TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

Index Of Sheets

SEE SHEET NO. 1A FOR INDEX

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF ENGINEERING

TENN.	YEAR	SHEET NO.
	2015	1
FED. AID PROJ. NO.	STP/HSIP-168(12)	
STATE PROJ. NOS.	47057-3237-94 47057-8237-14	

KNOX COUNTY

S.R. 168: FROM S.R. 115 TO MARTIN MILL PIKE

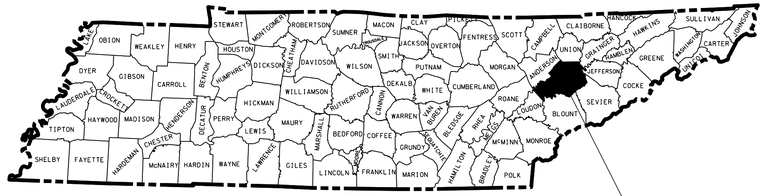
RESURFACE AND SAFETY

STATE HIGHWAY NO. 168 F.A.H.S. NO. N/A

RAILROAD UNDERPASS

NORFOLK SOUTHERN RAILROAD
ID# 730427S
L.M. 1.62±

SEE SHEETS NO. 4 & 7 FOR NOTES.



KNOX CO.
S.R. 168

BEGIN PROJECT

END PROJECT

NO EXCLUSIONS
NO EQUATIONS

PROJECT LIMITS
FROM: JCT. S.R. 115 (US 129) (L.M. 0.00)
TO: INTERSECTION OF MARTIN MILL PK. (L.M. 2.52)

N

0 ¼ MI. ½ MI. ¾ MI.

SCALE: 1" = 1/2 MILE

SEALED BY

PAUL THOMAS BEBBE
REGISTERED ENGINEER
AGRICULTURE
COMMERCE
No. 102240
STATE OF TENNESSEE

APPROVED: Paul D. Degges
PAUL D. DEGGES, CHIEF ENGINEER

DATE:

APPROVED:
JOHN SCHROER, COMMISSIONER

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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, 2015 AND ADDITIONAL SPECIFICATIONS AND SPECIAL PROVISIONS CONTAINED IN THE PLANS AND IN THE PROPOSAL CONTRACT.

TDOT TRANS. PROJ. SP. ERIC WILSON

DESIGNER KENNY KERLEY

P.E. NO. 98013-4203-04

PIN 105150.02

PROJECT LENGTH 2.52 MILES
TOTAL LANE MILES RESURFACED 6.56 MILES

TRAFFIC DATA	
ADT (2015)	20453
POSTED SPEED	50 MPH

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

APPROVED:

DIVISION ADMINISTRATOR DATE

3-JAN-2015 12:49
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TYPE	YEAR	PROJECT NO.	SHEET NO.
RESURF	2015	STP/HSIP-168(12)	1A

S.R. 168 KNOX CO.
47057-8237-14
47057-3237-94

INDEX

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STANDARD ROADWAY DRAWINGS

ROADWAY DESIGN STANDARDS

DWG. NO.	REV.	DESCRIPTION
RD-A-1	12-18-99	STANDARD ABBREVIATIONS
RD-L-1	10-26-94	STANDARD LEGEND
RD01-SE-3	10-15-02	RURAL SUPERELEVATION DETAILS

SAFETY DEVICES AND FENCE

DWG. NO.	REV.	DESCRIPTION
S-CZ-1		CLEAR ZONE CRITERIA
S-GRT-2	11-03-14	TYPE 38 GUARDRAIL TERMINAL
S-GRT-2P		EARTH PAD FOR TYPE 38 TERMINAL

TRAFFIC CONTROL

DWG. NO.	REV.	DESCRIPTION
T-FAB-1	05-27-97	FLASHING YELLOW ARROW BOARD
T-M-1	07-24-14	DETAILS OF PAVEMENT MARKINGS FOR CONVENTIONAL ROADS AND MARKING ABBREVIATIONS
T-M-2	07-24-14	DETAILS OF PAVEMENT MARKINGS FOR CONVENTIONAL ROADS
T-M-3	07-24-14	MARKING STANDARDS FOR TRAFFIC ISLANDS, MEDIANS & PAVED SHOULDER ON CONVENTIONAL ROADS
T-M-4	07-24-14	STANDARD INTERSECTION PAVEMENT MARKINGS
T-SG-2	07-29-04	LOOP LEAD-INS, CONDUIT AND PULL BOXES
T-SG-3	11-11-04	STANDARD NOTES AND DETAILS OF INDUCTIVE LOOPS
T-WZ-10	04-02-12	ADVANCE ROAD WORK SIGNING ON HIGHWAYS AND FREEWAYS

EROSION PREVENTION AND SEDIMENT CONTROL

DWG. NO.	REV.	DESCRIPTION
EC-STR-3B	08-01-12	SILT FENCE
EC-STR-3E	04-01-08	SILT FENCE FABRIC JOINING DETAILS
EC-STR-34	08-01-12	EROSION CONTROL BLANKET FOR SLOPE INSTALLATION

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DEPARTMENT OF TRANSPORTATION

INDEX AND STANDARD ROADWAY DRAWINGS

TENNESSEE D.O.T.
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FILE NO.

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TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
RESURF	2015	STP/HSIP-168(12)	2

S.R. 168 KNOX CO.
47057-8237-14
47057-3237-94

ESTIMATED ROADWAY QUANTITIES

	ITEM NO.	DESCRIPTION	UNIT	QUANTITY 47057-8237-14	QUANTITY STP/HSIP-168(12) 47057-3237-94
1	202-03.01	REMOVAL OF ASPHALT PAVEMENT	S.Y.	2628	
2	303-01	MINERAL AGGREGATE, TYPE A BASE, GRADING D	TON	159	
	307-01.08	ASPHALT CONCRETE MIX (PG64-22) (BPMB-HM) GRADING B-M2	TON	296	
	403-01	BITUMINOUS MATERIAL FOR TACK COAT (TC)	TON	23	
3	411-01.07	ACS MIX (PG64-22) GRADING E SHOULDER	TON	445	
4	411-02.10	ACS MIX(PG70-22) GRADING D	TON	3414	
5	415-01.01	COLD PLANING BITUMINOUS PAVEMENT	TON	3892	
6	502-08.01	RESEALING JOINTS (HOT POURED ELASTIC)	L.F.	3168	
7	705-04.07	TAN ENERGY ABSORBING TERM (NCHRP 350, TL3)	EACH		1
	705-04.09	EARTH PAD FOR TYPE 38 GR END TREATMENT	EACH		1
	712-04.01	FLEXIBLE DRUMS (CHANNELIZING)	EACH	138	
	712-05.01	WARNING LIGHTS (TYPE A)	EACH	69	
	712-01	TRAFFIC CONTROL	LS	1	
8	712-06	SIGNS (CONSTRUCTION)	S.F.	552	
9	716-01.21	Snwplwble Pvmt Mrkrs (Bi-Dir)(1 Color)	EACH		297
	716-01.22	Snwplwble Pvmt Mrkrs (Mono-Dir)(1 Color)	EACH		66
10	716-02.04	PLASTIC PAVEMENT MARKING (CHANNELIZATION STRIPING)	S.Y.		450
	716-02.05	PLASTIC PAVEMENT MARKING (STOP LINE)	L.F.		150
	716-02.06	PLASTIC PAVEMENT MARKING (TURN LANE ARROW)	EACH		14
	716-03.01	PLASTIC WORD PAVEMENT MARKING (ONLY)	EACH		3
11	716-05.01	PAINTED PAVEMENT MARKING (4" LINE)	L.M.	11	
	716-12.02	ENHANCED FLATLINE THERMO PVMT MRKNG (6IN LINE)	L.M.	11	
	717-01	MOBILIZATION	LS	1	
	730-14.02	SAW SLOT	L.F.	1000	
	730-14.03	LOOP WIRE	L.F.	2000	

FOOTNOTES

(1) TO BE USED FOR REMOVAL OF ALL ASPHALT SHOULDERS ADJACENT TO EXISTING CONCRETE RAMPS.

(2) TO BE USED ON EXISTING RAMP SHOULDERS FROM L.M. 0.00 TO L.M. 0.30.

(3) INCLUDES 252 TONS FOR SPOT LEVELING. (SPOT LEVELING TO BE USED ONLY TO CORRECT DEFICENCIES ON EXISTING PAVEMENT AND IS NOT TO BE COMBINED WITH OTHER COURSES.)

(4) INCLUDES 13 TONS FOR TURN LANES.

(5) INCLUDES 13 TONS FOR TURN LANES.

(6) TO BE USED TO SEAL SHOULDER JOINTS ON CONCRETE RAMPS.

(7) TO BE LOCATED AT L.M. 1.80 (LT) OR AS DIRECTED TDOT OPERATIONS DISTRICT ENGINEER. INCLUDES THE COST OF REMOVAL OF 50' EXISTING GUARDRAIL AND ANY MATERIALS NECESSARY FOR CONSTRUCTION INCLUDING EPSC MEASURES.

(8) QUANTITY INCLUDES THE FOLLOWING SIGNS:

NO.	DESCRIPTION	CODE	SIZE	QUANTITY (SF)
20	ROAD WORK	W20-1	48"X48"	320
8	LANE CLOSED	W20-5	48"X48"	128
4	LANE ENDS	W4-2	48"X48"	64
2	ROAD WORK NEXT 3 MILES	G20-1	36"X18"	9
2	ADVISORY SPEED	W13-1P	24"X24"	8
5	END ROAD WORK	G20-2	36"X18"	23
12	UNEVEN LANES	W8-9	30"X30"	75
			TOTAL:	552

NOTE: THIS CONSTRUCTION SIGNING IS TO BE A MINIMUM. OTHER SIGNS MAY BE REQUIRED AS DIRECTED BY THE TDOT OPERATIONS DISTRICT ENGINEER.

(9) INCLUDES THE REMOVAL OF EXISTING MARKERS.

(10) 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.

(11) TO BE USED FOR TEMPORARY PAVEMENT MARKING ON INTERMEDIATE LAYERS.

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DEPARTMENT OF TRANSPORTATION

ESTIMATED ROADWAY QUANTITIES

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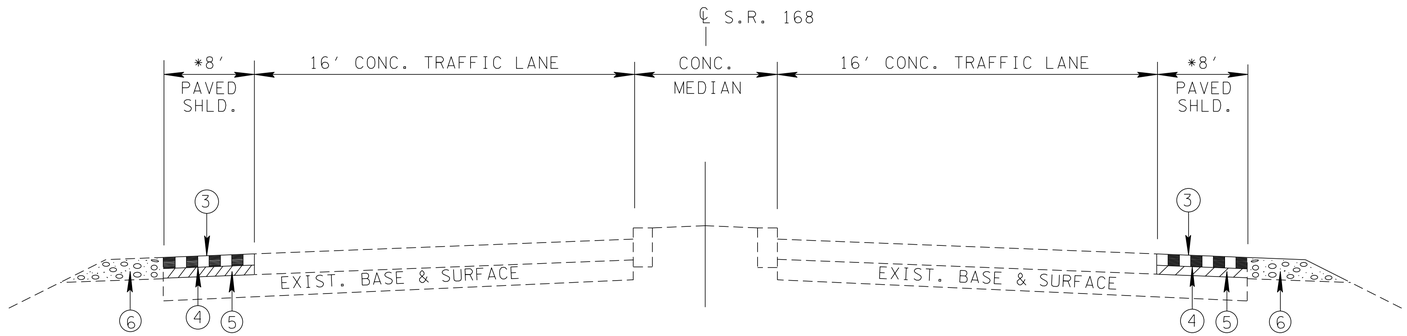
TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
RESURF	2015	STP/HSIP-168(12)	3

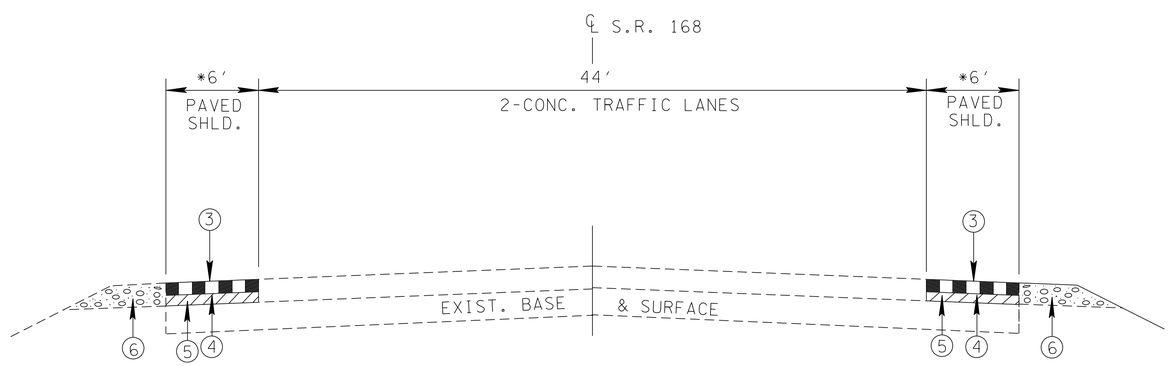
S.R. 168 KNOX CO.
47057-8237-14
47057-3237-94



TYPICAL CROSS-SECTION OF IMPROVEMENT

LOG MILE 0.00 TO LOG MILE 0.22

SEE SHEET 4 FOR
PROPOSED PAVEMENT SCHEDULE



TYPICAL CROSS-SECTION OF IMPROVEMENT

LOG MILE 0.22 TO LOG MILE 0.30

*TO BE PAID UNDER ITEM NO. 202-03.01 REMOVAL OF ASPHALT PAVEMENT.

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DEPARTMENT OF TRANSPORTATION

TYPICAL SECTIONS

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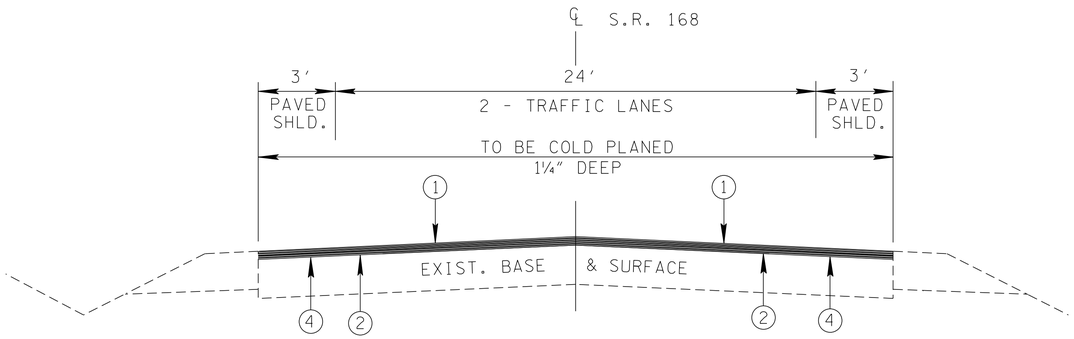
TYPE	YEAR	PROJECT NO.	SHEET NO.
RESURF	2015	STP/HSIP-168(12)	4

S.R. 168 KNOX CO.
47057-8237-14
47057-3237-94

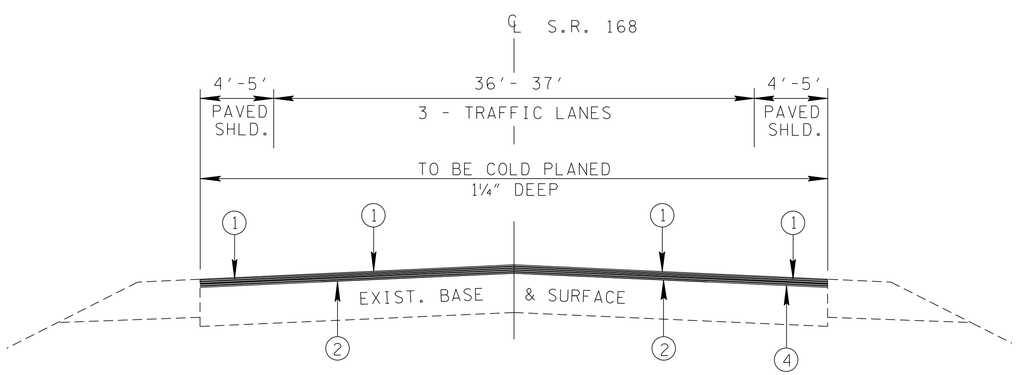
TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

NOTE:
ALL DEPTHS FOR COLD PLANING
TO BE ½" TOLERANCE.



TYPICAL CROSS-SECTION OF IMPROVEMENT

LOG MILE 0.30 TO LOG MILE 0.35



TYPICAL CROSS-SECTION OF IMPROVEMENT

LOG MILE 0.35 TO LOG MILE 0.40 (36' SURFACE) (5' SHLD.)
LOG MILE 0.40 TO LOG MILE 2.52 (37' SURFACE) (4' SHLD.)

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PROPOSED PAVEMENT SCHEDULE

1	ASPHALTIC CONCRETE SURFACE (HM) 1¼" TH. (APPROX. 132.5 LBS./SQ.YD.) 411-02.10 ACS MIX (PG70-22) GRADING D
2	ASPHALTIC CONCRETE SURFACE (HM) (SPOT LEVELING)(APPROX. 100 TONS/MILE) 411-01.07 ACS MIX (PG64-22) GRADING E SHOULDER
3	ASPHALTIC CONCRETE SURFACE (HM) 1¼" TH. (APPROX. 128.7 LBS./SQ.YD.) 411-01.07 ACS MIX (PG64-22) GRADING E SHOULDER
4	TACK COAT (TC) (APPROX. 0.10 GAL./SQ.YD.) 403-01 BITUMINOUS MATERIAL FOR TACK COAT (TC)
5	BITUMINOUS PLANT MIX BASE (HM) 2" TH. (APPROX. 226 LBS./SQ.YD.) 307-01.08 ASPHALT CONCRETE MIX (PG64-22) (BPMB-HM) GRADING B-M2
6	MINERAL AGGREGATE BASE (SHOULDERS) 4" TH. 303-01 MINERAL AGGREGATE, TYPE A BASE, GRADING D

NOTE:
THE FOLLOWING BRIDGES ARE TO BE COLD PLANED 1¼" AND PAVED WITH 1¼" 'D' MIX:
BRIDGE OVER S.R. 33 (L.M. 1.00)
BRIDGE OVER SOUTHERN R/R (L.M. 1.62)

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TYPICAL SECTIONS AND PROPOSED PAVEMENT SCHEDULE

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TYPE	YEAR	PROJECT NO.	SHEET NO.
RESURF	2015	STP/HSIP-168(12)	5

S.R. 168 KNOX CO.
47057-8237-14
47057-3237-94

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.

(2) 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 WITHOUT APPROVAL BY SAME. 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.

UTILITIES

(1) 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 ANY NECESSARY SPECIAL EQUIPMENT WILL BE INCLUDED IN THE PRICE BID FOR OTHER ITEMS OF CONSTRUCTION.

(2) 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.

MISCELLANEOUS

(1) 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

(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. 716-05.01, PAINTED PAVEMENT MARKING (4" LINE), L.M.

(2) 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.

PAVEMENT RESURFACING

(1) 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.

SIGNALIZATION

(1) EQUIPMENT AND INSTALLATION OF TRAFFIC SIGNALS SHALL COMPLY WITH TDOT STANDARD SPECIFICATIONS, SECTION 730.

(2) EQUIPMENT AND INSTALLATION SHALL COMPLY WITH THE TDOT "SPECIAL PROVISIONS REGARDING SECTION 730K- TRAFFIC SIGNALS."

(3) THE PROJECT ENGINEER SHALL BE RESPONSIBLE FOR SUPPLYING THE CONTRACTOR WITH AS BUILT SIGNAL PLANS AT THE PRE-CONSTRUCTION CONFERENCE. THESE PLANS WILL PROVIDE THE CONTRACTOR WITH THE DESIRED LOCATION FOR DETECTOR LOOP REPLACEMENT.

(4) LOOP REPLACEMENT SHALL BE IN ACCORDANCE WITH SECTION 730 OF THE STANDARD SPECIFICATIONS.

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, VERTICAL PANELS, 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 A 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 DETOUR AND CONSTRUCTION SIGNING SHALL BE IN STRICT ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

EROSION PREVENTION AND SEDIMENT CONTROL

LITTER, DEBRIS, WASTE, PETROLEUM

(1) THE CONTRACTOR SHALL ESTABLISH AND MAINTAIN A PROACTIVE METHOD TO PREVENT LITTER, CONSTRUCTION DEBRIS, AND CONSTRUCTION WASTES FROM ENTERING WATERS OF THE STATE/U.S. THESE MATERIALS WILL BE PICKED UP AND REMOVED FROM STORMWATER EXPOSURE PRIOR TO ANTICIPATED STORM EVENTS. AFTER USE, MATERIALS USED FOR EPSC WILL BE REMOVED FROM THE SITE.

(2) 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 (NFPA). APPROPRIATE CONTAINMENT MEASURES FOR THESE AREAS SHALL BE USED. 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.

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GENERAL NOTES

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TYPE	YEAR	PROJECT NO.	SHEET NO.
RESURF	2013	STP/HSIP-168(12)	6

S.R. 168 KNOX CO.
47057-8237-14
47057-3237-94

SPECIAL NOTES

GUARDRAIL

(1) THE CONTRACTOR SHALL NOT REMOVE ANY EXISTING GUARDRAIL AND/OR END TERMINAL UNTIL THE TDOT OPERATIONS DISTRICT ENGINEER CONCURS IN THE NECESSITY OF REMOVAL DUE TO CONSTRUCTION REQUIREMENTS AND THE APPROPRIATE WARNING DEVICES ARE INSTALLED. THE PROPOSED GUARDRAIL AND/OR END TERMINAL SHALL BE INSTALLED QUICKLY TO MINIMIZE TRAFFIC EXPOSURE TO ANY HAZARD. NO PAYMENT WILL BE MADE FOR ANY GUARDRAIL AND/OR END TERMINAL UNTIL IT IS COMPLETELY IN PLACE.

(2) IF ANY GUARDRAIL AND/OR END TERMINAL 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 MEASURES (BARRICADES, DRUMS, LIGHTS AND ROUNDED END ELEMENTS) SHALL BE INCLUDED IN THE COST OF THE GUARDRAIL AND/OR END TERMINAL.

UTILITIES

(1) UNLESS OTHERWISE NOTED, ALL UTILITY ADJUSTMENTS WILL BE PERFORMED BY THE UTILITY OR IT'S REPRESENTATIVE. THE CONTRACTOR AND UTILITY OWNERS WILL BE REQUIRED TO COOPERATE WITH EACH OTHER IN ORDER TO EXPEDITE THE WORK REQUIRED BY THIS CONTRACT.

(2) THE CONTRACTOR WILL PROVIDE ALL NECESSARY PROTECTIVE MEASURES TO SAFEGUARD EXISTING UTILITES FROM DAMAGE DURING CONSTRUCTION OF THE PROJECT. THE COST OF PROTECTING UTILITIES FROM DAMAGE AND FURNISHING ANY NECESSARY SPECIAL EQUIPMENT WILL BE INCLUDED IN THE PRICE BID FOR OTHER CONSTRUCTION ITEMS.

(3) 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 SCHDULE 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 CONTACTOR'S OPERATIONS.

(4) 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) BUSIINESS 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 1-800-331-1111 WILL BE REQUIRED.

(5) UTILITY OWNERS

ELECTRIC: KNOXVILLE UTILITIES BOARD

WATER/SEWER: KNOX-CHAPMAN UTILITY DISTRICT

GAS: KNOXVILLE UTILITIES BOARD AND /OR EAST TENNESSEE NATURAL GAS

CABLE: COMCAST

TELEPHONE: AT&T

MISCELLANEOUS

(1) THE CONTRACTOR WILL BE REQUIRED TO REMOVE AND RESET MAILBOXES AND POSTS WHERE NECESSARY. COST TO BE INCLUDED IN PRICE BID FOR OTHER CONSTRUCTION ITEMS.

(2) ALL GUARDRAIL, GUARDRAIL POSTS AND SIGNS WHICH INTERFERE WITH CONSTRUCTION WILL BE REMOVED AND STORED BY STATE FORCES.

(3) ALL SIGNING AND PAVEMENT MARKINGS ARE TO BE IN ACCORDANCE WITH THE CURRENT EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

(4) PAVED SHOULDERS SHALL BE BROOMED, AGGREGATE SHOULDERS SHALL BE CLIPPED, AND DITCHES SHALL BE CLEANED BY THE CONTRACTOR. ALL COST ASSOCIATED WITH THIS WORK SHALL BE INCLUDED IN COST OF OTHER ITEMS.

PAVEMENT MARKINGS

(1) THE CONTRACTOR WILL BE REQUIRED TO ESTABLISH AND LOCATE ALL "NO PASSING ZONES" IN ACCORDANCE WITH THE CURRENT EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES AS WELL AS TO PROVIDE THE LAYOUT OF ALL PAVEMENT MARKING REQUIRED ON THE PROJECT. THE METHOD OF DETERMINING THE "NO PASSING ZONES" IS TO BE APPROVED BY THE TDOT OPERATIONS DISTRICT ENGINEER, WITH ADVICE FROM THE REGIONAL TRAFFIC OFFICE, BEFORE PAVING OPERATIONS BEGIN.

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. 415-01.01.

(6) ALL DEPTHS FOR COLD PLANING TO BE ±½" TOLERANCE.

(7) ON ALL SUPERELEVATED CURVES, THE CONTRACTOR SHALL INSURE THAT THE SHOULDER ROLLOVER RATES SHOWN IN THE T.D.O.T. STANDARD ROADWAY DRAWINGS ARE ACHIEVED.

(8) A MATERIAL TRANSFER DEVICE IS TO BE USED ON ALL MIXES. COST TO BE INCLUDED IN THE UNIT PRICE BID FOR ASPHALT ITEMS. SEE SPECIAL PROVISION NO.407G.

(9) SPECIAL PROVISION NO. 411C APPLIES TO THIS PROJECT. AVERAGE HC-IRI NUMBER PER MILE IS 69.5. SEE TABLE BELOW:

EASTBOUND S.R. 168		
FROM	TO	HC/IRI LANE 1
0.00	1.00	88
1.00	2.00	67
2.00	2.52	47

WESTBOUND S.R. 168		
FROM	TO	HC/IRI LANE 1
0.00	1.00	49
1.00	2.00	60
2.00	2.52	106

(10) THE CONTRACTOR SHOULD TAKE EXTREME CARE WHEN COLD PLANING THE EXISTING ASPHALT OFF BRIDGE DECK, SO 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 PROJECT ENGINEER AT NO ADDITIONAL COST.

(11) LOOPS SHALL BE INSTALLED IN THE LEVELING COURSE IF A LEVELING COURSE IS PROVIDED.

CONSTRUCTION WORK ZONE & TRAFFIC CONTROL

(1) THE CONTRACTOR SHALL COMPLY WITH SECTION 712 OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION REGARDING TEMPORARY TRAFFIC CONTROL AND THE CURRENT EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

(2) ANY WORK REQUIRING LANE CLOSURES INCLUDING PAVEMENT MARKING OPERATIONS SHALL BE AT NON-PEAK HOURS (9:00 A.M. TO 3:00 P.M.) UNLESS OTHERWISE DIRECTED BY THE TDOT OPERATIONS DISTRICT ENGINEER.

(3) NO LANE CLOSURES WILL BE ALLOWED ON SATERDAYS WHEN THE UNIVERSITY OF TENNESSEE PLAYS FOOTBALL IN KNOXVILLE.

PAVEMENT EDGE DROP-OFF TRAFFIC CONTROL

(1) 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 2 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.

EROSION PREVENTION AND SEDIMENT CONTROL

DISTURBED AREA

(1) ALL DISTURBED AREAS SHALL BE PROPERLY STABILIZED AS SOON AS PRACTICABLE.

SEDIMENT CONTROL

(2) THE CONTRACTOR SHALL ESTABLISH AND MAINTAIN A PROACTIVE METHOD TO PREVENT THE OFF-SITE MIGRATION OR DEPOSIT OF SEDIMENT ON ROADWAYS USED BY THE GENERAL PUBLIC. OFFSITE VEHICLE TRACKING OF SEDIMENTS AND THE GENERATION OF DUST SHALL BE MINIMIZED.

STREAM/WETLAND

(3) WETLANDS SHALL NOT BE USED AS EQUIPMENT STORAGE, STAGING OR TRANSPORTATION AREAS.

NPDES

(4) DUE TO THE TYPE OF WORK IT IS OUR UNDERSTANDING THAT THE PROJECT WILL NOT DISTURB MORE THAN ONE ACRE. IF THE DISTURBED AREA IS MORE THAN ONE ACRE, PLEASE CONTACT THE TDOT ENVIRONMENTAL DIVISION, PERMITS SECTION BECAUSE A NPDES PERMIT WILL BE REQUIRED.

(5) THE CONTRACTOR SHALL TAKE APPROPRIATE STEPS, BEFORE CLEANING OUT OR REMOVAL/REPLACEMENT OF DITCHES, SIDE DRAINS, AND CROSS DRAINS, TO ENSURE THAT THE DRAINAGE FEATURES / WATERCOURSES ARE NOT STREAMS OR WETLANDS. IF THE CONTRACTOR / TDOT INSPECTOR IS UNSURE WHETHER THE DRAINAGE FEATURES ARE STREAMS OR WETLANDS, THE INSPECTOR SHALL CONTACT THE TDOT ENVIRONMENTAL DIVISION, PERMITS SECTION TO OBTAIN THE APPROPRIATE PERMITS.

UNOFFICIAL SET
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SEALED BY

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

SPECIAL NOTES

TYPE	YEAR	PROJECT NO.	SHEET NO.
RESURF	2013	STP/HSIP-168(12)	7

S.R. 168 KNOX CO.
47057-8237-14
47057-3237-94

SPECIAL NOTES

ECOLOGY

(6) THE CONTRACTOR SHALL TAKE APPROPRIATE STEPS BEFORE CONSTRUCTING EARTH PADS FOR THE TYPE 38 TERMINALS TO ENSURE THAT ENVIRONMENTAL FEATURES (STREAMS, WETLANDS, OR SPRINGS) ARE NOT IMPACTED DURING CONSTRUCTION. IF THE CONTRACTOR/ TDOT INSPECTOR IS UNSURE WHETHER THE ENVIRONMENTAL FEATURES ARE STREAMS, SPRINGS OR WETLANDS, THE INSPECTOR SHALL CONTACT THE TDOT ENVIRONMENTAL DIVISION ECOLOGY OR PERMITS SECTION SO AN ACCURATE DETERMINATION CAN BE ASSESSED.

(7) DURING CONSTRUCTION OF THE EARTH PADS FOR THE TYPE 38 GUARDRAIL TERMINALS, EXISTING VEGETATION WILL BE REQUIRED TO BE REMOVED FOR THE PROPOSED PAD AND SLOPES. IF DURING THE VEGETATION REMOVAL, ANY TREES GREATER THAN 5 INCHES IN DIAMETER ARE REQUIRED TO BE REMOVED, CONTACT THE TDOT ENVIRONMENTAL DIVISION ECOLOGY SECTION IMMEDIATELY. DUE TO THE RECENT MODIFICATION OF THE USFWS STANCE REGARDING THE INDIANA BAT NO TREES >5" DBH SHOULD BE CUT WITHOUT CLEARANCE FROM THE TDOT ENVIRONMENTAL DIVISION ECOLOGY SECTION.

RAILROAD

(1) THE CONTRACTOR SHALL CONDUCT HIS WORK SO AS TO PROTECT THE NORFOLK SOUTHERN TRACK FACILITIES AND PROPERTIES FROM ANY DAMAGE. THE WORK SHALL BE DONE IN ACCORDANCE WITH REGULATIONS STIPULATED *BY* NORFOLK SOUTHERN SO AS TO MAINTAIN CLEARANCE AND NOT INTERRUPT TRAIN TRAFFIC IN ANY MANNER.

(2) THE CONTRACTOR SHALL NOTIFY AND COORDINATE HIS WORK AT THE RAILROAD CROSSING WITH THE FOLLOWING REPRESENTATIVE OF THE RAILROAD:

MR. DON SUTHERLAND-DIVISION ENGINEER
NORFOLK SOUTHERN CORPORATION
CENTRAL DIVISION OFFICE
7208 OLD RUTLEDGE PIKE
KNOXVILLE, TN 37914
PHONE: (865) 521-1409
EMAIL: donald.sutherland@nscorp.com

AND

MR. ELLIS MAYS, ENGINEER- PUBLIC IMPROVEMENTS
NORFOLK SOUTHERN CORPORATION
1200 PEACHTREE ST., NE
ATLANTA, GA 30309-3579
PHONE: (404)938-3160
FAX: (404)526-1641
EMAIL: ellis.mays@nscorp.com

(3) THE CONTRACTOR SHALL NOT, FOR ANY REASON, STORE CONSTRUCTION EQUIPMENT UPON NOR STORE OR DUMP WASTE CONSTRUCTION MATERIALS UPON THE RAILROAD'S RIGHT-OF-WAY.

(4) THE CONTRACTOR IS PROHIBITED FROM INSTALLING ANY CONSTRUCTION SIGNS, MESSAGE BOARDS, ARROW BOARDS AND/OR OTHER TEMPORARY TRAFFIC CONTROL SIGNS OR DEVICES WITHIN THE RAILROAD'S RIGHT-OF-WAY, AND IN ALL CASES, THESE SIGNS MUST NEVER BE PLACED IN A POSITION SO AS TO OBSTRUCT THE VIEW OF ANY ADVANCE RAILROAD WARNING SIGNS OR ANY OTHER RAILROAD GRADE CROSSING WARNING DEVICES SUCH AS CROSSBUCK SIGNS, CROSSING SIGNALS, ETC.

(5) ANY PAVEMENT MARKING PREPARATION OR INSTALLATION, RAILROAD ADVANCE WARNING SIGN PREPARATION OR REPLACEMENT/NEW INSTALLATION OR PAVEMENT PREPARATION OR INSTALLATION WITHIN 25 FT. OF THE NORFOLK SOUTHERN TRACK UTILIZING CONTRACTOR EQUIPMENT OR PERSONNEL WILL REQUIRE FULL TIME RAILROAD FLAGGING SERVICES AND/OR WATCHMAN SERVICES AS PER THE DISCRETION OF THE NORFOLK SOUTHERN SUPERINTENDENT FOR THE RAIL LINE BEING IMPACTED.

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SPECIAL NOTES