

THIS DOCUMENT HAS BEEN DIGITALLY SIGNED AND SEALED BY:

**Aaron Hays**  
2024.01.08 19:10:43-05'00'

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ARCADIS  
11400 PARKSIDE DRIVE, SUITE 410  
KNOXVILLE, TENNESSEE 37934  
AARON HAYS, P.E. NO.: 126652

THE ABOVE NAMED PROFESSIONAL ENGINEER SHALL BE RESPONSIBLE FOR THE FOLLOWING SHEETS IN ACCORDANCE OF TENN. CODE ANN. §62-2-306.

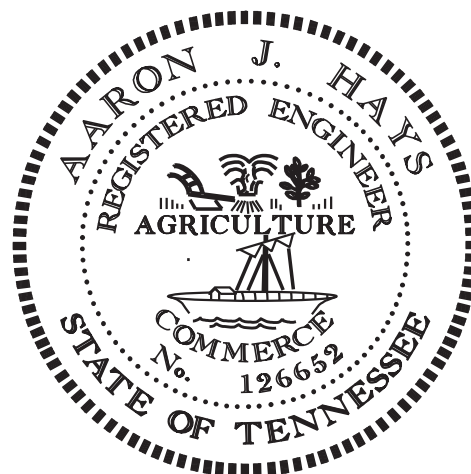
SHEET NAME	SHEET NO.
SIGNATURE SHEET .....	ROADWAY-SIGN1
TITLE SHEET .....	1
ROADWAY INDEX AND STANDARD ROADWAY DRAWINGS .....	1A
ESTIMATED ROADWAY QUANTITIES .....	2, 2-1, 2-2, 2-3
TYPICAL SECTIONS AND PAVEMENT SCHEDULE .....	2B
TYPICAL SECTIONS .....	2B1
GENERAL NOTES .....	2C
SPECIAL NOTES .....	2D
ENVIRONMENTAL NOTES .....	2E
EROSION PREVENTION AND SEDIMENT CONTROL NOTES .....	2E1
TABULATED QUANTITIES .....	2F
UTILITY NOTES AND UTILITY OWNERS .....	3
PAVEMENT EDGE DROP-OFF NOTES FOR TRAFFIC CONTROL .....	4

\$\$\$\$SYTIME\$\$\$\$  
\$\$\$\$DGN\$PE\$\$\$\$  
\$\$\$\$COC\$\$\$\$

YEAR	PROJECT NO.	SHEET NO.
2024	STP/HSIP-322(22)	ROADWAY-SIGN1

STATE OF TENNESSEE  
DEPARTMENT OF TRANSPORTATION

SIGNATURE  
SHEET



THIS DOCUMENT HAS BEEN DIGITALLY SIGNED AND SEALED BY:

**Aaron Hays**  
2024.01.23 14:24:33-05'00'

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ARCADIS  
11400 PARKSIDE DRIVE, SUITE 410  
KNOXVILLE, TENNESSEE 37934  
AARON HAYS, P.E. NO.: 126652

THE ABOVE NAMED PROFESSIONAL ENGINEER SHALL BE RESPONSIBLE FOR THE FOLLOWING SHEETS IN ACCORDANCE OF TENN. CODE ANN. §62-2-306.

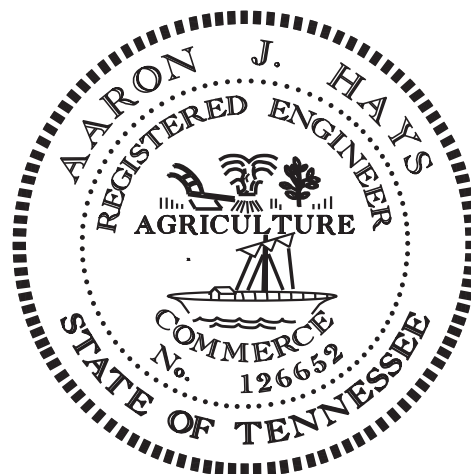
SHEET NAME	SHEET NO.
SIGNATURE SHEET .....	ROADWAY-SIGN2
ROADWAY INDEX AND STANDARD ROADWAY DRAWINGS .....	1A
ESTIMATED ROADWAY QUANTITIES .....	2-1, 2-2, 2-3
TYPICAL SECTIONS AND PAVEMENT SCHEDULE .....	2B

\$\$\$\$SYTIME\$\$\$\$  
\$\$\$\$DGN\$PE\$\$\$\$  
\$\$\$\$COC\$\$\$\$

YEAR	PROJECT NO.	SHEET NO.
2024	STP/HSIP-322(22)	ROADWAY-SIGN2

STATE OF TENNESSEE  
DEPARTMENT OF TRANSPORTATION

SIGNATURE SHEET



THIS DOCUMENT HAS BEEN DIGITALLY SIGNED AND SEALED BY:

**Aaron Hays**  
2024.02.02 18:29:55-05'00'

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ARCADIS  
11400 PARKSIDE DRIVE, SUITE 410  
KNOXVILLE, TENNESSEE 37934  
AARON HAYS, P.E. NO.: 126652

THE ABOVE NAMED PROFESSIONAL ENGINEER SHALL BE RESPONSIBLE FOR THE FOLLOWING SHEETS IN ACCORDANCE OF TENN. CODE ANN. §62-2-306.

SHEET NAME	SHEET NO.
SIGNATURE SHEET .....	ROADWAY-SIGN3
TITLE SHEET .....	1
ROADWAY INDEX AND STANDARD ROADWAY DRAWINGS .....	1A

YEAR	PROJECT NO.	SHEET NO.
2024	STP/HSIP-322(22)	ROADWAY-SIGN3

STATE OF TENNESSEE  
DEPARTMENT OF TRANSPORTATION

SIGNATURE  
SHEET

\$\$\$\$SYTIME\$\$\$\$  
\$\$\$\$DGN\$PE\$\$\$\$  
\$\$\$\$COC\$\$\$\$



Index Of Sheets  
SEE SHEET NO. 1A

STATE OF TENNESSEE  
DEPARTMENT OF TRANSPORTATION  
BUREAU OF ENGINEERING

DOES THIS PROJECT QUALIFY FOR UTILITY CHAPTER 86	YES	NO X
WORK ZONE SIGNIFICANCE DETERMINATION		
SIGNIFICANT	YES	NO X

TENN.	YEAR	SHEET NO.
	2024	1
FED. AID PROJ. NO.	STP/HSIP-322(22)	
STATE PROJ. NO.	73S322-F3-002; 73S322-F8-002; 53S322-F3-002; 53S322-F8-002; 62S322-F3-003; 62S322-F8-003	

REV. 02/02/24 : REVISED PROJECT DESCRIPTION.

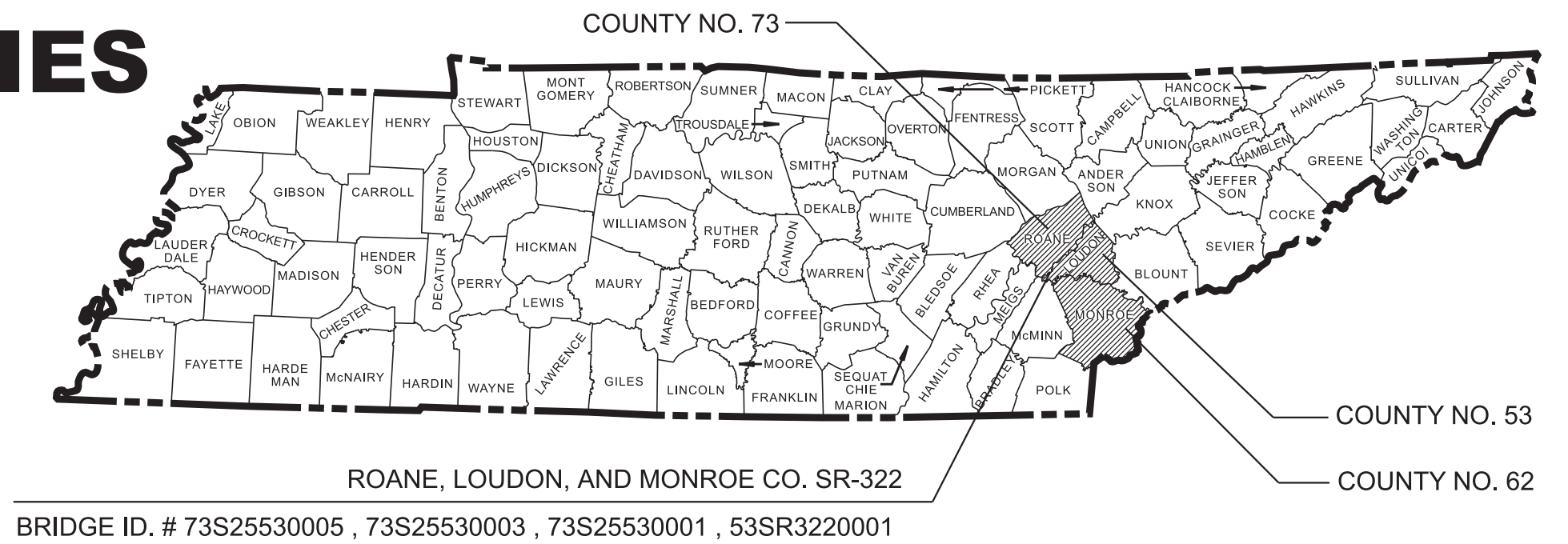
ROANE, LOUDON, AND MONROE COUNTIES

SR-322: FROM SR-72 IN ROANE COUNTY  
THROUGH LOUDON COUNTY  
TO THE MONROE COUNTY LINE (COUNTY SEQ 3)

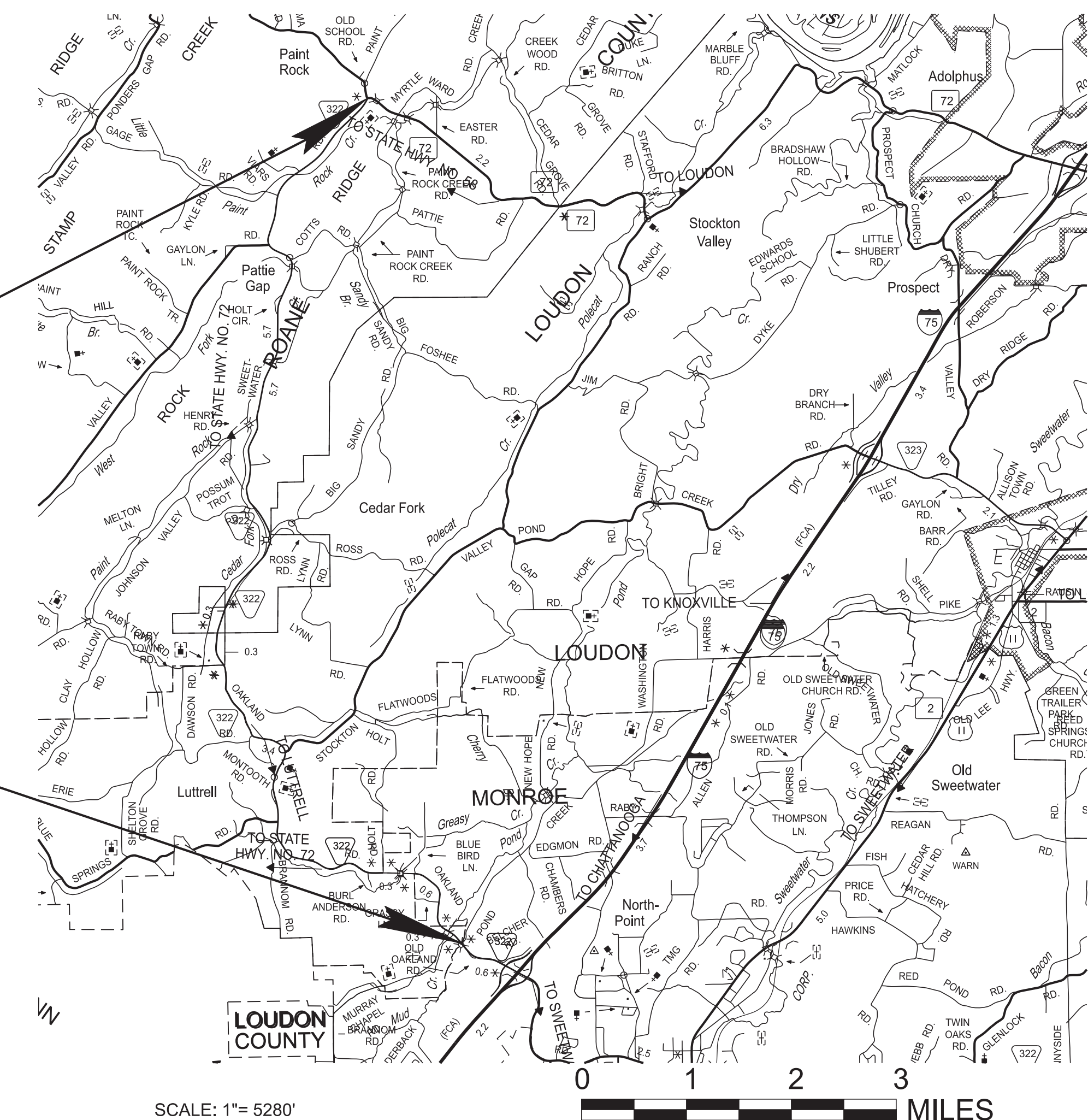
RESURFACE & SAFETY

411TLD OVERLAY @ 85 LBS OR CAPE SEAL W/ MICRO-SURFACE @ 32 LBS,  
PAVEMENT MARKINGS, AND GUARDRAIL

STATE HIGHWAY NO. 322 F.A.H.S. NO. N/A



NO EXCLUSIONS



- 62S322-F8-003
- 62S322-F3-003
- 53S322-F8-002
- 53S322-F3-002
- 73S322-F8-002
- 73S322-F3-002

BEGIN PROJECT NO. STP/HSIP-322(22) RESURFACE & SAFETY  
LM 0.00 (ROANE CO. SEQ. 1)

- 62S322-F8-003
- 62S322-F3-003
- 53S322-F8-002
- 53S322-F3-002
- 73S322-F8-002
- 73S322-F3-002

END PROJECT NO. STP/HSIP-322(22) RESURFACE & SAFETY  
LM 0.26 (LOUDON CO. SEQ. 3)

SPECIAL NOTES

PROPOSALS MAY BE REJECTED BY THE COMMISSIONER IF ANY OF THE UNIT PRICES CONTAINED THEREIN ARE OBVIOUSLY UNBALANCED, EITHER EXCESSIVE OR BELOW THE REASONABLE COST ANALYSIS VALUE.

THIS PROJECT TO BE CONSTRUCTED UNDER THE STANDARD SPECIFICATIONS OF THE TENNESSEE DEPARTMENT OF TRANSPORTATION DATED JANUARY 1, 2021 AND ADDITIONAL SPECIFICATIONS AND SPECIAL PROVISIONS CONTAINED IN THE PLANS AND IN THE PROPOSAL CONTRACT.

TDOT PROJECT MANAGER 1 : ERIC WILSON, P.E.

DESIGNED BY : ARCADIS

DESIGNER : NOAH DAVIS CHECKED BY AARON HAYS, P.E.

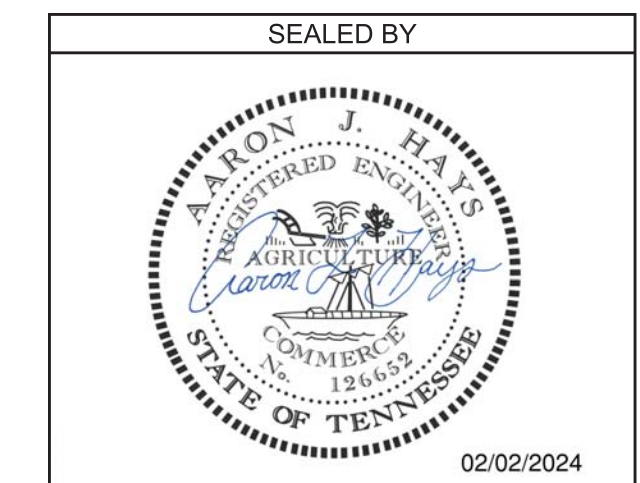
P.E. NO. 98013-4203-04

PIN NO. 130427.00

PROJECT LENGTH 10.52 MILES  
TOTAL LANE MILES RESURFACED 21.04 MILES

TRAFFIC DATA

ADT (2024)	1730
POSTED SPEED	
ROAN SEQ. 1 - L.M. 0.00 TO L.M. 5.62	45 MPH
LOUD SEQ. 1 - L.M. 0.00 TO L.M. 0.26	45 MPH
ROAN SEQ. 2 - L.M. 0.00 TO L.M. 0.33	45 MPH
LOUD SEQ. 2 - L.M. 0.00 TO L.M. 3.41	45 MPH
MONR SEQ. 1 - L.M. 0.00 TO L.M. 0.64	45 MPH
LOUD SEQ. 3 - L.M. 0.00 TO L.M. 0.26	45 MPH



APPROVED: *Will Reid*  
WILL REID, CHIEF ENGINEER

DATE:

APPROVED: *Howard H. Eley*  
HOWARD H. ELEY, COMMISSIONER

U.S. DEPARTMENT OF TRANSPORTATION  
FEDERAL HIGHWAY ADMINISTRATION

APPROVED: \_\_\_\_\_  
DIVISION ADMINISTRATOR DATE



# ROADWAY INDEX

SHEET NAME	SHEET NO.
SIGNATURE SHEET .....	ROADWAY-SIGN1
SIGNATURE SHEET .....	ROADWAY-SIGN2
SIGNATURE SHEET .....	ROADWAY-SIGN3
TITLE SHEET .....	1
ROADWAY INDEX AND STANDARD ROADWAY DRAWINGS .....	1A
ESTIMATED ROADWAY QUANTITIES .....	2, 2-1, 2-2, 2-3
TYPICAL SECTIONS AND PAVEMENT SCHEDULE .....	2B
TYPICAL SECTIONS .....	2B1
GENERAL NOTES .....	2C
SPECIAL NOTES .....	2D
ENVIRONMENTAL NOTES .....	2E
EROSION PREVENTION AND SEDIMENT CONTROL NOTES .....	2E1
TABULATED QUANTITIES .....	2F
UTILITY NOTES AND UTILITY OWNERS .....	3
PAVEMENT EDGE DROP-OFF NOTES FOR TRAFFIC CONTROL .....	4
*REFERENCE DRAWINGS .....	R1-R3

NOTE: THE ALPHABETICAL LETTERS "I", "O" & "Q" ARE NOT USED IN NUMBERING OF SHEETS.

NO PROJECT COMMITMENTS SHEET INCLUDED IN THIS SET OF PLANS.

\*PROVIDED BY THE TDOT REGION 1 TRAFFIC OFFICE

# STANDARD ROADWAY DRAWINGS

DWG.	REV.	DESCRIPTION
<b>STANDARD ROADWAY TITLE SHEET, ABBREVIATIONS, AND LEGENDS</b>		
RD-TP-1	09-26-16	STANDARD ROADWAY DRAWINGS TITLE SHEET
RD-A-1	02-20-20	STANDARD ABBREVIATIONS A THROUGH L
RD-A-2		STANDARD ABBREVIATIONS M THROUGH Z
RD-L-1	02-20-20	STANDARD LEGEND
RD-L-1A		STANDARD LEGEND
<b>ROADWAY DESIGN STANDARDS</b>		
RD11-SE-1		TRANSITION AND CROSS SLOPE DETAILS
RD11-SE-2		SUPERELEVATION TRANSITION DETAILS FOR UNDIVIDED ROADWAYS
RD11-SE-2A		SUPERELEVATION TRANSITION SECTIONS FOR UNDIVIDED ROADWAYS
RD11-LR-2		MINIMUM RUNOFF LENGTHS (LR) FOR RURAL HIGHWAYS
<b>SAFETY DESIGN AND GUARDRAILS</b>		
S-CZ-1	06-28-19	CLEAR ZONE CRITERIA
S-PL-1	03-01-23	SAFETY PLAN FOR BARRIER LENGTH OF NEED
S-PL-1A	03-01-23	SAFETY PLAN FOR BARRIER LENGTH OF NEED (FOR RIGID OBJECTS)
S-PL-1B	03-01-23	SAFETY PLAN FOR BARRIER LENGTH OF NEED ON CURVED ROADWAYS
S-PL-6	06-15-21	SAFETY PLAN SAFETY HARDWARE PLACEMENT ON OUTSIDE EDGE
S-GRT-2	06-28-19	TYPE 38 GUARDRAIL END TERMINAL
S-GR31-1	06-15-21	GUARDRAIL DETAILS
S-GRS-4	05-04-22	SPECIAL CASE GUARDRAIL HEIGHT TRANSITION DETAIL
S-GRT-2P	10-16-20	EARTH PAD FOR TYPE 38 AND TYPE 21 TERMINAL
S-GRT-2R	06-28-19	EARTH PAD FOR TYPE 38 AND TYPE 21 TERMINAL (RETROFIT)
<b>DESIGN - TRAFFIC CONTROL</b>		
T-M-1	06-28-19	DETAILS OF PAVEMENT MARKINGS FOR CONVENTIONAL ROADS AND MARKING ABBREVIATIONS
T-M-4	07-17-20	STANDARD INTERSECTION PAVEMENT MARKINGS
T-WZ-10	04-02-12	ADVANCE ROAD WORK SIGNING ON HIGHWAYS AND FREEWAYS
<b>EROSION PREVENTION AND SEDIMENT CONTROL</b>		
EC-STR-3B	06-15-21	SILT FENCE
EC-STR-3C	03-01-23	SILT FENCE WITH WIRE BACKING
EC-STR-3E	04-01-08	SILT FENCE FABRIC JOINING DETAILS
EC-STR-34	05-04-22	EROSION CONTROL BLANKET FOR SLOPE INSTALLATION

TYPE	YEAR	PROJECT NO.	SHEET NO.
RESURF.	2024	STP/HSIP-322(22)	1A

REV. 01/23/24 : ADDED SHEET ROADWAY-SIGN2 TO ROADWAY INDEX.

REV. 02/02/24 : ADDED SHEET ROADWAY-SIGN3 TO ROADWAY INDEX.

SEALED BY



02/02/2024

STATE OF TENNESSEE  
DEPARTMENT OF TRANSPORTATION

ROADWAY INDEX  
AND  
STANDARD  
ROADWAY  
DRAWINGS



TYPE	YEAR	PROJECT NO.	SHEET NO.
RESURF.	2024	STP/HSIP-322(22)	2

TOTAL PROJECT ESTIMATED ROADWAY QUANTITIES					
ITEM NO.	DESCRIPTION	UNIT	STP/HSIP-322(22) QUANTITY	STP/HSIP-322(22) QUANTITY	TOTAL QUANTITY
208-01.05	BROOMING & DEGRASSING SHOULDERS	L.M.	22		22
705-02.10	GUARDRAIL TRANSITION 27IN TO 31IN	EACH		23	23
705-04.09	EARTH PAD FOR TYPE 38 GR END TREATMENT	EACH		23	23
705-06.20	TANGENT ENERGY ABSORBING TERM MASH TL-3	EACH		23	23
712-01	TRAFFIC CONTROL	LS	1		1
712-04.01	FLEXIBLE DRUMS (CHANNELIZING)	EACH	158		158
712-05.01	WARNING LIGHTS (TYPE A)	EACH	79		79
712-06	SIGNS (CONSTRUCTION)	S.F.	706		706
716-01.21	SNOWPLOWABLE RAISED PAVEMENT MARKERS (BI-DIR) (1 COLOR)	EACH	370	323	696
716-01.30	REMOVAL OF SNOWPLOWABLE REFLECTIVE MARKER	EACH	370		370
716-02.05	PLASTIC PAVEMENT MARKING (STOP LINE)	L.F.		150	150
716-03.07	PLASTIC WORD PAVEMENT MARKING (STOP)	EACH		2	2
716-04.04	PLASTIC PAVEMENT MARKING (TRANSVERSE SHOULDER)	L.F.		1155	1155
716-05.20	PAINTED PAVEMENT MARKING (6" LINE)	L.M.	17		17
716-13.02	SPRAY THERMO PVMT MRKNG (60 mil) (6IN LINE)	L.M.	43		43
717-01	MOBILIZATION	LS	1		1
	ALTERNATE AA1				
307-01.15	ASC MIX (PG64-22) (BPMLC-HM) GRADING CS	TON	1334		1334
403-01	BITUMINOUS MATERIAL FOR TACK COAT (TC)	TON	102		102
411-03.12	ACS MIX(PG64-22) THIN LIFT D ASPHALT	TON	6671		6671
415-01.02	COLD PLANING BITUMINOUS PAVEMENT	S.Y.	567		567
	ALTERNATE AA2				
403-01.01	BITUMINOUS MATERIAL FOR TACK COAT (MICRO-SURFACING)	TON	20		20
405-01.01	BITUMINOUS MATERIAL (BSC)	TON	49		49
405-01.02	MINERAL AGGREGATE (BSC)	TON	424		424
414-03.01	EMULSIFIED ASPHALT FOR MICRO-SURFACING	TON	269		269
414-03.02	AGGREGATE FOR MICRO SURFACING	TON	2243		2243
716-08.20	REMOVAL OF PAVEMENT MARKING (LINE)	L.M.	43		43

**SEE SHEET 2-1, 2-2, AND 2-3 INDIVIDUAL COUNTY QUANTITIES.  
SEE SHEET 2-1, 2-2, AND 2-3 FOR FOOTNOTES**

**SEALED BY**



01/08/2024

**STATE OF TENNESSEE  
DEPARTMENT OF TRANSPORTATION**

**ESTIMATED  
ROADWAY  
QUANTITIES**

SHEET 1 OF 4



TYPE	YEAR	PROJECT NO.	SHEET NO.
RESURF.	2024	STP/HSIP-322(22)	2-1

REV. 01/23/24 : RENUMBERED FOOTNOTES 13 THROUGH 15. ADDED ITEM NUMBERS 712-01 AND 717-01 TO ESTIMATE.

ESTIMATED ROADWAY QUANTITIES					
ITEM NO.	DESCRIPTION	UNIT	STP/HSIP-322(22)	STP/HSIP-322(22)	ROANE SR-322
			QUANTITY 73S322-F8-002	QUANTITY 73S322-F3-002	TOTAL QUANTITY
	208-01.05	BROOMING & DEGRASSING SHOULDERS	L.M.	12	12
(1)(2)	705-02.10	GUARDRAIL TRANSITION 27IN TO 31IN	EACH		2
(2)(3)	705-04.09	EARTH PAD FOR TYPE 38 GR END TREATMENT	EACH		2
(2)	705-06.20	TANGENT ENERGY ABSORBING TERM MASH TL-3	EACH		2
	712-01	TRAFFIC CONTROL	LS	0.34	0.34
	712-04.01	FLEXIBLE DRUMS (CHANNELIZING)	EACH	86	86
	712-05.01	WARNING LIGHTS (TYPE A)	EACH	43	43
(4)	712-06	SIGNS (CONSTRUCTION)	S.F.	310	310
	716-01.21	SNOWPLOWABLE RAISED PAVEMENT MARKERS (BI-DIR) (1 COLOR)	EACH	370	23
(5)(6)	716-01.30	REMOVAL OF SNOWPLOWABLE REFLECTIVE MARKER	EACH	370	370
(7)	716-02.05	PLASTIC PAVEMENT MARKING (STOP LINE)	L.F.		80
(7)	716-03.07	PLASTIC WORD PAVEMENT MARKING (STOP)	EACH		2
(15)(7)	716-04.04	PLASTIC PAVEMENT MARKING (TRANSVERSE SHOULDER)	L.F.		775
(8)	716-05.20	PAINTED PAVEMENT MARKING (6" LINE)	L.M.	10	10
	716-13.02	SPRAY THERMO PVMT MRKNG (60 mil) (6IN LINE)	L.M.	24	24
	717-01	MOBILIZATION	LS	0.34	0.34
		ALTERNATE AA1			
(9)	307-01.15	ASC MX (PG64-22) (BPMLC-HM) GRADING CS	TON	715	715
	403-01	BITUMINOUS MATERIAL FOR TACK COAT (TC)	TON	55	55
(10)	411-03.12	ACS MX(PG64-22) THIN LIFT D ASPHALT	TON	3576	3576
(11)	415-01.02	COLD PLANING BITUMINOUS PAVEMENT	S.Y.	548	548
		ALTERNATE AA2			
(12)	403-01.01	BITUMINOUS MATERIAL FOR TACK COAT (MICRO-SURFACING)	TON	11	11
(13)	405-01.01	BITUMINOUS MATERIAL (BSC)	TON	26	26
(13)	405-01.02	MINERAL AGGREGATE (BSC)	TON	228	228
	414-03.01	EMULSIFIED ASPHALT FOR MICRO-SURFACING	TON	149	149
	414-03.02	AGGREGATE FOR MICRO SURFACING	TON	1241	1241
(14)	716-08.20	REMOVAL OF PAVEMENT MARKING (LINE)	L.M.	24	24

SEE SHEET 2 FOR TOTAL PROJECT QUANTITIES.

### FOOTNOTES

- (1) COST INCLUDES THE LENGTH NECESSARY TO TRANSITION FROM EXISTING HEIGHT OF GUARDRAIL TO 31 INCHES.
- (2) SEE SHEET 2F FOR PROPOSED GUARDRAIL (RESURFACING) TABULATION. INCLUDES THE THE COST OF REMOVAL OF THE EXISTING END TERMINALS.
- (3) INCLUDES ALL MATERIAL NECESSARY FOR THE CONSTRUCTION OF THE PAD AND ANY NECESSARY EPSC MEASURES.
- (4) SEE SHEET 2F FOR SIGN TABULATED QUANTITIES. THE CONSTRUCTION SIGNING IS TO BE A MINIMUM. OTHER SIGNS MAY BE REQUIRED AS DIRECTED BY THE TDOT OPERATIONS DISTRICT ENGINEER.
- (5) ANY DAMAGE OCCURRED DURING REMOVAL SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE AND TO THE SATISFACTION OF THE TDOT OPERATIONS DISTRICT ENGINEER.
- (6) TO BE USED FOR ROANE COUNTY SEQUENCE 1 (L.M. 0.00 TO L.M. 5.62).
- (7) THE CONTRACTOR MAY ELECT TO SUBSTITUTE PREFORMED PLASTIC FOR THERMOPLASTIC. PREFORMED PLASTIC SHALL BE PAID FOR AT THE SAME UNIT PRICE AS BID FOR THERMOPLASTIC.
- (8) TO BE USED FOR TEMPORARY STRIPING DURING PLACEMENT OF SPOT LEVELING ONLY. NO PAYMENT WILL BE MADE FOR TEMPORARY STRIPING DURING PLACEMENT OF THE FINAL SURFACE (ON EITHER EXISTING SURFACE OR FINAL) COURSE DUE TO THE CONTRACTOR'S METHODS OF CONSTRUCTION.
- (9) TO BE USED FOR SPOT LEVELING. SPOT LEVELING TO BE USED ONLY TO CORRECT DEFICIENCIES ON EXISTING PAVEMENT AND IS NOT TO BE COMBINED WITH OTHER COURSES.
- (10) INCLUDES 78 TONS FOR COUNTY ROADS. BUSINESS ENTRANCES AND PRIVATE DRIVES ARE TO BE TIED-IN AS NEEDED OR AS DIRECTED BY THE TDOT OPERATIONS DISTRICT ENGINEER.
- (11) INCLUDES 17 S.Y. FOR TRANSITION AT THE BEGINNING OF PROJECT LIMITS, 456 S.Y. FOR ALONG THE BRIDGES, AND 75 S.Y. FOR BRIDGE END TRANSITIONS.
- (12) NO PAYMENT WILL BE MADE DIRECTLY FOR THE WATER REQUIRED TO DILUTE THE TACK COAT.
- (13) INCLUDES QUANTITY TO BE USED ALONG EDGE OF PAVED SHOULDER WHILE MAKING LANE SHIFTS DURING THE COURSE OF CONSTRUCTION IN ORDER TO REDUCE RUTTING ALONG EDGE OF SHOULDER.
- (14) INCLUDES THE COST ASSOCIATED WITH REMOVAL OF EXISTING SPECIALTY MARKINGS WHERE MICRO-SURFACE IS TO BE PLACED.
- (15) SEE SHEET 2F FOR THE OPEN FRONTAGE TABULATED QUANTITIES. TO BE USED IN LOCATIONS SHOWN OR AS DIRECTED BY THE REGION'S TRAFFIC OFFICE. ADDITIONAL INFORMATION WILL BE PROVIDED DURING THE PRE-CONSTRUCTION MEETING.

SEALED BY



01/23/2024

ROANE SR-322

STATE OF TENNESSEE  
DEPARTMENT OF TRANSPORTATION

ESTIMATED  
ROADWAY  
QUANTITIES

SHEET 2 OF 4



TYPE	YEAR	PROJECT NO.	SHEET NO.
RESURF.	2024	STP/HSIP-322(22)	2-2

REV. 01/23/24 : RENUMBERED FOOTNOTES 11A THROUGH 13A. ADDED ITEM NUMBERS 712-01 AND 717-01 TO ESTIMATE.

### ESTIMATED ROADWAY QUANTITIES

ITEM NO.	DESCRIPTION	UNIT	STP/HSIP-322(22)	STP/HSIP-322(22)	LOUDON SR-322
			QUANTITY	QUANTITY	TOTAL QUANTITY
			53S322-F8-002	53S322-F3-002	
	208-01.05 BROOMING & DEGRASSING SHOULDERS	L.M.	8		8
(1A)(2A)	705-02.10 GUARDRAIL TRANSITION 27IN TO 31IN	EACH		21	21
(2A)(3A)	705-04.09 EARTH PAD FOR TYPE 38 GR END TREATMENT	EACH		21	21
(2A)	705-06.20 TANGENT ENERGY ABSORBING TERM MASH TL-3	EACH		21	21
	712-01 TRAFFIC CONTROL	LS	0.33		0.33
	712-04.01 FLEXIBLE DRUMS (CHANNELIZING)	EACH	58		58
	712-05.01 WARNING LIGHTS (TYPE A)	EACH	29		29
(4A)	712-06 SIGNS (CONSTRUCTION)	S.F.	278		278
	716-01.21 SNOWPLOWABLE RAISED PAVEMENT MARKERS (BI-DIR) (1 COLOR)	EACH		260	260
(5A)	716-02.05 PLASTIC PAVEMENT MARKING (STOP LINE)	L.F.		70	70
(5A)(13A)	716-04.04 PLASTIC PAVEMENT MARKING (TRANSVERSE SHOULDER)	L.F.		380	380
(6A)	716-05.20 PAINTED PAVEMENT MARKING (6" LINE)	L.M.	6		6
	716-13.02 SPRAY THERMO PVMT MRKNG (60 mil) (6IN LINE)	L.M.	16		16
	717-01 MOBILIZATION	LS	0.33		0.33
	ALTERNATE AA1				
(7A)	307-01.15 ASC MIX (PG64-22) (BPMLC-HM) GRADING CS	TON	534		534
	403-01 BITUMINOUS MATERIAL FOR TACK COAT (TC)	TON	41		41
(8A)	411-03.12 ACS MIX(PG64-22) THIN LIFT D ASPHALT	TON	2672		2672
(9A)	415-01.02 COLD PLANING BITUMINOUS PAVEMENT	S.Y.	19		19
	ALTERNATE AA2				
(10A)	403-01.01 BITUMINOUS MATERIAL FOR TACK COAT (MICRO-SURFACING)	TON	8		8
(11A)	405-01.01 BITUMINOUS MATERIAL (BSC)	TON	20		20
(11A)	405-01.02 MINERAL AGGREGATE (BSC)	TON	169		169
	414-03.01 EMULSIFIED ASPHALT FOR MICRO-SURFACING	TON	103		103
	414-03.02 AGGREGATE FOR MICRO SURFACING	TON	856		856
(12A)	716-08.20 REMOVAL OF PAVEMENT MARKING (LINE)	L.M.	16		16

SEE SHEET 2 FOR TOTAL PROJECT QUANTITIES.

### FOOTNOTES

- (1A) COST INCLUDES THE LENGTH NECESSARY TO TRANSITION FROM EXISTING HEIGHT OF GUARDRAIL TO 31 INCHES.
- (2A) SEE SHEET 2F FOR PROPOSED GUARDRAIL (RESURFACING) TABULATION. INCLUDES THE THE COST OF REMOVAL OF THE EXISTING END TERMINALS.
- (3A) INCLUDES ALL MATERIAL NECESSARY FOR THE CONSTRUCTION OF THE PAD AND ANY NECESSARY EPSC MEASURES.
- (4A) SEE SHEET 2F FOR SIGN TABULATED QUANTITIES. THE CONSTRUCTION SIGNING IS TO BE A MINIMUM. OTHER SIGNS MAY BE REQUIRED AS DIRECTED BY THE TDOT OPERATIONS DISTRICT ENGINEER.
- (5A) THE CONTRACTOR MAY ELECT TO SUBSTITUTE PREFORMED PLASTIC FOR THERMOPLASTIC. PREFORMED PLASTIC SHALL BE PAID FOR AT THE SAME UNIT PRICE AS BID FOR THERMOPLASTIC.
- (6A) TO BE USED FOR TEMPORARY STRIPING DURING PLACEMENT OF SPOT LEVELING ONLY. NO PAYMENT WILL BE MADE FOR TEMPORARY STRIPING DURING PLACEMENT OF THE FINAL SURFACE (ON EITHER EXISTING SURFACE OR FINAL) COURSE DUE TO THE CONTRACTOR'S METHODS OF CONSTRUCTION.
- (7A) TO BE USED FOR SPOT LEVELING. SPOT LEVELING TO BE USED ONLY TO CORRECT DEFICIENCIES ON EXISTING PAVEMENT AND IS NOT TO BE COMBINED WITH OTHER COURSES.
- (8A) INCLUDES 72 TONS FOR COUNTY ROADS. BUSINESS ENTRANCES AND PRIVATE DRIVES ARE TO BE TIED-IN AS NEEDED OR AS DIRECTED BY THE TDOT OPERATIONS DISTRICT ENGINEER.
- (9A) INCLUDES 19 S.Y. FOR TRANSITION AT THE END OF PROJECT LIMITS.
- (10A) NO PAYMENT WILL BE MADE DIRECTLY FOR THE WATER REQUIRED TO DILUTE THE TACK COAT.
- (11A) INCLUDES QUANTITY TO BE USED ALONG EDGE OF PAVED SHOULDER WHILE MAKING LANE SHIFTS DURING THE COURSE OF CONSTRUCTION IN ORDER TO REDUCE RUTTING ALONG EDGE OF SHOULDER.
- (12A) INCLUDES THE COST ASSOCIATED WITH REMOVAL OF EXISTING SPECIALTY MARKINGS WHERE MICRO-SURFACE IS TO BE PLACED.
- (13A) SEE SHEET 2F FOR THE OPEN FRONTAGE TABULATED QUANTITIES. TO BE USED IN LOCATIONS SHOWN OR AS DIRECTED BY THE REGION'S TRAFFIC OFFICE. ADDITIONAL INFORMATION WILL BE PROVIDED DURING THE PRE-CONSTRUCTION MEETING.

SEALED BY



01/23/2024

LOUDON SR-322

STATE OF TENNESSEE  
DEPARTMENT OF TRANSPORTATION

ESTIMATED  
ROADWAY  
QUANTITIES

SHEET 3 OF 4



TYPE	YEAR	PROJECT NO.	SHEET NO.
RESURF.	2024	STP/HSIP-322(22)	2-3

REV. 01/23/24 : ADDED ITEM NUMBERS 712-01 AND 717-01 TO ESTIMATE.

### ESTIMATED ROADWAY QUANTITIES

ITEM NO.	DESCRIPTION	UNIT	STP/HSIP-322(22)	STP/HSIP-322(22)	MONROE SR-322
			QUANTITY 62S322-F8-003	QUANTITY 62S322-F3-003	TOTAL QUANTITY
208-01.05	BROOMING & DEGRASSING SHOULDERS	L.M.	2		2
712-01	TRAFFIC CONTROL	LS	0.33		0.33
712-04.01	FLEXIBLE DRUMS (CHANNELIZING)	EACH	14		14
712-05.01	WARNING LIGHTS (TYPE A)	EACH	7		7
(1B) 712-06	SIGNS (CONSTRUCTION)	S.F.	118		118
716-01.21	SNOWPLOWABLE RAISED PAVEMENT MARKERS (BI-DIR) (1 COLOR)	EACH		43	43
(2B) 716-05.20	PAINTED PAVEMENT MARKING (6" LINE)	L.M.	1		1
716-13.02	SPRAY THERMO PVMT MRKNG (60 mil) (6IN LINE)	L.M.	3		3
717-01	MOBILIZATION	LS	0.33		0.33
	ALTERNATE AA1				
(3B) 307-01.15	ASC MX (PG64-22) (BPMLC-HM) GRADING CS	TON	85		85
403-01	BITUMINOUS MATERIAL FOR TACK COAT (TC)	TON	6		6
(4B) 411-03.12	ACS MX(PG64-22) THIN LIFT D ASPHALT	TON	423		423
	ALTERNATE AA2				
(5B) 403-01.01	BITUMINOUS MATERIAL FOR TACK COAT (MICRO-SURFACING)	TON	1		1
(6B) 405-01.01	BITUMINOUS MATERIAL (BSC)	TON	3		3
(6B) 405-01.02	MINERAL AGGREGATE (BSC)	TON	27		27
414-03.01	EMULSIFIED ASPHALT FOR MICRO-SURFACING	TON	18		18
414-03.02	AGGREGATE FOR MICRO SURFACING	TON	146		146
(7B) 716-08.20	REMOVAL OF PAVEMENT MARKING (LINE)	L.M.	3		3

### FOOTNOTES

- (1B) SEE SHEET 2F FOR SIGN TABULATED QUANTITIES. THE CONSTRUCTION SIGNING IS TO BE A MINIMUM. OTHER SIGNS MAY BE REQUIRED AS DIRECTED BY THE TDOT OPERATIONS DISTRICT ENGINEER.
- (2B) TO BE USED FOR TEMPORARY STRIPING DURING PLACEMENT OF SPOT LEVELING ONLY. NO PAYMENT WILL BE MADE FOR TEMPORARY STRIPING DURING PLACEMENT OF THE FINAL SURFACE (ON EITHER EXISTING SURFACE OR FINAL) COURSE DUE TO THE CONTRACTOR'S METHODS OF CONSTRUCTION.
- (3B) TO BE USED FOR SPOT LEVELING. SPOT LEVELING TO BE USED ONLY TO CORRECT DEFICIENCIES ON EXISTING PAVEMENT AND IS NOT TO BE COMBINED WITH OTHER COURSES.
- (4B) INCLUDES 12 TONS FOR COUNTY ROADS. BUSINESS ENTRANCES AND PRIVATE DRIVES ARE TO BE TIED-IN AS NEEDED OR AS DIRECTED BY THE TDOT OPERATIONS DISTRICT ENGINEER.
- (5B) NO PAYMENT WILL BE MADE DIRECTLY FOR THE WATER REQUIRED TO DILUTE THE TACK COAT.
- (6B) INCLUDES QUANTITY TO BE USED ALONG EDGE OF PAVED SHOULDER WHILE MAKING LANE SHIFTS DURING THE COURSE OF CONSTRUCTION IN ORDER TO REDUCE RUTTING ALONG EDGE OF SHOULDER.
- (7B) INCLUDES THE COST ASSOCIATED WITH REMOVAL OF EXISTING SPECIALTY MARKINGS WHERE MICRO-SURFACE IS TO BE PLACED.

SEE SHEET 2 FOR TOTAL PROJECT QUANTITIES.

SEALED BY



MONROE SR-322

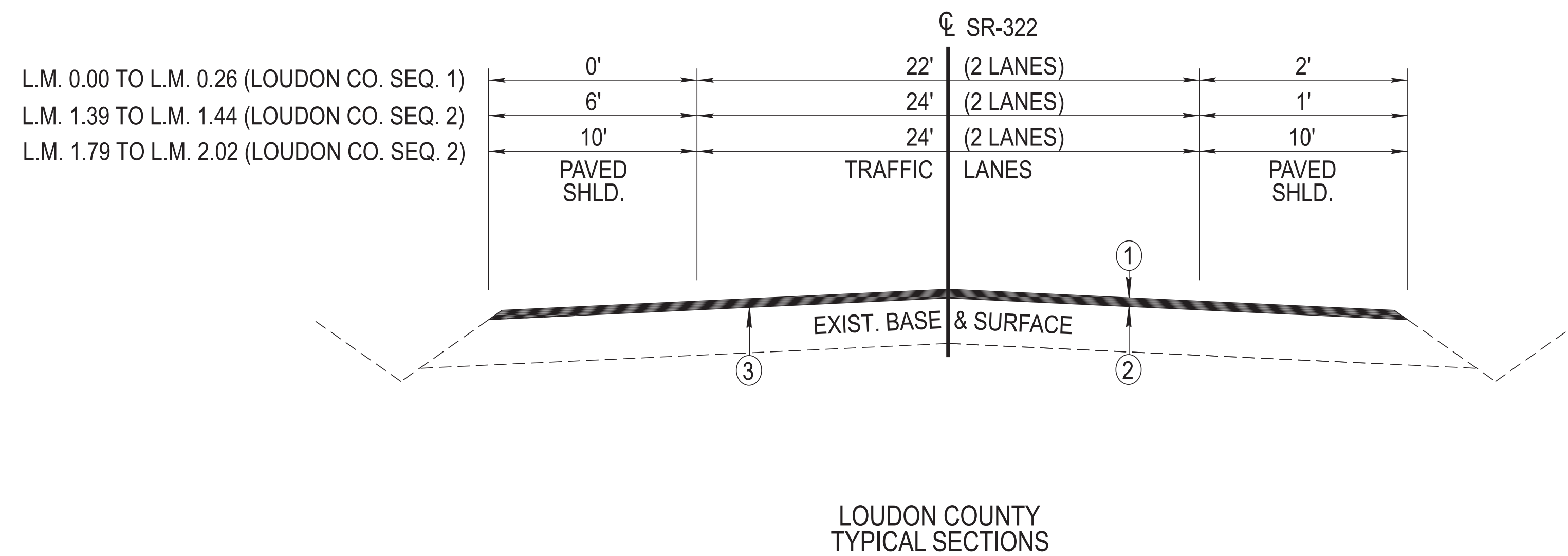
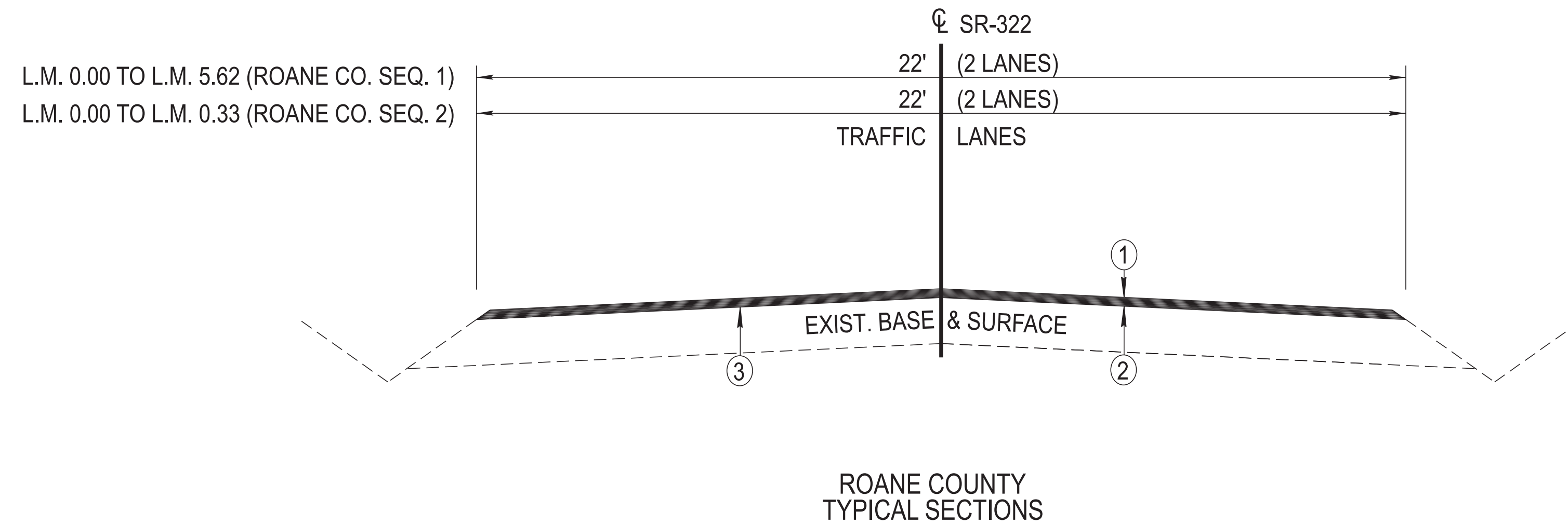
STATE OF TENNESSEE  
DEPARTMENT OF TRANSPORTATION

ESTIMATED  
ROADWAY  
QUANTITIES

SHEET 4 OF 4

TYPE	YEAR	PROJECT NO.	SHEET NO.
RESURF.	2024	STP/HSIP-322(22)	2B

REV. 01/23/24 : REVISED BRIDGE NOTES UNDER ALTERNATE AA1 PAVEMENT SCHEDULE. REVISED DESCRIPTIONS FOR ALTERNATE AA2 PAVEMENT SCHEDULE.



ALTERNATE AA1	
PROPOSED PAVEMENT SCHEDULE	
①	THIN LIFT ASPHALT (HM) 3/4" (APPROX. 85 LBS/SY) ITEM NO. 411-03.12 ACS MIX (PG64-22) THIN LIFT D ASPHALT
②	TACK COAT (TC) (APPROX. 0.15 GAL/SY) ITEM NO. 403-01 BITUMINOUS MATERIAL FOR TACK COAT (TC)
③	BITUMINOUS PLANT MIX BASE (HM) (SPOT LEVELING) ITEM NO. 307-01.15 ACS MIX (PG64-22) (BPMLC-HM) GRADING CS
COLD PLANING 3/4" TH. (APPROX. 78.8 LBS/SY) ITEM NO. 415-01.02 COLD PLANING BITUMINOUS PAVEMENT	

BRIDGE NOTES:  
BRIDGE OVER WEST FORK CREEK (L.M. 2.03, ROANE CO. SEQ. 1) AND BRIDGE OVER PAINT ROCK CREEK (L.M. 2.98, ROANE CO. SEQ. 1) IS TO BE COLD PLANED 3/4" AND PAVED WITH 3/4" 411-03.12 ACS MIX (PG64-22) THIN LIFT "D" ASPHALT.

BRIDGE OVER BRANCH (L.M. 4.80, ROANE CO. SEQ. 1) IS TO BE PAVED WITH 3/4" 411-03.12 ACS MIX (PG64-22) THIN LIFT "D" ASPHALT.

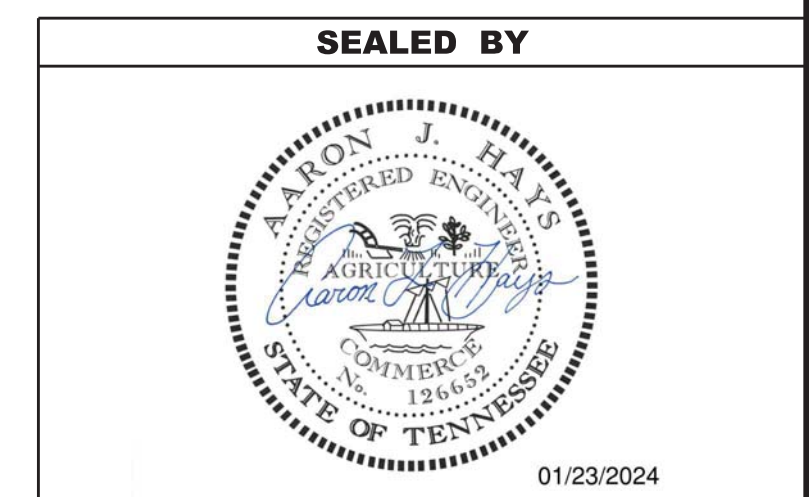
BRIDGE OVER GREASY CREEK (L.M. 3.27, LOUDON CO. SEQ. 2) IS TO BE PAVED WITH 3/4" 411-03.12 ACS MIX (PG64-22) THIN LIFT "D" ASPHALT.

ALTERNATE AA2	
PROPOSED PAVEMENT SCHEDULE	
①	MICRO-SURFACING (APPROX. 32 LBS/SY) ITEM NO. 414-03.01 EMULSIFIED ASPHALT FOR MICRO-SURFACING @ 12% OF THE DRY WEIGHT OF AGGREGATE ITEM NO. 414-03.02 AGGREGATE FOR MICRO-SURFACING @ 32 LBS/SY
②	TACK COAT (TC) ITEM NO. 403-01.01 BITUMINOUS MATERIAL FOR TACK COAT (TC) (MICRO-SURFACING) (APPROX. 0.10 - 0.15 GAL/SY) OF DILUTED EMULSION)
③	BITUMINOUS SEAL COAT (CHIP SEAL) 405-01.01 BITUMINOUS MATERIAL (BSC) @ 0.17 - 0.45 GAL/SY, TON 405-01.02 MINERAL AGGREGATE (BSC) @ 17 - 30 LBS/SY, TON

BRIDGE NOTES:  
BRIDGE OVER WEST FORK CREEK (L.M. 2.03, ROANE CO. SEQ. 1) AND BRIDGE OVER PAINT ROCK CREEK (L.M. 2.98, ROANE CO. SEQ. 1) ARE TO BE PAVED WITH MICRO-SURFACING @ 32 LBS/SY.

BRIDGE OVER BRANCH (L.M. 4.80, ROANE CO. SEQ. 1) IS TO BE PAVED WITH MICRO-SURFACING @ 32 LBS/SY.

BRIDGE OVER GREASY CREEK (L.M. 3.27, LOUDON CO. SEQ. 2) IS TO BE PAVED WITH MICRO-SURFACING @ 32 LBS/SY.

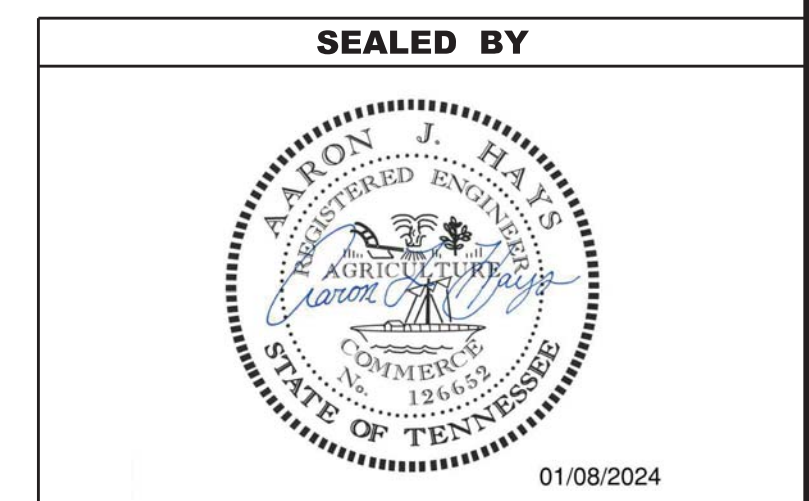
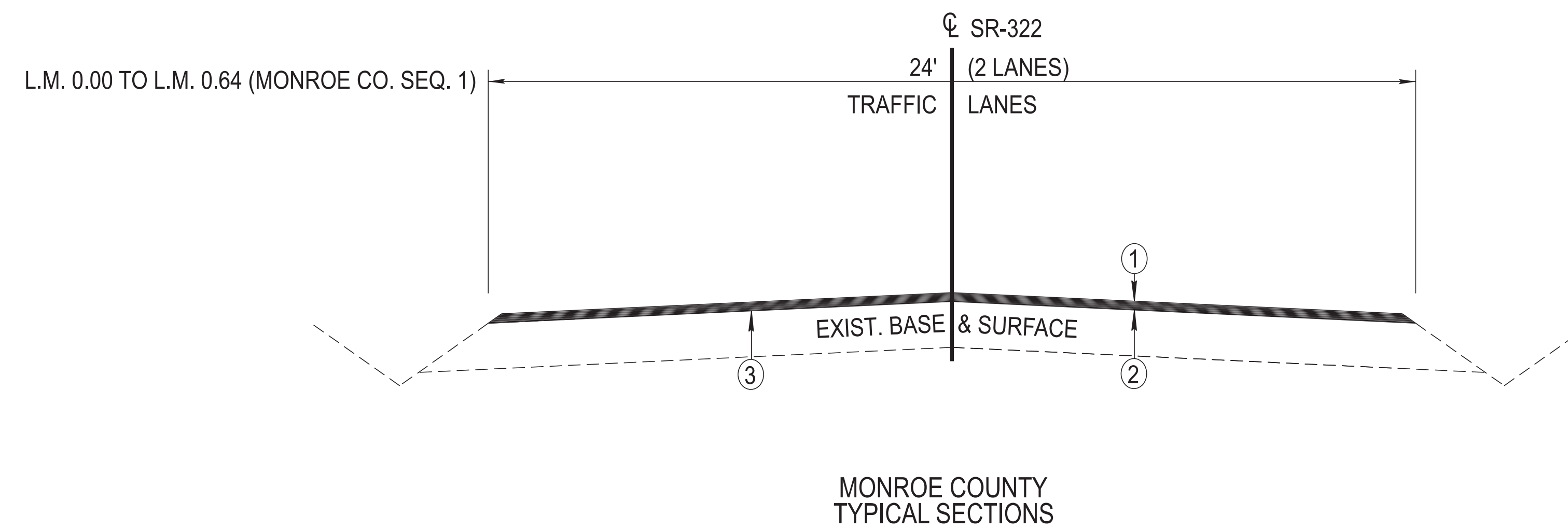
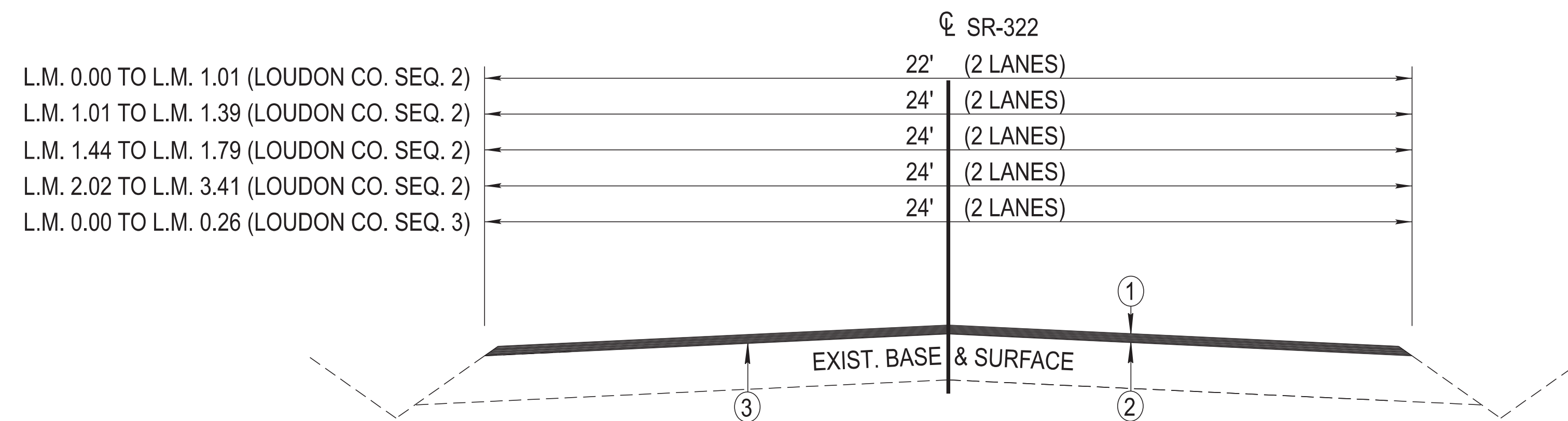


STATE OF TENNESSEE  
DEPARTMENT OF TRANSPORTATION

TYPICAL  
SECTIONS AND  
PAVEMENT  
SCHEDULE



TYPE	YEAR	PROJECT NO.	SHEET NO.
RESURF.	2024	STP/HSIP-322(22)	2B1



STATE OF TENNESSEE  
DEPARTMENT OF TRANSPORTATION

TYPICAL  
SECTIONS

SEE SHEET NO. 2B FOR PAVEMENT SCHEDULE



# GENERAL NOTES

## GRADING

- (1) ANY AREA THAT IS DISTURBED OUTSIDE LIMITS OF CONSTRUCTION DURING THE LIFE OF THIS PROJECT SHALL BE REPAIRED BY THE CONTRACTOR AT HIS EXPENSE.
- (3) THE CONTRACTOR SHALL NOT DISPOSE OF ANY MATERIAL EITHER ON OR OFF STATE-OWNED R.O.W. IN A REGULATORY FLOOD WAY AS DEFINED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA) WITHOUT APPROVAL BY FEMA. ALL MATERIAL SHALL BE DISPOSED OF IN UPLAND (NON-WETLAND) AREAS AND ABOVE ORDINARY HIGH WATER OF ANY ADJACENT WATERCOURSE. THIS DOES NOT ELIMINATE THE NEED TO OBTAIN ANY OTHER LICENSES OR PERMITS THAT MAY BE REQUIRED BY ANY OTHER FEDERAL, STATE OR LOCAL AGENCY.

## GUARDRAIL

- (1) THE CONTRACTOR SHALL NOT REMOVE ANY SECTIONS OF EXISTING GUARDRAIL TO REWORK SHOULDERS OR FLATTEN SLOPES UNTIL THE ENGINEER CONCURS IN THE NECESSITY OF REMOVAL DUE TO CONSTRUCTION REQUIREMENTS AND THE APPROPRIATE WARNING DEVICES ARE INSTALLED. THE PROPOSED GUARDRAIL, INCLUDING ANY ANCHOR SYSTEM, SHALL BE INSTALLED QUICKLY TO MINIMIZE TRAFFIC EXPOSURE TO ANY HAZARD. NO PAYMENT WILL BE MADE FOR A SECTION OF PROPOSED GUARDRAIL, INCLUDING ANCHORS, UNTIL IT IS COMPLETE IN PLACE.
- (3) IF ANY APPROACH END OF A SECTION OF GUARDRAIL OR BRIDGE RAIL MUST TEMPORARILY BE LEFT INCOMPLETE AND EXPOSED TO TRAFFIC, THE CONTRACTOR SHALL USE TWO (2) TEMPORARY BARRICADES OR DRUMS WITH TYPE "A" LIGHTS AND ROUNDED END ELEMENTS AS MINIMUM MEASURES TO PROTECT TRAFFIC FROM THE HAZARD OF AN EXPOSED END. ALL COST OF FURNISHING AND INSTALLING TEMPORARY BARRICADES OR DRUMS WITH TYPE "A" LIGHTS TO DELINEATE GUARDRAIL END AND A TEMPORARY ROUNDED END ELEMENT SHALL BE INCLUDED IN THE COST OF THE PROPOSED GUARDRAIL END TERMINAL.

## MISCELLANEOUS

- (2) THE CONTRACTOR SHALL BE REQUIRED TO REMOVE AND RESET MAILBOXES AND POSTS WHERE AND AS DIRECTED BY THE ENGINEER. COST TO BE INCLUDED IN PRICE BID FOR OTHER CONSTRUCTION ITEMS.
- (3) NOTHING IN THE GENERAL NOTES OR SPECIAL PROVISIONS SHALL RELIEVE THE CONTRACTOR FROM HIS RESPONSIBILITIES TOWARD THE SAFETY AND CONVENIENCE OF THE GENERAL PUBLIC AND THE RESIDENTS ALONG THE PROPOSED CONSTRUCTION AREA.

## PAVEMENT MARKINGS

### TEMPORARY PAVEMENT MARKINGS ON INTERMEDIATE LAYERS

- (2) TEMPORARY PAVEMENT LINE MARKINGS ON INTERMEDIATE LAYERS OF PAVEMENT SHALL BE REFLECTIVE TAPE OR REFLECTORIZED PAINT INSTALLED TO PERMANENT STANDARDS AT THE END OF EACH DAY'S WORK. SHORT, UNMARKED SECTIONS SHALL NOT BE ALLOWED. THESE MARKINGS WILL BE MEASURED AND PAID FOR UNDER ITEM NO. 716-05.20, PAINTED PAVEMENT MARKING (6" LINE), L.M.

### FINAL PAVEMENT MARKING

- (5) THE CONTRACTOR WILL BE REQUIRED TO PERFORM THE FOLLOWING WORK:
  - a. SHOULDERS SHALL BE BROOMED AND DE-GRASSED AND MATERIAL SHALL BE PICKED UP AND REMOVED. THIS WILL BE PAID FOR UNDER ITEM NO. 208-01.05.
  - b. REMOVE ALL GARBAGE AND CONSTRUCTION DEBRIS FROM PROJECT. THE COST FOR THIS WILL BE INCLUDED IN THE PRICE BID FOR OTHER ITEMS OF CONSTRUCTION.
- (11) PERMANENT PAVEMENT LINE MARKINGS SHALL BE 6" SPRAY THERMOPLASTIC (60 mil) INSTALLED TO PERMANENT STANDARDS AT THE END OF EACH DAY'S WORK. SHORT UNMARKED SECTIONS SHALL NOT BE ALLOWED. PAVEMENT MARKINGS WILL BE MEASURED AND PAID FOR UNDER ITEM NO. 716-13.02, SPRAY THERMO PVMT MRKNG (60 mil) (6IN LINE), L.M. THE CONTRACTOR SHALL HAVE THE OPTION OF USING REFLECTORIZED PAINT INSTALLED TO PERMANENT STANDARDS AT THE END OF EACH DAY'S WORK AND THEN INSTALLING THE PERMANENT MARKINGS AFTER THE PAVING OPERATION IS COMPLETED. THE TEMPORARY MARKINGS FOR THE FINAL SURFACE WILL NOT BE MEASURED AND PAID FOR DIRECTLY, BUT THE COSTS ARE TO BE INCLUDED IN THE PRICE BID FOR THE PERMANENT MARKINGS.

## SNOWPLOWABLE REFLECTIVE PAVEMENT MARKERS

- (19) REMOVE EXISTING SNOWPLOWABLE MARKERS PRIOR TO PAVING AND/OR COLD PLANING. REMOVE ALL ADHESIVES PRIOR TO PAVING. PATCH ANY HOLES OR DIVOTS RESULTING FROM THE REMOVAL OF A MARKER IN A MANNER WHICH ENSURES A UNIFORM PAVED SURFACE. PATCH WORK SHALL BE INCLUDED WITH COST OF OTHER ITEMS OF CONSTRUCTION.

## PAVEMENT

### PAVING

- (2) THE CONTRACTOR SHALL BE REQUIRED TO COLD PLANE AND PAVE IN THE DIRECTION OF TRAFFIC.

### RESURFACING

- (4) WHERE DIRECTED BY THE TDOT ENGINEER, THE CONTRACTOR SHALL BE REQUIRED TO SHAPE PUBLIC SIDE ROADS, BUSINESS ENTRANCES, AND PRIVATE DRIVES, AS WELL AS CLEANING OF EXISTING DRAINS BEFORE PLACING MATERIALS. ALL COSTS ARE TO BE INCLUDED IN THE PRICE BID FOR OTHER ITEMS OF CONSTRUCTION.
- (5) ALL PUBLIC SIDE ROADS SHALL BE PAVED ONE PAVER WIDTH THROUGH THE INTERSECTION AS A MINIMUM. A SATISFACTORY TRANSITION FROM THE NEW PAVEMENT TO THE EXISTING GRADE OF THE INTERSECTING PUBLIC ROAD OR BUSINESS ENTRANCE SHALL BE PROVIDED. SHOULD THE PAVEMENT OF THE INTERSECTING PUBLIC ROAD BE DISTRESSED, THE RESURFACING WIDTH MAY BE INCREASED TO THE NORMAL RIGHT OF WAY LINE.
- (6) PRIVATE DRIVEWAYS, FIELD ENTRANCES, AND BUSINESS ENTRANCES WILL BE RESURFACED A PAVER WIDTH (LANE WIDTH) AS A MINIMUM. A PAVEMENT TAPER TO TRANSITION THE NEW PAVEMENT SHALL BE REQUIRED, IT SHALL BE BASED ON AN ADDITIONAL ONE FOOT OF WIDTH PER ONE INCH DEPTH OF PAVEMENT. IF THE SHOULDER IS NARROW ENOUGH THAT THE SUM OF THE SHOULDER AND THE TRANSITION ARE LESS THAN A PAVER WIDTH, THE TRANSITION SHALL OCCUR WITHIN THE PAVER WIDTH. IF THE SUM OF THE SHOULDER AND THE TRANSITION IS GREATER THAN A PAVER WIDTH (LANE WIDTH), THE TRANSITION SHALL OCCUR OUTSIDE OF THE PAVER WIDTH.
- (9) IN ALL CASES, THE LENGTH OF THE PAVEMENT TRANSITION, THE THICKNESS AND WIDTH OF THE RESURFACING AND ANY ADDITIONAL PAVEMENT MATERIALS SHALL BE AS DIRECTED BY THE TDOT ENGINEER.

## SIGNING

- (12) ALL SIGNS WHICH INTERFERE WITH CONSTRUCTION WILL BE RELOCATED OUTSIDE LIMITS OF CONSTRUCTION BY THE CONTRACTOR. UPON COMPLETION OF CONSTRUCTION, THE CONTRACTOR WILL RESTORE THE SIGNS TO ORIGINAL LOCATION. THE CONTRACTOR SHALL CHECK WITH THE REGIONAL TRAFFIC ENGINEER PRIOR TO MOVING ANY PERMANENT SIGNS.

## TRAFFIC CONTROL DIRECTIONAL SIGNING.

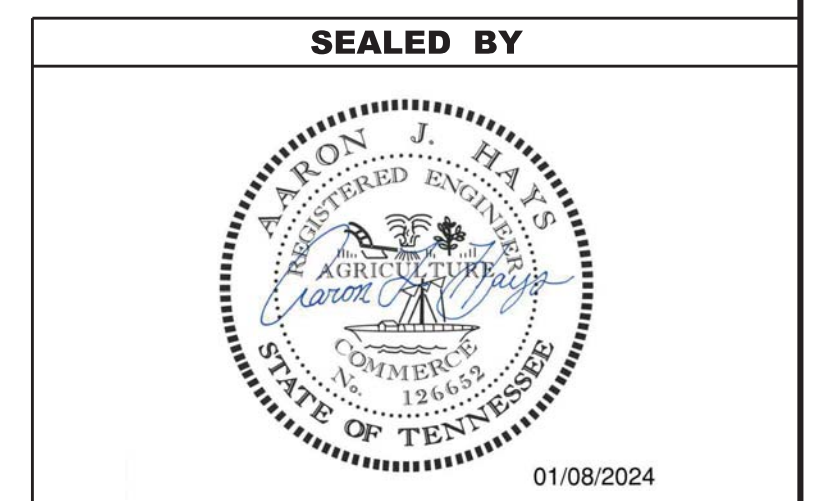
- (7) WHEN EXISTING "TOURIST ORIENTED DIRECTIONAL SIGNS" (TODS) ARE ON NON-ACCESS CONTROLLED CONSTRUCTION PROJECTS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR KEEPING THESE SIGNS IN FULL VIEW TO THE MOTORING PUBLIC DURING ALL PHASES OF CONSTRUCTION. ALL WORK IN MOVING THESE "TODS" AND TEMPORARY SUPPORTS ARE TO BE PAID FOR UNDER ITEM NO. (712-06) , AS DIRECTED BY THE ENGINEER. NEW SUPPORTS AND SIGN FACE FOR FINAL LOCATION WILL BE PAID FOR UNDER OTHER ITEMS OF CONSTRUCTION.

## CONSTRUCTION WORK ZONE & TRAFFIC CONTROL

- (1) ADVANCED WARNING SIGNS SHALL NOT BE DISPLAYED MORE THAN FORTY-EIGHT (48) HOURS BEFORE PHYSICAL CONSTRUCTION BEGINS. SIGNS MAY BE ERECTED UP TO ONE WEEK BEFORE NEEDED, IF THE SIGN FACE IS FULLY COVERED.
- (2) IF THE CONTRACTOR MOVES OFF THE PROJECT, HE SHALL COVER OR REMOVE ALL UNNEEDED SIGNS AS DIRECTED BY THE ENGINEER. COSTS OF REMOVAL, COVERING, AND REINSTALLING SIGNS SHALL NOT BE MEASURED AND PAID FOR SEPARATELY, BUT ALL COSTS SHALL BE INCLUDED IN THE ORIGINAL UNIT PRICE BID FOR ITEM NO. 712-06, SIGNS (CONSTRUCTION) PER SQUARE FOOT.
- (3) A LONG TERM BUT SPORADIC USE WARNING SIGN, SUCH AS A FLAGGER SIGN, MAY REMAIN IN PLACE WHEN NOT REQUIRED PROVIDED THE SIGN FACE IS FULLY COVERED.
- (4) TRAFFIC CONTROL DEVICES SHALL NOT BE DISPLAYED OR ERECTED UNLESS RELATED CONDITIONS ARE PRESENT NECESSITATING WARNING.

- (5) USE OF BARRICADES, PORTABLE BARRIER RAILS, AND DRUMS SHALL BE LIMITED TO THE IMMEDIATE AREAS OF CONSTRUCTION WHERE A HAZARD IS PRESENT. THESE DEVICES SHALL NOT BE STORED ALONG THE ROADWAY WITHIN THIRTY (30) FEET OF THE EDGE OF THE TRAVELED WAY BEFORE OR AFTER USE UNLESS PROTECTED BY GUARDRAIL, BRIDGE RAIL, AND/OR BARRIERS INSTALLED FOR OTHER PURPOSES FOR ROADWAYS WITH CURRENT ADT'S LESS THAN 1500 AND DESIGN SPEED OF LESS THAN 60 MPH. THIS DISTANCE SHALL INCREASE TO FORTY-FIVE (45) FEET FOR ROADWAYS WITH CURRENT ADT'S OF 1500 OR GREATER AND DESIGN SPEED OF 60 MPH OR GREATER OR ON THE OUTSIDE OF A HORIZONTAL CURVE. THESE DEVICES SHALL BE REMOVED FROM THE CONSTRUCTION WORK ZONE WHEN THE ENGINEER DETERMINES THEY ARE NO LONGER NEEDED. WHERE THERE IS INSUFFICIENT RIGHT-OF-WAY TO PROVIDE FOR THIS REQUIRED SETBACK, THE CONTRACTOR SHALL DETERMINE THE ALTERNATE LOCATIONS AND REQUEST THE ENGINEER'S APPROVAL TO USE THEM.
- (6) THE CONTRACTOR SHALL NOT BE PERMITTED TO PARK ANY VEHICLES OR CONSTRUCTION EQUIPMENT DURING PERIODS OF INACTIVITY, WITHIN THIRTY (30) FEET OF THE EDGE OF PAVEMENT WHEN THE LANE IS OPEN TO TRAFFIC UNLESS PROTECTED BY GUARDRAIL, BRIDGE RAIL, AND/OR BARRIERS INSTALLED FOR OTHER PURPOSES FOR ROADWAYS WITH CURRENT ADT'S LESS THAN 1500 AND DESIGN SPEED OF LESS THAN 60 MPH. THIS DISTANCE SHALL BE INCREASED TO FORTY-FIVE (45) FEET FOR ROADWAYS WITH CURRENT ADT'S OF 1500 OR GREATER AND DESIGN SPEED OF 60 MPH OR GREATER OR ON THE OUTSIDE OF A HORIZONTAL CURVE. PRIVATELY OWNED VEHICLES SHALL NOT BE ALLOWED TO PARK WITHIN THIRTY (30) FEET OF AN OPEN TRAFFIC LANE AT ANY TIME UNLESS PROTECTED AS DESCRIBED ABOVE FOR ROADWAYS WITH CURRENT ADT'S LESS THAN 1500 AND DESIGN SPEED OF LESS THAN 60 MPH. THIS DISTANCE SHALL BE INCREASED TO FORTY-FIVE (45) FEET FOR ROADWAYS WITH CURRENT ADT'S OF 1500 OR GREATER AND DESIGN SPEED OF 60 MPH OR GREATER OR ON THE OUTSIDE OF A HORIZONTAL CURVE. WHERE THERE IS INSUFFICIENT RIGHT-OF-WAY TO PROVIDE FOR THIS REQUIRED SETBACK, THE CONTRACTOR SHALL DETERMINE THE ALTERNATE LOCATIONS AND REQUEST THE ENGINEER'S APPROVAL TO USE THEM.
- (7) ALL DETCUR AND CONSTRUCTION SIGNING SHALL BE IN STRICT ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
- (8) ALL DETCOURS SHALL BE PAVED, STRIPED, SIGNED, AND FLEXIBLE DRUMS ARE TO BE IN PLACE BEFORE IT IS OPENED TO TRAFFIC.
- (9) THE CONTRACTOR SHALL BE RESPONSIBLE FOR STAKING CONSTRUCTION SIGNS. THE COST OF THIS WORK SHALL BE INCLUDED IN ITEM NO. 712-06, SIGNS (CONSTRUCTION), S.F.

TYPE	YEAR	PROJECT NO.	SHEET NO.
RESURF.	2024	STP/HSIP-322(22)	2C



STATE OF TENNESSEE  
DEPARTMENT OF TRANSPORTATION

GENERAL  
NOTES



# SPECIAL NOTES

## MISCELLANEOUS

- (1) ALL GUARDRAIL, GUARDRAIL POSTS AND SIGNS WHICH INTERFERE WITH CONSTRUCTION WILL BE REMOVED AND STORED BY STATE FORCES.
- (2) ALL SIGNING AND PAVEMENT MARKINGS ARE TO BE IN ACCORDANCE WITH THE CURRENT EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

## PAVEMENT

### RESURFACING

- (1) SURFACE IS TO BE CROWNED AS DIRECTED BY THE TDOT OPERATIONS DISTRICT ENGINEER.
- (2) THE CONTRACTOR WILL PLACE THE SPOT LEVELING WHERE AND AS DIRECTED BY THE TDOT OPERATIONS DISTRICT ENGINEER.
- (3) ALL SURPLUS PATCHING, JOINT MATERIAL AND CRACK SEALANT IS TO BE REMOVED BEFORE PLACING THE FIRST LAYER OF ASPHALT.
- (4) STATE FORCES WILL REMOVE ALL RAISED PAVEMENT MARKERS, IF ANY, BEFORE RESURFACING IS BEGUN.
- (5) COLD PLANING IS TO BE DONE IMMEDIATELY PRIOR TO THE COMMENCEMENT OF PAVING OPERATIONS. COLD PLANED SURFACES ARE NOT TO BE LEFT EXPOSED FOR MORE THAN FIVE (5) CALENDAR DAYS BEFORE BEING OVERLAYED BY THE FIRST COURSE OF ASPHALT. IF NECESSARY, COLD PLANING OPERATIONS ARE TO BE SUSPENDED TO ALLOW PAVING OPERATIONS TO CATCH UP. AFTER COLD PLANING AND PRIOR TO ALLOWING USE BY TRAFFIC, THE CONTRACTOR WILL RAMP ASPHALT AROUND EXISTING UTILITIES TO ELIMINATE HAZARD TO VEHICLES. ALL COLD PLANING REQUIRED ON CITY STREETS OR SIDE ROADS WILL BE PAID FOR AT THE UNIT PRICE BID FOR ITEM NO. 415-01.02.
- (6) THE CONTRACTOR SHALL TAKE EXTREME CARE WHEN COLD PLANNING THE EXISTING ASPHALT OFF BRIDGE DECKS AS NOT TO DAMAGE THE EXISTING DECK SEALANT AND/OR EXPANSION JOINT MEMBERS (STEEL PLATES, BARS, AND/OR HEADERS). IF DAMAGE DOES OCCUR THE CONTRACTOR SHALL BE RESPONSIBLE FOR NECESSARY REPAIRS ON ALL DAMAGED MEMBERS TO THE SATISFACTION OF THE TDOT OPERATIONS DISTRICT ENGINEER AT NO ADDITIONAL COST.

TYPE	YEAR	PROJECT NO.	SHEET NO.
RESURF.	2024	STP/HSIP-322(22)	2D

SEALED BY



01/08/2024

STATE OF TENNESSEE  
DEPARTMENT OF TRANSPORTATION

SPECIAL  
NOTES



TYPE	YEAR	PROJECT NO.	SHEET NO.
RESURF.	2024	STP/HSIP-322(22)	2E

# ENVIRONMENTAL NOTES

## SUBSECTION 1 – ENVIRONMENTAL GENERAL NOTES

### ENVIRONMENTAL GENERAL NOTES

#### NATURAL RESOURCES

- (4) THE OPERATION OF EQUIPMENT IN WATERS OF THE STATE/U.S., INCLUDING WETLANDS AND EPHEMERAL, INTERMITTENT, AND PERENNIAL STREAMS IS NOT ALLOWED.
- (9) THE CONTRACTOR SHALL TAKE APPROPRIATE STEPS PRIOR TO ANY CONSTRUCTION AND MAINTENANCE ACTIVITIES TO ENSURE THAT ENVIRONMENTAL FEATURES (E.G., STREAMS, WETLANDS, SPRINGS, ETC.) ARE NOT IMPACTED BEYOND PERMITTED LOCATIONS. IF THE CONTRACTOR OR TDOT INSPECTOR IS UNSURE OF THE IDENTITY OF AN ENVIRONMENTAL FEATURE, THE INSPECTOR SHALL CONTACT THE TDOT REGION ENVIRONMENTAL TECH GROUP IMMEDIATELY.

#### SPECIES

- (11) SHOULD CLIFF SWALLOW OR BARN SWALLOW NESTS, EGGS, OR BIRDS (YOUNG AND ADULTS) BE PRESENT, THE CONTRACTOR SHALL CONTACT THE REGIONAL ECOLOGY OFFICE TO DETERMINE IF SEASONAL RESTRICTIONS WILL BE NECESSARY. GENERALLY, BIRDS, NESTS, AND EGGS MAY NOT BE DISTURBED BETWEEN APRIL 15 AND JULY 31. FROM AUGUST 1 TO APRIL 14, NESTS CAN BE REMOVED OR DESTROYED SO LONG AS BIRDS OR EGGS ARE NOT PRESENT, AND MEASURES IMPLEMENTED TO PREVENT FUTURE NEST BUILDING AT THE SITE (I.E., CLOSING OFF AREA USING NETTING).
- (12) IF THE REMOVAL OF ANY TREES WITH A DIAMETER AT BREAST HEIGHT (DBH) GREATER THAN 3 INCHES IS DEEMED NECESSARY THE TDOT SUPERVISOR SHALL CONTACT THE TDOT ENVIRONMENTAL DIVISION, ECOLOGY SECTION IMMEDIATELY.

#### PERMITS, PLANS & RECORDS

- (15) IF A CHANGE IN PROJECT SCOPE OCCURS DURING CONSTRUCTION, INCLUDING VALUE ENGINEERING, THE TDOT PERMIT SECTION SHALL BE CONTACTED TO DETERMINE WHETHER PERMIT REVISIONS ARE NEEDED. THE ROADWAY DESIGN DIVISION SHALL BE CONTACTED TO DETERMINE IF ANY PLAN REVISIONS ARE NEEDED.

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STATE OF TENNESSEE  
DEPARTMENT OF TRANSPORTATION

ENVIRONMENTAL  
NOTES



**SUBSECTION 3 – EROSION PREVENTION AND SEDIMENT CONTROL GENERAL NOTES**

**EROSION PREVENTION AND SEDIMENT CONTROL GENERAL NOTES**

**DISTURBED AREA**

- (1) IF DISTURBED ACREAGE IS EQUAL TO ONE ACRE OR MORE, PLEASE CONTACT TDOT ENVIRONMENTAL DIVISION, PERMITS SECTION AS SOON AS POSSIBLE BECAUSE AN NPDES PERMIT WILL BE REQUIRED.

**SEDIMENT CONTROL**

- (6) EPSC MEASURES SHALL BE INSTALLED AND FUNCTIONAL PRIOR TO ANY EARTH MOVING OPERATIONS AND SHALL BE MAINTAINED THROUGHOUT THE CONSTRUCTION PERIOD EXCEPT AS SUCH WORK MAY BE NECESSARY TO INSTALL EPSC MEASURES.
- (8) THE CONTRACTOR SHALL ESTABLISH AND MAINTAIN A PROACTIVE METHOD TO PREVENT THE OFFSITE MIGRATION OR DEPOSIT OF SEDIMENT OFF THE PROJECT LIMITS (E.G. R.O.W., EASEMENTS, ETC.), INTO WATERS OF THE STATE/U.S., OR ONTO ROADWAYS USED BY THE GENERAL PUBLIC. IF SEDIMENT ESCAPES THE CONSTRUCTION SITE, OFFSITE ACCUMULATIONS OF SEDIMENT THAT HAVE NOT REACHED A STREAM MUST BE REMOVED AT A FREQUENCY SUFFICIENT TO MINIMIZE OFFSITE IMPACTS (E.G., FUGITIVE SEDIMENT THAT HAS ESCAPED THE CONSTRUCTION SITE AND HAS COLLECTED IN A STREET MUST BE REMOVED SO THAT IT IS NOT SUBSEQUENTLY WASHED INTO STORM SEWERS AND STREAMS BY THE NEXT RAIN AND/OR SO THAT IT DOES NOT POSE A SAFETY HAZARD TO USERS OF PUBLIC STREETS). ARRANGEMENTS CONCERNING REMOVAL OF SEDIMENT ON ADJOINING PROPERTY MUST BE NEGOTIATED WITH THE ADJOINING PROPERTY OWNER BEFORE REMOVAL OF SEDIMENT.

**GOOD HOUSEKEEPING MEASURES & WASTE DISPOSAL**

- (29) THE CONTRACTOR SHALL ESTABLISH AND MAINTAIN A PROACTIVE METHOD TO PREVENT LITTER AND CONSTRUCTION WASTES FROM ENTERING WATERS OF THE STATE/U.S. THESE MATERIALS SHALL BE REMOVED FROM STORMWATER EXPOSURE PRIOR TO ANTICIPATED STORM EVENTS OR BEFORE BEING CARRIED OFFSITE BY WIND, OR OTHERWISE PREVENTED FROM BECOMING A POLLUTANT SOURCE FOR STORMWATER DISCHARGES. AFTER USE, MATERIALS USED FOR EPSC SHALL BE REMOVED FROM THE SITE.
- (30) THE CONTRACTOR SHALL TAKE APPROPRIATE STEPS TO ENSURE THAT PETROLEUM PRODUCTS OR OTHER CHEMICAL POLLUTANTS ARE PREVENTED FROM ENTERING WATERS OF THE STATE/U.S. ALL EQUIPMENT REFUELING, SERVICING, AND STAGING AREAS SHALL COMPLY WITH ALL LOCAL, STATE, AND FEDERAL LAWS, RULES, REGULATIONS, AND ORDINANCES, INCLUDING THOSE OF THE NATIONAL FIRE PROTECTION ASSOCIATION. APPROPRIATE CONTAINMENT MEASURES FOR THESE AREAS SHALL BE USED.
- (31) CONTRACTORS SHALL PROVIDE DESIGNATED TRUCK WASHOUT AREAS ON THE SITE. THESE AREAS MUST BE SELF CONTAINED, NOT CONNECTED TO ANY STORMWATER OUTLET OF THE SITE, AND PROPERLY SIGNED. WASH DOWN OR WASTE DISCHARGE OF CONCRETE TRUCKS SHALL NOT BE PERMITTED ONSITE UNLESS PROPER SETTLEMENT AREAS HAVE BEEN PROVIDED IN ACCORDANCE WITH BOTH STATE AND FEDERAL REGULATIONS.
- (32) WHEEL WASH WATER SHALL BE COLLECTED AND ALLOWED TO SETTLE OUT SUSPENDED SOLIDS PRIOR TO DISCHARGE. WHEEL WASH WATER SHALL NOT BE DISCHARGED DIRECTLY INTO ANY STORMWATER SYSTEM OR STORMWATER TREATMENT SYSTEM.
- (33) IF PORTABLE SANITARY FACILITIES ARE PROVIDED ON CONSTRUCTION SITES, SANITARY WASTE SHALL BE COLLECTED FROM THE PORTABLE UNITS IN A TIMELY MANNER BY A LICENSED WASTE MANAGEMENT CONTRACTOR OR AS REQUIRED BY ANY REGULATIONS. THE CONTRACTOR SHALL OBTAIN ANY AND ALL NECESSARY PERMITS TO DISPOSE OF SANITARY WASTE.
- (34) ONLY CONSTRUCTION PRODUCTS NEEDED SHALL BE STORED ONSITE BY THE CONTRACTOR. THE CONTRACTOR SHALL STORE ALL MATERIALS UNDER COVER AND IN APPROPRIATE CONTAINERS. PRODUCTS MUST BE STORED IN ORIGINAL CONTAINERS AND LABELED. MATERIAL MIXING SHALL BE CONDUCTED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. THE CONTRACTOR'S RESPONSIBLE PARTY SHALL INSPECT MATERIALS STORAGE AREAS REGULARLY TO ENSURE PROPER USE AND DISPOSAL.
- (35) WHEN POSSIBLE, ALL PRODUCTS SHALL BE USED COMPLETELY BEFORE PROPERLY DISPOSING OF THE CONTAINER OFFSITE. THE

MANUFACTURER'S DIRECTIONS FOR DISPOSAL OF MATERIALS AND CONTAINERS SHALL BE FOLLOWED.

- (36) ALL PAINT CONTAINERS SHALL BE TIGHTLY SEALED AND STORED WHEN NOT REQUIRED FOR USE. EXCESS PAINT SHALL BE DISPOSED OF ACCORDING TO THE MANUFACTURER'S INSTRUCTIONS AND APPLICABLE STATE AND LOCAL REGULATIONS.
- (37) ALL HAZARDOUS WASTE MATERIALS SHALL BE DISPOSED OF IN A MANNER WHICH IS COMPLIANT WITH LOCAL OR STATE REGULATIONS. SITE PERSONNEL SHALL BE INSTRUCTED IN THESE PRACTICES, AND THE INDIVIDUAL DESIGNATED AS THE CONTRACTOR'S RESPONSIBLE PARTY SHALL BE RESPONSIBLE FOR SEEING THAT THESE PRACTICES ARE FOLLOWED. THE CONTRACTOR SHALL OBTAIN ANY AND ALL NECESSARY PERMITS TO DISPOSE OF HAZARDOUS MATERIAL.
- (38) OPEN BURNING IS PROHIBITED UNLESS IT IS SPECIFICALLY ALLOWED BY LAW. IF ALLOWED, NATURAL VEGETATION, TREES, AND UNTREATED LUMBER SHALL BE THE ONLY MATERIALS THAT CAN BE OPEN BURNED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL APPLICABLE STATE AND LOCAL PERMITS PRIOR TO ANY BURNING.
- (39) DISPOSAL OF ON SITE VEGETATION AND TREES BY CHIPPING THEM INTO MULCH IS PREFERABLE TO OPEN BURNING. THIS MULCH MAY BE USED AS AN ONSITE SOIL STABILIZATION MEASURE WHERE APPROPRIATE.
- (40) WASTE MATERIAL (EARTH, ROCK, ASPHALT, CONCRETE, ETC.) NOT REQUIRED FOR THE CONSTRUCTION OF THE PROJECT WILL BE DISPOSED OF BY THE CONTRACTOR. IMPACTS TO WATERS OF THE STATE/U.S. SHALL BE AVOIDED IF POSSIBLE. IF UNAVOIDABLE, THE CONTRACTOR WILL OBTAIN ANY AND ALL NECESSARY PERMITS INCLUDING, BUT NOT LIMITED TO NPDES, AQUATIC RESOURCES ALTERATION PERMIT(S), CORPS OF ENGINEERS SECTION 404 PERMITS, AND TVA SECTION 26A PERMITS TO DISPOSE OF WASTE MATERIALS.

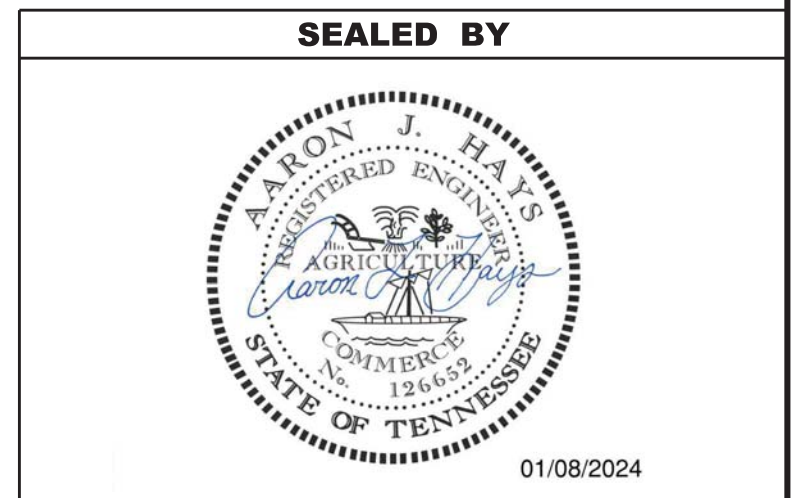
**SPILL PREVENTION, MANAGEMENT & NOTIFICATION**

- (44) ALL ONSITE VEHICLES SHALL BE MONITORED FOR LEAKS AND RECEIVE REGULAR PREVENTIVE MAINTENANCE TO REDUCE THE CHANCE OF LEAKAGE AND SPILLS.
- (45) FOR ALL HAZARDOUS MATERIALS STORED ONSITE, THE MANUFACTURER'S RECOMMENDED METHODS FOR SPILL CLEAN UP SHALL BE CLEARLY POSTED. SITE PERSONNEL SHALL BE MADE AWARE OF THE PROCEDURES AND THE LOCATIONS OF THE INFORMATION AND CLEANUP SUPPLIES.
- (46) APPROPRIATE CLEANUP MATERIALS AND EQUIPMENT SHALL BE MAINTAINED BY THE CONTRACTOR IN THE MATERIALS STORAGE AREA ONSITE AND UNDER COVER. SPILL RESPONSE EQUIPMENT SHALL BE INSPECTED AND MAINTAINED BY THE CONTRACTOR AS NECESSARY TO REPLACE ANY MATERIALS USED IN SPILL RESPONSE ACTIVITIES.
- (47) ALL SPILLS SHALL BE CLEANED IMMEDIATELY AFTER DISCOVERY AND THE MATERIALS DISPOSED OF PROPERLY. THE SPILL AREA SHALL BE KEPT WELL VENTILATED AND PERSONNEL WILL WEAR APPROPRIATE PROTECTIVE CLOTHING TO PREVENT INJURY FROM CONTACT WITH A HAZARDOUS SUBSTANCE.
- (48) THE CONTRACTOR'S RESPONSIBLE PARTY SHALL BE THE SPILL PREVENTION AND CLEANUP COORDINATOR. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT THE SITE SUPERINTENDENT HAS HAD APPROPRIATE TRAINING FOR HAZARDOUS MATERIALS HANDLING, SPILL MANAGEMENT, AND CLEANUP.
- (49) IF AN OIL SHEEN IS OBSERVED ON SURFACE WATER (E.G. SETTLING PONDS, DETENTION PONDS, SWALES), ACTION SHALL BE TAKEN IMMEDIATELY TO REMOVE THE MATERIAL CAUSING THE SHEEN. THE CONTRACTOR SHALL USE APPROPRIATE MATERIALS TO CONTAIN AND ABSORB THE SPILL. THE SOURCE OF THE OIL SHEEN WILL ALSO BE IDENTIFIED AND REMOVED OR REPAIRED AS NECESSARY TO PREVENT FURTHER RELEASES.
- (50) FERTILIZERS SHALL BE APPLIED ONLY IN THE AMOUNTS SPECIFIED. ONCE APPLIED, FERTILIZERS SHALL BE WORKED INTO THE SOIL TO LIMIT THE EXPOSURE TO STORMWATER.
- (51) IF A SPILL OCCURS THE CONTRACTOR'S RESPONSIBLE PARTY SHALL BE RESPONSIBLE FOR COMPLETING THE SPILL REPORTING FORM AND FOR REPORTING THE SPILL TO THE TDOT PROJECT RESPONSIBLE PARTY. ALL SPILLS MUST BE REPORTED TO THE APPROPRIATE AGENCY, AND MEASURES SHALL BE TAKEN IMMEDIATELY TO PREVENT THE POLLUTION OF WATERS OF THE STATE/U.S., INCLUDING GROUNDWATER, SHOULD A SPILL OCCUR.
- (52) WHERE A RELEASE CONTAINING A HAZARDOUS SUBSTANCE IN AN AMOUNT EQUAL TO OR IN EXCESS OF A REPORTABLE QUANTITY ESTABLISHED UNDER EITHER 40 CFR 117 OR 40 CFR 302 OCCURS DURING A 24 HOUR PERIOD. SEE THE LATEST TENNESSEE GENERAL PERMIT NO.

TNR100000 STORMWATER DISCHARGES FROM CONSTRUCTION ACTIVITIES SECTION 5.1 FOR REPORTING REQUIREMENTS.

- (53) CONTRACTOR'S BULK FUEL AND PETROLEUM PRODUCTS STORED ONSITE OR ADJACENT TO THE R.O.W. IN ABOVE GROUND STORAGE CONTAINERS WITH A COMBINED CAPACITY OF 1320 GALLONS OR MORE SHALL HAVE SECONDARY CONTAINMENT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PREPARING A SPILL PREVENTION CONTROL AND COUNTERMEASURE (SPCC) PLAN FOR THE BULK STORAGE AND BE SOLELY RESPONSIBLE FOR OBTAINING ANY NECESSARY LOCAL, STATE, AND FEDERAL PERMITS. THE SPCC PLAN AND/OR PERMITS SHALL BE KEPT ONSITE AND A COPY PROVIDED TO THE TDOT PROJECT RESPONSIBLE PARTY PRIOR TO STORING 1320 GALLONS ON SITE.

TYPE	YEAR	PROJECT NO.	SHEET NO.
RESURF.	2024	STP/HSIP-322(22)	2E1



**STATE OF TENNESSEE  
DEPARTMENT OF TRANSPORTATION**

**EROSION  
PREVENTION  
AND SEDIMENT  
CONTROL NOTES**



TYPE	YEAR	PROJECT NO.	SHEET NO.
RESURF.	2024	STP/HSIP-322(22)	2F

**TRAFFIC CONTROL SIGN TABULATION (RESURFACING) (ROANE CO)**

M.U.T.C.D. SIGN NO.	LEGEND \ DESCRIPTION	SIZE IN INCHES		S.F.	TOTAL NUMBER REQUIRED	ITEM NO. 712-06 S.F.
		L	x W			
G20-1	ROAD WORK NEXT 11 MILES	48"	x 24"	8	1	3
G20-2	END ROAD WORK	48"	x 24"	8	1	3
W3-4	BE PREPARED TO STOP	48"	x 48"	16	1	16
W13-1P	ADVISORY SPEED	30"	x 30"	6	1	6
W20-1	ROAD WORK	48"	x 48"	16	15	240
W20-4	ONE LANE ROAD	48"	x 48"	16	1	16
W20-7	FLAGGER	48"	x 48"	16	1	16
<b>TOTAL</b>					<b>310</b>	

**PROPOSED GUARDRAIL (RESURFACING) (ROANE CO.)**

SIDE	LOG MILE	GUARDRAIL	TERMINAL ANCHORS	
		GUARDRAIL	TYPE 38	TYPE 38
		TRANSITION 27 IN TO 31 IN	EARTH PAD	MASH TL3 (46.875')
LT	RT	705-02.10 (EACH)	705-04.09 (EACH)	705-06.20 (EACH)
X	0.132 (ROANE SEQ. 2)	1	1	1
X	0.156 (ROANE SEQ. 2)	1	1	1
<b>TOTALS</b>		<b>2</b>	<b>2</b>	<b>2</b>

**TRAFFIC CONTROL SIGN TABULATION (RESURFACING) (LOUDON CO)**

M.U.T.C.D. SIGN NO.	LEGEND \ DESCRIPTION	SIZE IN INCHES		S.F.	TOTAL NUMBER REQUIRED	ITEM NO. 712-06 S.F.
		L	x W			
G20-1	ROAD WORK NEXT 11 MILES	48"	x 24"	8	1	8
G20-2	END ROAD WORK	48"	x 24"	8	1	8
W3-4	BE PREPARED TO STOP	48"	x 48"	16	1	16
W13-1P	ADVISORY SPEED	30"	x 30"	6	1	6
W20-1	ROAD WORK	48"	x 48"	16	13	208
W20-4	ONE LANE ROAD	48"	x 48"	16	1	16
W20-7	FLAGGER	48"	x 48"	16	1	16
<b>TOTAL</b>					<b>278</b>	

**PROPOSED GUARDRAIL (RESURFACING) (LOUDON CO.)**

SIDE	LOG MILE	GUARDRAIL	TERMINAL ANCHORS	
		GUARDRAIL	TYPE 38	TYPE 38
		TRANSITION 27 IN TO 31 IN	EARTH PAD	MASH TL3 (46.875')
LT	RT	705-02.10 (EACH)	705-04.09 (EACH)	705-06.20 (EACH)
X	1.260 (LOUDON SEQ. 2)	1	1	1
X	1.270 (LOUDON SEQ. 2)	1	1	1
X	1.363 (LOUDON SEQ. 2)	1	1	1
X	1.480 (LOUDON SEQ. 2)	1	1	1
X	1.533 (LOUDON SEQ. 2)	1	1	1
X	1.685 (LOUDON SEQ. 2)	1	1	1
X	1.745 (LOUDON SEQ. 2)	1	1	1
X	2.060 (LOUDON SEQ. 2)	1	1	1
X	2.070 (LOUDON SEQ. 2)	1	1	1
X	2.483 (LOUDON SEQ. 2)	1	1	1
X	2.520 (LOUDON SEQ. 2)	1	1	1
X	2.780 (LOUDON SEQ. 2)	1	1	1
X	2.910 (LOUDON SEQ. 2)	1	1	1
X	3.150 (LOUDON SEQ. 2)	1	1	1
X	3.190 (LOUDON SEQ. 2)	1	1	1
X	3.240 (LOUDON SEQ. 2)	1	1	1
X	3.250 (LOUDON SEQ. 2)	1	1	1
X	3.260 (LOUDON SEQ. 2)	1	1	1
X	3.270 (LOUDON SEQ. 2)	1	1	1
X	3.270 (LOUDON SEQ. 2)	1	1	1
X	3.310 (LOUDON SEQ. 2)	1	1	1
<b>TOTALS</b>		<b>21</b>	<b>21</b>	<b>21</b>

**TRAFFIC CONTROL SIGN TABULATION (RESURFACING) (MONROE CO)**

M.U.T.C.D. SIGN NO.	LEGEND \ DESCRIPTION	SIZE IN INCHES		S.F.	TOTAL NUMBER REQUIRED	ITEM NO. 712-06 S.F.
		L	x W			
W3-4	BE PREPARED TO STOP	48"	x 48"	16	1	16
W13-1P	ADVISORY SPEED	30"	x 30"	6	1	6
W20-1	ROAD WORK	48"	x 48"	16	4	64
W20-4	ONE LANE ROAD	48"	x 48"	16	1	16
W20-7	FLAGGER	48"	x 48"	16	1	16
<b>TOTAL</b>					<b>118</b>	

**OPEN FRONTAGE**

COUNTY	ROUTE	BEGIN L.M.	END L.M.	DIRECTION	START	END	LENGTH (FT)	COMMENTS
ROANE	322	0	5.62	EB	1.184	1.208	380	Market
ROANE	322	0	5.62	EB	1.933	1.958	395	Market
LOUDON	322	0	3.41	EB	1.823	1.847	380	Paul's Country Store
<b>TOTAL:</b>							<b>1155</b>	

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STATE OF TENNESSEE  
DEPARTMENT OF TRANSPORTATION

TABULATED  
QUANTITIES



TYPE	YEAR	PROJECT NO.	SHEET NO.
RESURF.	2024	STP/HSIP-322(22)	3

## UTILITY

- (2) UNLESS OTHERWISE NOTED, ALL UTILITY ADJUSTMENTS WILL BE PERFORMED BY THE UTILITY OR ITS REPRESENTATIVE. THE CONTRACTOR AND UTILITY OWNERS WILL BE REQUIRED TO COOPERATE WITH EACH OTHER IN ORDER TO EXPEDITE THE WORK REQUIRED BY THIS CONTRACT. ON CONTRACTS WHERE CONSTRUCTION STAKES, LINES, AND GRADES ARE CONTRACT ITEMS, THE CONTRACTOR WILL BE REQUIRED TO PROVIDE RIGHT-OF-WAY OR SLOPE STAKES, DITCH OR STREAM BED GRADES, OR OTHER ESSENTIAL SURVEY STAKING TO PREVENT CONFLICTS WITH THE HIGHWAY CONSTRUCTION. FREQUENTLY, THIS WILL BE REQUIRED AS THE FIRST ITEM OF WORK AND AT ANY LOCATION ON THE PROJECT DIRECTED BY THE ENGINEER.
- (3) THE CONTRACTOR WILL PROVIDE ALL NECESSARY PROTECTIVE MEASURES TO SAFEGUARD EXISTING UTILITIES FROM DAMAGE DURING CONSTRUCTION OF THIS PROJECT. IN THE EVENT THAT SPECIAL EQUIPMENT IS REQUIRED TO WORK OVER AND AROUND THE UTILITIES, THE CONTRACTOR WILL BE REQUIRED TO FURNISH SUCH EQUIPMENT. THE COST OF PROTECTING UTILITIES FROM DAMAGE AND FURNISHING SPECIAL EQUIPMENT WILL BE INCLUDED IN THE PRICE BID FOR OTHER ITEMS OF CONSTRUCTION.
- (4) PRIOR TO SUBMITTING HIS BID, THE CONTRACTOR WILL BE SOLELY RESPONSIBLE FOR CONTACTING OWNERS OF ALL AFFECTED UTILITIES IN ORDER TO DETERMINE THE EXTENT TO WHICH UTILITY RELOCATIONS AND/OR ADJUSTMENTS WILL HAVE UPON THE SCHEDULE OF WORK FOR THE PROJECT. WHILE SOME WORK MAY BE REQUIRED 'AROUND' UTILITY FACILITIES THAT WILL REMAIN IN PLACE, OTHER UTILITY FACILITIES MAY NEED TO BE ADJUSTED CONCURRENTLY WITH THE CONTRACTOR'S OPERATIONS. ADVANCE CLEAR CUTTING MAY BE REQUIRED BY THE ENGINEER AT ANY LOCATION WHERE CLEARING IS CALLED FOR IN THE SPECIFICATIONS AND CLEAR CUTTING IS NECESSARY FOR A UTILITY RELOCATION. ANY ADDITIONAL COST WILL BE INCLUDED IN THE UNIT PRICE BID FOR THE CLEARING ITEM SPECIFIED IN THE PLANS.
- (5) THE CONTRACTOR SHALL NOTIFY EACH INDIVIDUAL UTILITY OWNER OF HIS PLAN OF OPERATION IN THE AREA OF THE UTILITIES. PRIOR TO COMMENCING WORK, THE CONTRACTOR SHALL CONTACT THE UTILITY OWNERS AND REQUEST THEM TO PROPERLY LOCATE THEIR RESPECTIVE UTILITY ON THE GROUND. THIS NOTIFICATION SHALL BE GIVEN AT LEAST THREE (3) BUSINESS DAYS PRIOR TO COMMENCEMENT OF OPERATIONS AROUND THE UTILITY IN ACCORDANCE WITH TCA 65-31-106. NOTIFICATION BY CALLING THE TENNESSEE ONE CALL SYSTEM, INC AT 1-800-351-1111 WILL BE REQUIRED.

## UTILITY OWNERS

### CABLE:

#### XFINITY

5720 ASHEVILLE HWY.  
KNOXVILLE, TN 37924  
CONTACT: DREW MCCAWLEY  
OFFICE PHONE: (865) 862-5061  
CELL PHONE: (865) 312-2340  
Email: james\_mccawley@cable.comcast.com

### ELECTRIC:

#### LOUDON UTILITIES BOARD

P.O. BOX 69  
2480 Highway 72 North  
LOUDON, TN 37774  
CONTACT: BILL WATKINS  
OFFICE PHONE: (865) 458-2091  
CELL PHONE: (865) 458-7561  
Email: bill.watkins@loudonUtilities.org

### GAS:

#### LOUDON UTILITIES BOARD

P.O. BOX 69  
2480 Highway 72 North  
LOUDON, TN 37774  
CONTACT: TY ROSS  
OFFICE PHONE: (865) 458-2091  
CELL PHONE: (865) 936-7059  
Email: ty.ross@cityofloudontn.org

### TELEPHONE:

#### AT&T

307 DR. MARTIN LUTHER KING JR PARKWAY  
MORRISTOWN, TN 37813  
CONTACT: SAM TRENT  
OFFICE PHONE: (423) 317-8804  
CELL PHONE: (865) 789-4715  
Email: st3528@att.com

### WATER:

#### LOUDON UTILITIES BOARD

P.O. BOX 69  
2480 Highway 72 North  
LOUDON, TN 37774  
CONTACT:  
OFFICE PHONE: (865) 458-2091  
CELL PHONE: (865) 936-7059  
Email: ty.ross@cityofloudontn.org

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STATE OF TENNESSEE  
DEPARTMENT OF TRANSPORTATION

UTILITY NOTES  
AND  
UTILITY OWNERS



# PAVEMENT EDGE DROP-OFF TRAFFIC CONTROL NOTES

TYPE	YEAR	PROJECT NO.	SHEET NO.
RESURF.	2024	STP/HSIP-322(22)	4

## A. DIFFERENCES IN ELEVATION BETWEEN ADJACENT TRAFFIC LANES OR TRAFFIC LANE AND SHOULDER WHERE THE TRAFFIC LANE IS BEING USED BY TRAFFIC, CAUSED BY BASE, PAVING OR RESURFACING:

1. DIFFERENCES IN ELEVATION BETWEEN ADJACENT ROADWAY ELEMENTS GREATER THAN 0.75 INCH AND NOT EXCEEDING 1.75 INCHES:
  - a. WARNING SIGNS, UNEVEN LANES (W8-11) AND/OR SHOULDER DROP-OFF WITH PLAQUE (W8-17 AND W8-17P), SHALL BE PLACED IN ADVANCE OF AND THROUGHOUT THE EXPOSED AREA. MAXIMUM SPACING BETWEEN SIGNS SHALL BE 2,000 FEET WITH A MINIMUM OF 2 SIGNS PER EXPOSED AREA. WHERE UNEVEN PAVEMENT IS ENCOUNTERED, SIGNS SHALL BE PLACED ON EACH SIDE OF THE ROADWAY.
  - b. DIFFERENCES IN ELEVATION BETWEEN ADJACENT TRAFFIC LANES BEING UTILIZED BY TRAFFIC CAUSED BY ADDED PAVEMENT SHALL BE ELIMINATED WITHIN THREE WORKDAYS.
  - c. DIFFERENCES IN ELEVATION BETWEEN ADJACENT TRAFFIC LANES BEING UTILIZED BY TRAFFIC CAUSED BY COLD PLANING SHALL BE ELIMINATED WITHIN THREE WORKDAYS.
  - d. WHEN THE DIFFERENCE IN ELEVATION IS BETWEEN THE TRAFFIC LANE BEING UTILIZED BY TRAFFIC AND SHOULDER THE DIFFERENCE IN ELEVATION SHALL BE ELIMINATED WITHIN SEVEN WORKDAYS AFTER THE CONDITION IS CREATED.
2. DIFFERENCES IN ELEVATION BETWEEN ADJACENT ROADWAY ELEMENTS GREATER THAN 1.75 INCHES AND NOT EXCEEDING 6 INCHES, TRAFFIC IS NOT TO BE ALLOWED TO TRAVERSE THIS DIFFERENCE IN ELEVATION.
  - a. SEPARATION SHALL BE ACCOMPLISHED BY DRUMS, BARRICADES OR OTHER APPROVED DEVICES IN ACCORDANCE WITH THE FOLLOWING:
    - (1) WHERE POSTED SPEEDS ARE 50 MPH OR GREATER, SPACING OF THE PROTECTIVE DEVICES SHALL NOT EXCEED 100 FEET.
    - (2) WHERE POSTED SPEEDS ARE LESS THAN 50 MPH, THE MAXIMUM SPACING OF THE PROTECTIVE DEVICES IN FEET SHALL NOT EXCEED TWICE THE POSTED SPEED IN MILES PER HOUR OR 50 FEET, WHICHEVER SPACING IS GREATER.
  - b. IF THE DIFFERENCE IN ELEVATION IS ELIMINATED OR DECREASED TO 2 INCHES OR LESS BY THE END OF EACH WORKDAY, CONES MAY BE USED DURING DAYLIGHT HOURS IN LIEU OF DRUMS, BARRICADES OR OTHER APPROVED PROTECTIVE DEVICES MENTIONED IN PARAGRAPH a, PROVIDED WARNING SIGNS ARE ERECTED. WARNING SIGNS (UNEVEN LANES AND/OR SHOULDER DROP-OFF) SHALL BE PLACED IN ADVANCE OF AND THROUGHOUT THE EXPOSED AREA. MAXIMUM SPACING BETWEEN SIGNS SHALL BE 2,000 FEET WITH A MINIMUM OF 2 SIGNS PER EXPOSED AREA. WHERE UNEVEN PAVEMENT IS ENCOUNTERED, SIGNS SHALL BE PLACED ON EACH SIDE OF THE ROADWAY.
  - c. WHEN THE DIFFERENCE IN ELEVATION IS BETWEEN THE THROUGH TRAFFIC LANE AND THE SHOULDER AND THE ELEVATION DIFFERENCE IS LESS THAN 3 INCHES, THE CONTRACTOR MAY USE WARNING SIGNS AND/OR PROTECTIVE DEVICES AS APPLICABLE AND APPROVED BY THE REGIONAL TRAFFIC ENGINEER. SEE PARAGRAPH a REGARDING USE OF DRUMS, BARRICADES OR OTHER APPROVED PROTECTIVE DEVICES. WARNING SIGNS (UNEVEN LANES AND/OR SHOULDER DROP-OFF) WILL BE PLACED IN ADVANCE OF AND THROUGHOUT THE EXPOSED AREA. MAXIMUM SPACING BETWEEN SIGNS SHALL BE 2,000 FEET WITH A MINIMUM OF 2 SIGNS PER EXPOSED AREA. WHERE UNEVEN PAVEMENT IS ENCOUNTERED, SIGNS SHALL BE PLACED ON EACH SIDE OF THE ROADWAY.

IN THESE SITUATIONS, THE CONTRACTOR SHALL LIMIT HIS OPERATIONS TO ONE WORK ZONE NOT EXCEEDING 2 MILES IN LENGTH UNLESS OTHERWISE NOTED ON THE PLANS OR APPROVED BY THE ENGINEER. ONCE THE CONTRACTOR BEGINS WORK IN A WORK ZONE, A CONTINUOUS OPERATION SHALL BE MAINTAINED UNTIL THE DIFFERENCE IN ELEVATION IS ELIMINATED. SIMULTANEOUS WORK ON SEPARATE ROADWAYS OF DIVIDED HIGHWAYS WILL BE CONSIDERED INDEPENDENTLY IN REGARD TO RESTRICTION OF WORK ZONE ACTIVITY.

## 3. DIFFERENCES IN ELEVATION BETWEEN ADJACENT ROADWAY ELEMENTS GREATER THAN 6 INCHES BUT NOT EXCEEDING 18 INCHES, THE CONTRACTOR, WITH THE ENGINEER'S APPROVAL, MAY UTILIZE ONE OF THE FOLLOWING:

- a. THE CONTRACTOR SHALL ACCOMPLISH SEPARATION BY DRUMS, BARRICADES OR OTHER APPROVED DEVICES IN ACCORDANCE WITH THE FOLLOWING:
  - (1) WHERE POSTED SPEEDS ARE 50 MPH OR GREATER, SPACING OF THE PROTECTIVE DEVICES SHALL NOT EXCEED 100 FEET.
  - (2) WHERE POSTED SPEEDS ARE LESS THAN 50 MPH, THE MAXIMUM SPACING OF THE PROTECTIVE DEVICES IN FEET SHALL NOT EXCEED TWICE THE POSTED SPEED IN MILES PER HOUR OR 50 FEET, WHICHEVER SPACING IS GREATER.

IN ORDER TO USE THIS METHOD, THE CONTRACTOR MUST REDUCE THE DIFFERENCE IN ELEVATION TO 6 INCHES OR LESS BY THE END OF THE WORKDAY THAT THE CONDITION IS CREATED.

- b. THE CONTRACTOR SHALL PROVIDE DRUMS, BARRICADES OR OTHER APPROVED SEPARATION DEVICES AS SPECIFIED IN PARAGRAPH a, AND CONSTRUCT A STONE WEDGE WITH A 4:1 SLOPE, OR FLATTER, TO ELIMINATE THE VERTICAL OFFSET IF THE LOWER ELEVATION IS AT OR BELOW SUBGRADE AT THE END OF EACH DAY.
- c. THE CONTRACTOR SHALL PROVIDE DRUMS, BARRICADES OR OTHER APPROVED SEPARATION DEVICES AS SPECIFIED IN PARAGRAPH a AND IF THE LOWER ELEVATION IS BASE STONE OR ASPHALT PAVEMENT, PLACEMENT OF SUBSEQUENT LAYERS OF PAVEMENT MUST BEGIN THE NEXT WORK DAY AND PROGRESS CONTINUOUSLY UNTIL THE DIFFERENCE IN ELEVATION IS ELIMINATED OR REDUCED TO SIX INCHES OR LESS.
- d. THE CONTRACTOR SHALL PROVIDE SEPARATION BY PORTABLE BARRIER RAIL.

FOR PRECEDING CONDITIONS a, b, AND c, THE CONTRACTOR SHALL USE THE SHOULDER DROP-OFF WARNING SIGN WITH PLAQUE (W8-17 AND W8-17P). IT SHALL BE PLACED IN ADVANCE OF AND THROUGHOUT THE EXPOSED AREA. MAXIMUM SPACING BETWEEN THE SIGNS SHALL BE 2,000 FEET WITH A MINIMUM OF 2 SIGNS PER EXPOSED AREA. IN THESE SITUATIONS, THE CONTRACTOR SHALL LIMIT HIS OPERATIONS TO ONE WORK ZONE NOT EXCEEDING 1 MILE IN LENGTH UNLESS OTHERWISE NOTED ON THE PLANS OR APPROVED BY THE ENGINEER. ONCE THE CONTRACTOR BEGINS WORK IN A WORK ZONE, A CONTINUOUS OPERATION SHALL BE MAINTAINED UNTIL THE DIFFERENCE IS ELIMINATED. SIMULTANEOUS WORK ON SEPARATE ROADWAYS OF DIVIDED HIGHWAYS WILL BE CONSIDERED INDEPENDENTLY IN REGARD TO RESTRICTION OF WORK ZONE ACTIVITY.

## 4. FOR DIFFERENCES IN ELEVATION BETWEEN ADJACENT ROADWAY ELEMENTS GREATER THAN 18 INCHES.

SEPARATION WILL BE PROVIDED BY USE OF PORTABLE BARRIER RAIL.

IN THIS SITUATION THE CONTRACTOR SHALL LIMIT HIS OPERATIONS TO ONE WORK ZONE NOT EXCEEDING 1 MILE IN LENGTH UNLESS OTHERWISE NOTED ON THE PLANS OR APPROVED BY THE ENGINEER. ONCE THE CONTRACTOR BEGINS WORK IN A WORK ZONE, A CONTINUOUS OPERATION SHALL BE MAINTAINED UNTIL THE DIFFERENCE IN ELEVATION IS ELIMINATED. SIMULTANEOUS WORK ON SEPARATE ROADWAYS OF DIVIDED HIGHWAYS WILL BE CONSIDERED INDEPENDENTLY IN REGARD TO RESTRICTION OF WORK ZONE ACTIVITY.

## B. IF THE DIFFERENCE IN ELEVATION IS WITHIN 30 FEET OF THE NEAREST TRAFFIC LANE BEING USED BY TRAFFIC CAUSED BY GRADING, EXCAVATION FOR UTILITIES, DRAINAGE STRUCTURES, UNDERCUTTING, ETC.:

1. IF THE DIFFERENCE IN ELEVATION IS WITHIN 8 FEET OF THE NEAREST TRAFFIC LANE WITH DIFFERENCE IN ELEVATION GREATER THAN 3/4 INCH AND NOT EXCEEDING 2 INCHES.
  - a. WARNING SIGNS (UNEVEN LANES AND/OR SHOULDER DROP-OFF) SHALL BE PLACED IN ADVANCE OF AND THROUGHOUT THE EXPOSED AREA. MAXIMUM SPACING BETWEEN SIGNS SHALL BE 2,000 FEET WITH A MINIMUM OF 2 SIGNS PER EXPOSED AREA. WHERE UNEVEN PAVEMENT IS ENCOUNTERED, SIGNS SHALL BE PLACED ON EACH SIDE OF THE ROADWAY.
2. IF THE DIFFERENCE IN ELEVATION IS WITHIN 8 FEET OF THE NEAREST TRAFFIC LANE WITH DIFFERENCE IN ELEVATION GREATER THAN 2 INCHES AND NOT EXCEEDING 6 INCHES:
  - a. SEPARATION SHALL BE ACCOMPLISHED BY DRUMS, BARRICADES OR OTHER APPROVED DEVICES IN ACCORDANCE WITH THE FOLLOWING:
    - (1) WHERE POSTED SPEEDS ARE 50 MPH OR GREATER, SPACING OF THE PROTECTIVE DEVICES SHALL NOT EXCEED 100 FEET.
    - (2) WHERE POSTED SPEEDS ARE LESS THAN 50 MPH THE MAXIMUM SPACING OF THE PROTECTIVE DEVICES IN FEET SHALL NOT EXCEED TWICE THE POSTED SPEED IN MILES PER HOUR OR 50 FEET, WHICHEVER SPACING IS GREATER.
3. IF THE DIFFERENCE IN ELEVATION IS WITHIN 8 FEET OF THE NEAREST TRAFFIC LANE WITH DIFFERENCE IN ELEVATION GREATER THAN 6 INCHES:
  - a. SEPARATION SHALL BE ACCOMPLISHED BY DRUMS, BARRICADES OR OTHER APPROVED DEVICES IN ACCORDANCE WITH THE FOLLOWING:
    - (1) WHERE POSTED SPEEDS ARE 50 MPH OR GREATER, SPACING OF THE PROTECTIVE DEVICES SHALL NOT EXCEED 100 FEET.
    - (2) WHERE POSTED SPEEDS ARE LESS THAN 50 MPH THE MAXIMUM SPACING OF THE PROTECTIVE DEVICES IN FEET SHALL NOT EXCEED TWICE THE POSTED SPEED IN MILES PER HOUR OR 50 FEET, WHICHEVER SPACING IS GREATER.
  - b. ELIMINATE VERTICAL OFFSET BY CONSTRUCTING A STONE WEDGE OR GRADING TO A 4:1 SLOPE, OR FLATTER, OR USE PORTABLE BARRIER RAIL.

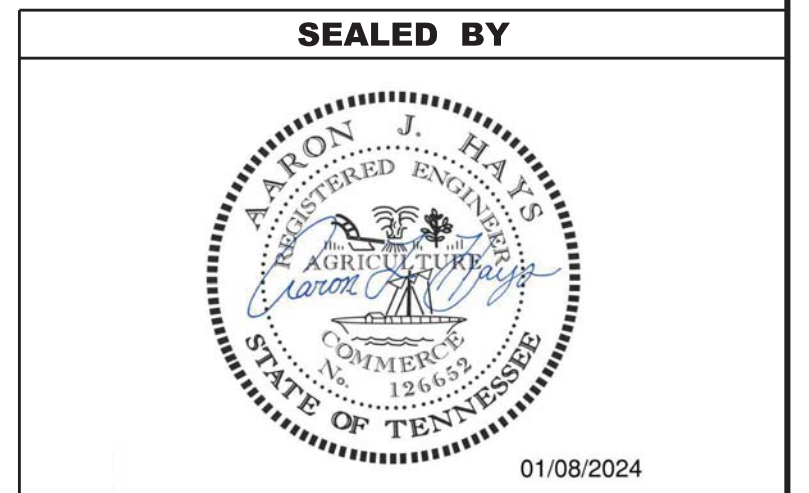
THE CONTRACTOR SHALL SCHEDULE THE WORK SO AS TO MINIMIZE THE TIME TRAFFIC IS EXPOSED TO AN ELEVATION DIFFERENCE. ONCE THE CONTRACTOR BEGINS AN ACTIVITY THAT CREATES AN ELEVATION DIFFERENCE WITHIN 8 FEET OF A TRAFFIC LANE, THE ACTIVITY SHALL BE PURSUED AS A CONTINUOUS OPERATION UNTIL THE ELEVATION DIFFERENCE IS ELIMINATED.

## C. IF THE DIFFERENCE IN ELEVATION IS FARTHER THAN 8 FEET FROM THE NEAREST TRAFFIC LANE BUT NOT MORE THAN 30 FEET FROM THE NEAREST TRAFFIC LANE:

SEPARATION SHALL BE ACCOMPLISHED BY DRUMS, BARRICADES OR OTHER APPROVED DEVICES IN ACCORDANCE WITH THE FOLLOWING:

1. WHERE POSTED SPEEDS ARE 50 MPH OR GREATER, SPACING OF THE PROTECTIVE DEVICES SHALL NOT EXCEED 100 FEET.
2. WHERE POSTED SPEEDS ARE LESS THAN 50 MPH, THE MAXIMUM SPACING OF THE PROTECTIVE DEVICES IN FEET SHALL NOT EXCEED TWICE THE POSTED SPEED IN MILES PER HOUR OR 50 FEET, WHICHEVER SPACING IS GREATER.

THE CONTRACTOR SHALL SCHEDULE THE WORK SO AS TO MINIMIZE THE TIME TRAFFIC IS EXPOSED TO AN ELEVATION DIFFERENCE. ONCE THE CONTRACTOR BEGINS AN ACTIVITY THAT CREATES AN ELEVATION DIFFERENCE, THE ACTIVITY SHALL BE PURSUED AS A CONTINUOUS OPERATION UNTIL THE ELEVATION DIFFERENCE IS ELIMINATED.



**STATE OF TENNESSEE  
DEPARTMENT OF TRANSPORTATION**

**PAVEMENT EDGE  
DROP-OFF NOTES  
FOR  
TRAFFIC CONTROL**



TYPE	YEAR	PROJECT NO.	SHEET NO.
RESURF	2024	STP/HSIP-322(22)	R1

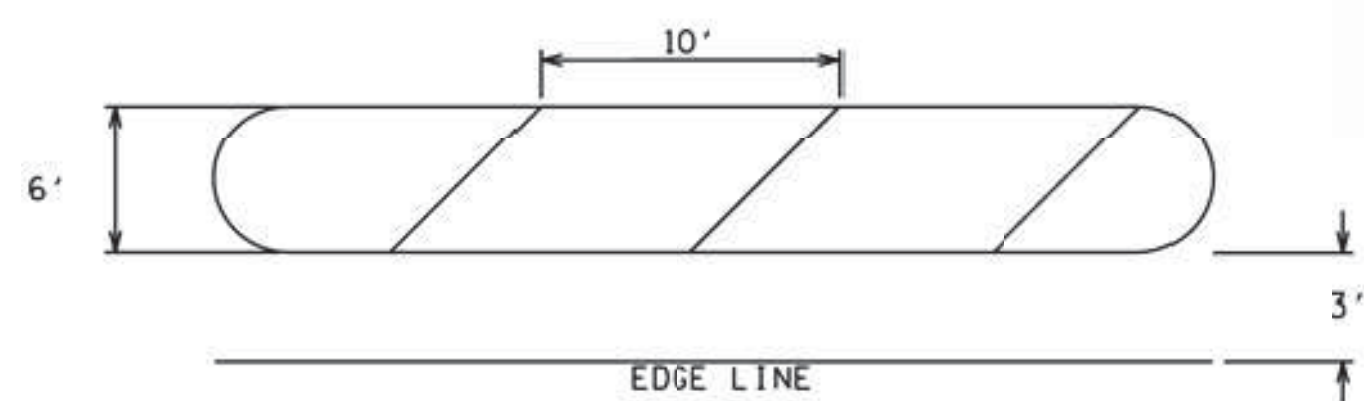


FOR REFERENCE ONLY.  
PROVIDED BY REGION 1 TRAFFIC.

SEALED BY

STATE OF TENNESSEE  
DEPARTMENT OF TRANSPORTATION

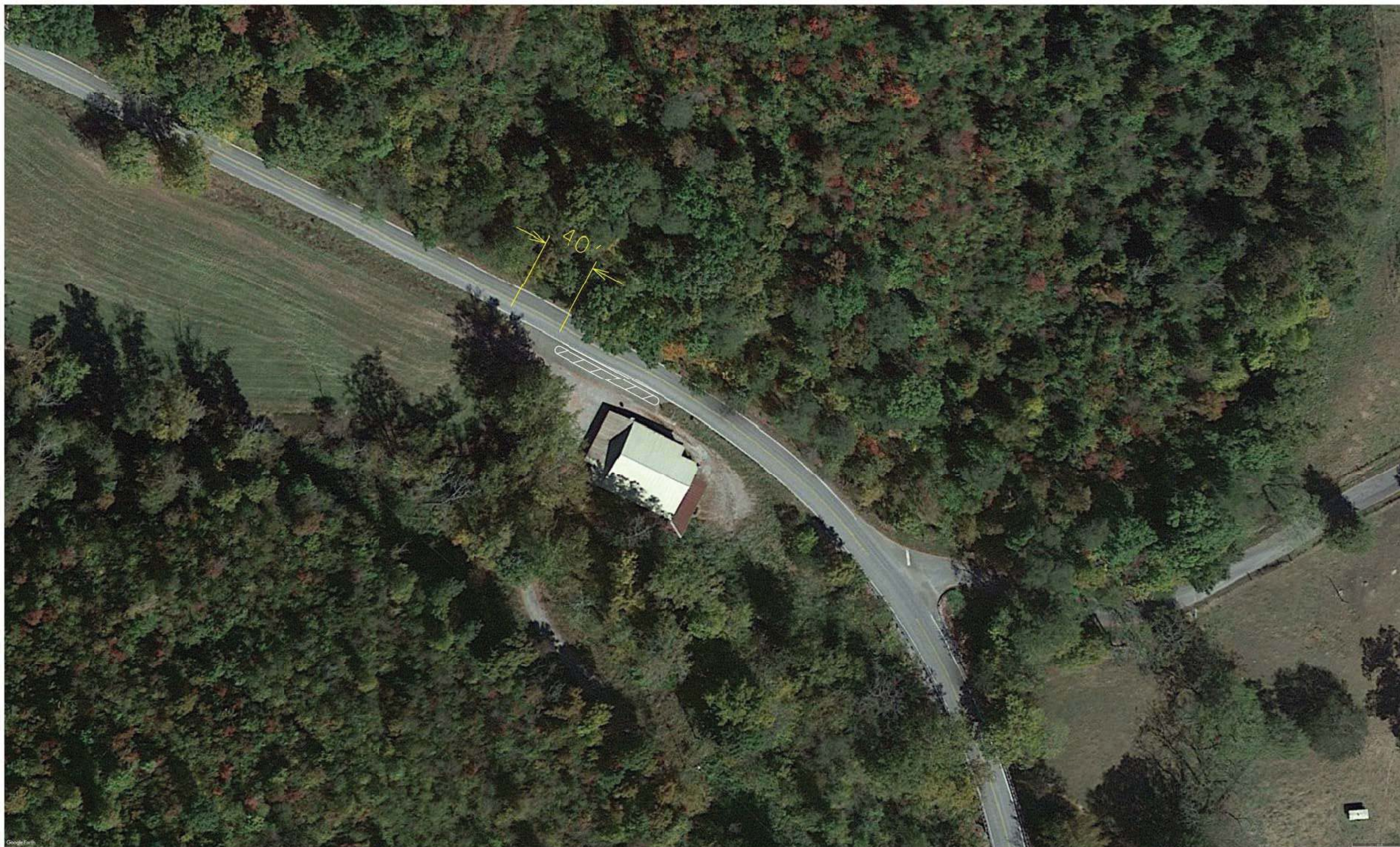
CHANNELIZED SHOULDER  
FOR ACCESS MANAGEMENT  
LM 1.184 TO 1.208  
STATE ROUTE 322  
Roane COUNTY



TYPICAL SECTION



TYPE	YEAR	PROJECT NO.	SHEET NO.
RESURF	2024	STP/HSIP-322(22)	R2

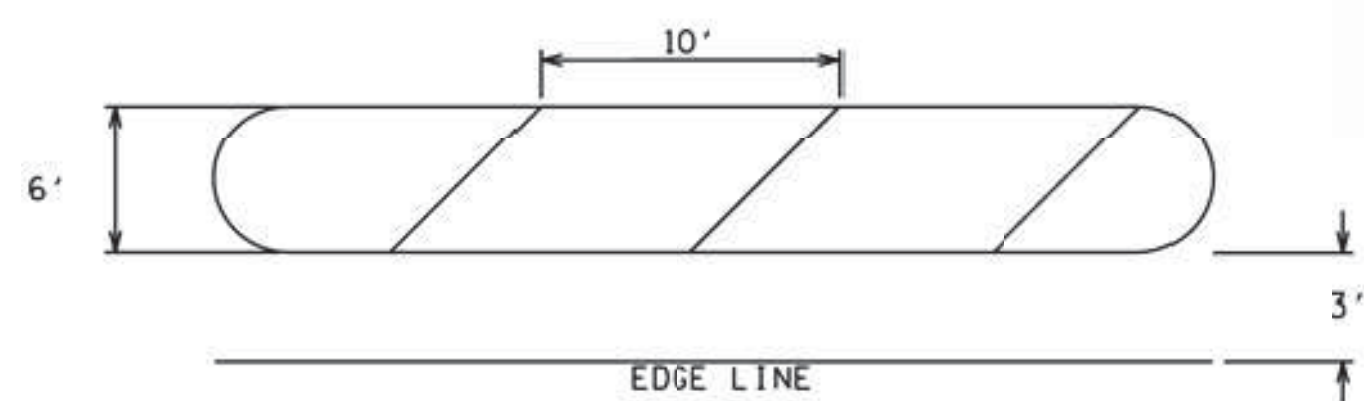


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STATE OF TENNESSEE  
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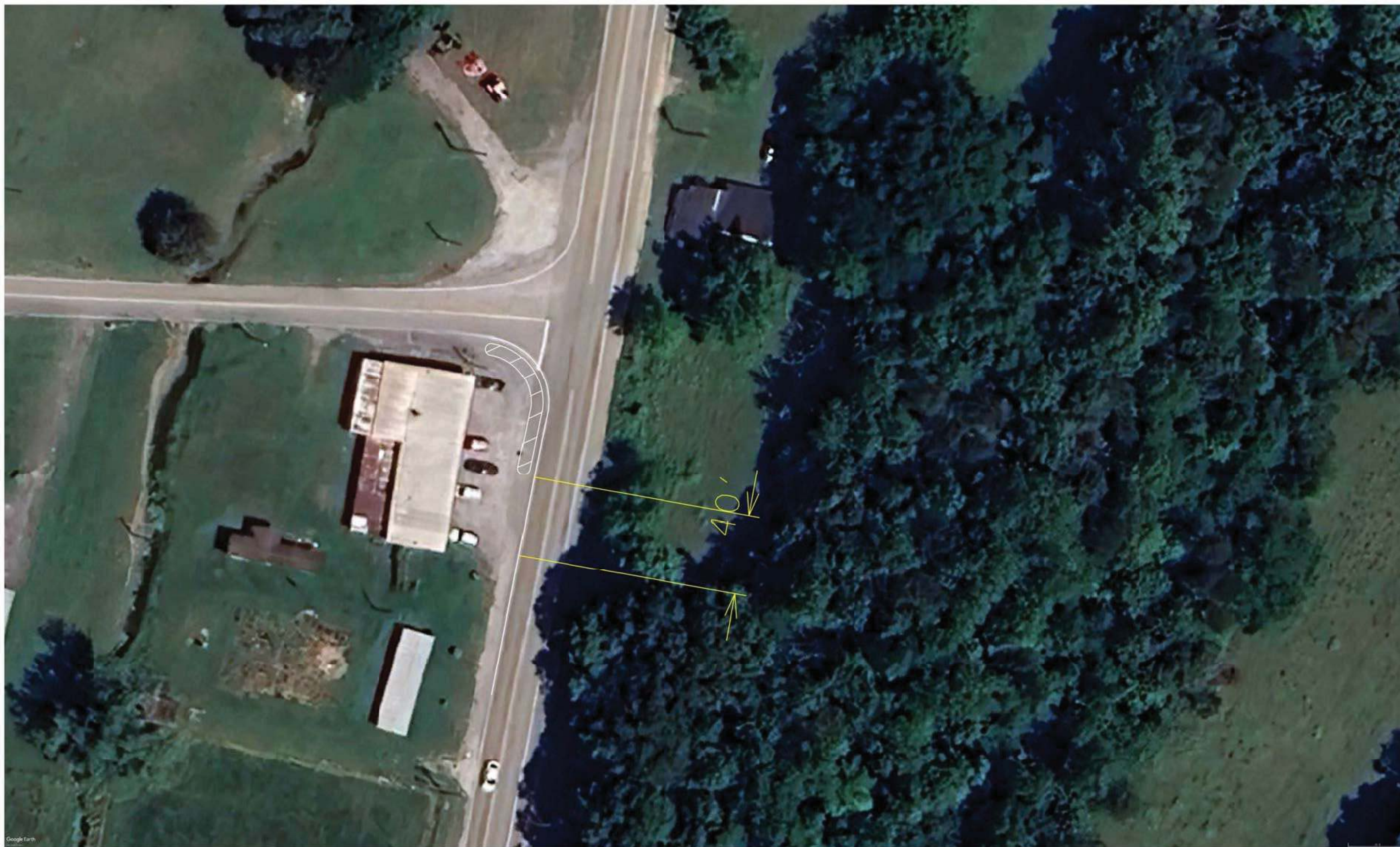
CHANNELIZED SHOULDER  
FOR ACCESS MANAGEMENT  
LM 1.933 TO 1.958  
STATE ROUTE 322  
Roane COUNTY



TYPICAL SECTION



TYPE	YEAR	PROJECT NO.	SHEET NO.
RESURF	2024	STP/HSIP-322(22)	R3



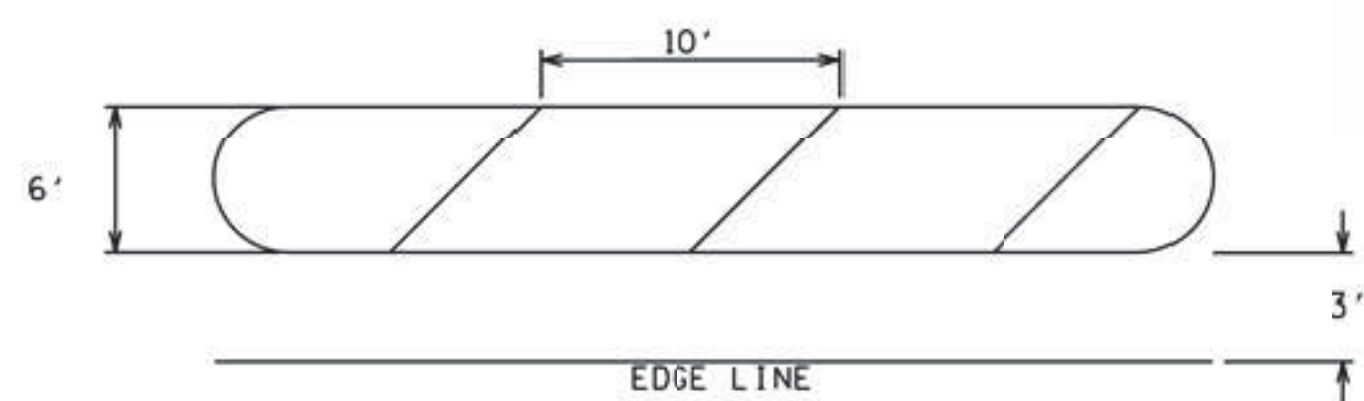
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STATE OF TENNESSEE  
DEPARTMENT OF TRANSPORTATION

CHANNELIZED SHOULDER  
FOR ACCESS MANAGEMENT  
LM 1.823 TO 1.847  
STATE ROUTE 322  
LOUDON COUNTY

0' 100' 200' 300'



TYPICAL SECTION