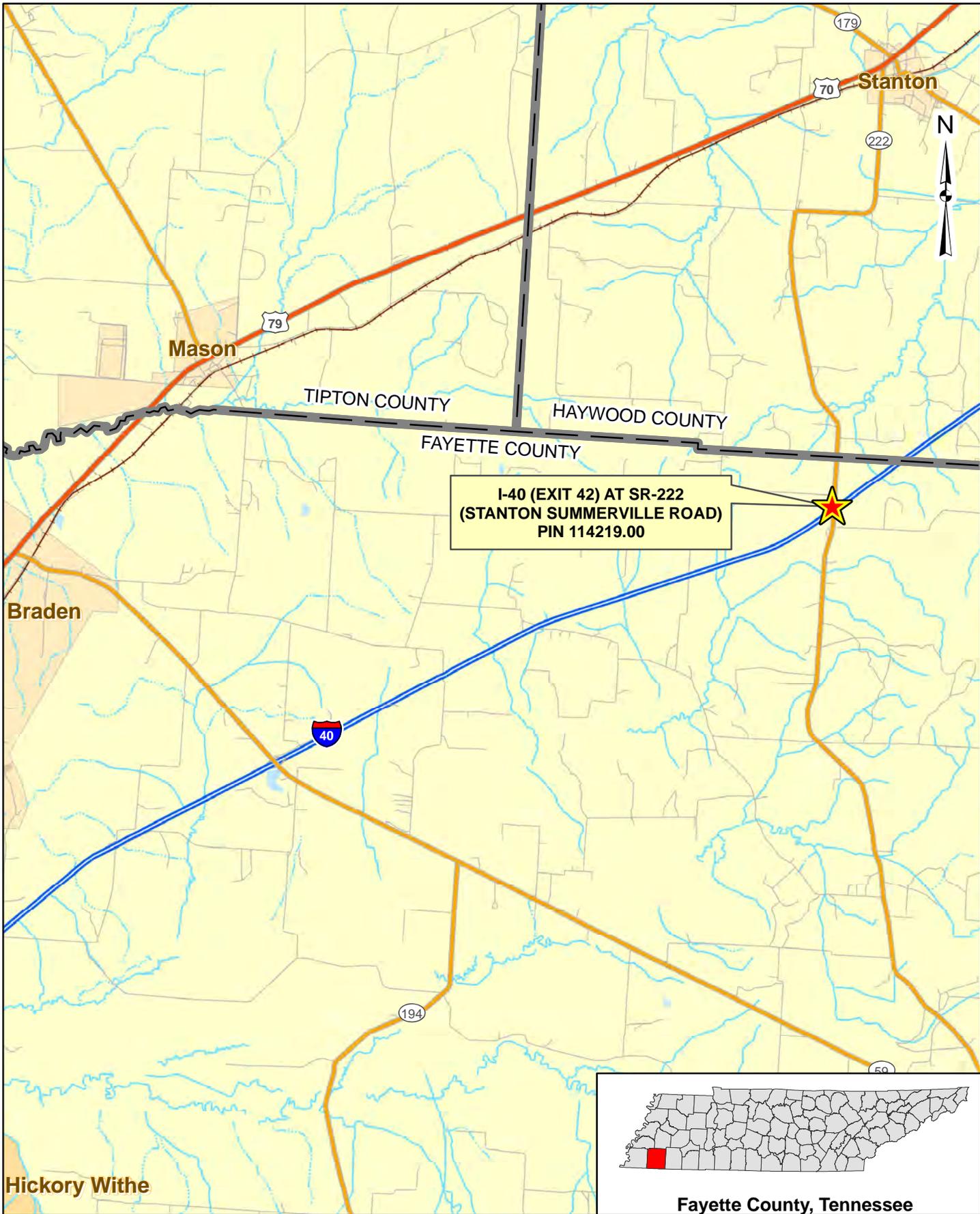


D-List Categorical Exclusion  
I-40 at SR-222 (Exit 42)  
Fayette County  
TDOT PIN 114219.00



## **Appendix A**

### **Project Location Maps**

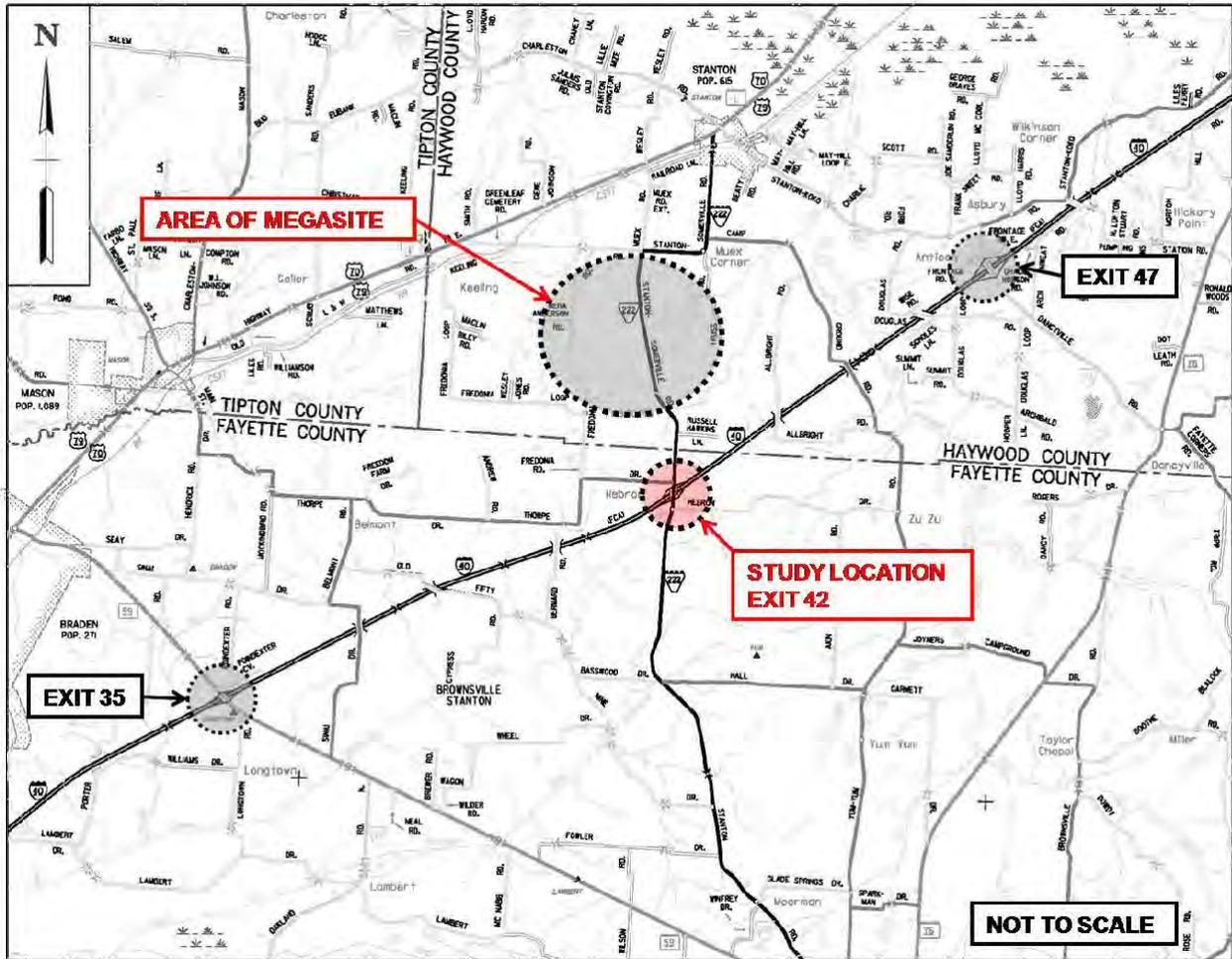


# PROJECT LOCATION MAP

D-List Categorical Exclusion  
I-40 at SR-222 (Exit 42)  
Fayette County  
TDOT PIN 114219.00



### Project Location Map Adjacent Exits and Proposed Area of Future Megasite



D-List Categorical Exclusion  
I-40 at SR-222 (Exit 42)  
Fayette County  
TDOT PIN 114219.00



Project Location Map  
Existing Interchange Overview

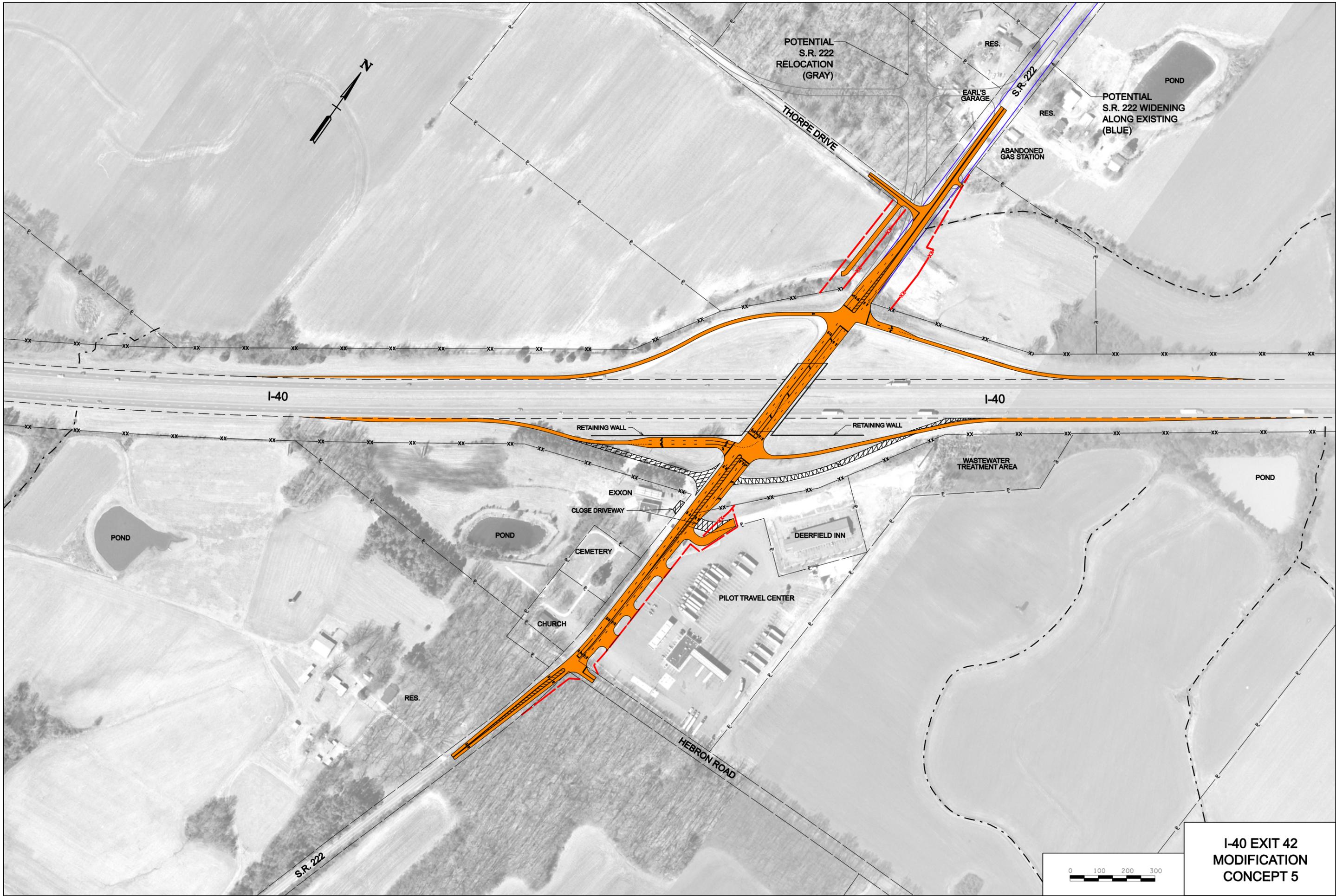


D-List Categorical Exclusion  
I-40 at SR-222 (Exit 42)  
Fayette County  
TDOT PIN 114219.00



## **Appendix B**

### **Approved Alternative 5**



POTENTIAL  
S.R. 222  
RELOCATION  
(GRAY)

RES.

EARL'S  
GARAGE

RES.

POTENTIAL  
S.R. 222 WIDENING  
ALONG EXISTING  
(BLUE)

POND

ABANDONED  
GAS STATION

THORPE DRIVE

S.R. 222

I-40

I-40

RETAINING WALL

RETAINING WALL

WASTEWATER  
TREATMENT AREA

POND

EXXON

CLOSE DRIVEWAY

DEERFIELD INN

CEMETERY

PILOT TRAVEL CENTER

CHURCH

RES.

HEBRON ROAD

S.R. 222



I-40 EXIT 42  
MODIFICATION  
CONCEPT 5

D-List Categorical Exclusion  
I-40 at SR-222 (Exit 42)  
Fayette County  
TDOT PIN 114219.00



## **Appendix C**

### **State Transportation Improvement Program (STIP) TDOT Proposed Comprehensive Multimodal Program (TIP)**

TENNESSEE DEPARTMENT OF TRANSPORTATION

GERALD NICELY, COMMISSIONER

# STIP

***STATE TRANSPORTATION IMPROVEMENT PROGRAM***

PRODUCED BY

TENNESSEE DEPARTMENT OF TRANSPORTATION

PROGRAM DEVELOPMENT AND ADMINISTRATION DIVISION

JIM MOORE, DIRECTOR

OCTOBER 2010

THIS DOCUMENT CAN BE ACCESSED VIA TDOT'S WEBSITE AT  
[www.TDOT.STATE.TN.US/](http://www.TDOT.STATE.TN.US/)

**TENNESSEE DEPARTMENT OF TRANSPORTATION  
 FY 2011 THRU FY 2014  
 TRANSPORTATION IMPROVEMENT PROGRAM  
 TITLE 23 U.S.C., SECTIONS 105 & 135**

<b>STIP #</b>	24000	<b>TDOT PIN</b>	114219.00	<b>LENGTH IN MILES</b>		<b>LEAD AGENCY</b>	TDOT
<b>COUNTY:</b>	FAYETTE	<b>TOTAL PROJECT COST</b>		\$10,000,000			
<b>ROUTE:</b>	I-40						
<b>TERMINI :</b>	INTERCHANGE @ SR-222						
<b>PROJECT DESCRIPTION:</b>	MODIFY INTERCHANGE						
<b>REMARKS</b>							

<u>FISCAL YEAR</u>	<u>TYPE OF WORK</u>	<u>FUNDING TYPE</u>	<u>TOTAL FUNDS</u>	<u>FED FUNDS</u>	<u>STATE FUNDS</u>	<u>LOCAL FUNDS</u>
2011	PE-N	IM	175,000	157,500	17,500	
2011	PE-D	IM	325,000	292,500	32,500	

<b>STIP #</b>	24010	<b>TDOT PIN</b>		<b>LENGTH IN MILES</b>		<b>LEAD AGENCY</b>	TDOT
<b>COUNTY:</b>	FAYETTE	<b>TOTAL PROJECT COST</b>		\$90,900,000			
<b>ROUTE:</b>							
<b>TERMINI :</b>	MEMPHIS REGIONAL INTERMODAL FACILITY						
<b>PROJECT DESCRIPTION:</b>	CONSTRUCT INTERMODAL FACILITY FOR NORFOLK SOUTHERN RAILROAD.						
<b>REMARKS</b>	THIS IS THE RURAL PORTION OF THIS PROJECT. THE REMAINDER OF THE PROJECT IS CONTAINED IN THE MEMPHIS TIP AS PROJECT NUMBER TN-C						

<u>FISCAL YEAR</u>	<u>TYPE OF WORK</u>	<u>FUNDING TYPE</u>	<u>TOTAL FUNDS</u>	<u>FED FUNDS</u>	<u>STATE FUNDS</u>	<u>LOCAL FUNDS</u>
2011	CONST	ARRA/TIGER	90,900,000	52,500,000		38,400,000

TENNESSEE DEPARTMENT OF TRANSPORTATION  
 PROPOSED FISCAL YEARS 2012 - 14 TIP  
 PROPOSED COMPREHENSIVE MULTIMODAL PROGRAM  
 APRIL 28, 2011

County	Route	Description	Length	Type of Work	FY-12	FY-13	FY-14
Dickson- Hickman- Rutherford- Williamson- Wilson		Nashville SmartWay Remote Travel Time Assessment for SR-840	0.0	Construction	CN		
Fayette	I-40	Interchange at SR-196 (Hickory Withe Road)	0.0	Right-of-Way	RW		
Fayette	I-40	Interchange @ SR-222	0.0	Right-of-Way		RW	
Fayette	SR-76	Bridges over Overflow, LM 0.55 & North Folk Wolf River, LM 0.74	0.0	Bridge	CN		
Fentress	SR-28 US-127	From SR-62 at Clarkrange to North of South Franklin Loop Road	2.8	Preliminary Engineering	PE		
Hamblen- Jefferson	SR-66REL	SR-160 in Morristown to Interstate 81 @ SR-341	5.0	Stage Construction			CN
Hamilton- Bradley	I-75	Chattanooga SmartWay ITS Expansion	12.0	Preliminary Engineering	PE		
Hamilton	I-124 US-27	North of I-24 to South of Tennessee River Bridge (Additional Lanes)	1.5	Construction			CN
Hamilton	SR-29 US-27	Olgiate Bridge over Tennessee River (Widening)	0.0	Construction			CN
Hamilton	SR-29 US-27	North of Tennessee River Bridge to SR-8 (US-127) (Additional Lanes)	1.6	Construction	CN		
Hamilton	SR-317	(Apison Pike); Intersection at Old Lee Hwy to SR-321	2.2	Right-of-Way Construction	RW		CN
Hancock	SR-70	Bridge over Clinch River, LM 1.65	0.0	Bridge	CN		

D-List Categorical Exclusion  
I-40 at SR-222 (Exit 42)  
Fayette County  
TDOT PIN 114219.00



## **Appendix D**

### **Related Area Projects**

<b>LEGEND</b>	
	PROPOSED S.R. 222 INTERCHANGE MODIFICATIONS
	POTENTIAL S.R. 222 ALIGNMENT ROUTE
	POTENTIAL I-40 TRUMPET INTERCHANGE, INCLUDING I-40 AUXILIARY LANES AND S.I.A. ROUTE FOR MEGASITE DEVELOPMENT

**POTENTIAL S.R. 222 ALIGNMENT ROUTE CONTINUES TO S.R. 1 (U.S. 70/U.S. 79) (CONSIDERATION FOR S.R. 222 RELOCATION AT REQUEST OF MEGASITE DEVELOPMENT)**

**POTENTIAL S.R. 222 ALIGNMENT ROUTES**

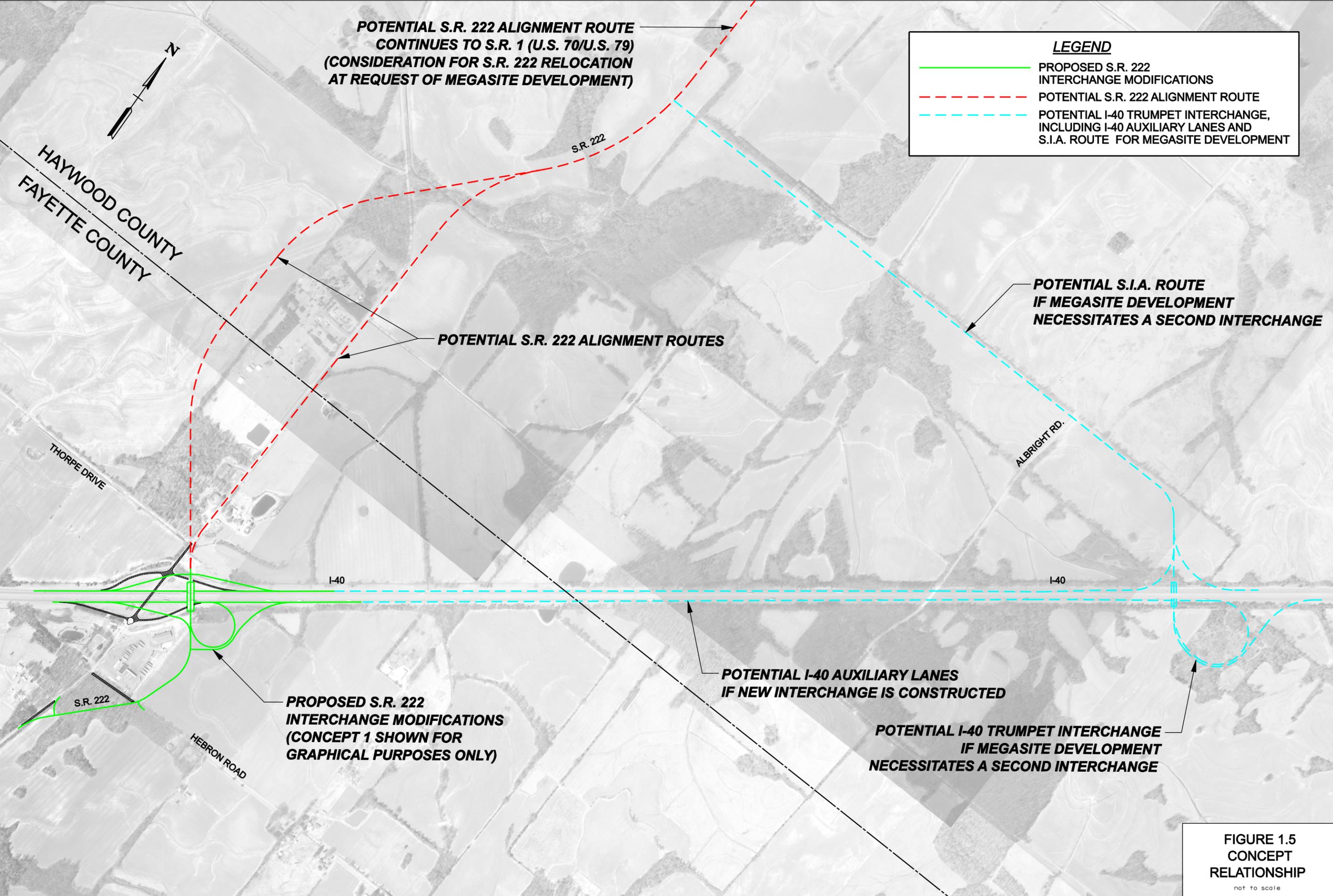
**POTENTIAL S.I.A. ROUTE IF MEGASITE DEVELOPMENT NECESSITATES A SECOND INTERCHANGE**

**POTENTIAL I-40 AUXILIARY LANES IF NEW INTERCHANGE IS CONSTRUCTED**

**POTENTIAL I-40 TRUMPET INTERCHANGE IF MEGASITE DEVELOPMENT NECESSITATES A SECOND INTERCHANGE**

**PROPOSED S.R. 222 INTERCHANGE MODIFICATIONS (CONCEPT 1 SHOWN FOR GRAPHICAL PURPOSES ONLY)**

**FIGURE 1.5  
CONCEPT  
RELATIONSHIP**  
not to scale



D-List Categorical Exclusion  
I-40 at SR-222 (Exit 42)  
Fayette County  
TDOT PIN 114219.00



## **Appendix E**

### **Area Photos**

I-40 & SR-222 (Exit 42)  
Fayette County, Tennessee  
PIN 114219.00

Area Photos

**Northbound on SR-222**



**Southbound on SR-222**



I-40 & SR-222 (Exit 42)  
Fayette County, Tennessee  
PIN 114219.00

Area Photos

**Abandoned Service Station and USTs – Northeast Quadrant of I-40 & SR-222 Interchange**



**Pilot Travel Center – Southeast Quadrant of I-40 & SR-222 Interchange**



I-40 & SR-222 (Exit 42)  
Fayette County, Tennessee  
PIN 114219.00

Area Photos

**Deerfield Inn – Southeast Quadrant of I-40 & SR-222 Interchange**



**Exxon Gas Station/Convenience Store – Southwest Quadrant of I-40 & SR-222 Interchange**



I-40 & SR-222 (Exit 42)  
Fayette County, Tennessee  
PIN 114219.00

Area Photos

**Bethlehem Hebron Chapel Church – Southwest Quadrant of I-40 & SR-222 Interchange**



D-List Categorical Exclusion  
I-40 at SR-222 (Exit 42)  
Fayette County  
TDOT PIN 114219.00



## **Appendix F**

### **Ecology**



STATE OF TENNESSEE  
**DEPARTMENT OF TRANSPORTATION**  
ENVIRONMENTAL DIVISION  
SUITE 900, JAMES K. POLK BUILDING  
505 DEADERICK STREET  
NASHVILLE, TENNESSEE 37243-0334

**MEMORANDUM**

To: Lia Obaid  
Design Division

From: Matt Richards  
Environmental Division

Date: March 28, 2012

Subject: ENVIRONMENTAL BOUNDARIES AND MITIGATION DESIGN FOR:  
Fayette County, Interstate 40 Interchange at State Route 222  
P.E. 24001-0147-44 PIN 114219.00

An ecological evaluation of the subject project has been conducted with the following results:

Wetlands present: **Three wetland areas are present within the project limits. Refer to attachments for locations and potential mitigation.**

No wetlands identified

Streams are present: **One stream is present within the project limits. Refer to attachments for locations and potential mitigation.**

No streams present in project impact area

Protected species present:

No protected species identified in project impact area

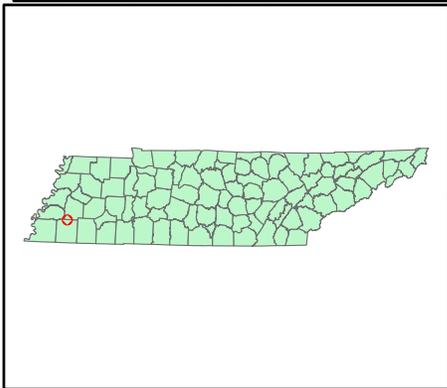
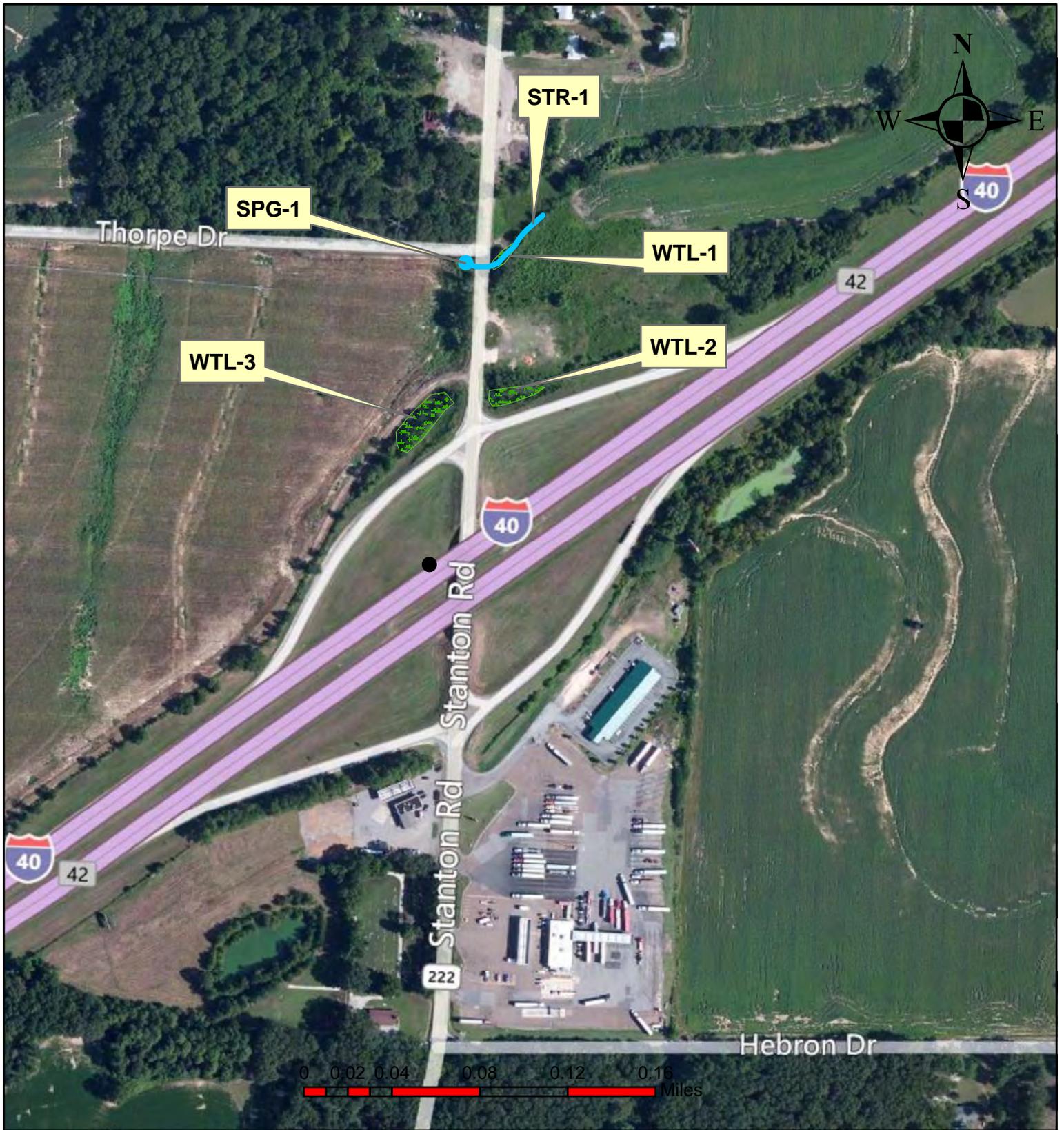
Special haul road provisions needed:

**THE FOLLOWING ITEMS ARE ATTACHED FOR YOUR USE:**

X	Environmental Boundaries
	Mitigation Design Sketches
	Narrative Mitigation Plan
	Other : <i>Marked present layout sheet</i>

Your assistance is appreciated. If you have any questions or comments, please contact Matt Richards in the Environmental Division at 615-532-3880 or [b.m.richards@tn.gov](mailto:b.m.richards@tn.gov).

xc: Jennifer Lloyd w/ attachments  
Shane Hester w/ attachments  
Freddy Miller w/ attachments  
John Hewitt w/ attachments  
Joe Matlock w/ attachments  
Michael Horlacher w/ attachments  
Construction Rep. w/ attachments  
Jon Zirkle w/ attachments  
Project File  
Reading File



**Fayette County I-40 Interchange at SR-222**

**P.E. 24001-0147-44**  
**PIN 114219.00**



**Project:** Fayette County, I-40 at SR-222

P.E. 24001-0147-44 PIN 114219.00

**Date of survey:** 3/22/2012**Biologist:** Matt Richards**Affiliation:** TDOT

<b>1-Station:</b> from plans	None provided
<b>2-Map label and name</b>	STR-1
<b>3-Latitude/Longitude</b>	89 24'41.27"W 35 23'40.18"N
<b>4-Potential impact</b>	Crossing
<b>5-Feature description:</b>	
what is it	Intermittent stream
blue-line on topo? (y/n)	No
defined channel (y/n)	Yes
straight or meandering	Straight
channel bottom width	1'
top of bank width	6'
bank height and slope ratio	3'
avg. gradient of stream (%)	
substratum	Soil, leaves
riffle/run/pool	20/0/80
width of buffer zone	LB: 7' RB: 7'
water flow	Slight
water depth	2"-1'
water width	1'
general water quality	Clear, flowing
OHWM indicators	Bed and bank, vegetation absent, deposition
groundwater connection	Yes
bank stability: LB, RB	Eroding
dominant species: LB, RB	Black willow, box elder, honeysuckle
overhead canopy (%)	85%
benthos	No
fish	No
algae or other aquatic life	Algae
habitat assessment score	
photo number (s)	1 Looking D/S from farm road crossing; 2 looking U/S from farm road crossing
rainfall information	4.69" in previous two weeks
<b>6- HUC code &amp; name</b> (12-digit)	080102080402, Big Muddy Creek, Lower
<b>7-Confirmed by:</b>	Unnecessary
<b>8-Mitigation</b>	No_____ Yes_____ : (include on Form J)
<b>9-ETW</b>	No <input checked="" type="checkbox"/> Yes_____
<b>10-303 (d) List</b>	No <input checked="" type="checkbox"/> Yes_____: Habitat_____ Siltation_____
<b>11-Notes</b> Estimate size (acres) of lake or pond if applicable; provide any pertinent information needed to better describe feature; indicate if hydrologic determination form completed	Hydrology supplied by SPG-1.



**WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region**

Project/Site: I-40 at SR-222, PIN 114219.00 City/County: Fayette Sampling Date: 3/22/2012  
 Applicant/Owner: TDOT State: TN Sampling Point: WTL-1  
 Investigator(s): Matt Richards Section, Township, Range: \_\_\_\_\_  
 Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): Convex Slope (%): \_\_\_\_\_  
 Subregion (LRR or MLRA): \_\_\_\_\_ Lat: \_\_\_\_\_ Long: \_\_\_\_\_ Datum: \_\_\_\_\_  
 Soil Map Unit Name: \_\_\_\_\_ NWI classification: \_\_\_\_\_

Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No \_\_\_\_\_ (If no, explain in Remarks.)  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes  No \_\_\_\_\_  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No _____ Hydric Soil Present? Yes <input checked="" type="checkbox"/> No _____ Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No _____	<b>Is the Sampled Area within a Wetland?</b> Yes <input checked="" type="checkbox"/> No _____
Remarks:	

**HYDROLOGY**

<b>Wetland Hydrology Indicators:</b> Primary Indicators (minimum of one is required; check all that apply)	<b>Secondary Indicators (minimum of two required)</b>
<input checked="" type="checkbox"/> Surface Water (A1) <input checked="" type="checkbox"/> Water-Stained Leaves (B9) <input checked="" type="checkbox"/> High Water Table (A2) <input checked="" type="checkbox"/> Aquatic Fauna (B13) <input checked="" type="checkbox"/> Saturation (A3) <input type="checkbox"/> Marl Deposits (B15) <b>(LRR U)</b> <input checked="" type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) <input checked="" type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input checked="" type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input checked="" type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-Neutral Test (D5)

<b>Field Observations:</b> Surface Water Present? Yes <input checked="" type="checkbox"/> No _____ Depth (inches): <u>1-6</u> Water Table Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? Yes <input checked="" type="checkbox"/> No _____ Depth (inches): <u>0</u> (includes capillary fringe)	<b>Wetland Hydrology Present?</b> Yes <input checked="" type="checkbox"/> No _____
---	--

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:  
 SPG-1 to west is hydrology source for WTL-1 and STR-1

**VEGETATION – Use scientific names of plants.**

Sampling Point: WTL-1

	Absolute % Cover	Dominant Species?	Indicator Status		
<b>Tree Stratum</b> (Plot sizes: _____ )					
1. <u>black willow</u>	<u>60</u>	<u>yes</u>	<u>FACW</u>	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A)  Total Number of Dominant Species Across All Strata: <u>3</u> (B)  Percent of Dominant Species That Are OBL, FACW, or FAC: <u>66</u> (A/B)	
2. _____					
3. _____					
4. _____					
5. _____					
6. _____					
7. _____					
				<b>Prevalence Index worksheet:</b> Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B)  Prevalence Index = B/A = _____	
_____ = Total Cover					
<b>Sapling Stratum</b> ( _____ )					
1. <u>boxelder</u>	<u>10</u>	<u>yes</u>	<u>FACW</u>		
2. _____					
3. _____					
4. _____					
5. _____					
6. _____					
7. _____					
				<b>Hydrophytic Vegetation Indicators:</b> <input checked="" type="checkbox"/> Dominance Test is >50% <input type="checkbox"/> Prevalence Index is ≤3.0 <sup>1</sup> <input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present.	
_____ = Total Cover					
<b>Shrub Stratum</b> ( _____ )					
1. _____					
2. _____					
3. _____					
4. _____					
5. _____					
6. _____					
7. _____					
				<b>Definitions of Vegetation Strata:</b>  <b>Tree</b> – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  <b>Sapling</b> – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  <b>Shrub</b> – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  <b>Herb</b> – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3 ft (1 m) in height.  <b>Woody vine</b> – All woody vines, regardless of height.   <b>Hydrophytic Vegetation Present?</b> Yes <input checked="" type="checkbox"/> No _____	
_____ = Total Cover					
<b>Herb Stratum</b> ( _____ )					
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6. _____					
7. _____					
8. _____					
9. _____					
10. _____					
11. _____					
12. _____					
				<b>Woody Vine Stratum</b> ( _____ )	
1. <u>honeysuckle</u>	<u>5</u>	<u>yes</u>			
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				<b>Woody Vine Stratum</b> ( _____ )	
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				<b>Woody Vine Stratum</b> ( _____ )	
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3. _____					
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				<b>Woody Vine Stratum</b> ( _____ )	
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				<b>Woody Vine Stratum</b> ( _____ )	
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2. _____					
3. _____					
4. _____					
5. _____					
				<b>Woody Vine Stratum</b> ( _____ )	
1. _____					
2. _____					
3. _____					
4. _____					
5. _____					
				<b>Woody Vine Stratum</b> ( _____ )	
1. _____					
2. _____					
3. _____					
4. _____					
5. _____					
				<b>Woody Vine Stratum</b> ( _____ )	
1. _____					
2. _____					
3. _____					
4. _____					
5. _____					
				<b>Woody Vine Stratum</b> ( _____ )	
1. _____					
2. _____					
3. _____					
4. _____					
5. _____					
				<b>Woody Vine Stratum</b> ( _____ )	
1. _____					
2. _____					
3. _____					
4. _____					
5. _____					
				<b>Woody Vine Stratum</b> ( _____ )	
1. _____					
2. _____					
3. _____					
4. _____					
5. _____					
				<b>Woody Vine Stratum</b> ( _____ )	
1. _____					
2. _____					
3. _____					
4. _____					
5. _____					
				<b>Woody Vine Stratum</b> ( _____ )	
1. _____					
2. _____					
3. _____					
4. _____					
5. _____					
				<b>Woody Vine Stratum</b> ( _____ )	
1. _____					
2. _____					
3. _____					
4. _____					
5. _____					
				<b>Woody Vine Stratum</b> ( _____ )	

**SOIL**

Sampling Point: WTL-1

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
10	10YR 6/1	90	7.5YR 5/6	5				

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.      <sup>2</sup>Location: PL=Pore Lining, M=Matrix.

**Hydric Soil Indicators:**

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5)
- Organic Bodies (A6) **(LRR P, T, U)**
- 5 cm Mucky Mineral (A7) **(LRR P, T, U)**
- Muck Presence (A8) **(LRR U)**
- 1 cm Muck (A9) **(LRR P, T)**
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Coast Prairie Redox (A16) **(MLRA 150A)**
- Sandy Mucky Mineral (S1) **(LRR O, S)**
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Dark Surface (S7) **(LRR P, S, T, U)**

- Polyvalue Below Surface (S8) **(LRR S, T, U)**
- Thin Dark Surface (S9) **(LRR S, T, U)**
- Loamy Mucky Mineral (F1) **(LRR O)**
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)
- Marl (F10) **(LRR U)**
- Depleted Ochric (F11) **(MLRA 151)**
- Iron-Manganese Masses (F12) **(LRR O, P, T)**
- Umbric Surface (F13) **(LRR P, T, U)**
- Delta Ochric (F17) **(MLRA 151)**
- Reduced Vertic (F18) **(MLRA 150A, 150B)**
- Piedmont Floodplain Soils (F19) **(MLRA 149A)**
- Anomalous Bright Loamy Soils (F20) **(MLRA 149A, 153C, 153D)**

**Indicators for Problematic Hydric Soils<sup>3</sup>:**

- 1 cm Muck (A9) **(LRR O)**
- 2 cm Muck (A10) **(LRR S)**
- Reduced Vertic (F18) **(outside MLRA 150A,B)**
- Piedmont Floodplain Soils (F19) **(LRR P, S, T)**
- Anomalous Bright Loamy Soils (F20) **(MLRA 153B)**
- Red Parent Material (TF2)
- Very Shallow Dark Surface (TF12) **(LRR T, U)**
- Other (Explain in Remarks)

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present.

**Restrictive Layer (if observed):**

Type: \_\_\_\_\_  
 Depth (inches): \_\_\_\_\_

Hydric Soil Present?    Yes     No \_\_\_\_\_

Remarks:

**WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region**

Project/Site: I-40 at SR-222 PIN 114219.00 City/County: Fayette Sampling Date: 3/22/2012  
 Applicant/Owner: TDOT State: TN Sampling Point: WTL-2  
 Investigator(s): Matt Richards Section, Township, Range: \_\_\_\_\_  
 Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): Convex Slope (%): \_\_\_\_\_  
 Subregion (LRR or MLRA): \_\_\_\_\_ Lat: \_\_\_\_\_ Long: \_\_\_\_\_ Datum: \_\_\_\_\_  
 Soil Map Unit Name: \_\_\_\_\_ NWI classification: \_\_\_\_\_

Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No \_\_\_\_\_ (If no, explain in Remarks.)  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes  No \_\_\_\_\_  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes _____ No _____ Hydric Soil Present? Yes _____ No _____ Wetland Hydrology Present? Yes _____ No _____	<b>Is the Sampled Area within a Wetland?</b> Yes _____ No _____
Remarks: Photo 5 looking east	

**HYDROLOGY**

<b>Wetland Hydrology Indicators:</b> Primary Indicators (minimum of one is required; check all that apply)	<b>Secondary Indicators (minimum of two required)</b>
<input checked="" type="checkbox"/> Surface Water (A1) <input checked="" type="checkbox"/> Water-Stained Leaves (B9) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Aquatic Fauna (B13) <input checked="" type="checkbox"/> Saturation (A3) <input type="checkbox"/> Marl Deposits (B15) ( <b>LRR U</b> ) <input checked="" type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-Neutral Test (D5)

<b>Field Observations:</b> Surface Water Present? Yes <input checked="" type="checkbox"/> No _____ Depth (inches): <u>2-4</u> Water Table Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? Yes <input checked="" type="checkbox"/> No _____ Depth (inches): <u>0</u> (includes capillary fringe)	<b>Wetland Hydrology Present?</b> Yes <input checked="" type="checkbox"/> No _____
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:  
 Water held between I-40 ramp and berm to north.

**VEGETATION – Use scientific names of plants.**

Sampling Point: WTL-2

<u>Tree Stratum</u> (Plot sizes: _____ )	Absolute % Cover	Dominant Species?	Indicator Status	<b>Dominance Test worksheet:</b>
1. <u>Black willow</u>	<u>70</u>		<u>FACW</u>	Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A)
2. _____				Total Number of Dominant Species Across All Strata: <u>1</u> (B)
3. _____				Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)
4. _____				<b>Prevalence Index worksheet:</b> Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B)  Prevalence Index = B/A = _____
5. _____				
6. _____				
7. _____				
_____ = Total Cover				
<u>Sapling Stratum</u> ( _____ )				
1. _____				
2. _____				
3. _____				
4. _____				
5. _____				
6. _____				
7. _____				
_____ = Total Cover				
<u>Shrub Stratum</u> ( _____ )				<b>Hydrophytic Vegetation Indicators:</b> <input checked="" type="checkbox"/> Dominance Test is >50% <input type="checkbox"/> Prevalence Index is ≤3.0 <sup>1</sup> <input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present.
1. _____				
2. _____				
3. _____				
4. _____				
5. _____				
6. _____				
7. _____				
_____ = Total Cover				
<u>Herb Stratum</u> ( _____ )				<b>Definitions of Vegetation Strata:</b>  <b>Tree</b> – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  <b>Sapling</b> – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  <b>Shrub</b> – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  <b>Herb</b> – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3 ft (1 m) in height.  <b>Woody vine</b> – All woody vines, regardless of height.  <b>Hydrophytic Vegetation Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
1. _____				
2. _____				
3. _____				
4. _____				
5. _____				
6. _____				
7. _____				
8. _____				
9. _____				
10. _____				
11. _____				
12. _____				
_____ = Total Cover				
<u>Woody Vine Stratum</u> ( _____ )				
1. _____				
2. _____				
3. _____				
4. _____				
5. _____				
_____ = Total Cover				

Remarks: (If observed, list morphological adaptations below).

**SOIL**

Sampling Point: WTL-2

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
10	10YR 6/1	80	10YR 4/6	8				

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.      <sup>2</sup>Location: PL=Pore Lining, M=Matrix.

**Hydric Soil Indicators:**

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5)
- Organic Bodies (A6) **(LRR P, T, U)**
- 5 cm Mucky Mineral (A7) **(LRR P, T, U)**
- Muck Presence (A8) **(LRR U)**
- 1 cm Muck (A9) **(LRR P, T)**
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Coast Prairie Redox (A16) **(MLRA 150A)**
- Sandy Mucky Mineral (S1) **(LRR O, S)**
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Dark Surface (S7) **(LRR P, S, T, U)**

- Polyvalue Below Surface (S8) **(LRR S, T, U)**
- Thin Dark Surface (S9) **(LRR S, T, U)**
- Loamy Mucky Mineral (F1) **(LRR O)**
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)
- Marl (F10) **(LRR U)**
- Depleted Ochric (F11) **(MLRA 151)**
- Iron-Manganese Masses (F12) **(LRR O, P, T)**
- Umbric Surface (F13) **(LRR P, T, U)**
- Delta Ochric (F17) **(MLRA 151)**
- Reduced Vertic (F18) **(MLRA 150A, 150B)**
- Piedmont Floodplain Soils (F19) **(MLRA 149A)**
- Anomalous Bright Loamy Soils (F20) **(MLRA 149A, 153C, 153D)**

**Indicators for Problematic Hydric Soils<sup>3</sup>:**

- 1 cm Muck (A9) **(LRR O)**
- 2 cm Muck (A10) **(LRR S)**
- Reduced Vertic (F18) **(outside MLRA 150A,B)**
- Piedmont Floodplain Soils (F19) **(LRR P, S, T)**
- Anomalous Bright Loamy Soils (F20) **(MLRA 153B)**
- Red Parent Material (TF2)
- Very Shallow Dark Surface (TF12) **(LRR T, U)**
- Other (Explain in Remarks)

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present.

**Restrictive Layer (if observed):**

Type: \_\_\_\_\_  
 Depth (inches): \_\_\_\_\_

Hydric Soil Present?    Yes     No \_\_\_\_\_

Remarks:

**WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region**

Project/Site: I-40 at SR-222 PIN 114219.00 City/County: Fayette Sampling Date: 3/22/2012  
 Applicant/Owner: TDOT State: TN Sampling Point: WTL-3  
 Investigator(s): Matt Richards Section, Township, Range: \_\_\_\_\_  
 Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): Convex Slope (%): \_\_\_\_\_  
 Subregion (LRR or MLRA): \_\_\_\_\_ Lat: \_\_\_\_\_ Long: \_\_\_\_\_ Datum: \_\_\_\_\_  
 Soil Map Unit Name: \_\_\_\_\_ NWI classification: \_\_\_\_\_

Are climatic / hydrologic conditions on the site typical for this time of year? Yes \_\_\_\_\_ No \_\_\_\_\_ (If no, explain in Remarks.)  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes  No \_\_\_\_\_  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No _____ Hydric Soil Present? Yes <input checked="" type="checkbox"/> No _____ Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No _____	<b>Is the Sampled Area within a Wetland?</b> Yes <input checked="" type="checkbox"/> No _____
Remarks: Photo 6 looking west	

**HYDROLOGY**

<b>Wetland Hydrology Indicators:</b> Primary Indicators (minimum of one is required; check all that apply)	<b>Secondary Indicators (minimum of two required)</b>
<input checked="" type="checkbox"/> Surface Water (A1) <input checked="" type="checkbox"/> Water-Stained Leaves (B9) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Aquatic Fauna (B13) <input checked="" type="checkbox"/> Saturation (A3) <input type="checkbox"/> Marl Deposits (B15) <b>(LRR U)</b> <input checked="" type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-Neutral Test (D5)

<b>Field Observations:</b> Surface Water Present? Yes <input checked="" type="checkbox"/> No _____ Depth (inches): <u>1-6</u> Water Table Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? Yes <input checked="" type="checkbox"/> No _____ Depth (inches): <u>0</u> (includes capillary fringe)	<b>Wetland Hydrology Present?</b> Yes <input checked="" type="checkbox"/> No _____
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:  
 Water held between I-40 ramp and field road to the north.

**VEGETATION** – Use scientific names of plants.

Sampling Point: WTL-3

	Absolute % Cover	Dominant Species?	Indicator Status		
<b>Tree Stratum</b> (Plot sizes: _____ )					
1. <u>Boxelder</u>	<u>35</u>	<u>yes</u>	<u>FACW</u>	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>3</u> (A)  Total Number of Dominant Species Across All Strata: <u>3</u> (B)  Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)	
2. _____					
3. _____					
4. _____					
5. _____					
6. _____					
7. _____					
				<b>Prevalence Index worksheet:</b> Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B)  Prevalence Index = B/A = _____	
_____ = Total Cover					
<b>Sapling Stratum</b> ( _____ )					
1. <u>Sweetgum</u>	<u>5</u>	<u>yes</u>	<u>FAC</u>		
2. _____					
3. _____					
4. _____					
5. _____					
6. _____					
7. _____					
				<b>Hydrophytic Vegetation Indicators:</b> <input checked="" type="checkbox"/> Dominance Test is >50% <input type="checkbox"/> Prevalence Index is ≤3.0 <sup>1</sup> <input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)	
_____ = Total Cover					
<b>Shrub Stratum</b> ( _____ )					
1. <u>Juncus effusus</u>	<u>5</u>	<u>yes</u>	<u>OBL</u>		
2. _____					
3. _____					
4. _____					
5. _____					
6. _____					
7. _____					
				<b>Definitions of Vegetation Strata:</b>  <b>Tree</b> – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  <b>Sapling</b> – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  <b>Shrub</b> – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  <b>Herb</b> – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3 ft (1 m) in height.  <b>Woody vine</b> – All woody vines, regardless of height.   <b>Hydrophytic Vegetation Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
_____ = Total Cover					
<b>Herb Stratum</b> ( _____ )					
1. _____					
2. _____					
3. _____					
4. _____					
5. _____					
6. _____					
7. _____					
8. _____					
9. _____					
10. _____					
11. _____					
12. _____					
				<b>Woody Vine Stratum</b> ( _____ )	
_____ = Total Cover					
1. _____					
2. _____					
3. _____					
4. _____					
5. _____					
				<b>Woody Vine Stratum</b> ( _____ )	
_____ = Total Cover					
1. _____					
2. _____					
3. _____					
4. _____					
5. _____					

Remarks: (If observed, list morphological adaptations below).

**SOIL**

Sampling Point: WTL-3

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
10	10YR 6/2	70	10YR 3/6	20				

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.      <sup>2</sup>Location: PL=Pore Lining, M=Matrix.

**Hydric Soil Indicators:**

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5)
- Organic Bodies (A6) **(LRR P, T, U)**
- 5 cm Mucky Mineral (A7) **(LRR P, T, U)**
- Muck Presence (A8) **(LRR U)**
- 1 cm Muck (A9) **(LRR P, T)**
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Coast Prairie Redox (A16) **(MLRA 150A)**
- Sandy Mucky Mineral (S1) **(LRR O, S)**
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Dark Surface (S7) **(LRR P, S, T, U)**

- Polyvalue Below Surface (S8) **(LRR S, T, U)**
- Thin Dark Surface (S9) **(LRR S, T, U)**
- Loamy Mucky Mineral (F1) **(LRR O)**
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)
- Marl (F10) **(LRR U)**
- Depleted Ochric (F11) **(MLRA 151)**
- Iron-Manganese Masses (F12) **(LRR O, P, T)**
- Umbric Surface (F13) **(LRR P, T, U)**
- Delta Ochric (F17) **(MLRA 151)**
- Reduced Vertic (F18) **(MLRA 150A, 150B)**
- Piedmont Floodplain Soils (F19) **(MLRA 149A)**
- Anomalous Bright Loamy Soils (F20) **(MLRA 149A, 153C, 153D)**

**Indicators for Problematic Hydric Soils<sup>3</sup>:**

- 1 cm Muck (A9) **(LRR O)**
- 2 cm Muck (A10) **(LRR S)**
- Reduced Vertic (F18) **(outside MLRA 150A,B)**
- Piedmont Floodplain Soils (F19) **(LRR P, S, T)**
- Anomalous Bright Loamy Soils (F20) **(MLRA 153B)**
- Red Parent Material (TF2)
- Very Shallow Dark Surface (TF12) **(LRR T, U)**
- Other (Explain in Remarks)

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present.

**Restrictive Layer (if observed):**

Type: \_\_\_\_\_  
 Depth (inches): \_\_\_\_\_

Hydric Soil Present?    Yes     No \_\_\_\_\_

Remarks:

Natural Resources Mitigation Sketches/Information

Project: P.E. PIN

Date of survey:

Biologist:

Affiliation:

Station	Map label	Attachments: Marked-up plans sheet (A); notes (B); mitigation plan (C) attached	Calculate permanent & temporary wetland impacts & provide to (name of regional biologist) and John Hewitt ("X")	Apply "standard" stream relocation configuration & instructions ("X")	Survey boundaries as flagged in field ("X")	General notes and/or specific changes requested
None Provided	STR-1	A, B, C		X		Unknown if STR-1 will require relocation or culvert extension. In-lieu fee payment required if culvert exceeds 200'. Standard stream relocation (attached) applies if a required relocation exceeds 50' in length.
None Provided	WTL-1	A, B, C	X		X	Unknown if WTL-1 will be impacted. If permanent project wetland impacts exceed 0.10 acres, mitigation will be required at 2:1 ratio in the Hatchie Mitigation Bank. Temporary wetland impact instructions are attached if necessary.
None Provided	SPG-1	A				Unknown if SPG-1 will be impacted. A spring box will be required to maintain flow to STR-1 if fill will cover SPG-1.
None Provided	WTL-2	A B, C	X		X	Unknown if WTL-1 will be impacted. If permanent project wetland impacts exceed 0.10 acres, mitigation will be required at 2:1 ratio in the Hatchie Mitigation Bank. Temporary wetland impact instructions are attached if necessary.
None Provided	WTL-3	A, B, C	X		X	Unknown if WTL-1 will be impacted. If permanent project wetland impacts exceed 0.10 acres, mitigation will be required at 2:1 ratio in the Hatchie Mitigation Bank. Temporary wetland impact instructions are attached if necessary.

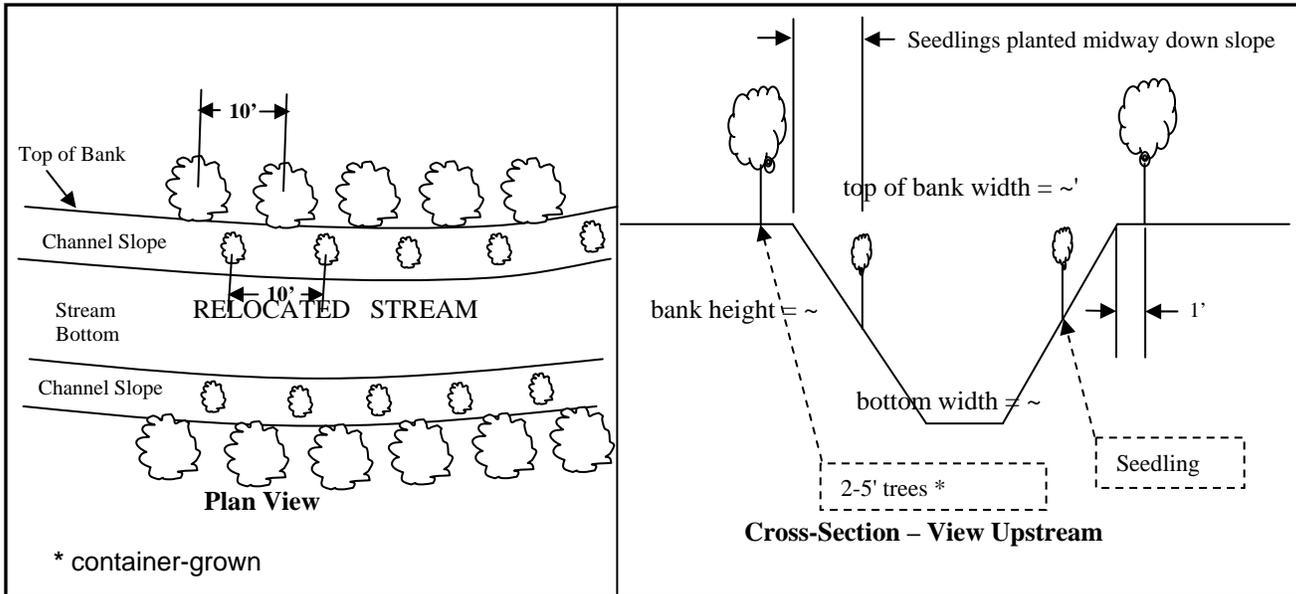
**Standard Stream Mitigation (if required)**

Apply these measures to all applicable streams listed in Form J. Duplicate the length, bottom channel width, elevations, side slopes, meander wavelength, and curvature of the existing channels to the extent possible. Each channel should transition smoothly from its beginning elevation to its tie-in elevation in the receiving stream, without profile drops or jumps. Locate the new channels in as flat an area as possible to avoid unusually high side slopes; this may require some additional right-of-way. Channel length placed in spring-boxes or culverts counts as part of the new channel length (but may require off-site compensatory mitigation that would not be required for an open channel). Channel side slopes should mimic existing channel side slopes, unless otherwise indicated, and be stabilized using appropriate BMPs – the use of rip-rap should be avoided if possible. If rip-rap is required, the rip-rap should be embedded into the soil such that (1) the top of the rip-rap is flush with the bottom and sides of the channel, (2) the voids are filled with material similar to the original channel bottom, and (3) water will flow on top of the embedded riprap and soil material to enable the water to be visible.

Plant two alternating rows of tree or shrub species on both sides of the new channels; the first row shall be bare root seedlings that are planted on the channel slope, centered on the midpoint of the slope. Along top of bank, two- to five-foot (2-5 ft) container grown trees are to be planted within one foot of the top of bank. If needed, black willow (*Salix nigra*) stakes will be installed along the edge of water in the new channel. The stakes will be fresh material cut in approximately foot lengths. The stakes will be installed on approximately five foot centers at the edge of water in the new channel. The stakes are to be driven in such that approximately six inches of the stake are left above ground. The bare root seedlings will be the same species as the trees, unless otherwise indicated.

Rip-rap, if required, should be limited to ends of culverts. All relocated channels and their accompanying mitigation features, including trees, are to be placed in right-of-way rather than easements; this may require acquisition of additional right-of-way. Use the following specifications for planted species.

**SPACING FOR PLANTING ALONG RELOCATED STREAM**



**Tree species for stream:**

Item #	Description	Unit
	<i>Acer rubrum</i> (red maple) 2-5' in height, containerized	Each
	<i>Fraxinus pennsylvanica</i> (green ash) 2-5' in height, containerized	Each
	<i>Platanus occidentalis</i> (sycamore) 2-5' in height, containerized	Each
	<i>Salix nigra</i> (black willow) 18"-24" Ht, BR	Each
	<i>Quercus alba</i> (white oak) 2-5' in height, containerized	Each
	<i>Acer negundo</i> (boxelder) 18"-24" Ht, BR	Each

**Standard On-site Mitigation for Temporary Wetland Impact Areas (if required)**

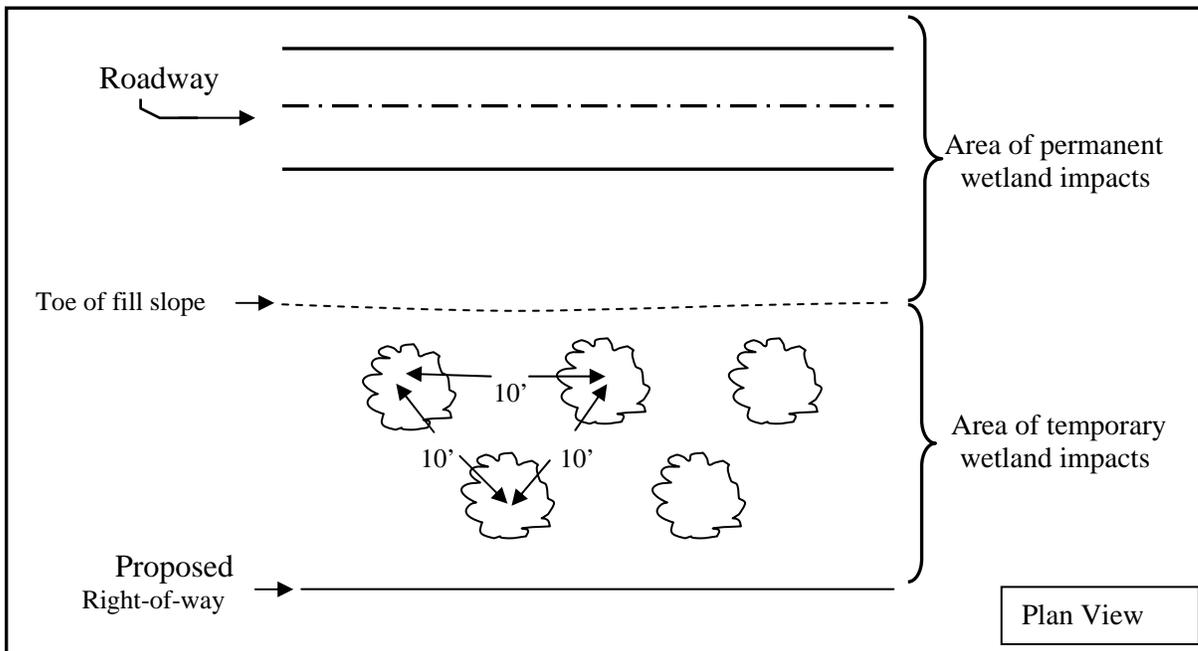
Apply these measures to all applicable temporary wetland impact areas listed in Form J. For temporary wetland impact areas, remove the top 12" of topsoil and stockpile it until construction is complete. Once construction activities are completed, restore all temporary wetland impact areas to pre-construction conditions. This includes removing haul roads (if applicable), restoring the site to the original (pre-construction) elevation and spreading stockpiled topsoil back over the wetland site. The area of temporary impacts will be stabilized according to standard practices. Planting will be based on notes provided by Ecology. Wetland areas located outside of proposed right-of-way and construction easements are to be clearly marked and not disturbed.

**Tree species for temporary wetland impacts:**

Item #	Description	Unit
	Seedling: <i>Acer rubrum</i> (red maple) 18"-24" Ht, BR	Each
	Seedling: <i>Fraxinus pennsylvanica</i> (green ash) 18"-24" Ht, BR	Each
	Seedling: <i>Platanus occidentalis</i> (sycamore) 18"-24" Ht, BR	Each
	Seedling: <i>Liquidambar styraciflua</i> (sweetgum) 18"-24" Ht, BR	Each
	Seedling: <i>Acer negundo</i> (box elder) 18"-24" Ht, BR	Each

Ht = Height, BR = Bare Root

**Tree planting scheme for temporary wetland impact areas**



**Please place the following notes in the Special Notes section of the plans:**

Topsoil is to be removed from all areas of temporary wetland impacts and stockpiled prior to construction.

Upon completion of construction activities, temporary haul roads are to be removed. Excavated material from the haul roads is to be disposed of as directed by the engineer.

**Plans Notes****Please add the following information verbatim to the Final Plans:****CHANNEL RELOCATION SEQUENCE AND IMPLEMENTATION NOTES FOR RELOCATED STREAM CHANNELS (IGNORE REFERENCES TO ITEMS NOT SPECIFIED)**

1. If the relocated channel flows into a proposed culvert, the new channel shall be relocated prior to installation of the culvert to ensure correct elevation levels are set for the inlet. The new channel shall be excavated and stabilized during a low-water period. Rip-rap (only as shown on plans), seeding, and/or sod shall be installed immediately following channel completion. Trees shall be installed in the first planting season following channel excavation. Water shall be diverted into the new channel only after it is completely stabilized, and only during a low-water period. Stabilized means that all specified rock, erosion control blankets, seeding, sod, or materials are in place and established.
2. CHANNEL RELOCATION SEQUENCE
  - a. Flag edge of the new channel top bank prior to clearing. Do not clear large trees in position to shade the new channel. Leave as many trees and shrubs as possible between toe of the new highway slope and the stream.
  - b. Excavate the new channel "in the dry" by leaving areas of undisturbed earth (diversion berms) in place at both ends.
  - c. Shape channel to specifications shown. Remove loose soils and debris.
  - d. Place topsoil, erosion control blanket. seed, sod, or other material as specified.
  - e. Remove diversion berms, beginning with the most downstream; banks and bottom elevation of the old channel should transition smoothly into the new channel. The elevations of the new channel bottom at each end of the relocation sequence should match the elevations of the existing channel, and a steady percent slope should be maintained throughout the relocated channel centerline or as specified.
  - f. Install trees according to standard specifications section 802.
3. Only rip-rap shown on plans should be used in the relocated channel reach. Any other proposed rip-rap should be coordinated with the Environmental Division through the TDOT Construction Office.
4. Requests by any agency that would require the modification of channels, ditches, elevations, rip-rap or any other stream mitigation items associated with the channel relocations shall be referred to the TDOT Environmental Division via the Headquarters Construction Office for coordination with all involved agencies and TDOT divisions. Tennessee Department of Environment and Conservation may make recommendations concerning erosion control via the engineer without such referral.

**TREES**

No substitutions of tree species or sizes shall be allowed without the written approval of TDOT Environmental Division. Trees shall be of the variety requested, between 2 and 5 feet in height, containerized, and first quality. Bare root trees shall be of the variety requested, well branched, and first quality. Bare roots must be kept moist at all times. No clones or cultivars will be accepted. Any found to be incorrect species, or improperly planted, at any time prior to termination of the contract shall be removed and replaced at the contractor's expense. Stakes and wires shall be removed immediately prior to contract termination, unless otherwise directed by Environmental Division.

The contractor should arrange several months ahead of time to obtain the correct tree species, as some may require some time to locate.

All trees planted shall be wrapped as per section 802.07 of TDOT standard specifications for the road and bridge construction.

Trees shall be watered as required through the period of establishment to ensure survival.



**STATE OF TENNESSEE  
DEPARTMENT OF TRANSPORTATION  
ENVIRONMENTAL DIVISION  
SUITE 900 - JAMES K. POLK BUILDING  
505 DEADERICK STREET  
NASHVILLE, TENNESSEE 37243-0334**

March 7, 2012

Mary Jennings  
U.S. Department of Interior  
Fish and Wildlife Service  
446 Neal Street  
Cookeville, TN 38501

**SUBJECT:** Fayette County, I-40 Interchange at SR-22  
P.E. 24001-1147-44 PIN 114219.00

Dear Ms. Jennings:

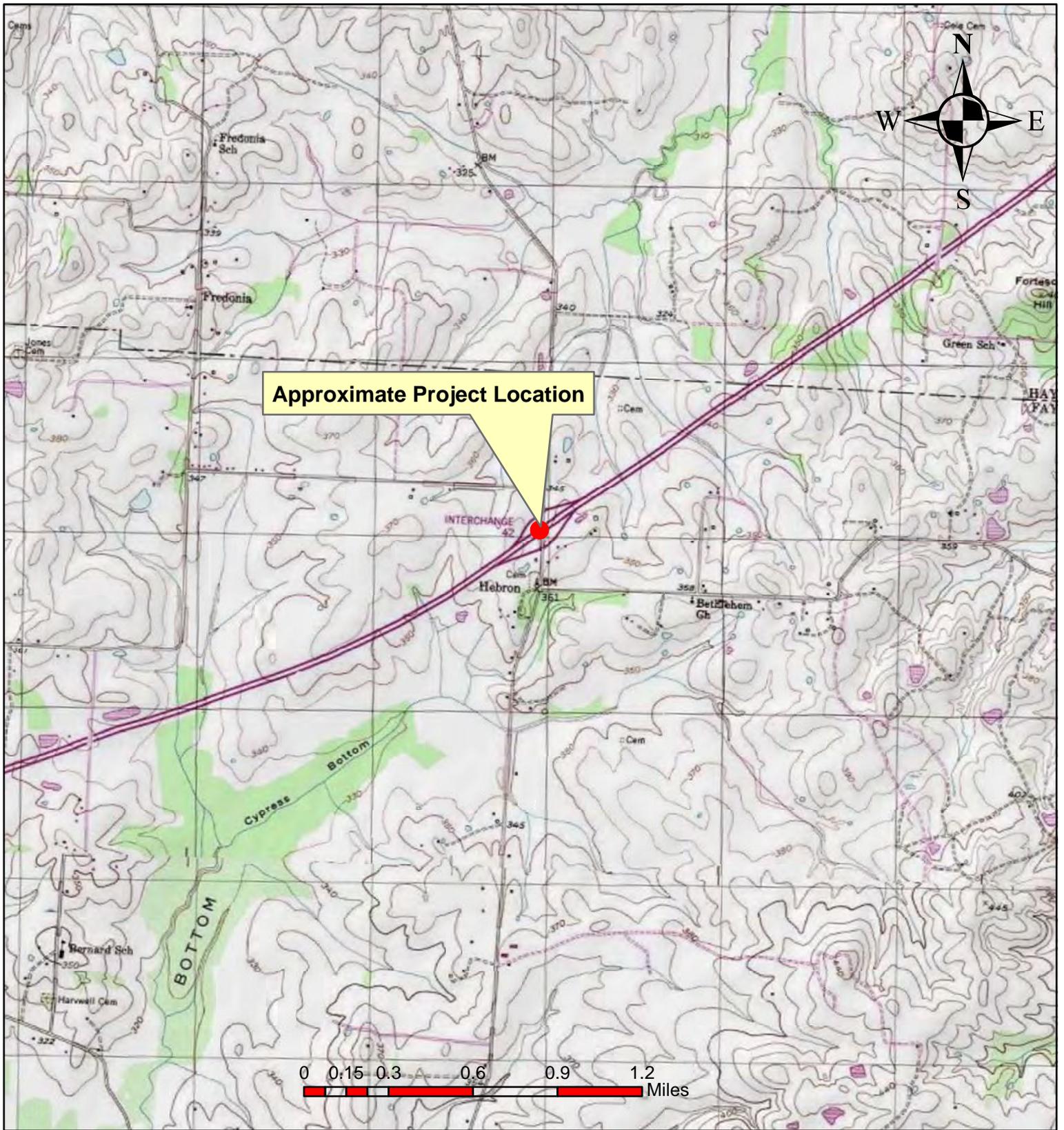
The Tennessee Department of Transportation proposes to construct the subject project. A Project Location Map is attached. In compliance with the Fish and Wildlife Act of 1958, and the Endangered Species Act of 1973 (as amended), we are requesting a list of threatened or endangered species that may be present in the vicinity of the proposed construction.

Please include in your reply the entire project description as listed in the subject line of this request. Your assistance in the preparation of this project is greatly appreciated. If you need additional information, please contact me at 615-532-3880.

Sincerely,

Matt Richards  
TDOT Biologist

xc: Reading File  
Project File



Approximate Project Location

0 0.15 0.3 0.6 0.9 1.2 Miles

### Fayette County, I-40 Interchange at SR-22

P.E. 24001-1147-44  
PIN 114219.00



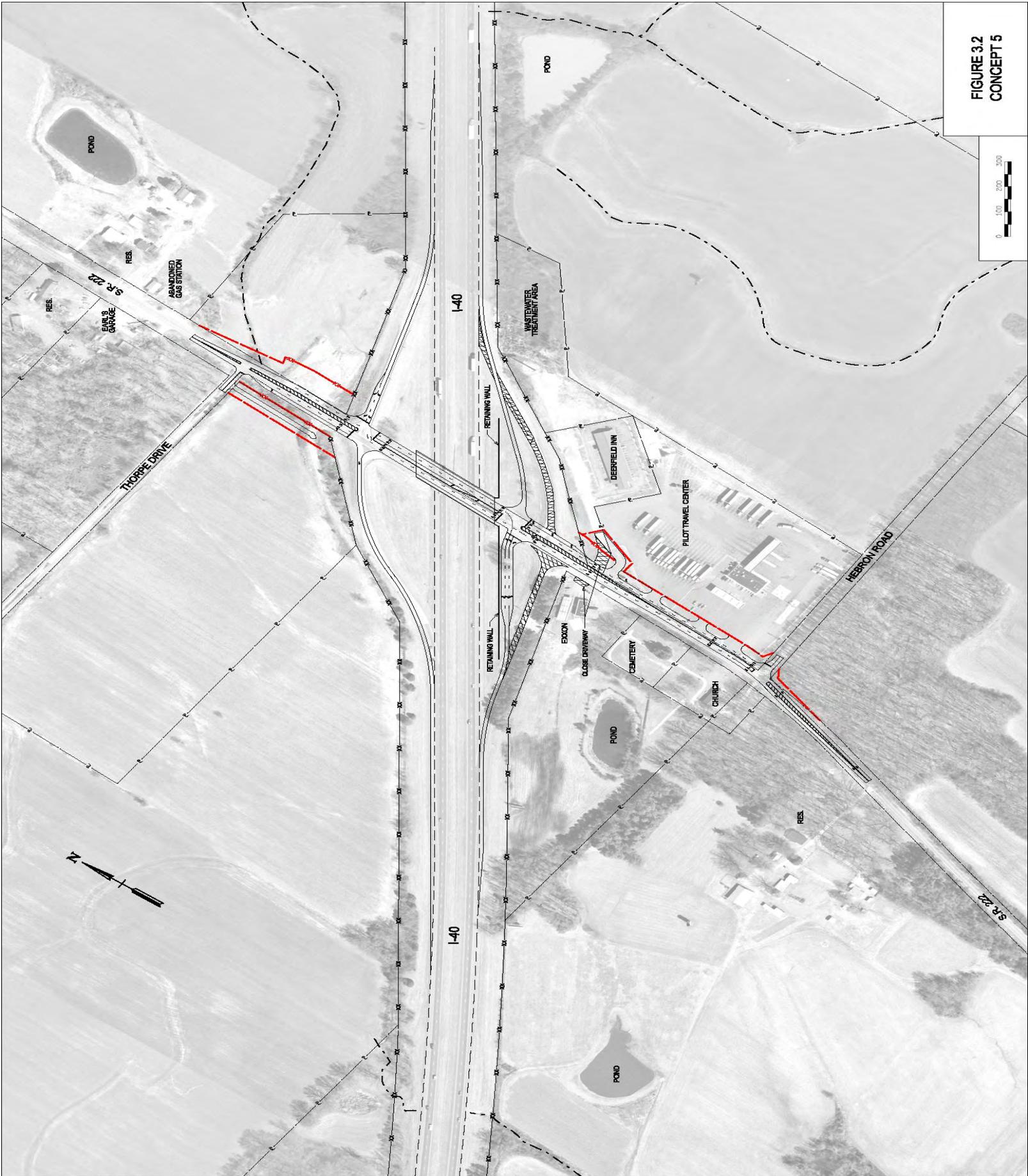


FIGURE 3.2  
CONCEPT 5



# United States Department of the Interior

## FISH AND WILDLIFE SERVICE

446 Neal Street  
Cookeville, TN 38501

March 22, 2012

Mr. Matt Richards  
Tennessee Department of Transportation  
Environmental Planning and Permits  
James K. Polk Building, Suite 900  
505 Deaderick Street  
Nashville, Tennessee 37243-0334

Subject: FWS #12-CPA-0361. Proposed construction to the Interstate 40 Interchange at State Route 22; P.E. 24001-1147-44, PIN# 114219.00, Fayette County, Tennessee.

Dear Mr. Richards:

Thank you for your correspondence dated March 7, 2012, regarding the proposal for construction to the Interstate 40 Interchange at State Route 22 in Fayette County, Tennessee. The Tennessee Department of Transportation has requested a list of threatened or endangered species that may be present within the project area. Personnel of the U.S. Fish and Wildlife Service have reviewed the subject proposal and offer the following comments.

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. Therefore, 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 this species. 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.

Information available to the Service does not indicate that wetlands exist in the vicinity of the proposed project. However, our wetland determination has been made in the absence of a field inspection and does not constitute a wetland delineation for the purposes of Section 404 of the Clean Water Act. The Corps of Engineers should be contacted if other evidence, particularly that obtained during an on-site inspection, indicates the potential presence of wetlands.

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](mailto:john_griffith@fws.gov).

Sincerely,

A handwritten signature in black ink that reads "Mary E. Jennings". The signature is written in a cursive style with a large, prominent "M" and "J".

Mary E. Jennings  
Field Supervisor

**Species Review**

Project: Fayette County, I-40 at SR-222  
 P.E. 24001-0147-44 PIN 114219.00

Date of field study: 3/22/2012

Date TDEC database checked: 3/28/2012

Completed by: Matt Richards, TDOT

**Species reported within 1 mile radius of project:**

Species  Scientific and common names, followed by (A) for animal or (P) for plant	Status		Species is potentially present in R-O-W because: <b>(A)</b> it is listed by TDEC within ROW <b>(B)</b> habitat is present <b>(C)</b> observed during site visit <b>(D)</b> critical habitat present within ROW	Species is considered likely NOT present in R-O-W because: <b>(A)</b> Present habitat unsuitable <b>(B)</b> Not observed during site visit <b>(C)</b> Original record questionable <b>(D)</b> Considered extinct/extirpated	Accommodations to minimize impacts: <b>(A)</b> BMPs are sufficient to protect species <b>(B)</b> Special Notes are included on project plans <b>(C)</b> Individuals will be impacted. <b>(D)</b> Accommodations not practical due to broad habitat description or mobility of species	Habitat (include blooming, breeding or other information; where found according to TDEC database; year last observed; reference)	Notes
	Fed	TN					
None							

**Species reported within 1-mile to 4-mile radius of project:**

Species  Scientific and common names, followed by (A) for animal or (P) for plant	Status		Species is potentially present in R-O-W because: <b>(A)</b> it is listed by TDEC within ROW <b>(B)</b> habitat is present <b>(C)</b> observed during site visit <b>(D)</b> critical habitat present within ROW	Species is considered likely NOT present in R-O-W because: <b>(A)</b> Present habitat unsuitable <b>(B)</b> Not observed during site visit <b>(C)</b> Original record questionable <b>(D)</b> Considered extinct/extirpated	Accommodations to minimize impacts: <b>(A)</b> BMPs are sufficient to protect species <b>(B)</b> Special Notes are included on project plans <b>(C)</b> Individuals will be impacted. <b>(D)</b> Accommodations not practical due to broad habitat description or mobility of species	Habitat (include blooming, breeding or other information; where found according to TDEC database; year last observed; reference)	Notes
	Fed	TN					
None							

**Species Review**

Project: Fayette County, I-40 at SR-222  
 P.E. 24001-0147-44 PIN 114219.00

**Migratory Birds**

List ***significant concentrations*** of migratory birds encountered within the project area (rookeries, aggregations, nesting areas, etc).

Species (Scientific and Common Name)	Approximate No. of Nests (or Individuals)	Location of Nests (or Individuals) (Include Latitude & Longitude)	Nesting Dates and Reference	Photograph #
None				

**USFWS letter:** Yes X (attached) No \_\_\_ (explain)

**Biological Assessment:** Yes \_\_\_ (response letter attached; see below) No X

Species (scientific and common names)	USFWS conclusion <sup>1</sup>

<sup>1</sup> Choose from "no effect"; "not likely to adversely affect;" "likely to adversely affect;" if "likely to adversely affect" is chosen, indicate "no jeopardy to species and no adverse modification to habitat" or "jeopardy to species, or adverse modification to habitat" based on FWS concurrence letter

List **Natural Areas, management areas, refuges, or similar sites within or adjacent to project (attach 7.5 minute topographic map with pertinent boundaries of area marked)**

Area Name	Type of Area	Pertinent Notes
None		

List **locations that contain potential Indiana bat habitat (Provide an aerial that indicates areas checked)**

Location (description; lat/long or station number)	Tree Species	Photograph #
None		



STR-1 looking downstream from farm road crossing



SPG-1 looking west



WTL-2 looking east



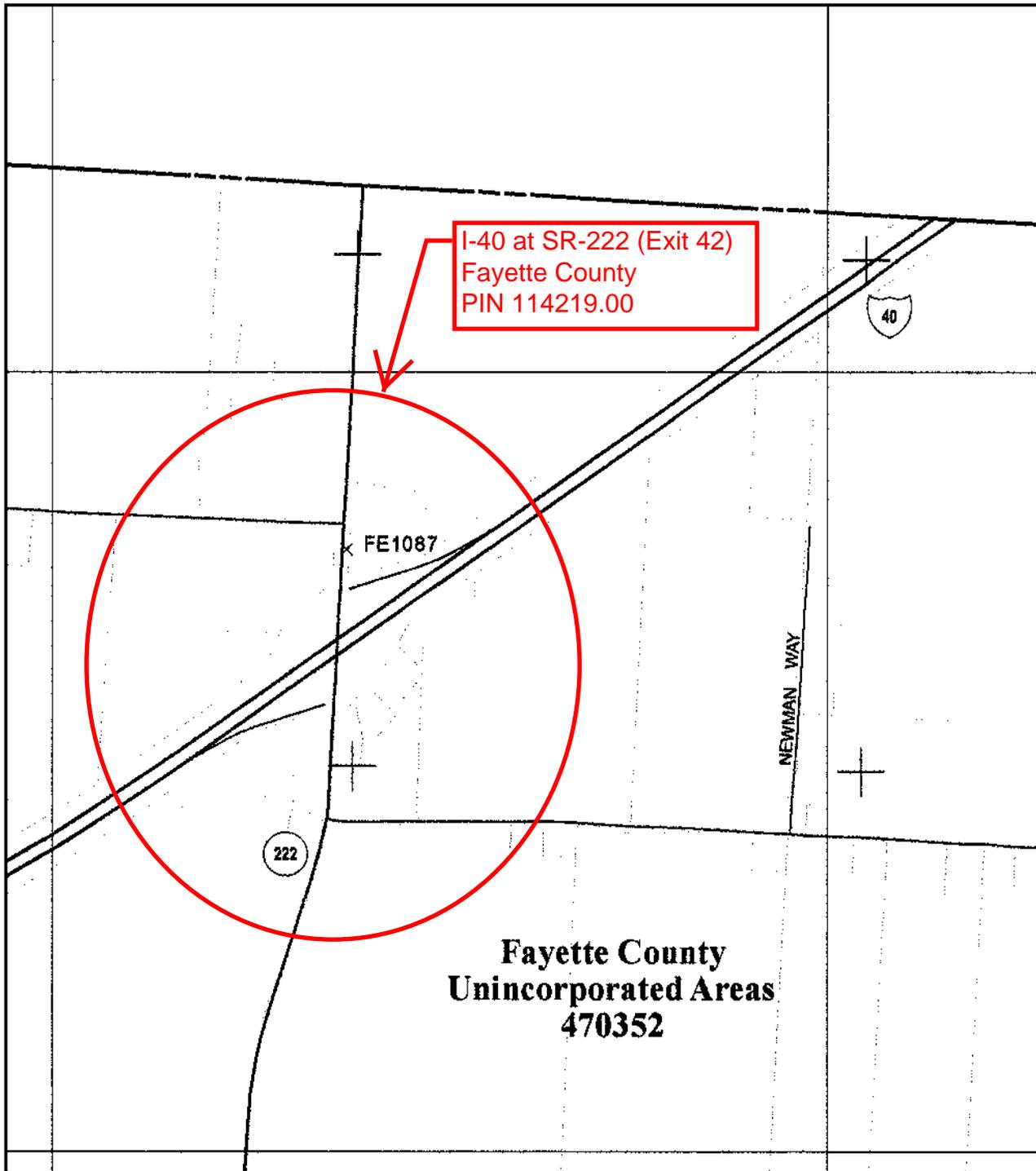
WTL-3 looking west

D-List Categorical Exclusion  
I-40 at SR-222 (Exit 42)  
Fayette County  
TDOT PIN 114219.00



## **Appendix G**

### **FEMA Flood Insurance Rate Map (FIRM)**



I-40 at SR-222 (Exit 42)  
 Fayette County  
 PIN 114219.00

FE1087

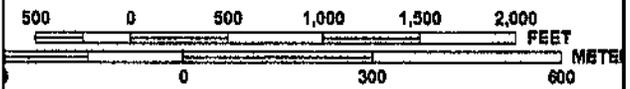
NEWMAN WAY

222

**Fayette County  
 Unincorporated Areas  
 470352**



MAP SCALE 1" = 1000'



NATIONAL FLOOD INSURANCE PROGRAM

PANEL 0070C

**FIRM**  
 FLOOD INSURANCE RATE MAP  
 FAYETTE COUNTY,  
 TENNESSEE  
 AND INCORPORATED AREAS

**PANEL 70 OF 605**  
 (SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
FAYETTE COUNTY	470352	0070	C

Note to User: The Map Number shown below should be used when placing map orders; the Community Number shown above should be used on insurance applications for the subject community.



**MAP NUMBER  
 47047C0070C**  
**EFFECTIVE DATE  
 NOVEMBER 5, 2008**

Federal Emergency Management Agency

This is an official copy of a portion of the above referenced flood map. It was extracted using F-MIT On-Line. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For the latest product information about National Flood Insurance Program flood maps check the FEMA Flood Map Store at [www.msc.fema.gov](http://www.msc.fema.gov)

D-List Categorical Exclusion  
I-40 at SR-222 (Exit 42)  
Fayette County  
TDOT PIN 114219.00



## **Appendix H**

### **Air and Noise**

## Farless, Ashley

---

**From:** Joe Matlock [Joe.Matlock@tn.gov]  
**Sent:** Wednesday, March 21, 2012 9:14 AM  
**To:** Strickland, Parrish; Farless, Ashley  
**Subject:** RE: Approved Concept, I-40 @ SR-222 Fayette County

Below is the air and noise statement.  
Matlock

---

From: Joe Matlock  
Sent: Monday, March 19, 2012 3:29 PM  
To: Parrish Strickland ARCADIS; Ashley Farless ARCADIS  
Subject: FW: Approved Concept, I-40 @ SR-222 Fayette County

Below is for your use in the CE.  
Matlock

---

From: Darlene Reiter  
Sent: Monday, March 19, 2012 3:18 PM  
To: Joe Matlock  
Subject: RE: Approved Concept, I-40 @ SR-222 Fayette County

Joe –

The air quality and noise statements for this project are provided below.

### **AIR QUALITY**

#### ***Transportation Conformity***

This project is located in an area that is in attainment for all regulated criteria pollutants. Therefore, conformity does not apply to this project.

#### ***Mobile Source Air Toxics (MSATs)***

This project involves improvements to the existing interchange including widening 1) the SR 222 bridge over I-40 and 2) the exit ramps from I-40 to provide additional turn lanes. The project will not result in any meaningful changes in traffic volumes, vehicle mix, location of the existing facility, or any other factor that would cause an increase in emissions impacts relative to the no-build alternative. As such, this project will generate minimal air quality impacts for Clean Air Act criteria pollutants and has not been linked with any special MSAT concerns per FHWA's *"Interim Guidance Update on Air Toxic Analysis in NEPA Documents."*

Moreover, EPA regulations for vehicle engines and fuels will cause overall MSAT emissions to decline significantly over the next several decades. Based on regulations now in effect, an analysis of national trends with EPA's MOBILE6.2 model forecasts a combined reduction of 72 percent in the total annual emission rate for the priority MSAT from 1999 to 2050 while vehicle-miles of travel are projected to increase by 145 percent. This will both reduce the background level of MSAT as well as the possibility of even minor MSAT emissions from this project.

### **NOISE**

The project is Type I in accordance with the 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*.

The land uses in the project area within approximately 500 feet of I-40 include an Exxon gas station, the Pilot Travel Center, and the Deerfield Inn.

The gas station and travel center are Category F land uses that are not noise-sensitive. Motels are Category C land uses. However, the Deerfield Inn does not have any exterior areas of frequent human use. Therefore, the motel is not noise-sensitive.

Since there are no noise-sensitive land uses in the project area, a detailed noise study is not needed.

- Darlene

---

From: Joe Matlock  
Sent: Monday, March 19, 2012 1:22 PM  
To: B M. Richards; Darlene Reiter; Gerald Kline; Holly Barnett; Martha Carver; TDOT EnvironmentalDoc; William Davis  
Cc: Parrish Strickland ARCADIS; Ashley Farless ARCADIS  
Subject: FW: Approved Concept, I-40 @ SR-222 Fayette County

See attached and link.  
This is a little bit better image of the build alternative.

## Joe W. Matlock

Transportation Planner Region IV  
Environmental Documentation Office – Local Programs  
ED TDOT  
615 741 5365

---

From: Melanie Bumpus  
Sent: Monday, March 19, 2012 11:13 AM  
To: Joe Matlock  
Subject: Approved Concept, I-40 @ SR-222 Fayette County

[http://www.tdot.state.tn.us/construction/DB1201\\_details.htm](http://www.tdot.state.tn.us/construction/DB1201_details.htm)

Melanie Bumpus  
Roadway Specialist 3  
Tennessee Department of Transportation  
Environmental Division  
Permitting Section  
Suite 900, James K Polk Building  
Nashville, TN 37243  
phone 615.253.2466

D-List Categorical Exclusion  
I-40 at SR-222 (Exit 42)  
Fayette County  
TDOT PIN 114219.00



## **Appendix I**

### **Cultural Resources**



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

March 29, 2012

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

RE: FHWA, ARCHITECTURAL/ARCHAEOLOGICAL SURVEY REPORT, I-40/SR-222/PIN#  
114219.00, UNINCORPORATED, FAYETTE COUNTY

Dear Ms. Carver:

In response to your request, received on Monday, March 26, 2012, 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. 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 the information provided, we find that the area of potential effects for this undertaking contains no cultural resources eligible for listing in the National Register of Historic Places. 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 this office 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,

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

EPM/jyg



**STATE OF TENNESSEE  
DEPARTMENT OF TRANSPORTATION  
ENVIRONMENTAL DIVISION  
SUITE 900 - JAMES K. POLK BUILDING  
505 DEADERICK STREET  
NASHVILLE, TENNESSEE 37243-0334  
(615) 741-3655**

March 23, 2012

**SUBJECT:** Cultural Resource, Combined Architecture and Archaeological, Assessment for Interstate 40 at State Route 22 (Exit 42) Interchange Improvements, Fayette County, PIN 114219.00

To Whom it May Concern:

The Tennessee Department of Transportation (TDOT) in cooperation with the Federal Highway Administration is proposing to improve the intersection of State Route 222 at Interstate 40, Exit 42 in Fayette County.

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. Historians from TDOT inventoried no National Register eligible properties that they believe the proposed project could impact.

The enclosed report discusses TDOT's survey findings. You are receiving this report because TDOT has identified you as a Fayette 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,

Holly M. Barnett, Historic Preservation Specialist  
Enclosure  
cc: Mr. E. Patrick McIntyre, TN-SHPO



**STATE OF TENNESSEE  
DEPARTMENT OF TRANSPORTATION  
ENVIRONMENTAL DIVISION  
SUITE 900 - JAMES K. POLK BUILDING  
505 DEADERICK STREET  
NASHVILLE, TENNESSEE 37243-0334  
(615) 741-3655**

March 23, 2012

Mr. E. Patrick McIntyre  
State Historic Preservation Office  
Clover Bottom Mansion  
2941 Lebanon Road  
Nashville, TN 37243-0442

**SUBJECT:** Cultural Resource, Combined Architecture and Archaeological,  
Assessment for Interstate 40 at State Route 222 Interchange  
Improvements (Exit 42), Fayette County, PIN: 114219.00

Dear Mr. McIntyre:

Enclosed is a cultural resource report concerning the above referenced project. It is the opinion of TDOT that there are no National Register listed or eligible resources within the project area of potential effect. On behalf of the Federal Highway Administration, we request your review of this report pursuant to regulations contained within 36 CFR 800.

We look forward to your comments. Thank you for your help in this matter.

Sincerely,

A handwritten signature in cursive script that reads "Martha Carver".

Martha Carver  
Historic Preservation Manager

Enclosure

cc: Mr. Jerry Melson

**TENNESSEE DEPARTMENT OF  
TRANSPORTATION**

**CULTURAL RESOURCE ASSESSMENT**  
(Combined Historic and Archaeological Resources)

**Interstate 40 at State Route 222 (Exit 42) Interchange  
Improvements**

**FAYETTE COUNTY**



**March 2012**

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**COMBINED ARCHITECTURE AND ARCHAEOLOGICAL ASSESSMENT  
PURSUANT TO 36 CFR 800 FOR  
Interstate 40 at State Route 222 (Exit 42) Interchange Improvements  
FAYETTE COUNTY**

**MANAGEMENT SUMMARY**

The Tennessee Department of Transportation with funding made available through the Federal Highway Administration is proposing to make improvements to the intersection of Interstate 40 at State Route 222 (Exit 42) in Fayette County.

Cultural resources staff from the Tennessee Department of Transportation (TDOT) performed a search of the files of the TN-SHPO to find that there are no National Register of Historic Places listed properties in the general project area. After performing field research and surveying one property, the Bethlehem Hebron Chapel and Cemetery, it is the opinion of TDOT cultural resources staff that no cultural resources within the project area are eligible for listing on the National Register of Historic Places.

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- C. Criteria of Effect, 36 CFR 800.5
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# **COMBINED ARCHITECTURE AND ARCHAEOLOGICAL ASSESSMENT**

## **PURSUANT TO 36 CFR 800 FOR**

### **Interstate 40 at State Route 222 (Exit 42) Interchange Improvements**

#### **FAYETTE COUNTY**

#### **STATEMENT OF DETERMINATION**

The Tennessee Department of Transportation with funding made available through the Federal Highway Administration is proposing to make improvements to the intersection of Interstate 40 at State Route 222 (Exit 42) in Fayette County.

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.

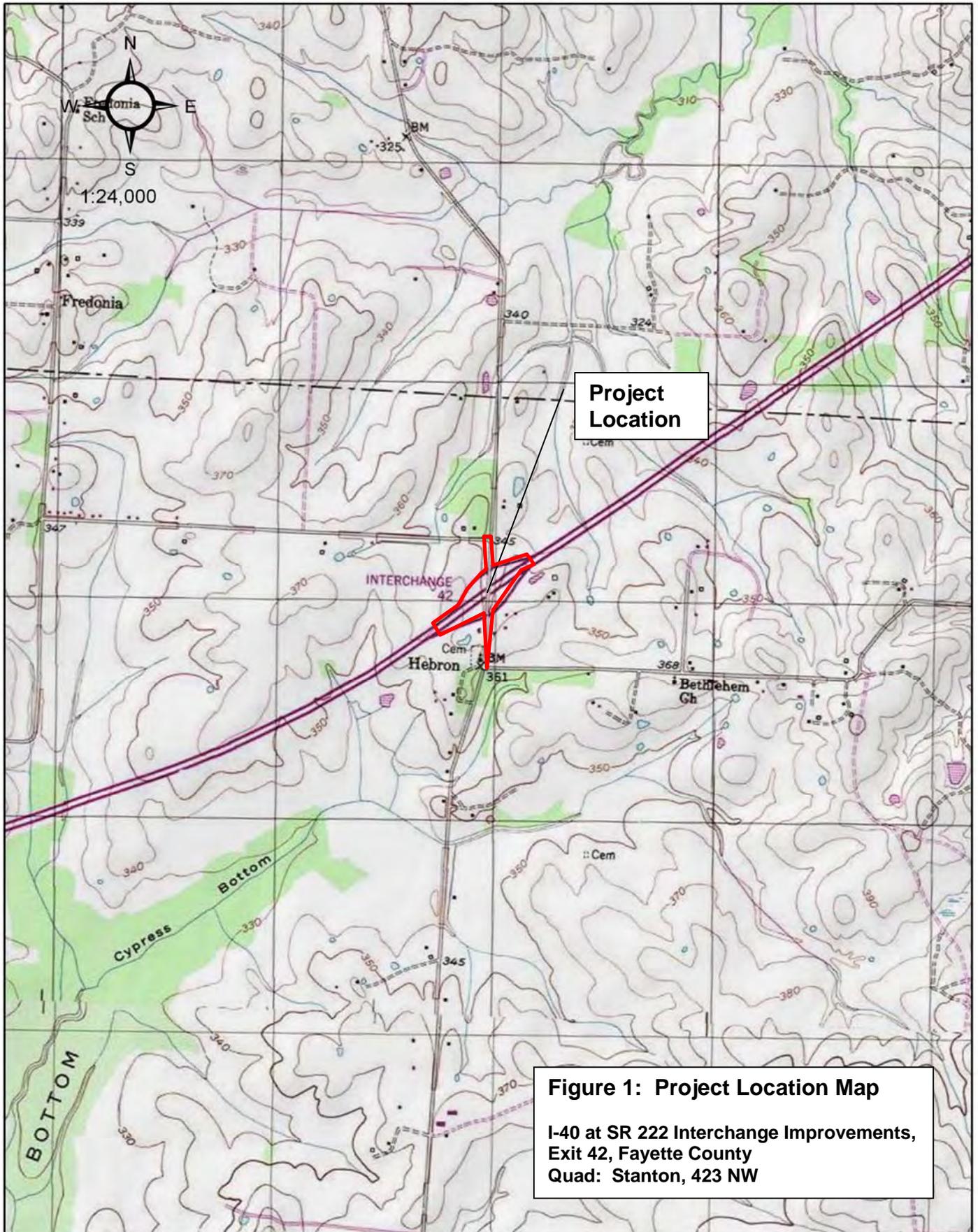
The U.S. Department of Transportation Act of 1966, as amended, also requires FHWA to assess the applicability of Section 4(f). This law prohibits the Secretary of Transportation from approving any project which requires the "use" of a historic property unless there is no prudent and feasible alternative 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, architectural historians from TDOT surveyed the area of potential environmental impact for this proposed project in an effort to identify any National Register-included or eligible properties. The historians inventoried one property, the Bethlehem Hebron Chapel and Cemetery, in the general project area. It is the opinion of TDOT that the inventoried property is not eligible for listing on the National Register of Historic Places. Cultural resource staff did not identify any additional National Register-included or eligible properties.

There will not be a Section 4(f) use of a historic property.

If fill material for this project must be obtained from outside the proposed right-of-way, it will be acquired in accordance with Federal Aid Provision 107.06

This document has been prepared in consultation with the TN-SHPO and will be circulated to the TN-SHPO and local historians.



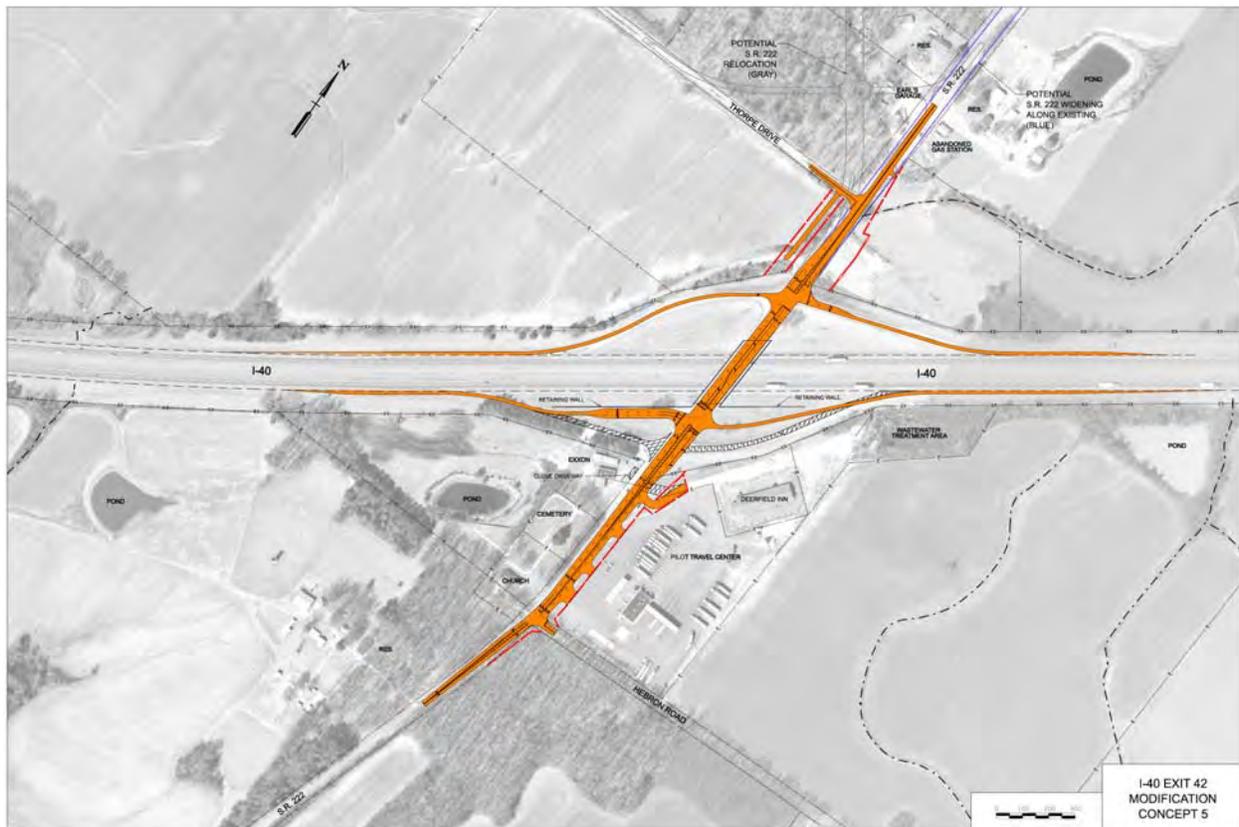
**Figure 1: Project Location Map**  
I-40 at SR 222 Interchange Improvements,  
Exit 42, Fayette County  
Quad: Stanton, 423 NW

## **PROJECT DESCRIPTION**

### **Combined Traditional/Tight Diamond Interchange**

The proposed project would rebuild the SR.222 bridge at the same location on the same skew angle. State Route 222 would be widened to a five-lane section of two travel lanes in each direction and a center left turn lane in each direction. All widening would be on the east side of SR 222 and the west side of SR 222 would remain on the existing location due to the church and cemetery on the south side of I-40 and all of the widening is along the east side of SR 222. The SR 222 improvements would reduce the construction impacts on SR 222 south of I-40.

This proposed project would not eliminate the existing access connections along the west side of SR 222 (south side of I-40) currently within the controlled access limits. The SR 222 improvements extend approximately 700 feet north from the northern ramp terminal intersection and 1,800 feet south from the southern ramp terminal intersection. On the north side of I-40, a field drive would be connected to Thorpe Drive since it is located within the proposed controlled access limits. The SR 222 widening will create changes to the existing access to the Pilot Station and Deerfield Inn properties.



**Figure 2: Aerial Layout of the Proposed Project**



**Figure 3: View of the project facing southbound on State Route 222 from the I-40 Interchange**

## **PUBLIC INVOLVEMENT**

On 19 March 2012, TDOT wrote to the local government official, Skip Taylor, Fayette County Mayor and asked him for information about the project and asked if he wished to be a consulting party in the Section 106 review process. To date, TDOT has received no responses.

On 21 March 2012, TDOT wrote to nine Native American tribes or representatives asking each for information regarding the project and if they would like to participate in the Section 106 review process as a consulting party. Attachment Two contains copies of relevant correspondence.

Kim Jumper  
Shawnee Tribe

LaDonna Brown  
Chicasaw Nation

Terry Cole  
Choctaw Nation of Oklahoma

Robin Dushane  
Eastern Shawnee Tribe of Oklahoma

Tiger Hobia  
Kialegee Tribal Town

Emman Spain  
Muscogee Creek Nation

Carrie V. Wilson  
Quapaw Tribe of Oklahoma

Charles Coleman  
Thlopthlocco Tribal Town

Lisa LaRue Baker  
United Keetoowah Band of Cherokee Indians

TDOT has prepared a list by counties of historic groups, county historians, and other such individuals or organizations that might be interested in proposed projects. TDOT regularly updates and refines the list. TDOT will mail a copy of this report to the following groups and individuals. Attachment Two contains copies of relevant correspondence.

Bethlehem Hebron Chapel and Cemetery  
550 Hebron Drive  
Mason, TN 38049

Mrs. J. R. Morton  
Fayette County Historian  
P. O. Box 127  
Moscow, TN 38057

Mayor Skip Taylor  
Fayette County Mayor  
Room 204  
Fayette County Courthouse  
Somerville, TN 38068

Mr. John Sicola, Executive Director  
Memphis-Delta (MATCOG) Development District  
1420 Union  
Memphis, TN 38103

Fayette County Historical Society  
P. O. Box 304  
Somerville, TN 38068

## **BRIEF HISTORICAL OVERVIEW OF PROJECT AREA**

Named for the Marquis de Lafayette, the Tennessee General Assembly established Fayette County in 1824. Somerville was established as the county seat and named in honor of Lieutenant Robert Somerville, a hero of the battle of Tohopeka in Alabama. Settlers began inhabiting the area as early as 1820, with Somerville and LaGrange incorporated by 1826. Fayette County now has nine incorporated towns: Braden, Gallaway, LaGrange, Moscow, Oakland, Piperton, Rossville, Somerville, and Williston.

The county has been traditionally agricultural with cotton historically serving as the primary crop. A few large plantation homes remain representing Fayette County's role in the cotton culture of the nineteenth century, subsidized by African slaves. After the Civil War many African-Americans remained in Fayette County as tenant farmers or sharecroppers. Unfortunately, living conditions for these citizens, who made up the majority of the county's population, did not improve. By the early 1960s Fayette County became a center of Civil Rights activity. In response to black tenant farmers who were evicted for attempting to register to vote, activists established two "tent cities" as shelter. African-American citizens also organized boycotts and marches. Through the 1970s, Civil Rights activists worked to improve the quality of life for citizens by holding voter registration drives and pushing for school integration.

Fayette County has traditionally had an economy supported solely on agriculture, primarily cotton and corn. Farms large and small brought their goods to the gins in every town and villages. In recent decades, the dominance of cotton has waned with soybeans, beef cattle, dairying, and eggs becoming increasingly important to the Fayette County economy. Although agriculture is still dominant in Fayette County, industry entered the county in the late twentieth century. In the 1960s Troxel Manufacturing Company opened a factory in Moscow, and several towns have industrial parks to lure companies to the county. Also suburban sprawl from Memphis in recent decades has removed numerous acres from production. Its population in 2000 stood at 28,806 (Morton, *Tennessee Encyclopedia*, 303-304).

## **SURVEY RESULTS**

In compliance with Section 106 of the National Historic Preservation Act of 1966, as amended, (for more information, see Attachment One or [www.achp.gov](http://www.achp.gov)), cultural resource staff surveyed the area of potential environmental impact for this project in compliance with 36 CFR 800 regulations. The purpose of this survey was to identify any resources either included in or potentially eligible for inclusion in the National Register of Historic Places (eligibility criteria are set forth in 36 CFR 60.4, see Attachment One). The area surveyed included land needed for additional right-of-way as well as areas that might possibly be affected by changes in air quality, noise levels, setting, and land use (see Attachment One for the criteria of adverse effect). The U.S. DOT Act of 1966 requires the assessment of the applicability of Section 4(f) (see Attachment One).

### **Archaeological Survey**

The TDOT Archaeology Section has checked the Division of Archaeology site files and there were no sites within the proposed project area of potential effect. The TDOT Archaeology Section has field reviewed the APE for this project and find the entire area to have been highly disturbed by previous governmental, commercial, and industrial development. There is little likelihood for intact archaeological resources. Therefore, no further work is warranted for this project.

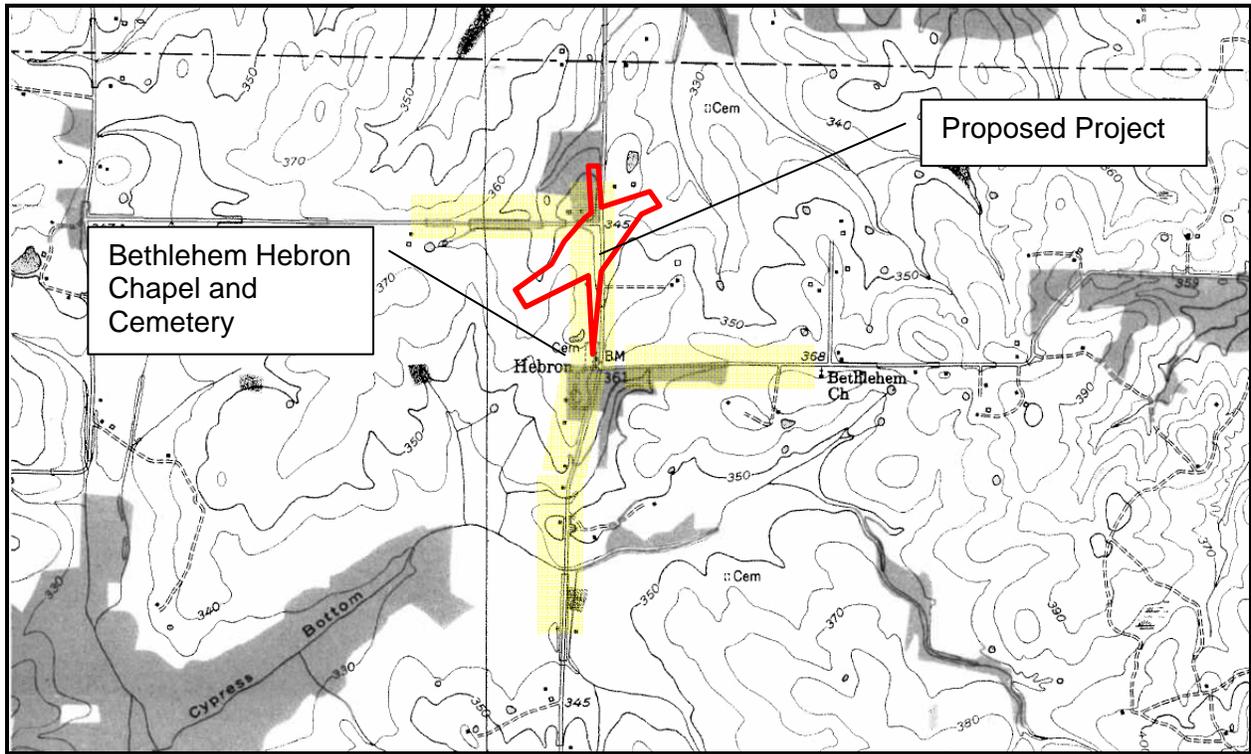
If fill material for this project must be obtained from outside the proposed right-of-way, it will be acquired in accordance with Federal Aid Provision 107.06.

### **Architectural/Historical Survey**

The proposed project is located in a rural built-up area of northeastern Fayette County that has development associated with the SR 222 and I-40 interchange. The APE for this project includes properties along and within the viewshed of the area that is being improved.

TDOT historians also consulted the survey files and the National Register of Historic Places files of the Tennessee State Historic Preservation Office (TN-SHPO) in Nashville to identify any National Register-included properties in the general project area. There are no National Register-listed properties located within the area of potential effect of the proposed project. The TN-SHPO has not surveyed this part of Fayette County. Historians inventoried one property, the Bethlehem-Hebron Chapel, and it is the opinion of TDOT that the property is not eligible for listing in the National Register of Historic Places. Additional information about this property begins on the page 8.

It is the opinion of TDOT that there are no cultural resources included in or eligible for inclusion in the National Register of Historic Places within the project area of potential effect. Therefore there will be no Section 4(f) use of a historic property.



**Figure 4: TN-SHPO Map with Inventoried Property Indicated**

 Area Driven by TDOT Historians

Quad: Stanton, 423 NW



**Figure 5: View of the façade and north elevation of Bethlehem Hebron Chapel**

**Inventoried Property: Bethlehem Hebron Chapel and Cemetery**

Address: 550 Hebron Drive, Mason, TN 38049

Facing east on State Route 222, the Bethlehem Hebron Chapel and Cemetery is located just south of Interstate 40. Located on a wooded plot, the church and cemetery are located on separate parcels. The church campus contains a single building with adjoining parking lot to the south, and the cemetery to the west and north. The area to the east of the church is wooded and to the east on the opposite side of State Route 222 is a recently constructed large truck stop with convenience store.

According to Fayette County historians Dorothy Rich Morton, the current chapel was known as the Bethlehem Methodist Church, which was a part of the Dancyville Circuit. During the nineteenth century, the church was a part of the Wesley and Stanton circuit (TSLA, *Guide to Church Records*). A banner inside the church denotes that the congregation dates to 1846 and is a part of the Brownsville District. In the *Cemetery Records of Fayette County*, Dorothy Rich Morton records the cemetery with both the Bethlehem and Hebron names. During the 19<sup>th</sup> century families such as Carraway, Davis, Hinson, Leath, Lewis, McNabb, O'Connell, Pattat, Sorrell, and Tapp buried multiple family members in the cemetery. Burial dates are primarily from the early to mid-twentieth century with dates ranging from the 1909 to the present (Morton, *Cemetery Records of Fayette County*, 26).

The ca. 1950 gable front church building is faced in brick and situated under a gable front roof covered in asphalt shingles. The church has a central hipped roof steeple topped with a cross. A small gabled porch under the steeple is supported by decorative metal posts. Metal framed gothic arched windows flank the double entry doors with



**Figure 6: Rear three-quarters views of the south and west elevations of the Bethlehem Hebron Chapel**

single diamond shaped windows. The steeple, entry area, and roof eaves have been covered in vinyl siding. There is no cornerstone. A ca. 1960 decorative metal sign with scrollwork and a cross that reads “Bethlehem Hebron Chapel in memory of MB Carraway” is located near the driveway facing State Route 222.

The north and south side elevations each have a series of six four-light aluminum windows. The rear elevation has a three-light wood and glass door and three four-light windows. There is a small vent in the gable peak.

Just north of the church are two sets of blonde brick entry posts with simple concrete caps. The two sets of posts are linked by a circular gravel drive. The easternmost posts contain a decorative metal arch that reads “Hebron Cemetery.” The cemetery is laid out primarily in rows from north to south. A newer section of the cemetery is located to the west of the church.

Gable-front churches are a common type found throughout rural areas in Tennessee. With the congregation dating to the mid-nineteenth century, much of the church’s history predates their ca. 1950 current building. The Hebron Cemetery reflects traditional markers and head stones of the nineteenth through the mid-twentieth century. Cemeteries are generally not eligible for the National Register unless they contain the grave of a significant person, have distinguished artistic merit or represent the only surviving vestige of a community. For these reasons, it is the opinion of TDOT that the Bethlehem Hebron Chapel and Cemetery is not eligible for the National Register.



**Figure 7: Views of the Bethlehem Hebron Cemetery**

Above-view of the front entry posts and sign

Middle- view of the rear entry posts and drive

Below-View of the cemetery facing south



## **SOURCES**

Fayette County Historical Society. *The History of Fayette County, Tennessee*.  
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Folmsbee, Stanley J., Robert E. Corlew, and Enoch L. Mitchell. *Tennessee:  
A Short History*. Knoxville: University of Tennessee Press, 1969.

Morton, Dorothy Rich. *Cemetery Records from Fayette County, Tennessee*.  
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\_\_\_\_\_. *Fayette County*. Memphis: Memphis State University Press, 1989.

\_\_\_\_\_. "Fayette County." *Tennessee Encyclopedia of History and Culture*.  
Edited by Carroll Van West. Tennessee Historical Society, 1998.

Tennessee State Library and Archives. "Guide to Church Records in the  
Holdings of the Tennessee State Library and Archives, Part 1." Mf 1188..  
Available from: <http://www.tennessee.gov/tsla/history/misc/church1.pdf>  
[accessed 20 March 2012]

## **CONCLUSION**

Pursuant to Section 106 of the National Historic Preservation Act of 1966, TDOT historians surveyed the area of potential effect and surveyed one property, the Bethlehem Hebron Chapel. It is the opinion of TDOT historians that this property is not eligible for the National Register of Historic Places. Therefore there are no cultural resources listed on or eligible for listing on the National Register of Historic Places within the project area of potential effect.

## **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

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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

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*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

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*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**

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**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**

Sample Letter to Native  
Americans



**STATE OF TENNESSEE  
DEPARTMENT OF TRANSPORTATION  
ENVIRONMENTAL DIVISION**  
SUITE 900 - JAMES K. POLK BUILDING  
505 DEADERICK STREET  
NASHVILLE, TENNESSEE 37243-0334  
(615) 741-3655

March 21, 2012

The Chickasaw Nation  
1001 No. Country Club  
Ada, OK 74820  
Attn: Ms. LaDonna Brown, Tribal Historic Preservation Officer

**SUBJECT:** Section 106 Initial Coordination for the I-40 at SR-222 Interchange, Stanton Vicinity,  
Fayette County, Tennessee

Dear Ms. Brown:

The Tennessee Department of Transportation (TDOT) in cooperation with the Federal Highway Administration (FHWA) is proposing to modify the I-40 at SR-222 interchange in Fayette County (maps attached). The project would replace the SR-222 bridge spanning I-40, relocate entrance driveways for businesses south of the interchange, widen SR-222 at the south end of the project, and reconfigure the on-ramp and off-ramp on the south side of the interchange as well as the intersections with Thorpe Drive to the north and Hebron Road to the south. Additional right-of-way will be 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](mailto: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,

Handwritten signature of Gerald Kline in cursive script.

Gerald Kline  
Transportation Specialist I  
Archaeology Program Manager

**Enclosure**

cc: Kim Jumper, Shawnee Tribe  
Tiger Hobbs, Kialegee Tribal Town  
Terry Cole, Choctaw Nation of Oklahoma  
Robin Dushane, Eastern Shawnee Tribe of Oklahoma  
Angela Asbury, Alabama-Quassarte Tribal Town  
Emman Spain, Muscogee Creek Nation

Carrie V. Wilson, Quapaw Tribe of Oklahoma  
Charles Coleman, Thlopthlocco Tribal Town  
Lisa LaRue-Baker, United Keetoowah Band of Cherokee  
Indians

TDOT PIN# 114219.00 – Region 4



Letter to Local  
Government Official

STATE OF TENNESSEE  
**DEPARTMENT OF TRANSPORTATION**  
ENVIRONMENTAL DIVISION  
SUITE 900 - JAMES K. POLK BUILDING  
505 DEADERICK STREET  
NASHVILLE, TENNESSEE 37243-0334  
(615) 741-3655

March 20, 2012

Skip Taylor, County Mayor  
Fayette County  
P.O. Box 218  
Somerville, TN 38068

SUBJECT: Section 106 Initial Coordination for the I-40 at SR-222 Interchange, Stanton  
Vicinity, Fayette County, Tennessee

Dear Mayor Taylor:

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 maps.

The 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,

A handwritten signature in cursive script that reads "Martha Carver".

Martha Carver  
Historic Preservation Program Manager

Enclosure

TDOT PIN# 114219.00 – Region 4

D-List Categorical Exclusion  
I-40 at SR-222 (Exit 42)  
Fayette County  
TDOT PIN 114219.00



## **Appendix J**

### **Hazardous Materials**

## **HAZMAT Remarks**

### **PIN 114219.00 Interchange @ I-40 & SR 222 – Fayette Co.**

Acquisition of data using desktop resources and TDEC file reviews indicate a Moderate Risk of environmental impact to the project from two (2) sites in the northeast quadrant of the interchange. A Phase II Environmental Site Assessment involving intrusive field investigations on Parcel 005.00 Map 012 (Site 1) and Parcel 003.00 Map 005 (Site 2) will be conducted by the Design/Build Team when definitive ROW plans are completed. Site 1 is a former dump site. Site 2, a former gas station, has no record of registered USTs at TDEC. USTs may remain onsite at this property.

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.

I have reviewed the available environmental databases, including the TDEC Superfund Database, TDEC Registered UST database, and EPA's Enviromapper.

Bill Davis

04.20.12

For Jim Ozment