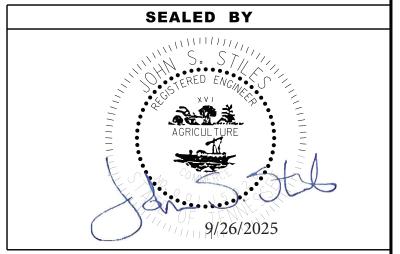
ITEM NO.	DESCRIPTION	UNIT	QUANTITY 33057-3228-94
105-01	CONSTRUCTION STAKES, LINES AND GRADES	LS	1
108-03	CPM PROJECT SCHEDULE	LS	1
201-01	CLEARING AND GRUBBING	LS	1
202-01.50	REMOVAL OF STRUCTURES AND OBSTRUCTIONS	EACH	1
202-02.01	REMOVAL OF PIPE (18" RCP, STA. 50+49 BENHAM DRIVE)	L.F.	105
202-03	REMOVAL OF RIGID PAVEMENT, SIDEWALK, ETC.	S.Y.	465
202-03.01	REMOVAL OF ASPHALT PAVEMENT	S.Y.	1610
202-08.10	REMOVAL OF CURB (CONCRETE CURB)	L.F.	1695
203-01	ROAD AND DRAINAGE EXCAVATION (UNCLASSIFIED)	C.Y.	5017
203-02.01 203-03	BORROW EXCAVATION (GRADED SOLID ROCK)  BORROW EXCAVATION (UNCLASSIFIED)	TON C.Y.	350 6150
203-03	PLACING AND SPREADING TOPSOIL	C.Y.	483
203-04	WATER	M.G.	16
203-07	FURNISHING & SPREADING TOPSOIL	C.Y.	1002
203-10.15	WASTE MATERIAL	C.Y.	207
203-50	CONSTRUCTION OF HAUL ROAD	LS	1
209-02.04	10" TEMPORARY SLOPE DRAIN	L.F.	71
209-05	SEDIMENT REMOVAL	C.Y.	116
209-08.02	TEMPORARY SILT FENCE (WITH BACKING)	L.F.	3532
209-08.07	ROCK CHECK DAM	EACH	3
209-08.08	ENHANCED ROCK CHECK DAM	EACH	5
209-09.43	CURB INLET PROTECTION (TYPE 4)	EACH	17
209-40.33	CATCH BASIN PROTECTION (TYPE D)	EACH	13
303-01	MINERAL AGGREGATE, TYPE A BASE, GRADING D	TON	2692
303-10.04	MINERAL AGGREGATE (SIZE 57)	TON	346
303-10.07 307-01.21	NO. 4 STONE ASP. CONC. MIX (PG70-22)(BPMB-HM) GR. A-S	TON	70 453
307-01.21	ASPHALT CONCRETE MIX (PG70-22)(BPMB-HM) GRADING A	TON	490
307-02.01	ASPHALT CONCRETE MIX (PG70-22)(BPMB-HM) GRADING B-M2	TON	446
402-01	BITUMINOUS MATERIAL FOR PRIME COAT (PC)	TON	4
402-02	AGGREGATE FOR COVER MATERIAL (PC)	TON	15
403-01	BITUMINOUS MATERIAL FOR TACK COAT (TC)	TON	5
407-20.05	SAW CUTTING ASPHALT PAVEMENT	L.F.	766
411-02.10	ACS MIX(PG70-22) GRADING D	TON	239
415-01.02	COLD PLANING BITUMINOUS PAVEMENT	S.Y.	731
502-03.13	CONCRETE PAVEMENT REMOVAL	S.Y.	152
502-04.01	SAWING CONCRETE PAVEMENT (FULL DEPTH)	L.F.	147
604-07.01	RETAINING WALL (WALL C)	S.F.	3355
607-03.02	18" CONCRETE PIPE CULVERT (CLASS III)	L.F.	1155
611-07.01 611-07.02	CLASS "A" CONCRETE (PIPE ENDWALLS)  STEEL BAR REINFORCEMENT	C.Y.	1 45
611-07.02	ADJUSTMENT OF EXISTING CATCH BASIN	LB. EACH	45
611-12.01	CATCH BASINS, TYPE 12, 0' - 4' DEPTH	EACH	4
611-12.02	<u> </u>	EACH	4
611-12.04	CATCH BASINS, TYPE 12, > 12' - 16' DEPTH	EACH	2
611-14.02		EACH	2
701-01.01	CONCRETE SIDEWALK (4")	S.F.	9316
701-02	CONCRETE DRIVEWAY	S.F.	1391
701-02.03	CONCRETE CURB RAMP	S.F.	207
702-01	CONCRETE CURB	C.Y.	2
702-03	CONCRETE COMBINED CURB & GUTTER	C.Y.	112
705-06.10	GR TERMINALTRAILING END (TYPE 13) MASH TL-3	EACH	2
705-06.20	TANGENT ENERGY ABSORBING TERM MASH TL-3	EACH	1
705-06.25	THRIE BEAM BRIDGE TRANSITION MASH TL-3	EACH	4
705-06.27	THRIE BEAM 38IN VEHICLE & PEDESTRIAN SAFETY RAIL MASH TL-3	L.F.	890
705-06.30	GR TERMINAL (ENERGY ABSORBING) MASH TL-2	EACH	1202
706-01 707-02.11	GUARDRAIL REMOVED  CHAIN-LINK FENCE (6 FOOT) (VINYL COATED)	L.F.	1293 190
707-02.11	END & CORNER POST ASSEMBLIES (6' VINYL COATED)	EACH	190
707-02.12	REMOVAL OF FENCE (VARIOUS)	L.F.	795
708-02.01	MARKERS (CONCRETE R.O.W. POSTS)	EACH	11

		ESTIMATED ROADWAY QUANTITIES		
	ITEM NO.	DESCRIPTION	UNIT	QUANTITY 33057-3228-94
(28)	709-05.05	MACHINED RIP-RAP (CLASS A-3)	TON	100
(29)	709-05.06	MACHINED RIP-RAP (CLASS A-1)	TON	18
, ,	710-02	AGGREGATE UNDERDRAINS (WITH PIPE)	L.F.	1755
	712-01	TRAFFIC CONTROL	LS	1
	712-02.02	INTERCONNECTED PORTABLE BARRIER RAIL	L.F.	2240
(30)	712-02.47	BRIDGE MOUNTED INTERCONNECTED PORTABLE BARRIER RAIL	L.F.	440
	712-02.60	TEMPORARY WORK ZONE CRASH CUSHION (MASH TL-3)	EACH	10
	712-04.01	FLEXIBLE DRUMS (CHANNELIZING)	EACH	50
	712-04.50	BARRIER RAIL DELINEATOR	EACH	268
	712-05.01	WARNING LIGHTS (TYPE A)	EACH	76
(31)	712-06	SIGNS (CONSTRUCTION)	S.F.	911
	712-07.02	TEMPORARY BARRICADES (TYPE II)	L.F.	12
	712-07.03	TEMPORARY BARRICADES (TYPE III)	L.F.	144
	712-09.02	REMOVABLE PAVEMENT MARKING (8" BARRIER LINE)	L.F.	424
	712-09.08	REMOVABLE PAVEMENT MARKING (6" LINE)	L.F.	1029
(48)	713-01.01	CLASS A CONCRETE (FOUNDATION FOR SIGN SUPPORTS)	C.Y.	2
(48)	713-01.02	STEEL BAR REINFORCEMENT (FOUNDATION FOR SIGN SUPPORTS)	LB.	271
	713-02.21	SIGN POST DELINEATION ENHANCEMENT	L.F.	12
(48)	713-06	STEEL I-BEAMS & WF-BEAMS(BREAKAWAY) SIGN SUPPORTS	LB.	493
	713-11.01	"U" SECTION STEEL POSTS	LB.	38
	713-11.02	PERFORATED/KNOCKOUT SQUARE TUBE POST	LB.	85
	713-13.03	FLAT SHEET ALUMINUM SIGNS (0.100" THICK)	S.F.	32
(48)	713-14	EXTRUDED ALUMINUM PANEL SIGNS	S.F.	40
(32)	713-15	REMOVAL OF SIGNS, POSTS AND FOOTINGS	LS	1
	713-16.01	CHANGEABLE MESSAGE SIGN UNIT	EACH	3
(33)	713-16.50	REMOVE AND REPLACE SIGN (EXISTING STREET NAME SIGNS)	EACH	2
(34)	716-01.21	SNOWPLOWABLE RAISED PAVEMENT MARKERS (BI-DIR)(1 COLOR)	EACH	21
	716-01.30	REMOVAL OF SNOWPLOWABLE REFLECTIVE MARKER	EACH	15
	716-02.04	PLASTIC PAVEMENT MARKING (CHANNELIZATION STRIPING)	S.Y.	5
(35)	716-02.05	PLASTIC PAVEMENT MARKING (STOP LINE)	L.F.	23
(35)	716-02.09	PLASTIC PAVEMENT MARKING (LONGITUDINAL CROSS-WALK)	L.F.	76
	716-05.02	PAINTED PAVEMENT MARKING (8" BARRIER LINE)	L.F.	2305
	716-05.20	PAINTED PAVEMENT MARKING (6" LINE)	L.M.	1.71
36)(37)	716-08.30	HYDROBLAST REMOVAL OF PAVEMENT MARKING (LINE)	L.M.	1.13
(38)	716-09.83	CONTRAST PAVEMENT MARKING 6"	L.F.	847
(39)	716-12.02	ENHANCED FLATLINE THERMO PVMT MRKNG (6IN LINE)	L.M.	0.81
	717-01	MOBILIZATION	LS	1
(17)	740-07.04	GEOGRID REINFORCEMENT TYPE 2	S.Y.	524
6)(40)(41)	740-10.03	GEOTEXTILE (TYPE III)(EROSION CONTROL)	S.Y.	223
(42)	740-10.04	GEOTEXTILE (TYPE IV)(STABILIZATION)	S.Y.	762
15)(16)	740-11.02	TEMPORARY SEDIMENT TUBE 12IN	L.F.	1616
5)(16)(43)	801-01	SEEDING (WITH MULCH)	UNIT	7
5)(16)(43)	801-01.07	TEMPORARY SEEDING (WITH MULCH)	UNIT	160
16)(43,44)	801-02	SEEDING (WITHOUT MULCH)	UNIT	45
5)(16)(45)	801-03	WATER (SEEDING & SODDING)	M.G.	9
15)(16)	803-01	SODDING (NEW SOD)	S.Y.	4325
5)(16)(46)	805-01.01	TURF REINFORCEMENT MAT (CLASS I)	S.Y.	392
(15)(16)	805-12.02	EROSION CONTROL BLANKET (TYPE II)	S.Y.	3581

TYPE	YEAR	PROJECT NO.	SHEET NO.
PLAN-IN-HAND	2024	BR-STP-320(10)	2
PS&E	2025	BR-STP-320(10)	2

LETTING REVISION 09/25/2025:
ADDED ITEM NO. 108-03 CPM PROJECT
SCHEDULE. REVISED ITEM NO.'S 713-01.02,
713-06, AND 713-14 TO REMOVE QUANTITY
FOR PROJECT INFORMATION SIGNS.



STATE OF TENNESSEE DEPARTMENT OF TRANSPORTATION

ESTIMATED ROADWAY QUANTITIES SHEET 1 OF 2

## **FOOTNOTES**

- (1) INCLUDES REMOVAL OF A CATCH BASIN ON BENHAM DRIVE.
- (2) SALVAGE SHALL BECOME THE PROPERTY OF THE CONTRACTOR
- (3) INCLUDES REMOVAL OF 18" RCP ON BENHAM DRIVE.
- (4) INCLUDES REMOVAL OF CONCRETE SIDEWALK ALONG E BRAINERD ROAD
- (5) INCLUDES REMOVAL OF EXISTING ASPHALT PAVEMENT OUTSIDE OF THE MILL AND OVERLAY AREAS.
- (6) INCLUDES REMOVAL OF CONCRETE POST CURB AND SLOPING CONCRETE CURB WITHIN THE PROJECT LIMITS AND AS DIRECTED BY THE ENGINEER.
- (7) INCLUDES 15 C.Y. FOR TEMPORARY CONSTRUCTION EXITS AND 229 C.Y. FOR CONSTRUCTION OF THE TEMPORARY BERMS.
- (8) THE CONTRACTOR'S ATTENTION IS DRAWN TO THE PHASING OF WORK AND TRAFFIC CONTROL. A MAJORITY OF THE FILL FOR THIS PROJECT WILL BE REQUIRED AT THE BEGINNING OF THE PROJECT TO CONSTRUCT NEW APPROACHES FOR THE RELOCATED BRIDGE AND A MAJORITY OF THE CUT WILL BE PERFORMED AFTER TRAFFIC HAS BEEN SWITCHED TO THE NEW ALIGNMENT. THE BORROW ITEM NO. 203-03 HAS BEEN ADJUSTED TO REFLECT THIS.
- (9) QUANTITY TO BE USED AT THE DISCRETION OF THE ENGINEER TO STABILIZE SOFT SUBGRADE AREAS.
- (10) INCLUDES 16 THOUSAND GALLONS FOR USE IN EARTHWORK.
- (11) THIS ITEM INCLUDES THE EXCAVATION OF POTENTIALLY CONTAMINED SOILS ON CSXT RIGHT-OF-WAY TO REMOVE EXISTING PORTIONS OF THE BRIDGE FOUNDATIONS AND FOR THE SLOPE PAVING AT ABUTMENT NO. 1 THAT IS NOT INCLUDED IN THE BRIDGE PLANS. THE CONTRACTOR SHALL COORDINATE WITH CSXT TO SCHEDULE TESTING OF THE MATERIAL BY A CSXT CONSULTANT. BASED ON TESTING RESULTS, CSXT WILL MAKE A DETERMINATION OF WHERE ANY SPOILS NEED TO BE WASTED. ALL COST ASSOCIATED WITH EXCAVATION, TRANSPORT, DISPOSAL, AND COORDINATION WITH CSX AND THEIR CONSULTANT SHALL BE INCLUDED IN THE COST OF THIS ITEM. THE AMOUNT OF EXCAVATION REQUIRED ON CSX RIGHT-OF-WAY HAS BEEN ESTIMATED AND IS SHOWN IN THE EARTHWORK TABULATED QUANTITIES BLOCK ON SHEET 2F. FOR DISPOSAL OF THE EXCESS CSXT MATERIAL, SEE THE CSXT SOIL AND WATER MANAGEMENT POLICY CONTAINED WITHIN THE CSXT PUBLIC PROJECT MANUAL.
- ITEM NUMBER 203-50 SHALL INCLUDE GEOTEXTILE (TYPE IV), BORROW EXCAVATION GRADED SOLID ROCK), OR MACHINED RIP-RAP (CLASS A-1, CLASS B, OR CLASS C), AND MINERAL AGGREGATE (SIZE 57) AS SHOWN ON SHEET 2F1. THE TABULATED HAUL ROAD QUANTITIES INCLUDE AN ADDITIONAL TEN (10) PERCENT IN THE STONE ITEM FOR MAINTENANCE OF THE HAUL ROADS DURING CONSTRUCTION. THIS ITEM NUMBER SHALL ALSO INCLUDE ANY SHORING THAT WILL BE REQUIRED FOR EITHER HAUL ROAD. HAUL ROAD #2 SHALL ALSO INCLUDE STEEL PLATE(S) THAT ARE TO BE INSTALLED OVER EXISTING CENTURYLINK/LUMEN FIBER LINE TO PROVIDE ADDITIONAL SUPPORT AND PROTECTION, THE TEMPORARY DRAINAGE DITCH. PRICE FOR THIS ITEM SHALL ALSO INCLUDE REMOVAL OF BOTH HAUL ROADS ONCE WORK IS COMPLETE.
- (13) IF THE HAUL ROAD IS CONSTRUCTED IN A DRY OR UNSATURATED AREA, BORROW EXCAVATION (GRADED SOLID ROCK) SHALL BE USED. IF THE HAUL ROAD IS CONSTRUCTED IN WATER OR IN AN AREA WITHIN THE FLOOD PLAIN, MACHINED RIP-RAP (CLASS A-1, CLASS B OR CLASS C) SHALL BE USED IN PLACE OF BORROW EXCAVATION. AN ADDITIONAL TEN (10) PERCENT FOR MINERAL AGGREGATE IS INCLUDED IN ITEM 203-50. THE ADDITIONAL TEN (10) PERCENT IS FOR THE MAINTENANCE OF THE HAUL ROAD DUE TO INCLEMENT WEATHER EVENTS OUTSIDE THE CONTRACTOR'S CONTROL.
- (14) THE BEDDING MATERIAL SHALL BE INCLUDED IN THE COST OF THE PROPOSED PIPE CULVERT.
- (15) SEE SUBSECTION 209.07 OF THE STANDARD SPECIFICATIONS FOR MAINTENANCE REPLACEMENT.
- (16) ALL QUANTITIES ARE TO BE USED AS DIRECTED BY THE ENGINEER.
- (17) FOR USE WITH PAVEMENT AT BRIDGE ENDS PER STANDARD DRAWING STD-10-2.
- 8) ITEM TO BE USED AS DIRECTED BY THE ENGINEER.
- (19) INCLUDES REMOVAL OF EXISTING CONCRETE PAVEMENT AT DRIVEWAY AT STA. 14+11.29
- 20) INCLUDES ALL LABOR, MATERIALS, AND EQUIPMENT TO SAWCUT EXISTING DRIVEWAY AT STA. 14+11.29.

## **FOOTNOTES**

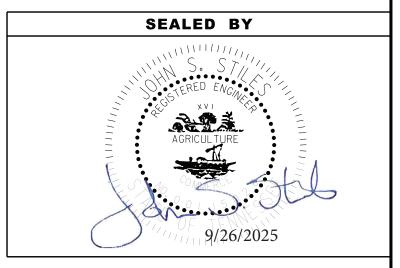
- ALL COST OF BUILDING AND INSTALLING THE RETAINING WALLS, INCLUDING FOUNDATION PREPARATION, BACKFILLING AND EXCAVATION, SHALL BE INCLUDED IN THE SQUARE FOOTAGE COST OF THE RETAINING WALLS. QUANTITES FOR FOUNDATION PREPARATION, BACKFILL AND EXCAVATION ARE REFLECTED IN THE END AREA CALCULATIONS ON CROSS SECTIONS AND IN GRADING QUANTITY ROADWAY ITEM 203-01, ROAD AND DRAINAGE EXCAVATION (C.Y.). FOR FURTHER INFORMATION ON RETAINING WALLS SEE R-SERIES SHEETS.
- 22) CONCRETE PARAPET IS LOCATED ON RETAINING WALL C AND IS NOT INCLUDED IN THE COST OF THE RETAINING WALL.
- (23) INLCUDES ALL LABOR, MATERIALS, AND EQUIPMENT NECESSARY TO ADJUST EXISTING CATCH BASINS AS NEEDED. INCLUDES, BUT MAY NOT BE LIMITED TO: CORING EXISTING STRUCTURES TO ACCEPT NEW PIPES, REPOURING PORTIONS OR ENTIRE DRAINAGE STRUCTURES, AND ADJUSTING EXISTING STRUCTURE LIDS, CASTINGS, OR GRATES TO PROPOSED ELEVATIONS.
- (24) INCLUDES APPROXIMATELY 0.5 C.Y. FOR 6" DETACHED CONCRETE CURB AT DRIVEWAY AT STA. 25+36.54 AND APPROXIMATELY 1.5 C.Y. FOR 6" DETACHED CONCRETE CURB AT THE APARTMENT COMPLEX AT STA. 21+52.01. SEE STANDARD DRAWING RP-VC-10.
- (25) VERTICAL DEPTH OF GUTTER = 8"
- (26) FENCE AND POSTS SHALL BE BLACK IN COLOR AND SHALL INCLUDE 3 STRANDS OF BARBED WIRE MOUNTED AT THE TOP OF THE FENCE TO MATCH THE EXISTING.
- (27) INCLUDES REMOVAL OF 151 L.F. OF PLAIN CHAIN-LINK FENCE, 303 L.F. OF WOOD FENCE WITH BRICK POSTS, 341 L.F. OF 6' BLACK VINYL COATED CHAIN LINK FENCE WITH BARBED WIRE, AND ANY OTHER FENCE AS DIRECTED BY THE ENGINEER.
- (28) INCLUDES 100 TONS FOR USE WITH TEMPORARY CONSTRUCTION EXITS.
- 29) INCLUDES 18 TONS FOR CONSTRUCTION OF SLOPE DRAIN RIP-RAP BASINS
- (30) INCLUDES ALL LABOR, MATERIALS AND EQUIPMENT NECESSARY TO MOUNT PORTABLE BARRIER RAIL ON THE PROPOSED BRIDGE DECK FOR TRAFFIC CONTROL.
- (31) ITEM SHALL INCLUDE BUT IS NOT LIMITED TO ALL CONSTRUCTIONS SIGNS AS SHOWN ON SHEET T3 AND THE TRAFFIC CONTROL LAYOUTS.
- (32) INCLUDES ALL LABOR, MATERIALS, AND EQUIPMENT NECESSARY TO REMOVE ANY EXISTING SIGNS WITHIN THE PROJECT LIMITS AND AS DIRECTED BY THE ENGINEER.
- (33) INCLUDES ALL LABOR, MATERIALS, AND EQUIPMENT NECESSARY TO REMOVE THE EXISTING STREET NAME SIGNS AND RESET THE ORIGINAL SIGNS AT LOCATIONS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER.
- (34) SNOWPLOWABLE MARKER REFLECTORS SHALL BE YELLOW IN COLOR.
- (35) CONTRACTOR MAY ELECT TO SUBSTITUTE PREFORMED PLASTIC FOR THERMOPLASTIC. PREFORMED PLASTIC SHALL BE PAID FOR AT THE SAME UNIT PRICE AS BID FOR THERMOPLASTIC.
- (36) ITEM TO BE USED FOR REMOVING CONFLICTING TRAFFIC CONTROL PAVEMENT MARKINGS ON EXISTING OR INTERMEDIATE PAVEMENT COURSES. NO HYDROBLASTING SHALL BE ALLOWED ON THE FINAL ASPHALT SURFACE COURSE.
- (37) INCLUDES 2,311 L.F. OF REMOVAL OF EXISTING PAVEMENT MARKINGS FOR PHASE 2 OF TRAFFIC CONTROL AND 5,985 L.F. OF REMOVAL OF TEMPORARY MARKINGS FOR PHASE 3 OF TRAFFIC CONTROL.
- (38) TO BE USED ON CONCRETE SURFACE OF BRIDGE AND APPROACHES.
- (39) CONTRACTOR SHALL USE THE EXTRUDED OR RIBBON METHOD FOR APPLICATION.
- (40) INCLUDES 172 SY FOR TEMPORARY CONSTRUCTION EXITS AND 51 SY FOR SLOPE DRAINS.
- (41) GEOTEXTILE SHALL BE PLACED UNDER ALL RIP-RAP.
- (42) INCLUDES 500 S.Y. TO BE USED AT THE DISCRETION OF THE ENGINEER TO STABILIZE SOFT SUBGRADE AREAS AND 262 S.Y. FOR USE WITH PAVEMENT AT BRIDGE ENDS.
- THE COST OF FERTILIZER AND LIME USED IN INITIAL SEED BED PREPARATION IS TO BE INCLUDED IN THE COST OF SEEDING. SEE SECTION 801 OF TDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.
- (44) INCLUDES 4 UNITS FOR USE WITH THE SPECIAL DITCH FROM STA. 16+50.00 TO 17+78.32.
- I5) INCLUDES 9 THOUSAND GALLONS FOR EROSION PREVENTION AND SEDIMENT CONTROL
- (46) FOR USE TO STABILIZE THE SPECIAL DITCH FROM STA. 16+50.00 TO 17+78.32
- (47) LINE ITEM ALSO INCLUDES ALL LABOR, MATERIALS AND EQUIPMENT NECESSARY

  TO INSTALL STEEL ROAD PLATES AND/OR COLD MIX ASPHALT, IF NEEDED, FOR ROAD

  CROSSINGS.
- FOR TN 511 (SMARTWAY) SIGNS. SEE STD. DWG T-S-9 AND T-S-13. QUANTITIES CALCULATED USING TYPE 5 FOOTINGS, 7 FT 0 IN CLEAR MOUNTING HEIGHT, AND S4 X 7.7 I-BEAM POSTS.

TYPE	YEAR	PROJECT NO.	SHEET NO.
PLAN-IN-HAND	2024	BR-STP-320(10)	2-1
PS&E	2025	BR-STP-320(10)	2-1

LETTING REVISION 09/25/2025: REVISED FOOTNOTE #48 TO REMOVE REFERENCE TO PROJECT INFORMATION SIGNS.



STATE OF TENNESSEE DEPARTMENT OF TRANSPORTATION

ESTIMATED ROADWAY QUANTITIES

SHEET 2 OF 2

# PAVEMENT EDGE DROP-OFF TRAFFIC CONTROL NOTES

- A. DIFFERENCES IN ELEVATION BETWEEN ADJACENT TRAFFIC LANES OR TRAFFIC LANE AND SHOULDER WHERE THE TRAFFIC LANE IS BEING USED BY TRAFFIC, CAUSED BY BASE, PAVING OR RESURFACING:
  - 1. DIFFERENCES IN ELEVATION BETWEEN ADJACENT ROADWAY ELEMENTS GREATER THAN 0.75 INCH AND NOT EXCEEDING 1.75 INCHES:
    - a. WARNING SIGNS, UNEVEN LANES (W8-11) AND/OR SHOULDER DROP-OFF WITH PLAQUE (W8-17 AND W8-17P), SHALL BE PLACED IN ADVANCE OF AND THROUGHOUT THE EXPOSED AREA. MAXIMUM SPACING BETWEEN SIGNS SHALL BE 2,000 FEET WITH A MINIMUM OF 2 SIGNS PER EXPOSED AREA. WHERE UNEVEN PAVEMENT IS ENCOUNTERED, SIGNS SHALL BE PLACED ON EACH SIDE OF THE ROADWAY.
    - b. DIFFERENCES IN ELEVATION BETWEEN ADJACENT TRAFFIC LANES BEING UTILIZED BY TRAFFIC CAUSED BY ADDED PAVEMENT SHALL BE ELIMINATED WITHIN THREE WORKDAYS.
    - c. DIFFERENCES IN ELEVATION BETWEEN ADJACENT TRAFFIC LANES BEING UTILIZED BY TRAFFIC CAUSED BY COLD PLANING SHALL BE ELIMINATED WITHIN THREE WORKDAYS.
    - d. WHEN THE DIFFERENCE IN ELEVATION IS BETWEEN THE TRAFFIC LANE BEING UTILIZED BY TRAFFIC AND SHOULDER THE DIFFERENCE IN ELEVATION SHALL BE ELIMINATED WITHIN SEVEN WORKDAYS AFTER THE CONDITION IS CREATED.
  - 2. DIFFERENCES IN ELEVATION BETWEEN ADJACENT ROADWAY ELEMENTS GREATER THAN 1.75 INCHES AND NOT EXCEEDING 6 INCHES, TRAFFIC IS NOT TO BE ALLOWED TO TRAVERSE THIS DIFFERENCE IN ELEVATION.
    - a. SEPARATION SHALL BE ACCOMPLISHED BY DRUMS, BARRICADES OR OTHER APPROVED DEVICES IN ACCORDANCE WITH THE FOLLOWING:
      - (1) WHERE POSTED SPEEDS ARE 50 MPH OR GREATER, SPACING OF THE PROTECTIVE DEVICES SHALL NOT EXCEED 100 FEET.
      - (2) WHERE POSTED SPEEDS ARE LESS THAN 50 MPH, THE MAXIMUM SPACING OF THE PROTECTIVE DEVICES IN FEET SHALL NOT EXCEED TWICE THE POSTED SPEED IN MILES PER HOUR OR 50 FEET, WHICHEVER SPACING IS GREATER.
    - b. IF THE DIFFERENCE IN ELEVATION IS ELIMINATED OR DECREASED TO 2 INCHES OR LESS BY THE END OF EACH WORKDAY, CONES MAY BE USED DURING DAYLIGHT HOURS IN LIEU OF DRUMS, BARRICADES OR OTHER APPROVED PROTECTIVE DEVICES MENTIONED IN PARAGRAPH a, PROVIDED WARNING SIGNS ARE ERECTED. WARNING SIGNS (UNEVEN LANES AND/OR SHOULDER DROP-OFF) SHALL BE PLACED IN ADVANCE OF AND THROUGHOUT THE EXPOSED AREA. MAXIMUM SPACING BETWEEN SIGNS SHALL BE 2,000 FEET WITH A MINIMUM OF 2 SIGNS PER EXPOSED AREA. WHERE UNEVEN PAVEMENT IS ENCOUNTERED, SIGNS SHALL BE PLACED ON EACH SIDE OF THE ROADWAY.
    - c. WHEN THE DIFFERENCE IN ELEVATION IS BETWEEN THE THROUGH TRAFFIC LANE AND THE SHOULDER AND THE ELEVATION DIFFERENCE IS LESS THAN 3 INCHES, THE CONTRACTOR MAY USE WARNING SIGNS AND/OR PROTECTIVE DEVICES AS APPLICABLE AND APPROVED BY THE REGIONAL TRAFFIC ENGINEER. SEE PARAGRAPH a REGARDING USE OF DRUMS, BARRICADES OR OTHER APPROVED PROTECTIVE DEVICES. WARNING SIGNS (UNEVEN LANES AND/OR SHOULDER DROP-OFF) WILL BE PLACED IN ADVANCE OF AND THROUGHOUT THE EXPOSED AREA. MAXIMUM SPACING BETWEEN SIGNS SHALL BE 2,000 FEET WITH A MINIMUM OF 2 SIGNS PER EXPOSED AREA. WHERE UNEVEN PAVEMENT IS ENCOUNTERED, SIGNS SHALL BE PLACED ON EACH SIDE OF THE ROADWAY.

IN THESE SITUATIONS, THE CONTRACTOR SHALL LIMIT HIS OPERATIONS TO ONE WORK ZONE NOT EXCEEDING 2 MILES IN LENGTH UNLESS OTHERWISE NOTED ON THE PLANS OR APPROVED BY THE ENGINEER. ONCE THE CONTRACTOR BEGINS WORK IN A WORK ZONE, A CONTINUOUS OPERATION SHALL BE MAINTAINED UNTIL THE DIFFERENCE IN ELEVATION IS ELIMINATED. SIMULTANEOUS WORK ON SEPARATE ROADWAYS OF DIVIDED HIGHWAYS WILL BE CONSIDERED INDEPENDENTLY IN REGARD TO RESTRICTION OF WORK ZONE ACTIVITY.

- 3. DIFFERENCES IN ELEVATION BETWEEN ADJACENT ROADWAY ELEMENTS GREATER THAN 6 INCHES BUT NOT EXCEEDING 18 INCHES, THE CONTRACTOR, WITH THE ENGINEER'S APPROVAL, MAY UTILIZE ONE OF THE FOLLOWING:
  - a. THE CONTRACTOR SHALL ACCOMPLISH SEPARATION BY DRUMS, BARRICADES OR OTHER APPROVED DEVICES IN ACCORDANCE WITH THE FOLLOWING:
    - 1) WHERE POSTED SPEEDS ARE 50 MPH OR GREATER, SPACING OF THE PROTECTIVE DEVICES SHALL NOT EXCEED 100 FEET.
    - (2) WHERE POSTED SPEEDS ARE LESS THAN 50 MPH, THE MAXIMUM SPACING OF THE PROTECTIVE DEVICES IN FEET SHALL NOT EXCEED TWICE THE POSTED SPEED IN MILES PER HOUR OR 50 FEET. WHICHEVER SPACING IS GREATER.

IN ORDER TO USE THIS METHOD, THE CONTRACTOR MUST REDUCE THE DIFFERENCE IN ELEVATION TO 6 INCHES OR LESS BY THE END OF THE WORKDAY THAT THE CONDITION IS CREATED.

- b. THE CONTRACTOR SHALL PROVIDE DRUMS, BARRICADES OR OTHER APPROVED SEPARATION DEVICES AS SPECIFIED IN PARAGRAPH a, AND CONSTRUCT A STONE WEDGE WITH A 4:1 SLOPE, OR FLATTER, TO ELIMINATE THE VERTICAL OFFSET IF THE LOWER ELEVATION IS AT OR BELOW SUBGRADE AT THE END OF EACH DAY.
- THE CONTRACTOR SHALL PROVIDE DRUMS, BARRICADES OR OTHER APPROVED SEPARATION DEVICES AS SPECIFIED IN PARAGRAPH a AND IF THE LOWER ELEVATION IS BASE STONE OR ASPHALT PAVEMENT, PLACEMENT OF SUBSEQUENT LAYERS OF PAVEMENT MUST BEGIN THE NEXT WORK DAY AND PROGRESS CONTINUOUSLY UNTIL THE DIFFERENCE IN ELEVATION IS ELIMINATED OR REDUCED TO SIX INCHES OR LESS.
- d. THE CONTRACTOR SHALL PROVIDE SEPARATION BY PORTABLE BARRIER RAIL.

FOR PRECEDING CONDITIONS a, b, AND c, THE CONTRACTOR SHALL USE THE SHOULDER DROP-OFF WARNING SIGN WITH PLAQUE (W8-17 AND W8-17P). IT SHALL BE PLACED IN ADVANCE OF AND THROUGHOUT THE EXPOSED AREA. MAXIMUM SPACING BETWEEN THE SIGNS SHALL BE 2,000 FEET WITH A MINIMUM OF 2 SIGNS PER EXPOSED AREA. IN THESE SITUATIONS, THE CONTRACTOR SHALL LIMIT HIS OPERATIONS TO ONE WORK ZONE NOT EXCEEDING 1 MILE IN LENGTH UNLESS OTHERWISE NOTED ON THE PLANS OR APPROVED BY THE ENGINEER. ONCE THE CONTRACTOR BEGINS WORK IN A WORK ZONE, A CONTINUOUS OPERATION SHALL BE MAINTAINED UNTIL THE DIFFERENCE IS ELIMINATED. SIMULTANEOUS WORK ON SEPARATE ROADWAYS OF DIVIDED HIGHWAYS WILL BE CONSIDERED INDEPENDENTLY IN REGARD TO RESTRICTION OF WORK ZONE ACTIVITY.

4. FOR DIFFERENCES IN ELEVATION BETWEEN ADJACENT ROADWAY ELEMENTS GREATER THAN 18 INCHES.

SEPARATION WILL BE PROVIDED BY USE OF PORTABLE BARRIER RAIL.

IN THIS SITUATION THE CONTRACTOR SHALL LIMIT HIS OPERATIONS TO ONE WORK ZONE NOT EXCEEDING 1 MILE IN LENGTH UNLESS OTHERWISE NOTED ON THE PLANS OR APPROVED BY THE ENGINEER. ONCE THE CONTRACTOR BEGINS WORK IN A WORK ZONE, A CONTINUOUS OPERATION SHALL BE MAINTAINED UNTIL THE DIFFERENCE IN ELEVATION IS ELIMINATED. SIMULTANEOUS WORK ON SEPARATE ROADWAYS OF DIVIDED HIGHWAYS WILL BE CONSIDERED INDEPENDENTLY IN REGARD TO RESTRICTION OF WORK ZONE ACTIVITY.

- B. IF THE DIFFERENCE IN ELEVATION IS WITHIN 30 FEET OF THE NEAREST TRAFFIC LANE BEING USED BY TRAFFIC CAUSED BY GRADING, EXCAVATION FOR UTILITIES, DRAINAGE STRUCTURES, UNDERCUTTING, ETC.:
  - 1. IF THE DIFFERENCE IN ELEVATION IS WITHIN 8 FEET OF THE NEAREST TRAFFIC LANE WITH DIFFERENCE IN ELEVATION GREATER THAN 3/4 INCH AND NOT EXCEEDING 2 INCHES.
    - a. WARNING SIGNS (UNEVEN LANES AND/OR SHOULDER DROP-OFF) SHALL BE PLACED IN ADVANCE OF AND THROUGHOUT THE EXPOSED AREA. MAXIMUM SPACING BETWEEN SIGNS SHALL BE 2,000 FEET WITH A MINIMUM OF 2 SIGNS PER EXPOSED AREA. WHERE UNEVEN PAVEMENT IS ENCOUNTERED, SIGNS SHALL BE PLACED ON EACH SIDE OF THE ROADWAY.
  - 2. IF THE DIFFERENCE IN ELEVATION IS WITHIN 8 FEET OF THE NEAREST TRAFFIC LANE WITH DIFFERENCE IN ELEVATION GREATER THAN 2 INCHES AND NOT EXCEEDING 6 INCHES:
    - a. SEPARATION SHALL BE ACCOMPLISHED BY DRUMS, BARRICADES OR OTHER APPROVED DEVICES IN ACCORDANCE WITH THE FOLLOWING:
      - (1) WHERE POSTED SPEEDS ARE 50 MPH OR GREATER, SPACING OF THE PROTECTIVE DEVICES SHALL NOT EXCEED 100 FEET.
      - (2) WHERE POSTED SPEEDS ARE LESS THAN 50 MPH THE MAXIMUM SPACING OF THE PROTECTIVE DEVICES IN FEET SHALL NOT EXCEED TWICE THE POSTED SPEED IN MILES PER HOUR OR 50 FEET, WHICHEVER SPACING IS GREATER.
  - 3. IF THE DIFFERENCE IN ELEVATION IS WITHIN 8 FEET OF THE NEAREST TRAFFIC LANE WITH DIFFERENCE IN ELEVATION GREATER THAN 6 INCHES:
    - a. SEPARATION SHALL BE ACCOMPLISHED BY DRUMS, BARRICADES OR OTHER APPROVED DEVICES IN ACCORDANCE WITH THE FOLLOWING:
      - (1) WHERE POSTED SPEEDS ARE 50 MPH OR GREATER, SPACING OF THE PROTECTIVE DEVICES SHALL NOT EXCEED 100 FFFT
      - (2) WHERE POSTED SPEEDS ARE LESS THAN 50 MPH THE MAXIMUM SPACING OF THE PROTECTIVE DEVICES IN FEET SHALL NOT EXCEED TWICE THE POSTED SPEED IN MILES PER HOUR OR 50 FEET, WHICHEVER SPACING IS GREATER.
    - ELIMINATE VERTICAL OFFSET BY CONSTRUCTING A STONE WEDGE OR GRADING TO A 4:1 SLOPE, OR FLATTER, OR USE PORTABLE BARRIER RAIL.

THE CONTRACTOR SHALL SCHEDULE THE WORK SO AS TO MINIMIZE THE TIME TRAFFIC IS EXPOSED TO AN ELEVATION DIFFERENCE. ONCE THE CONTRACTOR BEGINS AN ACTIVITY THAT CREATES AN ELEVATION DIFFERENCE WITHIN 8 FEET OF A TRAFFIC LANE, THE ACTIVITY SHALL BE PURSUED AS A CONTINUOUS OPERATION UNTIL THE ELEVATION DIFFERENCE IS ELIMINATED.

C. IF THE DIFFERENCE IN ELEVATION IS FARTHER THAN 8 FEET FROM THE NEAREST TRAFFIC LANE BUT NOT MORE THAN 30 FEET FROM THE NEAREST TRAFFIC LANE:

SEPARATION SHALL BE ACCOMPLISHED BY DRUMS, BARRICADES OR OTHER APPROVED DEVICES IN ACCORDANCE WITH THE FOLLOWING:

- 1. WHERE POSTED SPEEDS ARE 50 MPH OR GREATER, SPACING OF THE PROTECTIVE DEVICES SHALL NOT EXCEED 100 FEET.
- 2. WHERE POSTED SPEEDS ARE LESS THAN 50 MPH, THE MAXIMUM SPACING OF THE PROTECTIVE DEVICES IN FEET SHALL NOT EXCEED TWICE THE POSTED SPEED IN MILES PER HOUR OR 50 FEET, WHICHEVER SPACING IS GREATER.

THE CONTRACTOR SHALL SCHEDULE THE WORK SO AS TO MINIMIZE THE TIME TRAFFIC IS EXPOSED TO AN ELEVATION DIFFERENCE. ONCE THE CONTRACTOR BEGINS AN ACTIVITY THAT CREATES AN ELEVATION DIFFERENCE, THE ACTIVITY SHALL BE PURSUED AS A CONTINUOUS OPERATION UNTIL THE ELEVATION DIFFERENCE IS ELIMINATED.

TYPE	YEAR	PROJECT NO.	SHEET NO.
ROW	2022	BR-STP-320(10)	T1
PLAN-IN-HAND	2024	BR-STP-320(10)	T1
PS&E	2025	BR-STP-320(10)	T1

SEALED BY



COORDINATES ARE NAD 83(2011), ARE DATUM ADJUSTED BY THE FACTOR OF 0.99998 AND TIED TO THE TGRN.
ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988 WITH GEOID 12B.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PAVEMENT DROP-OFF NOTES

SCALE: N.T.S

	TABULATED TRAFFIC CONTROL QUANT	ITIES	
ITEM NO.	DESCRIPTION	UNIT	QUANTITY
712-02.02	INTERCONNECTED PORTABLE BARRIER RAIL	L.F.	2240
712-02.47	BRIDGE MOUNTED INTERCONNECTED PORTABLE BARRIER RAIL	L.F.	440
712-02.60	TEMPORARY WORK ZONE CRASH CUSHION (MASH TL-3)	EACH	10
712-04.01	FLEXIBLE DRUMS (CHANNELIZING)	EACH	50
712-04.50	BARRIER RAIL DELINEATOR	EACH	268
712-05.01	WARNING LIGHTS (TYPE A)	EACH	76
712-06	SIGNS (CONSTRUCTION)	S.F.	911
712-07.02	TEMPORARY BARRICADES (TYPE II)	L.F.	12
712-07.03	TEMPORARY BARRICADES (TYPE III)	L.F.	144
712-09.02	REMOVABLE PAVEMENT MARKING (8" BARRIER LINE)	L.F.	424
712-09.08	REMOVABLE PAVEMENT MARKING (6" LINE)	L.F.	1029
713-01.01	CLASS A CONCRETE (FOUNDATION FOR SIGN SUPPORTS)	C.Y.	2
713-01.02	STEEL BAR REINFORCEMENT (FOUNDATION FOR SIGN SUPPORTS)	LB.	271
713-06	STEEL I-BEAMS & WF-BEAMS (BREAKAWAY) SIGN SUPPORT	LB.	493
713-14	EXTRUDED ALUMINUM PANEL SIGNS	S.F.	40
713-16.01	CHANGEABLE MESSAGE SIGN UNIT	EACH	3
716-05.02	PAINTED PAVEMENT MARKING (8" BARRIER LINE)	L.F.	2305
716-05.20	PAINTED PAVEMENT MARKING (6" LINE)	L.M.	1.71
716-08.30	HYDROBLAST REMOVAL OF PAVEMENT MARKING (LINE)	L.M.	1.13

	TRA	FFIC	CC	NTR	OL S	IGN TAE	BULATION		
M.U.T.C.D.			SIZE			TOTAL	ITEM NO.	ITEM NO.	
SIGN NO.	LEGEND	IN	INCHE	ES	S.F.	NO.	712-06	713-14	REMARKS
		L	X	W		REQUIRED	S.F.	S.F.	
G20-2	END ROAD WORK	48"	Х	24"	8.0	4	32.00		
G20-5aP	WORK ZONE PLAQUE	24"	Х	18"	3.0	4	12.00		
M4-10L	DETOUR ARROW (LEFT)	24"	Х	12"	2.0	1	2.00		
M4-10R	DETOUR ARROW (RIGHT)	24"	Х	12"	2.0	1	2.00		
M4-8	DETOUR PLAQUE	24"	Х	12"	2.0	36	72.00		
M4-8	DETOUR (W/THRU ARROW)	30"	Х	24"	5.0	8	40.00		
M4-8A	END DETOUR	24"	Х	18"	3.0	2	6.00		
M4-9L	DETOUR W/ARROW (LEFT)	30"	Х	24"	5.0	3	15.00		
M4-9L	DETOUR ADVANCE LEFT TURN ARROW	30"	Х	24"	5.0	1	5.00		
M4-9R	DETOUR W/ARROW (RIGHT)	30"	Х	24"	5.0	3	15.00		
M4-9R	DETOUR ADVANCE RIGHT TURN ARROW	30"	Х	24"	5.0	3	15.00		
M6-2P	DIRECTIONAL ARROW (DIAGONAL LEFT)	21"	Х	15"	2.2	1	2.19		
M6-2P	DIRECTIONAL ARROW (ADVANCE DIAGONAL LEFT)	21"	Х	15"	2.2	1	2.19		
M6-2P	DIRECTIONAL ARROW (DIAGONAL RIGHT)	21"	Х	15"	2.2	7	15.31		
M6-2P	DIRECTIONAL ARROW (ADVANCE DIAGONAL RIGHT)	21"	Х	15"	2.2	7	15.31		
R11-2	ROAD CLOSED	48"	Х	30"	10.0	2	20.00		
R11-3A	ROAD CLOSED 1 MILE AHEAD LOCAL TRAFFIC ONLY	60"	Х	30"	12.5	2	25.00		
R11-4	ROAD CLOSED TO THRU TRAFFIC	60"	Х	30"	12.5	2	25.00		
R2-1	SPEED LIMIT SIGN (30 MPH)	24"	Х	30"	5.0	2	10.00		
R9-9	SIDEWALK CLOSED	24"	Х	12"	2.0	2	4.00		
TN-6E	TENNESSEE STATE ROUTE PLAQUE	30"	Х	24"	5.0	38	190.00		
W1-6L	ARROW (LEFT)	48"	Х	24"	8.0	1	8.00		
W1-6R	ARROW (RIGHT)	48"	Х	24"	8.0	1	8.00		
W20-1	ROAD WORK 500 FT	48"	Х	48"	16.0	2	32.00		
W20-1	ROAD WORK 1000 FT	48"	Х	48"	16.0	2	32.00		
W20-1	ROAD WORK 1/2 MILE	48"	Х	48"	16.0	2	32.00		
W20-1	ROAD WORK AHEAD	36"	Х	36"	9.0	2	18.00		
W20-2	DETOUR 1000 FT	48"	Х	48"	16.0	2	32.00		
W20-3F	ROAD CLOSED 1000 FT	48"	Х	48"	16.0	2	32.00		
W20-3F	ROAD CLOSED 500 FT	48"	Х	48"	16.0	2	32.00		
W20-4	ONE LANE ROAD AHEAD	48"	Х	48"	16.0	2	32.00		FOR USE DURING FLAGGING OPERATIONS
W20-7	FLAGGER SYMBOL	48"	Х	48"	16.0	2	32.00		FOR USE DURING FLAGGING OPERATIONS
W24-1	DOUBLE REVERSE CURVE (1 LANE) (RIGHT)	48"	Х	48"	16.0	1	16.00		
W24-1	DOUBLE REVERSE CURVE (1 LANE) (LEFT)	48"	Х	48"	16.0	1	16.00		
W3-4	BE PREPARED TO STOP	48"	Х	48"	16.0	2	32.00		FOR USE DURING FLAGGING OPERATIONS
W3-5	REDUCED SPEED AHEAD (30 MPH)	48"	Х	48"	16.0	2	32.00		
D12-5	TENNESSEE 511 (SMARTWAY) SIGNS	48"	Х	60"	20.0	2		40.00	
					TO	TAL S.F.	911	40	

TYPE	YEAR	PROJECT NO.	SHEET NO.	
PLAN-IN-HAND	2024	BR-STP-320(10)	T2	
PS&E	2025	BR-STP-320(10)	T2	

LETTING REVISION 09/25/2025: REVISED ITEM NO.'S 713-01.02, 713-06, AND 713-14 TO REMOVE QUANTITY FOR PROJECT INFORMATION SIGNS. REMOVED PROJECT INFORMATION SIGNS FROM TRAFFIC CONTROL SIGN TABULATION.

TRAF	FIC CONTROL LEGEND
SYMBOL	ITEM
	WORK ZONE
•	FLEXIBLE DRUMS (CHANNELIZING)
$\triangle$	TEMPORARY WORK ZONE CRASH CUSHION
	INTERCONNECTED PORTABLE BARRIER RAIL
$\rightarrow$	TRAFFIC FLOW
٠	SIGN (CONSTRUCTION)
	TEMPORARY BARRICADE (TYPE III)
•	FLEXIBLE DRUMS (CHANNELIZING)
A	WARNING LIGHT (TYPE A) (LOW-INTENSITY FLASHING)

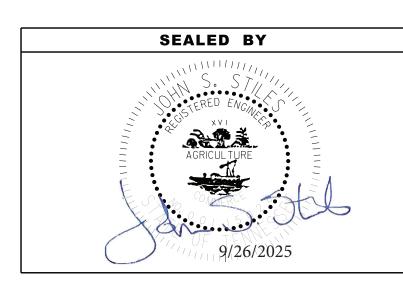
### TRAFFIC CONTROL - SPECIAL NOTES

- 1. THE TRAFFIC CONTROL PLAN IS TO SERVE AS A GUIDE ONLY. THIS PLAN DOES NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY OF INSTALLING TRAFFIC CONTROL DEVICES IN ACCORDANCE WITH THE CURRENT EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (M.U.T.C.D.)
- 2. IF ADDITIONAL SIGNS ARE DEEMED NECESSARY BY THE ENGINEER, THEY SHALL BE FURNISHED AND INSTALLED AT THE BID PRICE FOR ITEM NO. 712-06 SIGNS (CONSTRUCTION) S.F.
- 3. NO LESS THAN SEVEN (7) DAYS PRIOR TO THE CLOSURE OF ANY ROADS, THE CONTRACTOR SHALL NOTIFY THE FOLLOWING INDIVIDUALS OR AGENCIES COMPLETELY DESCRIBING THE AFFECTED ROADS AND APPROXIMATE DURATION OF THE CONSTRUCTION: THE PARTIES INCLUDE, BUT ARE NOT LIMITED TO:

  - (1) LOCAL LAW ENFORCEMENT OFFICE
    (2) LOCAL FIRE DEPARTMENT
    (3) AMBULANCE SERVICE
    (4) LOCAL SCHOOL SUPERINTENDENT
    (5) UNITED STATES POSTAL SERVICE
  - (6) LOCAL ROAD MUNICIPALITIES-CITY OF CHATTANOOGA & HAMILTON COUNTY
  - (7) LOCAL MEDIA
- 4. WHEN AN ELEVEN (11) FOOT LANE CAN NOT BE MAINTAINED IN EACH DIRECTION, CONTRACTOR TO UTILIZE A FLAGGER
- 5. PROSPERITY LANE AND BUSINESS DRIVEWAYS TO REMAIN OPEN AT ALL TIMES DURING CONSTRUCTION. CLOSURE OF SR-320 (E BRAINERD RD) FOR BRIDGE BEAM INSTALLATION TO BE LIMITED TO NIGHTLY CLOSURES 10 PM - 6 AM FOR A WEEK IN EACH PHASE.
- 6. HYDROBLASTING OF PAVEMENT MARKING HAS BEEN INCLUDED FOR REMOVAL OF CONFLICTING PAVEMENT MARKINGS ON EXISTING AND INTERMEDIATE SURFACE COURSES. NO HYDROBLASTING SHALL BE ALLOWED ON THE FINAL ASPHALT SURFACE COURSE.

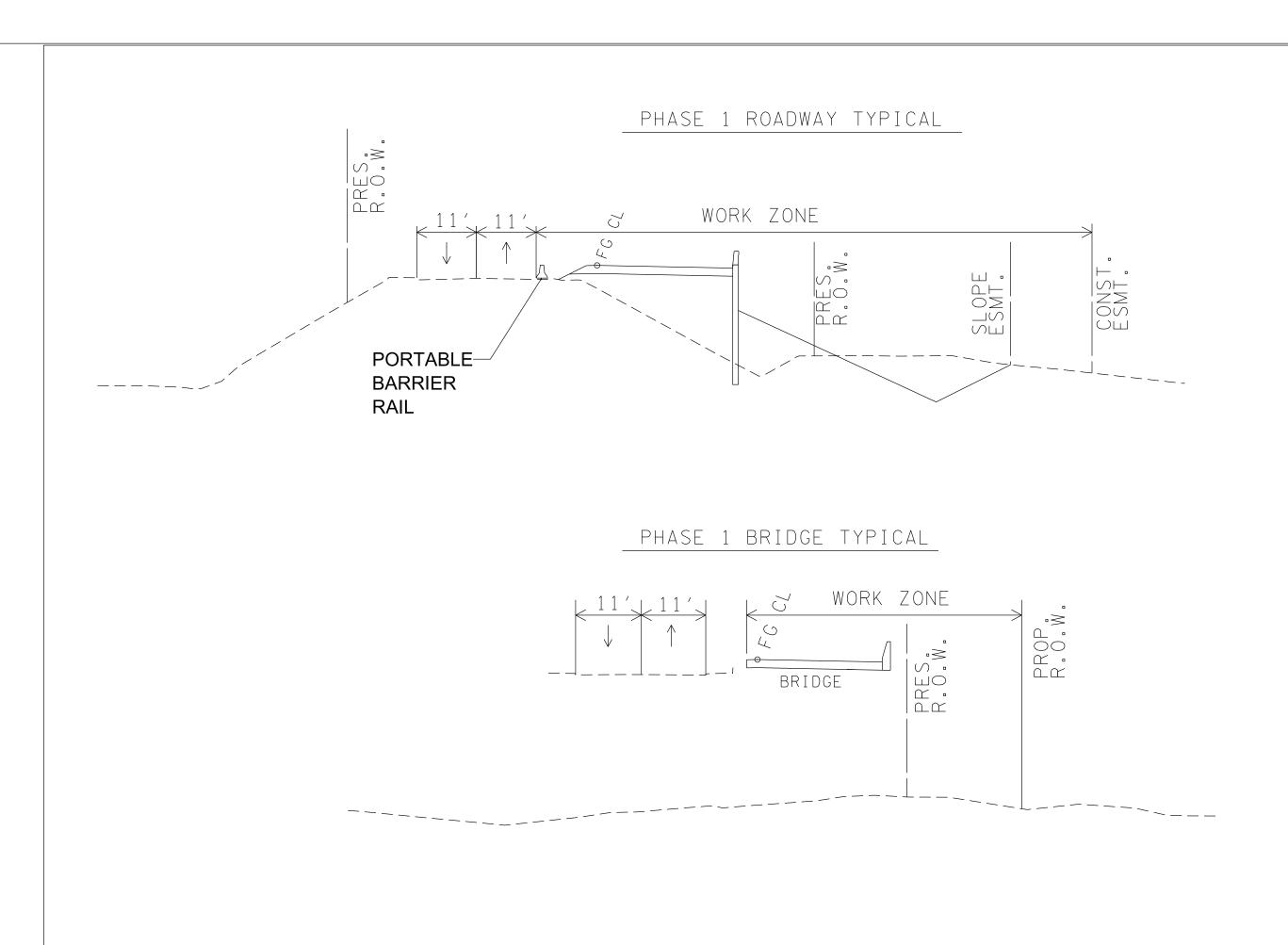
TRAFFIC CONTROL - PHASING NOTES

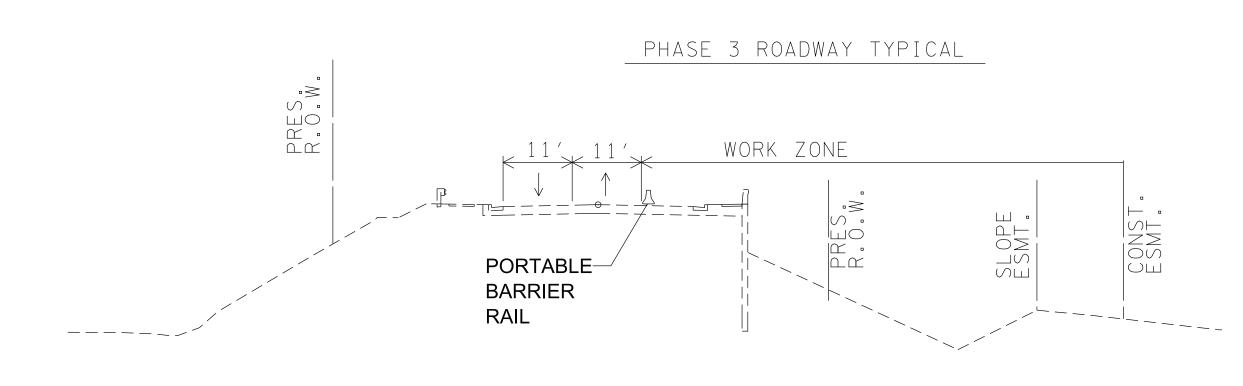
SEE TRAFFIC CONTROL TYPICAL SECTIONS ON SHEET T2A AND PHASING NOTES ON SHEETS T4 THRU T7.

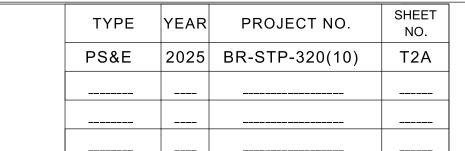


STATE OF TENNESSEE **DEPARTMENT OF TRANSPORTATION** 

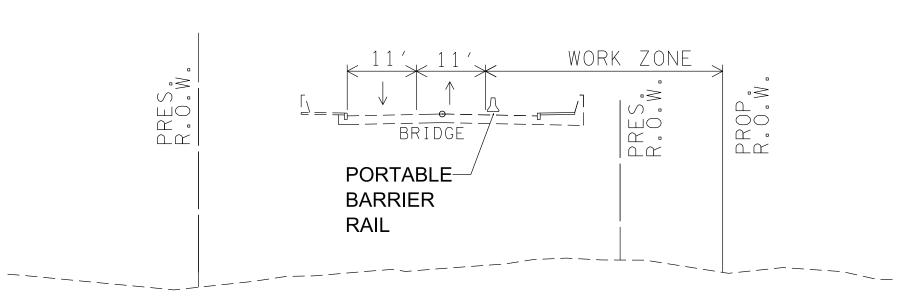
TRAFFIC CONTROL NOTES, LEGEND, AND TABULATION

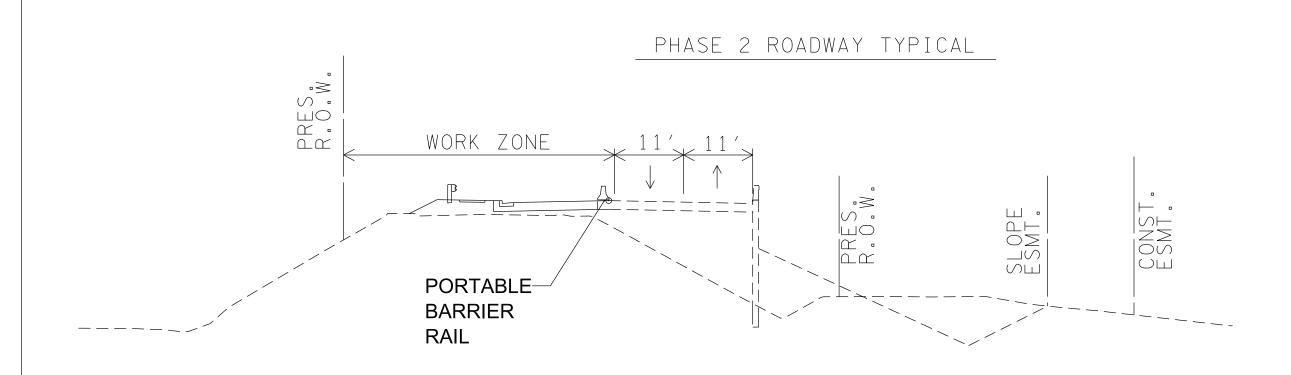




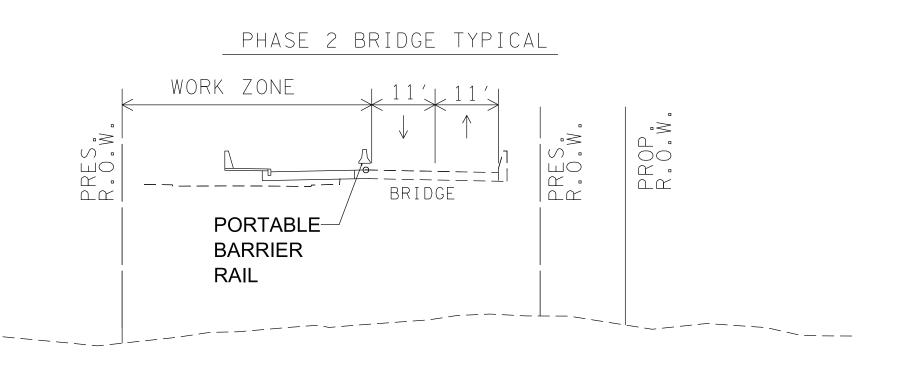


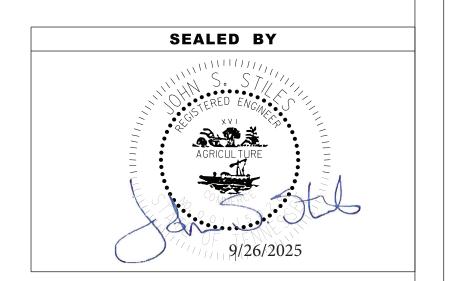






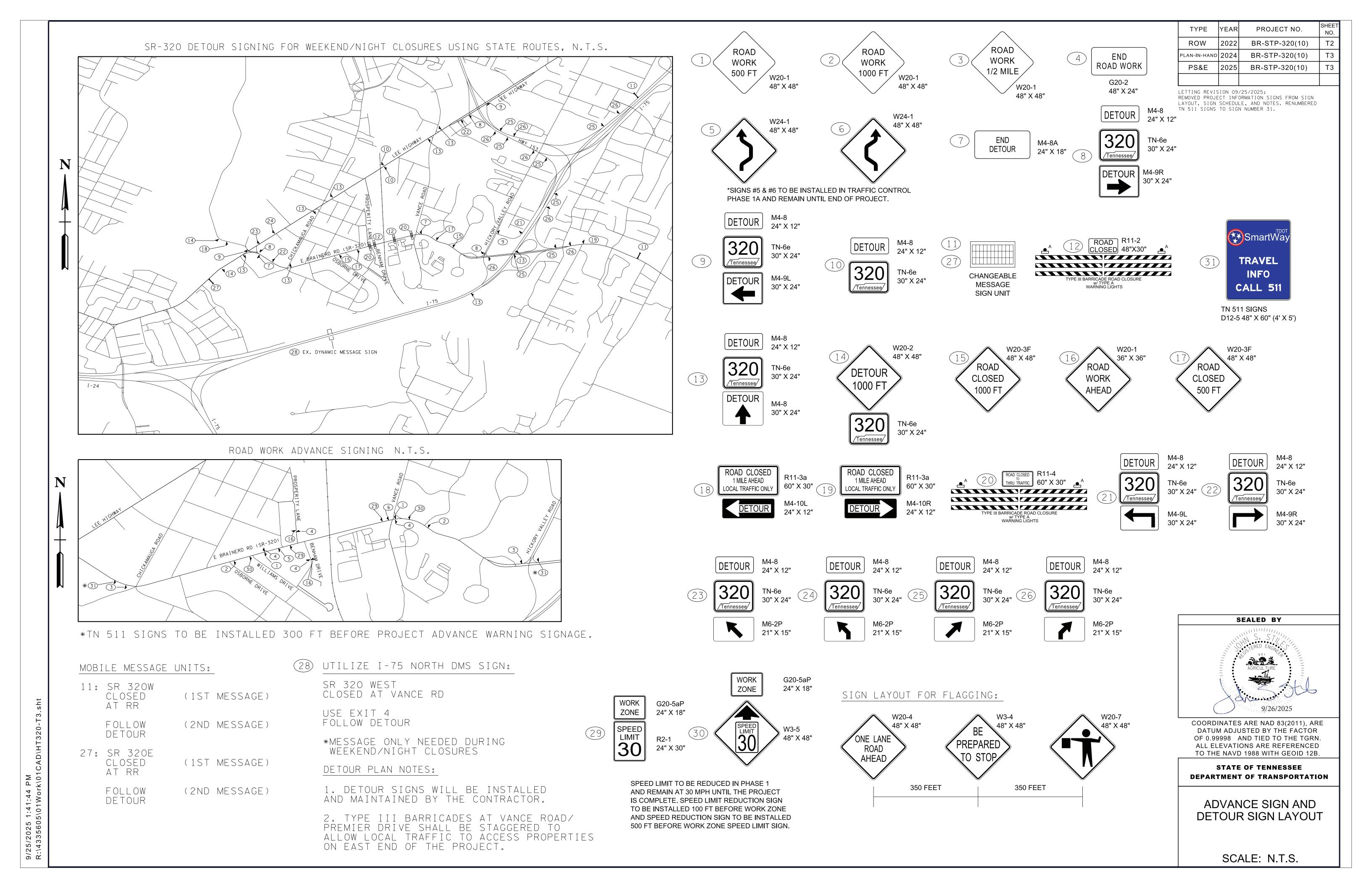
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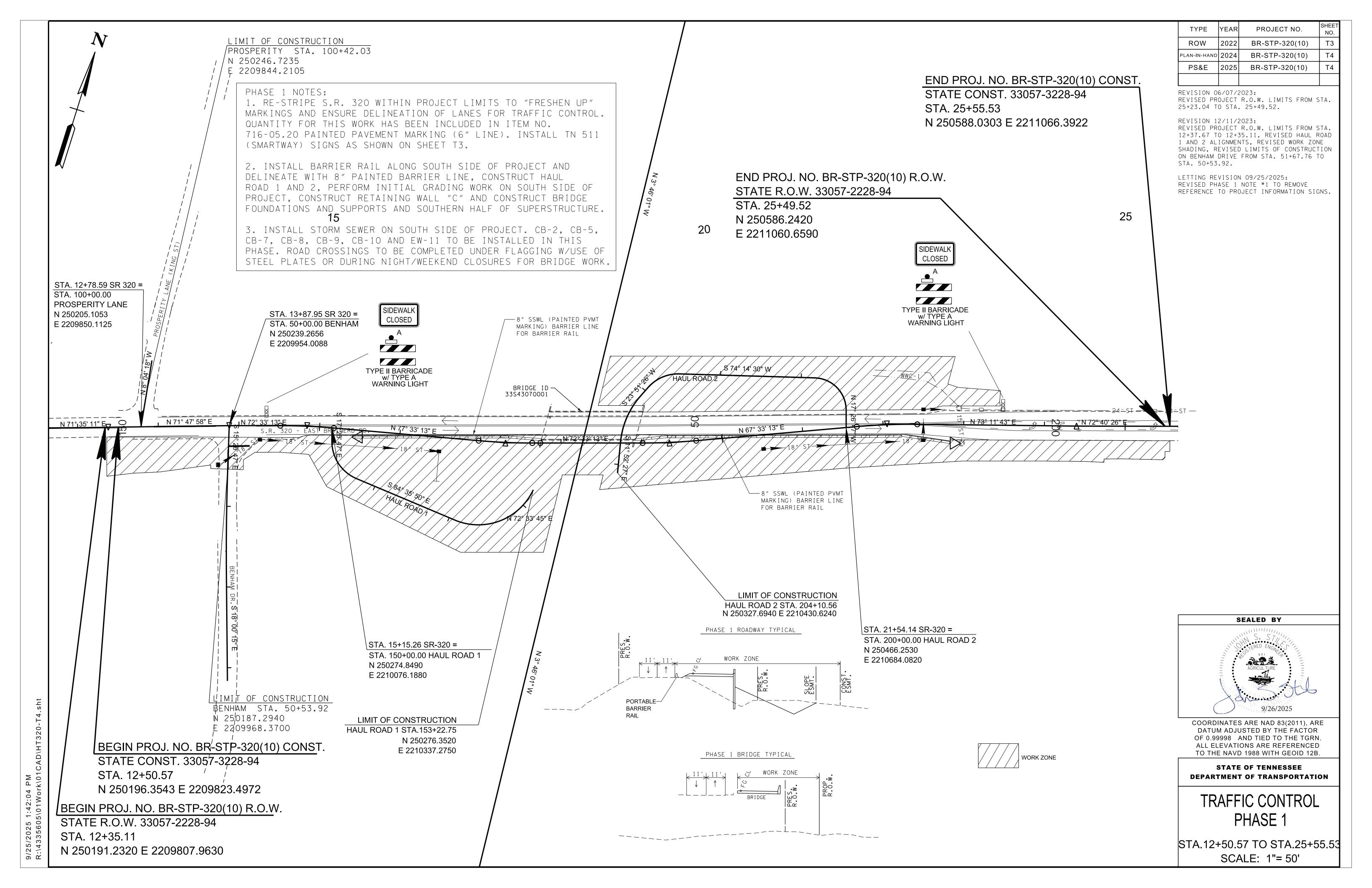


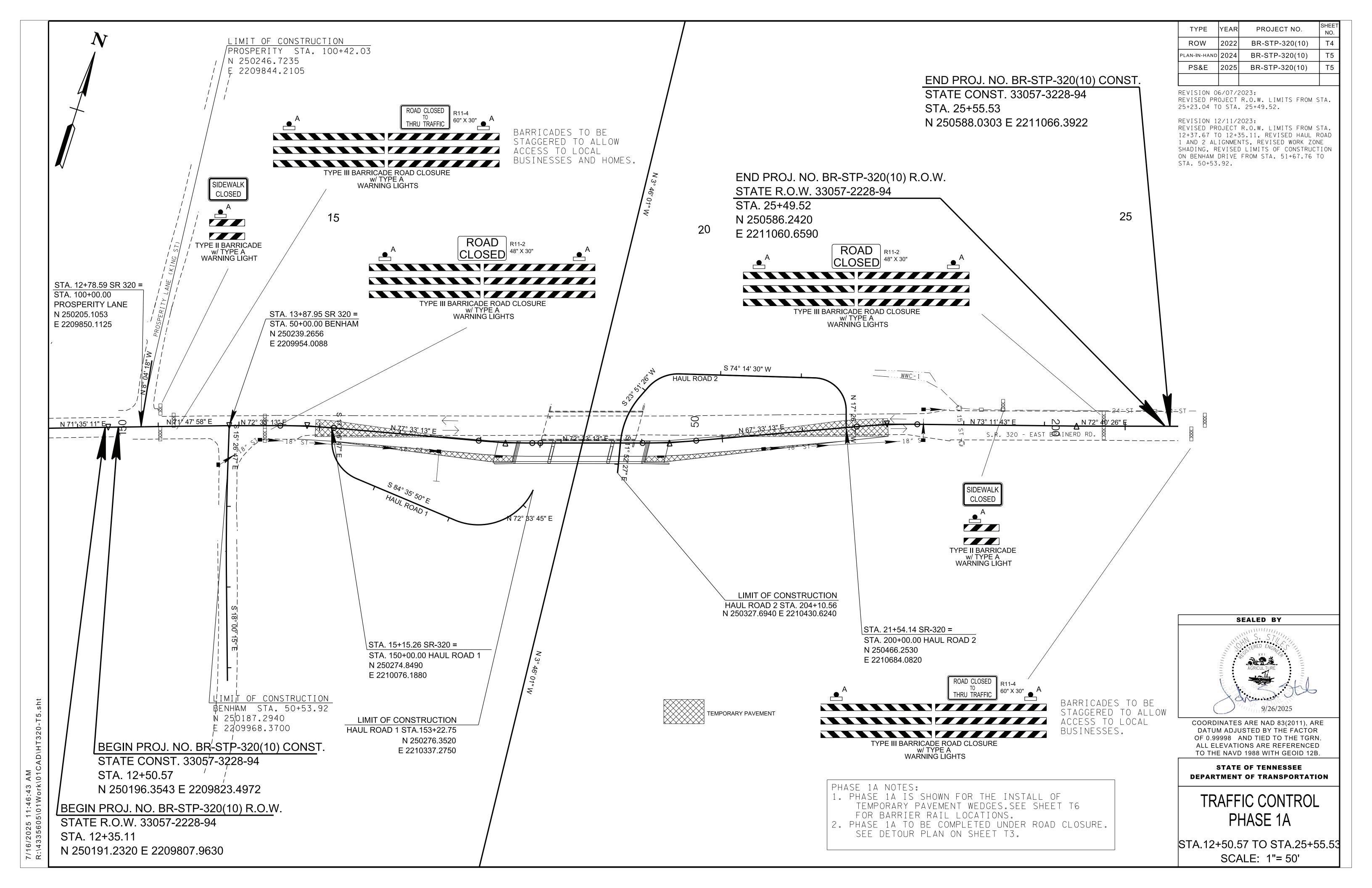


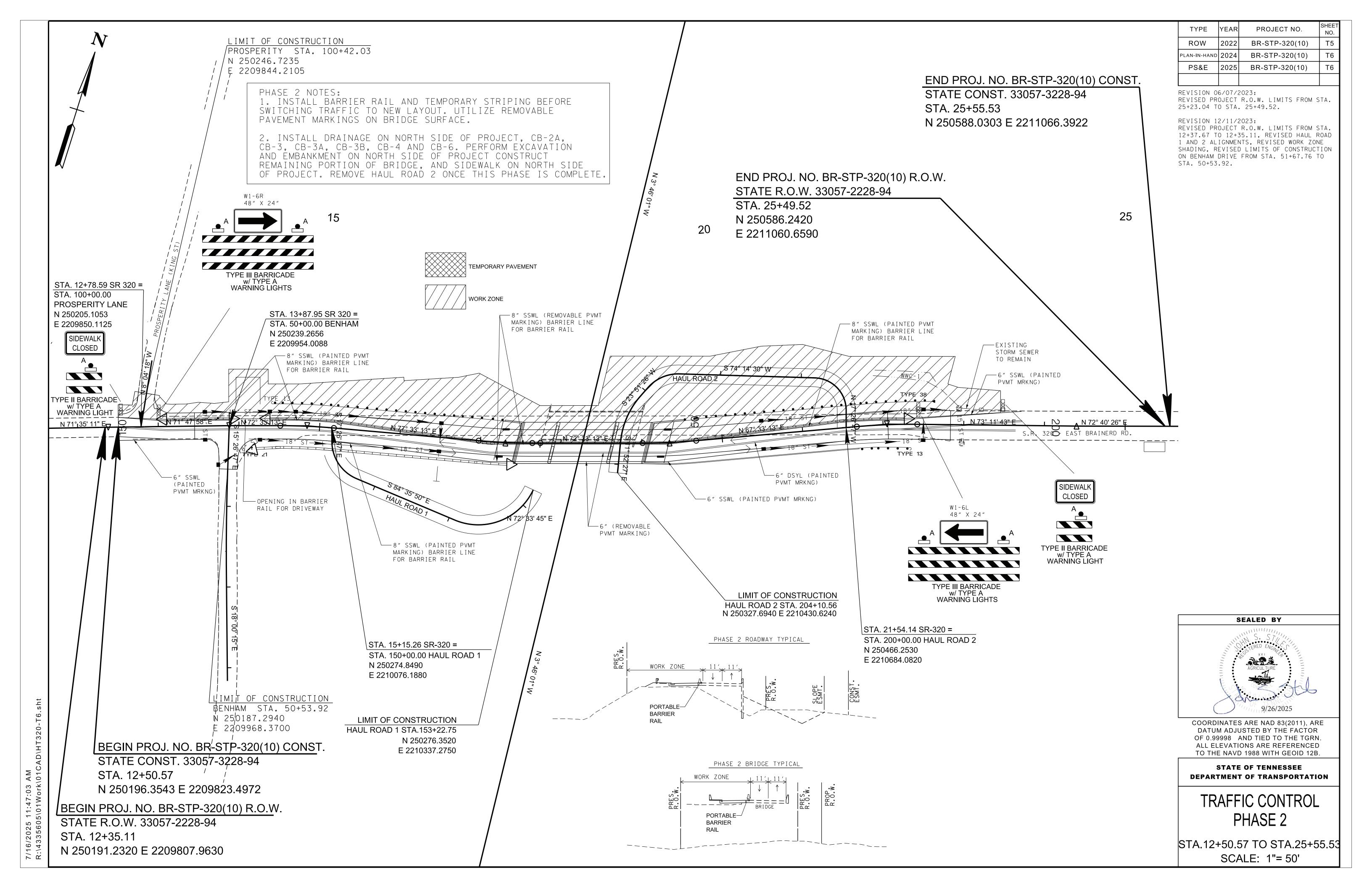
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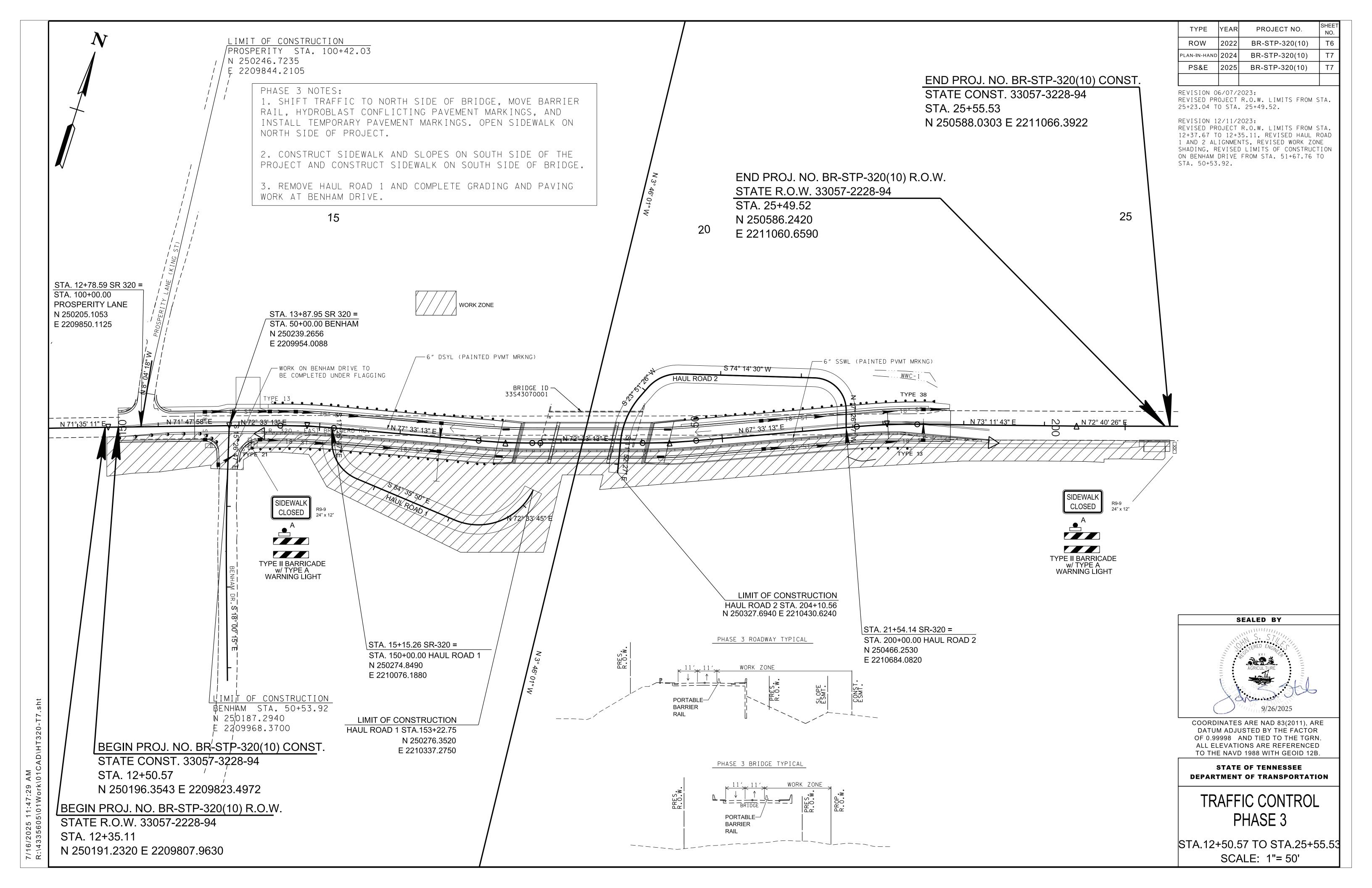
TRAFFIC CONTROL TYPICAL SECTIONS











### THIS DOCUMENT HAS BEEN DIGITALLY SIGNED AND SEALED BY:



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TENNESSEE DEPARTMENT OF TRANSPORTATION JAMES K. POLK BUILDING, SUITE 1100 505 DEADERICK STREET NASHVILLE, TN 37243 ROBERT LEFEVRE, P.E. NO. 104057

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

YEAR PROJECT NO. SHEET NO.

2025 BR-STP-320(10) STRUCTURE-SIGN3

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

SIGNATURE SHEET

					C	DNSTRUCTION NO.	33057-3228-94
					X181  STATE ROUTE 320  OVER  CSX RAILROAD  STA. 18+27.50	MISC  PARAPET RAIL ON TOP OF RETAINING WALL	
					CONTINUOUS PRECAST PRESTRESSED CONCRETE 24" X 36" BOX-BEAM WITH COMPOSITE CONCRETE DECK SLAB	WALL LOCATION:  RETAINING WALL "C"  STA. 19+33.00 - RT	
					3 SPAN BRIDGE TOTAL LENGTH = 163'-0" 37'-2" ROADWAY WITH 2-6'-0" SIDEWALKS AND STD-11-1 BRIDGERAILS	** SEE RETAINING WALL ** CONCEPTUAL DRAWINGS FOR MORE DETAILS	
		ED QUANTITIES			76°20′00" SKEW LAYOUT DRAWING NO.		
	ITEM NO.	DESCRIPTION	UNIT	TOTAL	U-95-425 QUANTITY	QUANTITY	
	204-02.01	REMOVAL OF STRUCTURES (BR. NO. 33-SR320-0.86)  DRY EXCAVATION (BRIDGES)	L.S. C.Y.	2,024	2,024		
	<b>—</b>	GRANULAR BACKFILL (BRIDGES)  EPOXY COATED REINFORCING STEEL	TON LB	1,985 92,655	1,985 92,655		
	<b>-</b>	CLASS 'A' CONCRETE (BRIDGES) STEEL BAR REINFORCEMENT (BRIDGES)	C.Y. LB.	897 165,612	897 165 <b>,</b> 612		
	604-03.04	PAVEMENT AT BRIDGE ENDS	S.Y.	262	262		
		CLASS 'D' CONCRETE (BRIDGE DECK)  APPLIED TEXTURE FINISH (NEW STRUCTURES)	C.Y. S.Y.	247 1,413	247 1,413		
	<b>—</b>	THREE STAR STATE EMBLEM BRIDGE DECK GROOVING (MECHANICAL)	EA. S.Y.	4 825	4 825		
		STEEL PILES (12 INCH)	L.F.	3,249	3,249		
		PILE TIPS (STEEL PILES, 12 INCH)  DECK DRAINS (GRATE TYPE 2)	EACH EA.	191	191 4		
	615-02.19	PRESTRESSED CONCRETE BOX BEAM (24" X 36")	L.F.	1,412	1,412		
		BRIDGE DECK CRACK SEAL SEALANT (HMWM)	L.F. GAL.	211	211 3		
	620-05	CONCRETE PARAPET WITH STRUCTURAL TUBING	L.F.	677 1,200	440 1 <b>,</b> 200	237	
	621-05.01 707-07.01	TEMPORARY SHORING CHAIN-LINK FENCE (BRIDGES)	S.F.	1,168	1,168		
		REINFORCED CONCRETE SLOPE PAVEMENT  6" PERF. PIPE WITH VERTICAL DRAIN SYSTEM	C.Y. L.F.	31 135	31 135		
	<del> </del>	6" PIPE UNDERDRAIN	L.F.	50	50		
LIST O	F DRAWINGS	LAST DWG.NO. 🛕 REV.DATE	LIST OF	STANDA	RD DRAWINGS [	LAST DWG NO REV DATE	
SIGNATURE SI SIGNATURE SI			STEEL SLIDER	PLATE ASSEMBL	 _IES FOR SINGLE	TILVEDATE	
SIGNATURE SI	HEET	STRUCTURE-SIGN3					
	RIDGE QUANTITIES		REINFORCED CC BRIDGE END DR AT BRIDGE E	DNCRETE PAVEM RAIN DETAILS 2 FNDS	ENT AT BRIDGE ENDS 'x8'-7" \$ 4'x8'-7" WITH PAVI	_ STD-1-5 6-05-23 EMENT STD-1-6 5-10-21	
	BRIDGE		BRIDGE END DR	RAIN DETAILS 2	$(\times 8'-7" \in 4' \times 8'-7" \text{ WITH PAV})$	F MF N T	
GENERAL NOT RAILROAD NO		5-20-2025 	BRIDGE ENDS -		'x8'-7" WITH PAVEMENT AT	_ STD-1-8 5-10-21	
ESTIMATED Q	UANTITIES	U-95-429 9-29-2025	STD. PRECAST F	PRESTRESSED B	RIDGE DECK PANELS RIDGE DECK PANELS		
FOUNDATION   FOUNDATION		U-95-430 5-20-2025 U-95-431 5-20-2025	SID. PRECASI I DESIGN CRITE	PRESTRESSED B ERIA	RIDGE DECK PANELS 	_STD-4-24-08-05	
SUPERSTRUCT		U-95-432 5-20-2025 U-95-433 5-20-2025	STD.PRECAST F GENERAL DET	PRESTRESSED B alls	RIDGE DECK PANELS	_ STD-4-3 3-02-02	
	URE DETAILS		STD.PRECAST F CONSTRUCTIO	PRESTRESSED B N DETAILS	RIDGE DECK PANELS	STD-4-4 6-10-96	
	UENCE DETAILS Box-beam details spans 1		STANDARD PILE Standard seis	E DETAILS Smic details		STD-5-1 STD-6-1	
PRESTRESSED	BOX-BEAM DETAILS SPAN 2		STANDARD SEIS STANDARD PRO	SMIC DETAILS TECTIVE FENCE	DETAIL	STD-6-2 11-07-94 _ STD-8-5 5-10-21	
ABUTMENT NO		U-95-439 5-20-2025	REINF.BAR SUP	PPORT DETAILS	FOR CONC.SLABS	_ STD-9-1 10-07-08	
ABUTMENT NO ABUTMENT NO		U-95-440 5-20-2025 U-95-441 5-20-2025	MISCELLANEOUS MISCELLANEOUS	S ABUTMENT ¢	DRAINAGE DETAILS	STD-10-1 6-05-23	
ABUTMENT NO	D.1 DETAILS	U-95-442 5-20-2025	AT BRIDGE	E ENDS BACKFIL	L DETAILS		
ABUTMENT NO ABUTMENT NO		U-95-443 5-20-2025 U-95-444 5-20-2025	STD. DETAILS I	FOR			
ABUTMENT NO		U-95-445 5-20-2025 U-95-446 5-20-2025	PKESIKESSEL SLOPE PROTECT	LION		- SID-14-3 3-6-24 - RD11-SA-1 1-09-24	ST
ABUTMENT NO	D. 2 DETAILS	U-95-447 5-20-2025				NS PROV. NO. REV.	•
BENT NO.1							

5-20-2025

5-20-2025

5-20-2025

5-20-2025

5-20-2025

5-20-2025

5-20-2025

BILL OF STEEL ...............U-95-454

JASON MILLER

05-25

TYPE	YEAR	PROJECT NO.	SHEET NO.
	2025		B-1

05-20-25 JM GENERAL REVISIONS

09-29-25 JM REV'D CLASS 'A'
CONCRETE AND
REV. DATES

STATE OF TENNESSEE DEPARTMENT OF TRANSPORTATION BUREAU OF HIGHWAYS

BRIDGE DWGS AND EST. BRIDGE QUANTITIES

PIN NO.:\_ 124076.00 JASON MILLER DATE: 12/15/2023 **DESIGN BY:** JASON MILLER DATE: 12/15/2023 DRAWN BY: SUPERVISED BY:\_ ROBERT LEFEVRE DATE: 12/15/2023 ROBERT LEFEVRE DATE: 12/15/2023

CONST. NO.: 33057-3228-94 PROJECT NO. YEAR SHEET NO. BR-STP-320(10) 2025 **REVISIONS** NO. DATE BY **BRIEF DESCRIPTION** 1 | 05-20-2025 | JM GENERAL REVISION

JM REVISED REV. DATES

2 09-29-2025

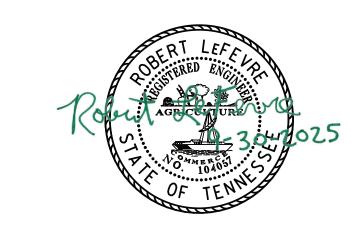
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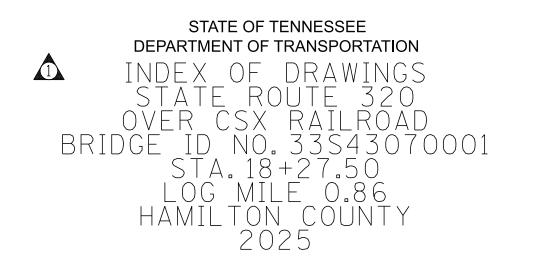
		2
		LAST
LIST OF DRAWINGS	DWG. NO.	REV. DATE
LAYOUT OF BRIDGE	U-95-425	5-20-2025
INDEX OF DRAWINGS		9-29-2025
GENERAL NOTES	U-95-427	5-20-2025
RAILROAD NOTES	U-95-428	5-20-2025
ESTIMATED QUANTITIES	U-95-429	9-29-2025
FOUNDATION DATA	U-95-430	5-20-2025
FOUNDATION DATA	U-95-431	5-20-2025
SUPERSTRUCTURE	U-95-432	5-20-2025
SUPERSTRUCTURE DETAILS	U-95-433	5-20-2025
SUPERSTRUCTURE DETAILS	U-95-434	5-20-2025
PHASING SEQUENCE DETAILS	U-95-435	5-20-2025
PRESTRESSED BOX-BEAM DETAILS SPANS 1 AND 3	. U-95-436	5-20-2025
PRESTRESSED BOX-BEAM DETAILS SPAN 2	. U-95-437	5-20-2025
ABUTMENT NO.1	U-95-438	5-20-2025
ABUTMENT NO.1 DETAILS	U-95-439	5-20-2025
ABUTMENT NO.1 DETAILS	U-95-440	5-20-2025
ABUTMENT NO.1 DETAILS	U-95-441	5-20-2025
ABUTMENT NO.1 DETAILS	U-95-442	5-20-2025
ABUTMENT NO.2	U-95-443	5-20-2025
ABUTMENT NO. 2 DETAILS	U-95-444	5-20-2025
ABUTMENT NO. 2 DETAILS	U-95-445	5-20-2025
ABUTMENT NO. 2 DETAILS	U-95-446	5-20-2025
ABUTMENT NO. 2 DETAILS		5-20-2025
BENT NO.1		5-20-2025
BENT NO.1 DETAILS		5-20-2025
BENT NO. 2		5-20-2025
BENT NO. 2 DETAILS		5-20-2025
FINAL FOUNDATION DATA		5-20-2025
FINAL FOUNDATION DATA		5-20-2025
BILL OF STEEL	U-95-454	5-20-2025

LAST LIST OF STANDARD DRAWINGS DWG.NO. REV.DATE STEEL SLIDER PLATE ASSEMBLIES FOR SINGLE SLOPE CONCRETE PARAPET AND BRIDGE DECK DRAIN DETAILS ---- 5-31-24 STD. PRECAST PRESTRESSED BRIDGE DECK PANELS GENERAL DETAILS ..... 3-02-02 STD.PRECAST PRESTRESSED BRIDGE DECK PANELS CONSTRUCTION DETAILS ..... 6-10-96 STANDARD PILE DETAILS......STD-5-1..... REINF.BAR SUPPORT DETAILS FOR CONC.SLABS \_\_\_\_\_\_STD-9-1 \_\_\_\_ 10-07-08 MISCELLANEOUS ABUTMENT & DRAINAGE DETAILS \_\_\_\_\_STD-10-1 \_\_\_\_ 6-05-23 MISCELLANEOUS ABUTMENT AND PAVEMENT AT BRIDGE ENDS BACKFILL DETAILS \_\_\_\_\_\_ STD-10-2\_\_\_\_ 6-05-23 BRIDGE RAILING WITH STRUCTURAL TUBING \_\_\_\_\_\_ STD-11-1 \_\_\_\_ 4-15-20 STD. DETAILS FOR PRESTRESSED BOX BEAMS \_\_\_\_\_ 3-6-24 SLOPE PROTECTION......1-09-24

LIST OF SPECIAL PROVISIONS PROV. NO. REV. DATE

REPAIR OF BRIDGE DECK CRACKS ......02-08-21





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PIN NO.\_

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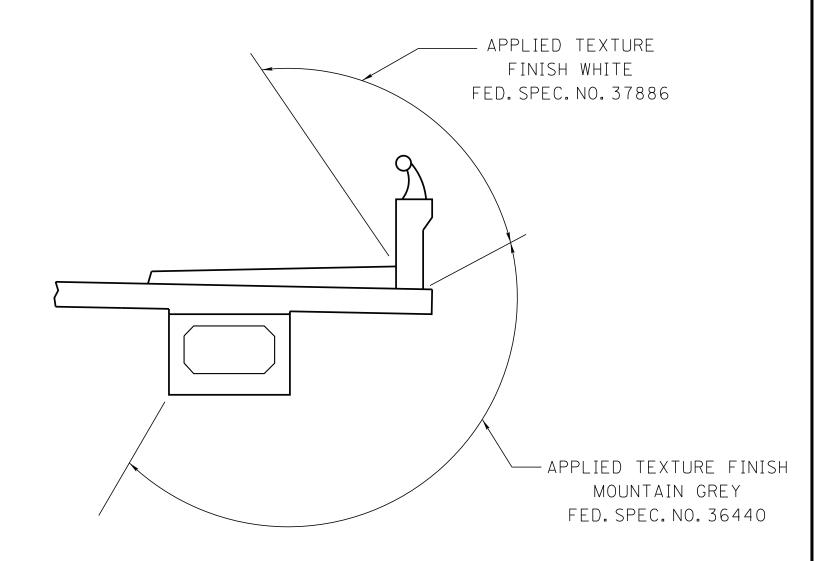
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# A ESTIMATED QUANTITIES

		<u></u>							
	ITEM NO.	DESCRIPTION	UNIT	TOTAL	SUPERSTRUCTURE	ABUTMENT 1	BENT 1	BENT 2	ABUTMENT 2
212	202-04.01	REMOVAL OF STRUCTURES (BR. NO. 33-SR320-0.86)	L.S.	1					
3	204-02.01	DRY EXCAVATION (BRIDGES)	C.Y.	2,024		716	125	125	1,058
9	303-01.02	GRANULAR BACKFILL (BRIDGES)	TON	1,985		555			1,430
$\simeq$	604-02.03	EPOXY COATED REINFORCING STEEL	LB	92,655	84,930	3,762			3,963
	604-03.01	CLASS 'A' CONCRETE (BRIDGES)	C.Y.	897	66	185	172	156	318
8	604-03.02	STEEL BAR REINFORCEMENT (BRIDGES)	LB.	165,612	1,107	29,346	43,177	38,725	53,257
1	604-03.04	PAVEMENT AT BRIDGE ENDS	S.Y.	262					
	604-03.09	CLASS 'D' CONCRETE (BRIDGE DECK)	C.Y.	247	247				
	604-04.01	APPLIED TEXTURE FINISH (NEW STRUCTURES)	S.Y.	1,413					
	604-04.41	THREE STAR STATE EMBLEM	EA.	4		2			2
	604-05.31	BRIDGE DECK GROOVING (MECHANICAL)	S.Y.	825	825				
13	606-03.03	STEEL PILES (12 INCH)	L.F.	3,249		927	262	311	1,749
10	606-03.06	PILE TIPS (STEEL PILES, 12 INCH)	EACH	191		46	28	28	89
	610-10.45	DECK DRAINS (GRATE TYPE 2)	EA.	4					
(5)	615-02.19	PRESTRESSED CONCRETE BOX BEAM (24" X 36")	L.F.	1,412					
11	617-02	BRIDGE DECK CRACK SEAL	L.F.	211					
11	617-05	SEALANT (HMWM)	GAL.	3					
4	620-05	CONCRETE PARAPET WITH STRUCTURAL TUBING	L.F.	440					
	621-05.01	TEMPORARY SHORING	S.F.	1,200					
	707-07.01	CHAIN-LINK FENCE (BRIDGES)	S.F.	1168					
	709-04	REINFORCED CONCRETE SLOPE PAVEMENT	C.Y.	31					
6	710-09.01	6" PERF. PIPE WITH VERTICAL DRAIN SYSTEM	L.F.	135		54			81
	710-09.02	6" PIPE UNDERDRAIN	L.F.	50		30			20

#### CONST. NO.: 33057-3228-94

PROJECT NO.			YEAR	SHEET NO.		
	BR-STP-320	(10)	2025			
			REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION			
1	05-20-2025	JM	GENERAL REVISION			
2	09-29-2025	JM	UPDATED CLASS 'A' CONCRETE QUANTITY			
1		1				



# APPLIED TEXTURE FINISH SKETCH

NOTE: IN ADDITION TO THE PORTIONS SHOWN IN THE APPLIED TEXTURE FINISH SKETCH, ALL EXPOSED SURFACES OF THE WINGWALLS, ABUTMENT BEAMS, BENTS, AND EXTERIOR PORTIONS OF ENDWALLS ARE TO RECEIVE AN APPLIED TEXTURE FINISH (GRAY, AMS-STD-595A, COLOR NO. 36440).

## ESTIMATED QUANTITIES NOTES

- (1) NOTE: PRIOR TO CONSTRUCTION OF THE PAVEMENT AT BRIDGE ENDS, THE CONTRACTOR SHALL SUBMIT A PROPOSED BILL OF STEEL TO THE ENGINEER FOR APPROVAL.
- (2) NOTE: LUMP SUM (3 SPANS AT 39' SIMPLY SUPPORTED CONCRETE DECK BEAM BRIDGE WITH CONCRETE SUBSTRUCTURE. 36'-4" OUT-TO-OUT, BRIDGE ID NO.33S43070001. EXISTING LAYOUT AND TYPICAL SECTION DWG.NO'S B-7-67 AND B-2-130.
- (3) NOTE: EXCAVATION BASED ON FINAL PROFILE AT ABUTMENTS 1, 2

  AND BENT 1 AND EXISTING GROUND AT BENT 2.
- (4) NOTE: THE COST OF BITUMINOUS-FIBERBOARD AND ALL MISCELLANEOUS JOINT MATERIAL TO BE INCLUDED IN THE UNIT PRICE BID FOR OTHER ITEMS.
- (5) NOTE: COST OF ELASTOMERIC PADS AND RUBBER BONDING CEMENT TO BE INCLUDED IN THE UNIT PRICE BID FOR THE PRESTRESSED BEAM.
- (6) NOTE: COST OF POLYETHYLENE SHEETING AND ALL MISCELLANEOUS ITEMS NECESSARY FOR INSTALLATION TO BE INCLUDED IN THE UNIT PRICE BID FOR PERFORATED PIPE.

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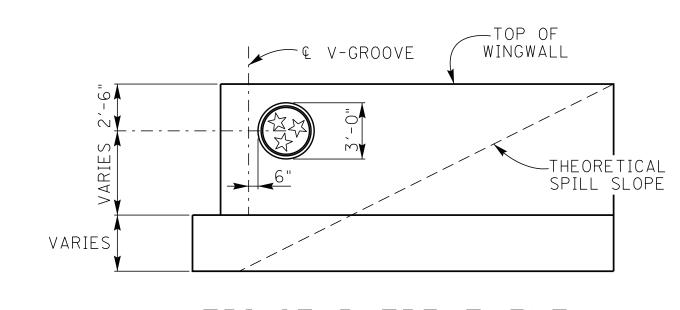
SUPERVISED BY: ROBERT LEFEVRE DATE: 12/15/2023

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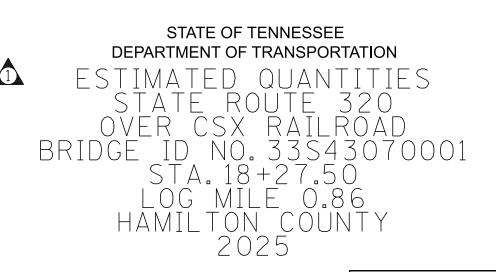
TERI JOHNSON DATE: 09/30/2024

- (7) NOTE: THE COST OF ALL MATERIALS AND LABOR NECESSARY FOR THE INSTALLATION OF 54 ANCHOR BOLT ASSEMBLIES SHALL BE INCLUDED IN THE UNIT PRICE BID FOR CLASS A CONCRETE (BRIDGES), ITEM NO. 604-03.01.
- (8) NOTE: MECHANICAL BAR SPLICERS MUST BE ON THE TDOT QUALIFIED PRODUCTS LIST 27. THE BAR SPLICERS SHALL MEET AASHTO LRFD SPECIFICATIONS FOR MECHANICAL CONNECTION. WHEN EPOXY COATING IS REQUIRED, THE EXPOSED THREADS SHALL BE REPAIRED AFTER SPLICING ACCORDING TO SECTION 907 OF THE STANDARD SPECIFICATIONS. THE COST OF FURNISHING THE BAR SPLICERS, (AND EPOXY COATING WHEN REQUIRED) INCLUDING ALL LABOR AND MATERIALS NECESSARY FOR COMPLETE INSTALLATION, SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM NO. 604-02.03 AND ITEM NO. 604-03.02.
- (9) NOTE: GRANULAR BACKFILL SHALL BE TYPE "A" GRADING "D" MATERIAL. SEE STANDARD DRAWING STD-10-1.
- (10) NOTE: THE UNIT PRICE BID FOR THE CAST STEEL POINTS SHALL INCLUDE FURNISHING AND INSTALLATION TO THE PILES.
- (11) NOTE: INCLUDES ALL COSTS FOR INSTALLING THE BRIDGE DECK CRACK SEALER (HMWM) INCLUDING CRACK PREPARATION, CLEANING, LABOR, AND ALL MISCELLANEOUS MATERIALS REQUIRED TO SEAL THE LONGITUDINAL CONSTRUCTION JOINT ACCORDING TO SPECIAL PROVISION 604CR AND MANUFACTURERS' SPECIFICATIONS. CRACK SEALING SHALL BE DONE AT THE END OF CONSTRUCTION TO ALLOW SHRINKAGE OF DECK CONCRETE CAUSING THE CRACK TO OCCUR.
- (12) NOTE: ALL SUBSTRUCTURE UNITS WITHIN CSXT ROW SHALL BE CUT OFF A MINIMUM OF 3'-O" BELOW THE FINISHED GRADE, THE DITCH LINE INVERT, OR AS OTHERWISE DIRECTED BY THE ENGINEER.
- (13) NOTE: THE COST OF DRILLING THE HOLES IN THE TOP OF THE PILES TO BE INCLUDED IN THE COST OF THE PILES.



TRI-STAR TREATMENT AT ABUTMENT WINGWALL (TYP. AT EACH WINGWALL)





U-95-429