

Index Of Sheets  
Resurfacing  
See Sheet IA

STATE OF TENNESSEE  
DEPARTMENT OF TRANSPORTATION  
BUREAU OF ENGINEERING

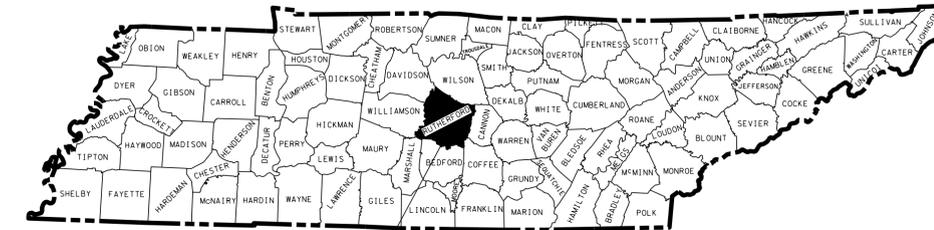
TENN.	YEAR	SHEET NO.
	2014	1
FED. AID PROJ. NO.	NH-1-24-1(113)	
STATE PROJ. NO.	75100-8106-44	
STATE PROJ. NO.	75100-4106-04	

**RUTHERFORD COUNTY**

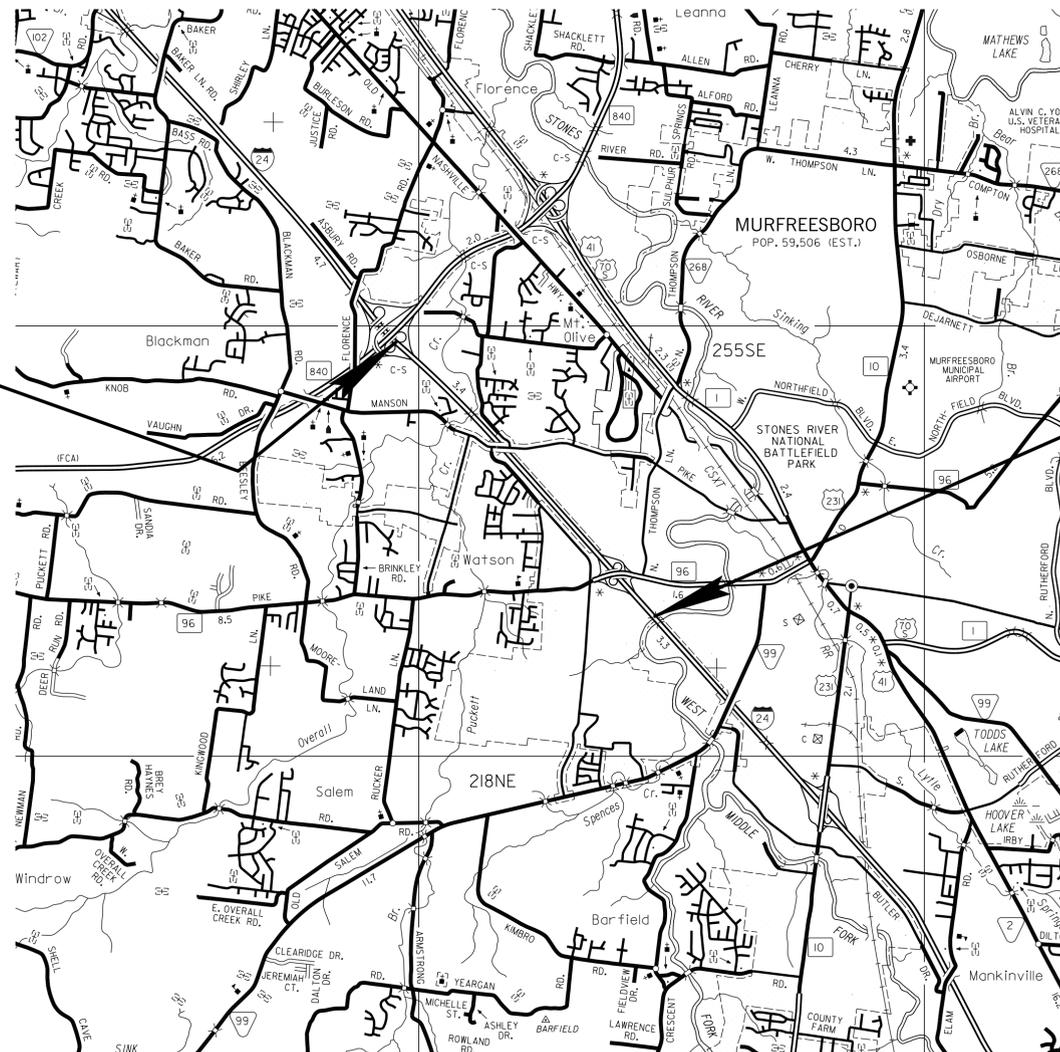
INTERSTATE NO. 24  
FROM EAST OF S.R. 840 (L.M. 11.90)  
TO STONES RIVER BRIDGE (L.M. 15.52)

**RESURFACING**

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



PROJECT LOCATION



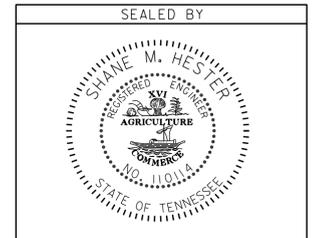
NO EXCLUSIONS

75100-4106-04  
75100-8106-44  
BEGIN PROJ. NO. NH-I-24-1(113)  
(L.M. 11.90)

75100-4106-04  
75100-8106-44  
END PROJ. NO. NH-I-24-1(113)  
(L.M. 15.52)



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NOT FOR  
BIDDING**



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

DATE: \_\_\_\_\_

APPROVED: *John Schroer*  
JOHN SCHROER, COMMISSIONER

**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.

TRAFFIC DATA	
ADT (2015)	103280
ADT (2035)	134260
DHV (2035)	12083
D	50 - 50
T (ADT)	13 %
T (DHV)	9 %
V	70 MPH

SCALE: 1" = 1 MILE

PROJECT LENGTH **3.620 MILES**  
TOTAL LANE MILES RESURFACED **29.0 MILES**

TDOT ROAD SP. SV. 2 BILLY BINION  
DESIGNER NATHAN BARTLETT CHECKED BY RUSTY BOGUSKIE  
P.E. NO. 98034-4194-04  
PIN NO. 081061.03

U.S. DEPARTMENT OF TRANSPORTATION  
FEDERAL HIGHWAY ADMINISTRATION

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

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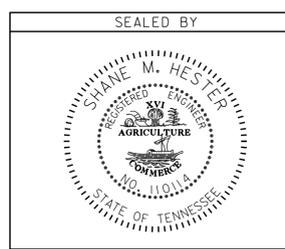
# STANDARD ROADWAY DRAWINGS

DWG. NO	REV.	DESCRIPTION
<b>ROADWAY DESIGN STANDARDS</b>		
RD-A-1	12-18-99	STANDARD ABBREVIATIONS
RD-L-1	10-26-94	STANDARD LEGEND
RD01-TS-4	07-23-03	DESIGN STANDARDS 1 AND 2 LAND RAMPS
RD01-TS-5	10-15-02	DESIGN STANDARDS FREEWAYS WITH DEPRESSED MEDIANS
RD01-TS-5A	10-15-02	DESIGN STANDARDS FREEWAYS WITH INDEPENDENT ROADWAYS
RD01-TS-5B	10-15-02	DESIGN STANDARDS FREEWAYS WITH MEDIAN BARRIER
<b>ROADWAY AND PAVEMENT APPURTENANCES</b>		
RP-J-23	01-24-12	CONCRETE PAVEMENT REPAIR DETAILS
RP-J-24	05-27-01	CONCRETE PAVEMENT SPALL AND RANDOM CRACK REPAIR DETAILS
RP-J-25	05-27-01	CONCRETE PAVEMENT JOINT REPAIR DETAILS
<b>SAFETY APPURTENANCES AND FENCE</b>		
S-GT31-1		W-BEAM GUARDRAIL
S-GRT-2		TYPE 38 GUARDRAIL TERMINAL
S-GRT-2P		EARTH PAD FOR TYPE 38 TERMINAL
S-GRT-2R		EARTH PAD FOR TYPE 38 (RETROFIT)
S-GRT-4		TYPE 13 GUARDRAIL TERMINAL (TRAILING END
S-GRA-3		GUARDRAIL ANCHOR FOR TYPE 21, 13, AND IN-LINE TERMINALS
<b>TRAFFIC CONTROL APPURTENANCES</b>		
T-FAB-1	05-27-97	FLASHING YELLOW ARROW BOARD
T-M-5	04-23-13	MARKING DETAILS FOR EXPRESSWAYS & FREEWAYS
T-M-6	06-22-12	MARKING DETAIL FOR EXPRESSWAY & FREEWAY INTERCHANGES
T-M-7	01-12-12	GORE MARKING DETAILS FOR EXPRESSWAY & FREEWAY INTERCHANGES
T-M-8	01-12-12	MARKING DETAILS FOR EXPRESSWAYS & FREEWAYS
T-M-9	11-01-11	MARKING DETAILS FOR RAMP INTERSECTIONS
T-S-11	06-06-11	DELINEATOR AND MILEPOST DETAILS
T-PBR-1	06-30-09	INTERCONNECTED PORTABLE BARRIER RAIL
T-PBR-2	10-10-06	DETAIL FOR VERTICAL PANELS AND FLEXIBLE
T-WZ-10	04-02-12	ADVANCE ROAD WORK SIGNING ON HIGHWAYS AND FREEWAYS
T-WZ-11	03-13-09	ONE LANE CLOSURE DETAIL ON DIVIDED HIGHWAYS
T-WZ-12	03-13-09	ONE LANE CLOSURE DETAIL FOR BRIDGES ON DIVIDED HIGHWAYS
T-WZ-13	03-13-09	TWO-OUTSIDE LANE CLOSURE ON FREEWAY OR EXPRESSWAY
T-WZ-14	03-13-09	TWO-OUTSIDE LANE CLOSURE ON INTERSTATES AND EXPRESSWAYS (PORTABLE BARRIER RAIL)
T-WZ-15	04-02-12	INTERIOR LANE CLOSURE ON FREEWAYS OR EXPRESSWAYS
T-WZ-16	03-13-09	LANE SHIFT ON DIVIDED HIGHWAYS AND FREEWAYS
T-WZ-18	03-13-09	SHOULDER CLOSURE DETAIL FOR FREEWAYS AND DIVIDED HIGHWAYS

TYPE	YEAR	PROJECT NO.	SHEET NO.
RESURF.	2014	NH-I-24-1 (113)	1A

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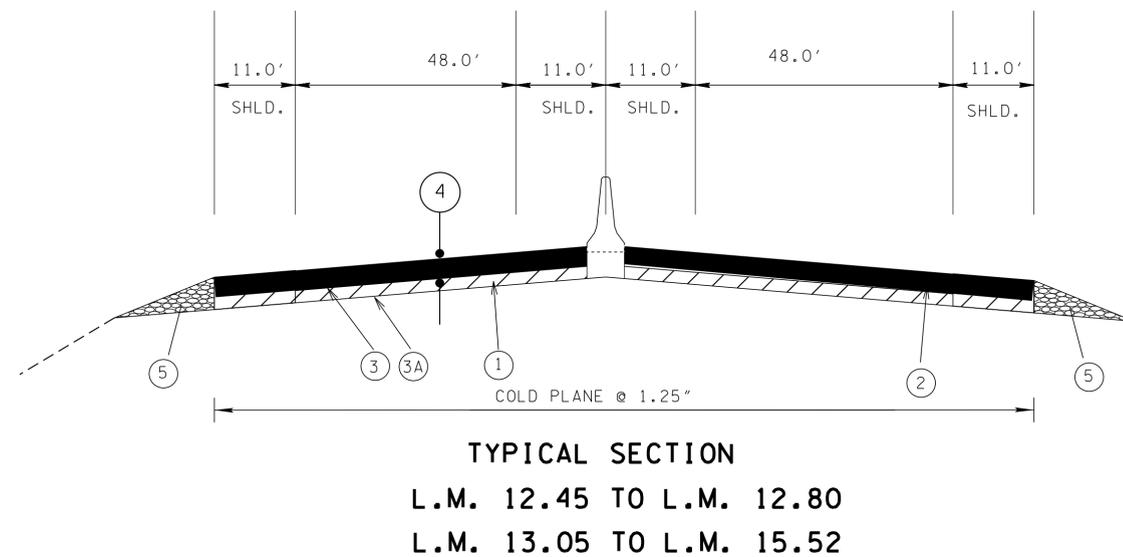
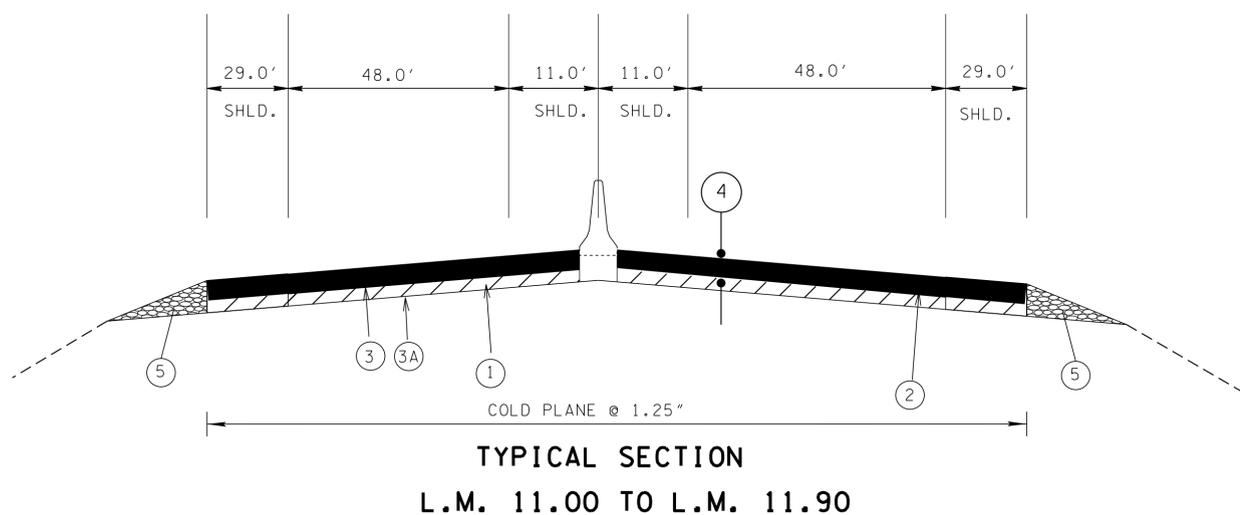
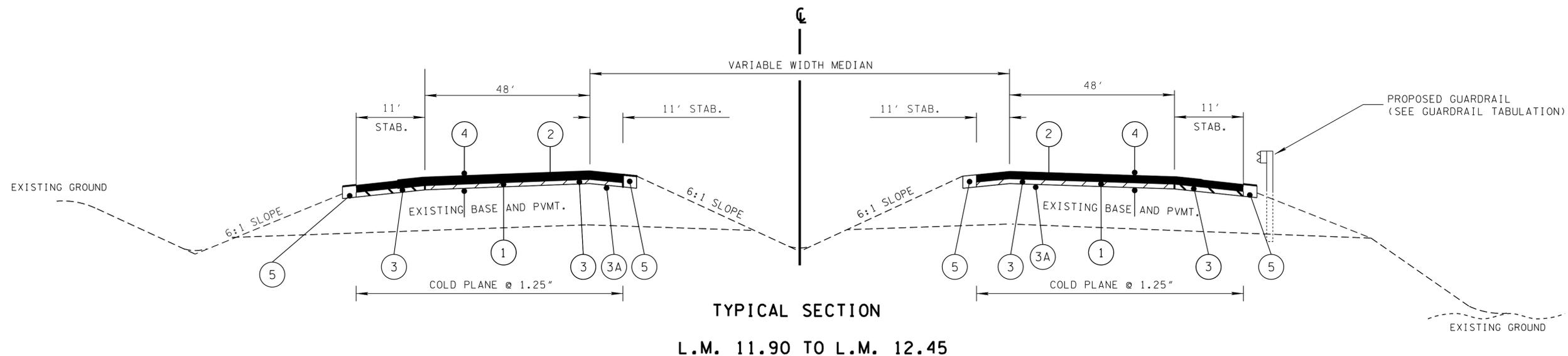


STATE OF TENNESSEE  
DEPARTMENT OF TRANSPORTATION

INDEX  
AND  
STANDARD  
DRAWINGS



TYPE	YEAR	PROJECT NO.	SHEET NO.
RESURF.	2014	NH-1-24-1(113)	2A

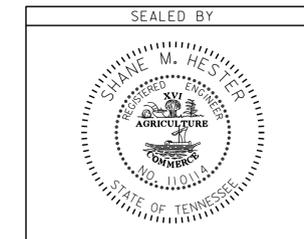


PROPOSED PAVEMENT SCHEDULE	
<p>① SURFACE @ (65.0 LB/S.Y.) 307-03.10 ASPHALT CONC MIX (PG76-22) (MPMB-HM) GR CS 411-03.09 ACS MIX (PG76-22) THIN LIFT CS ASPHALT</p>	<p>③A TACK COAT @ 0.1 GAL/SY (MILLING) 403-01 BITUMINOUS MATERIAL FOR TACK COAT (TC)</p>
<p>② SURFACE @ 1.25" THICK (110.0 LB/S.Y.) 411-03.15 ASPHALT CEMENT (PG76-22) FOR OGFC MIX 411-03.16 AGGREGATE FOR OGFC MIX</p>	<p>④ COLD PLANING @ 1.25" THICK 415-01.01 COLD PLANING BITUMINOUS PAVEMENT (TON)</p>
<p>③ TACK COAT @ 0.07 GAL/SY 403-01 BITUMINOUS MATERIAL FOR TACK COAT (TC)</p>	<p>⑤ MINERAL AGGREGATE BASE FOR SHOULDER @ 1.25" 303-01 MINERAL AGGREGATE, TYPE "A" BASE, GRADING "D"</p>

**SPECIAL NOTE:**

ALL SHOULDERS WILL BE DEGRASSED/CLIPPED AND CLEANED OF ALL VEGETATION, GRASS AND DEBRIS. SEE SPECIAL NOTES. ALL COST TO BE INCLUDED IN OTHER ITEMS OF WORK.

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STATE OF TENNESSEE  
DEPARTMENT OF TRANSPORTATION

**TYPICAL SECTIONS AND PAVEMENT SCHEDULE**

TYPE	YEAR	PROJECT NO.	SHEET NO.
RESURF.	2014	NH-1-24-1 (113)	2B

# GENERAL NOTES

## GUARDRAIL

- (1) THE PROPOSED GUARDRAIL, INCLUDING ANY ANCHOR SYSTEM, SHALL BE INSTALLED QUICKLY TO MINIMIZE TRAFFIC EXPOSURE TO ANY HAZARD. NO PAYMENT WILL BE MADE FOR A SECTION OF PROPOSED GUARDRAIL, INCLUDING ANCHORS, UNTIL IT IS COMPLETE IN PLACE.

## MISCELLANEOUS.

- (2) 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 MARKING ON INTERMEDIATE LAYERS

- (3) 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 DAYS 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 IF 6" ENHANCED FLATLINE THERMOPLASTIC IS USED

- (4) 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

### PAVING

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

### RESURFACING

- (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

- (7) 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.
- (8) 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.
- (9) 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.
- (10) TRAFFIC CONTROL DEVICES SHALL NOT BE DISPLAYED OR ERECTED UNLESS RELATED CONDITIONS ARE PRESENT NECESSITATING WARNING.
- (11) 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.

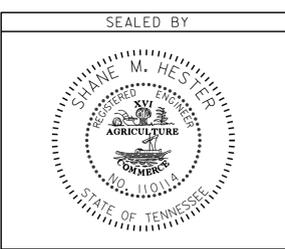
- (12) THE CONTRACTOR SHALL NOT BE PERMITTED TO PARK ANY VEHICLES OR CONSTRUCTION EQUIPMENT DURING PERIODS OF INACTIVITY, WITHIN THIRTY (30) FEET OF THE EDGE OF PAVEMENT WHEN THE LANE IS OPEN TO TRAFFIC UNLESS PROTECTED BY GUARDRAIL, BRIDGE RAIL, AND/OR BARRIERS INSTALLED FOR OTHER PURPOSES FOR ROADWAYS 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.

## EROSION PREVENTION AND SEDIMENT CONTROL

### LITTER, DEBRIS, WASTE, PETROLEUM

- (13) 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.
- (14) 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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STATE OF TENNESSEE  
DEPARTMENT OF TRANSPORTATION

**GENERAL  
NOTES**

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TYPE	YEAR	PROJECT NO.	SHEET NO.
RESURF.	2014	NH-1-24-1 (113)	2C

## SPECIAL NOTES

### MISCELLANEOUS

- (1) THE CONTRACTOR WILL BE REQUIRED TO PERFORM THE FOLLOWING WORK AND INCLUDE ALL COSTS THEREOF IN THE PRICES BID FOR OTHER ITEMS OF CONSTRUCTION: REPAIR OF SHOULDERS AND DITCHES. SHOULDERS SHALL BE DEGRASSSED, MATERIAL SHALL BE PICKED UP AND REMOVED. CLEANING AND STRAIGHTENING ENDS OF EXISTING SIDEDRAINS AND CROSSDRAINS WHERE DIRECTED BY THE ENGINEER.
- (2) THE CONTRACTOR SHALL TAKE EXTREME CARE WHEN WORKING AROUND EXISTING GUARDRAIL, HIGHWAY SIGNS, OR ANY DEPARTMENT OF TRANSPORTATION STRUCTURE TO AVOID DAMAGE DURING THE COURSE OF CONSTRUCTION. ANY DAMAGE WILL BE REPLACED OR REPAIRED AT HIS OWN EXPENSE.

### PAVEMENT MARKINGS

- (3) THE CONTRACTOR IS TO PROVIDE THE LAYOUT OF ALL EXISTING PAVEMENT MARKINGS BEFORE BEGINNING THE RESURFACING PROJECT. EXISTING MARKINGS SHALL BE REFERENCED AS NEEDED TO ENSURE THAT ALL NEW MARKINGS ARE REPLACED IN THEIR CORRESPONDING LOCATIONS UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

### PAVEMENT

#### PAVING

- (4) SURFACE TO BE CROWNED AS DIRECTED BY THE ENGINEER.

#### RESURFACING

- (5) DURING COLD PLANING OPERATION, A MINIMUM OF ONE LANE OF TRAFFIC IN EACH DIRECTION WILL REMAIN OPEN.
- (6) AFTER ANY COLD PLANING OPERATION, TEMPORARY STRIPING WILL BE REQUIRED BEFORE RETURNING TRAFFIC ONTO EXCAVATED ROADWAY.
- (7) 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 SWEEPED AND CLEANED OF ALL LOOSE MATERIALS.
  - C. THE DIFFERENCE IN ELEVATION BETWEEN THE MILLED SURFACE AND THE ADJACENT LANE SHALL NOT EXCEED 1 1/2 INCHES.
  - D. THE MILLED SURFACE SHALL BE PAVED WITHIN 48 HOURS.
  - E. RAIN OR INCLEMENT WEATHER IS NOT EXPECTED OR FORECASTED WITHIN 48 HOURS AFTER MILLING.
  - F. 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.
  - G. IF RAVELING OR DETERIORATION OF THE MILLED SURFACE IS OCCURRING WHILE TRAFFIC IS DRIVING ON THE MILLED SURFACE, THEN THIS PRACTICE WILL NOT BE ALLOWED AND PAVING SHALL BE COMPLETED IMMEDIATELY AFTER MILLING.

### CONSTRUCTION WORK ZONE & TRAFFIC CONTROL

- (8) THE CONSTRUCTION SIGNS, FLAGMEN AND OTHER TRAFFIC CONTROL DEVICES WILL BE IN ACCORDANCE WITH THE CURRENT EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
- (9) ONE ADVANCE ROAD CONSTRUCTION AHEAD SIGN IS TO BE PLACED ON ALL SIDE ROADS PRIOR TO THEIR INTERSECTION WITH THE PROPOSED PROJECT. LOCATION TO BE DETERMINED IN THE FIELD BY THE ENGINEER OR CONTRACTORS SUPERINTENDENT.

### EROSION PREVENTION AND SEDIMENT CONTROL

### FOR GUARDRAIL TERMINALS

- (10) 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.
- (11) 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 3 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 > 3" DBH SHOULD BE CUT WITHOUT CLEARANCE FROM THE TDOT ENVIRONMENTAL DIVISION ECOLOGY SECTION.

### NPDES

- (12) 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.

### WORK RESTRICTIONS

- (13) LANE CLOSURES ALLOWED BETWEEN 8:00 PM AND 5:00 AM. SEE SPECIAL PROVISION NO. 108B.
- (14) RAMP REPAIRS SHOULD BE DONE ON THE WEEKEND FROM 8:00 PM FRIDAY TIL 5:00 AM MONDAY.

### END OF TRAFFIC QUEUE PROTECTION

- (15) WHEN INTERSTATE LANE CLOSURES ARE PERFORMED, THE CONTRACTOR SHALL PROVIDE A MINIMUM OF TWO (2) MOBILE CHANGEABLE MESSAGE SIGN UNIT WITH MOUNTED ATTENUATOR FOR EACH TRAVELLING DIRECTION IN 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 NED 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 PHRASES: "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. CHANGEABLE MESSAGE SIGNS AND ATTENUATORS SHALL BE IN ACCORDANCE WITH THE NCHRP REPORT 350, MUTCD, INCLUDED IN THE TDOT QUALIFIED PRODUCTS LIST, AND MOUNTED PER THE MAUFACTURERE'S RECOMMENDATIONS.
  - e. MOBILE CHANGEABLE MESSAGE SIGN UNITS WITH MOUNTED ATTENUATOR WILL BE PAID FOR AS ITEM NO. 712-08.10, MOBILE MESSAGE SIGN UNIT W/ ATTENUATOR, PER HOUR. ALL COSTS ARE TO BE INCLUDED IN THE PRICE BID.

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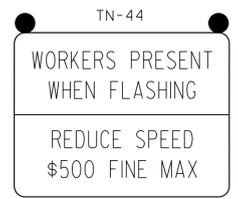
STATE OF TENNESSEE  
DEPARTMENT OF TRANSPORTATION

**SPECIAL  
NOTES**

TYPE	YEAR	PROJECT NO.	SHEET NO.
RESURF.	2014	NH-I-24-1(113)	20



TN-55A  
 TDOT Construction  
 Record-A-Comment  
 1-877-SmartWay



## PAVEMENT EDGE DROP-OFF TRAFFIC CONTROL NOTE

- 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.

### SPECIAL TRAFFIC CONTROL NOTES

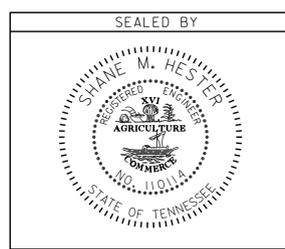
1. ALL TRAFFIC CONTROL DEVICES SHALL AGREE WITH THE CURRENT PUBLICATION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
2. THIS CONSTRUCTION SIGNING IS TO BE CONSIDERED A MINIMUM. OTHER SIGNS, AS DIRECTED BY THE ENGINEER, MAY BE REQUIRED DURING DIFFERENT PHASES OF CONSTRUCTION AND WILL BE PAID FOR AT THE PRICE BID UNDER THE APPROPRIATE ITEMS.
3. FOR DETAILS OF THE FLASHING ARROW BOARD, SEE STANDARD DRAWING T-FAB-1
4. WHERE CONES ARE USED ADJACENT TO LANES OF MOVING TRAFFIC THERE WILL BE A WAVE CREATED BY PASSING VEHICLES. THE USE OF WHEIGHED CONES WILL BE NECESSARY AS OUTLINED IN SECTION 6C-4 M.U.T.C.D 1979.
5. WHEN TRAFFIC LANES ARE OPEN, BUT SHOULDER IS CLOSED, THE CONTRACTOR SHALL USE AN ARROW BOARD W/ FOURTH COUNTER FLASHING MODE.
6. ALL REGULATORY AND WARNING SIGNS WHICH ARE NO LONGER APPROPRIATE BECAUSE OF THE CONSTRUCTION SHALL BE COVERED OR REMOVED.
7. BARRICADE WARNING LIGHTS SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE STANDARD FOR FLASHING AND STEADY BURN MARRICADE WARNING LIGHTS (1971).

TRAFFIC CONTROL QUANTITIES					
ITEM NO.	DESCRIPTION	UNIT	QUANTITY	M.U.T.C.D. NO.	REMARKS
712-01	TRAFFIC CONTROL	LS	1		
712-04.01	FLEXIBLE DRUMS (CHANNELIZING)	EACH	380		
712-06.16	WORKERS PRESENT REDUCED SPEED	EACH	2	TN-44	
712-08.03	ARROW BOARD (TYPE C)	EACH	6		
713-16.01	CHANGEABLE MESSAGE SIGN UNIT	EACH	6		
717-01	MOBILIZATION	LS	1		

SIGNS CONSTRUCTION							
ITEM NO.	DESCRIPTION	UNIT	QUANTITY	ITEM NO. 712-06 (S.F.)	SIZE	M.U.T.C.D. NO.	REMARKS
712-06.06	REDUCED SPEED WARNING		4		78x60	TN-44	SIGN
1) 712-06	"RECORD A COMMENT"		2	64	96x48	TN-55A	SIGN
712-06	ROAD WORK AHEAD		8	128	48 x 48	W20-1	SIGN
712-06	ROAD WORK 1 MILE		10	160	48 x 48	W20-1	SIGN
712-06	ROAD WORK 1/2 MILE		6	96	48 x 48	W20-1	SIGN
712-06	ROAD WORK 1000 FEET		4	64	48 x 48	W20-1	SIGN
712-06	RIGHT LANE CLOSED 1/2 MILE		4	64	48 x 48	W20-5R	SIGN
712-06	RIGHT LANE CLOSED 1500 FEET		4	64	48 x 48	W20-5R	SIGN
712-06	RIGHT LANE ENDS		8	128	48 x 48	W4-2R	SIGN
712-06	RIGHT TWO LANES CLOSED 1/2 MILE		4	64	48 x 48	W20-5R	SIGN
712-06	RIGHT TWO LANES CLOSED 1500 FEET		4	64	48 x 48	W20-5R	SIGN
712-06	LEFT LANE SHIFT		4	64	48 x 48	W1-4CR	SIGN
712-06	LEFT LANE CLOSED 1/2 MILE		4	64	48 x 48	W20-5L	SIGN
712-06	LEFT LANE CLOSED 1500 FEET		4	64	48 x 48	W20-5L	SIGN
712-06	LEFT LANE ENDS		8	128	48 x 48	W4-2L	SIGN
712-06	RIGHT TWO LANES CLOSED 1/2 MILE		4	64	48 x 48	W20-5L	SIGN
712-06	RIGHT TWO LANES CLOSED 1500 FEET		4	64	48 x 48	W20-5L	SIGN
712-06	LEFT LANE SHIFT		4	64	48 x 48	W1-4CL	SIGN
712-06	LANE SHIFT 1/2 MILE		4	64	48 x 48	W20-5	SIGN
712-06	GROOVED PAVEMENT - PORTABLE		8	128	48 x 48	TN-64	SIGN
712-06	ROAD WORK NEXT 4 MILES		4	20	30 x 24	W16-2	SIGN
712-06	END ROAD WORK		16	128	48 x 24	G20-2A	SIGN
712-06	UNEVEN LANES		20	320	48 x 48	W8-11	SIGN
712-06	EXIT (MOUNTED ON FLEXIBLE DRUM)		4	20	30 x 24	M4-9R	SIGN
712-06	YIELD		4	16	36 x 36 x 36	R1-2	SIGN
712-06	ON RAMP		4	36	36X36	W13-4	SIGN
712-06	RAMP NARROWS		4	64	48X48	W5-1(MOD)	SIGN
<b>TOTAL</b>				<b>2140</b>			

### FOOTNOTE:

- 1) 96" X 48" (BLUE BACKGROUND WITH WHITE COPY) 0.100" SHEET ALUMINUM

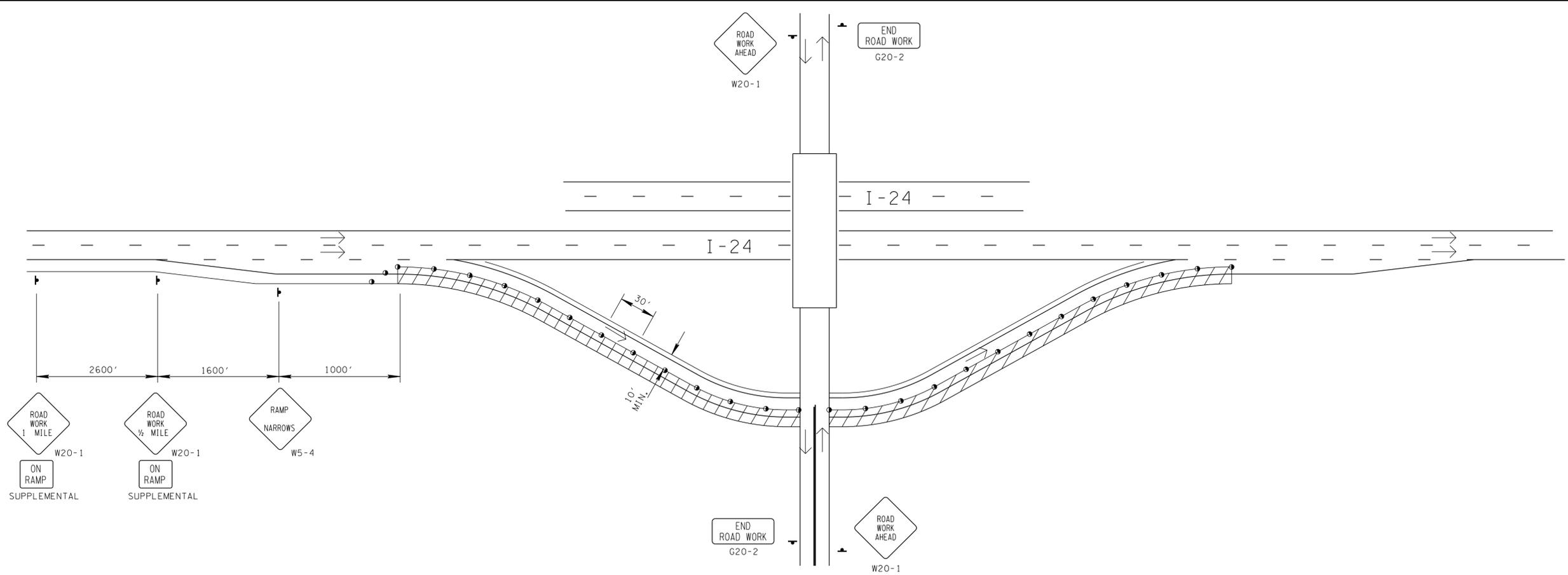


STATE OF TENNESSEE  
 DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL NOTES AND QUANTITIES

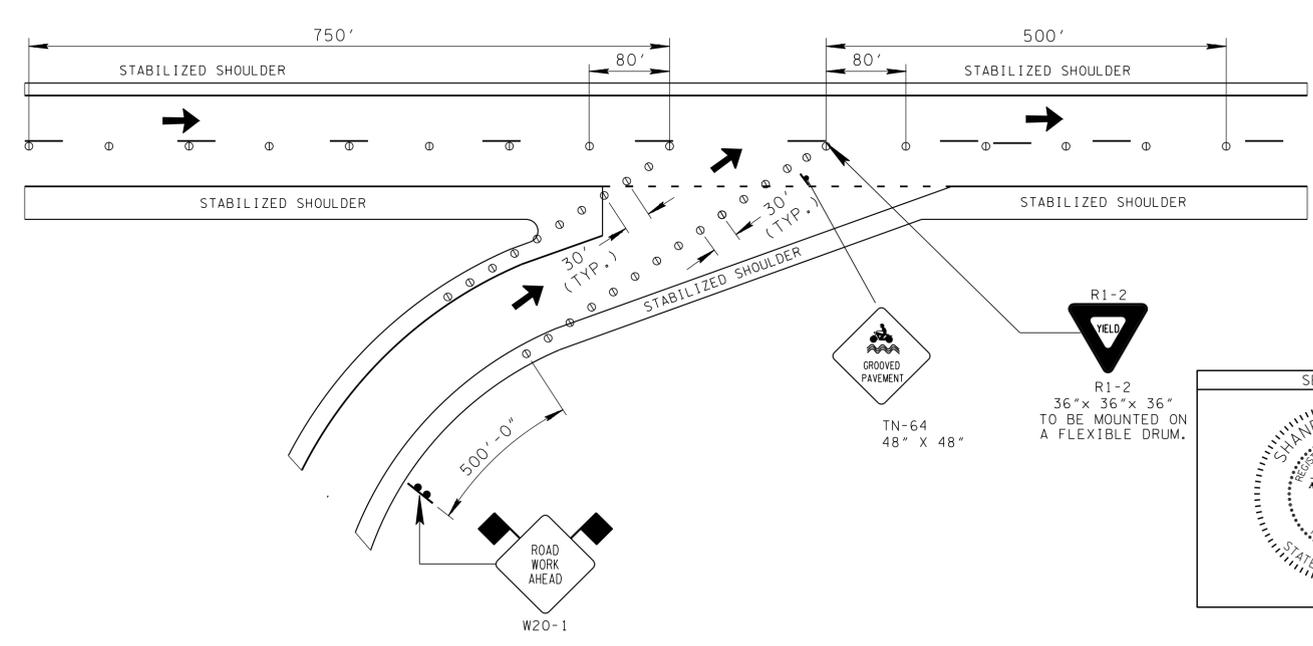
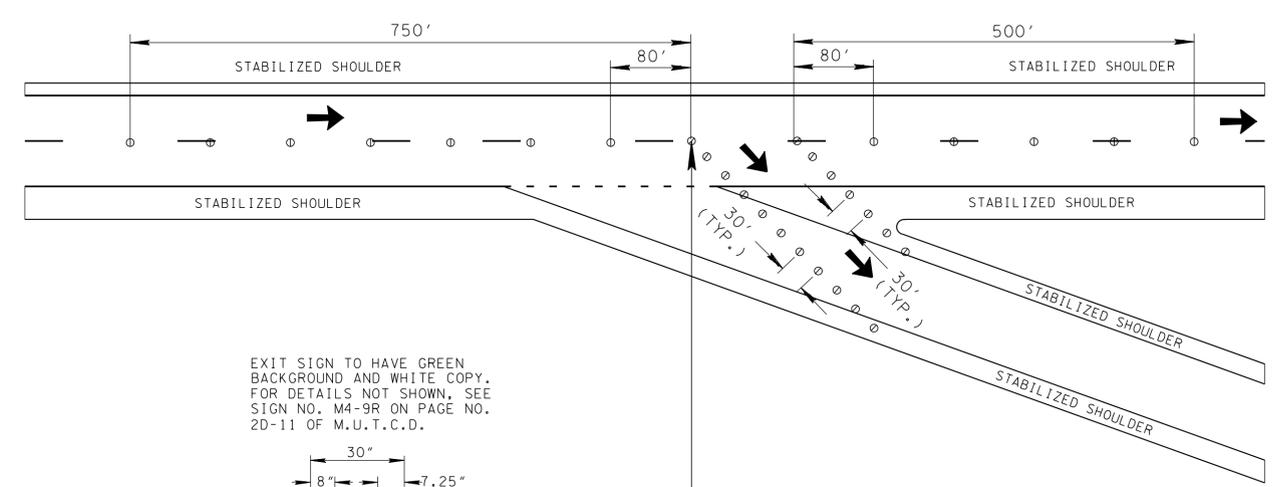
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TYPE	YEAR	PROJECT NO.	SHEET NO.
RESURF.	2014	NH-I-24-1(107)	2E

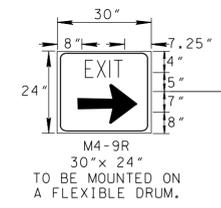


**INTERCHANGE DETAIL**

**UNOFFICIAL  
SET  
NOT FOR  
BIDDING**



EXIT SIGN TO HAVE GREEN BACKGROUND AND WHITE COPY. FOR DETAILS NOT SHOWN, SEE SIGN NO. M4-9R ON PAGE NO. 2D-11 OF M.U.T.C.D.



**TRAFFIC CONTROL FOR DECELERATION RAMP**

**TRAFFIC CONTROL FOR ACCELERATION RAMP**

**SIGNING NOTE**

- ① IF THESE SIGNS CONFLICT WITH ANY OTHER SIGNS DURING A DESIGNATED PHASE OF THE PROJECT, THEN THEY ARE TO BE COVERED OR REMOVED TO AVOID THAT CONFLICT.

SEALED BY  
SHANE M. HESTER  
REGISTERED ENGINEER  
NO. 11011  
STATE OF TENNESSEE

STATE OF TENNESSEE  
DEPARTMENT OF TRANSPORTATION

**TRAFFIC  
CONTROL  
FOR RAMPS**

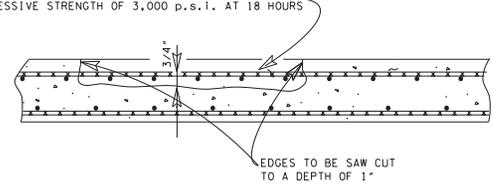
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TENNESSEE D.O.T.  
DESIGN DIVISION  
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
RESURF		75100-8106-44	B1
		NH-1-24-1(113)	
BRIDGE REPAIR		75100-4106-04	

TABULATION OF BRIDGE RELATED WORK AND ESTIMATED QUANTITIES					
LOCATION OF BRIDGE AND BRIDGE NUMBER	REFERENCE DRAWINGS TO BE PRINTED WITH CONTRACT DRAWINGS	TYPES OF WORK	604-10.50 BRIDGE DECK REPAIR (PARTIAL DEPTH OF SLAB) SY	604-10.44 EXPANSION JOINT REPAIR LF	617-04.01 TYPE 1 THIN EPOXY OVERLAY (EPOXY URETHANE) SY
75-124-12.61/ OVERALL CREEK		BRIDGE DECK REPAIR EPOXY OVERLAY EXPANSION JOINT REPAIR	5	336	4625
75-01084-6.68/ 124		BRIDGE DECK REPAIR EPOXY OVERLAY EXPANSION JOINT REPAIR	5	176	3212
75-124-15.50/ STONES RIVER		BRIDGE DECK REPAIR EPOXY OVERLAY EXPANSION JOINT REPAIR	5	280	6190
TOTAL			15	792	14027

CONCRETE FOR DECK REPAIR SHALL BE HIGH EARLY CONCRETE WITH A COMPRESSIVE STRENGTH OF 3,000 p.s.i. AT 18 HOURS



SKETCH SHOWING DECK REPAIR

- NOTE: PARTIAL DEPTH DECK REPAIR ONLY REMOVE CONCRETE IN ALL DELAMINATED AREAS TO A DEPTH OF 1/4" BELOW THE TOP BAR OF THE TOP MAT OF REINFORCING STEEL.
- NOTE: ALL REINFORCING STEEL IN THE AREAS OF THE DECK REPAIRS SHALL BE COMPLETELY CLEANED. CLEANING SHALL BE DONE PRIOR TO PLACING NEW CONCRETE. AREAS OF CONCRETE REMOVAL SHALL BE DESIGNATED BY PERSONNEL FROM THE HEADQUARTERS, BRIDGE INSPECTION AND REPAIR OFFICE. INSPECTIONS TO DETERMINE AREAS OF DECK REPAIR SHALL BE SCHEDULE WITH THE BRIDGE REPAIR OFFICE AT LEAST (3) DAYS IN ADVANCE.
- NOTE: THE COST OF CONCRETE, CONCRETE REMOVAL, LABOR, CLEANING REBARS AND ANY MISCELLANEOUS MATERIAL REQUIRED SHALL BE PAID FOR UNDER ITEM NO. 604-10.50 BRIDGE DECK REPAIR (PARTIAL DEPTH OF SLAB), S.Y.
- NOTE: ITEM NO. 604-10.50, BRIDGE DECK REPAIR (PARTIAL DEPTH OF SLAB) SHALL BE BID THIS MAY BE INCREASED, DECREASED OR ELIMINATED BY THE ENGINEER
- NOTE: TRAFFIC CONTROL SHALL BE PROVIDED ON ROADWAY UNDERPASS DURING PARTIAL DEPTH DECK REPAIR OF OVERHEAD BRIDGE.

POWER DRIVEN HAND TOOLS:

POWER DRIVEN HAND TOOLS USED FOR THE REMOVAL OF UNSOUND CONCRETE IN MAKING PARTIAL AND FULL DEPTH REPAIRS ARE SUBJECT TO THE FOLLOWING RESTRICTIONS:(1) PARTIAL DEPTH REPAIRS: PNEUMATIC HAMMERS HEAVIER THAN NOMINAL 60 lb. CLASS SHALL NOT BE USED. ALSO TRAFFIC CONTROL SHALL BE SET UP DURING PARTIAL DEPTH REPAIRS OVER TRAFFIC. (2) FULL DEPTH REPAIRS: PNEUMATIC HAMMERS HEAVIER THAN NOMINAL 90 lb.CLASS SHALL NOT BE USED. ALSO ALL DECK REPAIR OVER BEAMS WILL BE RESTRICTED TO 60 lb. PNEUMATIC HAMMERS. (3) CHIPPING HAMMERS WILL BE RESTRICTED TO 15 lb.CLASS SHALL BE USED TO REMOVE CONCRETE FROM BENEATH ANY REINFORCING STEEL.

BRIDGE DECK REPAIR MATERIAL

IF OVERNIGHT LANE CLOSURES ARE PROVIDED FOR THIS PROJECT AND THE LANE CLOSURES ARE SUCH THAT TRAFFIC WILL BE KEPT OFF THE BRIDGE DECK WHERE DECK REPAIRS WILL BE MADE, THEN HIGH EARLY STRENGTH CONCRETE SHALL BE USED WITH A COMPRESSIVE STRENGTH OF 3,000 p.s.i. AT 18 HOURS. THE CONTRACTOR SHALL PROVIDE PROOF PRIOR TO BEGINNING WORK THAT PROPOSED CONCRETE MIX WILL OBTAIN REQUIRED PROPERTIES. PROOF SHALL BE PROVIDED BY AN INDEPENDENT TESTING COMPANY AND SUBMITTED TO THE MATERIAL AND TEST DIVISION OF TENNESSEE DEPARTMENT OF TRANSPORTATION FOR APPROVAL. TRAFFIC SHALL NOT BE ALLOWED ON REPAIRED AREAS UNTIL THE CONCRETE HAS BEEN IN PLACE A MINIMUM OF 18 HOURS



STATE OF TENNESSEE  
DEPARTMENT OF TRANSPORTATION

BRIDGE  
TABULATION  
AND ESTIMATED  
QUANTITIES

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UNIVERSITY OF TENNESSEE  
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THIN EPOXY OVERLAY NOTES

TYPE 1 THIN EPOXY OVERLAY SYSTEM - USE DECK PRETREATMENT/PRIMER PER MANUFACTURER'S RECOMMENDATION, AND 2 LIFTS OF AN EPOXY-URETHANE COPOLYMER AND AGGREGATE. TYPE 1 OVERLAY SHALL BE APPLIED MECHANICALLY USING METERED EQUIPMENT; HAND MIXING OF MATERIAL IS NOT PERMITTED.

THIN OVERLAY SYSTEM SHALL BE FROM THE QUALIFIED PRODUCTS LIST 23, SECTION D2. MINIMUM OVERLAY THICKNESS SHALL BE 3/8 INCH.

APPLICATION EQUIPMENT SHOULD :

- A) BE CAPABLE OF METERING, MIXING AND DISTRIBUTING THE POLYMER AND PRETREATMENT TO MANUFACTURER'S RECOMMENDATION.
- B) USE AN APPLICATION MACHINE THAT FEATURES POSITIVE DISPLACEMENT VOLUMETRIC METERING PUMPS CONTROLLED BY A HYDRAULIC POWER UNIT.
- C) STORE COMPONENTS IN TEMPERATURE CONTROLLED RESERVOIRS CAPABLE OF MAINTAINING 100 DEGREES FAHRENHEIT (PLUS OR MINUS 10 DEGREES) TO INSURE OPTIMAL MIXING.
- D) CHECK MIXING RATIO AT THE PUMP OUTLETS AS WELL AS CYCLE COUNTING CAPABILITIES TO MONITOR OUTPUT ON STANDARD FEATURES.
- E) USE MOTIONLESS IN-LINE MIXING SO AS TO NOT OVERLY SHEAR THE MATERIAL TO ENTRAP AIR IN THE MIX.
- F) MAXIMIZE MATERIAL WORKING TIME BY MIXING IT IMMEDIATELY BEFORE DISPENSING.

AGGREGATE SHALL BE ANGULAR, HAVING LESS THAN 0.2% MOISTURE AND FREE OF DIRT, CLAY, ASPHALT AND OTHER FOREIGN OR ORGANIC MATERIALS. AGGREGATE FOR ALL LAYERS SHALL BE BAUXITE OR FLINT ROCK PRODUCTS FLINT AND MEETS THE FOLLOWING GRADATION:

<u>SIEVE SIZE</u>	<u>% PASSING</u>
NO. 6	95-100
NO. 10	10-35
NO. 20	0-3

FULL AND PARTIAL DEPTH DECK REPAIR SHALL CURE A MINIMUM OF 28 DAYS BEFORE THE OVERLAY IS PLACED. TRAFFIC SHALL BE ALLOWED TO USE THE BRIDGE DURING THE CURING PERIOD OF THE PATCHES BUT NOT AFTER SHOTBLASTING. MAGNESIUM PHOSPHATE BASED MATERIALS WILL NOT BE ALLOWED.

THE CONCRETE DECK SURFACE SHALL BE CLEANED BY SHOTBLASTING TO REMOVE ANY OIL, DIRT, RUBBER, TRAFFIC STRIPING, OR ANY OTHER POTENTIAL DETRIMENTAL MATERIAL SUCH AS CURING COMPOUND AND LAITANCES, WHICH THE MANUFACTURER AND ENGINEER'S OPINION WOULD PREVENT PROPER BONDING AND CURING OF THE MATERIAL. IN AREAS WHERE SHOTBLASTING EQUIPMENT CAN NOT REACH (I.E., ALONG CURBS AND BRIDGE RAILS) SANDBLASTING IS PERMITTED TO AN EXTENT TO THE ENGINEER'S AND MANUFACTURER'S APPROVAL. IMMEDIATELY BEFORE APPLICATION, ALL PREPARED SURFACES SHALL BE CLEANED WITH COMPRESSED AIR OR VACUUMED TO REMOVE DUST AND DEBRIS.

ALL SURFACES THAT ARE TREATED SHALL BE DRY AT THE TIME OF APPLICATION. THE OVERLAY SHALL NOT BE APPLIED WHEN IT HAS RAINED 24 HOURS PRIOR TO, OR RAIN IS FORECAST WITHIN 8 HOURS AFTER, APPLICATION. THE MOISTURE CONTENT IN THE DECK SUBSTRATE SHALL BE TESTED. MOISTURE IS NOT TO EXCEED 4.5 PERCENT WHEN MEASURED BY ELECTRONIC METER. IF THE TEST SHOWS EXCESS MOISTURE, THE DECK SHALL CONTINUE TO DRY BEFORE APPLICATION PROCEEDS.

BLUSHING (A WAXY SURFACE COATING ON THE EPOXY) IS CAUSED BY THE REACTION OF MOISTURE WITH THE HARDENING AGENT. BLUSHING CREATES A SURFACE THAT MAKES FUTURE LAYERS DIFFICULT TO ADHERE. LIFTS THAT SHOW SIGNS OF BLUSHING SHALL BE REMOVED AND REPLACED PRIOR TO APPLICATION OF THE NEXT. THE COST TO REMOVE AND REPLACE THESE AREAS SHALL BE AT THE CONTRACTOR'S EXPENSE.

TRAFFIC, OTHER THAN APPLICATION EQUIPMENT, SHALL NOT BE ALLOWED ON ANY PORTION OF THE DECK THAT HAS BEEN SHOTBLASTED OR WHERE PART OF THE APPLICATION HAS BEEN PLACED.

SEE MANUFACTURER'S RECOMMENDATIONS FOR REQUIRED AMBIENT AND SURFACE TEMPERATURES AND HUMIDITY LIMITS FOR APPLICATION.

THE MANUFACTURER SHALL HAVE A REPRESENTATIVE ON THE JOB SITE AT ALL TIMES DURING APPLICATION AND CURE TIME. THE REPRESENTATIVE, ALONG WITH CONSULTATION WITH ENGINEER, MAY SUSPEND ANY ITEM OF WORK THAT IS SUSPECT AND DOES NOT MEET THE REQUIREMENTS OF THE SPECIFICATIONS. WORK SHALL NOT RESUME UNTIL THE ENGINEER AND REPRESENTATIVE ARE SATISFIED THAT APPROPRIATE REMEDIAL ACTION HAS BEEN TAKEN BY THE CONTRACTOR.

ALL COSTS FOR AGGREGATE, EPOXY FOR MINIMUM OF TWO LIFTS, SURFACE PREPARATION, LABOR AND ANY OTHER MISCELLANEOUS MATERIALS REQUIRED TO PLACE THIN OVERLAY SHALL BE INCLUDED IN ITEM NO. 617-04.01, TYPE 1 THIN EPOXY OVERLAY (EPOXY URETHANE), SY, AS CALLED FOR ON THE QUANTITY SHEET.

THICKNESS VERIFICATION: THE PROJECT ENGINEER SHALL BE NOTIFIED OF THE NUMBER OF GALLONS USED ON THE PROJECT WITH NOTARIZED QUANTITY STATEMENTS FROM THE CONTRACTOR AND THE MANUFACTURER. THE CONTRACTOR SHALL VERIFY TO TDOT THAT THE OVERLAY IS AN AVERAGE OF AT LEAST 3/8 INCH THICK AT THREE RANDOM LOCATIONS AGREED UPON BY THE PROJECT ENGINEER AND THE MATERIAL MANUFACTURER REPRESENTATIVE. IF 3/8 INCH AVERAGE IS NOT ACHIEVED, A RETEST SHALL BE PERFORMED IN ADJOINING AREAS. THIN AREAS SHALL BE RE-COATED AS DESCRIBED ABOVE BY THE CONTRACTOR AND RE-VERIFIED AT NO ADDITIONAL COST TO TDOT. THIS VERIFICATION MAY CONSIST OF CORES, HOLES, ETC., BUT IN ALL CASES, ANY DESTRUCTIVELY TESTED AREAS SHALL BE REPAIRED BY THE CONTRACTOR BEFORE FINAL ACCEPTANCE BY THE PROJECT ENGINEER.

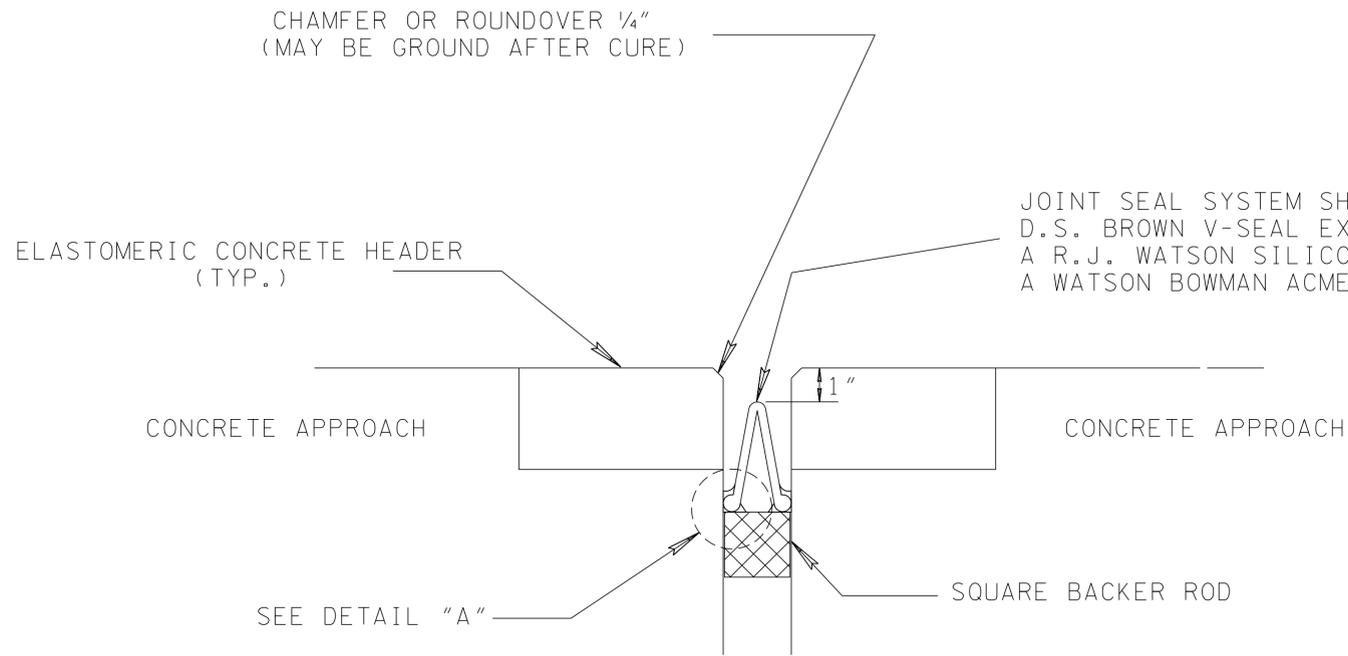
TYPE	YEAR	PROJECT NO.	SHEET NO.
RESURF		75100-8106-44	B2
		NH-I-24-1(113)	
BRIDGE REPAIR		75100-4106-04	



STATE OF TENNESSEE  
DEPARTMENT OF TRANSPORTATION

THIN EPOXY  
OVERLAY  
NOTES

TYPE	YEAR	PROJECT NO.	SHEET NO.
RESURF		75100-8106-44	B3
		NH-I-24-1(113)	
BRIDGE REPAIR		75100-4106-04	



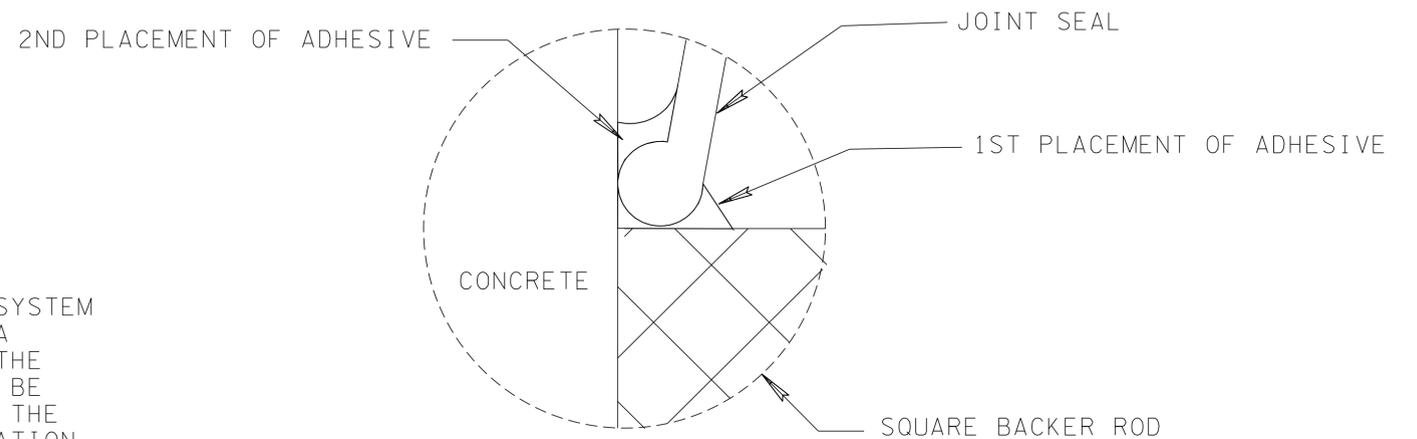
## JOINT SEAL DETAIL

THE JOINT SEAL SYSTEM SHALL BE EITHER A D.S. BROWN V-SEAL EXPANSION JOINT SYSTEM (V-400) OR A R.J. WATSON SILICOFLEX JOINT SEALING SYSTEM (MODEL SF400) OR A WATSON BOWMAN ACME (WABO SPS-400). FOR THE JOINT HEADER MATERIAL REFER TO THE (TDOT QUALIFIED PRODUCTS LIST NO. 9 SECTION A). THE JOINT SEAL SYSTEM SHALL BE INSTALLED UNDER DIRECT SUPERVISION OF AN AUTHORIZED TECHNICIAN PROVIDED BY THE JOINT SEAL SUPPLIER. FOR EACH JOINT AT EACH BRIDGE AND FOR EACH BRIDGE LOCATION WITHIN THE PROJECT, THE TECHNICIAN MUST APPROVE ALL ASPECTS OF THE GEOMETRY AND PREPARATION, INCLUDING GRINDING AND/OR GROOVING, PRIOR TO ANY JOINT MATERIAL INSTALLATION.

THIS INCLUDES THE REMOVAL OF THE EXISTING EXPANSION JOINT SYSTEM AND THE INSTALLATION OF THE NEW EXPANSION JOINT SYSTEM. THE NEW SYSTEM CONSISTS OF TWO ELASTOMERIC CONCRETE HEADERS, BACKER ROD, AND JOINT SEAL. DETAILED MANUFACTURER'S SPECIFICATIONS AND INSTALLATION PROCEDURES SHALL BE SUBMITTED TO THE PROJECT ENGINEER PRIOR TO CONSTRUCTION OF THE JOINT. THE MANUFACTURER AND THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE WORKMANSHIP AND PERFORMANCE OF THE INSTALLED JOINT

AFTER PAVING AND SEALING OVER THE EXISTING EXPANSION JOINT, THE ASPHALT SHALL BE CUT OUT AS SHOWN IN THE NEW EXPANSION JOINT DETAIL. FOLLOWING THE REMOVAL OF THE ASPHALT AND EXISTING JOINT MATERIAL, ALL AREAS SHALL BE THOROUGHLY CLEANED OF FOREIGN MATERIAL FOR THE FULL DEPTH OF THE EXISTING JOINT OPENING. ABRASIVE BLAST CLEANING MUST BE PERFORMED ON ALL SURFACES RECEIVING ANY NEW MATERIAL FOR THE NEW EXPANSION JOINT SYSTEM.

THE COST FOR REMOVING THE OLD JOINT SYSTEM AND INSTALLING THE NEW JOINT SEAL SYSTEM, LABOR, AND ANY MISCELLANEOUS MATERIALS NECESSARY TO INSTALL THE NEW EXPANSION JOINT TO BE INCLUDED UNDER ITEM NO. 604-10.44 EXPANSION JOINT REPAIRS, L.F.



## DETAIL A

JOINT SEAL ADHESIVE TO BE RUN ALONG THE CORNER CREATED BY THE BACKER ROD AND THE VERTICAL FACE PRIOR TO PLACEMENT OF JOINT SEAL AND SECOND APPLICATION OF ADHESIVE.



STATE OF TENNESSEE  
DEPARTMENT OF TRANSPORTATION

EXPANSION  
JOINT AT ENDS  
OF APPROACH  
PAVEMENT  
DETAILS