rooms were added to the rear of the house on the second story; bathrooms were incorporated throughout the house; kitchen cabinets were replaced, and a sunroom was added to the western elevation. The interior of the house has changed little since the 1935 restoration, with the original plaster walls and 1935 kitchen cabinets still in use.[8]

The Colonial Revival style was popularized in the 1880s and became the dominant style for domestic buildings for the first half of the twentieth century. Early examples of Colonial Revival houses were free interpretations of housing during the Colonial period. By the early twentieth century, builders began producing details more closely related to the architecture of the Colonial period. Common characteristics among all variations included symmetrical facades with a central accentuated front door, double-hung sash windows, and an entry porch with slender support columns.[9]

Constructed of brick in a common bond pattern, the Shipley-Jarvis House is a two-story, side-gable dwelling with a rear ell with Colonial Revival detailing. The side-gable roof is covered in asphalt shingles with a brick cornice on the original portion of the house. Two exterior brick chimneys are located on the gable ends. The façade is symmetrical with a centrally located wooden cross-and-bible door with sidelights and a transom underneath a one-story flat-roofed portico supported by Doric columns. Two nine-over-six double-hung sash windows are located on the eastern and western side of the central portico. The second floor of the façade has

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[6] *Families and History of Sullivan County, Tennessee, Volume One, 1779-1992* (Kingsport: Holston Territory Genealogical Society, 1993), 584.

[7] Jack and Shirley Jarvis, TDOT Property Owner Information Sheet, on file with the Tennessee Department of Transportation, Nashville, Tennessee.

[8] Ibid.

[9] McAlester, *A Field Guide*, 321 and 322.

five nine-over-six double-hung sash windows. A concrete walkway lined with bricks extends to the front door from State Route 126.

The western elevation has a one-story shed roofed sunroom with banks of windows attached to the original two-story section of the house. The southern end of the second floor clearly indicates the 1935 two-room addition with bricks that differ from the original ones on the first floor. The brick pattern on the 1935 addition continues the common bond brick pattern found on the 1840 section with a row of header bricks on every seventh row; whereas the original section had header bricks on every sixth row. Two six-over-six windows are located on the second floor and one six-over-six window is on the first floor. The rear elevation has an exterior brick chimney on the gable end of the ell, four six-over-six windows, and a rear entry door. A patio extends behind the house and is covered with a one-story flat-roofed covering. The eastern elevation has a one-story flat-roofed addition on the southern end with a bay window and a small bank of windows.

One outbuilding is associated with the house. Located to the south of the house, the banked two-story building was originally used as a dairy for the property. In the 1930s, it was converted into a garage with an apartment on the second story. Two modern garage doors and an entry door are located on the northern elevation. The second floor has six-over-six double-hung sash windows underneath a side gable roof. The eastern elevation has a patio that extends into a rock garden located south of the house.

The interior of the house retains many of the original (1840s) elements including wooden floors, staircase railing, and mantles. Many of the 1930s elements remain intact including light fixtures, cabinets, and paneling.

The Shipley-Jarvis House is a good example of the evolution of architectural styles that blends earlier styles with modern features. Its architectural features continue to illustrate both mid-nineteenth century building methods and twentieth-century stylistic changes. Therefore in the opinion of TDOT, the Shipley-Jarvis House is eligible for listing in the National Register of Historic Places under Criterion C for its architectural style.



Figure 12: *Façade of the Shipley-Jarvis House*



Figure 13: *Western elevation of the Shipley-Jarvis House. The 1935 addition is indicated through the use of different colored brick*

Figure 14: *Eastern elevation of the Shipley Jarvis House*





Figure 15: *The original dairy that was turned into a garage in the 1930s is located south of the house*

Proposed National Register Boundaries

The Shipley-Jarvis House is currently located on approximately 1.60 acres. In the opinion of TDOT, the proposed National Register Boundary should be the parcel on which the house sits.



Figure 16: *Proposed National Register Boundary for the Shipley-Jarvis House*

Effects to the Shipley-Jarvis House

TDOT is proposing to improve State Route 126 (Memorial Boulevard) from East Center Street to Interstate 81. According to preliminary plans, there will be a variety of cross-sections throughout the 8.8 mile project. However, the cross-section adjacent to the historic Shipley-Jarvis House will be a four-lane roadway with a median, curb, gutter, and sidewalks. Currently, the roadway in front of the Shipley-Jarvis House is a four-lane urban facility with curb-and-gutter.

Figure 17 shows the current urban roadway adjacent to the historic house. Figure 18 shows the preliminary right-of-way plans adjacent to the Shipley-Jarvis House.

Documentation of Effect

Pursuant to 36 CFR 800.5, TDOT applied the Criteria of Effect as found in 36 CFR 800.9 to the proposed roadway improvement project. It is the opinion of TDOT that the proposed project will have an effect that is not adverse to the Shipley Jarvis

House. As a result, there will not be Section 4(f) involvement with the historic property.

Section 106:

36CFR 800.5 (a) Apply Criteria of Adverse Effect

In consultation with the SHPO/THPO and any Indian tribe or Native Hawaiian organization that attaches religious and cultural significance to identified historic properties, the Agency Official shall apply the criteria of adverse effect to historic properties within the area of potential effects. The Agency Official shall consider any views concerning such effects, which have been provided by consulting parties and the public.

(a) (1) Criteria of Adverse Effect

An adverse effect is found when an undertaking may alter, directly or indirectly, any of the characteristics of a historic property that qualify the property for inclusion in the National Register in a manner that would diminish the integrity of the property's location, design, setting, materials, workmanship, feeling, or association. Consideration shall be given to all qualifying characteristics of a historic property, including those that may have been identified subsequent to the original evaluation of the property's eligibility for the National Register. Adverse effects may include reasonably foreseeable effects caused by the undertaking that may occur later in time, be farther removed in distance or be cumulative.

(b) (2) Examples of Adverse Effects

An undertaking is considered to have an Adverse Effect when the effect on a historic property may diminish the integrity of the property's location, design, setting, materials, workmanship, feeling, or association. Adverse effects on historic properties include, but are not limited to:

(i). Physical destruction of or damage to all or part of the property;

The proposed project would add a median and sidewalk to the existing four-lane urban roadway. The right-of-way required for the addition of the median will be taken from the northern side of the existing State Route 126. No additional right-of-way will be taken from the southern side of the existing roadway. Therefore, in the opinion of TDOT, the proposed project would not cause physical destruction or damage to the National Register eligible Shipley-Jarvis House.

(ii) Removal of the property from its historic location

The proposed project would not result in the removal of the property from its historic location.

(iii) Change of the character of the property's use or physical features within the property's setting that contribute to its historic significance;

The Shipley-Jarvis House is currently located adjacent to a four-lane urban roadway. The setting surrounding the historic property consists of a variety of residential and commercial mixed-use properties. Several of the houses adjacent to the historic house have been converted into commercial use. The proposed project would replace the existing urban roadway with a more scenic four-lane roadway with a median, curb-and-gutter, and a sidewalk. The setting surrounding the Shipley-Jarvis will be improved by shifting two traffic lanes to the north, further away from the historic house and eliminating several modern, deteriorating commercial buildings currently located to the north of State Route 126. Therefore in the opinion of TDOT, the proposed project would not change the character of the property's setting that contributes to its historic significance.



Figure 17: *The current setting of State Route 126 adjacent to the Shipley-Jarvis House. The current four-lane urban roadway will be replaced with a four-lane roadway with a median, effectively removing two traveling lanes from near the historic property.*

(v) Introduction of visual, atmospheric, or audible elements that diminish the integrity of the property's significant historic features;

The Shipley-Jarvis House is currently located adjacent to a four-lane urban roadway. The setting surrounding the historic property consists of a variety of residential and commercial mixed-use properties. The proposed project would replace the existing roadway with a more scenic four-lane roadway with a median, curb-and-gutter, and a sidewalk. Efforts were made by the Citizen's Resource Team to incorporate aesthetic elements into the proposed project. One of which is the addition of a landscaped median to sections of the roadway. The setting

surrounding the Shipley-Jarvis will be improved by shifting two traffic lanes to the north, further away from the historic house, eliminating several modern, deteriorating commercial buildings currently located to the north of State Route 126, and by the addition of a landscaped median to the roadway. In the opinion of TDOT, the proposed project would not introduce visual, atmospheric, or audible elements that diminish the integrity of the historic property.

(v) Neglect of a property which causes its deterioration, except where such neglect or deterioration are recognized qualities or a property of religious and cultural significance to an Indian tribe or Native Hawaiian organization; and

The property would not come under the jurisdiction of TDOT/FHWA during the course of the project and thus this does not apply.

Therefore, in the opinion of TDOT the proposed improvements will have an effect that is not adverse to the National Register eligible Shipley-Jarvis House.

Applicability of Section 4(f)

Codified at 49 CFR 303, "Section 4(f)" refers to a section of the U.S. Department of Transportation Act (1966, as amended) that gives special consideration to the use of park and recreational lands, wildlife and waterfowl refuges, and historic sites by federally assisted transportation projects. To be considered "historic," a property must be either listed in the National Register of Historic Places or is determined eligible for such listing by the Keeper of the Register of the State Historic Preservation Officer, Section 4(f) applies only to those projects using federal funds from the U.S. Department of Transportation.

Federal laws state that the Secretary of the Department of Transportation may approve the use of land from a historic site only if:

1. there is no prudent or feasible alternative to using that land, and

2. the program or project includes all possible planning to minimize harm to the historic site resulting from the use (see Appendix D).

The Federal Highway Administration (FHWA) determines if the requirements of the Section 4(f) statute are met. The FHWA will approve the use of the Section 4(f) property only if the requirements are satisfied.

In the opinion of TDOT, there will not be a Section 4(f) use of the historic property.

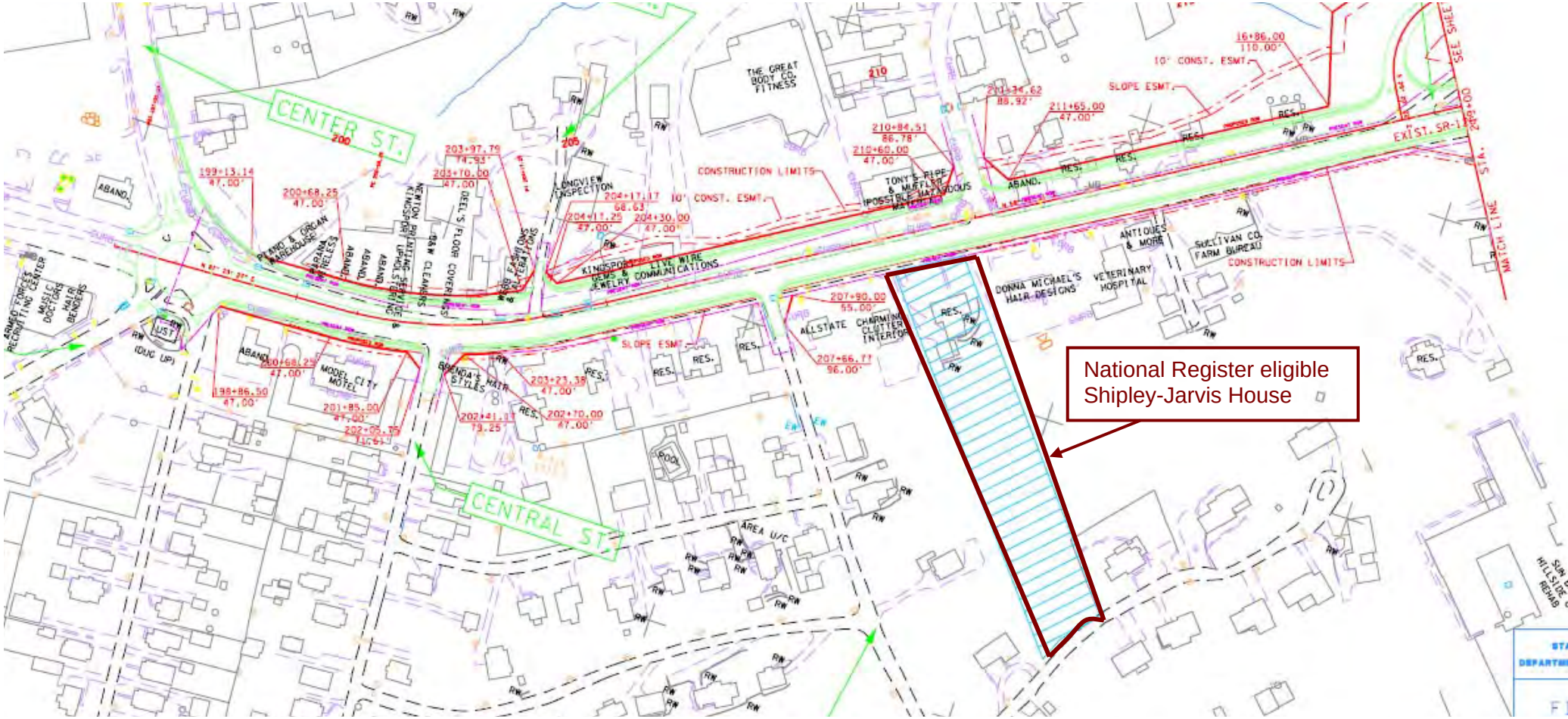

Figure 18: *Preliminary plans showing the project in relation to the Shipley-Jarvis House*

Conclusions

The Tennessee Department of Transportation (TDOT) with funding made available through the Federal Highway Administration (FHWA) is proposing to improve State Route 126 (Memorial Boulevard) from East Center Street to Interstate 81 in Kingsport.

In 2004, TDOT historians identified one National Register listed property: Yancey's Tavern and one National Register eligible property: the Shipley-Jarvis House. In a letter dated March 22, 2005, the TN-SHPO agreed with these findings.

The Documentation of Effect Report assessed the effects the proposed improvements, based on preliminary right-of-way plans, would have on the two historic properties. It is the opinion of TDOT that the proposed project would adversely impact the National Register listed Yancey's Tavern. Regarding the Shipley-Jarvis House, it is TDOT's opinion that the proposed project would have an effect that is not adverse to the historic house.

Pursuant to Section 4(f) of the U.S. Department of Transportation Act of 1966, the proposed project would not constitute a Section 4(f) use of a historic property.

Bibliography

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Folmsbee, Stanley, Robert E. Corlew, and Enoch L. Mitchell, *Tennessee: A Short History*. Knoxville: University of Tennessee Press, 1969.

Jarvis, Jack and Shirley. TDOT Property Owner Information Sheet, on file with the Tennessee Department of Transportation, Nashville, Tennessee.

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SECTION 106 REVIEW, NATIONAL HISTORIC PRESERVATION ACT OF 1966

Section 106 of the *National Historic Preservation Act* requires that Federal agencies consider what effects their actions and/or actions they may assist, permit, or license, may have on historic properties, and that they give ***the Advisory Council on Historic Preservation (Council)*** a "reasonable opportunity to comment" on such actions. The Council is an independent Federal agency. Its role in the review of actions under Section 106 is to encourage agencies to consider, and where feasible, adopt measures that will preserve historic properties that would otherwise be damaged or destroyed. The Council's regulations, entitled "Protection of Historic Properties" (36 CFR Part 800) govern the Section 106 process. The Council does not have the authority to require agencies to halt or abandon projects that will affect historic properties.

Section 106 applies to properties that have been listed in the *National Register of Historic Places (NRHP)*, properties that have been determined to be eligible for inclusion in the NRHP, and properties that may be eligible but have not yet been evaluated. If a property has not yet been nominated to the NRHP or determined eligible for inclusion, it is the responsibility of the Federal agency involved to ascertain its eligibility.

The Council's regulations are set forth in a process consisting of four basic steps which are as follows:

1. Initiate Section 106 Process: The Federal agency responsible for the action establishes the undertaking, determines whether the undertaking has the potential to affect historic properties (i.e., properties listed in or eligible for listing in the National Register of Historic Places), and identifies the appropriate State Historic Preservation Officer (SHPO) or Tribal Historic Preservation Officer (THPO). At this time, the agency plans to involve the public and identify other consulting parties.

2. Identify Historic Properties: If the agency's undertaking has the potential to affect historic properties, the agency determines the scope of appropriate identification efforts and proceeds to identify historic properties within the area of potential effects. Identification involves assessing the adequacy of existing survey data, inventories, and other information on the area's historic properties. This process may also include conducting further studies as necessary and consulting with the SHPO/THPO, consulting parties, local governments, and other interested parties. If properties are discovered that may be eligible for the National Register, but have not been listed or determined eligible for listing, the agency consults with the SHPO/THPO and, if needed, the Keeper of the National Register to determine the eligibility status of the property.

3. Assess Adverse Effects: The agency, in consultation with the SHPO/THPO, assesses the potential effects to historic properties affected by the undertaking. The agency at this time will determine that the action will have "no adverse effect" or an "adverse effect" on historic properties. Consulting parties and interested members of the public are informed of these findings.

   The regulations provide specific criteria for determining whether an action will have an effect, and whether that effect will be adverse. Generally, if the action may alter the characteristics that make a property eligible for the National Register, it is recognized that the undertaking will have an effect. If those alterations may be detrimental to the property's characteristics, including relevant qualities of the property's environment or use, the effects are recognized as "adverse."

4. Resolve Adverse Effects: The agency consults with the SHPO/THPO and others, including consulting parties and members of the public. The Council may choose to participate in consultation, particularly under circumstances where there are substantial impacts to historic properties, when a case presents important questions about interpretation, or if there is the potential for procedural problems. Consultation usually results in a Memorandum of Agreement (MOA).

If agreement cannot be reached, the agency, SHPO/THPO, or Council may terminate consultation. If the SHPO/THPO terminates consultation, the agency and the Council may conclude the MOA without SHPO/THPO involvement. If the SHPO/THPO terminates consultation and the undertaking is on or affecting historic properties on tribal lands, the Council must provide formal comments. The agency must request Council comments if no agreement can be reached.

ELIGIBILITY CRITERIA OF THE NATIONAL REGISTER OF HISTORIC PLACES AS SET FORTH AT 36 CFR 60.4

The quality of significance in American history, architecture, archaeology, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and:

- CRITERION A. that are associated with events that have made a significant contribution to the broad patterns of our history (history); or
- CRITERION B. that are associated with the lives of persons significant in our past (person); or
- CRITERION C. that embody the distinctive characteristic of a type, period, or method of construction or that represent the work of a master, or that possess high artistic values, or that components may lack individual distinction (architecture); or
- CRITERION D. that have yielded, or may be likely to yield, information important in prehistory or history (archaeology).

Ordinarily, cemeteries; birthplaces or graves of historical figures; properties owned by religious institutions or used for religious purposes; structures that have been moved from their original locations; reconstructed historic buildings; properties primarily commemorative in nature; and properties that have achieved significance within the past 50 years are not considered eligible for the National Register of Historic Places; however, such properties will qualify if they are integral parts of historic districts that do meet the criteria or if they fall within the following categories:

- EXCEPTION A. a religious property deriving primary significance from architectural or artistic distinction or historical importance; or
- EXCEPTION B. a building or structure removed from its original location but which is significant primarily for architectural value, or which is the surviving structure most importantly associated with a historic person or event; or
- EXCEPTION C. a birthplace or grave of a historical figure of outstanding importance if there is no other appropriate site or building directly associated with his productive life; or
- EXCEPTION D. a cemetery which derives its primary significance from graves or persons of transcendent importance, from age, from distinctive design features, or from association with historic events; or
- EXCEPTION E. a reconstructed building when accurately executed in a suitable environment and presented in a dignified manner as part of a restoration master plan, and when no other building or structure with the same association has survived; or
- EXCEPTION F. a property primarily commemorative in intent if design, age, tradition, or symbolic value has invested it with its own historical significance; or
- EXCEPTION G. a property achieving significance within the past 50 years if it is of exceptional importance.

NATIONAL REGISTER OF HISTORIC PLACES

Summary Sheet Prepared by TDOT

What is the National Register of Historic Places? The National Register, maintained by the Keeper of the Register within the National Park Service, Department of Interior, is the nation's official list of districts, buildings, sites, structures, and objects significant in American history, architecture, archeology, engineering, and culture.

What are the benefits and restrictions of listing? In addition to honorific recognition, listing in the National Register results in the following benefits for historic properties:

- Section 106 provides for consideration of National Register listed or eligible properties in planning for Federal, federally licensed, and federally assisted projects;
- Eligibility for certain tax provisions for the certified rehabilitation of income-producing National Register structures such as commercial, industrial, or rental residential buildings;
- Consideration of historic values in the decision to issue a surface mining permit where coal is located in accordance with the Surface Mining Control Act of 1977; and
- Qualification of Federal grants for historic preservation, when funds are available.

Does National Register designation place any additional burdens or obligations on the property owner? Owners of private property listed in the National Register are free to maintain, manage, or dispose of their property as they choose, provided that no Federal moneys are involved.

How is a property nominated to the National Register? The first step is for the owner to contact the Tennessee State Historic Preservation Office (TN-SHPO), Clover Bottom Mansion, 2941 Lebanon Road, Nashville, TN 37243-0442; 615-532-1558. Ordinarily, private individuals (or paid consultants) prepare nomination forms. The TN-SHPO submits these nominations to a State Review Board, which meets three times a year. This body reviews the nominations and votes to recommend or deny National Register listing. If approved, the TN-SHPO submits the nomination to the Keeper of the Register in Washington, D.C. for consideration for listing. The Keeper's Office has 45 days to review the nomination, and its decision regarding National Register listing is final.

How long does the nomination process take? The process varies but typically takes between eight and twelve months.

CRITERIA OF ADVERSE EFFECT

Regulations codified at 36 CFR 800 require Federal agencies to assess their impacts to historic resources. The regulations provide specific criteria for determining whether an action will have an effect, and whether that effect will be adverse. These criteria are given below.

36 CFR 800.5 Assessment of Adverse Effects

(a) *Apply Criteria of Adverse Effect*. In consultation with the SHPO/THPO and any Indian tribe or Native Hawaiian organization that attaches religious and cultural significance to identified historic properties, the Agency Official shall apply the criteria of adverse effect to historic properties within the area of potential effects. The Agency Official shall consider any views concerning such effects which have been provided by consulting parties and the public.

(1) Criteria of adverse effect. An adverse effect is found when an undertaking may alter, directly or indirectly, any of the characteristics of a historic property that qualify the property for inclusion in the National Register in a manner that would diminish the integrity of the property's location, design, setting, materials, workmanship, feeling, or association. Consideration shall be given to all qualifying characteristics of a historic property, including those that may have been identified subsequent to the original evaluation of the property's eligibility for the National Register. Adverse effects may include reasonably foreseeable effects caused by the undertaking that may occur later in time, be farther removed in distance or be cumulative.

(2) *Examples of adverse effects.* Adverse effects on historic properties include, but are not limited to:

(i) Physical destruction of or damage to all or part of the property;

(ii) Alteration of a property, including restoration, rehabilitation, repair, maintenance, stabilization, hazardous material remediation and provision of handicapped access that is not consistent with the Secretary's Standards for the Treatment of Historic Properties and applicable guidelines;

(iii) Removal of the property from its historic location;

(iv) Change of the character of the property's use or of physical features within the property's setting that contribute to its historic significance;

(v) Introduction of visual, atmospheric or audible elements that diminish the integrity of the property's significant historic features;

(vi) Neglect of a property which causes its deterioration, except where such neglect and deterioration are recognized qualities of a property of religious and cultural significance to an Indian tribe or Native Hawaiian organization; and

(vii) Transfer, lease or sale of property out of Federal ownership or control without adequate and legally enforceable restrictions or conditions to ensure long-term preservation of the property's historic significance.

SECTION 4(f), TDOT SUMMARY SHEET

WHAT IS SECTION 4 (f)? Codified at 49 CFR 303, "Section 4 (f)" refers to a section of the U.S. Department of Transportation Act which gives special consideration to the use of park and recreation lands, wildlife and waterfowl refuges, and historic sites by Federally assisted transportation projects. Section 4 (f) applies only to those projects using funds from the U.S. Department of Transportation. The law states:

(c) The Secretary may approve a transportation program or project (other than any project for a park road or parkway under section 204 of title 23) requiring the use of publicly owned land of a public park, recreation area, or wildlife and waterfowl refuge of national, State, or local significance, or land of an historic site of national, State, or local significance (as determined by the Federal, State, or local officials having jurisdiction over the park, area, refuge, or site) only if -

(1) there is no prudent or feasible alternative to using that land; and

(2) the program or project includes all possible planning to minimize harm to the park, recreation area, wildlife and waterfowl refuge, or historic site resulting from the use.

WHAT IS THE SECTION 4 (f) PROCESS FOR HISTORIC PROPERTIES? To be considered "historic," a property must either be listed in the National Register of Historic Places or be determined eligible for such listing by the Keeper of the Register or the State Historic Preservation Officer (SHPO).

On any project, the primary objective is to develop a design that does not have Section 4(f) involvement. If such a design is not possible, then the Section 4 (f) documentation is prepared and circulated. Such documentation is circulated to all appropriate agencies or groups (consistent with the Section 106 process and the National Environmental Policy Act), and as applicable, to the U.S. Department of the Interior, Housing and Urban Development, and Agriculture. It is also circulated to the agency having authority over the Section 4 (f) property. For historic properties, such agencies are the SHPO and the Advisory Council on Historic Preservation (ACHP). After review of any comments received, the final Section 4(f) documentation is sent to the Federal Highway Administration (FHWA) which determines if the requirements of the Section 4(f) statute are met. If the requirements are satisfied, then the FHWA will approve the use of the Section 4 (f) property.

HOW ARE SECTION 4 (f) AND SECTION 106 RELATED? Section 106 is a provision of the National Historic Preservation Act of 1966, which requires all federal agencies to consider the effects of their projects on historic properties and to provide the Advisory Council on Historic Preservation (ACHP) an opportunity to comment on those effects. The ACHP has promulgated regulations at 36 CFR 800 that describe the procedures that agencies must follow in order to comply with Section 106. Many of the Section 106 documentation requirements overlap the Section 4 (f) documentation requirements for historic properties. For this reason, for projects having a 4(f) use of a historic site, the documentation for Section 106 and Section 4 (f) is usually combined into one document and circulated to the appropriate groups described above. The consent of neither the SHPO nor the ACHP is necessary for FHWA to approve a Section 4 (f) use, but FHWA gives great consideration to comments from these agencies.

APPENDIX E

PUBLIC PARTICIPATION

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
ENVIRONMENTAL DIVISION
505 DEADERICK STREET
SUITE 900, JAMES K. POLK BUILDING
NASHVILLE, TENNESSEE 37243-0349
615-741-3655

October 17, 2008

SUBJECT: Documentation of Effect for the proposed improvements to State Route 126 (Memorial Boulevard) from East Center Street to Interstate 81 in Kingsport, Sullivan County, Tennessee

To Whom it May Concern:

The Tennessee Department of Transportation (TDOT) in cooperation with the Federal Highway Administration is proposing to improve State Route 126 in Kingsport.

Pursuant to regulations set forth in "36 CFR 800: Protection of Historic Properties" cultural resource staff from TDOT surveyed the general project area in an attempt to identify National Register-included or eligible properties which could be impacted by the proposed project. In 2005, TDOT staff prepared an Architectural Assessment for the above-referenced project that identified one National Register listed property, Yancey's Tavern, and one National Register eligible property, the Shipley-Jarvis House. In a letter dated, March 22, 2005, the TN-SHPO concurred with TDOT's findings. Since 2005, TDOT officials have worked closely with local citizens through the Context Sensitive Solutions process in order to find an alternative that alleviates traffic issues along State Route 126 and that fits within the context of the area.

The enclosed report discusses TDOT's effects assessment. You are receiving this report because TDOT has identified you as a Sullivan County party or individual with historic preservation interests. The Advisory Council on Historic Preservation Regulations specify that members of the public with interests in an undertaking and its effects on historic properties should be given reasonable opportunity to have an active role in the Section 106 process. As such, TDOT would like to give you the opportunity to participate in that process. If you feel that commenting on such projects is outside the interests of your organization, please notify me and I will remove your name from our list.

If you have any comments on historic issues related to this project, please write me. Federal regulations provide that you have thirty days to respond from the receipt of this letter.

Sincerely,

Tammy Sellers

Tammy Sellers, Historic Preservation Supervisor

Enclosure
cc: Mr. Patrick McIntyre, TN-SHPO

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
ENVIRONMENTAL PLANNING AND PERMITS DIVISION
SUITE 900, JAMES K. POLK BUILDING
505 DEADERICK STREET
NASHVILLE, TENNESSEE 37243-0334
(615) 741-3653

GERALD F. NICELY
COMMISSIONER

PHIL BREDESEN
GOVERNOR

November 19, 2003

Mr. James Bird
Tribal Historic Preservation Officer
Eastern Band of Cherokee Indians
Qualla Boundary
P.O. Box 455
Cherokee, NC 28719

Sample Letter to Native Americans

SUBJECT: Section 106 Initial Coordination for Proposed Improvements to State Route 126 (Memorial Blvd) From E. Center St. in Kingsport to I-81, Sullivan County, Tennessee

Dear Mr. Bird:

The Tennessee Department of Transportation (TDOT) in cooperation with the Federal Highway Administration is in the planning stages of evaluating the above-referenced project for possible implementation. The location of the proposed project is shown on the enclosed map.

The 2001 Advisory Council on Historic Preservation regulations, 36 CFR 800, stipulate that Indian tribes that attach religious and cultural significance to properties that may be affected by an undertaking be invited to participate in the project review process as consulting parties. TDOT would like to invite you to participate as a consulting party for the proposed project. This letter is also TDOT's request for comments on the identification of properties in the project's area of potential effect that may be of religious and cultural significance to your tribe.

If you choose to participate as a consulting party on the above-referenced project, you will receive copies of cultural assessment reports that identify Native American related properties. You will also be invited to attend project-related meetings with FHWA, TDOT and the Tennessee State Historic Preservation Office (TN-SHPO), if any are held. We respectfully request written responses to project reports and other materials within thirty (30) days of receipt.

If you would like to participate as a consulting party, please respond to me via letter, telephone (615-741-5257), fax (615-741-1098) or E-mail (Gerald.Kline@state.tn.us). To facilitate our planning process, please respond within 30 days of receipt of this letter. If you do not respond, you will not receive reports related to this project unless you specifically request them at a later date. Thank you for your assistance.

Sincerely,

Gerald Kline

Gerald Kline
Transportation Specialist I
Archaeology Program Manager

Enclosure

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
OFFICE OF ENVIRONMENTAL PLANNING AND PERMITS
SUITE 900, JAMES K. POLK BUILDING
505 DEADERICK STREET
NASHVILLE, TENNESSEE 37243-0334
(615) 741-3653

GERALD F. NICELY
COMMISSIONER

PHIL BREDESEN
GOVERNOR

November 19, 2003

Richard Venable, County Mayor
3411 Hwy 126, Ste 206
Blountville, TN 37617

Letter to Local Government Official

RE: Section 106 Initial Coordination for Proposed Improvements to State Route 126 (Memorial Blvd) From E. Center St. in Kingsport to I-81, Sullivan County, Tennessee

Dear Mr. Venable:

The Tennessee Department of Transportation (TDOT) in cooperation with the Federal Highway Administration is proposing to improve the above referenced project. Its location is shown on the enclosed map.

The 2001 Advisory Council on Historic Preservation regulations stipulate that TDOT invite local government representatives to participate in the historic review process as a consulting party. TDOT would like to invite you, as the local government official, to participate as a consulting party for the proposed project.

If you choose to participate as a consulting party, you will receive copies of TDOT's environmental reports and will be invited to attend project-related meetings between TDOT and the Tennessee State Historic Preservation Office (TN-SHPO), if any are held. As a consulting party, you should be prepared to attend any such meetings between TDOT and the TN-SHPO and provide a response to TDOT's reports in written form within 30 days upon receipt of the report. TDOT also wishes to seek your comments on the identification and evaluation of historic properties that the proposed project might impact.

If you would like to participate as a consulting party, please write to me at the above address. To facilitate our planning process, please respond within 30 days of receipt of this letter. Thank you for your assistance.

Sincerely,

Martha Carver

Martha Carver
Historic Preservation Program Manager

Enclosure
cc: Mr. Herbert Harper, TN-SHPO

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
OFFICE OF ENVIRONMENTAL PLANNING AND PERMITS
SUITE 900, JAMES K. POLK BUILDING
505 DEADERICK STREET
NASHVILLE, TENNESSEE 37243-0334
(615) 741-3653

GERALD F. NICELY
COMMISSIONER

PHIL BREDESEN
GOVERNOR

November 19, 2003

Letter to Local Government Official

Jeanette Blazier, Mayor
City of Kingsport
225 West Center Street
Kingsport, TN 37660

RE: Section 106 Initial Coordination for Proposed Improvements to State Route 126 (Memorial Blvd) From E. Center St. in Kingsport to I-81, Sullivan County, Tennessee

Dear Ms. Blazier:

The Tennessee Department of Transportation (TDOT) in cooperation with the Federal Highway Administration is proposing to improve the above referenced project. Its location is shown on the enclosed map.

The 2001 Advisory Council on Historic Preservation regulations stipulate that TDOT invite local government representatives to participate in the historic review process as a consulting party. TDOT would like to invite you, as the local government official, to participate as a consulting party for the proposed project.

If you choose to participate as a consulting party, you will receive copies of TDOT's environmental reports and will be invited to attend project-related meetings between TDOT and the Tennessee State Historic Preservation Office (TN-SHPO), if any are held. As a consulting party, you should be prepared to attend any such meetings between TDOT and the TN-SHPO and provide a response to TDOT's reports in written form within 30 days upon receipt of the report. TDOT also wishes to seek your comments on the identification and evaluation of historic properties that the proposed project might impact.

If you would like to participate as a consulting party, please write to me at the above address. To facilitate our planning process, please respond within 30 days of receipt of this letter. Thank you for your assistance.

Sincerely,

Martha Carver

Martha Carver
Historic Preservation Program Manager

Enclosure
cc: Mr. Herbert Harper, TN-SHPO

Sullivan County
Office of the County Executive

Richard S. Venable
County Executive

December 10, 2003

Ms. Martha Carver
T.D.O.T.
Environmental Planning & Permits
Suite 900. James Polk Bldg
505 Deaderick Street
Nashville, TN 37243-0334

RE: Improvements to S.R. 126, Sullivan County, Tennessee

Dear Ms. Carver:

Please include me on your list of consulting party contacts for the above referenced project.

Warmest regards,

Richard S. Venable

Richard S. Venable
Mayor of Sullivan County

RSV/alt

Sullivan County Courthouse • 3411 Highway 126, Suite 206 • Blountville, Tennessee 37617
423-323-6417 • Fax 423-279-2897 • sullcoex@sullivancounty.org

APPENDIX F

2005 TN-SHPO LETTER
FOR THE ARCHITECTURAL ASSESSMENT

TENNESSEE HISTORICAL COMMISSION
DEPARTMENT OF ENVIRONMENT AND CONSERVATION
2941 LEBANON ROAD
NASHVILLE, TN 37243-0442
(615) 532-1550

March 22, 2005

Ms. Martha Carver
Tennessee Department of Transportation
505 Deaderick St/900
Nashville, Tennessee, 37243-0349

RE: FHWA, ARCHITECTURAL SURVEY REPORT, SR-126/E, CENTER ST. TO I-81, KINGSPORT, SULLIVAN COUNTY

Dear Ms. Carver:

In response to your request, received on Thursday, March 17, 2005, we have reviewed the documents you submitted regarding your proposed undertaking. Our review of and comment on your proposed undertaking are among the requirements of Section 106 of the National Historic Preservation Act. This Act requires federal agencies or applicant for federal assistance to consult with the appropriate State Historic Preservation Office before they carry out their proposed undertakings. The Advisory Council on Historic Preservation has codified procedures for carrying out Section 106 review in 36 CFR 800. You may wish to familiarize yourself with these procedures (Federal Register, December 12, 2000, pages 77698-77739) if you are unsure about the Section 106 process.

Considering the information provided, we find that the area of potential effect contains one architectural resources eligible for listing in the National Register of Historic Places that may be affected by this undertaking, the Shipley-Jarvis House. We further find that the area of potential effect contains one architectural resources listed in the National Register of Historic Places that may be affected by this undertaking, Yancey's Tavern. You should notify interested persons and make the documentation associated with this finding available to the public.

All borrow areas outside proposed rights-of-way will require separate certification as specified under Section 107.06-Federal Aid Provisions. If your agency proposes any modifications in current project plans or discovers any archaeological remains during the ground disturbance or construction phase, please contact us to determine what further action, if any, will be necessary to comply with Section 106 of the National Historic Preservation Act.

This office appreciates your cooperation.

Sincerely,

Herbert L. Harper
Executive Director and
Deputy State Historic
Preservation Officer

HLH/jyg

Baseline Study

Phase I Site Assessment

of

UNDERGROUND STORAGE TANKS AND HAZARDOUS MATERIAL SITES

State Route 126

Memorial Boulevard from Center Street to I-81

Prepared for:

TDOT Go.

Tennessee Department of Transportation

Prepared by:

HMB PROFESSIONAL ENGINEERS, INC

3 HMB Circle
U.S. 460
Frankfort, Kentucky 40601

March 2008

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EXECUTIVE SUMMARY

A Phase I Environmental Site Assessment (ESA) investigation was conducted in accordance with the scope and limiting conditions set forth in the American Society for Testing and Materials (ASTM) practice 5127-05. Recognized environmental conditions (RECs) were identified for properties located in the approximate corridor of the proposed State Route (SR) 126 highway, also known as Memorial Boulevard, in Sullivan County Tennessee. The project would begin at East Center Street and travel eastward, approximately 8.8 miles, to its existing intersection with Interstate 81, which is east of Kingsport. The project would improve the existing SR 126 roadway and it would feature four and two-lane sections as appropriate.

The areas assessed in this Phase I ESA report result from a review of environmental regulatory records, historical research, interviews with land owners, and local and state officials from November 2007 to January 2008. ESA field observations were conducted in November 2007, and the area of study was a corridor 2,000 feet wide (1,000 feet in both directions from the center of the existing SR 126 roadway). Project plan maps have been provided, and they include limits of construction activities. The plans have been included in Appendix B.

The purpose of this ESA report is to determine the potential presence of aboveground storage tanks (ASTs), hazardous wastes or hazardous materials, solid and special wastes, areas that could pose a threat to human and natural environments, and areas that might potentially impact the SR 126 improvement project. The findings and conclusions of this report were used to determine the possibility that Phase II ESAs would be required if the project is constructed.

A state and federal database was conducted by FirstSearch Technology Corporation in July 2007. The report identified 111 properties and businesses with environmental records within the zip code of the project area. A total of 9 sites are located within the 1000 foot project corridor. A review of these records, an onsite field reconnaissance and literature searches were conducted on these sites and it was determined that 2 sites with minor environmental concerns were identified within the project area, and no sites that were not identified have recognized environmental conditions in relation to the project's alternative. No sites were identified as having high potential or medium potential for environmental impacts. Section 5.0, Findings and Conclusions, details the results of the investigation including the potential for environmental impacts associated with the project.

1.0 INTRODUCTION

This Phase I Environmental Assessment (ESA) and/or hazardous materials/UST baseline addresses in detail the environmental conditions that have been identified for properties that are associated with the proposal to construct an improved highway in Sullivan County, Tennessee. The improvements to State Route 126 (Memorial Boulevard) will include two-lane and four-lane segments as noted in Figure 1.1. The project distance is approximately 8.8 miles. The Tennessee Department of Transportation (TDOT) is administering the project. The Federal Highways Administration (FHWA) is designated as the lead federal agency.

1.1 Project Setting and Background

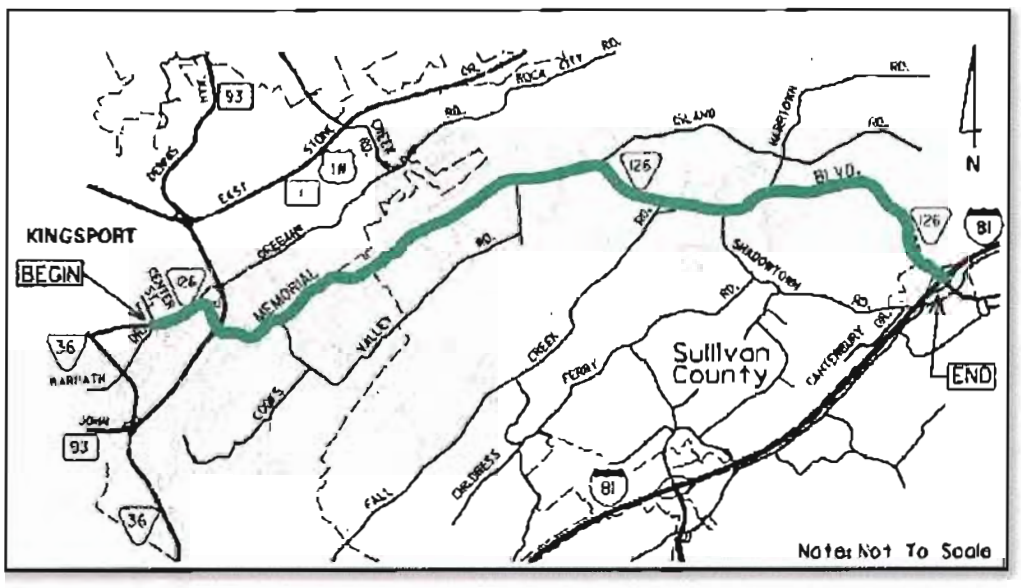
1.1.1 Description of the Study Corridor

The project study area is located in northeast Tennessee, on the eastern limits of Kingsport. The corridor begins in Kingsport at the East Center Street intersection with SR 126. It will travel eastward approximately 8.8 miles to the eastern terminus at Interstate 81. The study area is approximately 2000 feet wide, 1000 feet north and south of the existing centerline of SR 126.

SR 126 is currently classified as an urban minor arterial route which links the city of Kingsport to residential communities east of the city. These areas include Gunnings, Indian Springs, Cooks Valley, Bridwell Heights and Hillcrest. Reviews of aerial maps have indicated that growth has occurred in a steady rate for the past fifty years.

The initial western portion of SR 126 within this study area features a four-lane undivided highway. No turn lanes exist within this section between Center Street and the John B. Dennis Highway (SR 93). This portion of the project is approximately 0.5 miles in length. From the Dennis Highway Memorial Boulevard becomes a four-lane divided roadway for approximately 0.25 miles passing through two signalized intersections at the ramps of the Dennis Highway, then changing to a three-lane facility as it passes to the east on a steep incline. SR 126 becomes a two-lane road as it leaves the city limits of Kingsport for the next 5.75 miles until its final 0.2 mile section which returns to four-lanes as it approaches and merges with Interstate 81.

Figure 1.0 – State Route 126 (Memorial Boulevard) Project Corridor



1.1.2 Project Background

The needs for improvements to SR 126 have been identified in the City of Kingsport 1992 annual state legislative funding request. In addition, the Kingsport MPO requested an Advance Planning Report for Memorial Boulevard in 2003 based on recommendations made by the East Kingsport Comprehensive Land Use and Transportation Study.

In March 2003 a resolution by the Executive Board and Executive Staff of the Kingsport MPO passed a request for an APR for SR-126/Memorial Blvd. In April 2003, a letter drafted by the Mayor of Kingsport, along with a copy of the resolution, was sent to TDOT detailing the history of this project and the need to get something started. In May 2003, TDOT responded to the letter, acknowledging the effort and commitment of everyone involved and directing TDOT's resources to initiate the APR. Further commitment was made in September 2003 when SR-126/Memorial Blvd. was selected as Tennessee's first Context Sensitive Solutions (CSS) project. Context Sensitive Solutions is an approach that involves all stakeholders in developing a transportation facility that fits its physical setting.

The Context Sensitive Solutions Report (CSSR) was prepared and served to facilitate FHWA's NEPA decision making process. The CSSR documents the chronology of the process including early data that was collected and analyzed, recommendations developed during the planning phase and the early public involvement activities which have led to recommendations of a concept plan and recommendations to TDOT in 2005.

1.1.3 Project Need

The purpose for the project is to improve road safety, improve access management, provide modal interrelationship (need for safe pedestrian and bicycle mobility), improve substandard geometric deficiencies within the project area, and support a sustainable business climate by improving access from developing residential areas to existing commercial areas between Center Street in Kingsport and Interstate 81, approximately 8.8 miles to the east.

1.2 Objective of the Phase I Property Assessments

The Environmental Impact Study (EIS) will consist of a comprehensive evaluation of four factors – the environmental impacts, engineering feasibility, traffic analysis, and public input. Each of these factors will be considered in the selection process for a preferred alternative.

As part of the selection process, a Phase I Environmental Site Assessment (ESA) identifies properties that could have the potential to pose threats to the human and/or the natural environments. Along with other environmental conditions, the ESA will be reviewed for the most appropriate alternative. The objective of the Phase I ESA for SR 126 in Sullivan County is to determine the potential for the occurrences of hazardous materials at properties that could be acquired for the construction of a build alternative.

1.3 Statement of Qualifications and Limitations

The methodologies utilized in conducting this ESA are in accordance with the scope and limiting conditions set forth in the American Society for Testing and Materials (ASTM) practice 1527.

Information contained in this investigative report is based on: a record search of federal and appropriate state and local agencies; a historic use search of aerial photographs and maps; an in-field site reconnaissance; and, personal interviews with state and local officials. Information was gathered from ERS (Environmental FirstSearch, Inc.), U.S.G.S topographic maps, local and county road maps, as well as the Tennessee Geologic Survey. Information was also based on accessibility to the site, either by foot or a drive-by survey. Often site visibility was hampered by topography, fences, buildings, vegetative growth, or other structures.

The following considerations are beyond the scope of a Phase I Site Assessment and are not addressed in this investigation: lead-based paint issues, asbestos-containing materials, radon gas and lead in drinking water.

The findings of this investigation are based on Good Engineering Practice and Professional Judgment concerning the sources of information. Haworth, Meyer, & Boleyn Professional Engineers (HMB) does not warrant that each facility or adjoining land contains no hazardous waste, waste oil, USTs, or other latent conditions beyond that detected or observed during this study. The possibility always exists for contaminants to migrate onto or off a site through surface water, air, or groundwater. The ability to accurately address the environmental risk associated with transport in these media is beyond the scope of this project.

2.0 PHYSICAL CHARACTERISTICS OF THE PROJECT AREA

These sections present the physical characteristics of the project area in reference to topography, geology, agricultural soil associations, and hydrogeology. These data have been collected from available literature and observations made during field investigations.

2.1 Project Setting

The proposed project involves an area of Sullivan County from Kingsport at East Center Street and progresses eastward through the county approximately 8.8 miles until reaching Interstate 81.

2.1.1 Topography and Geology

The project area is situated in East Tennessee within the physiographic region. The area is comprised of Ordovician and Ordovician-Cambrian age limestone, dolomite, shale, chert, siltstone, sandstone and clay.

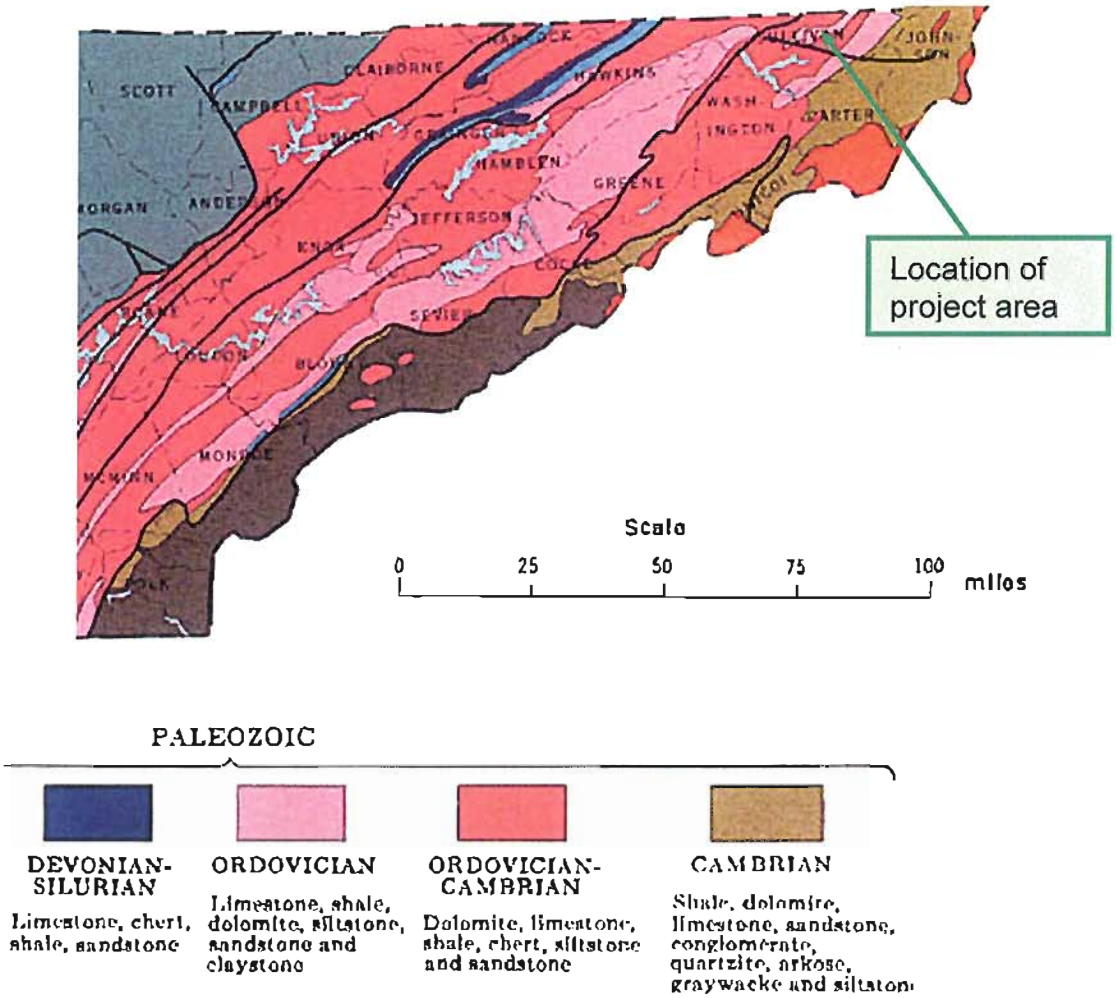


Figure 2.0 - Generalized Geologic Map of East Tennessee

Land use in the east end of Sullivan County is transitioning from agricultural and scattered residential to higher density single and multi-family residential uses. Several areas feature low-density, suburban style family residences, an elementary school, churches and neighborhood retail uses.

2.1.1.1 Soils

Sullivan County is located in the northeastern region of Tennessee. It is bordered on the north by Virginia, the south by Washington and Carter Counties, on the west by Hawkins County and on the east by Carter and Johnson Counties. Sullivan County is divided from east to west by the Holston River and the South Holston, Boone, and Fort Patrick Henry Reservoirs. The county is in two major land resource areas, the Southern Appalachian Ridges and Valleys and the Blue Ridge.

The project is located in west and central Sullivan County between the eastern limits of Kingsport and Interstate 81. This area of Sullivan County features rolling upland topography. Soils in the region include the Holston-Bellamy, Talbott-Bradyville, Collegedale-Etowah, and the Montevallo-Collegedale associations. Following are descriptions of the soil associations located within the project area.

Holston Bellamy
This soils association features moderately steep, well drained and moderately well drained areas that have a loamy subsoil. The soils are located on high and low terraces in the Southern Appalachian Ridges and Valleys area. The slope and hazard of erosion are the major management concerns. Slopes range from 2 to 20 percent.

Talbott-Bradyville
This soils association features moderately steep and steep, well draind soils that have a clayey subsoil. They are intermingled with outcrops of limestone bedrock, and are located on limestone hills and uplands in the Southern Appalachian Ridges and Valleys area. The hazard of erosion, and the rock outcrops are the major management concerns. Slopes range from 12 to 35 percent and are typically smooth and convex.

Collegedale-Etowah
This soils association features moderately sloping to steep, well drained soils that have a clayey and lumpy subsoil. They are situated on uplands and high terraces in the Southern Appalachian Ridges and Valleys area of Tennessee. Most of this association has been cleared and is used for pasture or hay land. Some row crops, such as corn, are evident. The slope and hazard of erosion are major management concerns in this association. Slopes range from 5 to 35 percent.

Montevallo-Collegedale
This soils association features moderately steep to extremely steep and well drained soils that have a loamy, clayey subsoil. They are located on shale ridges and the adjacent limestone uplands in the Southern Appalachian Ridges and Valleys area. A few areas on the lower side slopes have been cleared and are used as pasture land. Much of the area of land within this association is wooded. The slope, the depth to bedrock, and the hazard of erosion are major management concerns. Slopes range from 12 to 80 percent.

2.2 Land Use

The western portion of the project is located in an urban area that is heavily developed. The first portion of the area from Center Street to the area just east of the John B. Dennis Highway near Stratford Road, is a blend of residential and commercial land use. From Stratford Road, residential development is located on both sides of SR 126 with scattered farmland until the Indian Hills area near Fall Creek. From Indian Hills to Overhill Drive, scattered residential land use exists with occasional commercial land uses. The area between Overhill Drive and the intersection of SR 126 with I-81 is a mix of commercial and residential land use. As the project moves east, and away from Kingsport, farm areas and the sizes of farms increase.

3.0 ASSESSMENT METHODOLOGY

3.1 Resources

Resources utilized during this Phase I study include a database search performed by EDR; cooperation with state, local and federal environmental agencies; Aerial photographs; on-site field investigations and interviews with local residents and/or officials.

The first step in the investigatory process involved acquiring existing information to determine the location of registered and known underground storage tanks, waste sites, and related issues. This necessitated the contact of appropriate government agencies, and reviewing available literature and documents. The second aspect involved an on-site survey of the proposed corridor, including interviews with local people. All Assessment methods were in accordance with the scope and limitations of published ASTM Practice E-1527.

3.1.1 FirstSearch Technology Corporation

The purpose of the environmental records review was to establish a continuous environmental history of the subject properties to ascertain whether any hazardous waste or hazardous or toxic material management, handling, treatment or disposal practices occurred at the properties. An environmental database report generated by FirstSearch was used to access environmental records for this project. The databases searched include those specified by ASTM Practice E-1527 as well as other federal and state databases. FirstSearch contacts government agencies to receive updated records on a monthly or quarterly basis, depending on the database. Subsequently, additional listed facilities may exist within the specified search radii that FirstSearch has not identified. An copy of the FirstSearch report is provided in Appendix III.

3.1.1.1 United States Environmental Protection Agency

The following is a list of the Federal databases searched by FirstSearch.

CERCLIS The Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) database is a list of sites that the EPA has investigated or is currently investigating for potentially hazardous substance contamination for possible inclusion on the National Priority List (NPL).

Updated quarterly

NPL The NPL is a subset of CERCLIS and identifies more than 1,200 sites for priority cleanup under the Federal Superfund Program

Updated quarterly

RCRIS-TSD The Resource Conservation and Recovery Information System (RCRIS) contains information on hazardous waste handlers regulated by the USEPA. The TSD database is a subset of the complete RCRIS files, which include facilities that treat, store, dispose, transport or incinerate hazardous waste.

Updated quarterly

RCRIS-GEN RCRIS contains information on hazardous waste handlers regulated by the USEPA. The generators database is a subset of the RCRIS files, which include hazardous waste generators that create more than 100 kg of hazardous waste per month. Large Quantity Generators (LQG)

generates more than 1000 kg/month and Small Quantity Generators (SQG) generate between 100 and 1,000 kg/month.

Updated quarterly

ERNS The Emergency Response Notification System (ERNS) is a national database that contains information on specific notification releases of oil and hazardous substances into the environment.

Updated semiannually

FINDS FINDS contains both facility information and "pointers" to other sources that contain more detailed site information. The EDR report includes the following FINDS databases:

Updated Annually

- **PCS** Permit Compliance System,
- **AIRS** Aerometric Information Retrieval System,
- **DOCKET** (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes,
- **FURS** Federal Underground Injection Control,
- **C-DOCKET** Criminal Docket System used to track criminal enforcement actions for all environmental statutes,
- **FFIS** Federal Facilities Information System,
- **STATE** State Environmental Laws and Statutes, and
- **PADS** PCB Activity System

PADS The PCB Activity Database (PADS) identifies generators, transporters, commercial stores, and/or brokers and disposers of PCBs who are required to notify the EPA of such activities.

Updated quarterly

3.1.1.1 Tennessee Department of Environment & Conservation (TDEC)

The following is a list of the Tennessee TDEC databases searched by EDR:

State/Tribal SWL Solid Waste Program; a database of all permitted solid waste landfills updated annually.

State/Tribal VCP State Voluntary Cleanup Oversight and Assistance Program. Updated quarterly

State UST/AST Underground/Aboveground Storage Tanks
A list of underground and aboveground storage tanks

Drycleaners Registered Facilities List
A list of all active registered drycleaner facilities. - there may be some inactive facilities included.

State/Tribal LUST: Leaking Underground Storage Tank Sites
Updated quarterly.

3.1.1.1 Aerial Photographs

FirstSearch provided historical aerial photographs for the project corridor. The years represented include 1953, 1976, and 2006. The aerial photographs provide time comparisons showing land changes in utilization of the entire corridor. These were used for reference to assist in locating potential sites of concern.

3.1.1.2 Sanborn Maps

Sanborn fire insurance rate maps provide historical data at various dates for many cities across the United States. However, since Sanborn Map coverage is concentrated toward urbanized areas and due to the limited urban alternate exposure within this project area, it was determined that Sanborn maps would not provide any significant, additional information that would affect the conclusions of this investigation.

3.1.1.3 Personal Interviews

An interview was conducted during the November 2007 field trips with the Director of the Sullivan County Division of Emergency Management. The director is a longtime resident of Sullivan County, and is not aware of any identified or unidentified sites that might contain hazardous materials within the 2000 foot wide corridor surrounding SR 126. See Section 6.0 References.

In addition, a follow up conversation with the TDEC, Johnson City Environmental Field Office was conducted February 22, 2008. The project limits were discussed, and the Johnson City office personnel indicated that no hazardous materials sites of concern exist within the project corridor.

4.0 Records and Field Investigations.

4.1 Records Review

Standard and additional federal, state and local environmental records sources for properties within the ASTM standard radius for each database were reviewed. These records were conducted by FirstSearch Technology Corporation and are included in Appendix A of this report.

A review was conducted of the project area including topographic maps, aerial photographs, and Property Valuation Records. Historical topographic and aerial maps provided by FirstSearch were searched and included the years 1953, 1976, and 2006 for the entire project corridor.

The United States Environmental Protection Agency Envirofacts website and the Tennessee Department of Environment and Conservation website were reviewed.

4.2 Site Reconnaissance

A site visit and reconnaissance were conducted on November 6 and 7, 2007. Several sites with the potential for RECs were identified within and near the State Route 126 project corridor.

4.3 Recommendations

Based upon the field reconnaissance, records research and literature reviews, if the Build Alternative is selected, further action on the sites as identified below is recommended. Section 5.0 provides additional information on these sites.

2. Sunoco Fuel and Convenience Store
4001 Memorial Boulevard
Kingsport, TN 37664

This UST site is an active gasoline/convenience mart. A total of five gasoline tanks are located at this site. Two are in use and three are permanently out of use. Two of the inactive have 8,000 gallon capacities and the third has a 4,000 gallon capacity. The three inactive tanks showed no signs of leakage via stains, oil sheens or odors during field visits. The FirstSearch records search indicates that no tank or pipe leakages have been reported, but further site assessment is recommended to ensure no leakage is associated with this site prior to construction activities.

3. Former Midway Gas Station
5001 Memorial Boulevard
Kingsport, TN

This inactive UST site is located adjacent to SR 126. The FirstSearch records indicate that three USTs are located on the site. Two of the USTs have 1000 gallon capacities and the third is a 550 gallon UST. Tank leak detection is listed for all three of the tanks. However an interview with the current owner indicated that the tanks were removed.

Although the site does not appear to present an environmental concern in relation to the project, a vent pipe was detected in the front, right corner of the building. It is recommended that further investigations be conducted to ensure that proper removal has been completed at this site.

Site 4. B&W Cleaners
3200 Memorial Boulevard
Kingsport, TN 37660

This site was identified by FirstSearch as a RCRA, and FINDS site. Drycleaners produce ignitable waste.

All substances are contained within the building. The walking inspection of the site indicated no leakages or stains, and no odors were evident. This site is located near the western terminus of the project in an urban setting, and could avoid being acquired by the project. If the site does require removal of the dry cleaning facility it could represent a minor environmental concern for the project corridor associated with the production of the ignitable wastes.

6. Greenwood Market and Deli
5121 Memorial Boulevard
Kingsport, TN 37664

No leaks were evident or reported for the two active gasoline tanks. An inactive kerosene tank was reported as leaking in the past. A fourth tank, a 2000 gallon diesel tank was identified, but no tank leaks were reported or evident. The field trip did not reveal any stains, oil slicks or other visual signs of contamination associated with leaks. Although the site is located within the corridor, it is east of any existing anticipated construction activities indicated on the project plans. Further investigation is recommended if future alignments shift to the east to ensure that the kerosene leak has either been mitigated or is avoided.

Former Site of Indian Springs Marathon
5808 Memorial Boulevard
Blountville, TN 37617

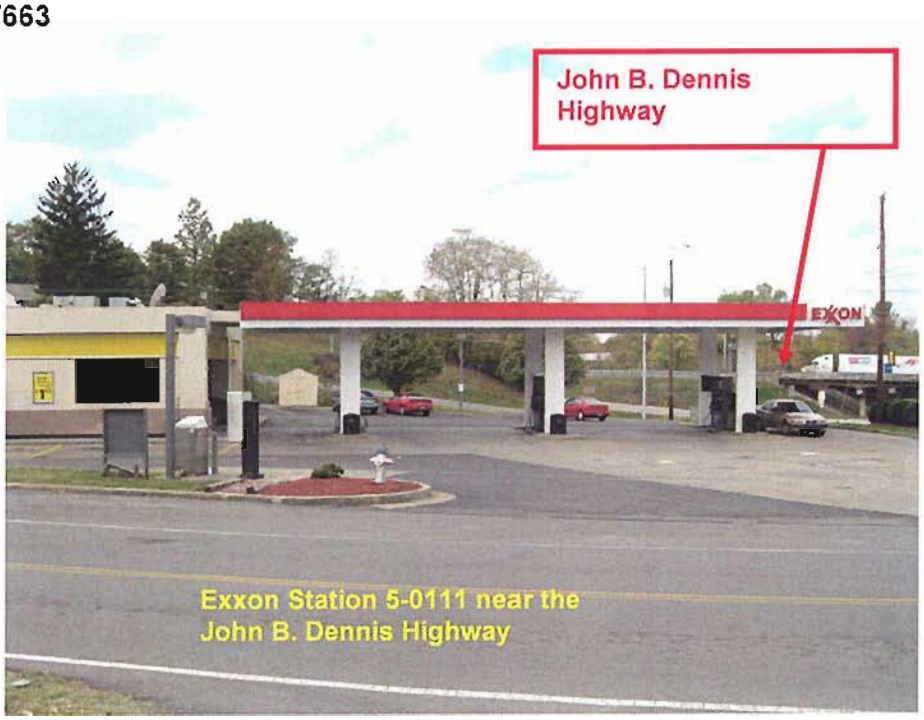
This site is currently inactive. It is located just south of the existing SR 126 highway. At this time, the plan sheets indicate that construction limits would avoid all but the entrance to the facility. However it is within the project corridor. If the alignment shifts to the south, further investigation is recommended for several concerns including three rusted, 55 gallon tanks labeled as containing antifreeze. The tanks were filled. In addition two ASTs were located on the site – one with used automotive oils and a second that was labeled with kerosene. Two hydraulic lifts in the shop area showed signs of hydraulic fluid leakage. It is also suspected that the UST fuel tanks are still located onsite.

5.0 FINDINGS AND CONCLUSIONS

The project corridor for the improvements to SR 126 passes through various land uses. The initial area between Center Street and Skyland Lane is primarily urban with commercial and residential land uses dominating. From Skyland Drive to Indian Hills, residential development is prevalent along most of the area within the immediate vicinity of the roadway. As the project travels eastward from Skyland Drive, the residential density decreases and farmland activities increase. Scattered commercial land use is evident throughout this portion of the project with some increase in commercial usage as the project approaches and passes through the Indian Hills area. From this point to Overhill Drive, residential and farming activities are mixed with occasional commercial uses occurring. The eastern terminus is located at the point where SR 126 joins I-81 as an intersection. A higher commercial land use area defines this final portion of the project corridor.

The project team worked within a 2000 foot corridor, 1000 feet from either side of the existing centerline of SR 126. Records searches and field inspections were combined to determine the existence of USTs, ASTs and other known and unknown sources of potentially hazardous materials. Several sites require further investigation. The sites include a dry cleaning facility located near the western terminus on the north side of existing SR 126, an active gasoline station on the south side of the project, and an inactive gas station that is currently an upholstery shop. Following are locations and accompanying descriptions of sites that were identified within the corridor. The project appears to avoid impacting these, however if alignment shifts require excavation and removal of these sites, additional investigations could be required for Sites 6, 7 and 8 in addition to the limited further investigation for Site 4 as mentioned above in Section 4.3, "Recommendations."

1. Exxon Station 5-0111
3717 Memorial Boulevard
Kingsport, TN 37663



This site, just north of the John B. Dennis Parkway, is currently not a hazardous waste concern. It was reported in 1991 to have had a leaking underground storage tank (LUST). The site is currently active, but past concerns appear to have been mitigated. No further environmental concerns appear to exist.

2. Sunoco Fuel and Convenience Store
4001 Memorial Boulevard
Kingsport, TN 37664

This UST site is an active gasoline/convenience mart. A total of five gasoline tanks are located at this site. Two are in use and three are permanently out of use. Two of the inactive have 8,000 gallon capacities and the third has a 4,000 gallon capacity. The three inactive tanks showed no signs of leakage via stains, oil sheens or odors during field visits. The FirstSearch records search indicates that no tank or pipe leakages have been reported.



In addition, the site has two active 12,000 gallon fuel tanks. These tanks feature a composite construction of steel with FRP. No leakages were evident during the visual walkthrough and none were reported in the FirstSearch records search. An automotive tank gauge is used for inventory control and piping is flexible plastic.

Although the field visit and the results from FirstSearch indicate that no environmental concerns were evident, it is recommended that detailed Environmental Site Assessment be conducted. This will ensure that no leakages of the out of service tanks are occurring or will occur prior to construction of the project.

2. Thouin Enterprises
3933 Memorial Boulevard
Kingsport, TN 37664

This UST-reported site is currently occupied by a retail Pool and Spa store. An interview was conducted with the owner in November 2007 during the field trips. The project construction limits do not require a total acquisition of this site. The FirstSearch report indicated that a 1000 gallon UST for gasoline was once located on this site. Tank leak detection was listed in the report. Conversations with the owner indicate that the tank was removed approximately 20 years ago. Paperwork documenting the removal is located at this site. No vent pipes or other signs associated with gasoline USTs were evident at this site.

3. Former Midway Gas Station
5001 Memorial Boulevard
Kingsport, TN

This inactive UST site is located adjacent to SR 126. The FirstSearch records indicate that three USTs are located on the site. Two of the USTs have 1000 gallon capacities and the third is a 550 gallon UST. Tank leak detection is listed for all three of the tanks. However an interview with the current owner indicated that the tanks were removed.



The current business occupying the site is an upholstery and fabric store. An interview with Mr. Jerry Fleenor, the Director of the Sullivan County Emergency Management Agency, confirmed that the tanks have been removed. According to the current occupant and Mr. Fleenor the tanks were removed approximately 25 years ago.

Although the site does not appear to present an environmental concern in relation to the project, a vent pipe was detected in the front, right corner of the building. It is recommended that further investigations be conducted to ensure that proper removal has been completed at this site.

4. B&W Cleaners
3200 Memorial Boulevard
Kingsport, TN 37660

This site was identified by FirstSearch as a RCRA, and FINDS site. Drycleaners produce ignitable waste.

All substances are contained within the building. The walking inspection of the site indicated no leakages or stains, and no odors were evident. This site is located near the western terminus of the project in an urban setting, and could avoid being acquired by the project. If the site does require removal of the dry cleaning facility it could represent a minor environmental concern for the project corridor associated with the production of the ignitable wastes.

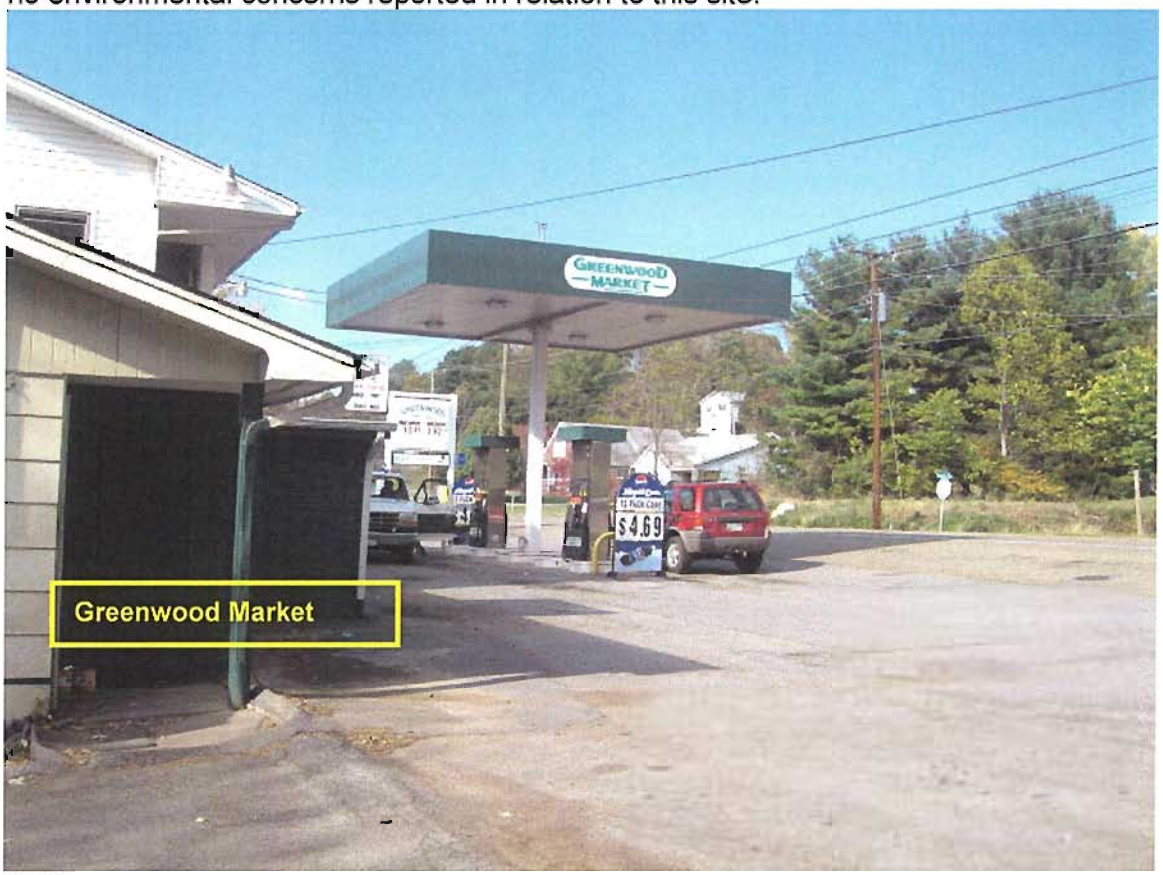
5. Tony's Pipe & Muffler
3310 Memorial Boulevard
Kingsport, TN 37664

This automobile repair facility is a former full service gasoline station. Conversations with the owner indicate that the gasoline tanks have been removed. At this time, the site does not appear to present environmental concerns for the project. The field visit did not

indicate the presence of ASTs, USTs, hazardous waste, stains or signs of leakage on the premises. No environmental concerns appear to exist for this site.

6. Greenwood Market and Deli
5121 Memorial Boulevard
Kingsport, TN 37664

This is an active site. FirstSearch and field visits indicate that two gasoline tanks are located on this site and both are currently in use. Each tank is a fiber reinforced plastic tank, asphalt coated and the interiors are lined. The pipe materials also consist of nonpressurized fiberglass reinforced plastic material. No leaks have been detected and no environmental concerns reported in relation to this site.



An inactive kerosene tank was reported as leaking in the past. A fourth tank, a 2000 gallon diesel tank was identified, but no tank leaks were reported or evident. The field trip did not reveal any stains, oil slicks or other visual signs of contamination associated with leaks. The site is located east of any existing anticipated construction activities. Further investigation is recommended if future alignments shift to the east to ensure that the kerosene leak has either been mitigated or is avoided.

7. Unnamed Construction Site
SR 126 (Memorial Boulevard adjacent to 5234 Memorial Blvd.)
Kingsport, TN 37664

This is an unreported site. Reviews of the project plans indicate that only a portion of the project near the front would be affected. This area did not appear to be included in the area where debris was noticed.

Field visits revealed that tires, vehicles and junk are scattered throughout the most of the site, but not the front area. Trucks and construction equipment are visible, and conversations with area residents indicated that a potential landfill exists. The materials in the fill could include tires and potential automotive fluids including fuel, oil and other materials associated with vehicles. The site was chained and inspections were limited to views from a property on the eastern perimeter of the property and from the roadway.

If alignment changes are made and the proposed new roadway is shifted to then north, minor environmental concerns for the project might occur. Information pertaining to the owner is available and will be supplied to TDOT, however due to the speculative nature of the materials at the site; the specific information will not be published in this document.

8. Former Site of Indian Springs Marathon
5808 Memorial Boulevard
Blountville, TN 37617

This is a former gasoline station. Current plans indicate that a partial acquisition of the property would avoid all areas associated with hazardous materials. If the plans change or a total acquisition is required, this site might present environmental concerns.

The field visit and walking inspection of the site revealed three rusting 55 gallon drums labeled, "used antifreeze" in the side lot on the west side of the building. The drums were sealed, almost filled, and no leakage was evident in the gravel underneath the drums or on the surfaces of the drums themselves. An AST was detected on the back side of the building. The partially filled AST is connected to the structure via a PVC pipe. This AST stored used motor oil. Some spillage was evident on the tank and immediately underneath the tank. A kerosene AST is located on the east side of the building and appeared to still contain some of the kerosene. No leakage was evident.



The garage area has two hydraulic lifts which show evidence of some leakage of hydraulic fluids on the lift posts and the floor area immediately surrounding the posts. It appears that two UST tanks might remain in the ground in the area between the front of the building and SR 126, and a vent pipe was detected at the entrance to the facility. In the area just west of the three drums, a crater was noticed. Next to this crater was a

broken vent pipe. Although no stains were evident, it is likely that an AST could have been removed from this area.





Section 6.0 – References

Environmental FirstSearch, FirstSearch Technology Corporation, Database Report, Inquiry Number 113500 November 5, 2007. Area/Corridor Study, SR 126, Memorial Boulevard, Tennessee.

Environmental FirstSearch, FirstSearch Technology Corporation, Historical Aerial Photographs of Sullivan County, 1953, 1976, 2006 for Indian Springs Quad, 11/05/2007.

Environmental FirstSearch, FirstSearch Technology Corporation, Fire Insurance (Sanborn) Map collection, Sullivan County, 11/05/2007.

Willingham, Fred TDEC, Management of Solid (Trash) & Hazardous Wastes Branch, Manager, Johnson City Office, telephone communication with John W. Brown of HMB, February 26, 2008.

Standard Practice for Environmental Site Assessments: *Phase I Environmental Site Assessment Process E 1527-97*, ASTM Standards on Environmental Site Assessments for Commercial Real Estate.

U.S. Department of Agriculture, 1962, Soil Survey of Dyer County, Tennessee.

U.S. Department of Agriculture, September, 2007, Soil Survey of Sullivan County, Tennessee.

U.S. Geological Survey (USGS), Tennessee 7.5-Minute Series Topographic Maps.

Sanborn Maps

Aerial Photographs of Sullivan County, 1963, 1976, 1996.

APPENDIX A

Environmental FirstSearch Report

FirstSearch Technology Corporation

Environmental FirstSearch™ Report

Target Property: State Road 126 Memorial Blvd

SR 126

KINGSPORT TN 37664

Job Number: 1135.00

PREPARED FOR:

HMB Professional Engineers Inc

3 HMB Circle

Frankfort, KY 40601

07-31-07

Tel: (407) 265-8900 *Fax: (407) 265-8904*

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Environmental FirstSearch
Search Summary Report

Target Site: SR 126

KINGSPORT TN 37664

FirstSearch Summary

Database	Sel	Updated	Radius	Site	1/8	1/4	1/2	1/2>	ZIP	TOTALS
NPL	Y	05-08-07	0.50	0	0	0	0	-	0	0
NPL Delisted	Y	03-08-07	0.50	0	0	0	0	-	0	0
CERCLIS	Y	05-08-07	0.50	0	0	0	0	-	0	0
NFRAP	Y	05-08-07	0.50	0	0	0	0	-	0	0
RCRA COR ACT	Y	06-06-06	0.50	0	0	0	0	-	0	0
RCRA TSD	Y	06-06-06	0.50	0	0	0	0	-	0	0
RCRA GEN	Y	06-06-06	0.50	0	2	1	3	-	0	6
Federal IC / EC	Y	04-16-07	0.50	0	0	0	0	-	0	0
ERNS	Y	12-31-06	0.50	0	1	0	1	-	2	4
Tribal Lands	Y	12-01-05	0.50	0	0	0	0	-	0	0
State/Tribal Sites	Y	04-07-07	0.50	0	0	0	0	-	0	0
State Spills 90	Y	NA	0.50	0	0	0	0	-	0	0
State Spills 80	Y	NA	0.50	0	0	0	0	-	0	0
State/Tribal SWL	Y	06-01-06	0.50	0	0	0	0	-	0	0
State/Tribal LUST	Y	12-01-04	0.50	0	6	1	1	-	2	10
State/Tribal UST/AST	Y	02-23-07	0.50	4	12	6	3	-	3	28
State/Tribal EC	Y	NA	0.50	0	0	0	0	-	0	0
State/Tribal IC	Y	NA	0.50	0	0	0	0	-	0	0
State/Tribal VCP	Y	02-20-07	0.50	0	0	0	0	-	0	0
State/Tribal Brownfields	Y	02-20-07	0.50	0	0	0	0	-	0	0
Wetlands	Y	11-20-00	0.50	0	0	5	4	-	0	9
Floodplains	Y	09-13-98	0.50	0	0	0	0	-	0	0
Receptors	Y	01-01-05	0.50	0	1	1	6	-	0	8
USGS Soils	Y	03-18-97	0.50	6	1	0	0	-	0	7
NPDES	Y	12-15-06	0.50	0	3	0	0	-	0	3
FINDS	Y	11-01-06	0.50	0	5	12	12	-	14	43
TRIS	Y	11-10-06	0.50	0	0	0	0	-	0	0
HMIRS	Y	07-03-07	0.50	0	0	0	0	-	3	3
NCDB	Y	09-22-06	0.50	0	0	1	0	-	0	1

Notice of Disclaimer

Due to the limitations, constraints, inaccuracies and incompleteness of government information and computer mapping data currently available to FirstSearch Technology Corp., certain conventions have been utilized in preparing the locations of all federal, state and local agency sites residing in FirstSearch Technology Corp.'s databases. All EPA NPL and state landfill sites are depicted by a rectangle approximating their location and size. The boundaries of the rectangles represent the eastern and western most longitudes; the northern and southern most latitudes. As such, the mapped areas may exceed the actual areas and do not represent the actual boundaries of these properties. All other sites are depicted by a point representing their approximate address location and make no attempt to represent the actual areas of the associated property. Actual boundaries and locations of individual properties can be found in the files residing at the agency responsible for such information.

Waiver of Liability

Although FirstSearch Technology Corp. uses its best efforts to research the actual location of each site, FirstSearch Technology Corp. does not and can not warrant the accuracy of these sites with regard to exact location and size. All authorized users of FirstSearch Technology Corp.'s services proceeding are signifying an understanding of FirstSearch Technology Corp.'s searching and mapping conventions, and agree to waive any and all liability claims associated with search and map results showing incomplete and or inaccurate site locations.

- Continued on next page -

Environmental FirstSearch
Search Summary Report

Target Site: SR 126

KINGSPORT TN 37664

FirstSearch Summary

Database	Sel	Updated	Radius	Site	1/8	1/4	1/2	1/2>	ZIP	TOTALS
PADS	Y	04-12-07	0.50	0	0	0	0	-	0	0
Releases	Y	12-31-06	0.50	0	0	0	0	-	1	1
State Other	Y	01-15-07	0.50	0	1	1	2	-	0	4
FI Map Coverage	Y	04-25-07	0.12	1	0	-	-	-	0	1
- TOTALS -				11	32	28	32	0	25	128

Notice of Disclaimer

Due to the limitations, constraints, inaccuracies and incompleteness of government information and computer mapping data currently available to FirstSearch Technology Corp., certain conventions have been utilized in preparing the locations of all federal, state and local agency sites residing in FirstSearch Technology Corp.'s databases. All EPA NPL and state landfill sites are depicted by a rectangle approximating their location and size. The boundaries of the rectangles represent the eastern and western most longitudes; the northern and southern most latitudes. As such, the mapped areas may exceed the actual areas and do not represent the actual boundaries of these properties. All other sites are depicted by a point representing their approximate address location and make no attempt to represent the actual areas of the associated property. Actual boundaries and locations of individual properties can be found in the files residing at the agency responsible for such information.

Waiver of Liability

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Environmental FirstSearch
Site Information Report

Request Date:	07-31-07	**Search Type:**	LINEAR
Requestor Name:	hmb/jbrown/vm		8.75 mile(s)
Standard:	LINEAR	**Job Number:**	1135.00
		Filtered Report	

Target Site: SR 126
KINGSPORT TN 37664

Demographics

Sites:	128	**Non-Geocoded:**	25	**Population:**	NA
Radon:	0.2 - 28.8 PCI/L				

Site Location

	Degrees (Decimal)	**Degrees (Min/Sec)**		**UTMs**
Longitude:	-82.454432	-82:27:16	**Easting:**	369806.855
Latitude:	36.539471	36:32:22	**Northing:**	4044568.368
			Zone:	17

Comment

Comment:

Additional Requests/Services

Adjacent ZIP Codes: 0.25 Mile(s)

ZIP Code	City Name	ST	Dist/Dir	Sel
37617	BLOUNTVILLE	TN	0.00 --	Y

Services:

	Requested?	Date
Sanborns	No	
Aerial Photographs	No	
Historical Topos	No	
City Directories	No	
Title Search/Env Liens	No	
Municipal Reports	No	
Online Topos	No	

Environmental FirstSearch
Sites Summary Report

Target Property: SR 126
KINGSPORT TN 37664

JOB: 1135.00

TOTAL: 128 **GEOCODED:** 103 **NON GEOCODED:** 25 **SELECTED:** 7

Map ID	DB Type	Site Name/ID/Status	Address	Dist/Dir	Page No.
10	FIMAP	FIRE INSURANCE MAP POLY-24554/SANBORN	KINGSPORT TN 37660	0.00 --	1
4	SOILS	USSOILS DATA TNSO-06-148/STATSGO	TN	0.00 --	2
9	SOILS	USGS-DIGITAL DATA SERIES-11 DDS-USGS-12829/BEDROCK GEOLOGY	US	0.00 --	3
1	SOILS	USSOILS DATA TNSO-06-123/STATSGO	TN	0.00 --	4
6	SOILS	USSOILS DATA TNSO-06-145/STATSGO	TN	0 00 --	5
8	SOILS	USGS-DIGITAL DATA SERIES-11 DDS-USGS-12817/BEDROCK GEOLOGY	US	0.00 --	6
3	SOILS	USSOILS DATA TNSO-06-131/STATSGO	TN	0.00 --	7
2	UST	GREENWOOD MARKET, INC 1-820448	5121 MEMORIAL BLVD. KINGSPORT TN 37664	0.00 --	8
2	UST	GREENWOOD MARKET 1-820150	5121 MEMORIAL BLVD. KINGSPORT TN 37660	0.00 --	10
7	UST	OLD SIMPSON MOTORS 1-820587	3310 MEMORIAL BLVD. KINGSPORT TN 37660	0.00 --	12
5	UST	THOUIN ENTERPRISES, INC 1-820582	3933 MEMORIAL BLVD. KINGSPORT TN 37664	0.00 --	15
13	FINDS	EXXON STATION 5-0111 110014331730/FRS	3717 MEMORIAL BOULEVARD KINGSPORT TN 37663	0.01 NE	16
13	LUST	EXXON STATION 5-0111 1-820163/ACTIVE	3717 MEMORIAL BlVD KINGSPORT TN 37664	0.01 NE	17
13	NPDES	TN0074110/MINOR	KINGSPORT TN 37664	0.01 NE	18
18	UST	TRI CITY GARBAGE AND DISPOSAL CO A 1-820585	3711 HIGHWAY 126 BLUFF CITY TN 37618	0.01 NE	19
16	UST	CHEVRON FACILITY 49739 1-820538	3801 MEMORIAL DRIVE KINGSPORT TN 37660	0.01 NE	23
13	UST	ZOOMERZ 54 1-820163	3717 MEMORIAL BLVD. KINGSPORT TN 37660	0.01 NE	26
17	ERNS	NRC-775049/FIXED	4601 MEMORIAL BLVD CHRISM43 KINGSPORT TN 37664	0.01 NW	30
15	FINDS	B and W CLEANERS 110015666858/FRS	3200 MEMORIAL BOULEVARD KINGSPORT TN 37660	0.01 NW	33
12	FINDS	SHALLOWBROOK CONDOMINIUM APTS TN0001716836	3204 MEMORIAL BLVD KINGSPORT TN 37664	0 01 NW	35
15	OTHER	B and W CLEANERS D-82-103	3200 MEMORIAL BLVD KINGSPORT TN 37664	0.01 NW	35

Environmental FirstSearch
Sites Summary Report

Target Property: SR 126
KINGSPORT TN 37664

JOB: 1135.00

TOTAL: 128 **GEOCODED:** 103 **NON GEOCODED:** 25 **SELECTED:** 7

Map ID	DB Type	Site Name/ID/Status	Address	Dist/Dir	Page No.
15	RCRAGN	B and W CLEANERS TNR000017160/VGN	3200 MEMORIAL BOULEVARD KINGSPORT TN 37660	0.01 NW	36
14	LUST	CHEROKEE FOOD STORE 4 1-820144/ACTIVE	3177 MEMORIAL BLVD. KINGSPORT TN 37660	0.01 S-	37
14	UST	GARDEN BASKET CONV STORE 4 1-820144	3177 MEMORIAL BLVD. KINGSPORT TN 37660	0.01 S-	38
11	FINDS	INDIAN SPRINGS CAR WASH TN0000541938	5703 MEMORIAL BLVD KINGSPORT TN 37664	0.01 SE	41
11	LUST	CHEROKEE FOOD STORE 13 1-820029/ACTIVE	5703 MEMORIAL BLVD. KINGSPORT TN 37660	0.01 SE	41
11	UST	CHEROKEE FOOD STORE 13 1-820029	5703 MEMORIAL BLVD. KINGSPORT TN 37660	0.01 SE	42
22	NPDES	MILTON DEVELOPMENT CORP. 3802 MEMO TNU950550/MINOR	TN 37664	0.02 NE	46
23	UST	SUNBRIDGE CARE AND REHABILITATION 1-820516	DBA HILLSIDE MANOR3641 MEMO KINGSPORT TN 37664	0.02 NE	47
20	LUST	AMOCO SERVICE STATION 1-820435/ACTIVE	3101 MEMORIAL BLVD KINGSPORT TN 37664	0.02 S-	49
20	UST	AMOCO SERVICE STATION 1-820435	3101 MEMORIAL BLVD. KINGSPORT TN 37664	0.02 S-	50
19	LUST	COASTAL MART 7034 1-820193/CLOSED	4000 MEMORIAL DRIVE KINGSPORT TN 37664	0.02 SE	53
19	UST	SUNOCO 0968-5355 1-820193	4001 MEMORIAL BLVD. KINGSPORT TN 37664	0.02 SE	54
21	UST	CENTRAL CHEVRON FOOD MART 1-820565	220 CAROLINA POTTERY DRIVE BLOUNTVILLE TN 37617	0.02 SW	58
24	UST	MIDWAY GROCERY 1-820237	5001 MEMORIAL BLVD. KINGSPORT TN 37660	0.03 NW	61
25	LUST	APPCO 22 1-820403/ACTIVE	181 AND HWY 126 BLOUNTVILLE TN 37617	0.05 NE	64
25	UST	BAY CO. 1-820403	5027 HIGHWAY 126 BLOUNTVILLE TN 37617	0.05 NE	65
26	SOILS	USSOILS DATA TNSO-06-118/STATSGO	TN	0.06 NW	69
28	SCHOOL	ROSS N ROBINSON JUNIOR HIGH SCHOOL TN-134980	TN	0.12 N-	70
27	FINDS	PENSKE TRUCK LEASING CO. L.P 110004990289/FRS	323 OVERHILL ROAD BLOUNTVILLE TN 37617	0.12 NE	71
27	NPDES	PENSKE TRUCK LEASING CO., L.P. TN0061760/MINOR	BLOUNTVILLE TN 37617	0.12 NE	73

Environmental FirstSearch
Sites Summary Report

Target Property: SR 126
KINGSPORT TN 37664

JOB: 1135.00

TOTAL: 128 **GEOCODED:** 103 **NON GEOCODED:** 25 **SELECTED:** 7

Map ID	DB Type	Site Name/ID/Status	Address	Dist/Dir	Page No.
27	RCRAGN	PENSKE TRUCK LEASING CO. L.P TND987766185/VGN	323 OVERHILL ROAD BLOUNTVILLE TN 37617	0 12 NE	74
27	UST	HERTZ PENSKE TRUCK LEASING 1-820411	323 OVVERHILL ROAD RT. 6 BO BLOUNTVILLE TN 37617	0.12 NE	75
29	WETLANDS	NATIONAL WETLANDS INVENTORY NWI-TN-12823/PUBHH	TN	0.13 SE	76
30	LUST	DIXIE CEMENT COMPANY 1-820116/DENIED	KINGSPORT TN 37660	0.14 SE	76
30	UST	DIXIE CEMENT CO 1-820116	HILL ST. KINGSPORT TN 37660	0.14 SE	77
31	FINDS	DISCOUNT TRANSMISSION and AUTOMOTI TN0001825801	1556 WARPATH DR KINGSPORT TN 37660	0.15 S-	79
32	SCHOOL	DICKSON ELEMENTARY SCHOOL TN-131548	TN	0.17 NW	79
33	FINDS	AIR RESOURCE ENGRNG TND987772472	4538 BROOKRIDGE DR KINGSPORT TN 37662	0.18 NW	79
33	FINDS	AIR RESOURCE ENGRNG 110001858231/FRS	4538 BROOKRIDGE DR KINGSPORT TN 37662	0.18 NW	80
34	FINDS	INDIAN SPRINGS ELEM SCH TND987780996	333 HILL RD KINGSPORT TN 37664	0.19 SW	82
34	NCDB	INDIAN SPRINGS ELEM NCDB-0801-023183/TSCA	333 HILL RD KINGSPORT TN 37664	0 19 SW	83
35	UST	HERITAGE FEDERAL BANK/SAVINGS 1-820574	2060 FT. HENRY DRIVE KINGSPORT TN 37664	0.21 SW	84
36	FINDS	SEARS ROEBUCK AND CO 2285 TN0001825819	2101 FORT HENRY DR KINGSPORT TN 37664	0.22 SW	85
36	FINDS	SEARS ROEBUCK AND CO 2825, 6808 110005003824/FRS	2101 FORT HENRY DRIVE KINGSPORT TN 37664	0.22 SW	86
36	RCRAGN	SEARS ROEBUCK AND CO 2825, 6808 TNR000002436/VGN	2101 FORT HENRY DRIVE KINGSPORT TN 37664	0.22 SW	88
36	UST	SEARS ROEBUCK AND CO. 2825 1-820314	2101 FT. HENRY DRIVE KINGSPORT TN 37660	0.22 SW	89
36	UST	J C PENNEY 1-820180	2101 FORT HENRY DRIVE KINGSPORT TN 37660	0.22 SW	90
39	OTHER	NCLRTN-810	1437 MILLER ST KINGSPORT TN	0.23 S-	92
37	WETLANDS	NATIONAL WETLANDS INVENTORY NWI-TN-12825/PUBHH	TN	0.23 SE	92
41	WETLANDS	NATIONAL WETLANDS INVENTORY NWI-TN-12824/PUBHH	TN	0 23 SE	93

Environmental FirstSearch
Sites Summary Report

Target Property: SR 126
KINGSPORT TN 37664

JOB: 1135.00

TOTAL: 128 **GEOCODED:** 103 **NON GEOCODED:** 25 **SELECTED:** 7

Map ID	DB Type	Site Name/ID/Status	Address	Dist/Dir	Page No.
40	WETLANDS	NATIONAL WETLANDS INVENTORY NWI-TN-12821/PUBHH	TN	0.23 SE	93
38	FINDS	JIFFY LUBE 110004991778/FRS	1786 FORT HENRY DR KINGSPORT TN 37664	0.23 SW	94
38	FINDS	TRICITY CAR KARE, INC.(JIFFY LUBE) TND987772787	1786 FORT HENRY DR KINGSPORT TN 37664	0.23 SW	95
38	UST	JIFFY LUBE 1-820400	1786 FT. HENRY DRIVE KINGSPORT TN 37660	0.23 SW	96
42	WETLANDS	NATIONAL WETLANDS INVENTORY NWI-TN-12826/PUBFH	TN	0.24 SE	99
44	FINDS	G and K SERVICES INCORPORATED 110001859123/FRS	2117 BERRY STREET KINGSPORT TN 37664	0.25 NW	100
44	FINDS	RENTAL UNIFORM CO INC TND980799365	2117 BERRY ST KINGSPORT TN 37664	0.25 NW	102
44	UST	RENTAL UNIFORM CO 1-820285	2117 BERRY ST. PO BOX 3570 KINGSPORT TN 37664	0.25 NW	103
43	FINDS	EXCELL-O-CLEAN 110004986052/FRS	217 SHULER ST KINGSPORT TN 37664	0.25 SE	106
43	FINDS	EXCELL-O-CLEAN TND982097347	217 SHULER ST KINGSPORT TN 37664	0.25 SE	107
45	ERNS	AMERICAN ELECTRIC POWER 493942/FIXED FACILITY	2312 ASHWOOD ST KINGSPORT TN 37664	0.27 N-	108
47	SCHOOL	SULLIVAN CENTRAL HIGH SCHOOL TN-135527	TN	0.28 SE	109
46	SCHOOL	INDIAN SPRINGS ELEMENTARY SCHOOL TN-132867	TN	0.28 SW	109
48	WETLANDS	NATIONAL WETLANDS INVENTORY NWI-TN-12820/PEM1C	TN	0.30 SE	109
49	FINDS	MUNAL CLINIC INC 110004975778/FRS	1735 FORT HENRY DRIVE KINGSPORT TN 37664	0.31 NW	110
49	UST	HOLSTON MEDICAL GROUP FACILITY 1-820584	1735 FORT HENRY DRIVE KINGSPORT TN 37664	0.31 NW	111
51	FINDS	CONCORD CUSTOM CLEANERS 067 TND981023807	FT HENRY and EASTMAN RD KINGSPORT TN 37664	0.32 NW	112
51	FINDS	CONCORD CUSTOM CLEANERS 067 110004982706/FRS	1700 FORT HENRY DRIVE KINGSPORT TN 37664	0.32 NW	113
51	OTHER	CONCORD CUSTOM CLEANERS 067 D-82-111	1700 FORT HENRY DRIVE KINGSPORT TN 37664	0.32 NW	115
51	RCRAGN	CONCORD CUSTOM CLEANERS 067 TND981023807/VGN	1700 FT HENRY DRIVE KINGSPORT TN 37664	0.32 NW	116

Environmental FirstSearch
Sites Summary Report

Target Property: SR 126
KINGSPORT TN 37664

JOB: 1135.00

TOTAL: 128 **GEOCODED:** 103 **NON GEOCODED:** 25 **SELECTED:** 7

Map ID	DB Type	Site Name/ID/Status	Address	Dist/Dir	Page No.
50	SCHOOL	HARBOR SCHOOL (HISTORICAL) TN-132465	TN	0.32 SE	118
52	SCHOOL	GUNNINGS SPECIAL EDUCATION SCHOOL TN-132404	TN	0.32 SW	118
53	FINDS	WATSON LITHOGRAPHING COMPANY* 110004957280/FRS	229 ISLAND ROAD KINGSPORT TN 37660	0.34 NE	119
54	FINDS	WILLEY INC DBA CHEMLAWN TND980540181	2301 FT HENRY DR KINGSPORT TN 37660	0.37 S-	120
54	FINDS	WILLEY INC DBA CHEMLAWN 110004981636/FRS	2301 FT HENRY DR KINGSPORT TN 37660	0.37 S-	121
55	SCHOOL	GUNNINGS ACADEMY (HISTORICAL) TN-132403	TN	0.38 SE	122
56	SCHOOL	SUNNYSIDE SCHOOL (HISTORICAL) TN-135570	TN	0.40 SE	122
57	FINDS	EXXON MOBIL CORP 56699 110004993204/FRS	1673 FORT HENRY DR KINGSPORT TN 37664	0.42 NW	123
57	LUST	EXXON STATION 1-820053/CLOSED	1673 FORT HENRY DRIVE KINGSPORT TN 37644	0.42 NW	124
57	UST	ZOOMERS 69 1-820053	1673 FT. HENRY DRIVE KINGSPORT TN 37660	0.42 NW	125
59	UST	M AND M MARKET LLC. 1-820230	1571 NORTH EASTMAN ROAD KINGSPORT TN 37660	0.44 NW	128
58	WETLANDS	NATIONAL WETLANDS INVENTORY NWI-TN-12767/PUBHH	TN	0.44 NW	132
60	FINDS	SULLIVAN CNTY JAILandCNTY OFFICE TN0001716828	1201 N EASTMAN RD KINGSPORT TN 37664	0.46 NW	132
61	WETLANDS	NATIONAL WETLANDS INVENTORY NWI-TN-12822/PUBFH	TN	0.46 SE	132
62	FINDS	HEPACO INC 110014439303/FRS	279 SHIPLEY FERRY RD BLOUNTVILLE TN 37617	0.47 SW	133
62	RCRAGN	HEPACO INC TNR000015198/LGN	279 SHIPLEY FERRY RD BLOUNTVILLE TN 37617	0.47 SW	135
63	WETLANDS	NATIONAL WETLANDS INVENTORY NWI-TN-12799/PUBHH	TN	0.48 SE	136
64	FINDS	STATION IS IN THE NORTH CORNER OF 110020862823/FRS	1649 D STREET KINGSPORT TN 37664	0.49 NW	137
65	FINDS	MASSEYS CLEANERS 110004969963/FRS	1175 SOUTH EASTMAN ROAD KINGSPORT TN 37664	0.50 SW	138
65	FINDS	MASSEYS CLEANERS INC TND058663352	GREENACRES SHOPPING CTR KINGSPORT TN 37664	0.50 SW	140

Environmental FirstSearch
Sites Summary Report

Target Property: SR 126
KINGSPORT TN 37664

JOB: 1135.00

TOTAL: 128 **GEOCODED:** 103 **NON GEOCODED:** 25 **SELECTED:** 7

Map ID	DB Type	Site Name/ID/Status	Address	Dist/Dir	Page No.
65	OTHER	MASSEY S DRY CLEANERS D-82-108	1175 EASTMAN DRIVE KINGSPORT TN 37664	0.50 SW	140
65	RCRAGN	MASSEYS CLEANERS TND058663352/VGN	1175 SOUTH EASTMAN ROAD KINGSPORT TN 37664	0.50 SW	141

Environmental FirstSearch
Sites Summary Report

Target Property: SR 126
KINGSPORT TN 37664

JOB: 1135.00

TOTAL: 128 **GEOCODED:** 103 **NON GEOCODED:** 25 **SELECTED:** 7

Map ID	DB Type	Site Name/ID/Status	Address	Dist/Dir	Page No.
	ERNS	PRAXAIR, INC. 561560/UNKNOWN	JCT I-81 AND I-181 KINGSPORT TN	NON GC	N/A
	ERNS	DEPENDABLE AUTO SHIPPERS 356369/UNKNOWN	I-81 APPROX MILE POST 63 BLOUNTVILLE TN 37617	NON GC	N/A
	FINDS	SITE ID 471631007 110006925738/FRS	2216 WESTMORELAND AVE KINGSPORT TN 37664	NON GC	N/A
	FINDS	APPCO 6 110027784805/FRS	3686 HIGHWAY 126 BLOUNTVILLE TN 37617	NON GC	N/A
	FINDS	CHAIRMAN GOLF CO INC 110008128613/FRS	DALE ST BLOUNTVILLE TN 37617	NON GC	N/A
	FINDS	BETHEL DRIVE SITE TND987766441	BETHEL DRIVE BLOUNTVILLE TN 37617	NON GC	N/A
	FINDS	EVAN ENERGY COMPANY 110010797334/FRS	1999 E STONE DR STE 201 KINGSPORT TN	NON GC	N/A
	FINDS	CHAIRMAN GOLF CO INC TN0001088392	DALE ST BLOUNTVILLE TN 37617	NON GC	N/A
	FINDS	TWO GUYS WELDING INC TN0001042902	5213 OLD ISLAND RD KINGSPORT TN 37664	NON GC	N/A
	FINDS	110020803157/FRS	EASTMAN SKYLAND DRIVE CHEST KINGSPORT TN 37664	NON GC	N/A
	FINDS	SITE ID 471630018 110006926238/FRS	EASTMAN SKYLAND DRIVE CHEST KINGSPORT TN 37664	NON GC	N/A
	FINDS	ZOOMERZ 69 110027740675/FRS	1673 FORT HENRY DRIVE KINGSPORT TN 37664	NON GC	N/A
	FINDS	WASTE MANAGEMENT TRI CITIES 110029013975/FRS	I-81 EXIT 63 BLOUNTVILLE TN 37617	NON GC	N/A
	FINDS	110020919737/FRS	EASTMAN PRESTON HILL OREBAN KINGSPORT TN	NON GC	N/A
	FINDS	ZOOMERZ 54 110027740452/FRS	3717 MEMORIAL BLVD KINGSPORT TN 37664	NON GC	N/A
	FINDS	BERRY JACK 110024224793/FRS	RT 3 FALL CREEK RD KINGSPORT TN 37664	NON GC	N/A
	HMIRS	HIGHWAY TRANSPORT 20040809604	6570 FORT HENRY DRIVE KINGSPORT TN 37664	NON GC	N/A
	HMIRS	ROGERS CARTAGE CO 2004100562/4	I-81 KINGSPORT TN	NON GC	N/A
	HMIRS	SCHNEIDER NAT L BULK CARRIERS 1994100940/HIGHWAY (FOR HIRE)	SHERWOOD RD KINGSPORT TN 37664	NON GC	N/A
	LUST	BROWN THURSTON MOTOR LINE 1-820436/ACTIVE	US HIGHWAY 11 WEST BLOUNTVILLE TN 37617	NON GC	N/A

Environmental FirstSearch
Sites Summary Report

Target Property: SR 126
KINGSPORT TN 37664

JOB: 1135.00

TOTAL: 128 **GEOCODED:** 103 **NON GEOCODED:** 25 **SELECTED:** 7

Map ID	DB Type	Site Name/ID/Status	Address	Dist/Dir	Page No.
	LUST	C and S TRANSIT FACILITY 1-820422/DENIED	VALLEY DRIVE BLOUNTVILLE TN 37617	NON GC	N/A
	RELEASES	DEPENDABLE AUTO SHIPPERS 356369/HIGHWAY RELATED	I-81 APPROX MILE POST 63 BLOUNTVILLE TN 37617	NON GC	N/A
	UST	BALL BROS FURNITURE 1-820445	HIGHWAY 126 BLOUNTVILLE TN 37617	NON GC	N/A
	UST	INTERSTATE TEXACO 1-820177	I-81 AND HIGHWAY 126 BLOUNTVILLE TN 37617	NON GC	N/A
	UST	MR HERMAN HANDY 1-820422	P O BOX 265 VALLEY DRIVE BLOUNTVILLE TN 37617	NON GC	N/A

Environmental FirstSearch
Site Detail Report

Target Property: SR 126
KINGSPORT TN 37664

JOB: 1135.00

FIMAP

SEARCH ID: 95 **DIST/DIR:** 0.00 -- **MAP ID:** 10

NAME: FIRE INSURANCE MAP
ADDRESS:
KINGSPORT TN 37660
CONTACT:

REV: 11/18/98
ID1: POLY-24554
ID2:
STATUS: SANBORN
PHONE:

SITE INFORMATION

SOURCE COLLECTION: SANBORN

NUMBER OF MAPS: UNDETERMINED

POSSIBLE MAP LOCATION

KINGSPORT

Environmental FirstSearch
Site Detail Report

Target Property: SR 126
KINGSPORT TN 37664

JOB: 1135.00

SOILS

SEARCH ID: 92 **DIST/DIR:** 0.00 -- **MAP ID:** 4

NAME: USSOILS DATA
ADDRESS:
TN
CONTACT:

REV: 3/18/97
ID1: TNSO-06-148
ID2: TN161
STATUS: STATSGO
PHONE:

SITE INFORMATION

The National Resource Conservation Service recommends that the data not be used to describe soil characteristics for regions smaller than a multi-county area.

WATER CAPACITY (INCHES PER INCH):	0.15
PERCENT CLAY (PERCENT < 2mm):	27.2
K FACTOR:	0.32
ORGANIC MATERIAL (PERCENT BY WEIGHT):	0.5
SOIL PERMEABILITY (INCHES PER HOUR):	1.19
CUMULATIVE LAYER THICKNESS (INCHES):	73
HYDROLOGIC CHARACTERISTICS:	2.4
SOIL DRAINAGE:	3.5
SUFACE SLOPE (PERCENT):	8 6
LIQUID LIMIT (PERCENT MOISTURE BY WEIGHT):	32.2
HYDRIC COMPONENT SHARE (1=ALL COMPONENTS):	0.1
ANNUAL FLOOD FREQUENCY:	3.8

LEGEND

HYDROLOGIC CHARACTERISTICS:
1 = HIGH INFILTRATION
2 = MODERATE INFILTRATION
3 = SLOW INFILTRATION
4 = VERY SLOW INFILTRATION

SOIL DRAINAGE:
1 = EXCESS
2 = MODERATE EXCESS
3 = WELL
4 = MODERATELY WELL
5 = MODERATELY POOR
6 = POOR
7 = VERY POOR

ANNUAL FLOOD FREQUENCY:
1 = GREATER THAN 50 PERCENT
2 = 5 TO 50 PERCENT
3 = 0 TO 5 PERCENT
4 = NONE

Environmental FirstSearch
Site Detail Report

Target Property: SR 126
KINGSPORT TN 37664

JOB: 1135.00

SOILS

SEARCH ID: 89 **DIST/DIR:** 0.00 -- **MAP ID:** 9

NAME: USGS-DIGITAL DATA SERIES-11
ADDRESS:
US
CONTACT:

REV: 1/19/99
ID1: DDS-USGS-12829
ID2:
STATUS: BEDROCK GEOLOGY
PHONE:

SITE INFORMATION

AREA:	0.609121
PERIMETER:	17.9587
ROCK DESCRIPTION:	Ordovician
METAMORPHOSIS:	No Metamorphism
STRATIGRAPHIC ORDER:	126 - Stratigraphic order from youngest (1) to oldest (162)

Environmental FirstSearch
Site Detail Report

Target Property: SR 126
KINGSPORT TN 37664

JOB: 1135.00

SOILS

SEARCH ID: 91 **DIST/DIR:** 0.00 -- **MAP ID:** 1

NAME: USSOILS DATA
ADDRESS:
TN
CONTACT:

REV: 3/18/97
ID1: TNSO-06-123
ID2: TN131
STATUS: STATSGO
PHONE:

SITE INFORMATION

The National Resource Conservation Service recommends that the data not be used to describe soil characteristics for regions smaller than a multi-county area.

WATER CAPACITY (INCHES PER INCH):	0.11
PERCENT CLAY (PERCENT < 2mm):	43.3
K FACTOR:	0.22
ORGANIC MATERIAL (PERCENT BY WEIGHT):	0.6
SOIL PERMEABILITY (INCHES PER HOUR):	0 56
CUMULATIVE LAYER THICKNESS (INCHES):	50.6
HYDROLOGIC CHARACTERISTICS:	3.1
SOIL DRAINAGE:	3.2
SUFACE SLOPE (PERCENT):	15.7
LIQUID LIMIT (PERCENT MOISTURE BY WEIGHT):	52
HYDRIC COMPONENT SHARE (1=ALL COMPONENTS):	0
ANNUAL FLOOD FREQUENCY:	3.9

LEGEND

HYDROLOGIC CHARACTERISTICS:	1 = HIGH INFILTRATION 2 = MODERATE INFILTRATION 3 = SLOW INFILTRATION 4 = VERY SLOW INFILTRATION
SOIL DRAINAGE:	1 = EXCESS 2 = MODERATE EXCESS 3 = WELL 4 = MODERATELY WELL 5 = MODERATELY POOR 6 = POOR 7 = VERY POOR
ANNUAL FLOOD FREQUENCY:	1 = GREATER THAN 50 PERCENT 2 = 5 TO 50 PERCENT 3 = 0 TO 5 PERCENT 4 = NONE

Target Property: SR 126
KINGSPORT TN 37664

JOB: 1135.00

SOILS

SEARCH ID: 94 **DIST/DIR:** 0.00 -- **MAP ID:** 6

NAME: USSOILS DATA
ADDRESS:
TN
CONTACT:

REV: 3/18/97
ID1: TNSO-06-145
ID2: TN143
STATUS: STATSGO
PHONE:

SITE INFORMATION

The National Resource Conservation Service recommends that the data not be used to describe soil characteristics for regions smaller than a multi-county area.

WATER CAPACITY (INCHES PER INCH):	0.11
PERCENT CLAY (PERCENT < 2mm):	30.5
K FACTOR:	0.24
ORGANIC MATERIAL (PERCENT BY WEIGHT):	0.5
SOIL PERMEABILITY (INCHES PER HOUR):	0.77
CUMULATIVE LAYER THICKNESS (INCHES):	39.4
HYDROLOGIC CHARACTERISTICS:	3.5
SOIL DRAINAGE:	2.9
SUFACE SLOPE (PERCENT):	26.7
LIQUID LIMIT (PERCENT MOISTURE BY WEIGHT):	36.2
HYDRIC COMPONENT SHARE (1=ALL COMPONENTS):	0
ANNUAL FLOOD FREQUENCY:	3.6

LEGEND

HYDROLOGIC CHARACTERISTICS:
1 = HIGH INFILTRATION
2 = MODERATE INFILTRATION
3 = SLOW INFILTRATION
4 = VERY SLOW INFILTRATION

SOIL DRAINAGE:
1 = EXCESS
2 = MODERATE EXCESS
3 = WELL
4 = MODERATELY WELL
5 = MODERATELY POOR
6 = POOR
7 = VERY POOR

ANNUAL FLOOD FREQUENCY:
1 = GREATER THAN 50 PERCENT
2 = 5 TO 50 PERCENT
3 = 0 TO 5 PERCENT
4 = NONE

Environmental FirstSearch
Site Detail Report

Target Property: SR 126
KINGSPORT TN 37664

JOB: 1135.00

SOILS

SEARCH ID: 88 **DIST/DIR:** 0.00 -- **MAP ID:** 8

NAME: USGS-DIGITAL DATA SERIES-11
ADDRESS:
US
CONTACT:

REV: 1/19/99
ID1: DDS-USGS-12817
ID2:
STATUS: BEDROCK GEOLOGY
PHONE:

SITE INFORMATION

AREA:	0.235867
PERIMETER:	11.9386
ROCK DESCRIPTION:	Cambrian
METAMORPHOSIS:	No Metamorphism
STRATIGRAPHIC ORDER:	134 - Stratigraphic order from youngest (1) to oldest (162)

Target Property: SR 126
KINGSPORT TN 37664

JOB: 1135.00

SOILS

SEARCH ID: 90 **DIST/DIR:** 0.00 -- **MAP ID:** 3

NAME: USSOILS DATA
ADDRESS:
TN
CONTACT:

REV: 3/18/97
ID1: TNSO-06-131
ID2: TN119
STATUS: STATSGO
PHONE:

SITE INFORMATION

The National Resource Conservation Service recommends that the data not be used to describe soil characteristics for regions smaller than a multi-county area.

WATER CAPACITY (INCHES PER INCH):	0.14
PERCENT CLAY (PERCENT < 2mm):	42.8
K FACTOR:	0.25
ORGANIC MATERIAL (PERCENT BY WEIGHT):	0.3
SOIL PERMEABILITY (INCHES PER HOUR):	0.84
CUMULATIVE LAYER THICKNESS (INCHES):	73.6
HYDROLOGIC CHARACTERISTICS:	2.6
SOIL DRAINAGE:	3.1
SUFACE SLOPE (PERCENT):	13.2
LIQUID LIMIT (PERCENT MOISTURE BY WEIGHT):	49.7
HYDRIC COMPONENT SHARE (1=ALL COMPONENTS):	0
ANNUAL FLOOD FREQUENCY:	3.9

LEGEND

HYDROLOGIC CHARACTERISTICS:
1 = HIGH INFILTRATION
2 = MODERATE INFILTRATION
3 = SLOW INFILTRATION
4 = VERY SLOW INFILTRATION

SOIL DRAINAGE:
1 = EXCESS
2 = MODERATE EXCESS
3 = WELL
4 = MODERATELY WELL
5 = MODERATELY POOR
6 = POOR
7 = VERY POOR

ANNUAL FLOOD FREQUENCY:
1 = GREATER THAN 50 PERCENT
2 = 5 TO 50 PERCENT
3 = 0 TO 5 PERCENT
4 = NONE

Target Property: SR 126
KINGSPORT TN 37664

JOB: 1135.00

UST

SEARCH ID: 64 **DIST/DIR:** 0.00 -- **MAP ID:** 2

NAME: GREENWOOD MARKET, INC
ADDRESS: 5121 MEMORIAL BLVD.
KINGSPORT TN 37664
SULLIVAN
CONTACT:

REV: 3/4/05
ID1: 1-820448
ID2:
STATUS:
PHONE:

SITE INFORMATION

TOTAL NUMBER OF TANKS: 2

OWNER INFORMATION:

OWNER ID NUMBER: 2604
OWNER DESCRIPTION: COMMERCIAL
OWNER NAME: Greenwood Market Inc.
OWNER ADDRESS: 5121 MEMORIAL BLVD.
KINGSPORT TN 37664
PHONE: (423) 288-2481

TANK INFORMATION:

TANK NUMBER: 1
TANK STATUS: CURRENTLY IN USE
TANK INSTALLED DATE: 4/28/1980

TANK CAPACITY: 6000 GALLONS
TANK CONTENTS: GASOLINE

MATERIALS OF CONSTRUCTION: ASPHALT COATED OR BARE STEEL / LINED INTERIOR

TANK PROTECTION INFORMATION:

MANUAL TANK GAUGE:	NO	TANK TIGHTNESS TEST:	NO
TANK INVENTORY CONTROL:	NO	AUTOMATIC TANK GAUGING:	NO
TANK VAPOR MONITOR:	NO	GROUNDWATER MONITORING:	NO
DOUBLE WALLED:	NO	SECONDARY CONTAINMENT	NO
SIR:	YES	TANK LEAK DETECTION LISTED:	NO

PIPE INFORMATION:

PIPE MATERIALS: FIBERGLASS REINFORCED PLASTIC / NONE
PIPING TYPE: PRESSURIZED

AUTO LINE LEAK DETECTION:	YES	LINE TIGHTNESS TEST:	NO
VAPOR MONITORING:	NO	GROUNDWATER MONITORING:	NO
DOUBLE WALLED:	NO	SECONDARY CONTAINMENT:	NO
SIR:	YES		
SPILL PROTECTION INSTALLED:	YES	OVERFILL INSTALLED:	YES

TANK NUMBER: 2
TANK STATUS: CURRENTLY IN USE
TANK INSTALLED DATE: 4/28/1980

TANK CAPACITY: 6000 GALLONS
TANK CONTENTS: GASOLINE

- Continued on next page -

Target Property: SR 126
KINGSPORT TN 37664

JOB: 1135.00

UST

SEARCH ID: 64 **DIST/DIR:** 0.00 -- **MAP ID:** 2

NAME:	GREENWOOD MARKET, INC	REV:	3/4/05
ADDRESS:	5121 MEMORIAL BLVD.	ID1:	1-820448
	KINGSPORT TN 37664	ID2:	
	SULLIVAN	STATUS:	
CONTACT:		PHONE:	

MATERIALS OF CONSTRUCTION: ASPHALT COATED OR BARE STEEL / LINED INTERIOR

TANK PROTECTION INFORMATION:

MANUAL TANK GAUGE:	NO	TANK TIGHTNESS TEST:	NO
TANK INVENTORY CONTROL:	NO	AUTOMATIC TANK GAUGING:	NO
TANK VAPOR MONITOR:	NO	GROUNDWATER MONITORING:	NO
DOUBLE WALLED:	NO	SECONDARY CONTAINMENT	NO
SIR:	YES	TANK LEAK DETECTION LISTED:	NO

PIPE INFORMATION:

PIPE MATERIALS: FIBERGLASS REINFORCED PLASTIC / NONE
PIPING TYPE: PRESSURIZED

AUTO LINE LEAK DETECTION:	YES	LINE TIGHTNESS TEST:	NO
VAPOR MONITORING:	NO	GROUNDWATER MONITORING:	NO
DOUBLE WALLED:	NO	SECONDARY CONTAINMENT:	NO
SIR:	YES		

SPILL PROTECTION INSTALLED: YES OVERFILL INSTALLED: YES

Target Property: SR 126
KINGSPORT TN 37664

JOB: 1135.00

UST

SEARCH ID: 63 **DIST/DIR:** 0.00 -- **MAP ID:** 2

NAME: GREENWOOD MARKET
ADDRESS: 5121 MEMORIAL BLVD.
KINGSPORT TN 37660
SULLIVAN
CONTACT:

REV: 3/4/05
ID1: 1-820150
ID2:
STATUS:
PHONE:

SITE INFORMATION

TOTAL NUMBER OF TANKS: 2

OWNER INFORMATION:

OWNER ID NUMBER: 352
OWNER DESCRIPTION: COMMERCIAL
OWNER NAME: Appalachian Oil Company, Inc.
OWNER ADDRESS: 1992 HIGHWAY 70
BLOUNTVILLE TN 37617
PHONE: (423) 323-5235

TANK INFORMATION:

TANK NUMBER: 1
TANK STATUS: PERMANENTLY OUT OF USE
TANK INSTALLED DATE: 5/7/1985

TANK CAPACITY: 1000 GALLONS
TANK CONTENTS: KEROSENE

MATERIALS OF CONSTRUCTION: ASPHALT COATED OR BARE STEEL / NONE

TANK PROTECTION INFORMATION:

MANUAL TANK GAUGE:	NO	TANK TIGHTNESS TEST:	NO
TANK INVENTORY CONTROL:	NO	AUTOMATIC TANK GAUGING:	NO
TANK VAPOR MONITOR:	NO	GROUNDWATER MONITORING:	NO
DOUBLE WALLED:	NO	SECONDARY CONTAINMENT	NO
SIR:	NO	TANK LEAK DETECTION LISTED:	YES

PIPE INFORMATION:

PIPE MATERIALS: GALVANIZED STEEL / NONE
PIPING TYPE: NOT LISTED

AUTO LINE LEAK DETECTION:	NO	LINE TIGHTNESS TEST:	YES
VAPOR MONITORING:	NO	GROUNDWATER MONITORING:	NO
DOUBLE WALLED:	NO	SECONDARY CONTAINMENT:	NO
SIR:	NO		
SPILL PROTECTION INSTALLED:	NO	OVERFILL INSTALLED:	NO

TANK NUMBER: 2
TANK STATUS: PERMANENTLY OUT OF USE
TANK INSTALLED DATE: 5/7/1985

TANK CAPACITY: 2000 GALLONS
TANK CONTENTS: DIESEL

- Continued on next page -

Target Property: SR 126
KINGSPORT TN 37664

JOB: 1135.00

UST

SEARCH ID: 63 **DIST/DIR:** 0.00 -- **MAP ID:** 2

NAME:	GREENWOOD MARKET	REV:	3/4/05
ADDRESS:	5121 MEMORIAL BLVD.	ID1:	1-820150
	KINGSPORT TN 37660	ID2:	
	SULLIVAN	STATUS:	
CONTACT:		PHONE:	

MATERIALS OF CONSTRUCTION: ASPHALT COATED OR BARE STEEL / NONE

TANK PROTECTION INFORMATION:

MANUAL TANK GAUGE:	NO	TANK TIGHTNESS TEST:	NO
TANK INVENTORY CONTROL:	YES	AUTOMATIC TANK GAUGING:	NO
TANK VAPOR MONITOR:	NO	GROUNDWATER MONITORING:	NO
DOUBLE WALLED:	NO	SECONDARY CONTAINMENT	NO
SIR:	NO	TANK LEAK DETECTION LISTED:	NO

PIPE INFORMATION:

PIPE MATERIALS: GALVANIZED STEEL / NONE
PIPING TYPE: NOT LISTED

AUTO LINE LEAK DETECTION:	NO	LINE TIGHTNESS TEST:	YES
VAPOR MONITORING:	NO	GROUNDWATER MONITORING:	NO
DOUBLE WALLED:	NO	SECONDARY CONTAINMENT:	NO
SIR:	NO		

SPILL PROTECTION INSTALLED: YES OVERFILL INSTALLED: YES

Target Property: SR 126
KINGSPORT TN 37664

JOB: 1135.00

UST

SEARCH ID: 53 **DIST/DIR:** 0.00 -- **MAP ID:** 7

NAME:	OLD SIMPSON MOTORS	REV:	3/4/05
ADDRESS:	3310 MEMORIAL BLVD	ID1:	1-820587
	KINGSPORT TN 37660	ID2:	
	SULLIVAN	STATUS:	
CONTACT:		PHONE:	

SITE INFORMATION

TOTAL NUMBER OF TANKS: 3

OWNER INFORMATION:

OWNER ID NUMBER: 15490
OWNER DESCRIPTION: COMMERCIAL
OWNER NAME: W D HARLESS
OWNER ADDRESS: 1405 RUFUS ROAD
KINGSPORT TN 37660
PHONE: (423) 246-3876

TANK INFORMATION:

TANK NUMBER: 1
TANK STATUS: PERMANENTLY OUT OF USE
TANK INSTALLED DATE:

TANK CAPACITY: 10000 GALLONS
TANK CONTENTS: GASOLINE

MATERIALS OF CONSTRUCTION: ASPHALT COATED OR BARE STEEL / NONE

TANK PROTECTION INFORMATION:

MANUAL TANK GAUGE:	NO	TANK TIGHTNESS TEST:	NO
TANK INVENTORY CONTROL:	NO	AUTOMATIC TANK GAUGING:	NO
TANK VAPOR MONITOR:	NO	GROUNDWATER MONITORING:	NO
DOUBLE WALLED:	NO	SECONDARY CONTAINMENT	NO
SIR:	NO	TANK LEAK DETECTION LISTED:	YES

PIPE INFORMATION:

PIPE MATERIALS: GALVANIZED STEEL / NONE
PIPING TYPE: U.S. SUCTION

AUTO LINE LEAK DETECTION:	NO	LINE TIGHTNESS TEST:	NO
VAPOR MONITORING:	NO	GROUNDWATER MONITORING:	NO
DOUBLE WALLED:	NO	SECONDARY CONTAINMENT:	NO
SIR:	NO		
SPILL PROTECTION INSTALLED:	NO	OVERFILL INSTALLED:	NO

TANK NUMBER: 2
TANK STATUS: PERMANENTLY OUT OF USE
TANK INSTALLED DATE:

TANK CAPACITY: 10000 GALLONS
TANK CONTENTS: GASOLINE

- Continued on next page -

Target Property: SR 126
KINGSPORT TN 37664

JOB: 1135.00

UST

SEARCH ID: 53 **DIST/DIR:** 0.00 -- **MAP ID:** 7

NAME: OLD SIMPSON MOTORS
ADDRESS: 3310 MEMORIAL BLVD.
KINGSPORT TN 37660
SULLIVAN
CONTACT:

REV: 3/4/05
ID1: 1-820587
ID2:
STATUS:
PHONE:

MATERIALS OF CONSTRUCTION: ASPHALT COATED OR BARE STEEL / NONE

TANK PROTECTION INFORMATION:

MANUAL TANK GAUGE:	NO	TANK TIGHTNESS TEST:	NO
TANK INVENTORY CONTROL:	NO	AUTOMATIC TANK GAUGING:	NO
TANK VAPOR MONITOR:	NO	GROUNDWATER MONITORING:	NO
DOUBLE WALLED:	NO	SECONDARY CONTAINMENT	NO
SIR:	NO	TANK LEAK DETECTION LISTED:	YES

PIPE INFORMATION:

PIPE MATERIALS: GALVANIZED STEEL / NONE
PIPING TYPE: U.S. SUCTION

AUTO LINE LEAK DETECTION:	NO	LINE TIGHTNESS TEST:	NO
VAPOR MONITORING:	NO	GROUNDWATER MONITORING:	NO
DOUBLE WALLED:	NO	SECONDARY CONTAINMENT:	NO
SIR:	NO		
SPILL PROTECTION INSTALLED:	NO	OVERFILL INSTALLED:	NO

TANK NUMBER: 3
TANK STATUS: PERMANENTLY OUT OF USE
TANK INSTALLED DATE:

TANK CAPACITY: 550 GALLONS
TANK CONTENTS: USED OIL

MATERIALS OF CONSTRUCTION: ASPHALT COATED OR BARE STEEL / NONE

TANK PROTECTION INFORMATION:

MANUAL TANK GAUGE:	NO	TANK TIGHTNESS TEST:	NO
TANK INVENTORY CONTROL:	NO	AUTOMATIC TANK GAUGING:	NO
TANK VAPOR MONITOR:	NO	GROUNDWATER MONITORING:	NO
DOUBLE WALLED:	NO	SECONDARY CONTAINMENT	NO
SIR:	NO	TANK LEAK DETECTION LISTED:	YES

PIPE INFORMATION:

PIPE MATERIALS: GALVANIZED STEEL / NONE
PIPING TYPE: U.S. SUCTION

AUTO LINE LEAK DETECTION:	NO	LINE TIGHTNESS TEST:	NO
VAPOR MONITORING:	NO	GROUNDWATER MONITORING:	NO
DOUBLE WALLED:	NO	SECONDARY CONTAINMENT:	NO
SIR:	NO		
SPILL PROTECTION INSTALLED:	NO	OVERFILL INSTALLED:	NO

- Continued on next page -

Target Property: SR 126
KINGSPORT TN 37664

JOB: 1135.00

UST

SEARCH ID: 53 **DIST/DIR:** 0.00 -- **MAP ID:** 7

NAME:	OLD SIMPSON MOTORS	REV:	3/4/05
ADDRESS:	3310 MEMORIAL BLVD.	ID1:	1-820587
	KINGSPORT TN 37660	ID2:	
	SULLIVAN	STATUS:	
CONTACT:		PHONE:	

Target Property: SR 126
KINGSPORT TN 37664

JOB: 1135.00

UST

SEARCH ID: 60 **DIST/DIR:** 0.00 -- **MAP ID:** 5

NAME:	THOUIN ENTERPRISES, INC	REV:	3/4/05
ADDRESS:	3933 MEMORIAL BLVD.	ID1:	1-820582
	KINGSPORT TN 37664	ID2:	
	SULLIVAN	STATUS:	
CONTACT:		PHONE:	

SITE INFORMATION

TOTAL NUMBER OF TANKS: 1

OWNER INFORMATION:

OWNER ID NUMBER:	14582
OWNER DESCRIPTION:	PRIVATE
OWNER NAME:	THOUIN ENTERPRISES, INC
OWNER ADDRESS:	3933 MEMORIAL BLVD. KINGSPORT TN 37664
PHONE:	(423) 247-1930

TANK INFORMATION:

TANK NUMBER:	1
TANK STATUS:	PERMANENTLY OUT OF USE
TANK INSTALLED DATE:	7/1/1987
TANK CAPACITY:	1000 GALLONS
TANK CONTENTS:	GASOLINE
MATERIALS OF CONSTRUCTION:	ASPHALT COATED OR BARE STEEL / NONE

TANK PROTECTION INFORMATION:

MANUAL TANK GAUGE:	NO	TANK TIGHTNESS TEST:	NO
TANK INVENTORY CONTROL:	NO	AUTOMATIC TANK GAUGING:	NO
TANK VAPOR MONITOR:	NO	GROUNDWATER MONITORING:	NO
DOUBLE WALLED:	NO	SECONDARY CONTAINMENT	NO
SIR:	NO	TANK LEAK DETECTION LISTED:	YES

PIPE INFORMATION:

PIPE MATERIALS:	GALVANIZED STEEL / NONE		
PIPING TYPE:	U.S. SUCTION		
AUTO LINE LEAK DETECTION:	NO	LINE TIGHTNESS TEST:	NO
VAPOR MONITORING:	NO	GROUNDWATER MONITORING:	NO
DOUBLE WALLED:	NO	SECONDARY CONTAINMENT:	NO
SIR:	NO		
SPILL PROTECTION INSTALLED:	NO	OVERFILL INSTALLED:	NO

Target Property: SR 126
KINGSPORT TN 37664

JOB: 1135.00

FINDS

SEARCH ID: 17 **DIST/DIR:** 0.01 NE **MAP ID:** 13

NAME: EXXON STATION 5-0111
ADDRESS: 3717 MEMORIAL BOULEVARD
KINGSPORT TN 37663
SULLIVAN
CONTACT:

REV: 7/10/07
ID1: 110014331730
ID2: TND987776929
STATUS: FRS
PHONE:

FACILITY REGISTRATION INFORMATION:

PROGRAM:	FRS	PROGRAM ID:	110014331730
PROVIDED BY:	FEDERAL AGENCY	AGENCY INTERESTED:	4/25/2003 6:22:57 PM
AGENCY INT QUAL:		INTEREST ENDED:	
INT END QUAL:		SOURCE OF DATA:	PCS
LAST REPORTED:	4/25/2003 6:22:57 PM	LAST EXTRACTED:	
ENFORCEMENT ACT:			
REG PROGRAM:	FACILITY -		

PROGRAM:	RCRAINFO	PROGRAM ID:	TND987776929
PROVIDED BY:	FEDERAL AGENCY	AGENCY INTERESTED:	
AGENCY INT QUAL:		INTEREST ENDED:	
INT END QUAL:		SOURCE OF DATA:	NOTIFICATION
LAST REPORTED:	11/12/2004	LAST EXTRACTED:	5/18/2003 1:55:51 AM
ENFORCEMENT ACT:			
REG PROGRAM:	NOT IN A UNIVERSE - THE HANDLER IS NOT CURRENTLY IN ANY HAZARDOUS WASTE UNIVERSE.		

SITE TYPE:	STATIONARY
INTEREST STATUS:	ACTIVE
DATA QUALITY:	V
LOCATION DESC:	
ADDRESS TYPE:	REGULAR URBAN
LAST REPORTED:	
POSTED TO DATABASE:	4/25/2003 6:22:57 PM
DATA UPDATED:	5/5/2003 2:27:54 PM
ENTERED PERSON/METHOD:	TIGERBEE
PARENT REG ID:	
CONFIDENCE IN ADDR:	MEDIUM
ENFORCEMENT SENSITIVE:	N
REQ MANUAL REVIEW:	
REASON MAN REVIEW:	
SMALL BUS POLICY:	
ENFORCEMENT ACTION:	
DATA PUB ACCESS:	YES
INTERNAL SYS ID:	
FEDERAL FACILITY:	NO
FEDERAL AGENCY:	
TRIBAL LAND:	NO
TRIBAL LAND NAME:	
CONGRESSIONAL DIST:	
LEGISLATIVE DIST:	10
HYDROLOGICAL UNTIS:	
EPA REGION:	04
AIRSHED:	
CENSUS BLOCK:	

Target Property: SR 126
KINGSPORT TN 37664

JOB: 1135.00

LUST

SEARCH ID: 73 **DIST/DIR:** 0.01 NE **MAP ID:** 13

NAME:	EXXON STATION 5-0111	REV:	12/1/04
ADDRESS:	3717 MEMORIAL BIVD	ID1:	1-820163
	KINGSPORT TN	ID2:	
		STATUS:	ACTIVE
CONTACT:	EXXON COMPANY USA	PHONE:	

SITE INFORMATION

RELEASE DATE:	11/22/1991	APPLICATION:	98076
NUM OF TANKS:	108	TOT DEDUCTABLE:	$ 20000
AMOUNT REQUESTED:	$ 219843.35	DISALLOWED:	$ 9495.06
BALANCE DUE:	$ 10270.08	TOTAL PAID:	$ 171742.57
NET PAID:	$ 182012.65	RECEIVED APPLICATION:	1/16/2001
NUMBER RECEIVED:	07	AUTHOR RECEIVED:	11/22/1991
AUTHOR APPROVED:	11/22/1991	CONTRACTOR:	C0105
APPROVAL:	Y	COVERAGE:	
OWNER ID:	11976		
TANK OWNER:	EXXON COMPANY USA		

SITE INFORMATION

RELEASE DATE:	1/23/1991	APPLICATION:	94214
NUM OF TANKS:	108	TOT DEDUCTABLE:	$ 20000
AMOUNT REQUESTED:	$ 99339.28	DISALLOWED:	$ 6605.54
BALANCE DUE:	$ 0	TOTAL PAID:	$ 72733.74
NET PAID:	$ 72733 74	RECEIVED APPLICATION:	11/13/1997
NUMBER RECEIVED:	04	AUTHOR RECEIVED:	10/12/1993
AUTHOR APPROVED:	11/17/1993	CONTRACTOR:	CO217
APPROVAL:	Y	COVERAGE:	
OWNER ID:	11976		
TANK OWNER:	EXXON COMPANY USA		

Target Property: SR 126
KINGSPORT TN 37664

JOB: 1135.00

NPDES

SEARCH ID: 10 **DIST/DIR:** 0.01 NE **MAP ID:** 13

NAME:
ADDRESS:
KINGSPORT TN 37664
SULLIVAN
CONTACT: JEFF PHILLIPS

REV: 2/20/03
ID1: TN0074110
ID2:
STATUS: MINOR
PHONE: 9013601776

SITE INFORMATION

PERMIT ISSUED: 4/1/1997
PERMIT EXPIRED: 3/31/2002
RECEIVING WATERS: UNNAMED TRIB - REEDY CREEK - HOLSTO

SIC INFORMATION:

5541 - GASOLINE SERVICE STATIONS

MAILING CONTACT: EXXON FACILITY 50111
3800 EZELL RD. SUITE 100
NASHVILLE TN 37211

Target Property: SR 126
KINGSPORT TN 37664

JOB: 1135.00

UST

SEARCH ID: 57 **DIST/DIR:** 0.01 NE **MAP ID:** 18

NAME: TRI CITY GARBAGE AND DISPOSAL CO AND
ADDRESS: 3711 HIGHWAY 126
BLUFF CITY TN 37618
SULLIVAN
CONTACT:

REV: 3/4/05
ID1: 1-820585
ID2:
STATUS:
PHONE:

SITE INFORMATION

TOTAL NUMBER OF TANKS: 6

OWNER INFORMATION:

OWNER ID NUMBER: 15313
OWNER DESCRIPTION: COMMERCIAL
OWNER NAME: ERNEST GALE SAMMONS (OPERATOR)
OWNER ADDRESS: 252 HAWLEY ROAD
BLUFF CITY TN 37618
PHONE: (423) 323-5616

TANK INFORMATION:

TANK NUMBER: 1
TANK STATUS: PERMANENTLY OUT OF USE
TANK INSTALLED DATE: 12/1/1970

TANK CAPACITY: 2000 GALLONS
TANK CONTENTS: GASOLINE

MATERIALS OF CONSTRUCTION: ASPHALT COATED OR BARE STEEL / NONE

TANK PROTECTION INFORMATION:

MANUAL TANK GAUGE:	NO	TANK TIGHTNESS TEST:	NO
TANK INVENTORY CONTROL:	NO	AUTOMATIC TANK GAUGING:	NO
TANK VAPOR MONITOR:	NO	GROUNDWATER MONITORING:	NO
DOUBLE WALLED:	NO	SECONDARY CONTAINMENT	NO
SIR:	NO	TANK LEAK DETECTION LISTED:	YES

PIPE INFORMATION:

PIPE MATERIALS: GALVANIZED STEEL / NONE
PIPING TYPE: PRESSURIZED

AUTO LINE LEAK DETECTION:	NO	LINE TIGHTNESS TEST:	NO
VAPOR MONITORING:	NO	GROUNDWATER MONITORING:	NO
DOUBLE WALLED:	NO	SECONDARY CONTAINMENT:	NO
SIR:	NO		
SPILL PROTECTION INSTALLED:	NO	OVERFILL INSTALLED:	NO

TANK NUMBER: 2
TANK STATUS: PERMANENTLY OUT OF USE
TANK INSTALLED DATE: 12/1/1970

TANK CAPACITY: 2000 GALLONS
TANK CONTENTS: GASOLINE

- Continued on next page -

Target Property: SR 126
KINGSPORT TN 37664

JOB: 1135.00

UST

SEARCH ID: 57 **DIST/DIR:** 0.01 NE **MAP ID:** 18

NAME: TRI CITY GARBAGE AND DISPOSAL CO AND
ADDRESS: 3711 HIGHWAY 126
BLUFF CITY TN 37618
SULLIVAN
CONTACT:

REV: 3/4/05
ID1: 1-820585
ID2:
STATUS:
PHONE:

MATERIALS OF CONSTRUCTION: ASPHALT COATED OR BARE STEEL / NONE

TANK PROTECTION INFORMATION:

MANUAL TANK GAUGE:	NO	TANK TIGHTNESS TEST:	NO
TANK INVENTORY CONTROL:	NO	AUTOMATIC TANK GAUGING:	NO
TANK VAPOR MONITOR:	NO	GROUNDWATER MONITORING:	NO
DOUBLE WALLED:	NO	SECONDARY CONTAINMENT	NO
SIR:	NO	TANK LEAK DETECTION LISTED:	YES

PIPE INFORMATION:

PIPE MATERIALS: GALVANIZED STEEL / NONE
PIPING TYPE: PRESSURIZED

AUTO LINE LEAK DETECTION:	NO	LINE TIGHTNESS TEST:	NO
VAPOR MONITORING:	NO	GROUNDWATER MONITORING:	NO
DOUBLE WALLED:	NO	SECONDARY CONTAINMENT:	NO
SIR:	NO		

SPILL PROTECTION INSTALLED: NO OVERFILL INSTALLED: NO

TANK NUMBER: 3
TANK STATUS: PERMANENTLY OUT OF USE
TANK INSTALLED DATE: 12/1/1970

TANK CAPACITY: 2000 GALLONS
TANK CONTENTS: GASOLINE

MATERIALS OF CONSTRUCTION: ASPHALT COATED OR BARE STEEL / NONE

TANK PROTECTION INFORMATION:

MANUAL TANK GAUGE:	NO	TANK TIGHTNESS TEST:	NO
TANK INVENTORY CONTROL:	NO	AUTOMATIC TANK GAUGING:	NO
TANK VAPOR MONITOR:	NO	GROUNDWATER MONITORING:	NO
DOUBLE WALLED:	NO	SECONDARY CONTAINMENT	NO
SIR:	NO	TANK LEAK DETECTION LISTED:	YES

PIPE INFORMATION:

PIPE MATERIALS: GALVANIZED STEEL / NONE
PIPING TYPE: PRESSURIZED

AUTO LINE LEAK DETECTION:	NO	LINE TIGHTNESS TEST:	NO
VAPOR MONITORING:	NO	GROUNDWATER MONITORING:	NO
DOUBLE WALLED:	NO	SECONDARY CONTAINMENT:	NO
SIR:	NO		

SPILL PROTECTION INSTALLED: NO OVERFILL INSTALLED: NO

- Continued on next page -

Target Property: SR 126
KINGSPORT TN 37664

JOB: 1135.00

UST

SEARCH ID: 57 **DIST/DIR:** 0.01 NE **MAP ID:** 18

NAME: TRI CITY GARBAGE AND DISPOSAL CO AND
ADDRESS: 3711 HIGHWAY 126
BLUFF CITY TN 37618
SULLIVAN
CONTACT:

REV: 3/4/05
ID1: 1-820585
ID2:
STATUS:
PHONE:

TANK NUMBER: 4
TANK STATUS: PERMANENTLY OUT OF USE
TANK INSTALLED DATE: 12/1/1970

TANK CAPACITY: 2000 GALLONS
TANK CONTENTS: GASOLINE

MATERIALS OF CONSTRUCTION: ASPHALT COATED OR BARE STEEL / NONE

TANK PROTECTION INFORMATION:

MANUAL TANK GAUGE:	NO	TANK TIGHTNESS TEST:	NO
TANK INVENTORY CONTROL:	NO	AUTOMATIC TANK GAUGING:	NO
TANK VAPOR MONITOR:	NO	GROUNDWATER MONITORING:	NO
DOUBLE WALLED:	NO	SECONDARY CONTAINMENT	NO
SIR:	NO	TANK LEAK DETECTION LISTED:	YES

PIPE INFORMATION:

PIPE MATERIALS: GALVANIZED STEEL / NONE
PIPING TYPE: PRESSURIZED

AUTO LINE LEAK DETECTION:	NO	LINE TIGHTNESS TEST:	NO
VAPOR MONITORING:	NO	GROUNDWATER MONITORING:	NO
DOUBLE WALLED:	NO	SECONDARY CONTAINMENT:	NO
SIR:	NO		

SPILL PROTECTION INSTALLED: NO OVERFILL INSTALLED: NO

TANK NUMBER: 5
TANK STATUS: PERMANENTLY OUT OF USE
TANK INSTALLED DATE: 12/1/1970

TANK CAPACITY: 275 GALLONS
TANK CONTENTS: USED OIL

MATERIALS OF CONSTRUCTION: ASPHALT COATED OR BARE STEEL / NONE

TANK PROTECTION INFORMATION:

MANUAL TANK GAUGE:	NO	TANK TIGHTNESS TEST:	NO
TANK INVENTORY CONTROL:	NO	AUTOMATIC TANK GAUGING:	NO
TANK VAPOR MONITOR:	NO	GROUNDWATER MONITORING:	NO
DOUBLE WALLED:	NO	SECONDARY CONTAINMENT	NO
SIR:	NO	TANK LEAK DETECTION LISTED:	YES

PIPE INFORMATION:

PIPE MATERIALS: GALVANIZED STEEL / NONE
PIPING TYPE: GRAVITY FEED

- Continued on next page -

Target Property: SR 126
KINGSPORT TN 37664

JOB: 1135.00

UST

SEARCH ID: 57 **DIST/DIR:** 0.01 NE **MAP ID:** 18

NAME:	TRI CITY GARBAGE AND DISPOSAL CO AND	REV:	3/4/05
ADDRESS:	3711 HIGHWAY 126	ID1:	I-820585
	BLUFF CITY TN 37618	ID2:	
	SULLIVAN	STATUS:	
CONTACT:		PHONE:	

AUTO LINE LEAK DETECTION:	NO	LINE TIGHTNESS TEST:	NO
VAPOR MONITORING:	NO	GROUNDWATER MONITORING:	NO
DOUBLE WALLED:	NO	SECONDARY CONTAINMENT:	NO
SIR:	NO		
SPILL PROTECTION INSTALLED:	NO	OVERFILL INSTALLED:	NO

TANK NUMBER:	6
TANK STATUS:	PERMANENTLY OUT OF USE
TANK INSTALLED DATE:	12/1/1970
TANK CAPACITY:	300 GALLONS
TANK CONTENTS:	KEROSENE
MATERIALS OF CONSTRUCTION:	ASPHALT COATED OR BARE STEEL / NONE

TANK PROTECTION INFORMATION:

MANUAL TANK GAUGE:	NO	TANK TIGHTNESS TEST:	NO
TANK INVENTORY CONTROL:	NO	AUTOMATIC TANK GAUGING:	NO
TANK VAPOR MONITOR:	NO	GROUNDWATER MONITORING:	NO
DOUBLE WALLED:	NO	SECONDARY CONTAINMENT	NO
SIR:	NO	TANK LEAK DETECTION LISTED:	YES

PIPE INFORMATION:

PIPE MATERIALS:	GALVANIZED STEEL / NONE
PIPING TYPE:	PRESSURIZED

AUTO LINE LEAK DETECTION:	NO	LINE TIGHTNESS TEST:	NO
VAPOR MONITORING:	NO	GROUNDWATER MONITORING:	NO
DOUBLE WALLED:	NO	SECONDARY CONTAINMENT:	NO
SIR:	NO		
SPILL PROTECTION INSTALLED:	NO	OVERFILL INSTALLED:	NO

Target Property: SR 126
KINGSPORT TN 37664

JOB: 1135.00

UST

SEARCH ID: 46 **DIST/DIR:** 0.01 NE **MAP ID:** 16

NAME:	CHEVRON FACILITY 49739	REV:	3/4/05
ADDRESS:	3801 MEMORIAL DRIVE	ID1:	1-820538
	KINGSPORT TN 37660	ID2:	
	SULLIVAN	STATUS:	
CONTACT:		PHONE:	

SITE INFORMATION

TOTAL NUMBER OF TANKS: 4

OWNER INFORMATION:

OWNER ID NUMBER:	11760
OWNER DESCRIPTION:	PRIVATE
OWNER NAME:	CHEVRON U S A INC
OWNER ADDRESS:	P.O. BOX 1706
	ATLANTA GA 30301
PHONE:	(404) 984-3000

TANK INFORMATION:

TANK NUMBER:	1
TANK STATUS:	PERMANENTLY OUT OF USE
TANK INSTALLED DATE:	5/1/1969
TANK CAPACITY:	10000 GALLONS
TANK CONTENTS:	GASOLINE
MATERIALS OF CONSTRUCTION:	UNKNOWN / NONE

TANK PROTECTION INFORMATION:

MANUAL TANK GAUGE:	NO	TANK TIGHTNESS TEST:	NO
TANK INVENTORY CONTROL:	NO	AUTOMATIC TANK GAUGING:	NO
TANK VAPOR MONITOR:	NO	GROUNDWATER MONITORING:	NO
DOUBLE WALLED:	NO	SECONDARY CONTAINMENT	NO
SIR:	NO	TANK LEAK DETECTION LISTED:	YES

PIPE INFORMATION:

PIPE MATERIALS:	UNKNOWN / NONE		
PIPING TYPE:	U.S. SUCTION		
AUTO LINE LEAK DETECTION:	NO	LINE TIGHTNESS TEST:	NO
VAPOR MONITORING:	NO	GROUNDWATER MONITORING:	NO
DOUBLE WALLED:	NO	SECONDARY CONTAINMENT:	NO
SIR:	NO		
SPILL PROTECTION INSTALLED:	NO	OVERFILL INSTALLED:	NO

TANK NUMBER:	2
TANK STATUS:	PERMANENTLY OUT OF USE
TANK INSTALLED DATE:	5/1/1969
TANK CAPACITY:	10000 GALLONS
TANK CONTENTS:	GASOLINE

- Continued on next page -

Target Property: SR 126
KINGSPORT TN 37664

JOB: 1135.00

UST

SEARCH ID: 46 **DIST/DIR:** 0.01 NE **MAP ID:** 16

NAME: CHEVRON FACILITY 49739
ADDRESS: 3801 MEMORIAL DRIVE
KINGSPORT TN 37660
SULLIVAN
CONTACT:

REV: 3/4/05
ID1: 1-820538
ID2:
STATUS:
PHONE:

MATERIALS OF CONSTRUCTION: UNKNOWN / NONE

TANK PROTECTION INFORMATION:

MANUAL TANK GAUGE:	NO	TANK TIGHTNESS TEST:	NO
TANK INVENTORY CONTROL:	NO	AUTOMATIC TANK GAUGING:	NO
TANK VAPOR MONITOR:	NO	GROUNDWATER MONITORING:	NO
DOUBLE WALLED:	NO	SECONDARY CONTAINMENT	NO
SIR:	NO	TANK LEAK DETECTION LISTED:	YES

PIPE INFORMATION:

PIPE MATERIALS: UNKNOWN / NONE
PIPING TYPE: U.S. SUCTION

AUTO LINE LEAK DETECTION:	NO	LINE TIGHTNESS TEST:	NO
VAPOR MONITORING:	NO	GROUNDWATER MONITORING:	NO
DOUBLE WALLED:	NO	SECONDARY CONTAINMENT:	NO
SIR:	NO		
SPILL PROTECTION INSTALLED:	NO	OVERFILL INSTALLED:	NO

TANK NUMBER: 3
TANK STATUS: PERMANENTLY OUT OF USE
TANK INSTALLED DATE: 5/1/1969

TANK CAPACITY: 5000 GALLONS
TANK CONTENTS: GASOLINE

MATERIALS OF CONSTRUCTION: UNKNOWN / NONE

TANK PROTECTION INFORMATION:

MANUAL TANK GAUGE:	NO	TANK TIGHTNESS TEST:	NO
TANK INVENTORY CONTROL:	NO	AUTOMATIC TANK GAUGING:	NO
TANK VAPOR MONITOR:	NO	GROUNDWATER MONITORING:	NO
DOUBLE WALLED:	NO	SECONDARY CONTAINMENT	NO
SIR:	NO	TANK LEAK DETECTION LISTED:	YES

PIPE INFORMATION:

PIPE MATERIALS: UNKNOWN / NONE
PIPING TYPE: U.S. SUCTION

AUTO LINE LEAK DETECTION:	NO	LINE TIGHTNESS TEST:	NO
VAPOR MONITORING:	NO	GROUNDWATER MONITORING:	NO
DOUBLE WALLED:	NO	SECONDARY CONTAINMENT:	NO
SIR:	NO		
SPILL PROTECTION INSTALLED:	NO	OVERFILL INSTALLED:	NO

- Continued on next page -

Target Property: SR 126
KINGSPORT TN 37664

JOB: 1135.00

UST

SEARCH ID: 46 **DIST/DIR:** 0.01 NE **MAP ID:** 16

NAME:	CHEVRON FACILITY 49739	REV:	3/4/05
ADDRESS:	3801 MEMORIAL DRIVE	ID1:	1-820538
	KINGSPORT TN 37660	ID2:	
	SULLIVAN	STATUS:	
CONTACT:		PHONE:	

TANK NUMBER:	4
TANK STATUS:	PERMANENTLY OUT OF USE
TANK INSTALLED DATE:	5/1/1969
TANK CAPACITY:	550 GALLONS
TANK CONTENTS:	USED OIL
MATERIALS OF CONSTRUCTION:	UNKNOWN / NONE

TANK PROTECTION INFORMATION:

MANUAL TANK GAUGE:	NO	TANK TIGHTNESS TEST:	NO
TANK INVENTORY CONTROL:	NO	AUTOMATIC TANK GAUGING:	NO
TANK VAPOR MONITOR:	NO	GROUNDWATER MONITORING:	NO
DOUBLE WALLED:	NO	SECONDARY CONTAINMENT	NO
SIR:	NO	TANK LEAK DETECTION LISTED:	YES

PIPE INFORMATION:

PIPE MATERIALS:	UNKNOWN / NONE		
PIPING TYPE:	U.S. SUCTION		
AUTO LINE LEAK DETECTION:	NO	LINE TIGHTNESS TEST:	NO
VAPOR MONITORING:	NO	GROUNDWATER MONITORING:	NO
DOUBLE WALLED:	NO	SECONDARY CONTAINMENT:	NO
SIR:	NO		
SPILL PROTECTION INSTALLED:	NO	OVERFILL INSTALLED:	NO

Target Property: SR 126
KINGSPORT TN 37664

JOB: 1135.00

UST

SEARCH ID: 59 **DIST/DIR:** 0.01 NE **MAP ID:** 13

NAME: ZOOMERZ 54
ADDRESS: 3717 MEMORIAL BLVD.
KINGSPORT TN 37660
CONTACT:

REV: 3/4/05
ID1: 1-820163
ID2:
STATUS:
PHONE:

SITE INFORMATION

TOTAL NUMBER OF TANKS: 5

OWNER INFORMATION:

OWNER ID NUMBER: 7945
OWNER DESCRIPTION: COMMERCIAL
OWNER NAME: ROGERS PETROLEUM, INC.
OWNER ADDRESS: 1634 WEST 1ST NORTH ST.
MORRISTOWN TN 37816
PHONE: (423) 581-7460

TANK INFORMATION:

TANK NUMBER: 1
TANK STATUS: CURRENTLY IN USE
TANK INSTALLED DATE: 5/7/1985

TANK CAPACITY: 12000 GALLONS
TANK CONTENTS: GASOLINE

MATERIALS OF CONSTRUCTION: FIBERGLASS REINFORCED PLASTIC / NONE

TANK PROTECTION INFORMATION:

MANUAL TANK GAUGE:	NO	TANK TIGHTNESS TEST:	NO
TANK INVENTORY CONTROL:	NO	AUTOMATIC TANK GAUGING:	YES
TANK VAPOR MONITOR:	NO	GROUNDWATER MONITORING:	NO
DOUBLE WALLED:	NO	SECONDARY CONTAINMENT	NO
SIR:	NO	TANK LEAK DETECTION LISTED:	NO

PIPE INFORMATION:

PIPE MATERIALS: FIBERGLASS REINFORCED PLASTIC / NONE
PIPING TYPE: PRESSURIZED

AUTO LINE LEAK DETECTION:	YES	LINE TIGHTNESS TEST:	YES
VAPOR MONITORING:	NO	GROUNDWATER MONITORING:	NO
DOUBLE WALLED:	NO	SECONDARY CONTAINMENT:	NO
SIR:	NO		

SPILL PROTECTION INSTALLED: YES OVERFILL INSTALLED: YES

TANK NUMBER: 2
TANK STATUS: CURRENTLY IN USE
TANK INSTALLED DATE: 5/7/1985

TANK CAPACITY: 10000 GALLONS
TANK CONTENTS: GASOLINE

- Continued on next page -

Target Property: SR 126
KINGSPORT TN 37664

JOB: 1135.00

UST

SEARCH ID: 59 **DIST/DIR:** 0.01 NE **MAP ID:** 13

NAME: ZOOMERZ 54
ADDRESS: 3717 MEMORIAL BLVD.
KINGSPORT TN 37660
CONTACT:

REV: 3/4/05
ID1: 1-820163
ID2:
STATUS:
PHONE:

MATERIALS OF CONSTRUCTION: FIBERGLASS REINFORCED PLASTIC / NONE

TANK PROTECTION INFORMATION:

MANUAL TANK GAUGE:	NO	TANK TIGHTNESS TEST:	NO
TANK INVENTORY CONTROL:	NO	AUTOMATIC TANK GAUGING:	YES
TANK VAPOR MONITOR:	NO	GROUNDWATER MONITORING:	NO
DOUBLE WALLED:	NO	SECONDARY CONTAINMENT	NO
SIR:	NO	TANK LEAK DETECTION LISTED:	NO

PIPE INFORMATION:

PIPE MATERIALS: FIBERGLASS REINFORCED PLASTIC / NONE
PIPING TYPE: PRESSURIZED

AUTO LINE LEAK DETECTION:	YES	LINE TIGHTNESS TEST:	YES
VAPOR MONITORING:	NO	GROUNDWATER MONITORING:	NO
DOUBLE WALLED:	NO	SECONDARY CONTAINMENT:	NO
SIR:	NO		

SPILL PROTECTION INSTALLED: YES OVERFILL INSTALLED: YES

TANK NUMBER: 3
TANK STATUS: CURRENTLY IN USE
TANK INSTALLED DATE: 5/7/1985

TANK CAPACITY: 10000 GALLONS
TANK CONTENTS: GASOLINE

MATERIALS OF CONSTRUCTION: FIBERGLASS REINFORCED PLASTIC / NONE

TANK PROTECTION INFORMATION:

MANUAL TANK GAUGE:	NO	TANK TIGHTNESS TEST:	NO
TANK INVENTORY CONTROL:	NO	AUTOMATIC TANK GAUGING:	YES
TANK VAPOR MONITOR:	NO	GROUNDWATER MONITORING:	NO
DOUBLE WALLED:	NO	SECONDARY CONTAINMENT	NO
SIR:	NO	TANK LEAK DETECTION LISTED:	NO

PIPE INFORMATION:

PIPE MATERIALS: FIBERGLASS REINFORCED PLASTIC / NONE
PIPING TYPE: PRESSURIZED

AUTO LINE LEAK DETECTION:	YES	LINE TIGHTNESS TEST:	YES
VAPOR MONITORING:	NO	GROUNDWATER MONITORING:	NO
DOUBLE WALLED:	NO	SECONDARY CONTAINMENT:	NO
SIR:	NO		

SPILL PROTECTION INSTALLED: YES OVERFILL INSTALLED: YES

- Continued on next page -

Target Property: SR 126
KINGSPORT TN 37664

JOB: 1135.00

UST

SEARCH ID: 59 **DIST/DIR:** 0.01 NE **MAP ID:** 13

NAME: ZOOMERZ 54
ADDRESS: 3717 MEMORIAL BLVD.
KINGSPORT TN 37660
CONTACT:

REV: 3/4/05
ID1: 1-820163
ID2:
STATUS:
PHONE:

TANK NUMBER: 4
TANK STATUS: CURRENTLY IN USE
TANK INSTALLED DATE: 5/7/1985

TANK CAPACITY: 10000 GALLONS
TANK CONTENTS: DIESEL

MATERIALS OF CONSTRUCTION: FIBERGLASS REINFORCED PLASTIC / NONE

TANK PROTECTION INFORMATION:

MANUAL TANK GAUGE:	NO	TANK TIGHTNESS TEST:	NO
TANK INVENTORY CONTROL:	NO	AUTOMATIC TANK GAUGING:	YES
TANK VAPOR MONITOR:	NO	GROUNDWATER MONITORING:	NO
DOUBLE WALLED:	NO	SECONDARY CONTAINMENT	NO
SIR:	NO	TANK LEAK DETECTION LISTED:	NO

PIPE INFORMATION:

PIPE MATERIALS: FIBERGLASS REINFORCED PLASTIC / NONE
PIPING TYPE: PRESSURIZED

AUTO LINE LEAK DETECTION:	YES	LINE TIGHTNESS TEST:	YES
VAPOR MONITORING:	NO	GROUNDWATER MONITORING:	NO
DOUBLE WALLED:	NO	SECONDARY CONTAINMENT:	NO
SIR:	NO		

SPILL PROTECTION INSTALLED: YES OVERFILL INSTALLED: YES

TANK NUMBER: 5
TANK STATUS: CURRENTLY IN USE
TANK INSTALLED DATE: 5/7/1985

TANK CAPACITY: 1000 GALLONS
TANK CONTENTS: KEROSENE

MATERIALS OF CONSTRUCTION: FIBERGLASS REINFORCED PLASTIC / NONE

TANK PROTECTION INFORMATION:

MANUAL TANK GAUGE:	NO	TANK TIGHTNESS TEST:	NO
TANK INVENTORY CONTROL:	NO	AUTOMATIC TANK GAUGING:	YES
TANK VAPOR MONITOR:	NO	GROUNDWATER MONITORING:	NO
DOUBLE WALLED:	NO	SECONDARY CONTAINMENT	NO
SIR:	NO	TANK LEAK DETECTION LISTED:	NO

PIPE INFORMATION:

PIPE MATERIALS: FIBERGLASS REINFORCED PLASTIC / NONE
PIPING TYPE: SAFE SUCTION

- Continued on next page -

Target Property: SR 126
KINGSPORT TN 37664

JOB: 1135.00

UST

SEARCH ID: 59 **DIST/DIR:** 0.01 NE **MAP ID:** 13

NAME: ZOOMERZ 54
ADDRESS: 3717 MEMORIAL BLVD.
KINGSPORT TN 37660
CONTACT:

REV: 3/4/05
ID1: 1-820163
ID2:
STATUS:
PHONE:

AUTO LINE LEAK DETECTION:	NO	LINE TIGHTNESS TEST:	NO
VAPOR MONITORING:	NO	GROUNDWATER MONITORING:	NO
DOUBLE WALLED:	NO	SECONDARY CONTAINMENT:	NO
SIR:	NO		
SPILL PROTECTION INSTALLED:	YES	OVERFILL INSTALLED:	YES

Target Property: SR 126
KINGSPORT TN 37664

JOB: 1135.00

ERNS

SEARCH ID: 8 **DIST/DIR:** 0.01 NW **MAP ID:** 17

NAME:		REV:	12/31/05
ADDRESS:	4601 MEMORIAL BLVD CHRISM43 AOL.COM	ID1:	NRC-775049
	KINGSPORT TN 37664	ID2:	
	SULLIVAN	STATUS:	FIXED
CONTACT:	MANAGERS OFFICE CITY	PHONE:	4232299412

SITE INFORMATION

THIS INFORMATION WAS OBTAINED FROM THE NATIONAL RESPONSE CENTER

DATE RECEIVED:	10/5/2005 10:19:14 AM		DATE COMPLETE:
10/5/2005 10:35:06 AM			
CALL TAKER:	KLW5156	CALL TYPE:	INC

RESPONSIBLE PARTY:	MANAGERS OFFICE CITY
PHONE 1:	4232299412 PRIMARY
PHONE 2:	
PHONE 3:	
RESPONSIBLE COMPANY:	
ORGANIZATION TYPE:	LOCAL GOVERNMENT
ADDRESS:	THE CITY OF KINGSPORT KINGSPORT TN
SOURCE:	TELEPHONE

INCIDENT INFORMATION

INCIDENT DESCRIPTION: CALLER STATED THERE IS A RELEASE OF MATERIALS INTO A HOLD WHICH WAS DUG BY THE CITY. THIS HOLE IS NEXT TO HIS PROPERTY AND THE CITY IS RELEASING HUMAN WASTE FROM A OLD PUMP THEY ARE REPLACING. CALLER STATES THE OLD PUMP WILL BE LEFT IN THE GROUND. THE

INCIDENT TYPE:	FIXED	INCIDENT CAUSE:	DUMPING
INCIDENT DATE:	10/4/2005 10:30:00 AM		INCIDENT DATE DESC:
OCCURRED			
DISTANCE FROM CITY:		DISTANCE UNITS:	
DIRECTION FROM CITY:		LOCATION SECTION:	
LOCATION TOWNSHIP:		LOCATION RANGE:	
AIRCRAFT TYPE:		AIRCRAFT MODEL:	
AIRCRAFT ID:		AIRCRAFT FUEL CAPACITY:	
AIRCRAFT FUEL CAPACITY UNITS:		AIRCRAFT FUEL ON BOARD:	
AIRCRAFT FUEL ON BOARD UNITS:		AIRCRAFT SPOT NUMBER:	
AIRCRAFT HANGER:		AIRCRAFT RUNWAY NUM:	
ROAD MILE MARKER:		BUILDING ID:	
TYPE OF FIXED OBJECT:	PRIVATE RESIDENCE		POWER GEN FACILITY: U
GENERATING CAPACITY:		TYPE OF FUEL:	
NPDES:		NPDES COMPLIANCE:	U
PIPELINE TYPE:		DOT REGULATED:	U
PIPELINE ABOVE GROUND:	ABOVE	EXPOSED UNDERWATER:	U
PIPELINE COVERED:	N	GRADE CROSSING:	U
LOCATION SUBDIVISION:		RAILROAD MILEPOST:	
TYPE VEHICLE INVOLVED:		CROSSING DEVICE TYPE:	
DEVICE OPERATIONAL:	U		

- Continued on next page -

Target Property: SR 126
KINGSPORT TN 37664

JOB: 1135.00

ERNS

SEARCH ID: 8 **DIST/DIR:** 0.01 NW **MAP ID:** 17

NAME:		REV:	12/31/05
ADDRESS:	4601 MEMORIAL BLVD CHRISM43 AOL COM	ID1:	NRC-775049
	KINGSPORT TN 37664	ID2:	
	SULLIVAN	STATUS:	FIXED
CONTACT:	MANAGERS OFFICE CITY	PHONE:	4232299412

DOT CROSSING NUMBER:		BRAKE FAILURE:	U
TANK ABOVE GROUND:		TRANSPORTABLE CONTAINER:	U
TANK REGULATED:	U	TANK REGULATED BY:	
TANK ID:		CAPACITY OF TANK:	
CAPACITY OF TANK UNITS:		ACTUAL AMOUNT:	
ACTUAL AMOUNT UNITS:		PLATFORM RIG NAME:	
PLATFORM LETTER:		LOCATION AREA ID:	
LOCATION BLOCK ID:			

DESCRIPTION OF TANK:

OCSG NUMBER:		OCSP NUMBER:	
STATE LEASE NUMBER:		PIER DOCK NUMBER:	
BERTH SLIP NUMBER:		CONTIN RELEASE TYPE:	
INITIAL CONT RELEASE NUM:		CONT RELEASE PERMIT:	
ALLISION:	U	TYPE OF STRUCTURE:	
STRUCTURE NAME:		STRUCT OPERATIONAL:	U
AIRBAG DEPLOYED:		DATE NORMAL SERVICE:	
SERVICE DISRUPT TIME:		SERVICE DISRUPT UNITS:	
TRANSIT BUS FLAG:		CR BEGIN DATE:	
CR END DATE:		CR CHANGE DATE:	

FIRE INVOLVED:	N	FIRE EXTINGUISHED:	U
ANY EVACUATIONS:	N	NUMBER EVACUATED:	
WHO EVACUATED:		RADIUS OF EVACUATION:	
ANY INJURIES:	N	NUMBER INJURED:	
NUMBER HOSPITALIZED:		ANY FATALITIES:	N
NUMBER FATALITIES:		ANY DAMAGES:	N
DAMAGE AMOUNT:		AIR CORRIDOR CLOSED:	N
AIR CORRIDOR DESC:		AIR CLOSURE TIME:	
WATERWAY CLOSED:	N	WATERWAY DESC:	
WATERWAY CLOSURE TIME:		ROAD CLOSED:	N
ROAD DESC:		ROAD CLOSURE TIME:	
CLOSURE DIRECTION:		MAJOR ARTERY:	N

TRACK CLOSED:	N	TRACK DESC:	
TRACK CLOSURE TIME:		MEDIA INTEREST:	NONE
MEDIUM DESC:	LAND	ADDTL MEDIUM INFO:	INTO A DUG HOLE.
BODY OF WATER:		TRIBUTARY OF:	
NEAREST RIVER MILE MARK:		RELEASE SECURED:	N
EST DUR OF RELEASE:		RELEASE RATE:	
TRACK CLOSE DIR:		ST AGENCY ON SCENE:	NONE
ST AGENCY RPT NUM:	NONE	OTHER AGENCY NOTIFIED:	
WEATHER CONDITIONS:	OVERCAST	AIR TEMPERATURE:	68
WIND SPEED:		WIND DIRECTION:	
WATER SUPPLY CONTAM:	U	SHEEN SIZE:	
SHEEN COLOR:		DIR OF SHEEN TRAVEL:	
SHEEN ODOR DESCRIPTION:		WAVE CONDITION:	
CURRENT SPEED:		CURRENT DIRECTION:	
WATER TEMPERATURE:			

DESC OF REMEDIAL ACTION: NO ACTIONS TAKEN

- Continued on next page -

Target Property: SR 126
KINGSPORT TN 37664

JOB: 1135.00

ERNS

SEARCH ID: 8 **DIST/DIR:** 0.01 NW **MAP ID:** 17

NAME:		REV:	12/31/05
ADDRESS:	4601 MEMORIAL BLVD CHRISM43 AOL.COM	ID1:	NRC-775049
	KINGSPORT TN 37664	ID2:	
	SULLIVAN	STATUS:	FIXED
CONTACT:	MANAGERS OFFICE CITY	PHONE:	4232299412

EMPL FATALITY:		PASS FATALITY:	
COMMUNITY IMPACT:	N	WIND SPEED UNITS:	
EMPLOYEE INJURIES:		PASSENGER INJURIES:	
OCCUPANT FATALITY:		CURRENT SPEED UNITS:	
ROAD CLOSURE UNITS:		TRACK CLOSURE UNITS:	
SHEEN SIZE UNITS:		STATE AGENCY NOTIFIED:	CITY OF KINGSPORT
FED AGENCY NOTIFIED:	NONE	NEAREST RIVER MILE MARK:	
SHEEN SIZE LENGTH:		SHEEN SIZE LENGTH UNITS:	
SHEEN SIZE WIDTH:		SHEEN SIZE WIDTH UNITS:	
OFFSHORE:	N	DURATION UNIT:	
RELEASE RATE UNIT:		RELEASE RATE RATE:	

ADDITIONAL INFO: NO ADDITIONAL INFORMATION.

MATERIAL INFORMATION

CHRIS CODE:	NCC	CASE NUMBER:	000000-00-0
UN NUMBER:		REACHED WATER:	NO

NAME OF MATERIAL: HUMAN WASTE
AMOUNT OF MATERIAL: 0 UNKNOWN AMOUNT
AMOUNT IN WATER:

OTHER MATERIAL INFORMATION

MOBILE DETAILS INFORMATION

TRAIN INFORMATION

VESSEL INFORMATION

Target Property: SR 126
KINGSPORT TN 37664

JOB: 1135.00

FINDS

SEARCH ID: 12 **DIST/DIR:** 0.01 NW **MAP ID:** 15

NAME:	B and W CLEANERS	REV:	7/10/07
ADDRESS:	3200 MEMORIAL BOULEVARD	ID1:	110015666858
	KINGSPORT TN 37660	ID2:	TNR000017160
	SULLIVAN	STATUS:	FRS
CONTACT:		PHONE:	

FACILITY REGISTRATION INFORMATION:

PROGRAM:	RCRAINFO	PROGRAM ID:	TNR000017160
PROVIDED BY:	FEDERAL AGENCY	AGENCY INTERESTED:	
AGENCY INT QUAL:		INTEREST ENDED:	
INT END QUAL:		SOURCE OF DATA:	RCRAINFO
LAST REPORTED:	8/27/2003	LAST EXTRACTED:	9/23/2003 12:05:42 PM
ENFORCEMENT ACT:			

REG PROGRAM: CESQG - HAZARDOUS WASTE CONDITIONALLY EXEMPT SMALL QUANTITY GENERATORS GENERATE: A) 100 KILOGRAMS OR LESS OF HAZARDOUS WASTE PER CALENDAR MONTH, AND ACCUMULATE 1000 KG OR LESS OF HAZARDOUS WASTE AT ANY TIME; OR (B) ONE KILOGRAM OR LESS OF ACUTELY HAZARDOUS WASTE PER CALENDAR MONTH, AND ACCUMULATE AT ANY TIME: 1 KG OR LESS OF ACUTELY HAZARDOUS WASTE; OR 100 KG OR LESS OF ANY RESIDUE OR CONTAMINATED SOIL, WASTE OR OTHER DEBRIS RESULTING FROM THE CLEANUP OF A SPILL, INTO OR ON ANY LAND OR WATER, OF ACUTELY HAZARDOUS WASTE; OR (C) 100 KG OR LESS OF ANY RESIDUE OR CONTAMINATED SOIL, WASTE OR OTHER DEBRIS RESULTING FROM THE CLEANUP OF A SPILL, INTO OR ON ANY LAND OR WATER, OF ACUTELY HAZARDOUS WASTE DURING ANY CALENDAR MONTH, AND ACCUMULATE AT ANY TIME: 1 KG OR LESS OF ACUTELY HAZARDOUS WASTE; OR 100 KG OR LESS OF ANY RESIDUE OR CONTAMINATED SOIL, WASTE OR OTHER DEBRIS RESULTING FROM THE CLEANUP OF A SPILL, INTO OR ON ANY LAND OR WATER, OF ACUTELY HAZARDOUS WASTE.

PROGRAM:	FRS	PROGRAM ID:	110015666858
PROVIDED BY:	FEDERAL AGENCY	AGENCY INTERESTED:	9/23/2003 12:05:42 PM
AGENCY INT QUAL:		INTEREST ENDED:	
INT END QUAL:		SOURCE OF DATA:	RCRAINFO
LAST REPORTED:	9/23/2003 12:05:42 PM	LAST EXTRACTED:	
ENFORCEMENT ACT:			
REG PROGRAM:	FACILITY -		

SITE TYPE:	STATIONARY
INTEREST STATUS:	ACTIVE
DATA QUALITY:	V
LOCATION DESC:	
ADDRESS TYPE:	REGULAR URBAN
LAST REPORTED:	
POSTED TO DATABASE:	9/23/2003 12:05:42 PM
DATA UPDATED:	1/5/2006 9:07:38 PM
ENTERED PERSON/METHOD:	REFRESH
PARENT REG ID:	
CONFIDENCE IN ADDR:	
ENFORCEMENT SENSITIVE:	
REQ MANUAL REVIEW:	
REASON MAN REVIEW:	
SMALL BUS POLICY:	
ENFORCEMENT ACTION:	
DATA PUB ACCESS:	YES
INTERNAL SYS ID:	
FEDERAL FACILITY:	NO
FEDERAL AGENCY:	
TRIBAL LAND:	NO

- Continued on next page -

Target Property: SR 126
KINGSPORT TN 37664

JOB: 1135.00

FINDS

SEARCH ID: 12 **DIST/DIR:** 0.01 NW **MAP ID:** 15

NAME:	B and W CLEANERS	REV:	7/10/07
ADDRESS:	3200 MEMORIAL BOULEVARD	ID1:	110015666858
	KINGSPORT TN 37660	ID2:	TNR000017160
	SULLIVAN	STATUS:	FRS
CONTACT:		PHONE:	

TRIBAL LAND NAME:
CONGRESSIONAL DIST:
LEGISLATIVE DIST: 10
HYDROLOGICAL UNTIS:
EPA REGION: 04
AIRSHED:
CENSUS BLOCK:

Environmental FirstSearch
Site Detail Report

Target Property: SR 126
KINGSPORT TN 37664

JOB: 1135.00

FINDS

SEARCH ID: 26 **DIST/DIR:** 0.01 NW **MAP ID:** 12

NAME: SHALLOWBROOK CONDOMINIUM APTS
ADDRESS: 3204 MEMORIAL BLVD
KINGSPORT TN 37664
CONTACT:

REV:
ID1: TN0001716836
ID2:
STATUS:
PHONE:

DETAILS NOT AVAILABLE

OTHER

SEARCH ID: 41 **DIST/DIR:** 0.01 NW **MAP ID:** 15

NAME: B and W CLEANERS
ADDRESS: 3200 MEMORIAL BLVD
KINGSPORT TN 37664
CONTACT:

REV: 01/25/07
ID1: D-82-103
ID2:
STATUS:
PHONE:

SITE INFORMATION

CERTIFICATE SERIAL NO: 1452
SERIAL NO: 8590
RECEIPT NO: 0003
EXPIRE DATE:

Please contact the Tennessee Drycleaner Environmental Response Program at (615) 532-0900 for further information on this site.

Target Property: SR 126
KINGSPORT TN 37664

JOB: 1135.00

RCRAGN

SEARCH ID: 1 **DIST/DIR:** 0.01 NW **MAP ID:** 15

NAME:	B and W CLEANERS	REV:	6/6/06
ADDRESS:	3200 MEMORIAL BOULEVARD	ID1:	TNR000017160
	KINGSPORT TN 37660	ID2:	
	SULLIVAN	STATUS:	VGN
CONTACT:	BOB HYATT	PHONE:	4232462441

SITE INFORMATION

CONTACT INFORMATION: BOB HYATT
MEMORIAL BOULEVARD
KINGSPORT TN 37660

PHONE: 4232462441

UNIVERSE INFORMATION:

NAIC INFORMATION

81232 - DRYCLEANING AND LAUNDRY SERVICES (EXCEPT COIN-OPERATED)

ENFORCEMENT INFORMATION:

VIOLATION INFORMATION:

HAZARDOUS WASTE INFORMATION:

Ignitable waste

Environmental FirstSearch
Site Detail Report

Target Property: SR 126
KINGSPORT TN 37664

JOB: 1135.00

LUST

SEARCH ID: 71 **DIST/DIR:** 0.01 S- **MAP ID:** 14

NAME:	CHEROKEE FOOD STORE 4	REV:	12/1/04
ADDRESS:	3177 MEMORIAL BLVD.	ID1:	1-820144
	KINGSPORT TN 37660	ID2:	
		STATUS:	ACTIVE
CONTACT:	CHEROKEE OIL COMPANY	PHONE:	

SITE INFORMATION

RELEASE DATE:	5/22/1998	APPLICATION:	00005
NUM OF TANKS:	37	TOT DEDUCTABLE:	$ 20000
AMOUNT REQUESTED:	$ 53069.66	DISALLOWED:	$ 262.45
BALANCE DUE:	$ 0	TOTAL PAID:	$ 42133.99
NET PAID:	$ 42133.99	RECEIVED APPLICATION:	8/27/2001
NUMBER RECEIVED:	02	AUTHOR RECEIVED:	8/16/2000
AUTHOR APPROVED:	9/11/2000	CONTRACTOR:	C0401
APPROVAL:	Y	COVERAGE:	
OWNER ID:	1588		
TANK OWNER:	CHEROKEE OIL COMPANY		

Target Property: SR 126
KINGSPORT TN 37664

JOB: 1135.00

UST

SEARCH ID: 47 **DIST/DIR:** 0.01 S- **MAP ID:** 14

NAME: GARDEN BASKET CONV.STORE 4
ADDRESS: 3177 MEMORIAL BLVD.
KINGSPORT TN 37660
SULLIVAN
CONTACT:

REV: 3/4/05
ID1: 1-820144
ID2:
STATUS:
PHONE:

SITE INFORMATION

TOTAL NUMBER OF TANKS: 3

OWNER INFORMATION:

OWNER ID NUMBER: 1588
OWNER DESCRIPTION: COMMERCIAL
OWNER NAME: CHEROKEE OIL, CO., INC
OWNER ADDRESS: 930 WILCOX COURT SUITE 7
KINGSPORT TN 37660
PHONE: (423) 288-2011

TANK INFORMATION:

TANK NUMBER: 1
TANK STATUS: PERMANENTLY OUT OF USE
TANK INSTALLED DATE: 1/16/1985

TANK CAPACITY: 6000 GALLONS
TANK CONTENTS: GASOLINE

MATERIALS OF CONSTRUCTION: ASPHALT COATED OR BARE STEEL / NONE

TANK PROTECTION INFORMATION:

MANUAL TANK GAUGE:	NO	TANK TIGHTNESS TEST:	NO
TANK INVENTORY CONTROL:	NO	AUTOMATIC TANK GAUGING:	NO
TANK VAPOR MONITOR:	NO	GROUNDWATER MONITORING:	NO
DOUBLE WALLED:	NO	SECONDARY CONTAINMENT	NO
SIR:	YES	TANK LEAK DETECTION LISTED:	NO

PIPE INFORMATION:

PIPE MATERIALS: GALVANIZED STEEL / NONE
PIPING TYPE: NOT LISTED

AUTO LINE LEAK DETECTION:	YES	LINE TIGHTNESS TEST:	NO
VAPOR MONITORING:	NO	GROUNDWATER MONITORING:	NO
DOUBLE WALLED:	NO	SECONDARY CONTAINMENT:	NO
SIR:	YES		
SPILL PROTECTION INSTALLED:	NO	OVERFILL INSTALLED:	NO

TANK NUMBER: 2
TANK STATUS: PERMANENTLY OUT OF USE
TANK INSTALLED DATE: 1/16/1985

TANK CAPACITY: 6000 GALLONS
TANK CONTENTS: GASOLINE

- Continued on next page -

Target Property: SR 126
KINGSPORT TN 37664

JOB: 1135.00

UST

SEARCH ID: 47 **DIST/DIR:** 0.01 S- **MAP ID:** 14

NAME: GARDEN BASKET CONV.STORE 4
ADDRESS: 3177 MEMORIAL BLVD.
KINGSPORT TN 37660
SULLIVAN
CONTACT:

REV: 3/4/05
ID1: 1-820144
ID2:
STATUS:
PHONE:

MATERIALS OF CONSTRUCTION: ASPHALT COATED OR BARE STEEL / NONE

TANK PROTECTION INFORMATION:

MANUAL TANK GAUGE:	NO	TANK TIGHTNESS TEST:	NO
TANK INVENTORY CONTROL:	NO	AUTOMATIC TANK GAUGING:	NO
TANK VAPOR MONITOR:	NO	GROUNDWATER MONITORING:	NO
DOUBLE WALLED:	NO	SECONDARY CONTAINMENT	NO
SIR:	YES	TANK LEAK DETECTION LISTED:	NO

PIPE INFORMATION:

PIPE MATERIALS: GALVANIZED STEEL / NONE
PIPING TYPE: NOT LISTED

AUTO LINE LEAK DETECTION:	YES	LINE TIGHTNESS TEST:	NO
VAPOR MONITORING:	NO	GROUNDWATER MONITORING:	NO
DOUBLE WALLED:	NO	SECONDARY CONTAINMENT:	NO
SIR:	YES		

SPILL PROTECTION INSTALLED: NO OVERFILL INSTALLED: NO

TANK NUMBER: 3
TANK STATUS: PERMANENTLY OUT OF USE
TANK INSTALLED DATE: 1/16/1985

TANK CAPACITY: 4000 GALLONS
TANK CONTENTS: GASOLINE

MATERIALS OF CONSTRUCTION: ASPHALT COATED OR BARE STEEL / NONE

TANK PROTECTION INFORMATION:

MANUAL TANK GAUGE:	NO	TANK TIGHTNESS TEST:	NO
TANK INVENTORY CONTROL:	NO	AUTOMATIC TANK GAUGING:	NO
TANK VAPOR MONITOR:	NO	GROUNDWATER MONITORING:	NO
DOUBLE WALLED:	NO	SECONDARY CONTAINMENT	NO
SIR:	YES	TANK LEAK DETECTION LISTED:	NO

PIPE INFORMATION:

PIPE MATERIALS: GALVANIZED STEEL / NONE
PIPING TYPE: NOT LISTED

AUTO LINE LEAK DETECTION:	YES	LINE TIGHTNESS TEST:	NO
VAPOR MONITORING:	NO	GROUNDWATER MONITORING:	NO
DOUBLE WALLED:	NO	SECONDARY CONTAINMENT:	NO
SIR:	YES		

SPILL PROTECTION INSTALLED: NO OVERFILL INSTALLED: NO

- Continued on next page -

Target Property: SR 126
KINGSPORT TN 37664

JOB: 1135.00

UST

SEARCH ID: 47 **DIST/DIR:** 0.01 S- **MAP ID:** 14

NAME:	GARDEN BASKET CONV.STORE 4	REV:	3/4/05
ADDRESS:	3177 MEMORIAL BLVD.	ID1:	1-820144
	KINGSPORT TN 37660	ID2:	
	SULLIVAN	STATUS:	
CONTACT:		PHONE:	

Environmental FirstSearch
Site Detail Report

Target Property: SR 126
KINGSPORT TN 37664

JOB: 1135.00

FINDS

SEARCH ID: 38 **DIST/DIR:** 0.01 SE **MAP ID:** 11

NAME: INDIAN SPRINGS CAR WASH
ADDRESS: 5703 MEMORIAL BLVD
KINGSPORT TN 37664
CONTACT:

REV:
ID1: TN0000541938
ID2:
STATUS:
PHONE:

DETAILS NOT AVAILABLE

LUST

SEARCH ID: 76 **DIST/DIR:** 0.01 SE **MAP ID:** 11

NAME: CHEROKEE FOOD STORE 13
ADDRESS: 5703 MEMORIAL BLVD.
KINGSPORT TN 37660
CONTACT: CHEROKEE OIL COMPANY

REV: 12/1/04
ID1: 1-820029
ID2:
STATUS: ACTIVE
PHONE:

SITE INFORMATION

RELEASE DATE:	2/10/1998	APPLICATION:	99106
NUM OF TANKS:	37	TOT DEDUCTABLE:	$ 20000
AMOUNT REQUESTED:	$ 727.5	DISALLOWED:	$ 0
BALANCE DUE:	$ 0	TOTAL PAID:	$ 582
NET PAID:	$ 582	RECEIVED APPLICATION:	3/1/1999
NUMBER RECEIVED:	02	AUTHOR RECEIVED:	8/11/2000
AUTHOR APPROVED:	8/28/2000	CONTRACTOR:	C0401
APPROVAL:	Y	COVERAGE:	
OWNER ID:	1588		
TANK OWNER:	CHEROKEE OIL COMPANY		

Target Property: SR 126
KINGSPORT TN 37664

JOB: 1135.00

UST

SEARCH ID: 66 **DIST/DIR:** 0.01 SE **MAP ID:** 11

NAME: CHEROKEE FOOD STORE 13
ADDRESS: 5703 MEMORIAL BLVD.
KINGSPORT TN 37660
SULLIVAN
CONTACT:

REV: 3/4/05
ID1: 1-820029
ID2:
STATUS:
PHONE:

SITE INFORMATION

TOTAL NUMBER OF TANKS: 5

OWNER INFORMATION:

OWNER ID NUMBER: 1588
OWNER DESCRIPTION: COMMERCIAL
OWNER NAME: CHEROKEE OIL, CO., INC
OWNER ADDRESS: 930 WILCOX COURT SUITE 7
KINGSPORT TN 37660
PHONE: (423) 288-2011

TANK INFORMATION:

TANK NUMBER: 1
TANK STATUS: PERMANENTLY OUT OF USE
TANK INSTALLED DATE: 1/16/1973

TANK CAPACITY: 6000 GALLONS
TANK CONTENTS: GASOLINE

MATERIALS OF CONSTRUCTION: ASPHALT COATED OR BARE STEEL / NONE

TANK PROTECTION INFORMATION:

MANUAL TANK GAUGE:	NO	TANK TIGHTNESS TEST:	YES
TANK INVENTORY CONTROL:	YES	AUTOMATIC TANK GAUGING:	NO
TANK VAPOR MONITOR:	NO	GROUNDWATER MONITORING:	NO
DOUBLE WALLED:	NO	SECONDARY CONTAINMENT	NO
SIR:	NO	TANK LEAK DETECTION LISTED:	NO

PIPE INFORMATION:

PIPE MATERIALS: GALVANIZED STEEL / NONE
PIPING TYPE: NOT LISTED

AUTO LINE LEAK DETECTION:	YES	LINE TIGHTNESS TEST:	YES
VAPOR MONITORING:	NO	GROUNDWATER MONITORING:	NO
DOUBLE WALLED:	NO	SECONDARY CONTAINMENT:	NO
SIR:	NO		
SPILL PROTECTION INSTALLED:	NO	OVERFILL INSTALLED:	NO

TANK NUMBER: 2
TANK STATUS: PERMANENTLY OUT OF USE
TANK INSTALLED DATE: 1/16/1973

TANK CAPACITY: 6000 GALLONS
TANK CONTENTS: GASOLINE

- Continued on next page -

Target Property: SR 126
KINGSPORT TN 37664

JOB: 1135.00

UST

SEARCH ID: 66 **DIST/DIR:** 0.01 SE **MAP ID:** 11

NAME: CHEROKEE FOOD STORE 13
ADDRESS: 5703 MEMORIAL BLVD.
KINGSPORT TN 37660
SULLIVAN
CONTACT:

REV: 3/4/05
ID1: 1-820029
ID2:
STATUS:
PHONE:

MATERIALS OF CONSTRUCTION: ASPHALT COATED OR BARE STEEL / NONE

TANK PROTECTION INFORMATION:

MANUAL TANK GAUGE:	NO	TANK TIGHTNESS TEST:	YES
TANK INVENTORY CONTROL:	YES	AUTOMATIC TANK GAUGING:	NO
TANK VAPOR MONITOR:	NO	GROUNDWATER MONITORING:	NO
DOUBLE WALLED:	NO	SECONDARY CONTAINMENT	NO
SIR:	NO	TANK LEAK DETECTION LISTED:	NO

PIPE INFORMATION:

PIPE MATERIALS: GALVANIZED STEEL / NONE
PIPING TYPE: NOT LISTED

AUTO LINE LEAK DETECTION:	YES	LINE TIGHTNESS TEST:	YES
VAPOR MONITORING:	NO	GROUNDWATER MONITORING:	NO
DOUBLE WALLED:	NO	SECONDARY CONTAINMENT:	NO
SIR:	NO		

SPILL PROTECTION INSTALLED: NO OVERFILL INSTALLED: NO

TANK NUMBER: 3
TANK STATUS: PERMANENTLY OUT OF USE
TANK INSTALLED DATE: 1/16/1973

TANK CAPACITY: 2000 GALLONS
TANK CONTENTS: KEROSENE

MATERIALS OF CONSTRUCTION: ASPHALT COATED OR BARE STEEL / NONE

TANK PROTECTION INFORMATION:

MANUAL TANK GAUGE:	YES	TANK TIGHTNESS TEST:	YES
TANK INVENTORY CONTROL:	YES	AUTOMATIC TANK GAUGING:	NO
TANK VAPOR MONITOR:	NO	GROUNDWATER MONITORING:	NO
DOUBLE WALLED:	NO	SECONDARY CONTAINMENT	NO
SIR:	NO	TANK LEAK DETECTION LISTED:	NO

PIPE INFORMATION:

PIPE MATERIALS: GALVANIZED STEEL / NONE
PIPING TYPE: NOT LISTED

AUTO LINE LEAK DETECTION:	NO	LINE TIGHTNESS TEST:	YES
VAPOR MONITORING:	NO	GROUNDWATER MONITORING:	NO
DOUBLE WALLED:	NO	SECONDARY CONTAINMENT:	NO
SIR:	NO		

SPILL PROTECTION INSTALLED: NO OVERFILL INSTALLED: NO

- Continued on next page -

Target Property: SR 126
KINGSPORT TN 37664

JOB: 1135.00

UST

SEARCH ID: 66 **DIST/DIR:** 0.01 SE **MAP ID:** 11

NAME: CHEROKEE FOOD STORE 13
ADDRESS: 5703 MEMORIAL BLVD.
KINGSPORT TN 37660
SULLIVAN
CONTACT:

REV: 3/4/05
ID1: 1-820029
ID2:
STATUS:
PHONE:

TANK NUMBER: 4
TANK STATUS: PERMANENTLY OUT OF USE
TANK INSTALLED DATE: 1/16/1973

TANK CAPACITY: 4000 GALLONS
TANK CONTENTS: GASOLINE

MATERIALS OF CONSTRUCTION: ASPHALT COATED OR BARE STEEL / NONE

TANK PROTECTION INFORMATION:

MANUAL TANK GAUGE:	NO	TANK TIGHTNESS TEST:	YES
TANK INVENTORY CONTROL:	YES	AUTOMATIC TANK GAUGING:	NO
TANK VAPOR MONITOR:	NO	GROUNDWATER MONITORING:	NO
DOUBLE WALLED:	NO	SECONDARY CONTAINMENT	NO
SIR:	NO	TANK LEAK DETECTION LISTED:	NO

PIPE INFORMATION:

PIPE MATERIALS: GALVANIZED STEEL / NONE
PIPING TYPE: NOT LISTED

AUTO LINE LEAK DETECTION:	NO	LINE TIGHTNESS TEST:	YES
VAPOR MONITORING:	NO	GROUNDWATER MONITORING:	NO
DOUBLE WALLED:	NO	SECONDARY CONTAINMENT:	NO
SIR:	NO		

SPILL PROTECTION INSTALLED: NO OVERFILL INSTALLED: NO

TANK NUMBER: 5
TANK STATUS: PERMANENTLY OUT OF USE
TANK INSTALLED DATE: 1/16/1973

TANK CAPACITY: 4000 GALLONS
TANK CONTENTS: GASOLINE

MATERIALS OF CONSTRUCTION: ASPHALT COATED OR BARE STEEL / NONE

TANK PROTECTION INFORMATION:

MANUAL TANK GAUGE:	NO	TANK TIGHTNESS TEST:	YES
TANK INVENTORY CONTROL:	YES	AUTOMATIC TANK GAUGING:	NO
TANK VAPOR MONITOR:	NO	GROUNDWATER MONITORING:	NO
DOUBLE WALLED:	NO	SECONDARY CONTAINMENT	NO
SIR:	NO	TANK LEAK DETECTION LISTED:	NO

PIPE INFORMATION:

PIPE MATERIALS: GALVANIZED STEEL / NONE
PIPING TYPE: NOT LISTED

- Continued on next page -

Target Property: SR 126
KINGSPORT TN 37664

JOB: 1135.00

UST

SEARCH ID: 66 **DIST/DIR:** 0.01 SE **MAP ID:** 11

NAME:	CHEROKEE FOOD STORE 13	**REV:**	3/4/05
ADDRESS:	5703 MEMORIAL BLVD.	**ID1:**	1-820029
	KINGSPORT TN 37660	**ID2:**	
	SULLIVAN	**STATUS:**	
CONTACT:		**PHONE:**	

AUTO LINE LEAK DETECTION:	NO	**LINE TIGHTNESS TEST:**	YES
VAPOR MONITORING:	NO	**GROUNDWATER MONITORING:**	NO
DOUBLE WALLED:	NO	**SECONDARY CONTAINMENT:**	NO
SIR:	NO		
SPILL PROTECTION INSTALLED:	NO	**OVERFILL INSTALLED:**	NO

Target Property: SR 126
KINGSPORT TN 37664

JOB: 1135.00

NPDES

SEARCH ID: 9 **DIST/DIR:** 0.02 NE **MAP ID:** 22

NAME:	MILTON DEVELOPMENT CORP. 3802 MEMORIAL BLVD.	REV:	9/16/01
ADDRESS:		ID1:	TNU950550
	TN	ID2:	
	SULLIVAN	STATUS:	MINOR
CONTACT:	WILLIAM B. MILTON	PHONE:	

SITE INFORMATION

PERMIT ISSUED:
PERMIT EXPIRED:
RECEIVING WATERS:

SIC INFORMATION:

MAILING CONTACT:

Target Property: SR 126
KINGSPORT TN 37664

JOB: 1135.00

UST

SEARCH ID: 56 **DIST/DIR:** 0.02 NE **MAP ID:** 23

NAME:	SUNBRIDGE CARE AND REHABILITATION	REV:	3/4/05
ADDRESS:	DBA HILLSIDE MANOR3641 MEMORIAL BLVD.	ID1:	1-820516
	KINGSPORT TN 37664	ID2:	
	SULLIVAN	STATUS:	
CONTACT:		PHONE:	

SITE INFORMATION

TOTAL NUMBER OF TANKS: 2

OWNER INFORMATION:

OWNER ID NUMBER: 156818
OWNER DESCRIPTION: PRIVATE
OWNER NAME: SUNBRIDGE HEALTHCARE CORPORATION
OWNER ADDRESS: 1160 GALLATIN PIKE 500
MADISON TN 37115
PHONE: (423) 246-2411

TANK INFORMATION:

TANK NUMBER: 1
TANK STATUS: PERMANENTLY OUT OF USE
TANK INSTALLED DATE: 6/21/1968

TANK CAPACITY: 250 GALLONS
TANK CONTENTS: DIESEL

MATERIALS OF CONSTRUCTION: ASPHALT COATED OR BARE STEEL / NONE

TANK PROTECTION INFORMATION:

MANUAL TANK GAUGE:	NO	TANK TIGHTNESS TEST:	NO
TANK INVENTORY CONTROL:	NO	AUTOMATIC TANK GAUGING:	NO
TANK VAPOR MONITOR:	NO	GROUNDWATER MONITORING:	NO
DOUBLE WALLED:	NO	SECONDARY CONTAINMENT	NO
SIR:	NO	TANK LEAK DETECTION LISTED:	YES

PIPE INFORMATION:

PIPE MATERIALS: COPPER / NONE
PIPING TYPE: SAFE SUCTION

AUTO LINE LEAK DETECTION:	NO	LINE TIGHTNESS TEST:	NO
VAPOR MONITORING:	NO	GROUNDWATER MONITORING:	NO
DOUBLE WALLED:	NO	SECONDARY CONTAINMENT:	NO
SIR:	NO		
SPILL PROTECTION INSTALLED:	NO	OVERFILL INSTALLED:	NO

TANK NUMBER: 2
TANK STATUS: PERMANENTLY OUT OF USE
TANK INSTALLED DATE: 6/21/1975

TANK CAPACITY: 250 GALLONS
TANK CONTENTS: DIESEL

- Continued on next page -

Target Property: SR 126
KINGSPORT TN 37664

JOB: 1135.00

UST

SEARCH ID: 56 **DIST/DIR:** 0.02 NE **MAP ID:** 23

NAME: SUNBRIDGE CARE AND REHABILITATION
ADDRESS: DBA HILLSIDE MANOR3641 MEMORIAL BLVD.
KINGSPORT TN 37664
SULLIVAN
CONTACT:

REV: 3/4/05
ID1: 1-820516
ID2:
STATUS:
PHONE:

MATERIALS OF CONSTRUCTION: ASPHALT COATED OR BARE STEEL / NONE

TANK PROTECTION INFORMATION:

MANUAL TANK GAUGE:	NO	TANK TIGHTNESS TEST:	NO
TANK INVENTORY CONTROL:	NO	AUTOMATIC TANK GAUGING:	NO
TANK VAPOR MONITOR:	NO	GROUNDWATER MONITORING:	NO
DOUBLE WALLED:	NO	SECONDARY CONTAINMENT	NO
SIR:	NO	TANK LEAK DETECTION LISTED:	YES

PIPE INFORMATION:

PIPE MATERIALS: COPPER / NONE
PIPING TYPE: SAFE SUCTION

AUTO LINE LEAK DETECTION:	NO	LINE TIGHTNESS TEST:	NO
VAPOR MONITORING:	NO	GROUNDWATER MONITORING:	NO
DOUBLE WALLED:	NO	SECONDARY CONTAINMENT:	NO
SIR:	NO		

SPILL PROTECTION INSTALLED: NO OVERFILL INSTALLED: NO

Environmental FirstSearch
Site Detail Report

Target Property: SR 126
KINGSPORT TN 37664

JOB: 1135.00

LUST

SEARCH ID: 70 **DIST/DIR:** 0.02 S- **MAP ID:** 20

NAME:	AMOCO SERVICE STATION	REV:	12/1/04
ADDRESS:	3101 MEMORIAL BLVD	ID1:	1-820435
	KINGSPORT TN 37664	ID2:	
		STATUS:	ACTIVE
CONTACT:	CONOCOPHILLIPS INC	PHONE:	

SITE INFORMATION

RELEASE DATE:	3/14/2002	APPLICATION:	02126
NUM OF TANKS:	3	TOT DEDUCTABLE:	$ 10000
AMOUNT REQUESTED:	$ 17651.35	DISALLOWED:	$ 0
BALANCE DUE:	$ 0	TOTAL PAID:	$ 15886.22
NET PAID:	$ 15886.22	RECEIVED APPLICATION:	
NUMBER RECEIVED:		AUTHOR RECEIVED:	4/11/2002
AUTHOR APPROVED:	7/17/2002	CONTRACTOR:	C0401
APPROVAL:	Y	COVERAGE:	
OWNER ID:	157426		
TANK OWNER:	CONOCOPHILLIPS INC		

Target Property: SR 126
KINGSPORT TN 37664

JOB: 1135.00

UST

SEARCH ID: 45 **DIST/DIR:** 0.02 S- **MAP ID:** 20

NAME: AMOCO SERVICE STATION
ADDRESS: 3101 MEMORIAL BLVD.
KINGSPORT TN 37664
SULLIVAN
CONTACT:

REV: 3/4/05
ID1: 1-820435
ID2:
STATUS:
PHONE:

SITE INFORMATION

TOTAL NUMBER OF TANKS: 3

OWNER INFORMATION:

OWNER ID NUMBER: 157426
OWNER DESCRIPTION: PRIVATE
OWNER NAME: JOHN E FRY
OWNER ADDRESS: 3036 CLIFFSIDE ROAD
KINGSPORT TN 37664
PHONE: (423) 246-9705

TANK INFORMATION:

TANK NUMBER: 1
TANK STATUS: PERMANENTLY OUT OF USE
TANK INSTALLED DATE: 12/15/1986

TANK CAPACITY: 6000 GALLONS
TANK CONTENTS: GASOLINE

MATERIALS OF CONSTRUCTION: CATHODICALLY PROTECTED STEEL / NONE

TANK PROTECTION INFORMATION:

MANUAL TANK GAUGE:	NO	TANK TIGHTNESS TEST:	NO
TANK INVENTORY CONTROL:	NO	AUTOMATIC TANK GAUGING:	NO
TANK VAPOR MONITOR:	NO	GROUNDWATER MONITORING:	NO
DOUBLE WALLED:	NO	SECONDARY CONTAINMENT	NO
SIR:	YES	TANK LEAK DETECTION LISTED:	NO

PIPE INFORMATION:

PIPE MATERIALS: FIBERGLASS REINFORCED PLASTIC / NONE
PIPING TYPE: PRESSURIZED

AUTO LINE LEAK DETECTION:	YES	LINE TIGHTNESS TEST:	NO
VAPOR MONITORING:	NO	GROUNDWATER MONITORING:	NO
DOUBLE WALLED:	NO	SECONDARY CONTAINMENT:	NO
SIR:	YES		
SPILL PROTECTION INSTALLED:	YES	OVERFILL INSTALLED:	YES

TANK NUMBER: 2
TANK STATUS: PERMANENTLY OUT OF USE
TANK INSTALLED DATE: 12/15/1986

TANK CAPACITY: 4000 GALLONS
TANK CONTENTS: GASOLINE

- Continued on next page -

Target Property: SR 126
KINGSPORT TN 37664

JOB: 1135.00

UST

SEARCH ID: 45 **DIST/DIR:** 0.02 S- **MAP ID:** 20

NAME:	AMOCO SERVICE STATION	REV:	3/4/05
ADDRESS:	3101 MEMORIAL BLVD.	ID1:	1-820435
	KINGSPORT TN 37664	ID2:	
	SULLIVAN	STATUS:	
CONTACT:		PHONE:	

MATERIALS OF CONSTRUCTION: CATHODICALLY PROTECTED STEEL / NONE

TANK PROTECTION INFORMATION:

MANUAL TANK GAUGE:	NO	TANK TIGHTNESS TEST:	NO
TANK INVENTORY CONTROL:	NO	AUTOMATIC TANK GAUGING:	NO
TANK VAPOR MONITOR:	NO	GROUNDWATER MONITORING:	NO
DOUBLE WALLED:	NO	SECONDARY CONTAINMENT	NO
SIR:	YES	TANK LEAK DETECTION LISTED:	NO

PIPE INFORMATION:

PIPE MATERIALS: FIBERGLASS REINFORCED PLASTIC / NONE
PIPING TYPE: PRESSURIZED

AUTO LINE LEAK DETECTION:	YES	LINE TIGHTNESS TEST:	NO
VAPOR MONITORING:	NO	GROUNDWATER MONITORING:	NO
DOUBLE WALLED:	NO	SECONDARY CONTAINMENT:	NO
SIR:	YES		

SPILL PROTECTION INSTALLED: YES OVERFILL INSTALLED: YES

TANK NUMBER: 3
TANK STATUS: PERMANENTLY OUT OF USE
TANK INSTALLED DATE: 8/1/1987

TANK CAPACITY: 4000 GALLONS
TANK CONTENTS: GASOLINE

MATERIALS OF CONSTRUCTION: CATHODICALLY PROTECTED STEEL / NONE

TANK PROTECTION INFORMATION:

MANUAL TANK GAUGE:	NO	TANK TIGHTNESS TEST:	NO
TANK INVENTORY CONTROL:	NO	AUTOMATIC TANK GAUGING:	NO
TANK VAPOR MONITOR:	NO	GROUNDWATER MONITORING:	NO
DOUBLE WALLED:	NO	SECONDARY CONTAINMENT	NO
SIR:	YES	TANK LEAK DETECTION LISTED:	NO

PIPE INFORMATION:

PIPE MATERIALS: FIBERGLASS REINFORCED PLASTIC / NONE
PIPING TYPE: PRESSURIZED

AUTO LINE LEAK DETECTION:	YES	LINE TIGHTNESS TEST:	NO
VAPOR MONITORING:	NO	GROUNDWATER MONITORING:	NO
DOUBLE WALLED:	NO	SECONDARY CONTAINMENT:	NO
SIR:	YES		

SPILL PROTECTION INSTALLED: YES OVERFILL INSTALLED: YES

- Continued on next page -

Target Property: SR 126
KINGSPORT TN 37664

JOB: 1135.00

UST

SEARCH ID: 45 **DIST/DIR:** 0.02 S- **MAP ID:** 20

NAME:	AMOCO SERVICE STATION	REV:	3/4/05
ADDRESS:	3101 MEMORIAL BLVD.	ID1:	1-820435
	KINGSPORT TN 37664	ID2:	
	SULLIVAN	STATUS:	
CONTACT:		PHONE:	

Environmental FirstSearch
Site Detail Report

Target Property: SR 126
KINGSPORT TN 37664

JOB: 1135.00

LUST

SEARCH ID: 74 **DIST/DIR:** 0.02 SE **MAP ID:** 19

NAME:	COASTAL MART 7034	REV:	12/1/04
ADDRESS:	4000 MEMORIAL DRIVE	ID1:	1-820193
	KINGSPORT TN	ID2:	
		STATUS:	CLOSED
CONTACT:	COASTAL MART INC	PHONE:	

SITE INFORMATION

RELEASE DATE:	3/26/1992	APPLICATION:	94277
NUM OF TANKS:	54	TOT DEDUCTABLE:	$ 20000
AMOUNT REQUESTED:	$ 39066.2	DISALLOWED:	$ 1482.39
BALANCE DUE:	$ 0	TOTAL PAID:	$ 17583.81
NET PAID:	$ 17583.81	RECEIVED APPLICATION:	5/5/1995
NUMBER RECEIVED:	03	AUTHOR RECEIVED:	5/18/1994
AUTHOR APPROVED:	6/1/1994	CONTRACTOR:	
APPROVAL:	Y	COVERAGE:	
OWNER ID:	1980		
TANK OWNER:	COASTAL MART INC		

Target Property: SR 126
KINGSPORT TN 37664

JOB: 1135.00

UST

SEARCH ID: 61 **DIST/DIR:** 0.02 SE **MAP ID:** 19

NAME:	SUNOCO 0968-5355	REV:	3/4/05
ADDRESS:	4001 MEMORIAL BLVD.	ID1:	1-820193
	KINGSPORT TN 37664	ID2:	
	SULLIVAN	STATUS:	
CONTACT:		PHONE:	

SITE INFORMATION

TOTAL NUMBER OF TANKS: 5

OWNER INFORMATION:

OWNER ID NUMBER: 157677
OWNER DESCRIPTION: COMMERCIAL
OWNER NAME: SUNOCO, INC. (R and M)
OWNER ADDRESS: 1801 MARKET ST 22ND FLOOR
PHILADELPHIA PA 19103
PHONE: (215) 246-8513

TANK INFORMATION:

TANK NUMBER: 1
TANK STATUS: PERMANENTLY OUT OF USE
TANK INSTALLED DATE: 5/7/1972

TANK CAPACITY: 8000 GALLONS
TANK CONTENTS: GASOLINE

MATERIALS OF CONSTRUCTION: ASPHALT COATED OR BARE STEEL / NONE

TANK PROTECTION INFORMATION:

MANUAL TANK GAUGE:	NO	TANK TIGHTNESS TEST:	YES
TANK INVENTORY CONTROL:	YES	AUTOMATIC TANK GAUGING:	NO
TANK VAPOR MONITOR:	NO	GROUNDWATER MONITORING:	NO
DOUBLE WALLED:	NO	SECONDARY CONTAINMENT	NO
SIR:	NO	TANK LEAK DETECTION LISTED:	NO

PIPE INFORMATION:

PIPE MATERIALS: GALVANIZED STEEL / NONE
PIPING TYPE: SAFE SUCTION

AUTO LINE LEAK DETECTION:	NO	LINE TIGHTNESS TEST:	YES
VAPOR MONITORING:	NO	GROUNDWATER MONITORING:	NO
DOUBLE WALLED:	NO	SECONDARY CONTAINMENT:	NO
SIR:	NO		
SPILL PROTECTION INSTALLED:	NO	OVERFILL INSTALLED:	NO

TANK NUMBER: 2
TANK STATUS: PERMANENTLY OUT OF USE
TANK INSTALLED DATE: 5/7/1972

TANK CAPACITY: 8000 GALLONS
TANK CONTENTS: GASOLINE

- Continued on next page -

Target Property: SR 126
KINGSPORT TN 37664

JOB: 1135.00

UST

SEARCH ID: 61 **DIST/DIR:** 0.02 SE **MAP ID:** 19

NAME:	SUNOCO 0968-5355	REV:	3/4/05
ADDRESS:	4001 MEMORIAL BLVD.	ID1:	1-820193
	KINGSPORT TN 37664	ID2:	
	SULLIVAN	STATUS:	
CONTACT:		PHONE:	

MATERIALS OF CONSTRUCTION: ASPHALT COATED OR BARE STEEL / NONE

TANK PROTECTION INFORMATION:

MANUAL TANK GAUGE:	NO	TANK TIGHTNESS TEST:	NO
TANK INVENTORY CONTROL:	YES	AUTOMATIC TANK GAUGING:	NO
TANK VAPOR MONITOR:	NO	GROUNDWATER MONITORING:	NO
DOUBLE WALLED:	NO	SECONDARY CONTAINMENT	NO
SIR:	NO	TANK LEAK DETECTION LISTED:	NO

PIPE INFORMATION:

PIPE MATERIALS: GALVANIZED STEEL / NONE
PIPING TYPE: SAFE SUCTION

AUTO LINE LEAK DETECTION:	NO	LINE TIGHTNESS TEST:	YES
VAPOR MONITORING:	NO	GROUNDWATER MONITORING:	NO
DOUBLE WALLED:	NO	SECONDARY CONTAINMENT:	NO
SIR:	NO		

SPILL PROTECTION INSTALLED: NO OVERFILL INSTALLED: NO

TANK NUMBER: 3
TANK STATUS: PERMANENTLY OUT OF USE
TANK INSTALLED DATE: 5/7/1972

TANK CAPACITY: 4000 GALLONS
TANK CONTENTS: GASOLINE

MATERIALS OF CONSTRUCTION: ASPHALT COATED OR BARE STEEL / NONE

TANK PROTECTION INFORMATION:

MANUAL TANK GAUGE:	NO	TANK TIGHTNESS TEST:	YES
TANK INVENTORY CONTROL:	YES	AUTOMATIC TANK GAUGING:	NO
TANK VAPOR MONITOR:	NO	GROUNDWATER MONITORING:	NO
DOUBLE WALLED:	NO	SECONDARY CONTAINMENT	NO
SIR:	NO	TANK LEAK DETECTION LISTED:	NO

PIPE INFORMATION:

PIPE MATERIALS: GALVANIZED STEEL / NONE
PIPING TYPE: SAFE SUCTION

AUTO LINE LEAK DETECTION:	NO	LINE TIGHTNESS TEST:	YES
VAPOR MONITORING:	NO	GROUNDWATER MONITORING:	NO
DOUBLE WALLED:	NO	SECONDARY CONTAINMENT:	NO
SIR:	NO		

SPILL PROTECTION INSTALLED: NO OVERFILL INSTALLED: NO

- Continued on next page -

Target Property: SR 126
KINGSPORT TN 37664

JOB: 1135.00

UST

SEARCH ID: 61 **DIST/DIR:** 0.02 SE **MAP ID:** 19

NAME: SUNOCO 0968-5355
ADDRESS: 4001 MEMORIAL BLVD.
KINGSPORT TN 37664
SULLIVAN
CONTACT:

REV: 3/4/05
ID1: 1-820193
ID2:
STATUS:
PHONE:

TANK NUMBER: 4
TANK STATUS: CURRENTLY IN USE
TANK INSTALLED DATE: 3/1/1992

TANK CAPACITY: 12000 GALLONS
TANK CONTENTS: GASOLINE

MATERIALS OF CONSTRUCTION: COMPOSITE (STEEL W/ FRP) / NONE

TANK PROTECTION INFORMATION:

MANUAL TANK GAUGE:	NO	TANK TIGHTNESS TEST:	NO
TANK INVENTORY CONTROL:	YES	AUTOMATIC TANK GAUGING:	NO
TANK VAPOR MONITOR:	NO	GROUNDWATER MONITORING:	NO
DOUBLE WALLED:	NO	SECONDARY CONTAINMENT	NO
SIR:	YES	TANK LEAK DETECTION LISTED:	NO

PIPE INFORMATION:

PIPE MATERIALS: FIBERGLASS REINFORCED PLASTIC / NONE
PIPING TYPE: PRESSURIZED

AUTO LINE LEAK DETECTION:	YES	LINE TIGHTNESS TEST:	YES
VAPOR MONITORING:	NO	GROUNDWATER MONITORING:	NO
DOUBLE WALLED:	NO	SECONDARY CONTAINMENT:	NO
SIR:	YES		

SPILL PROTECTION INSTALLED: YES OVERFILL INSTALLED: YES

TANK NUMBER: 5
TANK STATUS: CURRENTLY IN USE
TANK INSTALLED DATE: 3/1/1992

TANK CAPACITY: 12000 GALLONS
TANK CONTENTS: GASOLINE/GASOLINE

MATERIALS OF CONSTRUCTION: COMPOSITE (STEEL W/ FRP) / NONE

TANK PROTECTION INFORMATION:

MANUAL TANK GAUGE:	NO	TANK TIGHTNESS TEST:	NO
TANK INVENTORY CONTROL:	YES	AUTOMATIC TANK GAUGING:	NO
TANK VAPOR MONITOR:	NO	GROUNDWATER MONITORING:	NO
DOUBLE WALLED:	NO	SECONDARY CONTAINMENT	NO
SIR:	YES	TANK LEAK DETECTION LISTED:	NO

PIPE INFORMATION:

PIPE MATERIALS: FIBERGLASS REINFORCED PLASTIC / NONE
PIPING TYPE: PRESSURIZED

- Continued on next page -

Environmental FirstSearch
Site Detail Report

Target Property: SR 126
KINGSPORT TN 37664

JOB: 1135.00

UST

SEARCH ID: 61 **DIST/DIR:** 0.02 SE **MAP ID:** 19

NAME:	SUNOCO 0968-5355	REV:	3/4/05
ADDRESS:	4001 MEMORIAL BLVD.	ID1:	1-820193
	KINGSPORT TN 37664	ID2:	
	SULLIVAN	STATUS:	
CONTACT:		PHONE:	

AUTO LINE LEAK DETECTION:	YES	LINE TIGHTNESS TEST:	YES
VAPOR MONITORING:	NO	GROUNDWATER MONITORING:	NO
DOUBLE WALLED:	NO	SECONDARY CONTAINMENT:	NO
SIR:	YES		
SPILL PROTECTION INSTALLED:	YES	OVERFILL INSTALLED:	YES

Target Property: SR 126
KINGSPORT TN 37664

JOB: 1135.00

UST

SEARCH ID: 68 **DIST/DIR:** 0.02 SW **MAP ID:** 21

NAME: CENTRAL CHEVRON FOOD MART
ADDRESS: 220 CAROLINA POTTERY DRIVE
BLOUNTVILLE TN 37617
SULLIVAN
CONTACT:

REV: 3/4/05
ID1: 1-820565
ID2:
STATUS:
PHONE:

SITE INFORMATION

TOTAL NUMBER OF TANKS: 3

OWNER INFORMATION:

OWNER ID NUMBER: 13635
OWNER DESCRIPTION: COMMERCIAL
OWNER NAME: C. R. QUESENBERRY, INC.
OWNER ADDRESS: P.O. BOX 158
ABINGDON VA 24210
PHONE: 276-268-2104

TANK INFORMATION:

TANK NUMBER: 1
TANK STATUS: CURRENTLY IN USE
TANK INSTALLED DATE: 11/1/1992

TANK CAPACITY: 12000 GALLONS
TANK CONTENTS: GASOLINE

MATERIALS OF CONSTRUCTION: COMPOSITE (STEEL W/ FRP) / DOUBLE-WALLED

TANK PROTECTION INFORMATION:

MANUAL TANK GAUGE:	NO	TANK TIGHTNESS TEST:	NO
TANK INVENTORY CONTROL:	NO	AUTOMATIC TANK GAUGING:	YES
TANK VAPOR MONITOR:	NO	GROUNDWATER MONITORING:	NO
DOUBLE WALLED:	NO	SECONDARY CONTAINMENT	NO
SIR:	NO	TANK LEAK DETECTION LISTED:	NO

PIPE INFORMATION:

PIPE MATERIALS: FLEXIBLE PLASTIC / SECONDARY CONTAINMENT
PIPING TYPE: PRESSURIZED

AUTO LINE LEAK DETECTION:	YES	LINE TIGHTNESS TEST:	YES
VAPOR MONITORING:	NO	GROUNDWATER MONITORING:	NO
DOUBLE WALLED:	NO	SECONDARY CONTAINMENT:	NO
SIR:	NO		
SPILL PROTECTION INSTALLED:	YES	OVERFILL INSTALLED:	YES

TANK NUMBER: 2
TANK STATUS: CURRENTLY IN USE
TANK INSTALLED DATE: 11/1/1992

TANK CAPACITY: 8000 GALLONS
TANK CONTENTS: GASOLINE

- Continued on next page -

Target Property: SR 126
KINGSPORT TN 37664

JOB: 1135.00

UST

SEARCH ID: 68 **DIST/DIR:** 0.02 SW **MAP ID:** 21

NAME: CENTRAL CHEVRON FOOD MART
ADDRESS: 220 CAROLINA POTTERY DRIVE
BLOUNTVILLE TN 37617
SULLIVAN
CONTACT:

REV: 3/4/05
ID1: 1-820565
ID2:
STATUS:
PHONE:

MATERIALS OF CONSTRUCTION: COMPOSITE (STEEL W/ FRP) / DOUBLE-WALLED

TANK PROTECTION INFORMATION;

MANUAL TANK GAUGE:	NO	TANK TIGHTNESS TEST:	NO
TANK INVENTORY CONTROL:	NO	AUTOMATIC TANK GAUGING:	YES
TANK VAPOR MONITOR:	NO	GROUNDWATER MONITORING:	NO
DOUBLE WALLED:	NO	SECONDARY CONTAINMENT	NO
SIR:	NO	TANK LEAK DETECTION LISTED:	NO

PIPE INFORMATION:

PIPE MATERIALS: FLEXIBLE PLASTIC / SECONDARY CONTAINMENT
PIPING TYPE: PRESSURIZED

AUTO LINE LEAK DETECTION:	YES	LINE TIGHTNESS TEST:	YES
VAPOR MONITORING:	NO	GROUNDWATER MONITORING:	NO
DOUBLE WALLED:	NO	SECONDARY CONTAINMENT:	NO
SIR:	NO		

SPILL PROTECTION INSTALLED: YES OVERFILL INSTALLED: YES

TANK NUMBER: 3
TANK STATUS: CURRENTLY IN USE
TANK INSTALLED DATE: 11/1/1992

TANK CAPACITY: 8000 GALLONS
TANK CONTENTS: GASOLINE

MATERIALS OF CONSTRUCTION: COMPOSITE (STEEL W/ FRP) / DOUBLE-WALLED

TANK PROTECTION INFORMATION:

MANUAL TANK GAUGE:	NO	TANK TIGHTNESS TEST:	NO
TANK INVENTORY CONTROL:	NO	AUTOMATIC TANK GAUGING:	YES
TANK VAPOR MONITOR:	NO	GROUNDWATER MONITORING:	NO
DOUBLE WALLED:	NO	SECONDARY CONTAINMENT	NO
SIR:	NO	TANK LEAK DETECTION LISTED:	NO

PIPE INFORMATION:

PIPE MATERIALS: FLEXIBLE PLASTIC / SECONDARY CONTAINMENT
PIPING TYPE: PRESSURIZED

AUTO LINE LEAK DETECTION:	YES	LINE TIGHTNESS TEST:	YES
VAPOR MONITORING:	NO	GROUNDWATER MONITORING:	NO
DOUBLE WALLED:	NO	SECONDARY CONTAINMENT:	NO
SIR:	NO		

SPILL PROTECTION INSTALLED: YES OVERFILL INSTALLED: YES

- Continued on next page -

Target Property: SR 126
KINGSPORT TN 37664

JOB: 1135.00

UST

SEARCH ID: 68 **DIST/DIR:** 0.02 SW **MAP ID:** 21

NAME:	CENTRAL CHEVRON FOOD MART	REV:	3/4/05
ADDRESS:	220 CAROLINA POTTERY DRIVE	ID1:	1-820565
	BLOUNTVILLE TN 37617	ID2:	
	SULLIVAN	STATUS:	
CONTACT:		PHONE:	

Target Property: SR 126
KINGSPORT TN 37664

JOB: 1135.00

UST

SEARCH ID: 62 **DIST/DIR:** 0.03 NW **MAP ID:** 24

NAME: MIDWAY GROCERY
ADDRESS: 5001 MEMORIAL BLVD.
KINGSPORT TN 37660
SULLIVAN
CONTACT:

REV: 3/4/05
ID1: 1-820237
ID2:
STATUS:
PHONE:

SITE INFORMATION

TOTAL NUMBER OF TANKS: 3

OWNER INFORMATION:

OWNER ID NUMBER: 2839
OWNER DESCRIPTION: PRIVATE
OWNER NAME: E.J. SMITH INC./CITCO SERVICE CTR
OWNER ADDRESS: 1000 NORTH WILCOX DRIVE
KINGSPORT TN 37660
PHONE: (423) 246-8194

TANK INFORMATION:

TANK NUMBER: 1
TANK STATUS: PERMANENTLY OUT OF USE
TANK INSTALLED DATE: 5/7/1976

TANK CAPACITY: 550 GALLONS
TANK CONTENTS: GASOLINE

MATERIALS OF CONSTRUCTION: ASPHALT COATED OR BARE STEEL / NONE

TANK PROTECTION INFORMATION:

MANUAL TANK GAUGE:	NO	TANK TIGHTNESS TEST:	NO
TANK INVENTORY CONTROL:	NO	AUTOMATIC TANK GAUGING:	NO
TANK VAPOR MONITOR:	NO	GROUNDWATER MONITORING:	NO
DOUBLE WALLED:	NO	SECONDARY CONTAINMENT	NO
SIR:	NO	TANK LEAK DETECTION LISTED:	YES

PIPE INFORMATION:

PIPE MATERIALS: GALVANIZED STEEL / NONE
PIPING TYPE: NOT LISTED

AUTO LINE LEAK DETECTION:	NO	LINE TIGHTNESS TEST:	NO
VAPOR MONITORING:	NO	GROUNDWATER MONITORING:	NO
DOUBLE WALLED:	NO	SECONDARY CONTAINMENT:	NO
SIR:	NO		
SPILL PROTECTION INSTALLED:	NO	OVERFILL INSTALLED:	NO

TANK NUMBER: 2
TANK STATUS: PERMANENTLY OUT OF USE
TANK INSTALLED DATE: 5/7/1962

TANK CAPACITY: 1000 GALLONS
TANK CONTENTS: GASOLINE

- Continued on next page -

Target Property: SR 126
KINGSPORT TN 37664

JOB: 1135.00

UST

SEARCH ID: 62 **DIST/DIR:** 0.03 NW **MAP ID:** 24

NAME: MIDWAY GROCERY
ADDRESS: 5001 MEMORIAL BLVD.
KINGSPORT TN 37660
SULLIVAN
CONTACT:

REV: 3/4/05
ID1: 1-820237
ID2:
STATUS:
PHONE:

MATERIALS OF CONSTRUCTION: ASPHALT COATED OR BARE STEEL / NONE

TANK PROTECTION INFORMATION:

MANUAL TANK GAUGE:	NO	TANK TIGHTNESS TEST:	NO
TANK INVENTORY CONTROL:	NO	AUTOMATIC TANK GAUGING:	NO
TANK VAPOR MONITOR:	NO	GROUNDWATER MONITORING:	NO
DOUBLE WALLED:	NO	SECONDARY CONTAINMENT	NO
SIR:	NO	TANK LEAK DETECTION LISTED:	YES

PIPE INFORMATION:

PIPE MATERIALS: GALVANIZED STEEL / NONE
PIPING TYPE: NOT LISTED

AUTO LINE LEAK DETECTION:	NO	LINE TIGHTNESS TEST:	NO
VAPOR MONITORING:	NO	GROUNDWATER MONITORING:	NO
DOUBLE WALLED:	NO	SECONDARY CONTAINMENT:	NO
SIR:	NO		

SPILL PROTECTION INSTALLED: NO OVERFILL INSTALLED: NO

TANK NUMBER: 3
TANK STATUS: PERMANENTLY OUT OF USE
TANK INSTALLED DATE: 5/7/1962

TANK CAPACITY: 1000 GALLONS
TANK CONTENTS: GASOLINE

MATERIALS OF CONSTRUCTION: ASPHALT COATED OR BARE STEEL / NONE

TANK PROTECTION INFORMATION:

MANUAL TANK GAUGE:	NO	TANK TIGHTNESS TEST:	NO
TANK INVENTORY CONTROL:	NO	AUTOMATIC TANK GAUGING:	NO
TANK VAPOR MONITOR:	NO	GROUNDWATER MONITORING:	NO
DOUBLE WALLED:	NO	SECONDARY CONTAINMENT	NO
SIR:	NO	TANK LEAK DETECTION LISTED:	YES

PIPE INFORMATION:

PIPE MATERIALS: GALVANIZED STEEL / NONE
PIPING TYPE: NOT LISTED

AUTO LINE LEAK DETECTION:	NO	LINE TIGHTNESS TEST:	NO
VAPOR MONITORING:	NO	GROUNDWATER MONITORING:	NO
DOUBLE WALLED:	NO	SECONDARY CONTAINMENT:	NO
SIR:	NO		

SPILL PROTECTION INSTALLED: NO OVERFILL INSTALLED: NO

- Continued on next page -

Target Property: SR 126
KINGSPORT TN 37664

JOB: 1135.00

UST

SEARCH ID: 62 **DIST/DIR:** 0.03 NW **MAP ID:** 24

NAME:	MIDWAY GROCERY	**REV:**	3/4/05
ADDRESS:	5001 MEMORIAL BLVD.	**ID1:**	1-820237
	KINGSPORT TN 37660	**ID2:**	
	SULLIVAN	**STATUS:**	
CONTACT:		**PHONE:**	

Environmental FirstSearch
Site Detail Report

Target Property: SR 126
KINGSPORT TN 37664

JOB: 1135.00

LUST

SEARCH ID: 77 **DIST/DIR:** 0.05 NE **MAP ID:** 25

NAME:	APPCO 22	REV:	12/1/04
ADDRESS:	181 AND HWY 126	ID1:	1-820403
	BLOUNTVILLE TN 37617	ID2:	
	SULLIVAN	STATUS:	ACTIVE
CONTACT:	APPALACHIAN OIL CO, INC	PHONE:	

SITE INFORMATION

RELEASE DATE:	12/20/1991	APPLICATION:	94019
NUM OF TANKS:	488	TOT DEDUCTABLE:	$ 20000
AMOUNT REQUESTED:	$ 360590.61	DISALLOWED:	$ 10734.42
BALANCE DUE:	$ 23696.14	TOTAL PAID:	$ 294657.76
NET PAID:	$ 318353.9	RECEIVED APPLICATION:	8/1/2001
NUMBER RECEIVED:	35	AUTHOR RECEIVED:	9/11/1992
AUTHOR APPROVED:	2/18/1993	CONTRACTOR:	C0162
APPROVAL:	Y	COVERAGE:	
OWNER ID:	352		
TANK OWNER:	APPALACHIAN OIL CO, INC		

Target Property: SR 126
KINGSPORT TN 37664

JOB: 1135.00

UST

SEARCH ID: 67 **DIST/DIR:** 0.05 NE **MAP ID:** 25

NAME: BAY CO.
ADDRESS: 5027 HIGHWAY 126
BLOUNTVILLE TN 37617
SULLIVAN
CONTACT:

REV: 3/4/05
ID1: 1-820403
ID2:
STATUS:
PHONE:

SITE INFORMATION

TOTAL NUMBER OF TANKS: 5

OWNER INFORMATION:

OWNER ID NUMBER: 352
OWNER DESCRIPTION: COMMERCIAL
OWNER NAME: Appalachian Oil Company, Inc.
OWNER ADDRESS: 1992 HIGHWAY 70
BLOUNTVILLE TN 37617
PHONE: (423) 323-5235

TANK INFORMATION:

TANK NUMBER: 1
TANK STATUS: PERMANENTLY OUT OF USE
TANK INSTALLED DATE: 9/23/1986

TANK CAPACITY: 8000 GALLONS
TANK CONTENTS: GASOLINE

MATERIALS OF CONSTRUCTION: CATHODICALLY PROTECTED STEEL / NONE

TANK PROTECTION INFORMATION:

MANUAL TANK GAUGE:	NO	TANK TIGHTNESS TEST:	NO
TANK INVENTORY CONTROL:	NO	AUTOMATIC TANK GAUGING:	YES
TANK VAPOR MONITOR:	NO	GROUNDWATER MONITORING:	NO
DOUBLE WALLED:	NO	SECONDARY CONTAINMENT	NO
SIR:	YES	TANK LEAK DETECTION LISTED:	NO

PIPE INFORMATION:

PIPE MATERIALS: FIBERGLASS REINFORCED PLASTIC / NONE
PIPING TYPE: PRESSURIZED

AUTO LINE LEAK DETECTION:	YES	LINE TIGHTNESS TEST:	YES
VAPOR MONITORING:	NO	GROUNDWATER MONITORING:	NO
DOUBLE WALLED:	NO	SECONDARY CONTAINMENT:	NO
SIR:	YES		
SPILL PROTECTION INSTALLED:	YES	OVERFILL INSTALLED:	YES

TANK NUMBER: 2
TANK STATUS: PERMANENTLY OUT OF USE
TANK INSTALLED DATE: 9/23/1986

TANK CAPACITY: 8000 GALLONS
TANK CONTENTS: GASOLINE

- Continued on next page -

Target Property: SR 126
KINGSPORT TN 37664

JOB: 1135.00

UST

SEARCH ID: 67 **DIST/DIR:** 0.05 NE **MAP ID:** 25

NAME: BAY CO.
ADDRESS: 5027 HIGHWAY 126
BLOUNTVILLE TN 37617
SULLIVAN
CONTACT:

REV: 3/4/05
ID1: 1-820403
ID2:
STATUS:
PHONE:

MATERIALS OF CONSTRUCTION: CATHODICALLY PROTECTED STEEL / NONE

TANK PROTECTION INFORMATION:

MANUAL TANK GAUGE:	NO	TANK TIGHTNESS TEST:	NO
TANK INVENTORY CONTROL:	NO	AUTOMATIC TANK GAUGING:	YES
TANK VAPOR MONITOR:	NO	GROUNDWATER MONITORING:	NO
DOUBLE WALLED:	NO	SECONDARY CONTAINMENT	NO
SIR:	YES	TANK LEAK DETECTION LISTED:	NO

PIPE INFORMATION:

PIPE MATERIALS: FIBERGLASS REINFORCED PLASTIC / NONE
PIPING TYPE: PRESSURIZED

AUTO LINE LEAK DETECTION:	YES	LINE TIGHTNESS TEST:	YES
VAPOR MONITORING:	NO	GROUNDWATER MONITORING:	NO
DOUBLE WALLED:	NO	SECONDARY CONTAINMENT:	NO
SIR:	YES		

SPILL PROTECTION INSTALLED: YES OVERFILL INSTALLED: YES

TANK NUMBER: 3
TANK STATUS: PERMANENTLY OUT OF USE
TANK INSTALLED DATE: 9/1/1987

TANK CAPACITY: 8000 GALLONS
TANK CONTENTS: GASOLINE

MATERIALS OF CONSTRUCTION: EPOXY COATED STEEL / NONE

TANK PROTECTION INFORMATION:

MANUAL TANK GAUGE:	NO	TANK TIGHTNESS TEST:	NO
TANK INVENTORY CONTROL:	NO	AUTOMATIC TANK GAUGING:	YES
TANK VAPOR MONITOR:	NO	GROUNDWATER MONITORING:	NO
DOUBLE WALLED:	NO	SECONDARY CONTAINMENT	NO
SIR:	YES	TANK LEAK DETECTION LISTED:	NO

PIPE INFORMATION:

PIPE MATERIALS: FIBERGLASS REINFORCED PLASTIC / CATHODICALLY PROTECTED
PIPING TYPE: PRESSURIZED

AUTO LINE LEAK DETECTION:	YES	LINE TIGHTNESS TEST:	YES
VAPOR MONITORING:	NO	GROUNDWATER MONITORING:	NO
DOUBLE WALLED:	NO	SECONDARY CONTAINMENT:	NO
SIR:	YES		

SPILL PROTECTION INSTALLED: YES OVERFILL INSTALLED: YES

- Continued on next page -

Target Property: SR 126
KINGSPORT TN 37664

JOB: 1135.00

UST

SEARCH ID: 67 **DIST/DIR:** 0.05 NE **MAP ID:** 25

NAME: BAY CO.
ADDRESS: 5027 HIGHWAY 126
BLOUNTVILLE TN 37617
SULLIVAN
CONTACT:

REV: 3/4/05
ID1: 1-820403
ID2:
STATUS:
PHONE:

TANK NUMBER: 4
TANK STATUS: PERMANENTLY OUT OF USE
TANK INSTALLED DATE: 9/1/1987

TANK CAPACITY: 1000 GALLONS
TANK CONTENTS: DIESEL

MATERIALS OF CONSTRUCTION: CATHODICALLY PROTECTED STEEL / NONE

TANK PROTECTION INFORMATION:

MANUAL TANK GAUGE:	NO	TANK TIGHTNESS TEST:	NO
TANK INVENTORY CONTROL:	NO	AUTOMATIC TANK GAUGING:	YES
TANK VAPOR MONITOR:	NO	GROUNDWATER MONITORING:	NO
DOUBLE WALLED:	NO	SECONDARY CONTAINMENT	NO
SIR:	YES	TANK LEAK DETECTION LISTED:	NO

PIPE INFORMATION:

PIPE MATERIALS: FIBERGLASS REINFORCED PLASTIC / CATHODICALLY PROTECTED
PIPING TYPE: SAFE SUCTION

AUTO LINE LEAK DETECTION:	NO	LINE TIGHTNESS TEST:	YES
VAPOR MONITORING:	NO	GROUNDWATER MONITORING:	NO
DOUBLE WALLED:	NO	SECONDARY CONTAINMENT:	NO
SIR:	YES		

SPILL PROTECTION INSTALLED: YES OVERFILL INSTALLED: YES

TANK NUMBER: 5
TANK STATUS: PERMANENTLY OUT OF USE
TANK INSTALLED DATE: 9/1/1987

TANK CAPACITY: 1000 GALLONS
TANK CONTENTS: KEROSENE

MATERIALS OF CONSTRUCTION: CATHODICALLY PROTECTED STEEL / NONE

TANK PROTECTION INFORMATION:

MANUAL TANK GAUGE:	YES	TANK TIGHTNESS TEST:	NO
TANK INVENTORY CONTROL:	NO	AUTOMATIC TANK GAUGING:	YES
TANK VAPOR MONITOR:	NO	GROUNDWATER MONITORING:	NO
DOUBLE WALLED:	NO	SECONDARY CONTAINMENT	NO
SIR:	YES	TANK LEAK DETECTION LISTED:	NO

PIPE INFORMATION:

PIPE MATERIALS: FIBERGLASS REINFORCED PLASTIC / CATHODICALLY PROTECTED
PIPING TYPE: SAFE SUCTION

- Continued on next page -

Environmental FirstSearch
Site Detail Report

Target Property: SR 126
KINGSPORT TN 37664

JOB: 1135.00

UST

SEARCH ID: 67 **DIST/DIR:** 0.05 NE **MAP ID:** 25

NAME:	BAY CO.	REV:	3/4/05
ADDRESS:	5027 HIGHWAY 126	ID1:	1-820403
	BLOUNTVILLE TN 37617	ID2:	
	SULLIVAN	STATUS:	
CONTACT:		PHONE:	

AUTO LINE LEAK DETECTION:	YES	LINE TIGHTNESS TEST:	YES
VAPOR MONITORING:	NO	GROUNDWATER MONITORING:	NO
DOUBLE WALLED:	NO	SECONDARY CONTAINMENT:	NO
SIR:	YES		
SPILL PROTECTION INSTALLED:	YES	OVERFILL INSTALLED:	YES

Target Property: SR 126
KINGSPORT TN 37664

JOB: 1135.00

SOILS

SEARCH ID: 93 **DIST/DIR:** 0.06 NW **MAP ID:** 26

NAME: USSOILS DATA
ADDRESS:
TN
CONTACT:

REV: 3/18/97
ID1: TNSO-06-118
ID2: TN143
STATUS: STATSGO
PHONE:

SITE INFORMATION

The National Resource Conservation Service recommends that the data not be used to describe soil characteristics for regions smaller than a multi-county area.

WATER CAPACITY (INCHES PER INCH):	0.11
PERCENT CLAY (PERCENT < 2mm):	30.5
K FACTOR:	0.24
ORGANIC MATERIAL (PERCENT BY WEIGHT):	0.5
SOIL PERMEABILITY (INCHES PER HOUR):	0.77
CUMULATIVE LAYER THICKNESS (INCHES):	39.4
HYDROLOGIC CHARACTERISTICS:	3.5
SOIL DRAINAGE:	2.9
SUFACE SLOPE (PERCENT):	26.7
LIQUID LIMIT (PERCENT MOISTURE BY WEIGHT):	36.2
HYDRIC COMPONENT SHARE (1=ALL COMPONENTS):	0
ANNUAL FLOOD FREQUENCY:	3.6

LEGEND

HYDROLOGIC CHARACTERISTICS:
1 = HIGH INFILTRATION
2 = MODERATE INFILTRATION
3 = SLOW INFILTRATION
4 = VERY SLOW INFILTRATION

SOIL DRAINAGE:
1 = EXCESS
2 = MODERATE EXCESS
3 = WELL
4 = MODERATELY WELL
5 = MODERATELY POOR
6 = POOR
7 = VERY POOR

ANNUAL FLOOD FREQUENCY:
1 = GREATER THAN 50 PERCENT
2 = 5 TO 50 PERCENT
3 = 0 TO 5 PERCENT
4 = NONE

Environmental FirstSearch
Site Detail Report

Target Property: SR 126
KINGSPORT TN 37664

JOB: 1135.00

SCHOOL

SEARCH ID: 97 **DIST/DIR:** 0.12 N- **MAP ID:** 28

NAME: ROSS N ROBINSON JUNIOR HIGH SCHOOL
ADDRESS:
TN
SULLIVAN
CONTACT:

REV: 1/1/05
ID1: TN-134980
ID2:
STATUS:
PHONE:

DETAILS NOT AVAILABLE

Target Property: SR 126
KINGSPORT TN 37664

JOB: 1135.00

FINDS

SEARCH ID: 39 **DIST/DIR:** 0.12 NE **MAP ID:** 27

NAME: PENSKE TRUCK LEASING CO. L.P
ADDRESS: 323 OVERHILL ROAD
BLOUNTVILLE TN 37617
SULLIVAN
CONTACT:

REV: 7/10/07
ID1: 110004990289
ID2: TND987766185
STATUS: FRS
PHONE:

FACILITY REGISTRATION INFORMATION:

PROGRAM: RCRAINFO
PROVIDED BY: FEDERAL AGENCY
AGENCY INT QUAL:
INT END QUAL:
LAST REPORTED: 2/22/1999
ENFORCEMENT ACT:
REG PROGRAM: CESQG - HAZARDOUS WASTE CONDITIONALLY EXEMPT SMALL QUANTITY GENERATORS GENERATE: A) 100 KILOGRAMS OR LESS OF HAZARDOUS WASTE PER CALENDAR MONTH, AND ACCUMULATE 1000 KG OR LESS OF HAZARDOUS WASTE AT ANY TIME; OR (B) ONE KILOGRAM OR LESS OF ACUTELY HAZARDOUS WASTE PER CALENDAR MONTH, AND ACCUMULATE AT ANY TIME: 1 KG OR LESS OF ACUTELY HAZARDOUS WASTE; OR 100 KG OR LESS OF ANY RESIDUE OR CONTAMINATED SOIL, WASTE OR OTHER DEBRIS RESULTING FROM THE CLEANUP OF A SPILL, INTO OR ON ANY LAND OR WATER, OF ACUTELY HAZARDOUS WASTE; OR (C) 100 KG OR LESS OF ANY RESIDUE OR CONTAMINATED SOIL, WASTE OR OTHER DEBRIS RESULTING FROM THE CLEANUP OF A SPILL, INTO OR ON ANY LAND OR WATER, OF ACUTELY HAZARDOUS WASTE DURING ANY CALENDAR MONTH, AND ACCUMULATE AT ANY TIME: 1 KG OR LESS OF ACUTELY HAZARDOUS WASTE; OR 100 KG OR LESS OF ANY RESIDUE OR CONTAMINATED SOIL, WASTE OR OTHER DEBRIS RESULTING FROM THE CLEANUP OF A SPILL, INTO OR ON ANY LAND OR WATER, OF ACUTELY HAZARDOUS WASTE.

PROGRAM ID: TND987766185
AGENCY INTERESTED:
INTEREST ENDED:
SOURCE OF DATA: NOTIFICATION (RCRA)
LAST EXTRACTED:

PROGRAM: FRS
PROVIDED BY: FEDERAL AGENCY
AGENCY INT QUAL:
INT END QUAL:
LAST REPORTED:
ENFORCEMENT ACT:
REG PROGRAM: FACILITY -

PROGRAM ID: 110004990289
AGENCY INTERESTED:
INTEREST ENDED:
SOURCE OF DATA: FRS
LAST EXTRACTED:

SITE TYPE: STATIONARY
INTEREST STATUS: ACTIVE
DATA QUALITY: V
LOCATION DESC:
ADDRESS TYPE: REGULAR URBAN
LAST REPORTED:
POSTED TO DATABASE: 3/1/2000
DATA UPDATED: 1/6/2006 7:46:20 PM
ENTERED PERSON/METHOD: REFRESH
PARENT REG ID:
CONFIDENCE IN ADDR: MEDIUM
ENFORCEMENT SENSITIVE: N
REQ MANUAL REVIEW:
REASON MAN REVIEW:
SMALL BUS POLICY:
ENFORCEMENT ACTION:
DATA PUB ACCESS: YES
INTERNAL SYS ID:

FEDERAL FACILITY: NO
FEDERAL AGENCY:
TRIBAL LAND: NO

- Continued on next page -

Target Property: SR 126
KINGSPORT TN 37664

JOB: 1135.00

FINDS

SEARCH ID: 39 **DIST/DIR:** 0.12 NE **MAP ID:** 27

NAME:	PENSKE TRUCK LEASING CO. L.P	REV:	7/10/07
ADDRESS:	323 OVERHILL ROAD	ID1:	110004990289
	BLOUNTVILLE TN 37617	ID2:	TND987766185
	SULLIVAN	STATUS:	FRS
CONTACT:		PHONE:	

TRIBAL LAND NAME:
CONGRESSIONAL DIST: 01
LEGISLATIVE DIST: 10
HYDROLOGICAL UNTIS: 06010102
EPA REGION: 04
AIRSHED:
CENSUS BLOCK:

Environmental FirstSearch
Site Detail Report

Target Property: SR 126
KINGSPORT TN 37664

JOB: 1135.00

NPDES

SEARCH ID: 11 **DIST/DIR:** 0.12 NE **MAP ID:** 27

NAME: PENSKE TRUCK LEASING CO., L.P.
ADDRESS:
BLOUNTVILLE TN
SULLIVAN
CONTACT:

REV:
ID1: TN0061760
ID2:
STATUS: MINOR
PHONE:

SOURCE: NPDES
CLASS: MINOR

REC WATER:
DES FLOW: *MG/D*

MAIL CONTACT:
COMPANY: PENSKE TRUCK LEASING CO., L.P.
ADDRESS:

TELEPHONE:
ISSUE DATE: 07-31-97
EXPIRE DATE: 07-31-02

CITY:

NOV: ACTION NO: REV DATE:

TYPE: ISS: TYPE: ISS:
TYPE: ISS: TYPE:
ISS:

Target Property: SR 126
KINGSPORT TN 37664

JOB: 1135.00

RCRAGN

SEARCH ID: 5 **DIST/DIR:** 0.12 NE **MAP ID:** 27

NAME:	PENSKE TRUCK LEASING CO. L.P	REV:	6/6/06
ADDRESS:	323 OVERHILL ROAD	ID1:	TND987766185
	BLOUNTVILLE TN 37617	ID2:	
	SULLIVAN	STATUS:	VGN
CONTACT:	MICHAEL COSTANZA	PHONE:	6107756471

SITE INFORMATION

CONTACT INFORMATION: MICHAEL COSTANZA
PO BOX 7635
READING PA 196037635

PHONE: 6107756471

UNIVERSE INFORMATION:

NAIC INFORMATION

53212 - TRUCK, UTILITY TRAILER, AND RV (RECREATIONAL VEHICLE) RENTAL AND LEASING
811111 - GENERAL AUTOMOTIVE REPAIR

ENFORCEMENT INFORMATION:

VIOLATION INFORMATION:

Environmental FirstSearch
Site Detail Report

Target Property: SR 126
KINGSPORT TN 37664

JOB: 1135.00

UST

SEARCH ID: 69 **DIST/DIR:** 0.12 NE **MAP ID:** 27

NAME: HERTZ PENSKE TRUCK LEASING
ADDRESS: 323 OVVERHILL ROAD RT. 6 BOX 389-1
BLOUNTVILLE TN 37617
SULLIVAN
CONTACT:

REV: 3/4/05
ID1: 1-820411
ID2:
STATUS:
PHONE:

SITE INFORMATION

TOTAL NUMBER OF TANKS: 1

OWNER INFORMATION:

OWNER ID NUMBER: 7124
OWNER DESCRIPTION: PRIVATE
OWNER NAME: PENSKE TRUCK LEASING, CO.,L.P.
OWNER ADDRESS: P.O. BOX 7635 RT. 10 GREEN HILLS
READING PA 19603
PHONE: (610) 603-8450

TANK INFORMATION:

TANK NUMBER: 1
TANK STATUS: CURRENTLY IN USE
TANK INSTALLED DATE: 2/19/1987

TANK CAPACITY: 12000 GALLONS
TANK CONTENTS: DIESEL

MATERIALS OF CONSTRUCTION: CATHODICALLY PROTECTED STEEL / NONE

TANK PROTECTION INFORMATION:

MANUAL TANK GAUGE:	NO	TANK TIGHTNESS TEST:	NO
TANK INVENTORY CONTROL:	NO	AUTOMATIC TANK GAUGING:	YES
TANK VAPOR MONITOR:	NO	GROUNDWATER MONITORING:	NO
DOUBLE WALLED:	NO	SECONDARY CONTAINMENT	NO
SIR:	NO	TANK LEAK DETECTION LISTED:	NO

PIPE INFORMATION:

PIPE MATERIALS: FLEXIBLE PLASTIC / CATHODICALLY PROTECTED
PIPING TYPE: PRESSURIZED

AUTO LINE LEAK DETECTION:	YES	LINE TIGHTNESS TEST:	NO
VAPOR MONITORING:	NO	GROUNDWATER MONITORING:	NO
DOUBLE WALLED:	NO	SECONDARY CONTAINMENT:	NO
SIR:	NO		
SPILL PROTECTION INSTALLED:	YES	OVERFILL INSTALLED:	YES

Target Property: SR 126
KINGSPORT TN 37664

JOB: 1135.00

WETLANDS

SEARCH ID: 83 **DIST/DIR:** 0.13 SE **MAP ID:** 29

NAME: NATIONAL WETLANDS INVENTORY
ADDRESS:
TN
CONTACT:

REV: 2/27/02
ID1: NWI-TN-12823
ID2:
STATUS: PUBHH
PHONE:

SITE INFORMATION

AREA:	7713.13
PERIMETER:	339.682
WETC:	44
WETC_ID:	47
ATTRIBUTE:	PUBHh

LUST

SEARCH ID: 75 **DIST/DIR:** 0.14 SE **MAP ID:** 30

NAME: DIXIE CEMENT COMPANY
ADDRESS:
KINGSPORT TN 37660
CONTACT: SOUTHDOWN, INC

REV: 12/1/04
ID1: 1-820116
ID2:
STATUS: DENIED
PHONE:

SITE INFORMATION

RELEASE DATE:	12/18/1992	APPLICATION:	
NUM OF TANKS:		TOT DEDUCTABLE:	$ 0
AMOUNT REQUESTED:	$	DISALLOWED:	$
BALANCE DUE:	$	TOTAL PAID:	$
NET PAID:	$	RECEIVED APPLICATION:	7/29/1993
NUMBER RECEIVED:		AUTHOR RECEIVED:	7/29/1993
AUTHOR APPROVED:	10/13/1993	CONTRACTOR:	
APPROVAL:	N	COVERAGE:	
OWNER ID:			
TANK OWNER:	SOUTHDOWN, INC		

Target Property: SR 126
KINGSPORT TN 37664

JOB: 1135.00

UST

SEARCH ID: 65 **DIST/DIR:** 0.14 SE **MAP ID:** 30

NAME: DIXIE CEMENT CO
ADDRESS: HILL ST.
KINGSPORT TN 37660
SULLIVAN
CONTACT:

REV: 3/4/05
ID1: 1-820116
ID2:
STATUS:
PHONE:

SITE INFORMATION

TOTAL NUMBER OF TANKS: 2

OWNER INFORMATION:

OWNER ID NUMBER: 2578
OWNER DESCRIPTION: PRIVATE
OWNER NAME: DIXIE CEMENT
OWNER ADDRESS: 6212 CEMENT PLANT ROAD
KNOXVILLE TN 37914
PHONE: (423) 522-1171

TANK INFORMATION:

TANK NUMBER: 3
TANK STATUS: PERMANENTLY OUT OF USE
TANK INSTALLED DATE: 5/7/1946

TANK CAPACITY: 500 GALLONS
TANK CONTENTS: DIESEL

MATERIALS OF CONSTRUCTION: ASPHALT COATED OR BARE STEEL / NONE

TANK PROTECTION INFORMATION:

MANUAL TANK GAUGE:	NO	TANK TIGHTNESS TEST:	NO
TANK INVENTORY CONTROL:	NO	AUTOMATIC TANK GAUGING:	NO
TANK VAPOR MONITOR:	NO	GROUNDWATER MONITORING:	NO
DOUBLE WALLED:	NO	SECONDARY CONTAINMENT	NO
SIR:	NO	TANK LEAK DETECTION LISTED:	YES

PIPE INFORMATION:

PIPE MATERIALS: UNKNOWN / NONE
PIPING TYPE: NOT LISTED

AUTO LINE LEAK DETECTION:	NO	LINE TIGHTNESS TEST:	NO
VAPOR MONITORING:	NO	GROUNDWATER MONITORING:	NO
DOUBLE WALLED:	NO	SECONDARY CONTAINMENT:	NO
SIR:	NO		
SPILL PROTECTION INSTALLED:	NO	OVERFILL INSTALLED:	NO

TANK NUMBER: 4
TANK STATUS: PERMANENTLY OUT OF USE
TANK INSTALLED DATE: 5/7/1956

TANK CAPACITY: 1000 GALLONS
TANK CONTENTS: GASOLINE

- Continued on next page -

Target Property: SR 126
KINGSPORT TN 37664

JOB: 1135.00

UST

SEARCH ID: 65 **DIST/DIR:** 0.14 SE **MAP ID:** 30

NAME: DIXIE CEMENT CO
ADDRESS: HILL ST.
KINGSPORT TN 37660
SULLIVAN
CONTACT:

REV: 3/4/05
ID1: 1-820116
ID2:
STATUS:
PHONE:

MATERIALS OF CONSTRUCTION: ASPHALT COATED OR BARE STEEL / NONE

TANK PROTECTION INFORMATION:

MANUAL TANK GAUGE:	NO	TANK TIGHTNESS TEST:	NO
TANK INVENTORY CONTROL:	NO	AUTOMATIC TANK GAUGING:	NO
TANK VAPOR MONITOR:	NO	GROUNDWATER MONITORING:	NO
DOUBLE WALLED:	NO	SECONDARY CONTAINMENT	NO
SIR:	NO	TANK LEAK DETECTION LISTED:	YES

PIPE INFORMATION:

PIPE MATERIALS: UNKNOWN / NONE
PIPING TYPE: NOT LISTED

AUTO LINE LEAK DETECTION:	NO	LINE TIGHTNESS TEST:	NO
VAPOR MONITORING:	NO	GROUNDWATER MONITORING:	NO
DOUBLE WALLED:	NO	SECONDARY CONTAINMENT:	NO
SIR:	NO		

SPILL PROTECTION INSTALLED: NO OVERFILL INSTALLED: NO

Environmental FirstSearch
Site Detail Report

Target Property: SR 126
KINGSPORT TN 37664

JOB: 1135.00

FINDS

SEARCH ID: 15 **DIST/DIR:** 0.15 S- **MAP ID:** 31

NAME: DISCOUNT TRANSMISSION and AUTOMOTIVE
ADDRESS: 1556 WARPATH DR
KINGSPORT TN 37660
CONTACT:

REV:
ID1: TN0001825801
ID2:
STATUS:
PHONE:

DETAILS NOT AVAILABLE

SCHOOL

SEARCH ID: 96 **DIST/DIR:** 0.17 NW **MAP ID:** 32

NAME: DICKSON ELEMENTARY SCHOOL
ADDRESS:
TN
SULLIVAN
CONTACT:

REV: 1/1/05
ID1: TN-131548
ID2:
STATUS:
PHONE:

DETAILS NOT AVAILABLE

FINDS

SEARCH ID: 32 **DIST/DIR:** 0.18 NW **MAP ID:** 33

NAME: AIR RESOURCE ENGRNG
ADDRESS: 4538 BROOKRIDGE DR
KINGSPORT TN 37662
CONTACT:

REV:
ID1: TND987772472
ID2:
STATUS:
PHONE:

DETAILS NOT AVAILABLE

Target Property: SR 126
KINGSPORT TN 37664

JOB: 1135.00

FINDS

SEARCH ID: 33 **DIST/DIR:** 0.18 NW **MAP ID:** 33

NAME:	AIR RESOURCE ENGRNG	REV:	11/1/06
ADDRESS:	4538 BROOKRIDGE DR	ID1:	110001858231
	KINGSPORT TN 37662	ID2:	4716300224
	SULLIVAN	STATUS:	FRS
CONTACT:		PHONE:	

FACILITY REGISTRATION INFORMATION:

PROGRAM:	FRS	PROGRAM ID:	110001858231
PROVIDED BY:	FEDERAL AGENCY	AGENCY INTERESTED:	
AGENCY INT QUAL:		INTEREST ENDED:	
INT END QUAL:		SOURCE OF DATA:	FRS
LAST REPORTED:		LAST EXTRACTED:	
ENFORCEMENT ACT:			
REG PROGRAM:	FACILITY -		

PROGRAM:	AIRS/AFS	PROGRAM ID:	4716300224
PROVIDED BY:	FEDERAL AGENCY	AGENCY INTERESTED:	
AGENCY INT QUAL:		INTEREST ENDED:	
INT END QUAL:		SOURCE OF DATA:	AIRS/AFS
LAST REPORTED:	8/29/1994	LAST EXTRACTED:	
ENFORCEMENT ACT:			

REG PROGRAM: AIR MINOR - A FACILITY IS CLASSIFIED AS A CLEAN AIR ACT STATIONARY SOURCE MINOR DISCHARGER OF AIR POLLUTANTS IF. (A) POTENTIAL UNCONTROLLED EMISSIONS < 100 TONS/YEAR; OR (B) MAJOR SOURCE THRESHOLDS ARE NOT DEFINED, OR CLASSIFICATION IS UNKNOWN.

SITE TYPE:	STATIONARY
INTEREST STATUS:	ACTIVE
DATA QUALITY:	V
LOCATION DESC:	
ADDRESS TYPE:	REGULAR URBAN
LAST REPORTED:	
POSTED TO DATABASE:	3/1/2000
DATA UPDATED:	2/4/2006 10:04:53 AM
ENTERED PERSON/METHOD:	REFRESH
PARENT REG ID:	
CONFIDENCE IN ADDR:	MEDIUM
ENFORCEMENT SENSITIVE:	N
REQ MANUAL REVIEW:	
REASON MAN REVIEW:	
SMALL BUS POLICY:	
ENFORCEMENT ACTION:	
DATA PUB ACCESS:	YES
INTERNAL SYS ID:	
FEDERAL FACILITY:	NO
FEDERAL AGENCY:	
TRIBAL LAND:	
TRIBAL LAND NAME:	
CONGRESSIONAL DIST:	01
LEGISLATIVE DIST:	
HYDROLOGICAL UNTIS:	06010102
EPA REGION:	04
AIRSHED:	
CENSUS BLOCK:	

- Continued on next page -

Target Property: SR 126
KINGSPORT TN 37664

JOB: 1135.00

FINDS

SEARCH ID: 33 **DIST/DIR:** 0.18 NW **MAP ID:** 33

NAME:	AJR RESOURCE ENGRNG	REV:	11/1/06
ADDRESS:	4538 BROOKRIDGE DR	ID1:	110001858231
	KINGSPORT TN 37662	ID2:	4716300224
	SULLIVAN	STATUS:	FRS
CONTACT:		PHONE:	

Environmental FirstSearch
Site Detail Report

Target Property: SR 126
KINGSPORT TN 37664

JOB: 1135.00

FINDS

SEARCH ID: 37 **DIST/DIR:** 0.19 SW **MAP ID:** 34

NAME: INDIAN SPRINGS ELEM SCH
ADDRESS: 333 HILL RD
KINGSPORT TN 37664

CONTACT:

REV:
ID1: TND987780996
ID2:
STATUS:
PHONE:

DETAILS NOT AVAILABLE

Target Property: SR 126
KINGSPORT TN 37664

JOB: 1135.00

NCDB

SEARCH ID: 87 **DIST/DIR:** 0.19 SW **MAP ID:** 34

NAME: INDIAN SPRINGS ELEM
ADDRESS: 333 HILL RD
KINGSPONT TN 37664
CONTACT:

REV: 8/10/01
ID1: NCDB-0801-023183
ID2: 19870810R4005 I
STATUS: TSCA
PHONE:

SITE INFORMATION

EPA REGION:	04	INSPECTION REG OR ST:	04
INSPECTOR ID:	R4005	INSPECTION DATE:	8/10/87
INSPECTOR NAME:	WILBER, RON	NUMBER OF SAMPLES:	0
NUMBER OF AUDITS:	0	DUNN and BRAD NUMBER:	
FEDERAL FACILITY:	N	LEGISLATION CODE:	T
NUMBER OF SCHOOLS:	1	SCHOOL TYPE:	P - PUBLIC
EPA PESTICIDE ID:		EPA FIFRA REG ID:	

FACILITY FUNCTION: US - USER

INVESTIGATION TYPE: ACO - ASBESTOS ASHAA CLOSE OUT

REASON: SCD - SECONDARY INSPECTION

REFERRAL TYPE :

PRINT INFO: SULLIVAN COUNTY SCHOOL DIST.
BLOUNTVILLE
BLOUNTVILLE TN 37617-

SIC INFORMATION:

SIC 1:

SIC 2:

SIC 3:

SIC 4:

SIC 5:

SIC 6:

SAMPLE INFORMATION

IMPORT INFORMATION

REFERRAL INFORMATION:

Target Property: SR 126
KINGSPORT TN 37664

JOB: 1135.00

UST

SEARCH ID: 48 **DIST/DIR:** 0.21 SW **MAP ID:** 35

NAME: HERITAGE FEDERAL BANK/SAVINGS
ADDRESS: 2060 FT. HENRY DRIVE
KINGSPORT TN 37664
SULLIVAN
CONTACT:

REV: 3/4/05
ID1: 1-820574
ID2:
STATUS:
PHONE:

SITE INFORMATION

TOTAL NUMBER OF TANKS: 1

OWNER INFORMATION:

OWNER ID NUMBER: 14076
OWNER DESCRIPTION: PRIVATE
OWNER NAME: HERITAGE FEDERAL BANK/SAVINGS
OWNER ADDRESS: 110 EAST CENTER ST. P.O. BOX 484
KINGSPORT TN 37660
PHONE: (423) 378-2805

TANK INFORMATION:

TANK NUMBER: 1
TANK STATUS: PERMANENTLY OUT OF USE
TANK INSTALLED DATE: 1/1/1970

TANK CAPACITY: 1000 GALLONS
TANK CONTENTS: GASOLINE

MATERIALS OF CONSTRUCTION: UNKNOWN / NONE

TANK PROTECTION INFORMATION:

MANUAL TANK GAUGE:	NO	TANK TIGHTNESS TEST:	NO
TANK INVENTORY CONTROL:	NO	AUTOMATIC TANK GAUGING:	NO
TANK VAPOR MONITOR:	NO	GROUNDWATER MONITORING:	NO
DOUBLE WALLED:	NO	SECONDARY CONTAINMENT	NO
SIR:	NO	TANK LEAK DETECTION LISTED:	YES

PIPE INFORMATION:

PIPE MATERIALS: UNKNOWN / NONE
PIPING TYPE: NOT LISTED

AUTO LINE LEAK DETECTION:	NO	LINE TIGHTNESS TEST:	NO
VAPOR MONITORING:	NO	GROUNDWATER MONITORING:	NO
DOUBLE WALLED:	NO	SECONDARY CONTAINMENT:	NO
SIR:	NO		
SPILL PROTECTION INSTALLED:	NO	OVERFILL INSTALLED:	NO

Environmental FirstSearch
Site Detail Report

Target Property: SR 126
KINGSPORT TN 37664

JOB: 1135.00

FINDS

SEARCH ID: 25 **DIST/DIR:** 0.22 SW **MAP ID:** 36

NAME: SEARS ROEBUCK AND CO 2285
ADDRESS: 2101 FORT HENRY DR
KINGSPORT TN 37664

CONTACT:

REV:
ID1: TN0001825819
ID2:
STATUS:
PHONE:

DETAILS NOT AVAILABLE

Target Property: SR 126
KINGSPORT TN 37664

JOB: 1135.00

FINDS

SEARCH ID: 24 **DIST/DIR:** 0.22 SW **MAP ID:** 36

NAME: SEARS ROEBUCK AND CO 2825, 6808
ADDRESS: 2101 FORT HENRY DRIVE
KINGSPORT TN 37664
SULLIVAN
CONTACT:

REV: 7/10/07
ID1: 110005003824
ID2: TNR000002436
STATUS: FRS
PHONE:

FACILITY REGISTRATION INFORMATION:

PROGRAM:	FRS	PROGRAM ID:	110005003824
PROVIDED BY:	FEDERAL AGENCY	AGENCY INTERESTED:	
AGENCY INT QUAL:		INTEREST ENDED:	
INT END QUAL:		SOURCE OF DATA:	FRS
LAST REPORTED:		LAST EXTRACTED:	
ENFORCEMENT ACT:			
REG PROGRAM:	FACILITY -		

PROGRAM:	RCRAINFO	PROGRAM ID:	TNR000002436
PROVIDED BY:	FEDERAL AGENCY	AGENCY INTERESTED:	
AGENCY INT QUAL:		INTEREST ENDED:	
INT END QUAL:		SOURCE OF DATA:	NOTIFICATION (RCRA)
LAST REPORTED:	2/20/2004	LAST EXTRACTED:	
ENFORCEMENT ACT:			

REG PROGRAM: CESQG - HAZARDOUS WASTE CONDITIONALLY EXEMPT SMALL QUANTITY GENERATORS GENERATE: A) 100 KILOGRAMS OR LESS OF HAZARDOUS WASTE PER CALENDAR MONTH, AND ACCUMULATE 1000 KG OR LESS OF HAZARDOUS WASTE AT ANY TIME; OR (B) ONE KILOGRAM OR LESS OF ACUTELY HAZARDOUS WASTE PER CALENDAR MONTH, AND ACCUMULATE AT ANY TIME: 1 KG OR LESS OF ACUTELY HAZARDOUS WASTE; OR 100 KG OR LESS OF ANY RESIDUE OR CONTAMINATED SOIL, WASTE OR OTHER DEBRIS RESULTING FROM THE CLEANUP OF A SPILL, INTO OR ON ANY LAND OR WATER, OF ACUTELY HAZARDOUS WASTE; OR (C) 100 KG OR LESS OF ANY RESIDUE OR CONTAMINATED SOIL, WASTE OR OTHER DEBRIS RESULTING FROM THE CLEANUP OF A SPILL, INTO OR ON ANY LAND OR WATER, OF ACUTELY HAZARDOUS WASTE DURING ANY CALENDAR MONTH, AND ACCUMULATE AT ANY TIME: 1 KG OR LESS OF ACUTELY HAZARDOUS WASTE; OR 100 KG OR LESS OF ANY RESIDUE OR CONTAMINATED SOIL, WASTE OR OTHER DEBRIS RESULTING FROM THE CLEANUP OF A SPILL, INTO OR ON ANY LAND OR WATER, OF ACUTELY HAZARDOUS WASTE.

SITE TYPE:	STATIONARY
INTEREST STATUS:	ACTIVE
DATA QUALITY:	V
LOCATION DESC:	
ADDRESS TYPE:	REGULAR URBAN
LAST REPORTED:	
POSTED TO DATABASE:	3/1/2000
DATA UPDATED:	1/6/2006 10:20:10 AM
ENTERED PERSON/METHOD:	REFRESH
PARENT REG ID:	
CONFIDENCE IN ADDR:	MEDIUM
ENFORCEMENT SENSITIVE:	N
REQ MANUAL REVIEW:	
REASON MAN REVIEW:	
SMALL BUS POLICY:	
ENFORCEMENT ACTION:	
DATA PUB ACCESS:	YES
INTERNAL SYS ID:	
FEDERAL FACILITY:	NO
FEDERAL AGENCY:	
TRIBAL LAND:	NO

- Continued on next page -

Target Property: SR 126
KINGSPORT TN 37664

JOB: 1135.00

FINDS

SEARCH ID: 24 **DIST/DIR:** 0.22 SW **MAP ID:** 36

NAME:	SEARS ROEBUCK AND CO 2825, 6808	REV:	7/10/07
ADDRESS:	2101 FORT HENRY DRIVE	ID1:	110005003824
	KINGSPORT TN 37664	ID2:	TNR000002436
	SULLIVAN	STATUS:	FRS
CONTACT:		PHONE:	

TRIBAL LAND NAME:
CONGRESSIONAL DIST: 01
LEGISLATIVE DIST: 10
HYDROLOGICAL UNTIS: 06010102
EPA REGION: 04
AIRSHED:
CENSUS BLOCK:

Target Property: SR 126
KINGSPORT TN 37664

JOB: 1135.00

RCRAGN

SEARCH ID: 4 **DIST/DIR:** 0.22 SW **MAP ID:** 36

NAME: SEARS ROEBUCK AND CO 2825, 6808
ADDRESS: 2101 FORT HENRY DRIVE
KINGSPORT TN 37664
SULLIVAN
CONTACT: KATHLEEN M FLAHERTY

REV: 6/6/06
ID1: TNR000002436
ID2:
STATUS: VGN
PHONE: 8472867199

SITE INFORMATION

CONTACT INFORMATION: KATHLEEN FLAHERTY
3333 BEVERLY ROAD A2-238A
HOFFMAN ESTATES IL 60179

PHONE: 8472867199

CONTACT INFORMATION: KATHLEEN FLAHERTY
BEVERLY ROAD A2-238A
HOFFMAN ESTATES IL 60179

PHONE: 8472867199

CONTACT INFORMATION: KATHLEEN FLAHERTY
BEVERLY ROAD A2-238A
HOFFMAN ESTATES IL 60192-3322

PHONE: 8472867199

UNIVERSE INFORMATION:

NAIC INFORMATION

45211 - DEPARTMENT STORES
811111 - GENERAL AUTOMOTIVE REPAIR

ENFORCEMENT INFORMATION:

VIOLATION INFORMATION:

HAZARDOUS WASTE INFORMATION:

Cadmium
Tetrachloroethylene
Ignitable waste
Lead
1,4-Dichlorobenzene
Benzene
Trichloroethylene

Target Property: SR 126
KINGSPORT TN 37664

JOB: 1135.00

UST

SEARCH ID: 55 **DIST/DIR:** 0.22 SW **MAP ID:** 36

NAME: SEARS ROEBUCK AND CO. 2825
ADDRESS: 2101 FT. HENRY DRIVE
KINGSPORT TN 37660
SULLIVAN
CONTACT:

REV: 3/4/05
ID1: 1-820314
ID2:
STATUS:
PHONE:

SITE INFORMATION

TOTAL NUMBER OF TANKS: 1

OWNER INFORMATION:

OWNER ID NUMBER: 8185
OWNER DESCRIPTION: PRIVATE
OWNER NAME: FORT HENRY MALL MGT. OFFICE
OWNER ADDRESS: 2101 FORTH HENRY DRIVE
KINGSPORT TN 37664
PHONE: (423) 246-3871

TANK INFORMATION:

TANK NUMBER: 1
TANK STATUS: PERMANENTLY OUT OF USE
TANK INSTALLED DATE: 5/5/1976

TANK CAPACITY: 560 GALLONS
TANK CONTENTS: USED OIL

MATERIALS OF CONSTRUCTION: ASPHALT COATED OR BARE STEEL / NONE

TANK PROTECTION INFORMATION:

MANUAL TANK GAUGE:	NO	TANK TIGHTNESS TEST:	NO
TANK INVENTORY CONTROL:	NO	AUTOMATIC TANK GAUGING:	NO
TANK VAPOR MONITOR:	NO	GROUNDWATER MONITORING:	NO
DOUBLE WALLED:	NO	SECONDARY CONTAINMENT	NO
SIR:	NO	TANK LEAK DETECTION LISTED:	YES

PIPE INFORMATION:

PIPE MATERIALS: GALVANIZED STEEL / NONE
PIPING TYPE: GRAVITY FEED

AUTO LINE LEAK DETECTION:	NO	LINE TIGHTNESS TEST:	NO
VAPOR MONITORING:	NO	GROUNDWATER MONITORING:	NO
DOUBLE WALLED:	NO	SECONDARY CONTAINMENT:	NO
SIR:	NO		
SPILL PROTECTION INSTALLED:	NO	OVERFILL INSTALLED:	NO

Target Property: SR 126
KINGSPORT TN 37664

JOB: 1135.00

UST

SEARCH ID: 50 **DIST/DIR:** 0.22 SW **MAP ID:** 36

NAME: J C PENNEY
ADDRESS: 2101 FORT HENRY DRIVE
KINGSPORT TN 37660
SULLIVAN
CONTACT:

REV: 3/4/05
ID1: 1-820180
ID2:
STATUS:
PHONE:

SITE INFORMATION

TOTAL NUMBER OF TANKS: 2

OWNER INFORMATION:

OWNER ID NUMBER: 3970
OWNER DESCRIPTION: PRIVATE
OWNER NAME: HAHN PROP MGNT CORP
OWNER ADDRESS: 4350 LAJOLLA VILLAGE
SAN DIEGO CA 92122
PHONE: (619) 569-4949

TANK INFORMATION:

TANK NUMBER: 1
TANK STATUS: PERMANENTLY OUT OF USE
TANK INSTALLED DATE: 5/7/1977

TANK CAPACITY: 8000 GALLONS
TANK CONTENTS: DIESEL

MATERIALS OF CONSTRUCTION: UNKNOWN / NONE

TANK PROTECTION INFORMATION:

MANUAL TANK GAUGE:	NO	TANK TIGHTNESS TEST:	NO
TANK INVENTORY CONTROL:	NO	AUTOMATIC TANK GAUGING:	NO
TANK VAPOR MONITOR:	NO	GROUNDWATER MONITORING:	NO
DOUBLE WALLED:	NO	SECONDARY CONTAINMENT	NO
SIR:	NO	TANK LEAK DETECTION LISTED:	YES

PIPE INFORMATION:

PIPE MATERIALS: UNKNOWN / NONE
PIPING TYPE: SAFE SUCTION

AUTO LINE LEAK DETECTION:	NO	LINE TIGHTNESS TEST:	NO
VAPOR MONITORING:	NO	GROUNDWATER MONITORING:	NO
DOUBLE WALLED:	NO	SECONDARY CONTAINMENT:	NO
SIR:	NO		
SPILL PROTECTION INSTALLED:	NO	OVERFILL INSTALLED:	NO

TANK NUMBER: 2
TANK STATUS: PERMANENTLY OUT OF USE
TANK INSTALLED DATE: 7/1/1977

TANK CAPACITY: 550 GALLONS
TANK CONTENTS: USED OIL

- Continued on next page -

Environmental FirstSearch
Site Detail Report

Target Property: SR 126
KINGSPORT TN 37664

JOB: 1135.00

UST

SEARCH ID: 50 **DIST/DIR:** 0.22 SW **MAP ID:** 36

NAME:	J C PENNEY	REV:	3/4/05
ADDRESS:	2101 FORT HENRY DRIVE	ID1:	1-820180
	KINGSPORT TN 37660	ID2:	
	SULLIVAN	STATUS:	
CONTACT:		PHONE:	

MATERIALS OF CONSTRUCTION: ASPHALT COATED OR BARE STEEL / NONE

TANK PROTECTION INFORMATION:

MANUAL TANK GAUGE:	NO	TANK TIGHTNESS TEST:	NO
TANK INVENTORY CONTROL:	NO	AUTOMATIC TANK GAUGING:	NO
TANK VAPOR MONITOR:	NO	GROUNDWATER MONITORING:	NO
DOUBLE WALLED:	NO	SECONDARY CONTAINMENT	NO
SIR:	NO	TANK LEAK DETECTION LISTED:	YES

PIPE INFORMATION:

PIPE MATERIALS:	BARE STEEL / NONE
PIPING TYPE:	GRAVITY FEED

AUTO LINE LEAK DETECTION:	NO	LINE TIGHTNESS TEST:	NO
VAPOR MONITORING:	NO	GROUNDWATER MONITORING:	NO
DOUBLE WALLED:	NO	SECONDARY CONTAINMENT:	NO
SIR:	NO		

SPILL PROTECTION INSTALLED:	NO	OVERFILL INSTALLED:	NO

Target Property: SR 126
KINGSPORT TN 37664

JOB: 1135.00

OTHER

SEARCH ID: 44 **DIST/DIR:** 0.23 S- **MAP ID:** 39

NAME:
ADDRESS: 1437 MILLER ST
KINGSPORT TN
SULLIVAN
CONTACT:

REV: 1/1/07
ID1: NCLRTN-810
ID2:
STATUS:
PHONE:

NATIONAL CLANDESTINE LABORATORY REGISTER

SIEZURE DATE: 8/26/2004

WETLANDS

SEARCH ID: 85 **DIST/DIR:** 0.23 SE **MAP ID:** 37

NAME: NATIONAL WETLANDS INVENTORY
ADDRESS:
TN
CONTACT:

REV: 2/27/02
ID1: NWI-TN-12825
ID2:
STATUS: PUBHH
PHONE:

SITE INFORMATION

AREA:	675.068
PERIMETER:	100.971
WETC:	46
WETC_ID:	46
ATTRIBUTE:	PUBHh

Environmental FirstSearch
Site Detail Report

Target Property: SR 126
KINGSPORT TN 37664

JOB: 1135.00

WETLANDS

SEARCH ID: 84 **DIST/DIR:** 0.23 SE **MAP ID:** 41

NAME: NATIONAL WETLANDS INVENTORY
ADDRESS:
TN
CONTACT:

REV: 2/27/02
ID1: NWI-TN-12824
ID2:
STATUS: PUBHH
PHONE:

SITE INFORMATION

AREA:	477.25
PERIMETER:	83.3872
WETC:	45
WETC_ID:	45
ATTRIBUTE:	PUBHh

WETLANDS

SEARCH ID: 80 **DIST/DIR:** 0.23 SE **MAP ID:** 40

NAME: NATIONAL WETLANDS INVENTORY
ADDRESS:
TN
CONTACT:

REV: 2/27/02
ID1: NWI-TN-12821
ID2:
STATUS: PUBHH
PHONE:

SITE INFORMATION

AREA:	1638.46
PERIMETER:	151.844
WETC:	42
WETC_ID:	53
ATTRIBUTE:	PUBHh

Target Property: SR 126
KINGSPORT TN 37664

JOB: 1135.00

FINDS

SEARCH ID: 19 **DIST/DIR:** 0.23 SW **MAP ID:** 38

NAME: JIFFY LUBE
ADDRESS: 1786 FORT HENRY DR
KINGSPORT TN 37664
SULLIVAN
CONTACT:

REV: 7/10/07
ID1: 110004991778
ID2: TND987772787
STATUS: FRS
PHONE:

FACILITY REGISTRATION INFORMATION:

PROGRAM:	FRS	PROGRAM ID:	110004991778
PROVIDED BY:	FEDERAL AGENCY	AGENCY INTERESTED:	
AGENCY INT QUAL:		INTEREST ENDED:	
INT END QUAL:		SOURCE OF DATA:	FRS
LAST REPORTED:		LAST EXTRACTED:	
ENFORCEMENT ACT:			
REG PROGRAM:	FACILITY -		

PROGRAM:	RCRAINFO	PROGRAM ID:	TND987772787
PROVIDED BY:	FEDERAL AGENCY	AGENCY INTERESTED:	
AGENCY INT QUAL:		INTEREST ENDED:	
INT END QUAL:		SOURCE OF DATA:	NOTIFICATION
LAST REPORTED:	9/11/1992	LAST EXTRACTED:	5/18/2003 1:55:51 AM
ENFORCEMENT ACT:			
REG PROGRAM:	NOT IN A UNIVERSE - THE HANDLER IS NOT CURRENTLY IN ANY HAZARDOUS WASTE UNIVERSE.		

SITE TYPE:	STATIONARY
INTEREST STATUS:	ACTIVE
DATA QUALITY:	V
LOCATION DESC:	
ADDRESS TYPE:	REGULAR URBAN
LAST REPORTED:	
POSTED TO DATABASE:	3/1/2000
DATA UPDATED:	1/6/2006 11:17:01 AM
ENTERED PERSON/METHOD:	REFRESH
PARENT REG ID:	
CONFIDENCE IN ADDR:	MEDIUM
ENFORCEMENT SENSITIVE:	N
REQ MANUAL REVIEW:	
REASON MAN REVIEW:	
SMALL BUS POLICY:	
ENFORCEMENT ACTION:	
DATA PUB ACCESS:	YES
INTERNAL SYS ID:	
FEDERAL FACILITY:	NO
FEDERAL AGENCY:	
TRIBAL LAND:	NO
TRIBAL LAND NAME:	
CONGRESSIONAL DIST:	01
LEGISLATIVE DIST:	10
HYDROLOGICAL UNTIS:	06010102
EPA REGION:	04
AIRSHED:	
CENSUS BLOCK:	

Environmental FirstSearch
Site Detail Report

Target Property: SR 126
KINGSPORT TN 37664

JOB: 1135.00

FINDS

SEARCH ID: 29 **DIST/DIR:** 0.23 SW **MAP ID:** 38

NAME: TRICITY CAR KARE, INC.(JIFFY LUBE)
ADDRESS: 1786 FORT HENRY DR
KINGSPORT TN 37664

CONTACT:

REV:
ID1: TND987772787
ID2:
STATUS:
PHONE:

DETAILS NOT AVAILABLE

Target Property: SR 126
KINGSPORT TN 37664

JOB: 1135.00

UST

SEARCH ID: 51 **DIST/DIR:** 0.23 SW **MAP ID:** 38

NAME: JIFFY LUBE
ADDRESS: 1786 FT. HENRY DRIVE
KINGSPORT TN 37660
CONTACT:

REV: 3/4/05
ID1: 1-820400
ID2:
STATUS:
PHONE:

SITE INFORMATION

TOTAL NUMBER OF TANKS: 3

OWNER INFORMATION:

OWNER ID NUMBER: 13463
OWNER DESCRIPTION: PRIVATE
OWNER NAME: WITT AND WITT INC
OWNER ADDRESS: 1786 FT. HENRY DRIVE
KINGSPORT TN 37664
PHONE: (423) 245-3967

TANK INFORMATION:

TANK NUMBER: 1
TANK STATUS: PERMANENTLY OUT OF USE
TANK INSTALLED DATE: 10/1/1987

TANK CAPACITY: 4000 GALLONS
TANK CONTENTS: USED OIL

MATERIALS OF CONSTRUCTION: ASPHALT COATED OR BARE STEEL / NONE

TANK PROTECTION INFORMATION:

MANUAL TANK GAUGE:	YES	TANK TIGHTNESS TEST:	NO
TANK INVENTORY CONTROL:	NO	AUTOMATIC TANK GAUGING:	NO
TANK VAPOR MONITOR:	NO	GROUNDWATER MONITORING:	NO
DOUBLE WALLED:	NO	SECONDARY CONTAINMENT	NO
SIR:	NO	TANK LEAK DETECTION LISTED:	NO

PIPE INFORMATION:

PIPE MATERIALS: GALVANIZED STEEL / NONE
PIPING TYPE: SAFE SUCTION

AUTO LINE LEAK DETECTION:	NO	LINE TIGHTNESS TEST:	NO
VAPOR MONITORING:	NO	GROUNDWATER MONITORING:	NO
DOUBLE WALLED:	NO	SECONDARY CONTAINMENT:	NO
SIR:	NO		

SPILL PROTECTION INSTALLED: NO OVERFILL INSTALLED: NO

TANK NUMBER: 2
TANK STATUS: PERMANENTLY OUT OF USE
TANK INSTALLED DATE: 7/22/1986

TANK CAPACITY: 2000 GALLONS
TANK CONTENTS: NOT LISTED

- Continued on next page -

Target Property: SR 126
KINGSPORT TN 37664

JOB: 1135.00

UST

SEARCH ID: 51 **DIST/DIR:** 0.23 SW **MAP ID:** 38

NAME: JIFFY LUBE
ADDRESS: 1786 FT. HENRY DRIVE
KINGSPORT TN 37660
CONTACT:

REV: 3/4/05
ID1: 1-820400
ID2:
STATUS:
PHONE:

MATERIALS OF CONSTRUCTION: ASPHALT COATED OR BARE STEEL / NONE

TANK PROTECTION INFORMATION:

MANUAL TANK GAUGE:	YES	TANK TIGHTNESS TEST:	NO
TANK INVENTORY CONTROL:	YES	AUTOMATIC TANK GAUGING:	NO
TANK VAPOR MONITOR:	NO	GROUNDWATER MONITORING:	NO
DOUBLE WALLED:	NO	SECONDARY CONTAINMENT	NO
SIR:	NO	TANK LEAK DETECTION LISTED:	NO

PIPE INFORMATION:

PIPE MATERIALS: GALVANIZED STEEL / NONE
PIPING TYPE: SAFE SUCTION

AUTO LINE LEAK DETECTION:	NO	LINE TIGHTNESS TEST:	NO
VAPOR MONITORING:	NO	GROUNDWATER MONITORING:	NO
DOUBLE WALLED:	NO	SECONDARY CONTAINMENT:	NO
SIR:	NO		
SPILL PROTECTION INSTALLED:	NO	OVERFILL INSTALLED:	NO

TANK NUMBER: 3
TANK STATUS: PERMANENTLY OUT OF USE
TANK INSTALLED DATE: 7/22/1986

TANK CAPACITY: 2000 GALLONS
TANK CONTENTS: NOT LISTED

MATERIALS OF CONSTRUCTION: ASPHALT COATED OR BARE STEEL / NONE

TANK PROTECTION INFORMATION:

MANUAL TANK GAUGE:	YES	TANK TIGHTNESS TEST:	NO
TANK INVENTORY CONTROL:	YES	AUTOMATIC TANK GAUGING:	NO
TANK VAPOR MONITOR:	NO	GROUNDWATER MONITORING:	NO
DOUBLE WALLED:	NO	SECONDARY CONTAINMENT	NO
SIR:	NO	TANK LEAK DETECTION LISTED:	NO

PIPE INFORMATION:

PIPE MATERIALS: GALVANIZED STEEL / NONE
PIPING TYPE: SAFE SUCTION

AUTO LINE LEAK DETECTION:	NO	LINE TIGHTNESS TEST:	NO
VAPOR MONITORING:	NO	GROUNDWATER MONITORING:	NO
DOUBLE WALLED:	NO	SECONDARY CONTAINMENT:	NO
SIR:	NO		
SPILL PROTECTION INSTALLED:	NO	OVERFILL INSTALLED:	NO

- Continued on next page -

Environmental FirstSearch
Site Detail Report

Target Property: SR 126
KINGSPORT TN 37664

JOB: 1135.00

UST

SEARCH ID: 51 **DIST/DIR:** 0.23 SW **MAP ID:** 38

NAME:	JIFFY LUBE	**REV:**	3/4/05
ADDRESS:	1786 FT. HENRY DRIVE	**ID1:**	1-820400
	KINGSPORT TN 37660	**ID2:**	
		STATUS:	
CONTACT:		**PHONE:**	

Environmental FirstSearch
Site Detail Report

Target Property: SR 126
KINGSPORT TN 37664

JOB: 1135.00

WETLANDS

SEARCH ID: 79 **DIST/DIR:** 0.24 SE **MAP ID:** 42

NAME: NATIONAL WETLANDS INVENTORY
ADDRESS:
TN
CONTACT:

REV: 2/27/02
ID1: NWI-TN-12826
ID2:
STATUS: PUBFH
PHONE:

SITE INFORMATION

AREA:	490.007
PERIMETER:	89.0954
WETC:	47
WETC_ID:	66
ATTRIBUTE:	PUBFh

Target Property: SR 126
KINGSPORT TN 37664

JOB: 1135.00

FINDS

SEARCH ID: 18 **DIST/DIR:** 0.25 NW **MAP ID:** 44

NAME:	G and K SERVICES INCORPORATED	REV:	7/10/07
ADDRESS:	2117 BERRY STREET	ID1:	110001859123
	KINGSPORT TN 37664	ID2:	TND980799365
	SULLIVAN	STATUS:	FRS
CONTACT:		PHONE:	

FACILITY REGISTRATION INFORMATION:

PROGRAM:	AIRS/AFS	PROGRAM ID:	4716300209
PROVIDED BY:	FEDERAL AGENCY	AGENCY INTERESTED:	
AGENCY INT QUAL:		INTEREST ENDED:	
INT END QUAL:		SOURCE OF DATA:	AIRS/AFS
LAST REPORTED:	6/25/1994	LAST EXTRACTED:	
ENFORCEMENT ACT:			

REG PROGRAM: AIR MINOR - A FACILITY IS CLASSIFIED AS A CLEAN AIR ACT STATIONARY SOURCE MINOR DISCHARGER OF AIR POLLUTANTS IF: (A) POTENTIAL UNCONTROLLED EMISSIONS < 100 TONS/YEAR; OR (B) MAJOR SOURCE THRESHOLDS ARE NOT DEFINED, OR CLASSIFICATION IS UNKNOWN.

PROGRAM:	FRS	PROGRAM ID:	110001859123
PROVIDED BY:	FEDERAL AGENCY	AGENCY INTERESTED:	
AGENCY INT QUAL:		INTEREST ENDED:	
INT END QUAL:		SOURCE OF DATA:	FRS
LAST REPORTED:		LAST EXTRACTED:	
ENFORCEMENT ACT:			
REG PROGRAM:	FACILITY -		

PROGRAM:	RCRAINFO	PROGRAM ID:	TND980799365
PROVIDED BY:	FEDERAL AGENCY	AGENCY INTERESTED:	
AGENCY INT QUAL:		INTEREST ENDED:	
INT END QUAL:		SOURCE OF DATA:	RCRAINFO
LAST REPORTED:	2/18/2004	LAST EXTRACTED:	11/8/2004 1:46:41 PM
ENFORCEMENT ACT:			

REG PROGRAM: UNSPECIFIED UNIVERSE - THE HANDLER IS IN A HAZARDOUS WASTE UNIVERSE OTHER THAN TSD, GENERATOR (LQG, SQG, CESQG), TRANSPORTER, OR USED OIL PROGRAM.

SITE TYPE:	STATIONARY
INTEREST STATUS:	ACTIVE
DATA QUALITY:	V
LOCATION DESC:	
ADDRESS TYPE:	REGULAR URBAN
LAST REPORTED:	
POSTED TO DATABASE:	3/1/2000
DATA UPDATED:	2/3/2007 9.19:15 PM
ENTERED PERSON/METHOD:	REFRESH
PARENT REG ID:	
CONFIDENCE IN ADDR:	MEDIUM
ENFORCEMENT SENSITIVE:	N
REQ MANUAL REVIEW:	
REASON MAN REVIEW:	
SMALL BUS POLICY:	
ENFORCEMENT ACTION:	
DATA PUB ACCESS:	YES
INTERNAL SYS ID:	

- Continued on next page -

Target Property: SR 126
KINGSPORT TN 37664

JOB: 1135.00

FINDS

SEARCH ID: 18 **DIST/DIR:** 0.25 NW **MAP ID:** 44

NAME:	G and K SERVICES INCORPORATED	REV:	7/10/07
ADDRESS:	2117 BERRY STREET	ID1:	110001859123
	KINGSPORT TN 37664	ID2:	TND980799365
	SULLIVAN	STATUS:	FRS
CONTACT:		PHONE:	

FEDERAL FACILITY:	NO
FEDERAL AGENCY:	
TRIBAL LAND:	NO
TRIBAL LAND NAME:	
CONGRESSIONAL DIST:	01
LEGISLATIVE DIST:	10
HYDROLOGICAL UNTIS:	06010102
EPA REGION:	04
AIRSHED:	
CENSUS BLOCK:	

Environmental FirstSearch
Site Detail Report

Target Property: SR 126
KINGSPORT TN 37664

JOB: 1135.00

FINDS

SEARCH ID: 23 **DIST/DIR:** 0.25 NW **MAP ID:** 44

NAME: RENTAL UNIFORM CO INC
ADDRESS: 2117 BERRY ST
KINGSPORT TN 37664

CONTACT:

REV:
ID1: TND980799365
ID2:
STATUS:
PHONE:

DETAILS NOT AVAILABLE

Target Property: SR 126
KINGSPORT TN 37664

JOB: 1135.00

UST

SEARCH ID: 54 **DIST/DIR:** 0.25 NW **MAP ID:** 44

NAME: RENTAL UNIFORM CO
ADDRESS: 2117 BERRY ST. PO BOX 3570
KINGSPORT TN 37664
CONTACT:

REV: 3/4/05
ID1: 1-820285
ID2:
STATUS:
PHONE:

SITE INFORMATION

TOTAL NUMBER OF TANKS: 4

OWNER INFORMATION:

OWNER ID NUMBER: 7627
OWNER DESCRIPTION: PRIVATE
OWNER NAME: RENTAL UNIFORM CO
OWNER ADDRESS: C/O KYLE BROWDER GENERAL MGR. 2117 BERRY ST. PO BOX 3570
KINGSPORT TN 37664
PHONE: (423) 247-4101

TANK INFORMATION:

TANK NUMBER: 1
TANK STATUS: PERMANENTLY OUT OF USE
TANK INSTALLED DATE: 5/8/1979

TANK CAPACITY: 15000 GALLONS
TANK CONTENTS: GASOLINE

MATERIALS OF CONSTRUCTION: FIBERGLASS REINFORCED PLASTIC / NONE

TANK PROTECTION INFORMATION:

MANUAL TANK GAUGE:	NO	TANK TIGHTNESS TEST:	YES
TANK INVENTORY CONTROL:	NO	AUTOMATIC TANK GAUGING:	YES
TANK VAPOR MONITOR:	NO	GROUNDWATER MONITORING:	NO
DOUBLE WALLED:	NO	SECONDARY CONTAINMENT	NO
SIR:	NO	TANK LEAK DETECTION LISTED:	NO

PIPE INFORMATION:

PIPE MATERIALS: GALVANIZED STEEL / NONE
PIPING TYPE: NOT LISTED

AUTO LINE LEAK DETECTION:	YES	LINE TIGHTNESS TEST:	NO
VAPOR MONITORING:	NO	GROUNDWATER MONITORING:	NO
DOUBLE WALLED:	NO	SECONDARY CONTAINMENT:	NO
SIR:	NO		
SPILL PROTECTION INSTALLED:	YES	OVERFILL INSTALLED:	YES

TANK NUMBER: 2
TANK STATUS: PERMANENTLY OUT OF USE
TANK INSTALLED DATE: 5/7/1966

TANK CAPACITY: 12000 GALLONS
TANK CONTENTS: GASOLINE

- Continued on next page -

Target Property: SR 126
KINGSPORT TN 37664

JOB: 1135.00

UST

SEARCH ID: 54 **DIST/DIR:** 0.25 NW **MAP ID:** 44

NAME: RENTAL UNIFORM CO
ADDRESS: 2117 BERRY ST. PO BOX 3570
KINGSPORT TN 37664
CONTACT:

REV: 3/4/05
ID1: 1-820285
ID2:
STATUS:
PHONE:

MATERIALS OF CONSTRUCTION: ASPHALT COATED OR BARE STEEL / NONE

TANK PROTECTION INFORMATION:

MANUAL TANK GAUGE:	YES	TANK TIGHTNESS TEST:	NO
TANK INVENTORY CONTROL:	NO	AUTOMATIC TANK GAUGING:	YES
TANK VAPOR MONITOR:	NO	GROUNDWATER MONITORING:	NO
DOUBLE WALLED:	NO	SECONDARY CONTAINMENT	NO
SIR:	NO	TANK LEAK DETECTION LISTED:	NO

PIPE INFORMATION:

PIPE MATERIALS: GALVANIZED STEEL / NONE
PIPING TYPE: NOT LISTED

AUTO LINE LEAK DETECTION:	NO	LINE TIGHTNESS TEST:	NO
VAPOR MONITORING:	NO	GROUNDWATER MONITORING:	NO
DOUBLE WALLED:	NO	SECONDARY CONTAINMENT:	NO
SIR:	NO		

SPILL PROTECTION INSTALLED: YES OVERFILL INSTALLED: NO

TANK NUMBER: 3
TANK STATUS: PERMANENTLY OUT OF USE
TANK INSTALLED DATE: 5/7/1968

TANK CAPACITY: 15000 GALLONS
TANK CONTENTS: DIESEL

MATERIALS OF CONSTRUCTION: ASPHALT COATED OR BARE STEEL / NONE

TANK PROTECTION INFORMATION:

MANUAL TANK GAUGE:	NO	TANK TIGHTNESS TEST:	NO
TANK INVENTORY CONTROL:	NO	AUTOMATIC TANK GAUGING:	NO
TANK VAPOR MONITOR:	NO	GROUNDWATER MONITORING:	NO
DOUBLE WALLED:	NO	SECONDARY CONTAINMENT	NO
SIR:	NO	TANK LEAK DETECTION LISTED:	YES

PIPE INFORMATION:

PIPE MATERIALS: GALVANIZED STEEL / NONE
PIPING TYPE: NOT LISTED

AUTO LINE LEAK DETECTION:	NO	LINE TIGHTNESS TEST:	NO
VAPOR MONITORING:	NO	GROUNDWATER MONITORING:	NO
DOUBLE WALLED:	NO	SECONDARY CONTAINMENT:	NO
SIR:	NO		

SPILL PROTECTION INSTALLED: NO OVERFILL INSTALLED: NO

- Continued on next page -

Environmental FirstSearch
Site Detail Report

Target Property: SR 126
KINGSPORT TN 37664

JOB: 1135.00

UST

SEARCH ID: 54 **DIST/DIR:** 0.25 NW **MAP ID:** 44

NAME: RENTAL UNIFORM CO
ADDRESS: 2117 BERRY ST. PO BOX 3570
KINGSPORT TN 37664
CONTACT:

REV: 3/4/05
ID1: 1-820285
ID2:
STATUS:
PHONE:

TANK NUMBER: 5
TANK STATUS: PERMANENTLY OUT OF USE
TANK INSTALLED DATE: 5/7/1956

TANK CAPACITY: 6000 GALLONS
TANK CONTENTS: DIESEL

MATERIALS OF CONSTRUCTION: ASPHALT COATED OR BARE STEEL / NONE

TANK PROTECTION INFORMATION:

MANUAL TANK GAUGE:	NO	TANK TIGHTNESS TEST:	NO
TANK INVENTORY CONTROL:	NO	AUTOMATIC TANK GAUGING:	NO
TANK VAPOR MONITOR:	NO	GROUNDWATER MONITORING:	NO
DOUBLE WALLED:	NO	SECONDARY CONTAINMENT	NO
SIR:	NO	TANK LEAK DETECTION LISTED:	YES

PIPE INFORMATION:

PIPE MATERIALS: GALVANIZED STEEL / NONE
PIPING TYPE: NOT LISTED

AUTO LINE LEAK DETECTION:	NO	LINE TIGHTNESS TEST:	NO
VAPOR MONITORING:	NO	GROUNDWATER MONITORING:	NO
DOUBLE WALLED:	NO	SECONDARY CONTAINMENT:	NO
SIR:	NO		
SPILL PROTECTION INSTALLED:	NO	OVERFILL INSTALLED:	NO

Target Property: SR 126
KINGSPORT TN 37664

JOB: 1135.00

FINDS

SEARCH ID: 35 **DIST/DIR:** 0.25 SE **MAP ID:** 43

NAME:	EXCELL-O-CLEAN	REV:	7/10/07
ADDRESS:	217 SHULER ST	ID1:	110004986052
	KINGSPORT TN 37664	ID2:	TND982097347
	SULLIVAN	STATUS:	FRS
CONTACT:		PHONE:	

FACILITY REGISTRATION INFORMATION:

PROGRAM:	FRS	PROGRAM ID:	110004986052
PROVIDED BY:	FEDERAL AGENCY	AGENCY INTERESTED:	
AGENCY INT QUAL:		INTEREST ENDED:	
INT END QUAL:		SOURCE OF DATA:	FRS
LAST REPORTED:		LAST EXTRACTED:	
ENFORCEMENT ACT:			
REG PROGRAM:	FACILITY -		

PROGRAM:	RCRAINFO	PROGRAM ID:	TND982097347
PROVIDED BY:	FEDERAL AGENCY	AGENCY INTERESTED:	
AGENCY INT QUAL:		INTEREST ENDED:	
INT END QUAL:		SOURCE OF DATA:	NOTIFICATION
LAST REPORTED:	5/21/1987	LAST EXTRACTED:	5/18/2003 1:55:56 AM
ENFORCEMENT ACT:			
REG PROGRAM:	NOT IN A UNIVERSE - THE HANDLER IS NOT CURRENTLY IN ANY HAZARDOUS WASTE UNIVERSE.		

SITE TYPE:	STATIONARY
INTEREST STATUS:	ACTIVE
DATA QUALITY:	V
LOCATION DESC:	
ADDRESS TYPE:	REGULAR URBAN
LAST REPORTED:	
POSTED TO DATABASE:	3/1/2000
DATA UPDATED:	1/5/2006 6:41:40 PM
ENTERED PERSON/METHOD:	REFRESH
PARENT REG ID:	
CONFIDENCE IN ADDR:	MEDIUM
ENFORCEMENT SENSITIVE:	N
REQ MANUAL REVIEW:	
REASON MAN REVIEW:	
SMALL BUS POLICY:	
ENFORCEMENT ACTION:	
DATA PUB ACCESS:	YES
INTERNAL SYS ID:	
FEDERAL FACILITY:	NO
FEDERAL AGENCY:	
TRIBAL LAND:	NO
TRIBAL LAND NAME:	
CONGRESSIONAL DIST:	01
LEGISLATIVE DIST:	10
HYDROLOGICAL UNTIS:	06010102
EPA REGION:	04
AIRSHED:	
CENSUS BLOCK:	

Environmental FirstSearch
Site Detail Report

Target Property: SR 126
KINGSPORT TN 37664

JOB: 1135.00

FINDS

SEARCH ID: 34 **DIST/DIR:** 0.25 SE **MAP ID:** 43

NAME: EXCELL-O-CLEAN
ADDRESS: 217 SHULER ST
KINGSPORT TN 37664

CONTACT:

REV:
ID1: TND982097347
ID2:
STATUS:
PHONE:

DETAILS NOT AVAILABLE

Target Property: SR 126
KINGSPORT TN 37664

JOB: 1135.00

ERNS

SEARCH ID: 7 **DIST/DIR:** 0.27 N- **MAP ID:** 45

NAME: AMERICAN ELECTRIC POWER
ADDRESS: 2312 ASHWOOD ST
KINGSPORT TN
SULLIVAN
CONTACT:

REV: 5/7/96
ID1: 493942
ID2:
STATUS: FIXED FACILITY
PHONE:

SPILL INFORMATION
DATE OF SPILL: 5/7/96 TIME OF SPILL: 1158

PRODUCT RELEASED (1): OIL, MISC: TRANSFORMER; NON-PCB
QUANTITY (1): 10
UNITS (1): GAL

PRODUCT RELEASED (2):
QUANTITY (2):
UNITS (2):

PRODUCT RELEASED (3):
QUANTITY (3):
UNITS (3):

MEDIUM/MEDIA AFFECTED

AIR:	NO	GROUNDWATER:	NO
LAND:	YES	FIXED FACILITY:	NO
WATER:	NO	OTHER:	NO

WATERBODY AFFECTED BY RELEASE:

CAUSE OF RELEASE

DUMPING:	NO	EQUIPMENT FAILURE:	NO
NATURAL PHENOMENON:	NO	OPERATOR ERROR:	NO
OTHER CAUSE:	NO	TRANSP. ACCIDENT:	NO
UNKNOWN:	NO		

ACTIONS TAKEN: SOME MATERIAL ENTERED A STORM DRAIN/SORBENTS DEPLOYED/AREA AFFECTED WAS CLEANED
RELEASE DETECTION: POLE-MOUNTED TRANSFORMER/SECONDARY LEED FROM THE POLE BURNED A HOLE IN THE TRANSFORMER TANK
MISC. NOTES:

DISCHARGER INFORMATION
DISCHARGER ID: 493942
TYPE OF DISCHARGER: PRIVATE ENTERPRISE
NAME OF DISCHARGER: AMERICAN ELECTRIC POWER
ADDRESS: BOX 698
WYTHEVILLE VA 24382

DUN and BRADSTREET :

Environmental FirstSearch
Site Detail Report

Target Property: SR 126
KINGSPORT TN 37664

JOB: 1135.00

SCHOOL

SEARCH ID: 103 **DIST/DIR:** 0.28 SE **MAP ID:** 47

NAME: SULLIVAN CENTRAL HIGH SCHOOL
ADDRESS:
TN
SULLIVAN
CONTACT:

REV: 1/1/05
ID1: TN-135527
ID2:
STATUS:
PHONE:

DETAILS NOT AVAILABLE

SCHOOL

SEARCH ID: 100 **DIST/DIR:** 0.28 SW **MAP ID:** 46

NAME: INDIAN SPRINGS ELEMENTARY SCHOOL
ADDRESS:
TN
SULLIVAN
CONTACT:

REV: 1/1/05
ID1: TN-132867
ID2:
STATUS:
PHONE:

DETAILS NOT AVAILABLE

WETLANDS

SEARCH ID: 81 **DIST/DIR:** 0.30 SE **MAP ID:** 48

NAME: NATIONAL WETLANDS INVENTORY
ADDRESS:
TN
CONTACT:

REV: 2/27/02
ID1: NWI-TN-12820
ID2:
STATUS: PEM1C
PHONE:

SITE INFORMATION

AREA:	2553.85
PERIMETER:	263.444
WETC:	41
WETC_ID:	69
ATTRIBUTE:	PEM1C

Target Property: SR 126
KINGSPORT TN 37664

JOB: 1135.00

FINDS

SEARCH ID: 22 **DIST/DIR:** 0.31 NW **MAP ID:** 49

NAME:	MUNAL CLINIC INC	REV:	7/10/07
ADDRESS:	1735 FORT HENRY DRIVE	ID1:	110004975778
	KINGSPORT TN 37664	ID2:	TND074901257
	SULLIVAN	STATUS:	FRS
CONTACT:		PHONE:	

FACILITY REGISTRATION INFORMATION:

PROGRAM:	FRS	PROGRAM ID:	110004975778
PROVIDED BY:	FEDERAL AGENCY	AGENCY INTERESTED:	
AGENCY INT QUAL:		INTEREST ENDED:	
INT END QUAL:		SOURCE OF DATA:	FRS
LAST REPORTED:		LAST EXTRACTED:	
ENFORCEMENT ACT:			
REG PROGRAM:	FACILITY -		

PROGRAM:	RCRAINFO	PROGRAM ID:	TND074901257
PROVIDED BY:	FEDERAL AGENCY	AGENCY INTERESTED:	
AGENCY INT QUAL:		INTEREST ENDED:	
INT END QUAL:		SOURCE OF DATA:	NOTIFICATION
LAST REPORTED:	11/19/1980	LAST EXTRACTED:	5/18/2003 1:56:08 AM
ENFORCEMENT ACT:			
REG PROGRAM:	NOT IN A UNIVERSE - THE HANDLER IS NOT CURRENTLY IN ANY HAZARDOUS WASTE UNIVERSE.		

SITE TYPE:	STATIONARY
INTEREST STATUS:	ACTIVE
DATA QUALITY:	V
LOCATION DESC:	
ADDRESS TYPE:	REGULAR URBAN
LAST REPORTED:	
POSTED TO DATABASE:	3/1/2000
DATA UPDATED:	1/6/2006 11:27:07 AM
ENTERED PERSON/METHOD:	REFRESH
PARENT REG ID:	
CONFIDENCE IN ADDR:	MEDIUM
ENFORCEMENT SENSITIVE:	N
REQ MANUAL REVIEW:	
REASON MAN REVIEW:	
SMALL BUS POLICY:	
ENFORCEMENT ACTION:	
DATA PUB ACCESS:	YES
INTERNAL SYS ID:	
FEDERAL FACILITY:	NO
FEDERAL AGENCY:	
TRIBAL LAND:	NO
TRIBAL LAND NAME:	
CONGRESSIONAL DIST:	01
LEGISLATIVE DIST:	10
HYDROLOGICAL UNTIS:	06010102
EPA REGION:	04
AIRSHED:	
CENSUS BLOCK:	

Target Property: SR 126
KINGSPORT TN 37664

JOB: 1135.00

UST

SEARCH ID: 49 **DIST/DIR:** 0.31 NW **MAP ID:** 49

NAME: HOLSTON MEDICAL GROUP FACILITY
ADDRESS: 1735 FORT HENRY DRIVE
KINGSPORT TN 37664
SULLIVAN
CONTACT:

REV: 3/4/05
ID1: 1-820584
ID2:
STATUS:
PHONE:

SITE INFORMATION

TOTAL NUMBER OF TANKS: 1

OWNER INFORMATION:

OWNER ID NUMBER: 14927
OWNER DESCRIPTION: PRIVATE
OWNER NAME: HOLSTON MEDICAL GROUP
OWNER ADDRESS: 2204 PAVILION DRIVE
KINGSPORT TN 37660
PHONE: (423) 392-6200

TANK INFORMATION:

TANK NUMBER: 1
TANK STATUS: PERMANENTLY OUT OF USE
TANK INSTALLED DATE:

TANK CAPACITY: 200 GALLONS
TANK CONTENTS: GASOLINE

MATERIALS OF CONSTRUCTION: UNKNOWN / NONE

TANK PROTECTION INFORMATION:

MANUAL TANK GAUGE:	NO	TANK TIGHTNESS TEST:	NO
TANK INVENTORY CONTROL:	NO	AUTOMATIC TANK GAUGING:	NO
TANK VAPOR MONITOR:	NO	GROUNDWATER MONITORING:	NO
DOUBLE WALLED:	NO	SECONDARY CONTAINMENT	NO
SIR:	NO	TANK LEAK DETECTION LISTED:	YES

PIPE INFORMATION:

PIPE MATERIALS: UNKNOWN / NONE
PIPING TYPE: NOT LISTED

AUTO LINE LEAK DETECTION:	NO	LINE TIGHTNESS TEST:	NO
VAPOR MONITORING:	NO	GROUNDWATER MONITORING:	NO
DOUBLE WALLED:	NO	SECONDARY CONTAINMENT:	NO
SIR:	NO		

SPILL PROTECTION INSTALLED: NO OVERFILL INSTALLED: NO

Environmental FirstSearch
Site Detail Report

Target Property: SR 126
KINGSPORT TN 37664

JOB: 1135.00

FINDS

SEARCH ID: 14 **DIST/DIR:** 0.32 NW **MAP ID:** 51

NAME: CONCORD CUSTOM CLEANERS 067
ADDRESS: FT HENRY and EASTMAN RD
KINGSPORT TN 37664

CONTACT:

REV:
ID1: TND981023807
ID2:
STATUS:
PHONE:

DETAILS NOT AVAILABLE

Target Property: SR 126
KINGSPORT TN 37664

JOB: 1135.00

FINDS

SEARCH ID: 13 **DIST/DIR:** 0.32 NW **MAP ID:** 51

NAME:	CONCORD CUSTOM CLEANERS 067	REV:	7/10/07
ADDRESS:	1700 FORT HENRY DRIVE	ID1:	110004982706
	KINGSPORT TN 37664	ID2:	TND981023807
	SULLIVAN	STATUS:	FRS
CONTACT:		PHONE:	

FACILITY REGISTRATION INFORMATION:

PROGRAM:	FRS	PROGRAM ID:	110004982706
PROVIDED BY:	FEDERAL AGENCY	AGENCY INTERESTED:	
AGENCY INT QUAL:		INTEREST ENDED:	
INT END QUAL:		SOURCE OF DATA:	FRS
LAST REPORTED:		LAST EXTRACTED:	
ENFORCEMENT ACT:			
REG PROGRAM:	FACILITY -		

PROGRAM:	AIRS/AFS	PROGRAM ID:	4716300277
PROVIDED BY:	FEDERAL AGENCY	AGENCY INTERESTED:	
AGENCY INT QUAL:		INTEREST ENDED:	
INT END QUAL:		SOURCE OF DATA:	AIRS/AFS
LAST REPORTED:	9/15/2003	LAST EXTRACTED:	10/22/2003 1:31:40 PM
ENFORCEMENT ACT:			

REG PROGRAM: AIR MINOR - A FACILITY IS CLASSIFIED AS A CLEAN AIR ACT STATIONARY SOURCE MINOR DISCHARGER OF AIR POLLUTANTS IF: (A) POTENTIAL UNCONTROLLED EMISSIONS < 100 TONS/YEAR; OR (B) MAJOR SOURCE THRESHOLDS ARE NOT DEFINED, OR CLASSIFICATION IS UNKNOWN.

PROGRAM:	RCRAINFO	PROGRAM ID:	TND981023807
PROVIDED BY:	FEDERAL AGENCY	AGENCY INTERESTED:	
AGENCY INT QUAL:		INTEREST ENDED:	
INT END QUAL:		SOURCE OF DATA:	RCRAINFO
LAST REPORTED:	2/17/2004	LAST EXTRACTED:	8/15/2003 1:59:06 PM
ENFORCEMENT ACT:			

REG PROGRAM: CESQG - HAZARDOUS WASTE CONDITIONALLY EXEMPT SMALL QUANTITY GENERATORS GENERATE: A) 100 KILOGRAMS OR LESS OF HAZARDOUS WASTE PER CALENDAR MONTH, AND ACCUMULATE 1000 KG OR LESS OF HAZARDOUS WASTE AT ANY TIME; OR (B) ONE KILOGRAM OR LESS OF ACUTELY HAZARDOUS WASTE PER CALENDAR MONTH, AND ACCUMULATE AT ANY TIME: 1 KG OR LESS OF ACUTELY HAZARDOUS WASTE; OR 100 KG OR LESS OF ANY RESIDUE OR CONTAMINATED SOIL, WASTE OR OTHER DEBRIS RESULTING FROM THE CLEANUP OF A SPILL, INTO OR ON ANY LAND OR WATER, OF ACUTELY HAZARDOUS WASTE; OR (C) 100 KG OR LESS OF ANY RESIDUE OR CONTAMINATED SOIL, WASTE OR OTHER DEBRIS RESULTING FROM THE CLEANUP OF A SPILL, INTO OR ON ANY LAND OR WATER, OF ACUTELY HAZARDOUS WASTE DURING ANY CALENDAR MONTH, AND ACCUMULATE AT ANY TIME. 1 KG OR LESS OF ACUTELY HAZARDOUS WASTE; OR 100 KG OR LESS OF ANY RESIDUE OR CONTAMINATED SOIL, WASTE OR OTHER DEBRIS RESULTING FROM THE CLEANUP OF A SPILL, INTO OR ON ANY LAND OR WATER, OF ACUTELY HAZARDOUS WASTE.

SITE TYPE:	STATIONARY
INTEREST STATUS:	ACTIVE
DATA QUALITY:	V
LOCATION DESC:	
ADDRESS TYPE:	REGULAR URBAN
LAST REPORTED:	
POSTED TO DATABASE:	3/1/2000
DATA UPDATED:	2/3/2007 9:49:13 PM
ENTERED PERSON/METHOD:	REFRESH
PARENT REG ID:	
CONFIDENCE IN ADDR:	MEDIUM

- Continued on next page -

Environmental FirstSearch
Site Detail Report

Target Property: SR 126
KINGSPORT TN 37664

JOB: 1135.00

FINDS

SEARCH ID: 13 **DIST/DIR:** 0.32 NW **MAP ID:** 51

NAME:	CONCORD CUSTOM CLEANERS 067	REV:	7/10/07
ADDRESS:	1700 FORT HENRY DRIVE	ID1:	110004982706
	KINGSPORT TN 37664	ID2:	TND981023807
	SULLIVAN	STATUS:	FRS
CONTACT:		PHONE:	

ENFORCEMENT SENSITIVE:	N
REQ MANUAL REVIEW:	
REASON MAN REVIEW:	
SMALL BUS POLICY:	
ENFORCEMENT ACTION:	
DATA PUB ACCESS:	YES
INTERNAL SYS ID:	
FEDERAL FACILITY:	NO
FEDERAL AGENCY:	
TRIBAL LAND:	NO
TRIBAL LAND NAME:	
CONGRESSIONAL DIST:	01
LEGISLATIVE DIST:	10
HYDROLOGICAL UNTIS:	06010102
EPA REGION:	04
AIRSHED:	
CENSUS BLOCK:	

Environmental FirstSearch
Site Detail Report

Target Property: SR 126
KINGSPORT TN 37664

JOB: 1135.00

OTHER

SEARCH ID: 42 **DIST/DIR:** 0.32 NW **MAP ID:** 51

NAME: CONCORD CUSTOM CLEANERS 067
ADDRESS: 1700 FORT HENRY DRIVE
KINGSPORT TN 37664
CONTACT:

REV: 01/25/07
ID1: D-82-111
ID2:
STATUS:
PHONE:

SITE INFORMATION

CERTIFICATE SERIAL NO: 1316
SERIAL NO: 0046
RECEIPT NO: 0046
EXPIRE DATE:

Please contact the Tennessee Drycleaner Environmental Response Program at (615) 532-0900 for further information on this site.

Target Property: SR 126
KINGSPORT TN 37664

JOB: 1135.00

RCRAGN

SEARCH ID: 2 **DIST/DIR:** 0.32 NW **MAP ID:** 51

NAME: CONCORD CUSTOM CLEANERS 067
ADDRESS: 1700 FT HENRY DRIVE
KINGSPORT TN 37664

CONTACT: COMPLIANCE DIRECTOR

REV: 6/6/06
ID1: TND981023807
ID2:
STATUS: VGN
PHONE: 8594224800

SITE INFORMATION

CONTACT INFORMATION: COMPLIANCE DIRECTOR
BOX 55910
LEXINGTON KY 40555

PHONE: 8594224800

CONTACT INFORMATION: COMPLIANCE DIRECTOR
BOX 55910
LEXINGTON KY 40555-5910

PHONE: 8594224800

UNIVERSE INFORMATION:

NAIC INFORMATION

81232 - DRYCLEANING AND LAUNDRY SERVICES (EXCEPT COIN-OPERATED)

ENFORCEMENT INFORMATION:

AGENCY:	S - STATE	DATE:	3/1/1991
TYPE:	120 - WRITTEN INFORMAL		
AGENCY:	S - STATE	DATE:	10/19/1994
TYPE:	120 - WRITTEN INFORMAL		
AGENCY:	S - STATE	DATE:	3/1/1991
TYPE:	120 - WRITTEN INFORMAL		
AGENCY:	S - STATE	DATE:	10/7/1991
TYPE:	120 - WRITTEN INFORMAL		
AGENCY:	S - STATE	DATE:	10/19/1994
TYPE:	120 - WRITTEN INFORMAL		
AGENCY:	S - STATE	DATE:	3/1/1994
TYPE:	110 - VERBAL INFORMAL		
AGENCY:	S - STATE	DATE:	10/7/1991
TYPE:	120 - WRITTEN INFORMAL		
AGENCY:	S - STATE	DATE:	11/8/1994
TYPE:	120 - WRITTEN INFORMAL		

- Continued on next page -

Target Property: SR 126
KINGSPORT TN 37664

JOB: 1135.00

RCRAGN

SEARCH ID: 2 **DIST/DIR:** 0.32 NW **MAP ID:** 51

NAME: CONCORD CUSTOM CLEANERS 067
ADDRESS: 1700 FT HENRY DRIVE
KINGSPORT TN 37664
CONTACT: COMPLIANCE DIRECTOR

REV: 6/6/06
ID1: TND981023807
ID2:
STATUS: VGN
PHONE: 8594224800

AGENCY: S - STATE DATE: 11/8/1994
TYPE: 120 - WRITTEN INFORMAL

AGENCY: S - STATE DATE: 3/1/1994
TYPE: 110 - VERBAL INFORMAL

VIOLATION INFORMATION:

VIOLATION NUMBER: 0001 RESPONSIBLE: S - STATE
DETERMINED: 3/1/1991 DETERMINED BY: S - STATE
CITATION: 11-.03(5)(b)1;0435
RESOLVED: 8/28/1991
TYPE: GENERATOR-RECORDKEEPING REQUIREMENTS

VIOLATION NUMBER: 0002 RESPONSIBLE: S - STATE
DETERMINED: 10/7/1991 DETERMINED BY: S - STATE
CITATION: 11-.08(4);0437
RESOLVED: 10/30/1991
TYPE: GENERATOR-RECORDKEEPING REQUIREMENTS

VIOLATION NUMBER: 0003 RESPONSIBLE: S - STATE
DETERMINED: 3/1/1994 DETERMINED BY: S - STATE
CITATION: .03(5)(b)1
RESOLVED: 3/4/1994
TYPE: GENERATOR-RECORDKEEPING REQUIREMENTS

VIOLATION NUMBER: 0004 RESPONSIBLE: S - STATE
DETERMINED: 10/18/1994 DETERMINED BY: S - STATE
CITATION: .03(4):262.34(a)(2)
RESOLVED: 11/1/1994
TYPE: GENERATOR-PRE-TRANSPORT REQUIREMENTS

VIOLATION NUMBER: 0005 RESPONSIBLE: S - STATE
DETERMINED: 10/18/1994 DETERMINED BY: S - STATE
CITATION: .03(4)·262.34(c)(1)(ii)
RESOLVED: 11/1/1994
TYPE: GENERATOR-PRE-TRANSPORT REQUIREMENTS

HAZARDOUS WASTE INFORMATION:

The following spent halogenated solvents: Tetrachloroethylene, methylene chloride, trichloroethylene, 1,1,1-trichloroethane, chlorobenzene, 1,1,2-trichloro-1,2,2-trifluoroethane, ortho-dichlorobenzene, trichlorofluoromethane

Environmental FirstSearch
Site Detail Report

Target Property: SR 126
KINGSPORT TN 37664

JOB: 1135.00

SCHOOL

SEARCH ID: 98 **DIST/DIR:** 0.32 SE **MAP ID:** 50

NAME: HARBOR SCHOOL (HISTORICAL)
ADDRESS:
TN
SULLIVAN
CONTACT:

REV: 1/1/05
ID1: TN-132465
ID2:
STATUS:
PHONE:

DETAILS NOT AVAILABLE

SCHOOL

SEARCH ID: 102 **DIST/DIR:** 0.32 SW **MAP ID:** 52

NAME: GUNNINGS SPECIAL EDUCATION SCHOOL
ADDRESS:
TN
SULLIVAN
CONTACT:

REV: 1/1/05
ID1: TN-132404
ID2:
STATUS:
PHONE:

DETAILS NOT AVAILABLE

Environmental FirstSearch
Site Detail Report

Target Property: SR 126
KINGSPORT TN 37664

JOB: 1135.00

FINDS

SEARCH ID: 36 **DIST/DIR:** 0.34 NE **MAP ID:** 53

NAME:	WATSON LITHOGRAPHING COMPANY*	REV:	7/10/07
ADDRESS:	229 ISLAND ROAD	ID1:	110004957280
	KINGSPORT TN 37660	ID2:	TND003377942
	SULLIVAN	STATUS:	FRS
CONTACT:		PHONE:	

FACILITY REGISTRATION INFORMATION:

PROGRAM:	RCRAINFO	PROGRAM ID:	TND003377942
PROVIDED BY:	FEDERAL AGENCY	AGENCY INTERESTED:	
AGENCY INT QUAL:		INTEREST ENDED:	
INT END QUAL:		SOURCE OF DATA:	NOTIFICATION
LAST REPORTED:	11/19/1980	LAST EXTRACTED:	5/18/2003 1:56:32 AM
ENFORCEMENT ACT:			
REG PROGRAM:	NOT IN A UNIVERSE - THE HANDLER IS NOT CURRENTLY IN ANY HAZARDOUS WASTE UNIVERSE.		

PROGRAM:	FRS	PROGRAM ID:	110004957280
PROVIDED BY:	FEDERAL AGENCY	AGENCY INTERESTED:	
AGENCY INT QUAL:		INTEREST ENDED:	
INT END QUAL:		SOURCE OF DATA:	FRS
LAST REPORTED:		LAST EXTRACTED:	
ENFORCEMENT ACT:			
REG PROGRAM:	FACILITY -		

SITE TYPE:	STATIONARY
INTEREST STATUS:	ACTIVE
DATA QUALITY:	V
LOCATION DESC:	
ADDRESS TYPE:	REGULAR URBAN
LAST REPORTED:	
POSTED TO DATABASE:	3/1/2000
DATA UPDATED:	1/6/2006 11:25.49 AM
ENTERED PERSON/METHOD:	REFRESH
PARENT REG ID:	
CONFIDENCE IN ADDR:	MEDIUM
ENFORCEMENT SENSITIVE:	N
REQ MANUAL REVIEW:	
REASON MAN REVIEW:	
SMALL BUS POLICY:	
ENFORCEMENT ACTION:	
DATA PUB ACCESS:	YES
INTERNAL SYS ID:	
FEDERAL FACILITY:	NO
FEDERAL AGENCY:	
TRIBAL LAND:	NO
TRIBAL LAND NAME:	
CONGRESSIONAL DIST:	01
LEGISLATIVE DIST:	10
HYDROLOGICAL UNTIS:	06010102
EPA REGION:	04
AIRSHED:	
CENSUS BLOCK:	

Environmental FirstSearch
Site Detail Report

Target Property: SR 126
KINGSPORT TN 37664

JOB: 1135.00

FINDS

SEARCH ID: 30 **DIST/DIR:** 0.37 S- **MAP ID:** 54

NAME: WILLEY INC DBA CHEMLAWN
ADDRESS: 2301 FT HENRY DR
KINGSPORT TN 37660

CONTACT:

REV:
ID1: TND980540181
ID2:
STATUS:
PHONE:

DETAILS NOT AVAILABLE

Target Property: SR 126
KINGSPORT TN 37664

JOB: 1135.00

FINDS

SEARCH ID: 31 **DIST/DIR:** 0.37 S- **MAP ID:** 54

NAME:	WILLEY INC DBA CHEMLAWN	REV:	7/10/07
ADDRESS:	2301 FT HENRY DR	ID1:	110004981636
	KINGSPORT TN 37660	ID2:	TND980540181
	SULLIVAN	STATUS:	FRS
CONTACT:		PHONE:	

FACILITY REGISTRATION INFORMATION:

PROGRAM:	RCRAINFO	PROGRAM ID:	TND980540181
PROVIDED BY:	FEDERAL AGENCY	AGENCY INTERESTED:	
AGENCY INT QUAL:		INTEREST ENDED:	
INT END QUAL:		SOURCE OF DATA:	NOTIFICATION
LAST REPORTED:	11/18/1980	LAST EXTRACTED:	5/18/2003 1:56:00 AM
ENFORCEMENT ACT:			
REG PROGRAM:	NOT IN A UNIVERSE - THE HANDLER IS NOT CURRENTLY IN ANY HAZARDOUS WASTE UNIVERSE.		

PROGRAM:	FRS	PROGRAM ID:	110004981636
PROVIDED BY:	FEDERAL AGENCY	AGENCY INTERESTED:	
AGENCY INT QUAL:		INTEREST ENDED:	
INT END QUAL:		SOURCE OF DATA:	FRS
LAST REPORTED:		LAST EXTRACTED:	
ENFORCEMENT ACT:			
REG PROGRAM:	FACILITY -		

SITE TYPE:	STATIONARY
INTEREST STATUS:	ACTIVE
DATA QUALITY:	V
LOCATION DESC:	
ADDRESS TYPE:	REGULAR URBAN
LAST REPORTED:	
POSTED TO DATABASE:	3/1/2000
DATA UPDATED:	1/6/2006 11:24:08 AM
ENTERED PERSON/METHOD:	REFRESH
PARENT REG ID:	
CONFIDENCE IN ADDR:	MEDIUM
ENFORCEMENT SENSITIVE:	N
REQ MANUAL REVIEW:	
REASON MAN REVIEW:	
SMALL BUS POLICY:	
ENFORCEMENT ACTION:	
DATA PUB ACCESS:	YES
INTERNAL SYS ID:	
FEDERAL FACILITY:	NO
FEDERAL AGENCY:	
TRIBAL LAND:	NO
TRIBAL LAND NAME:	
CONGRESSIONAL DIST:	01
LEGISLATIVE DIST:	10
HYDROLOGICAL UNTIS:	06010102
EPA REGION:	04
AIRSHED:	
CENSUS BLOCK:	

Target Property: SR 126
KINGSPORT TN 37664

JOB: 1135.00

SCHOOL

SEARCH ID: 101 **DIST/DIR:** 0.38 SE **MAP ID:** 55

NAME: GUNNINGS ACADEMY (HISTORICAL)
ADDRESS:
TN
SULLIVAN
CONTACT:

REV: 1/1/05
ID1: TN-132403
ID2:
STATUS:
PHONE:

DETAILS NOT AVAILABLE

SCHOOL

SEARCH ID: 99 **DIST/DIR:** 0.40 SE **MAP ID:** 56

NAME: SUNNYSIDE SCHOOL (HISTORICAL)
ADDRESS:
TN
SULLIVAN
CONTACT:

REV: 1/1/05
ID1: TN-135570
ID2:
STATUS:
PHONE:

DETAILS NOT AVAILABLE

Environmental FirstSearch
Site Detail Report

Target Property: SR 126
KINGSPORT TN 37664

JOB: 1135.00

FINDS

SEARCH ID: 16 **DIST/DIR:** 0.42 NW **MAP ID:** 57

NAME:	EXXON MOBIL CORP 56699	REV:	7/10/07
ADDRESS:	1673 FORT HENRY DR	ID1:	110004993204
	KINGSPORT TN 37664	ID2:	TND987777059
	SULLIVAN	STATUS:	FRS
CONTACT:		PHONE:	

FACILITY REGISTRATION INFORMATION:

PROGRAM:	FRS	PROGRAM ID:	110004993204
PROVIDED BY:	FEDERAL AGENCY	AGENCY INTERESTED:	
AGENCY INT QUAL:		INTEREST ENDED:	
INT END QUAL:		SOURCE OF DATA:	FRS
LAST REPORTED:		LAST EXTRACTED:	
ENFORCEMENT ACT:			
REG PROGRAM:	FACILITY -		

PROGRAM:	RCRAINFO	PROGRAM ID:	TND987777059
PROVIDED BY:	FEDERAL AGENCY	AGENCY INTERESTED:	
AGENCY INT QUAL:		INTEREST ENDED:	
INT END QUAL:		SOURCE OF DATA:	NOTIFICATION
LAST REPORTED:	3/2/2004	LAST EXTRACTED:	5/18/2003 1:55.51 AM
ENFORCEMENT ACT:			
REG PROGRAM:	NOT IN A UNIVERSE - THE HANDLER IS NOT CURRENTLY IN ANY HAZARDOUS WASTE UNIVERSE.		

SITE TYPE:	STATIONARY
INTEREST STATUS:	ACTIVE
DATA QUALITY:	V
LOCATION DESC:	
ADDRESS TYPE:	REGULAR URBAN
LAST REPORTED:	
POSTED TO DATABASE:	3/1/2000
DATA UPDATED:	1/5/2006 6:43:17 PM
ENTERED PERSON/METHOD:	REFRESH
PARENT REG ID:	
CONFIDENCE IN ADDR:	
ENFORCEMENT SENSITIVE:	N
REQ MANUAL REVIEW:	
REASON MAN REVIEW:	
SMALL BUS POLICY:	
ENFORCEMENT ACTION:	
DATA PUB ACCESS:	YES
INTERNAL SYS ID:	
FEDERAL FACILITY:	NO
FEDERAL AGENCY:	
TRIBAL LAND:	NO
TRIBAL LAND NAME:	
CONGRESSIONAL DIST:	
LEGISLATIVE DIST:	10
HYDROLOGICAL UNTIS:	
EPA REGION:	04
AIRSHED:	
CENSUS BLOCK:	

Environmental FirstSearch
Site Detail Report

Target Property: SR 126
KINGSPORT TN 37664

JOB: 1135.00

LUST

SEARCH ID: 72 **DIST/DIR:** 0.42 NW **MAP ID:** 57

NAME:	EXXON STATION	REV:	12/1/04
ADDRESS:	1673 FORT HENRY DRIVE	ID1:	1-820053
	KINGSPORT TN	ID2:	
		STATUS:	CLOSED
CONTACT:	EXXON COMPANY USA	PHONE:	

SITE INFORMATION

RELEASE DATE:		APPLICATION:	
NUM OF TANKS:		TOT DEDUCTABLE:	$ 0
AMOUNT REQUESTED:	$	DISALLOWED:	$
BALANCE DUE:	$	TOTAL PAID:	$
NET PAID:	$	RECEIVED APPLICATION:	5/18/1995
NUMBER RECEIVED:		AUTHOR RECEIVED:	5/18/1995
AUTHOR APPROVED:	7/14/1995	CONTRACTOR:	
APPROVAL:	N	COVERAGE:	
OWNER ID:			
TANK OWNER:	EXXON COMPANY USA		

Target Property: SR 126
KINGSPORT TN 37664

JOB: 1135.00

UST

SEARCH ID: 58 **DIST/DIR:** 0.42 NW **MAP ID:** 57

NAME: ZOOMERS 69
ADDRESS: 1673 FT. HENRY DRIVE
KINGSPORT TN 37660
SULLIVAN
CONTACT:

REV: 3/4/05
ID1: 1-820053
ID2:
STATUS:
PHONE:

SITE INFORMATION

TOTAL NUMBER OF TANKS: 4

OWNER INFORMATION:

OWNER ID NUMBER: 7945
OWNER DESCRIPTION: COMMERCIAL
OWNER NAME: ROGERS PETROLEUM, INC.
OWNER ADDRESS: 1634 WEST 1ST NORTH ST.
MORRISTOWN TN 37816
PHONE: (423) 581-7460

TANK INFORMATION:

TANK NUMBER: 1
TANK STATUS: CURRENTLY IN USE
TANK INSTALLED DATE: 5/7/1985

TANK CAPACITY: 8000 GALLONS
TANK CONTENTS: GASOLINE

MATERIALS OF CONSTRUCTION: FIBERGLASS REINFORCED PLASTIC / LINED INTERIOR

TANK PROTECTION INFORMATION:

MANUAL TANK GAUGE:	NO	TANK TIGHTNESS TEST:	YES
TANK INVENTORY CONTROL:	YES	AUTOMATIC TANK GAUGING:	NO
TANK VAPOR MONITOR:	NO	GROUNDWATER MONITORING:	NO
DOUBLE WALLED:	NO	SECONDARY CONTAINMENT	NO
SIR:	NO	TANK LEAK DETECTION LISTED:	NO

PIPE INFORMATION:

PIPE MATERIALS: FIBERGLASS REINFORCED PLASTIC / NONE
PIPING TYPE: PRESSURIZED

AUTO LINE LEAK DETECTION:	YES	LINE TIGHTNESS TEST:	YES
VAPOR MONITORING:	NO	GROUNDWATER MONITORING:	NO
DOUBLE WALLED:	NO	SECONDARY CONTAINMENT:	NO
SIR:	NO		

SPILL PROTECTION INSTALLED: YES OVERFILL INSTALLED: YES

TANK NUMBER: 2
TANK STATUS: CURRENTLY IN USE
TANK INSTALLED DATE: 5/7/1985

TANK CAPACITY: 10000 GALLONS
TANK CONTENTS: GASOLINE

- Continued on next page -

Target Property: SR 126
KINGSPORT TN 37664

JOB: 1135.00

UST

SEARCH ID: 58 **DIST/DIR:** 0.42 NW **MAP ID:** 57

NAME: ZOOMERS 69
ADDRESS: 1673 FT. HENRY DRIVE
KINGSPORT TN 37660
SULLIVAN
CONTACT:

REV: 3/4/05
ID1: 1-820053
ID2:
STATUS:
PHONE:

MATERIALS OF CONSTRUCTION: FIBERGLASS REINFORCED PLASTIC / LINED INTERIOR

TANK PROTECTION INFORMATION:

MANUAL TANK GAUGE:	NO	TANK TIGHTNESS TEST:	YES
TANK INVENTORY CONTROL:	YES	AUTOMATIC TANK GAUGING:	NO
TANK VAPOR MONITOR:	NO	GROUNDWATER MONITORING:	NO
DOUBLE WALLED:	NO	SECONDARY CONTAINMENT	NO
SIR:	NO	TANK LEAK DETECTION LISTED:	NO

PIPE INFORMATION:

PIPE MATERIALS:	FIBERGLASS REINFORCED PLASTIC / NONE		
PIPING TYPE:	PRESSURIZED		
AUTO LINE LEAK DETECTION:	YES	LINE TIGHTNESS TEST:	YES
VAPOR MONITORING:	NO	GROUNDWATER MONITORING:	NO
DOUBLE WALLED:	NO	SECONDARY CONTAINMENT:	NO
SIR:	NO		
SPILL PROTECTION INSTALLED:	YES	OVERFILL INSTALLED:	YES

TANK NUMBER: 3
TANK STATUS: CURRENTLY IN USE
TANK INSTALLED DATE: 5/7/1985

TANK CAPACITY: 12000 GALLONS
TANK CONTENTS: GASOLINE

MATERIALS OF CONSTRUCTION: FIBERGLASS REINFORCED PLASTIC / LINED INTERIOR

TANK PROTECTION INFORMATION:

MANUAL TANK GAUGE:	NO	TANK TIGHTNESS TEST:	YES
TANK INVENTORY CONTROL:	YES	AUTOMATIC TANK GAUGING:	NO
TANK VAPOR MONITOR:	NO	GROUNDWATER MONITORING:	NO
DOUBLE WALLED:	NO	SECONDARY CONTAINMENT	NO
SIR:	NO	TANK LEAK DETECTION LISTED:	NO

PIPE INFORMATION:

PIPE MATERIALS:	FIBERGLASS REINFORCED PLASTIC / NONE		
PIPING TYPE:	PRESSURIZED		
AUTO LINE LEAK DETECTION:	YES	LINE TIGHTNESS TEST:	YES
VAPOR MONITORING:	NO	GROUNDWATER MONITORING:	NO
DOUBLE WALLED:	NO	SECONDARY CONTAINMENT:	NO
SIR:	NO		
SPILL PROTECTION INSTALLED:	YES	OVERFILL INSTALLED:	YES

- Continued on next page -

Environmental FirstSearch
Site Detail Report

Target Property: SR 126
KINGSPORT TN 37664

JOB: 1135.00

UST

SEARCH ID: 58 **DIST/DIR:** 0.42 NW **MAP ID:** 57

NAME: ZOOMERS 69
ADDRESS: 1673 FT. HENRY DRIVE
KINGSPORT TN 37660
SULLIVAN
CONTACT:

REV: 3/4/05
ID1: 1-820053
ID2:
STATUS:
PHONE:

TANK NUMBER: 4
TANK STATUS: CURRENTLY IN USE
TANK INSTALLED DATE: 5/7/1985

TANK CAPACITY: 10000 GALLONS
TANK CONTENTS: DIESEL

MATERIALS OF CONSTRUCTION: FIBERGLASS REINFORCED PLASTIC / LINED INTERIOR

TANK PROTECTION INFORMATION:

MANUAL TANK GAUGE:	NO	TANK TIGHTNESS TEST:	YES
TANK INVENTORY CONTROL:	YES	AUTOMATIC TANK GAUGING:	NO
TANK VAPOR MONITOR:	NO	GROUNDWATER MONITORING:	NO
DOUBLE WALLED:	NO	SECONDARY CONTAINMENT	NO
SIR:	NO	TANK LEAK DETECTION LISTED:	NO

PIPE INFORMATION:

PIPE MATERIALS: FIBERGLASS REINFORCED PLASTIC / NONE
PIPING TYPE: PRESSURIZED

AUTO LINE LEAK DETECTION:	YES	LINE TIGHTNESS TEST:	YES
VAPOR MONITORING:	NO	GROUNDWATER MONITORING:	NO
DOUBLE WALLED:	NO	SECONDARY CONTAINMENT:	NO
SIR:	NO		

SPILL PROTECTION INSTALLED: YES OVERFILL INSTALLED: YES

Target Property: SR 126
KINGSPORT TN 37664

JOB: 1135.00

UST

SEARCH ID: 52 **DIST/DIR:** 0.44 NW **MAP ID:** 59

NAME: M AND M MARKET LLC.
ADDRESS: 1571 NORTH EASTMAN ROAD
KINGSPORT TN 37664
SULLIVAN
CONTACT:

REV: 3/4/05
ID1: 1-820230
ID2:
STATUS:
PHONE:

SITE INFORMATION

TOTAL NUMBER OF TANKS: 3

OWNER INFORMATION:

OWNER ID NUMBER: 5973
OWNER DESCRIPTION: COMMERCIAL
OWNER NAME: MANJIT DHALIWAL
OWNER ADDRESS: 1571 NORTH EASTMAN ROAD
KINGSPORT TN 37660
PHONE: (423) 378-3119

TANK INFORMATION:

TANK NUMBER: 1
TANK STATUS: CURRENTLY IN USE
TANK INSTALLED DATE: 5/7/1985

TANK CAPACITY: 8000 GALLONS
TANK CONTENTS: GASOLINE

MATERIALS OF CONSTRUCTION: CATHODICALLY PROTECTED STEEL / NONE

TANK PROTECTION INFORMATION:

MANUAL TANK GAUGE:	NO	TANK TIGHTNESS TEST:	NO
TANK INVENTORY CONTROL:	NO	AUTOMATIC TANK GAUGING:	YES
TANK VAPOR MONITOR:	NO	GROUNDWATER MONITORING:	NO
DOUBLE WALLED:	NO	SECONDARY CONTAINMENT	NO
SIR:	NO	TANK LEAK DETECTION LISTED:	NO

PIPE INFORMATION:

PIPE MATERIALS: GALVANIZED STEEL / CATHODICALLY PROTECTED
PIPING TYPE: PRESSURIZED

AUTO LINE LEAK DETECTION:	YES	LINE TIGHTNESS TEST:	YES
VAPOR MONITORING:	NO	GROUNDWATER MONITORING:	NO
DOUBLE WALLED:	NO	SECONDARY CONTAINMENT:	NO
SIR:	NO		
SPILL PROTECTION INSTALLED:	YES	OVERFILL INSTALLED:	YES

TANK NUMBER: 2
TANK STATUS: CURRENTLY IN USE
TANK INSTALLED DATE: 5/7/1985

TANK CAPACITY: 8000 GALLONS
TANK CONTENTS: GASOLINE

- Continued on next page -

Target Property: SR 126
KINGSPORT TN 37664

JOB: 1135.00

UST

SEARCH ID: 52 **DIST/DIR:** 0.44 NW **MAP ID:** 59

NAME: M AND M MARKET LLC.
ADDRESS: 1571 NORTH EASTMAN ROAD
KINGSPORT TN 37664
SULLIVAN
CONTACT:

REV: 3/4/05
ID1: 1-820230
ID2:
STATUS:
PHONE:

MATERIALS OF CONSTRUCTION: CATHODICALLY PROTECTED STEEL / NONE

TANK PROTECTION INFORMATION:

MANUAL TANK GAUGE:	NO	TANK TIGHTNESS TEST:	NO
TANK INVENTORY CONTROL:	NO	AUTOMATIC TANK GAUGING:	YES
TANK VAPOR MONITOR:	NO	GROUNDWATER MONITORING:	NO
DOUBLE WALLED:	NO	SECONDARY CONTAINMENT	NO
SIR:	NO	TANK LEAK DETECTION LISTED:	NO

PIPE INFORMATION:

PIPE MATERIALS: STEEL W/IMPRESSED CURRENT / CATHODICALLY PROTECTED
PIPING TYPE: PRESSURIZED

AUTO LINE LEAK DETECTION:	YES	LINE TIGHTNESS TEST:	YES
VAPOR MONITORING:	NO	GROUNDWATER MONITORING:	NO
DOUBLE WALLED:	NO	SECONDARY CONTAINMENT:	NO
SIR:	NO		
SPILL PROTECTION INSTALLED:	YES	OVERFILL INSTALLED:	YES

TANK NUMBER: 3
TANK STATUS: CURRENTLY IN USE
TANK INSTALLED DATE: 5/7/1985

TANK CAPACITY: 4000 GALLONS
TANK CONTENTS: GASOLINE

MATERIALS OF CONSTRUCTION: CATHODICALLY PROTECTED STEEL / NONE

TANK PROTECTION INFORMATION:

MANUAL TANK GAUGE:	NO	TANK TIGHTNESS TEST:	YES
TANK INVENTORY CONTROL:	NO	AUTOMATIC TANK GAUGING:	NO
TANK VAPOR MONITOR:	NO	GROUNDWATER MONITORING:	NO
DOUBLE WALLED:	NO	SECONDARY CONTAINMENT	NO
SIR:	NO	TANK LEAK DETECTION LISTED:	NO

PIPE INFORMATION:

PIPE MATERIALS: GALVANIZED STEEL / CATHODICALLY PROTECTED
PIPING TYPE: PRESSURIZED

AUTO LINE LEAK DETECTION:	YES	LINE TIGHTNESS TEST:	YES
VAPOR MONITORING:	NO	GROUNDWATER MONITORING:	NO
DOUBLE WALLED:	NO	SECONDARY CONTAINMENT:	NO
SIR:	NO		
SPILL PROTECTION INSTALLED:	YES	OVERFILL INSTALLED:	YES

- Continued on next page -

Environmental FirstSearch
Site Detail Report

Target Property: SR 126
KINGSPORT TN 37664

JOB: 1135.00

UST

SEARCH ID: 52 **DIST/DIR:** 0.44 NW **MAP ID:** 59

NAME:	M AND M MARKET LLC.	REV:	3/4/05
ADDRESS:	1571 NORTH EASTMAN ROAD	ID1:	1-820230
	KINGSPORT TN 37664	ID2:	
	SULLIVAN	STATUS:	
CONTACT:		PHONE:	

Target Property: SR 126
KINGSPORT TN 37664

JOB: 1135.00

WETLANDS

SEARCH ID: 86 **DIST/DIR:** 0.44 NW **MAP ID:** 58

NAME: NATIONAL WETLANDS INVENTORY
ADDRESS:
TN
CONTACT:

REV: 2/27/02
ID1: NWI-TN-12767
ID2:
STATUS: PUBHH
PHONE:

SITE INFORMATION

AREA:	766.043
PERIMETER:	106.303
WETC:	36
WETC_ID:	36
ATTRIBUTE:	PUBHh

FINDS

SEARCH ID: 28 **DIST/DIR:** 0.46 NW **MAP ID:** 60

NAME: SULLIVAN CNTY JAILandCNTY OFFICE
ADDRESS: 1201 N EASTMAN RD
KINGSPORT TN 37664
CONTACT:

REV:
ID1: TN0001716828
ID2:
STATUS:
PHONE:

DETAILS NOT AVAILABLE

WETLANDS

SEARCH ID: 82 **DIST/DIR:** 0.46 SE **MAP ID:** 61

NAME: NATIONAL WETLANDS INVENTORY
ADDRESS:
TN
CONTACT:

REV: 2/27/02
ID1: NWI-TN-12822
ID2:
STATUS: PUBFH
PHONE:

Environmental FirstSearch
Site Detail Report

Target Property: SR 126
KINGSPORT TN 37664

JOB: 1135.00

WETLANDS

SEARCH ID: 82 **DIST/DIR:** 0.46 SE **MAP ID:** 61

NAME: NATIONAL WETLANDS INVENTORY
ADDRESS:
TN
CONTACT:

REV: 2/27/02
ID1: NWI-TN-12822
ID2:
STATUS: PUBFH
PHONE:

SITE INFORMATION

AREA:	545.075
PERIMETER:	89.0217
WETC:	43
WETC_ID:	62
ATTRIBUTE:	PUBFh

Target Property: SR 126
KINGSPORT TN 37664

JOB: 1135.00

FINDS

SEARCH ID: 40 **DIST/DIR:** 0.47 SW **MAP ID:** 62

NAME:	HEPACO INC	REV:	7/10/07
ADDRESS:	279 SHIPLEY FERRY RD	ID1:	110014439303
	BLOUNTVILLE TN 37617	ID2:	TNR000015198
	SULLIVAN	STATUS:	FRS
CONTACT:		PHONE:	

FACILITY REGISTRATION INFORMATION:

PROGRAM:	FRS	PROGRAM ID:	110014439303
PROVIDED BY:	FEDERAL AGENCY	AGENCY INTERESTED:	7/1/2003 4:34:05 PM
AGENCY INT QUAL:		INTEREST ENDED:	
INT END QUAL:		SOURCE OF DATA:	RCRAINFO
LAST REPORTED:	7/1/2003 4:34:05 PM	LAST EXTRACTED:	
ENFORCEMENT ACT:			
REG PROGRAM:	FACILITY -		

PROGRAM:	RCRAINFO	PROGRAM ID:	TNR000015198
PROVIDED BY:	FEDERAL AGENCY	AGENCY INTERESTED:	
AGENCY INT QUAL:		INTEREST ENDED:	
INT END QUAL:		SOURCE OF DATA:	NOTIFICATION
LAST REPORTED:	4/2/2003	LAST EXTRACTED:	7/1/2003 4:34:05 PM
ENFORCEMENT ACT:			
REG PROGRAM:	TRANSPORTER - HAZARDOUS WASTE HANDLERS ENGAGED IN THE TRANSPORTATION OF HAZARDOUS WASTE.		

PROGRAM:	RCRAINFO	PROGRAM ID:	TNR000015198
PROVIDED BY:	FEDERAL AGENCY	AGENCY INTERESTED:	
AGENCY INT QUAL:		INTEREST ENDED:	
INT END QUAL:		SOURCE OF DATA:	NOTIFICATION
LAST REPORTED:	4/2/2003	LAST EXTRACTED:	7/1/2003 4:34:05 PM
ENFORCEMENT ACT:			

REG PROGRAM: LQG - HAZARDOUS WASTE LARGE QUANTITY GENERATORS GENERATE: (A) 1,000 KG OR MORE OF HAZARDOUS WASTE DURING ANY CALENDAR MONTH; OR (B) MORE THAN 1 KG OF ACUTELY HAZARDOUS WASTE DURING ANY CALENDAR MONTH; OR (C) MORE THAN 100 KG OF ANY RESIDUE OR CONTAMINATED SOIL, WASTE OR OTHER DEBRIS RESULTING FROM THE CLEANUP OF A SPILL, INTO OR ON ANY LAND OR WATER, OF ACUTELY HAZARDOUS WASTE DURING ANY CALENDAR MONTH; OR (D) 1 KG OR LESS OF ACUTELY HAZARDOUS WASTE DURING ANY CALENDAR MONTH, AND ACCUMULATE MORE THAN 1 KG OF ACUTELY HAZARDOUS WASTE AT ANY TIME; OR (E) 100 KG OR LESS OF ANY RESIDUE OR CONTAMINATED SOIL, WASTE OR OTHER DEBRIS RESULTING FROM THE CLEANUP OF A SPILL, INTO OR ON ANY LAND OR WATER, OF ACUTELY HAZARDOUS WASTE DURING ANY CALENDAR MONTH, AND ACCUMULATED MORE THAN 100 KG OF THAT MATERIAL AT ANY TIME.

SITE TYPE:	STATIONARY
INTEREST STATUS:	ACTIVE
DATA QUALITY:	V
LOCATION DESC:	
ADDRESS TYPE:	REGULAR URBAN
LAST REPORTED:	
POSTED TO DATABASE:	7/1/2003 4:34:05 PM
DATA UPDATED:	1/5/2006 8:40:15 PM
ENTERED PERSON/METHOD:	REFRESH
PARENT REG ID:	
CONFIDENCE IN ADDR:	MEDIUM
ENFORCEMENT SENSITIVE:	
REQ MANUAL REVIEW:	
REASON MAN REVIEW:	

- Continued on next page -

Target Property: SR 126
KINGSPORT TN 37664

JOB: 1135.00

FINDS

SEARCH ID: 40 **DIST/DIR:** 0.47 SW **MAP ID:** 62

NAME:	HEPACO INC	REV:	7/10/07
ADDRESS:	279 SHIPLEY FERRY RD	ID1:	110014439303
	BLOUNTVILLE TN 37617	ID2:	TNR000015198
	SULLIVAN	STATUS:	FRS
CONTACT:		PHONE:	

SMALL BUS POLICY:
ENFORCEMENT ACTION:
DATA PUB ACCESS: YES
INTERNAL SYS ID:

FEDERAL FACILITY: NO
FEDERAL AGENCY:
TRIBAL LAND: NO
TRIBAL LAND NAME:
CONGRESSIONAL DIST:
LEGISLATIVE DIST: 3
HYDROLOGICAL UNTIS:
EPA REGION: 04
AIRSHED:
CENSUS BLOCK:

Target Property: SR 126
KINGSPORT TN 37664

JOB: 1135.00

RCRAGN

SEARCH ID: 6 **DIST/DIR:** 0.47 SW **MAP ID:** 62

NAME:	HEPACO INC	REV:	6/6/06
ADDRESS:	279 SHIPLEY FERRY RD	ID1:	TNR000015198
	BLOUNTVILLE TN 37617	ID2:	
	SULLIVAN	STATUS:	LGN
CONTACT:	JON FRANCISCO	PHONE:	4233230133

SITE INFORMATION

CONTACT INFORMATION: JON FRANCISCO
SHIPLEY FERRY RD
BLOUNTVILLE TN 37617

PHONE: 4233230133

UNIVERSE INFORMATION:

NAIC INFORMATION

485991 - SPECIAL NEEDS TRANSPORTATION

ENFORCEMENT INFORMATION:

VIOLATION INFORMATION:

Environmental FirstSearch
Site Detail Report

Target Property: SR 126
KINGSPORT TN 37664

JOB: 1135.00

WETLANDS

SEARCH ID: 78 **DIST/DIR:** 0.48 SE **MAP ID:** 63

NAME: NATIONAL WETLANDS INVENTORY
ADDRESS:
TN
CONTACT:

REV: 2/27/02
ID1: NWI-TN-12799
ID2:
STATUS: PUBHH
PHONE:

SITE INFORMATION

AREA:	1782.77
PERIMETER:	159.85
WETC:	50
WETC_ID:	54
ATTRIBUTE:	PUBHh

Environmental FirstSearch
Site Detail Report

Target Property: SR 126
KINGSPORT TN 37664

JOB: 1135.00

FINDS

SEARCH ID: 27 **DIST/DIR:** 0.49 NW **MAP ID:** 64

NAME:	STATION IS IN THE NORTH CORNER OF A FENCED GRASSY	REV:	7/10/07
ADDRESS:	1649 D STREET	ID1:	110020862823
	KINGSPORT TN 37664	ID2:	
	SULLIVAN	STATUS:	FRS
CONTACT:		PHONE:	

FACILITY REGISTRATION INFORMATION:

PROGRAM:	AIRS/AQS	PROGRAM ID:	15018
PROVIDED BY:	FEDERAL AGENCY	AGENCY INTERESTED:	10/1/1998
AGENCY INT QUAL:	DATE MONITORING STARTED	INTEREST ENDED:	
INT END QUAL:		SOURCE OF DATA:	AQS SITES TRANSACTION
LAST REPORTED:		LAST EXTRACTED:	7/11/2006 2:06:34 PM
ENFORCEMENT ACT:			
REG PROGRAM:	AIR MONITORING SITE - A SITE ESTABLISHED TO MEASURE CONCENTRATIONS OF AIR POLLUTANTS.		

PROGRAM:	FRS	PROGRAM ID:	110020862823
PROVIDED BY:	FEDERAL AGENCY	AGENCY INTERESTED:	4/11/2005 8:06:57 PM
AGENCY INT QUAL:		INTEREST ENDED:	
INT END QUAL:		SOURCE OF DATA:	AIRS/AQS
LAST REPORTED:	4/11/2005 8:06:57 PM	LAST EXTRACTED:	
ENFORCEMENT ACT:			
REG PROGRAM:	FACILITY -		

SITE TYPE:	MONITORING STATION
INTEREST STATUS:	ACTIVE
DATA QUALITY:	V
LOCATION DESC:	
ADDRESS TYPE:	REGULAR URBAN
LAST REPORTED:	
POSTED TO DATABASE:	4/11/2005 8:06:57 PM
DATA UPDATED:	1/31/2006 3:18:50 PM
ENTERED PERSON/METHOD:	GHAZNAVI
PARENT REG ID:	
CONFIDENCE IN ADDR:	
ENFORCEMENT SENSITIVE:	N
REQ MANUAL REVIEW:	
REASON MAN REVIEW:	
SMALL BUS POLICY:	
ENFORCEMENT ACTION:	
DATA PUB ACCESS:	YES
INTERNAL SYS ID:	
FEDERAL FACILITY:	
FEDERAL AGENCY:	
TRIBAL LAND:	NO
TRIBAL LAND NAME:	
CONGRESSIONAL DIST:	
LEGISLATIVE DIST:	
HYDROLOGICAL UNTIS:	
EPA REGION:	04
AIRSHED:	
CENSUS BLOCK:	

Target Property: SR 126
KINGSPORT TN 37664

JOB: 1135.00

FINDS

SEARCH ID: 20 **DIST/DIR:** 0.50 SW **MAP ID:** 65

NAME:	MASSEYS CLEANERS	REV:	7/10/07
ADDRESS:	1175 SOUTH EASTMAN ROAD	ID1:	110004969963
	KINGSPORT TN 37660	ID2:	TND058663352
	SULLIVAN	STATUS:	FRS
CONTACT:		PHONE:	

FACILITY REGISTRATION INFORMATION:

PROGRAM:	FRS	PROGRAM ID:	110004969963
PROVIDED BY:	FEDERAL AGENCY	AGENCY INTERESTED:	
AGENCY INT QUAL:		INTEREST ENDED:	
INT END QUAL:		SOURCE OF DATA:	FRS
LAST REPORTED:		LAST EXTRACTED:	
ENFORCEMENT ACT:			
REG PROGRAM:	FACILITY -		

PROGRAM:	RCRAINFO	PROGRAM ID:	TND058663352
PROVIDED BY:	FEDERAL AGENCY	AGENCY INTERESTED:	
AGENCY INT QUAL:		INTEREST ENDED:	
INT END QUAL:		SOURCE OF DATA:	NOTIFICATION (RCRA)
LAST REPORTED:	2/12/2004	LAST EXTRACTED:	
ENFORCEMENT ACT:			

REG PROGRAM: CESQG - HAZARDOUS WASTE CONDITIONALLY EXEMPT SMALL QUANTITY GENERATORS GENERATE: A) 100 KILOGRAMS OR LESS OF HAZARDOUS WASTE PER CALENDAR MONTH, AND ACCUMULATE 1000 KG OR LESS OF HAZARDOUS WASTE AT ANY TIME; OR (B) ONE KILOGRAM OR LESS OF ACUTELY HAZARDOUS WASTE PER CALENDAR MONTH, AND ACCUMULATE AT ANY TIME: 1 KG OR LESS OF ACUTELY HAZARDOUS WASTE; OR 100 KG OR LESS OF ANY RESIDUE OR CONTAMINATED SOIL, WASTE OR OTHER DEBRIS RESULTING FROM THE CLEANUP OF A SPILL, INTO OR ON ANY LAND OR WATER, OF ACUTELY HAZARDOUS WASTE; OR (C) 100 KG OR LESS OF ANY RESIDUE OR CONTAMINATED SOIL, WASTE OR OTHER DEBRIS RESULTING FROM THE CLEANUP OF A SPILL, INTO OR ON ANY LAND OR WATER, OF ACUTELY HAZARDOUS WASTE DURING ANY CALENDAR MONTH, AND ACCUMULATE AT ANY TIME: 1 KG OR LESS OF ACUTELY HAZARDOUS WASTE; OR 100 KG OR LESS OF ANY RESIDUE OR CONTAMINATED SOIL, WASTE OR OTHER DEBRIS RESULTING FROM THE CLEANUP OF A SPILL, INTO OR ON ANY LAND OR WATER, OF ACUTELY HAZARDOUS WASTE.

SITE TYPE:	STATIONARY
INTEREST STATUS:	ACTIVE
DATA QUALITY:	V
LOCATION DESC:	
ADDRESS TYPE:	REGULAR URBAN
LAST REPORTED:	
POSTED TO DATABASE:	3/1/2000
DATA UPDATED:	1/5/2006 6:22.44 PM
ENTERED PERSON/METHOD:	REFRESH
PARENT REG ID:	
CONFIDENCE IN ADDR:	
ENFORCEMENT SENSITIVE:	N
REQ MANUAL REVIEW:	
REASON MAN REVIEW:	
SMALL BUS POLICY:	
ENFORCEMENT ACTION:	
DATA PUB ACCESS:	YES
INTERNAL SYS ID:	
FEDERAL FACILITY:	NO
FEDERAL AGENCY:	
TRIBAL LAND:	NO

- Continued on next page -

Target Property: SR 126
KINGSPORT TN 37664

JOB: 1135.00

FINDS

SEARCH ID: 20 **DIST/DIR:** 0.50 SW **MAP ID:** 65

NAME:	MASSEYS CLEANERS	REV:	7/10/07
ADDRESS:	1175 SOUTH EASTMAN ROAD	ID1:	110004969963
	KINGSPORT TN 37660	ID2:	TND058663352
	SULLIVAN	STATUS:	FRS
CONTACT:		PHONE:	

TRIBAL LAND NAME:	
CONGRESSIONAL DIST:	01
LEGISLATIVE DIST:	10
HYDROLOGICAL UNTIS:	06010102
EPA REGION:	04
AIRSHED:	
CENSUS BLOCK:	

Environmental FirstSearch
Site Detail Report

Target Property: SR 126
KINGSPORT TN 37664

JOB: 1135.00

FINDS

SEARCH ID: 21 **DIST/DIR:** 0.50 SW **MAP ID:** 65

NAME: MASSEYS CLEANERS INC
ADDRESS: GREENACRES SHOPPING CTR
KINGSPORT TN 37664
CONTACT:

REV:
ID1: TND058663352
ID2:
STATUS:
PHONE:

DETAILS NOT AVAILABLE

OTHER

SEARCH ID: 43 **DIST/DIR:** 0.50 SW **MAP ID:** 65

NAME: MASSEY S DRY CLEANERS
ADDRESS: 1175 EASTMAN DRIVE
KINGSPORT TN 37664
CONTACT:

REV: 01/25/07
ID1: D-82-108
ID2:
STATUS:
PHONE:

SITE INFORMATION

CERTIFICATE SERIAL NO:
SERIAL NO: 8593
RECEIPT NO: 0478
EXPIRE DATE:

Please contact the Tennessee Drycleaner Environmental Response Program at (615) 532-0900 for further information on this site.

Target Property: SR 126
KINGSPORT TN 37664

JOB: 1135.00

RCRAGN

SEARCH ID: 3 **DIST/DIR:** 0.50 SW **MAP ID:** 65

NAME:	MASSEYS CLEANERS	REV:	6/6/06
ADDRESS:	1175 SOUTH EASTMAN ROAD	ID1:	TND058663352
	KINGSPORT TN 37660	ID2:	
	SULLIVAN	STATUS:	VGN
CONTACT:	JAMES L POWERS	PHONE:	4232886304

SITE INFORMATION

CONTACT INFORMATION: JAMES L POWERS
PO BOX 3670
KINGSPORT TN 37664

PHONE: 4232458911

CONTACT INFORMATION: JAMES POWERS
PO BOX 3670
KINGSPORT TN 37664

PHONE: 4232886304

UNIVERSE INFORMATION:

NAIC INFORMATION

81232 - DRYCLEANING AND LAUNDRY SERVICES (EXCEPT COIN-OPERATED)

ENFORCEMENT INFORMATION:

VIOLATION INFORMATION:

HAZARDOUS WASTE INFORMATION:

The following spent halogenated solvents: Tetrachloroethylene, methylene chloride, trichloroethylene, 1,1,1-trichloroethane, chlorobenzene, 1,1,2-trichloro-1,2,2-trifluoroethane, ortho-dichlorobenzene, trichlorofluoromethane
Tetrachloroethylene

Environmental FirstSearch Descriptions

NPL: *EPA* NATIONAL PRIORITY LIST - The National Priorities List is a list of the worst hazardous waste sites that have been identified by Superfund. Sites are only put on the list after they have been scored using the Hazard Ranking System (HRS), and have been subjected to public comment. Any site on the NPL is eligible for cleanup using Superfund Trust money.
A Superfund site is any land in the United States that has been contaminated by hazardous waste and identified by the Environmental Protection Agency (EPA) as a candidate for cleanup because it poses a risk to human health and/or the environment.
FINAL - Currently on the Final NPL
PROPOSED - Proposed for NPL

NPL DELISTED: *EPA* NATIONAL PRIORITY LIST Subset - Database of delisted NPL sites. The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.
DELISTED - Deleted from the Final NPL

CERCLIS: *EPA* COMPREHENSIVE ENVIRONMENTAL RESPONSE COMPENSATION AND LIABILITY INFORMATION SYSTEM (CERCLIS)- CERCLIS is a database of potential and confirmed hazardous waste sites at which the EPA Superfund program has some involvement. It contains sites that are either proposed to be or are on the National Priorities List (NPL) as well as sites that are in the screening and assessment phase for possible inclusion on the NPL.
PART OF NPL- Site is part of NPL site
DELETED - Deleted from the Final NPL
FINAL - Currently on the Final NPL
NOT PROPOSED - Not on the NPL
NOT VALID - Not Valid Site or Incident
PROPOSED - Proposed for NPL
REMOVED - Removed from Proposed NPL
SCAN PLAN - Pre-proposal Site
WITHDRAWN - Withdrawn

NFRAP: *EPA* COMPREHENSIVE ENVIRONMENTAL RESPONSE COMPENSATION AND LIABILITY INFORMATION SYSTEM ARCHIVED SITES - database of Archive designated CERCLA sites that, to the best of EPA's knowledge, assessment has been completed and has determined no further steps will be taken to list this site on the National Priorities List (NPL). This decision does not necessarily mean that there is no hazard associated with a given site; it only means that, based upon available information, the location is not judged to be a potential NPL site.
NFRAP – No Further Remedial Action Plan
P - Site is part of NPL site
D - Deleted from the Final NPL
F - Currently on the Final NPL
N - Not on the NPL
O - Not Valid Site or Incident
P - Proposed for NPL
R - Removed from Proposed NPL
S - Pre-proposal Site
W – Withdrawn

RCRA COR ACT: *EPA* RESOURCE CONSERVATION AND RECOVERY INFORMATION SYSTEM SITES - Database of hazardous waste information contained in the Resource Conservation and Recovery Act Information (RCRAInfo), a national program management and inventory system about hazardous waste handlers. In general, all generators, transporters, treaters, storers, and disposers of hazardous waste are required to provide information about their activities to state environmental agencies. These agencies, in turn pass on the information to regional and national EPA offices. This regulation is governed by the Resource Conservation and Recovery Act (RCRA), as amended by the Hazardous and Solid Waste Amendments of 1984.
RCRAInfo facilities that have reported violations and subject to corrective actions.

RCRA TSD: *EPA* RESOURCE CONSERVATION AND RECOVERY INFORMATION SYSTEM

TREATMENT, STORAGE, and DISPOSAL FACILITIES. - Database of hazardous waste information contained in the Resource Conservation and Recovery Act Information (RCRAInfo), a national program management and inventory system about hazardous waste handlers. In general, all generators, transporters, treaters, storers, and disposers of hazardous waste are required to provide information about their activities to state environmental agencies. These agencies, in turn pass on the information to regional and national EPA offices. This regulation is governed by the Resource Conservation and Recovery Act (RCRA), as amended by the Hazardous and Solid Waste Amendments of 1984.
Facilities that treat, store, dispose, or incinerate hazardous waste.

RCRA GEN: ***EPA*** RESOURCE CONSERVATION AND RECOVERY INFORMATION SYSTEM GENERATORS - Database of hazardous waste information contained in the Resource Conservation and Recovery Act Information (RCRAInfo), a national program management and inventory system about hazardous waste handlers. In general, all generators, transporters, treaters, storers, and disposers of hazardous waste are required to provide information about their activities to state environmental agencies. These agencies, in turn pass on the information to regional and national EPA offices. This regulation is governed by the Resource Conservation and Recovery Act (RCRA), as amended by the Hazardous and Solid Waste Amendments of 1984.
Facilities that generate or transport hazardous waste or meet other RCRA requirements.
LGN - Large Quantity Generators
SGN - Small Quantity Generators
VGN – Conditionally Exempt Generator.
Included are RAATS (RCRA Administrative Action Tracking System) and CMEL (Compliance Monitoring & Enforcement List) facilities.

Federal IC / EC: ***EPA*** BROWNFIELD MANAGEMENT SYSTEM (BMS) - database designed to assist EPA in collecting, tracking, and updating information, as well as reporting on the major activities and accomplishments of the various Brownfield grant Programs.
FEDERAL ENGINEERING AND INSTITUTIONAL CONTROLS- Superfund sites that have either an engineering or an institutional control. The data includes the control and the media contaminated.

ERNS: ***EPA/NRC*** EMERGENCY RESPONSE NOTIFICATION SYSTEM (ERNS) - Database of incidents reported to the National Response Center. These incidents include chemical spills, accidents involving chemicals (such as fires or explosions), oil spills, transportation accidents that involve oil or chemicals, releases of radioactive materials, sightings of oil sheens on bodies of water, terrorist incidents involving chemicals, incidents where illegally dumped chemicals have been found, and drills intended to prepare responders to handle these kinds of incidents. Data since January 2001 has been received from the National Response System database as the EPA no longer maintains this data.

Tribal Lands: ***DOI/BIA*** INDIAN LANDS OF THE UNITED STATES - Database of areas with boundaries established by treaty, statute, and (or) executive or court order, recognized by the Federal Government as territory in which American Indian tribes have primary governmental authority. The Indian Lands of the United States map layer shows areas of 640 acres or more, administered by the Bureau of Indian Affairs. Included are Federally-administered lands within a reservation which may or may not be considered part of the reservation.

State/Tribal Sites: ***TDEC*** PROMULGATED SITE LIST - database of inactive hazardous substance sites.

State/Tribal SWL: ***TDEC*** SOLID WASTE FACILITY DATABASE - database of all permitted solid waste landfills.

State/Tribal LUST: ***TDEC*** FUND ELIGIBLE SITES - database of all sites that have received state assistance for leaking underground storage tanks.

State/Tribal UST/AST: ***TDEC*** TENNESSEE PETROLEUM UNDERGROUND STORAGE TANK - database of registered underground storage tanks. The data contains information such as the name, address and ID # of each tank owner, facility information such as the facility name, address, type of facility (e.g., state owned, commercial, private), contact name, address and phone number, facility phone number, tank information such as the size of tank, tank contents, tank and piping construction, installation date, status (e.g., currently in use, out-of-service, temporarily-out-of-service) and information about upgrading, etc.

State/Tribal VCP: ***TDEC*** VOLUNTARY CLEANUP OVERSIGHT AND ASSISTANCE PROGRAM (VOAP) -database of sites that offer people the opportunity to work proactively with state government to address necessary cleanup of a property to return it to productive use. In return for their efforts, participants can receive a No Further Action letter and a release of liability for areas where investigation and cleanup is

conducted.

Wetlands: *US FWS* NATIONAL WETLANDS INVENTORY (NWI) - database of information on the characteristics, extent, and status of the Nation's wetlands and deepwater habitats. This data is available for select areas of the United States.

Floodplains: *FEMA* FLOODPLAINS – database of 100 year and 500 year flood zone boundaries for select counties in the United States

Receptors: *US DOC* SENSITIVE RECEPTORS - 2005 Census Bureau's TIGER (Topologically Integrated Geographic Encoding and Referencing System) database of schools and hospitals. List of schools and hospitals that may house individuals deemed sensitive to environmental discharges due to their fragile immune systems.

USGS Soils: *USGS/NRCS* NATIONAL SOILS DATABASE - Database comprised of the State Soil Geographic (STATSGO) data for the conterminous United States, Soil Survey Geographic (SSURGO) and Digital Data Series Bedrock data. These databases contain information regarding soil characteristics such as water capacity, percent clay, organic material, permeability, thickness of layers, hydrological characteristics, quality of drainage, surface, slope, liquid limit, and the annual frequency of flooding.

NPDES: *EPA* THE NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM - Database of permitted facilities receiving and discharging effluents to and from a natural source where treatment of the effluent is monitored.

FINDS: *EPA* FACILITY INDEX SYSTEM(FINDS)/FACILITY REGISTRY SYSTEM(FRS) - The index of identification numbers associated with a property or facility which the EPA has investigated or has been made aware of in conjunction with various regulatory programs. Each record indicates the EPA office that may have files on the site or facility. A Facility Registry System site has an FRS in the status field.

TRIS: *EPA* TOXIC RELEASE INVENTORY SYSTEM (TRIS)– Database that contains information on toxic chemical releases and other waste management activities reported annually by certain covered industry groups as well as federal facilities. This inventory was established under the Emergency Planning and Community Right-to-Know Act of 1986 (EPCRA) and expanded by the Pollution Prevention Act of 1990.

HMIRS: *US DOT* HAZARDOUS MATERIALS INCIDENT RESPONSE SYSTEM - Database of information regarding materials, packaging, and a description of events for tracked incidents.

NCDB: *EPA* NATIONAL COMPLIANCE DATA BASE SYSTEM - Database of regional compliance and enforcement activity and manages the Pesticides and Toxic Substances Compliance and Enforcement program at a national level. The system tracks all compliance monitoring and enforcement activities from the time an inspector conducts and inspection until the time the inspector closes or the case settles the enforcement action. NCDB is the national repository of the 10 regional and Headquarters FIFRA/TSCA Tracking System (FTTS). Data collected in the regional FTTS is transferred to NCDB to support the need for monitoring national performance of regional programs.

PADS: *EPA* DATABASE OF PCB HANDLERS - Database of PolyChlorinatedBiPhenol generators, transporters, storers and/or disposers that are required to register with the EPA. This database indicates the type of handler and registration number. Also included is the PCB Transformer Registration Database.

RADON: *NTIS* NATIONAL RADON DATABASE - EPA radon data from 1990-1991 national radon project collected for a variety of zip codes across the United States.

State Other: *TDEC* REGISTERED FACILITIES LIST - database of permanent and temporary drycleaning facilities.

State Other: *US DOJ* NATIONAL CLANDESTINE LABORATORY REGISTER - Database of addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the U.S. Department of Justice ("the Department"), and the Department has not verified the entry and does not guarantee its accuracy. All sites that are included in this data set will have an id that starts with NCLR.

FI Map Coverage: *PROPRIETARY* FIRE INSURANCE MAP AVAILABILITY - Database of historical fire insurance map availability.

Environmental FirstSearch Database Sources

NPL: *EPA* Environmental Protection Agency

Updated quarterly

NPL DELISTED: *EPA* Environmental Protection Agency

Updated quarterly

CERCLIS: *EPA* Environmental Protection Agency

Updated quarterly

NFRAP: *EPA* Environmental Protection Agency.

Updated quarterly

RCRA COR ACT: *EPA* Environmental Protection Agency.

Updated quarterly

RCRA TSD: *EPA* Environmental Protection Agency.

Updated quarterly

RCRA GEN: *EPA* Environmental Protection Agency.

Updated quarterly

Federal IC / EC: *EPA* Environmental Protection Agency

Updated quarterly

ERNS: *EPA/NRC* Environmental Protection Agency

Updated semi-annually

Tribal Lands: *DOI/BIA* United States Department of the Interior

Updated annually

State/Tribal Sites: *TDEC* Tennessee Department of Environment and Conservation, Division of Remediation

Updated quarterly

State/Tribal SWL: ***TDEC*** Tennessee Department of Environment and Conservation, Solid Waste Program

Updated annually

State/Tribal LUST: ***TDEC*** Tennessee Department of Environment and Conservation, Division of Underground Storage Tanks

Updated quarterly

State/Tribal UST/AST: ***TDEC*** Tennessee Department of Environment and Conservation, Division of Underground Storage Tanks

Updated

State/Tribal VCP: ***TDEC*** Tennessee Department of Environment and Conservation

Updated quarterly

Wetlands: ***US FWS*** U.S. Fish and Wildlife Service

Updated when available

Floodplains: ***FEMA*** Federal Emergency Management Agency

Updated when available

Receptors: ***US DOC*** US Department of Commerce, Census Bureau

Updated periodically

USGS Soils: ***USGS/NRCS*** United States Geographical Survey

Updated annually

NPDES: ***EPA*** Environmental Protection Agency

Updated quarterly

FINDS: ***EPA*** Environmental Protection Agency

Updated annually

TRIS: ***EPA*** Environmental Protection Agency.

Updated quarterly

HMIRS: ***US DOT*** US Department of Transportation

Updated quarterly

NCDB: *EPA* Environmental Protection Agency

Updated quarterly

PADS: *EPA* Environmental Protection Agency

Updated quarterly

RADON: *NTIS* Environmental Protection Agency, National Technical Information Services

Updated periodically

State Other: *TDEC* Tennessee Department of Environment and Conservation, Drycleaner Environmental Response Program

Updated annually

State Other: *US DOJ* U.S. Department of Justice

Updated when available

FI Map Coverage: *PROPRIETARY* Library of Congress
Catalogue of Maps Published by Sanborn Mapping and Geographic Information Service in February 1988® ProQuest
Other internally produced datasets

Updated quarterly

Environmental FirstSearch
Street Name Report for Streets within .25 Mile(s) of Target Property

Target Property: SR 126
KINGSPORT TN 37664

JOB: 1135.00

Street Name	Dist/Dir	Street Name	Dist/Dir
Adams Acres Dr	0.07 NE	Lana View Dr	0.00 --
Adams St	0.08 NE	Landon Ct	0.16 SE
Adrian Dr	0.17 SE	Larry St	0.22 NE
Alameda Pl	0.10 S-	Laurel St	0.25 NW
Amy Ave	0.00 --	Leaside Dr	0.07 N-
Apache Dr	0.21 SE	Lemay Dr	0.00 --
Arapaho Dr	0.21 NW	Linda Ct	0.17 SE
Arley St	0.07 NW	Linden Rd	0.25 N-
Armstrong Ave	0.06 SE	Locust Dr	0.12 NE
Ashley St	0.21 SE	Lonesome Pine Rd	0.20 SW
Ashwood Ave	0.24 N-	Lynda Ln	0.06 NW
Aztec Dr	0.14 SW	Lynnbrook Ln	0.02 NE
Barger Pl	0.23 NE	Mandan Rd	0.07 NE
Berry St	0.12 NW	Mc Coy St	0.15 NW
Beverly Hill St	0.00 --	Meadow Rd	0.14 S-
Blakemore Dr	0.05 S-	Memorial Blvd	0.00 --
Blythwood	0.17 SE	Memorial Ct	0.04 NW
Bond Dr	0.05 NW	Miller St	0.00 --
Bond Ln	0.08 NW	Milton Ct	0.00 --
Bonita St	0.02 NW	Mohawk Cir	0.23 SW
Boss Rd	0.24 SE	Mohican Ln	0.05 SE
Briarwood Rd	0.00 --	Monterey Ave	0.23 S-
Bridwell Heights Rd	0.00 --	Montezuma Rd	0.00 --
Bridwell St	0.07 S-	Morningstar Ct	0.19 SE
Brookridge Dr	0.11 NW	Morningstar Dr	0.14 SE
Brookvalley Dr	0.08 NE	Mountain Dr	0.19 NW
Busbee St	0.02 NW	Mountain View Ave	0.08 SE
Carolina Pottery Dr	0.00 --	N John B Dennis Hwy	0.00 --
Cassidy Dr	0.00 --	Natchez Ln	0.00 --
Central St	0.00 --	NOCOVERAGE	0.00 --
Chestnut Ridge Rd	0.00 --	NORTH John B Dennis	0.00 --
Cheyenne Ln	0.16 NW	Old Fall Creek Rd	0.00 --
Chippewa Ln	0.18 NE	Old Parker Private D	0.09 SE
Clayman Rd	0.15 SW	Old Stage Rd	0.00 --
Clover St	0.06 SE	Oneida Ct	0.13 NW
Cochise Trl	0.00 --	Orebank Rd	0.00 --
Commanche Dr	0.19 NW	Overhill Dr	0.01 NE
Conway Dr	0.00 --	Parker St	0.06 SE
Cooks Valley Rd	0.00 --	Parkerson Dr	0.00 --
Country Dr	0.00 --	Peachtree Dr	0.14 NW
Cree St	0.00 --	Pear St	0.03 SE
Crestwood Dr	0.13 NW	Peers St	0.10 SE
Curtis Ct	0.23 SE	Pleasant Hill Dr	0.24 NW
Dakota Dr	0.00 --	Pocahontas Dr	0.08 SW
E Center St	0.00 --	Polk St	0.11 N-
EAST Center St	0.00 --	Red Robin Ln	0.00 --
Eatons Station Rd	0.00 --	Ridgeview St	0.13 SE
Eau Clair St	0.17 SE	Ridgeway Dr	0.12 SW

Environmental FirstSearch
Street Name Report for Streets within .25 Mile(s) of Target Property

Target Property: SR 126
KINGSPORT TN 37664

JOB: 1135.00

Street Name	Dist/Dir	Street Name	Dist/Dir
Edens Ridge Rd	0.00 --	Robin Ct	0.22 NW
Edens View Rd	0.14 NW	Robin St	0.17 NW
Elm St	0.23 SW	Rosecliff Dr	0.08 NE
Emory Harr Private D	0.03 SW	Rustic Way	0.25 SE
Ethel Dr	0.00 --	Samlola Rd	0.00 --
Fairhaven Ave	0.15 SW	Sanford Dr	0.25 S-
Fall Creek Rd	0.00 --	Santana Rd	0.00 --
Fisher Dr	0.00 --	Satana Rd	0.07 NE
Fleenor Dr	0.17 SE	Seneca Dr	0.18 SW
Fort Henry Dr	0.22 SW	Shamrock St	0.10 SE
Glen Eden Rd	0.13 NW	Shawnee Dr	0.13 SW
Glenbrook Dr	0.12 SE	Sherwood Rd	0.22 SW
Glenway Dr	0.21 SW	Shipley Ferry Rd	0.16 SE
Glenwood St	0.00 --	Shuler Dr	0.00 --
Gott St	0.15 S-	Sioux Dr	0.21 SE
Grace Dr	0.17 SW	Skyland Dr	0.00 --
Gravel Top Rd	0.00 --	Skyland Ln	0.07 SE
Green Spring Cir	0.07 NW	Skyline Ave	0.23 SE
Harbor Chapel Rd	0.09 SE	Smith Dr	0.21 SW
Harbor Cir	0.15 SE	Spring Hill Dr	0.17 NW
Harbor Dr	0.22 SW	Stadium Dr	0.14 NW
Harr Town Road	0.00 --	Stagecoach Rd	0.10 NW
Hawthorne St	0.00 --	Steadman St	0.18 N-
Heather Ln	0.00 --	Stratford Rd	0.00 --
Hemlock Ln	0.25 NW	Summit Dr	0.11 SW
Hickory St	0.18 NW	Sunbury Ct	0.08 SE
Highway 126	0.00 --	Sycamore St	0.12 NW
Hill Rd	0.00 --	Tacoma Rd	0.20 S-
Hillcrest Dr	0.00 --	Tanglewood Rd	0.00 --
Hobbs St	0.04 SE	Timberlake Ln	0.17 NW
Holiday Hills Rd	0.00 --	Tinker Ln	0.24 SE
Hunter Ln	0.21 SE	Triangle Cir	0.19 SE
Huron Cir	0.05 NW	Trinity Ln	0.00 --
Hydaway Pl	0.24 SW	Union Way	0.21 NW
I-81	0.00 --	Virginia Ave	0.16 N-
Inglewood Dr	0.25 NE	Warpath Dr	0.00 --
Ingram St	0.06 SW	Washington Ave	0.22 N-
Island Rd	0.00 --	Wembeck Dr	0.00 --
Jessee St	0.00 --	Wilburn Dr	0.00 --
John B Dennis Hwy	0.00 --	Woodhaven Dr	0.23 SE
Kenmore Dr	0.00 --	Woodridge Ave	0.03 NW
Kent St	0.00 --	Woods Way	0.00 --
Kiowa St	0.00 --	Woodside Dr	0.00 --
Kite St	0.00 --		

HISTORICAL FIRE INSURANCE MAPS

MAPS AVAILABLE

07-31-07
1135.00
SR 126
KINGSPORT TN 37664

A search of FirstSearch Technology Corporation's proprietary database of historical fire insurance map availability confirmed that there is a high probability that MAPS ARE AVAILABLE for the Subject Location as shown above.

FirstSearch Technology Corporation's proprietary database of historical fire insurance map availability represents abstracted information from the Sanborn® Map Company obtained through online access to the U.S. Library of Congress via local libraries.

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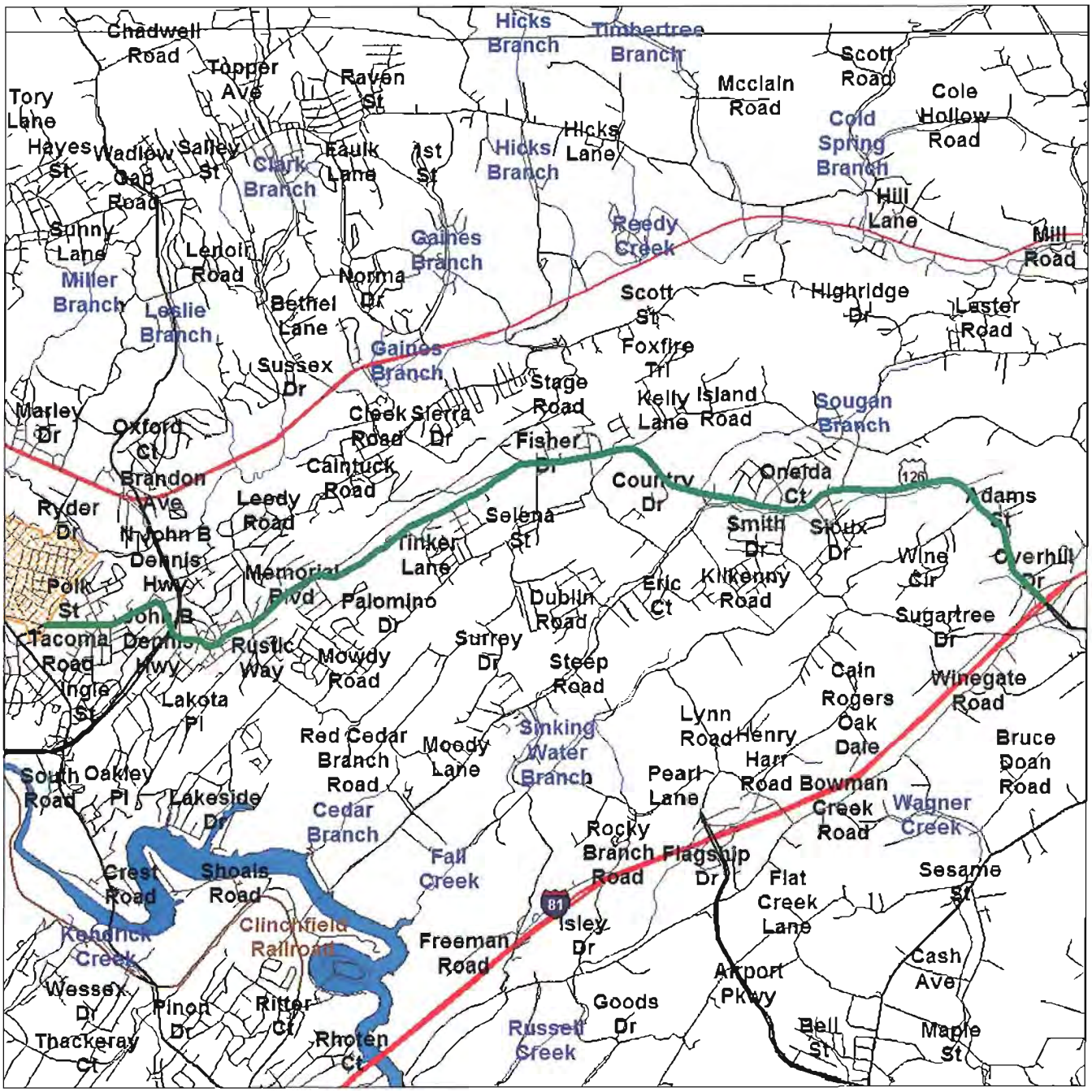
Environmental FirstSearch

.12 Mile Radius from Line

Historical Fire Insurance Coverage Map

SR 126 , KINGSPORT TN 37664



Source: 2005 U.S. Census TIGER Files

Linear Search Line .....

Historical Fire Insurance Coverage Map .....

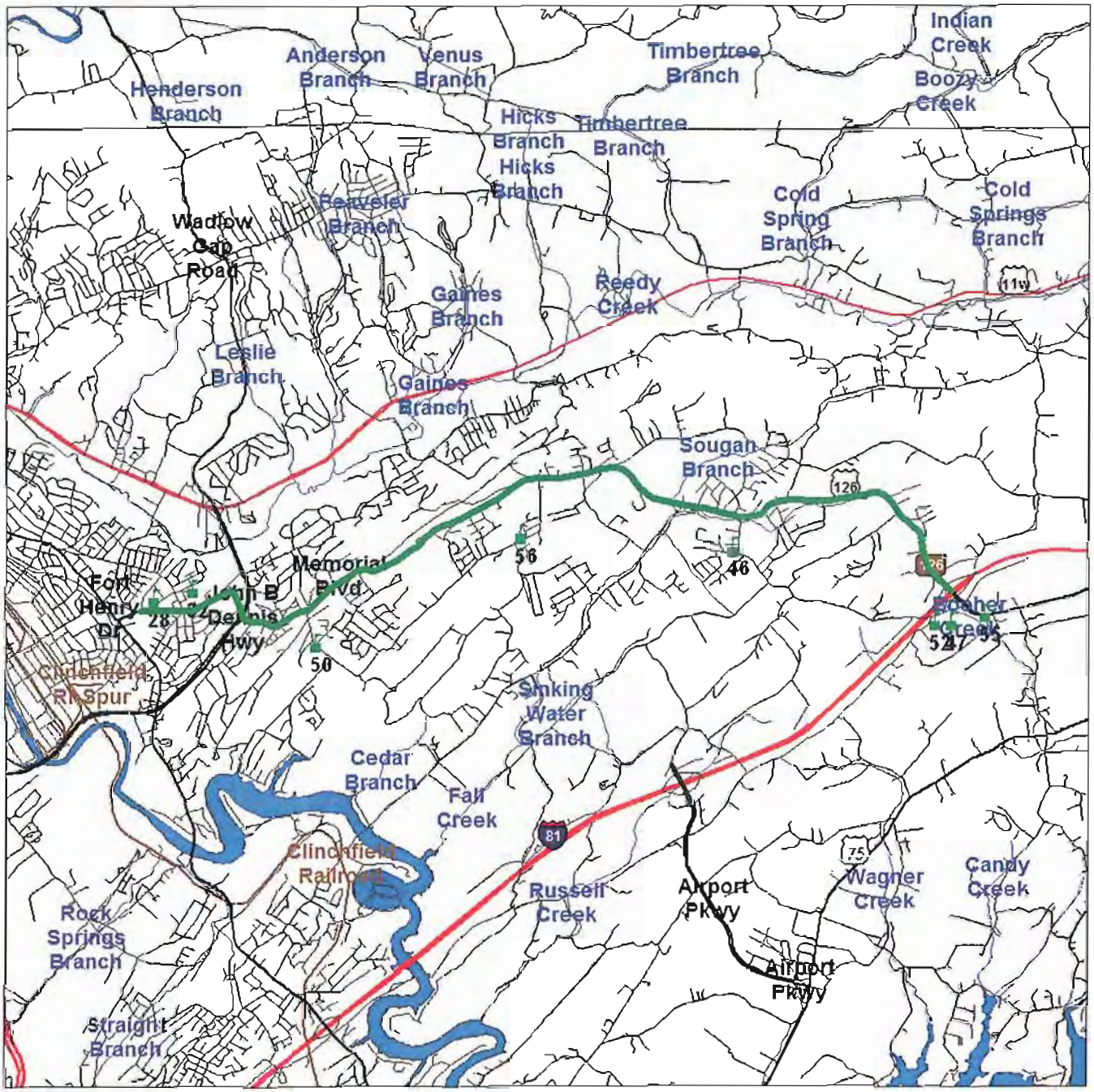
Railroads .....

Environmental FirstSearch

1 Mile Radius from Line

ASTM Map: NPL, RCRACOR, STATE Sites

SR 126 , KINGSPORT TN 37664



Source: 2005 U.S. Census TIGER Files

Linear Search Line

Identified Site, Multiple Sites, Receptor

NPL, DELNPL, Brownfield, Solid Waste Landfill (SWL), Hazardous Waste

Triballand

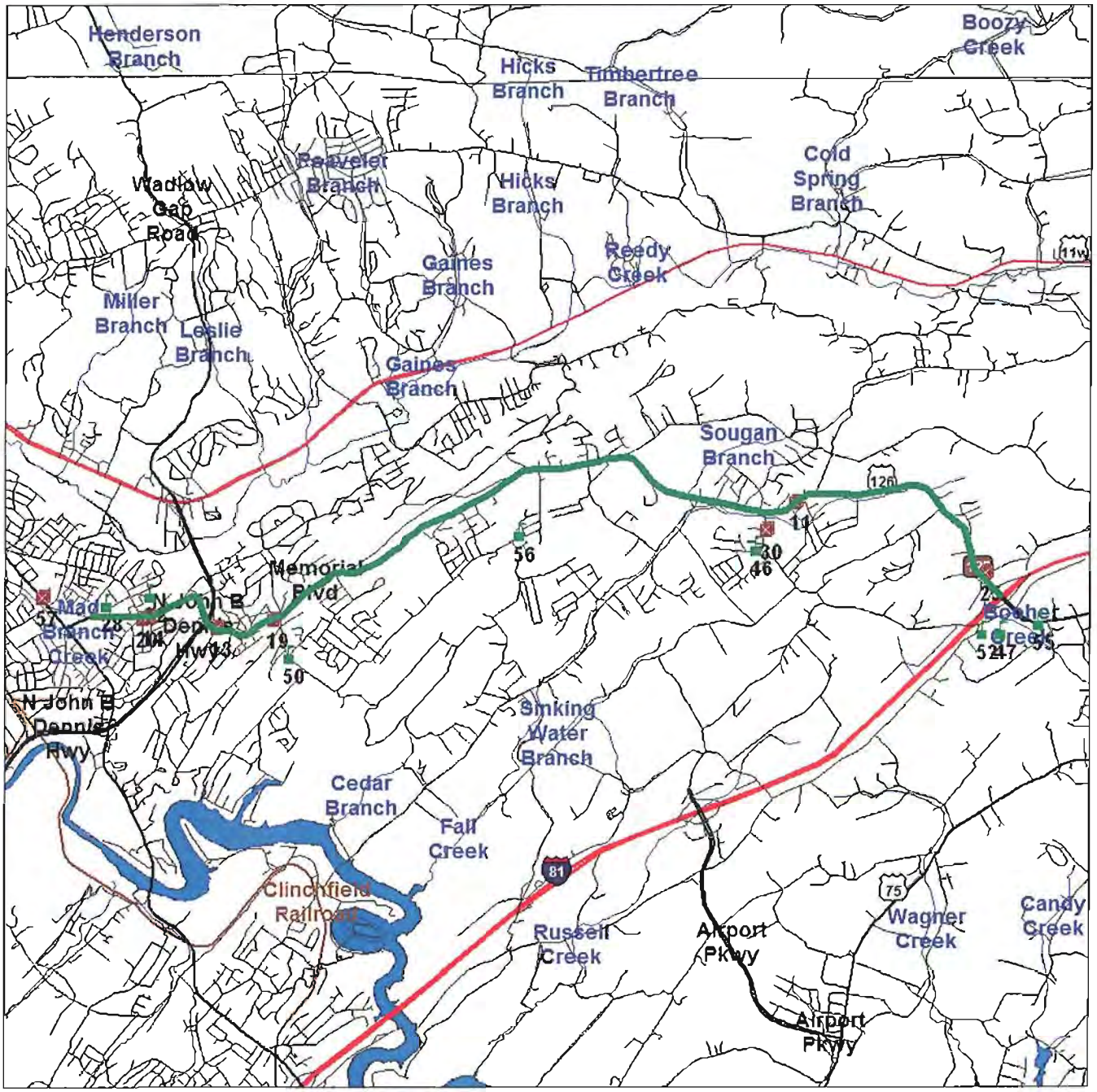
Railroads

Environmental FirstSearch

.5 Mile Radius from Line

ASTM Map: CERCLIS, RCRATSD, LUST, SWL

SR 126 , KINGSPORT TN 37664



Source: 2005 U.S. Census TIGER Files

Linear Search Line .....

Identified Site, Multiple Sites, Receptor .....

NPL, DELNPL, Brownfield, Solid Waste Landfill (SWL), Hazardous Waste

Triballand .....

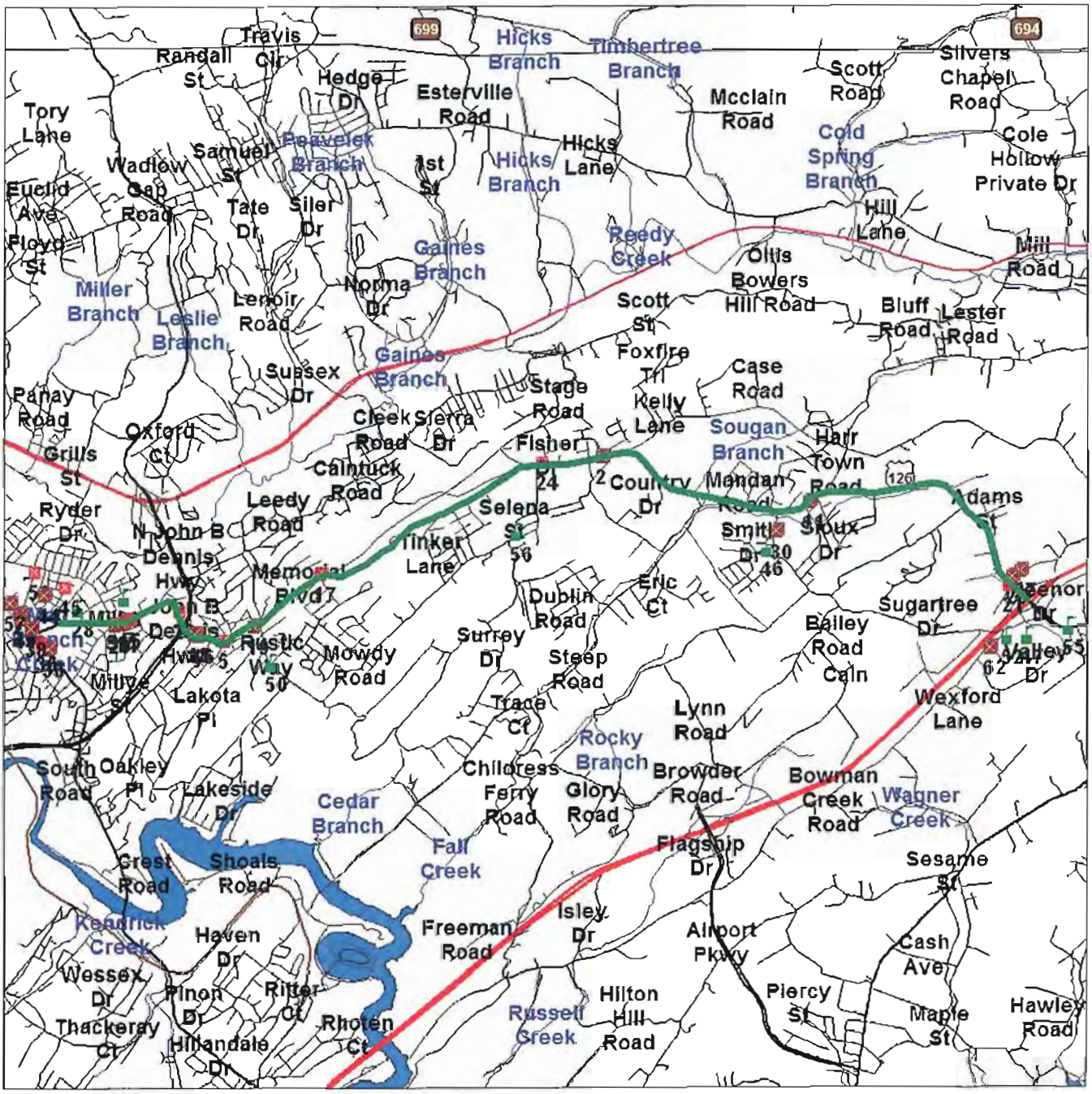
Railroads .....

Environmental FirstSearch

.25 Mile Radius from Line

ASTM Map: RCRAGEN, ERNS, UST

SR 126 , KINGSPORT TN 37664



Source: 2005 U.S. Census TIGER Files

Linear Search Line

Identified Site, Multiple Sites, Receptor

NPL, DELNPL, Brownfield, Solid Waste Landfill (SWL), Hazardous Waste

Triballand

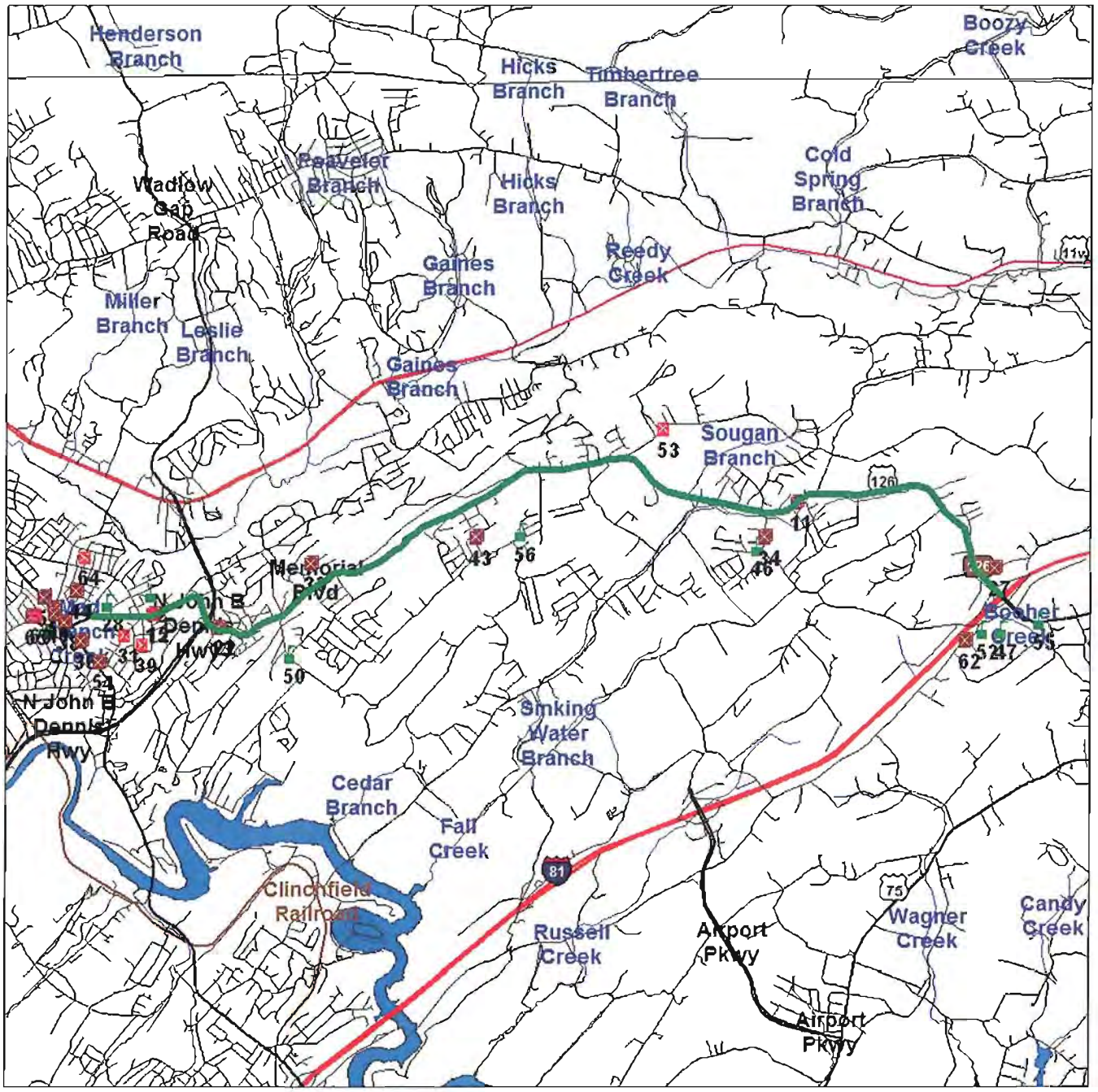
Railroads

Environmental FirstSearch

.5 Mile Radius from Line

Non-ASTM Map: NPDES, FINDS, Other, NCDB

SR 126 , KINGSPORT TN 37664



Source: 2005 U.S. Census TIGER Files

Linear Search Line .....

Identified Site, Multiple Sites, Receptor .....

NPL, DELNPL, Brownfield, Solid Waste Landfill (SWL), Hazardous Waste

Triballand.....

National Historic Sites and Landmark Sites .....

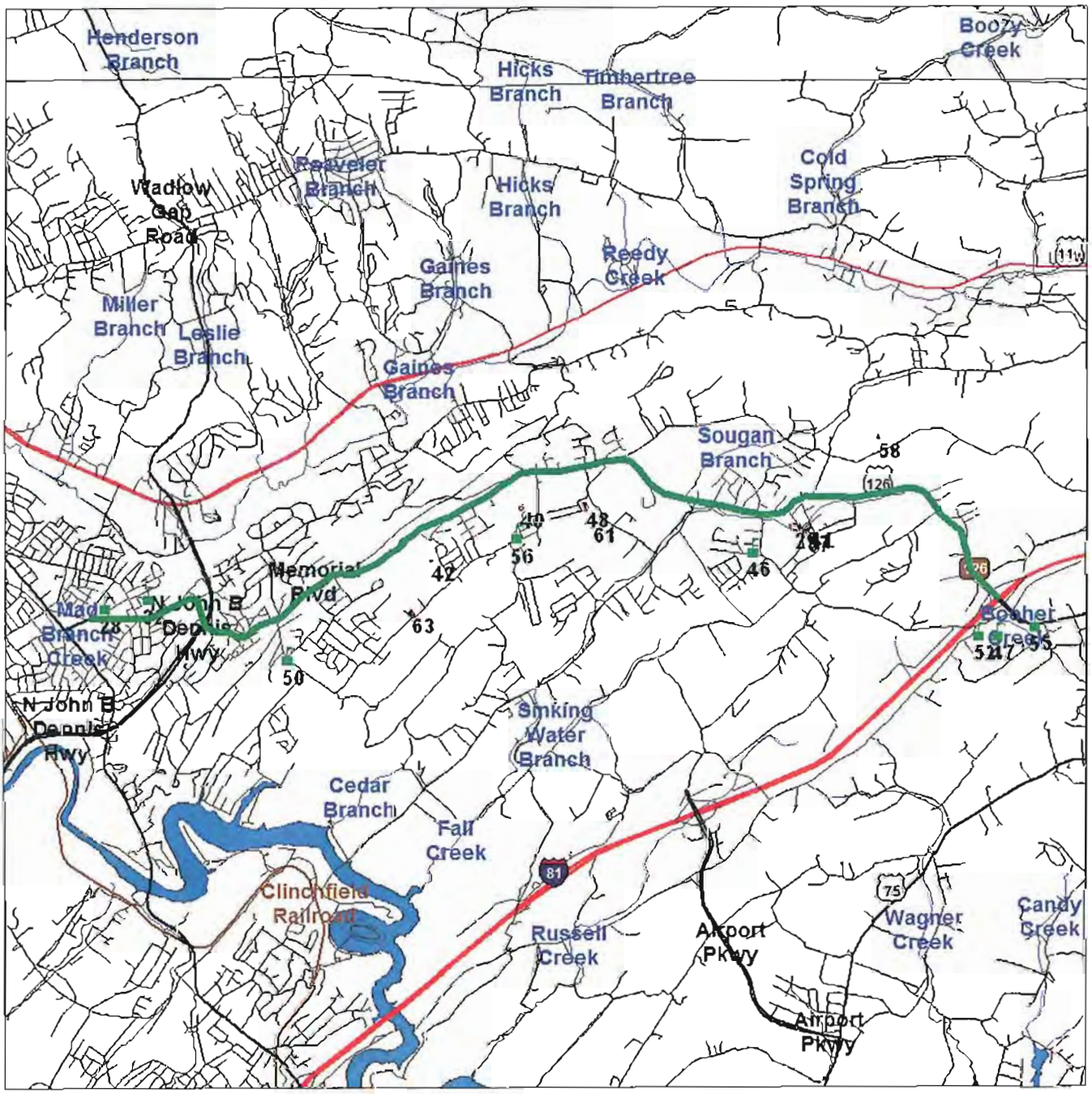
Railroads .....

Environmental FirstSearch

.5 Mile Radius from Line

Wetlands Sites

SR 126 , KINGSPORT TN 37664



Source: 2005 U.S. Census TIGER Files

Linear Search Line .....

Identified Site, Multiple Sites, Receptor .....

NPL, DELNPL, Brownfield, Solid Waste Landfill (SWL), Hazardous Waste

Triballand .....

Railroads .....

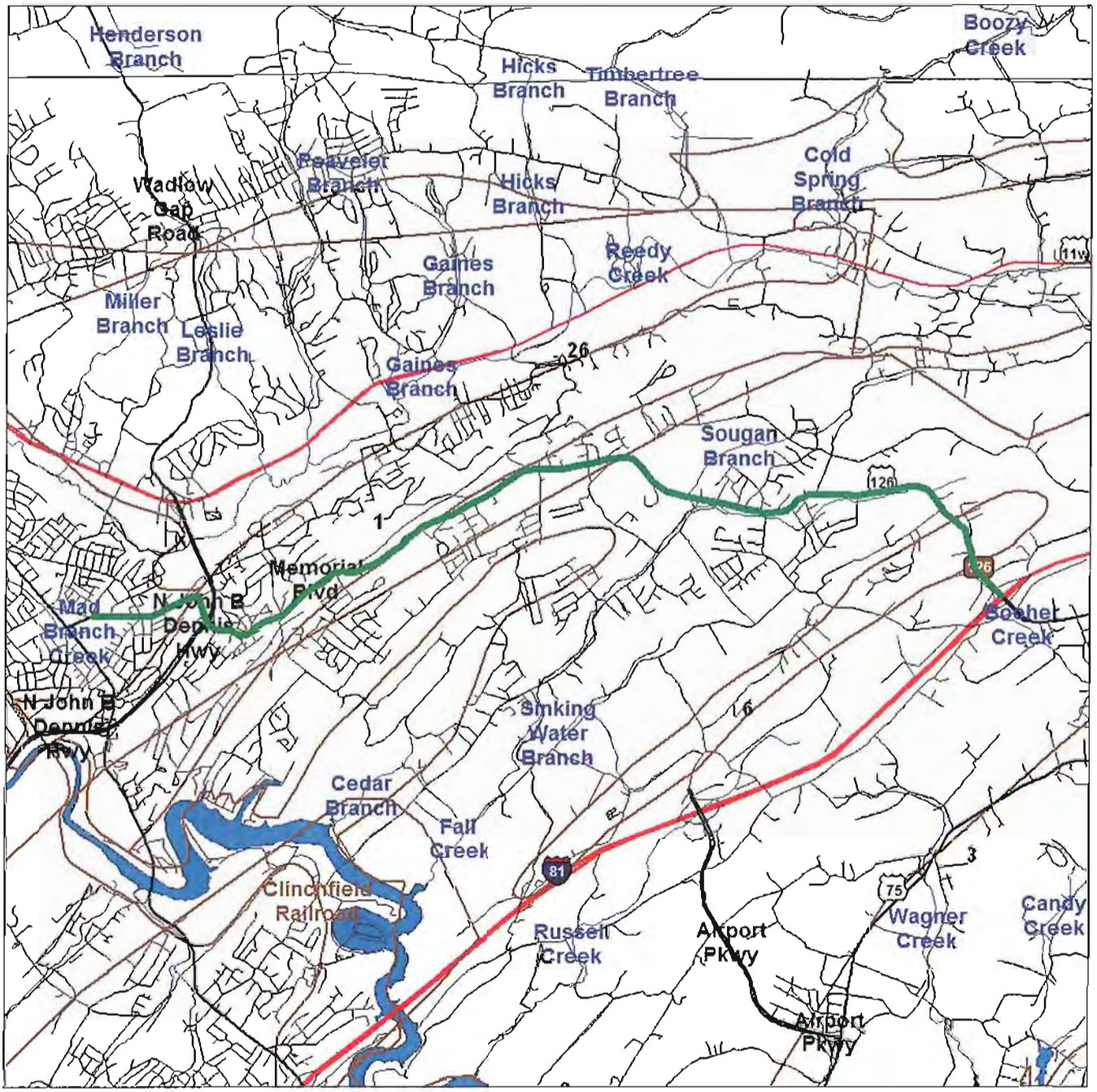
Wetlands .....

Environmental FirstSearch

.5 Mile Radius from Line

USGS US Soil Sites

SR 126 , KINGSPORT TN 37664



Source: 2005 U.S. Census TIGER Files

Linear Search Line .....

Identified Site, Multiple Sites, Receptor .....

NPL, DELNPL, Brownfield, Solid Waste Landfill (SWL), Hazardous Waste

Triballand.....

Railroads .....

Environmental FirstSearch

Map Width: 0.790 Mile(s)

Selected FEDERAL STATE LOCAL Sites

SR 126 , KINGSPORT TN 37664



Source: 2005 U.S. Census TIGER Files

Linear Search Line .....

Identified Site, Multiple Sites, Receptor .....

NPL, DELNPL, Brownfield, Solid Waste Landfill (SWL), Hazardous Waste

Triballand.....

Soil Sites .....

Railroads .....

Floodplains: 100 Year, 500 Year .....

Wetlands .....

Environmental FirstSearch

Map Width: 1.218 Mile(s)

Selected FEDERAL STATE LOCAL Sites

SR 126 , KINGSPORT TN 37664



Source: 2005 U.S. Census TIGER Files

Linear Search Line .....

Identified Site, Multiple Sites, Receptor .....

NPL, DELNPL, Brownfield, Solid Waste Landfill (SWL), Hazardous Waste .....

Triballand .....

Soil Sites .....

Railroads .....

Floodplains: 100 Year, 500 Year .....

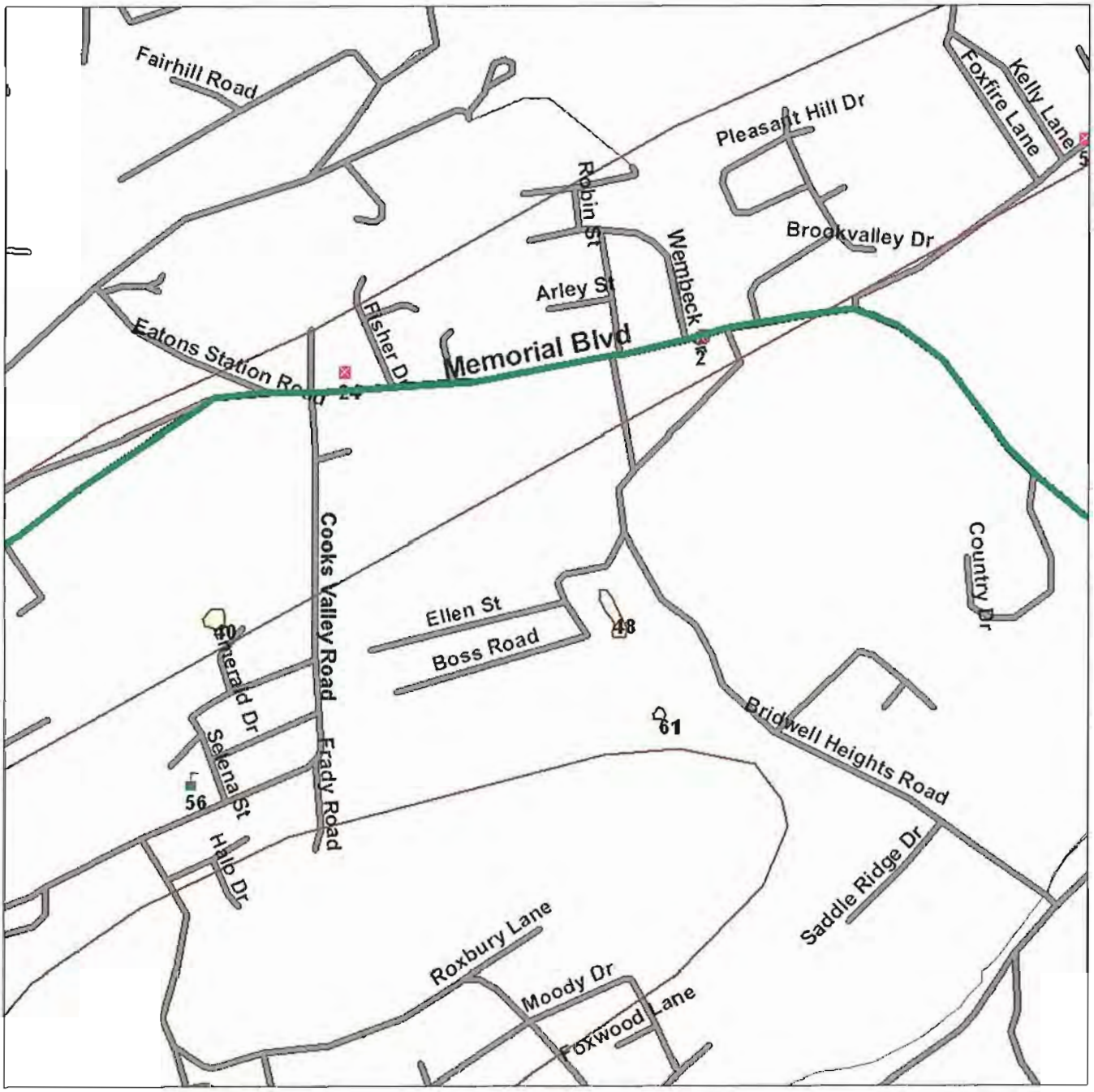
Wetlands .....

Environmental FirstSearch

Map Width: 1.136 Mile(s)

Selected FEDERAL STATE LOCAL Sites

SR 126 , KINGSPORT TN 37664



Source: 2005 U.S. Census TIGER Files

Linear Search Line

Identified Site, Multiple Sites, Receptor

NPL, DELNPL, Brownfield, Solid Waste Landfill (SWL), Hazardous Waste

Triballand

Soil Sites

Railroads

Floodplains: 100 Year, 500 Year

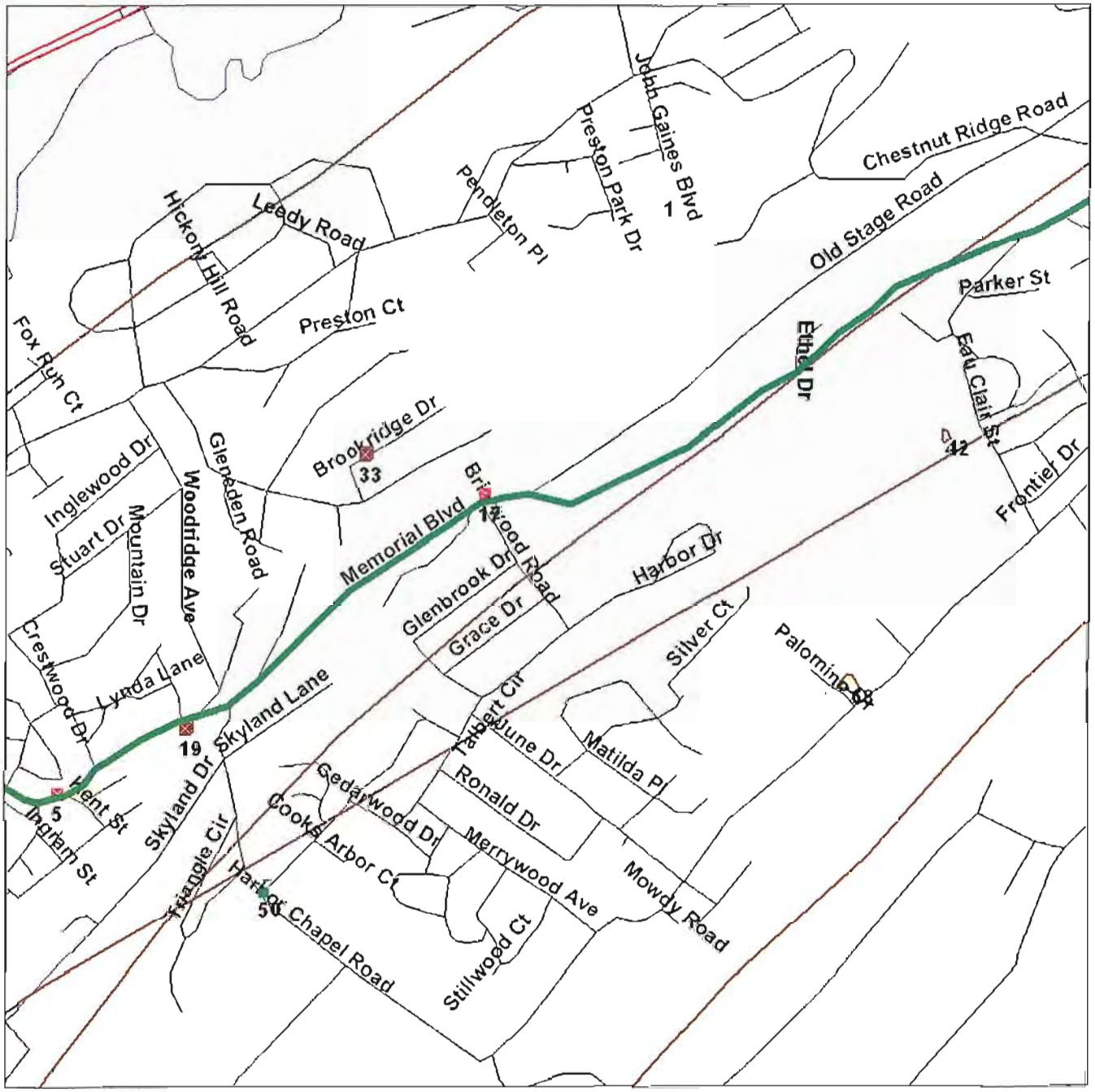
Wetlands

Environmental FirstSearch

Map Width: 1.494 Mile(s)

Selected FEDERAL STATE LOCAL Sites

SR 126 , KINGSPORT TN 37664



Source: 2005 U.S. Census TIGER Files

Linear Search Line

Identified Site, Multiple Sites, Receptor

NPL, DELNPL, Brownfield, Solid Waste Landfill (SWL), Hazardous Waste

Triballand

Soil Sites

Railroads

Floodplains: 100 Year, 500 Year

Wetlands

Environmental FirstSearch

Map Width: 0.934 Mile(s)

Selected FEDERAL STATE LOCAL Sites

SR 126 , KINGSPORT TN 37664



Source: 2005 U.S. Census TIGER Files

Linear Search Line

Identified Site, Multiple Sites, Receptor

NPL, DELNPL, Brownfield, Solid Waste Landfill (SWL), Hazardous Waste

Triballand

Soil Sites

Railroads

Floodplains: 100 Year, 500 Year

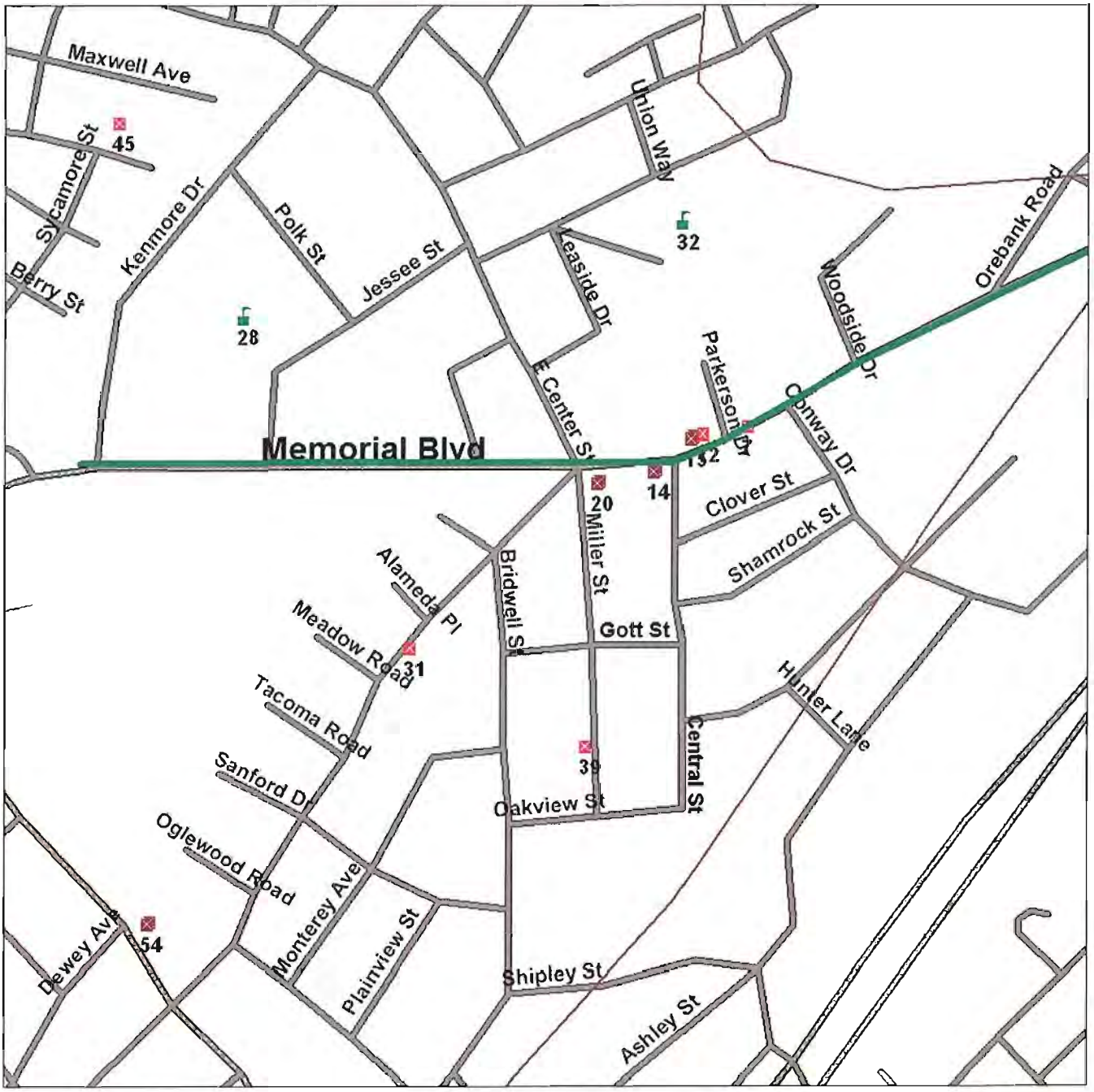
Wetlands

Environmental FirstSearch

Map Width: 0.698 Mile(s)

Selected FEDERAL STATE LOCAL Sites

SR 126 , KINGSPORT TN 37664



Source: 2005 U.S. Census TIGER Files

Linear Search Line

Identified Site, Multiple Sites, Receptor

NPL, DELNPL, Brownfield, Solid Waste Landfill (SWL), Hazardous Waste

Triballand

Soil Sites

Railroads

Floodplains: 100 Year, 500 Year

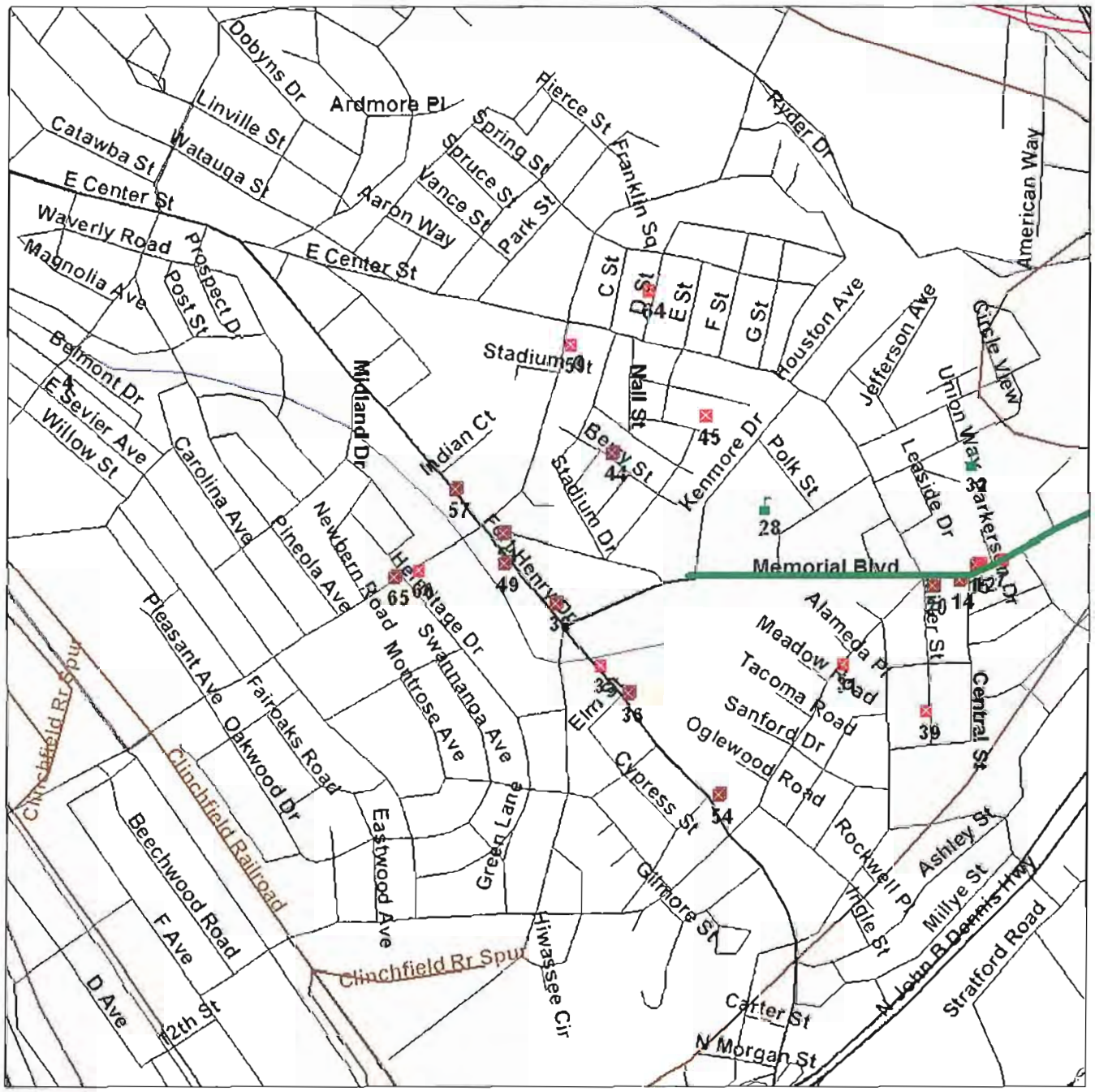
Wetlands

Environmental FirstSearch

Map Width: 1.474 Mile(s)

Selected FEDERAL STATE LOCAL Sites

SR 126 , KINGSPORT TN 37664



Source: 2005 U.S. Census TIGER Files

Linear Search Line .....

Identified Site, Multiple Sites, Receptor .....

NPL, DELNPL, Brownfield, Solid Waste Landfill (SWL), Hazardous Waste

Triballand.....

Soil Sites .....

Railroads .....

Floodplains: 100 Year, 500 Year .....

Wetlands .....

APPENDIX B

Project Maps

Project Area Maps

Sanborn Maps

Land Use Aerial Maps

TYPE	YEAR	PROJECT NO.	SHEET NO.
			4

0 100 200 300

N

WOODSIDE DR.

PARKERSON DR.

OREBANK RD.

CENTER ST.

CENTRAL ST.

CONWAY DR.

WARPATH DR

EXIST. SR-126

CONSTRUCTION LIMITS

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

FINAL REC.
SULLIVAN COUNTY
S.R. 126

SCALE: 1"=100'

...\DESIGN\V8 files\sl126l01E.dgn 3/6/2008 4:00:25 PM

TYPE	YEAR	PROJECT NO.	SHEET NO.
			5

0 100 200 300

EDENS RIDGE RD.

HAWTHORNE ST.

STRATFORD DR.

CONSTRUCTION LIMITS

MATCH LINE

SEE SHEET NO. 6

SUN BRIDGE HILLSIDE CARE & REHAB

POOL

DEBRIS

MISC STRUCTURE

AREA U/C

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

FINAL REC.
SULLIVAN COUNTY
S.R. 126

SCALE: 1"=100'

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TYPE	YEAR	PROJECT NO.	SHEET NO.
			6

0 100 200 300

BEVERLY HILLS ST.

GLENWOOD ST.

HAWTHORNE ST

KITE ST.

KENT ST.

HARBOR CHAPEL RD

CONSTRUCTION LIMITS

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

FINAL REC.
SULLIVAN COUNTY
S.R. 126

SCALE: 1"=100'

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TYPE	YEAR	PROJECT NO.	SHEET NO.
			7

CEMETERY

TRINITY LN.

AMY AVE.

ATHLETIC FIELD

EXIST. SR-126

CONSTRUCTION LIMITS

SEE SHEET NO. 6

SEE SHEET NO. 8

MATCH LINE STA. 216+00

MATCH LINE STA. 301+00

TANGLEWOOD RD.

RES.

POOL

0 100 200 300

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

FINAL REC.
SULLIVAN COUNTY
S.R. 126

SCALE: 1"=100'

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TYPE	YEAR	PROJECT NO.	SHEET NO.
			8

0 100 200 300

OLD STAGE RD.

BRIARWOOD RD.

CONSTRUCTION LIMITS

SEE SHEET NO. 7

SEE SHEET NO. 9

MATCH LINE STA. 301+00

MATCH LINE STA. 314+00

OBSCURED AREA

RES.

DEBRIS

ACE INSURANCE SERVICE

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

FINAL REC.
SULLIVAN COUNTY
S.R. 126

SCALE: 1"=100'

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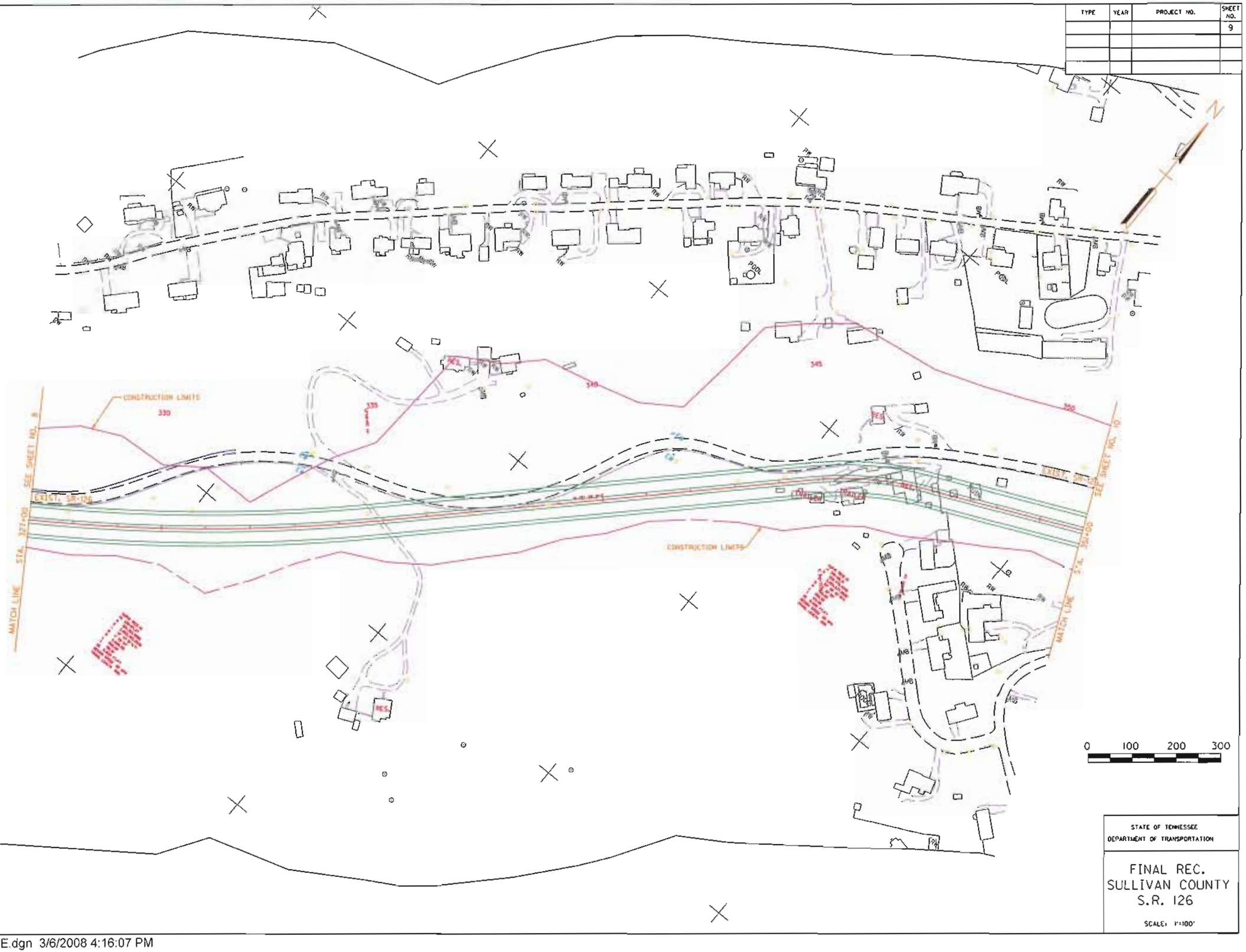
TYPE	YEAR	PROJECT NO.	SHEET NO.
			9



STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

FINAL REC.
SULLIVAN COUNTY
S.R. 126

SCALE: 1"=100'

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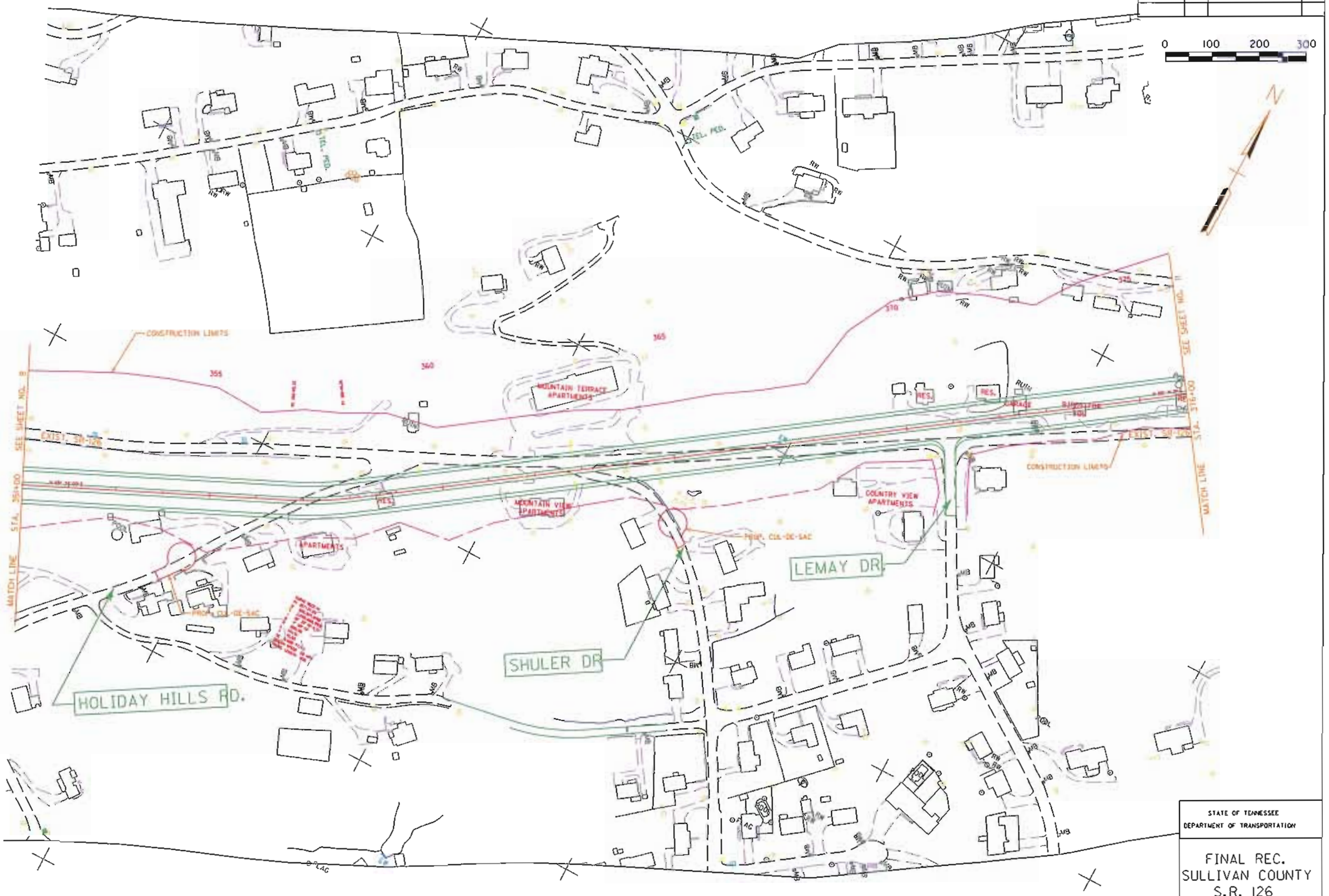
TYPE	YEAR	PROJECT NO.	SHEET NO.
			10



STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

FINAL REC.
SULLIVAN COUNTY
S.R. 126

SCALE: 1"=100'

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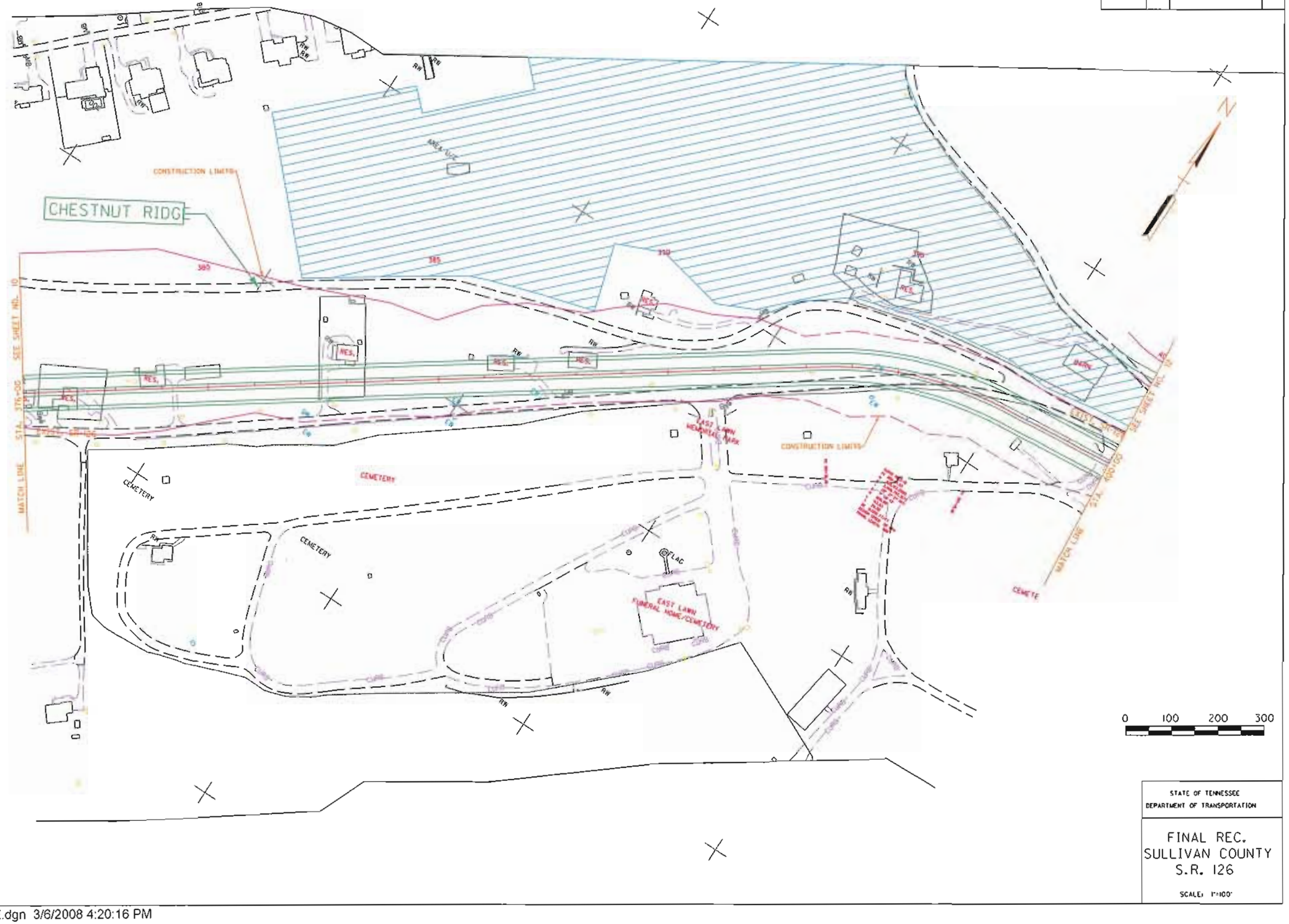
TYPE	YEAR	PROJECT NO.	SHEET NO.
			11



STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

FINAL REC.
SULLIVAN COUNTY
S.R. 126

SCALE: 1"=100'

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TYPE	YEAR	PROJECT NO.	SHEET NO.
			12

0 100 200 300

N

EATON STATION RD.

FISHER DR.

COOKS VALLEY RD.

BRIDEWELL HEIGHTS RD.

DEBRIS

STORAGE

TRI-CITY FENCE

CONSTRUCTION LIMITS

SEE SHEET NO. 11

SEE SHEET NO. 13

MATCH LINE STA. 400+00

MATCH LINE STA. 425+00

RES.

BARN

POOL

APARTMENTS

SUNNY TERRACE APARTMENTS

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

FINAL REC.
SULLIVAN COUNTY
S.R. 126

SCALE 1"=100'

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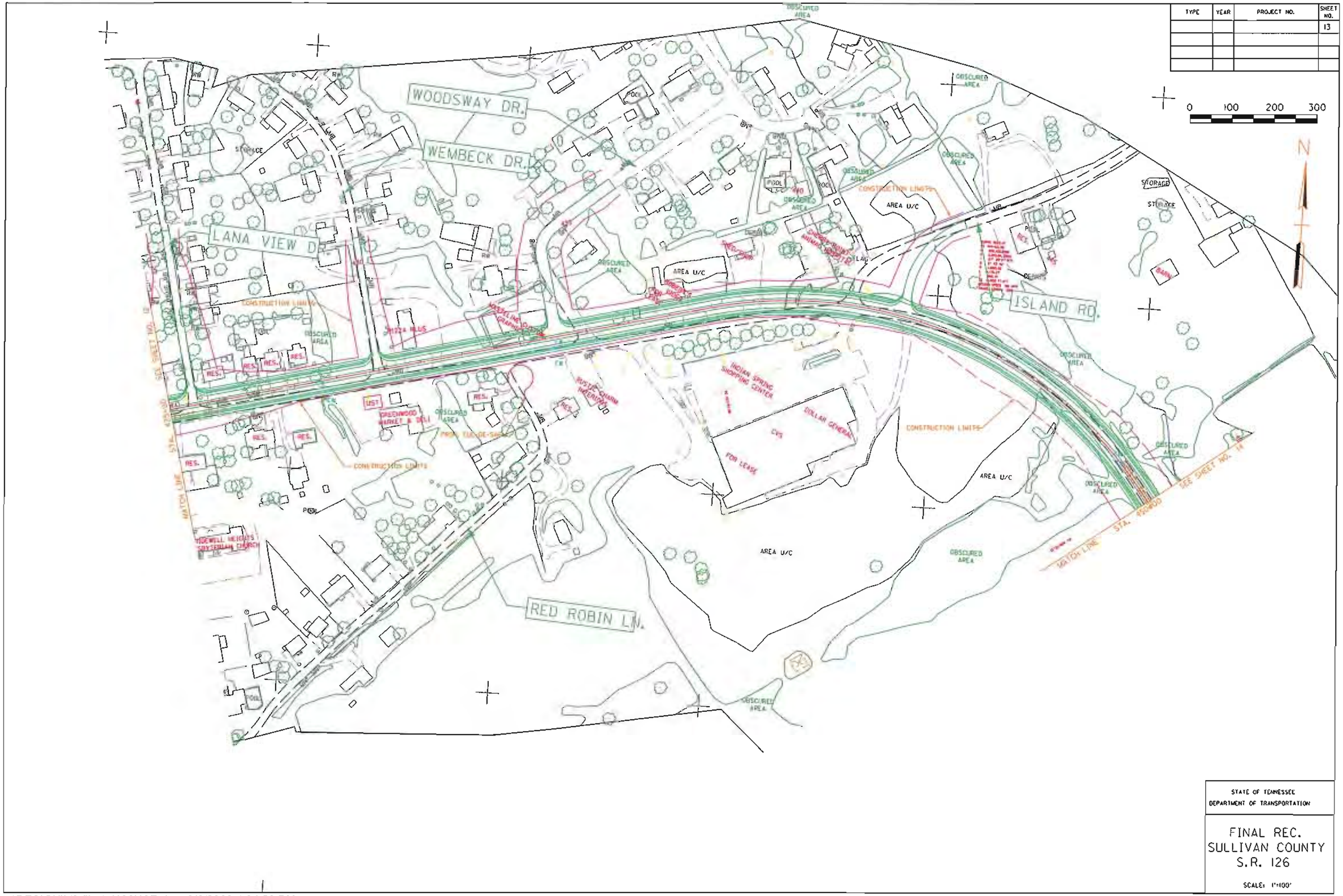
TYPE	YEAR	PROJECT NO.	SHEET NO.
			13



STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

FINAL REC.
SULLIVAN COUNTY
S.R. 126

SCALE: 1"=100'

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TYPE	YEAR	PROJECT NO.	SHEET NO.
			14

0 100 200 300



STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

FINAL REC.
SULLIVAN COUNTY
S.R. 126

SCALE: 1"=100'

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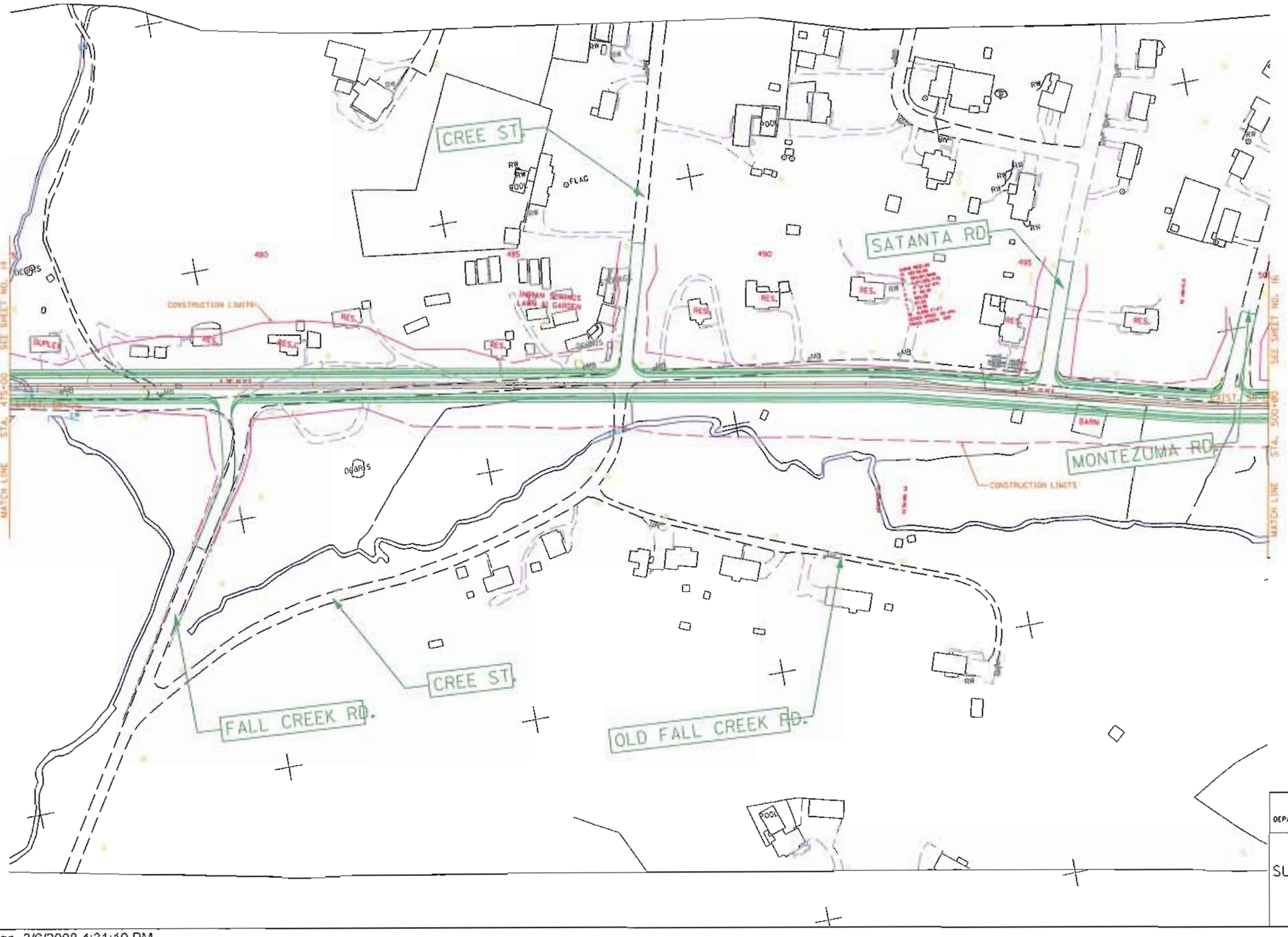
TYPE	YEAR	PROJECT NO.	SHEET NO.
			15

0 100 200 300



STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

FINAL REC.
SULLIVAN COUNTY
S.R. 126

SCALE: 1"=100'

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TYPE	YEAR	PROJECT NO.	SHEET NO.
			16

0 100 200 300

N

KIOWA ST

NATCHEZ LN.

DAKOTA RD

HILL RD

MATCH LINE STA. 500+00 SEE SHEET NO. 15

MATCH LINE STA. 525+00 SEE SHEET NO. 17

CONSTRUCTION LIMITS

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

FINAL REC.
SULLIVAN COUNTY
S.R. 126

SCALE: 1"=100'

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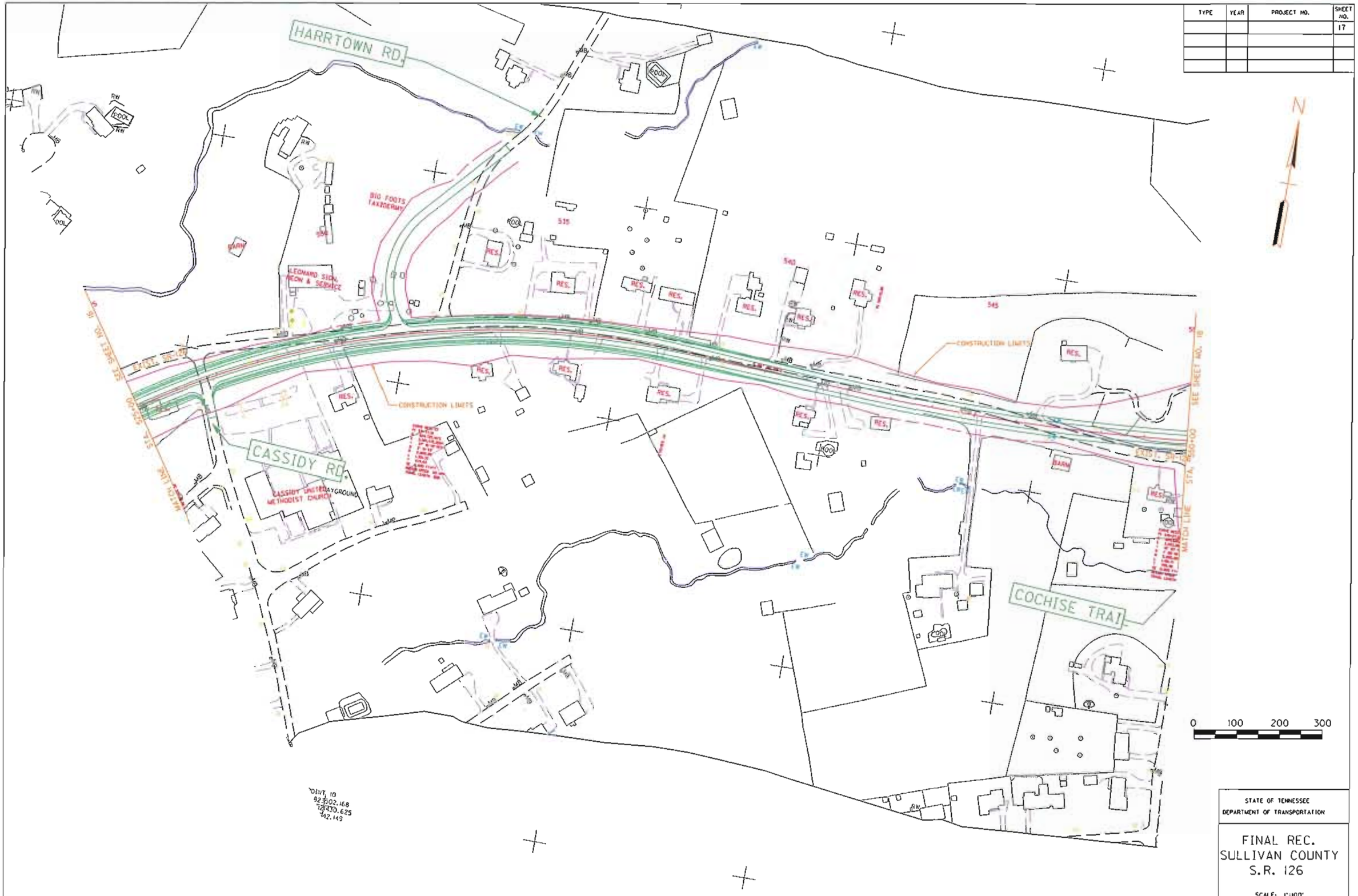

TYPE	YEAR	PROJECT NO.	SHEET NO.
			17

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TYPE	YEAR	PROJECT NO.	SHEET NO.
			18



STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

FINAL REC.
SULLIVAN COUNTY
S.R. 126

SCALE: 1"=100'

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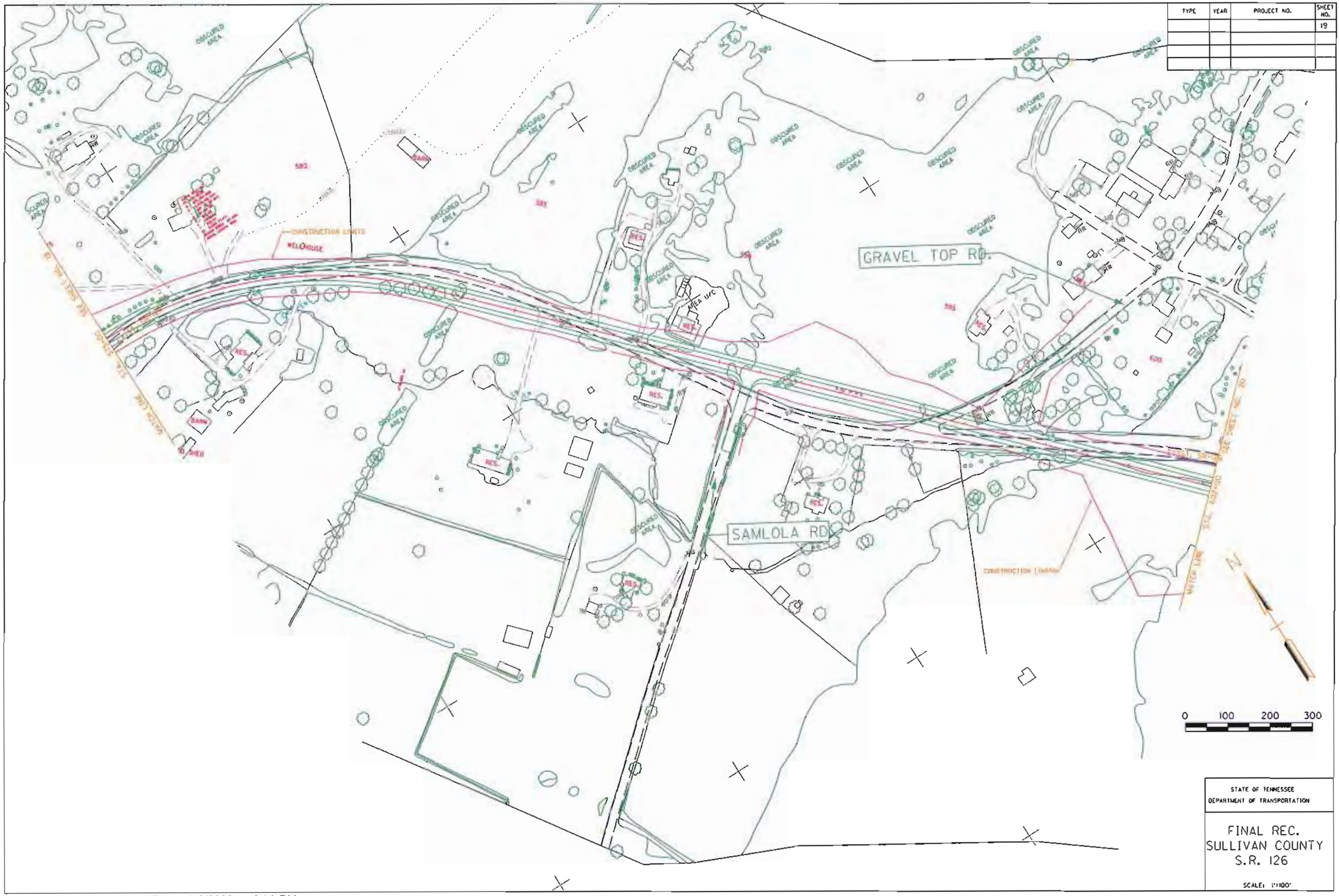

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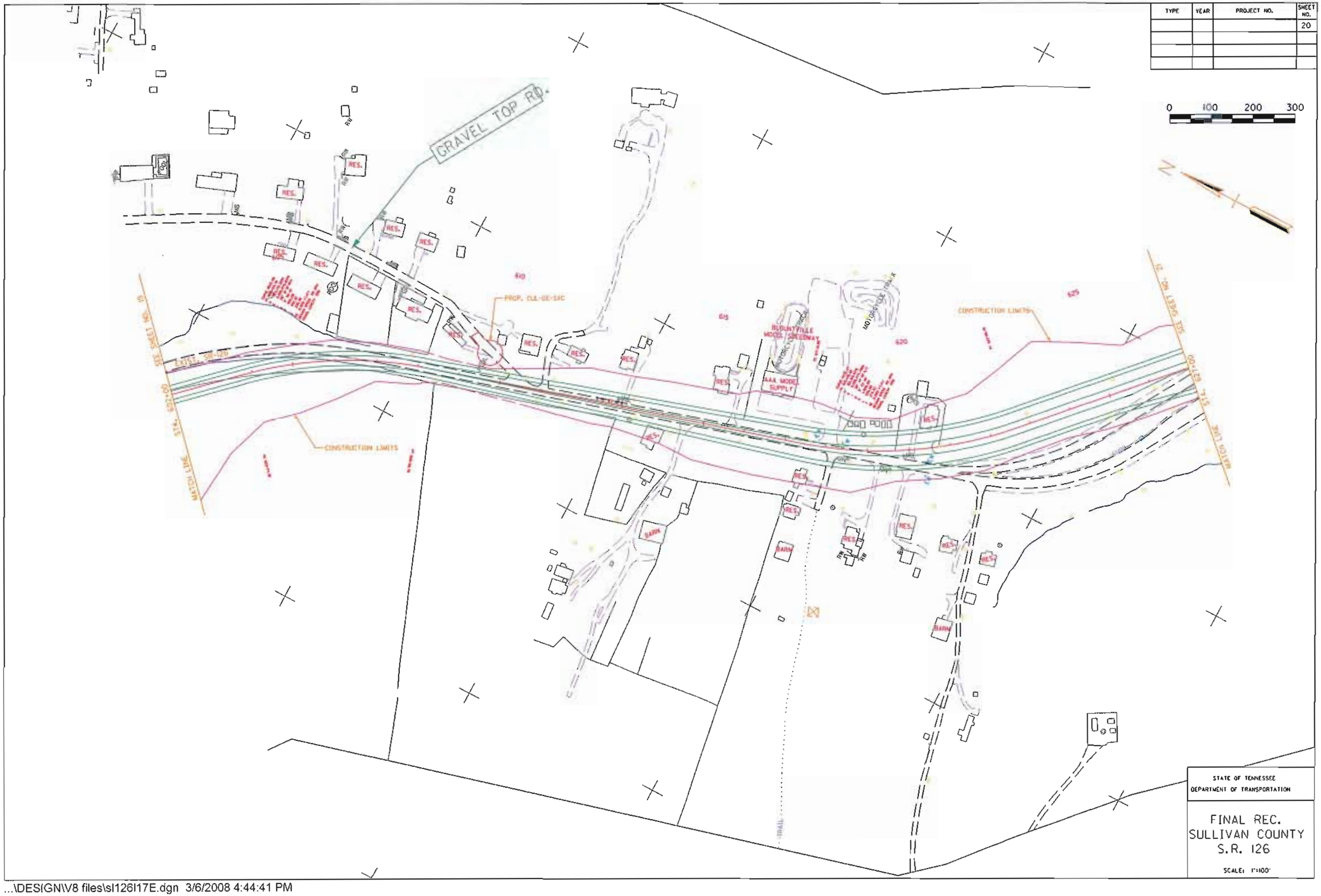

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TYPE	YEAR	PROJECT NO.	SHEET NO.
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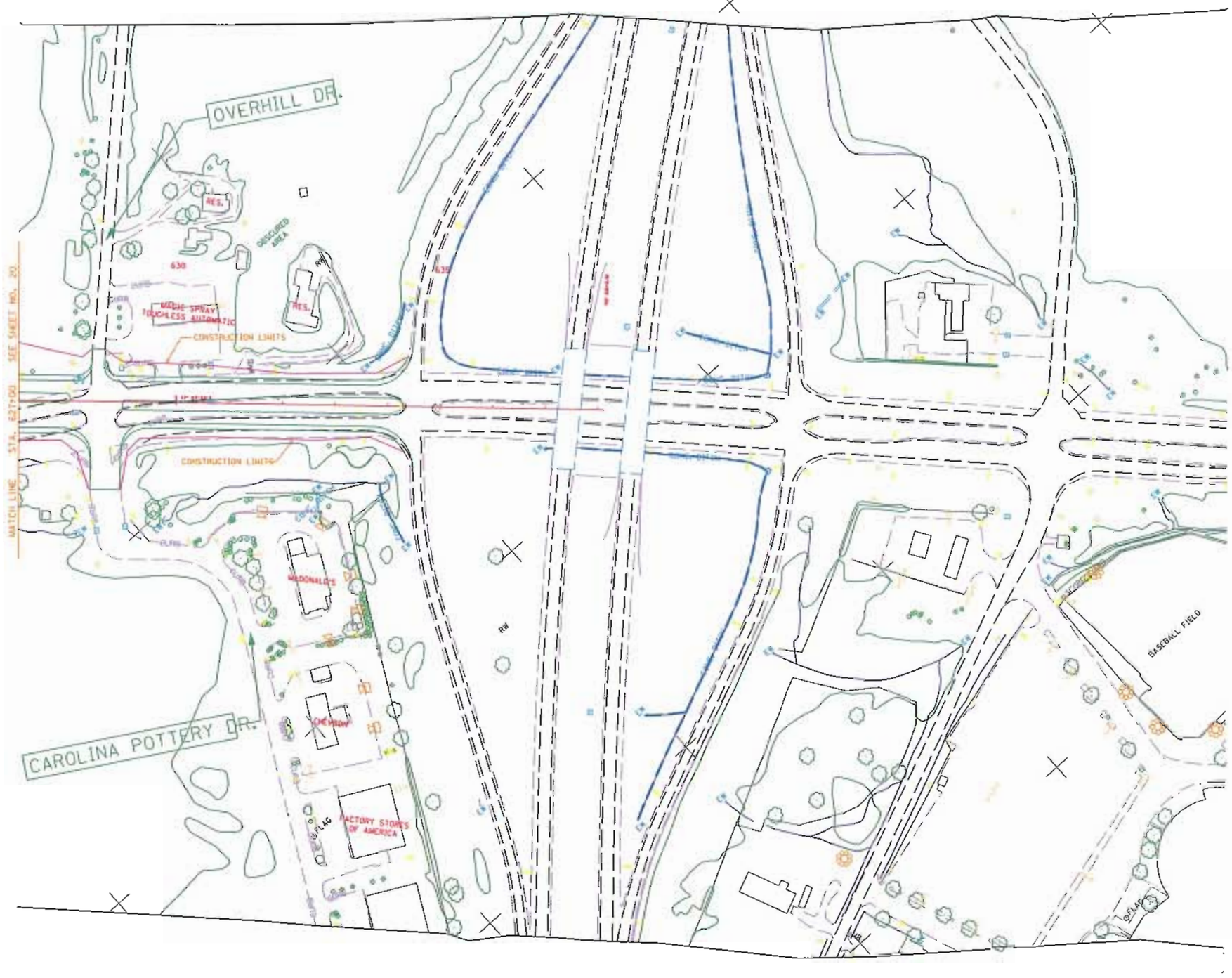

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

FINAL REC.
SULLIVAN COUNTY
S.R. 126

SCALE: 1"=100'

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FIRE INSURANCE MAP ABSTRACT RESEARCH RESULTS

11/5/2007

1135.00

SR 126
KINGSPORT, TN 37664

Listed below, please find the results of our search for historic fire insurance maps, performed in conjunction with your Environmental FirstSearch® report.

State	City	Date	Volume	Sheet Number(s)
Tennessee	Kingsport	1963	none	Index, 38, 48

This abstract is the result of a visual inspection of various Sanborn® Map collections. Supporting documentation follows in the Appendix. Use of this material is meant for research purposes only.

Copyright Policy Disclaimer

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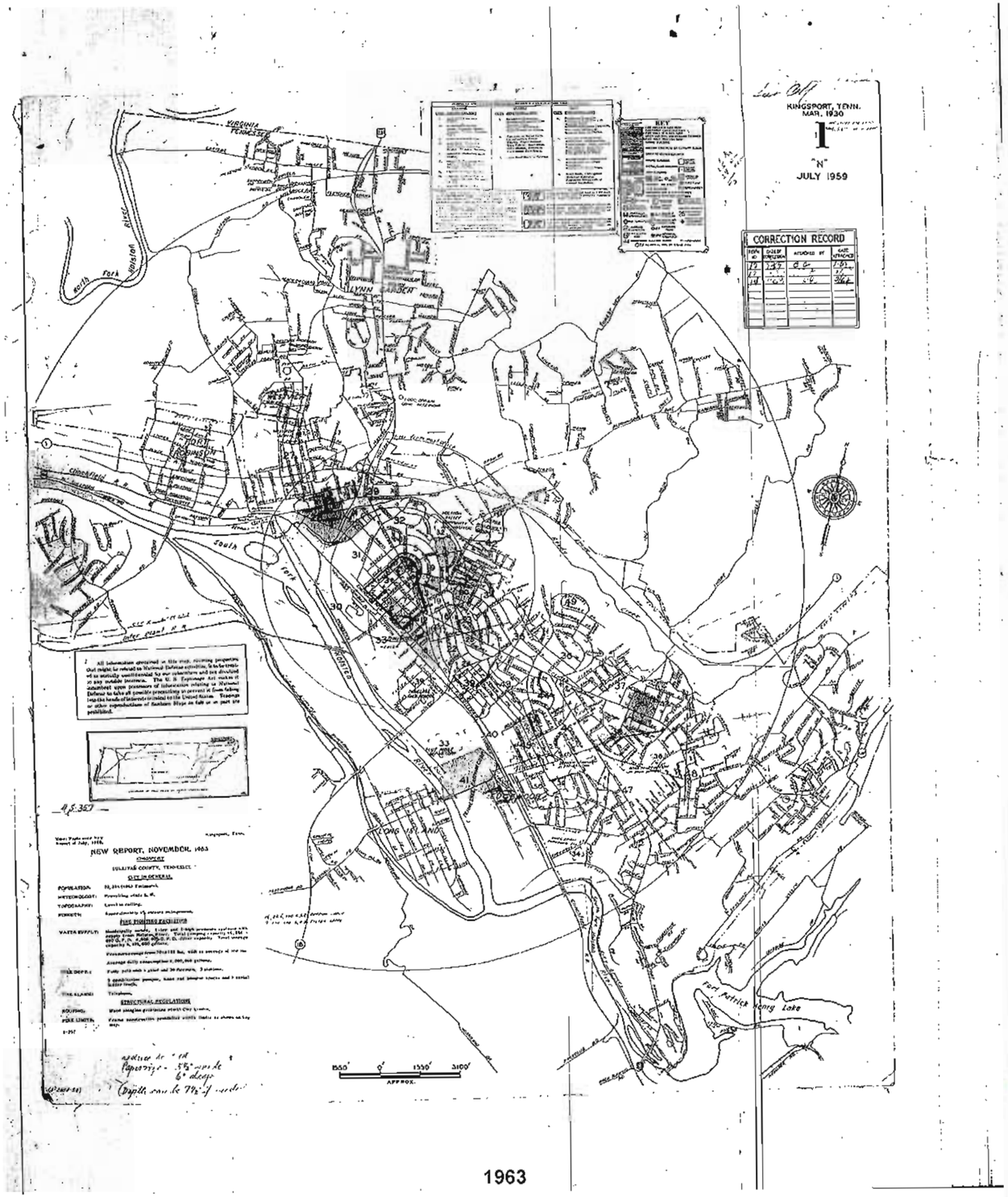
FirstSearch Technology Corporation

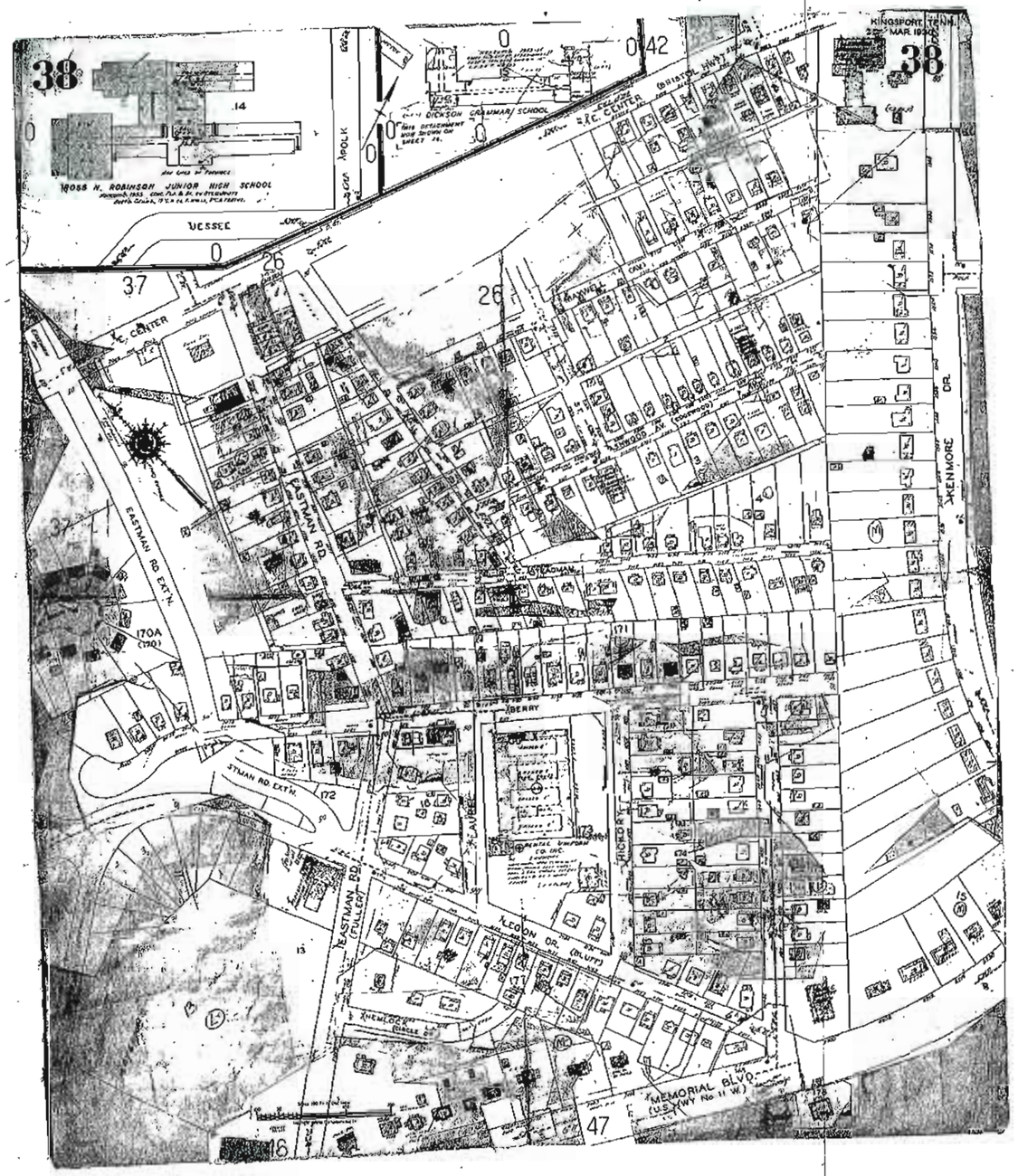
10 Cottage Street, Norwood, MA 02062
Tel: 781-551-0470 Fax: 781-551-0471

Appendix

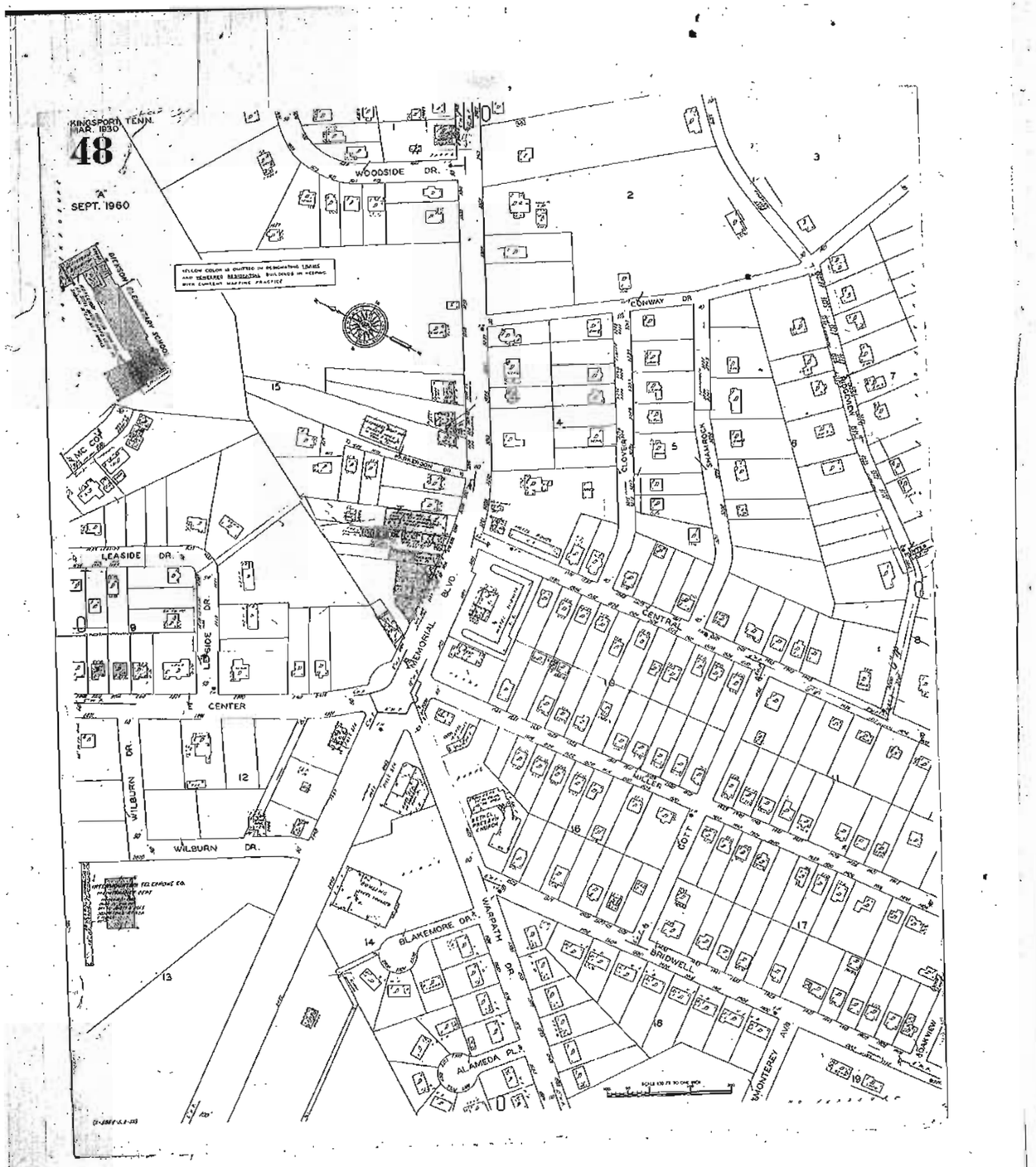
Supporting Documentation


KINGSPORT, TENN.
MAR. 1930
1
"N"
JULY 1959
CORRECTION RECORD
KEY
VIRGINIA
TENNESSEE
North Fork Holston River
LYNN GARDEN
WESTVIEW
FORT ROBINSON
Clinchfield R.R.
South Fork
Holston River
LONG ISLAND
Fort Patrick Henry Lake
NEW REPORT, NOVEMBER, 1963
CHAMPAIGN
SULLIVAN COUNTY, TENNESSEE
CITY IN GENERAL
POPULATION:
METEOROLOGY:
TOPOGRAPHY:
FORESTS:
FIRE FIGHTING FACILITIES
WATER SUPPLY:
FIRE DEPT.:
FIRE ALARM:
STRUCTURAL REGULATIONS
ROOFING:
FIRE LIMITS:
1550' 0' 1550' 3100'
APPROX.

1963


38
KINGSPORT TENN.
MAR. 1930
38
ROSS N. ROBINSON JUNIOR HIGH SCHOOL
DICKSON GRAMMAR SCHOOL
C. CENTER
BRISTOL HWY.
VESSEE
POLK
37
26
26
C. CENTER
EASTMAN RD.
EASTMAN RD. EXT'N.
170A
(170)
KENMORE DR.
BERRY
EASTMAN RD. EXT'N.
172
EASTMAN RD.
(FULLER)
LEGION DR. (BLUFF)
HEMLOCK
MEMORIAL BLVD.
(U.S. WY No. 11 W.)
47
16

1963


KINGSPORT, TENN.
MAR. 1930
48
"A"
SEPT. 1960
WOODSIDE DR.
CONWAY DR.
CLOVER
SHAMROCK
ROGERSON
MEMORIAL BLVD.
CENTRAL
LEASIDE DR.
CENTER
WILBURN DR.
MILLER
GOTT
BRIDWELL
BLAKEMORE DR.
WARPATH DR.
ALAMEDA PL.
MONTEREY AVE.
SOAKVIEW
MC COY
DICKSON ELEMENTARY SCHOOL

1963

Environmental FirstSearch

Historical Aerial

2006 - Reference Mosaic

SR 126 , KINGSPORT TN 37664



Source:
Target Site (Latitude: 36.539471 Longitude: -82.454432)
Quad Name: Indian Springs
Date: 2006 - Reference Mosaic

Approximate Scale: 1 inch equals 6,667 feet

Legend

Target Area

1-6 Index Numbers

COPYRIGHT: MICRODOT, INC

Environmental FirstSearch

Historical Aerial

1953 - 1

SR 126 , KINGSPORT TN 37664



Source:
Target Site (Latitude: 36.539471 Longitude: -82.454432)
Quad Name: Indian Springs
Date: 1953 - 1

Approximate Scale: 1 inch equals 1,125 feet

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Environmental FirstSearch

Historical Aerial

1953 - 2

SR 126 , KINGSPORT TN 37664



Source:
Target Site (Latitude: 36.539471 Longitude: -82.454432)
Quad Name: Indian Springs
Date: 1953 - 2

Approximate Scale: 1 inch equals 1,125 feet

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Environmental FirstSearch

Historical Aerial

1953 - 3

SR 126 , KINGSPORT TN 37664



Source:
Target Site (Latitude: 36.539471 Longitude: -82.454432)
Quad Name: Indian Springs
Date: 1953 - 3

Approximate Scale: 1 inch equals 1,125 feet

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Environmental FirstSearch

Historical Aerial

1953 - 4

SR 126 , KINGSPORT TN 37664



Source:
Target Site (Latitude: 36.539471 Longitude: -82.454432)
Quad Name: Indian Springs
Date: 1953 - 4

Approximate Scale: 1 inch equals 1,125 feet

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Environmental FirstSearch

Historical Aerial

1953 - 5

SR 126 , KINGSPORT TN 37664



Source:
Target Site (Latitude: 36.539471 Longitude: -82.454432)
Quad Name: Indian Springs
Date: 1953 - 5

Approximate Scale: 1 inch equals 1,125 feet

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Environmental FirstSearch

Historical Aerial

1953 - 6

SR 126 , KINGSPORT TN 37664



Source:
Target Site (Latitude: 36.53947) Longitude: -82.454432)
Quad Name: Indian Springs
Date: 1953 - 6

Approximate Scale: 1 inch equals 1,125 feet

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Environmental FirstSearch

Historical Aerial

1976 - 1

SR 126 , KINGSPORT TN 37664



Source:
Target Site (Latitude: 36.539471 Longitude: -82.454432)
Quad Name: Indian Springs
Date: 1976 - 1

Approximate Scale: 1 inch equals 1,125 feet

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Environmental FirstSearch

Historical Aerial

1976 - 2

SR 126 , KINGSPORT TN 37664



Source:
Target Site (Latitude: 36.539471 Longitude: -82.454432)
Quad Name: Indian Springs
Date: 1976 - 2

Approximate Scale: 1 inch equals 1,125 feet

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Environmental FirstSearch

Historical Aerial

1976 - 3

SR 126 , KINGSPORT TN 37664



Source:
Target Site (Latitude: 36.53947) Longitude: -82.454432)
Quad Name: Indian Springs
Date: 1976 - 3

Approximate Scale: 1 inch equals 1,125 feet

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Environmental FirstSearch

Historical Aerial

1976 - 4

SR 126 , KINGSPORT TN 37664



Source:
Target Site (Latitude: 36.539471 Longitude: -82.454432)
Quad Name: Indian Springs
Date: 1976 - 4

Approximate Scale: 1 inch equals 1,125 feet

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Environmental FirstSearch

Historical Aerial

1976 - 5

SR 126 , KINGSPORT TN 37664



Source:
Target Site (Latitude: 36.539471 Longitude: -82.454432)
Quad Name: Indian Springs
Date: 1976 - 5

Approximate Scale: 1 inch equals 1,125 feet

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Environmental FirstSearch

Historical Aerial

1976 - 6

SR 126 , KINGSPORT TN 37664



Source:
Target Site (Latitude: 36.539471 Longitude: -82.454432)
Quad Name: Indian Springs
Date: 1976 - 6

Approximate Scale: 1 inch equals 1,125 feet

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Environmental FirstSearch

Historical Aerial

2006 - 1

SR 126 , KINGSPORT TN 37664



Source:
Target Site (Latitude: 36.539471 Longitude: -82.454432)
Quad Name: Indian Springs
Date: 2006 - 1

Approximate Scale: 1 inch equals 1,108 feet

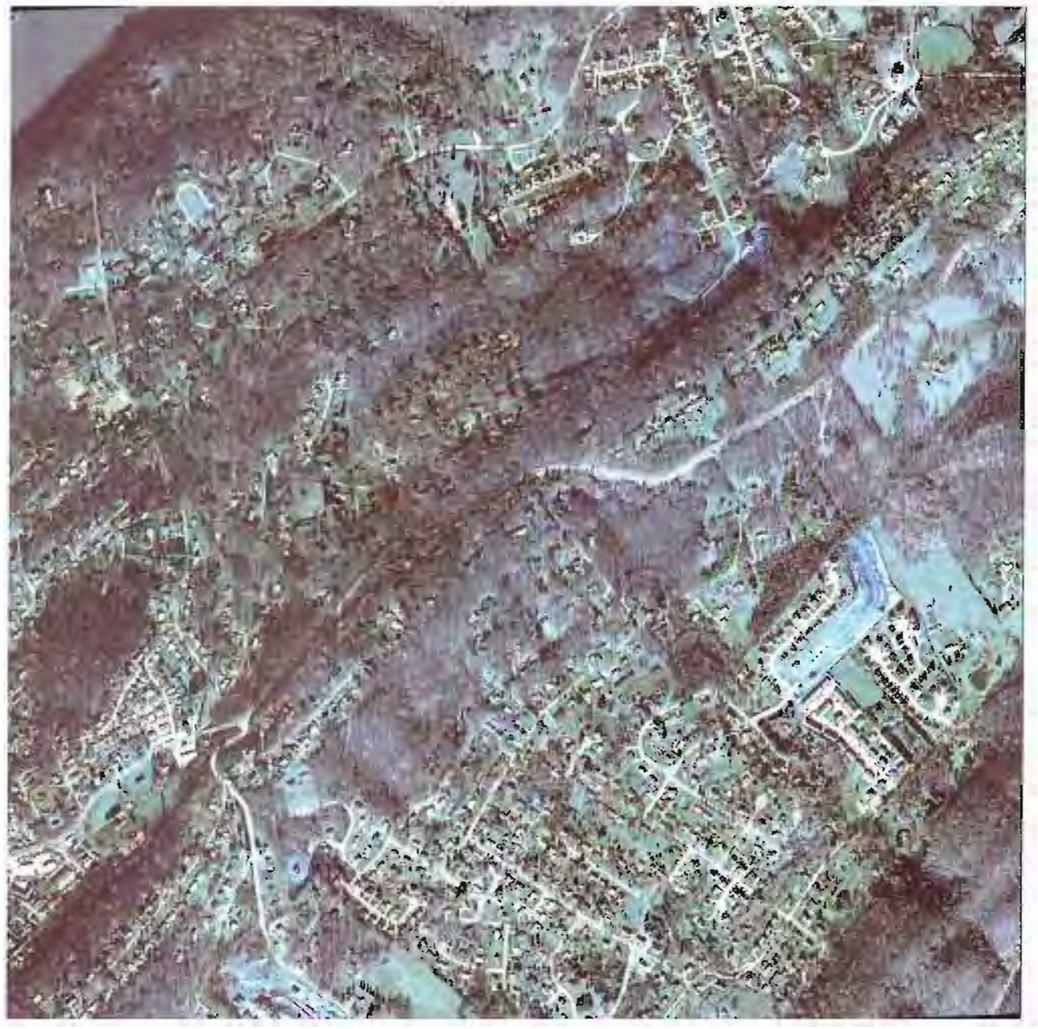
COPYRIGHT: MICRODOT, INC

Environmental FirstSearch

Historical Aerial

2006 - 2

SR 126 , KINGSPORT TN 37664



Source:
Target Site (Latitude: 36.539471 Longitude: -82.454432)
Quad Name: Indian Springs
Date: 2006 - 2

Approximate Scale: 1 inch equals 1,108 feet

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Environmental FirstSearch

Historical Aerial

2006 - 3

SR 126 , KINGSPORT TN 37664



Source:
Target Site (Latitude: 36.539471 Longitude: -82.454432)
Quad Name: Indian Springs
Date: 2006 - 3

Approximate Scale: 1 inch equals 1,108 feet

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Environmental FirstSearch

Historical Aerial

2006 - 4

SR 126 , KINGSPORT TN 37664



Source:
Target Site (Latitude: 36.539471 Longitude: -82.454432)
Quad Name: Indian Springs
Date: 2006 - 4

Approximate Scale: 1 inch equals 1,108 feet

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Environmental FirstSearch

Historical Aerial

2006 - 5

SR 126 , KINGSPORT TN 37664



Source:
Target Site (Latitude: 36.539471 Longitude: -82.454432)
Quad Name: Indian Springs
Date: 2006 - 5

Approximate Scale: 1 inch equals 1,108 feet

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Environmental FirstSearch

Historical Aerial

2006 - 6

SR 126 , KINGSPORT TN 37664



Source:
Target Site (Latitude: 36.539471 Longitude: -82.454432)
Quad Name: Indian Springs
Date: 2006 - 6

Approximate Scale: 1 inch equals 1,108 feet

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DEPARTMENT OF THE ARMY
NASHVILLE DISTRICT, CORPS OF ENGINEERS
Regulatory Branch
3701 Bell RD
Nashville, TN 37214

March 16, 2010

Regulatory Branch

SUBJECT: File 200900048; TESA Concurrence Points 1 and 2; Proposed SR-126 from East Center Street in Kingsport to I-81, in Sullivan County, Tennessee [TDOT PIN #105467.00]

Mr. Tom Love (TM II)
Tennessee Department of Transportation
Environmental Division
Suite 900, James K. Polk Building
505 Deaderick Street
Nashville, Tennessee 37243-0334

Dear Mr. Love:

This concerns your March 10, 2010, request for concurrence with the subject project's Purpose and Need and Study Area and Alternative to be Evaluated Package (Combined Concurrence Points 1 and 2) in accordance with the provisions of the current TESA document.

Enclosed is the signed form with our concurrence for Points 1 and 2.

Thanks for allowing us to participate in the review of this project.

Sincerely,

J. Ruben Hernandez
Project Manager
Operations Division

Enclosure

Tennessee Environmental Streamlining Agreement Concurrence Form
Combined Concurrence Point #1 and #2
State Route 126, from East Center Street in Kingsport, to Interstate 81 in Sullivan County, Tennessee
P.I.N. 105467.00

The Tennessee Department of Transportation (TDOT) is preparing an Draft Environmental Impact Statement (DEIS) for a improvements to State Route (SR) 126 (Memorial Boulevard), from East Center Street to Interstate 81 in Kingsport, Sullivan County, Tennessee. This DEIS is being developed by TDOT to document the impacts of the subject project, in accordance with the N*ational Environmental Policy Act (NEPA)* and the *Tennessee Environmental Streamlining Agreement* (*TESA*). In accordance with *TESA*, we are requesting your review and concurrence on *Combined Concurrence Point #1 and #2, Purpose and Need and Study Area/ Alternatives to be Evaluated Package.*

The *Purpose and Need Package and Study Area/Alternatives to be Evaluated Package* was sent to you on February 11, 2010 for a 45-day review period. Once you have had the opportunity to review the above referenced document, please sign the attached form. In signing this document, you are indicating your concurrence on the purpose and need, study area, and the alternatives to be evaluated in the environmental document.

Please sign and return this form to Tom Love at the address below by March 29, 2010, or by email to Tom.Love@tn.gov.

Mr. Tom Love
TDOT Environmental Division
Suite 900
James K. Polk Building
505 Deaderick Street
Nashville, TN 37243-0334

If you feel all provisions of *TESA Concurrence Points #1 and #2* have been satisfied, please acknowledge concurrence with the adequacy of the *Purpose and Need/ Alternatives to be Evaluated Package.*

AGENCY: USACE, NASHVILLE DIST.

CONCURRENCE: YES

DATE: 16 MAR 10

Tennessee Environmental Streamlining Agreement Concurrence Form
Combined Concurrence Point #1 and #2
State Route 126, from East Center Street in Kingsport, to Interstate 81 in Sullivan County, Tennessee
P.I.N. 105467.00

The Tennessee Department of Transportation (TDOT) is preparing an Draft Environmental Impact Statement (DEIS) for a improvements to State Route (SR) 126 (Memorial Boulevard), from East Center Street to Interstate 81 in Kingsport, Sullivan County, Tennessee. This DEIS is being developed by TDOT to document the impacts of the subject project, in accordance with the N*ational Environmental Policy Act (NEPA)* and the *Tennessee Environmental Streamlining Agreement* (*TESA*). In accordance with *TESA*, we are requesting your review and concurrence on *Combined Concurrence Point #1 and #2, Purpose and Need and Study Area/ Alternatives to be Evaluated Package.*

The *Purpose and Need Package and Study Area/Alternatives to be Evaluated Package* was sent to you on February 11, 2010 for a 45-day review period. Once you have had the opportunity to review the above referenced document, please sign the attached form. In signing this document, you are indicating your concurrence on the purpose and need, study area, and the alternatives to be evaluated in the environmental document.

Please sign and return this form to Tom Love at the address below by March 29, 2010, or by email to Tom.Love@tn.gov.

Mr. Tom Love
TDOT Environmental Division
Suite 900
James K. Polk Building
505 Deaderick Street
Nashville, TN 37243-0334

If you feel all provisions of *TESA Concurrence Points #1 and #2* have been satisfied, please acknowledge concurrence with the adequacy of the *Purpose and Need/ Alternatives to be Evaluated Package.*

AGENCY: U.S. Environmental Protection Agency

CONCURRENCE: Jamie Higgins / Life Scientist

DATE: 3-17-10

* Advisory Comments Attached

Concurrence Points 31 and #2, Purpose and Need and Study Area Package & Alternatives to be Evaluated for State Route 126 (Memorial Boulevard) From East Center Street in Kingsport, to Interstate 81, Sullivan County, TN

U.S. Environmental Protection Agency—Advisory Comments:

1. In 2.1.1 Evaluation of Initial Alternatives, page 20, EPA recommends that the impacts be described in a matrix. In other words, each alternative would be evaluated for each category of impact and displayed in a table. This would allow the reviewer and the public an opportunity to quickly compare the environmental impacts of each alternative.

2. On page 22, in 2.2.1 Public Preferences for Concept Plans, Other Alternatives Considered in the CSS Process. The last paragraph of this section discusses the public involvement session that took place on May 26, 2005. Why has it taken so long to develop concurrence point 1 and 2? If there have been significant issues associated with the project that have delayed the process, than these issues should be discussed in the NEPA document.

Tennessee Environmental Streamlining Agreement Concurrence Form
Combined Concurrence Point #1 and #2
State Route 126, from East Center Street in Kingsport, to Interstate 81 in Sullivan County, Tennessee
P.I.N. 105467.00

The Tennessee Department of Transportation (TDOT) is preparing an Draft Environmental Impact Statement (DEIS) for a improvements to State Route (SR) 126 (Memorial Boulevard), from East Center Street to Interstate 81 in Kingsport, Sullivan County, Tennessee. This DEIS is being developed by TDOT to document the impacts of the subject project, in accordance with the N*ational Environmental Policy Act (NEPA)* and the *Tennessee Environmental Streamlining Agreement* (*TESA*). In accordance with *TESA*, we are requesting your review and concurrence on *Combined Concurrence Point #1 and #2, Purpose and Need and Study Area/ Alternatives to be Evaluated Package*.

The *Purpose and Need Package and Study Area/Alternatives to be Evaluated Package* was sent to you on February 11, 2010 for a 45-day review period. Once you have had the opportunity to review the above referenced document, please sign the attached form. In signing this document, you are indicating your concurrence on the purpose and need, study area, and the alternatives to be evaluated in the environmental document.

Please sign and return this form to Tom Love at the address below by March 29, 2010, or by email to Tom.Love@tn.gov.

Mr. Tom Love
TDOT Environmental Division
Suite 900
James K. Polk Building
505 Deaderick Street
Nashville, TN 37243-0334

If you feel all provisions of *TESA Concurrence Points #1 and #2* have been satisfied, please acknowledge concurrence with the adequacy of the *Purpose and Need/ Alternatives to be Evaluated Package*.

AGENCY: Tennessee Valley Authority

CONCURRENCE: Kenneth D. R

DATE: 3/26/10

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
ENVIRONMENTAL DIVISION
SUITE 900, JAMES K. POLK BUILDING
505 DEADERICK STREET
NASHVILLE, TENNESSEE 37243-0334

February 11, 2010

Mr. Charles P. Nicholson
Environmental Manager, Environmental Policy and Planning
Tennessee Valley Authority
400 West Summit Hill Drive, Suite WT8C
Knoxville, TN 37902-1499

Subject: Transmittal of Material for Coordination with Participating Agencies – Purpose and Need, Study Area and Alternative to be Evaluated. Combined TESA Concurrence Points #1 and #2 Package. Environmental Impact Statement for State Route 126, from East Center Street in Kingsport, to Interstate 81 in Sullivan County, Tennessee **P.I.N. 105467.00**

Dear Mr. Nicholson,

Enclosed please find the *Purpose and Need and Study Area /Alternatives to be Evaluated Package*, which is being transmitted to your agency pursuant to the *Tennessee Environmental Streamlining Agreement (TESA)*. This document comprises the materials required for *TESA Concurrence Points #1 and #2*.

The enclosed package describes the purpose and need and study area and includes:

- Definition of the study area;
- Project history;
- Project description;
- Project objectives;
- Public and agency input; and
- Alternative screening criteria for meeting purpose and need.

The enclosed package also describes the alternatives that have been developed and considered during the project planning process and the on-going public and agency coordination. The alternatives described in this package include the following:

- No-Build Alternative,
- Build Alternative A,
- Build Alternative B.

TDOT is requesting your comments and concurrence on the purpose and need, study area, and the alternatives to be evaluated that are presented in this package. Please submit your comments on the enclosed form no later than **March 29, 2010**. Your comments are requested in writing and should involve a concurrence, a non-concurrence, a request for a review time extension, or a request for formal cessation of concurrence, or you may provide your comments via email. You may also provide advisory comments based on your statutory or regulatory authority. Unless an extension is requested, TDOT will assume concurrence if your agency does not respond by **March 29, 2010**.

Please contact me by phone at 615-741-5364 or by email at Tom.Love@tn.gov if you have any questions or need additional information.

Regards,

Tom Love
Transportation Manager I

Enclosures

United States Department of the Interior

FISH AND WILDLIFE SERVICE
446 Neal Street
Cookeville, TN 38501

March 25, 2010

Mr. Tom Love
Tennessee Department of Transportation
Environmental Planning and Permits Division
Suite 900, James K. Polk Building
505 Deaderick Street
Nashville, Tennessee 37243-0334

Subject: Concurrence points I and II. Proposed construction to State Route 126 (Memorial Boulevard), Sullivan County, Tennessee.

Dear Mr. Love:

The Tennessee Department of Transportation (TDOT), in cooperation with the Federal Highway Administration (FHWA), is initiating National Environmental Policy Act (NEPA) documentation and analysis for the proposed construction to approximately 8.4 miles of State Route 126 between East Center Street and Interstate 81 (I-81) in Sullivan County, Tennessee. The purpose of this project is to improve the existing two-lane roadway, reduce the crash rates, and enhance travel and emergency response times from East Center Street in Kingsport to I-81. TDOT, the City of Kingsport, and local citizens conducted a Context Sensitive Solutions process which documents the majority decisions made by a Community Resource Team regarding design elements, roadway cross sections, and components of the project's purpose and need.

The *Purpose and Need and Study Area/ Alternatives to be Evaluated Package* was developed by TDOT to justify this project and outline the preferred build alternatives and their potential impacts in accordance with the National Environmental Policy Act and the Tennessee Environmental Streamlining Agreement (TESA). In accordance with TESA, TDOT has requested that the U.S. Fish and Wildlife Service review and provide concurrence (or non concurrence) on concurrence points 1 and 2, *Purpose and Need and Study Area/ Alternatives to be Evaluated Package*.

We have reviewed the *Purpose and Need and Study Area/ Alternatives to be Evaluated Package* and **concur** that it is adequate and that TDOT should proceed to Concurrence Point 3, *Draft Environmental Assessment*. Endangered species collection records available to the Service do not indicate that federally listed or proposed endangered or threatened species occur within the impact area of the project. We note, however, that collection records available to the Service may not be all-inclusive. Our data base is a compilation of collection records made available by

various individuals and resource agencies. This information is seldom based on comprehensive surveys of all potential habitat and thus does not necessarily provide conclusive evidence that protected species are present or absent at a specific locality. However, based on the best information available at this time, we believe that the requirements of section 7 of the Endangered Species Act of 1973, as amended, are fulfilled. Obligations under section 7 of the Act must be reconsidered if (1) new information reveals impacts of the proposed action that may affect listed species or critical habitat in a manner not previously considered, (2) the proposed action is subsequently modified to include activities which were not considered during this consultation, or (3) new species are listed or critical habitat designated that might be affected by the proposed action. The signed TESA concurrence points 1 and 2 package for this project is attached.

If you have any questions regarding our comments, please contact John Griffith of my staff at 931/528-6481 (ext. 228) or by email at john_griffith@fws.gov.

Sincerely,

Mary E. Jennings

Mary E. Jennings
Field Supervisor

Enclosure

United States Department of the Interior

FISH AND WILDLIFE SERVICE
446 Neal Street
Cookeville, TN 38501

September 21, 2011

Ms. Ann Andrews
Tennessee Department of Transportation
Environmental Planning and Permits Division
Suite 900, James K. Polk Building
505 Deaderick Street
Nashville, Tennessee 37243-0334

Subject: FWS# 11-CPA-0192. Concurrence Point 3. Proposed construction to State Route 126 (Memorial Boulevard), Sullivan County, Tennessee.

Dear Ms. Andrews:

The Tennessee Department of Transportation (TDOT), in cooperation with the Federal Highway Administration (FHWA), is initiating National Environmental Policy Act (NEPA) documentation and analysis for the proposed construction to approximately 8.4 miles of State Route 126 between East Center Street and Interstate 81 (I-81) in Sullivan County, Tennessee. The purpose of this project is to improve the existing two-lane roadway, reduce the crash rates, and enhance travel and emergency response times from East Center Street in Kingsport to I-81. TDOT, the City of Kingsport, and local citizens conducted a Context Sensitive Solutions process which documents the majority decisions made by a Community Resource Team on design elements, roadway cross sections, and components of the project's purpose and need.

The Draft Environmental Impact Statement (DEIS) was developed by TDOT to document the impacts of the subject project in accordance with the National Environmental Policy Act and the Tennessee Environmental Streamlining Agreement (TESA). In accordance with TESA, TDOT has requested that the U.S. Fish and Wildlife Service review and provide concurrence (or nonconcurrence) on Concurrence Point 3, *Adequacy of Draft Environmental Impact Statement Package*.

Our office concurred with the adequacy of a bat study proposal for this project dated July 14, 2011. Although the study was likely completed during the 2011 survey season, we have yet to see the results and have not provided our concurrence on TDOT's effects determination for the Indiana bat (*Myotis sodalis*). We withhold our section 7 comments until this species has been properly coordinated.

We note that Section 4.9.2, Mitigation Measures for Impacted Streams, estimates costs for stream mitigation based on "the U.S. Army Corps of Engineers ratio of 1.5:1 linear feet." Currently, there is no sanctioned stream banking instrument in Tennessee and the only approved State in-lieu fee program is the Tennessee Stream Mitigation Program. They require a 1:1 mitigation ratio at $200/linear foot for all stream loss if total impacts to a stream exceed 200 linear feet. Furthermore, all linear feet of riprap must be mitigated at a 0.75:1 ratio or $150/linear foot if the riprapped channel extends beyond 50 linear feet. We recommend that the currently sanctioned ratios and values be applied to estimate stream mitigation costs for this project and that the EIS reflect this correction.

In a May 26, 2005 public meeting, a petition was presented to the project management team to make improvements to but maintain the highway as a 2-lane facility (DEIS, p. 196). This petition included 1,124 individual signatures concerned with the potential for increase and severity of traffic accidents with a 4-lane design and for impact to the community from destruction of homes and businesses. For all intents and purposes, Alternative B is the only build alternative under review as it is a refined Alternative A (Section 2.1, last paragraph). Even with the inclusion of a 3-lane section, this project would result in substantial numbers of residential and business displacements which, according to section 4.4.2, the local market is not capable of supporting. Furthermore, grave relocations would be necessary with either alternative (Table A) and would be viewed unfavorably by the community. Given these constraints, constructing along a new alignment might be a better option.

We have reviewed the *Draft Environmental Impact Statement* and **concur** that the environmental concerns have been adequately addressed, but recommend that TDOT revisit the project purpose and need or consider the possibility for construction along a new alignment prior to proceeding to the development of Concurrence Point 4, *Preferred Alternative and Preliminary Mitigation Package.* The signed TESA Concurrence Point 3 for this project is attached.

If you have any questions regarding our comments, please contact John Griffith of my staff at 931/525-4995 or by email at john_griffith@fws.gov.

Sincerely,

Brad Bingham

Acting for Mary E. Jennings
Field Supervisor

Enclosure

Tennessee Environmental Streamlining Agreement Concurrence Form
Concurrence Point 3
SR 126 (Memorial Boulevard)
from East Center Street in Kingsport to Interstate 81
Sullivan County, Tennessee
PIN 105467.00

The Tennessee Department of Transportation (TDOT) is preparing an Environmental Impact Statement (EIS) for SR 126 (Memorial Boulevard) from East Center Street in Kingsport to Interstate 81 in Sullivan County, Tennessee. This EIS is being developed by TDOT to document the impacts of the subject project, in accordance with the *National Environmental Policy Act (NEPA)* and the *Tennessee Environmental Streamlining Agreement (TESA).* In accordance with TESA, we are requesting your review and concurrence on *Concurrence Point 3, Adequacy of the Draft EIS.*

The *Adequacy of the Draft EIS Package* was sent to you on August 12, 2011 for a 45-day review period. Once you have had the opportunity to review the above referenced document, please sign this form. In signing this document, you are indicating your concurrence with the Preliminary Draft Environmental Impact Statement, TESA Concurrence Point 3.

Please sign and return this form to Ms. JonnaLeigh Stack at the address below by September 26, 2011.

JonnaLeigh Stack, Esq.
TDOT Environmental Division
Suite 900
James K. Polk Building
505 Deaderick Street
Nashville, TN 37243-0334

If you feel all provisions of TESA Concurrence Point 3 have been satisfied, please acknowledge your concurrence with your signature below. Please include any comments you would like addressed as the project proceeds.

AGENCY: U.S Fish and Wildlife Service

CONCURRRENCE: Brad Bingham Acting for Mary Jennings

DATE: 9-23-11

STATE OF TENNESSEE
DEPARTMENT OF ENVIRONMENT AND CONSERVATION
DIVISION OF WATER POLLUTION CONTROL
7TH FLOOR, L&C ANNEX
401 CHURCH STREET
NASHVILLE, TENNESSEE 37243-1534

19 SEPT 2011

Ms. Ann Andrews
TDOT
Environmental Division
Suite 900, James K. Polk Building
505 Deaderick Street
Nashville, Tennessee 37243-0334

RE: **TESA Concurrence Point #3**
SR-126 from East Center St. to I-81
Sullivan County
PIN 105467.00

Dear Mr. Love:

The Tennessee Department of Environment and Conservation (TDEC) has reviewed the Concurrence Point # 3 document, Draft Environmental Impact Statement, for the subject project. The signed TESA concurrence form is attached.

The following advisory comments were received from TDEC Divisions/Offices and should be considered during development of the Preferred Alternatives and Preliminary Mitigation and design of the project to avoid, minimize, and mitigate impacts to the natural environment. Where environmental impacts cannot be avoided, information needed to complete the appropriate TDEC permit applications should be composed during project development. A summary of TDEC environmental permit requirements is available on the TDEC website, http://state.tn.us/environment/permits.

DIVISION OF AIR POLLUTION CONTROL
The Division of Air Pollution Control has the following comments:
This project is in an area designated as attainment/unclassified for the National Ambient Air Quality Standards (NAAQS), therefore, a transportation conformity determination is not required.
This agency's other interests, above what would be addressed through the standard NEPA process, concerns the control of fugitive dust and equipment exhaust emissions during the construction phase, and the assurance that any structures requiring demolition are asbestos free, as per the requirements of Chapter 1200-3-11, Hazardous Materials.

The open burning regulations have changed dramatically. Before burning any wood waste, please refer to Chapter 1200-3-4, Open Burning rules at: http://tn.gov/sos/rules/1200/1200.htm. We also suggest contacting other applicable regulatory agencies.
Please continue to keep us apprised of the progress on this project in the event that circumstances change and new concerns regarding air quality develop.

DIVISION OF GEOLOGY
The Division of Geology has reviewed the DEIS and has no comments at this time.

DIVISION OF SOLID WASTE MANAGEMENT
The Division of Solid Waste Management has the following comments:
English Cabinets located at 5236 Memorial Blvd. is a possible area of interest. This facility was not addressed in the proposal.

DIVISION OF UNDERGROUND STORAGE TANKS
The Division of Underground Storage Tanks has the following comments regarding CP 3 in addition to the comments submitted previously for CP 1 and 2 (attached):
CP 3, entitled Draft Environmental Impact Statement, does not list DUST as having responded to CP 1 and 2. In fact, CP 3 on page 182 and 182 indicates that **no** TDEC divisions responded to CP 1 and 2.
A new UST facility, People's Food Store Facility ID #1-820631, located at 3104 Memorial Blvd.; Kingsport, TN 37660, has become active since CP 1 and 2 was reviewed.
CP 3 does not address the following UST facilities listed during my review of CP 1 and 2:
Former Amoco Station (ID #1-820435), 3101 Memorial Blvd., Kingsport, TN 37664: Tanks Permanently out of Service (POS)
Former Garden Basket Convenience Center (ID #1-820144), 3177 Memorial Blvd., Kingsport, TN 37660: Tanks POS; Contamination case closed 2/2/2011.
Former Chevron Facility #49739 (ID #1-820538), 3801 Memorial Blvd., Kingsport, TN 37660: Tanks POS; Contamination case closed 7/20/2001.
Former Cherokee Food Store #13 (ID #1-820029), 5703 Memorial Blvd., Kingsport, TN 37660: Tanks POS; Contamination case closed 5/17/2009.
Sunbridge Care and Rehabilitation (ID #1-820516), Dba Hillside Manor 3641 Memorial Blvd., Kingsport, TN 37664 Richard Chadbourne property (ID #1-829003), 5340 Memorial Blvd, Kingsport, TN 37660

DIVISION OF WATER POLLUTION CONTROL
The Division of Water Pollution Control has the following comments:
An impaired stream (Booher Creek) is near the intersection of SR-126 and I-81. The cause of the impairment is *Escherichia coli* due to livestock grazing in the riparian or shoreline zones. There are no known Exceptional Tennessee Waters (ETW) within the project study area. Streams may be assessed during the permitting process if the proposed

activity is determined to be degradation. If these streams are found to be ETW or impaired due to habitat alteration, in-system mitigation may be required.

Thank you for the opportunity to participate in the planning of this project. If you have any questions regarding the information provided, please email TDEC.TESA@state.tn.us or contact Greg Clement, Acting TDEC TESA Coordinator, at 615-532-2331.

Sincerely,

Daniel C. Eagar

Daniel C. Eagar, Manager
WPC Natural Resources Section

Tennessee Environmental Streamlining Agreement Concurrence Form
Concurrence Point 3
SR 126 (Memorial Boulevard)
from East Center Street in Kingsport to Interstate 81
Sullivan County, Tennessee
PIN 105467.00

The Tennessee Department of Transportation (TDOT) is preparing an Environmental Impact Statement (EIS) for SR 126 (Memorial Boulevard) from East Center Street in Kingsport to Interstate 81 in Sullivan County, Tennessee. This EIS is being developed by TDOT to document the impacts of the subject project, in accordance with the *National Environmental Policy Act (NEPA)* and the *Tennessee Environmental Streamlining Agreement (TESA).* In accordance with TESA, we are requesting your review and concurrence on *Concurrence Point 3, Adequacy of the Draft EIS.*

The *Adequacy of the Draft EIS Package* was sent to you on August 12, 2011 for a 45-day review period. Once you have had the opportunity to review the above referenced document, please sign this form. In signing this document, you are indicating your concurrence with the Preliminary Draft Environmental Impact Statement, TESA Concurrence Point 3.

Please sign and return this form to Ms. JonnaLeigh Stack at the address below by September 26, 2011.

JonnaLeigh Stack, Esq.
TDOT Environmental Division
Suite 900
James K. Polk Building
505 Deaderick Street
Nashville, TN 37243-0334

If you feel all provisions of TESA Concurrence Point 3 have been satisfied, please acknowledge your concurrence with your signature below. Please include any comments you would like addressed as the project proceeds.

AGENCY: TN - Dept. Environment & Conservation

CONCURRRENCE: Daniel C. Cary

DATE: 19 Sept. 2011

Sullivan Co. General File

Alan Hayes - Re: TESA CP1&2 - Sullivan Co SR-126 (PIN 105467.00)

From: Lisa Pugh
To: TESA, TDEC
Date: 3/24/2010 10:06 AM
Subject: Re: TESA CP1&2 - Sullivan Co SR-126 (PIN 105467.00)
CC: Boyd, Stan; Braswell, Mark; Ellis, Ernestine; Hayes, Alan
Attachments: Memorial Blvd Registered UST Facilities.xls

Good morning Susannah,

Our Field Office Manager, Alan Hayes, has put together the attached spreadsheet with the identified facilities within the Sullivan County project area. Most of them no longer have active underground storage tanks. The legend at the bottom will define the status and active contamination cases are indicated.
If you need any additional information, please let us know.
Have a great day,
Lisa Pugh
Field Operations Coordinator
Division of Underground Storage Tanks
Tennessee Department of Environment and Conservation
>>> TDEC TESA 2/17/2010 8:59 AM >>>
Attached is the Tennessee Environmental Streamlining Agreement (TESA) combined Concurrence Point 1 and 2, Purpose & Need and Study Area and Alternative to be Evaluated, Package for the subject project. TDEC accepted the invitation to be a Participating Agency in the development of this project without comment.

TDOT appreciates TDEC's programmatic review of TESA projects and welcomes both program-related advisory comments and any other relevant project comments. Please review the attached CP1&2 document and email any advisory comments, based on a review of all appropriate TDEC programs, to TDEC.TESA@tn.gov by Friday, March 26, 2010. Alternatively, please reply to this email account that there are no comments. Comments from all participating TDEC Divisions/Offices will be included in a Department response to TDOT.

TDEC will have the opportunity to provide advisory comments at two more project development concurrence points, the draft environmental document (CP3) and the selection of final alternative (CP4).

Please email all TESA correspondence, comments, and/or concerns to this email account. Please contact me if you have received this email in error, know of other TDEC staff who should receive this information, or need additional information. Thanks-

---

Susannah Kniazewycz
Acting TDEC TESA Coordinator
615-889-6888
TDEC.TESA@tn.gov

10-1

Facility	1820435	Amoco Service Station	3101 Memorial Blvd.; Kingsport, TN 37664-	POS	
Facility	1820163	Zoomerz # 54	3717 Memorial Blvd.; Kingsport, TN 37660-	CIU	Contamination Case Closed 6/14/2006
Facility	1820538	Chevron Facility #49739	3801 Memorial Drive; Kingsport, TN 37660-	POS	Contamination Case Closed 7/20/2001
Facility	1820144	Garden Basket Conv.store #4	3177 Memorial Blvd.; Kingsport, TN 37660-	POS	**Open/Active Contamination Case**
Facility	1820448	Greenwood Market, Inc.	5121 Memorial Blvd.; Kingsport, TN 37664-	CIU	
Facility	1820029	Cherokee Food Store #13	5703 Memorial Blvd.; Kingsport, TN 37660-	POS	Contamination Case Closed 5/17/2009
Facility	1820582	Thouin Enterprises, Inc	3933 Memorial Blvd.; Kingsport, TN 37664-	POS	
Facility	1820280	Indian Springs Marathon	5637 Memorial Blvd.; Kingsport, TN 37660-	POS	
Facility	1820237	Midway Grocery	5001 Memorial Blvd.; Kingsport, TN 37660-	POS	
Facility	1820587	Old Simpson Motors	3310 Memorial Blvd.; Kingsport, TN 37660-	POS	
Facility	1820193	Roadrunner Market #175	4001 Memorial Avenue; Kingsport, TN 37664-	CIU	Contamination Case Closed 1/17/1995
Facility	1820516	Sunbridge Care And Rehabilitation	Dba Hillside Manor 3641 Memorial Blvd.; Kingsport, TN 37664-	POS	Contamination Case Closed 7/7/2003
Facility	1829003	Richard Chadbourne	5340 Memorial Blvd.	POS	

POS: Permanently Out of Service
CIU: Currently in Use

TENNESSEE WILDLIFE RESOURCES AGENCY

ELLINGTON AGRICULTURAL CENTER
P. O. BOX 40747
NASHVILLE, TENNESSEE 37204

September 23, 2011

JonnaLeigh Stack
TDOT Environmental Division
Suite 900
James K. Polk Building
505 Deaderick Street
Nashville, TN 37243-0334

Re: TESA Concurrence Point #3 Package
Adequacy of Draft Environmental Impact Statement for the SR 126 (Memorial Boulevard) Corridor Improvement Project, from East Center Street to Interstate 81 in Sullivan County, Kingsport, TN
PIN: 105467.00, Project No: 82085-0225-14

Dear Ms. Stack:

The Tennessee Wildlife Resource Agency has received and reviewed the information your office provided us regarding the proposed project listed above. Our current concerns are potential impacts to streams, floodplains, and fish and wildlife species under our authority that may occur due to the construction of this project. We provide the following advisory comments:

- On Page vii, Section S.4.6, entitled "Protected Species" of the summary section, the following statement is made: "The proposed project will not impact any federally listed, threatened, or endangered species or critical habitat." It is our understanding that bat surveys have not been completed to determine potential impact to the Indiana bat. It is our opinion that the sentence should be reworded to read: "The proposed project is not likely to affect any federally listed, threatened, or endangered species or critical habitat."
- On page xi, Section S.9.1, entitled "Water Quality Impact Minimization/Mitigation", the statement is made: "Best Management Practices will include but not limited to:" and then lists some broad practices. We would like to see more specific language regarding compensatory stream mitigation for impacts to these resources; such as "Stream mitigation will be compliant with the „Stream Mitigation Guidelines for the State of Tennessee" by the Tennessee Department of Environment and Conservation, Division of Water Pollution Control, Natural Resources Section" and regulations of the U.S. Army Corps of Engineers.
- On page 117 in Chapter 3, Section 3.5.3, entitled "Federally Listed and Proposed Threatened and Endangered Species", it lists the Bald Eagle (*Haliaeetus leucocephalus*) as a federally threatened species, which is inaccurate. Bald eagles are state listed as "Wildlife-In-Need-Of-Management."
- On page 117 in Chapter 3, Section 3.5.4, entitled "State Listed Species", it is stated: "Efforts have been made to identify Federal and State-listed species in the project impact

area." It is our opinion that a description of the "efforts" should be included in this section of the final Environmental Impact Statement for this proposed project.

- On page 121 in Chapter 3, the title of TABLE 3.5.2: entitled "ANIMALS IDENTIFIED WITHIN SULLIVAN COUNTY BY TWRA (1 OF 2)" should be reworded to read "ANIMALS IDENTIFIED WITHIN SULLIVAN COUNTY BY TWRA AND TDEC (1 OF 2)", since this information was provide to TDOT by TDEC and since TWRA does not have regulatory authority over the Stonefly (*Allocapnia brooksi)*, the Cherokee Clubtail Dragonfly (*Gomphus consanguis*), the Cave Spider (*Nesticus paynei*), and the Diana Fritillary (*Speyeria Diana*). We also request that the state status of "Wildlife-In-Need-Of-Management" be included in the table for the following species: Tangerine Darter (*Percina aurantiaca*), Blotchside Logperch (*Percina burtoni*), Bald Eagle (*Haliaeetus leucocephalus*), Swainson's Warbler (*Limnothlypis swainsonii*), Common Barn Owl (*Tyto alba*), Hairy-tailed Mole (*Parascalops breweri*), Smoky Shrew (*Sorex fumeus*), Southeastern Shrew (*Sorex longirostris*), Southern Bog Lemming (*Synaptomys cooperi*), and the Meadow Jumping Mouse (*Zapus hudsonius*). The Sharphead Darter (*Etheostoma acuticeps*), the Tennessee Dace (Phoxinus tennesseensis), and the Least Weasel (Mustela nivalis) have no Tennessee Wildlife Resources Agency state status. The state status for the Longhead Darter (*Percina macrocephala*) is threatened.
- On page 139 in Chapter 4, Section 4.9.1 Terrestrial Ecology, second paragraph, second to the last sentence, the statement is made "As habitats are encroached upon most wildlife will adjust to changes in their environment. Displaced wildlife species will move to similar habitats in nearby areas for refuge. The proposed project will have a minor impact on local mammals and birds." It is the opinion of the Tennessee Wildlife Resources Agency that as available habitat is reduced due to the construction of this road project, the carrying capacity and/or necessary specie niche requirements may not be met resulting in loss of local wildlife. We would also prefer to see the statement "The proposed project will result in minimal loss of wildlife habitat and local wildlife populations." instead of the statement "The proposed project will have a minor impact on local mammals and birds." that currently exists in the document.

We concur on Concurrence Point 3 regarding the Adequacy of Draft Environmental Impact Statement for the SR 126 (Memorial Boulevard) Corridor Improvement Project, from East Center Street to Interstate 81 in Sullivan County, Kingsport, Tennessee. We have completed the requested concurrence form, which is enclosed.

We thank you for the opportunity to participate during the coordination process for this proposed project and look forward to future coordination to avoid, minimize, and/or mitigate for potential impacts to the state"s fish and wildlife resources due to this proposed project.

Sincerely,

Robert M. Todd

Robert M. Todd
Fish and Wildlife Environmentalist

cc: Vincent Pontello, Wildlife Biologist/East TN TDOT Liaison
Rob Lindbom, Region IV Habitat Biologist
John Gregory, Region IV Manager

Tennessee Environmental Streamlining Agreement Concurrence Form
Concurrence Point 3
SR 126 (Memorial Boulevard)
from East Center Street in Kingsport to Interstate 81
Sullivan County, Tennessee
PIN 105467.00

The Tennessee Department of Transportation (TDOT) is preparing an Environmental Impact Statement (EIS) for SR 126 (Memorial Boulevard) from East Center Street in Kingsport to Interstate 81 in Sullivan County, Tennessee. This EIS is being developed by TDOT to document the impacts of the subject project, in accordance with the *National Environmental Policy Act (NEPA)* and the *Tennessee Environmental Streamlining Agreement (TESA)*. In accordance with TESA, we are requesting your review and concurrence on *Concurrence Point 3, Adequacy of the Draft EIS.*

The *Adequacy of the Draft EIS Package* was sent to you on August 12, 2011 for a 45-day review period. Once you have had the opportunity to review the above referenced document, please sign this form. In signing this document, you are indicating your concurrence with the Preliminary Draft Environmental Impact Statement, TESA Concurrence Point 3.

Please sign and return this form to Ms. JonnaLeigh Stack at the address below by September 26, 2011.

JonnaLeigh Stack, Esq.
TDOT Environmental Division
Suite 900
James K. Polk Building
505 Deaderick Street
Nashville, TN 37243-0334

If you feel all provisions of TESA Concurrence Point 3 have been satisfied, please acknowledge your concurrence with your signature below. Please include any comments you would like addressed as the project proceeds.

AGENCY: TENNESSEE WILDLIFE RESOURCES AGENCY

CONCURRRENCE: Robert Todd

DATE: 9-23-2011

DEPARTMENT OF THE ARMY
NASHVILLE DISTRICT, CORPS OF ENGINEERS
3701 Bell Road
NASHVILLE, TENNESSEE 37214

September 9, 2011

REPLY TO
ATTENTION OF:

Regulatory Branch

SUBJECT: File No. 200900048; Concurrence Point 3 (Preliminary Draft Environmental Impact Statement) for Proposed Improvements to State Route 126 (Memorial Boulevard) from East Center Street, in Kingsport, to Interstate 81, in Sullivan County, Tennessee (PIN 105467.00)

Ms. JonnaLeigh Stack
Tennessee Department of Transportation
Environmental Division
Suite 900 - James K. Polk Building
505 Deaderick Sreet
Nashville, Tennessee 37243-0334

Dear Ms. Stack:

This is in reference to your letter requesting review and concurrence on Concurrence Point 3, Preliminary Draft Environmental Impact Statement (DEIS) for the subject project.

We have reviewed the draft EIS document and concur with the information in the Preliminary DEIS. Also, enclosed is a signed concurrence document form.

Thank you for including this office in the review of this project. Please contact me at the above address, telephone 615-369-7509, or email at amy.m.robinson@usace.army.mil.

Sincerely,

Amy M. Robinson
Project Manager
Operations Division

Enclosure

Tennessee Environmental Streamlining Agreement Concurrence Form
Concurrence Point 3
SR 126 (Memorial Boulevard)
from East Center Street in Kingsport to Interstate 81
Sullivan County, Tennessee
PIN 105467.00

The Tennessee Department of Transportation (TDOT) is preparing an Environmental Impact Statement (EIS) for SR 126 (Memorial Boulevard) from East Center Street in Kingsport to Interstate 81 in Sullivan County, Tennessee. This EIS is being developed by TDOT to document the impacts of the subject project, in accordance with the *National Environmental Policy Act (NEPA)* and the *Tennessee Environmental Streamlining Agreement (TESA).* In accordance with TESA, we are requesting your review and concurrence on *Concurrence Point 3, Adequacy of the Draft EIS.*

The *Adequacy of the Draft EIS Package* was sent to you on August 12, 2011 for a 45-day review period. Once you have had the opportunity to review the above referenced document, please sign this form. In signing this document, you are indicating your concurrence with the Preliminary Draft Environmental Impact Statement, TESA Concurrence Point 3.

Please sign and return this form to Ms. JonnaLeigh Stack at the address below by September 26, 2011.

JonnaLeigh Stack, Esq.
TDOT Environmental Division
Suite 900
James K. Polk Building
505 Deaderick Street
Nashville, TN 37243-0334

If you feel all provisions of TESA Concurrence Point 3 have been satisfied, please acknowledge your concurrence with your signature below. Please include any comments you would like addressed as the project proceeds.

AGENCY: U.S. Army Corps of Engineers

CONCURRRENCE: [signature]

DATE: 9/9/11

APPENDIX K – PAGES FROM WEBSITES USED IN THE FEIS

SR-126 (Memorial Boulevard)

From East Center Street in the City of Kingsport to I-81, Sullivan County.

Public Involvement

This Web site, http://www.tdot.state.tn.us/sr126/ (http://www.tdot.state.tn.us/sr126/), will be one of the principal means of public involvement and feedback.

Public comments concerning this project can also be submitted to: TDOT.Comments@tn.gov (mailto:TDOT.Comments@tn.gov)

SCHEDULED MEETINGS
There are no public involvement meetings scheduled at this time.

PAST MEETINGS

Public Hearing
December 11, 2012
Kingsport Civic Center Auditorium

You may access project information using the links below:

- **Draft Environmental Impact Statement (DEIS)** *(pdf) (large file 16 MB)*
- **Appendix for DEIS** *(pdf) (large file 14.6 MB)*
- **Public Hearing Handout** *(pdf)*
- **Public Hearing Maps** *(pdf)*
  - Alternate A (Sheet 1 of 2)
  - Alternate A (Sheet 2 of 2)
  - Alternate B (Sheet 1 of 2)
  - Alternate B (Sheet 2 of 2)
  - Alternate B Modified (Sheet 1 of 2)
  - Alternate B Modified (Sheet 2 of 2)

Natural Heritage Inventory Program

Helpful Links

Explanation of Rank and Status Code (docs/status_ranks.pdf)
Rare and Endangered Animal List of Tennessee (docs/animal_list.pdf)
Tennessee Rare Plant List (docs/plant_list.pdf)
Tennessee Rare Species Survey Form (http://environment-online.state.tn.us/etdec/DownloadFile.aspx?row_id=CN-1154)
Natural Areas Home (index.shtml)

NEW! – Interactive Rare Species Database for Environmental Review. Search and download data by County, Quadrangle, or Watershed. (http://environment-online.state.tn.us:8080/pls/enf_reports/f?p=9014:3:2083109232364451)

The Natural Heritage Inventory Program operates under authority of the Rare Plant Protection and Conservation Act of 1985 (../permits/tcalink.shtml), and the Rare Plant Protection and Conservation Regulations (/sos/rules/0400/0400-06/0400-06-02.pdf). The Program maintains a GIS database with information on the distribution and ecology of rare plants, animals and ecological communities across Tennessee.

The Program uses Heritage Methodology - based on that of its parent organization NatureServe (http://www.natureserve.org) - for the most recent taxonomic information, ecological community classification, methodology, and software development.

The database currently contains over 14,000 rare species and plant community occurrence records as well as information on hundreds of conservation sites. Information gathered by program biologists, assists in directing conservation, restoration, and management activities of other programs in the Division.

Through the Natural Heritage Inventory Program, the Department of Environment and Conservation publishes the state's rare plant list. The ability to legally list plants as Threatened, Endangered, and Special Concern is granted by the Rare Plant Protection and Conservation Act of 1985 (../permits/tcalink.shtml).

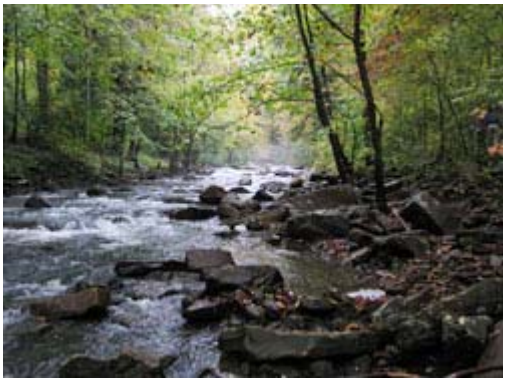
The program also publishes a list of the rare animals of Tennessee, but the legal listing of animals as Threatened, Endangered, or Deemed in Need of Management is handled by the Tennessee Wildlife Resources Agency.

To view available data, forms, information on environmental review procedures, and publications resulting from Natural Heritage Inventory Program work click here (data.shtml).

The Division uses information from the Program and other sources for various conservation initiatives including identifying areas for inclusion in the Natural Areas System. Rare species data are also used by state, federal and local governments for conducting environmental reviews. Natural Heritage Program staff direct and conduct field surveys of species, natural communities, and natural areas of special concern. Staff also conduct workshops and provide technical assistance to state and federal agencies, local governments, private conservation groups, and industrial and private landowners, for use in the management of their lands. The Program issues scientific collecting permits (../permits/parkcoll.shtml) for research on state parks and state natural areas, and issues rare plant dealer licenses (../permits/enddeal.shtml).

The Rare Plant Protection and Conservation Act of 1985 (../permits/tcalink.shtml) also allows the Division to enter into agreements with other agencies "with respect to programs designed to conserve rare plants. . ." A formal cooperative agreement between the U.S. Fish and Wildlife Service and the State establishes the Division as the lead state agency in the process of listing and recovery efforts for federally endangered or threatened species of plants. Independent of this agreement, the Program also conducts U.S. Fish and Wildlife Service-funded projects to conserve and protect federal concern animal species. Through extensive field investigations, research and management

activities, the Division seeks to prevent imperiled species of plants and animals from becoming further imperiled, to effect the recovery of federally listed species so that they may be de-listed, and to prevent the extirpation of critically imperiled species.



U.S. Energy Information Administration

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International Energy Statistics

Country: All Countries by Region Start Year: 2007 End Year: 2011 UPDATE

Product: Total Carbon Dioxide Emissions from the Consumption of Energy Unit: Million Metric Tons

Total Carbon Dioxide Emissions from the Consumption of Energy (Million Metric Tons) Units Conversion Download Excel

	2007	2008	2009	2010	2011
North America	7,065.083	6,877.108	6,407.535	6,617.038	6,506.960
Bermuda	0.751	0.750	0.712	0.699	0.777
Canada	593.090	578.248	549.684	546.652	552.557
Greenland	0.600	0.642	0.648	0.648	0.611
Mexico	444.270	452.794	421.124	432.210	462.293
Saint Pierre and Miquelon	0.089	0.092	0.089	0.089	0.091
United States	6,026.284	5,844.582	5,435.279	5,636.739	5,490.631
Central & South America	1,169.560	1,222.954	1,200.598	1,288.268	1,339.474
Antarctica	0.245	0.264	0.245	0.072	0.137
Antigua and Barbuda	0.631	0.659	0.666	0.666	0.732

Footnotes:

-- = Not applicable
(s) = Value is too small for the number of decimal places shown
NA = Not available
W = Data withheld to avoid disclosure
F = Forecast

Related Information:

- Table Notes
- Sources
- Glossary
- Contacts
- Country

U.S. Energy Information Administration

Emissions of Greenhouse Gases in the U. S.

Release Date: March 31, 2011 | **Next Release Date:** Report Discontinued |
Report Number: DOE/EIA-0573(2009)

1. Greenhouse Gas Emissions Overview

1.1 Total emissions

Total U.S. anthropogenic (human-caused) greenhouse gas emissions in 2009 were 5.8 percent below the 2008 total (Table 1). The decline in total emissions—from 6,983 million metric tons carbon dioxide equivalent ($MMTCO_2e$) in 2008 to 6,576 $MMTCO_2e$ in 2009—was the largest since emissions have been tracked over the 1990-2009 time frame. It was largely the result of a 419-$MMTCO_2e$ drop in carbon dioxide (CO_2) emissions (7.1 percent). There was a small increase of 7 $MMTCO_2e$ (0.9 percent) in methane (CH_4) emissions, and an increase of 8 $MMTCO_2e$ (4.9 percent), based on partial data, in emissions of man-made gases with high global warming potentials (high-GWP gases). (Draft estimates for emissions of HFC and PFC substitutes for ozone-depleting substances in 2009 are included; 2008 data are used for emissions of other high-GWP gases.) Emissions of nitrous oxide (N_2O), on the other hand, fell by 4 $MMTCO_2e$ (1.7 percent).

The decrease in U.S. CO_2 emissions in 2009 resulted primarily from three factors: an economy in recession, a particularly hard-hit energy-intensive industries sector, and a large drop in the price of natural gas that caused fuel switching away from coal to natural gas in the electric power sector.

Methane emissions totaled 731 $MMTCO_2e$ in 2009 (Figure 1), up by 7 $MMTCO_2e$ (0.9 percent) from 2008. Increases in energy-related methane emissions—largely from underground coal mining—were offset by decreases in emissions from agricultural sources. Methane emissions from waste management systems rose by 7 $MMTCO_2e$, while industrial emissions declined by 0.4 $MMTCO_2e$.

Emissions of nitrous oxide dropped by 4 $MMTCO_2e$ (1.7 percent) to 220 $MMTCO_2e$. The decrease came mainly from a reduction in energy-related emissions, as well as declines in industrial-related and agricultural nitrous oxide emissions.

Based on a partial estimate, U.S. emissions of high-GWP gases totaled 178 $MMTCO_2e$ in 2009—8 $MMTCO_2e$ (4.9 percent) above the 2008 level. Emissions of hydrofluorocarbons (HFCs) rose by 7 $MMTCO_2e$ (5.4 percent) from 2008 to 2009.

Figure Data

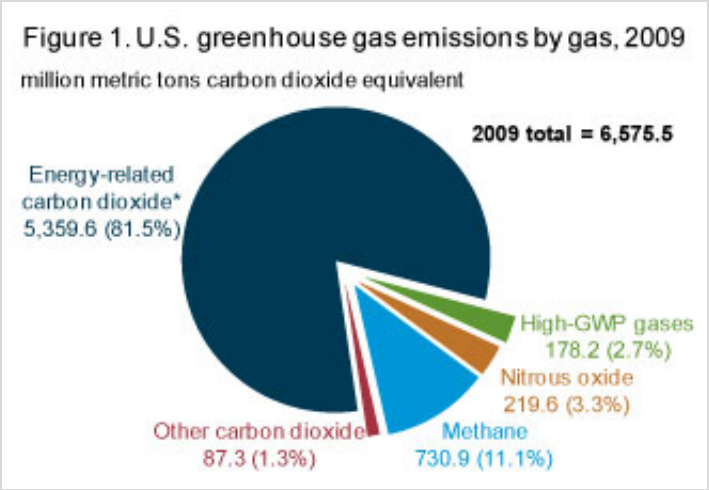
1.2. Energy-related carbon dioxide emissions by fuel and end use

Energy-related CO_2 emissions dominate total U.S. greenhouse gas emissions (Figure 1). The figures below show the shares of energy-related CO_2 emissions accounted for by major energy fuels and by energy sectors.

Petroleum is the largest fossil fuel source for energy-related CO_2 emissions, contributing 43 percent of the total (Figure 2).

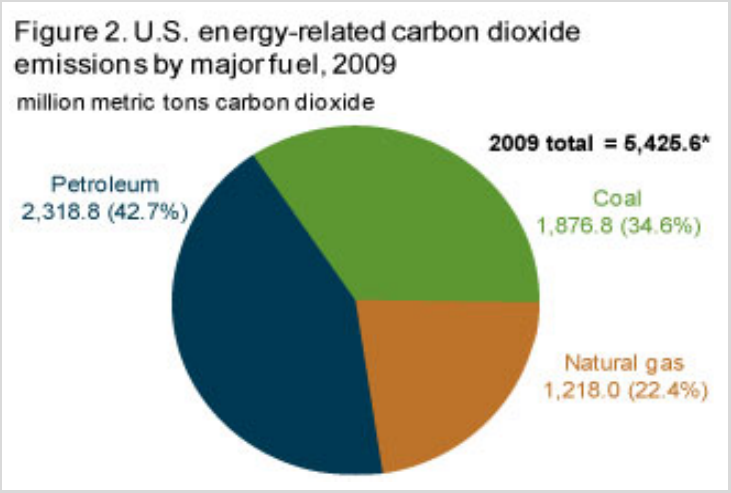
Figure Data

Coal is the second-largest fossil fuel contributor, at 35 percent. Although coal produces more CO_2 per unit of energy produced



U.S. greenhouse gas emissions, 1990, 2005, 2008, and 2009

	1990	2005	2008	2009
Estimated emissions (million metric tons CO_2e)	6,133.2	7,109.4	6,983.1	6,575.5
Change from 1990 (million metric tons CO_2e)		976.1	849.8	442.3
(percent)		*15.9%*	*13.9%*	*7.2%*
Average annual change from 1990 *(percent)*		*1.0%*	*0.7%*	*0.4%*
Change from 2005 (million metric tons CO_2e)			-126.3	-533.8
(percent)			*-1.8%*	*-7.5%*
Change from 2008 (million metric tons CO_2e)				-407.5
(percent)				*-5.8%*



than petroleum does (i.e., coal has a higher carbon intensity than petroleum), petroleum consumption—in terms of British thermal units (Btu)—made up 45.0 percent of total fossil fuel energy consumption in 2009, as compared with coal's 25 percent.

Natural gas, with a carbon intensity that is about 55 percent of the carbon intensity of coal and 75 percent of the carbon intensity of petroleum, accounted for 30 percent of U.S. fossil energy use in 2009 but only 22 percent of total energy-related CO_2 emissions.

In Figure 3, emissions are divided into three categories: emissions from the direct use of fossil fuels in homes (for example, natural gas for heating), commercial buildings, and industry; emissions from fuel use for transportation (principally, petroleum); and emissions from the conversion of primary energy to electricity in the electric power sector.

Figure Data

The electric power sector is the largest source, accounting for 40 percent of all energy-related CO_2 emissions. The electric power sector consists of those entities whose primary business is the production of electricity.

The transportation sector is the second-largest source, at 34 percent of the total. Those emissions are principally from the combustion of motor gasoline, diesel fuel, and jet fuel.

Direct fuel use in the residential and commercial sectors (mainly for heating) and the use of fuels to produce process heat in the industrial sector together accounted for 26 percent of total CO_2 emissions in 2009.

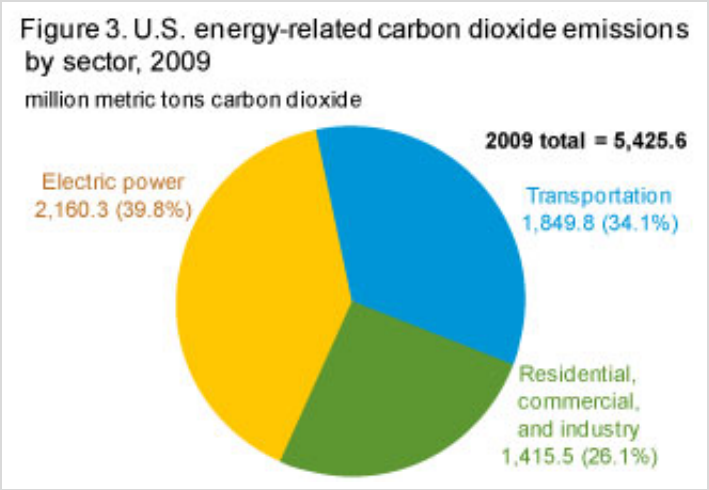
1.3 Decomposition of U.S. greenhouse gas changes

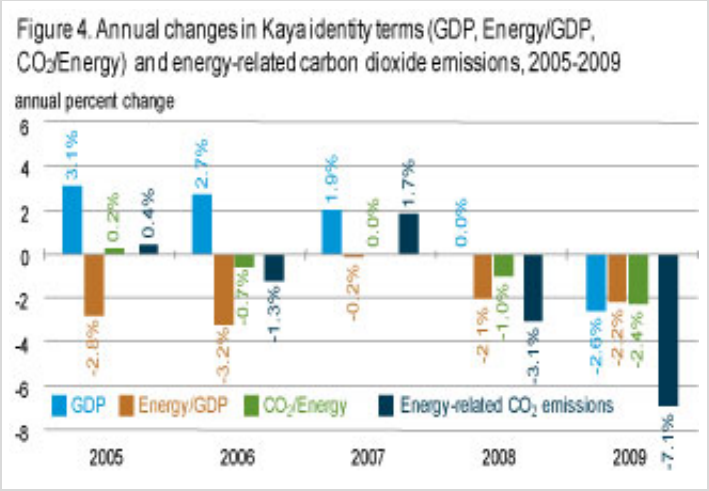
While the U.S. economy declined by 2.6 percent in 2009, a 5.8-percent decrease in total greenhouse gas emissions meant that U.S. greenhouse gas intensity decreased by 3.3 percent from 2008 to 2009.

Because energy-related CO_2 is such a large component of greenhouse gas emissions, it is helpful to analyze energy-related CO_2 emissions by using an equation known as the Kaya identity. The Kaya identity relates percent changes in energy-related CO_2 emissions to changes in the economy through the following approximation:

$$\%\Delta CO_2 \approx \%\Delta GDP + \%\Delta(Energy/GDP) + \%\Delta(CO_2/Energy) \quad ,$$

where %Δ represents percentage change.





As indicated in Figure 4, energy-related CO_2 emissions have declined in every year since 2005, with the exception of 2007. Although this is not a long period of time, it is instructive to examine the reasons for the change in trend as compared with the period from 1990 to 2005. A lower rate of economic growth from 2005 to 2009 (averaging 0.5 percent per year, as compared with the average of 3.1 percent per year from 1990 to 2005) is a key driver of the changing trend in emissions.

Figure Data

Over both periods, the energy intensity of the economy declined by an average of 1.9 percent per year, as the trend toward a service-oriented, post-industrial U.S. economy continued. In contrast, a drop in the carbon intensity of the U.S. energy supply may represent a new trend: from 1990 to 2005, carbon intensity increased on average by 1.0 percent per year, but from 2005 to 2009 it fell by an average of 1.9 percent per year, as natural gas was increasingly substituted for coal, and renewable electricity generation continued to grow. In combination, these factors resulted in a 7.1-percent decline in energy-related CO_2 emissions from 2008 to 2009 (Table 2).

1.4. Greenhouse gas emissions in the U.S. economy

Figure 5 illustrates the flow of U.S. greenhouse gas emissions in 2009, from their sources to their end uses. The left side shows CO_2 quantities by fuel sources and quantities for other gases; the right side shows their distribution by sector. The center of the diagram indicates the split between CO_2 emissions from direct fuel combustion and those from electricity conversion. Adjustments indicated at the top of the diagram for U.S. territories and international bunker fuels correspond to greenhouse gas reporting requirements developed by the United Nations Framework Convention on Climate Change (UNFCCC) (see also Table 3).

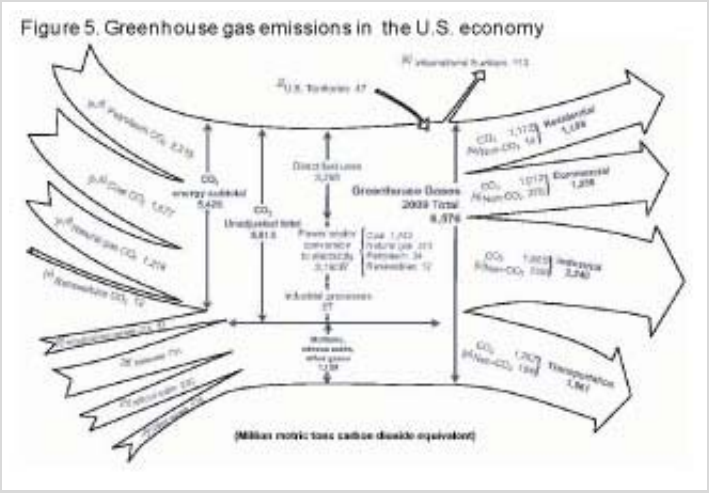


Diagram notes

CO_2. CO_2 emission sources include energy-related emissions (primarily from fossil fuel consumption) and emissions from industrial processes. The energy subtotal (5,426 $MMTCO_2e$) includes petroleum, coal, and natural gas consumption and smaller amounts from nonbiogenic municipal solid waste and some forms of geothermal power generation. The energy subtotal also includes emissions from nonfuel uses of fossil fuels, mainly as inputs to other products. Industrial process emissions (87 $MMTCO_2e$) include CO_2 stripped from natural gas and flared natural gas, cement manufacture, limestone and dolomite calcination, soda ash manufacture and consumption, CO_2 manufacture, and aluminum production. The sum of the energy subtotal and industrial processes equals unadjusted CO_2 emissions (5,513 $MMTCO_2e$). The energy component of unadjusted

emissions can be divided into direct fuel use (3,265 $MMTCO_2e$) and fuel converted to electricity (2,160 $MMTCO_2e$).

Non-CO_2 gases. Methane (731 $MMTCO_2e$) and nitrous oxide (220 $MMTCO_2e$) sources include emissions related to energy, agriculture, waste management, and industrial processes. High-GWP gases (178 $MMTCO_2e$) include hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF_6). These gases have a variety of uses in the U.S. economy, including as refrigerants, insulators, solvents, and aerosols; as etching, cleaning, and firefighting agents; and as cover gases in various manufacturing processes.

Adjustments. In keeping with the UNFCCC, CO_2 emissions from U.S. Territories (47 $MMTCO_2e$) are added to the U.S. total, and CO_2 emissions from fuels used for international transport (both oceangoing vessels and airplanes) (113 $MMTCO_2e$) are subtracted to derive total U.S. greenhouse gas emissions (6,576 $MMTCO_2e$).

Emissions by end-use sector. CO_2 emissions by end-use sector are based on EIA's estimates of energy consumption (direct fuel use and purchased electricity) by sector and on the attribution of industrial process emissions by sector. CO_2 emissions from purchased electricity are allocated to the end-use sectors, based on their shares of total electricity sales. Non-CO_2 gases are allocated by direct emissions in those sectors plus emissions in the electric power sector that can be attributed to the end-use sectors on the basis of electricity sales.

Residential emissions (1,186 $MMTCO_2e$) include energy-related CO_2 emissions (1,172 MMT) and non-CO_2 emissions (14 $MMTCO_2e$). The non-CO_2 sources include methane and nitrous oxide emissions from direct fuel use. Non-CO_2 indirect emissions attributable to purchased electricity, including methane and nitrous oxide emissions from electric power generation and SF_6 emissions related to electricity transmission and distribution, are also included.

Commercial emissions (1,288 $MMTCO_2e$) include both energy-related CO_2 emissions (1,012 MMT) and non-CO_2 emissions (276 $MMTCO_2e$). The non-CO_2 emissions include direct emissions from landfills, wastewater treatment plants, and commercial refrigerants, and emissions of methane and nitrous oxide from stationary combustion. Non-CO_2 indirect emissions attributable to purchased electricity, including methane and nitrous oxide emissions from electric power generation and SF_6 emissions related to electricity transmission and distribution, are also included.

Industrial emissions (2,240 $MMTCO_2e$) include CO_2 emissions (1,505 MMT)—which can be broken down between combustion (1,418 MMT) and process emissions (87 MMT)—and non-CO_2 emissions (735 $MMTCO_2e$). The non-CO_2 direct emissions include emissions from agriculture (methane and nitrous oxide), coal mines (methane), petroleum and natural gas pipelines (methane), industrial process emissions (methane, nitrous oxide, HFCs, PFCs, and SF_6), and direct stationary combustion emissions of methane and nitrous oxide. Non-CO_2 indirect emissions attributable to purchased electricity, including methane and nitrous oxide emissions from electric power generation and SF_6 emissions related to electricity transmission and distribution, are also included.

Transportation emissions (1,861 $MMTCO_2e$) include energy-related CO_2 emissions from mobile source combustion (1,757 MMT) and non-CO_2 emissions (104 $MMTCO_2e$). The non-CO_2 emissions include methane and nitrous oxide emissions from mobile source combustion and HFC emissions from the use of refrigerants for mobile source air-conditioning units.

1.5. U.S. emissions in a global perspective

Total U.S. energy-related CO_2 emissions in 2007 (including nonfuel uses of fossil fuels) are estimated at 6,022 MMT—about 20 percent of the 2007 world total for energy-related CO_2 emissions, estimated at 29,728 MMT (Table 4).

CO_2 emissions related to energy use in the mature economies of countries that are members of the Organization for Economic Cooperation and Development (OECD)—including OECD North America, OECD Europe, Japan, South Korea, and Australia/New Zealand—were estimated at 13,711 MMT in 2007, or 46 percent of the world total, with the remaining 54 percent

of worldwide energy-related CO_2 emissions (16,017 MMT) estimated to have come from non-OECD countries (Figure 6).

Figure 6. World carbon dioxide emissions by region, 1990, 2007, 2025, and 2035

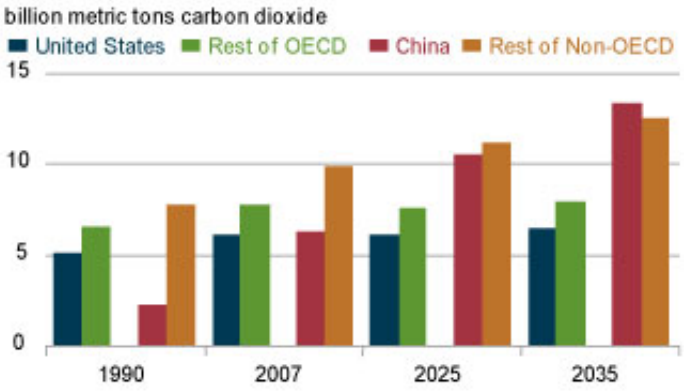


Figure Data

World energy-related carbon dioxide emissions, 1990, 2005, 2007, and 2035

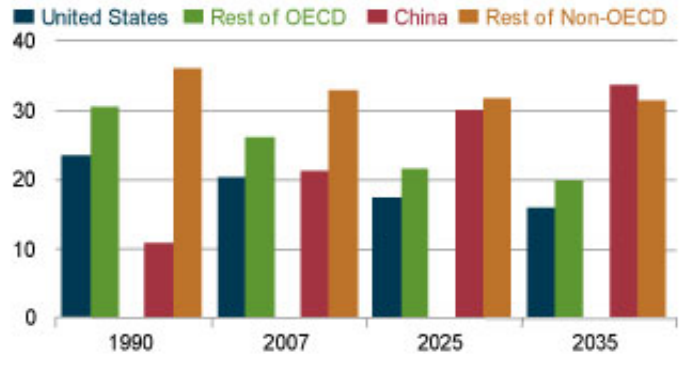
	1990	2005	2007	2035
Estimated emissions (million metric tons)	21,537	28,329	29,728	42,386
Change from 1990 (million metric tons)		6,793	8,191	20,849
(percent)		*31.5%*	*38.0%*	*96.8%*
Average annual change from 1990 *(percent)*		*1.8%*	*1.9%*	*1.7%*
Change from 2005 to 2035 (million metric tons)				14,057
(percent)				*49.6%*
Annual average change from 2005 to 2035 *(percent)*				1.4%

In EIA's *International Energy Outlook 2010* (*IEO2010*) Reference case, projections of energy use and emissions are sensitive to economic growth rates and energy prices. Projections for a range of alternative growth and price scenarios are presented in *IEO2010*.

U.S. energy-related CO_2 emissions are projected to increase by an average of 0.2 percent per year from 2007 to 2035 in the *Annual Energy Outlook 2011* (*AEO2011*) Reference case, while emissions from the non-OECD economies (*IEO2010* Reference case) grow by 1.7 percent per year. Both rates are lower than previous projections as a result of the 2008-2009 global recession and newly enacted energy policies. Consequently, the U.S. share of world CO_2 emissions is projected to fall to 15.8 percent (6,320 MMT out of a global total of 39,975 MMT) in 2035 (Figure 7).

Figure Data

Figure 7. Regional shares of world carbon dioxide emissions, 1990, 2007, 2025, and 2035



China's share of global energy-related CO_2 emissions is projected to grow from 21 percent in 2007 to 31 percent in 2035, and China accounts for 56 percent of the projected increase in world emissions over the period. India accounts for the second-largest share of the projected increase, 7 percent.

1.6. Recent U.S. and international developments in global climate change

United States: Federal actions

U.S. Environmental Protection Agency

Rules for Mandatory Reporting of Greenhouse Gases by 31 industries and emissions sources were finalized by the U.S. Environmental Protection Agency (EPA) in October 2009.[1] Final rules and methods were proposed in April 2010 for a second group of industries: oil and natural gas systems; five industries that emit fluorinated greenhouse gases (GHGs); and facilities that inject and store CO_2 underground for the purposes of geologic sequestration or enhanced oil and gas recovery. The rules were finalized in November and December 2010, with data collection for this second group beginning in January 2011. Reporting rules for the remaining sources from the original proposed rule that were not finalized in October 2009 were finalized in June 2010. This batch of final rules included magnesium production, underground coal mines, industrial wastewater treatment, and industrial landfills. However, the EPA has not acted to finalize the proposed rules for ethanol production, food processing, and coal suppliers.

In December 2009, the EPA issued its final endangerment and cause or contribute findings for greenhouse gas emissions from light-duty vehicles, classifying them as a danger to public health and welfare. As a result, the EPA and the U.S. Department of Transportation's National Highway Traffic Safety Administration (NHTSA), in April 2010, jointly published Corporate Average Fuel Economy (CAFE) and GHG emissions standards to regulate emissions from light-duty vehicles of model years 2012-2016.

In May 2010, a Presidential memo declared that the rulemaking to set standards for light-duty vehicles of model years 2017-2025 would begin, and also directed the EPA and NHTSA for the first time to draft efficiency rules for medium- and heavy-duty engines and vehicles.[2] A Notice of Intent to conduct a joint rulemaking on light-duty vehicles for model years 2017-2025, which includes the Agencies' initial assessment of a potential future standard, was released in September 2010.[3] Proposed rules covering model years 2014-2018 were announced in October 2010. Also in May 2010, the EPA published its Tailoring Rule, which details the Agency's plans to begin regulating GHG emissions from large industrial GHG sources, including power generation facilities, industrial boilers, and oil refineries.[4] The EPA began requiring Clean Air Act (CAA) permits for stationary GHG sources under the Prevention of Significant Deterioration (PSD) requirements of the CAA in January 2011.[5] In August 2010, the EPA announced plans to amend or take over State permitting operations in cases where the State Implementation Plan (SIP) for PSD permitting did not adequately address GHG emissions, as would be required by the CAA.[6]

Other Federal agencies and offices

Implementation of Executive Order 13514 (EO 13514). The White House Council on Environmental Quality (CEQ) and DOE's Federal Energy Management Program (FEMP) developed guidance and calculation methodologies for Federal agencies to conduct and report their GHG inventories under the requirements of EO 13514, Federal Leadership in Environmental, Energy, and Economic Performance (October 5, 2009). The final guidelines for FY 2008 and FY 2010 inventory submissions were published in October 2010. CEQ and FEMP will continue to update the guidelines and methodologies to cover additional emissions sources and provide improved calculation methods for future inventory years. Individual agencies submitted their Strategic Sustainability Performance Plans in June 2010, detailing their strategies to help reach the overall Federal Government-wide goal to reduce Scope 1 and 2 emissions by 28 percent and Scope 3 emissions by 13 percent.[7]

New home appliance efficiency standards agreement. In August, a coalition of energy and water efficiency and consumer advocacy groups, along with major home appliance manufacturers and their industry association, announced an agreement to increase the efficiency of Energy Star home appliances and to seek tax credits for the production of super-efficient appliances.

American Recovery and Reinvestment Act. As of September 30, 2010, the close of the government's fiscal year 2010, DOE had used $35.2 billion in Recovery Act appropriations and $7.5 billion in Treasury tax incentive programs to support more than $100 billion in clean energy projects. This funding went to support more than 8,000 projects across the country, selected from among more than 30,000 applications.[8]

United States: Regional and State initiatives

Regional GHG initiatives. The Western Climate Initiative (WCI) consists of seven western U.S. member States, four Canadian member provinces, and an additional 14 observing States and provinces in the United States, Canada, and Mexico. The U.S. member States hold 19 percent of the total U.S. population and produce 20 percent of U.S. GDP.[9] In July 2010, WCI released its comprehensive design strategy, which outlines its plan to reduce regional GHG emissions to 15 percent below 2005 levels by 2020.

State energy and GHG legislation. A number of new energy efficiency, renewable energy, and climate change laws were enacted in States across the country in 2010,[10] including: RPS amendments (Maryland increased its solar carve-out, and Colorado increased its solar energy target to 30 percent of total energy production by 2020); an ocean energy development goal (Maine); electric vehicle incentives (Maryland); a carbon tax (Montgomery County, Maryland); a low carbon fuel standard for vehicle fuels (California); energy efficiency standards for utilities (Massachusetts) and for new commercial buildings (California); smart grid policy development (Maine); and planning for reductions in GHG emissions from the transportation

sector (Oregon).

In July 2010, the Governors of Rhode Island and Massachusetts signed a Memorandum of Understanding (MOU) on the development of offshore wind energy facilities in the Federal waters off of their coasts. The MOU requires that the States coordinate and collaborate on wind energy efforts in an "area of mutual interest" in their overlapping shared waters.[11]

International actions

UNFCCC and the Kyoto Protocol

The 15th Conference of the Parties (COP-15) and 5th Meeting of the Parties to the Kyoto Protocol (CMP-5) were held in Copenhagen, Denmark, in December 2009. The main product of the meetings was the Copenhagen Accord, which had been agreed to by 140 of the 192 UNFCCC nations as of November 2010.[12] The Accord is a non-binding statement pledging action on:

- A goal to limit global warming to 2 degrees Celsius
- Submission of mitigation goals by individual nations
- Funding $30 billion in "new and additional" financing for mitigation, adaptation, technology development, and capacity building in developing nations over the 2010-2012 period, increasing to $100 billion per year by 2020
- Reporting and verification of national inventories and mitigation actions
- Establishment of a mechanism to use developed country financing in support of efforts to reduce emissions from deforestation and forest degradation and to enhance carbon sinks.

COP-16 and CMP-6 convened from November 29 through December 10, 2010, in Cancun, Mexico. The Parties adopted a package of agreements that reaffirms and builds upon the Copenhagen Accord of 2009. The Cancun Agreements[13] include the following actions:

- Reaffirm the Accord's goal to limit global average temperature rise to 2 degrees Celsius above pre-industrial levels
- Formally recognize the reduction pledges made in the Copenhagen Accord for the first time by "taking note" of the pledges made by both developed and developing nations
- Indicate that the Clean Development Mechanism (CDM) and Joint Implementation, by which Annex I nations may use non-Annex I mitigation projects to offset their emissions, will continue beyond 2012
- Create a new "standardized baseline" process for some types of CDM projects
- Set out a reporting framework that continues annual submission of inventories by developed nations and creates a new registry for developing nations to report on mitigation actions that receive international financing and includes general guidelines for reporting autonomous actions
- Provide a framework to develop financing and other policies to Reduce Emissions from Deforestation and Degradation (REDD+) and call upon developing nations to develop national strategies and reference levels for future efforts to reduce deforestation
- Establish the World Bank as interim trustee of The Green Climate Fund, which seeks to raise $100 billion per year from public and private sources by 2020 to support greenhouse gas mitigation efforts in developing countries
- Set up the Cancun Adaptation Framework to formalize and outline efforts to enhance adaptation activities by all UNFCCC members
- Establish the Technology Mechanism to assist developing countries with identification, transfer, and application of appropriate low-carbon technologies.

Montreal Protocol

The United States, Canada, and Mexico continued to move forward with their proposal, first announced in 2009, to amend the Montreal Protocol to include a binding schedule for phasing down production and consumption of 20 hydrofluorocarbons (HFCs). The proposal calls for developed countries to reduce their production and consumption of the 20 HFCs to 15 percent of

a 2004-2006 average baseline by 2033, and for developing nations to meet the same level by 2043. The proposal was considered at the 22nd Meeting of the Parties to the Montreal Protocol in Bangkok in November. The United States, Canada, and Mexico also offered a proposal to increase project-based efforts to control emissions from HFC-23 and HCFC-22 production.[14] (For more information on domestic efforts to reduce emissions of high-GWP gases, see Chapter 5.)

Major Economies Forum

The 6th, 7th, and 8th Meetings of the Leaders' Representatives to the Major Economies Forum on Energy and Climate Change convened during 2010.[15] Representatives of the 17 major economies, the United Nations, and guest smaller nations discussed the path forward after COP-15 in Copenhagen and toward COP-16 in Cancun. Discussions centered around further development of the Copenhagen Accord and goals for progress in Cancun, including an emphasis on monitoring, reporting, verification, and transparency; quick implementation of the Accord's Fast Start Financing provisions; the future of the Kyoto Protocol; and different notions of equity. Separately, a Clean Energy Ministerial meeting track was launched to advance initiatives related to energy supply, energy efficiency, and energy access. The Ministerial met in July to develop steps toward accelerated deployment of clean energy technologies and will meet again in April 2011 in Abu Dhabi.[16]

Bilateral and multilateral agreements

The U.S. State Department signed two memoranda of understanding (MOU) in 2010 related to cooperation on greenhouse gas emissions. In March, the United States signed an MOU with Brazil establishing a "Climate Change Policy Dialogue," which aims to increase cooperation between the two nations on energy efficiency, capacity building, and combating deforestation.[17] In July, the United States and China signed an MOU to cooperate in the development of clean energy and energy efficiency technologies and engage in a policy dialog.[18]

1.7. Special topic: Energy and carbon initiatives at the U.S. Department of Energy

Under EO 13514, all Federal Government agencies are required to develop integrated sustainability plans that include greenhouse gas emission reductions; efficient water use; waste reduction and pollution prevention; and increased efficiency in buildings, products, and vehicle fleets.[19] At the U.S. Department of Energy (DOE), the mission of the Federal Energy Management Program (FEMP) is to facilitate the Federal Government's implementation of sound, cost-effective energy management and investment practices in order to enhance the Nation's energy security and environmental stewardship. Serving its mission, FEMP assists DOE and other agencies in planning and implementing strategies to achieve conservation, efficiency, and renewable energy goals under EO 13514 and other mandates.

DOE has more than 15,000 Federal employees in offices and laboratories around the country. Under the EO 13514 requirement to quantify Agency GHG emissions, DOE calculated a fiscal year (FY) 2008 baseline of 5 $MMTCO_2e$ and established a goal of a 28-percent absolute reduction in its emissions by 2020.[20]

In October 2010, FEMP released its *Annual GHG and Sustainability Data Report, Version 1.0* to coincide with the release of the *Federal Greenhouse Gas Accounting and Reporting Guidance* and *Technical Support Document by the White House Council on Environmental Quality*. The documents and reporting tool aid Federal agencies in gauging their progress toward goals set under EO 13514 by providing guidance and the means for the necessary data collection.[21] The Data Report includes reporting requirements for facility and operational energy and water use, as well as calculation of Federal fleet fuel use, fulfilling previous FEMP requirements. FEMP will continue to release updated versions of the Data Report to aid agencies in realizing their EO 13514 goals. Notable initiatives contributing to DOE's efforts to achieve EO 13514 goals are described below.

DOE Headquarters facilities

DOE Headquarters (HQ) is located in the James Forrestal building in downtown Washington, DC, and in Germantown, MD. The HQ facilities house more than 5,800 of the Agency's Federal and contract employees. Initiatives to increase energy savings and efficiency at DOE HQ buildings include the following.

Solar array

Installed on the roof of the Forrestal building in September 2008, the solar array generates about 235,000 kilowatthours of electricity per year. The array is also important for technology demonstration and testing purposes. In addition to the main configuration, the array contains several examples of solar panel technologies, along with monitoring stations to measure power generation in relation to weather conditions.

Energy savings

In December 2009, DOE entered into an Energy Savings Performance Contract (ESPC) involving a large-scale HQ retrofit project. An ESPC allows DOE to finance the project with minimal initial cost, because the installation costs will be offset by monetary savings associated with reduced resource consumption.[22] The project focuses on reducing energy consumption in the Forrestal building and water consumption at the Germantown facilities. Construction is scheduled to be completed by December 2011. The efforts are expected to result in reductions of energy consumption by 22 percent at the Forrestal building and water consumption by 11 percent in Germantown. In spring 2010, the Forrestal corridor lighting system was rewired to allow for all lights, with the exception of emergency lighting, to be turned off during night and weekend hours. This upgrade should reduce energy consumption by about 280,000 kilowatthours per year.

Forrestal west and south buildings cool roofs

DOE has completed a "cool roof" on the cafeteria and plans to complete one for the south building at the Forrestal complex over the summer of 2011. The project includes roof engineering designs that will reflect sunlight and emit heat more efficiently than existing roofs, reducing energy consumption and costs associated with summertime cooling. It also includes solar hot water heating for the cafeteria, energy savings and life-cycle cost evaluation, and other technical and economic analyses.

Other notable DOE projects

During December 2009, DOE awarded 16 new Energy Savings Performance Contracts (ESPCs), including the following.

Savannah River Biomass Steam Plant, Aiken, South Carolina

DOE's Savannah River Biomass Steam Plant is one of the largest of its kind. Originally powered by coal-burning boilers, the project, financed by an ESPC, has replaced the original boilers with two steam boilers powered by the combustion of woody biomass. These upgrades are estimated to save $34 million a year in fuel, operations, and maintenance costs.

Existing Building Assessment Tool

In 2009, DOE continued to use the Existing Building Assessment Tool (EBAT), part of the High Performance Sustainable Building Assessment Tool. EBAT aids in identifying and prioritizing sustainability projects for retrofitting DOE's building stock with energy-efficient technologies.[23] DOE's building portfolio currently includes 20 Leadership in Energy and Environmental Design (LEED) certified buildings. LEED is an internationally recognized green building certification system, which verifies that a building was designed and constructed to improve energy savings, CO_2 emission reductions, and other environmental factors.[24] The assessment tool is being used to identify candidate projects that would enable additional buildings to gain certification.

National Renewable Energy Laboratory, Golden, Colorado

DOE's National Renewable Energy Laboratory (NREL) facility in Golden, Colorado, has begun efforts to achieve net-zero energy consumption. Part of the initiative includes "greening" its data center by consolidating servers from 250 to 50, arranging servers to enable more efficient air flow, and using more energy-efficient methods to cool the air around servers. The efforts will reduce power consumption at the data center by 65 percent.[25]

Future DOE projects

Data center acceleration campaign

DOE is planning a $2.5 million strategic energy efficiency plan for its information technology infrastructure. The plan emphasizes 41 data centers. FEMP projects a 30-percent energy savings through the implementation of existing technologies under the initiative.[26]

Biomass generation plant at Oak Ridge, Tennessee

DOE's research facilities in Oak Ridge, Tennessee, will house a biomass steam generation plant, scheduled to be operational in 2011. The project replaces four natural-gas-fired boilers and will eliminate more than 55,000 metric tons of carbon dioxide emissions each year, in addition to reductions in nitrogen oxide and sulfur dioxide emissions.[27]

1.8. Units for measuring greenhouse gases

Emissions data are reported here in metric units. Metric tons are relatively intuitive for users of U.S. measurement units, because 1 metric ton is only about 10 percent heavier than a short ton.

Throughout this report, emissions of carbon dioxide and other greenhouse gases are given in carbon dioxide equivalents. In the case of carbon dioxide, emissions denominated in the molecular weight of the gas or in carbon dioxide equivalents are the same. Carbon dioxide equivalent data can be converted to carbon equivalents by multiplying by 12/44.

Emissions of other greenhouse gases (such as methane) can also be measured in carbon dioxide equivalent units by multiplying their emissions (in metric tons) by their global warming potentials (GWPs). Carbon dioxide equivalents are the amount of carbon dioxide by weight emitted into the atmosphere that would produce the same estimated radiative forcing as a given weight of another radiatively active gas.

Carbon dioxide equivalents are computed by multiplying the weight of the gas being measured (for example, methane) by its estimated GWP (which is 25 for methane). As indicated in Table 5, the GWP for methane was estimated at 21 in the second scientific assessment and 23 in the third. These changes reflect enhanced knowledge, through climate research, of methane's radiative efficiency. Also, as the level of carbon dioxide in the atmosphere increases, it becomes marginally less potent as a greenhouse gas. Consequently, other gases with lower atmospheric concentrations are relatively more potent. In 2008, the IPCC Working Group I released Errata to its Fourth Assessment Report, *Climate Change 2007: The Physical Science Basis*.[28] The Errata revise the reported GWPs for a small number of high-GWP gases. The GWPs published in the Errata to the Fourth Assessment Report (AR4) were used in the calculation of carbon dioxide equivalent emissions for this report. Table 5 summarizes the GWP values from the Second, Third, and Fourth Assessment Reports.

1.9. Methodology updates for this report

Carbon dioxide

Revised coal and motor gasoline carbon factors have been adopted, based on work done by the U.S. EPA.[29]

For the first time, EIA is providing estimates of biogenic CO_2 emissions from biofuels and bioenergy, based on energy consumption data from EIA's *Monthly Energy Review* (*MER*). The estimates are provided in Chapter 6 for informational purposes and are not included in the total emissions estimate, because they are considered to be part of the natural carbon cycle and so are excluded under UNFCCC guidelines.

Methane

Styrene has been dropped as a source of CH_4 emissions from the chemicals industry, based on guidance from the 2006 IPCC guidelines. Those emissions have been removed from all years of this inventory.

CH_4 emission factors for passenger cars and light-duty vehicles have been revised to the values published in the 2006 IPCC guidelines, resulting in a significant decline in calculated emissions from this source category from 1990 to 2008.

Updates have been made to the specificity of the calculations used to estimate emissions from the production and management of manure, including conducting a State-level analysis of swine manure emissions for the first time. In addition, sheep populations have been separated into those on feedlots and those not on feedlots; and populations of pullets, other chickens, and turkeys have been included in the poultry account for the first time. These updates also affect the estimation of N_2O emissions from manure management.

Changes in livestock population data that are used to derive the emissions factors for calculating CH_4 emissions from enteric fermentation resulted in an average increase in emissions of 3 percent over the series.

Additional emissions factors, conversion factors, and constants applied to the calculation of emissions related to agriculture and livestock have been updated on the basis of the most recent values published by the EPA or IPCC, as applicable.

For the first time in this report, CH_4 emissions from composting and from the combustion of waste are included in the inventory.

Nitrous oxide

Emissions calculations methodologies for direct and indirect emissions of N_2O from nitrogen fertilization of agricultural soils and from runoff of fertilizer and manure applied to soils have been revised to align more completely with methods in the 2006 IPCC guidelines. Most notably, the revised IPCC methodology, which accounts for nitrogen in below-ground crop residues but omits biological fixation of nitrogen, has been implemented for the 2009 inventory.

Emissions resulting from manure that is directly deposited on lands by grazing or pasture-raised animals have been transferred from the manure management category to the agricultural soils category, and new sources of indirect emissions from soil leaching and volatization have been included in nitrogen fertilization of soils.

The specificity of direct and indirect emissions from manure management has been improved by implementing State-level calculation of swine emissions and updating the waste management system distributions for dairy cattle and swine to annually variable State-level values.

N_2O emission factors for passenger cars and light-duty vehicles have been revised to the values published in the 2006 IPCC guidelines, resulting in a significant decline in calculated emissions from this source category from 1990 to 2008.

Emissions estimates for 2007 and 2008 have been corrected to account for the 2006 closing of the smallest adipic acid plant in the United States, which was the only remaining plant that did not use abatement technology. Also, the N_2O emission factor for adipic acid production has been revised to the value published in the 2006 IPCC guidelines.

For the first time in this report, N_2O emissions from composting are included in the inventory.

High-GWP gases

Data for 2009 covering the use or production of HFCs, PFCs, and SF_6 in industrial applications are not yet available for inclusion in the 2009 GHG inventory. To obtain a total, the 2008 values for those emissions were used. Draft estimates for emissions of HFC and PFC substitutes for ozone-depleting substances are included in Chapter 5. Complete final estimates of those emissions will be available in the EPA's 2009 inventory of greenhouse gas emissions and sinks, to be published in April 2011.[30]

1.10. Special topic: Beyond carbon dioxide—reducing emissions of black carbon to achieve near-term results

What is black carbon?

Black carbon is an aerosol component of particulate matter formed through the incomplete combustion of fossil fuels, biofuels,

and biomass. It is found in both anthropogenic (human-caused) and naturally occurring soot. The science and understanding of black carbon have evolved rapidly over the past decade. This has drawn attention to black carbon's contribution to climate change. Globally, the primary sources of black carbon include emissions from diesel engines, cook stoves, wood fires, and forest fires. In contrast with CO_2, which has an atmospheric lifetime of more than 100 years, black carbon remains in the atmosphere for only a few weeks. Therefore, reducing black carbon emissions may be an effective way to slow climate change in the short term. The 20-year GWP of black carbon is estimated at 2,200, with a 100-year GWP of 680.[31] Because of its relatively short atmospheric lifetime, the 20-year GWP is considered a more accurate estimate of the climate impact of black carbon emissions.

Black carbon contributes to changes in the atmosphere in two ways. First, when it is suspended in the air it absorbs sunlight and generates heat and can affect regional cloud formation and precipitation patterns, which may have a cooling effect. Second, when deposited on snow and ice, it absorbs sunlight, generating heat and counteracting the usual reflective (cooling) effects of pure snow, thus warming both the air above and the snow and ice below, accelerating melting, and further reducing the reflective power of snow and ice cover. Its warming effects in the polar regions are of particular concern.

In 2010, in the Department of the Interior, Environment and Related Agencies Appropriations Act, the U.S. Congress allocated money for the EPA to conduct a study of black carbon emissions and their possible effects on climate change. The study is due to be published in April 2011.[32]

Regional sources of black carbon emissions

Since 1950, the United States, Europe, and the former Soviet Union have significantly reduced black carbon emissions from fossil fuel sources.[33] U.S. emissions of black carbon—measured as elemental carbon—are estimated to have fallen by 30 percent from 1990 to 2005, when they made up about 6 percent of total world black carbon emissions.[34] The primary source of black carbon emissions in the United States is mobile combustion (vehicle fuels), and 90 percent of emissions in this category are from diesel fuel use. Figure 8 shows a breakdown of U.S. black carbon emissions sources in 2001 and projections for 2020. After mobile emissions, biomass combustion is the second-largest source of black carbon emissions in the United States, and its share of the total is expected to grow as diesel emissions continue to be reduced.

Technology has played a major role in reducing black carbon emissions. Important technologies include filters placed in diesel vehicle engines to capture the emissions, fuel switching (e.g., from diesel to natural gas in buses), and cleaner-burning, more efficient cook stoves in developing nations. Today, the majority of black carbon emissions come from developing countries.[35] The leading emitters are Asia, Latin America, and Africa.[36] China and India, in particular, are responsible for more than one-fourth of global black carbon pollution.[37] Significant sources of biomass-related emissions in the developing world include deforestation by burning, wildfires, and savannah burning.[38]

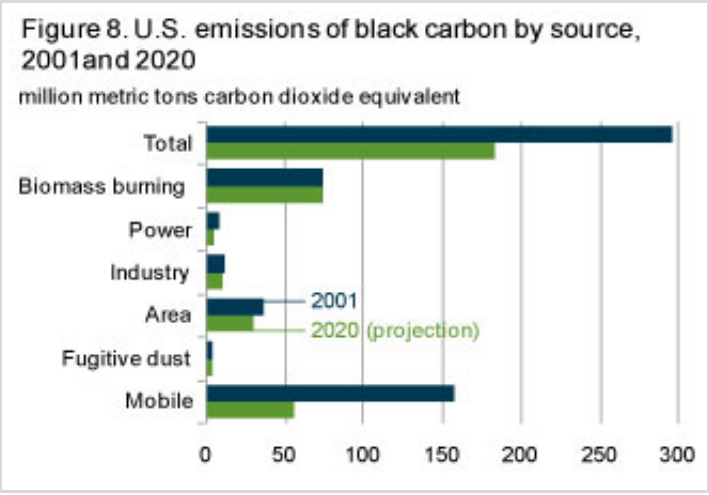


Figure Data

Reducing emissions of black carbon

The United States does not have any regulations in force that are directly aimed at reducing black carbon emissions. However, some States have included black carbon emissions and corresponding reduction strategies in their Climate Action Plans.[39] Also, Federal rules developed to address particulate matter, a class of criteria pollutant under the Clean Air Act, and smog-forming nitrogen oxide from engines and stationary sources have the added effect of reducing black carbon emissions. Key regulations in effect

include National Ambient Air Quality Standards (NAAQS) for airborne particulates, the Clean Air Highway Diesel Rule (2001), the Diesel Emissions Reduction Act (2005), and the Clean Air Visibility Rule (2005).[40] These regulations typically require the use of emission control technologies, such as particulate filters, to reduce emissions. The EPA estimates that the rules already finalized will lead to reductions in U.S. emissions of black carbon by 38 percent in 2020 from their 2001 baseline (Figure 8), primarily by achieving additional reductions in the mobile emissions sector.[41] The 2020 projection assumes continued implementation of the Clean Air Nonroad Diesel Rule, the Clean Air Highway Diesel Rule, and the Clean Air Interstate Rule, among others. If all areas meet their NAAQS requirements for small-diameter particulater matter ($PM_{2.5}$), the reduction is projected to reach 42 percent, with total U.S. emissions of black carbon falling to 255,000 metric tons in 2020. The State of Maine estimates that the cost of reducing black carbon emissions through use of ultra-low-sulfur diesel (ULSD) and clean diesel technologies would be $14 per ton CO_2e.[42]

In December 2009, the United States pledged $5 million in funding for the development and implementation of black carbon mitigation strategies for the Arctic.[43] The pledge came in the wake of the April 2009 Tromso Declaration, in which the Arctic Council recognized the impacts of black carbon, methane, and other short-lived climate-forcing emissions on climate change in the Arctic.[44]

International strategies to reduce emissions from deforestation, such as the Reducing Emissions from Deforestation and Forest Degradation (REDD) policies being discussed under the UNFCCC process, could also contribute to black carbon emissions reductions, particularly in the developing world.

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U.S. Energy Information Administration

Host: www2 Environment: production Database: INTANNWEB_PNX8A INTANNWEB_PNX8A Query Engine: v40 Caching Dur: page: 7 days query: 7 days Generated: 22:03:15 PM

International Energy Statistics

Country: All Countries by Region Start Year: 2007 End Year: 2011 UPDATE

Product: Total Carbon Dioxide Emissions from the Consumption of Energy Unit: Million Metric Tons

Total Carbon Dioxide Emissions from the Consumption of Energy (Million Metric Tons) Units Conversion Download Excel

	2007	2008	2009	2010	2011
North America	7,065.083	6,877.108	6,407.535	6,617.038	6,506.960
Bermuda	0.751	0.750	0.712	0.699	0.777
Canada	593.090	578.248	549.684	546.652	552.557
Greenland	0.600	0.642	0.648	0.648	0.611
Mexico	444.270	452.794	421.124	432.210	462.293
Saint Pierre and Miquelon	0.089	0.092	0.089	0.089	0.091
United States	6,026.284	5,844.582	5,435.279	5,636.739	5,490.631
Central & South America	1,169.560	1,222.954	1,200.598	1,288.268	1,339.474
Antarctica	0.245	0.264	0.245	0.072	0.137
Antigua and Barbuda	0.631	0.659	0.666	0.666	0.732

Footnotes:

-- = Not applicable
(s) = Value is too small for the number of decimal places shown
NA = Not available
W = Data withheld to avoid disclosure
F = Forecast

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CAFE - Fuel Economy

CHAT HELP

Corporate Average Fuel Economy (CAFE)

First enacted by Congress in 1975, the purpose of CAFE is to reduce energy consumption by increasing the fuel economy of cars and light trucks. NHTSA has recently set standards to increase CAFE levels rapidly over the next several years, which will improve our nation's energy security and save consumers money at the pump. This site contains an immense amount of information about the CAFE program including a CAFE overview, rulemaking actions, fleet characteristics data, compliance activities, summaries of manufacturers' fuel economy performances since 1978, and related studies.

LATEST NEWS

February 20, 2014: Proposed Rule Alternative Fuel Badging and Consumer Information

NHTSA is proposing to require badges, labels and owner's manual information for new passenger cars, low-speed vehicles (LSVs) and light-duty trucks rated at not more than 8,500 pounds gross vehicle weight, in order to increase consumer awareness regarding the use and benefits of alternative fuels.

This proposed rule would implement specific statutory mandates that manufacturers be required to: Identify each vehicle capable of running on an alternative fuel by means of a permanent and prominent display affixed to the exterior of the vehicle; add proposed text describing the capabilities and benefits of using alternative fuels to the owners' manuals provided for alternative fuel vehicles; and identify each vehicle that is capable of running on an alternative fuel by means of a label in the fuel filler compartment.

- View or download a copy of the proposed rule
- Please submit any comments on or before April 21, 2014, to docket number: NHTSA-2010-0134

February 18, 2014: Phase 2 of the DOT and EPA Fuel Efficiency and GHG Emission Program for Medium- and Heavy-Duty Vehicles announced

President Obama directs the National Highway Traffic Safety Administration (NHTSA) and the Environmental Protection Agency (EPA) to develop and issue the next phase ("Phase 2") of medium- and heavy-duty vehicle fuel efficiency and greenhouse gas (GHG) standards by March 2016. Under this timeline, the agencies are expected to issue a Notice of Proposed Rulemaking (NPRM) by March 2015. This second round of fuel efficiency standards will build on the first-ever standards for medium- and heavy-duty vehicles (model years 2014 through 2018).

- **FACT SHEET --** Opportunity For All: Improving the Fuel Efficiency of American Trucks - Bolstering Energy Security, Cutting Carbon Pollution, Saving Money and Supporting Manufacturing Innovation
- **WHITE HOUSE REPORT --** Improving the Fuel Efficiency of American Trucks
- More information on "Phase 1" is below

Phase 1 of Fuel Efficiency and GHG Emission Program for Medium- and Heavy-Duty Trucks, MYs 2014-2018

- Technical Amendments
- Partial Withdrawal of Heavy-Duty Engine and Vehicle, and Nonroad Technical Amendments
- Heavy-Duty Engine and Vehicle, and Nonroad Technical Amendments

NHTSA Consumer Research on Fuel Economy, GHG and Alternative Fuels

Read the final reports and webinar presentation for focus groups and online surveys NHTSA conducted to inform development of a consumer education campaign.

- Focus Groups Details and Results
- Online Survey Details and Results
- Webinar Materials on Research

Requests for Product Plan Info

NHTSA periodically requests future product plan information from auto manufacturers to help the agency in its CAFE rulemaking analyses.

- Current and past product plan requests

Summary of Fuel Economy Performance

- April 2013 Summary of Fuel Economy Performance
- Flexible Fuel Credits (2003-2013)
- Summary of CAFE fines (Updated April 2013)
- CAFE Credit Status for Models Year 2008 through 2011
- New Passenger Car Fleet Characteristics
- Domestic Passenger Car Fleet Characteristics
- Imported Passenger Car Fleet Characteristics
- Light Truck Fleet Characteristics
- 2WD Light Truck Fleet Characteristics
- 4WD Light Truck Fleet Characteristics
- Asian Imported Passenger Car Fleet Characteristics
- European Imported Passenger Car Fleet Characteristics
- Historical Passenger Car Fleet Characteristics

- **Final Rule**
- Final rule
- Correcting Amendments for Base Tire Definition
- Final Regulatory Impact Analysis
- Read the Aug. 9, 2011, News Release
- Fact Sheet
- **NEPA Process**
- Environmental Impact Statements (FEIS & DEIS)
- **Notice of Proposed Rulemaking**
- Fact Sheet
- Correction Notice for Notice of Proposed Rulemaking
- Notice of Proposed Rulemaking
- Draft Regulatory Impact Analysis
- NHTSA Study: Factors and Considerations for Establishing a Fuel Efficiency Regulatory Improvement Program for Commercial Medium- and Heavy-Duty Vehicles
- Notice of Public Hearings for Proposal on Nov. 15 & 18
- NAS Study: Technologies and Approaches to Reducing the Fuel Consumption of Medium- and Heavy-Duty Vehicles
- Read the News Release

NHTSA Holds Workshop on Vehicle Mass-Size-Safety

NHTSA conducted a workshop on May 13-14 on issues related to fuel economy, vehicle mass reduction and the effects of vehicle mass and size on vehicle safety.

- Workshop Reports and Presentations
- Recap of February 2011 Workshop

DOT and EPA Establish CAFE and GHG Emissions Standards for Model Years 2017 and Beyond

Following the direction set by President Obama on May 21, 2010, NHTSA and EPA have issued joint Final Rules for Corporate Average Fuel Economy and Greenhouse Gas emissions regulations for model years 2017 and beyond, that will help address our country's dependence on imported oil, save consumers money at the pump, and reduce emissions of greenhouse gases that contribute to global climate change.

- Read the Aug. 28, 2012, News Release
- Final Rule (Federal Register version)
- Correction Notice for Final Rule, Part 536 (Oct. 18, 2012)
- Final Regulatory Impact Analysis (FRIA)
- Joint Technical Support Document (TSD)
- Environmental Impact Statements: Final (July 2012) & Draft (Nov. 2011)
- Fact Sheet
- CAFE Compliance and Effects Modeling System: The Volpe Model
- Other NHTSA Research Supporting the Final Rule
- Transcripts for Public Hearings in Detroit, Philadelphia, and San Francisco
- Documents Associated with the Dec. 2011 Proposal
- Documents Leading Up to the Proposal

DOT and EPA Unveil New Fuel Economy Labels

NHTSA and EPA have jointly issued a final rule establishing new requirements for a fuel

economy and environment label that will be posted on the window sticker of all new automobiles sold in the U.S. The redesigned label provides expanded information to American consumers about new vehicle fuel economy and fuel consumption, greenhouse gas and smog-forming emissions, and projected fuel costs and savings, and also includes a smartphone interactive code that permits direct access to additional web resources. Click the link below for more information.

- Complete Information on the New Label

New Fuel Efficiency Program Announced

At the direction of President Obama on May 21, 2010, NHTSA and EPA are taking the next steps to improve fuel efficiency and reduce greenhouse gas (GHG) emissions from mobile sources.

- Notice of Intent to Prepare an Environmental Impact Statement
- Read the Presidential Memorandum
- Fact Sheet
- Stakeholder Commitment Letters

Joint Rulemaking to Establish CAFE and GHG Emissions Standards, MY 2012-2016

There is a critically important need for our country to address global climate change and to reduce oil consumption. In this context, DOT and EPA worked in coordination to establish standards for CAFE and emissions of greenhouse gases (GHG) for Model Years 2012-2016.

- Final Rule
- Notice of Proposed Rulemaking (NPRM)
- Environmental Impact Statements (Final and Draft)

Average Fuel Economy Standards, Passenger Cars and Light Trucks, MY 2011-2015

Proposes substantial increases in CAFE standards for passenger cars and light trucks that would enhance energy security by improving fuel economy. Since carbon dioxide (CO2) is the natural by-product of the combustion of fuel, the increased standards would also address climate change by reducing tailpipe emissions of CO2. Those emissions represent 97 percent of the total greenhouse gas emissions from motor vehicles. Implementation of the new standards would dramatically add to the billions of barrels of fuel already saved since the beginning of the CAFE program in 1975.

- Final Environmental Impact Statement
- NHTSA Public Hearing on the CAFE DEIS
- Draft Environmental Impact Statement

View All

Average Fuel Economy Standards, Passenger Cars and Light Trucks, MY 2011

NHTSA estimates that the MY 2011 standards will raise the industry-wide combined average to 27.3 mpg, save 887 million gallons of fuel over the lifetime of the MY 2011 cars and light trucks, and reduce CO2 emissions by 8.3 million metric tons during that period.

- Final Rule
- Final Regulatory Impact Analysis

Light Truck Fuel Economy Standard Rulemaking, MY 2008-2011

This final rule reforms the structure of the CAFE program for light trucks and

establishes higher CAFE standards for model year (MY) 2008-2011 light trucks. Manufacturers may comply with CAFE standards established under the reformed structure (Reformed CAFE) or with standards established in the traditional way (Unreformed CAFE) during a transition period of MYs 2008-2010. In MY 2011, all manufacturers will be required to comply with a Reformed CAFE standard. Under Reformed CAFE, fuel economy standards are restructured so they are based on a measure of vehicle size called "footprint," the product of multiplying a vehicle's wheelbase by its track width. A target level of fuel economy is established for each increment in footprint. Smaller footprint light trucks have higher targets and larger ones, lower targets.

- New Light Truck Economy Standards to Save 10.7 Billion Gallons of Fuel
- Final Rule
- Final Environmental Assessment
- Final Regulatory Impact Analysis

Rules

FMVSS	Part	Details	Actions
	49 CFR Parts 523, 533 and 537	**Light Truck Average Fuel Economy Standards, Model Years 2008-2011** This final rule reforms the structure of the corporate average fuel economy (CAFE) program for light trucks and establishes higher CAFE standards for model year (MY) 2008-2011 light trucks. Reforming the CAFE program will enable it to achieve larger fuel savings, while enhancing safety and preventing adverse economic consequences.	Final rule Final Environmental Assessment Final Regulatory Impact Analysis
	49 CFR Parts 523, 531, 534, 536, 537	**Average Fuel Economy Standards, Passenger Cars and Light Trucks, Model Years 2011-2015** Proposes substantial increases in the Corporate Average Fuel Economy (CAFE) standards for passenger cars and light trucks that would enhance energy security by improving fuel economy. Since the carbon dioxide (CO2) emitted from the tailpipes of new motor vehicles is the natural by-product of the combustion of fuel, the increased standards would also address climate change by reducing tailpipe emissions of CO2. Those emissions represent 97 percent of the total greenhouse gas emissions from motor vehicles. Implementation of the new standards would dramatically add to the billions of barrels of fuel already saved since the beginning of the CAFE program in 1975.	Supplemental Scoping Notice Draft Environmental Impact Statement, Appendix C Draft Environmental Impact Statement, Appendix B Request for Product Plan Information Draft Environmental Impact Statement, Appendix A Draft Environmental Impact Statement Preliminary Regulatory Impact Analysis Notice of Proposed Rulemaking (NPRM)
	49 CFR Part 533	**Reforming the Automobile Fuel Economy Standards Program** This document seeks comment on various issues relating to the corporate average fuel economy (CAFE) program. In particular, this document seeks comments relating to possible enhancements to the program that will assist in furthering fuel conservation while protecting motor vehicle safety and the economic vitality of the auto industry. The agency is particularly interested in improvements to the structure of the CAFE program authorized under current statutory authority. The focus of this document is to solicit comments on the structure of the CAFE program, not the stringency level for a future CAFE standard.	Request for Comments Advance Notice of Proposed Rulemaking
	49 CFR Part 538	**Automobile Fuel Economy Manufacturing Incentives for Alternative Fueled Vehicles** This final rule extends the incentive created by the Alternative Motor Fuels Act of 1988 (AMFA) to encourage the continued production of motor vehicles capable of operating on alternative fuels for four additional model years covering model years (MY) 2005 to MY 2008. Under the special procedures for calculating the fuel economy of those vehicles contained in AMFA, alternative and dual fueled vehicles are assigned a higher fuel economy value for CAFE purposes, which can result in manufacturers earning credits for their fleets. The final rule limits the maximum amount of credit that may be applied to any manufacturers' fleet to 0.9 mpg per fleet during MY 2005 - MY 2008.	Final Rule
	49 CFR Part 538	**Under 49 CFR Part 538, Automotive Fuel Economy Manufacturing Incentives for Alternative Fuel Vehicles** To provide an incentive for the production of vehicles that can operate on certain alternative fuels as well as on regular petroleum fuels, Congress established a special procedure for calculating the fuel economy of those vehicles for determining compliance with the Corporate Average Fuel Economy standards.	Notice of proposed rulemaking (NPRM)
		Draft Environmental Assessment The draft environmental assessment evaluates the potential environmental impacts associated with NHTSA's proposed action to set Corporate Average Fuel Economy Standards for model year 2008-2011 light trucks. This document describes the	Draft of the Evironmental Assessment proposed action to set CAFE standards for model year 2008-2011 light trucks

		environment and resources that might be affected by the proposed light truck CAFE standards for model years 2008-2011, and assesses estimated impacts of alternative actions.	
	NHTSA: 49 CFR Parts 531, 533, and 537; EPA: 40 CFR Parts 86 and 600	**Establish Light-Duty Vehicle Greenhouse Gas Emission Standards and CAFE Standards** EPA and NHTSA are issuing this joint proposal to establish a National Program consisting of new standards for light-duty vehicles that will reduce greenhouse gas emissions and improve fuel economy. EPA is proposing greenhouse gas emissions standards under the Clean Air Act, and NHTSA is proposing Corporate Average Fuel Economy standards under the Energy Policy and Conservation Act, as amended. These standards apply to passenger cars, light-duty trucks, and medium-duty passenger vehicles, covering model years 2012 through 2016, and represent a harmonized and consistent National Program. Under the National Program, automobile manufacturers would be able to build a single light-duty national fleet that satisfies all requirements under both programs while ensuring that consumers still have a full range of vehicle choices.	Draft Environmental Impact Statement Notice of Intent Preliminary Regulatory Impact Analysis Draft Joint Technical Support Document Notice of Proposed Rulemaking
		Nissan North America, Inc. Petition for Exemption from Two-Fleet Rule Affecting Compliance with Passenger Automobile Fuel Economy Standards Nissan filed a petition requesting exemption from the two fleet rule for the 2006-2010 model years. The two fleet rule, which is contained in the CAFE statute, requires that a manufacturer divide its passenger automobiles into two fleets, a domestically-manufactured fleet and a non-domestically manufactured fleet, and ensure that each fleet separately meets the CAFE standards for passenger automobiles. The CAFE statute requires NHTSA to grant such a petition unless it finds that doing so would result in reduced employment in the U.S. related to motor vehicle manufacturing. NHTSA's analysis does not support a finding that granting the petition would reduce automotive manufacturing employment in the United States. Accordingly, in this notice, NHTSA is granting Nissan's petition.	Grant of petition for exemption from two-fleet rule
	49 CFR Parts 523, 531, 533, 534, 536 and 537	**Average Fuel Economy Standards, Passenger Cars and Light Trucks, Model Year 2011** NHTSA estimates that the MY 2011 standards will raise the industry-wide combined average to 27.3 mpg, save 887 million gallons of fuel over the lifetime of the MY 2011 cars and light trucks, and reduce CO2 emissions by 8.3 million metric tons during that period.	Final Regulatory Impact Analysis Final Rule, Record of Decision
	49 CFR Part 533	**Light Truck Average Fuel Economy Standards, Model Years 2005-2007** This final rule established the average fuel economy standards for light trucks that will be manufactured in the 2005-2007 model years (MYs). Chapter 329 of Title 49 of the United States Code requires the issuance of these standards. The standards for all light trucks manufactured by a manufacturer is set at 21.0 mpg for MY 2005, 21.6 mpg for MY 2006, and 22.2 mpg for MY 2007. This rule is effective May 5, 2003.	Final Environmental Assessment Final Economic Assessment Final Rule

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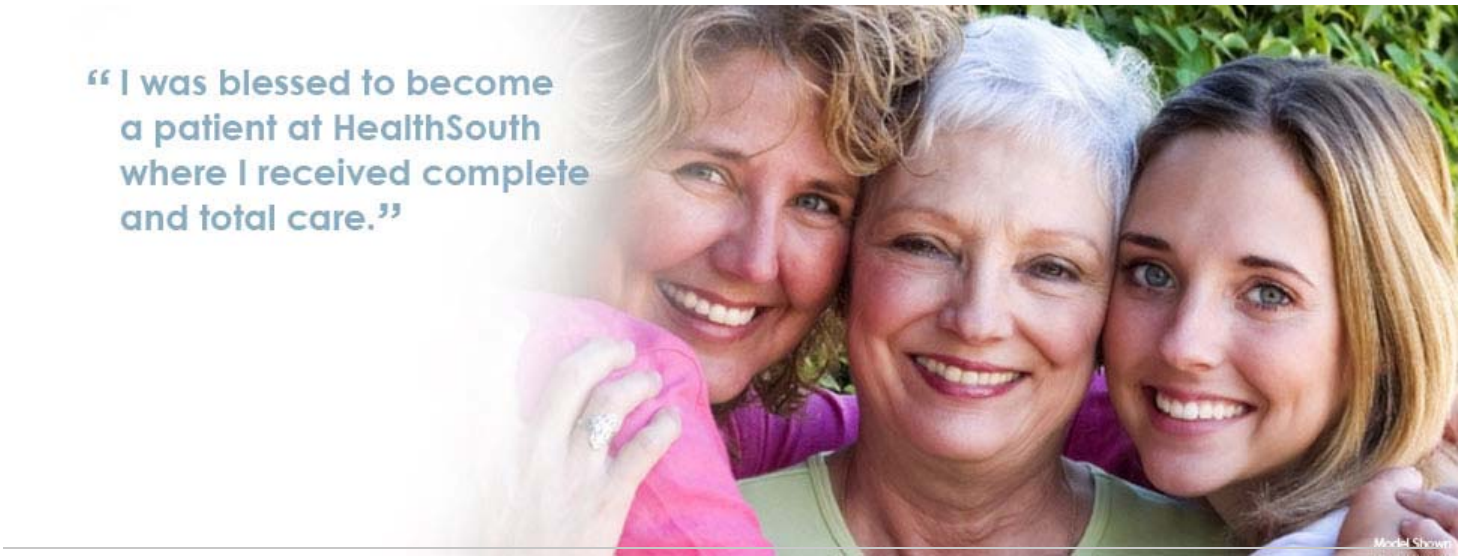
Rehabilitation Hospital



Our Hospital



Designed to return patients to leading active, independent lives, HealthSouth Rehabilitation Hospital is a 50-bed rehabilitation hospital that provides a higher level of comprehensive rehabilitation services.

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Conditions We Treat



Stroke

Neurological Disorders

Spinal Cord Injury

Other Orthopedic Conditions

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Career Opportunities



Physical Therapist Asst. Pool (1312123)

Physical Therapist (Pool) (1218288)

Occupational Therapist (Pool) (1312736)

View Other Careers »



Take Action for Stroke

May is Stroke Awareness Month and our hospital, through its annual stroke month campaign, Take Action for Stroke, is educating the community on rehabilitation options after stroke. Take action by learning stroke risk factors and symptoms as it can happen to anyone and any time. Many stroke survivors can benefit from medical rehabilitation as part of the recovery process. Rehabilitation programs targeting strength, skill and speech improvement, like the one offered by our hospital, can help survivors make the improvements that mean the difference between returning home or staying in an institution.

You can take action for stroke! »

See Our Hospital

Join us for a virtual tour of our hospital where you will see our patient rooms, exercise facilities, and more. You can also set up a personal tour by calling our hospital.

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Certification

By demonstrating compliance with The Joint Commission's national standards for healthcare quality and safety, our hospital is accredited by The Joint Commission.

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Need to find a...

Type keyword or doctor name without pressing enter, select from list.

For example: heart, stroke, cancer, orthopedic, Dr. Barnes, Dr. Hale, Smith, Wright

Indian Path Physician List

ER Wait Times

Current wait time at IPMC: 13m

See our hospital ER wait times. You can also check them through our mobile app.

SEE TIMES

Maps & Directions

2000 Brookside Drive
Kingsport, TN 37660

See it on Google Maps



What's New at IPMC?

Indian Path Medical Center celebrates 40 years of serving the community 03/04/2014

MSHA partners with the Tenn. Department of Health to reduce sleep-related infant deaths 02/26/2014

CrestPoint Health offers free quilt pattern

12/17/2013

View all news

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Indian Path Medical Center, Kingsport, Tennessee, is a 261-bed, not-for-profit hospital. IPMC provides convenient parking, easy access and private rooms, as well as a variety of menu options and convenient room service 24 hours a day. All ancillary and outpatient services are on the ground floor to provide more expedient care. IPMC joined Mountain States Health Alliance in 1998.

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Sullivan County, Tennessee

People QuickFacts	Sullivan County	Tennessee
Population, 2013 estimate	156,595	6,495,978
Population, 2012 estimate	156,655	6,454,914
Population, 2010 (April 1) estimates base	156,823	6,346,113
Population, percent change, April 1, 2010 to July 1, 2013	-0.1%	2.4%
Population, percent change, April 1, 2010 to July 1, 2012	-0.1%	1.7%
Population, 2010	156,823	6,346,105
Persons under 5 years, percent, 2012	5.1%	6.3%
Persons under 18 years, percent, 2012	20.1%	23.1%
Persons 65 years and over, percent, 2012	19.5%	14.2%
Female persons, percent, 2012	51.6%	51.2%
White alone, percent, 2012 (a)	95.4%	79.3%
Black or African American alone, percent, 2012 (a)	2.3%	17.0%
American Indian and Alaska Native alone, percent, 2012 (a)	0.3%	0.4%
Asian alone, percent, 2012 (a)	0.6%	1.6%
Native Hawaiian and Other Pacific Islander alone, percent, 2012 (a)	Z	0.1%
Two or More Races, percent, 2012	1.3%	1.6%
Hispanic or Latino, percent, 2012 (b)	1.6%	4.8%
White alone, not Hispanic or Latino, percent, 2012	94.1%	75.1%
Living in same house 1 year & over, percent, 2008-2012	85.7%	84.4%
Foreign born persons, percent, 2008-2012	1.5%	4.5%
Language other than English spoken at home, pct age 5+, 2008-2012	2.6%	6.6%
High school graduate or higher, percent of persons age 25+, 2008-2012	83.8%	83.9%
Bachelor's degree or higher, percent of persons age 25+, 2008-2012	20.6%	23.5%
Veterans, 2008-2012	14,815	493,980
Mean travel time to work (minutes), workers age 16+, 2008-2012	21.2	24.1
Housing units, 2012	73,878	2,834,620
Homeownership rate, 2008-2012	74.7%	68.4%
Housing units in multi-unit structures, percent, 2008-2012	13.7%	18.2%
Median value of owner-occupied housing units, 2008-2012	$118,100	$138,700
Households, 2008-2012	66,595	2,468,841
Persons per household, 2008-2012	2.31	2.51
Per capita money income in past 12 months (2012 dollars), 2008-2012	$23,823	$24,294
Median household income, 2008-2012	$40,025	$44,140
Persons below poverty level, percent, 2008-2012	16.9%	17.3%

Business QuickFacts	Sullivan County	Tennessee
Private nonfarm establishments, 2011	3,339	129,489[1]
Private nonfarm employment, 2011	64,241	2,300,542[1]
Private nonfarm employment, percent change, 2010-2011	1.5%	1.6%[1]
Nonemployer establishments, 2011	9,543	473,451
Total number of firms, 2007	12,859	545,348
Black-owned firms, percent, 2007	S	8.4%

American Indian- and Alaska Native-owned firms, percent, 2007	0.3%	0.5%
Asian-owned firms, percent, 2007	S	2.0%
Native Hawaiian and Other Pacific Islander-owned firms, percent, 2007	F	0.1%
Hispanic-owned firms, percent, 2007	0.8%	1.6%
Women-owned firms, percent, 2007	23.0%	25.9%
Manufacturers shipments, 2007 ($1000)	5,463,624	140,447,760
Merchant wholesaler sales, 2007 ($1000)	1,055,317	80,116,528
Retail sales, 2007 ($1000)	2,026,276	77,547,291
Retail sales per capita, 2007	$13,200	$12,563
Accommodation and food services sales, 2007 ($1000)	255,074	10,626,759
Building permits, 2012	289	20,147

Geography QuickFacts	**Sullivan County**	**Tennessee**
Land area in square miles, 2010	413.36	41,234.90
Persons per square mile, 2010	379.4	153.9
FIPS Code	163	47
Metropolitan or Micropolitan Statistical Area	Kingsport-Bristol-Bristol, TN-VA Metro Area	

1: Includes data not distributed by county.

(a) Includes persons reporting only one race.
(b) Hispanics may be of any race, so also are included in applicable race categories.

D: Suppressed to avoid disclosure of confidential information
F: Fewer than 25 firms
FN: Footnote on this item for this area in place of data
NA: Not available
S: Suppressed; does not meet publication standards
X: Not applicable
Z: Value greater than zero but less than half unit of measure shown

Source U.S. Census Bureau: State and County QuickFacts. Data derived from Population Estimates, American Community Survey, Census of Population and Housing, State and County Housing Unit Estimates, County Business Patterns, Nonemployer Statistics, Economic Census, Survey of Business Owners, Building Permits
Last Revised: Thursday, 27-Mar-2014 09:57:49 EDT



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SULLIVAN COUNTY COMMON CORE "Pulling the Pieces Together"

The state of Tennessee has formally adopted the Common Core State Standards and transition to these new, more rigorous standards will be completed by 2014-2015. The Sullivan County Department of Education has taken a proactive approach to the Common Core State Standards, with all K-2 curriculum transitioned to the Core Standards during the 2011-2012 school year. Many plans and workshops are in the works to ensure that our teachers have the most current information and collaborative time to plan for the coming transition. More information can be found here: www.sullivank12.net/learning/common-core-resources/



The Sullivan County School Nutrition Department provides a very important support service to your child's education. Our main goal is to meet the nutritional needs of students on a daily basis, helping them to be more ready to learn throughout the day. If you would like to learn more about the department, find access to helpful programs such as MySchoolMoney, LunchApplication.com or just need to download the latest month's school lunch calendar, please visit our School Nutrition Department webpage. You can visit the page at www.sullivank12.net/departments/school-nutrition

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Now you can apply on-line for your children to receive free or reduced price school meals. Your application will be sent from our secure web site directly to your school district, so you don't need to worry about filling out a paper form that could be lost or misplaced.

We have designed LunchApplication.com to make it easy for you to know exactly what information you need to provide and to

guide you through the process. Your school district will determine your eligibility and send you a letter with the results. LunchApplication.com is an easy, secure and convenient way to apply for free or reduced lunch.

You can visit the page at www.lunchapplication.com

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The Sullivan County Board of Education, in partnership with students, families, employees and community, will utilize all available resources to provide a collaborative learning environment that will enable each student to reach his/her maximum potential as a productive and successful citizen in an ever changing global and technological environment.

Learn more...

Recent News

- 2014 Summer Feeding Program
- '14-'15 Out-of-Zone Application Deadline
- SCDE Moves to online Employment Application Portal
- Dental Insurance Open Enrollment 2014
- National School Breakfast
- Bristol Race early dismissal notice
- Health Insurance Annual Enrollment/Transfer Period
- Sept. 9 Board Meeting Agenda
- Innovation Academy 13-14 Enrollment

Questions?

Where do I find Section 504 & ADA Grievances?
Where do I find a department contact directory?
Where do I find lunch menus?
Where do I find a department contact directory?
Can I view the School Board Policy online?
Having trouble viewing the site?
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154 Blountville Bypass
P.O. Box 306
Blountville, TN 37617
info@sullivank12.net

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Water Quality Reports & Publications

Division Resources

- Water Quality Home
- Citizen Water Quality Complaints
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- Reports and Publications
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- TMDL Program
- Training and Certification
- Watershed Management
- Permits DataViewer

- Water Quality Laws
- Rules
- General Information & Planning Documents
- Water Quality Assessment Publications
- Technical & Engineering Documents

Water Quality Laws

Law	Citation	Brief Description	Contact Person
Tennessee Water Quality Control Act	69-3-101 *et seq*	Law establishing Water Resources program. Identifies responsibilities and extent of authority for Commissioner and the Water Quality Control Board. Establishes concept of clean water goals and water quality planning and assessment. Provides for permitting program for discharges to, or alterations of, water of the state.	Vojin Janjic Vojin.Janjic@tn.gov
Tennessee Environmental Protection Fund	68-203-101	Law establishing mechanism for fees to be charged for permits issued by the Division of Water Resources.	Lloyd Craig Lloyd.Craig@tn.gov

Rules

All rule downloads provided by the Secretary of State (/sos/)

Regulation	Citation	Brief Description	Contact Person
Certification of Qualified Hydrologic Professionals	0400-40-17	Establishes qualifications and process for persons to obtain certification as a hydrologic professional for the purpose of identifying streams and wet weather conveyances. Includes requirements for submitting of hydrologic determination reports.	Jimmy Smith Jimmy.R.Smith@tn.gov
General Rules	0400-40-01	Establishes treatment requirements for point source dischargers.	Wade Murphy Wade.Murphy@tn.gov
Plans Submittal, Control of Construction	0400-40-02	This regulation identifies the requirements for Division approval of plans for construction of sewer lines and treatment plant expansions.	Phil Simmons Phil.Simmons@tn.gov
General Water Quality Criteria 2013 Version	0400-40-03	Establishes numeric and narrative criteria for each of the seven classified uses. Additionally, contains Tennessee's Antidegradation Policy, which identifies scenarios in which degradation can be allowed in surface waters. Note: groundwater criteria are in a separate document available from the Division of Underground Storage Tanks.	Greg Denton Gregory.Denton@tn.gov
Use Classifications for Surface Waters 2013 Version	0400-40-04	Establishes seven classified uses for surface waters. Identifies a combination of uses for each named or unnamed surface water. Note: classified uses for groundwater are established in a separate document available from the Division of Underground Storage Tanks.	Greg Denton Gregory.Denton@tn.gov
Effluent Standards	0400-40-05	This regulation establishes treatment requirements for facilities that discharge to effluent-limited streams.	Wade Murphy Wade.Murphy@tn.gov
UIC Regulations (Division of Water Supply)	1200-4-6	Establishes permitting process for the discharge of materials into ground water by way of wells and/or sinkholes.	Scotty Sorrells Scotty.Sorrells@tn.gov
Aquatic Resource Alteration Permits	0400-40-07	Establishes permitting process for physical alteration of waters of the state. Includes general permits for several activities including utility line crossings.	Jimmy Smith Jimmy.R.Smith@tn.gov
Navigable Waters	0400-40-	Establishes permitting process for physical	Robert Baker

Permit	08	alteration of navigable waters not regulated by the Corps of Engineers. This regulation is specific to Reelfoot Lake.	Robert.D.Baker@tn.gov
Water Well Licensing(Division of Water Supply)	1200-4-9	Establishes licensing process for well drillers. Identifies requirements for well construction.	Luke Ewing Luke.Ewing@tn.gov
NPDES General Permits	0400-40-10	Establishes general NPDES permits for certain activities including discharge of industrial stormwater and Concentrated Animal Feeding Operations.	Wade Murphy Wade.Murphy@tn.gov
Environmental Protection Fund Fee Rules	0400-40-11	Establishes fee schedules for different types of permits issued by the Division.	Wayne Gregory Wayne.Gregory@tn.gov
Pretreatment Requirements	0400-40-14	Establishes responsibilities of State, and local government, industry and the public to implement the National Pretreatment Standards.	Yatasha Moore Yatasha.Moore@tn.gov
Biosolids Management	0400-40-15	These rules establish standards, which consist of general requirements, contaminant limits, management practices, and operational standards, for the land application of biosolids generated during the treatment of domestic sewage in a wastewater treatment works.	Robert G. O'Dette, M.S., P.E Robert.Odette@tn.gov
Public Sewerage Systems	0400-40-16	Establishes supervision requirements during the construction and operation of public sewage systems.	Phil Simmons Phil.Simmons@tn.gov

General Information and Planning Documents

Publication	Brief Description	Contact Person
Tennessee's Watershed Management Approach	A brochure describing the watershed management approach as envisioned and implemented by the Division of Water Resources.	Sherry Wang Sherry.Wang@tn.gov
Bacteriological and Fishing Advisories in Tennessee	List of streams and reservoirs where fish consumption or human contact advisories have been issued.	Greg Denton Gregory.Denton@tn.gov
Stream Mitigation Guidelines July 1, 2004	This document provides general guidance and discussion for compensatory mitigation of permanent impacts to streams.	Jimmy Smith Jimmy.R.Smith@tn.gov

Water Quality Assessment Publications

New Publications

Publication	Brief Description	Contact Person
Final 2012 303(d) List January 2014	A final list of streams, rivers, reservoirs, and lakes that do not meet water quality standards in 2012. Provides pollutant information and TMDL prioritization. Responses to Public Comments	Greg Denton Gregory.Denton@tn.gov
Quality Assurance Project Plan for 106 Monitoring in the Division of Water Resources Volume I February 2013	This document describes monitoring, analyses, quality control, and assessment procedures used by the Division of Water Resources to develop TMDLs, 305(b) and 303(d) assessments.	Linda Cartwright Linda.Cartwright@tn.gov
2012 305(b) Report: The Status of Water Quality in Tennessee	Report on the general water quality of surface waters in Tennessee. Contains information about water quality, the assessment process, use support, causes and sources of pollution, and waterbodies posted due to human health risks.	Debbie Arnwine Debbie.Arnwine@tn.gov
Exceptional Tennessee Waters & Outstanding National Resource Waters	The Division of Water Resources has compiled a partial list of exceptional Tennessee waters based on characteristics set forth in the regulation by the Tennessee Water Quality Control Board.	Debbie Arnwine Debbie.Arnwine@tn.gov
EPA Approved Final Version Year 2010 303(d) List October 2011	An EPA approved final list of streams, rivers, reservoirs, and lakes that do not meet water quality standards in 2010. Provides pollutant information and TMDL prioritization.	Greg Denton Gregory.Denton@tn.gov
Quality Systems Standard Operating Procedure for Chemical and Bacteriological Sampling of Surface Water (TDEC, WPC) (4.4 mb pdf) August 2011	This document describes procedures for collecting chemical and bacteriological samples of surface waters as well as chain-of-custody and quality control approved by the Division of Water Resources. Protocols are also described for the specifications and accurate use of water-quality probes, sampling equipment, and flow meters.	Debbie Arnwine Debbie.Arnwine@tn.gov
Quality System Standard Operating Procedure for Macroinvertebrate Stream	This document describes procedures for performing two types of macroinvertebrate surveys approved by the Division of Water Resources for assessing	Debbie Arnwine Debbie.Arnwine@tn.gov

Surveys (TDEC, WPC) (2.7 mb pdf) July 2011	biological integrity of streams. The entire procedure is described including protocols for sample collection, habit assessment, sample analysis, data reduction and reporting.	
2010 305(b) Report The Status of Water Quality in Tennessee November 2010	Report on the general water quality of surface waters in Tennessee. Contains information about water quality, posted waterbodies, and watershed summaries.	Greg Denton Gregory.Denton@tn.gov
Quality System Standard Operating Procedure for Periphyton Stream Surveys January 2010	This document describes procedures for performing periphyton surveys approved by the Division of Water Resources for assessing biological integrity of streams. The entire procedure is described including protocols for sample collection, habit assessment, sample analysis, data reduction and reporting."	Debbie Arnwine Debbie.Arnwine@tn.gov

Water Quality Assessment Publications

Existing Publications

Publication	Brief Description	Contact Person
2010 Probabilistic Monitoring of Wadeable Streams in Tennessee	A probabilistically-based survey of wadeable streams in Tennessee. This report is a follow-up to a study conducted in 2007 and 2008, which was published in a series of 6 reports.	Debbie Arnwine Debbie.Arnwine@tn.gov
Mercury Air Deposition and Selenium Levels in Tennessee Fish and Surface Water December 2010	This document reports the results from a study that was designed to test whether predicted mercury air deposition levels using the REMSAD model was correlated to mercury concentrations in fish tissue and water samples. Selenium concentrations were also analyzed in the fish tissue and water samples.	Debbie Arnwine Debbie.Arnwine@tn.gov
2007-2008 Probabilistic Monitoring of Wadeable Streams in Tennessee Volume 2: Study Design and Stream Characterization February 2009	A probabilistically-based survey of wadeable streams in Tennessee. A series of 6 reports are being published to convey the results of the study. Volume 2 provides detail on the design and implementation of the project. It describes the site selection process. Information on drainage area, ecoregion, watersheds and land use is discussed to determine representativeness of the subsample to the entire population of Tennessee streams. This volume	Debbie Arnwine Debbie.Arnwine@tn.gov

	also provides information on sample collection, analyses and quality assurance.	
2007-2008 Probabilistic Monitoring of Wadeable Streams in Tennessee Volume 3: Macroinvertebrates and Habitat February 2009	A probabilistically-based survey of wadeable streams in Tennessee. A series of 6 reports are being published to convey the results of the study. Volume 3 provides details on macroinvertebrate populations and habitat quality.	Debbie Arnwine Debbie.Arnwine@tn.gov
2007-2008 Probabilistic Monitoring of Wadeable Streams in Tennessee Volume 4: Water Chemistry March 2009	A probabilistically-based survey of wadeable streams in Tennessee. A series of 6 reports are being published to convey the results of the study. Volume 4 provides details on field measurements and chemical data.	Debbie Arnwine Debbie.Arnwine@tn.gov
2007-2008 Probabilistic Monitoring of Wadeable Streams in Tennessee Volume 5: Pathogens February 2009	A probabilistically-based survey of wadeable streams in Tennessee. A series of 6 reports are being published to convey the results of the study. Volume 5 provides details on bacteriological data using the indicator organism E. coli.	Debbie Arnwine Debbie.Arnwine@tn.gov
2007-2008 Probabilistic Monitoring of Wadeable Streams in Tennessee Volume 6: Periphyton June 2010	A probabilistically-based survey of wadeable streams in Tennessee. A series of 6 reports are being published to convey the results of the study. Volume 6 provides details on periphyton.	Debbie Arnwine Debbie.Arnwine@tn.gov
2008 305(b) Report The Status of Water Quality in Tennessee April 2008	Report on the general water quality of surface waters in Tennessee, including 2006 – 2008 assessments. Contains information about water quality, posted waterbodies, and watershed summaries.	Greg Denton Gregory.Denton@tn.gov
Mercury Levels in Tennessee Fish	The Tennessee Department of Environment and Conservation compiled tissue data from multiple agencies in order to analyze mercury concentrations in fish from Tennessee's rivers, lakes, reservoirs and streams. This analysis led to the issuance of new and updated mercury advisories in April, 2007.	Greg Denton Gregory.Denton@tn.gov

Probabilistic Monitoring of Streams Below Small Impoundments in Tennessee	This report describes the results of a probabilistic study of 75 streams below small impoundments and the effects of the impoundments on aquatic life, nutrients, dissolved oxygen, pH, iron, manganese, habitat, flow, and periphyton density.	Debbie Arnwine Debbie.Arnwine@tn.gov
EPA Approved Final Version Year 2006 303(d) List December 2006	An EPA approved final list of streams, rivers, reservoirs, and lakes that do not meet water quality standards in 2006. Provides pollutant information and TMDL prioritization.	Greg Denton Gregory.Denton@tn.gov
2006 305(b) Report The Status of Water Quality in Tennessee April 2006	Report on the general water quality of surface waters in Tennessee, including 2004 - 2006 assessments. Contains information about water quality, posted waterbodies, and watershed summaries.	Greg Denton Gregory.Denton@tn.gov
Threatened and Endangered Species List	This lists the known threatened and endangered species including aquatic and semi-aquatic plants and aquatic animals in Tennessee. The list is subject to revision.	Debbie Arnwine Debbie.Arnwine@tn.gov
Regional Characterization of Streams in Tennessee with Emphasis on Diurnal Dissolved Oxygen, Nutrients, Habitat, Geomorphology and Macroinvertebrates September 2005	This report describes a 2004 statewide study, which is a continuation of a 2002 study of regional differences in diurnal dissolved oxygen patterns in wadeable streams. Other goals of this study were to characterize streams based on geomorphology, periphyton, and nutrients and describe streams that cross ecoregions in west Tennessee.	Debbie Arnwine Debbie.Arnwine@tn.gov
Tennessee's Plan for Nutrient Criteria Development (TDEC, WPC, PAS) September 2007	Describes the approach the Division of Water Resources will use to identify and adopt additional water quality standards for nutrient related parameters.	Greg Denton Gregory.Denton@tn.gov
Probabilistic Monitoring in the Inner Nashville Basin with Emphasis on Nutrient and Macroinvertebrate Relationships (Arnwine, Sparks, and Denton, 2003)	This report describes the results of a probabilistic study conducted in the Inner Nashville Basin to determine the relationship between the biological communities and nutrient levels.	Debbie Arnwine Debbie.Arnwine@tn.gov
The Results of Fish Tissue Monitoring in Tennessee:	Contains a general description of the fish tissue monitoring program and contains the result of	Greg Denton Gregory.Denton@tn.gov

1992 – 1997. (Freeman & Denton)	contaminate monitoring for a five-year period.	
Development of Regionally-Based pH Criteria for Wadeable Streams (Arnwine and Denton, 2002) April 2004	This document describes a statewide study of regional differences in the effect pH has on the aquatic communities in wadeable streams and rivers. These results will form the basis of recommendations for regional pH criteria to be formalized in the General Water Quality Criteria..	Greg Denton Gregory.Denton@tn.gov
Evaluation of Regional Dissolved Oxygen Patterns of Wadeable Streams in Tennessee Based on Diurnal and Daytime Monitoring (Arnwine and Denton, 2003) (2.39 mb pdf)	This report describes a statewide study of regional differences in both diurnal and daylight dissolved oxygen patterns in wadeable streams. Study results will help guide fish and aquatic life criteria decisions for the 2002 triennial review of water quality standards.	Debbie Arnwine Debbie.Arnwine@tn.gov
Dioxin Levels in Pigeon River Fish 1996-2002 (Denton and Arnwine, 2002) (1.02 mb pdf)	This report describes the improvement in water quality that has resulted in the removal of the fish tissue advisory for the Tennessee portion of the Pigeon River.	Greg Denton Gregory.Denton@tn.gov
Comparison of Nutrient Levels, Periphyton Densities and Diurnal Dissolved Oxygen Patterns in Impaired and Reference Quality Streams in Tennessee (Arnwine and Sparks) 2003	This document compares algal densities and nutrient levels to diurnal DO patterns in reference and impaired steams in 16 subecoregions.	Debbie Arnwine Debbie.Arnwine@tn.gov
EPA Approved Final Version Year 2004 303(d) List April 2005	A list of streams and lakes that do not meet water quality standards in 2004. Provides cause and source of pollutant information and TMDL prioritization.	Greg Denton Gregory.Denton@tn.gov
2004 305(b) Report The Status of Water Quality in Tennessee (Denton, Sparks, Arnwine, Cartwright)	Report documenting the general quality of surface waters during the period 2002-2004. Contains information about streams, lakes, and wetlands. Identifies streams that are currently posted due to fish contamination and elevated bacteria levels.	Greg Denton Gregory.Denton@tn.gov
Final Version Year 2002 303(d) List	A list of the streams and lakes not meeting water quality standards in 2002. Provides documentation of pollutants and general sources of pollutants. Prioritizes	Greg Denton Gregory.Denton@tn.gov

January 2004	streams for future TMDL development.	
2002 305(b) Report The Status of Water Quality in Tennessee (Denton, Sparks, Arnwine, Cartwright) (6.69 mb pdf)	Report documenting the general quality of surface waters during the period 2000-2002. Contains information about streams, lakes, and wetlands. Highlights success stories and innovative management strategies. Identifies streams that are currently posted due to fish contamination and elevated bacteria levels.	Greg Denton Gregory.Denton@tn.gov
Habitat Quality of Least-Impacted Streams in Tennessee 2001 (Arnwine and Denton)	This report describes the habitat quality of ecoregion reference streams. Seasonal variability, stream size and ecoregion expectations are discussed. Reference data is compared to historic habitat assessments. Guidelines for maintaining protective habitat in each of Tennessee's 25 ecological subregions are provided. The report includes a question and answer section of habitat guidance implementation.	Debbie Arnwine Debbie.Arnwine@tn.gov
Development of Regionally-Based Numeric Interpretations of Tennessee's Narrative Biological Integrity Criterion 2001 (Arnwine and Deton)	This report contains guidance for interpretation of existing narrative biological criteria based on regional reference data. The report details macroinvertebrate monitoring at reference streams. The metric selection and assessment guidelines are discussed. A description of how ecoregions were grouped into bioregions for assessment purposes is included. Seasonal variability of macroinvertebrate populations is discussed. Numeric biocriteria based on a multi-metric index is proposed and compared to historic targeted and probabilistic monitoring. The report contains a question and answer section on biocriteria implementation.	Debbie Arnwine Debbie.Arnwine@tn.gov
Development of Regionally-Based Interpretations of Tennessee's Narrative Nutrient Criterion. 2001 (Denton, Arnwine and Wang)	This report contains guidance for interpretation of existing narrative nutrient criteria based on regional reference data. The report summarizes reference nutrient data and describes how nitrate+nitrite and total phosphorus goals were developed. A comparison of reference data to historic targeted and probabilistic monitoring sites is included. Relationships between nutrient levels and macroinvertebrate populations are explored. The report contains a question and answer section on nutrient criteria implementation.	Greg Denton Gregory.Denton@tn.gov
Tennessee Ecoregion Project 1994-1999. (Arnwine, Broach, Cartwright and Denton)	This report contains a detailed description of Tennessee's ecoregion delineation and reference stream monitoring project. The ecoregion report describes how subregions were defined and how reference streams were selected. The report includes descriptions of macroinvertebrate, bacteriological, and	Debbie Arnwine Debbie.Arnwine@tn.gov

	chemical monitoring as well as habitat assessment. Summaries of all data are provided.	
The Status of Water Quality in Tennessee Year 2000 305(b) Report (Denton, Vann and Wang)	Report documenting the general quality of surface waters during the period 1998-2000. Contains information about streams, lakes, and wetlands. Highlights success stories, emerging water quality issues, and innovative management strategies. Identifies streams that are currently posted due to fish contamination and elevated bacteria levels. Additionally, the 305(b) report contains the water quality assessments of group 1,2 and 3 watersheds.	Greg Denton Gregory.Denton@tn.gov
Ecoregions of Tennessee (Griffith, Omernik, and Azevedo)	This EPA publication documents work to delineate sub-ecoregion boundaries in Tennessee.	Debbie Arnwine Debbie.Arnwine@tn.gov
Level III and IV Ecoregions in Tennessee	A one-page color map illustrating the boundaries of ecoregions and sub-ecoregions in Tennessee.	Debbie Arnwine Debbie.Arnwine@tn.gov

Technical/Engineering Documents

Publications	Brief Description	Contact
Division of Water Resources Collection System Project	Download Draft Documents for Review	Robert G. O'Dette, M.S., P.E Robert.Odette@tn.gov
Pretreatment Model Sewer Use Ordinance	View in PDF format View in Word format	Yatasha Moore Yatasha.Moore@tn.gov
Design Criteria for Sewage Works	Guidance for municipalities and industries for the design of sewage systems and wastewater treatment plants. Design Criteria-Table of Contents (/environment/water/docs/wpc/design-criteria_table-of-contents.pdf) Design Criteria Chapter 1 (/environment/water/docs/wpc/design-criteria_chapter-1.pdf) - General Engineering Requirements Design Criteria Chapter 2 (/environment/water/docs/wpc/design-criteria_chapter-2.pdf) - Sewers and Wastewater Pumping Stations	Robert G. O'Dette, M.S., P.E Robert.Odette@tn.gov

Design Criteria Chapter 3 (/environment/water/docs/wpc/design-criteria_chapter-3.pdf) - Laboratory, Personnel, Maintenance Facilities and Safety Design

Design Criteria Chapter 4 (/environment/water/docs/wpc/design-criteria_chapter-4.pdf) - Preliminary and Pretreatment Facilities

Design Criteria Chapter 5 (/environment/water/docs/wpc/design-criteria_chapter-5.pdf) - Clarifiers

Design Criteria Chapter 6 (/environment/water/docs/wpc/design-criteria_chapter-6.pdf) - Fixed Film Reactors

Design Criteria Chapter 7 (/environment/water/docs/wpc/design-criteria_chapter-7.pdf) - Activated Sludge

Design Criteria Chapter 8 (/environment/water/docs/wpc/design-criteria_chapter-8.pdf) - Nitrification

Design Criteria Chapter 9 (/environment/water/docs/wpc/design-criteria_chapter-9.pdf) - Ponds and Aerated Lagoons

Design Criteria Chapter 10 (/environment/water/docs/wpc/design-criteria_chapter-10.pdf) - Disinfection

Design Criteria Chapter 11 (/environment/water/docs/wpc/design-criteria_chapter-11.pdf) - Tertiary Treatment / Advanced Wastewater Treatment

Design Criteria Chapter 12 (/environment/water/docs/wpc/design-criteria_chapter-12.pdf) - Sludge Processing and Disposal

Design Criteria Chapter 13 (/environment/water/docs/wpc/design-criteria_chapter-13.pdf) - Plant Flow Measurement and Sampling

Design Criteria Chapter 14 (/environment/water/docs/wpc/design-criteria_chapter-14.pdf) - Instrumentation, Control and Electrical

	Systems Design Criteria Chapter 15 (/environment/water/docs/wpc/design-criteria_chapter-15.pdf) - Managed Wastewater Dispersal Using Drip Irrigation Design Criteria Chapter 16 (/environment/water/docs/wpc/design-criteria_chapter-16.pdf) - Design Guidelines for Wastewater Treatment Systems Using Spray Irrigation Design Criteria Chapter 17 (/environment/water/docs/wpc/design-criteria_chapter-17.pdf) - Design Guidelines for Wastewater Dispersal Using Drip Irrigation Design Criteria Chapter 18 (/environment/water/docs/wpc/design-criteria_chapter-18.pdf) - Collection System Rehabilitation Wastewater Plans Review Fee Worksheet (docs/wpc/WastewaterPlansReviewFeeWorksheet.pdf)	
Erosion and Sediment Control Handbook	A guide for protection of state waters through the use of best management practices during land disturbing activities.	Robert Karesh Robert.Karesh@tn.gov
TN Oil and Grease Control Guidance Document	Guidance for municipalities in creating regulations and enforcement plans dealing with oil and grease on a local level. Guidance Document Cover Page (78.6KB) Guidance Document (528KB) Appendices (512KB)	Jennifer Peters Dodd Jennifer.Dodd@tn.gov

American Community Survey

Question Corner
for Survey Respondents

Why is the Census Bureau calling me?

If you don't mail back your form or if you leave questions blank, we may call you. More.

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Call Us

General 1-800-923-8282
Questionnaire 1-800-354-7271
¿Ayuda? 1-877-833-5625

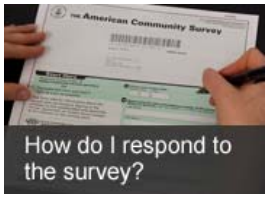
Language Brochures

Questions and Answers about the American Community Survey in 11 languages. [pdf format]

العربية Arabic
中文 Chinese
English English
Français French
Kreyòl ayisyen Haitian Creole
한 국 어 Korean
Polski Polish
Português Portuguese
русский Russian
En español Spanish
Việt Ngữ Vietnamese



The American Community Survey (ACS) is a mandatory, ongoing statistical survey that samples a small percentage of the population every year – giving communities the information they need to plan investments and services. Learn more.



Learn ways to respond to the ACS or get help with the survey. Learn more about how we protect your privacy; why you were selected; why it's important to participate; why we ask specific questions and more in About the Survey.



We release new data every year — get the latest on American FactFinder, or get advice on choosing the right tool or data table for your needs. Learn more about our annual data releases or browse the supporting documentation.

Respond Online | Upcoming Events | Bike to Work | 2008-2012 Data Released! | ACS Information Guide

Upcoming Events

May 20, 2014
Commerce Day on the Hill

May 29, 2014
ACS Data Users Conference

June 24, 2014
Accessing Block Group Data with the American Community Survey Webinar



Get more details, and see all of our upcoming events

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Did you receive a survey?
Learn why you were selected; why you should participate; how to respond; how we protect your privacy; why we ask specific questions; and more in About the Survey.



Explore the Interactive Form
Before you get started filling out the questionnaire, click through our interactive form that explains how the collected information helps communities. (Flash required). Or get our pdf's on why we ask specific questions.



New Report on Out-of-State and Long Commutes
Trends in Commuting are explored in this new report. Highlights include which states have the longest commutes, the most out-of-state commuters and more. Download Out-of-State and Long Commutes: 2011 based on data collected from the American Community Survey.



How the ACS Works for Your Community
View a visual representation of the data collection process of the ACS and how this translates into dollars for your community to help fund school-lunch programs, place new hospitals, build new businesses and take other actions that lead to healthy towns and cites. (Text version also available.)

SEARCH

Current Data Profiles

Social, Economic, Housing and Demographic Characteristics

United States Go

Website Feedback

Tell us how to make this website better.

Data by Topic

People

- Age and Sex / Aging
- Ancestry
- Disability
- Commuting to Work
- Education
- Employment
- Family/Relationships
- Health Insurance
- Income and Earnings
- Language
- Origins
- Population Change
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- Veterans

Housing

- Financial Characteristics
- Physical Characteristics

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Transportation is a critical part of our nation's infrastructure
Learn how your answers on the American Community Survey help communities make smarter decisions about transportation resources to keep America moving.

[PDF] or denotes a file in Adobe's Portable Document Format. To view the file, you will need the Adobe® Reader® available **free** from Adobe.

2010 Census Data

2010 Data Release Schedules

2010 Census Data Products: United States – At A Glance
2010 Census Data Product Descriptions [PDF]

2010 Census Summary Files

The Summary File 1 data tables provide the most detailed information available so far from the 2010 Census about a community's entire population, including cross-tabulations of age, sex, households, families, relationship to householder, housing units, detailed race and Hispanic or Latino origin groups, and group quarters. The Summary File 2 tables add a new layer of detail — making information, such as age, relationship and homeownership available for specific race and ethnic groups within a community.
Summary File 1
Summary File 2

American Indian & Alaska Native Map

This map shows the 2010 Census American Indian and Alaska Native areas along with graphics that reflect 2010 Census statistics.



2010 Guide to State and Local Census Geography

This resource contains state geographic information and provides links to lists of geographic entities within each state.

2010 Census Demographic Profiles



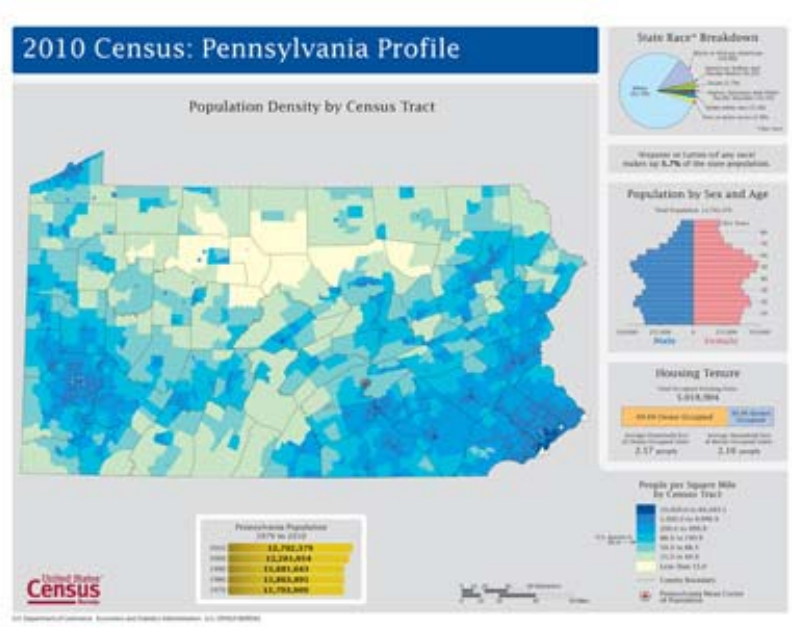
The first set of 2010 Census Demographic Profiles are ready for viewing. These profiles provide details about race and Hispanic groups, age, sex and housing status. The profiles will be released on a state-by-state basis for each of the 50 states, the District of Columbia and Puerto Rico.

Interactive Population Map — Explore the data with this interactive tool

Download Demographic Profiles

Download Summary File 1

2010 Census Population Profile Maps



The U.S. Census Bureau's 2010 Census Profile maps present a graphic overview of selected demographic information from the 2010 Census of Population and Housing. In addition to a population density map, each page includes a pie chart showing percent of total population by race, a population pyramid, and a bar chart illustrating housing occupancy rates. The map series consists of one page-sized map for each state in the United States, the District of Columbia, and Puerto Rico, as well as a national map.

These map files are in Portable Document Format (PDF) and were designed to be viewed with Adobe® Reader® Offsite, which is available **free** from Adobe. If your browser opens them in another PDF reader, the screen display may not accurately reproduce the map.

These maps are being released on a flow basis as they become available. Go to our 2010 Census Population Profile Maps page to view the individual state maps that have been released.

2010 Census Briefs

Native Hawaiian and Other Pacific Islander: 2010
Households and Families: 2010
The Asian Population: 2010
The American Indian and Alaska Native Population: 2010
The Older Population: 2010
Congressional Apportionment
Housing Characteristics: 2010
The White Population: 2010
The Black Population: 2010
The Hispanic Population: 2010
La Población Hispana: 2010
Age and Sex Composition: 2010

Population Distribution and Change: 2000 to 2010
An Overview: Race and Hispanic Origin and the 2010 Census



Redistricting Data

The Census Bureau's interactive redistricting map widget enables users to view local 2010 Census data by state, including population change and race and Hispanic or Latino origin data by county.

Additional Data: To access data from multiple geographies within the state, such as census blocks, tracts, voting districts, cities, counties and school districts, visit American Factfinder: http://factfinder2.census.gov.

Embed on your site by copying the following code, replacing XX with your two-digit state abbreviation (e.g. "LA") and optionally replacing the values for width and height. To embed the U.S. map, leave off the state parameter.

```
<iframe src="http://www.census.gov/2010census/data/embedstate.html?state=XX" frameborder="0" scrolling="no" marginheight="0" marginwidth="0" width="800" height="510">IFRAMES not supported</iframe>
```

Note: height should equal width divided by 1.566, rounded to a whole number. For example, 940x600 or 800x510.

Data provided by U.S. Census Bureau.

- - Represents zero or rounds to 0.0
- The term 'county' refers to county or equivalent entity.
- For more information on Substantial Changes to Counties and County Equivalent Entities: 1970-Present, please visit: http://www.census.gov/geo/www/tiger/ctychng.html

For questions, comments and suggestions about Census Bureau data visualizations, please contact: pio.2010@census.gov.

Apportionment Data

The Census Bureau's interactive map widget enables users to view 10 decades of apportionment history, current apportionment totals and our country's changing population through the past century.

View as HTML: Population Change, Population Density, Apportionment

Download as CSV: Population Change, Population Density, Apportionment

Embed on your site:

```
<iframe src="http://www.census.gov/2010census/data/embedmap.php" frameborder="0" scrolling="no" marginheight="0" marginwidth="0" width="638" height="405">IFRAMES not supported</iframe>
```

Data provided by U.S. Census Bureau.

Population Density: Includes Puerto Rico and the District of Columbia in population density rankings, 1 to 52.

Apportionment: Apportionment is the process of dividing the 435 seats in the House of Representatives among the 50 states. Puerto Rico and the District of Columbia are not included.

Alaska and Hawaii gained statehood in 1959. Arizona and New Mexico gained statehood in 1912. For apportionment, data before those periods are not reflected on the map.

Congress did not reapportion in 1920. Therefore, the apportionment data shown for this decade replicates the data for 1910. There is no data reflected for the apportionment population in the 1920 "people per representative" chart.