



Digitally signed by: James Fritz Brogdon, PE
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brogdon@arcadis.com C = US O = Arcadis, Inc. OU = Senior
Transportation Engineer
Date: 2025.01.29 11:49:46 -05'00'

ARCADIS U.S. INC.
1210 PREMIER DRIVE, SUITE 200
CHATTANOOGA, TN

JAMES FRITZ BROGDON, P.E. NO. 106940

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

SHEET NAME	SHEET NO.
SIGNATURE SHEET	ROADWAY-SIGN3
TITLE SHEET	1
ROADWAY INDEX AND STANDARD ROADWAY DRAWINGS	1A
ESTIMATED ROADWAY QUANTITIES	2

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

SIGNATURE
SHEET

Index Of Sheets
SEE SHEET NO. 1A

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF ENGINEERING

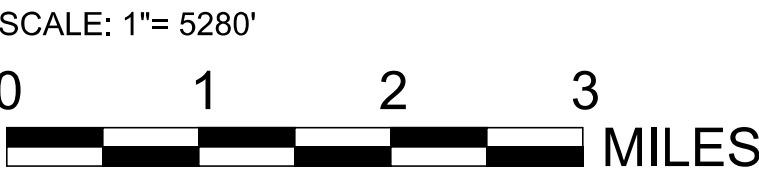
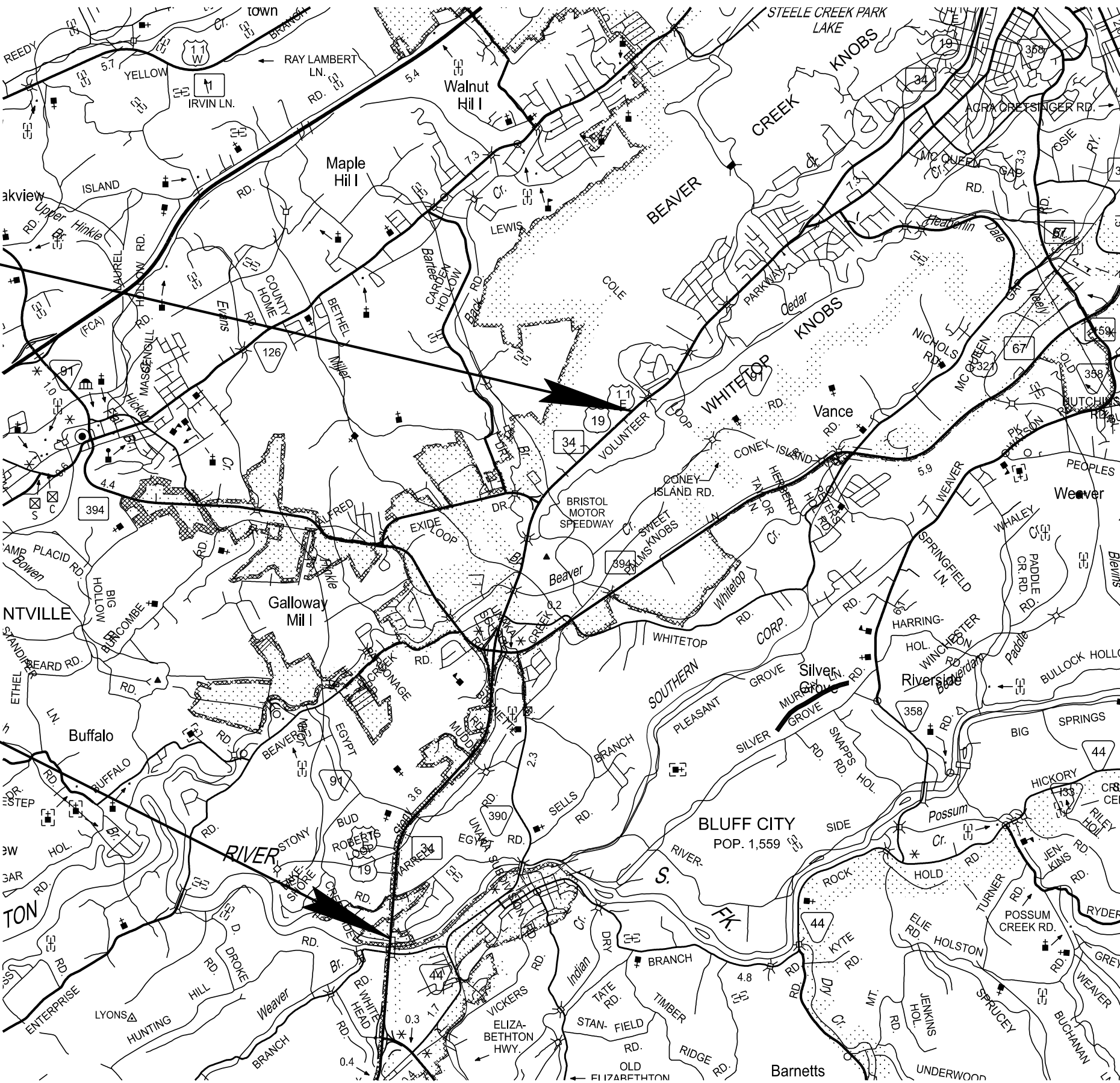
SULLIVAN COUNTY

SR-34 (US-11E):
FROM NEAR HOLSTON RIVER
TO NEAR BEAVER CREEK
RESURFACE & SAFETY
411D AND MILLING, GUARDRAIL, AND PAVEMENT MARKINGS

STATE HIGHWAY NO. 34 F.A.H.S. NO. 11E, 19W

82S034-F8-004
82S034-F3-004
END PROJECT NO. NH/HSIP-34(136) RESURFACE & SAFETY
L.M. 11.50

82S034-F8-004
82S034-F3-004
BEGIN PROJECT NO. NH/HSIP-34(136) RESURFACE & SAFETY
L.M. 6.10



SPECIAL NOTES

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

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

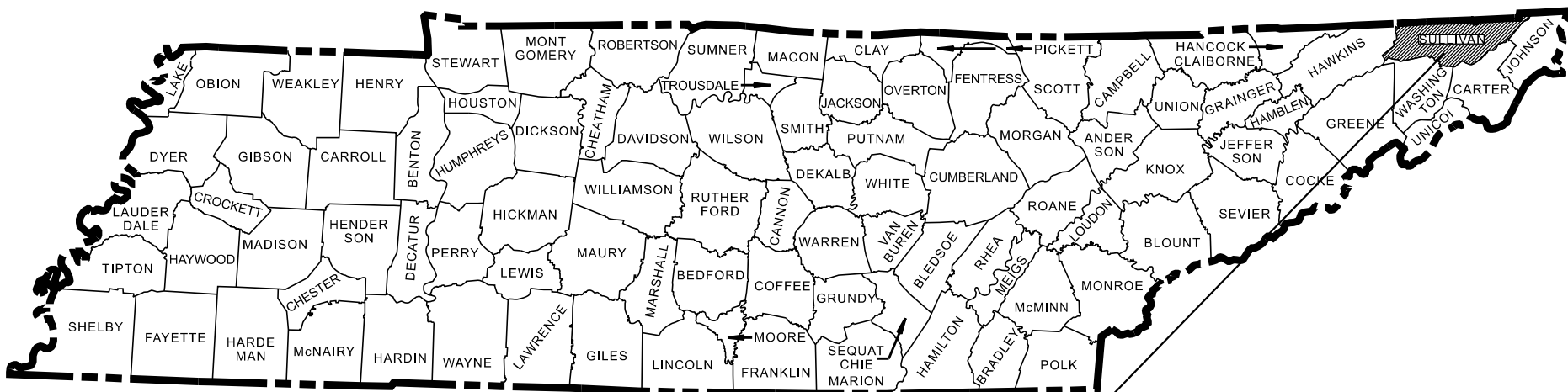
TDOT PROJECT MANAGER 1: ERIC WILSON, P.E.
DESIGNER : ADAM GRAVITT
P.E. NO. : 98013-4203-04 (DESIGN)
PIN NO. 131615.00
CHECKED BY : JAMES FRITZ BROGDAN, P.E.

PROJECT LENGTH 5.40 MILES
TOTAL LANE MILES RESURFACED 21.85 MILES

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

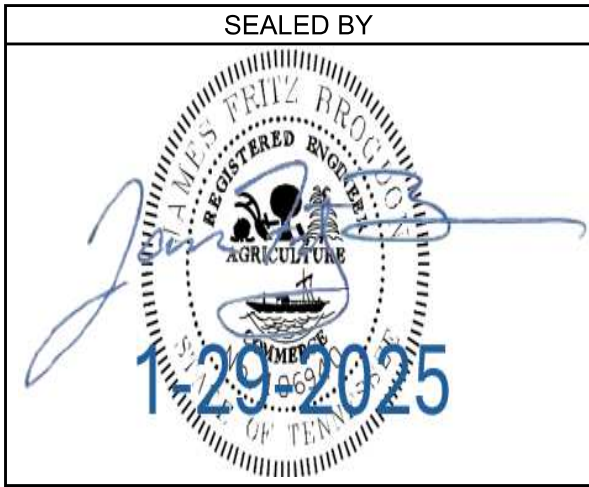
TENN.	YEAR 2025	SHEET NO. 1
FED. AID PROJ. NO.	NH/HSIP-34(136)	
STATE PROJ. NO.	82S034-F3-004, 82S034-F8-004	

REV. 01/29/25 : REMOVED BRACKETED PROJECT NOTE FROM SHEET.



PROJECT LOCATION
BRIDGE ID. # 82SR0340027 , 82SR0340028 , 82SR0340003 , 82SR0340005 ,
82SR0340007 , 82SR0340008

NO EXCLUSIONS



APPROVED: WILL REID, CHIEF ENGINEER

DATE:

APPROVED: HOWARD H. ELEY, COMMISSIONER

SULLIVAN TRAFFIC DATA	
ADT (2025)	17690
POSTED SPEED	
LM 6.10 - LM 8.92	55 MPH
LM 8.92 - LM 11.50	45 MPH

U.S. DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION	
APPROVED:	
DIVISION ADMINISTRATOR	DATE

ROADWAY INDEX

SHEET NAME

SHEET NO.

SIGNATURE SHEET	ROADWAY-SIGN1
SIGNATURE SHEET	ROADWAY-SIGN2
SIGNATURE SHEET	ROADWAY-SIGN3
TITLE SHEET	1
ROADWAY INDEX AND STANDARD ROADWAY DRAWINGS	1A
STANDARD TRAFFIC OPERATIONS DRAWINGS	1A1
ESTIMATED ROADWAY QUANTITIES	2
TYPICAL SECTIONS	2B
TYPICAL SECTIONS AND PAVEMENT SCHEDULE	2B1
GENERAL NOTES	2C
SPECIAL NOTES	2D
ENVIRONMENTAL NOTES	2E
EROSION PREVENTION AND SEDIMENT CONTROL NOTES	2E1
TABULATED QUANTITIES	2F
UTILITY NOTES AND UTILITY OWNERS	3
PAVEMENT EDGE DROP-OFF NOTES FOR TRAFFIC CONTROL	4
*CURB RAMP REFERENCE SHEETS	27-33

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

NO PROJECT COMMITMENT SHEET INCLUDED IN THIS SET OF PLANS

* REFERENCE SHEETS ARE FROM CURB RAMP CONTRACT, PIN 133441.01 PROVIDED BY OTHERS.

STANDARD ROADWAY DRAWINGS

DWG.

REV.

DESCRIPTION

STANDARD ROADWAY TITLE SHEET, ABBREVIATIONS, AND LEGENDS

RD-TP-1	10-01-24	STANDARD ROADWAY DRAWINGS TITLE SHEET
RD-A-1	02-20-20	STANDARD ABBREVIATIONS A THROUGH L
RD-A-2		STANDARD ABBREVIATIONS M THROUGH Z
RD-L-1	02-20-20	STANDARD LEGEND
RD-L-1A		STANDARD LEGEND

ROADWAY DESIGN STANDARDS

RD11-SE-1		TRANSITION AND CROSS SLOPE DETAILS
RD11-SE-2		SUPERELEVATION TRANSITION DETAILS FOR UNDIVIDED ROADWAYS
RD11-SE-2A		SUPERELEVATION TRANSITION SECTIONS FOR UNDIVIDED ROADWAYS
RD11-SE-3		SUPERELEVATION TRANSITION DETAILS FOR DIVIDED ROADWAYS
RD11-SE-3A		SUPERELEVATION TRANSITION SECTIONS FOR DIVIDED ROADWAYS
RD11-LR-1		MINIMUM RUNOFF LENGTHS (LR) FOR URBAN HIGHWAYS
RD11-LR-2		MINIMUM RUNOFF LENGTHS (LR) FOR RURAL HIGHWAYS

SAFETY DESIGN AND GUARDRAILS

S-CZ-1	06-28-19	CLEAR ZONE CRITERIA
S-PL-1	03-01-23	SAFETY PLAN FOR BARRIER LENGTH OF NEED
S-PL-1A	03-01-23	SAFETY PLAN FOR BARRIER LENGTH OF NEED (FOR RIGID OBJECTS)
S-PL-1B	03-01-23	SAFETY PLAN FOR BARRIER LENGTH OF NEED ON CURVED ROADWAYS
S-PL-3	03-01-23	SAFETY PLAN MINIMUM INSTALLATION AT BRIDGE ENDS
S-PL-5	06-28-19	SAFETY PLAN FOR BRIDGE ENDS IN MEDIANS
S-PL-6	07-30-24	SAFETY PLAN SAFETY HARDWARE PLACEMENT ON OUTSIDE EDGE
S-PL-6A	06-28-19	SAFETY PLAN SAFETY HARDWARE PLACEMENT IN MEDIAN
S-GR31-1	06-15-21	GUARDRAIL DETAILS
S-GRS-4	05-04-22	SPECIAL CASE GUARDRAIL HEIGHT TRANSITION DETAIL
S-GRT-2	06-28-19	TYPE 38 GUARDRAIL END TERMINAL
S-GRT-2P	10-16-20	EARTH PAD FOR TYPE 38 AND TYPE 21 TERMINAL
S-GRT-2R	06-28-19	EARTH PAD FOR TYPE 38 AND TYPE 21 TERMINAL (RETROFIT)
S-GRT-3	06-28-19	TYPE 21 GUARDRAIL END TERMINAL
S-GRT-4		TYPE 21 GATING END TERMINAL
S-GRT-4A		TYPE 21 GATING END TERMINAL ANCHOR DETAILS
S-GRT-4B		GATING TERMINAL POST & RAIL DETAILS

DWG.

REV.

DESCRIPTION

DESIGN - TRAFFIC CONTROL

T-M-1	06-28-19	DETAILS OF PAVEMENT MARKINGS FOR CONVENTIONAL ROADS AND MARKING ABBREVIATIONS
T-M-2	01-09-24	DETAILS OF PAVEMENT MARKINGS FOR CONVENTIONAL ROADS
T-M-3	07-07-23	MARKING STANDARDS FOR TRAFFIC ISLANDS, PAVED SHOULDERS AND MEDIANS FOR CONVENTIONAL ROADS
T-M-4	07-17-20	STANDARD INTERSECTION PAVEMENT MARKINGS
T-M-15	06-28-19	ASPHALT SHOULDER RUMBLE STRIP INSTALLATION DETAILS FOR INTERSTATE AND ACCESS CONTROLLED ROUTES
T-M-15A	06-28-19	ASPHALT SHOULDER RUMBLE STRIP INSTALLATION DETAILS FOR NON-ACCESS CONTROLLED RURAL ROUTES
T-WZ-10	04-02-12	ADVANCE ROAD WORK SIGNING ON HIGHWAYS AND FREEWAYS
T-WZ-11	03-04-21	ONE LANE CLOSURE DETAIL ON DIVIDED HIGHWAYS
T-WZ-12	03-04-21	ONE LANE CLOSURE DETAIL FOR BRIDGES ON DIVIDED HIGHWAYS
T-WZ-FAB1		FLASHING YELLOW ARROW BOARD

EROSION PREVENTION AND SEDIMENT CONTROL

EC-STR-3B	06-15-21	SILT FENCE
EC-STR-3C	03-01-23	SILT FENCE WITH WIRE BACKING
EC-STR-3E	04-01-08	SILT FENCE FABRIC JOINING DETAILS
EC-STR-34	05-04-22	EROSION CONTROL BLANKET FOR SLOPE INSTALLATION

TYPE	YEAR	PROJECT NO.	SHEET NO.
RESURF.	2025	NH/HSIP-34(136)	1A

REV. 01/09/25 : ADDED SHEET ROADWAY-SIGN2 TO ROADWAY INDEX.
REV. 01/29/25 : ADDED SHEET ROADWAY-SIGN3 TO ROADWAY INDEX.

SEALED BY



STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

ROADWAY INDEX
AND
STANDARD
ROADWAY
DRAWINGS

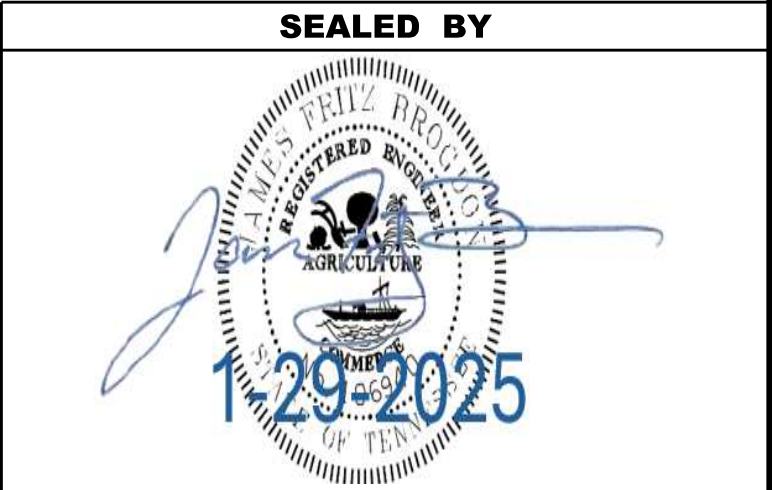
TYPE	YEAR	PROJECT NO.	SHEET NO.
RESURF.	2025	NH/HSP-34(136)	2

REV. 01/09/25 : REVISED QUANTITIES FOR ITEM NUMBERS 712-01 AND 717-01.
REV. 01/29/25 : REMOVED FOOTNOTE NUMBER (6) AND RENUMBERED FOOTNOTES.

ESTIMATED ROADWAY QUANTITIES					
ITEM NO.	DESCRIPTION	UNIT	QUANTITY 82S034-F8-004	QUANTITY 82S034-F3-004	TOTAL QUANTITY
	208-01.05 BROOMING & DEGRASSING SHOULDERS	L.M.	22		22
	403-01 BITUMINOUS MATERIAL FOR TACK COAT (TC)	TON	126		126
	411-01.07 ACS MX (PG64-22) GRADING E SHOULDER	TON	4854		4854
	411-01.21 LONGITUDINAL JOINT SEALANT	L.M.	28		28
(1)	411-02.10 ACS MX(PG70-22) GRADING D	TON	14430		14430
(2)	411-12.02 SCORING SHOULDERS (NON-CONTINUOUS) (16IN WIDTH)	L.M.		11	11
(3)	415-01.01 COLD PLANING BITUMINOUS PAVEMENT	TON	19020		19020
(4)	705-02.10 GUARDRAIL TRANSITION 27IN TO 31IN	EACH		10	10
(4)	705-04.09 EARTH PAD FOR TYPE 38 GR END TREATMENT	EACH		8	8
(4) (5)	705-04.10 EARTH PAD FOR GUARD RAIL END TREATMENT	EACH		2	2
(4)	705-06.20 TANGENT ENERGY ABSORBING TERM MASH TL-3	EACH		8	8
(4)	705-06.30 GR TERMINAL (ENERGY ABSORBING) MASH TL2	EACH		2	2
	712-01 TRAFFIC CONTROL	LS	1		1
	712-04.01 FLEXIBLE DRUMS (CHANNELIZING)	EACH	285		285
	712-05.01 WARNING LIGHTS (TYPE A)	EACH	143		143
(6)	712-06 SIGNS (CONSTRUCTION)	S.F.	1849		1849
	712-08.03 ARROW BOARD (TYPE C)	EACH	2		2
	716-01.23 SNOWPLOWABLE RAISED PAVEMENT MARKERS (B+DIR)(2 COLOR)	EACH	45		45
(7)	716-01.30 REMOVAL OF SNOWPLOWABLE REFLECTIVE MARKER	EACH	45		45
(8)	716-02.04 PLASTIC PAVEMENT MARKING(CHANNELIZATION STRIPING)	S.Y.		780	780
(8)	716-02.05 PLASTIC PAVEMENT MARKING (STOP LINE)	L.F.		372	372
(8)	716-02.06 PLASTIC PAVEMENT MARKING (TURN LANE ARROW)	EACH		57	57
(8)(9)	716-02.09 PLASTIC PAVEMENT MARKING (LONGITUDINAL CROSS-WALK)	L.F.		1000	1000
(8)	716-03.04 PLASTIC WORD PAVEMENT MARKING (SCHOOL)	EACH		4	4
(8)	716-04.05 PLASTIC PAVEMENT MARKING (STRAIGHT ARROW)	EACH		1	1
(8)	716-04.12 PLASTIC PAVEMENT MARKING (YIELD LINE)	S.F.		72	72
(8)	716-04.14 PLASTIC PAVEMENT MARKING (LANE REDUCTION ARROW)	EACH		1	1
(8)	716-04.16 PLASTIC PAVEMENT MARKING (NOISE STRIP)	L.F.		60	60
(10)	716-05.20 PAINTED PAVEMENT MARKING (6" LINE)	L.M.	25		25
	716-13.02 SPRAY THERMO PVMT MRKNG (60 mil) (6IN LINE)	L.M.	25		25
	716-13.05 SPRAY THERMO PVMT MRKNG (60 mil) (6IN DOTTED LINE)	L.F.	1712		1712
	717-01 MOBILIZATION	LS	1		1
	730-14.02 SAW SLOT	L.F.	3500		3500
(11)	730-14.03 LOOP WIRE	L.F.	7000		7000

FOOTNOTES	
(1)	INCLUDES 2210 TONS FOR SR-394 CROSS-OVERS, TURN LANES, AND RAMPS, AND 30 TONS FOR CITY STREETS AND COUNTY ROADS.
(2)	QUANTITY INCLUDES 4.9 LM FOR OUTSIDE SHOULDER BETWEEN LM 6.10 – LM 9.17. QUANTITY CALCULATED BY MULTIPLYING PROJECT LENGTH BY A FACTOR OF (60/75). QUANTITY ALSO INCLUDES 6.1 LM FOR INSIDE SHOULDER BETWEEN LM 6.10 – LM 9.17 A CONTINUOUS APPLICATION SHOULD BE APPLIED TO THE INSIDE SHOULDER
(3)	INCLUDES 2190 TONS FOR SR-394 CROSS-OVERS, TURN LANES, AND RAMPS, AND 29.7 TONS FOR COUNTY ROADS.
(4)	SEE SHEET NUMBER 2F FOR PROPOSED GUARDRAIL TABLE. INCLUDES THE COST OF REMOVAL OF THE EXISTING END TERMINALS.
(5)	INCLUDES ALL MATERIAL NECESSARY FOR THE CONSTRUCTION OF THE PAD AND ANY NECESSARY EPSC MEASURES.
(6)	SEE SHEET NUMBER 2F FOR TRAFFIC CONTROL SIGN TABULATION BLOCK.
(7)	ANY DAMAGE INCURRED DURING THE REMOVAL SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE AND TO THE SATISFACTION OF THE TDOT MANAGER
(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)	SEE SHEET NUMBER 2F FOR ADDITIONAL INFO.
(10)	TO BE USED FOR TEMPORARY STRIPING DURING THE MILLING OPERATION. NO PAYMENT WILL BE MADE FOR TEMPORARY STRIPING DURING PLACEMENT OF THE FINAL SURFACE (ON EITHER EXISTING SURFACE OR FINAL) COURSE DUE TO THE CONTRACTOR'S METHODS OF CONSTRUCTION.
(11)	SIGNAL DETECTION LOOPS SHALL BE INSTALLED BEFORE THE FINAL SURFACE IS APPLIED.

NOTE: THERE ARE NO UTILITY ADJUSTMENTS ON THIS PROJECT.



STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

ESTIMATED
ROADWAY
QUANTITIES