

STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION
 BUREAU OF ENGINEERING

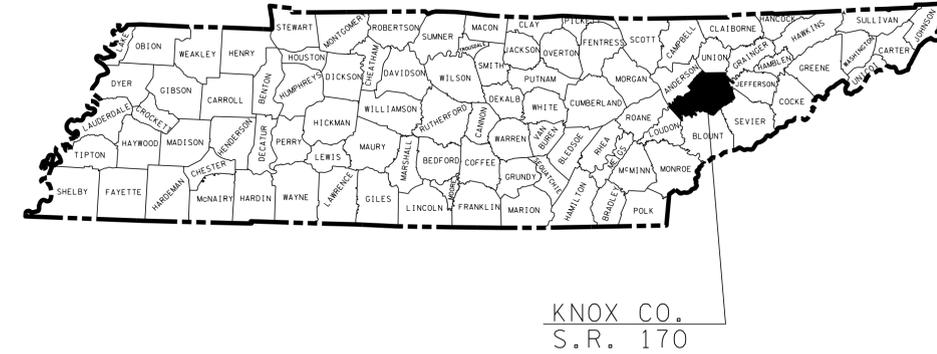
TENN.	YEAR	SHEET NO.
	2014	1
FED. AID PROJ. NO.	HSIP-170(8)	
STATE PROJ. NO.	47043-4210-04 47043-3210-94	

KNOX COUNTY

S.R. 170: FROM HEISKELL ROAD TO S.R. 71 (U.S. 441)

RESURFACE AND SAFETY

STATE HIGHWAY NO. 170 F.A.H.S. NO.

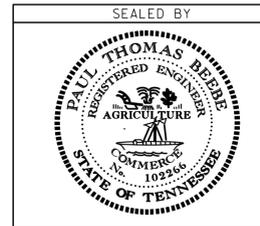


BEGIN PROJECT

PROJECT LIMITS
 FROM: HEISKELL ROAD (L.M. 2.27)
 TO: S.R. 71 (U.S. 441) (L.M. 6.98)

NO EXCLUSIONS
NO EQUATIONS

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END PROJECT



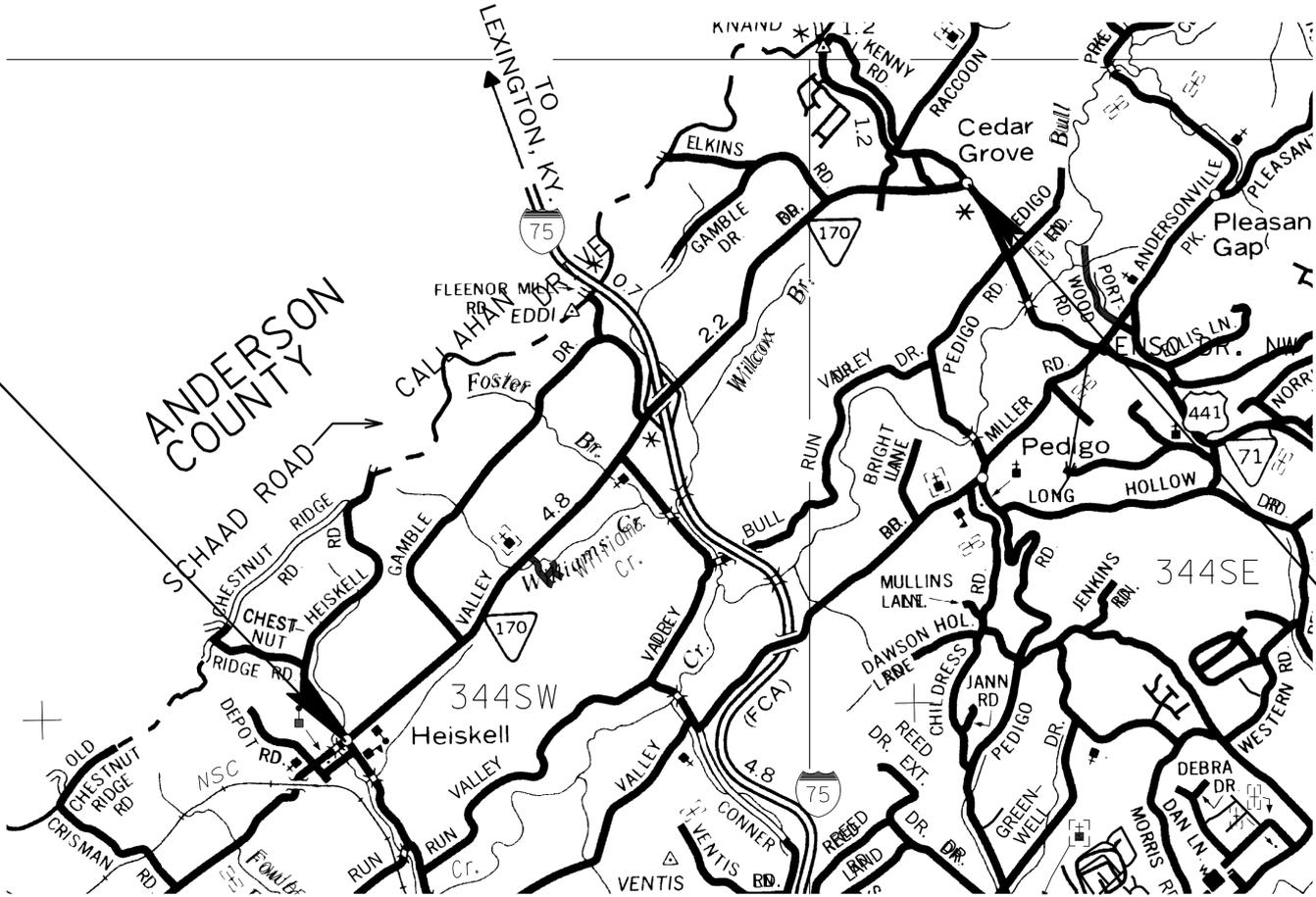
SCALE: 1" = 1 MILE



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 MARCH 1, 2006 AND ADDITIONAL SPECIFICATIONS AND SPECIAL PROVISIONS CONTAINED IN THE PLANS AND IN THE PROPOSAL CONTRACT.



PROJECT LENGTH 4.71 MILES
TOTAL LANE MILES RESURFACED 10.42 MILES

TRAFFIC DATA	
ADT (2014)	4478
POSTED SPEED	40 MPH

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

DATE: _____

APPROVED: *John Schroer*
 JOHN SCHROER, COMMISSIONER

U.S. DEPARTMENT OF TRANSPORTATION
 FEDERAL HIGHWAY ADMINISTRATION

APPROVED: _____
 DIVISION ADMINISTRATOR DATE

TRANS. PROJ. SP. SV. 1 _____ ANDREA R. HALL
 DESIGNER ED. HAMMETT CHECKED BY: PAUL BEEBE
 P.E. NO. 98013-4203-04
 PIN 084073.01

INDEX

DESCRIPTION	SHT. NO.
TITLE SHEET	1
INDEX AND STANDARD ROADWAY DRAWINGS	1A
ESTIMATED ROADWAY QUANTITIES	2
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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

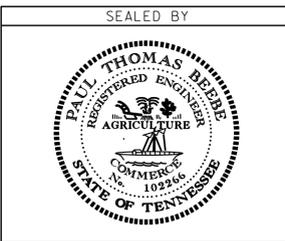
TRAFFIC CONTROL

DWG. NO.	REV.	DESCRIPTION
T-FAB-1	05-27-97	FLASHING YELLOW ARROW BOARD
T-M-1	11-01-11	DETAILS OF PAVEMENT MARKINGS FOR CONVENTIONAL ROADS AND MARKING ABBREVIATIONS
T-M-2	01-15-13	DETAILS OF PAVEMENT MARKINGS FOR CONVENTIONAL ROADS
T-M-3	09-19-91	MARKING STANDARDS FOR TRAFFIC ISLANDS, MEDIANS PAVED SHOULDERS ON COVENTIONAL ROADS
T-M-4	11-01-11	STANDARD INTERSECTION PAVEMENT MARKINGS
T-S-16	11-01-11	GROUND MOUNTED ROADSIDE SIGN AND DETAILS
T-S-16A	11-01-11	GROUND MOUNTED ROADSIDE SIGN PLACEMENT DETAILS
T-S-17	07-19-13	STANDARD GROUND MOUNTED SIGN USING PERFORATED/KNOCKOUT SQUARE TUBE
T-S-19	07-19-13	STANDARD STEEL SIGN SUPPORTS
T-S-20	11-01-11	SIGN DETAILS
T-WZ-10	04-02-12	ADVANCE ROAD WORK SIGNING ON HIGHWAYS AND FREEWAYS

TYPE	YEAR	PROJECT NO.	SHEET NO.
RESURF	2014	HSIP-170(8)	1A

S.R. 170 KNOX CO.
 47043-4210-04
 47043-3210-94

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STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION

INDEX
 AND
 STANDARD
 ROADWAY
 DRAWINGS

TYPE	YEAR	PROJECT NO.	SHEET NO.
RESURF	2014	HSIP-170(8)	2

S.R. 170 KNOX CO.
47043-4210-04
47043-3210-94

ESTIMATED ROADWAY QUANTITIES				
ITEM NO.	DESCRIPTION	UNIT	QUANTITY	QUANTITY
			47043-4210-04	47043-3210-94
303-01	MINERAL AGGREGATE, TYPE A BASE, GRADING D	TON	1129	
403-01	BITUMINOUS MATERIAL FOR TACK COAT (TC)	TON	27	
① 411-01.07	ACS MIX (PG64-22) GRADING E SHOULDER	TON	479	
② 411-01.10	ACS MIX(PG64-22) GRADING D	TON	5457	
③ 415-01.02	COLD PLANING BITUMINOUS PAVEMENT	S.Y.	9744	
712-01	TRAFFIC CONTROL	LS	1	
712-04.02	FLEXIBLE DRUMS (CHANNELIZATION)	EACH	51	
712-05.01	WARNING LIGHTS (TYPE A)	EACH	26	
④ 712-06	SIGNS (CONSTRUCTION)	S.F.	603	
712-08.03	ARROW BOARD (TYPE C)	EACH	2	
⑤ 713-16.20	SIGNS (W1-8)	EACH		2
⑥ 713-16.21	SIGNS (W2-2)	EACH		1
⑦ 716-01.21	Snowplwble Pvmt Mrks (Bi-Dir)(1 Color)	EACH		390
716-01.22	Snowplwble Pvmt Mrks (Mono-Dir)(1 Color)	EACH		13
⑧ 716-02.05	PLASTIC PAVEMENT MARKING (STOP LINE)	L.F.		160
716-02.06	PLASTIC PAVEMENT MARKING (TURN LANE ARROW)	EACH		8
⑨ 716-05.01	PAINTED PAVEMENT MARKING (4" LINE)	L.M.	6	
716-12.03	ENHANCED FLATLINE THERMO PVMT MRKNG (8IN BARRIER LINE)	L.F.		130
716-13.01	SPRAY THERMO PVMT MRKNG (60 mil) (4IN LINE)	L.M.	19	
717-01	MOBILIZATION	LS	1	

- ⑤ TO BE USED AT L.M. 3.22+ OR AS DIRECTED BY THE TDOT OPERATIONS DISTRICT ENGINEER.
- ⑥ TO BE USED AT L.M. 3.00+ OR AS DIRECTED BY THE TDOT OPERATIONS DISTRICT ENGINEER. INCLUDES REMOVAL OF EXISTING SIGN.
- ⑦ INCLUDES COST OF REMOVAL OF ANY EXISTING MARKERS.
- ⑧ 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.
- ⑨ TO BE USED FOR TEMPORARY PAVEMENT MARKING ON INTERMEDIATE LAYERS.

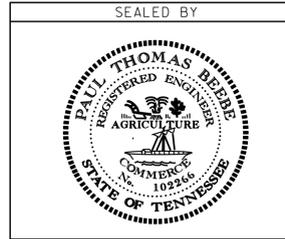
FOOTNOTES

- ① INCLUDES 353 TONS FOR SPOT LEVELING. (SPOT LEVELING TO BE USED ONLY TO CORRECT DEFICIENCIES ON EXISTING PAVEMENT AND IS NOT TO BE COMBINED WITH OTHER COURSES.)
- ② INCLUDES 80 TONS FOR BUSINESS ENTRANCES, 188 TONS FOR PRIVATE DRIVES, 22 TONS FOR TURN LANES AND 130 TONS FOR SIDE ROADS.
- ③ INCLUDES 1248 S.Y. FOR BRIDGE OVER I-75 (L.M. 4.74), 333 S.Y. FOR TURN LANE AND 1963 S.Y. FOR COUNTY ROADS.
- ④ QUANTITY INCLUDES THE FOLLOWING SIGNS:

NO.	DESCRIPTION	CODE	SIZE	QUANTITY (SF)
22	ROAD WORK	W20-1	48"X48"	352
2	LANE CLOSED	W20-4	48"X48"	32
2	LANE ENDS	W20-7	48"X48"	32
2	ROAD WORK NEXT 5 MILES	G20-1	36"X18"	9
2	ADVISORY SPEED	W13-1	24"X24"	8
3	END ROAD WORK	G20-2	36"X18"	14
25	LOW SHOULDER	W8-9	30"X30"	156
TOTAL:				603

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

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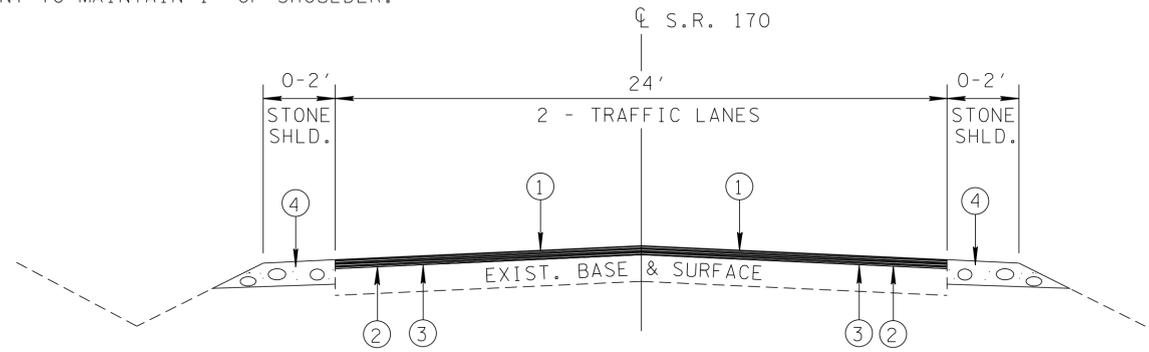
**ESTIMATED
ROADWAY
QUANTITIES**

D:\MAY-2014 16:28 \\J00WF01.tdot.state.tn.us\Q\Shared\SURVDES\DESIGN\PROJECTS\RESURF\2014\KNOX_SRI70\2014 Knox Co_SRI70.dgn

TYPE	YEAR	PROJECT NO.	SHEET NO.
RESURF	2014	HSIP-170(8)	3

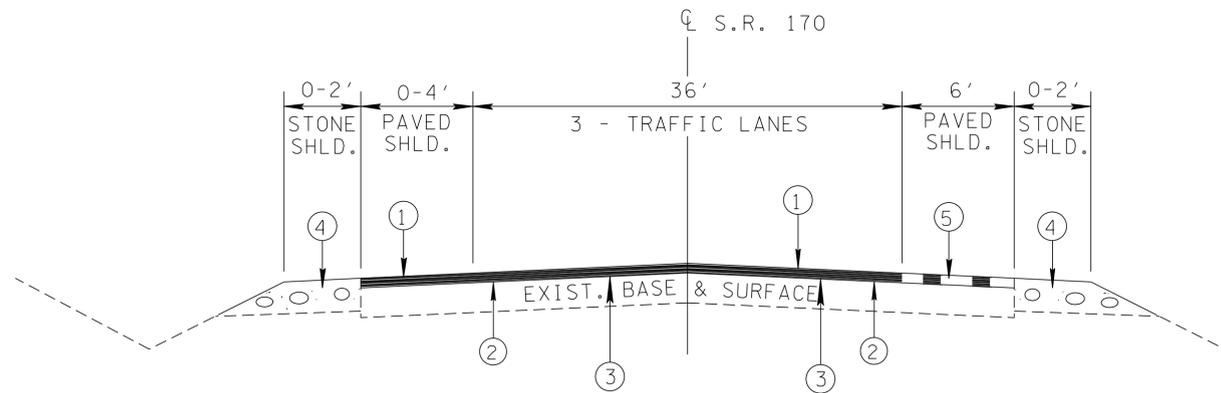
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NOTE: IN AREAS WITH LESS THAN 1' OF SHOULDER, THE CONTRACTOR SHALL STRIPE INSIDE THE EDGE OF PAVEMENT TO MAINTAIN 1' OF SHOULDER.



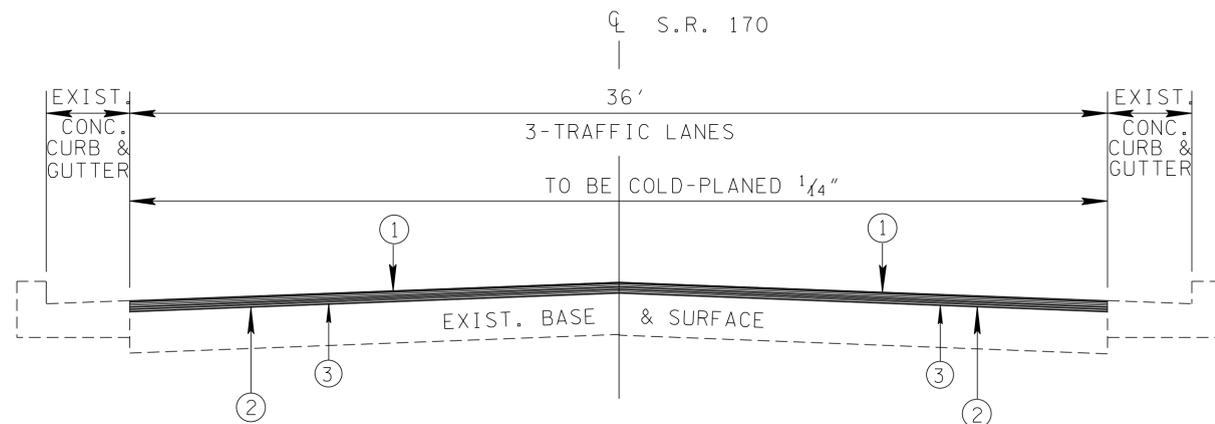
TYPICAL CROSS-SECTION OF IMPROVEMENT

LOG MILE 2.27 TO LOG MILE 4.30
 LOG MILE 5.30 TO LOG MILE 6.98



TYPICAL CROSS-SECTION OF IMPROVEMENT

LOG MILE 4.30 TO LOG MILE 4.90



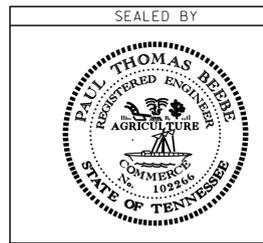
TYPICAL CROSS-SECTION OF IMPROVEMENT

LOG MILE 4.90 TO LOG MILE 5.30

PROPOSED PAVEMENT SCHEDULE	
①	ASPHALTIC CONCRETE SURFACE (HM) 1/4" TH. (APPROX. 132.5 LBS./SQ.YD.) 411-01.10 ACS MIX (PG64-22) GRADING D
②	ASPHALTIC CONCRETE SURFACE (HM) (SPOT LEVELING) (APPROX. 75 TONS/MILE) 411-01.07 ACS MIX (PG64-22) GRADING E SHOULDER
③	TACK COAT (TC) (APPROX. 0.10 GAL./SQ.YD.) 403-01 BITUMINOUS MATERIAL FOR TACK COAT (TC)
④	MINERAL AGGREGATE BASE (SHOULDERS) 2" TH. 303-01 MINERAL AGGREGATE, TYPE A BASE, GRADING D
⑤	ASPHALTIC CONCRETE SURFACE (HM) 1/4" TH. (APPROX. 128.75 LBS./SQ.YD.) 411-01.07 ACS MIX (PG64-22) GRADING E SHOULDER

NOTE: BRIDGE OVER I-75 (L.M. 4.74) TO BE COLD PLANED 1/4" DEEP AND PAVED WITH 1/4" OF "D" MIX.

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STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION

**TYPICAL
 SECTIONS
 AND
 PROPOSED
 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.
- (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 4" 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. 716-13.01, SPRAY THERMO PVMT MRKNG (60 mil) (4IN 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.

PAVING

- (1) THE CONTRACTOR SHALL ATTACH A DEVICE TO THE SCREED OF THE PAVER SUCH THAT MATERIAL IS CONFINED AT THE END GATE AND EXTRUDES THE ASPHALT MATERIAL IN SUCH A WAY THAT RESULTS IN A CONSOLIDATED WEDGE-SHAPE PAVEMENT EDGE OF APPROXIMATELY 25 TO 30 DEGREES AS IT LEAVES THE PAVER (MEASURED FROM A LINE PARALLEL TO THE PAVEMENT SURFACE.) THE DEVICE SHALL MEET THE REQUIREMENTS THAT ARE CURRENTLY SET FORTH IN SPECIAL PROVISION 407SE.

PAVEMENT

RESURFACING

- (1) 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.

- (2) 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.

- (3) 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 THE PAVER WIDTH.

- (4) ON CURB AND GUTTER SECTIONS, PUBLIC ROAD INTERSECTIONS SHALL BE RESURFACED TO THE END OF THE RADIUS. A SATISFACTORY TRANSITION FROM THE NEW PAVEMENT TO THE EXISTING GRADE OF THE INTERSECTING PUBLIC ROAD SHALL BE PROVIDED.

- (5) ON URBAN TYPICAL SECTIONS, (CURB AND GUTTER), RESIDENTIAL DRIVEWAYS AND BUSINESS ENTRANCES SHALL HAVE MINIMUM WIDTH OF MATERIAL NOT LESS THAN ONE FOOT USED IN THE TRANSITION TO FEATHER THE PAVEMENT EDGE.

- (6) 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.

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

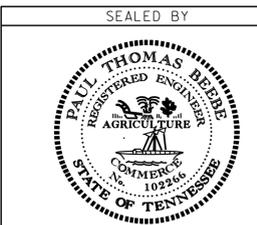
- (1) THE CONTRACTOR SHALL ESTABLISH AND MAINTAIN A PROACTIVE METHOD TO PREVENT LITTER, CONSTRUCTION DEBRIS, AND CONSTRUCTION WASTES FROM ENTERING WATERS OF THE STATE/U.S. THESE MATERIALS WILL BE PICKED UP AND REMOVED FROM STORMWATER EXPOSURE PRIOR TO ANTICIPATED STORM EVENTS. AFTER USE, MATERIALS USED 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 (NFFPA). 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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RESURF	2014	HS1P-170(B)	4

S.R. 170 KNOX CO.
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STATE OF TENNESSEE
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**GENERAL
NOTES**

SPECIAL NOTES

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) 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 1-800-331-1111 WILL BE REQUIRED.
- (5) UTILITY OWNERS
 ELECTRIC: KNOXVILLE UTILITIES BOARD
 WATER/SEWER: KNOXVILLE UTILITIES BOARD
 GAS: KNOXVILLE UTILITIES BOARD
 CABLE: XFINITY (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 SIGNING AND PAVEMENT MARKINGS ARE TO BE IN ACCORDANCE WITH THE CURRENT EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
- (3) 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 T.D.O.T. SUPERVISOR, WITH ADVICE FROM THE REGIONAL TRAFFIC OFFICE, BEFORE PAVING OPERATIONS BEGIN.

PAVEMENT

RESURFACING

- (1) SURFACE IS TO BE CROWNED AS DIRECTED BY THE T.D.O.T. SUPERVISOR.
- (2) THE CONTRACTOR WILL PLACE THE SPOT LEVELING WHERE AND AS DIRECTED BY THE T.D.O.T. SUPERVISOR.
- (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) 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.
- (8) 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.
- (9) 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.
- (10) SPECIAL PROVISION NO. 411C APPLIES TO THIS PROJECT. AVERAGE HC-IRI NUMBER PER MILE IS 122.4. SEE TABLE BELOW:

WESTBOUND S.R. 170			EASTBOUND S.R. 170		
FROM	TO	HC/IRI	FROM	TO	HC/IRI
0.00	1.00	126	0.00	1.00	119
1.00	2.00	141	1.00	2.00	106
2.00	3.00	132	2.00	3.00	133
3.00	4.00	115	3.00	4.00	111
4.00	4.71	127	4.00	4.71	114

CONSTRUCTION WORK ZONE & TRAFFIC CONTROL

- (1) DURING ALL PERIODS OF CONSTRUCTION INACTIVITY, THE CONTRACTOR SHALL BE REQUIRED TO KEEP ALL LANES OPEN IN ACCORDANCE WITH THE T.D.O.T. PAVEMENT DROP-OFF POLICY. THIS WILL REQUIRE THE REMOVAL OF ALL TRAFFIC CONTROL DEVICES ASSOCIATED WITH ANY LANE CLOSURES AT THE END OF THE WORK DAY AND THE REINSTALLATION OF THE DEVICES AT THE BEGINNING OF THE NEXT WORK DAY.
- (2) 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.
- (3) ANY WORK REQUIRING LANE CLOSURES INCLUDING PAVEMENT MARKING OPERATIONS SHALL BE AT NON-PEAK HOURS (9 AM TO 3 PM) UNLESS OTHERWISE DIRECTED BY THE TDOT OPERATIONS DISTRICT ENGINEER.

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.

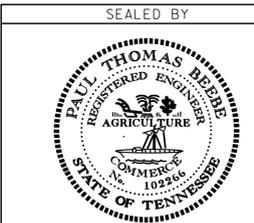
NPDES

- (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.

TYPE	YEAR	PROJECT NO.	SHEET NO.
RESURF	2014	HSIP-170(8)	5

S.R. 170 KNOX CO.
 47043-4210-04
 47043-3210-94

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STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION

**SPECIAL
 NOTES**