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ARCADIS 1400 PARKSIDE DR SUITE 410 KNOXVILLE, TN 37934

ELECTRONIC DOCUMENTS.

RACHEL H. COLE, P.E. 119667

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

#### SHEET NO. SHEET NAME ....ROADWAY-SIGN1 SIGNATURE SHEET ..... TITLE SHEET ..... ROADWAY INDEX AND STANDARD ROADWAY DRAWINGS ......1A ESTIMATED ROADWAY QUANTITIES ..... TYPICAL SECTIONS AND PAVEMENT SCHEDULE ..... ....2B, 2B1 GENERAL NOTES..... SPECIAL NOTES..... ENVIRONMENTAL NOTES..... TABULATED QUANTITIES ...... DETAIL SHEETS ..... ....2G, 2G1-2G3 UTILITY NOTES AND UTILITY OWNERS......3 PAVEMENT EDGE DROP-OFF NOTES FOR TRAFFIC CONTROL.....T1 TRAFFIC CONTROL PLANS .....

YEAR	PROJECT NO.	SHEET NO.
2025	NH-I-24-2(194)	ROADWAY-SIGN 1
	58I024-F8-012	

STATE OF TENNESSEE DEPARTMENT OF TRANSPORTATION

SIGNATURE SHEET

# 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 DETERM	INATION	
SIGNIFICANT	YES	NO X

×	TENN.	YEAR	SHEET NO.		
	I CININ.	2025	1		
<u> </u>	FED. AID PROJ. NO.	NH-I-24	l-2(194)		
	STATE PROJ. NO.	58I024-F8-012			

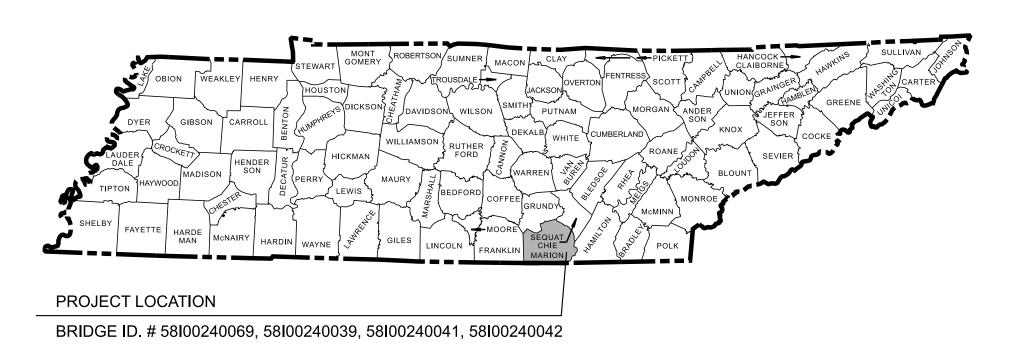
# **MARION COUNTY**

**-24**:

FROM EAST OF SR-28 (L.M. 21.76)
TO WEST OF THE TENNESSEE RIVER (L.M. 25.85)

RESURFACE NIGHT WORK, COLD PLANING, CM MIX, OGFC, INTELLIGENT COMPACTION, AND PAVEMENT MARKINGS

STATE HIGHWAY NO. I-24 F.A.H.S. NO. N/A



# 58I024-F8-012 BEGIN PROJECT NO. NH-I-24-2(194) RESURFACE L.M. 21.76 END PROJECT NO. NH-I-24-2(194) RESURFACE L.M. 25.85 END PROJECT NO. NH-I-24-2(194) RESURFACE L.M. 25.85

SCALE: 1"= 5280'

PROJECT LENGTH

TOTAL LANE MILES RESURFACED

NO EXCLUSIONS

SEALED BY

SEALED BY

GRICUPRE

12/17 A

1966.1 COMMERCE
11966.1 COMMINING
11966.1 C

APPROVED:

WILL REID, CHIEF ENGINEER

DATE:

HOWARD H ELEY COMMISSIONE

TA 48720 APPROVED:

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

APPROVED:

DIVISION ADMINISTRATOR

DATE

TRAFFIC DATA

ADT (2025) 48720 POSTED SPEED 70 MPH

4.09 MILES

16.36 MILES

TDOT PROJECT MANAGER: ANDREW ZAZZARA, P.E.

SPECIAL NOTES

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

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

CHECKED BY RACHEL H. COLE, P.E.

DESIGNED BY: ARCADIS
DESIGNER: NATALIE KERNISANT

P.E. NO. 98023-4113-04 (DESIGN)

AND IN THE PROPOSAL CONTRACT.

THE REASONABLE COST ANALYSIS VALUE.

P.E. NO. 98023-4113-04 (DESIGN)

PIN NO. 135612.00

# **ROADWAY INDEX**

# STANDARD ROADWAY DRAWINGS

TYPE	YEAR	PROJECT NO.	SHEET NO.
RESURF.	2025	NH-I-24-2(194)	1A
		58I024-F8-012	

SHEET NAME	SHEET NO.
SIGNATURE SHEET	ROADWAY-SIGNI1
TITLE SHEET	1
ROADWAY INDEX AND STANDARD ROADWAY DRAWINGS	1A
ESTIMATED ROADWAY QUANTITIES	2
TYPICAL SECTIONS AND PAVEMENT SCHEDULE	2B, 2B1
GENERAL NOTES	2C
SPECIAL NOTES	2D
ENVIRONMENTAL NOTES	2E
TABULATED QUANTITIES	2F
DETAIL SHEETS	2G, 2G1-2G3
UTILITY NOTES AND UTILITY OWNERS	3
PAVEMENT EDGE DROP-OFF NOTES FOR TRAFFIC CONTROL	T1
TRAFFIC CONTROL PLANS	T2
NOTE: THE ALPHABETICAL LETTERS "I", "O" & "Q" ARE NOT USEINUMBERING OF SHEETS.	O IN THE
NO PROJECT COMMITMENTS INCLUDED IN THIS PROJECT.	

10-100.00 AND LEGE		RD ROADWAY TITLE SHEET, ABBREVIATIONS,
RD-TP-1	10-01-24	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
10-107.00	DESIGN -	- TRAFFIC CONTROL
T-M-1	06-28-19	DETAILS OF PAVEMENT MARKINGS FOR CONVENTIONAL ROADS AND MARKING ABBREVIATIONS
T-M-5	03-01-23	MARKING DETAIL FOR FREEWAYS
T-M-6	03-01-23	MARKING DETAIL FOR EXPRESSWAY AND FREEWAY INTERCHANGES
T-M-7	06-28-19	GORE MARKING DETAILS FOR EXPRESSWAY & FREEWAY INTERCHANGES
T-M-8	06-28-19	MARKING DETAILS FOR EXPRESSWAYS & FREEWAYS
T-M-9	05-01-23	PAVEMENT MARKING AND SIGNING DETAILS FOR RAMP INTERSECTIONS
T-M-9A		PAVEMENT MARKING AND SIGNING DETAILS FOR RAMP INTERSECTIONS
T-M-9B		PAVEMENT MARKING AND SIGNING DETAILS FOR RAMP INTERSECTIONS
T-M-15	06-28-19	ASPHALT SHOULDER RUMBLE STRIP INSTALLATION DETAILS FOR INTERSTATE AND ACCESS CONTROLLED ROUTES
T-M-18	10-29-21	FLEXIBLE DELINEATOR DETAILS
T-M-18A		DELINEATOR MOUNTING DETAILS
T-WZ-10	04-02-12	ADVANCE ROAD WORK SIGNING ON HIGHWAYS AND FREEWAYS
T-WZ-11	03-04-21	ONE LANE CLOSURE DETAIL ON DIVIDED HIGHWAYS
T-WZ-12	03-04-21	ONE LANE CLOSURE DETAIL FOR BRIDGES ON DIVIDED HIGHWAYS
T-WZ-21	05-01-20	LANE CLOSURE WITH LEFT HAND MERGE AND LANE SHIFT
T-WZ-60		FREEWAY RESURFACING SIGNING LAYOUT
T-WZ-63	01-09-24	WORK ZONE IN THE VICINITY OF AN ENTRANCE RAMP
T-WZ-64		WORK ZONE IN THE VICINITY OF AN EXIT

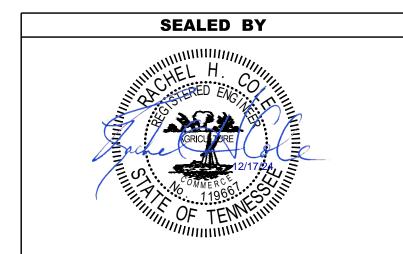
FLASHING YELLOW ARROW BOARD

**DESCRIPTION** 

DWG.

T-WZ-FAB1

REV.



STATE OF TENNESSEE DEPARTMENT OF TRANSPORTATION

ROADWAY INDEX
AND
STANDARD
ROADWAY
DRAWINGS

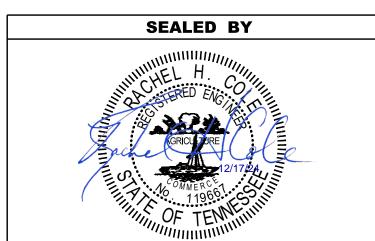
	ITEM NO.	DESCRIPTION	UNIT	QUANTITY 581024-F8-012
(1)	202-03.01	REMOVAL OF ASPHALT PAVEMENT	S.Y.	5473
(2)(3)	208-01.05	BROOMING & DEGRASSING SHOULDERS	L.M.	16.4
(4)	303-01	MINERAL AGGREGATE, TYPE A BASE, GRADING D	TON	2687
` ,	307-01.18	ASPHALT CONCRETE MIX (PG64-22) GRADING CM	TON	4355
(5)	307-03.08	ASPHALT CONCRETE MIX (PG76-22) (BPMB-HM) GRADING B-M2	TON	928
` ,	307-03.12	ASPHALT CONCRETE MIX (PG76-22) GRADINC CM	TON	11086
(6)	402-01	BITUMINOUS MATERIAL FOR PRIME COAT (PC)	TON	27
(7)	403-01.10	HIGH PERFORMANCE FOG SEALS	S.Y.	38486
(8)	411-03.10	ACS MIX(PG76-22) GRADING D	TON	1659
10)(11)(12)	411-03.23	ACS MIX (PG76-22) OGFC	TON	11215
(3)	411-12.01	SCORING SHOULDERS (CONTINUOUS) (16IN WIDTH)	L.M.	16.4
(13)(14)	415-01.01	COLD PLANING BITUMINOUS PAVEMENT	TON	15665
(15)	705-04.20	GUARDRAIL DELINEATION ENHANCEMENT	EACH	4597
(16)	712-01	TRAFFIC CONTROL	LS	1
	712-04.01	FLEXIBLE DRUMS (CHANNELIZING)	EACH	30
(17)	712-06	SIGNS (CONSTRUCTION)	S.F.	3400
	712-08.03	ARROW BOARD (TYPE C)	EACH	2
	712-08.08	SPEED FEEDBACK SIGN ASSEMBLY	EACH	2
(18)	712-08.09	DIGITAL SPEED LIMIT SIGN ASSEMBLY	EACH	12
(19)	712-08.12	QUEUE PROTECTION TRUCK	DAY	42
(20)	713-16.01	CHANGEABLE MESSAGE SIGN UNIT	EACH	4
(21)	716-01.23	SNOWPLOWABLE RAISED PAVEMENT MARKERS (BI-DIR)(2 COLOR)	EACH	845
(22)(23)	716-01.30	REMOVAL OF SNOWPLOWABLE REFLECTIVE MARKER	EACH	845
(24)	716-02.04	PLASTIC PAVEMENT MARKING(CHANNELIZATION STRIPING)	S.Y.	889
(24)	716-02.05	PLASTIC PAVEMENT MARKING (STOP LINE)	L.F.	40
(24)	716-02.06	PLASTIC PAVEMENT MARKING (TURN LANE ARROW)	EACH	2
(24)	716-02.07	PLASTIC PAVEMENT MARKING (24" BARRIER LINE)	L.F.	1764
(24)	716-04.05	PLASTIC PAVEMENT MARKING (STRAIGHT ARROW)	EACH	1
(24)	716-04.12	PLASTIC PAVEMENT MARKING (YIELD LINE)	S.F.	20
(25)	716-05.20	PAINTED PAVEMENT MARKING (6" LINE)	L.M.	18.4
	716-08.30	HYDROBLAST REMOVAL OF PAVEMENT MARKING (LINE)	L.M.	1.7
	716-09.86	CONTRAST PAVEMENT MARKING 6"	L.M.	1.7
(26)	716-12.02	ENHANCED FLATLINE THERMO PVMT MRKNG (6IN LINE)	L.M.	18.4
(26)	716-12.03	ENHANCED FLATLINE THERMO PVMT MRKNG (8IN BARRIER LINE)	L.F.	5649
(26)	716-12.05	ENHANCED FLATLINE THERMO PVMT MRKNG (6IN DOTTED LINE)	L.F.	3460
(26)	716-12.06	ENHANCED FLAT LINE THERMO (8IN LINE)	L.F.	4830
	717-01	MOBILIZATION	LS	1
		ALTERNATE AA1		
(27)(28)	403-02.01	TRACKLESS TACK COAT	TON	267
		ALTERNATE AA2		
(28)	403-02.01	TRACKLESS TACK COAT	TON	81
(29)	403-02.02	HOT APPLIED TACK COAT	TON	140

#### **FOOTNOTES**

- (1) SEE RAMP DETAIL ON SHEET 2B1 FOR ADDITIONAL INFORMATION.
- INCLUDES THE COST OF REMOVING DEBRIS AND SWEEPING SHOULDERS PRIOR TO WORK.
- (3) INCLUDES 8.2 L.M. INSIDE SHOULDERS AND 8.2 L.M. OUTSIDE SHOULDERS.
- (4) INCLUDES 570 TONS FOR ENTRANCE / EXIT RAMP SHOULDERS, AND 2117 TONS FOR LOW SHOULDERS AS DIRECTED BY THE TDOT PROJECT ENGINEER (BASED ON 84,480' LENGTH, 2' WIDTH AND 2" DEPTH).
- (5) ITEM FOR SPOT REPAIRS AS DIRECTED BY THE TDOT PROJECT ENGINEER. (QUANTITY BASED ON 3500' LENGTH, 8' WIDTH, 3" DEPTH.)
- (6) TO BE USED AS DIRECTED BY THE TDOT PROJECT ENGINEER FOR STONE SHOULDER STABILIZATION.
- (7) TO BE APPLIED TO SHOULDER SCORING AFTER PERMANENT EDGELINE MARKINGS ARE IN PLACE.

  SEE SHEET 2G FOR PLACEMENT DETAIL. INCLUDES 19243 S.Y. FOR INSIDE SHOULDERS AND 19243 S.Y. FOR OUTSIDE SHOULDERS.
- (8) INCLUDES 259 TONS FOR EXIT #158 AND REST AREA EXIT GORE AREAS. SEE SHEETS 2G-2G3 FOR DETAILS.
- (9) MODIFY AIR VOID CONTENT SPECIFIED IN TABLE 411.03-04 FROM MINIMUM 20% TO MINIMUM 17% AS DETERMINED BY THE "VOLUME METHOD" DESCRIBED IN SECTION 6.2.2 OF AASHTO 269. AGE CANTABRO TEST SPECIMENS FOR 4 HOURS AT LAB COMPACTION TEMPERATURE. TSR TESTING SHALL BE PERFORMED ACCORDING TO THE METHOD DESCRIBED IN 407.03.E.1 FOR OGFC AND MEET A MINIMUM TENSILE STRENGTH OF 50 PSI AND A MINIMUM TSR OF 70%.
- (10) INCLUDES 160 TONS TO BE USED FOR PLANT STARTUP AND HEATING UP EQUIPMENT AT BEGINNING OF EACH SHIFT, 15 TONS WASTE MATERIAL PER DAY.
- (11) INCLUDES 567 TONS FOR EXIT #158 & REST AREA EXIT RAMPS. SEE SHEETS 2F, 2G-2G3 FOR DETAILS.
- (12) ITEM INCLUDES 534 TONS TO BE USED AS DIRECTED BY THE TDOT PROJECT ENGINEER.
- (13) MILLED MATERIAL TO BECOME PROPERTY OF THE CONTRACTOR.
- (14) INCLUDES 812 TONS FOR EXIT #158 RAMPS & REST AREA EXIT RAMPS & 327 TONS FOR SPOT REPAIR. SEE SHEET NOS. 2F, 2G-2G3 FOR DETAILS.
- (15) INCLUDES 3178 WHITE AND 1419 YELLOW DELINEATORS. DELINEATORS SHALL BE:
  - -- "HINGED-TYPE" FROM TDOT'S CURRENT QPL
  - -- MOUNTED TO GUARDRAIL POSTS AT LOCATIONS AS DIRECTED BY THE TDOT PROJECT ENGINEER.
  - -- ATTACHED TO GUARDRAIL POST AS PER MANUFACTURER'S INSTRUCTION USING MANUFACTURER'S RECOMMENDED ADHESIVE.
- (16) INCLUDES ALL COSTS ASSOCIATED WITH NIGHTTIME WORK ZONE LIGHTING.
- (17) SEE SHEET 2F FOR TABULATION.
- (18) SEE SHEET T2 FOR SUGGESTED PLACEMENT DETAILS.
- (19) QUANTITY WILL PROVIDE QUEUE PROTECTION FOR BOTH NIGHTLY PAVING OPERATIONS AND WEEKEND CLOSURES FOR THE BRIDGE WORK AS DIRECTED BY THE TDOT PROJECT ENGINEER.
- (20) INCLUDES FOUR (4) MESSAGE BOARDS TO BE USED ON EXIT #158 & REST AREA EXIT/ENTRANCE RAMPS TO I-24 AS DIRECTED BY THE TDOT PROJECT ENGINEER.
- (21) INCLUDES 305 CLEAR/RED SPM'S ALONG TRANSVERSE SHOULDER STRIPING.
- (22) TO BECOME PROPERTY OF THE CONTRACTOR. INCLUDES ALL COST ASSOCIATED WITH REMOVAL AND PROPER DISPOSAL.
- 23) REMOVAL OF EXISTING SPM FROM EXISTING CONCRETE SURFACE SHALL BE DONE IN SUCH A MANNER
  AS TO MINIMIZE DAMAGE TO THE ADJACENT CONCRETE. INCLUDES ALL COST ASSOCIATED WITH PATCHING
  VOID AREAS OR DIVOTS ON CONCRETE SURFACES CREATED DURING REMOVAL OF SPM'S WITH MATERIAL
  APPROVED BY THE TDOT ENGINEER.
- (24) CONTRACTOR MAY ELECT TO SUBSTITUTE PREFORMED PLASTIC FOR THERMOPLASTIC.

  PREFORMED PLASTIC SHALL BE PAID FOR AT THE SAME UNIT PRICE AS BID FOR THERMOPLASTIC.
- (25) FOR TEMPORARY PAVEMENT MARKINGS ON MILLED SURFACE AND INTERMEDIATE SURFACES.
- (26) ENHANCED FLATLINE THERMO PVMT MARKING SHALL BE APPLIED USING RIBBON METHOD AS DIRECTED BY THE TDOT PROJECT ENGINEER.
- USE AN APPROVED TRACKLESS TACK FROM QPL 40-F APPLIED WITH A DISTRIBUTOR AT A MINIMUM RATE OF 0.20 GAL/SY (APPROXIMATE RESIDUAL RATE 0.10 GAL/SY). PAVING OF THE OGFC SHALL NOT BEGIN UNTIL THE DEPARTMENT IS SATISFIED THAT THE APPLICATION RATE IS ACHIEVED AND THE EMULSION HAS FULLY BROKEN. MULTIPLE PASSES MAY BE REQUIRED. OR, EMULSION TYPE CQS-1HP MAY BE APPLIED WITH A SPRAY PAVER AT AN APPLICATION RATE BETWEEN 0.18 TO 0.23 GAL/SY. THE SPRAY PAVER SHALL BE A SINGLE PIECE OF EQUIPMENT THAT APPLIES THE TACK COAT AND SPREADS THE BITUMINOUS PAVEMENT. AT A MINIMUM THE SPRAY PAVER SHALL MEET THE PAVER REQUIREMENTS OF 407.06 AND THE DISTRIBUTOR REQUIREMENTS IN 402.03.
- (28) INCLUDES 81 TONS TO BE USED ON MILLED SURFACES USING STANDARD APPLICATION RATE REQUIRED FOR MILLED SURFACES.
- (29) TO BE USED FOR TACK COAT UNDERNEATH OGFC. HOT APPLIED TRACKLESS TACK MAY BE EITHER HOT APPLIED TRACKLESS TACK COAT FROM QPL 40 SECTION F. IF USING ASPHALT BINDERS, THE MINIMUM GRADE SHALL BE PG64-22 BUT A HIGHER GRADE MAY BE USED AT THE CONTRACTOR'S DISCRETION.



PROJECT NO.

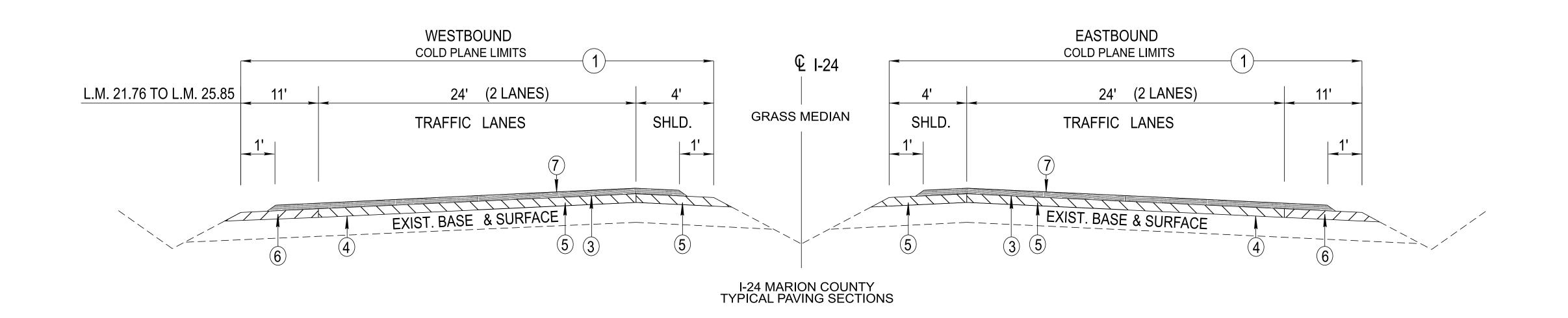
NH-I-24-2(194)

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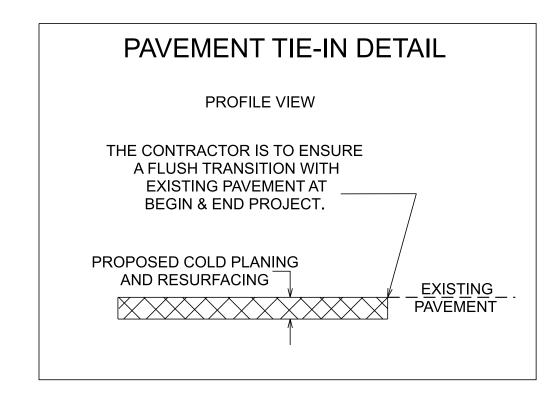
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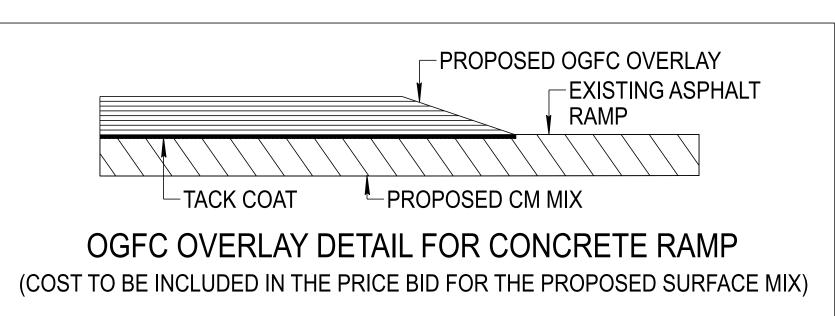
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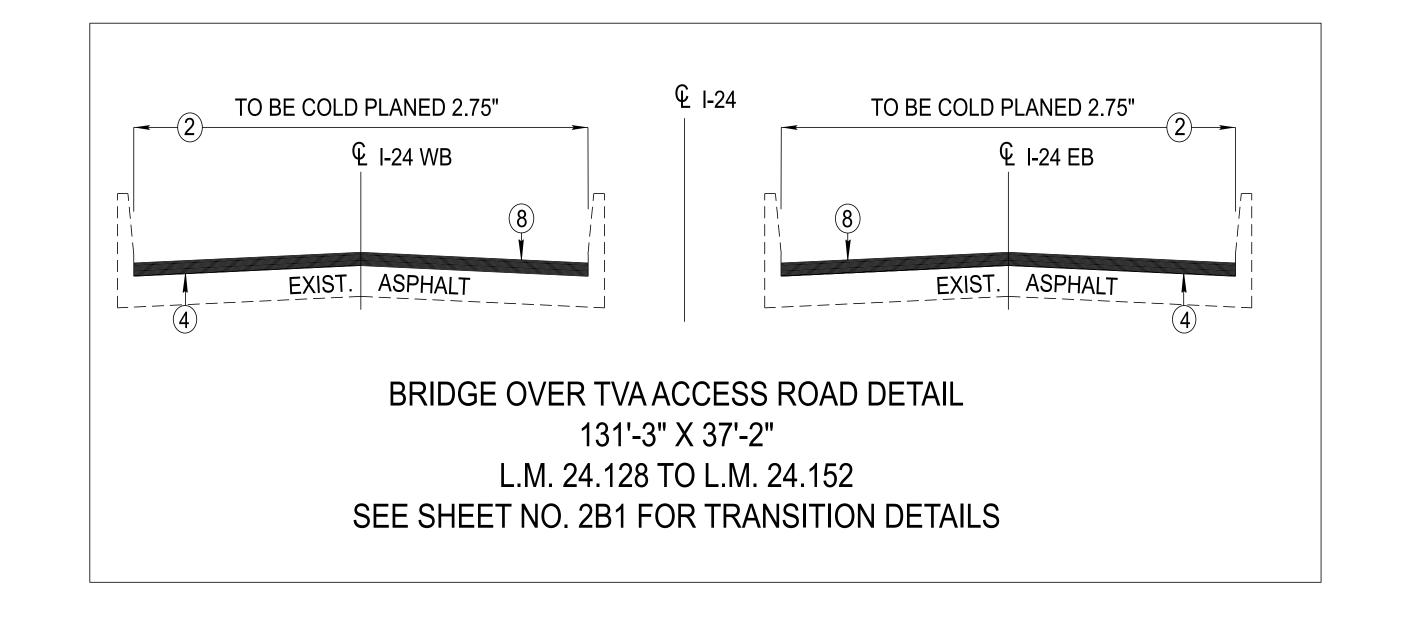
ESTIMATED ROADWAY QUANTITIES

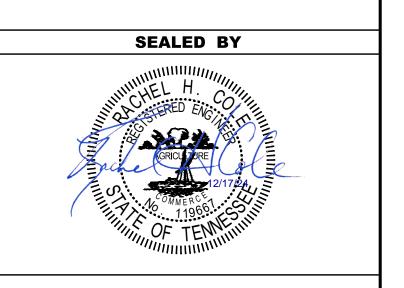


		PROPOSED PAVE	ME	NT SCHEDULE
1		5" TH. (APPROX. 157.5 LB/SY) 01 COLD PLANING BITUMINOUS PAVEMENT	5	BASE MIX (RDY) @ 1.5" THICK (APPROX. 165 LBS/SY) ITEM NO. 307-03.12 ASPHALT CONCRETE MIX (PG76-22) GRADING CM, TON
2	COLD PLANING 2. ITEM NO. 415-01.0	OLD PLANING 2.75" TH. (APPROX. 288.75 LB/SY) EM NO. 415-01.01 COLD PLANING BITUMINOUS PAVEMENT		BASE MIX (SHOULDER) @ 1.5" THICK (APPROX. 165 LBS/SY) ITEM NO. 307-01.18 ASPHALT CONCRETE MIX (PG64-22) GRADING CM, TON
3	ALTERNATE  "AA1"  TRACKLESS TACK COAT (TC)  SEE SHEET NO. 2 FOOTNOTE (26) FOR RATE INFORMATION. ITEM NO. 403-02.01 TRACKLESS TACK COAT (TC), TON		7	ASPHALTIC CONCRETE SURFACE (HM) @ 1.25" TH. (APPROX. 117.5 LBS/SY) ITEM NO. 411-03.23 ACS MIX (PG76-22) OGFC
	ALTERNATE "AA2"	HOT APPLIED TACK COAT (TC) @ 0.13-0.18 GAL/SY ITEM NO. 403-02.02 HOT APPLIED TACK COAT (TC), TON	8	ASPHALTIC CONCRETE SURFACE (HM) 2.75" TH. (APPROX. 291.5 LBS/SY) ITEM NO. 411-03.10 ACS MIX (PG76-22) GRADING D
4	TRACKLESS TACK COAT (TC) ITEM NO. 403-02.01 TRACKLESS TACK COAT (TC), TON SEE 403.05 FOR DETERMINING APPLICATION RATE IN THE FIELD.			



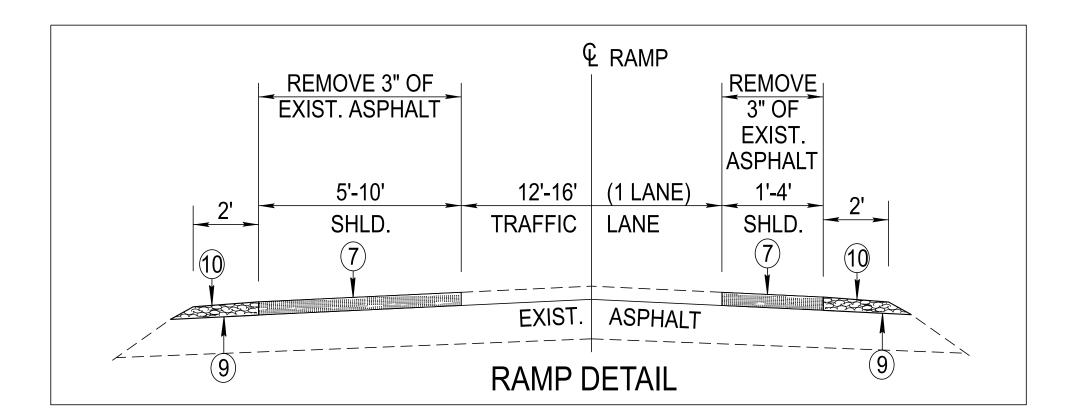


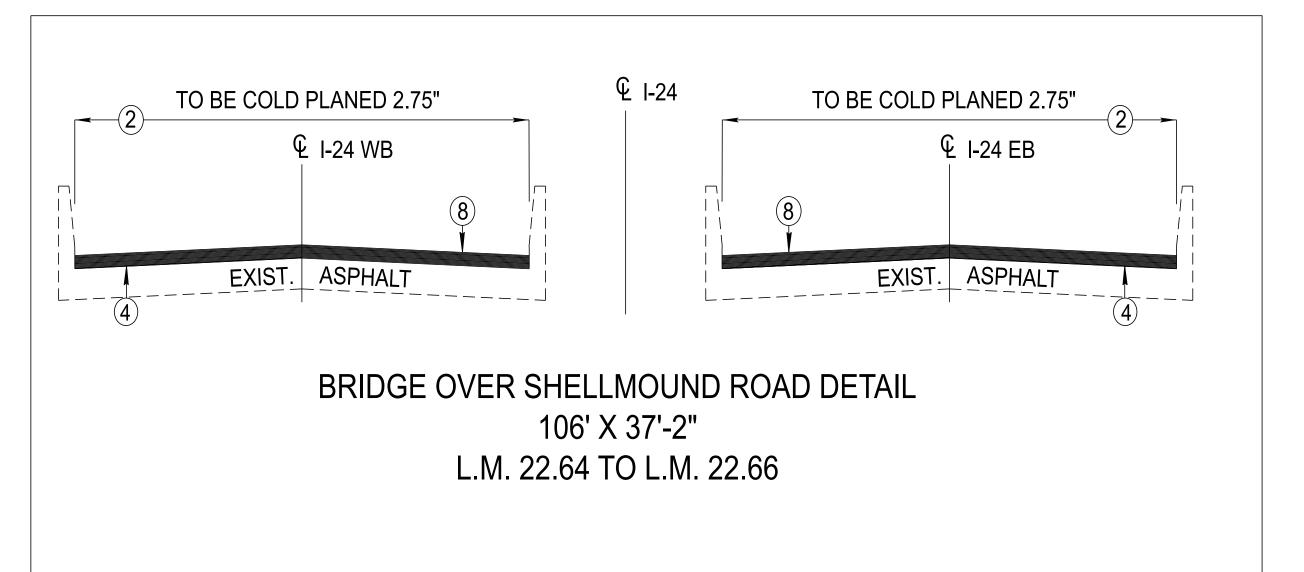




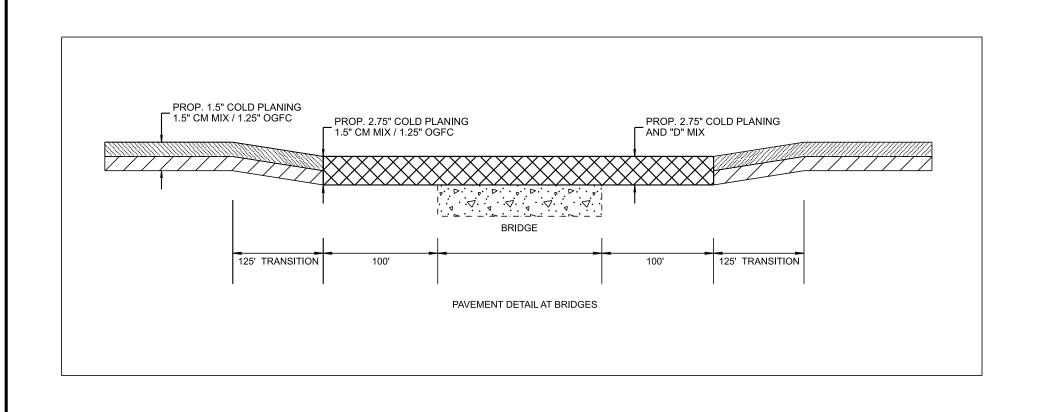
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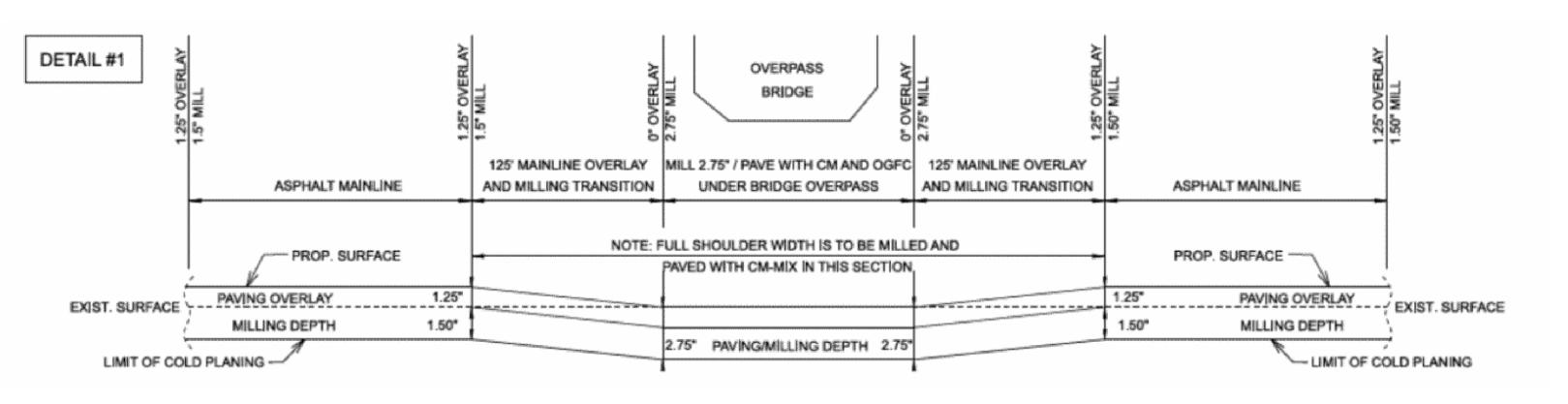
TYPICAL
SECTIONS AND
PAVEMENT
SCHEDULE

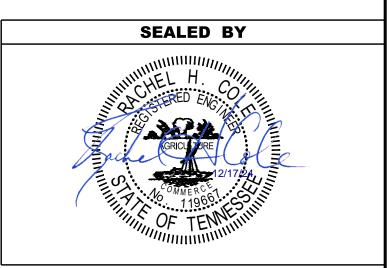




		PROPOSED PAVE	ME	NT SCHEDULE
1	COLD PLANING 1.5" TH. (APPROX. 157.5 LB/SY) ITEM NO. 415-01.01 COLD PLANING BITUMINOUS PAVEMENT			BASE MIX (SHOULDER) @ 1.5" THICK (APPROX. 165 LBS/SY) ITEM NO. 307-01.18 ASPHALT CONCRETE MIX (PG64-22) GRADING CM, TON
2	COLD PLANING 2.75" TH. (APPROX. 288.75 LB/SY) ITEM NO. 415-01.01 COLD PLANING BITUMINOUS PAVEMENT		7	ASPHALTIC CONCRETE SURFACE (HM) @ 1.25" TH. (APPROX. 117.5 LBS/SY) ITEM NO. 411-03.23 ACS MIX (PG76-22) OGFC
3	ALTERNATE "AA1"	TRACKLESS TACK COAT (TC)  SEE SHEET NO. 2 FOOTNOTE (26) FOR RATE INFORMATION. ITEM NO. 403-02.01 TRACKLESS TACK COAT (TC), TON	8	ASPHALTIC CONCRETE SURFACE (HM) 2.75" TH. (APPROX. 291.5 LBS/SY) ITEM NO. 411-03.10 ACS MIX (PG76-22) GRADING D
3	ALTERNATE "AA2"			MINERAL AGGREGATE BASE 2" THICK @ 2.03 TON/CY ITEM NO. 303-01 MINERAL AGGREGATE, TYPE "A" BASE, GRADING "D", TON
4	TRACKLESS TACK COAT (TC) ITEM NO. 403-02.01 TRACKLESS TACK COAT (TC), TON SEE 403.05 FOR DETERMINING APPLICATION RATE IN THE FIELD.  BASE MIX (RDY) @ 1.5" THICK (APPROX. 165 LBS/SY) ITEM NO. 307-03.12 ASPHALT CONCRETE MIX (PG76-22) GRADING CM, TON		10	SHOULDER STONE STABILIZATION ITEM NO. 402-01 BITUMINOUS MATERIAL FOR PRIME COAT (PC), TON
5				***PRIME COAT WIDTH SHALL BE A MINIMUM OF 3 FEET FROM EDGE OF PAVED SHOULDER AND AROUND GUARDRAIL POST AS DIRECTED BY TDOT ENGINEER







STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

TYPICAL
SECTIONS AND
PAVEMENT
SCHEDULE

# **GENERAL NOTES**

#### **MISCELLANEOUS**

(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**

(1) 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

- (7) IN AREAS WITH OPEN-GRADED FRICTION COURSE PAVEMENT, THE CONTRACTOR WILL BE REQUIRED TO PERFORM THE FOLLOWING WORK:
  - a. SHOULDERS SHALL BE BROOMED AND DE-GRASSED IN A MANNER WHICH PERMITS PROPER DRAINAGE OF PAVEMENT STRUCTURE. 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.
- (9) PERMANENT PAVEMENT LINE MARKINGS SHALL BE 6" ENHANCED FLATLINE THERMOPLASTIC 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. 716-12.02, ENHANCED FLATLINE THERMO PVMT MRKNG (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.
- (10) PERMANENT PAVEMENT LINE MARKINGS SHALL BE 8" ENHANCED FLATLINE THERMOPLASTIC 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. 716-12.03, ENHANCED FLATLINE THERMO PVMT MRKNG (8IN BARRIER LINE), L.F. 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

(20) 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.

#### **PAVING**

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

#### **RESURFACING**

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.

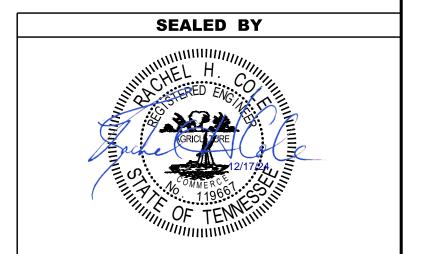
#### SIGNING

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

#### **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.
- 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.
- 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.
- (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.

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STATE OF TENNESSEE DEPARTMENT OF TRANSPORTATION

GENERAL NOTES

# **SPECIAL NOTES**

#### TRAFFIC CONTROL

- (1) THE CONTRACTOR SHALL MAKE PROVISIONS TO SAFELY CONTROL TRAFFIC INGRESS AT ALL ROADWAY ENTRANCES WITHIN THE FLAGGED WORK ZONE TO THE SATISFACTION OF THE TDOT PROJECT ENGINEER. ALL COST ASSOCIATED WITH THE CONTROLS WILL BE INCLUDED IN THE PRICE BID FOR TRAFFIC CONTROL.
- (2) EXISTING CONSTRUCTION, REGULATORY AND WARNING SIGNS WHICH CONFLICT WITH THE CONSTRUCTION SIGNING SHALL BE REMOVED DURING CONSTRUCTION AND REINSTALLED AS DIRECTED BY THE TDOT PROJECT ENGINEER. ALL COSTS TO BE INCLUDED IN THE PRICE BID FOR ITEM NO. 712-01, TRAFFIC CONTROL, PER LUMP SUM.
- (3) THE CONTRACTOR SHALL GIVE THE TDOT PROJECT ENGINEER A MINIMUM OF SEVEN (7) DAYS NOTICE PRIOR TO STARTING WORK SO THAT SUFFICIENT NOTICE CAN BE PREPARED AND DISTRIBUTED TO THE MEDIA.
- (4) IMMEDIATELY UPON COMPLETION OF EACH CONSTRUCTION PHASE, ALL TRAFFIC CONTROL ITEMS THAT ARE NOT NECESSARY FOR THE SUCCEEDING PHASE SHALL BE REMOVED, COVERED, OR TURNED TO FACE AWAY FROM THE TRAFFIC.
- (5) A MINIMUM OF TWO (2) TYPE "C" ARROW BOARDS WILL BE REQUIRED. IF THE CONTRACTOR SCHEDULES HIS OPERATIONS SUCH THAT MORE THAN TWO (2) ARROW BOARDS ARE REQUIRED, THE COST OF ALL ADDITIONAL ARROW BOARDS WILL BE AT THE CONTRACTOR'S EXPENSE.
- (6) CHANGEABLE MESSAGE SIGNS UNITS (ITEM NO. 713-16.01) WILL BE REQUIRED ON THIS PROJECT. THE SIGNS WILL BE USED FOR ADVANCED WARNING OR AS DIRECTED BY THE ENGINEER.
- (7) MESSAGE BOARDS SHALL BE DISPLAYED A MINIMUM OF SEVEN (7) DAYS PRIOR TO STARTING WORK TO INFORM PUBLIC OF UPCOMING CONSTRUCTION PROJECT.
- (8) PRIOR TO DISPLAYING MESSAGES ON CHANGEABLE MESSAGE BOARDS, ALL MESSAGES SHALL BE APPROVED BY THE TDOT PROJECT ENGINEER AND REGION 2 TRAFFIC ENGINEER.
- (9) INFORMATION ON CHANGEABLE MESSAGE BOARDS SHALL BE UPDATED TO REFLECT CURRENT CONSTRUCTION CONDITIONS ACTIVITIES AT ALL TIMES.
- (10) ACCESS TO THE PROJECT WILL BE PERMITTED AT THE INTERCHANGES ONLY. THE CONTRACTOR WILL BE PERMITTED TO CROSS MEDIAN AT EXISTING CROSS-OVERS ONLY.

#### LANE CLOSURES

- (1) THE RESTRICTION OF TRAFFIC TO ONE LANE SHALL NOT EXCEED A TWO (2) MILE PAVING OPERATION OR AS DIRECTED BT THE TDOT PROJECT ENGINEER.
- (2) THE CONTRACTOR SHALL KEEP ALL TRAFFIC LANES OPEN TO TRAFFIC DURING NON-WORKING HOURS AND/OR NON-WORKDAYS.
- (3) DAYTIME LANE CLOSURES WILL NOT BE ALLOWED UNLESS DIRECTED BY THE TDOT PROJECT ENGINEER.
- (4) THE CONTRACTOR SHALL NOT BE ALLOWED TO INTERRUPT TRAFFIC FLOW AND SHALL MAINTAIN ALL LANES OF TRAFFIC IN EACH DIRECTION ON THE FOLLOWING DAYS:
  - A. OFFICIAL STATE HOLIDAYS.
  - B. FRIDAY <u>AT 6:00 AM</u> UNTIL TUESDAY AT <u>7:00 PM</u>, IF A STATE HOLIDAY OCCURS OR IS OBSERVED ON MONDAY.
  - C. THURSDAY <u>AT 6:00 AM</u> UNTIL SUNDAY AT <u>7:00PM</u>, IF A STATE HOLIDAY OCCURS OR IS OBSERVED ON FRIDAY.
  - D. DURING LOCAL FESTIVALS, GAMES OR EVENTS THAT COULD BE IMPEDED BY THE PAVING OPERATIONS WHERE AND AS DIRECTED BY THE TDOT PROJECT ENGINEER.

#### **PAVING**

- INTELLIGENT COMPACTION SHALL BE USED.
- (2) ANY QUANTITY REMAINING ON ITEMS COMPLETED PRIOR TO THE PAVING OPERATION WILL NOT BE CONVERTED TO ADDITIONAL ASPHALT FOR THE ROADWAY.

#### **PAVEMENT MARKING**

- (1) THE CONTRACTOR IS RESPONSIBLE FOR THE LAYOUT OF ALL PAVEMENT MARKING. ANY CHANGE FROM THE EXISTING PAVEMENT MARKINGS MUST BE APPROVED BY THE REGION 2 TRAFFIC MANAGER.
- (2) RAMPS SHALL BE MARKED UP TO WHERE THEY CONNECT TO THE INTERSECTING ROADWAY.
- (3) ENHANCED FLATLINE THERMO PVMT MARKING SHALL BE APPLIED USING RIBBON METHOD AS DIRECTED BY THE TDOT PROJECT ENGINEER.
- (4) EDGELINE AND LANE LINE MARKINGS ON CONCRETE SURFACE OF INTERCHANGE RAMPS SHALL BE CONTRAST MARKINGS.
- (5) EXISTING MARKINGS ON CONCRETE SURFACE OF INTERCHANGE RAMPS SHALL BE REMOVED BY HYDROBLAST METHOD.

#### **OGFC**

(1) AT THE START OF EACH NIGHT'S PAVING, PRODUCE APPROXIMATELY 15 TONS OF THE BITUMINOUS PAVEMENT FOR THE PURPOSE OF PLANT START UP AND HEATING UP THE MATERIAL TRANSFER DEVICE (MTD). THIS MATERIAL SHALL BE UNLOADED INTO THE MTD AT A MINIMUM TEMPERATURE 280f AND THE ENTIRE LOAD DISCHARGED THROUGH THE MTD AND WASTED OFF THE PROJECT SITE IMMEDIATELY PRIOR TO THE COMMENCING OF PAVING OPERATIONS.

#### **COLD PLANING**

- (1) IF SUBSURFACE PAVEMENT FAILURE IS EXPOSED AFTER MILLING, REMOVE AREA OF FAILURE TO SOUND PAVEMENT AND REPLACE WITH "BM2" MIX PRIOR TO PLACING PROPOSED OVERLAY.
- (2) AT THE COMPLETION OF COLD PLANING OPERATION, ANY DEPRESSIONS WILL BE CLEANED AND BROUGHT TO PROPER GRADE WITH "BM2" MIX MATERIAL. THE COST OF THE CLEAN UP WILL BE INCLUDED IN THE UNIT PRICE FOR "BM2" MIX MATERIAL.

#### **PAVEMENT**

- (1) TRAFFIC WILL BE ALLOWED TO TEMPORARILY DRIVE ON THE MILLED SURFACE OF THE ROADWAY UNDER THE FOLLOWING CONDITIONS ONLY:
  - A. THE MILLED SURFACE IS FINE TEXTURED. THE FINE TEXTURE SHALL BE OBTAINED BY A MILLING MACHINE UTILIZING A MILLING HEAD WITH TEETH SPACING 3/8" OR LESS OPERATING AT LESS THAN 80 FEET PER MINUTE.
  - B. THE SURFACE SHALL BE SWEPT AND CLEANED OF ALL LOOSE MATERIALS.
  - C. THE MILLED SURFACE SHALL BE PAVED WITHIN 72 HOURS IF THE CURRENT ADT IS > 70,000 OR WITHIN 96 HOURS IF THE CURRENT ADT IS < 70,000.
  - D. RAIN OR INCLEMENT WEATHER IS NOT EXPECTED OR FORECASTED WITHIN 48 HOURS AFTER MILLING.
  - E. ALL APPLICABLE SIGNING IS INSTALLED IN ACCORDANCE WITH THE MUTCD. SIGNING SHALL INCLUDE MOTORCYCLE WARNING SIGNS (TN-64) PLACED IN ADVANCE OF ANY MILLED AREAS
  - F. IF MILLED SURFACE BEGINS TO DETERIORATE, PAVING TO COVER UP DETERIORATING MILLED SURFACES SHOULD OCCUR AS DIRECTED BY THE ENGINEER DURING THE NEXT WORKING DAY. IF SEVERE DISTRESS OCCURS. IMMEDIATE RESPONSE WILL BE REQUIRED.
  - G. ONLY ONE LANE IN EACH DIRECTION SHALL HAVE A MILLED SURFACE AT ONE TIME.
- (2) ALL DRAINS ACROSS BRIDGES NEED TO BE CHECKED AND CLEANED AFTER PAVING IS COMPLETE. COST TO BE INCLUDED IN OTHER ITEMS.
- (3) THE INSIDE SHOULDER SHALL BE PAVED CONCURRENTLY WITH THE INSIDE TRAFFIC LANE.

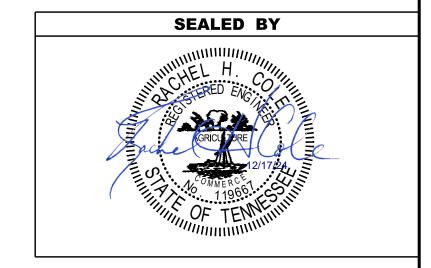
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#### **NIGHT WORK**

- (1) ALL COST ASSOCIATED WITH NIGHT WORK ZONE LIGHTING SHALL BE INCLUDED IN ITEM 712-01.
- (2) THE CONTRACTOR SHALL COMPLY WITH SECTION 712.04 OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION REGARDING NIGHT WORK LIGHTING.
- (3) LIGHTS FOR NIGHT WORK TO BE APPROVED BY THE TDOT ENGINEER.
- 4) NIGHT WORK SHALL BE DONE BETWEEN THE HOURS OF 7:00 PM AND 6:00 AM SUNDAY NIGHT THROUGH SATURDAY MORNING. ALL WORK TO BE DONE AT NIGHT SHALL BE DURING THESE HOURS. THIS INCLUDES CONSTRUCTION, MOBILIZATION OF EQUIPMENT AND PLACEMENT AND REMOVAL OF TRAFFIC CONTROL DEVICES
- (5) ALL CONSTRUCTION SIGNS THAT ARE TO REMAIN IN PLACE DURING CONSTRUCTION MAY BE INSTALLED DURING DAYTIME HOURS AS DIRECTED BY THE TDOT PROJECT ENGINEER.

#### **END OF TRAFFIC QUEUE PROTECTION**

- (1) WHEN INTERSTATE LANE CLOSURES ARE PERFORMED, THE CONTRACTOR SHALL PROVIDE A MINIMUM OF TWO (2) TRUCK MOUNTED MOBILE CHANGEABLE MESSAGE SIGNS WITH TRUCK MOUNTED ATTENUATORS FOR EACH TRAVELING DIRECTION IF WHICH LANES ARE CLOSED, TO PROTECT THE END OF THE TRAFFIC QUEUE
  - A. AT LEAST ONE UNIT SHALL BE POSITIONED ON THE SHOULDER UPSTREAM FROM THE END OF THE TRAFFIC QUEUE AT ALL TIMES, BUT NO FURTHER THAN 1/2 MILE FROM THE QUEUE.
  - B. THE CHANGEABLE MESSAGE SIGN SHALL DISPLAY TWO PHASES: "STOPPED TRAFFIC AHEAD" AND "BE PREPARED TO STOP"
  - C. IN THE EVENT THAT THE TRAFFIC QUEUE EXTENDS UPSTREAM BEYOND THE UNIT, A SECOND UNIT SHALL MOBILIZE IN ACCORDANCE WITH [A.]. THE DOWNSTREAM UNIT MAY DEPART WHEN THE SECOND UNIT HAS MOVED INTO POSITION.
  - D. TRUCK MOUNTED CHANGEABLE MESSAGE SIGNS AND ATTENUATORS SHALL BE IN ACCORDANCE WITH THE NCHRP REPORT 350, MASH TL-3, MUTCD, AND MOUNTED PER THE MANUFACTURER'S RECOMMENDATIONS. TRUCK MOUNTED CHANGEABLE MESSAGE SIGNS SHALL BE LISTED ON QPL LIST 30, SECTION B, AND TRUCK MOUNTED ATTENUATORS SHALL BE LISTED ON QPL LIST 34, SECTION D.
  - E. MOBILE CHANGEABLE MESSAGE SIGN UNITS WITH MOUNTED ATTENUATOR WILL BE PAID FOR AS ITEM NO.712-08.12, QUEUE PROTECTION TRUCK, DAY ALL COSTS ARE TO BE INCLUDED IN THE PRICE BID.



STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

SPECIAL NOTES

### **ENVIRONMENTAL 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.

#### **ENVIRONMENTAL SPECIAL NOTES**

#### **ENVIRONMENTAL**

 STAFF FROM THE TDOT ENVIRONMENTAL DIVISION COMPLIANCE AND FIELD SERVICES OFFICE SHALL BE INVITED TO ALL PRE-CONSTRUCTION MEETINGS.

#### **SCOPE OF WORK**

(6) NIGHT WORK, COLD PLANING, CM MIX, OGFC, INTELLIGENT COMPACTION, AND PAVEMENT MARKINGS.

# 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.

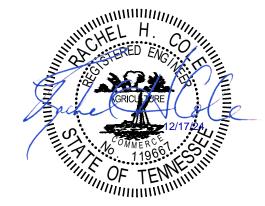
- (38) OPEN BURNING IS PROHIBITED UNLESS IT IS SPECIFICALLY ALLOWED BY LAW. IF ALLOWED, NATURAL VEGETATION, TREES, AND UNTREATED LUMBER SHALL BE THE ONLY MATERIALS THAT CAN BE OPEN BURNED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL
- (39) DISPOSAL OF ONSITE VEGETATION AND TREES BY CHIPPING THEM INTO MULCH IS PREFERABLE TO OPEN BURNING. THIS MULCH MAY BE USED AS AN ONSITE SOIL STABILIZATION MEASURE WHERE APPROPRIATE.

APPLICABLE STATE AND LOCAL PERMITS PRIOR TO ANY BURNING.

(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.



STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

ENVIRONMENTAL NOTES

RES	REST AREA INTERSTATE 24 ENTRANCE / EXIT RAMPS									
DESCRIPTION										
			411-03.10	716-01.23	716-01.30	716-12.05	716-12.03			
EXIT #	INTERCHANGE ROUTE#	RAMP	ACS MIX GRADING D TONS	SNOWPLOWABLE PAVEMENT MARKERS  EACH	REMOVAL OF SNOWPLOWABLE MARKERS	ENHANCED FLATLINE THERMO (6" DOTTED LINE)	ENHANCED FLATLINE THERMO (8" BARRIER) LF			
ENTRANCE TO REST AREA RT	DEST ADEA I 24 @ TN DIVED	DEST ADEA	111.00	30.00	30.00	255.00	685.00			
EXIT FROM REST AREA AND WELCOME CENTER RT.	REST AREA I-24 @ TN RIVER			35.00	35.00	330.00	550.00			
	REST AREA I-24 @ TN RIVER									
ENTRANCE TO REST AREA AND WELCOME CENTER LT.				30.00	30.00	200.00	750.00			
EXIT FROM REST AREA AND WELCOME CENTER LT.	REST AREA I-24 @ TN RIVER	REST AREA	168.00	30.00	30.00	220.00	700.00			
TOTALS			534	125	125	1005	2685			

	INTERSTATE 24 ENTRANCE / EXIT RAMPS										
DESCR	RIPTION										
			411-03.10	716-09.86	716-01.23	716-01.30	716-12.05	716-12.03			
EXIT #	INTERCHANGE ROUTE#	RAMP	ACS MIX CONTRAST GRADING D PAVEMENT MARKING (6'		SNOWPLOWABLE PAVEMENT MARKERS	REMOVAL OF SNOWPLOWABLE MARKERS	ENHANCED FLATLINE THERMO (6" DOTTED LINE)	ENHANCED FLATLINE THERMO (8" BARRIER			
			TONS	LM	EACH	EACH	LF	LF			
158	RA GRIFFITH HWY	158-A	252.50	0.50	35.00	35.00	200.00	750.00			
158	RA GRIFFITH HWY	158-B	246.00	0.31	35.00	35.00	200.00	664.00			
158	RA GRIFFITH HWY	158-C	143.50	0.33	55.00	55.00	200.00	800.00			
158	RA GRIFFITH HWY	158-D	315.00	0.51	55.00	55.00	470.00	750.00			
	TOTALS			1.7	180	180	1070	2964			

BRIDGE DECK RECOMMENDATIONS (RESURFACING)								
BRIDGE NUMBER	LOCATION LOG MILE	CROSSES OVER/UNDER	BRIDGE LENGTH	BRIDGE DECK RECOMMENDATIONS				
58I00240069 58-I24-22.65 K-47-114 K-47-115	22.65	SHELLMOUND RD	106.00'	COLD PLANE 2.75" OF THE EXISTING ASPHALT AND REPLACE WITH 2.75" OF NEW ASPHALT. IF COLD PLANING IS NOT IN THE PROJECT LEAVE BRIDGE AS IS.				
58100240039 58-124-22.78 UNDERPASS	22.78	SHELLMOUND RD	140.10'	TO MAINTAIN MINIMUM VERTICAL CLEARANCE OF THE UNDERPASS COLD PLANE TO MATCH THE THICKNESS OF TREATMENT.				
58I00240041 58-I24-24.14 R K-47-124 K-47-125	24.14	TVA ACCESS RD	131.25'	COLD PLANE 2.75" OF THE EXISTING ASPHALT AND REPLACE WITH 2.75" OF NEW ASPHALT. IF COLD PLANING IS NOT IN THE PROJECT LEAVE BRIDGE AS IS.				
58I00240042 58-I24-24.15L K-47-124 K-47-125	24.15	TVA ACCESS RD	131.25'	COLD PLANE 2.75" OF THE EXISTING ASPHALT AND REPLACE WITH 2.75" OF NEW ASPHALT. IF COLD PLANING IS NOT IN THE PROJECT LEAVE BRIDGE AS IS.				

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RESURF.	2025	NH-I-24-2(194)	2F
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# PROPOSED GUARDRAIL (RESURFACING)

NO GUARDRAIL IMPROVEMENTS ARE INCLUDED IN THIS PROJECT

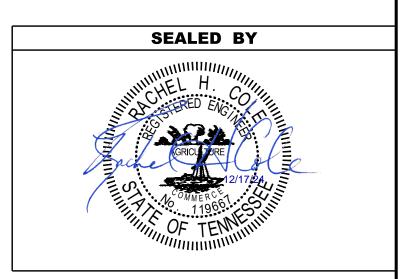
# UTILITY ADJUSTMENTS (RESURFACING)

THERE ARE NO UTILITY ADJUSTMENTS ON THIS PROJECT.

# STORM DRAIN ADJUSTMENTS (RESURFACING)

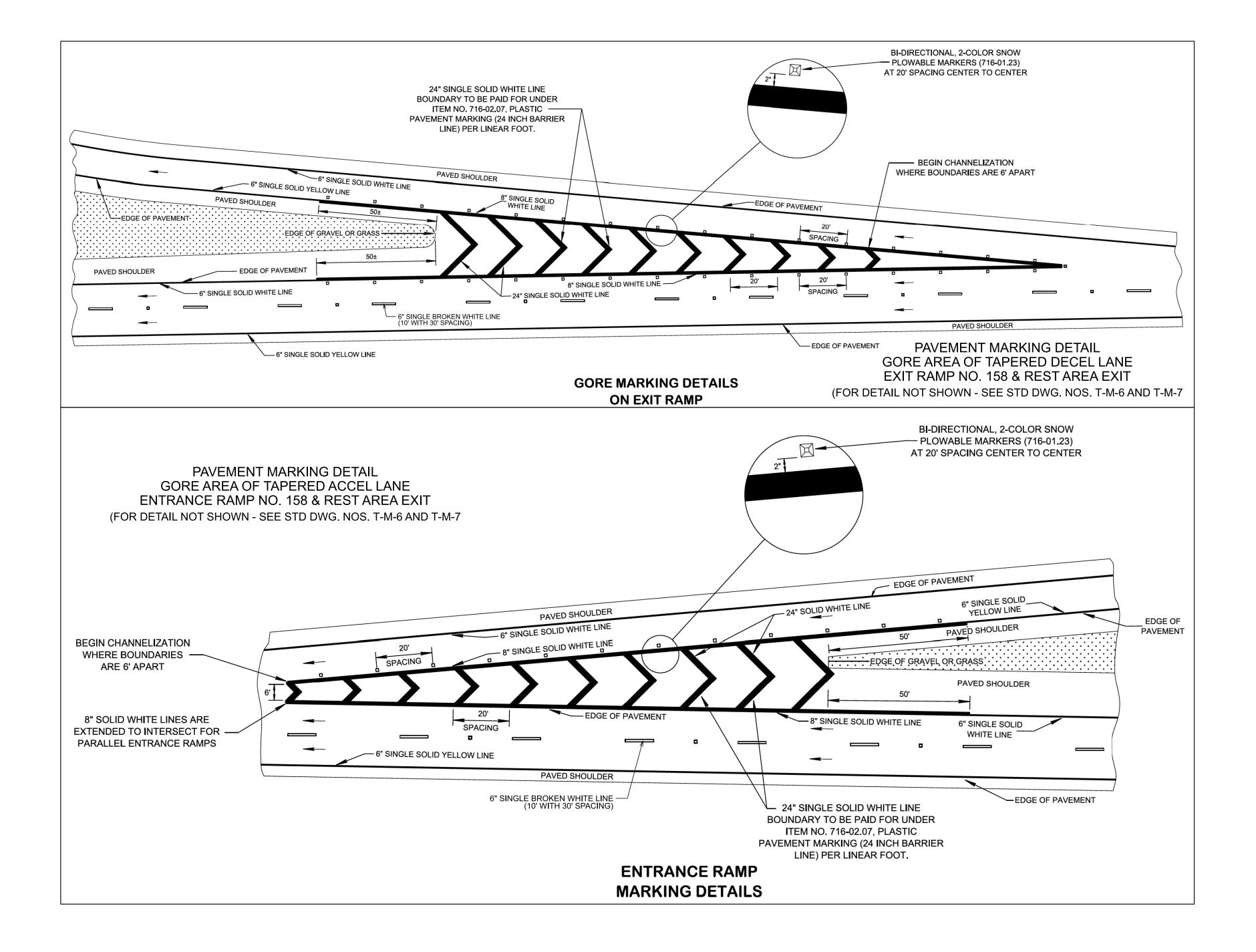
THERE ARE NO STORM DRAIN ADJUSTMENTS ON THIS PROJECT.

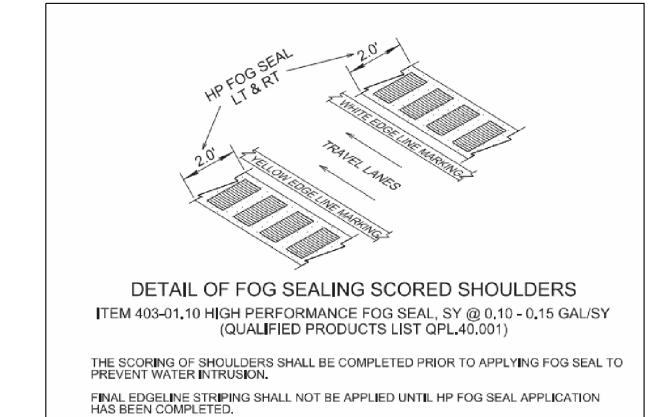
TRAFFIC CONTROL SIGN TABULATION (RESURFACING)								
M.U.T.C.D.		SI	ZE			TOTAL	ITEM NO.	
SIGN	LEGEND \ DESCRIPTION	IN INCHES			S.F.	NUMBER	712-06	
NO.		L x	<b>(</b>	W		REQUIRED	S.F.	
E5-2A	EXIT CLOSED	48" >	X	48"	16	4	64	
G20-1	ROAD WORK NEXT 5 MILES	48" >	X	48"	16	2	32	
G20-2	END ROAD WORK	48" >	X	48"	16	10	160	
W1-4AR	REVERSE CURVE (RT)	48" >	X	48"	16	2	32	
W4-2R	LANE ENDS (RT)	48" >	X	48"	16	2	32	
W4-2L	LANE ENDS (LT)	48" >	X	48"	16	2	32	
W8-11	UNEVEN LANES	48" >	X	48"	16	44	704	
W8-15	GROOVED PAVEMENT	48" >	X	48"	16	44	704	
W8-15P	MOTORCYCLE (PLAQUE)	<b>24"</b> >	X	18"	3	44	132	
W8-17	SHOULDER DROP OFF (SYMBOL)	48" >	X	48"	16	44	704	
W8-17P	SHOULDER DROP-OFF (PLAQUE)	24" >	X	18"	3	44	132	
W20-1	ROAD WORK AHEAD	48" >	X	48"	16	10	160	
W20-1	ROAD WORK 3 MILE	48" >	X	48"	16	2	32	
W20-1	ROAD WORK 2 MILE	48" >	X	48"	16	2	32	
W20-1	ROAD WORK 1 MILE	48" >	X	48"	16	2	32	
W20-1	ROAD WORK 1/2 MILE	48" >	X	48"	16	2	32	
W20-1	ROAD WORK 1000 FT	48" >	X	48"	16	2	32	
W20-5R	RIGHT LANE CLOSED 1500 FT	48" >	X	48"	16	2	32	
W20-5R	RIGHT LANE CLOSED 1 MILE	48" >	X	48"	16	2	32	
W20-5R	RIGHT LANE CLOSED 1/2 MILE	48" >	X	48"	16	2	32	
W20-5R	RIGHT LANE CLOSED 1000 FT	48" >	X	48"	16	2	32	
W20-5L	LEFT LANE CLOSED 1/2 MILE	48" >	X	48"	16	2	32	
W20-5L	LEFT LANE CLOSED 1000 FT	48" >	X	48"	16	2	32	
W21-2	FRESH OIL	48" >	X	48"	16	2	32	
W21-5R	RIGHT SHOULDER CLOSED 1500 FT	48" >	X	48"	16	2	32	
W21-5R	RIGHT SHOULDER CLOSED	48" >	X	48"	16	2	32	
W21-5L	LEFT SHOULDER CLOSED 1500 FT	48" >	X	48"	16	2	32	
W21-5L	LEFT SHOULDER CLOSED	48" >	X	48"	16	2	32	
						TOTAL	3400	

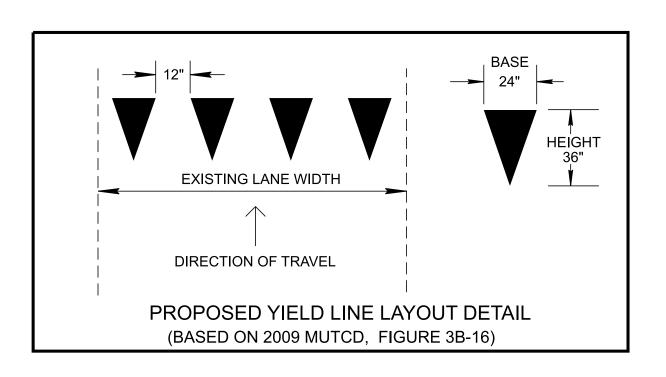


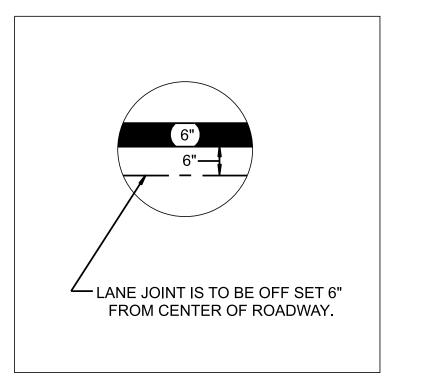
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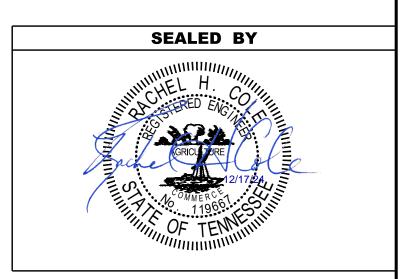
TABULATED QUANTITIES











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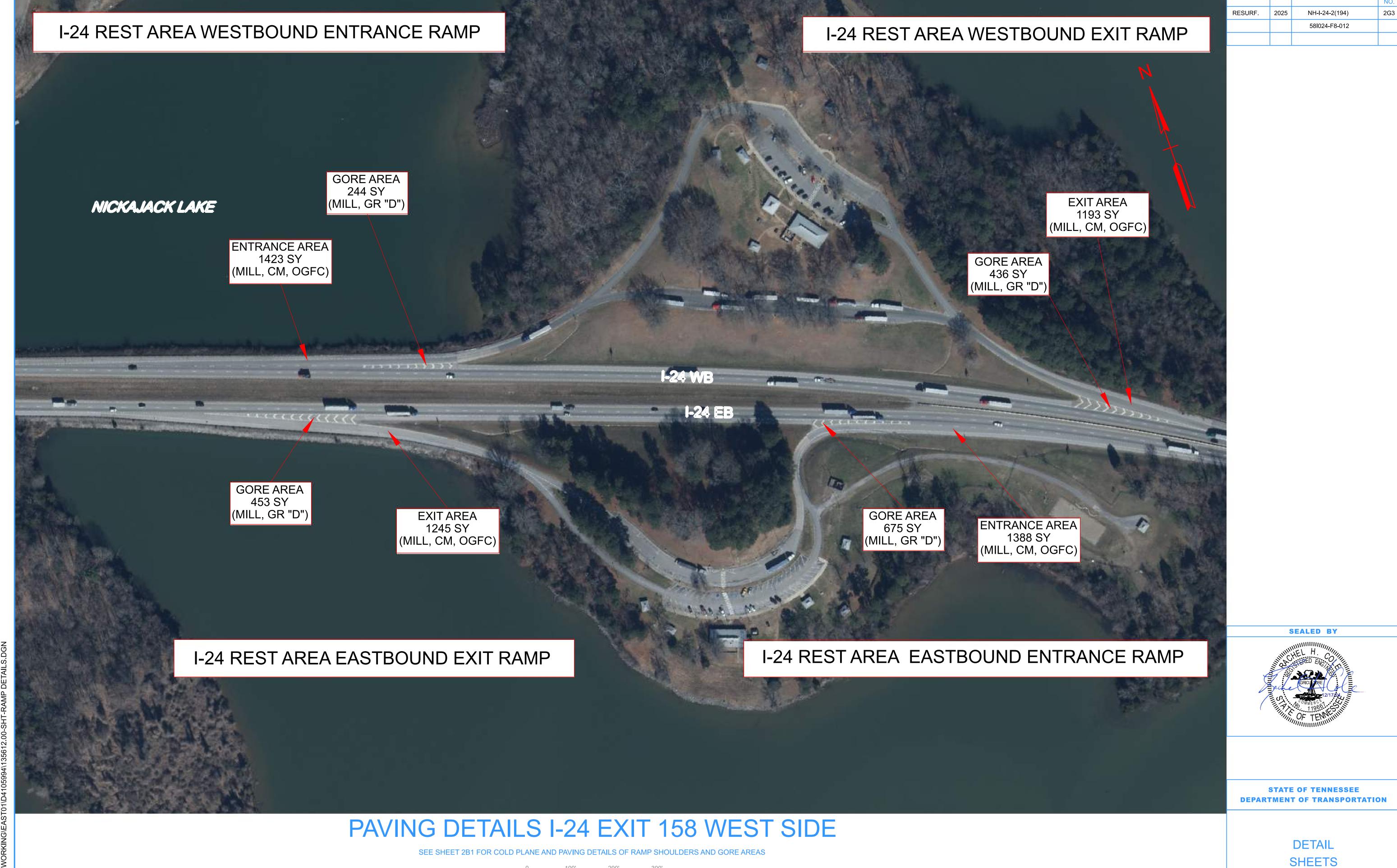
DETAIL SHEETS



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#### UTILITY

- (1) THE LOCATIONS OF UTILITIES SHOWN WITHIN THESE PLANS ARE APPROXIMATE ONLY. THE SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES. ABOVE GRADE AND UNDERGROUND UTILITIES SHOWN WERE TAKEN FROM VISIBLE APPURTENANCES AT THE SITE, PUBLIC RECORDS, AND/OR MAPS PREPARED BY OTHERS, THEREFORE, RELIANCE UPON THE TYPE, SIZE, AND LOCATION OF UTILITIES SHOWN SHOULD BE DONE SO WITH THIS CIRCUMSTANCE CONSIDERED. DETAILED VERIFICATION OF EXISTENCE, LOCATION, AND DEPTH SHOULD ALSO BE MADE PRIOR TO ANY DECISION RELATIVE THERETO IS MADE. AVAILABILITY AND COST OF SERVICE SHOULD BE CONFIRMED WITH THE APPROPRIATE UTILITY COMPANY. IN TENNESSEE, IT IS A REQUIREMENT, PER "THE UNDERGROUND UTILITY DAMAGE PREVENTION ACT", THAT ANYONE WHO ENGAGES IN EXCAVATION MUST NOTIFY ALL KNOWN UNDERGROUND UTILITY OWNERS. NO LESS THAN THREE (3) OR NOT MORE THAN TEN (10) WORKING DAYS PRIOR TO THE DATE OF THEIR INTENT TO EXCAVATE AND ALSO TO AVOID ANY POSSIBLE HAZARD OR CONFLICT. NOTIFICATION BY CALLING THE TENNESSEE ONE CALL SYSTEM, INC., AT 1-800-351-1111 AS REQUIRED BY TCA 65-31-106 WILL BE REQUIRED.
- 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.
- 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.
- 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.
- 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 & FIBER:**

#### **CHARTER COMMUNICATIONS**

1103 S HAMILTON STREET DALTON, GA 30720 CONTACT: ERIC CHADWICK

OFFICE PHONE: 706 483 4925 Email: eric.chadwick@charter.com

#### **ELECTRIC**:

#### **SEQUACHEE VALLEY ELECTRIC COOPERATIVE**

512 S CEDAR AVENUE SOUTH PITTSBURG, TN 37380 CONTACT: LUCAS MARSH OFFICE PHONE: 423 837 8605 Email: lmarsh@svalleyec.com

#### FIBER:

#### **SEQUACHEE VALLEY ELECTRIC COOPERATIVE**

P.O. BOX 31

SOUTH PITTSBURG, TN 37380 CONTACT: MIKE BIRDWELL OFFICE PHONE: 423 837 5076 Email: mbirdwell@svalleyec.com

#### **TELEPHONE:**

#### BELLSOUTH DBA AT&T

300 E MARTIN LUTHER KING BOULEVARD, 5TH FLOOR

CHATTANOOGA, TN 37403 CONTACT: JOE PERREL OFFICE PHONE: 423 266 1566 Email: jp1389@att.com

SHEE TYPE YEAR PROJECT NO. RESURF. 2025 NH-I-24-2(194) 58I024-F8-012

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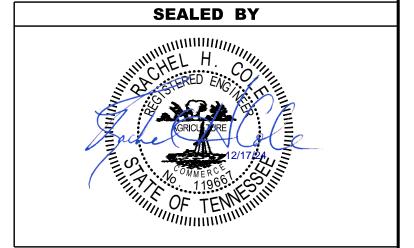
> UTILITY NOTES AND **UTILITY OWNERS**

# PAVEMENT EDGE DROP-OFF TRAFFIC CONTROL NOTES

- 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.

TYPE	YEAR	PROJECT NO.	SHEET NO.	
RESURF.	2025	NH-I-24-2(194)	T1	
		58I024-F8-012		
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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PAVEMENT EDGE
DROP-OFF NOTES
FOR
TRAFFIC CONTROL

(A) THE CONTRACTOR SHALL MONITOR ALL SPEED LIMIT ASSEMBLIES TO PREVENT COMMUNICATING CONFLICTING MESSAGES CONCERNING THE SPEED LIMIT.

EXISTING SPEED LIMIT SIGNS SHALL BE SUFFICIENTLY COVERED THROUGH THE ENTIRE WORK ZONE. IF THE COVERING BEGINS TO REVEAL THE EXISTING SPEED LIMIT SIGN, THE COVERING SHALL BE REPAIRED OR REPLACED AS DIRECTED BY THE TDOT PROJECT ENGINEER. SEE SPECIAL PROVISION 712DSL.

(C) TAPE SHALL NOT BE AFFIXED TO THE REFLECTIVE SHEETING.

NICKAJACK DAM

DIGITAL SPEED LIMIT ASSEMBLY APPROX. LOCATION LM 23.84 (I-24 WB) (BEFORE ENTRANCE RAMP 158 WESTBOUND)

(AFTER ENTRANCE RAMP 158 EASTBOUND)

DIGITAL SPEED LIMIT ASSEMBLY APPROX. LOCATION LM 23.80 (I-24 EB) -(AFTER EXIT RAMP 158 EASTBOUND)

DIGITAL SPEED LIMIT ASSEMBLY

APPROX. LOCATION LM 24.31 (I-24 EB)

DIGITAL SPEED LIMIT ASSEMBLY APPROX. LOCATION LM 23.76 (I-24 EB) (AT APPROX. 2 MILE SPACING)

DIGITAL SPEED LIMIT ASSEMBLY

58I024-F8-012 BEGIN PROJECT NO. NH-I-24-2(194) RESURFACE

DIGITAL SPEED LIMIT ASSEMBLY APPROX. LOCATION LM 25.42 (I-24 WB) (AFTER ENTRANCE RAMP FROM REST STOP)

DIGITAL SPEED LIMIT ASSEMBLY

DIGITAL SPEED LIMIT ASSEMBLY

APPROX. LOCATION LM 24.41 (I-24 WB)

(AFTER EXIT RAMP 158 WESTBOUND)

APPROX. LOCATION LM 25.34 (I-24 EB)

(BEFORE EXIT RAMP TO REST STOP)

DIGITAL SPEED LIMIT ASSEMBLY APPROX. LOCATION LM 25.66 (I-24 EB) (BEFORE EXIT RAMP TO REST STOP)

DIGITAL SPEED LIMIT ASSEMBLY APPROX. LOCATION LM 25.76 (I-24 EB) (AT APPROX. 2 MILE SPACING)

DIGITAL SPEED LIMIT ASSEMBLY APPROX. LOCATION LM 25.78 (I-24 WB) (AFTER ENTRANCE RAMP FROM REST STOP)

DIGITAL SPEED LIMIT ASSEMBLY APPROX. LOCATION LM 26.85 (I-24 WB) (1 MILE AFTER END PROJECT)

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> TRAFFIC CONTROL **PLANS**

APPROX. LOCATION LM 20.76 (I-24 EB) (1 MILE PRIOR TO BEGIN PROJECT)

L.M. 21.76

58I024-F8-012 END PROJECT NO. NH-I-24-2(194) RESURFACE L.M. 25.85