THIS DOCUMENT HAS BEEN DIGITALLY SIGNED AND SEALED BY:

Kirschten Roberts
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GRESHAM SMITH
222 2ND AVE. SOUTH, SUITE 1400
NASHVILLE, TN 37201-2308
KIRSCHTEN ROBERTS, P.E. NO. 126215

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 SHEETS	ROADWAY-SIGN1
TITLE SHEET	1
ROADWAY INDEX AND STANDARD ROADWAY DRAWINGS	1A
STANDARD STRUCTURE AND TRAFFIC OPERATIONS DRAWINGS	1A1
PROJECT COMMITMENTS	1B
ESTIMATED ROADWAY QUANTITIES	2
TYPICAL SECTIONS AND PAVEMENT SCHEDULE	2B, 2B1
GENERAL NOTES	2C
SPECIAL NOTES	2D
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TABULATED QUANTITIES	2F
RIGHT-OF-WAY NOTES, UTILITY NOTES AND UTILITY OWNERS	3
PROPERTY MAP(S) AND RIGHT-OF-WAY ACQUISITION TABLE(S)	3A – 3B
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PROPOSED PROFILE(S)	4C – 5C
PRIVATE DRIVE, BUSINESS, AND FIELD ENTRANCE PROFILE(S)	6
DRAINAGE MAP(S).	7
EROSION PREVENTION AND SEDIMENT CONTROL PLANS	8 - 12
SIGNING AND PAVEMENT MARKING PLAN(S)	13 – 14
SIGN SCHEDULE SHEET(S)	15
ROADWAY CROSS SECTIONS	16 – 36
TRAFFIC CONTROL PLANS	T1 – T3, T3A

YEAR	PROJECT NO.	SHEET NO.
2026	38S180-S3-007	ROADWAY-SIGN 1
	38S180-M3-007	
	38S180-S3-008	

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

SIGNATURE SHEET

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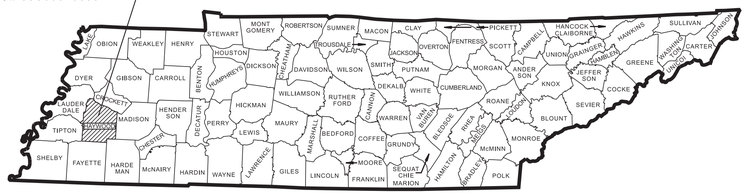
PS&E Index Of Sheets
SEE SHEET NO. 1A

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF ENGINEERING

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

TENN.	YEAR	SHEET NO.
	2026	1
FED. AID PROJ. NO.	ER-BR-STP-180(14)	
STATE PROJ. NO.	38S180-S3-007 38S180-M3-007 38S180-S3-008	

PROJECT LOCATION
BRIDGE ID. # 38S80510007
BRIDGE ID. # 38S80510009



END PROJECT NO. 38S180-S2-007 R.O.W.
END PROJECT NO. 38S180-M2-007 R.O.W.
END PROJECT NO. 38S180-S3-007 CONST.
END PROJECT NO. 38S180-M3-007 CONST.
STA. 119+86.59 SR 180

N 534592.2345 E 962999.3553

BEGIN PROJECT NO. 38S180-S2-007 R.O.W.
BEGIN PROJECT NO. 38S180-M2-007 R.O.W.
STA. 112+37.49 SR 180

N 534176.8388 E 962375.9797

END PROJECT NO. 38S180-S3-008 CONST.
BEGIN PROJECT NO. 38S180-S3-007 CONST.
BEGIN PROJECT NO. 38S180-M3-007 CONST.
STA. 111+00.00 SR 180

N 534100.5969 E 962261.5652

END PROJECT NO. 38S180-S2-008 R.O.W.
STA. 109+64.81 SR 180

N 534025.6305 E 962149.0647

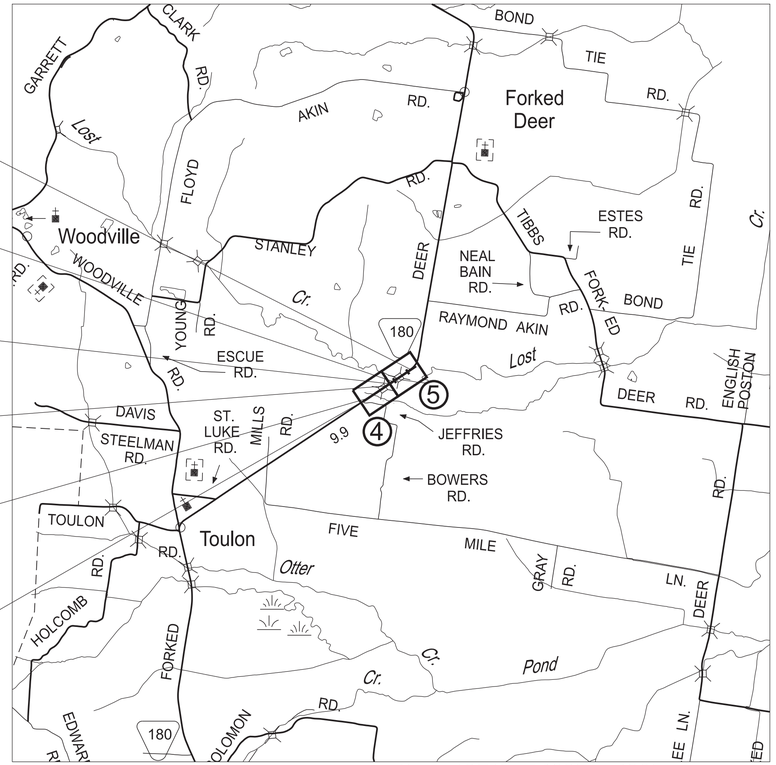
BEGIN PROJECT NO. 38S180-S3-008 CONST.
STA. 101+86.88 SR 180

N 533594.2477 E 961501.6977

BEGIN PROJECT NO. 38S180-S2-008 R.O.W.
STA. 101+64.77 SR 180

N 533581.9872 E 961483.2985

STATE HIGHWAY NO. 180



SCALE: 1"= 2640'

0 2640 5280 7920

N

NO EXCLUSIONS

S.R. 180 TO BE CLOSED DURING CONSTRUCTION

DESIGN EXCEPTION
APPROVED 06-26-25
1) EXCEPTION FROM RD11-TS-2
PROPOSED LANE WIDTH OF 10'

SEALED BY
KIRSCHTEN T. ROBERTS
REGISTERED ENGINEER
AGRICULTURE
ENVIRONMENT
TENNESSEE
STATE OF TENNESSEE
12/09/2025

APPROVED:
SHANE HESTER, CHIEF ENGINEER

DATE:

APPROVED:
WILL REID, 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 JANUARY 1, 2021 AND ADDITIONAL SPECIFICATIONS AND SPECIAL PROVISIONS CONTAINED IN THE PLANS AND IN THE PROPOSAL CONTRACT.

TDOT PROJECT MANAGER: STEVE SELLERS
DESIGNED BY: GRESHAM SMITH
DESIGNER : KIRSCHTEN ROBERTS, P.E. CHECKED BY : BEN COLES, P.E.
P.E. NO. 38S180-S3-007 / 38S180-M3-007 / 38S180-S3-008
PIN NO. 136347.07 / 136185.06

R.O.W. LENGTH	0.293 MILES
ROADWAY LENGTH	0.306 MILES
BRIDGE LENGTH	0.035 MILES
PROJECT LENGTH	0.341 MILES

SURVEY 05-19-25	TRAFFIC DATA	
	ADT (2029)	707
	ADT (2049)	1,180
	DHV (2049)	142
	D	65 - 35
	T (ADT)	3 %
	T (DHV)	%
	V	50 MPH

COORDINATES ARE NAD/83(2011) DATUM ADJUSTED BY THE FACTOR OF 1.00006 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988 USING GEOID 18 MODEL.

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ROADWAY INDEX

SHEET NAME	SHEET NO.
SIGNATURE SHEETS	ROADWAY-SIGN1
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ROADWAY INDEX AND STANDARD ROADWAY DRAWINGS	1A
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BRIDGE PLANS	B-1
STORM WATER POLLUTION PREVENTION PLAN (SWPPP) PLANS	S-1

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

STANDARD ROADWAY DRAWINGS

10-100.00 STANDARD ROADWAY TITLE SHEET, ABBREVIATIONS, AND LEGENDS

DWG.	REV.	DESCRIPTION
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
RD-L-2	02-20-20	STANDARD LEGEND FOR UTILITY INSTALLATIONS
RD-L-5	07-30-24	STANDARD LEGEND FOR EROSION PREVENTION AND SEDIMENT CONTROL
RD-L-6	02-20-20	STANDARD LEGEND FOR EROSION PREVENTION AND SEDIMENT CONTROL
RD-L-7	02-20-20	STANDARD LEGEND FOR EROSION PREVENTION AND SEDIMENT CONTROL

10-101.00 STANDARDS ROADWAY DRAWINGS

DWG.	REV.	DESCRIPTION
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-TS-2		DESIGN STANDARDS FOR COLLECTORS, 2-LANE ROADS AND STREETS
RD11-LR-1		MINIMUM RUNOFF LENGTHS (LR) FOR URBAN HIGHWAYS
RD11-LR-2		MINIMUM RUNOFF LENGTHS (LR) FOR RURAL HIGHWAYS
RD11-S-11		DESIGN AND CONSTRUCTION DETAILS FOR ROADSIDE SLOPE DEVELOPMENT
RD11-S-11A		ROADSIDE DITCH DETAILS FOR DESIGN AND CONSTRUCTION
RD11-S-11B		DESIGN AND CONSTRUCTION DETAILS FOR ROCK CUT SLOPE AND CATCHMENT

10-106.00 SAFETY DESIGN AND GUARDRAILS

DWG.	REV.	DESCRIPTION
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-6	07-30-24	SAFETY PLAN SAFETY HARDWARE PLACEMENT ON OUTSIDE EDGE
S-GR31-1	03-13-25	GUARDRAIL DETAILS
S-GR31-1A	06-28-19	GUARDRAIL AND BLOCK-OUT DETAILS
S-GR31-1B		GUARDRAIL FASTENING HARDWARE
S-GR31-1C	07-07-23	GUARDRAIL GENERAL NOTES AND POST DETAILS
S-AGT-1		LONG SPAN APPROACH GUARDRAIL TRANSITION
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-GR28-1M	06-15-21	W-BEAM & THRIE BEAM BARRIER RAIL AND RUB RAIL DETAILS
S-GR28-2M	06-28-19	GUARDRAIL HARDWARE DETAILS
S-GRC-1M		GUARDRAIL CONNECTION TO BRIDGE ENDS OR BARRIER WALL

10-107.00 EROSION PREVENTION AND SEDIMENT CONTROL

DWG.	REV.	DESCRIPTION
EC-STR-3C	03-01-23	SILT FENCE WITH WIRE BACKING
EC-STR-34	05-04-22	EROSION CONTROL BLANKET FOR SLOPE INSTALLATION
EC-STR-6	11-30-20	ROCK CHECK DAM
EC-STR-6A	05-06-16	ENHANCED ROCK CHECK DAM
EC-STR-7	05-04-22	SEDIMENT TRAP WITH CHECK DAM

TYPE	YEAR	PROJECT NO.	SHEET NO.
FUNC.	2025	38S180-S2-007	NA
		38S180-M2-007	
		38S180-S2-008	
PIH	2025	38S180-S3-007	1A
		38S180-M3-007	
		38S180-S3-008	
PS&E	2026	38S180-S3-007	1A
		38S180-M3-007	
		38S180-S3-008	

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

ROADWAY INDEX AND STANDARD ROADWAY DRAWINGS

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STANDARD TRAFFIC OPERATIONS DRAWINGS

DWG.	REV.	DESCRIPTION
SIGNS		
T-S-6	02-12-91	STANDARD MOUNTING DETAILS - BOLTED EXTRUDED PANELS
T-S-9	06-10-14	STANDARD LAYOUT - GROUND MOUNTED SIGNS
T-S-10	04-04-12	STANDARD MOUNTING DETAILS FLAT SHEET SIGNS, ALUMINUM-STEEL DESIGN
T-S-12	07-10-17	STANDARD STEEL GROUND MOUNTED SIGNS, BREAK-AWAY TYPE POST FOOTING DETAILS, SQUARE TUBES
T-S-13	10-21-19	I-BEAM BREAK-AWAY LARGE SIGN SUPPORT DETAILS
T-S-16	07-02-15	GROUND MOUNTED ROADSIDE SIGN PLACEMENT DETAILS
T-S-16A	07-02-15	GROUND MOUNTED ROADSIDE SIGN PLACEMENT DETAILS
T-S-17	07-11-17	STANDARD GROUND MOUNTED SIGN USING PERFORATED/KNOCKOUT SQUARE TUBE
T-S-19	06-12-20	STANDARD STEEL SIGN SUPPORTS
T-S-20	07-11-17	SIGN DETAILS
T-S-23A	07-11-17	MULTI-DIRECTIONAL SLIP BASE BREAKAWAY P-POST SIGN SUPPORT
10-204.00 DESIGN - TRAFFIC CONTROL		
T-M-1	01-24-25	DETAILS OF PAVEMENT MARKINGS FOR CONVENTIONAL ROADS AND MARKING ABBREVIATIONS
T-M-2	01-24-25	DETAILS OF PAVEMENT MARKINGS FOR CONVENTIONAL ROADS
T-M-15A	01-24-25	ASPHALT SHOULDER RUMBLE STRIP INSTALLATION DETAILS FOR NON-ACCESS CONTROLLED RURAL ROUTES
T-M-16	01-24-25	RUMBLE STRIPE INSTALLATION LAYOUT
T-WZ-10	03-26-25	ADVANCE ROAD WORK SIGNING ON HIGHWAYS AND FREEWAYS

TYPE	YEAR	PROJECT NO.	SHEET NO.
FUNC.	2025	38S180-S2-007	NA
		38S180-M2-007	
		38S180-S2-008	
PIH	2025	38S180-S3-007	1A1
		38S180-M3-007	
		38S180-S3-008	
PS&E	2026	38S180-S3-007	1A1
		38S180-M3-007	
		38S180-S3-008	

SEALED BY

KIRSCHTEN T. ROBERTS
REGISTERED ENGINEER
AGRICULTURE COMMERCE
STATE OF TENNESSEE
12/09/2025

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

STANDARD STRUCTURE AND TRAFFIC OPERATION DRAWINGS

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TYPE	YEAR	PROJECT NO.	SHEET NO.
FUNC.	2025	38S180-S2-007	1B
		38S180-M2-007	
		38S180-S2-008	
PIH	2025	38S180-S3-007	1B
		38S180-M3-007	
		38S180-S3-008	
PS&E	2026	38S180-S3-007	1B
		38S180-M3-007	
		38S180-S3-008	

38S108-S2-008 PROJECT COMMITMENTS

COMMITMENT ID	SOURCE DIVISON	DESCRIPTION	STA. / LOCATION
EDHZ001	ENVIRONMENTAL	THE STATE OF TENNESSEE ASBESTOS ACCREDITATION REQUIREMENTS (TDEC RULES CHAPTER 1200-01-20) MANDATES THAT ACM ABATEMENT WORK BE PERFORMED BY AND ACREDITED FIRM (CONTRACTOR) USING ACCREDITED ABATEMENT WORKERS AND SUPERVISORS. ABATEMENT OF THIS MATERIAL SHALL BE ACCOMPLISHED PER SP202ACM SPECIAL PROVISION REGARDING REMOVAL OF ASBESTOS-CONTAINING MATERIALS. ACM ABATEMENT SHOULD BE COMPLETED PRIOR TO ANY DEMOLITION ACTIVITIES IF POSSIBLE. PRIOR TO THE DEMOLITION OR REHABILITATION OF ANY STRUCTURE (BRIDGE OR BUILDING), THE CONTRACTOR IS REQUIRRED TO SUBMIT THE NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS STANDARD 10-DAY NOTICE OF DEMOLITION TO THE TDEC DIVISION OF AIR POLLUTION CONTROL (PER TDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (JANUARY 1, 2021) SECTIONS 107.08.D AND 202.03)	STA. 105+38.50 TO STA. 106+43.50
EDHZ002	ENVIRONMENTAL	AN ASBESTOS CONTAINING MATERIAL (ACM) SURVEY WAS COMPLETED ON BRIDGE NO.38S8051007 SR-180 OVER OVERFLOW LM 4.57 (38-SR180-04.57). THE BRIDGE HAS ASBESTOS IN THE PAD MATERIAL BETWEEN THE CURB AND GUARD RAIL SUPPORTS; APPROXIMATELY 40 SQUARE FEET AT 80% CHRYSOTILE. PLEASE SEE THE REPORT FOR FURTHER DETAILS AND PHOTOGRAPHS.	STA. 105+38.50 TO STA. 106+43.50

38S108-M2-007 PROJECT COMMITMENTS

COMMITMENT ID	SOURCE DIVISON	DESCRIPTION	STA. / LOCATION
EDHZ001	ENVIRONMENTAL	AN ASBESTOS CONTAINING MATERIAL (ACM) SURVEY WAS COMPLETED ON BRIDGE NO.38S8051009 SR-180 OVER LOST CREEK LM 4.75 (38-SR180-04.75). THE BRIDGE HAS ASBESTOS IN THE PAD MATERIAL BETWEEN THE CURB AND GUARD RAIL SUPPORTS; APPROXIMATELY 50 SQUARE FEET AT 60% CHRYSOTILE. PLEASE SEE THE REPORT FOR FURTHER DETAILS AND PHOTOGRAPHS.	STA. 115+26.96 TO STA. 116+21.96
EDHZ002	ENVIRONMENTAL	THE STATE OF TENNESSEE ASBESTOS ACCREDITATION REQUIREMENTS (TDEC RULES CHAPTER 1200-01-20) MANDATES THAT ACM ABATEMENT WORK BE PERFORMED BY AND ACREDITED FIRM (CONTRACTOR) USING ACCREDITED ABATEMENT WORKERS AND SUPERVISORS. ABATEMENT OF THIS MATERIAL SHALL BE ACCOMPLISHED PER SP202ACM SPECIAL PROVISION REGARDING REMOVAL OF ASBESTOS-CONTAINING MATERIALS. ACM ABATEMENT SHOULD BE COMPLETED PRIOR TO ANY DEMOLITION ACTIVITIES IF POSSIBLE. PRIOR TO THE DEMOLITION OR REHABILITATION OF ANY STRUCTURE (BRIDGE OR BUILDING), THE CONTRACTOR IS REQUIRRED TO SUBMIT THE NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS STANDARD 10-DAY NOTICE OF DEMOLITION TO THE TDEC DIVISION OF AIR POLLUTION CONTROL (PER TDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (JANUARY 1, 2021) SECTIONS 107.08.D AND 202.03)	STA. 115+26.96 TO STA. 116+21.96

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PROJECT
COMMITMENTS

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ESTIMATED ROADWAY QUANTITIES

	ITEM NO.	DESCRIPTION	UNIT	38S180-S3-008 QUANTITY	38S180-S3-007 QUANTITY	38S180-M3-007 QUANTITY	TOTAL QUANTITY
	105-01	CONSTRUCTION STAKES, LINES AND GRADES	LS	0.5	0.5		1
	201-01	CLEARING AND GRUBBING	LS	0.5	0.5		1
(12)	203-01	ROAD & DRAINAGE EXCAVATION (UNCLASSIFIED)	C.Y.	1251	968		2219
	203-03	BORROW EXCAVATION (UNCLASSIFIED)	C.Y.	1303	4201		5504
	203-04	PLACING AND SPREADING TOPSOIL	C.Y.	330	378		708
(3)	203-06	WATER	M.G.	4	3		7
(1) (2)	209-05	SEDIMENT REMOVAL	C.Y.	63	63		126
(1) (2)	209-08.02	TEMPORARY SILT FENCE (WITH BACKING)	L.F.	3898	4600		8498
(1) (2)	209-08.07	ROCK CHECK DAM	EACH	4			4
(1) (2)	209-08.08	ENHANCED ROCK CHECK DAM	EACH	2			2
(1) (2)	209-65.03	TEMPORARY DIVERSION CHANNEL	L.F.	192			192
(5)	303-01	MINERAL AGGREGATE, TYPE A BASE, GRADING D	TON	672	778		1450
(1) (2) (4)	303-10.01	MINERAL AGGREGATE (SIZE 57)	TON	8379	100	8279	16758
(5)	307-01.01	ASPHALT CONCRETE MIX (PG64-22) (BPMB-HM) GRADING A	TON	367	375		742
(5)	307-01.08	ASPHALT CONCRETE MIX (PG64-22) (BPMB-HM) GRADING BM-2	TON	240	302		542
(5)	402-01	BITUMINOUS MATERIAL FOR PRIME COAT (PC)	TON	4	4		8
(1) (5)	402-02	AGGREGATE FOR COVER MATERIAL (PC)	TON	13	13		26
(5)	403-01	BITUMINOUS MATERIAL FOR TACK COAT (TC)	TON	2	2		4
(14)	407-20.05	SAW CUTTING OF ASPHALT PAVEMENT	L.F.	437	87		524
(5)	411-01.10	ACS MIX (PG64-22) GRADING D	TON	163	181		344
	411-12.03	SCORING FOR RUMBLE STRIPE (NON-CONTINUOS) (8" WIDTH)	L.M.	0.3	0.3		0.6
(5)	415-01.02	COLD PLANING BITUMINOUS PAVEMENT	S.Y.	341	68		409
	705-06.01	W BEAM GR (TYPE 2) MASH TL-3	L.F.	175	175		350
	705-06.20	TANGENT ENERGY ABSORBING TERM MASH TL-3	EACH	4	4		8
	705-06.28	THRIE BEAM AGT (LONG SPAN) MASH TL-3	EACH	4	4		8
	706-01	GUARDRAIL REMOVED	L.F.	347	190		537
(1) (2)	707-08.11	HIGH-VISIBILITY CONSTRUCTION FENCE	L.F.	692	1038		1730
	708-02.01	MARKERS (CONCRETE R.O.W. POSTS)	EACH	12	8		20
(1) (2) (6)	709-05.05	MACHINED RIP-RAP (CLASS A-3)	TON	100	100		200
(1) (7)	709-05.06	MACHINED RIP-RAP (CLASS A-1)	TON	503			503
(1) (8)	709-05.08	MACHINED RIP-RAP (CLASS B)	TON			975	975
	712-01	TRAFFIC CONTROL	LS	0.5	0.5		1
(1)	712-05.01	WARNING LIGHTS (TYPE A)	EACH	3	3		6
(1) (9)	712-06	SIGNS (CONSTRUCTION)	S.F.	355	354		709
	712-07.03	TEMPORARY BARRICADES (TYPE III)	L.F.	40	40		80
	713-01.01	CLASS A CONCRETE (FOUNDATION FOR SIGN SUPPORTS)	C.Y.	0.5	0.5		1
	713-01.02	STEEL BAR REINFORCEMENT(FOUNDATION FOR SIGN SUPPORTS)	LB.	97	97		194
	713-06	STEEL I-BEAMS & WF-BEAMS(BREAKAWAY) SIGN SUPPORT	LB.	204	204		408
	713-11.02	PREFORATED/KNOCKOUT SQUARE TUBE POST	LBS	108	153		261
	713-11.21	P POST SLIP BASE	EACH	2	3		5
	713-13.02	FLAT SHEET ALUMINUM SIGN (0.080 THICK)	S.F.		3		3
	713-13.03	FLAT SHEET ALUMINUM SIGN (0.100 THICK)	S.F.	56	60		116
	713-15	REMOVAL OF SIGNS, POSTS AND FOOTINGS	L.S.		1		1
(1)	713-16.01	CHANGEABLE MESSAGE UNIT SIGN	EACH	1	2		3
	716-01.11	RAISED PVMT MARKERS (BI-DIRECTIONAL) (1 COLOR LENS)	EACH	16	13		29
(13)	716-01.30	REMOVAL OF SNOWPLOWABLE REFLECTIVE MARKER	EACH	5	2		7
(13)	716-08.30	HYDROBLAST REMOVAL OF PAVEMENT MARKINGS (LINE)	L.M.	0.1	0.1		0.2
(10)	716-09.86	CONTRAST PAVEMENT MARKING 6"	L.M.	0.1	0.2		0.3
	716-12.02	ENHANCED FLATLINE THERMO PVMT MRKNG (6IN LINE)	L.M.	0.7	0.6		1.3
	717-01	MOBILIZATION	LS	0.5	0.5		1
(11)	740-07.04	GEOGRID REINFORCEMENT TYPE 2	S.Y.	309		618	927
(1) (2) (15)	740-10.03	GEOTEXTILE (TYPE III) (EROSION CONTROL)	S.Y.	342	172		514
(11)	740-10.04	GEOTEXTILE (TYPE IV) (STABILIZATION)	S.Y.	155		155	310
(1) (2)	801-01	SEEDING (WITH MULCH)	UNIT	39	45		84
(1) (2)	801-01.07	TEMPORARY SEEDING (WITH MULCH)	UNIT	39	45		84
(1) (2)	801-02.15	FERTILIZER	TON	1	1		2
(1) (2)	801-03	WATER (SEEDING & SODDING)	M.G.	27	32		59
(1) (2)	803-01	SODDING (NEW SOD)	S.Y.	1942	2224		4166
(1) (2)	805-12.01	EROSION CONTROL BLANKET (TYPE I)	S.Y.	100	100		200

FOOTNOTES:

(1) TO BE USED AS DIRECTED BY THE ENGINEER
(2) SEE SUBSECTION 209.07 OF THE STANDARD SPECIFICATIONS FOR MAINTENANCE REPLACEMENT.
(3) ITEM TO BE USED FOR EMBANKMENTS AND BASE MATERIAL PURPOSES
(4) ITEMS INCLUDES 16558 TONS FOR PAVEMENT AT BRIDGE ENDS.
(5) SEE TABULATED QUANTITIES FOR LOCATION AND DETAILS.
(6) ITEM TO BE USED FOR TEMP. CONSTRUCTION EXITS.
(7) ITEM INCLUDES 58 TONS FOR SPECIAL DITCHES AND 445 TONS FOR BRIDGE ABUTMENT SLOPE STABILIZATION.
(8) ITEM INCLUDES 975 TONS FOR BRIDGE ABUTMENT SLOPE STABILIZATION.
(9) SEE SHEET T2 FOR SCHEDULE, ADDITIONAL SIGNS INSTALLED AS DIRECTED BY THE ENGINEER. SHALL BE PAID FOR AT THE UNIT COST FOR THIS ITEM.
(10) CONTRAST PAVEMENT MARKINGS TO BE USED ON ALL CONCRETE SURFACES
(11) ITEM TO BE USED FOR PAVEMENT AT BRIDGE ENDS.
(12) ITEM INCLUDES 15 C.Y. FOR EACH PROJECT NUMBER FOR EROSION CONTROL.
(13) FOR REMOVAL OF PAVEMENT MARKINGS OUTSIDE OF RESURFACING LIMITS.
(14) ITEM TO BE USED FOR SAWCUTTING OF PAVEMENT THROUGH MILL AND OVERLAY SECTIONS.
(15) ITEM INCLUDES 344 S.Y. FOR TEMP. CONSTRUCTION EXITS.

TYPE	YEAR	PROJECT NO.	SHEET NO.
FUNC.	2025	38S180-S2-007	2
		38S180-M2-007	
		38S180-S2-008	
PIH	2025	38S180-S3-007	2
		38S180-M3-007	
		38S180-S3-008	
PS&E	2026	38S180-S3-007	2
		38S180-M3-007	
		38S180-S3-008	

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KIRSCHTEN T. ROBERTS
REGISTERED ENGINEER
AGRICULTURE
COMMERCE
No. 126315
STATE OF TENNESSEE
12/09/2025

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

ESTIMATED
ROADWAY
QUANTITIES

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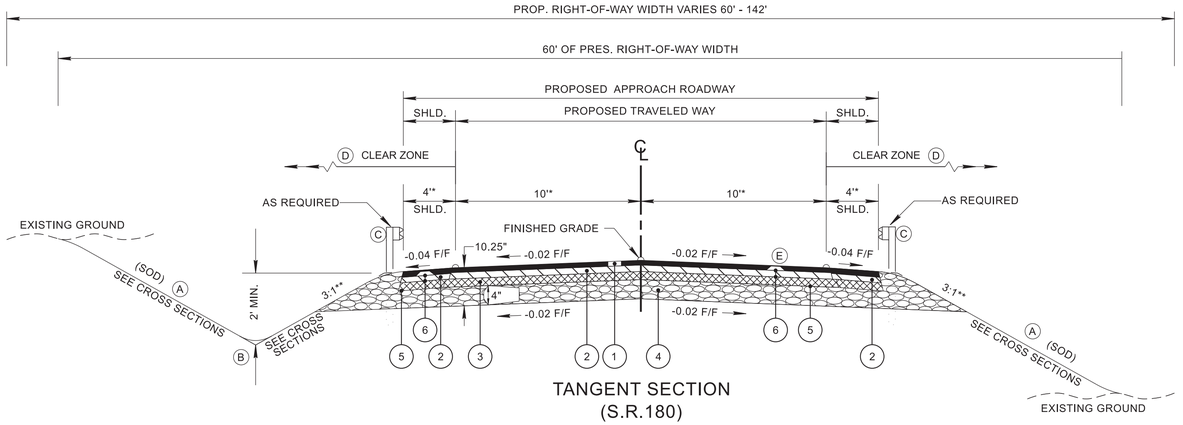
TYPE	YEAR	PROJECT NO.	SHEET NO.
FUNC.	2025	38S180-S2-007	2B
		38S180-M2-007	
		38S180-S2-008	
PIH	2025	38S180-S3-007	2B
		38S180-M3-007	
		38S180-S3-008	
PS&E	2026	38S180-S3-007	2B
		38S180-M3-007	
		38S180-S3-008	

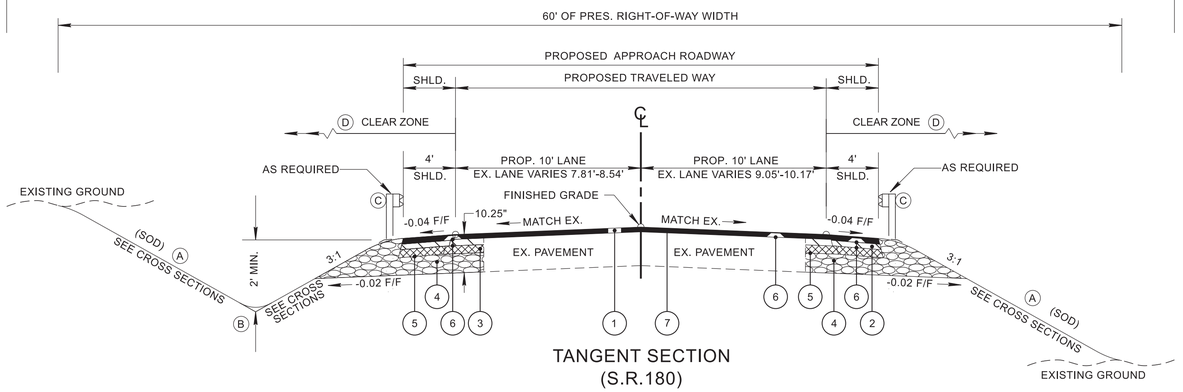


TANGENT SECTION
(S.R.180)

(BASED ON STD. DWG. RD11-TS-2)
FROM STA. 102+00.00 TO STA. 105 +32.00
FROM STA. 106+50.00 TO STA. 109+00.00
FROM STA. 111+25.00 TO STA. 114+92.67
FROM STA. 116+55.67 TO STA. 119+75.00

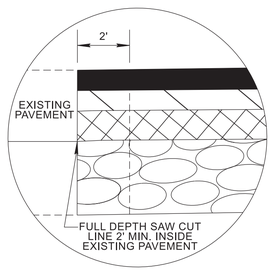
*SEE LANE AND SHOULDER TAPER DETAILS FOR WIDTH TRANSITIONS.

**2:1 SLOPES USED FOR SPECIAL DITCH AND ABUTMENT GRADING BEHIND GUARDRAIL.
SEE SPECIAL DITCH TABLE ON SHEET 2B1.



TANGENT SECTION
(S.R.180)

(BASED ON STD. DWG. RD11-TS-2)
FROM STA. 101+86.88 TO STA. 102+00.00
FROM STA. 109+00.00 TO STA. 111+25.00
FROM STA. 119+75.00 TO STA. 119+86.59



EXISTING & PROPOSED
PAVEMENT JOINT
DETAIL

(A) SEE STANDARD DRAWINGS RD11-S-11 AND RD11-S-11B FOR FILL AND CUT SLOPE TABLES, ROUNDING ON TOP OF CUT SLOPES AND TOE OF FILL SLOPES, SPECIAL ROCK TREATMENT AND SUB GRADE ROUNDING IF APPLICABLE.

(B) SEE STANDARD DRAWING RD11-S-11A FOR ROUNDING OF ROADSIDE DITCH SLOPES.

(C) SEE STANDARD DRAWING S-PL-6 FOR TYPICAL GUARDRAIL PLACEMENT.

(D) SEE STANDARD DRAWING S-CZ-1 FOR CLEAR ZONE CRITERIA. SEE THE "ROADSIDE DESIGN GUIDE", AASHTO, 2011, FOR FURTHER INFORMATION REGARDING CLEAR ZONES.

(E) APPROACH SLAB TO BE CONSTRUCTED ACCORDING TO STD 1-5 AND STD 10-2.
STA. 105+32.00 TO STA. 106+56.00
STA. 106+26.00 TO STA. 106+50.00
STA. 114+92.67 TO STA. 115+16.67
STA. 116+31.67 TO STA. 116+55.67

LANE TAPER DETAILS - S.R. 180

STATION LIMITS	WIDTH	OFFSET	LENGTH
102+00.00	8.32'	8.32' LT	50'
102+50.00	10.00'	10.00' LT	
102+00.00	9.09'	9.09' RT	50'
102+50.00	10.00'	10.00' RT	
119+25.00	10.00'	10.00' LT	50'
119+75.00	8.47'	8.47' LT	
119+25.00	10.00'	10.00' RT	50'
119+75.00	9.30'	9.30' RT	

SHOULDER TAPER DETAILS - S.R. 180

STATION LIMITS	WIDTH	OFFSET	LENGTH
102+00.00	3.25'	11.57' LT	50'
102+50.00	4.00'	14.00' LT	
102+00.00	2.45'	11.54' RT	50'
102+50.00	4.00'	14.00' RT	
119+25.00	4.00'	14.00' LT	50'
119+75.00	2.40'	10.87' LT	
119+25.00	4.00'	14.00' RT	50'
119+75.00	2.39'	11.69' RT	

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TYPICAL SECTIONS AND PAVEMENT SCHEDULE

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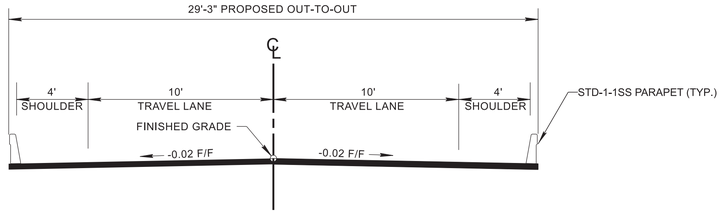
TYPE	YEAR	PROJECT NO.	SHEET NO.
FUNC.	2025	38S180-S2-007	2B1
		38S180-M2-007	
		38S180-S2-008	
PIH	2025	38S180-S3-007	2B1
		38S180-M3-007	
		38S180-S3-008	
PS&E	2026	38S180-S3-007	2B1
		38S180-M3-007	
		38S180-S3-008	

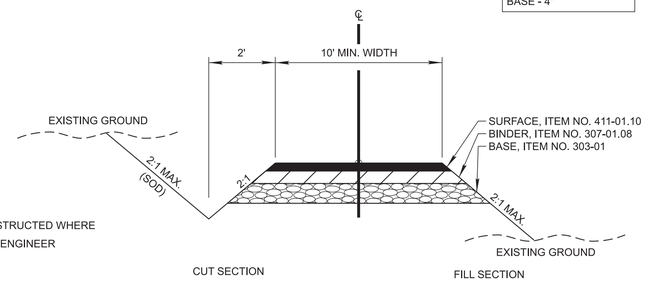


BRIDGE SECTION
(S.R.180)

FROM STA. 105+56.00 TO STA. 106+26.00
FROM STA. 115+16.67 TO STA. 116+31.67

FIELD OR RESIDENTIAL

SURFACE - 1½"
BINDER - 2"
BASE - 4"



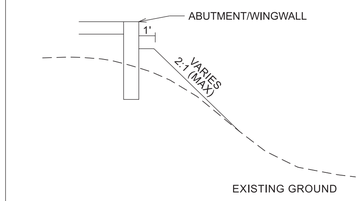
NOTE: DITCH TO BE CONSTRUCTED WHERE DIRECTED BY THE ENGINEER

TYPICAL SECTION
PRIVATE DRIVE TO FIELD

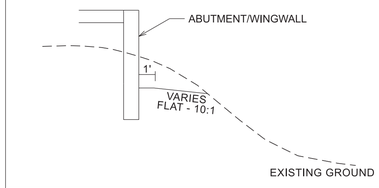
NOTE: WHERE SURFACE OF EXISTING DRIVE IS GRAVEL PROVIDE 4" OF BASE

ABUTMENT/WINGWALL GRADING DETAILS

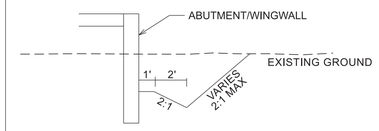
DETAIL NO. 1 - FILL SECTION



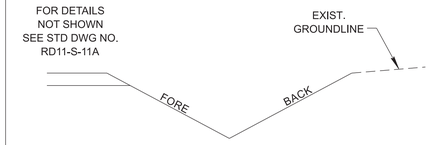
DETAIL NO. 2 - CUT SECTION



DETAIL NO. 3 - CUT SECTION

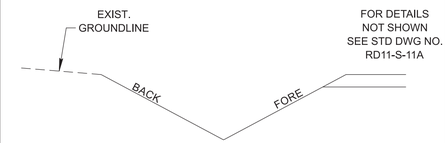


DETAIL NO. 1



PROP. RT. "V" BOTTOM
SODDED OR RIPRAPPED DITCH

DETAIL NO. 2



PROP. LT. "V" BOTTOM
SODDED OR RIPRAPPED DITCH

PROPOSED PAVEMENT SCHEDULE

① ASPHALTIC CONCRETE SURFACE (HOT MIX) PG64-22 GRADING "D" SURFACE @ 1.25" THICK (APPROX. 132.5 LB./S.Y.) 411-01.10 ACS MIX (PG64-22) GRADING "D"	⑤ PRIME COAT 402-01 BITUMINOUS MATERIAL FOR PRIME COAT (PC) AT 0.30-0.35 GALLONS/S.Y. 402-02 AGGREGATE FOR COVER MATERIAL (PC) AT 8-12 LB./S.Y.
② BITUMINOUS PLANT MIX BASE (HOT MIX) PG64-22 GRADING "B-M2" @ 2.00" THICK (APPROX. 226 LB./S.Y.) 307-01.08 ASPHALT CONCRETE MIX (PG64-22) (BPMB-HM) GRADING "B-M2"	⑥ TACK COAT 403-01 BITUMINOUS MATERIAL FOR TACK COAT (TC) SEE 403.05 FOR DETERMINING APPLICATION RATE IN THE FIELD
③ BITUMINOUS PLANT MIX BASE (HOT MIX) PG64-22 GRADING "A" @ 3.00" THICK (APPROX. 345 LB./S.Y.) 307-01.01 ASPHALT CONCRETE MIX (PG64-22) (BPMB-HM) GRADING "A"	⑦ COLD PLANING 415-01.01 COLD PLANING NITUMINOUS PAVEMENT (TON) AT 1.25" THICK
④ MINERAL AGGREGATE 4" THICK 303-01 MINERAL AGGREGATE, TYPE "A" BASE, GRADING "D"	

SPECIAL DITCHES

ROAD	STATION FROM	STATION TO	SLOPE FORE (H/V)	SLOPE BOTTOM WIDTH (FT.)	SLOPE BACK (H/V)	MIN. DEPTH (FT.)	DETAIL NO.	TYPE	RIP-RAP CLASS A-1 709-05.06 (TON)	RIP-RAP CLASS B 709-05.08 (TON)	Class 1 TRM 805-01.01 (S.Y.)	SODDING 803-01 (S.Y.)
S.R 180	103+25.00 RT	105+15.00 RT	2-3	0-3	2	1.25	1	SOD				157
S.R 180	103+88.38 LT	105+25.00 LT	3	0	2	2.21	2	CLASS A-1 RIP-RAP	58			
TOTALS									58	0	0	157

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TYPICAL SECTIONS
AND
PAVEMENT SCHEDULE

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GENERAL NOTES

GRADING

(1) ANY AREA THAT IS DISTURBED OUTSIDE LIMITS OF CONSTRUCTION DURING THE LIFE OF THIS PROJECT SHALL BE REPAIRED BY THE CONTRACTOR AT HIS EXPENSE.

(2) CERTIFICATION FOR ALL BORROW PITS MUST BE OBTAINED IN ACCORDANCE WITH SUBSECTION 107.06 OF THE STANDARD SPECIFICATIONS.

(3) THE CONTRACTOR SHALL NOT DISPOSE OF ANY MATERIAL EITHER ON OR OFF STATE-OWNED R.O.W. IN A REGULATORY FLOOD WAY AS DEFINED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA) WITHOUT APPROVAL BY FEMA. ALL MATERIAL SHALL BE DISPOSED OF IN UPLAND (NON-WETLAND) AREAS AND ABOVE ORDINARY HIGH WATER OF ANY ADJACENT WATERCOURSE. THIS DOES NOT ELIMINATE THE NEED TO OBTAIN ANY OTHER LICENSES OR PERMITS THAT MAY BE REQUIRED BY ANY OTHER FEDERAL, STATE OR LOCAL AGENCY.

SEEDING AND SODDING

(1) SOD SHALL BE PLACED AT LOCATIONS SHOWN ON THE PLANS TO PREVENT DAMAGE TO ADJACENT FACILITIES AND PROPERTY DUE TO EROSION ON ALL NEWLY GRADED CUT AND FILL SLOPES AS WORK PROGRESSES.

(3) ITEM NO. 801-01, SEEDING (WITH MULCH), SHALL BE USED WHERE EROSION CONTROL BLANKET OR SOD ARE NOT APPLIED.

GUARDRAIL

(1) THE CONTRACTOR SHALL NOT REMOVE ANY SECTIONS OF EXISTING GUARDRAIL TO REWORK SHOULDERS OR FLATTEN SLOPES UNTIL THE ENGINEER CONCURS IN THE NECESSITY OF REMOVAL DUE TO CONSTRUCTION REQUIREMENTS AND THE APPROPRIATE WARNING DEVICES ARE INSTALLED. 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.

(2) IF ANY APPROACH END OF A SECTION OF GUARDRAIL OR BRIDGE RAIL MUST TEMPORARILY BE LEFT INCOMPLETE AND EXPOSED TO TRAFFIC, THE CONTRACTOR SHALL USE TWO (2) TEMPORARY BARRICADES OR DRUMS WITH TYPE "A" LIGHTS AND ROUNDED END ELEMENTS AS MINIMUM MEASURES TO PROTECT TRAFFIC FROM THE HAZARD OF AN EXPOSED END. ALL COST OF FURNISHING AND INSTALLING TEMPORARY BARRICADES OR DRUMS WITH TYPE "A" LIGHTS TO DELINEATE GUARDRAIL END AND A TEMPORARY ROUNDED END ELEMENT SHALL BE INCLUDED IN THE COST OF THE PROPOSED GUARDRAIL END TERMINAL.

(3) GUARDRAIL IS TO BE COMPLETE IN PLACE BEFORE THE MAINLINE ROADWAY IS OPENED TO TRAFFIC.

DRAINAGE

(1) THE CONTRACTOR SHALL SHAPE DITCHES TO THE SPECIFIED DESIGN. THIS WORK WILL NOT BE MEASURED AND PAID FOR DIRECTLY, BUT THE COST WILL BE INCLUDED IN THE COST OF OTHER ITEMS.

(2) CULVERT EXCAVATION FOR CONCRETE BOX OR SLAB TYPE CULVERTS OR BRIDGES WILL NOT BE MEASURED AND PAID FOR DIRECTLY, BUT THE COST WILL BE INCLUDED IN THE COST OF OTHER ITEMS.

MISCELLANEOUS

(1) THE CONTRACTOR SHALL BE REQUIRED TO REMOVE AND RESET MAILBOXES AND POSTS WHERE AND AS DIRECTED BY THE ENGINEER. COST TO BE INCLUDED IN PRICE BID FOR OTHER CONSTRUCTION ITEMS.

(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.

ROAD CLOSURE

(1) NO LESS THAN SEVEN (7) DAYS PRIOR TO THE CLOSURE OF THE ROAD, THE CONTRACTOR SHALL NOTIFY THE FOLLOWING INDIVIDUALS OR AGENCIES COMPLETELY DESCRIBING THE AFFECTED ROADS AND THE APPROXIMATE DURATION OF THE CONSTRUCTION: THESE 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, AND (6) LOCAL ROAD SUPERINTENDENT.

FINAL PAVEMENT MARKING

(1) 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.

SNOWPLOWABLE REFLECTIVE PAVEMENT MARKERS

(1) REMOVE EXISTING SNOWPLOWABLE MARKERS PRIOR TO PAVING AND/OR CCLD PLANING. REMOVE ALL ADHESIVES PRIOR TO PAVING. PATCH ANY HOLES OR DIVOTS RESULTING FROM THE REMOVAL OF A MARKER IN A MANNER WHICH ENSURES A UNIFORM PAVED SURFACE. PATCH WORK SHALL BE INCLUDED WITH COST OF OTHER ITEMS OF CONSTRUCTION.

PAVING

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

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

SIGNING

(1) FOR ALL PERMANENT PANEL SIGNS WITH A SILVER-WHITE, YELLOW, RED, GREEN, BROWN, OR BLUE BACKGROUND, PROVIDE REFLECTIVE SHEETING THAT MEETS OR EXCEEDS AASHTO M268, TYPE D.

(2) THE LENGTHS OF ALL SIGN SUPPORTS SHOWN ON THE SIGN SCHEDULE ARE APPROXIMATE AND ARE FOR ESTIMATING PURPOSES ONLY. THE LENGTHS WERE COMPUTED FROM THE CROSS-SECTIONS CONTAINED IN THE CONSTRUCTION PLANS. IN THE EVENT THE SUPPORT LENGTHS ARE 2 FEET SHORTER OR LONGER THAN SHOWN ON THE PLANS, THE ENGINEER SHALL VERIFY THE SUPPORT TYPE WITH THE TRAFFIC DESIGN DIVISION, SIGNING SECTION, TELEPHONE NO. (615)-741-0802. THE CONTRACTOR SHALL VERIFY ALL SUPPORT LENGTHS AT THE SITE PRIOR TO ORDERING MATERIAL.

(3) THE TOP OF THE SIGN FOOTINGS SHALL BE PLACED LEVEL WITH THE GROUND LINE.

(4) AFTER THE SIGN LOCATIONS HAVE BEEN STAKED, BUT PRIOR TO ORDERING ANY MATERIAL FOR THE SUPPORTS, THERE SHALL BE A FIELD INSPECTION AND APPROVAL BY THE REGIONAL OPERATIONS OFFICE.

(5) ALL SIGNS MARKED "TO BE REMOVED" ARE TO BE REMOVED BY THE CONTRACTOR AND PAID FOR UNDER ITEM NO. 713-15 AND BECOME THE PROPERTY OF THE CONTRACTOR.

(6) THE EXISTING FOOTINGS ARE TO BE REMOVED 6 INCHES BELOW GROUND LINE.

(7) THE LETTERS, DIGITS, ARROWS, BORDERS, AND ALPHABET ACCESSORIES ON ALL FLAT SHEET SIGNS SHALL BE APPLIED BY SILK SCREENING PROCESS, EXCEPT THAT CUT-OUT DIRECT APPLIED COPY SHALL BE USED ON ALL FLAT SHEET SIGNS WITH A GREEN BACKGROUND, OR BROWN BACKGROUND.

(8) THE LENGTHS OF ALL SIGN SUPPORTS SHOWN ON THE SIGN SCHEDULE ARE APPROXIMATE AND ARE FOR ESTIMATING PURPOSES ONLY. THE CONTRACTOR SHALL VERIFY ALL SUPPORT LENGTHS AT THE SITE PRIOR TO ERECTION.

(9) THE LETTERS, DIGITS, ARROWS, BORDERS, AND ALPHABET ACCESSORIES ON ALL FLAT SHEET SIGNS SHALL BE APPLIED BY SILK SCREENING PROCESS.

(10) ALL SIGNS WHICH INTERFERE WITH CONSTRUCTION WILL BE RELOCATED OUTSIDE LIMITS OF CONSTRUCTION BY THE CONTRACTOR. UPON COMPLETION OF CONSTRUCTION, THE CONTRACTOR WILL RESTORE THE SIGNS TO ORIGINAL LOCATION. THE CONTRACTOR SHALL CHECK WITH THE REGIONAL TRAFFIC ENGINEER PRIOR TO MOVING ANY PERMANENT SIGNS.

TRAFFIC CONTROL DIRECTIONAL SIGNING

(1) WHEN EXISTING "TOURIST ORIENTED DIRECTIONAL SIGNS" (TODS) ARE ON NON-ACCESS CONTROLLED CONSTRUCTION PROJECTS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR KEEPING THESE SIGNS IN FULL VIEW TO THE MOTORING PUBLIC DURING ALL PHASES OF CONSTRUCTION. ALL WORK IN MOVING THESE "TODS" AND TEMPORARY SUPPORTS ARE TO BE PAID FOR UNDER ITEM NO. 712-01 , AS DIRECTED BY THE ENGINEER. NEW SUPPORTS AND SIGN FACE FOR FINAL LOCATION WILL BE PAID FOR UNDER OTHER ITEMS OF CONSTRUCTION.

CONSTRUCTION WORK ZONE & TRAFFIC CONTROL

(1) ADVANCED WARNING SIGNS SHALL NOT BE DISPLAYED MORE THAN FORTY-EIGHT (48) HOURS BEFORE PHYSICAL CONSTRUCTION BEGINS. SIGNS MAY BE ERECTED UP TO ONE WEEK BEFORE NEEDED, IF THE SIGN FACE IS FULLY COVERED.

(2) IF THE CONTRACTOR MOVES OFF THE PROJECT, HE SHALL COVER OR REMOVE ALL UNNEEDED SIGNS AS DIRECTED BY THE ENGINEER. COSTS OF REMOVAL, COVERING, AND REINSTALLING SIGNS SHALL NOT BE MEASURED AND PAID FOR SEPARATELY, BUT ALL COSTS SHALL BE INCLUDED IN THE ORIGINAL UNIT PRICE BID FOR ITEM NO. 712-06, SIGNS (CONSTRUCTION) PER SQUARE FOOT.

(3) A LONG TERM BUT SPORADIC USE WARNING SIGN, SUCH AS A FLAGGER SIGN, MAY REMAIN IN PLACE WHEN NOT REQUIRED PROVIDED THE SIGN FACE IS FULLY COVERED.

(4) TRAFFIC CONTROL DEVICES SHALL NOT BE DISPLAYED OR ERECTED UNLESS RELATED CONDITIONS ARE PRESENT NECESSITATING WARNING.

(5) USE OF BARRICADES, PORTABLE BARRIER RAILS, AND DRUMS SHALL BE LIMITED TO THE IMMEDIATE AREAS OF CONSTRUCTION WHERE A HAZARD IS PRESENT. THESE DEVICES SHALL NOT BE STORED ALONG THE ROADWAY WITHIN THIRTY (30) FEET OF THE EDGE OF THE TRAVELED WAY BEFORE OR AFTER USE UNLESS PROTECTED BY GUARDRAIL, BRIDGE RAIL, AND/OR BARRIERS INSTALLED FOR OTHER PURPOSES FOR ROADWAYS WITH CURRENT ADT'S LESS THAN 1500 AND DESIGN SPEED OF LESS THAN 60 MPH. THIS DISTANCE SHALL INCREASE TO FORTY-FIVE (45) FEET FOR ROADWAYS WITH CURRENT ADT'S OF 1500 OR GREATER AND DESIGN SPEED OF 60 MPH OR GREATER OR ON THE OUTSIDE OF A HORIZONTAL CURVE. THESE DEVICES SHALL BE REMOVED FROM THE CONSTRUCTION WORK ZONE WHEN THE ENGINEER DETERMINES THEY ARE NO LONGER NEEDED. WHERE THERE IS INSUFFICIENT RIGHT-OF-WAY TO PROVIDE FOR THIS REQUIRED SETBACK, THE CONTRACTOR SHALL DETERMINE THE ALTERNATE LOCATIONS AND REQUEST THE ENGINEER'S APPROVAL TO USE THEM.

(6) THE CONTRACTOR SHALL NOT BE PERMITTED TO PARK ANY VEHICLES OR CONSTRUCTION EQUIPMENT DURING PERIODS OF INACTIVITY, WITHIN THIRTY (30) FEET OF THE EDGE OF PAVEMENT WHEN THE LANE IS OPEN TO TRAFFIC UNLESS PROTECTED BY GUARDRAIL, BRIDGE RAIL, AND/OR BARRIERS INSTALLED FOR OTHER PURPOSES FOR ROADWAYS WITH CURRENT ADT'S LESS THAN 1500 AND DESIGN SPEED OF LESS THAN 60 MPH. THIS DISTANCE SHALL BE INCREASED TO FORTY-FIVE (45) FEET FOR ROADWAYS WITH CURRENT ADT'S OF 1500 OR GREATER AND DESIGN SPEED OF 60 MPH OR GREATER OR ON THE OUTSIDE OF A HORIZONTAL CURVE. PRIVATELY OWNED VEHICLES SHALL NOT BE ALLOWED TO PARK WITHIN THIRTY (30) FEET OF AN OPEN TRAFFIC LANE AT ANY TIME UNLESS PROTECTED AS DESCRIBED ABOVE FOR ROADWAYS WITH CURRENT ADT'S LESS THAN 1500 AND DESIGN SPEED OF LESS THAN 60 MPH. THIS DISTANCE SHALL BE INCREASED TO FORTY-FIVE (45) FEET FOR ROADWAYS WITH CURRENT ADT'S OF 1500 OR GREATER AND DESIGN SPEED OF 60 MPH OR GREATER OR ON THE OUTSIDE OF A HORIZONTAL CURVE. WHERE THERE IS INSUFFICIENT RIGHT-OF-WAY TO PROVIDE FOR THIS REQUIRED SETBACK, THE CONTRACTOR SHALL DETERMINE THE ALTERNATE LOCATIONS AND REQUEST THE ENGINEER'S APPROVAL TO USE THEM.

(7) ALL DETOUR AND CONSTRUCTION SIGNING SHALL BE IN STRICT ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

(8) ALL DETOURS SHALL BE PAVED, STRIPED, SIGNED, AND FLEXIBLE DRUMS ARE TO BE IN PLACE BEFORE IT IS OPENED TO TRAFFIC.

(9) THE CONTRACTOR SHALL BE RESPONSIBLE FOR STAKING CONSTRUCTION SIGNS. THE COST OF THIS WORK SHALL BE INCLUDED IN ITEM NO. 712-06, SIGNS (CONSTRUCTION), S.F.

TYPE	YEAR	PROJECT NO.	SHEET NO.
FUNC.	2025	38S180-S2-007	NA
		38S180-M2-007	
		38S180-S2-008	
PIH	2025	38S180-S3-007	2C
		38S180-M3-007	
		38S180-S3-008	
PS&E	2026	38S180-S3-007	2C
		38S180-M3-007	
		38S180-S3-008	

SEALED BY

KIRSCHTEN T. ROBERTS
REGISTERED ENGINEER
AGRICULTURE
No. 126315
STATE OF TENNESSEE
12/09/2025

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

GENERAL NOTES

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SPECIAL NOTES

GRADING

(1) THE GRADING TABULATIONS AND RESULTING EARTHWORK ASSOCIATED BID QUANTITIES WERE PREPARED UTILIZING AVAILABLE GEOTECHNICAL INFORMATION AND/OR REPORTS PREPARED FOR THIS PROJECT. THIS INFORMATION IS PROVIDED FOR GENERAL INFORMATION AND ESTIMATION GUIDANCE ONLY.

(2) BORING DEPICTIONS SHOWN ON THE FOUNDATION DATA SHEETS, SOILS SHEETS, PLANS, AND CROSS-SECTIONS INDICATE SOIL AND ROCK CONDITIONS AT THE SPECIFIC BORING LOCATIONS. ANY SOIL PROFILE AND/OR ROCK LINE IS INTERPRETIVE BASED ON THE JUDGMENT OF THE GEOTECHNICAL ENGINEER/GEOLOGIST. THE TRANSITION BETWEEN BORINGS AND LAYERS MAY VARY SIGNIFICANTLY DEPENDING ON THE GEOLOGIC FORMATIONS ENCOUNTERED.

(3) TO ASSIST IN BID PREPARATION FOR EARTHWORK AND FOUNDATION CONSTRUCTION, DETAIL ROCK AND SOIL DESCRIPTION AND ON SOME PROJECTS, ROCK CORE SAMPLES ARE AVAILABLE FOR INSPECTION AT THE MATERIALS AND TESTS HEADQUARTERS AT 6601 CENTENNIAL BOULEVARD, NASHVILLE, TN OR AT THE TDOT REGION 1 BUILDING IN KNOXVILLE, TN.

(4) THE CONTRACTOR SHALL UTILIZE ALL INFORMATION PROVIDED IN THE PLANS, CROSS-SECTIONS AND CONTRACT DOCUMENTS INCLUDING ANY SPECIAL PROVISIONS AS WELL AS UTILIZING HIS PAST EXPERIENCE WITH PROJECTS OF SIMILAR NATURE, SCOPE AND LOCATION IN PREPARATION OF HIS BID FOR EARTHWORK ITEMS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE AND PROVIDE EQUIPMENT AND MEANS NECESSARY TO CONDUCT THE EXCAVATION ACTIVITIES IN ACCORDANCE WITH PLANS AND SPECIFICATIONS.

(5) EARTHWORK IS PAID FOR UNDER ITEM NO. 203-01, ROAD AND DRAINAGE EXCAVATION (UNCLASSIFIED). NO ADDITIONAL PAYMENT WILL BE MADE FOR EARTHWORK QUANTITIES BASED SOLELY ON A CLAIM THAT THE QUANTITIES SHOWN IN THE GRADING TABULATION OR ELSEWHERE IN THE PLANS ARE INACCURATE WITH RESPECT TO THE TYPE OF MATERIALS ENCOUNTERED DURING CONSTRUCTION EXCEPT AS PROVIDED FOR BY SECTION 104.02 IN THE CURRENT EDITION OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION OR AS AMENDED IN SUPPLEMENTAL SPECIFICATIONS.

DEMOLITION, REPAIR, OR REHABILITATION OF BRIDGES

(1) THE CONTRACTOR SHALL VERIFY THAT AN ASBESTOS SURVEY HAS BEEN COMPLETED PRIOR TO ANY DEMOLITION, REPAIR OR REHABILITATIONS ACTIVITIES (NOT INCLUDING ASPHALT MILLING OR OVERLAY).

(2) ASBESTOS-CONTAINING MATERIALS (ACM) ABATEMENT IS THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE COMPLETED PRIOR TO ANY DEMOLITION, REPAIR OR REHABILITATION OF BRIDGE(S). ABATEMENT SHOULD BE ACCOMPLISHED PER SP202ACM SPECIAL PROVISION REGARDING REMOVAL OF ASBESTOS-CONTAINING MATERIALS. STATE OF TENNESSEE ASBESTOS ACCREDITATION REQUIREMENTS (TCA 1200-01-20) MANDATE THAT ACM ABATEMENT WORK BE PERFORMED BY AN ACCREDITED FIRM (CONTRACTOR) USING ACCREDITED ABATEMENT WORKERS AND SUPERVISORS.

(3) THE CONTRACTOR SHALL BE RESPONSIBLE FOR SUBMITTING A NOTICE TO THE TDEC, DIVISION OF AIR POLLUTION CONTROL TEN (10) DAYS IN ADVANCE OF ANY ACM ABATEMENT, DEMOLITION, OR MAJOR REPAIR INVOLVING THE REMOVAL/REPLACEMENT OF A STRUCTURAL COMPONENT.

TYPE	YEAR	PROJECT NO.	SHEET NO.
FUNC.	2025	38S180-S2-007	NA
		38S180-M2-007	
		38S180-S2-008	
PIH	2025	38S180-S3-007	2D
		38S180-M3-007	
		38S180-S3-008	
PS&E	2026	38S180-S3-007	2D
		38S180-M3-007	
		38S180-S3-008	

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COORDINATES ARE NAD 83(2011), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00006 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988 WITH GEOID 2018.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

SPECIAL NOTES

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ENVIRONMENTAL NOTES

ENVIRONMENTAL GENERAL NOTES

NATURAL RESOURCES

(1) SOIL MATERIALS MUST BE PREVENTED FROM ENTERING WATERS OF THE STATE/U.S. EPSC MEASURES TO PROTECT NATURAL RESOURCES AND WATER QUALITY SHALL BE MAINTAINED THROUGHOUT THE CONSTRUCTION PERIOD. APPROPRIATE EPSC MEASURES MUST BE INSTALLED ALONG THE BASE OF ALL FILLS AND CUTS, ON THE DOWNHILL SIDE OF STOCKPILED SOIL, AND ALONG NATURAL RESOURCES IN CLEARED AREAS TO PREVENT SEDIMENT MIGRATION INTO STREAMS, WETLANDS OR OTHER NATURAL FEATURES IN ACCORDANCE WITH TDOT STANDARDS. EPSC MEASURES SHALL BE INSTALLED ON THE CONTOUR, ENTRENCHED AND STAKED, AND EXTEND THE WIDTH OF THE AREA TO BE CLEARED.

(2) NEW CHANNEL CONSTRUCTION SHALL BE COMPLETED IN THE DRY AND STABILIZED FOR AT LEAST 72 HOURS PRIOR TO DIVERTING WATER FROM THE EXISTING AND/OR TEMPORARY CHANNEL.

(3) INSTREAM EPSC DEVICES REQUIRE THE TDOT ENVIRONMENTAL DIVISION, PERMITS SECTION REVIEW AND MUST BE PROCESSED BY THE PERMITS SECTION TO OBTAIN WATER QUALITY PERMITS.

(4) THE OPERATION OF EQUIPMENT IN WATERS OF THE STATE/U.S., INCLUDING WETLANDS AND EPHEMERAL, INTERMITTENT, AND PERENNIAL STREAMS, IS NOT ALLOWED.

(5) THE WIDTH OF THE FILL ASSOCIATED WITH TEMPORARY CROSSINGS SHALL BE LIMITED TO THE MINIMUM NECESSARY FOR THE ACTUAL CROSSING, NOT TO EXCEED THE WIDTH SPECIFIED IN THE STANDARD DRAWING.

(6) STREAM BEDS SHALL NOT BE USED AS TRANSPORTATION ROUTES FOR CONSTRUCTION EQUIPMENT. TEMPORARY CULVERT CROSSINGS SHALL BE LIMITED TO ONE POINT PER STREAM AND EPSC MEASURES SHALL BE USED WHERE THE STREAM BANKS ARE DISTURBED. WHERE THE STREAMBED IS NOT COMPOSED OF BEDROCK, A PAD OF CLEAN ROCK SHALL BE USED AT THE CROSSING POINT AND CULVERTED TO PREVENT THE IMPOUNDMENT OF WATER FLOW. CLEAN ROCK IS ROCK OF VARIOUS TYPE AND SIZE, DEPENDING UPON APPLICATION, WHICH CONTAINS NO FINES, SOILS, OR OTHER WASTES OR CONTAMINANTS. OTHER MATERIALS USED FOR ALL TEMPORARY FILLS SHALL BE COMPLETELY REMOVED IN THEIR ENTIRETY AFTER THE WORK IS COMPLETED AND THE AFFECTED AREAS RETURNED TO PREEXISTING ELEVATIONS. ALL TEMPORARY CROSSINGS SHALL BE CONSTRUCTED IN ACCORDANCE WITH STD. DWG. EC-STR-25 UNLESS SPECIFICALLY ADDRESSED IN THE EPSC PLANS. ALTERNATIVELY, PLACING A TEMPORARY BRIDGE (E.G. BAILEY BRIDGE OR EQUIVALENT, TIMBERS, ETC.) FROM TOP OF BANK TO TOP OF BANK OR THE APPROPRIATE USE OF BARGES AT THE CROSSING TO AVOID DISTURBANCE OF THE STREAMBED IS AN ACCEPTABLE OPTION.

(7) HEAVY EQUIPMENT WORKING IN WETLANDS WITH PERMITTED TEMPORARY IMPACTS SHALL BE PLACED ON MATS, OR OTHER MEASURES MUST BE TAKEN TO MINIMIZE SOIL DISTURBANCE AND COMPACTION UNLESS SPECIFICALLY ADDRESSED IN THE CONSTRUCTION PLANS. ANY MATS AND OTHER MEASURES USED FOR HEAVY EQUIPMENT SHALL BE REMOVED IN THEIR ENTIRETY AFTER THE WORK IS COMPLETED. ALL AFFECTED AREAS SHOULD BE RETURNED TO PRE-EXISTING CONDITIONS.

(8) WETLANDS SHALL NOT BE USED AS EQUIPMENT STORAGE, STAGING, OR TRANSPORTATION AREAS, UNLESS SPECIFICALLY PROVIDED FOR IN THE CONSTRUCTION PLANS AND PERMITS.

(9) THE CONTRACTOR SHALL TAKE APPROPRIATE STEPS PRIOR TO ANY CONSTRUCTION AND MAINTENANCE ACTIVITIES TO ENSURE THAT ENVIRONMENTAL FEATURES (E.G., STREAMS, WETLANDS, SPRINGS, ETC.) ARE NOT IMPACTED BEYOND PERMITTED LOCATIONS. IF THE CONTRACTOR OR TDOT INSPECTOR IS UNSURE OF THE IDENTITY OF AN ENVIRONMENTAL FEATURE, THE INSPECTOR SHALL CONTACT THE TDOT REGION ENVIRONMENTAL TECH GROUP IMMEDIATELY.

SPECIES

(10) NO ACTIVITY MAY SUBSTANTIALLY DISRUPT THE MOVEMENT OF THOSE SPECIES OF AQUATIC LIFE INDIGENOUS TO THE WATER BODY, INCLUDING THOSE SPECIES THAT NORMALLY MIGRATE THROUGH THE AREA.

(11) SHOULD CLIFF SWALLOW OR BARN SWALLOW NESTS, EGGS, OR BIRDS (YOUNG AND ADULTS) BE PRESENT, THE CONTRACTOR SHALL CONTACT THE REGIONAL ECOLOGY OFFICE TO DETERMINE IF SEASONAL RESTRICTIONS WILL BE NECESSARY. GENERALLY, BIRDS, NESTS, AND EGGS MAY NOT BE DISTURBED BETWEEN APRIL 15 AND JULY 31. FROM AUGUST 1 TO APRIL 14, NESTS CAN BE REMOVED OR DESTROYED SO LONG AS BIRDS OR EGGS ARE NOT PRESENT, AND MEASURES IMPLEMENTED TO PREVENT FUTURE NEST BUILDING AT THE SITE (I.E., CLOSING OFF AREA USING NETTING).

PERMITS, PLANS & RECORDS

(12) THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR AND OBTAIN ANY NECESSARY ENVIRONMENTAL PERMITS OR APPROVALS, INCLUDING BUT NOT LIMITED TO ARCHAEOLOGY, ECOLOGY, HISTORICAL, HAZARDOUS MATERIALS, AIR AND NOISE, TDEC ARAP/401, USACE SECTION 404, TVA SECTION 26A, AND TDEC NPDES PERMITS, FROM FEDERAL, STATE AND/OR LOCAL AGENCIES REGARDING ANY MATERIAL AND STAGING AREAS AND THE OPERATION OF ANY PROJECT-DEDICATED ASPHALT AND/OR CONCRETE PLANTS TO BE USED. ANY SUCH PERMITS SHALL BE SUPPLIED TO THE TDOT PROJECT RESPONSIBLE PARTY PRIOR TO THE USE OF THE PERMITTED AREA(S).

(13) ANY DISAGREEMENT BETWEEN THE CONSTRUCTION PLANS, THE PROJECT AS CONSTRUCTED, AND THE PERMIT(S) ISSUED FOR THE PROJECT, SHALL BE BROUGHT TO THE ATTENTION OF THE TDOT PROJECT RESPONSIBLE PARTY. THE ENVIRONMENTAL DIVISION, DESIGN DIVISION, AND HEADQUARTERS CONSTRUCTION OFFICE SHALL BE CONTACTED IN THESE INSTANCES AND DECIDE WHICH HAS PRECEDENCE AND WHETHER PERMIT OR PLANS REVISIONS ARE NEEDED. IN GENERAL, PERMIT CONDITIONS WILL PREVAIL.

(14) IF A CHANGE IN PROJECT SCOPE OCCURS DURING CONSTRUCTION, INCLUDING VALUE ENGINEERING, THE TDOT PERMIT SECTION SHALL BE CONTACTED TO DETERMINE WHETHER PERMIT REVISIONS ARE NEEDED. THE ROADWAY DESIGN DIVISION SHALL BE CONTACTED TO DETERMINE IF ANY PLAN REVISIONS ARE NEEDED.

(15) THE CONTRACTOR SHALL REVIEW ALL EXISTING PERMITS TO ENSURE THAT WORK AT PERMITTED SITES DOES NOT EXCEED EXPIRATION DATE. IF WORK IS GOING TO BE CONTINUED AFTER EXPIRATION DATES, THE CONTRACTOR SHALL CONTACT THE TDOT PROJECT RESPONSIBLE PARTY TO COMMENCE PERMIT RENEWAL PROCESS.

(16) ALL WATER QUALITY PERMITS SHALL BE POSTED NEAR THE MAIN ENTRANCE OF THE CONSTRUCTION SITE ACCESSIBLE TO THE PUBLIC. THE NAME, COMPANY NAME, EMAIL ADDRESS, TELEPHONE NUMBER AND ADDRESS OF THE PROJECT SITE OWNER, OPERATOR, OR A LOCAL CONTACT PERSON WITH A BRIEF DESCRIPTION OF THE PROJECT SHALL ALSO BE POSTED. IF POSTING THIS INFORMATION NEAR A MAIN ENTRANCE IS INFEASIBLE, THE INFORMATION SHALL BE PLACED IN A PUBLICLY ACCESSIBLE LOCATION NEAR WHERE THE CONSTRUCTION IS ACTIVELY UNDERWAY AND MOVED AS NECESSARY. THIS LOCATION SHALL BE POSTED AT THE CONSTRUCTION SITE. ALL POSTINGS SHALL BE MAINTAINED IN LEGIBLE CONDITION.

SUPPORT ACTIVITIES

(17) MATERIALS AND STAGING AREAS SHALL NOT AFFECT ANY WATERS OF THE STATE/U.S. UNLESS THESE AREAS ARE SPECIFICALLY COVERED BY ENVIRONMENTAL PERMITS, OBTAINED SOLELY BY THE CONTRACTOR. THE CONTRACTOR SHALL REVIEW ALL EXISTING PERMITS TO ENSURE THAT WORK AT PERMITTED SITES DOES NOT EXCEED EXPIRATION DATES. IF WORK IS GOING TO BE CONTINUED AFTER EXPIRATION DATES, THE CONTRACTOR SHALL CONTACT THE TDOT PROJECT RESPONSIBLE PARTY TO COMMENCE PERMIT RENEWAL PROCESS.

ENVIRONMENTAL

(18) EXCEPT AS OTHERWISE SPECIFIED, THERE ARE NO KNOWN SPECIAL ENVIRONMENTAL FACTORS PRESENT ON THIS PROJECT THAT INDICATE A NEED FOR SEASONAL LIMITATIONS ON THE CLEARING, GRUBBING, EXCAVATION, GRADING, CUTTING OR FILLING OPERATIONS OR ON THE TOTAL AREA OF EXPOSED SOIL.

ENVIRONMENTAL SPECIAL NOTES

ENVIRONMENTAL

(1) STAFF FROM THE TDOT ENVIRONMENTAL DIVISION COMPLIANCE AND FIELD SERVICES OFFICE SHALL BE INVITED TO ALL PRE-CONSTRUCTION MEETINGS.

ECOLOGY

(2) STAFF FROM THE TDOT ENVIRONMENTAL DIVISION OR A DESIGNEE SHALL ADVISE THE CONTRACTOR DURING THE PRECONSTRUCTION MEETING WHEN ENVIRONMENTAL DIVISION PERSONNEL OR A DESIGNATED CONSULTANT WILL NEED TO BE ONSITE FOR WORK BEING DONE WHICH COULD AFFECT WATERS OF THE STATE/U.S. OR SPECIES.

(3) STAFF FROM THE TDOT ENVIRONMENTAL DIVISION OR A DESIGNEE SHALL ATTEND THE PRECONSTRUCTION MEETING FOR ALL PROJECTS WHICH HAVE THREATENED OR ENDANGERED SPECIES OR CRITICAL HABITAT PROXIMAL TO SCHEDULED WORK. THIS WILL PROVIDE THE OPPORTUNITY TO ENSURE THAT PERSONNEL INCLUDING THE CONTRACTOR'S PERSONNEL AND SUBCONTRACTORS ARE MADE AWARE OF THE NECESSARY PRECAUTIONS THAT MUST BE FOLLOWED.

(4) ALL PROJECTS WITH LEGALLY PROTECTED SPECIES OR CRITICAL HABITAT IDENTIFIED SHALL HAVE MEASURES IN PLACE TO CONTAIN CONCRETE DUST, CEMENT DUST AND ALL OTHER MATERIALS. THESE MATERIALS ARE NOT ALLOWED TO ENTER WATERS OF THE STATE/U.S.

PROJECT COMMITMENTS

(5) SEE PROJECT COMMITMENTS, SHEET 1B, FOR DETAILS RELATING TO SPECIAL ENVIRONMENTAL COMMITMENTS REQUIRED BY THIS PROJECT.

SCOPE OF WORK

(6) THIS PROJECT INCLUDES GRADE AND CONSTRUCTION OF A TWO LANE TYPICAL SECTION OF SR 180 TO LINES AND GRADES AS INDICATED ON THE ROADWAY PLANS, THE PROFILE SHEETS, AND CROSS SECTION SHEETS OR AS DIRECTED BY THE T.D.O.T. OPERATIONS ENGINEER.

(7) THIS PROJECT INCLUDES THE DEMOLITION AND REMOVAL OF EXISTING BRIDGE (#38S80510007) ON SR 180 FROM STA 105+38.50 TO STA 106+43.50 AND EXISTING BRIDGE (#38S80510009) ON SR 180 FROM STA 115+26.96 TO STA 116+21.96 AS INDICATED ON THE BRIDGE PLANS OR AS DIRECTED BY THE T.D.O.T. OPERATIONS ENGINEER.

(8) THIS PROJECT INCLUDES THE INSTALLATION OF GUARDRAIL AND RELATED TRAFFIC CONTROL APPURTENANCES AS SHOW ON THE TYPICAL SECTIONS SHEET, THE ROADWAY PLANS AND THE CORSS SECTION SHEETS OR AS DIRECTED BY THE T.D.O.T. OPERATIONS ENGINEER.

(9) THIS PROJECT INCLUDES THE APPLICATION OF EROSION PREVENTATION AND SEDIMENT CONTROL DEVICES, PAVEMENT MARKINGS, INSTALLATION OF TRAFFIC CONTROL DEVICES AND OTHER DESIGN FEATURES AS INDICATED ON THE ROADWAY PLANS OR AS DIRECTED BY THE T.D.O.T. OPERATIONS ENGINEER.

EROSION PREVENTION AND SEDIMENT CONTROL SPECIAL NOTES

STREAMS, WETLANDS & BUFFER ZONES

(1) FOR PROJECTS THAT DISCHARGE INTO KNOWN EXCEPTIONAL TENNESSEE WATERS OR WATERS IMPAIRED BY SILTATION, A 60 FOOT NATURAL RIPARIAN BUFFER ZONE ADJACENT TO AND ON BOTH SIDES OF THE RECEIVING STREAM WITH THIS DESIGNATION SHALL BE PRESERVED TO THE MAXIMUM EXTENT PRACTICABLE DURING CONSTRUCTION ACTIVITIES AT THE SITE. THE 60 FOOT CRITERION FOR THE WIDTH OF THE BUFFER ZONE CAN BE ESTABLISHED ON AN AVERAGE WIDTH BASIS AT A PROJECT, AS LONG AS THE MINIMUM WIDTH OF THE BUFFER ZONE IS MORE THAN 30 FEET AT ANY MEASURED LOCATION.

(2) A 30 FOOT NATURAL RIPARIAN BUFFER ZONE ADJACENT TO AND ON BOTH SIDES OF THE RECEIVING STREAM SHALL BE PRESERVED TO THE MAXIMUM EXTENT PRACTICABLE DURING CONSTRUCTION ACTIVITIES AT THE SITE. THE 30 FOOT CRITERION FOR THE WIDTH OF THE BUFFER ZONE CAN BE ESTABLISHED ON AN AVERAGE WIDTH BASIS AT A PROJECT, AS LONG AS THE MINIMUM WIDTH OF THE BUFFER ZONE IS MORE THAN 15 FEET AT ANY MEASURED LOCATION. EVERY ATTEMPT SHALL BE MADE FOR CONSTRUCTION ACTIVITIES NOT TO TAKE PLACE WITHIN THE BUFFER ZONES.

(3) BUFFER ZONES ARE NOT SEDIMENT CONTROL MEASURES AND MUST NOT BE RELIED UPON AS PRIMARY SEDIMENT CONTROL MEASURES. THE RIPARIAN BUFFER ZONE SHALL BE ESTABLISHED BETWEEN THE TOP OF THE STREAM BANK AND THE DISTURBED CONSTRUCTION AREA. EVERY ATTEMPT SHALL BE MADE FOR CONSTRUCTION ACTIVITIES NOT TO TAKE PLACE WITHIN THE BUFFER ZONES. BEST MANAGEMENT PRACTICES (BMPS) PROVIDING EQUIVALENT PROTECTION AS THE NATURAL RIPARIAN ZONE MAY BE USED. WHERE ISSUED, ARAP/401 REQUIREMENTS WILL PREVAIL IF IN CONFLICT WITH THESE BUFFER ZONE REQUIREMENTS.

TYPE	YEAR	PROJECT NO.	SHEET NO.
FUNC.	2025	38S180-S2-007	2E
		38S180-M2-007	
		38S180-S2-008	
PIH	2025	38S180-S3-007	2E
		38S180-M3-007	
		38S180-S3-008	
PS&E	2026	38S180-S3-007	2E
		38S180-M3-007	
		38S180-S3-008	

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ENVIRONMENTAL NOTES

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TYPE	YEAR	PROJECT NO.	SHEET NO.
FUNC.	2025	38S180-S2-007	2F
		38S180-M2-007	
		38S180-S2-008	
PIH	2025	38S180-S3-007	2F
		38S180-M3-007	
		38S180-S3-008	
PS&E	2026	38S180-S3-007	2F
		38S180-M3-007	
		38S180-S3-008	

PAVEMENT QUANTITIES

LOCATION	PAY ITEMS							
	303-01 GR D STONE (TON)	307-01.01 GR A PG64-22 (TON)	307-01.08 GR B-M2 PG64-22 (TON)	402-01 PRIME COAT (TON)	402-02 PRIME COVER (TON)	403-01 TACK COAT (TON)	411-01.10 GR D (PG64-22) (TON)	415-01.02 COLD PLAIN. PAVEMENT (S.Y.)
S.R. 180 (38S180-S2-008)	672	367	240	4.0	13.0	2.0	163	341
S.R. 180 (38S180-S2-007)	666	375	246	4.0	13.0	2.0	148	68
DRIVEWAYS (38S180-S2-007)	112		56				33	
TOTALS	**1450**	**742**	**542**	**8**	**26**	**4**	**344**	**409**

EARTHWORK BALANCE

LOCATION:	EXCAVATION				EXC. AVAILIBLE FOR EMB.	EMBANKMENT	BAL (C.Y.)
	EXC. COMMON (C.Y)	EXC. TOPSOIL (C.Y.)	PAVEMENT REMOVAL (C.Y.)	EXC. UNCLASSIFIED (C.Y.)		EMB. (C.Y.)	
	A	B	C	D=A+B+C	E =A*(1-15%)	F	G=E-F
S.R. 180 (38S180-S2-008)	441	247	548	1,236	374	1,507	(1,132)
		-	-	-	-	-	-
TOTALS	**441**	**247**	**548**	**1,236**	**374**	**1,507**	**(1,132)**

ESTIMATED QUANTITIES		
	TOTALS	UNITS
EXCAVATION UNCLASSIFIED = (D)	1,236	CY
BORROW = G*(1+15%)	1,303	CY

EARTHWORK BALANCE

LOCATION:	EXCAVATION				EXC. AVAILIBLE FOR EMB.	EMBANKMENT	BAL (C.Y.)
	EXC. COMMON (C.Y)	EXC. TOPSOIL (C.Y.)	PAVEMENT REMOVAL (C.Y.)	EXC. UNCLASSIFIED (C.Y.)		EMB. (C.Y.)	
	A	B	C	D=A+B+C	E =A*(1-15%)	F	G=E-F
S.R. 180 (38S180-S2-007)	77	328	548	953	65	3,718	(3,653)
		-	-	-	-	-	-
TOTALS	**77**	**328**	**548**	**953**	**65**	**3,718**	**(3,653)**

ESTIMATED QUANTITIES		
	TOTALS	UNITS
EXCAVATION UNCLASSIFIED = (D)	953	CY
BORROW = G*(1+15%)	4,201	CY

PROPOSED GUARDRAIL

SHEET NO.	LOCATION	SIDE		STATION		38S180-S2-008			38S180-S2-007			REMARKS
						GUARDRAIL	TERMINAL ANCHORS		GUARDRAIL	TERMINAL ANCHORS		
		LT	RT	FROM	TO	SINGLE TYPE 2 705-06.01 (L.F)	TYPE 38 705-06.20 (EACH)	THRIE BEAM AGT (LONG SPAN) TL3 705-06.28) (EACH)	SINGLE TYPE 2 705-06.01 (L.F)	TYPE 38 705-06.20 (EACH)	THRIE BEAM AGT (LONG SPAN) TL3 705-06.28) (EACH)	
4B	SR 180		X	104+01.57	105+46.18	75.00	1	1	-	-	-	
4B	SR 180	X		104+47.18	105+29.29	12.50	1	1	-	-	-	
4B	SR 180	X		106+35.82	107+80.43	75.00	1	1	-	-	-	
4B	SR 180		X	106+52.71	107+34.82	12.50	1	1	-	-	-	
5B	SR 180		X	113+64.73	115+09.34	-	-	-	75.00	1	1	
5B	SR 180	X		114+10.35	114+92.45	-	-	-	12.50	1	1	
5B	SR 180	X		116+38.99	117+83.60	-	-	-	75.00	1	1	
5B	SR 180		X	116+55.88	117+37.99	-	-	-	12.50	1	1	
TOTALS						**175**	**4**	**4**	**175**	**4**	**4**	

R.O.W. MARKERS

SHEET NO.	QUANTITIES			
	"A"	"B"	"C"	TOTALS
4A	1	6	5	12
5A		4	4	8
TOTALS	1	10	9	20

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TABULATED QUANTITIES

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RIGHT-OF-WAY

(3) EXISTING PAVED DRIVEWAY PER TRACT REMAINDER WILL BE REPLACED IN KIND TO A TOUCHDOWN POINT.

(4) WHERE THE EXISTING DRIVEWAY IS UNPAVED AND THE PROPOSED DRIVEWAY EXCEEDS 7 PERCENT IN GRADE, EACH DRIVEWAY WILL BE PAVED TO A TOUCHDOWN POINT OR UNTIL THE GRADE IS LESS THAN 7 PERCENT.

(5) WHERE THE EXISTING DRIVEWAY IS UNPAVED AND THE PROPOSED DRIVEWAY IS LESS THAN 7 PERCENT IN GRADE, EACH DRIVEWAY WILL BE PAVED A SHOULDER WIDTH FROM THE EDGE OF PAVEMENT AND THE REMAINDER OF THAT DRIVEWAY REPLACED IN KIND TO A TOUCHDOWN POINT.

(6) ANY NECESSARY PAVING OF DRIVEWAYS WILL BE DONE DURING PAVING OPERATIONS ON THE MAIN ROADWAY.

(7) TRACT REMAINDERS NOT HAVING AN EXISTING DRIVEWAY WILL BE PROVIDED ONE 50-FOOT OPENING IN THE ACCESS CONTROL FENCE AND A DRIVEWAY WILL BE CONSTRUCTED UNLESS ACCESS IS PROVIDED FROM AN INTERSECTING ROAD OR BASED ON PHYSICAL CONDITIONS AND/OR CONFLICTS WITH OTHER DESIGN CONSIDERATIONS WHICH PREVENT AN ACCESS OPENING. PAVING OF THESE NEW DRIVEWAYS WILL BE IN ACCORDANCE TO THE 7 PERCENT CRITERIA PREVIOUSLY MENTIONED FOR EXISTING DRIVEWAYS.

(9) ON PROJECTS WITHOUT CURB AND GUTTER THAT ARE ON STATE ROUTES, IT WILL BE THE RESPONSIBILITY OF THE OWNER TO SECURE A PERMIT AND TO CONSTRUCT ADDITIONAL DRIVEWAYS AND FIELD ENTRANCES OTHER THAN THOSE PROVIDED IN THE PLANS.

UTILITY

(1) THE LOCATIONS OF UTILITIES SHOWN WITHIN THESE PLANS ARE APPROXIMATE ONLY. THE SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES. ABOVE GRADE AND UNDERGROUND UTILITIES SHOWN WERE TAKEN FROM VISIBLE APPURTENANCES AT THE SITE, PUBLIC RECORDS, AND/OR MAPS PREPARED BY OTHERS. THEREFORE, RELIANCE UPON THE TYPE, SIZE, AND LOCATION OF UTILITIES SHOWN SHOULD BE DONE SO WITH THIS CIRCUMSTANCE CONSIDERED. DETAILED VERIFICATION OF EXISTENCE, LOCATION, AND DEPTH SHOULD ALSO BE MADE PRIOR TO ANY DECISION RELATIVE THERETO IS MADE. AVAILABILITY AND COST OF SERVICE SHOULD BE CONFIRMED WITH THE APPROPRIATE UTILITY COMPANY. IN TENNESSEE, IT IS A REQUIREMENT, PER "THE UNDERGROUND UTILITY DAMAGE PREVENTION ACT", THAT ANYONE WHO ENGAGES IN EXCAVATION MUST NOTIFY ALL KNOWN UNDERGROUND UTILITY OWNERS, NO LESS THAN THREE (3) OR NOT MORE THAN TEN (10) WORKING DAYS PRIOR TO THE DATE OF THEIR INTENT TO EXCAVATE AND ALSO TO AVOID ANY POSSIBLE HAZARD OR CONFLICT. NOTIFICATION BY CALLING THE TENNESSEE ONE CALL SYSTEM, INC., AT 1-800-351-1111 AS REQUIRED BY TCA 65-31-106 WILL BE REQUIRED.

(2) UNLESS OTHERWISE NOTED, ALL UTILITY ADJUSTMENTS WILL BE PERFORMED BY THE UTILITY OR ITS REPRESENTATIVE. THE CONTRACTOR AND UTILITY OWNERS WILL BE REQUIRED TO COOPERATE WITH EACH OTHER IN ORDER TO EXPEDITE THE WORK REQUIRED BY THIS CONTRACT. ON CONTRACTS WHERE CONSTRUCTION STAKES, LINES, AND GRADES ARE CONTRACT ITEMS, THE CONTRACTOR WILL BE REQUIRED TO PROVIDE RIGHT-OF-WAY OR SLOPE STAKES, DITCH OR STREAM BED GRADES, OR OTHER ESSENTIAL SURVEY STAKING TO PREVENT CONFLICTS WITH THE HIGHWAY CONSTRUCTION. FREQUENTLY, THIS WILL BE REQUIRED AS THE FIRST ITEM OF WORK AND AT ANY LOCATION ON THE PROJECT DIRECTED BY THE ENGINEER.

(3) THE CONTRACTOR WILL PROVIDE ALL NECESSARY PROTECTIVE MEASURES TO SAFEGUARD EXISTING UTILITIES FROM DAMAGE DURING CONSTRUCTION OF THIS PROJECT. IN THE EVENT THAT SPECIAL EQUIPMENT IS REQUIRED TO WORK OVER AND AROUND THE UTILITIES, THE CONTRACTOR WILL BE REQUIRED TO FURNISH SUCH EQUIPMENT. THE COST OF PROTECTING UTILITIES FROM DAMAGE AND FURNISHING SPECIAL EQUIPMENT WILL BE INCLUDED IN THE PRICE BID FOR OTHER ITEMS OF CONSTRUCTION.

(4) PRIOR TO SUBMITTING HIS BID, THE CONTRACTOR WILL BE SOLELY RESPONSIBLE FOR CONTACTING OWNERS OF ALL AFFECTED UTILITIES IN ORDER TO DETERMINE THE EXTENT TO WHICH UTILITY RELOCATIONS AND/OR ADJUSTMENTS WILL HAVE UPON THE SCHEDULE OF WORK FOR THE PROJECT. WHILE SOME WORK MAY BE REQUIRED 'AROUND' UTILITY FACILITIES THAT WILL REMAIN IN PLACE, OTHER UTILITY FACILITIES MAY NEED TO BE ADJUSTED CONCURRENTLY WITH THE CONTRACTOR'S OPERATIONS. ADVANCE CLEAR CUTTING MAY BE REQUIRED BY THE ENGINEER AT ANY LOCATION WHERE CLEARING IS CALLED FOR IN THE SPECIFICATIONS AND CLEAR CUTTING IS NECESSARY FOR A UTILITY RELOCATION. ANY ADDITIONAL COST WILL BE INCLUDED IN THE UNIT PRICE BID FOR THE CLEARING ITEM SPECIFIED IN THE PLANS.

(5) THE CONTRACTOR SHALL NOTIFY EACH INDIVIDUAL UTILITY OWNER OF HIS PLAN OF OPERATION IN THE AREA OF THE UTILITIES. PRIOR TO COMMENCING WORK, THE CONTRACTOR SHALL CONTACT THE UTILITY OWNERS AND REQUEST THEM TO PROPERLY LOCATE THEIR RESPECTIVE UTILITY ON THE GROUND. THIS NOTIFICATION SHALL BE GIVEN AT LEAST THREE (3) BUSINESS DAYS PRIOR TO COMMENCEMENT OF OPERATIONS AROUND THE UTILITY IN ACCORDANCE WITH TCA 65-31-106. NOTIFICATION BY CALLING THE TENNESSEE ONE CALL SYSTEM, INC AT 1-800-351-1111 WILL BE REQUIRED.

UTILITY OWNERS

WATER:
CITY OF HALLS
208 N. CHURCH ST.
HALLS, TN 38040
CONTACT: ALAN CHERRY
OFFICE PHONE: 731 836 9653
CELL PHONE: 731 225 9786
Email: TOHPWAC@LCTN.COM

GAS:
BROWNSVILLE ENERGY AUTHORITY
P.O. BOX 424.
BROWNSVILLE, TN 38012
CONTACT: RUSS STOOTS
OFFICE PHONE: 731 772 8845
CELL PHONE: ___ ___ ____
Email: RSTOOTS@BUDUTIL.COM

TELEPHONE & FIBER:
AT&T DISTRIBUTION
315 E. COLLEGE ST.
JACKSON, TN 38301
CONTACT: DANIEL R. POTTS
OFFICE PHONE: 901 488 2359
CELL PHONE: ___ ___ ____
Email: DP7607@ATT.COM

ELECTRIC:
FORKED DEER ELECTRIC
1135 N. CHURCH ST.
HALLS, TN 38040
CONTACT: JEFF NEWMAN
OFFICE PHONE: 731 836 7508
CELL PHONE: ___ ___ ____
Email: JEFF@FORKEDDEER.COM

TYPE	YEAR	PROJECT NO.	SHEET NO.
FUNC.	2025	38S180-S2-007	3
		38S180-M2-007	
		38S180-S2-008	
PIH	2025	38S180-S3-007	3
		38S180-M3-007	
		38S180-S3-008	
PS&E	2026	38S180-S3-007	3
		38S180-M3-007	
		38S180-S3-008	

SEALED BY

KIRSCHTEN T. ROBERTS
REGISTERED ENGINEER
AGRICULTURE COMMERCE
STATE OF TENNESSEE
12/09/2025

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

RIGHT-OF-WAY
NOTES,
UTILITY NOTES
AND
UTILITY OWNERS

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TYPE	YEAR	PROJECT NO.	SHEET NO.
FUNC.	2025	38S180-S2-007	3A
		38S180-M2-007	
		38S180-S2-008	
PIH	2025	38S180-S3-007	3A
		38S180-M3-007	
		38S180-S3-008	
PS&E	2026	38S180-S3-007	3A
		38S180-M3-007	
		38S180-S3-008	

REV. 09-10-2025
REVISED TRACT 3 LEFT, RIGHT AND TOTAL AREAS.

R.O.W. ACQUISITION TABLE

TRACT NO.	PROPERTY OWNERS	COUNTY RECORDS				TOTAL AREA (ACRES)			AREA TO BE ACQUIRED (ACRES)			AREA REMAINING (ACRES)		EASEMENT (ACRES)				
		TAX MAP NO.	PARCEL NO.	DEED DOCUMENT REFERENCE		LEFT	RIGHT	TOTAL	LEFT	RIGHT	TOTAL	LEFT	RIGHT	PERM DRAINAGE	SLOPE	CONST	AIR RIGHTS	PERM RAILROAD
				BOOK	PAGE													
1	HRJR FARMS, LLC	013	007.00	247	282	129.860		129.860	0.232		0.232	129.628						
~~2~~	~~PATRICIA ARCHIE AND HUSBAND, DAVID JAMES ARCHIE~~	~~014~~	~~001.02~~	~~156~~	~~608~~		~~9.978~~	~~9.978~~					~~9.978~~					
3	FREDDIE L. JEFFRIES REVOCABLE TRUST DATED SEPTEMBER 11, 2013	011	037.00	212	577	5.500	50.000	55.500	0.284	0.576	0.860	5.216	49.424			0.115		
4	SUNNY SOUTH LAND COMPANY	011	036.01	128	234	19.406		19.406	3402 S.F.		3402 S.F.	19.328						
5	JOHN C. EMERSON AND WIFE, BOBBIE C. EMERSON	011	020.00	112	151	159.816		159.816	0.244		0.244	159.572				2265 S.F.		
6	JACKSON B. WILLIAMS	011	032.00	62	403		84.230	84.230		0.141	0.141		84.089			3110 S.F.		
ACQUISITION TOTALS (ACRES)									1.555							0.239		

DISTURBED AREA

IN BETWEEN SLOPE LINES	2.150	(AC)
15 FOOT WIDE STRIP (OUT SIDE SLOPE LINES)	1.500	(AC)
TOTAL DISTURBED AREA	3.650	(AC)
TOTAL PROJECT AREA	4.300	(AC)

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KIRSCHTEN T. ROBERTS
REGISTERED ENGINEER
AGRICULTURE
COMMERCE
No. 125515
STATE OF TENNESSEE
12/09/2025

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

RIGHT-OF-WAY
ACQUISITION
TABLE

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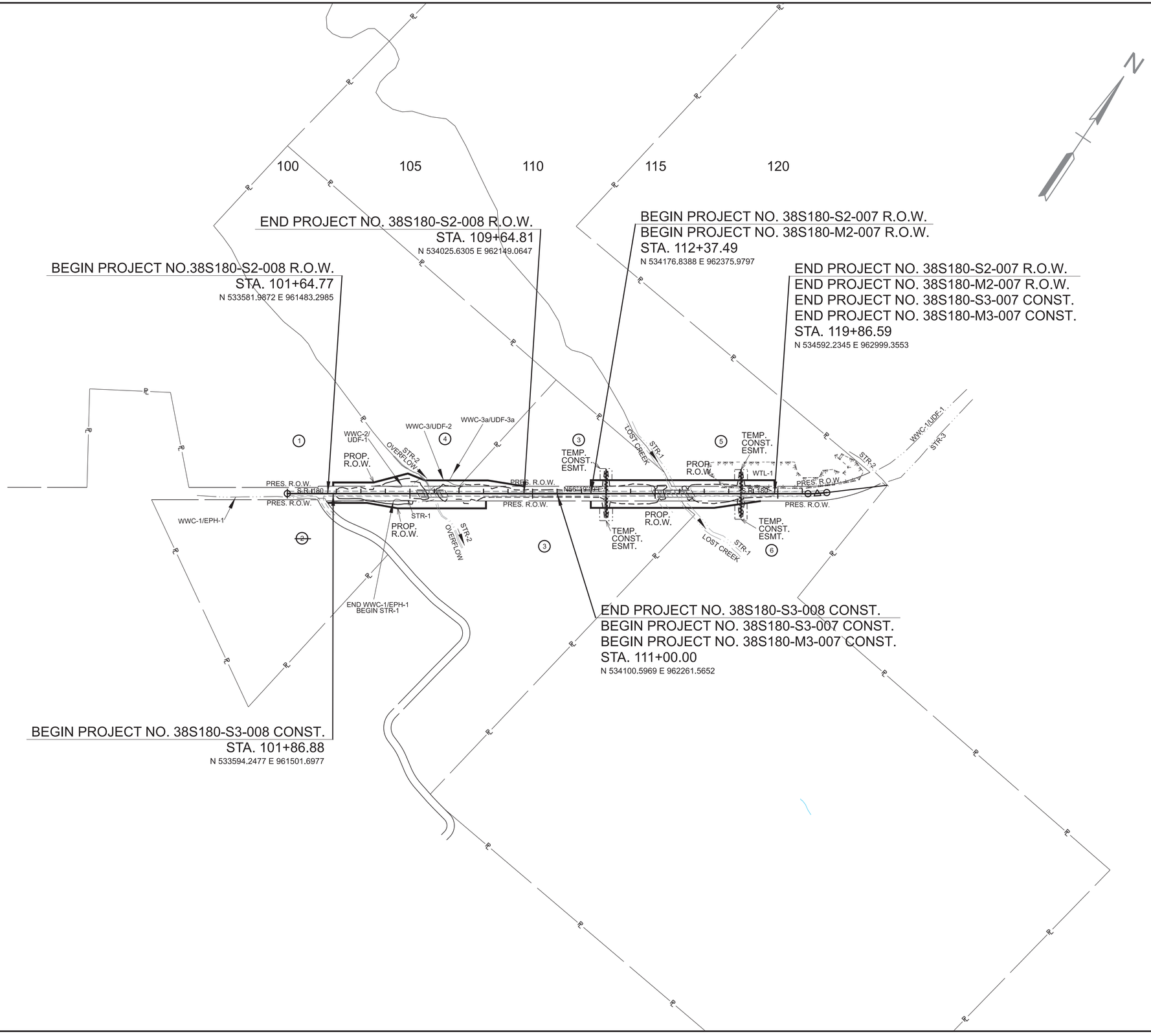
TYPE	YEAR	PROJECT NO.	SHEET NO.
FUNC.	2025	38S180-S2-007	3B
		38S180-M2-007	
		38S180-S2-008	
PIH	2025	38S180-S3-007	3B
		38S180-M3-007	
		38S180-S3-008	
PS&E	2026	38S180-S3-007	3B
		38S180-M3-007	
		38S180-S3-008	



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COORDINATES ARE NAD 83(2011), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00006 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988 WITH GEOID 2018.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PROPERTY MAP

STA. 100+00.00 TO STA. 122+00.00
SCALE: 1" = 200'

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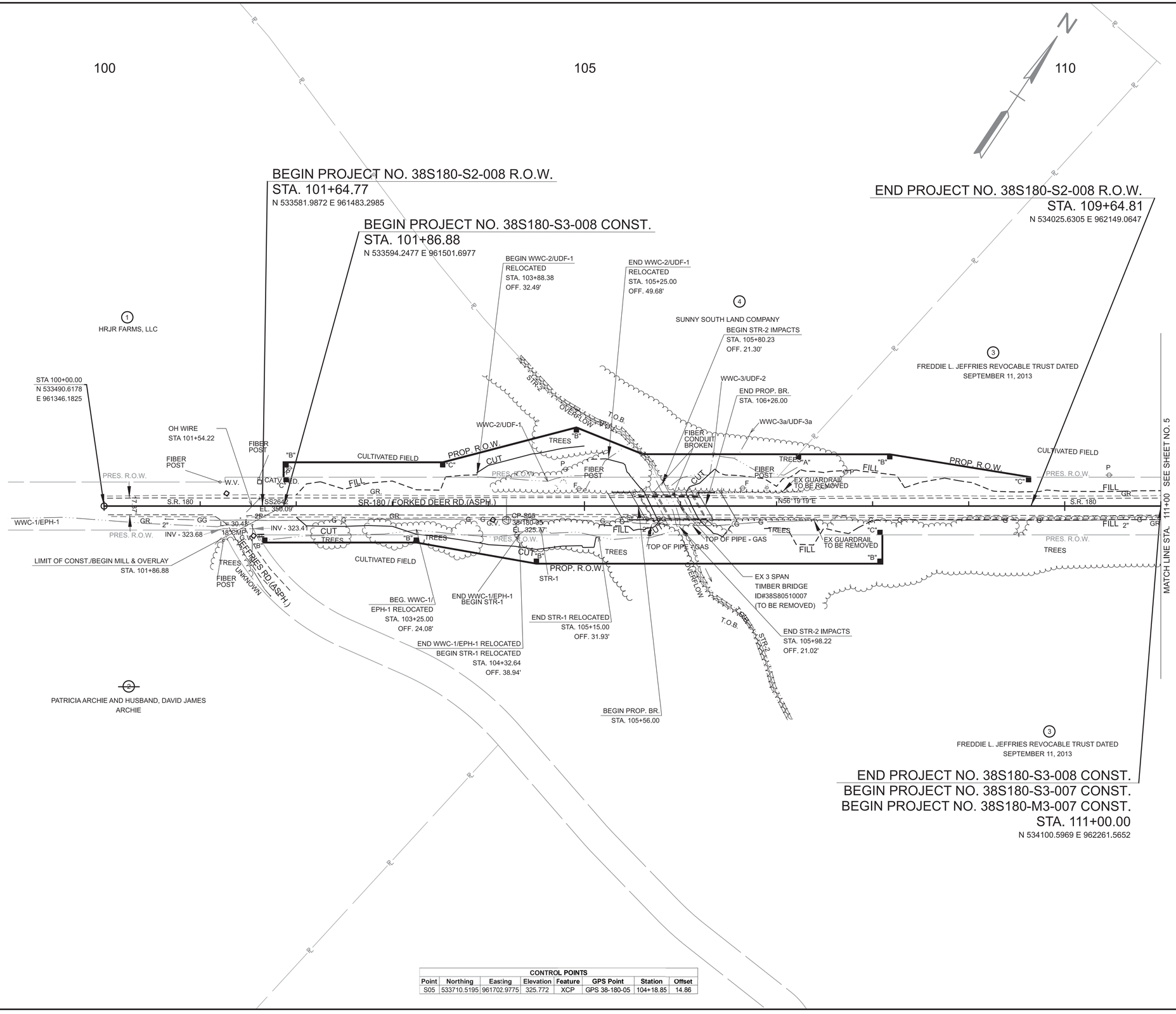
TYPE	YEAR	PROJECT NO.	SHEET NO.
FUNC.	2025	38S180-S2-007	4
		38S180-M2-007	
		38S180-S2-008	
PIH	2025	38S180-S3-007	4
		38S180-M3-007	
		38S180-S3-008	
PS&E	2026	38S180-S3-007	4
		38S180-M3-007	
		38S180-S3-008	



CONTROL POINTS							
Point	Northing	Easting	Elevation	Feature	GPS Point	Station	Offset
S05	533710.5195	961702.9775	325.772	XCP	GPS 38-180-05	104+18.85	14.86

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KIRSCHTEN T. ROBERTS
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AGRICULTURE
No. 126315
STATE OF TENNESSEE
12/09/2025

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PRESENT LAYOUT

STA. 100+00.00 TO STA. 111+00.00
SCALE: 1" = 50'

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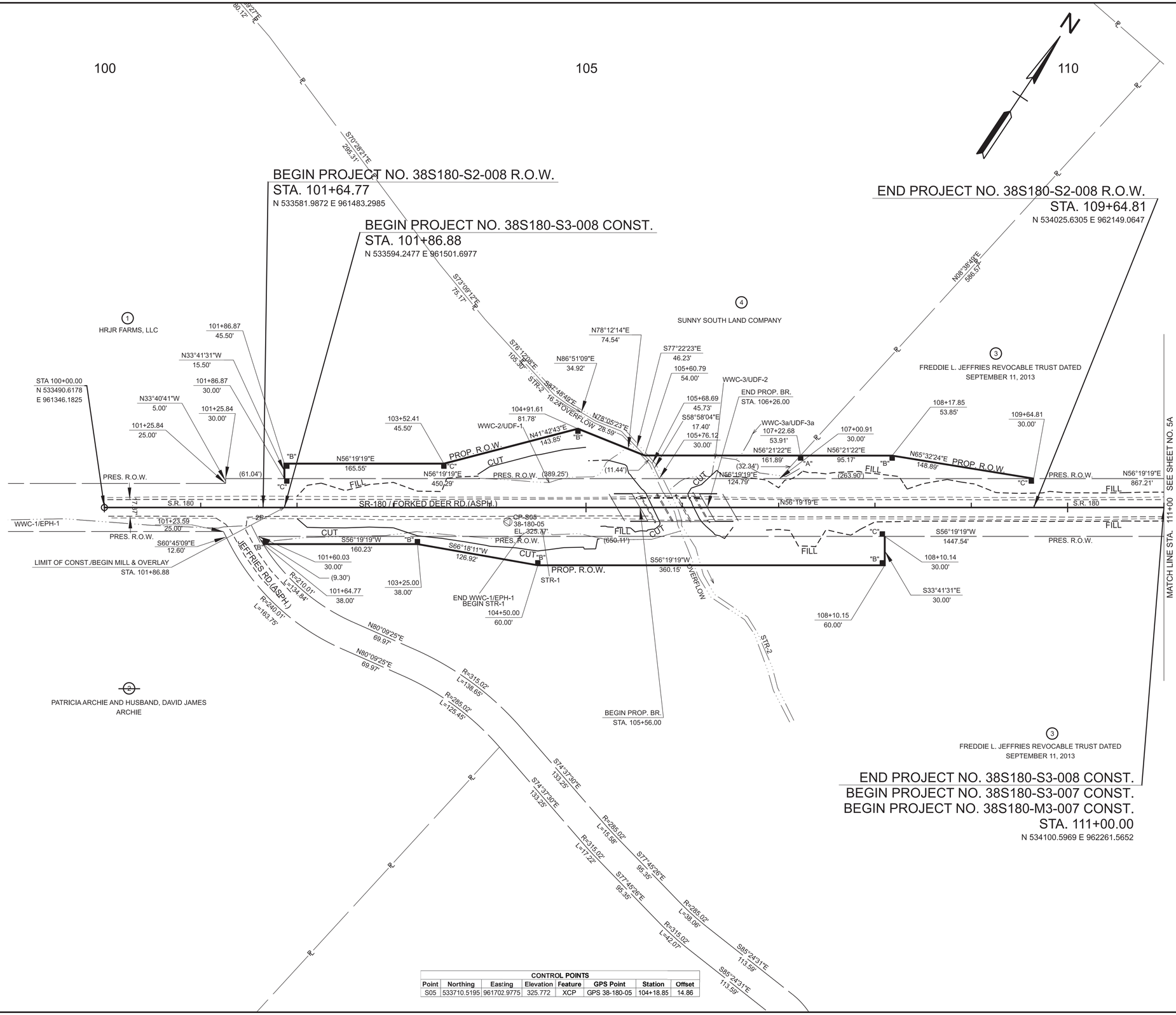
TYPE	YEAR	PROJECT NO.	SHEET NO.
FUNC.	2025	38S180-S2-007	4A
		38S180-M2-007	
		38S180-S2-008	
PIH	2025	38S180-S3-007	4A
		38S180-M3-007	
		38S180-S3-008	
PS&E	2026	38S180-S3-007	4A
		38S180-M3-007	
		38S180-S3-008	



CONTROL POINTS							
Point	Northing	Easting	Elevation	Feature	GPS Point	Station	Offset
S05	533710.5195	961702.9775	325.772	XCP	GPS 38-180-05	104+18.85	14.86

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KIRSCHTEN T. ROBERTS
REGISTERED ENGINEER
AGRICULTURE
No. 126115
STATE OF TENNESSEE
12/09/2025

COORDINATES ARE NAD 83(2011), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00006 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988 WITH GEOID 2018.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

RIGHT OF WAY DETAILS

STA. 100+00.00 TO STA. 111+00.00
SCALE: 1" = 50'

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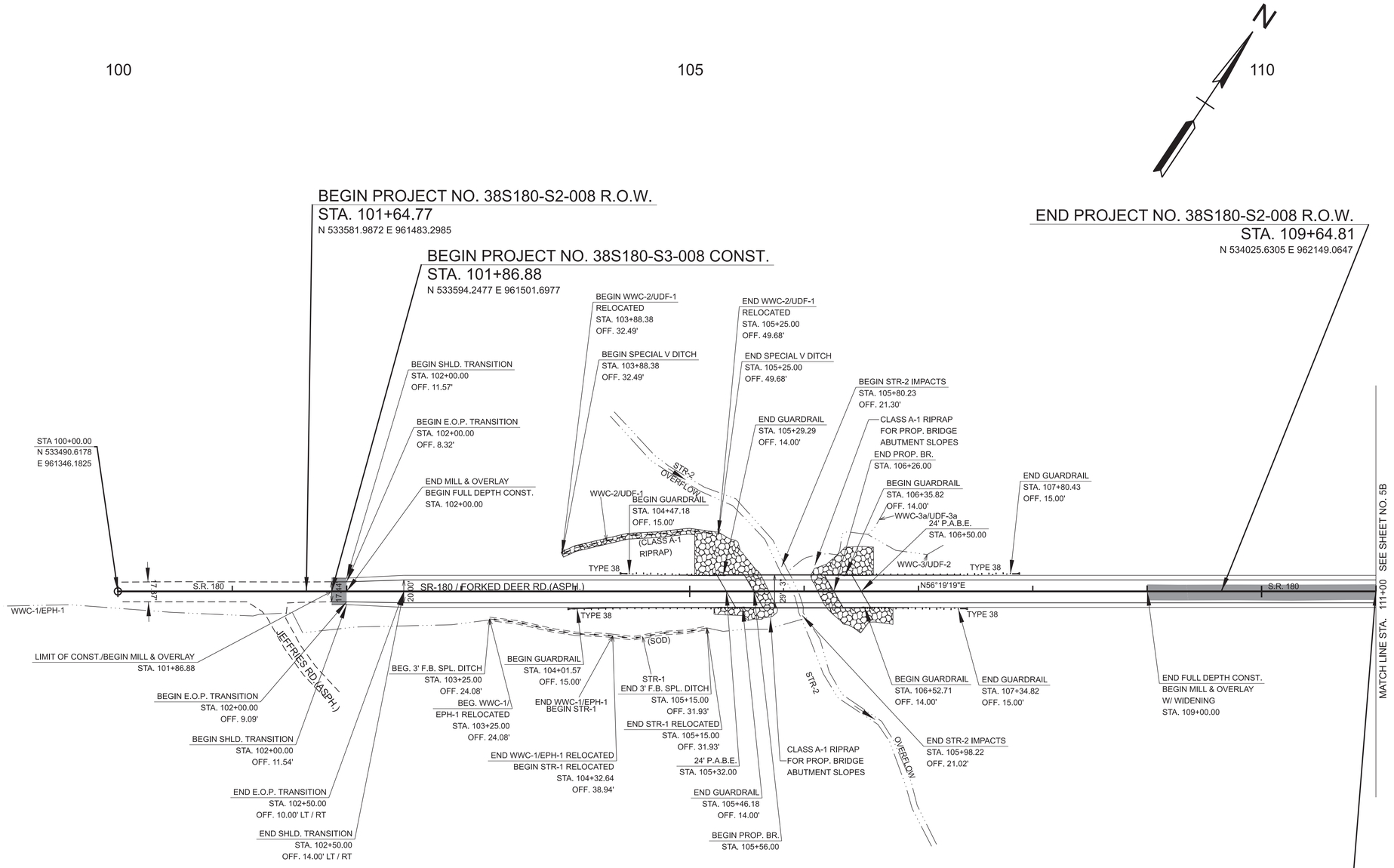
TYPE	YEAR	PROJECT NO.	SHEET NO.
FUNC.	2025	38S180-S2-007	4B
		38S180-M2-007	
		38S180-S2-008	
PIH	2025	38S180-S3-007	4B
		38S180-M3-007	
		38S180-S3-008	
PS&E	2026	38S180-S3-007	4B
		38S180-M3-007	
		38S180-S3-008	



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COORDINATES ARE NAD 83(2011), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00006 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988 WITH GEOID 2018.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PROPOSED LAYOUT

STA. 100+00.00 TO STA. 111+00.00
SCALE: 1" = 50'

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TYPE	YEAR	PROJECT NO.	SHEET NO.
FUNC.	2025	38S180-S2-007	4C
		38S180-M2-007	
		38S180-S2-008	
PIH	2025	38S180-S3-007	4C
		38S180-M3-007	
		38S180-S3-008	
PS&E	2026	38S180-S3-007	4C
		38S180-M3-007	
		38S180-S3-008	

PROP. BRIDGE
STATION: 105 + 91.00
STRUCTURE: 70' OF 1 SPAN 36" BOX BEAM

SKEW	60 DEG
DRAINAGE AREA	0.46 MI²
DESIGN DISCHARGE (Q50)	3180 CFS
DESIGN DISCHARGE (Q100)	3521 CFS
OVERTOPPING	325.18 ELEV.
ALLOWABLE HEADWATER	325.18 ELEV.
Q50 HEADWATER	318.76 ELEV.
Q100 HEADWATER	320.08 ELEV.
VELOCITY (Q50)	2.62 FT/S
VELOCITY (Q100)	3.04 FT/S
INLET	N/A FT.
OUTLET	N/A FT.

STANDARD DRAWING NOS.: SEE BRIDGE PLANS

OH WIRE
STA. 101+54.22
LOW WIRE EL. 350.09'
TEMP. 78 (F) DEG.
2 POWER

BEGIN PROJECT NO. 38S180-S2-008 R.O.W.
STA. 101+64.77
N 533581.9872 E 961483.2985

END PROJECT NO. 38S180-S2-008 R.O.W.
STA. 109+64.81
N 534025.6305 E 962149.0647

VC = 145.00'
K = 100

VC = 140.00'
K = 101

MILL & OVERLAY
STA. 101+86.88 - STA. 102+00.00

MILL & OVERLAY
STA. 109+00.00 - STA. 111+25.00

PROPOSED F.G.

BEGIN BRIDGE
STA. 105+56.00

END BRIDGE
STA. 106+26.00

SR-180 STA. 105+91.41=
TRIBUTARY TO LOST CREEK STA. 202+28.15

CP-S05
GPS 38-180-05
STA. 104+18.85
OFF. 14.86' (RT)
N 533710.5195
E 961702.9775
EL. 325.77'
ALUM. DISK

VPI STA. 101+86.88
EL. 325.28

VPC STA. 102+10.50
EL. 325.30

VPT STA. 103+55.00
EL. 326.43

VPC STA. 104+65.50
EL. 328.09

VPI STA. 105+93.00
EL. 330.11

VPT STA. 107+20.50
EL. 328.16

VPC STA. 107+49.00
EL. 327.75

VPI STA. 108+89.00
EL. 326.70

VPI STA. 109+03.32
EL. 326.69

VPI STA. 102+83.00
EL. 325.34

EX. GROUND
+0.06%
+1.51%
-1.45%
-0.06%
TOP OF EX. DECK
EXIST. GROUND
EXIST BRIDGE NO.38S80510007 (TO BE REMOVED)
EXIST. TIMBER BEAM
THE 2" GAS LINE IS MOUNTED ON SOUTH SIDE OF BRIDGE BEAM
EX. 2" GAS
CREST STA. 105+95.68
EL. 329.07
PROP. 100 YR WSEL EL. 319.23'
MATCH EXISTING
END FULL DEPTH PAVEMENT STA 109+00.00

WWC-1/EPH-1 (RELOCATED)
2.75%
2.32%
STR-1 (RELOCATED)
7.64%
3.00%
WWC-2/UDF-2 (RELOCATED)
1.32%

VC = 255.00'
K = 86

BEGIN SPECIAL 3' F.B. DITCH RT
STA. 103+25.00 - EL. 322.82

BEGIN SPECIAL V DITCH LT
STA. 103+88.88 - EL. 320.42

VPI STA. 104+00.00
EL. 318.89

END WWC-1/EPH-1 RELOCATED
BEG. STR-1 RELOCATED
STA. 104+32.64 - EL. 319.87

VPI STA. 104+97.61
EL. 318.08'

VPI STA. 105+00.00
EL. 315.99

END SPECIAL 3' F.B. DITCH RT
STA. 105+15.00 - EL. 316.75

END SPECIAL V DITCH LT
STA. 105+25.00 - EL. 315.66

VPI STA. 108+19.00
EL. 326.74

BEGIN PROJECT NO. 38S180-S3-008 CONST.
STA. 101+86.88
N 533594.2477 E 961501.6977

END PROJECT NO. 38S180-S3-008 CONST.
BEGIN PROJECT NO. 38S180-S3-007 CONST.
BEGIN PROJECT NO. 38S180-M3-007 CONST.
STA. 111+00.00
N 534100.5969 E 962261.5652

100+00 101+00 102+00 103+00 104+00 105+00 106+00 107+00 108+00 109+00 110+00 111+00

375 370 365 360 355 350 345 340 335 330 325 320 315 310 305 300 295 290 285 280 275

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KIRSCHTEN T. ROBERTS
REGISTERED ENGINEER
AGRICULTURE
COMMERCE
STATE OF TENNESSEE
12/09/2025

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PROPOSED PROFILE

STA. 100+00.00 TO STA. 111+00.00

SCALE: 1" = 50' HORIZ.
1" = 5' VERT.

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TYPE	YEAR	PROJECT NO.	SHEET NO.
FUNC.	2025	38S180-S2-007	5
		38S180-M2-007	
		38S180-S2-008	
PIH	2025	38S180-S3-007	5
		38S180-M3-007	
		38S180-S3-008	
PS&E	2026	38S180-S3-007	5
		38S180-M3-007	
		38S180-S3-008	

LEGEND	WETLAND IMPACTS (WTL-1)
	AREA OF PERMANENT IMPACT = 0.07 AC.
	VOLUME OF PERMANENT IMPACT = 113 C.Y.
	AREA OF TEMPORARY IMPACT = 0.14 AC.
	VOLUME OF TEMPORARY IMPACT = 232 C.Y.

115

120

N

NOTE: PLACE HIGH VISIBILITY CONSTRUCTION FENCE S-F-1 TO PROTECT WETLAND WTL-1 TO REMAIN

BEGIN PROJECT NO. 38S180-S2-007 R.O.W.
BEGIN PROJECT NO. 38S180-M2-007 R.O.W.
STA. 112+37.49
N 534176.8388 E 962375.9797

END PROJECT NO.38S180-S2-007 R.O.W.
END PROJECT NO.38S180-M2-007 R.O.W.
END PROJECT NO.38S180-S3-007 CONST.
END PROJECT NO.38S180-M3-007 CONST.
STA. 119+86.59
N 534592.2345 E 962999.3553

LIMIT OF CONST./ END MILL AND OVERLAY
STA. 119+86.59

SR 180
CURVE
PI 121+61.62
N 534689.2932
E 963145.0093
Δ 06°54'59" LT.
D 09°00'00"
R 636.62'
L 76.85'
T 38.47'
LC 76.80'
BC N52°51'49.6"E
SE N/A
TRANS. LENGTH N/A
DESIGN SPEED N/A

③ FREDDIE L. JEFFRIES REVOCABLE TRUST DATED SEPTEMBER 11, 2013

⑤ JOHN C. EMERSON AND WIFE, BOBBIE C. EMERSON

BEGIN STR-1 IMPACTS
STA. 115+68.63
OFF. 29.08'

END PROP. BR.
STA. 116+31.67

LIMIT OF CONST.
STA. 0+92.41

TEMP. CONST. ESMT.

LIMIT OF CONST.
STA. 0+87.95

TEMP. CONST. ESMT.

MATCH LINE STA. 111+00 SEE SHEET NO. 4

PRES. R.O.W.

CP-S06
38-180-06
EL. 326.19'

"B"
"C"

FILL
TREES
FIBER POST
F
S.R. 180
N56°19'19"E
CUT
RIP RAP APRON
CULTIVATED FIELD
EX GUARDRAIL TO BE REMOVED
TREES
T.O.B.
STR-1
LOST CREEK
PROP. R.O.W.
CULTIVATED FIELD
FILL
CUT
CROSS
F
CATV PED.
WTL-1
HVF
"B"
"C"
FILL
TREES
PRES. R.O.W.
SR-180 / FORKED DEER RD.(ASPH.)
S.R. 180
N77°6'41"E
GR.

CP-S04
EL. 350.45'
P
GAS
FILL
UNKNOWN
GR.
CUT
2"
TOP OF 2" PIPE - GAS
TOP OF PIPE - GAS
GAS MARKER
FILL
TREES
PRES. R.O.W.
PROP. R.O.W.
TREES
CULTIVATED FIELD
EX. SIGN TO BE REMOVED
BEGIN PROP. BR.
STA. 115+16.67
TREES
EX 5 SPAN TIMBER BRIDGE ID# 38S80510009 (TO BE REMOVED)
CULTIVATED FIELD
STA 122+00.00
N 534714.3260
E 963174.2213

LIMIT OF CONST.
STA. 0+97.72
TEMP. CONST. ESMT.

END STR-1 IMPACTS
STA. 116+02.53
OFF. 21.92'

LIMIT OF CONST.
STA. 0+94.18
TEMP. CONST. ESMT.

PC STA. 121+23.15

PCC STA. 122+00.00

⑥ JACKSON B. WILLIAMS

③ FREDDIE L. JEFFRIES REVOCABLE TRUST DATED SEPTEMBER 11, 2013

BEGIN PROJECT NO. 38S180-S3-007 CONST.
BEGIN PROJECT NO. 38S180-M3-007 CONST.
END PROJECT NO. 38S180-S3-008 CONST.
STA. 111+00.00
N 534100.5969 E 962261.5652

CONTROL POINTS							
Point	Northing	Easting	Elevation	Feature	GPS Point	Station	Offset
S06	534167.3916	962336.5806	326.195	XCP	GPS 38-180-06	111+99.47	-13.99

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KIRSCHTEN T. ROBERTS
REGISTERED ENGINEER
AGRICULTURE
COMMERCE
No. 126315
STATE OF TENNESSEE
12/09/2025

COORDINATES ARE NAD 83(2011), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00006 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988 WITH GEOID 2018.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PRESENT LAYOUT

STA. 111+00.00 TO STA. 122+00.00
SCALE: 1" = 50'

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TYPE	YEAR	PROJECT NO.	SHEET NO.
FUNC.	2025	38S180-S2-007	5A
		38S180-M2-007	
		38S180-S2-008	
PIH	2025	38S180-S3-007	5A
		38S180-M3-007	
		38S180-S3-008	
PS&E	2026	38S180-S3-007	5A
		38S180-M3-007	
		38S180-S3-008	

LEGEND	WETLAND IMPACTS (WTL-1)
	AREA OF PERMANENT IMPACT = 0.07 AC.
	VOLUME OF PERMANENT IMPACT = 113 C.Y.
	AREA OF TEMPORARY IMPACT = 0.14 AC.
	VOLUME OF TEMPORARY IMPACT = 232 C.Y.

115

120

N

BEGIN PROJECT NO. 38S180-S2-007 R.O.W.
BEGIN PROJECT NO. 38S180-M2-007 R.O.W.
STA. 112+37.49
N 534176.8388 E 962375.9797

END PROJECT NO.38S180-S2-007 R.O.W.
END PROJECT NO.38S180-M2-007 R.O.W.
END PROJECT NO.38S180-S3-007 CONST.
END PROJECT NO.38S180-M3-007 CONST.
STA. 119+86.59
N 534592.2345 E 962999.3553

LIMIT OF CONST./ END MILL AND OVERLAY
STA. 119+86.59

S03°13'20"E 579.83'

S58°23'37"E 92.56'

S75°29'22"E 81.06'

S63°39'47"E 173.19'

S60°01'35"E 73.89'

S60°14'21"E 54.44'

S60°32'08"E 28.23'

S63°12'47"E 37.09'

S33°41'31"E 25.00'

S56°19'19"W 392.25'

S56°19'19"W 111.16'

S56°19'19"W 515.58'

S47°56'16"W 192.03'

S84°04'16"E 27.06'

N04°59'37"E 561.85'

R=645.64'
L=157.10'

R=606.62'
L=104.33'

R=699.79'
L=200.29'

R=666.62'
L=115.15'

(3) FREDDIE L. JEFFRIES REVOCABLE TRUST DATED SEPTEMBER 11, 2013

(5) JOHN C. EMERSON AND WIFE, BOBBIE C. EMERSON

(6) JACKSON B. WILLIAMS

(3) FREDDIE L. JEFFRIES REVOCABLE TRUST DATED SEPTEMBER 11, 2013

MATCH LINE STA. 111+00 SEE SHEET NO. 4A

TEMP. CONST. ESMT.

LIMIT OF CONST. STA. 0+92.41

LIMIT OF CONST. STA. 0+87.95

LIMIT OF CONST. STA. 0+97.72

LIMIT OF CONST. STA. 0+94.18

END PROP. BR. STA. 116+31.67

BEGIN PROP. BR. STA. 115+16.67

PROP. R.O.W.

PRES. R.O.W.

CP-S06 38-180-06 EL. 326.19'

S.R. 180

SR-180 / FORKED DEER RD.(ASPH.)

LOST CREEK

STR-1

FILL

CUT

"B"

"C"

112+37.50 30.00'
112+75.56 102.41'
112+75.57 55.00'
112+37.49 55.00'
(38.08')
113+23.80 102.41'
(48.24')
113+23.81 55.00'
N56°19'19"E 316.46'
N33°41'31"W 25.00'
(230.14')
(330.62')
N56°19'19"E 867.21'

115+37.07 87.46'
115+53.95 55.00'
115+68.11 30.00'
N56°19'19"E 432.64'
(28.74')
(370.06')
116+07.57 30.00'
S65°40'36"E 21.81'
(14.26')
(323.33')
116+19.13 48.50'
116+29.76 58.00'
S81°53'29"E 29.40'
(303.41')

118+23.82 98.09'
118+23.83 55.00'
118+76.38 98.09'
(52.56')
119+86.59 55.00'
118+76.40 55.00' WTL-1
119+86.59 30.00'
(269.89')
(110.19')
(416.48')
555.04'
121+23.15 30.00'
(56.71')
(50.51')
118+74.80 38.27'
119+30.91 30.00'
118+74.82 104.18'
117+40.93 58.00'
118+24.83 45.63'
118+24.85 104.18'
(84.81')

112+37.51 30.00'
N33°41'31"W 28.00'
112+37.52 58.00'
112+73.85 58.00'
112+73.86 110.00'
(52.51')
(36.33')
113+26.36 58.00'
113+26.37 110.00'
121+23.15 30.00'

TEMP. CONST. ESMT.

STA 122+00.00
N 534714.3260
E 963174.2213

BEGIN PROJECT NO. 38S180-S3-007 CONST.
BEGIN PROJECT NO. 38S180-M3-007 CONST.
END PROJECT NO. 38S180-S3-008 CONST.
STA. 111+00.00
N 534100.5969 E 962261.5652

CONTROL POINTS							
Point	Northing	Easting	Elevation	Feature	GPS Point	Station	Offset
S06	534167.3916	962336.5806	326.195	XCP	GPS 38-180-06	111+99.47	-13.99

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KIRSCHTEN T. ROBERTS
REGISTERED ENGINEER
AGRICULTURE
TRANSPORTATION
COMMERCE
No. 126315
STATE OF TENNESSEE

12/09/2025

COORDINATES ARE NAD 83(2011), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00006 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988 WITH GEOID 2018.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

RIGHT OF WAY DETAILS

STA. 111+00.00 TO STA. 122+00.00
SCALE: 1" = 50'

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TYPE	YEAR	PROJECT NO.	SHEET NO.
FUNC.	2025	38S180-S2-007	5B
		38S180-M2-007	
		38S180-S2-008	
PIH	2025	38S180-S3-007	5B
		38S180-M3-007	
		38S180-S3-008	
PS&E	2026	38S180-S3-007	5B
		38S180-M3-007	
		38S180-S3-008	

115

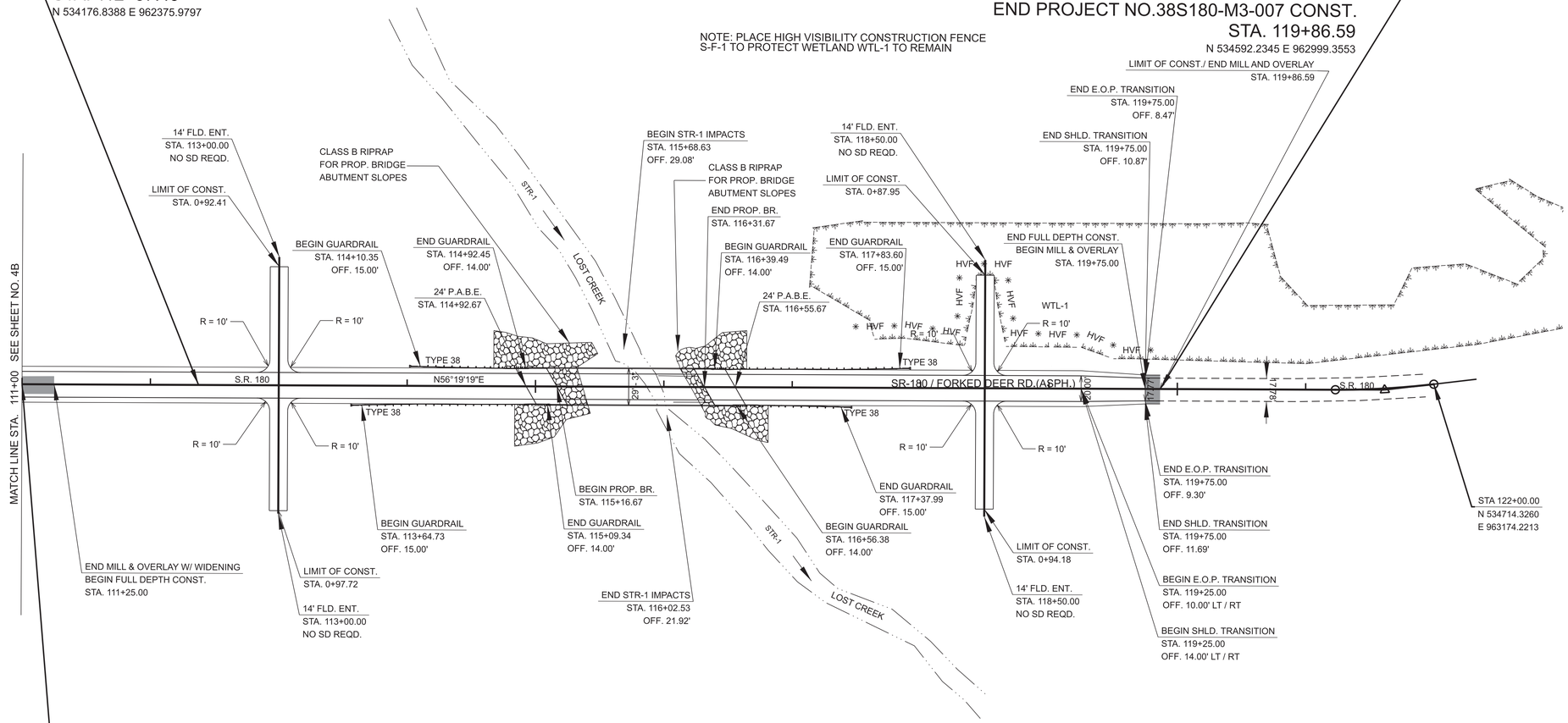
120

N

BEGIN PROJECT NO. 38S180-S2-007 R.O.W.
BEGIN PROJECT NO. 38S180-M2-007 R.O.W.
STA. 112+37.49
N 534176.8388 E 962375.9797

END PROJECT NO.38S180-S2-007 R.O.W.
END PROJECT NO.38S180-M2-007 R.O.W.
END PROJECT NO.38S180-S3-007 CONST.
END PROJECT NO.38S180-M3-007 CONST.
STA. 119+86.59
N 534592.2345 E 962999.3553

NOTE: PLACE HIGH VISIBILITY CONSTRUCTION FENCE
S-F-1 TO PROTECT WETLAND WTL-1 TO REMAIN



BEGIN PROJECT NO. 38S180-S3-007 CONST.
BEGIN PROJECT NO. 38S180-M3-007 CONST.
END PROJECT NO. 38S180-S3-008 CONST.
STA. 111+00.00
N 534100.5969 E 962261.5652

MILL & OVERLAY

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No. 126315
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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PROPOSED LAYOUT

STA. 111+00.00 TO STA. 122+00.00
SCALE: 1" = 50'

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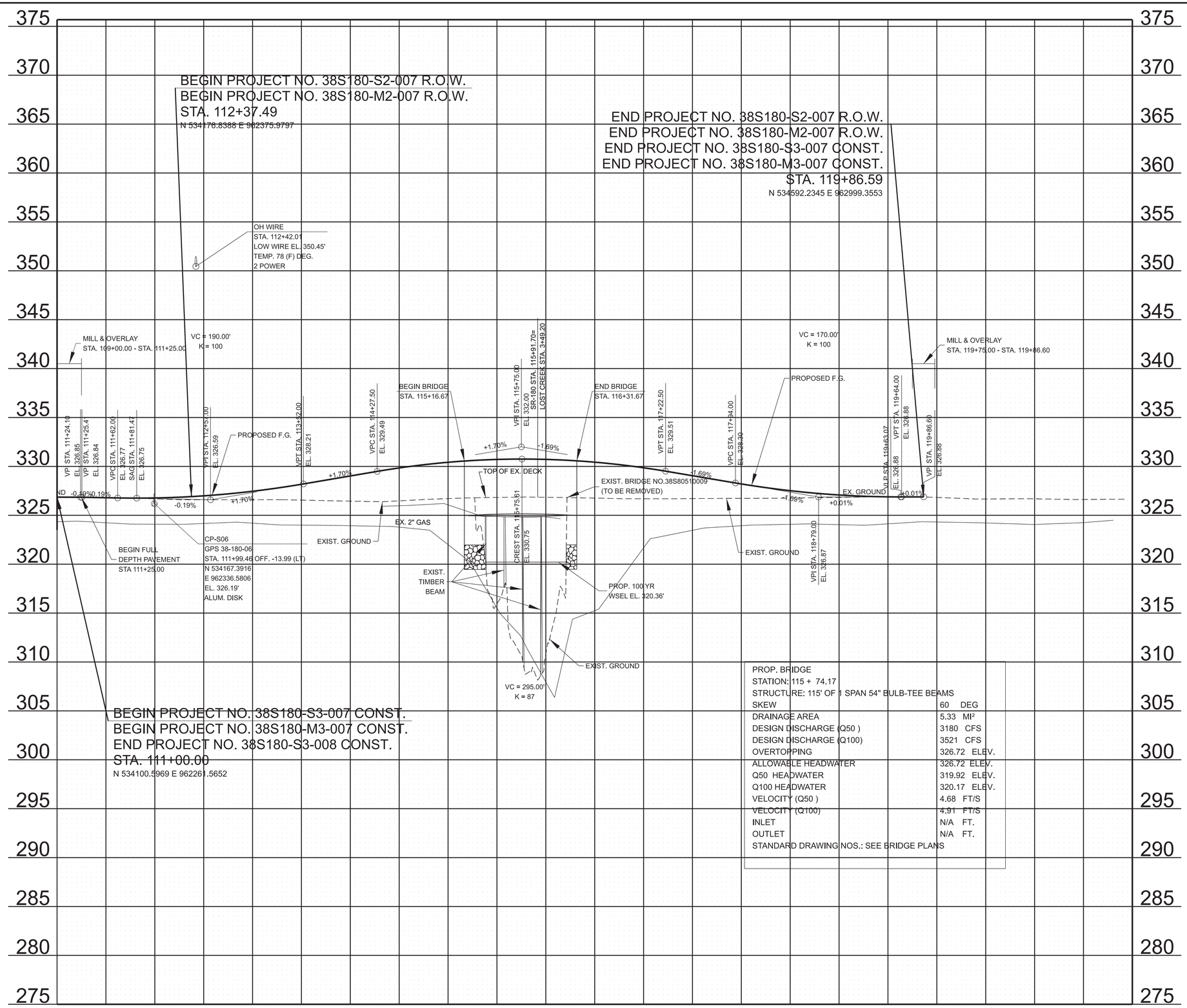
TYPE	YEAR	PROJECT NO.	SHEET NO.
FUNC.	2025	38S180-S2-007	5C
		38S180-M2-007	
		38S180-S2-008	
PIH	2025	38S180-S3-007	5C
		38S180-M3-007	
		38S180-S3-008	
PS&E	2026	38S180-S3-007	5C
		38S180-M3-007	
		38S180-S3-008	



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REGISTERED ENGINEER
AGRICULTURE COMMERCE
1963
STATE OF TENNESSEE

12/09/2025

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PROPOSED PROFILE

STA. 111+00.00 TO STA. 119+86.60

SCALE: 1" = 50' HORIZ.
1" = 5' VERT.

12/8/2025 11:09:27 AM
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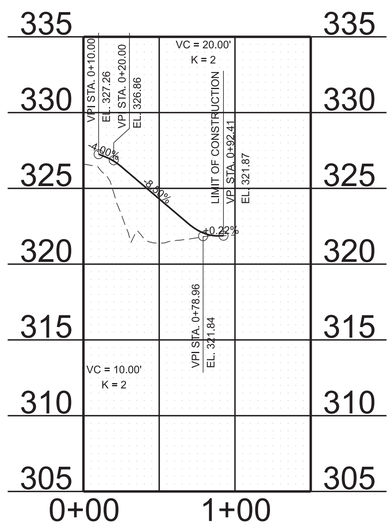
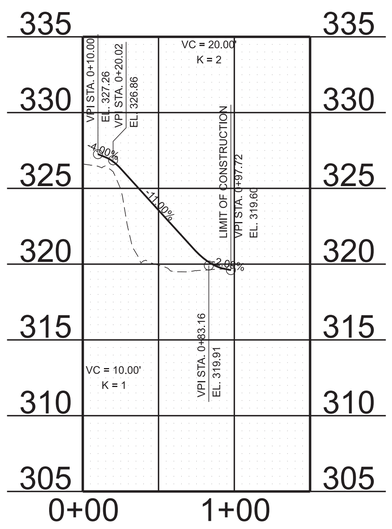
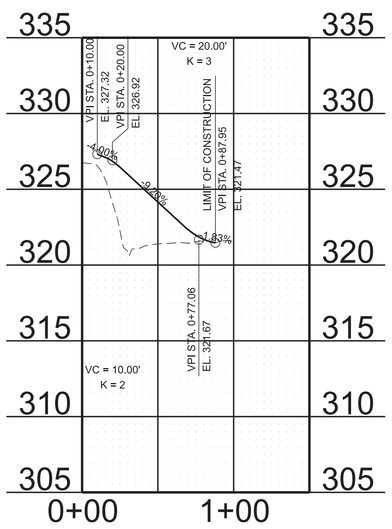


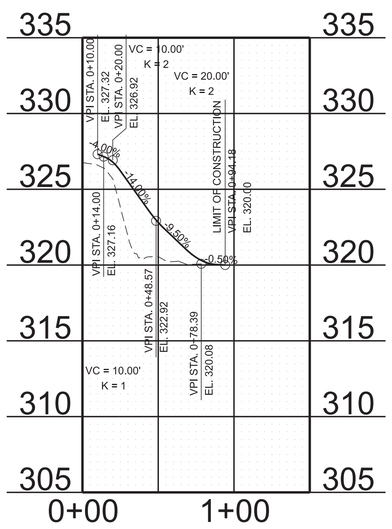
14' FIELD ENTRANCE
STA. 113+00 LT
TRACT NO. 3



14' FIELD ENTRANCE
STA. 113+00 RT
TRACT NO. 3



14' FIELD ENTRANCE
STA. 118+50 LT
TRACT NO. 5



14' FIELD ENTRANCE
STA. 118+50 RT
TRACT NO. 6

TYPE	YEAR	PROJECT NO.	SHEET NO.
FUNC.	2025	38S180-S2-007	6
		38S180-M2-007	
		38S180-S2-008	
PIH	2025	38S180-S3-007	6
		38S180-M3-007	
		38S180-S3-008	
PS&E	2026	38S180-S3-007	6
		38S180-M3-007	
		38S180-S3-008	

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AGRICULTURE
COMMERCE
No. 122615
STATE OF TENNESSEE
12/09/2025

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PRIVATE DRIVE, BUSINESS, AND FIELD ENTRANCE PROFILES

SCALE: 1" = 50' HORIZ.
1" = 5' VERT.

12/8/2025 11:09:38 AM
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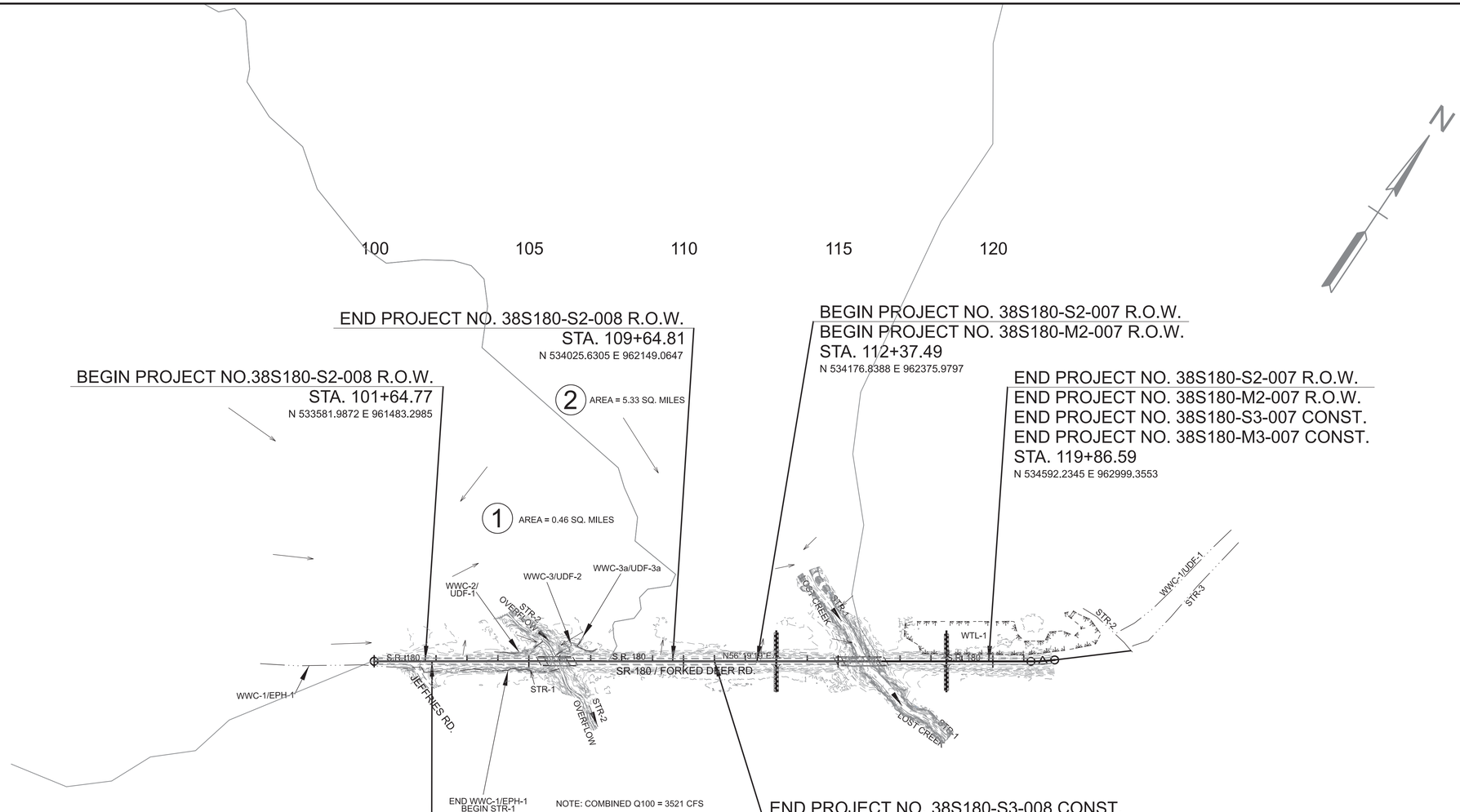
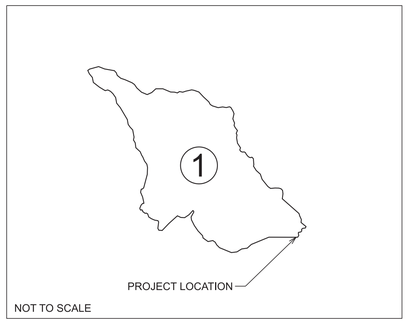
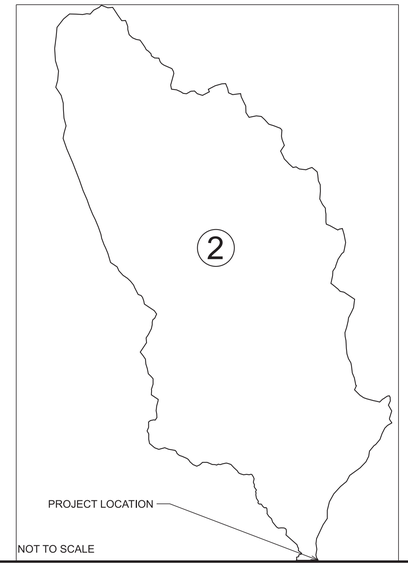
TYPE	YEAR	PROJECT NO.	SHEET NO.
FUNC.	2025	38S180-S2-007	7
		38S180-M2-007	
		38S180-S2-008	
PIH	2025	38S180-S3-007	7
		38S180-M3-007	
		38S180-S3-008	
PS&E	2026	38S180-S3-007	7
		38S180-M3-007	
		38S180-S3-008	







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REGISTERED ENGINEER
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COMMERCE
No. 128324
STATE OF TENNESSEE
12/09/2025

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

DRAINAGE MAP

STA. 100+00.00 TO STA. 122+00.00
SCALE: 1" = 200'

12/8/2025 11:09:51 AM
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EROSION PREVENTION AND SEDIMENT CONTROL GENERAL NOTES

INSPECTION, MAINTENANCE & REPAIR

(1) REFER TO THE STORM WATER POLLUTION AND PREVENTION PLAN SHEET SERIES (S-1) FOR SWPPP, PERMITS, AND RECORDS NOTES.

GOOD HOUSEKEEPING MEASURES & WASTE DISPOSAL

(1) THE CONTRACTOR SHALL ESTABLISH AND MAINTAIN A PROACTIVE METHOD TO PREVENT LITTER AND CONSTRUCTION WASTES FROM ENTERING WATERS OF THE STATE/U.S. THESE MATERIALS SHALL BE REMOVED FROM STORMWATER EXPOSURE PRIOR TO ANTICIPATED STORM EVENTS OR BEFORE BEING CARRIED OFFSITE BY WIND, OR OTHERWISE PREVENTED FROM BECOMING A POLLUTANT SOURCE FOR STORMWATER DISCHARGES. AFTER USE, MATERIALS USED FOR EPSC SHALL BE REMOVED FROM THE SITE.

(2) THE CONTRACTOR SHALL TAKE APPROPRIATE STEPS TO ENSURE THAT PETROLEUM PRODUCTS OR OTHER CHEMICAL POLLUTANTS ARE PREVENTED FROM ENTERING WATERS OF THE STATE/U.S. ALL EQUIPMENT REFUELING, SERVICING, AND STAGING AREAS SHALL COMPLY WITH ALL LOCAL, STATE, AND FEDERAL LAWS, RULES, REGULATIONS, AND ORDINANCES, INCLUDING THOSE OF THE NATIONAL FIRE PROTECTION ASSOCIATION. APPROPRIATE CONTAINMENT MEASURES FOR THESE AREAS SHALL BE USED.

(3) CONTRACTORS SHALL PROVIDE DESIGNATED TRUCK WASHOUT AREAS ON THE SITE. THESE AREAS MUST BE SELF CONTAINED, NOT CONNECTED TO ANY STORMWATER OUTLET OF THE SITE, AND PROPERLY SIGNED. WASH DOWN OR WASTE DISCHARGE OF CONCRETE TRUCKS SHALL NOT BE PERMITTED ONSITE UNLESS PROPER SETTLEMENT AREAS HAVE BEEN PROVIDED IN ACCORDANCE WITH BOTH STATE AND FEDERAL REGULATIONS.

(4) WHEEL WASH WATER SHALL BE COLLECTED AND ALLOWED TO SETTLE OUT SUSPENDED SOLIDS PRIOR TO DISCHARGE. WHEEL WASH WATER SHALL NOT BE DISCHARGED DIRECTLY INTO ANY STORMWATER SYSTEM OR STORMWATER TREATMENT SYSTEM.

(5) IF PORTABLE SANITARY FACILITIES ARE PROVIDED ON CONSTRUCTION SITES, SANITARY WASTE SHALL BE COLLECTED FROM THE PORTABLE UNITS IN A TIMELY MANNER BY A LICENSED WASTE MANAGEMENT CONTRACTOR OR AS REQUIRED BY ANY REGULATIONS. THE CONTRACTOR SHALL OBTAIN ANY AND ALL NECESSARY PERMITS TO DISPOSE OF SANITARY WASTE.

(6) ONLY CONSTRUCTION PRODUCTS NEEDED SHALL BE STORED ONSITE BY THE CONTRACTOR. THE CONTRACTOR SHALL STORE ALL MATERIALS UNDER COVER AND IN APPROPRIATE CONTAINERS. PRODUCTS MUST BE STORED IN ORIGINAL CONTAINERS AND LABELED. MATERIAL MIXING SHALL BE CONDUCTED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. THE CONTRACTOR'S RESPONSIBLE PARTY SHALL INSPECT MATERIALS STORAGE AREAS REGULARLY TO ENSURE PROPER USE AND DISPOSAL.

(7) WHEN POSSIBLE, ALL PRODUCTS SHALL BE USED COMPLETELY BEFORE PROPERLY DISPOSING OF THE CONTAINER OFFSITE. THE MANUFACTURER'S DIRECTIONS FOR DISPOSAL OF MATERIALS AND CONTAINERS SHALL BE FOLLOWED.

(8) ALL PAINT CONTAINERS SHALL BE TIGHTLY SEALED AND STORED WHEN NOT REQUIRED FOR USE. EXCESS PAINT SHALL BE DISPOSED OF ACCORDING TO THE MANUFACTURER'S INSTRUCTIONS AND APPLICABLE STATE AND LOCAL REGULATIONS.

(9) ALL HAZARDOUS WASTE MATERIALS SHALL BE DISPOSED OF IN A MANNER WHICH IS COMPLIANT WITH LOCAL OR STATE REGULATIONS. SITE PERSONNEL SHALL BE INSTRUCTED IN THESE PRACTICES, AND THE INDIVIDUAL DESIGNATED AS THE CONTRACTOR'S RESPONSIBLE PARTY SHALL BE RESPONSIBLE FOR SEEING THAT THESE PRACTICES ARE FOLLOWED. THE CONTRACTOR SHALL OBTAIN ANY AND ALL NECESSARY PERMITS TO DISPOSE OF HAZARDOUS MATERIAL.

(10) OPEN BURNING IS PROHIBITED UNLESS IT IS SPECIFICALLY ALLOWED BY LAW. IF ALLOWED, NATURAL VEGETATION, TREES, AND UNTREATED LUMBER SHALL BE THE ONLY MATERIALS THAT CAN BE OPEN BURNED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL APPLICABLE STATE AND LOCAL PERMITS PRIOR TO ANY BURNING.

(11) DISPOSAL OF ONSITE VEGETATION AND TREES BY CHIPPING THEM INTO MULCH IS PREFERABLE TO OPEN BURNING. THIS MULCH MAY BE USED AS AN ONSITE SOIL STABILIZATION MEASURE WHERE APPROPRIATE.

(12) WASTE MATERIAL (EARTH, ROCK, ASPHALT, CONCRETE, ETC.) NOT REQUIRED FOR THE CONSTRUCTION OF THE PROJECT WILL BE DISPOSED OF BY THE CONTRACTOR. IMPACTS TO WATERS OF THE STATE/U.S. SHALL BE AVOIDED IF POSSIBLE. IF UNAVOIDABLE, THE CONTRACTOR WILL OBTAIN ANY AND ALL NECESSARY PERMITS INCLUDING, BUT NOT LIMITED TO NPDES, AQUATIC RESOURCES ALTERATION PERMIT(S), CORPS OF ENGINEERS SECTION 404 PERMITS, AND TVA SECTION 26A PERMITS TO DISPOSE OF WASTE MATERIALS.

STREAMS, WETLANDS & BUFFER ZONES

(1) ANY WORK WITHIN THE STREAM CHANNEL AREA (E.G., PIER FOOTING, RIP-RAP PLACEMENT, CULVERT/BRIDGE CONSTRUCTION, ETC.) SHALL BE SEPARATED FROM FLOWING WATER OR EXPECTED FLOW PATH AND PERFORMED DURING LOW FLOW CONDITIONS. ALL ITEMS USED WITHIN THE STREAM CHANNEL AREA FOR DIVERSION OF FLOW (OR EXPECTED FLOW), UNLESS SPECIFIED IN THE PLANS, SHALL NOT BE PAID FOR DIRECTLY BUT SHALL BE INCLUDED IN THE COST OF OTHER ITEMS. THIS NOTE EXCLUDES ANY ITEMS SPECIFIED IN THE PLANS FOR THE TEMPORARY DIVERSION CHANNELS (EC-STR-31) AND TEMPORARY DIVERSION CULVERTS (EC STR-32) FOR SINGLE BARREL CULVERT CONSTRUCTION.

EROSION PREVENTION AND SEDIMENT CONTROL LEGEND		
SYMBOL	ITEM	STD. DWG.
⁎ HVF ⁎ HVF	HIGH VISIBILITY FENCE	S-F-1
⁎ SFB⁎ SFB⁎	SILT FENCE WITH WIRE BACKING	EC-STR-3C EC-STR-4 & 4A
	ROCK CHECK DAM (V-DITCH)	EC-STR-6
	ENHANCED ROCK CHECK DAM (V-DITCH)	EC-STR-6A
TCE	TEMPORARY CONSTRUCTION EXIT	EC-STR-25
	TEMPORARY DIVERSION CHANNEL (DESCRIBE-SIZE AND TYPE OF LINING)	EC-STR-31

STORMWATER OUTFALLS - STAGE 1		
OUTFALL NO.	AREA (AC.)	AVERAGE SLOPE (%)
1	2.71	2.45
2	1.96	3.16

STORMWATER OUTFALLS - STAGE 2		
OUTFALL NO.	AREA (AC.)	AVERAGE SLOPE (%)
1	2.71	2.45
2	1.96	3.16

EPSC QUANTITIES

	ITEM NO.	DESCRIPTION	UNIT	38S180-S3-008 QUANTITY	38S180-S3-007 QUANTITY	TOTAL QUANTITY
(1) (2)	203-01	ROAD & DRAINAGE EXCAVATION (UNCLASSIFIED)	C.Y.	15	15	30
(1) (2)	209-05	SEDIMENT REMOVAL	C.Y.	63	63	126
(1) (2)	209-08.02	TEMPORARY SILT FENCE (WITH BACKING)	L.F.	3898	4600	8498
(1) (2)	209-08.07	ROCK CHECK DAM	EACH	4		4
(1) (2)	209-08.08	ENHANCED ROCK CHECK DAM	EACH	2		2
(1) (2)	209-65.03	TEMPORARY DIVERSION CHANNEL	L.F.	192		192
(1) (2)	303-10.01	MINERAL AGGREGATE (SIZE 57)	TON	100	100	200
(1) (2)	707-08.11	HIGH-VISIBILITY CONSTRUCTION FENCE	L.F.	692	1038	1730
(1) (2)	709-05.05	MACHINED RIP-RAP (CLASS A-3)	TON	100	100	200
(1) (2)	740-10.03	GEOTEXTILE (TYPE III) (EROSION CONTROL)	S.Y.	172	172	344
(1) (2)	801-01	SEEDING (WITH MULCH)	UNIT	39	45	84
(1) (2)	801-01.07	TEMPORARY SEEDING (WITH MULCH)	UNIT	39	45	84
(1) (2)	801-02.15	FERTILIZER	TON	1	1	2
(1) (2)	801-03	WATER (SEEDING AND SODDING)	M.G.	27	32	59
(1) (2)	803-01	SODDING (NEW SOD)	S.Y.	1942	2224	4166
(1) (2)	805-12.01	EROSION CONTROL BLANKET (TYPE I)	S.Y.	100	100	200

FOOTNOTES:

(1) TO BE USED AS DIRECTED BY THE ENGINEER

(2) SEE SUBSECTION 209.07 OF THE STANDARD SPECIFICATIONS FOR MAINTENANCE REPLACEMENT

TYPE	YEAR	PROJECT NO.	SHEET NO.
FUNC.	2025	38S180-S2-007	8
		38S180-M2-007	
		38S180-S2-008	
PIH	2025	38S180-S3-007	8
		38S180-M3-007	
		38S180-S3-008	
PS&E	2026	38S180-S3-007	8
		38S180-M3-007	
		38S180-S3-008	

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COMMERCE
No. 126315
STATE OF TENNESSEE
12/09/2025

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

EROSION PREVENTION AND SEDIMENT CONTROL NOTES, OUTFALLS, LEGEND AND QUANTITIES

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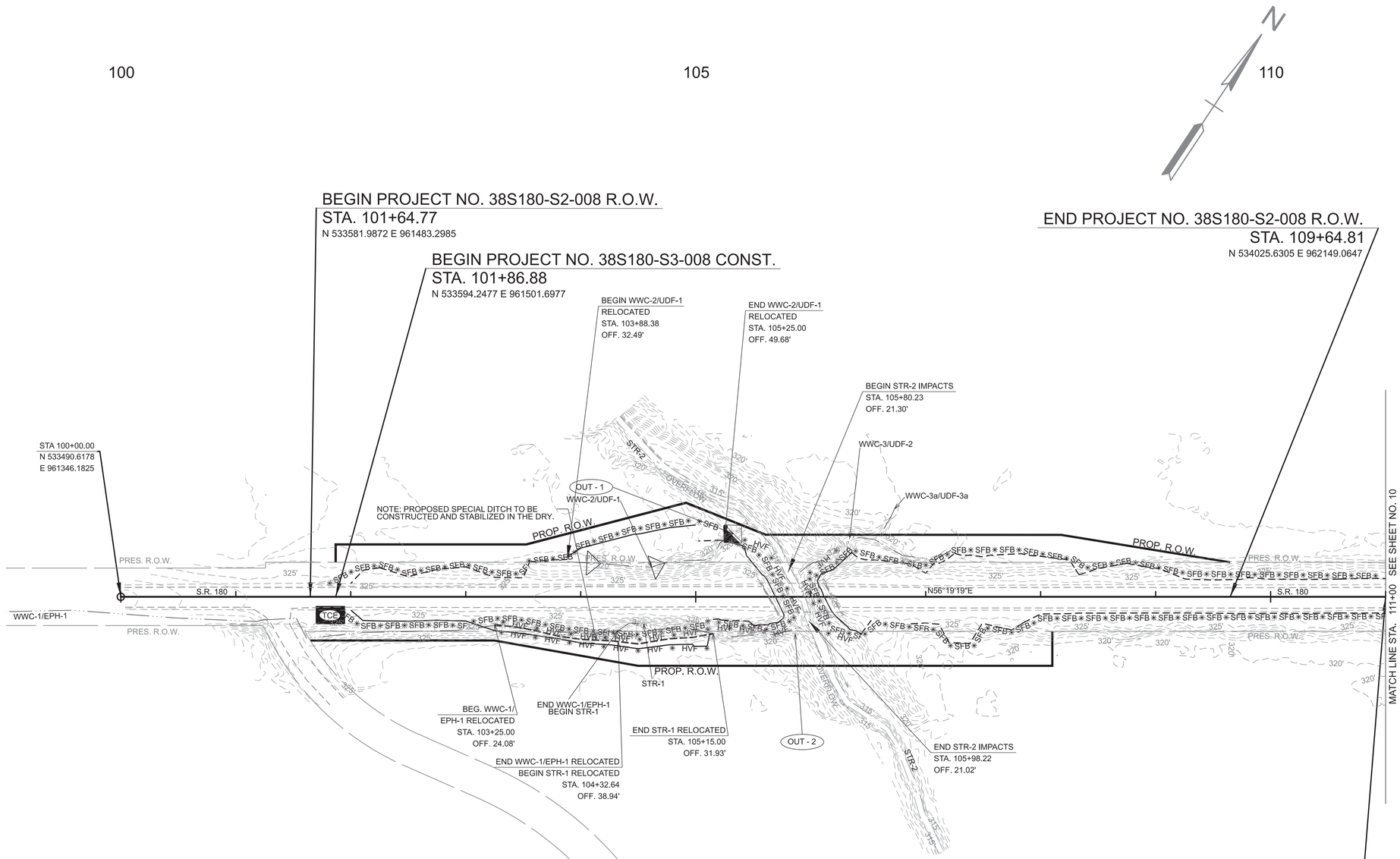
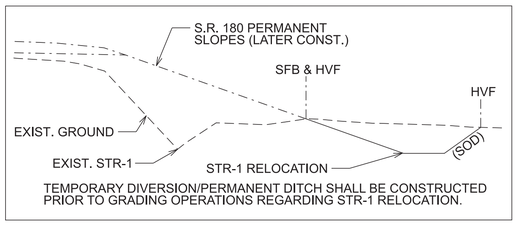
TYPE	YEAR	PROJECT NO.	SHEET NO.
FUNC.	2025	38S180-S2-007	9
		38S180-M2-007	
		38S180-S2-008	
PIH	2025	38S180-S3-007	9
		38S180-M3-007	
		38S180-S3-008	
PS&E	2026	38S180-S3-007	9
		38S180-M3-007	
		38S180-S3-008	





STEP 1A: STR-1 RELOCATION DETAIL
S.R. 180 STA. 103+25.00 - STA. 105+15.00

NOTE: EXISTING CONTOURS SHOWN ON STAGE 1.

END PROJECT NO. 38S180-S3-008 CONST.
BEGIN PROJECT NO. 38S180-S3-007 CONST.
BEGIN PROJECT NO. 38S180-M3-007 CONST.
STA. 111+00.00
N 534100.5969 E 962261.5652

SPECIAL NOTE:
THE CONTRACTOR SHALL USE ANY MEASURE NECESSARY TO ENSURE THAT NO CONSTRUCTION ACTIVITY WILL OCCUR IN, NOR THAT ANY CONSTRUCTION EQUIPMENT WILL ENTER ANY PORTION OF STR-2 (OVERFLOW) AND THAT THE SURROUNDING VEGETATION WILL NOT BE DISTURBED AND ARE PROTECTED FROM SEDIMENT AND OTHER POLLUTANTS EXCEPT AT PERMITTED LOCATIONS.

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STATE OF TENNESSEE
12/09/2025

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

EROSION PREVENTION & SEDIMENT CONTROL (EPSC) PLANS-STAGE 1

STA. 100+00.00 TO STA. 111+00.00
SCALE: 1" = 50'

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TYPE	YEAR	PROJECT NO.	SHEET NO.
FUNC.	2025	38S180-S2-007	10
		38S180-M2-007	
		38S180-S2-008	
PIH	2025	38S180-S3-007	10
		38S180-M3-007	
		38S180-S3-008	
PS&E	2026	38S180-S3-007	10
		38S180-M3-007	
		38S180-S3-008	

LEGEND	WETLAND IMPACTS (WTL-1)
	AREA OF PERMANENT IMPACT = 0.07 AC.
	VOLUME OF PERMANENT IMPACT = 113 C.Y.
	AREA OF TEMPORARY IMPACT = 0.14 AC.
	VOLUME OF TEMPORARY IMPACT = 232 C.Y.

115

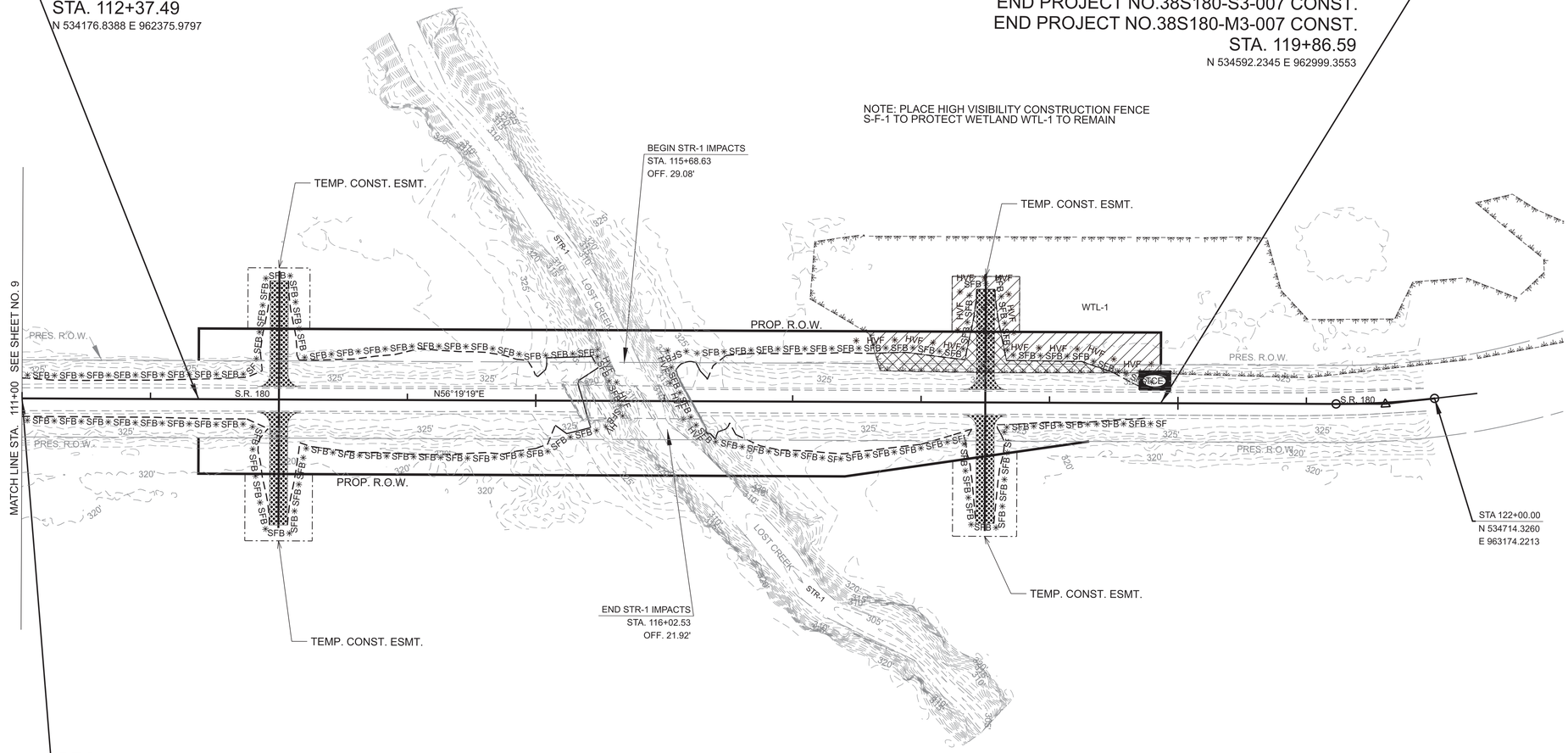
120

N

BEGIN PROJECT NO. 38S180-S2-007 R.O.W.
BEGIN PROJECT NO. 38S180-M2-007 R.O.W.
STA. 112+37.49
N 534176.8388 E 962375.9797

END PROJECT NO.38S180-S2-007 R.O.W.
END PROJECT NO.38S180-M2-007 R.O.W.
END PROJECT NO.38S180-S3-007 CONST.
END PROJECT NO.38S180-M3-007 CONST.
STA. 119+86.59
N 534592.2345 E 962999.3553

NOTE: PLACE HIGH VISIBILITY CONSTRUCTION FENCE S-F-1 TO PROTECT WETLAND WTL-1 TO REMAIN



BEGIN PROJECT NO. 38S180-S3-007 CONST.
BEGIN PROJECT NO. 38S180-M3-007 CONST.
END PROJECT NO. 38S180-S3-008 CONST.
STA. 111+00.00
N 534100.5969 E 962261.5652

NOTE: EXISTING CONTOURS SHOWN ON STAGE 1.

SPECIAL NOTE:
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12/09/2025

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

EROSION PREVENTION & SEDIMENT CONTROL (EPSC) PLANS-STAGE 1

STA. 111+00.00 TO STA. 122+00.00
SCALE: 1" = 50'

12/8/2025 11:11:14 AM
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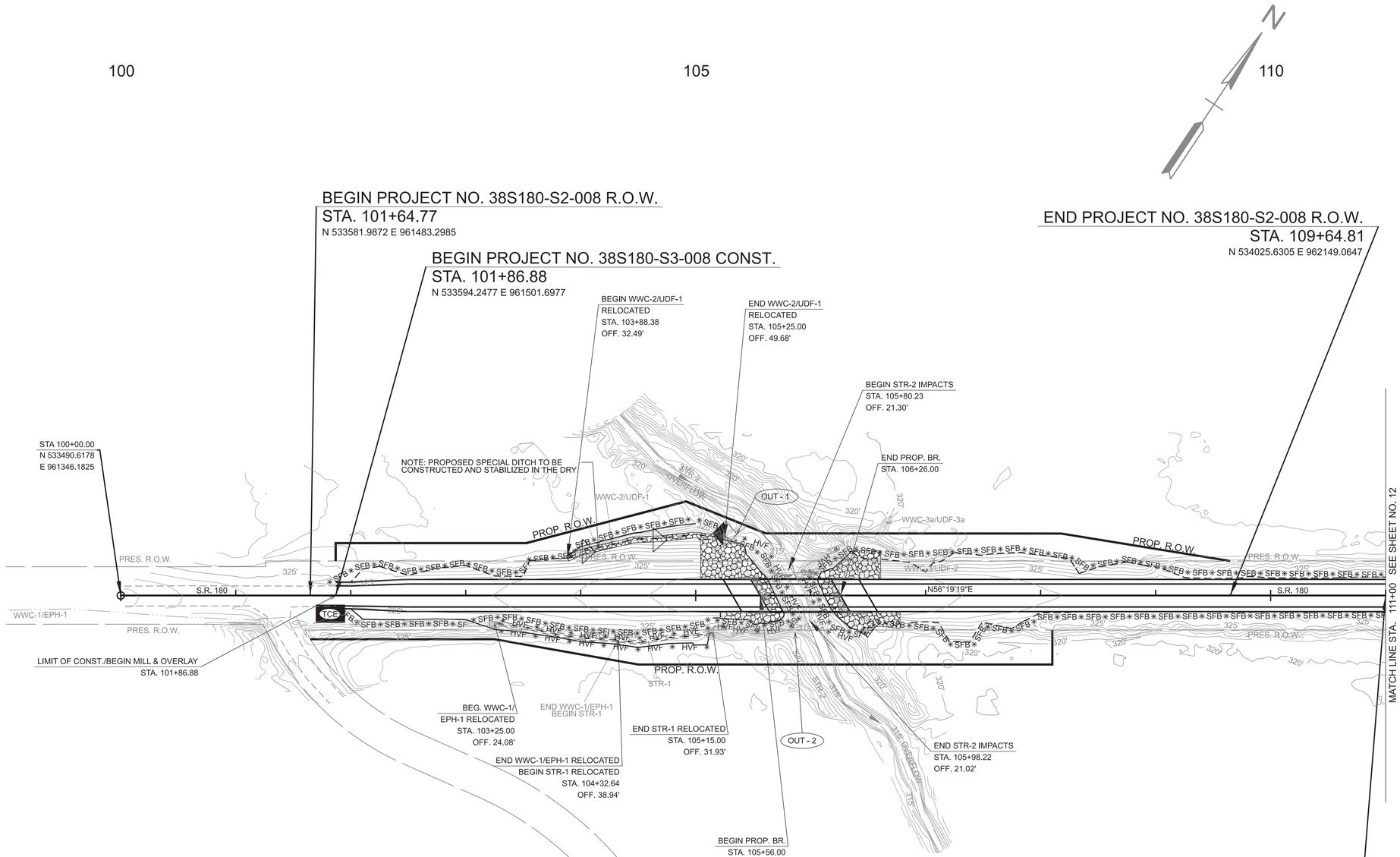
TYPE	YEAR	PROJECT NO.	SHEET NO.
FUNC.	2025	38S180-S2-007	11
		38S180-M2-007	
		38S180-S2-008	
PIH	2025	38S180-S3-007	11
		38S180-M3-007	
		38S180-S3-008	
PS&E	2026	38S180-S3-007	11
		38S180-M3-007	
		38S180-S3-008	



NOTE:
ALL DISTURBED AREAS TO EITHER BE SODDED OR COVERED WITH RIPRAP.

SPECIAL NOTE:
THE CONTRACTOR SHALL USE ANY MEASURE NECESSARY TO ENSURE THAT NO CONSTRUCTION ACTIVITY WILL OCCUR IN, NOR THAT ANY CONSTRUCTION EQUIPMENT WILL ENTER ANY PORTION OF STR-1 (OVERFLOW) AND THAT THE SURROUNDING VEGETATION WILL NOT BE DISTURBED AND ARE PROTECTED FROM SEDIMENT AND OTHER POLLUTANTS EXCEPT AT PERMITTED LOCATIONS.

NOTE: PROPOSED CONTOURS SHOWN ON STAGE 2.

SEALED BY

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

EROSION PREVENTION & SEDIMENT CONTROL (EPSC) PLANS-STAGE 2

STA. 100+00.00 TO STA. 111+00.00
SCALE: 1" = 50'

12/8/2025 11:11:26 AM
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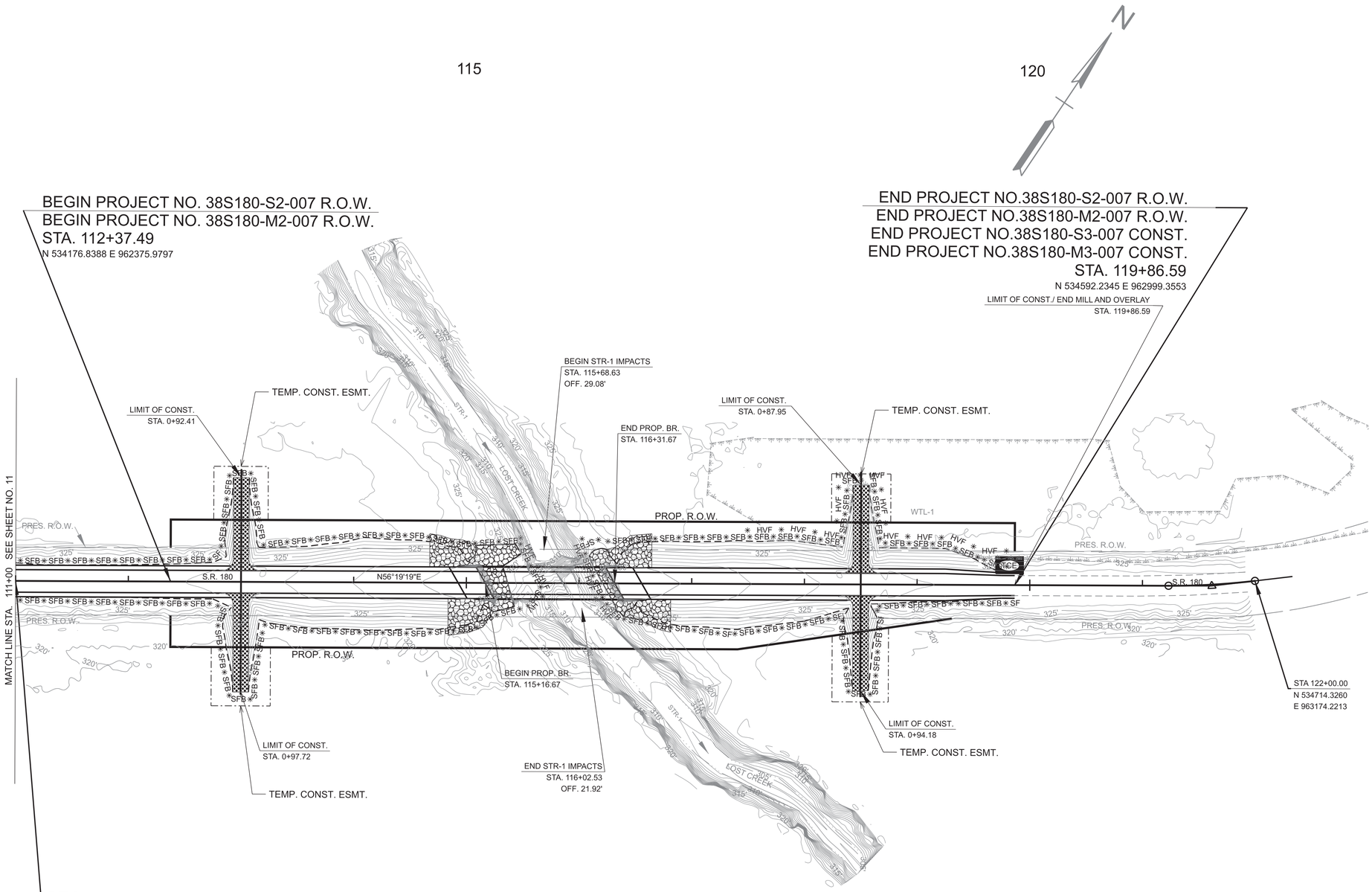
TYPE	YEAR	PROJECT NO.	SHEET NO.
FUNC.	2025	38S180-S2-007	12
		38S180-M2-007	
		38S180-S2-008	
PIH	2025	38S180-S3-007	12
		38S180-M3-007	
		38S180-S3-008	
PS&E	2026	38S180-S3-007	12
		38S180-M3-007	
		38S180-S3-008	



NOTE: PROPOSED CONTOURS SHOWN ON STAGE 2.

NOTE:
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No. 126315
STATE OF TENNESSEE
12/09/2025

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

EROSION PREVENTION & SEDIMENT CONTROL (EPSC) PLANS-STAGE 2

STA. 111+00.00 TO STA. 122+00.00
SCALE: 1" = 50'

12/8/2025 11:11:27 AM
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TYPE	YEAR	PROJECT NO.	SHEET NO.
FUNC.	2025	38S180-S2-007	13
		38S180-M2-007	
		38S180-S2-008	
PIH	2025	38S180-S3-007	13
		38S180-M3-007	
		38S180-S3-008	
PS&E	2026	38S180-S3-007	13
		38S180-M3-007	
		38S180-S3-008	

100 105 110

N

BEGIN PROJECT NO. 38S180-S2-008 R.O.W.
STA. 101+64.77
N 533581.9872 E 961483.2985

BEGIN PROJECT NO. 38S180-S3-008 CONST.
STA. 101+86.88
N 533594.2477 E 961501.6977

END PROJECT NO. 38S180-S2-008 R.O.W.
STA. 109+64.81
N 534025.6305 E 962149.0647

STA 100+00.00
N 533490.6178
E 961346.1825

CONSTRUCT 392' OF 6" DSYL
REMOVE 392' OF 6" DBYL
AND RAISED PAVEMENT MARKERS

OVERFLOW

6" SSWL W/
8" NON-CONTINUOUS RUMBLE STRIP

S.R. 180

N56°19'19"E

6" DSYL

6" SSWL W/
8" NON-CONTINUOUS RUMBLE STRIP

OVERFLOW

SEE SHEET NO. 14
MATCH LINE STA. 111+00

END PROJECT NO. 38S180-S3-008 CONST.
BEGIN PROJECT NO. 38S180-S3-007 CONST.
BEGIN PROJECT NO. 38S180-M3-007 CONST.
STA. 111+00.00
N 534100.5969 E 962261.5652

NOTE: SEE SIGN SCHEDULE SHEET 15 AND TRAFFIC CONTROL SHEET T2 FOR LOCATION AND SIZE OF PROJECT INFORMATION SIGNS NO. I2-5 AND D12-5

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KIRSCHTEN T. ROBERTS
REGISTERED ENGINEER
AGRICULTURE
COMMERCE
No. 126315
STATE OF TENNESSEE
12/09/2025

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

SIGNING AND PAVEMENT MARKING PLAN

STA. 100+00.00 TO STA. 111+00.00
SCALE: 1" = 50'

12/8/2025 11:11:39 AM
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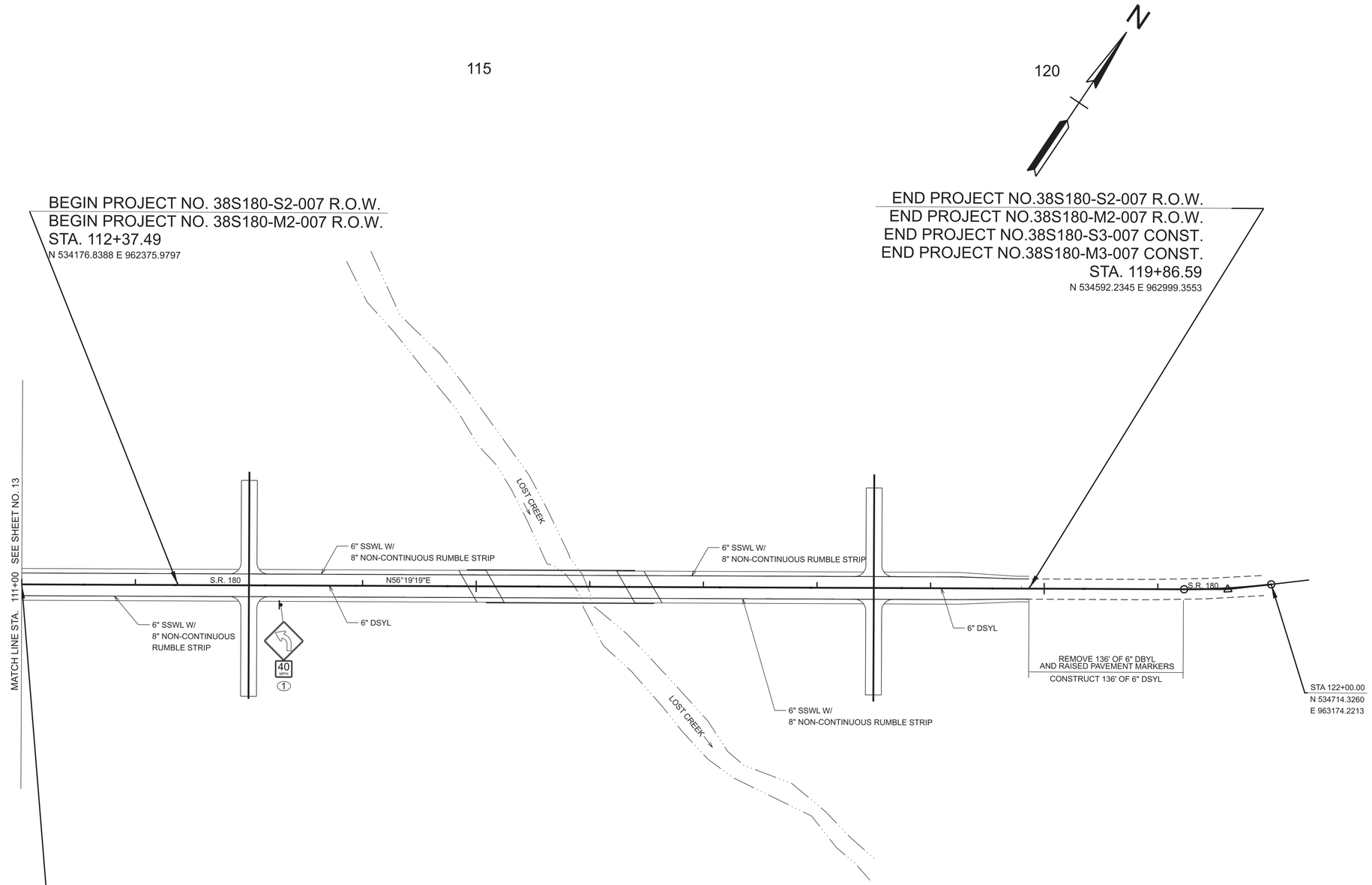
TYPE	YEAR	PROJECT NO.	SHEET NO.
FUNC.	2025	38S180-S2-007	14
		38S180-M2-007	
		38S180-S2-008	
PIH	2025	38S180-S3-007	14
		38S180-M3-007	
		38S180-S3-008	
PS&E	2026	38S180-S3-007	14
		38S180-M3-007	
		38S180-S3-008	



NOTE: SEE SIGN SCHEDULE SHEET 15 AND TRAFFIC CONTROL SHEET T2 FOR LOCATION AND SIZE OF PROJECT INFORMATION SIGNS NO. I2-5 AND D12-5

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COMMERCE
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12/09/2025

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

SIGNING AND PAVEMENT MARKING PLAN

STA. 111+00.00 TO STA. 122+00.00
SCALE: 1" = 50'

12/8/2025 11:11:40 AM
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ALL SIGNS SHOWN WITH DESIGNATIONS ARE TO BE FRABRICATED AS DETAILED IN THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (CURRENT EDITION)

SEE STD. DWG. NO. T-S-19

THE FOLLOWING STANDARD DRAWINGS APPLY UNLESS OTHERWISE NOTED IN THE REMARKS: FLAT SHEET (T-S SERIES 10, 12, 16, 17, 19, 20); EXTRUDED PANEL (T-S SERIES 6, 9, 13, 14); WALL/BARRIER MOUNTED (T-S-21), MULTI-DIRECTIONAL BASE (T-S SERIES 23A, 23B, 23C); RAILROAD (T-S-16)

SIGN NO	LEGEND		SHEET NO	SIZE				COPY			SHIELD	ARROW	SIGN FACE			STEEL DESIGN (BREAK-AWAY)					MINIMUM VERTICAL CLEARANCE	REMARKS
				LENGTH	HEIGHT	RADIUS	BORDER WIDTH	CAPITAL	LOWER CASE	NUMERAL SERIES			COPY	BACKGROUND	MATERIAL	SUPPORT TYPE	SUPPORT LENGTH	FOOTING	CONC. CU. YD.	REIN. STEEL LBS.		
1		W1-2L W13-1P	14	24" 18"	24" 18"								BLACK	YELLOW (RETROFLECTIVE)	0.100" SHEET ALUMINUM 0.080" SHEET ALUMINUM	P4	14'				5'0"	
		I2-5	T2	108"	48"								WHITE	GREEN (RETROFLECTIVE)	0.100" SHEET ALUMINUM	2 @ S4 X 7.7	14.25' 12.25'	TYPE 5 1' - 3"	0.72	194.42	5'0"	SEE SHEET T2 FOR LOCATION
		D12-5	T2	48"	60"								WHITE	BLUE (RETROFLECTIVE)	0.100" SHEET ALUMINUM	2 @ P6	16.75' 17.50'				5'0"	SEE SHEET T2 FOR LOCATION

TYPE	YEAR	PROJECT NO.	SHEET NO.
FUNC.	2025	38S180-S2-007	15
		38S180-M2-007	
		38S180-S2-008	
PIH	2025	38S180-S3-007	15
		38S180-M3-007	
		38S180-S3-008	
PS&E	2026	38S180-S3-007	15
		38S180-M3-007	
		38S180-S3-008	

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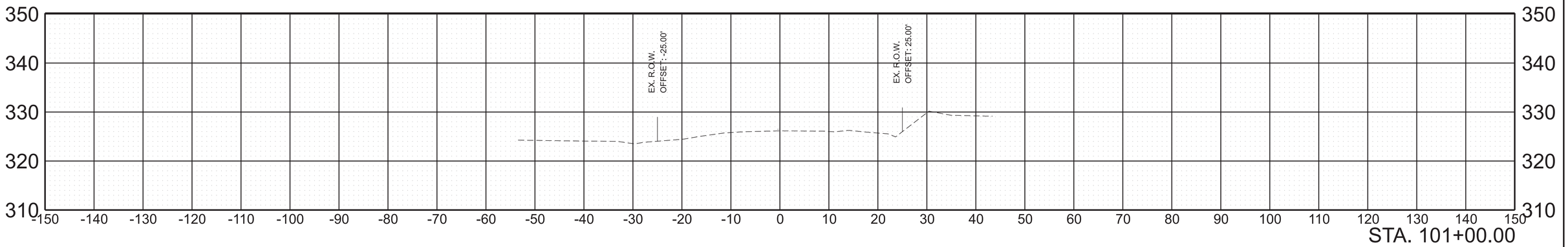
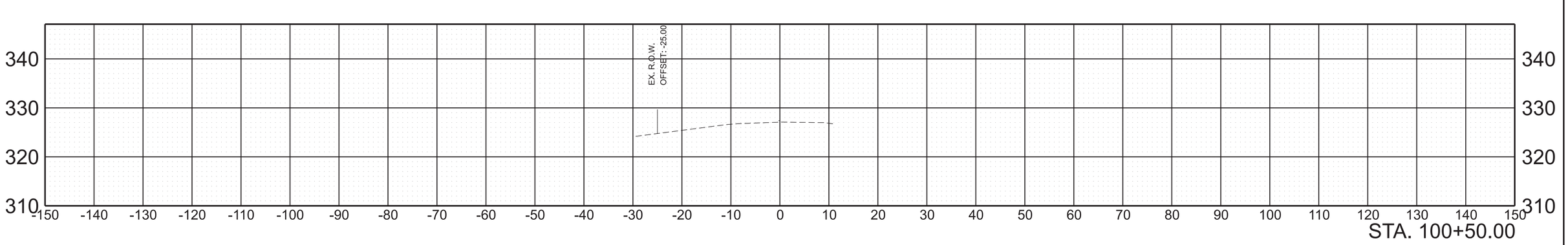
DEPARTMENT OF TRANSPORTATION

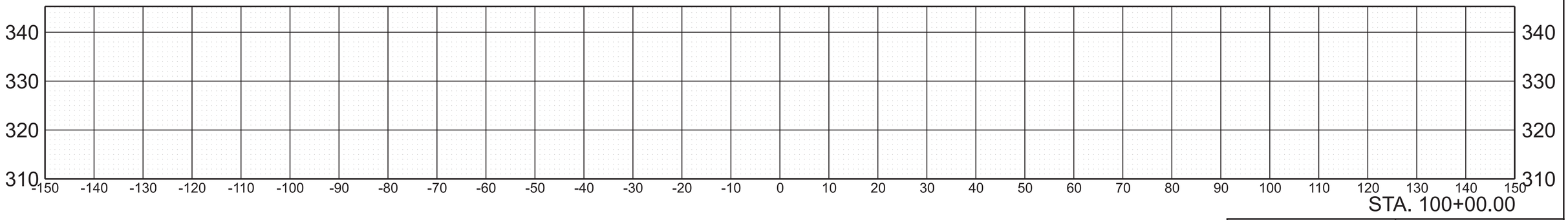
SIGN SCHEDULE

12/8/2025 11:11:50 AM
$$$$DGNSPECS

TYPE	YEAR	PROJECT NO.	SHEET NO.
FUNC.	2025	38S180-S2-007	16
		38S180-M2-007	
		38S180-S2-008	
PIH	2025	38S180-S3-007	16
		38S180-M3-007	
		38S180-S3-008	
PS&E	2026	38S180-S3-007	16
		38S180-M3-007	
		38S180-S3-008	







SCALE:	1"=10' HORIZ.	BEGIN STA. 100+00.00
	1"=10' VERT.	END STA. 101+00.00

12/8/2025 11:12:26 AM
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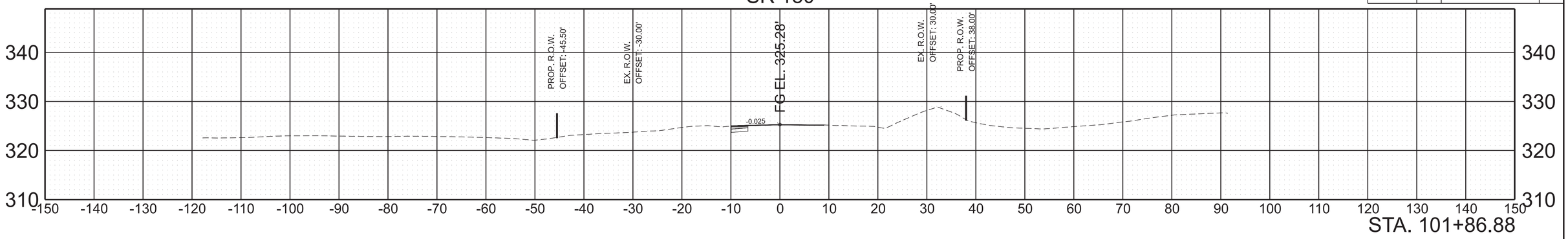
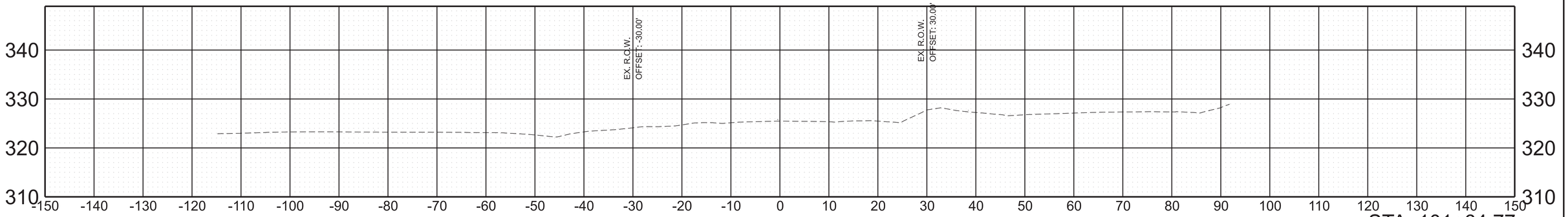
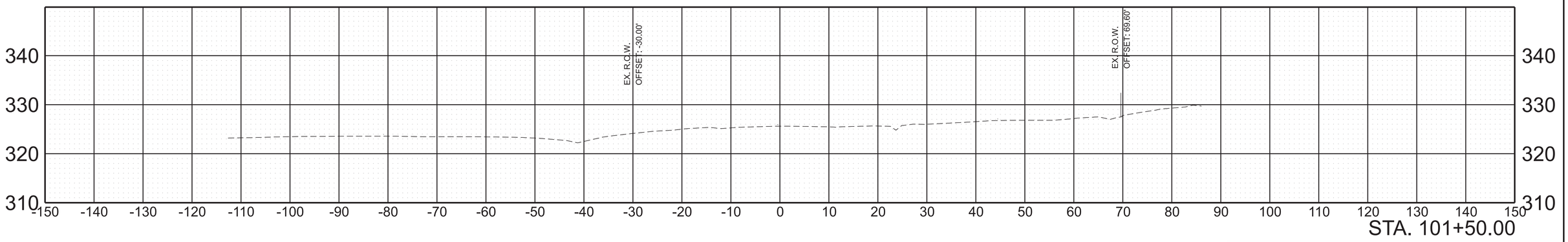
TYPE	YEAR	PROJECT NO.	SHEET NO.
FUNC.	2025	38S180-S2-007	17
		38S180-M2-007	
		38S180-S2-008	
PIH	2025	38S180-S3-007	17
		38S180-M3-007	
		38S180-S3-008	
PS&E	2026	38S180-S3-007	17
		38S180-M3-007	
		38S180-S3-008	







SCALE:	1"=10' HORIZ.	BEGIN STA. 101+50.00
	1"=10' VERT.	END STA. 101+86.88

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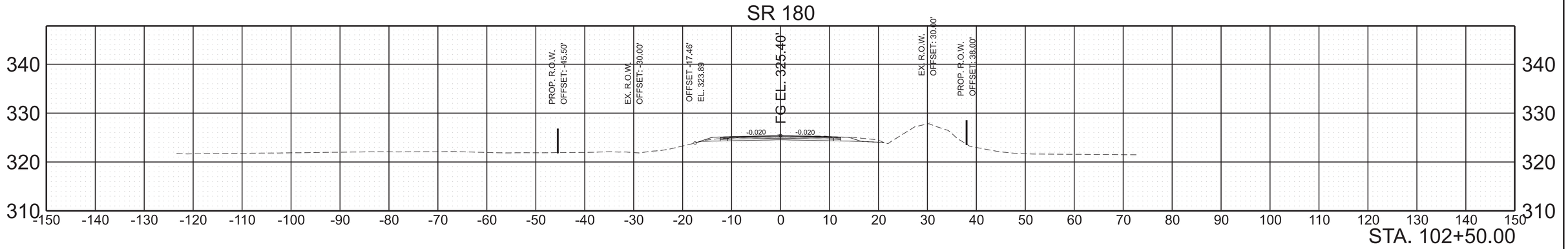
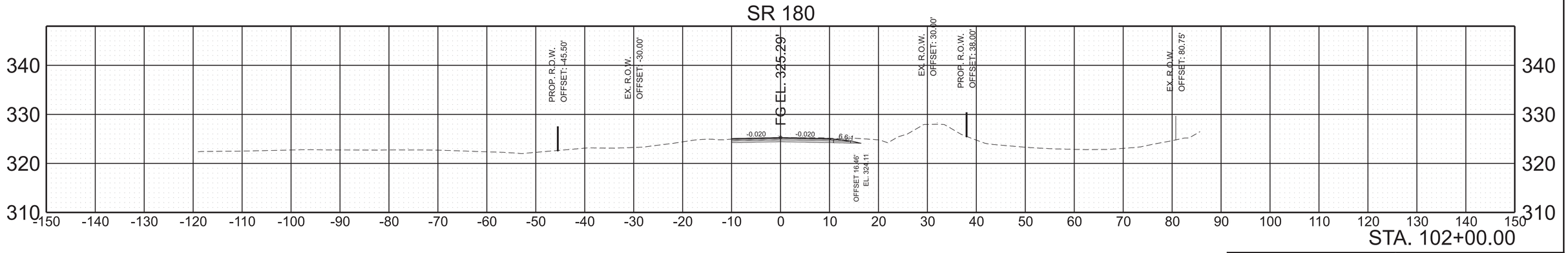
TYPE	YEAR	PROJECT NO.	SHEET NO.
FUNC.	2025	38S180-S2-007	18
		38S180-M2-007	
		38S180-S2-008	
PIH	2025	38S180-S3-007	18
		38S180-M3-007	
		38S180-S3-008	
PS&E	2026	38S180-S3-007	18
		38S180-M3-007	
		38S180-S3-008	





SCALE:	1"=10' HORIZ.	BEGIN STA. 102+00.00
	1"=10' VERT.	END STA. 102+50.00

12/8/2025 11:12:31 AM
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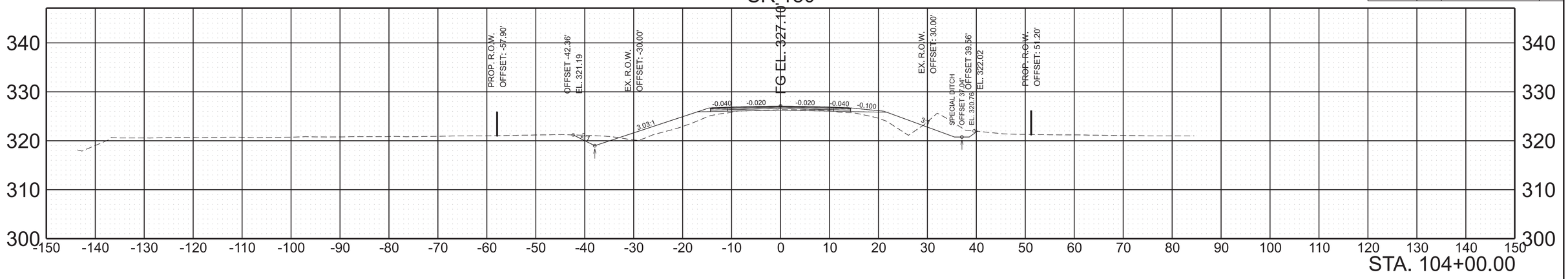
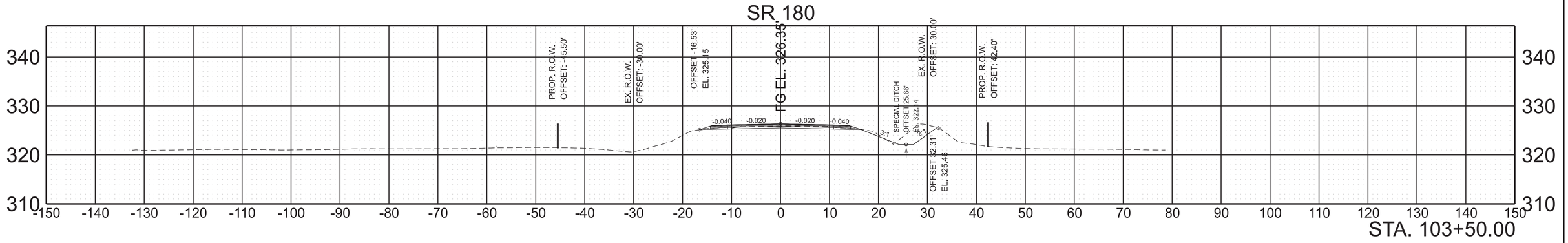
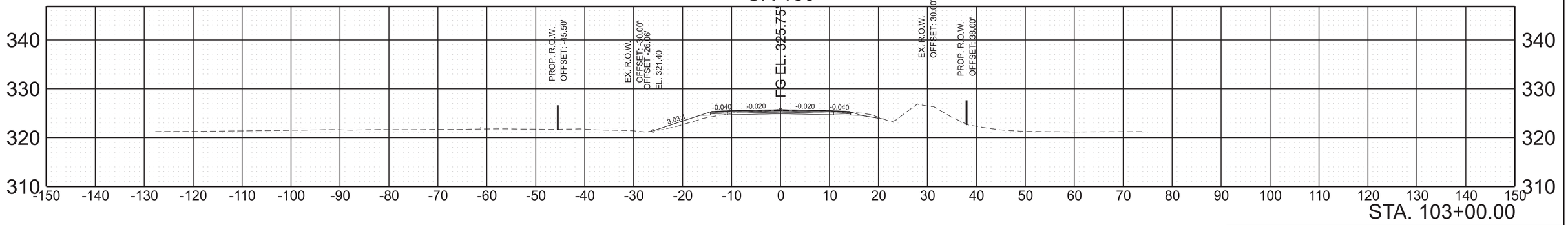
TYPE	YEAR	PROJECT NO.	SHEET NO.
FUNC.	2025	38S180-S2-007	19
		38S180-M2-007	
		38S180-S2-008	
PIH	2025	38S180-S3-007	19
		38S180-M3-007	
		38S180-S3-008	
PS&E	2026	38S180-S3-007	19
		38S180-M3-007	
		38S180-S3-008	







SCALE:	1"=10' HORIZ.	BEGIN STA. 103+00.00
	1"=10' VERT.	END STA. 104+00.00

12/8/2025 11:12:33 AM
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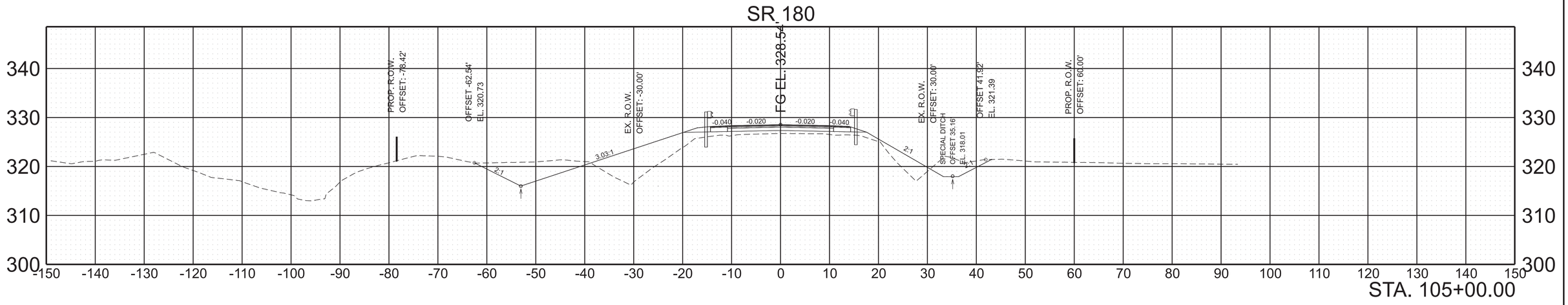
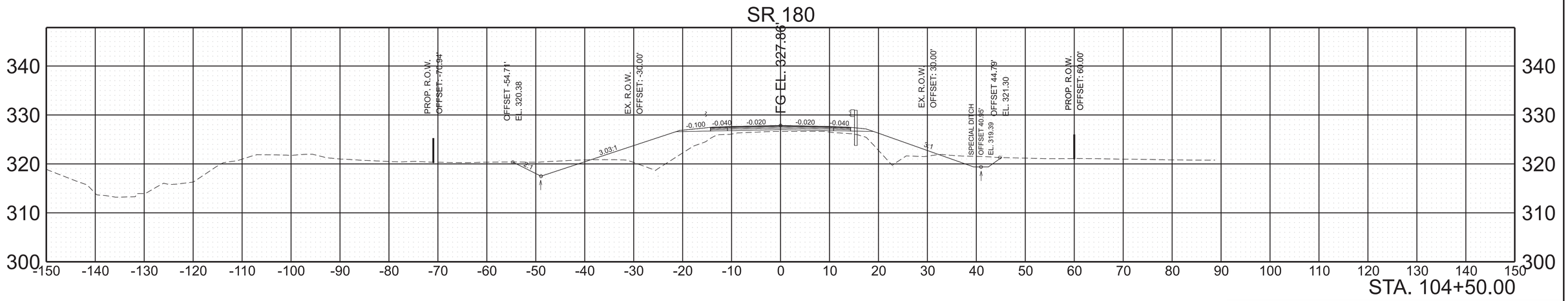
TYPE	YEAR	PROJECT NO.	SHEET NO.
FUNC.	2025	38S180-S2-007	20
		38S180-M2-007	
		38S180-S2-008	
PIH	2025	38S180-S3-007	20
		38S180-M3-007	
		38S180-S3-008	
PS&E	2026	38S180-S3-007	20
		38S180-M3-007	
		38S180-S3-008	

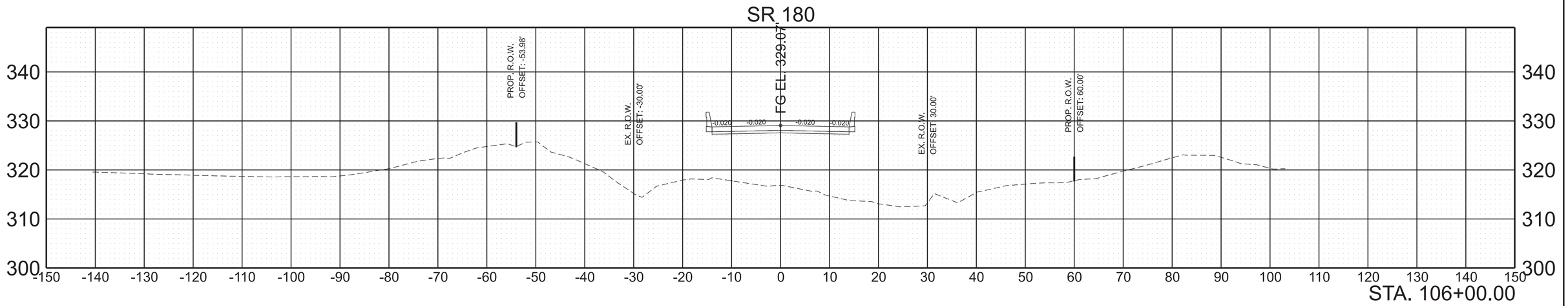


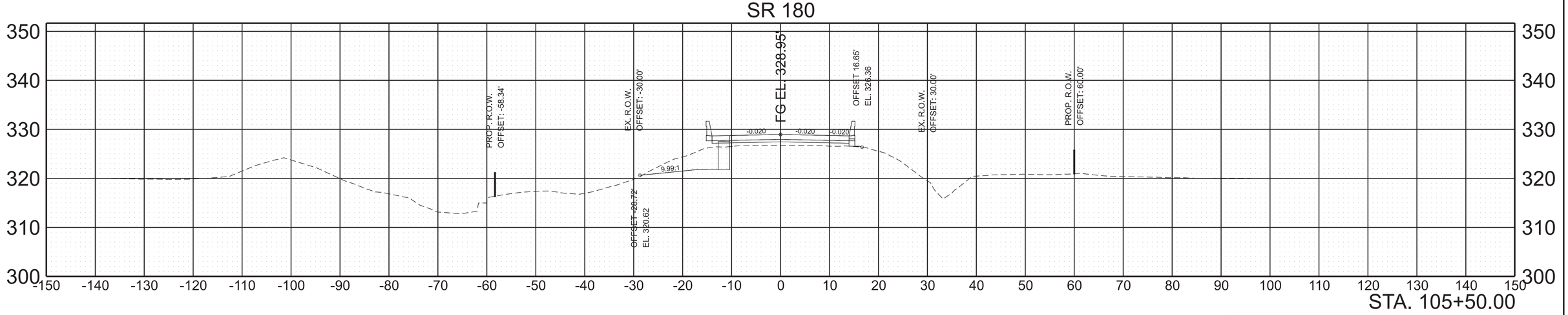


SCALE:	1"=10' HORIZ.	BEGIN STA. 104+50.00
	1"=10' VERT.	END STA. 105+00.00

12/8/2025 11:12:35 AM
C:\TMP\PWISE\D0160785\38S180-SHT-XS-SR180.DGN

TYPE	YEAR	PROJECT NO.	SHEET NO.
FUNC.	2025	38S180-S2-007	21
		38S180-M2-007	
		38S180-S2-008	
PIH	2025	38S180-S3-007	21
		38S180-M3-007	
		38S180-S3-008	
PS&E	2026	38S180-S3-007	21
		38S180-M3-007	
		38S180-S3-008	

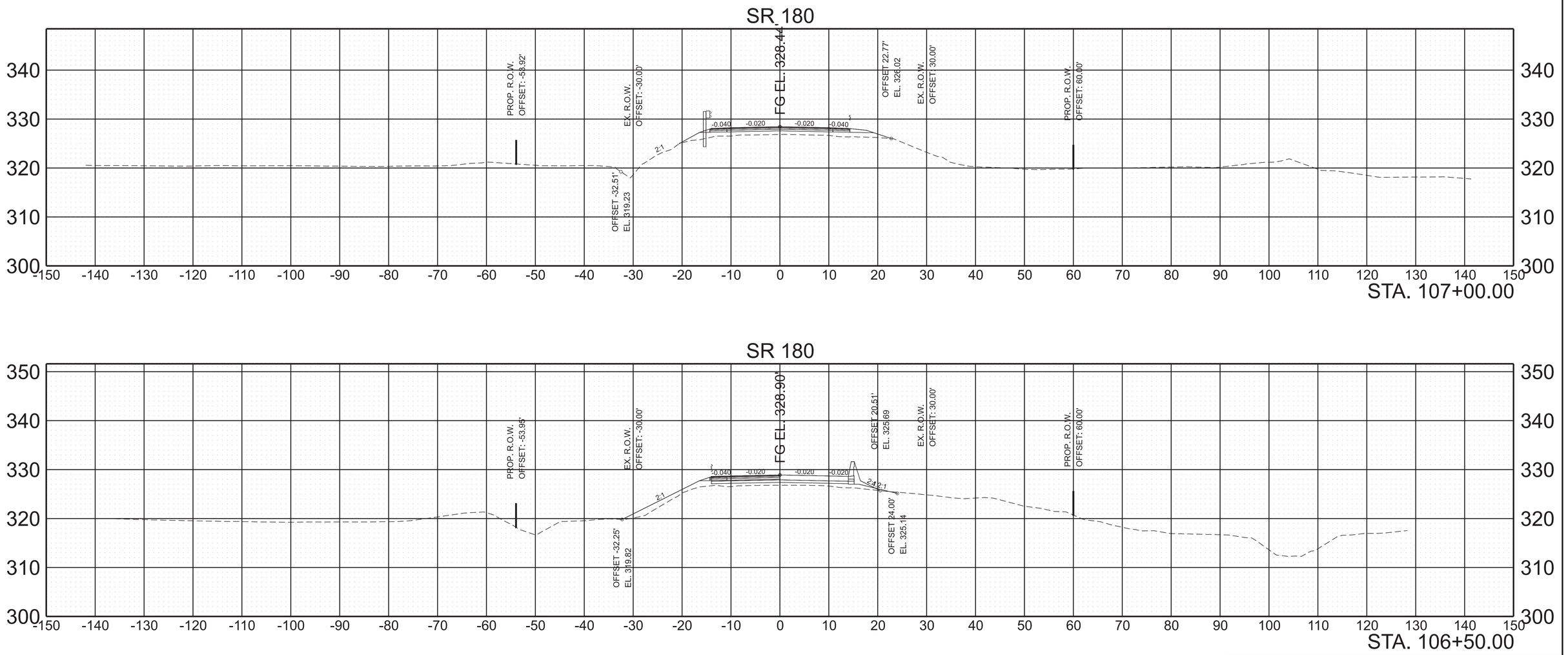




SCALE:		
	1"=10' HORIZ.	BEGIN STA. 105+50.00
	1"=10' VERT.	END STA. 106+00.00

12/8/2025 11:12:38 AM
C:\TMP\PWISE\D0160785\38S180-SHT-XS-SR180.DGN

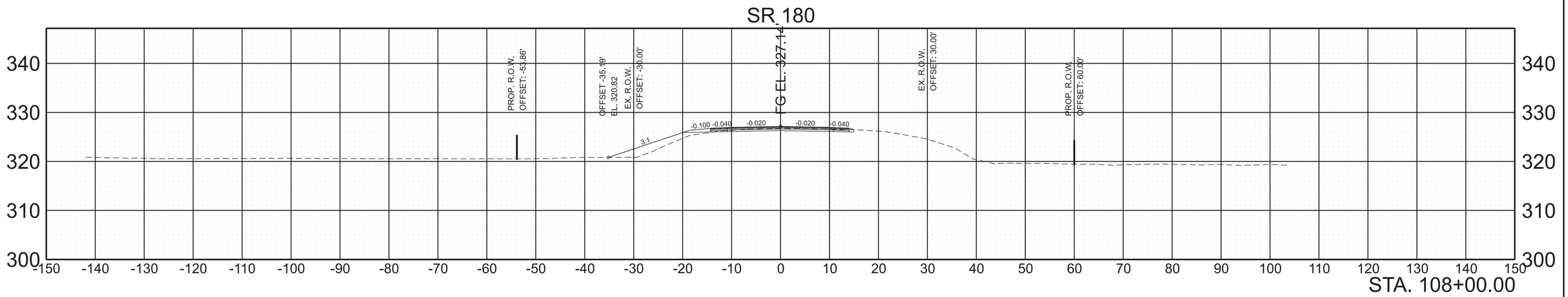
TYPE	YEAR	PROJECT NO.	SHEET NO.
FUNC.	2025	38S180-S2-007	22
		38S180-M2-007	
		38S180-S2-008	
PIH	2025	38S180-S3-007	22
		38S180-M3-007	
		38S180-S3-008	
PS&E	2026	38S180-S3-007	22
		38S180-M3-007	
		38S180-S3-008	

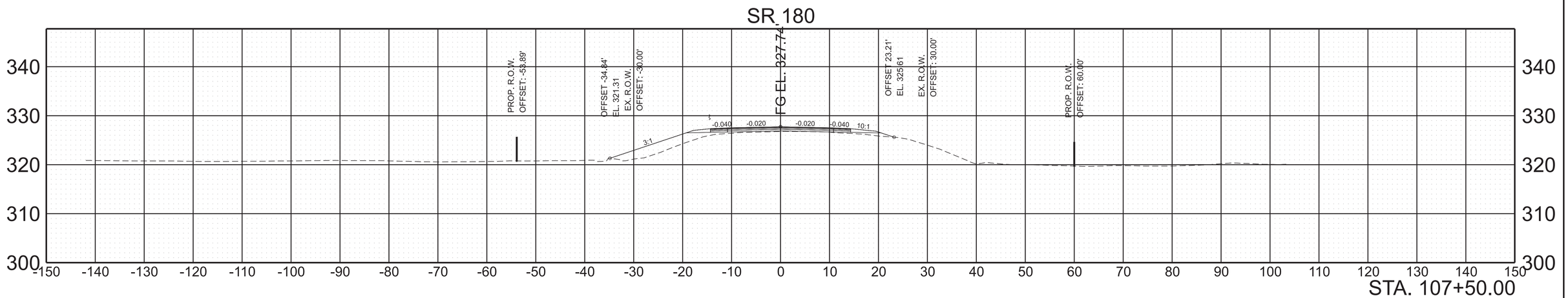


SCALE:	1"=10' HORIZ.	BEGIN STA. 106+50.00
	1"=10' VERT.	END STA. 107+00.00

12/8/2025 11:12:40 AM
C:\TMP\PWISE\D0160785\38S180-SHT-XS-SR180.DGN

TYPE	YEAR	PROJECT NO.	SHEET NO.
FUNC.	2025	38S180-S2-007	23
		38S180-M2-007	
		38S180-S2-008	
PIH	2025	38S180-S3-007	23
		38S180-M3-007	
		38S180-S3-008	
PS&E	2026	38S180-S3-007	23
		38S180-M3-007	
		38S180-S3-008	

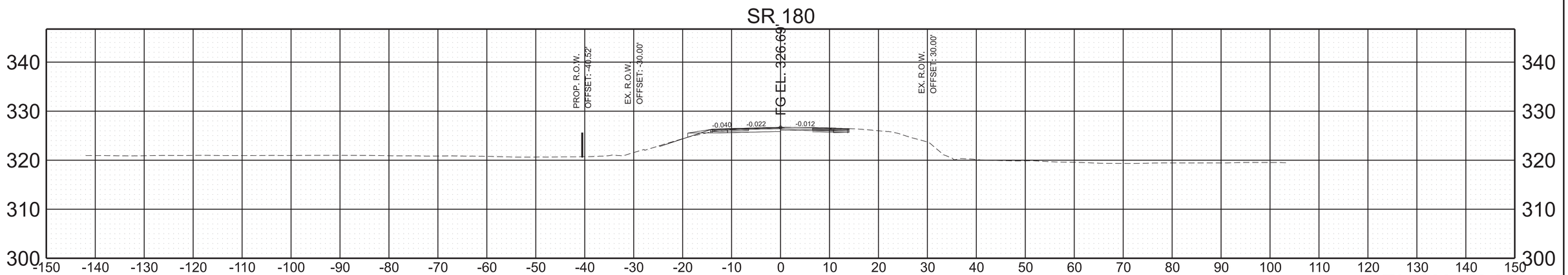


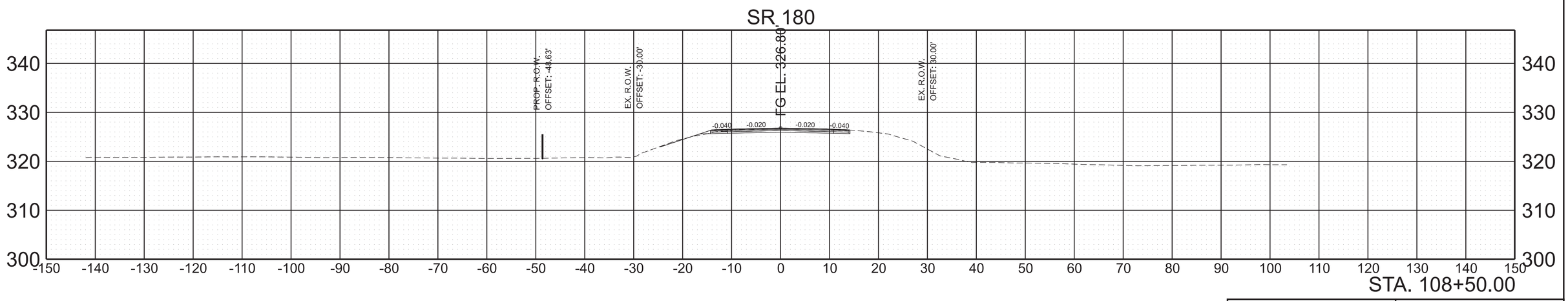


SCALE:		
	1"=10' HORIZ.	BEGIN STA. 107+50.00
	1"=10' VERT.	END STA. 108+00.00

12/8/2025 11:12:42 AM
C:\TMP\PWISE\D0160785\38S180-SHT-XS-SR180.DGN

TYPE	YEAR	PROJECT NO.	SHEET NO.
FUNC.	2025	38S180-S2-007	24
		38S180-M2-007	
		38S180-S2-008	
PIH	2025	38S180-S3-007	24
		38S180-M3-007	
		38S180-S3-008	
PS&E	2026	38S180-S3-007	24
		38S180-M3-007	
		38S180-S3-008	

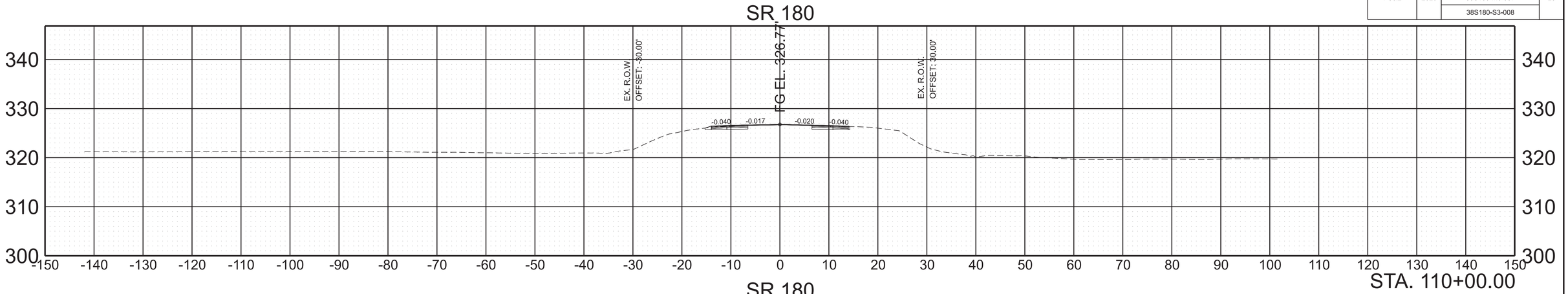


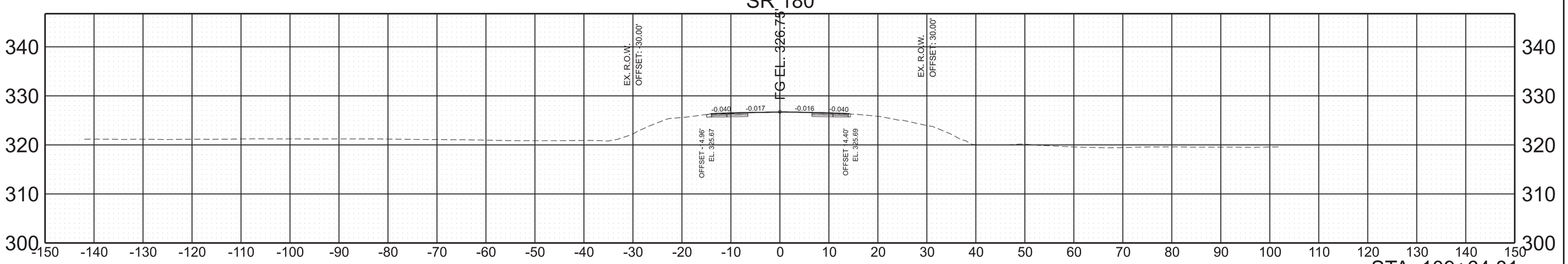


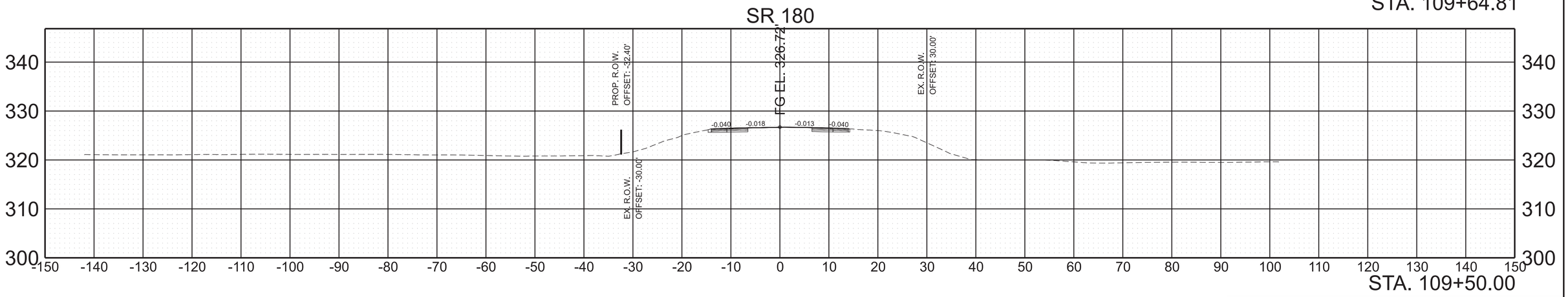
SCALE:		
	1"=10' HORIZ.	BEGIN STA. 108+50.00
	1"=10' VERT.	END STA. 109+00.00

12/8/2025 11:12:44 AM
C:\TMP\PWISE\D0160785\38S180-SHT-XS-SR180.DGN

TYPE	YEAR	PROJECT NO.	SHEET NO.
FUNC.	2025	38S180-S2-007	25
		38S180-M2-007	
		38S180-S2-008	
PIH	2025	38S180-S3-007	25
		38S180-M3-007	
		38S180-S3-008	
PS&E	2026	38S180-S3-007	25
		38S180-M3-007	
		38S180-S3-008	



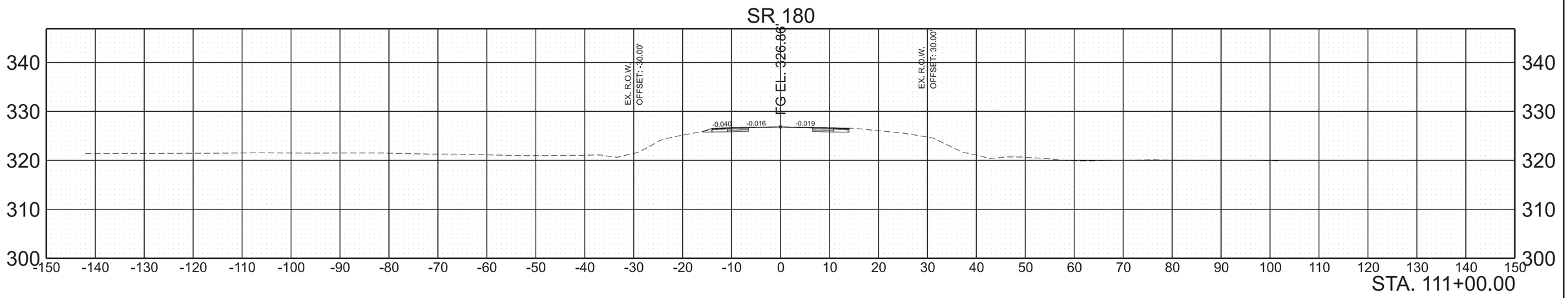


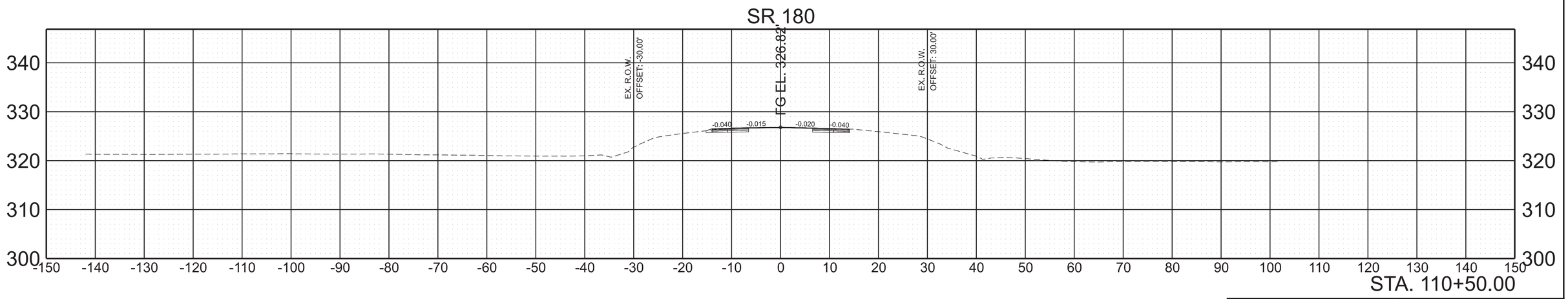


SCALE:		
	1"=10' HORIZ.	BEGIN STA. 109+50.00
	1"=10' VERT.	END STA. 110+00.00

12/8/2025 11:12:46 AM
C:\TMP\PWISE\D0160785\38S180-SHT-XS-SR180.DGN

TYPE	YEAR	PROJECT NO.	SHEET NO.
FUNC.	2025	38S180-S2-007	26
		38S180-M2-007	
		38S180-S2-008	
PIH	2025	38S180-S3-007	26
		38S180-M3-007	
		38S180-S3-008	
PS&E	2026	38S180-S3-007	26
		38S180-M3-007	
		38S180-S3-008	

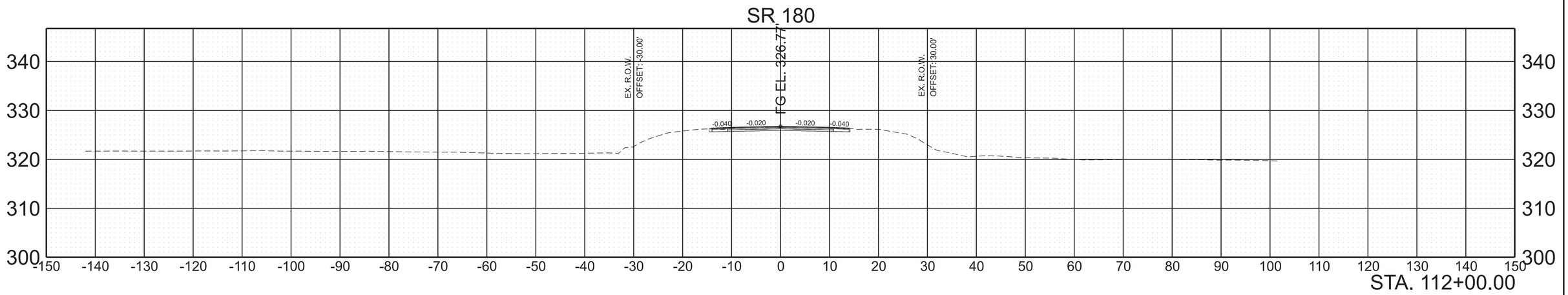


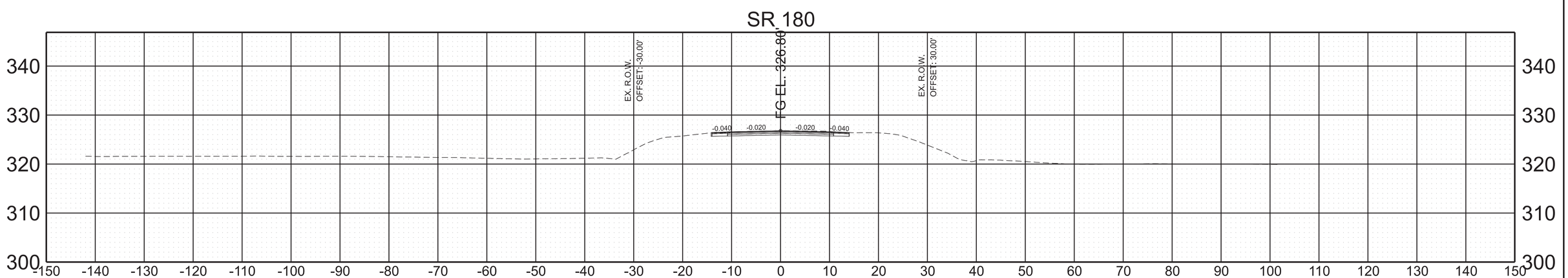


SCALE:	1"=10' HORIZ.	BEGIN STA. 110+50.00
	1"=10' VERT.	END STA. 111+00.00

12/8/2025 11:12:48 AM
C:\TMP\PWISE\D0160785\38S180-SHT-XS-SR180.DGN

TYPE	YEAR	PROJECT NO.	SHEET NO.
FUNC.	2025	38S180-S2-007	27
		38S180-M2-007	
		38S180-S2-008	
PIH	2025	38S180-S3-007	27
		38S180-M3-007	
		38S180-S3-008	
PS&E	2026	38S180-S3-007	27
		38S180-M3-007	
		38S180-S3-008	

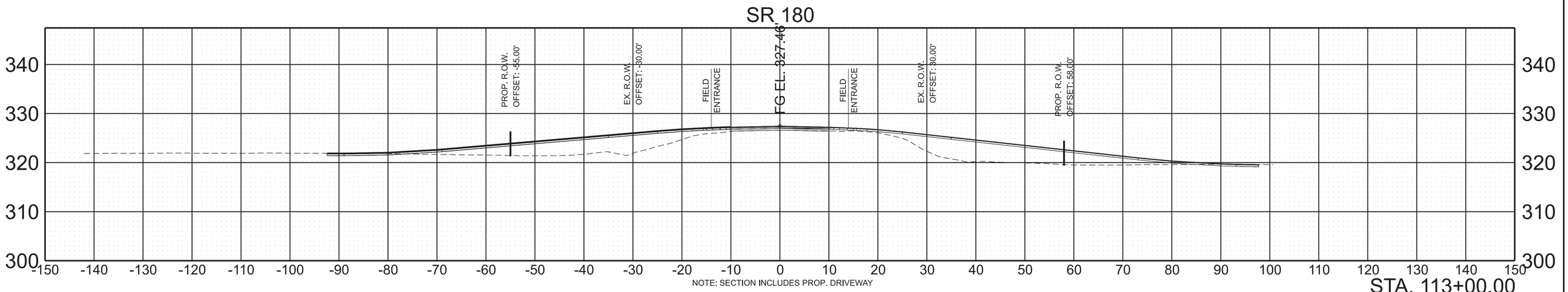




SCALE:			
	1"=10'	HORIZ.	BEGIN STA. 111+50.00
	1"=10'	VERT.	END STA. 112+00.00

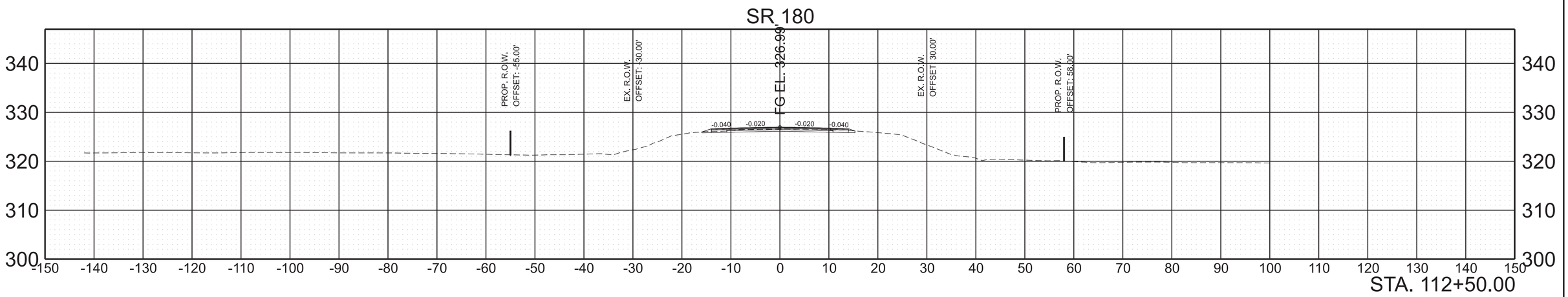
12/8/2025 11:12:50 AM
C:\TMP\PWISE\D0160785\38S180-SHT-XS-SR180.DGN

TYPE	YEAR	PROJECT NO.	SHEET NO.
FUNC.	2025	38S180-S2-007	28
		38S180-M2-007	
		38S180-S2-008	
PIH	2025	38S180-S3-007	28
		38S180-M3-007	
		38S180-S3-008	
PS&E	2026	38S180-S3-007	28
		38S180-M3-007	
		38S180-S3-008	



NOTE: SECTION INCLUDES PROP. DRIVEWAY

STA. 113+00.00

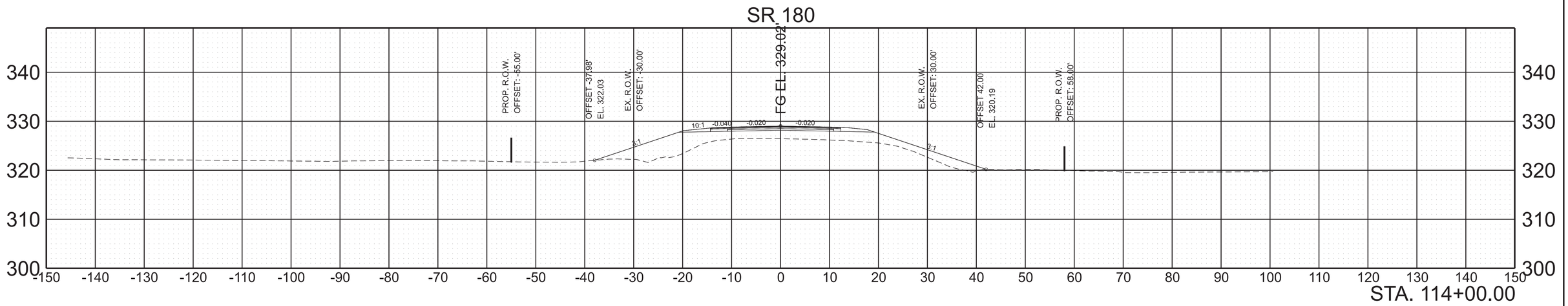


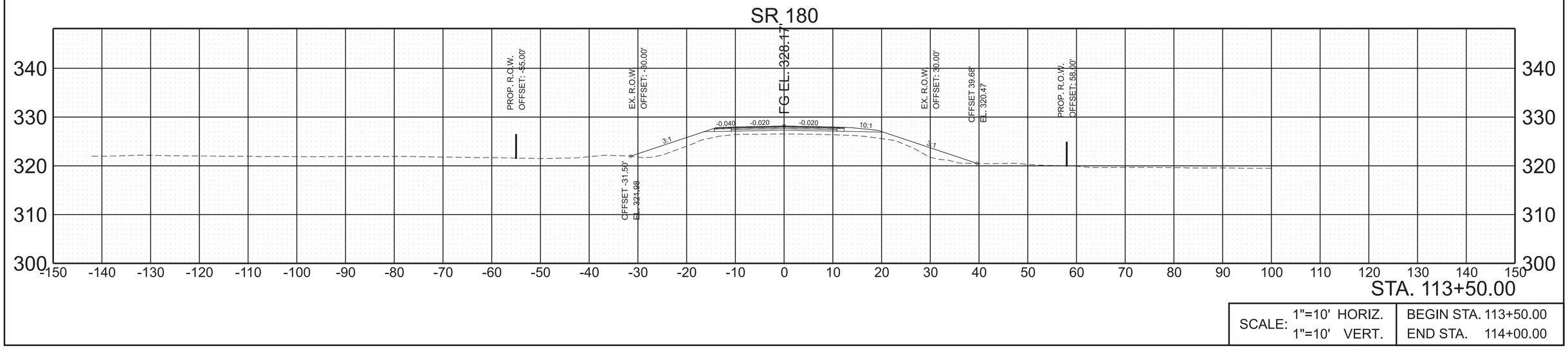
STA. 112+50.00

SCALE:	1"=10' HORIZ.	BEGIN STA. 112+50.00
	1"=10' VERT.	END STA. 113+00.00

12/8/2025 11:12:52 AM
C:\TMPIPWISE\D0160785\38S180-SHT-XS-SR180.DGN

TYPE	YEAR	PROJECT NO.	SHEET NO.
FUNC.	2025	38S180-S2-007	29
		38S180-M2-007	
		38S180-S2-008	
PIH	2025	38S180-S3-007	29
		38S180-M3-007	
		38S180-S3-008	
PS&E	2026	38S180-S3-007	29
		38S180-M3-007	
		38S180-S3-008	

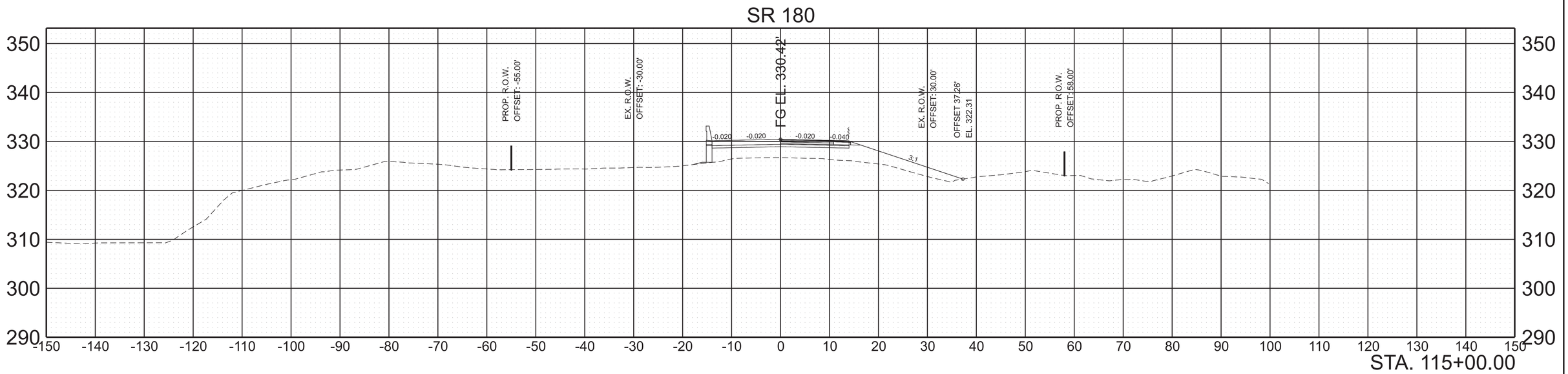


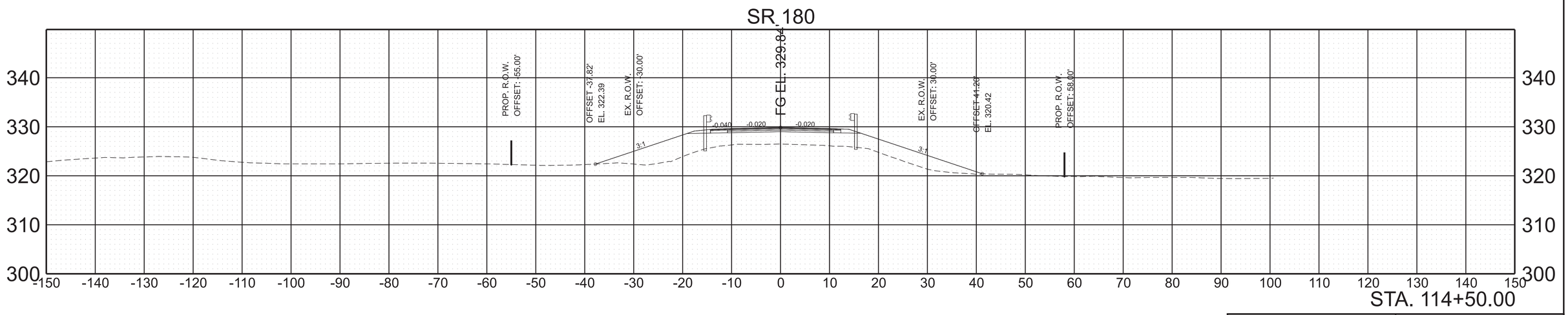


SCALE:	1"=10' HORIZ.	BEGIN STA. 113+50.00
	1"=10' VERT.	END STA. 114+00.00

12/8/2025 11:12:54 AM
C:\TMP\PWISE\D0160785\38S180-SHT-XS-SR180.DGN

TYPE	YEAR	PROJECT NO.	SHEET NO.
FUNC.	2025	38S180-S2-007	30
		38S180-M2-007	
		38S180-S2-008	
PIH	2025	38S180-S3-007	30
		38S180-M3-007	
		38S180-S3-008	
PS&E	2026	38S180-S3-007	30
		38S180-M3-007	
		38S180-S3-008	

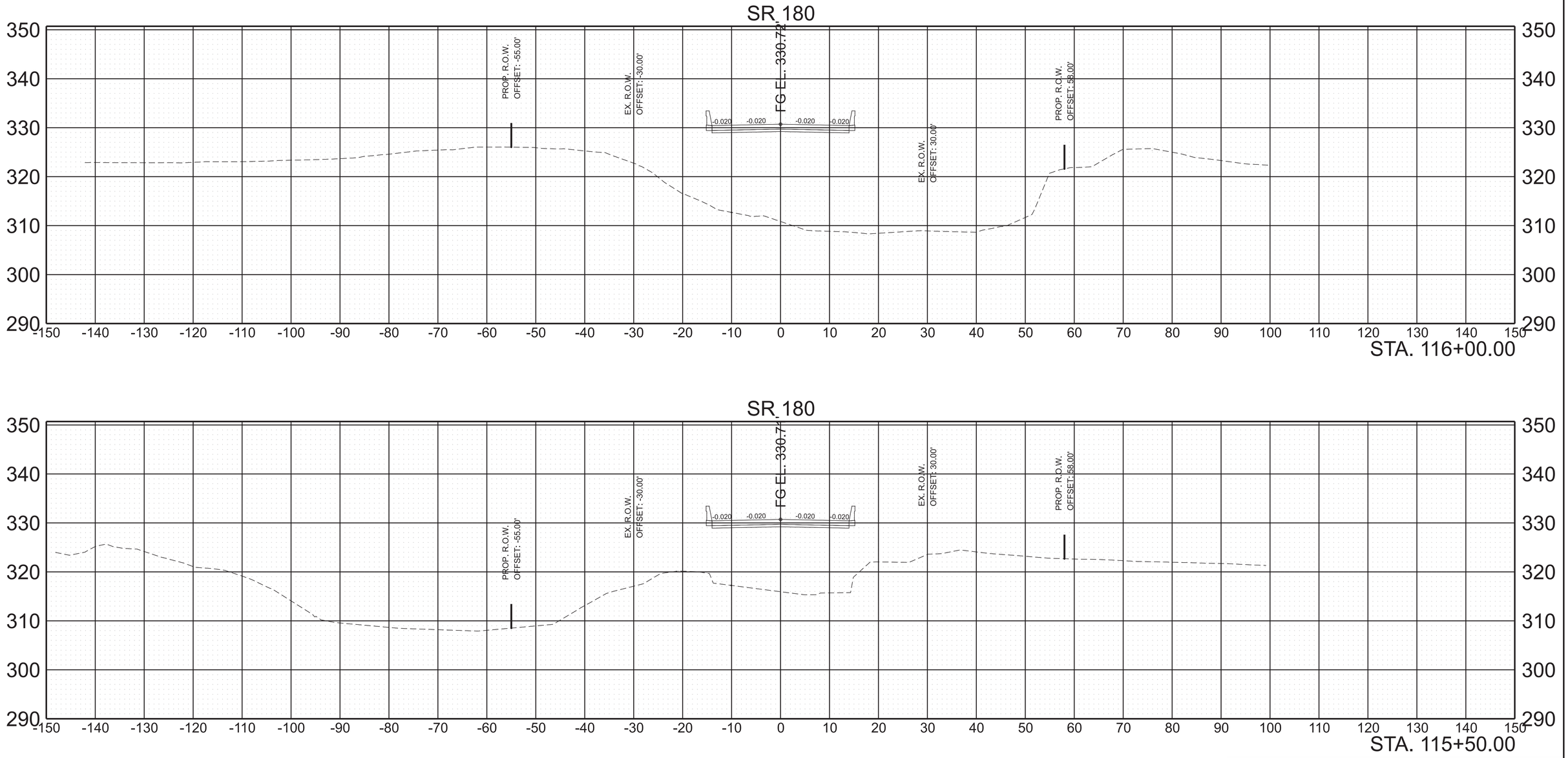




SCALE:	1"=10' HORIZ. 1"=10' VERT.	BEGIN STA. 114+50.00 END STA. 115+00.00	

12/8/2025 11:12:56 AM
C:\TMP\PWISE\D0160785\38S180-SHT-XS-SR180.DGN

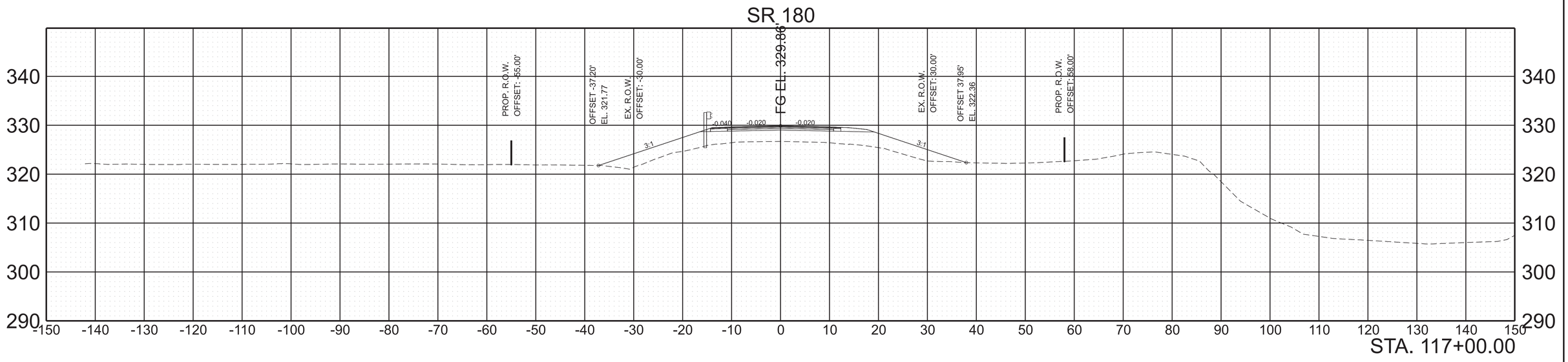
TYPE	YEAR	PROJECT NO.	SHEET NO.
FUNC.	2025	38S180-S2-007	31
		38S180-M2-007	
		38S180-S2-008	
PIH	2025	38S180-S3-007	31
		38S180-M3-007	
		38S180-S3-008	
PS&E	2026	38S180-S3-007	31
		38S180-M3-007	
		38S180-S3-008	

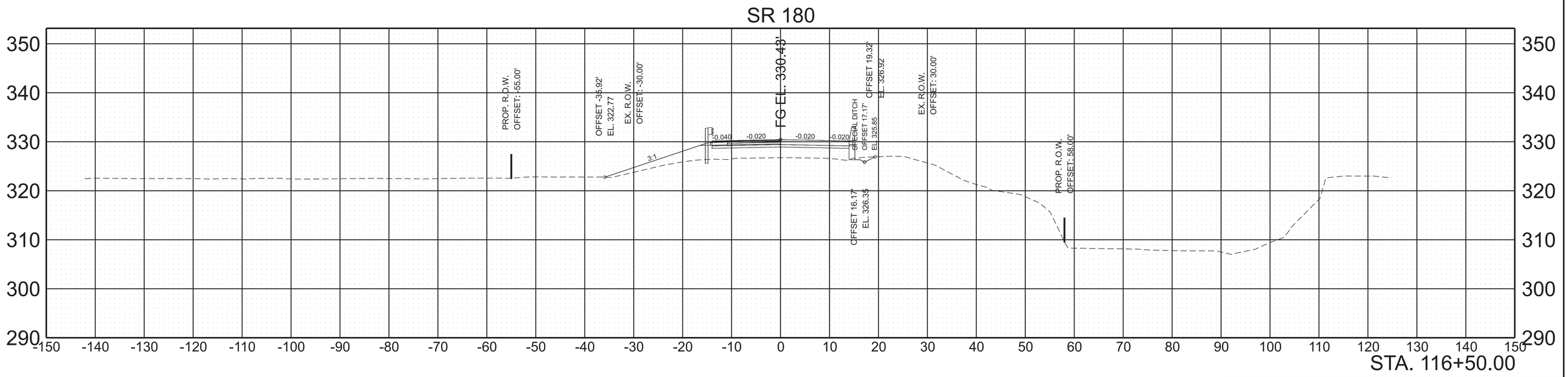


SCALE:	1"=10' HORIZ.	BEGIN STA. 115+50.00
	1"=10' VERT.	END STA. 116+00.00

12/8/2025 11:12:59 AM
C:\TMP\PWISE\D0160785\38S180-SHT-XS-SR180.DGN

TYPE	YEAR	PROJECT NO.	SHEET NO.
FUNC.	2025	38S180-S2-007	32
		38S180-M2-007	
		38S180-S2-008	
PIH	2025	38S180-S3-007	32
		38S180-M3-007	
		38S180-S3-008	
PS&E	2026	38S180-S3-007	32
		38S180-M3-007	
		38S180-S3-008	

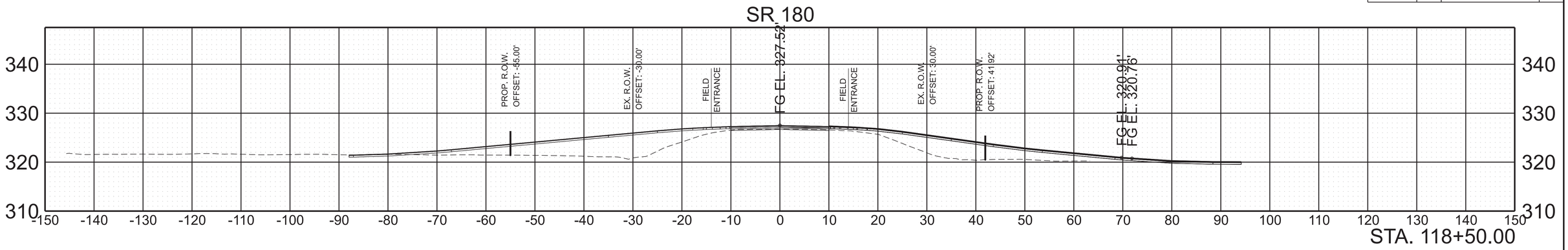


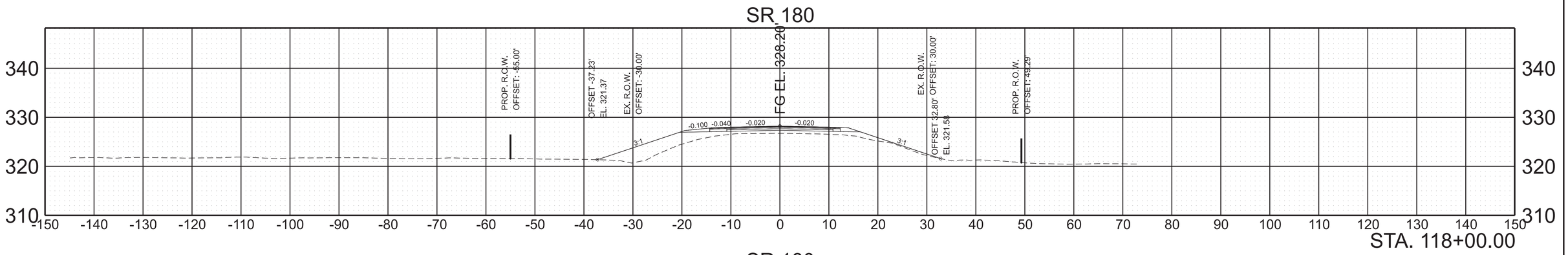


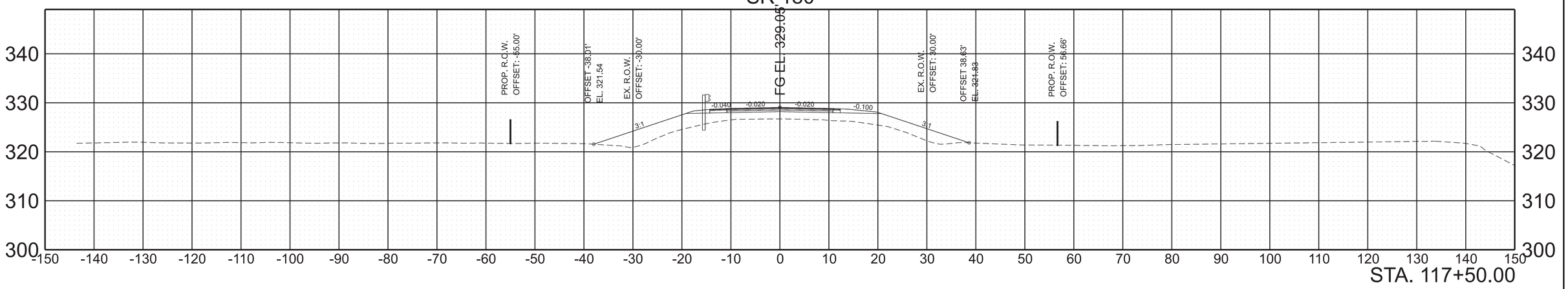
SCALE:		
	1"=10' HORIZ.	BEGIN STA. 116+50.00
	1"=10' VERT.	END STA. 117+00.00

12/8/2025 11:13:01 AM
C:\TMP\PWISE\D0160785\38S180-SHT-XS-SR180.DGN

TYPE	YEAR	PROJECT NO.	SHEET NO.
FUNC.	2025	38S180-S2-007	33
		38S180-M2-007	
		38S180-S2-008	
PIH	2025	38S180-S3-007	33
		38S180-M3-007	
		38S180-S3-008	
PS&E	2026	38S180-S3-007	33
		38S180-M3-007	
		38S180-S3-008	



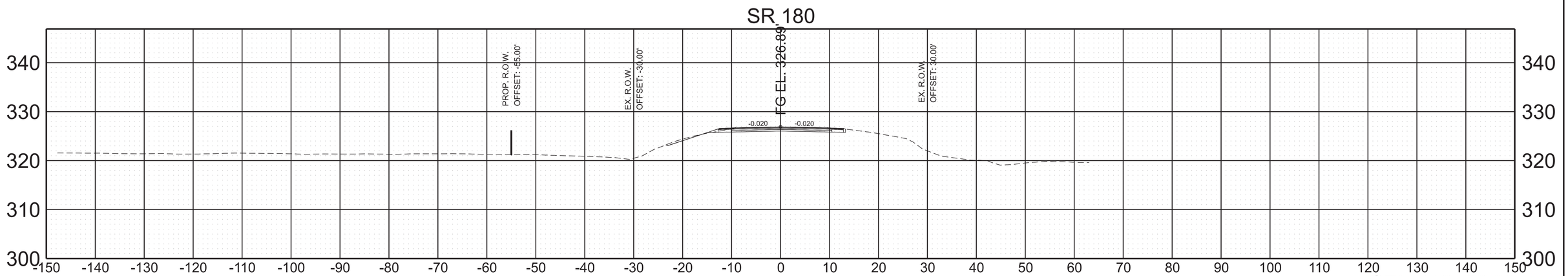


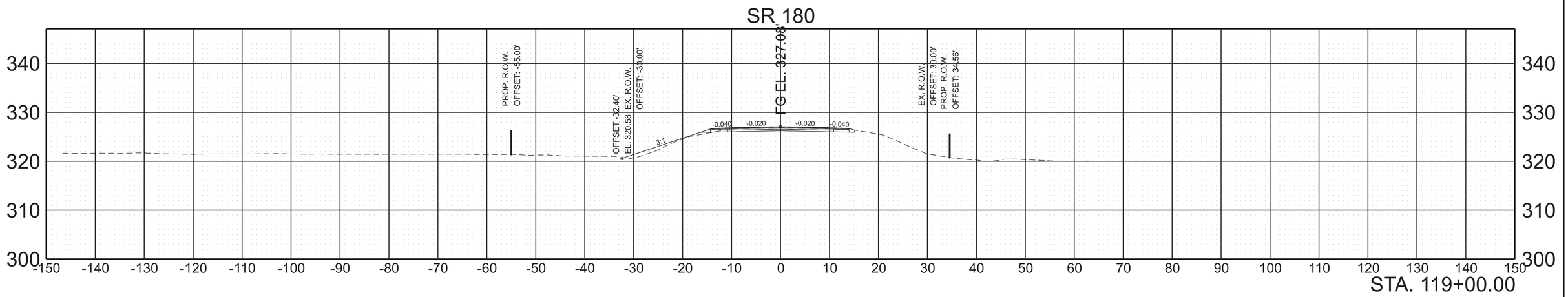


SCALE:		
	1"=10' HORIZ.	BEGIN STA. 117+50.00
	1"=10' VERT.	END STA. 118+50.00

12/8/2025 11:13:03 AM
C:\TMP\PWISEID\D160785\38S180-SHT-XS-SR180.DGN

TYPE	YEAR	PROJECT NO.	SHEET NO.
FUNC.	2025	38S180-S2-007	34
		38S180-M2-007	
		38S180-S2-008	
PIH	2025	38S180-S3-007	34
		38S180-M3-007	
		38S180-S3-008	
PS&E	2026	38S180-S3-007	34
		38S180-M3-007	
		38S180-S3-008	

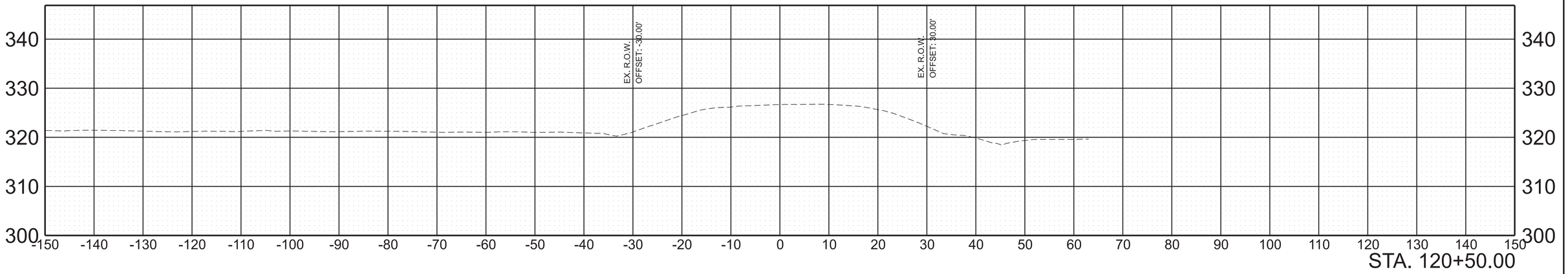




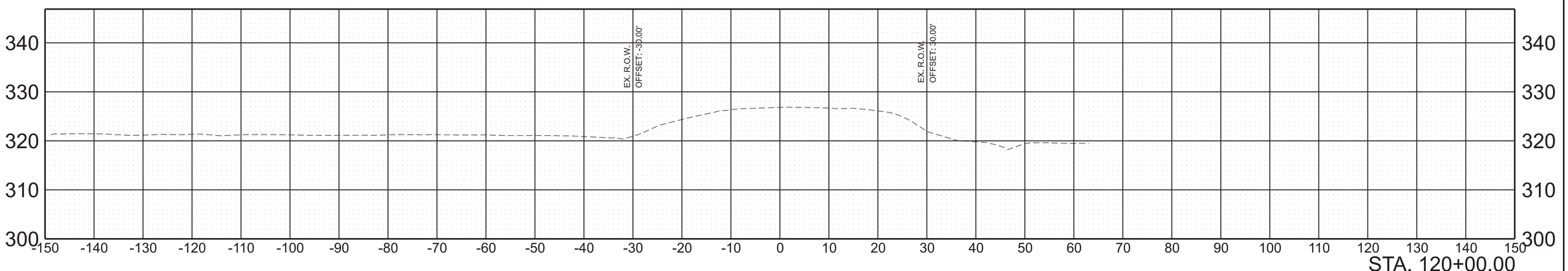
SCALE:	1"=10' HORIZ. 1"=10' VERT.	BEGIN STA. 119+00.00 END STA. 119+50.00

12/8/2025 11:13:05 AM
C:\TMPIPWISE\D0160785\38S180-SHT-XS-SR180.DGN

TYPE	YEAR	PROJECT NO.	SHEET NO.
FUNC.	2025	38S180-S2-007	35
		38S180-M2-007	
		38S180-S2-008	
PIH	2025	38S180-S3-007	35
		38S180-M3-007	
		38S180-S3-008	
PS&E	2026	38S180-S3-007	35
		38S180-M3-007	
		38S180-S3-008	



STA. 120+50.00



STA. 120+00.00

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	1"=10' VERT.	END STA. 120+50.00

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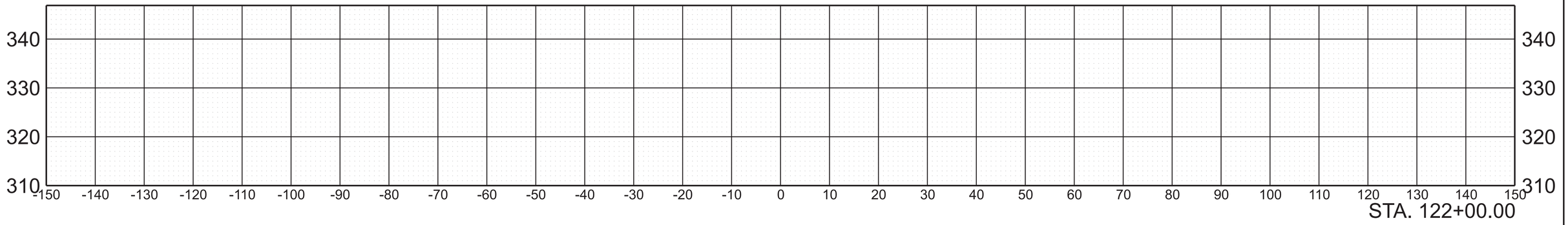
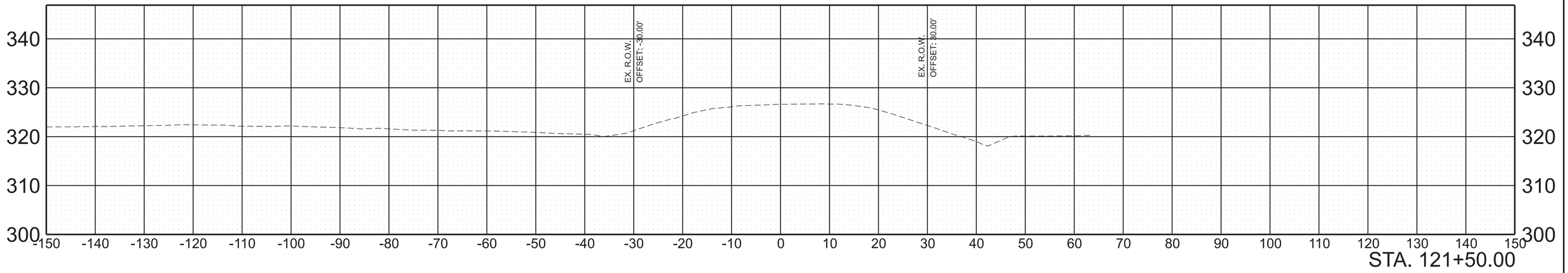
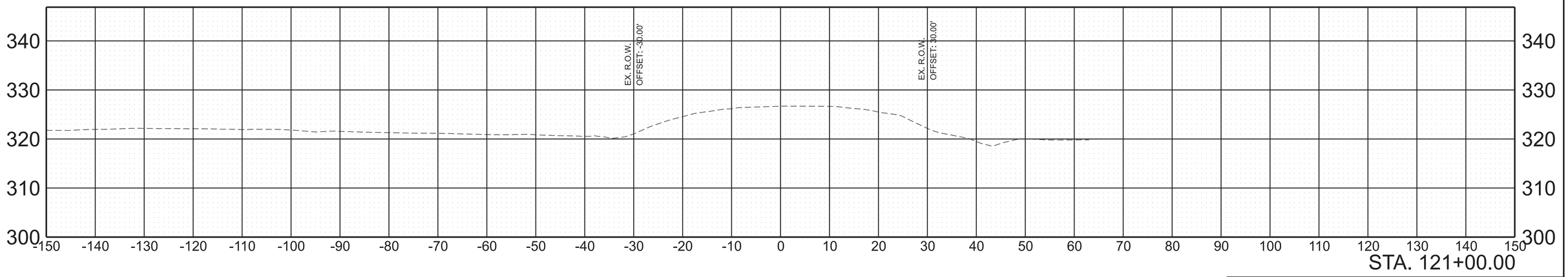
TYPE	YEAR	PROJECT NO.	SHEET NO.
FUNC.	2025	38S180-S2-007	36
		38S180-M2-007	
		38S180-S2-008	
PIH	2025	38S180-S3-007	36
		38S180-M3-007	
		38S180-S3-008	
PS&E	2026	38S180-S3-007	36
		38S180-M3-007	
		38S180-S3-008	







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	1"=10' VERT.	END STA. 122+00.00

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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.

   c. 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 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. 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.
FUNC.	2025	38S180-S2-007	T1
		38S180-M2-007	
		38S180-S2-008	
PIH	2025	38S180-S3-007	T1
		38S180-M3-007	
		38S180-S3-008	
PS&E	2026	38S180-S3-007	T1
		38S180-M3-007	
		38S180-S3-008	

SEALED BY

KIRSCHTEN T. ROBERTS
REGISTERED ENGINEER
AGRICULTURE
COMPETENCE
No. 129215
STATE OF TENNESSEE
12/09/2025

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PAVEMENT EDGE
DROP-OFF NOTES
FOR
TRAFFIC CONTROL

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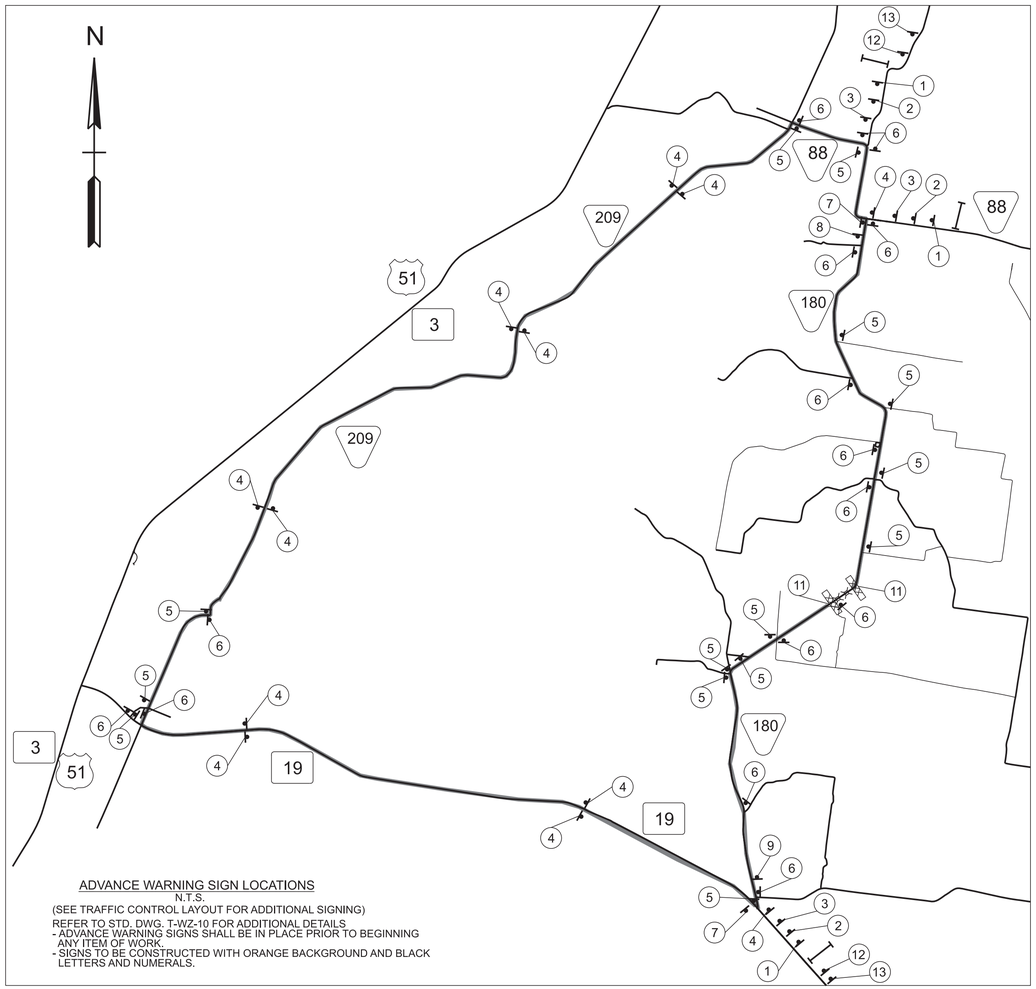
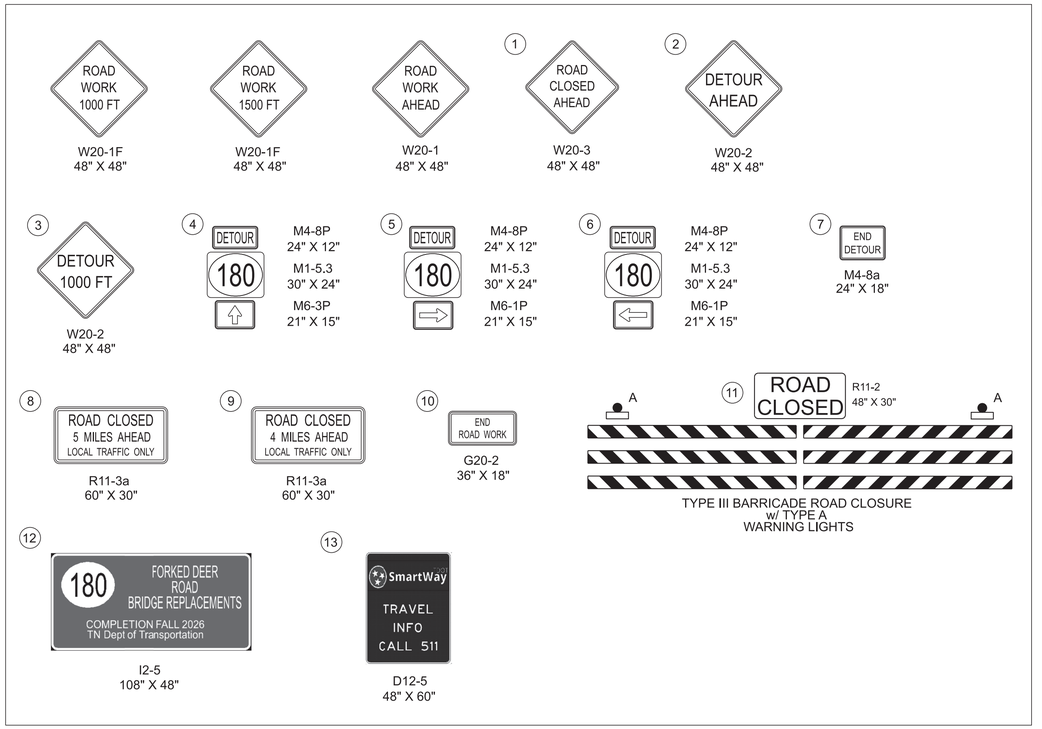
TYPE	YEAR	PROJECT NO.	SHEET NO.
FUNC.	2025	38S180-S2-007	T2
		38S180-M2-007	
		38S180-S2-008	
PIH	2025	38S180-S3-007	T2
		38S180-M3-007	
		38S180-S3-008	
PS&E	2026	38S180-S3-007	T2
		38S180-M3-007	
		38S180-S3-008	



ADVANCE WARNING SIGN LOCATIONS
N.T.S.
(SEE TRAFFIC CONTROL LAYOUT FOR ADDITIONAL SIGNING)
REFER TO STD. DWG. T-WZ-10 FOR ADDITIONAL DETAILS.
- ADVANCE WARNING SIGNS SHALL BE IN PLACE PRIOR TO BEGINNING ANY ITEM OF WORK.
- SIGNS TO BE CONSTRUCTED WITH ORANGE BACKGROUND AND BLACK LETTERS AND NUMERALS.



NOTE: SEE SHEET 15 FOR INFORMATION REGARDING SIGNS 12 AND 13

TRAFFIC CONTROL SIGNS

M.U.T.C.D. NO.	DESCRIPTION	SIZE	NO.	ITEM NO. 712-06 (S.F.)
G20-2	END ROAD WORK	36" X 18"	2	9
M1-5.3	STATE ROUTE 180	30" X 24"	41	205
M4-8P	DETOUR	24" X 12"	41	82
M4-8A	END DETOUR	24" X 18"	2	6
M6-1P	DIRECTIONAL ARROW PLAQUE (LEFT)	21" X 15"	15	33
M6-1P	DIRECTIONAL ARROW PLAQUE (RIGHT)	21" X 15"	14	31
M6-3P	DIRECTIONAL ARROW PLAQUE (AHEAD)	21" X 15"	12	26
R11-2	ROAD CLOSED	48" X 30"	2	20
R11-3A	ROAD CLOSED LOCAL TRAFFIC ONLY	60" X 30"	2	25
W20-1	ROAD WORK AHEAD	48" X 48"	2	32
W20-1F	ROAD WORK 1000 FT	48" X 48"	2	32
W20-1F	ROAD WORK 1500 FT	48" X 48"	5	80
W20-2	DETOUR AHEAD	48" X 48"	3	48
W20-2	DETOUR 1000 FT	48" X 48"	3	48
W20-3	ROAD CLOSED AHEAD	48" X 48"	2	32
TOTAL			**148**	**709**

TRAFFIC CONTROL QUANTITIES

	ITEM NO.	DESCRIPTION	UNIT	38S180-S3-008 QUANTITY	38S180-S3-007 QUANTITY	TOTAL QUANTITY
(1)	712-05.01	WARNING LIGHTS (TYPE A)	EACH	3	3	6
(2)	712-06	SIGNS (CONSTRUCTION)	S.F.	355	354	709
	712-07.03	TEMPORARY BARRICADES (TYPE III)	L.F.	40	40	80
(1)	713-16.01	CHANGEABLE MESSAGE SIGN UNIT	EACH	1	2	3

FOOTNOTES:
(1) TO BE USED AS DIRECTED BY ENGINEER.
(2) SEE THIS SHEET FOR SCHEDULE, ADDITIONAL SIGNS INSTALLED AS DIRECTED BY THE ENGINEER SHALL BE PAID FOR AT THE UNIT COST FOR THIS ITEM.

TRAFFIC CONTROL SPECIAL NOTES

1. THESE TRAFFIC CONTROL PLANS DO NOT RELIEVE THE CONTRACTOR OF RESPONSIBILITY OF INSTALLING TRAFFIC CONTROL DEVICES IN ACCORDANCE WITH THE CURRENT EDITION OF THE 'MANUAL OF TRAFFIC CONTROL DEVICES".
2. ANY VARIATION IN THE PROPOSED CLOSURE SHALL REQUIRE A REVIEW AND APPROVAL OF THE SIGNING AND TRAFFIC CONTROL DEVICES BY THE ENGINEER.
3. CONSTRUCTION SIGNING SHOWN IN THESE PLANS IS TO SERVE AS A GUIDE ONLY. OTHER SIGNS MAY BE REQUIRED.
4. ALL TRAFFIC CONTROL DEVICES SHALL BE REMOVED IMMEDIATELY WHEN CONDITIONS NO LONGER EXIST, EXCEPT FOR THE TYPE III BARRICADES.
5. INGRESS AND EGRESS FOR LOCAL TRAFFIC AND DRIVEWAYS SHALL BE MAINTAINED THROUGHOUT CONSTRUCTION OF THIS PROJECT WITH BASE STONE.
6. THE CONTRACTOR SHALL COMPLY WITH SECTION T12 REGARDING "TEMORARY TRAFFIC CONTROL" OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION IN THE IMPLEMENTATION OF THE TRAFFIC CONTROL. PLAN TEMPORARY CENTERLINE AND LANE MARKINGS SHALL BE PROVIDED AT THE CONCLUSION OF EACH WORK DAY DURING THE CONSTRUCTION OF THIS PROJECT
7. THE CONTRACTOR IS DIRECTLY RESPONSIBLE FOR THE PROVISION OF ANY AND ALL TRAFFIC CONTROL DEVICES IN ACCORDANCE WITH M.U.T.C.D. AND SECTION T12 OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION
8. 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.
9. MESSAGE BOARDS TO BE PLACED ON PROJECT TWO WEEKS BEFORE ROAD IS CLOSED.

TRAFFIC CONTROL LEGEND	
SYMBOL	ITEM
	TEMPORARY BARRICADE (TYPE III)
	CHANGEABLE MESSAGE SIGN
	WORK ZONE
	SIGN (CONSTRUCTION)
A	WARNING LIGHT (TYPE A) (LOW-INTENSITY FLASHING)

SEALED BY

COORDINATES ARE NAD 83(2011), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00006 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988 WITH GEOID 2018.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL PHASING NOTES, LEGEND AND TABULATION

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TYPE	YEAR	PROJECT NO.	SHEET NO.
FUNC.	2025	38S180-S2-007	T3
		38S180-M2-007	
		38S180-S2-008	
PIH	2025	38S180-S3-007	T3
		38S180-M3-007	
		38S180-S3-008	
PS&E	2026	38S180-S3-007	T3
		38S180-M3-007	
		38S180-S3-008	

100 105 110

N

BEGIN PROJECT NO. 38S180-S2-008 R.O.W.
STA. 101+64.77
N 533581.9872 E 961483.2985

BEGIN PROJECT NO. 38S180-S3-008 CONST.
STA. 101+86.88
N 533594.2477 E 961501.6977

END PROJECT NO. 38S180-S2-008 R.O.W.
STA. 109+64.81
N 534025.6305 E 962149.0647

BEGIN WWC-2/UDF-1
RELOCATED
STA. 103+88.38
OFF. 32.49'

END WWC-2/UDF-1
RELOCATED
STA. 105+25.00
OFF. 49.68'

BEGIN STR-2 IMPACTS
STA. 105+80.23
OFF. 21.30'

END PROP. BR.
STA. 106+26.00

STA 100+00.00
N 533490.6178
E 961346.1825

END ROAD WORK
G20-2
36" X 18"

17' R/W

S.R. 180

SR-180 / FORKED DEER RD (ASPH.)

N56°19'19"E

S.R. 180

OVERFLOW

LIMIT OF CONST./BEGIN MILL & OVERLAY
STA. 101+86.88

JEFFRIES RD (ASPH.)

BEG. WWC-1/
EPH-1 RELOCATED
STA. 103+25.00
OFF. 24.08'

END WWC-1/EPH-1 RELOCATED
BEGIN STR-1 RELOCATED
STA. 104+32.64
OFF. 38.94'

END STR-1 RELOCATED
STA. 105+15.00
OFF. 31.93'

OVERFLOW

END STR-2 IMPACTS
STA. 105+98.22
OFF. 21.02'

BEGIN PROP. BR.
STA. 105+56.00

MATCH LINE STA. 111+00 SEE SHEET NO. T3A

ROAD CLOSED
R11-2
48" X 30"

A A

TYPE III BARRICADE ROAD CLOSURE
w/ TYPE A
WARNING LIGHTS

500 FT 250 FT 250 FT 500 FT

BEGINNING OF PROJECT

ROAD WORK 1500 FT	ROAD WORK 1000 FT	ROAD WORK AHEAD	ROAD CLOSED AHEAD
W20-1F 48" X 48"	W20-1F 48" X 48"	W20-1 48" X 48"	W20-3 48" X 48"

END PROJECT NO. 38S180-S3-008 CONST.
BEGIN PROJECT NO. 38S180-S3-007 CONST.
BEGIN PROJECT NO. 38S180-M3-007 CONST.
STA. 111+00.00
N 534100.5969 E 962261.5652

MILL & OVERLAY

SEALED BY

KIRSCHTEN T. ROBERTS
REGISTERED ENGINEER
STATE OF TENNESSEE
No. 136611
12/09/2025

COORDINATES ARE NAD 83(2011), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00006 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988 WITH GEOID 2018.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL

STA. 100+00.00 TO STA. 111+00.00
SCALE: 1" = 50'

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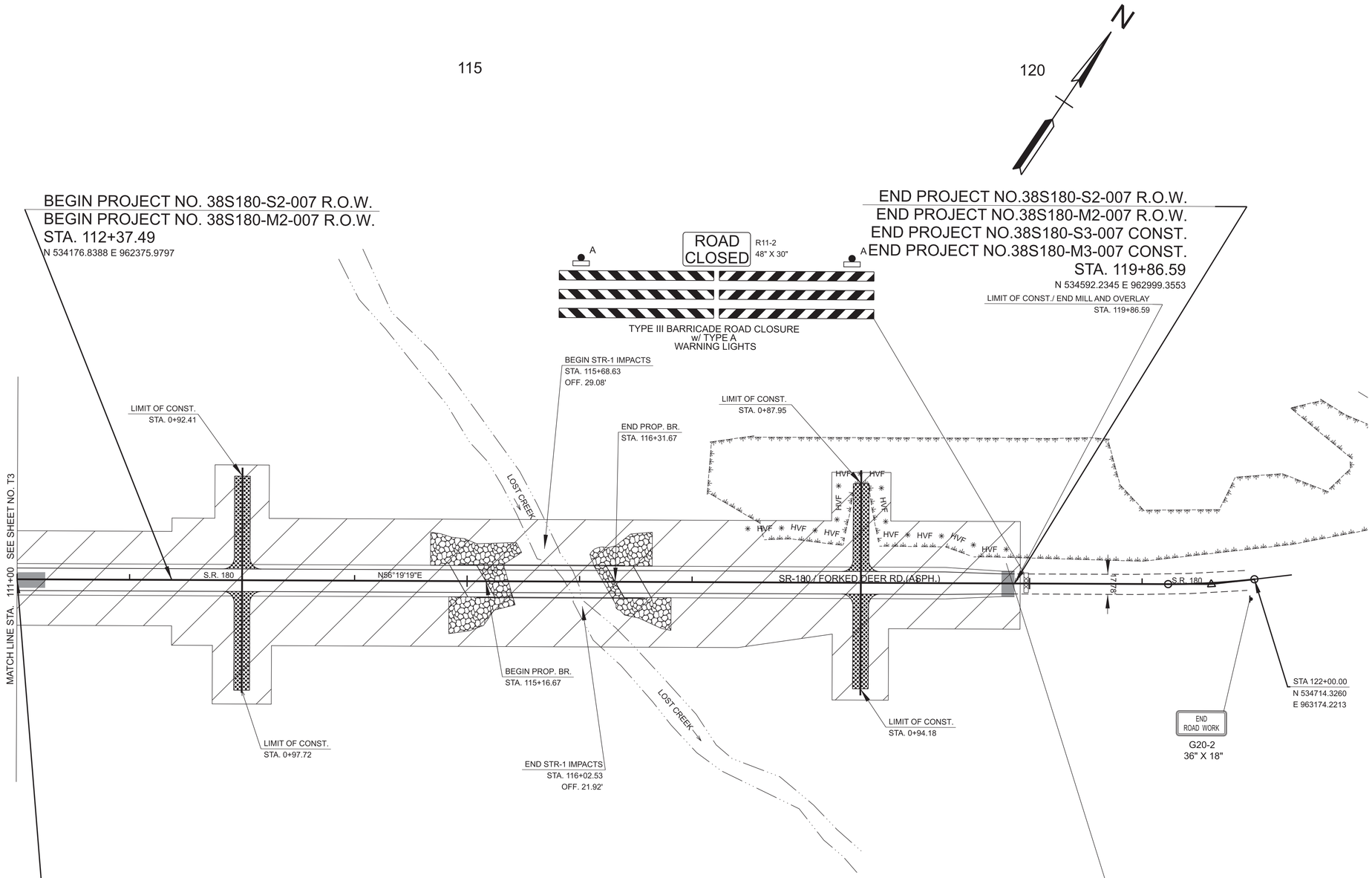
TYPE	YEAR	PROJECT NO.	SHEET NO.
FUNC.	2025	38S180-S2-007	T3A
		38S180-M2-007	
		38S180-S2-008	
PIH	2025	38S180-S3-007	T3A
		38S180-M3-007	
		38S180-S3-008	
PS&E	2026	38S180-S3-007	T3A
		38S180-M3-007	
		38S180-S3-008	



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COORDINATES ARE NAD 83(2011), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00006 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988 WITH GEOID 2018.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL

STA. 111+00.00 TO STA. 122+00.00
SCALE: 1" = 50'

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THIS DOCUMENT HAS BEEN DIGITALLY SIGNED AND SEALED BY:

Gilreath, Corey Digitally signed by Gilreath, Corey
Date: 2025.12.10 12:48:08 -05'00'

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AMERICAN STRUCTUREPOINT, INC.
9025 RIVER ROAD, SUITE 200
INDIANAPOLIS, IN 46240
COREY D. GILREATH, P.E. NO. 132497

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 SHEETS	STRUCTURE-SIGN1
INDEX OF DRAWINGS	B-1
LAYOUT OF BRIDGE	U-97-967
GENERAL NOTES AND ESTIMATED QUANTITIES	U-97-968
SUPERSTRUCTURE	U-97-970
SUPERSTRUCTURE DETAILS	U-97-971
PRESTRESSED BOX BEAM DETAILS	U-97-972
ABUTMENT NO.1	U-97-973
ABUTMENT NO.1 DETAILS	U-97-974
ABUTMENT NO.1 DETAILS	U-97-975
ABUTMENT NO.2	U-97-976
ABUTMENT NO.2 DETAILS	U-97-977
ABUTMENT NO.2 DETAILS	U-97-978
FINAL FOUNDATION DATA	U-97-979
BILL OF STEEL	U-97-980

THIS DOCUMENT HAS BEEN DIGITALLY SIGNED AND SEALED BY:

Conway, Eric 2025.07.01 08:02:56 -05'00'

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TERRACON
1922 OLD MURFREESBORO PIKE, SUITE 905
NASHVILLE, TN 37217
ERIC CONWAY, P.E. NO. 127025

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.
FOUNDATION DATA	U-97-969

YEAR	PROJECT NO.	SHEET NO.
2026	38S180-S3-008	STRUCTURE-SIGN 1

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

SIGNATURE SHEET

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CONST. NO.:

PROJECT NO.	YEAR	SHEET NO.
38S180-S3-008	2026	B-1

REVISIONS

NO.	DATE	BY	BRIEF DESCRIPTION
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	- -		
	- -		
	- -		
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LIST OF DRAWINGS

TITLE	DWG. NO.	LAST REV. DATE
INDEX OF DRAWINGS	B-1	
LAYOUT OF BRIDGE	U-97-967	
GENERAL NOTES AND ESTIMATED QUANTITIES	U-97-968	
FOUNDATION DATA	U-97-969	
SUPERSTRUCTURE	U-97-970	
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PRESTRESSED BOX BEAM DETAILS	U-97-972	
ABUTMENT NO.1	U-97-973	
ABUTMENT NO.1 DETAILS	U-97-974	
ABUTMENT NO.1 DETAILS	U-97-975	
ABUTMENT NO.2	U-97-976	
ABUTMENT NO.2 DETAILS	U-97-977	
ABUTMENT NO.2 DETAILS	U-97-978	
FINAL FOUNDATION DATA	U-97-979	
BILL OF STEEL	U-97-980	

LIST OF STANDARD DRAWINGS

TITLE	DWG. NO.	LAST REV. DATE
BRIDGE RAILING SINGLE SLOPE CONCRETE PARAPET	STD-1-1SS	7-24-24
REINFORCED CONCRETE PAVEMENT AT BRIDGE ENDS	STD-1-5	06-05-23
STANDARD PILE DETAILS	STD-5-1	2023
STANDARD SEISMIC DETAILS	STD-6-1	12-08-23
STANDARD REINFORCING BAR SUPPORT DETAILS FOR CONCRETE SLABS	STD-9-1	10-07-08
MISCELLANEOUS ABUTMENT AND DRAINAGE DETAILS	STD-10-1	06-05-23
MISC. ABUTMENT AND PAVEMENT AT BRIDGE ENDS BACKFILL DETAILS	STD-10-2	06-05-23
STANDARD DETAILS FOR PRESTRESSED BOX BEAMS	STD-14-3	06-06-24

LIST OF SPECIAL PROVISIONS

TITLE	SPEC. PROV. NO.	REV. DATE
REMOVAL OF ASBESTOS CONTAINING MATERIAL (ACM)	202ACM	07-07-14

LIST OF REFERENCE DRAWINGS

(TO BE PRINTED WITH PLANS

TITLE	DWG. NO.
LAYOUT OF BRIDGE LOST CREEK	K-04-03
PRECAST SLAB BRIDGE	F-10-31
STANDARD TIMBER PILE BENTS WITH TIMBER CAP & CONCRETE CAP FOR PRECST CONCRETE DECK	F-10-32

SEALED BY

COREY D. GILREATH
REGISTERED ENGINEER
AGRICULTURE
COMMERCE
No. 132447
STATE OF TENNESSEE

06-30-2025

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

INDEX OF DRAWINGS
STATE ROUTE 180 OVER OVERFLOW
BRIDGE I.D NO. 38S80510007
STATION 105+91.00
LOG MILE 4.57
HAYWOOD COUNTY
2026

PIN NO.: 136185.06
DESIGN BY: CDG DATE: 06/10/2025
DRAWN BY: TMT DATE: 06/13/2025
SUPERVISED BY: MAH DATE: 06/13/2025
CHECKED BY: CDG DATE: 06/16/2025

AMERICAN STRUCTUREPOINT INC.

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CONST. NO.:

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38S180-S3-008	2026	

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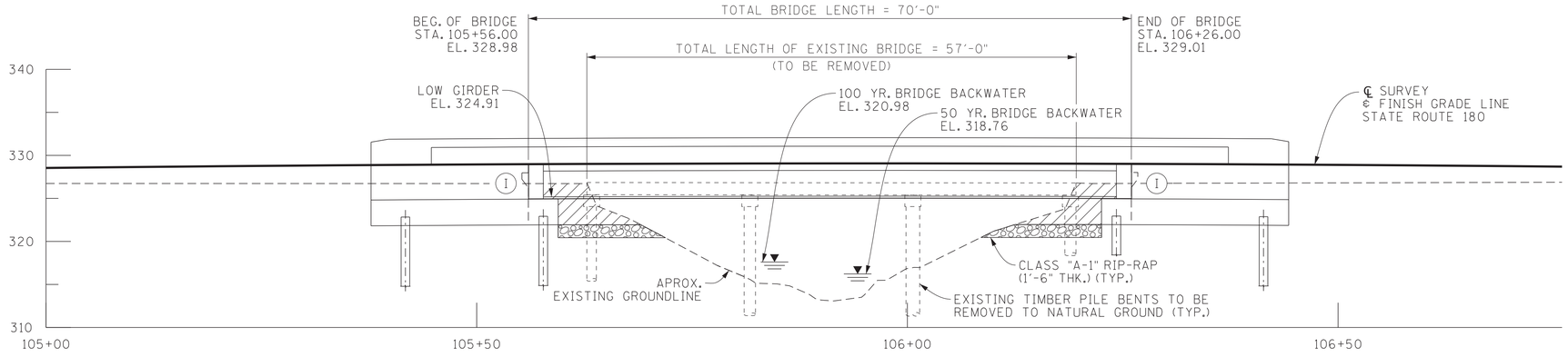
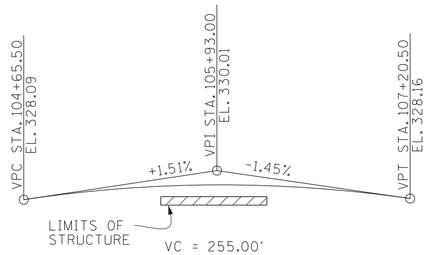


ELEVATION

DENOTES: AREA TO BE EXCAVATED AND PAID FOR AS A ROADWAY ITEM

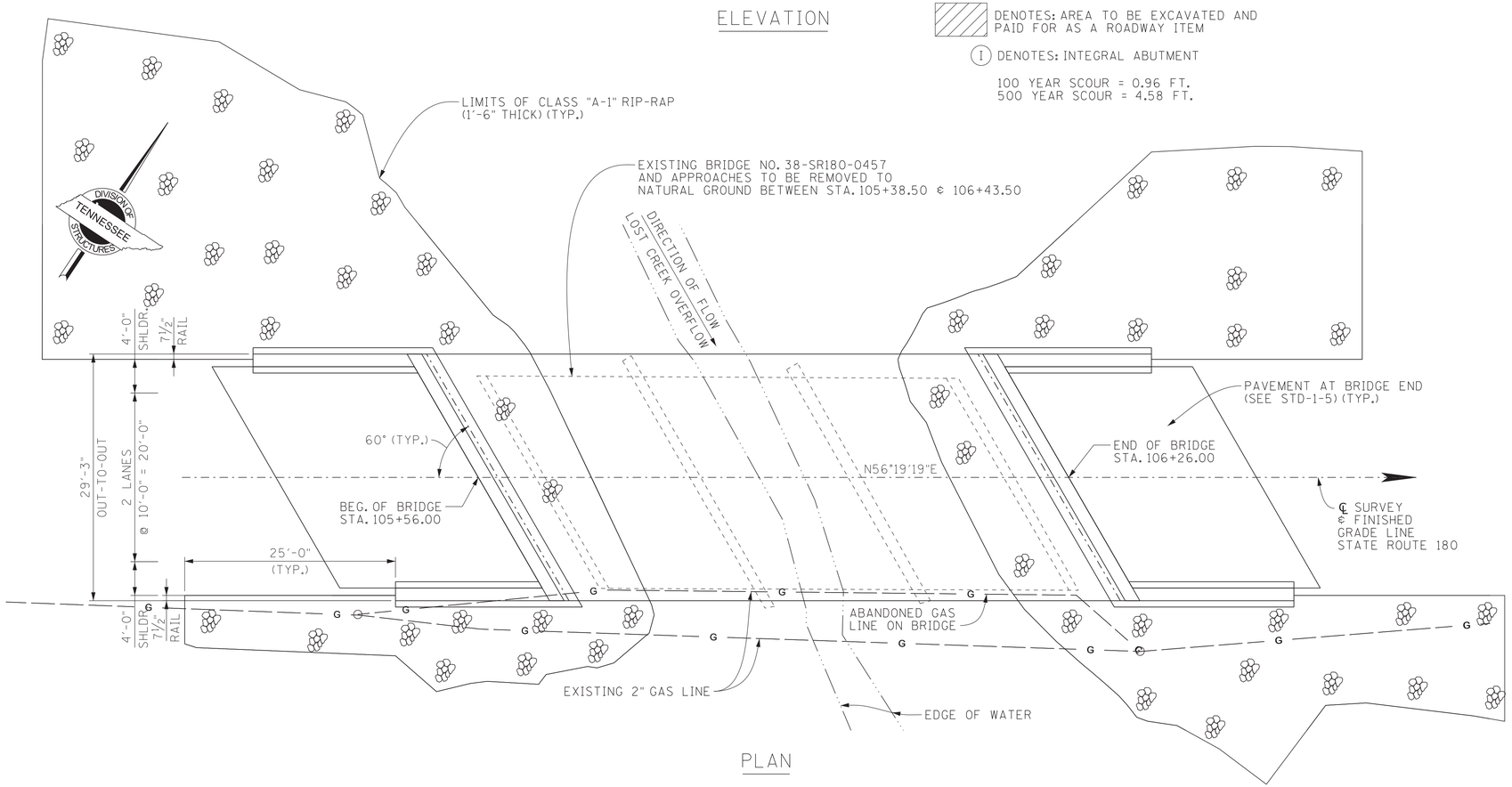
(I) DENOTES: INTEGRAL ABUTMENT

100 YEAR SCOUR = 0.96 FT.
500 YEAR SCOUR = 4.58 FT.



GRADE SKETCH

STATE ROUTE 180
NO SCALE



PLAN

HYDRAULIC DATA

DRAINAGE AREA = 0.46 MI²
DESIGN DISCHARGE (50 YR.) = 3180 CFS
WATER AREA PROVIDED BELOW EL. 318.58 = 62.22 FT²
50 YR. VELOCITY = 2.62 FPS
50 YR. BRIDGE BACKWATER = 0.00 FT @ EL. 318.58
ROADWAY OVERTOPPING EL. 325.18 FT.
100 YEAR DISCHARGE 3521 CFS @ EL. 320.98

2049 ADT = 1180
28'-00" ROADWAY, AND STD-1-1SS PARAPET
DESIGN SPEED = 50 MPH

SEALED BY

COREY D. GILREATH REGISTERED ENGINEER AGRICULTURE COMMERCE No. 135497 STATE OF TENNESSEE

06-30-2025

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

LAYOUT OF BRIDGE
STATE ROUTE 180 OVER OVERFLOW
BRIDGE I.D NO. 38S80510007
STATION 105+91.00
LOG MILE 4.57
HAYWOOD COUNTY
2026

U-97-967

PIN NO.: 136185.06
DESIGN BY: CDG DATE: 05/09/2025
DRAWN BY: TMT DATE: 05/12/2025
SUPERVISED BY: MAH DATE: 05/12/2025
CHECKED BY: CDG DATE: 05/23/2025

AMERICAN STRUCTUREPOINT INC.

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GENERAL NOTES:

CONSTRUCTION SPECIFICATIONS: TENNESSEE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (JANUARY 1, 2021 EDITION).

DESIGN SPECIFICATIONS: 10TH EDITION (2024) AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS AND THE 2ND EDITION (2011) AASHTO GUIDE SPECIFICATIONS FOR LRFD SEISMIC BRIDGE DESIGN WITH INTERIMS.

LOADING:
HL-93 LIVE LOAD INCREASED BY 10% (MULTIPLIED BY 1.1) IN ADDITION TO ALL LOAD FACTORS SPECIFIED BY AASHTO FOR ALL APPLICABLE LOAD COMBINATIONS SEISMIC DESIGN CATEGORY C WITH AS=0.54, SDS=1.087, SD1=0.467, (1000 YEAR RETURN PERIOD) DEAD LOAD INCLUDES 35 LB/SQ. FT. FOR FUTURE WEARING SURFACE.

CONCRETE: TO BE CLASS A (CAST-IN-PLACE) F'C = 3000 PSI EXCEPT AS NOTED OTHERWISE.

BRIDGE DECKS: CLASS D CONCRETE FOR BRIDGE DECKS SHALL BE IN ACCORDANCE WITH SECTION 604 OF THE STANDARD SPECIFICATIONS.

BRIDGE DECK SURFACE FINISH: TO BE IN ACCORDANCE WITH METHOD 3 IN ARTICLE 604.22 OF THE STANDARD SPECIFICATIONS.

BRIDGE DECK FORMS: BRIDGE DECK FORMS FOR CONCRETE DECKS SHALL BE CONSTRUCTED USING EITHER REMOVABLE FORMS OR PERMANENT FORMS. PERMANENT FORMS SHALL BE REMAIN-IN-PLACE STEEL. FORMS SHALL BE ATTACHED BY MEANS OTHER THAN WELDING TO MAIN STRUCTURAL MEMBERS OR REINFORCING STEEL. TEMPORARY ERECTION DIAPHRAGMS MUST BE USED AT THE ENDS OF PRECAST CONCRETE GIRDERS WHERE END DIAPHRAGMS, SUPPORT DIAPHRAGMS, OR ABUTMENT ENDWALLS ARE TO BE POURED CONCURRENTLY WITH THE DECK AND SHALL BE PROVIDED ELSEWHERE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS TO PREVENT GIRDER ROTATION. SEE STANDARD DRAWING STD-14-3 AND ARTICLE 604.05 OF THE STANDARD SPECIFICATIONS.

REINFORCING STEEL: SHALL BE ASTM A615 GRADE 60 UNLESS NOTED OTHERWISE. SEE SECTIONS 604 AND 907 OF THE STANDARD SPECIFICATIONS.

FOUNDATION PREPARATION: SEE SECTION 204 OF THE STANDARD SPECIFICATIONS. IF IT IS DETERMINED THAT COFFERDAMS ARE REQUIRED, THEY SHALL BE IN ACCORDANCE WITH SECTION 204.09 OF THE STANDARD SPECIFICATIONS.

ABUTMENTS ON FILL: THE FILLS AT THE ENDS OF THE BRIDGE SHALL BE IN PLACE AND THOROUGHLY COMPACTED BEFORE ANY ABUTMENT PILES ARE DRIVEN.

FRICTION PILES: TO BE 14" ø PIPE PILES, 0.500" WALL THICKNESS. AFTER EXCAVATION TO THE PROPOSED FOOTING ELEVATIONS, A TEST PILE SHALL BE DRIVEN AT EACH SUBSTRUCTURE AT THE LOCATION DESIGNATED ON DRAWING NO. U-97-979. A LOAD TEST WILL THEN BE APPLIED TO THE TEST PILE IN ABUT. NO. 1. FROM THE RESULTS OF THE LOAD TEST, THE ENGINEER OF STRUCTURES WILL DETERMINE THE REQUIRED LENGTH OF THE PRODUCTION PILES AND MINIMUM REQUIRED BEARING. FOR PILE DESIGN LOADS AND CUT-OFF ELEVATIONS, SEE TABLE ON DRAWING NO. U97-968. THE CONTRACTOR SHALL INSTALL PILING SUCH THAT ALL THE FOLLOWING REQUIREMENTS ARE MET. THE TIP ELEVATION FOR ALL TEST PILES AND PRODUCTION PILES SHALL BE EQUAL TO OR BELOW THE MINIMUM PILE TIP ELEVATION SHOWN ON THE PLANS. IN ADDITION, TEST PILES TO BE LOAD TESTED SHALL BE INSTALLED TO AT LEAST THE SPECIFIED BEARING SHOWN ON THE PLANS OR FULL LENGTH, WHICHEVER OCCURS FIRST. ALL OTHER TEST PILES SHALL BE INSTALLED TO AT LEAST 1.5 TIMES THE SPECIFIED BEARING SHOWN ON THE PLANS OR FULL LENGTH, WHICHEVER OCCURS FIRST. ALL PRODUCTION PILES SHALL BE INSTALLED FULL LENGTH UNLESS EXCESSIVELY HARD DRIVING WHICH MIGHT DAMAGE THE PILES IS ENCOUNTERED. IF THE PRODUCTION PILES DO NOT ACHIEVE THE MINIMUM REQUIRED BEARING, THE ENGINEER OF STRUCTURES WILL DETERMINE IF ADDITIONAL PILES ARE REQUIRED. IN THE EVENT THAT DRIVING THE TEST PILE TO AT LEAST THE MINIMUM TIP ELEVATION OR DRIVING THE PRODUCTION PILE FULL LENGTH MIGHT DAMAGE THE PILE BECAUSE OF EXCESSIVELY HARD DRIVING, THE CONTRACTOR SHALL USE OTHER METHODS APPROVED BY THE ENGINEER FOR INSTALLING THE PILES SUCH AS JETTING OR PRE-DRILLING HOLES. HOWEVER, ALL PILES MUST BE DRIVEN BY HAMMER FOR THE LAST FEW FEET OF PENETRATION. NO MEASUREMENT FOR PAYMENT WILL BE MADE FOR PRE-DRILLING HOLES OR FOR JETTING PILING TO OBTAIN THE REQUIRED PILE PENETRATION. THE PILE LOAD TEST SHALL BE A QUICK LOAD TEST CONDUCTED IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS. THE PILE LOAD TEST APPARATUS FOR APPLYING LOADS AND MEASURING MOVEMENT SHALL MEET THE REQUIREMENTS OF ASTM D1143, STANDARD TEST METHODS FOR DEEP FOUNDATION ELEMENTS UNDER STATIC AXIAL COMPRESSIVE LOAD. WHEN INSUFFICIENT CLEARANCE IS AVAILABLE WITHIN AN EXCAVATION, THE CLEARANCE REQUIREMENTS IN ARTICLE 9.1.1 MAY BE REDUCED, BUT ONLY WITH PRIOR APPROVAL OF THE ENGINEER.

PIPE PILES: SHALL BE STEEL PIPE PILES (14-INCH), GRADE 3 MODIFIED WITH A MINIMUM YIELD STRESS OF 50 KSI IN ACCORDANCE WITH ASTM A252. WEATHERING STEEL WILL NOT BE ALLOWED FOR PIPE PILES. ANY PIPE PILE HAVING BENDS, KINKS OR OTHER DEFORMATIONS DURING THE PROCESS OF DRIVING THAT WOULD IMPAIR THE STRENGTH (10% REDUCTION AS DETERMINED BY THE ENGINEER) EFFICIENCY OF THE COMPLETED PILE SHALL BE EITHER REMOVED AND REPLACED OR REPAIRED BY THE CONTRACTOR IN A MANNER SATISFACTORY TO THE ENGINEER. THE CONTRACTOR WILL NOT BE REIMBURSED FOR ANY SUCH PIPE PILE ORDERED REMOVED OR REPLACED BY THE ENGINEER.

PIPE PILE SPLICES: FULL LENGTH PILES SHALL BE USED WHERE PRACTICAL. PILES MAY BE SPLICED WITH THE PRIOR APPROVAL OF THE ENGINEER. SPLICES SHALL USE FULL PENETRATION WELDS DESIGNED TO DEVELOP THE FULL STRENGTH OF THE PILE CROSS-SECTION IN TENSION AND COMPRESSION. ONLY ONE SPLICE PER 40 LINEAR FEET OF PILE WILL BE ALLOWED. DRIVE-ON SPLICES SHALL NOT BE USED AND ONLY COMMERCIALLY MANUFACTURED SPLICES WILL BE ALLOWED. SPLICING DETAILS MUST BE SUBMITTED TO THE ENGINEER FOR APPROVAL. COST TO BE INCLUDED IN THE COST OF PILES ITEM NO. 606-18.03.

STREAM CHANNEL: ANY WORK WITHIN THE STREAM CHANNEL AREA (E.G. PIER/BENT FOOTING, RIP-RAP PLACEMENT, ETC.) SHALL BE SEPARATED FROM FLOWING WATER OR EXPECTED FLOW PATH AND PERFORMED DURING LOW FLOW CONDITIONS. ALL ITEMS USED WITHIN THE STREAM CHANNEL AREA FOR DIVERSION OF FLOW (OR EXPECTED FLOW), UNLESS SPECIFIED IN THE PLANS, SHALL NOT BE PAID FOR DIRECTLY BUT SHALL BE INCLUDED IN THE COST OF OTHER ITEMS. THIS NOTE EXCLUDES ANY ITEMS SPECIFIED IN THE PLANS FOR TEMPORARY DIVERSION CHANNELS (EC-STR-31).

UTILITIES: IT IS INTENDED THAT THE COST OF MATERIALS AND LABOR NECESSARY FOR THE COMPLETE INSTALLATION OF UTILITIES SHALL BE BORNE BY OTHERS AND SHALL NOT BE PAID FOR AS A PART OF THIS CONTRACT. THE CONTRACTOR SHALL COOPERATE WITH OTHERS IN THE INSTALLATION OF UTILITIES WITH NO ADDITIONAL COMPENSATION ALLOWED THE CONTRACTOR AS A RESULT.

SHOP DRAWINGS: SEE SECTION 105.02 OF THE STANDARD SPECIFICATIONS.

PARAPET SYSTEM: BUILD PARAPETS ACCORDING TO STANDARD DRAWING STD-1-1SS. THE PARAPETS SHALL BE FORMED AND CAST PLUMB, NOT PERPENDICULAR TO THE SLAB. THE DIMENSIONS AT THE TRAFFIC FACE SHALL BE KEPT CONSTANT, WITH VARIATION DUE TO CROSS-SLOPE ACCOMMODATED AT THE REAR FACE.

RIP-RAP: MACHINED RIP-RAP SHALL BE CLASS "A-1" IN ACCORDANCE WITH SECTION 709 OF THE STANDARD SPECIFICATIONS AND SHALL BE MEASURED AND PAID FOR UNDER ROADWAY ITEM NO 709-05.06.

VALUE ENGINEERING ALTERNATE BRIDGE DESIGN CRITERIA: ALTERNATE BRIDGE DESIGN PROPOSALS MAY NOT DIMINISH THE FUNCTIONAL OR STRUCTURAL EQUIVALENCY OF THE BRIDGE AND MUST MEET OR EXCEED THE CAPACITIES OF THE CONTRACT PLANS STRUCTURE AT ALL LIMIT STATES IN AASHTO TABLE 3.4.1-1. ADDITIONALLY, THE WATERWAY OPENING AND FLOOD CLEARANCES MAY NOT BE REDUCED.

FINISHING CONCRETE SURFACES: CONCRETE FINISHING SHALL BE IN ACCORDANCE WITH SECTION 604.21 OF THE STANDARD SPECIFICATIONS. A CLASS I FINISH FOLLOWED BY AN APPLIED TEXTURE FINISH SHALL BE USED IN LIEU OF A CLASS II FINISH. NO TEXTURE FINISH SHALL BE APPLIED PRIOR TO COMPLETION OF PAVING AND HAULING OPERATIONS AT THE BRIDGE SITE. THE APPLIED TEXTURE FINISH SHALL BE MEASURED AND PAID FOR UNDER ITEM NO. 604-04.01.

ESTIMATED QUANTITIES

ITEM NO.	DESCRIPTION	UNIT	TOTAL	SUPERSTRUCTURE	ABUTMENT 1	ABUTMENT 2
202-01.02	REMOVAL OF ASBESTOS	L.S.	1			
202-04.01	REMOVAL OF STRUCTURES (EXIST. BRIDGE NO. 38-SR180-0457)	L.S.	1			
204-02.01	DRY EXCAVATION (BRIDGES)	C.Y.	148		74	74
303-01.02	GRANULAR BACKFILL (BRIDGES)	TON	50		25	25
604-02.03	EPOXY COATED REINFORCING STEEL	LB.	15223	12609	1307	1307
604-03.01	CLASS "A" CONCRETE (BRIDGES)	C.Y.	48		24	24
604-03.02	STEEL BAR REINFORCEMENT (BRIDGES)	LB.	10234		5117	5117
604-03.04	PAVEMENT @ BRIDGE ENDS	S.Y.	140			
604-03.09	CLASS D CONCRETE (BRIDGE DECK)	C.Y.	88	54	17	17
604-04.01	APPLIED TEXTURE FINISH (NEW STRUCTURES)	S.Y.	330	238	46	46
604-05.31	BRIDGE DECK GROOVING (MECHANICAL)	S.Y.	352			
606-18.01	TEST PILES (STEEL PIPE PILES, 14-INCH)	L.F.	148		71	77
606-18.02	LOADING TEST (STEEL PIPE PILES, 14-INCH)	EACH	1		1	
606-18.03	STEEL PIPE PILES (14-INCH)	L.F.	896		427	469
615-01.20	ERECTION OF BRIDGE BEAMS	L.S.	0.5	0.5		
620-05.01	CONCRETE PARAPET SINGLE SLOPE (STD-1-1SS)	L.F.	212			
710-09.01	6" PERFORATED PIPE WITH VERTICAL DRAIN SYSTEM	L.F.	130		65	65
710-09.02	6" PIPE UNDERDRAIN	L.F.	48		24	24

NOTE: PRIOR TO CONSTRUCTION OF THE PAVEMENT AT BRIDGE ENDS, THE CONTRACTOR SHALL SUBMIT A PROPOSED BILL OF STEEL TO THE ENGINEER FOR APPROVAL.

NOTE: LUMP SUM: TO INCLUDE COMPLETE REMOVAL OF EXISTING BRIDGE NO. 38-SR180-04.57 AND APPROACHES TO NATURAL GROUND. LENGTH OF 57' AND WIDTH OF 24'-11" CONSISTS OF 3 SPANS OF CONCRETE CHANNEL SLAB SUPPORTED ON A TIMBER PILE SUBSTRUCTURE.

NOTE: EXCAVATION BASED ON FINAL PROFILE AT ABUTMENTS.

NOTE: THE COST OF BITUMINOUS-FIBERBOARD, AND ALL MISCELLANEOUS JOINT MATERIAL TO BE INCLUDED IN THE UNIT PRICE BID FOR OTHER ITEMS.

NOTE: THE DEPARTMENT PROCURED THE BEAMS AHEAD OF LETTING THIS JOB, WHICH INCLUDES DELIVERY TO THE PROJECT SITE. THE UNIT PRICE BID FOR THE ERECTION OF BRIDGE BEAMS SHALL INCLUDE ALL LABOR, MATERIALS, AND EQUIPMENT NECESSARY TO ERECT THE BEAMS. THIS INCLUDES ALL WORK NECESSARY TO COORDINATE BEAM DELIVERY, OFFLOAD THE BEAMS, AND SET THE BEAMS INTO FINAL POSITION. THE COST OF ELASTOMERIC PADS AND RUBBER BONDING CEMENT TO BE INCLUDED IN THE UNIT PRICE BID FOR THE ERECTION OF BRIDGE BEAMS.

NOTE: COST OF POLYETHYLENE SHEETING AND ALL MISCELLANEOUS ITEMS NECESSARY FOR INSTALLATION TO BE INCLUDED IN THE UNIT PRICE BID FOR PERFORATED PIPE.

NOTE: GRANULAR BACKFILL SHALL BE TYPE "A" GRADING "D" MATERIAL. SEE STANDARD DRAWING STD-10-1

NOTE: THE UNIT PRICE BID FOR THE CAST STEEL POINTS SHALL INCLUDE FURNISHING AND INSTALLATION TO THE PILES.

NOTE: SEE PROJECT COMMITMENTS AND SPECIAL PROVISION 202ACM.

PILE DATA TABLE

LOCATION	DESIGN LOADS (TONS)	TEST PILE CUT-OFF EL. (FT.)	ESTIMATED PILE LENGTH (FT.)	TEST PILE LENGTH (FT.)	MINIMUM PILE TIP ELEVATION
ABUTMENT 1	115	322.70	73	83	250.00
ABUTMENT 2	115	322.74	86	96	237.00

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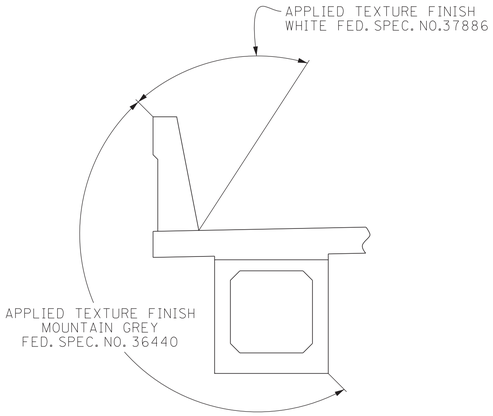

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APPLIED TEXTURE FINISH SKETCH

NOTE: IN ADDITION TO THE SURFACES SHOWN IN THE APPLIED TEXTURE FINISH SKETCH ALL EXPOSED SURFACES OF THE WINGWALLS, ABUTMENT BEAMS, AND EXTERIOR PORTIONS OF ENDWALL ARE TO RECEIVE AN APPLIED TEXTURE FINISH MOUNTAIN GREY, FED. SPEC. NO. 36440.

SEALED BY

06-30-2025

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

GENERAL NOTES AND
ESTIMATED QUANTITIES
STATE ROUTE 180 OVER OVERFLOW
BRIDGE I.D NO. 38S80510007
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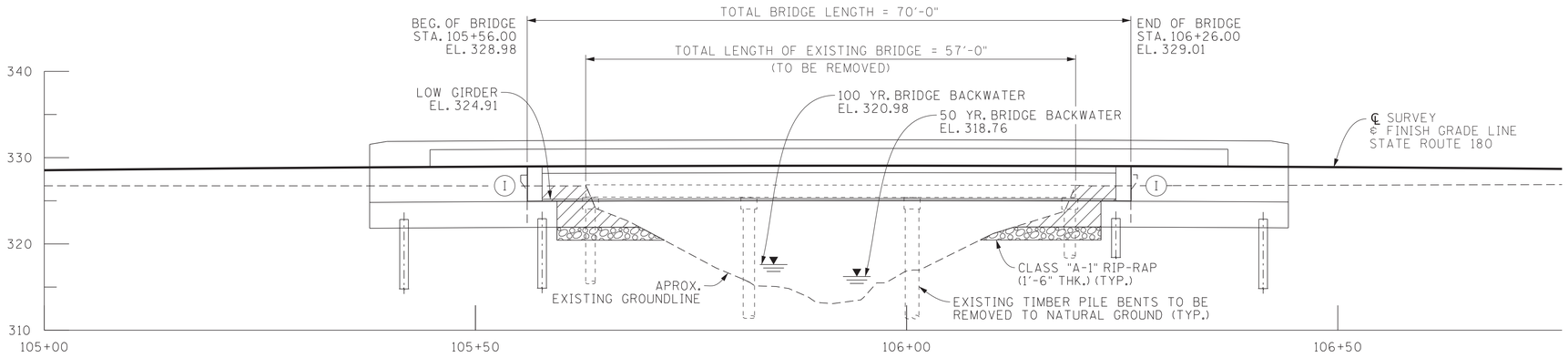

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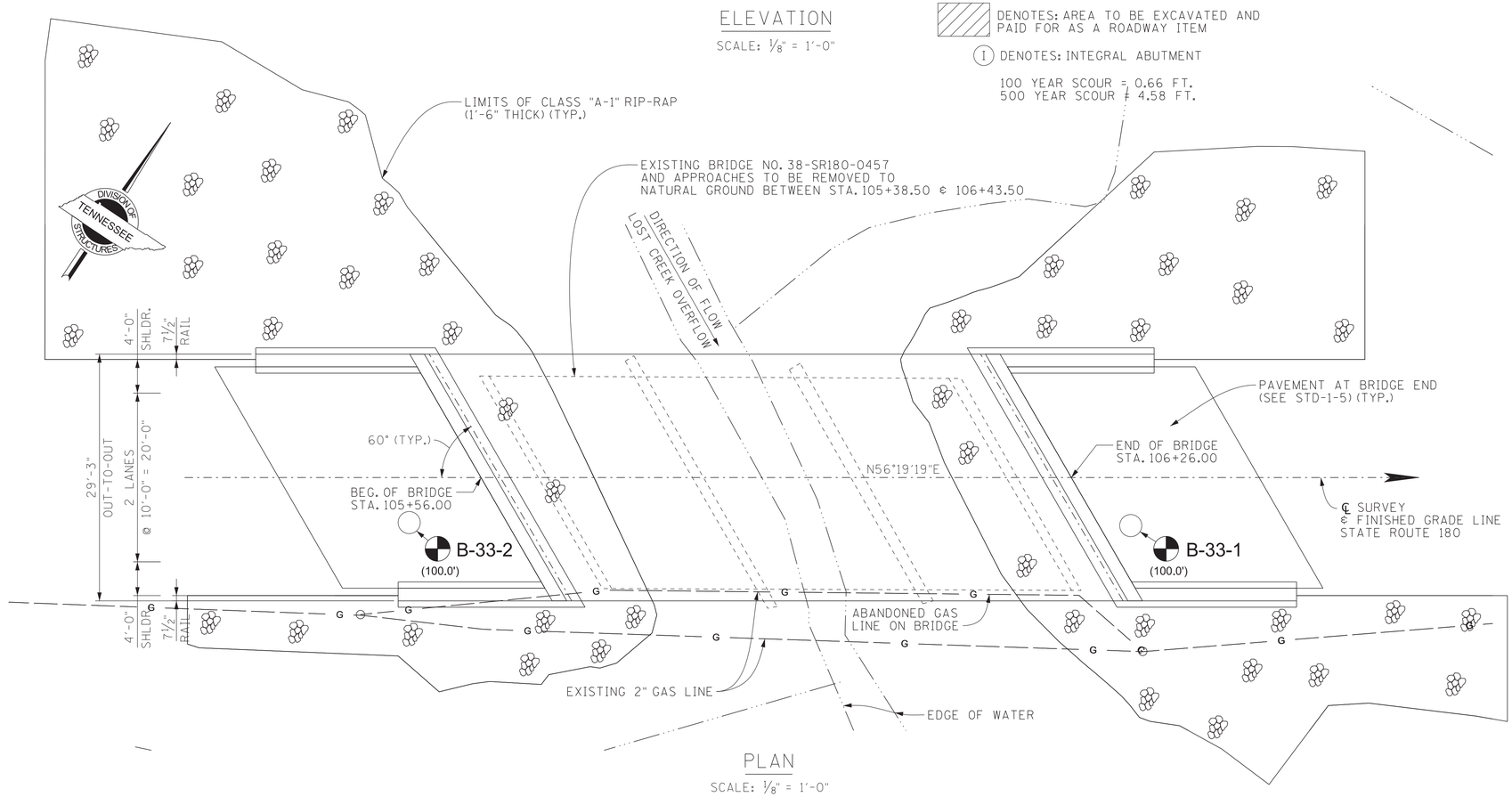
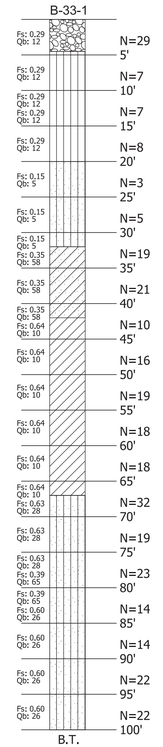
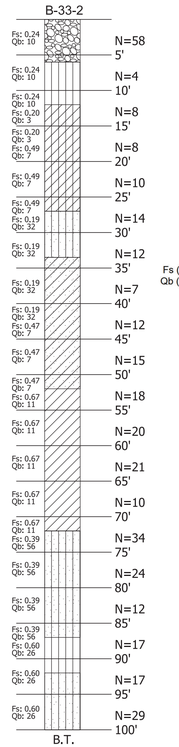


PLAN

SCALE: 1/8" = 1'-0"

NOTE: THIS DRAWING IS FOR FOUNDATION DATA ONLY AND IS NOT TO BE USED AS A LAYOUT





LEGEND

- FILL
- CLAY
- SAND
- SILT

B.T.= BORING TERMINATED
Fs (TSF) - NOMINAL UNIT SKIN FRICTION
Qb (TSF) - NOMINT UNIT TIP RESISTANCE
N (bpf) - MEASURED STANDARD PENETRATION TEST N-VALUE

LEGEND

B-33-1 & B-33-2 (100.0') — BORING LOCATION TERMINATION DEPTH (NO REFUSAL)

BORING NO.	STATION	OFFSET	GROUND ELEVATION	ROCK ELEVATION	TOTAL DEPTH
B-33-2	106+33.05	RT. 5'	326.7'	N/A	100.0'
B-33-1	105+47.49	RT. 5'	326.7'	N/A	100.0'

SEALED BY

ERIC C. CONWAY
REGISTERED ENGINEER
AGRICULTURE
COMMERCE
No. 127025
STATE OF TENNESSEE
06/30/2025

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

FOUNDATION DATA
STATE ROUTE 180 OVER OVERFLOW
BRIDGE I.D NO. 38S80510007
STATION 105+91.00
LOG MILE 4.57
HAYWOOD COUNTY
2026

U-97-969

PIN NO.: 136185.06
DESIGN BY: TERRACON DATE: 06/2025
DRAWN BY: DATE:
SUPERVISED BY: DATE:
CHECKED BY: DATE:

6/30/2025 7:39:20 AM
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CONST. NO.:

PROJECT NO.	YEAR	SHEET NO.
38S180-S3-008	2026	

REVISIONS

NO.	DATE	BY	BRIEF DESCRIPTION
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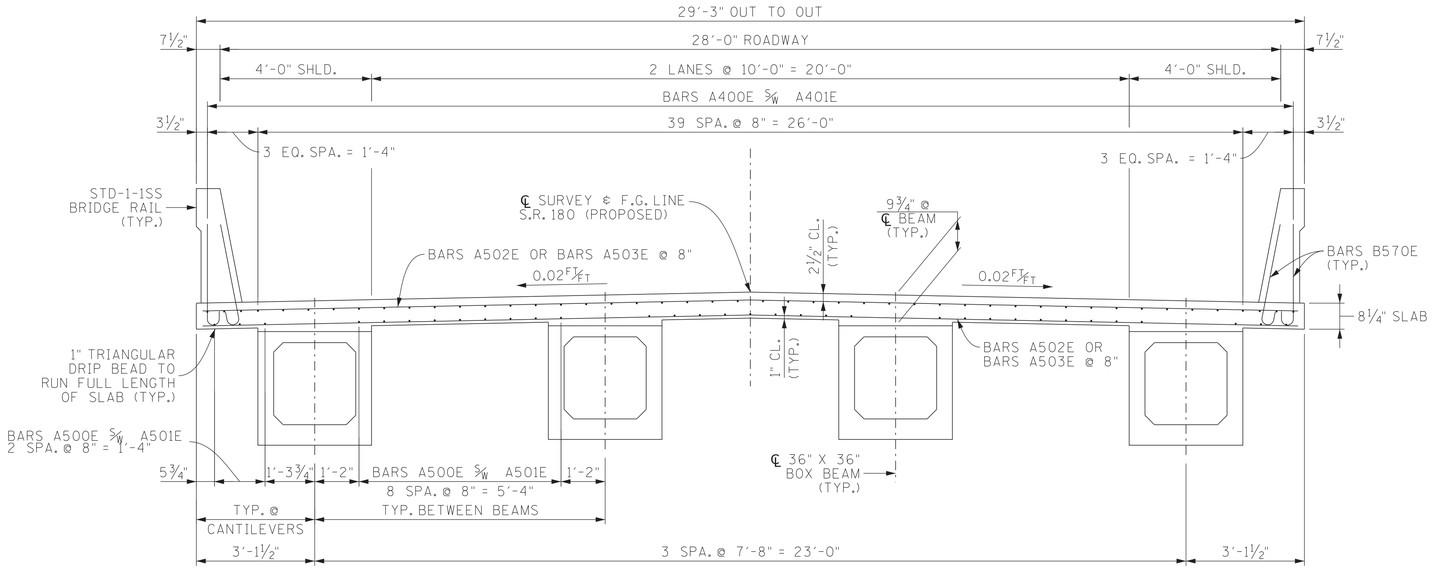


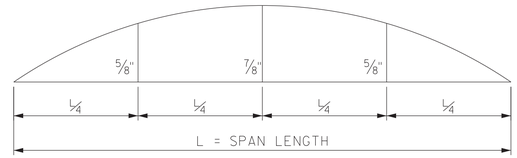
TYPICAL CROSS-SECTION

(LOOKING FORWARD ON SURVEY)

NOTE: NO PORTION OF THE PARAPET SHALL BE POURED UNTIL THE ENTIRE DECK SLAB IS IN PLACE.

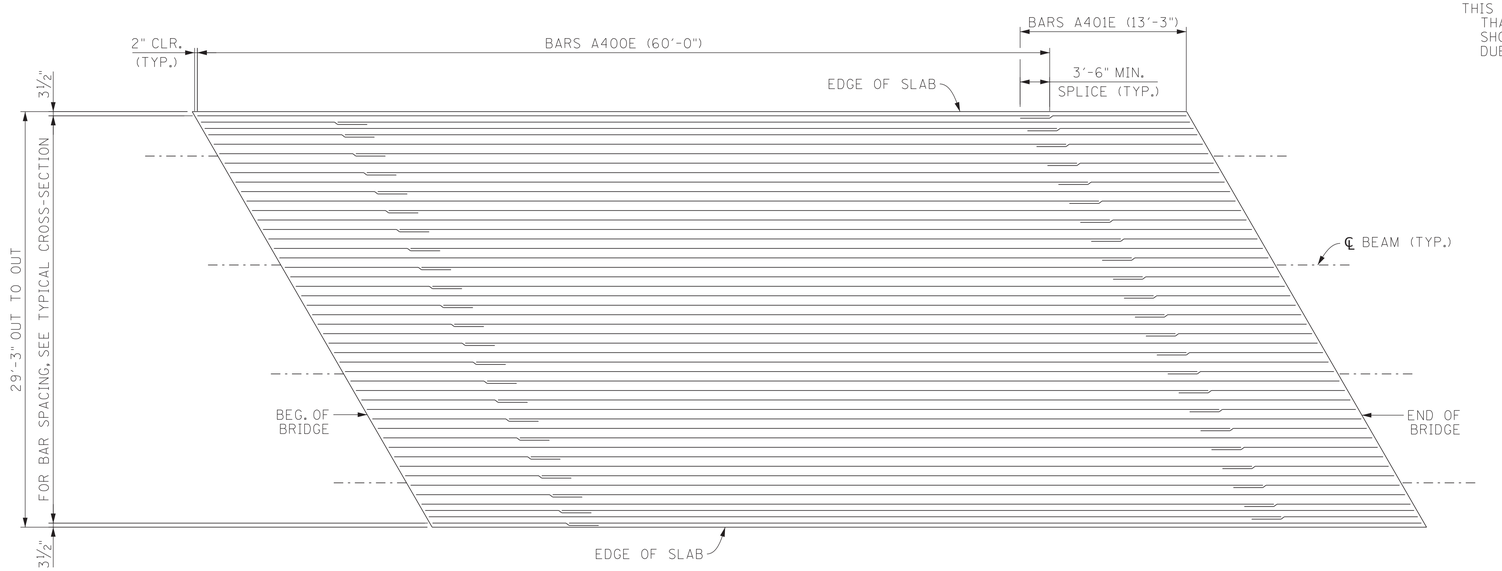
NOTE: WHEN POURING SLAB, PROVISIONS SHALL BE MADE FOR SETTING REINFORCING STEEL FOR PARAPET. THE PARAPET SHALL NOT BE POURED UNTIL THE SLAB IS POURED AND CURED. ALSO, SEE DRAWING NO. STD-1-1SS.

NOTE: THE CONTRACTOR IS SOLELY RESPONSIBLE FOR SUPPORTING THE BEAMS TO PREVENT DAMAGE DUE TO TWISTING OR OVERTURNING DURING ALL PHASES OF CONSTRUCTION.



DEAD LOAD CORRECTION CURVE

THIS CURVE IS FOR DEAD LOAD SLAB AND ALL DEAD LOADS THAT ARE APPLIED AFTER THE SLAB IS IN PLACE AND SHOULD BE CORRECTED TO COMPENSATE FOR THE EFFECTS DUE TO THE VERTICAL CURVE.



PLAN OF MAIN REINFORCMENT

(SHOWING ALTERNATING SPLICES)

ESTIMATED QUANTITIES	
CLASS "D" CONCRETE (BRIDGE DECK) C.Y.	EPOXY COATED REINFORCING STEEL LBS.
54	12,609

SEALED BY

COREY D. GILREATH REGISTERED ENGINEER AGRICULTURE COMMERCE No. 132457 STATE OF TENNESSEE

06-30-2025

PIN NO.: 136185.06

DESIGN BY:	ATH	DATE: 05/07/2025
DRAWN BY:	TMT	DATE: 06/13/2025
SUPERVISED BY:	CDG	DATE: 06/16/2025
CHECKED BY:	CDG	DATE: 06/16/2025

AMERICAN STRUCTUREPOINT INC.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

SUPERSTRUCTURE
STATE ROUTE 180 OVER OVERFLOW
BRIDGE I.D NO. 38S80510007
STATION 105+91.00
LOG MILE 4.57
HAYWOOD COUNTY
2026

U-97-970

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CONST. NO.:

PROJECT NO.	YEAR	SHEET NO.
38S180-S3-008	2026	

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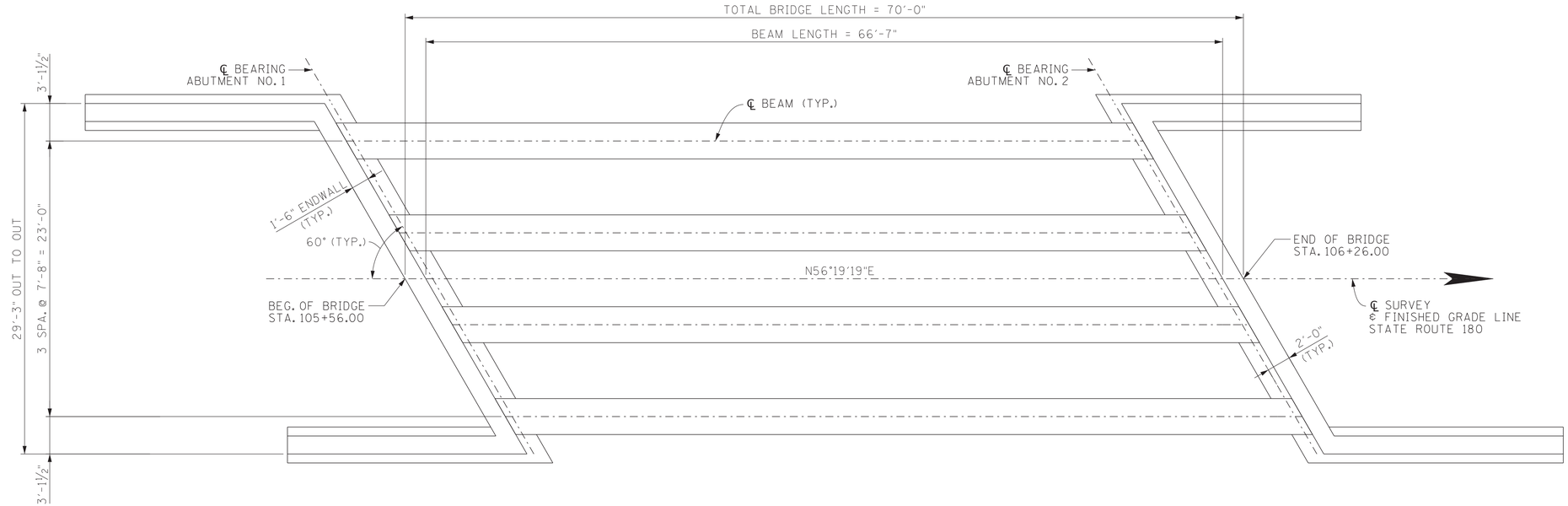
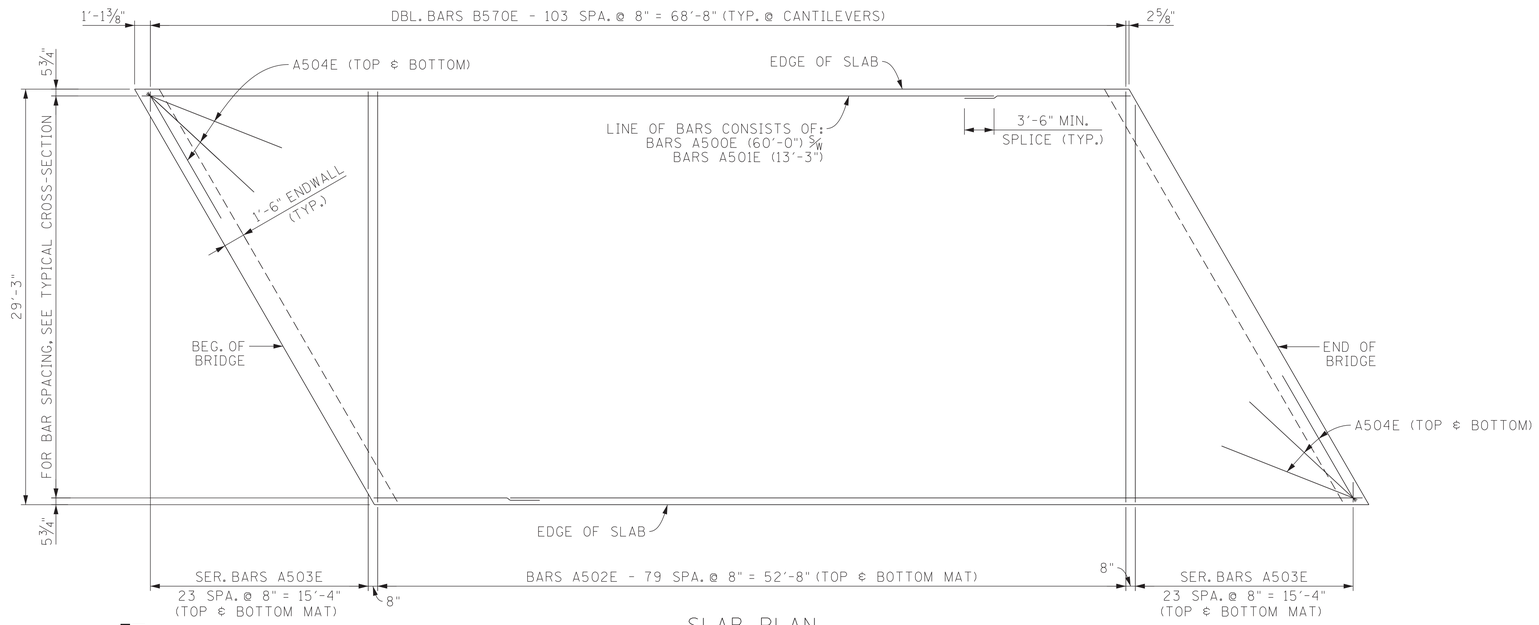


FRAMING PLAN



SLAB PLAN

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REGISTERED ENGINEER
AGRICULTURE
COMMERCE
No. 132457
STATE OF TENNESSEE
06-30-2025

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

SUPERSTRUCTURE DETAILS
STATE ROUTE 180 OVER OVERFLOW
BRIDGE I.D NO. 38S80510007
STATION 105+91.00
LOG MILE 4.57
HAYWOOD COUNTY
2026

U-97-971

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38S180-S3-008	2026	

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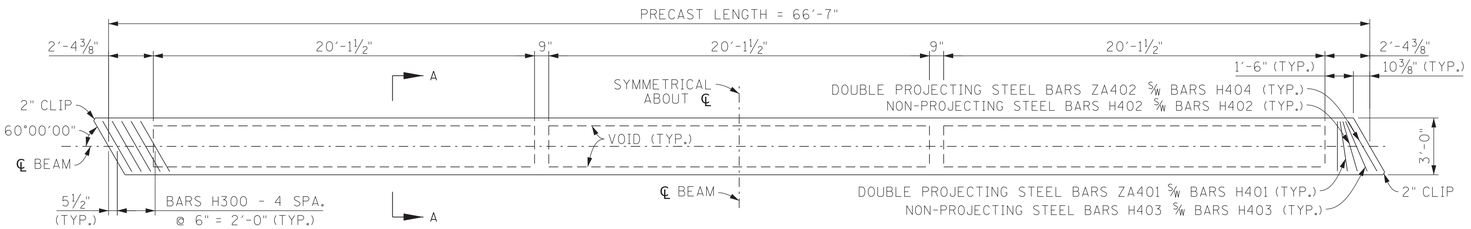
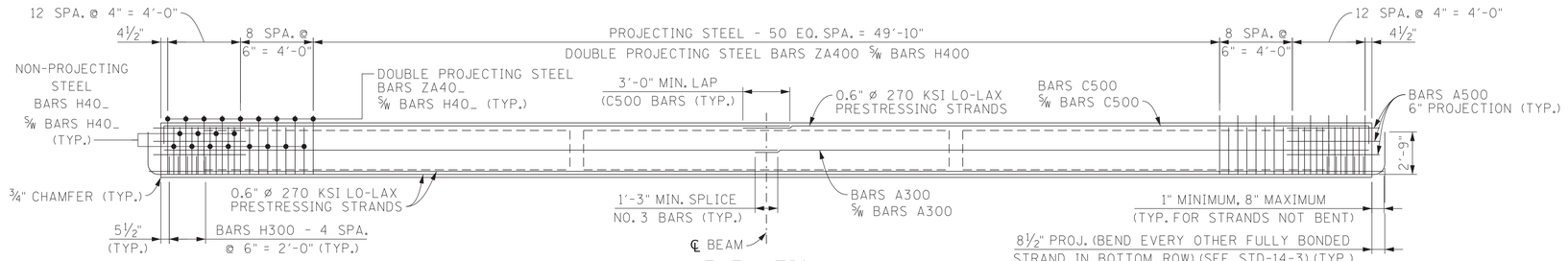


PLAN



ELEVATION

(SHOWING STIRRUP SPACING & PRESTRESSING STRANDS)

ESTIMATED QUANTITIES - PER BEAM			
NO. REQ'D.	0.6"ø PRESTRESSING STRANDS (LOW RELAXATION) LB.	CONCRETE CLASS "P" C.Y.	REINFORCING STEEL LB.
4	1334	13	1476

NOTE: SEE STD-14-3 FOR BOX BEAM STANDARD DETAILS, NOTES AND REINFORCING NOT SHOWN ON THIS SHEET.

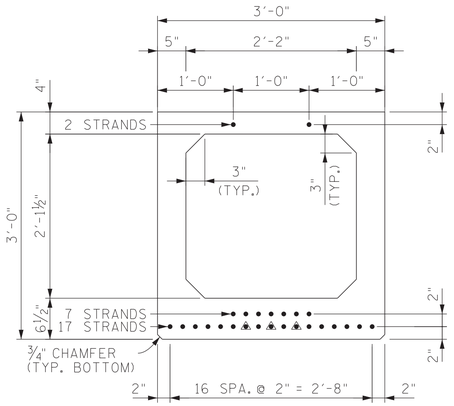
NOTE: THE PRESTRESSED BEAMS SHALL ATTAIN AN AGE OF AT LEAST 90 DAYS PRIOR TO POURING THE SUPPORT DIAPHRAGMS (EXCLUDING BOTTOM 15") AND DECK SLAB.

NOTE: THE CONCRETE FOR THIS CONSTRUCTION SHALL BE OF SUCH PROPERTIES AS TO ATTAIN A COMPRESSIVE STRENGTH OF NOT LESS THAN 6,500 PSI AT THE AGE OF 28 DAYS AND STRESS TRANSFER SHALL NOT BE MADE TO THE BRIDGE MEMBER UNTIL THE TEST SPECIMENS INDICATE THAT THE CONCRETE HAS REACHED A COMPRESSIVE STRENGTH OF AT LEAST 5,500 PSI. SEE GENERAL NOTES FOR CONCRETE FINISHING NOTE.

NOTE: ALL BEAMS SHALL HAVE UPWARD DEFLECTION OF AT LEAST ⅛" UNDER TOTAL DEAD LOAD.

PRESTRESSING STRANDS: ALL STRANDS SHALL BE 6/10" DIAMETER, UNCOATED 7- WIRE STRANDS, ASTM A416 GRADE 270, LOW-LAX, A = 0.217 SQ. IN. PULLED TO 43,943 LBS. PER STRAND UNLESS OTHERWISE NOTED.

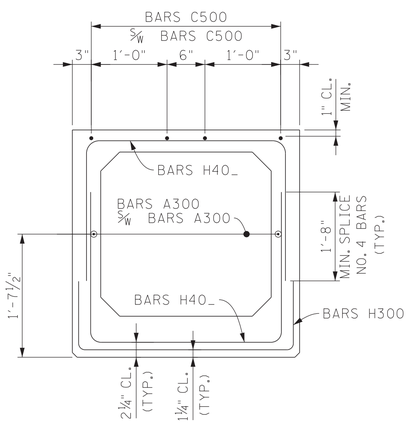
PRESTRESSED BEAM DESIGN DATA (PER BEAM):
LIVE LOAD DISTRIBUTION FACTOR:
MOMENT = 0.717 LANES
SHEAR = 0.889 LANES
COMPOSITE DEAD LOAD:
DC = 188 LB/FT
DW = 235 LB/FT
COMPOSITE SLAB DESIGN STRENGTH: F 'C = 4000 PSI



SECTION A-A

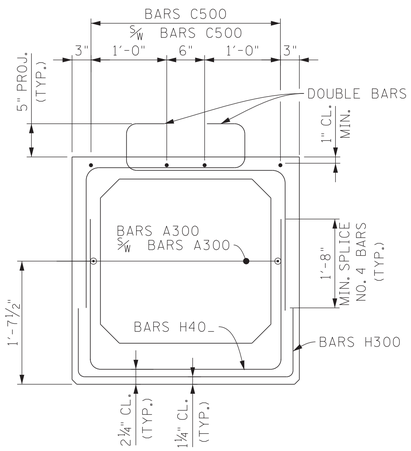
(SHOWING PROPERTIES & PRESTRESSING STRANDS-26 TOTAL)

▲ DENOTES: BREAK BOND 3'-0" @ EACH END OF BEAM



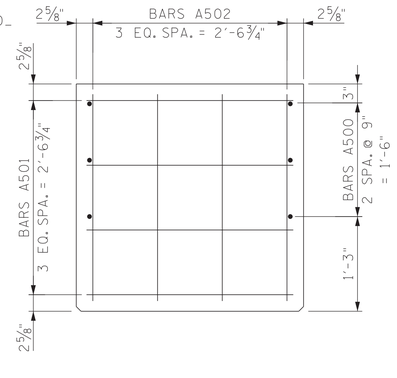
SECTION A-A

(SHOWING NON-PROJ. REINF.)



SECTION A-A

(SHOWING PROJ. REINF.)

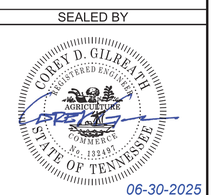


END ELEVATION

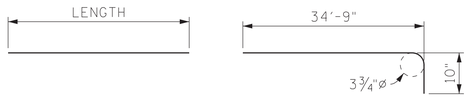
(PERPENDICULAR TO CL GIRDER)

BILL OF STEEL - PER BEAM				
BAR	SIZE	NO. REQ'D.	BEND DIM. "A"	LENGTH
A300	3	4		33'-9"
A500	5	12		5'-6"
A501	5	8		3'-1"
A502	5	8		2'-8"
C500	5	8		35'-7"
H300	3	10		6'-4"
H400	4	103	2'-7½"	7'-1½"
H401	4	2	2'-7¾"	7'-1¾"
H402	4	4	2'-8¾"	7'-2¾"
H403	4	4	2'-10¼"	7'-4¼"
H404	4	2	3'-0¼"	7'-6¼"
ZA400	4	126	1'-11½"	4'-10⅝"
ZA401	4	4	1'-11¾"	4'-11"
ZA402	4	4	2'-4¼"	5'-3⅜"

SEALED BY

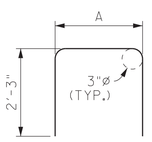


06-30-2025

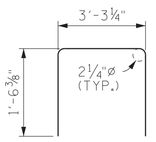


BAR A

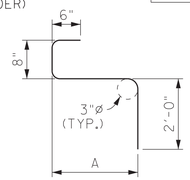
BAR C500



BAR H40_



BAR H300



BAR ZA40_

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PRESTRESSED BOX BEAM DETAILS
STATE ROUTE 180 OVER OVERFLOW
BRIDGE I.D NO. 38S80510007
STATION 105+91.00
LOG MILE 4.57
HAYWOOD COUNTY
2026

U-97-972

PIN NO.: 136185.06

DESIGN BY:	CDG	DATE: 05/09/2025
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SUPERVISED BY:	MAH	DATE: 05/12/2025
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CONST. NO.:

PROJECT NO.	YEAR	SHEET NO.
38S180-S3-008	2026	

REVISIONS

NO.	DATE	BY	BRIEF DESCRIPTION
	- -		
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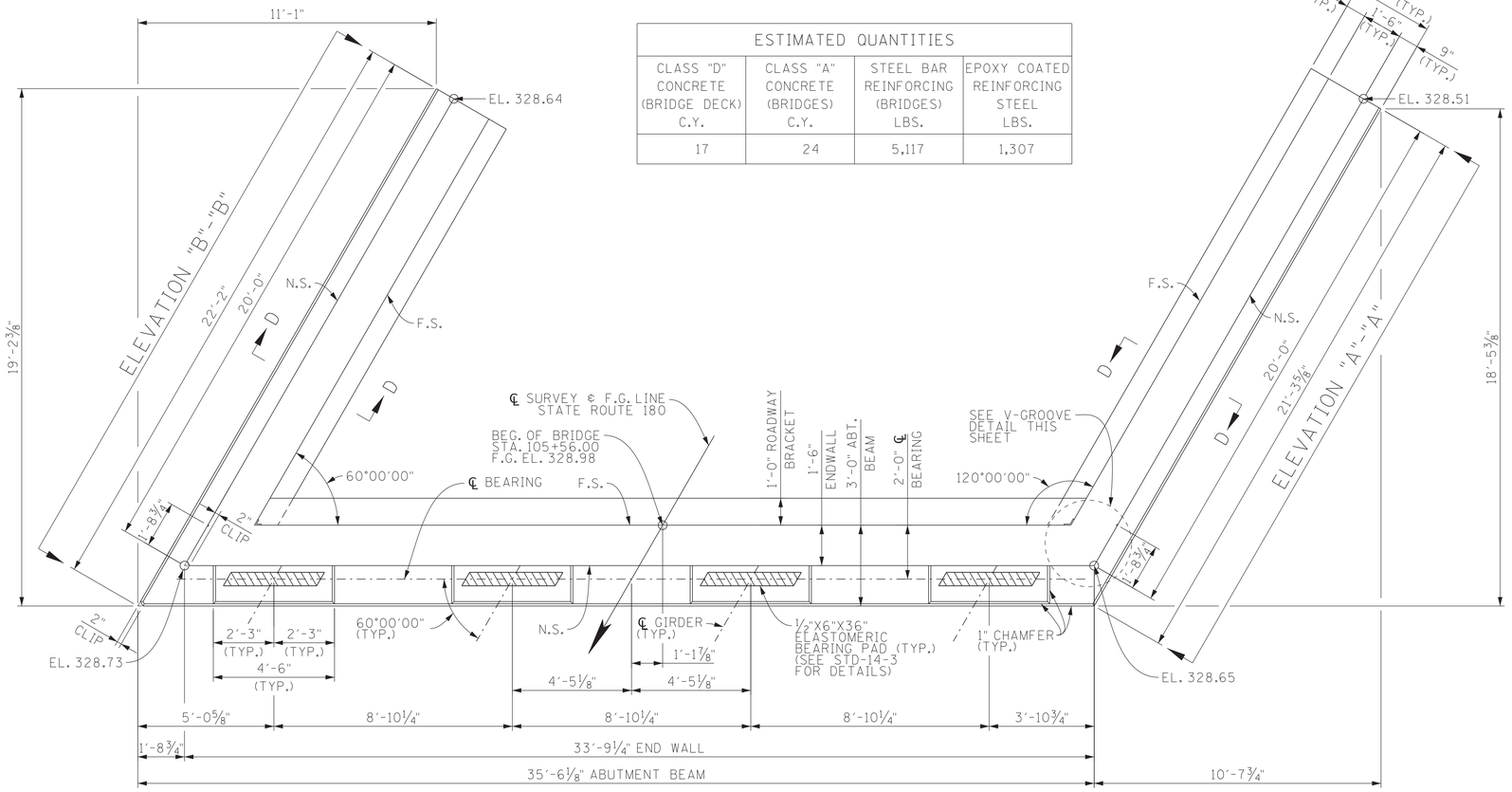
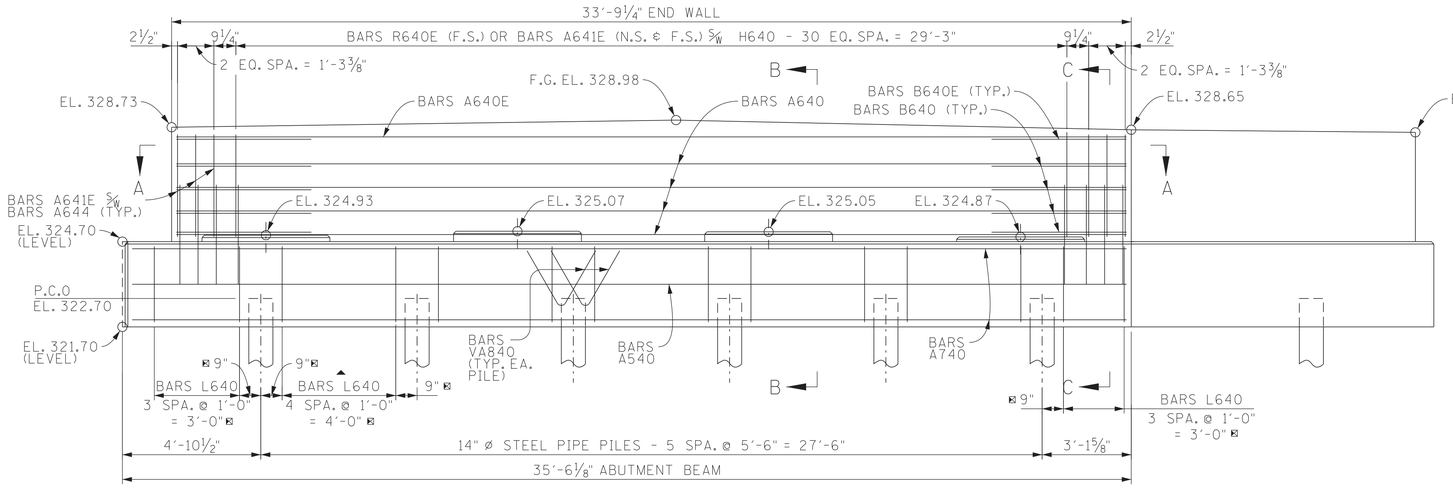
ESTIMATED QUANTITIES			
CLASS "D" CONCRETE (BRIDGE DECK) C.Y.	CLASS "A" CONCRETE (BRIDGES) C.Y.	STEEL BAR REINFORCING (BRIDGES) LBS.	EPOXY COATED REINFORCING STEEL LBS.
17	24	5,117	1,307



PLAN



ELEVATION

▲ DENOTES: TYP. BETWEEN PILES

⊠ DENOTES: DIMENSIONS ALONG ℄ PILE

ABUTMENT GENERAL NOTES

NOTE: RISER BLOCKS SHALL BE POURED MONOLITHICALLY WITH ABUTMENT BEAM.

NOTE: WHEN POURING WINGWALLS, PROVISIONS SHALL BE MADE FOR SETTING REINFORCING STEEL FOR WINGPOSTS & PARAPETS. FOR DETAILS OF WINGPOSTS & PARAPETS, SEE STD. DWG. NO. STD-1-1SS.

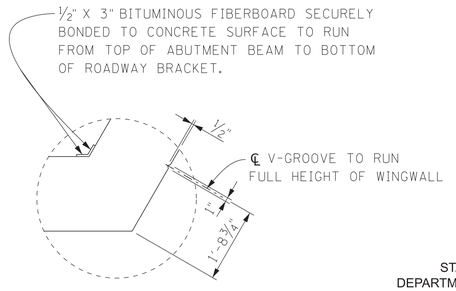
NOTE: COST OF BRIDGE RAIL AND POST SHALL BE INCLUDED IN THE UNIT PRICE BID FOR BRIDGE RAIL SYSTEM.

NOTE: ELASTOMERIC PADS SHALL BE IN PLACE A MINIMUM OF ONE DAY BEFORE BEING DISTURBED BY SETTING BEAMS. PLACE RUBBER BONDING CEMENT IN SUCH A WAY THAT VISIBLE CONCRETE SURFACES WILL NOT BE STAINED.

NOTE: WINGBEAM PILES SHALL BE DRIVE TO THE PLANS TIP ELEVATION OR REFUSAL. SEISMIC ATTACHMENT IS NOT REQUIRED FOR WINGBEAM PILES.

NOTE: NOT LESS THAN HALF OF THE SLAB SHALL BE POURED PRIOR TO, OR CONCURRENTLY WITH, PLACEMENT OF ANY PART OF THE ABUTMENT ENDWALLS. ONE ABUTMENT ENDWALL SHALL BE POURED FULL HEIGHT CONCURRENTLY WITH THE END OF SLAB. AT LEAST THE TOP 12 INCHES OF THE OTHER ENDWALL SHALL BE POURED CONCURRENTLY WITH THE END OF SLAB.

NOTE: SEE STANDARD DRAWING STD-6-1 FOR PILE DETAILS AND NOTES.



V-GROOVE DETAIL

(TYP. EACH WING)

SEALED BY

COREY D. GILREATH REGISTERED ENGINEER AGRICULTURE COMMERCE No. 123497 STATE OF TENNESSEE

06-30-2025

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

ABUTMENT NO. 1
STATE ROUTE 180 OVER OVERFLOW
BRIDGE I.D NO. 38S80510007
STATION 105+91.00
LOG MILE 4.57
HAYWOOD COUNTY
2026

U-97-973

PIN NO.: 136185.06

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CONST. NO.:

PROJECT NO.	YEAR	SHEET NO.
38S180-S3-008	2026	

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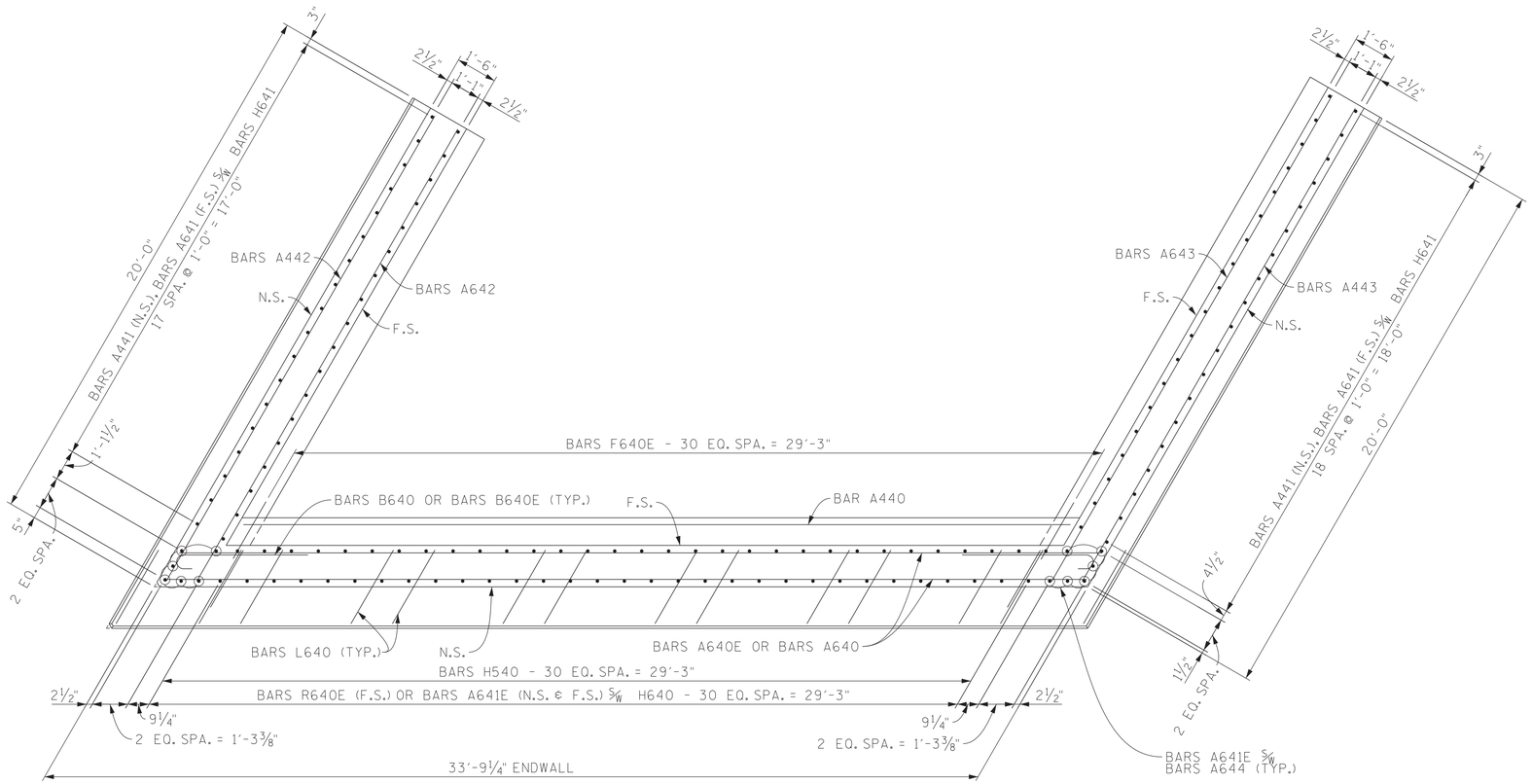
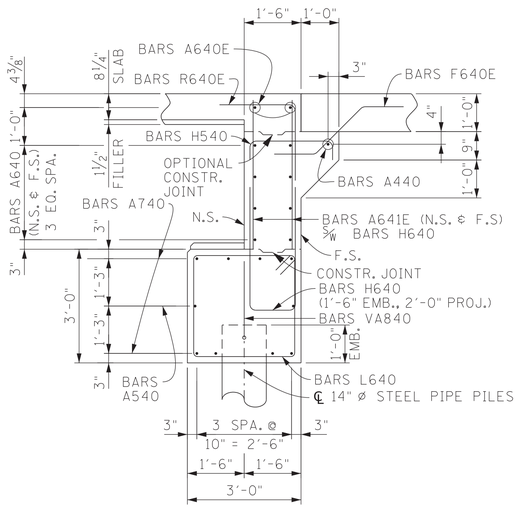


SECTION A-A



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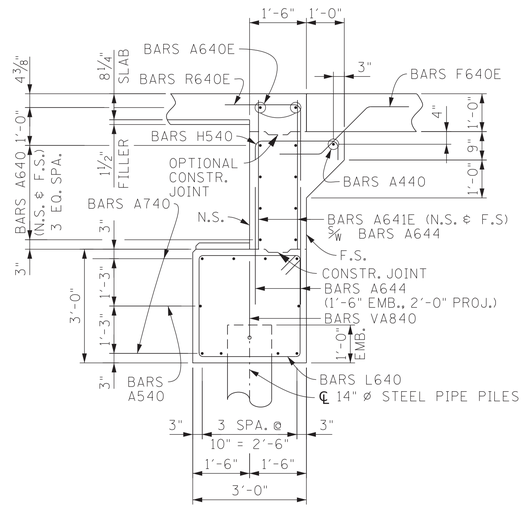

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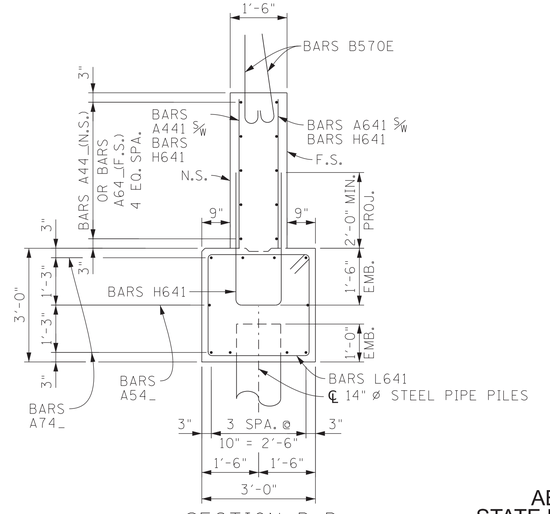

SECTION D-D

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COREY D. GILREATH REGISTERED ENGINEER AGRICULTURE COMMERCE No. 139497 STATE OF TENNESSEE

06-30-2025

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

ABUTMENT NO. 1 DETAILS
STATE ROUTE 180 OVER OVERFLOW
BRIDGE I.D NO. 38S80510007
STATION 105+91.00
LOG MILE 4.57
HAYWOOD COUNTY
2026

U-97-974

PIN NO.: 136185.06
DESIGN BY: CDG DATE: 06/10/2025
DRAWN BY: TMT DATE: 06/13/2025
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CONST. NO.:

PROJECT NO.	YEAR	SHEET NO.
38S180-S3-008	2026	

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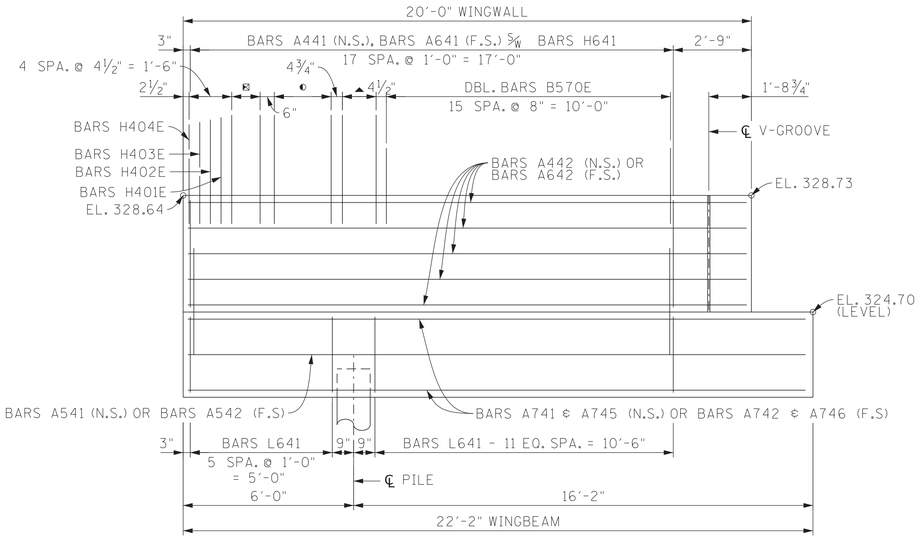
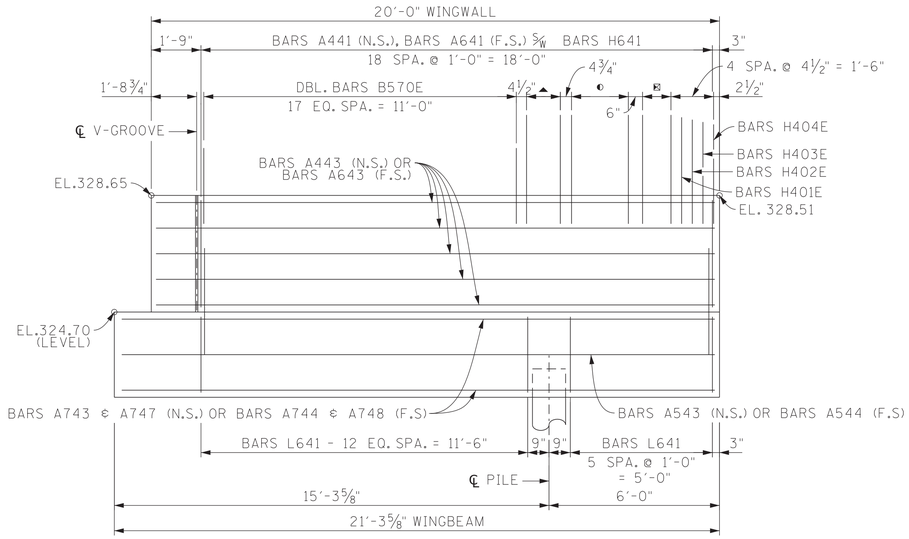


ELEVATION "B"-"B"



ELEVATION "A"-"A"

▣ DENOTES: BARS H400E - 2 SPA. @ 6" = 1'-0"
◐ DENOTES: SER. BARS HD401E - 4 SPA. @ 6" = 2'-0"
▲ DENOTES: SER. BARS HD400E - 3 SPA. @ 4¾" = 1'-2¼"

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06-30-2025

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

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STATE ROUTE 180 OVER OVERFLOW
BRIDGE I.D NO. 38S80510007
STATION 105+91.00
LOG MILE 4.57
HAYWOOD COUNTY
2026

U-97-975

PIN NO.: 136185.06

DESIGN BY:	CDG	DATE:	06/10/2025
DRAWN BY:	TMT	DATE:	06/13/2025
SUPERVISED BY:	MAH	DATE:	06/13/2025
CHECKED BY:	CDG	DATE:	06/16/2025

AMERICAN STRUCTUREPOINT INC.

6/27/2025 9:28:20 AM
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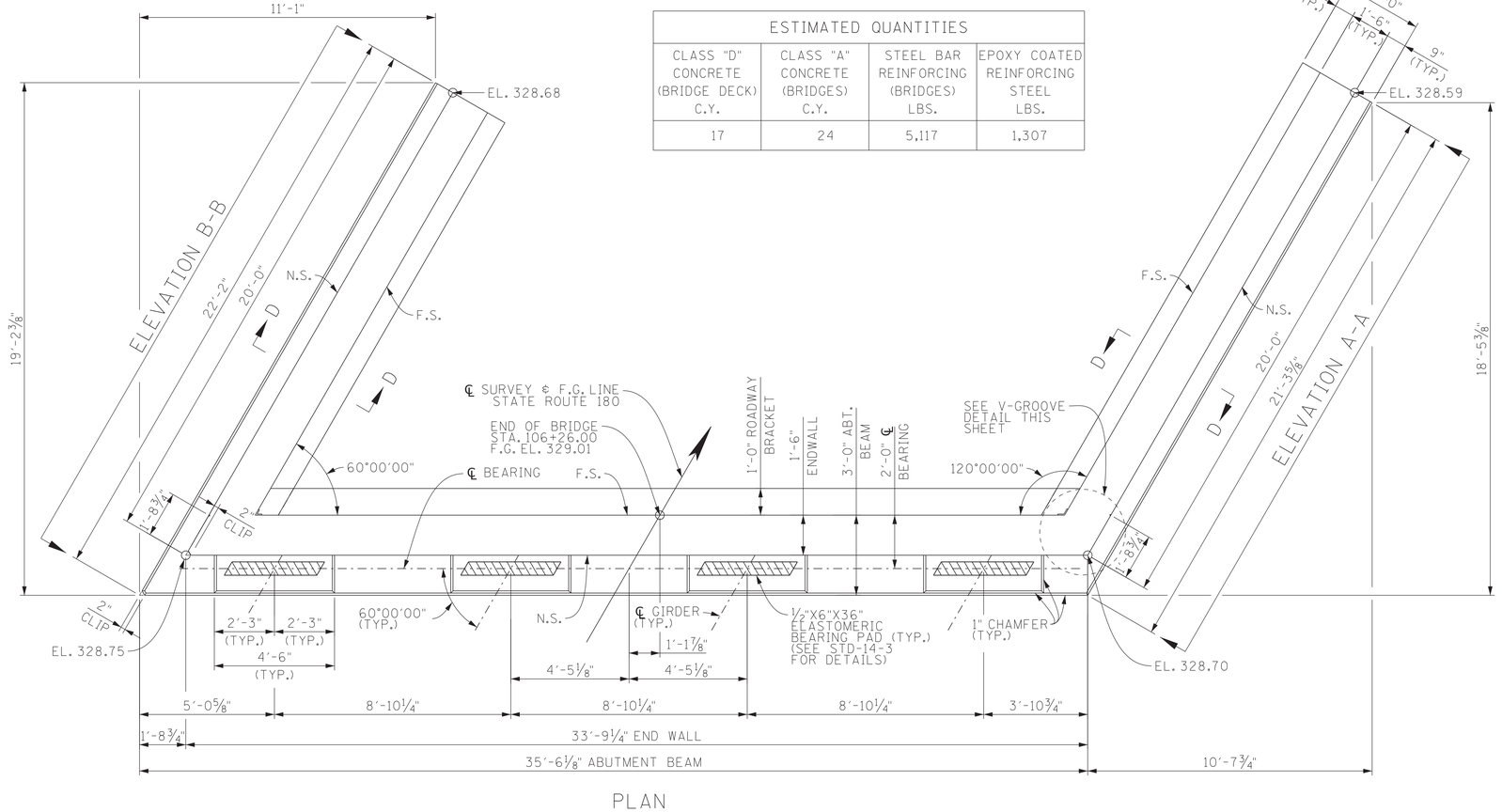
CONST. NO.:

PROJECT NO.	YEAR	SHEET NO.
38S180-S3-008	2026	

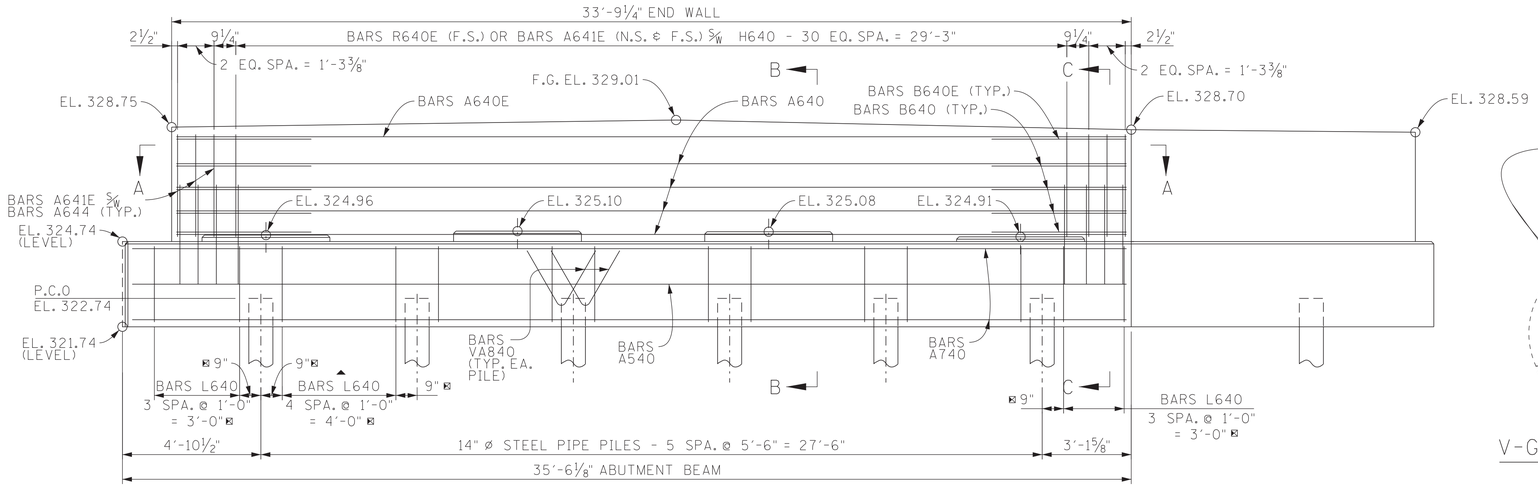
REVISIONS

NO.	DATE	BY	BRIEF DESCRIPTION
	- -		
	- -		
	- -		
	- -		
	- -		

ESTIMATED QUANTITIES			
CLASS "D" CONCRETE (BRIDGE DECK) C.Y.	CLASS "A" CONCRETE (BRIDGES) C.Y.	STEEL BAR REINFORCING (BRIDGES) LBS.	EPOXY COATED REINFORCING STEEL LBS.
17	24	5,117	1,307



PLAN



ELEVATION

▲ DENOTES: TYP. BETWEEN PILES

⊠ DENOTES: DIMENSIONS ALONG ℄ PILE

ABUTMENT GENERAL NOTES

NOTE: RISER BLOCKS SHALL BE POURED MONOLITHICALLY WITH ABUTMENT BEAM.

NOTE: WHEN POURING WINGWALLS, PROVISIONS SHALL BE MADE FOR SETTING REINFORCING STEEL FOR WINGPOSTS & PARAPETS. FOR DETAILS OF WINGPOSTS & PARAPETS, SEE STD. DWG. NO. STD-1-1SS.

NOTE: COST OF BRIDGE RAIL AND POST SHALL BE INCLUDED IN THE UNIT PRICE BID FOR BRIDGE RAIL SYSTEM.

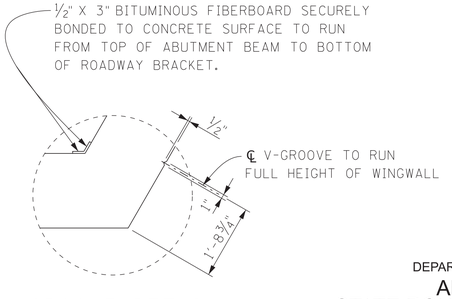
NOTE: ELASTOMERIC PADS SHALL BE IN PLACE A MINIMUM OF ONE DAY BEFORE BEING DISTURBED BY SETTING BEAMS. PLACE RUBBER BONDING CEMENT IN SUCH A WAY THAT VISIBLE CONCRETE SURFACES WILL NOT BE STAINED.

NOTE: WINGBEAM PILES SHALL BE DRIVE TO THE PLANS TIP ELEVATION OR REFUSAL. SEISMIC ATTACHMENT IS NOT REQUIRED FOR WINGBEAM PILES.

NOTE: NOT LESS THAN HALF OF THE SLAB SHALL BE POURED PRIOR TO, OR CONCURRENTLY WITH, PLACEMENT OF ANY PART OF THE ABUTMENT ENDWALLS. ONE ABUTMENT ENDWALL SHALL BE POURED FULL HEIGHT CONCURRENTLY WITH THE END OF SLAB. AT LEAST THE TOP 12 INCHES OF THE OTHER ENDWALL SHALL BE POURED CONCURRENTLY WITH THE END OF SLAB.

NOTE: SEE STANDARD DRAWING STD-6-1 FOR PILE DETAILS AND NOTES.

1/2" X 3" BITUMINOUS FIBERBOARD SECURELY BONDED TO CONCRETE SURFACE TO RUN FROM TOP OF ABUTMENT BEAM TO BOTTOM OF ROADWAY BRACKET.



V-GROOVE DETAIL

(TYP. EACH WING)

SEALED BY

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

ABUTMENT NO. 2
STATE ROUTE 180 OVER OVERFLOW
BRIDGE I.D NO. 38S80510007
STATION 105+91.00
LOG MILE 4.57
HAYWOOD COUNTY
2026

U-97-976

PIN NO.: 136185.06
DESIGN BY: CDG DATE: 06/10/2025
DRAWN BY: TMT DATE: 06/13/2025
SUPERVISED BY: MAH DATE: 06/13/2025
CHECKED BY: CDG DATE: 06/16/2025

AMERICAN STRUCTUREPOINT INC.

6/27/2025 9:28:32 AM
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CONST. NO.:

PROJECT NO.	YEAR	SHEET NO.
38S180-S3-008	2026	

REVISIONS

NO.	DATE	BY	BRIEF DESCRIPTION
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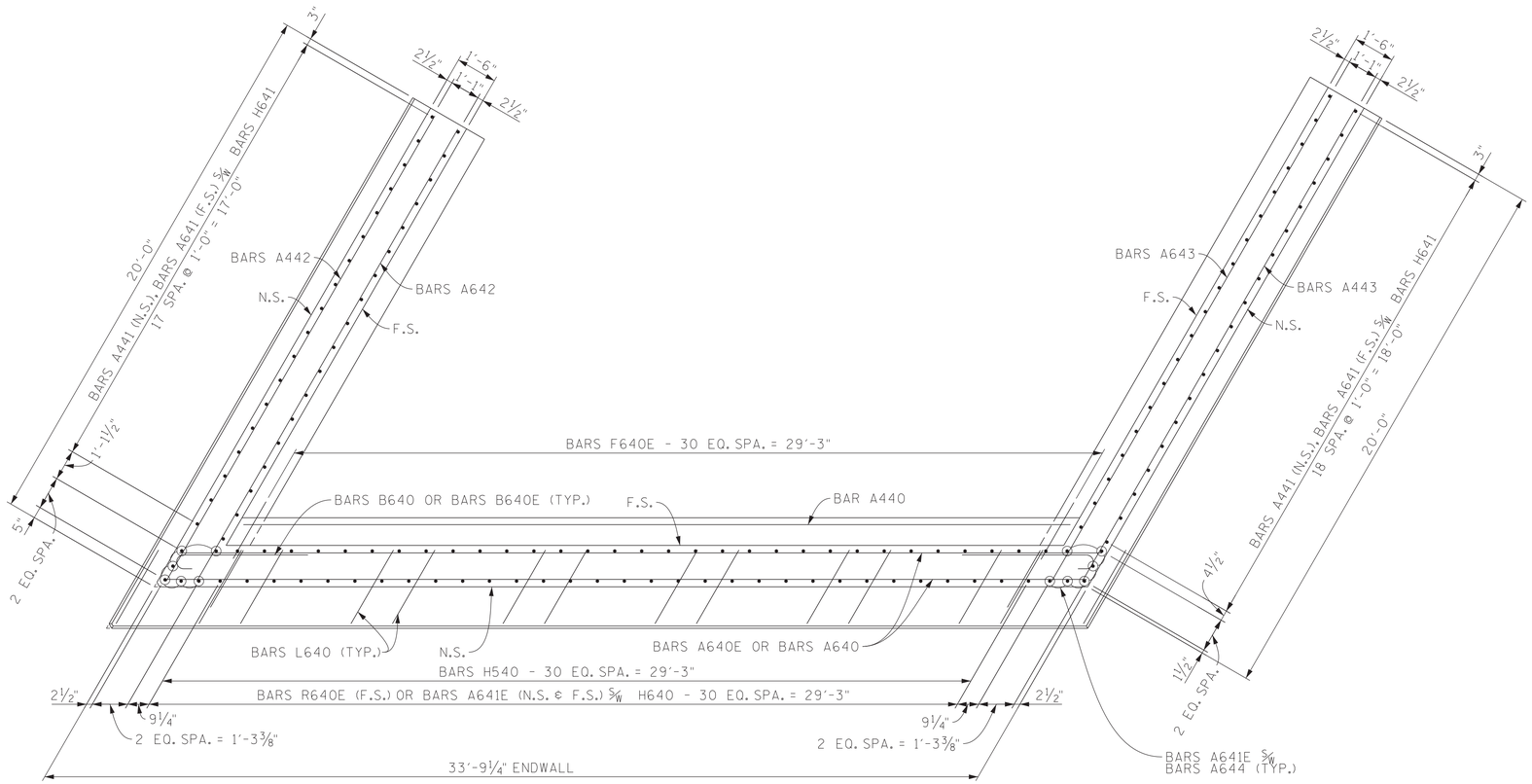
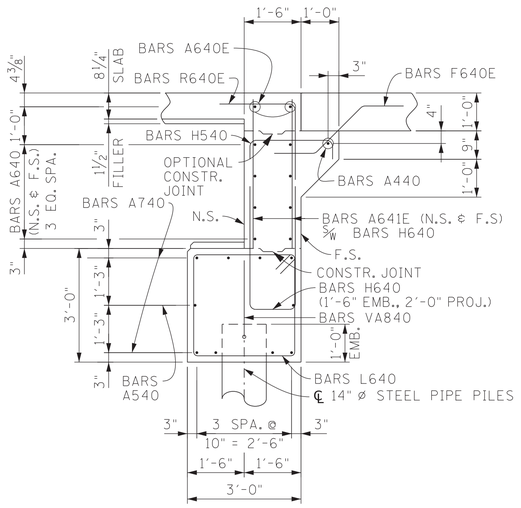
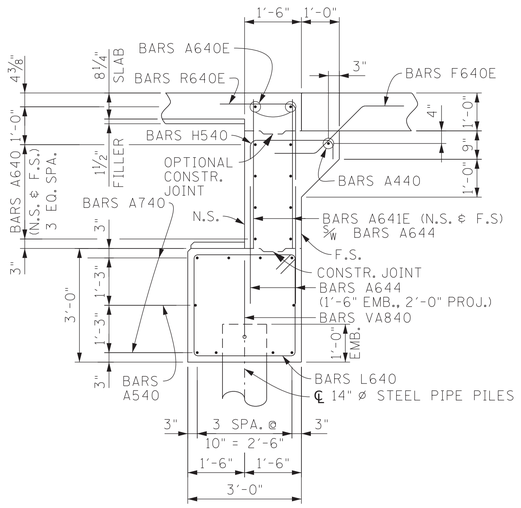
	- -		
	- -		
	- -		



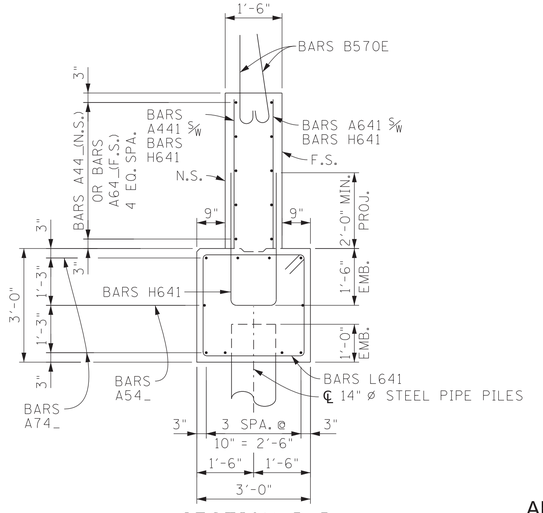
SECTION A-A



SECTION B-B



SECTION C-C



SECTION D-D

SEALED BY

COREY D. GILREATH REGISTERED ENGINEER AGRICULTURE COMMERCE No. 135495 STATE OF TENNESSEE

06-30-2025

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

ABUTMENT NO. 2 DETAILS
STATE ROUTE 180 OVER OVERFLOW
BRIDGE I.D NO. 38S80510007
STATION 105+91.00
LOG MILE 4.57
HAYWOOD COUNTY
2026

U-97-977

PIN NO.: 136185.06
DESIGN BY: CDG DATE: 06/10/2025
DRAWN BY: TMT DATE: 06/13/2025
SUPERVISED BY: MAH DATE: 06/13/2025
CHECKED BY: CDG DATE: 06/16/2025

AMERICAN STRUCTUREPOINT INC.

6/27/2025 9:28:44 AM
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CONST. NO.:

PROJECT NO.	YEAR	SHEET NO.
38S180-S3-008	2026	

REVISIONS

NO.	DATE	BY	BRIEF DESCRIPTION
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	- -		
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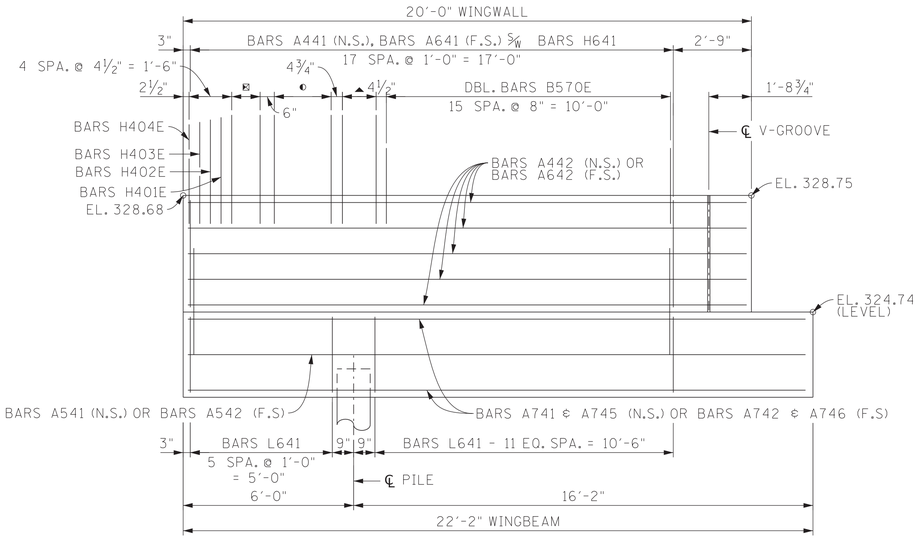
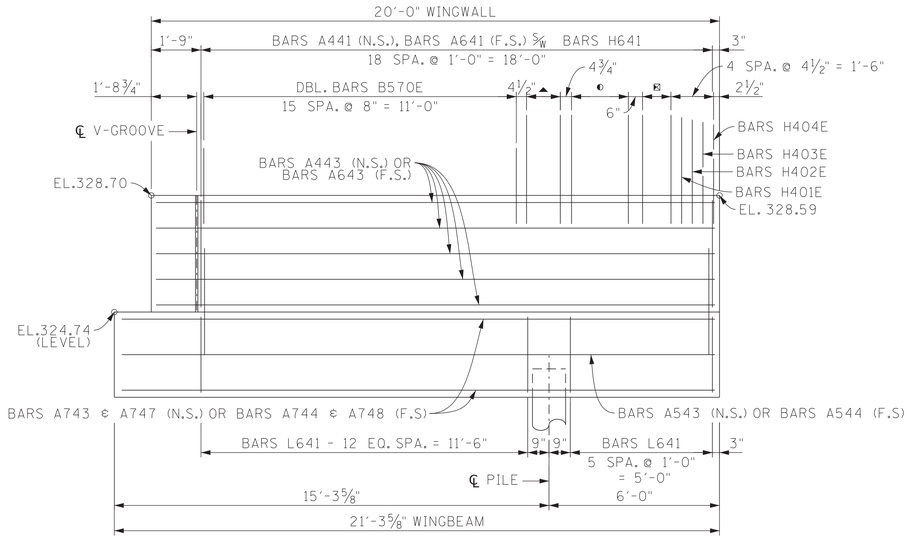


ELEVATION "B"-"B"



ELEVATION "A"-"A"

▣ DENOTES: BARS H400E - 2 SPA. @ 6" = 1'-0"
◐ DENOTES: SER. BARS HD401E - 4 SPA. @ 6" = 2'-0"
▲ DENOTES: SER. BARS HD400E - 3 SPA. @ 4¾" = 1'-2¼"

SEALED BY

06-30-2025

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

ABUTMENT NO. 2 DETAILS
STATE ROUTE 180 OVER OVERFLOW
BRIDGE I.D NO. 38S80510007
STATION 105+91.00
LOG MILE 4.57
HAYWOOD COUNTY
2026

U-97-978

PIN NO.: 136185.06
DESIGN BY: CDG DATE: 06/10/2025
DRAWN BY: TMT DATE: 06/13/2025
SUPERVISED BY: MAH DATE: 06/13/2025
CHECKED BY: CDG DATE: 06/16/2025

AMERICAN STRUCTUREPOINT INC.

6/27/2025 9:28:56 AM
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CONST. NO.:

PROJECT NO.	YEAR	SHEET NO.
38S180-S3-008	2026	

REVISIONS

NO.	DATE	BY	BRIEF DESCRIPTION
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	- -		
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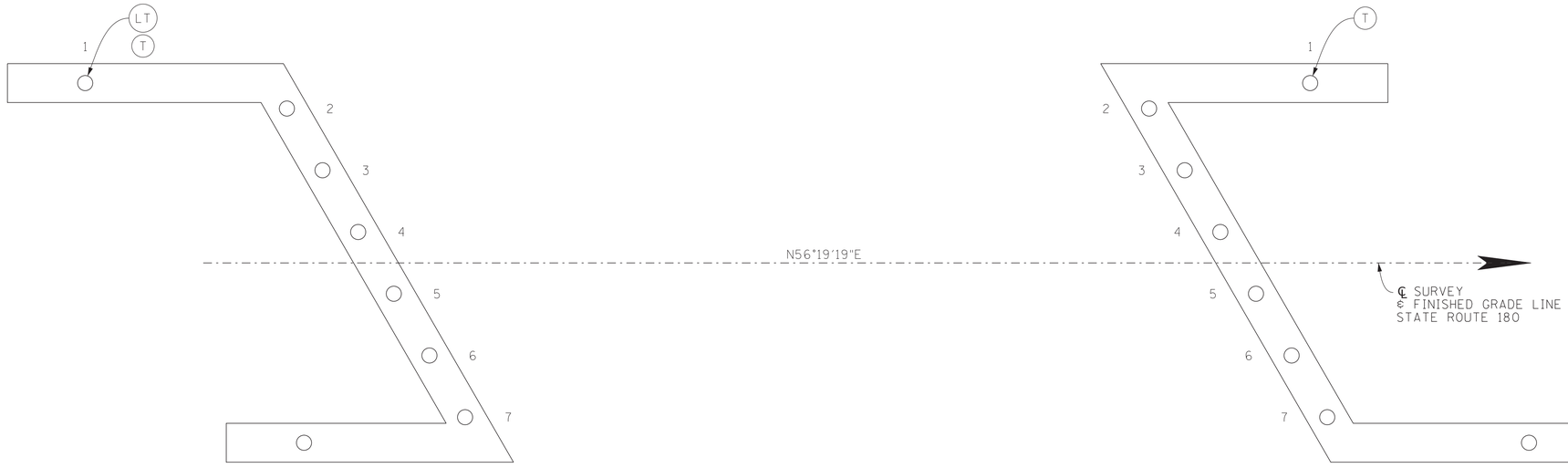

ABUTMENT NO. 1

ABUTMENT NO. 2

(T) DENOTES: TEST PILE

(LT) DENOTES: LOAD TEST PILE

PLAN

TABLE OF PILE DATA

	PILE NO.	1	2	3	4	5	6	7	8
ABUTMENT NO. 1	PILE CUT OFF EL.								
	PILE TIP EL.								
	IN PLACE PILE LENGTH								
ABUTMENT NO. 2	PILE CUT OFF EL.								
	PILE TIP EL.								
	IN PLACE PILE LENGTH								

NOTE TO CONTRACTOR AND CONSTRUCTION OFFICE:
THE BLANKS ON THIS SHEET ARE TO BE FILLED IN BY THE CONSTRUCTION OFFICE AND/OR FIELD ENGINEER GIVING AS BUILT CONDITIONS. AFTER COMPLETION IT IS TO BE SENT TO THE DIVISION OF STRUCTURES TO BECOME PART OF FINAL BRIDGE DOCUMENTS.

SEALED BY

COREY D. GILREATH
REGISTERED ENGINEER
AGRICULTURE COMMERCE
No. 132497
STATE OF TENNESSEE

06-30-2025

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
FINAL FOUNDATION DATA
STATE ROUTE 180 OVER OVERFLOW
BRIDGE I.D NO. 38S80510007
STATION 105+91.00
LOG MILE 4.57
HAYWOOD COUNTY
2026

U-97-979

PIN NO.: 136185.06
DESIGN BY: CDG DATE: 06/10/2025
DRAWN BY: TMT DATE: 06/13/2025
SUPERVISED BY: MAH DATE: 06/13/2025
CHECKED BY: CDG DATE: 06/16/2025

AMERICAN STRUCTUREPOINT INC.

6/27/2025 9:29:08 AM
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SUPERSTRUCTURE (EPOXY)

BAR	LOCATION	SIZE	NO REQ'D.	BENDING DIMENSION A	B	C	D	LENGTH
A400E	SLAB	4	46	60'-0"				60'-0"
A401E	SLAB	4	46	13'-3"				13'-3"
A500E	SLAB	5	33	60'-0"				60'-0"
A501E	SLAB	5	33	13'-3"				13'-3"
A502E SER.	SLAB	5	160	28'-11"				28'-11"
A503E	SLAB	5	4	*				353'-0"
				*DIM. A VARIES FROM 1'-5" TO 28'-0" IN INC. OF 13 7/8" (24 BARS)				
A504E	SLAB	5	12	10'-3"				10'-3"
B570E	SLAB/PARAPET	5	416	2'-8"				3'-3"

REINFORCING STEEL CODE

TYPE	SIZE	SERIES
A	5	06

NOTE: DIMENSIONS SHOWN ON THIS SHEET ARE OUTSIDE TO OUTSIDE OF BAR. STANDARD C.R.S.I. HOOK DETAILS SHALL APPLY, EXCEPT AS NOTED

NOTE: THE SUFFIX E FOR BARS SO MAKED DENOTES EPOXY COATED REINFORCEMENT.

ABUTMENT NO. 1

BAR	LOCATION	SIZE	NO REQ'D.	BENDING DIMENSION A	B	C	D	LENGTH
A440	ROADWAY BRACKET	4	1	29'-11"				29'-11"
A441	WINGWALLS	4	37	3'-8"				3'-8"
A442	WINGWALLS	4	5	19'-5"				19'-5"
A443	WINGWALLS	4	5	19'-9"				19'-9"
A540	ABUTMENT BEAM	5	2	35'-1"				35'-1"
A541	WING BEAMS	5	1	21'-8"				21'-8"
A542	WING BEAMS	5	1	20'-2"				20'-2"
A543	WING BEAMS	5	1	21'-1"				21'-1"
A544	WING BEAMS	5	1	22'-6"				22'-6"
A640	ENDWALL	6	8	33'-4"				33'-4"
A641	WINGWALLS	6	37	3'-8"				3'-8"
A642	WINGWALLS	6	5	18'-10"				18'-10"
A643	WINGWALLS	6	5	20'-3"				20'-3"
A644	ENDWALL/ABUTMENT BEAM	6	12	3'-6"				3'-5"
A740	ABUTMENT BEAM	7	8	35'-1"				35'-1"
A741	WING BEAMS	7	2	21'-8"				21'-8"
A742	WING BEAMS	7	2	20'-2"				20'-2"
A743	WING BEAMS	7	2	21'-1"				21'-1"
A744	WING BEAMS	7	2	22'-6"				22'-6"
A745	WING BEAMS	7	2	21'-2"				21'-2"
A746	WING BEAMS	7	2	20'-8"				20'-8"
A747	WING BEAMS	7	2	21'-6"				21'-6"
A748	WING BEAMS	7	2	22'-0"				22'-0"
B640	ENDWALL	6	8	5'-0"				5'-8"
H540	ROADWAY BRACKET/ENDWAL	5	31	2'-6"	0'-6"			3'-5"
H640	ABUTMENT BEAM	6	31	1'-4"	3'-6"			8'-4"
H641	WING BEAMS	6	37	1'-2"	3'-6"			8'-2"
L640	ABUTMENT BEAM	6	33	3'-1"	2'-8"			12'-10"
L641	WING BEAMS	6	37	2'-8"	2'-8"			12'-0"
VA840	ABUTMENT BEAM	8	12	2'-5"	2'-5"			4'-10"

ABUTMENT NO. 1 (EPOXY)

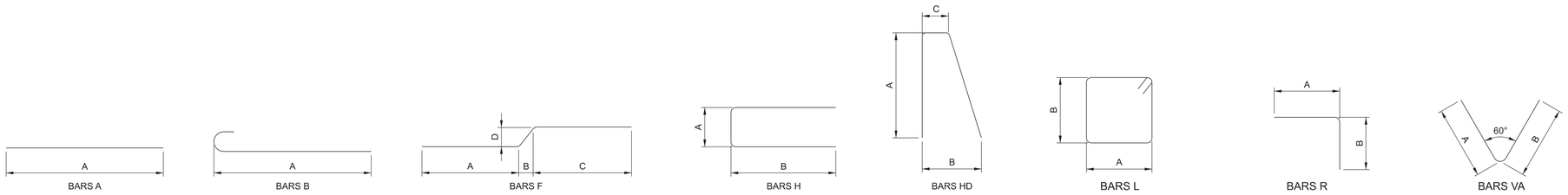
BAR	LOCATION	SIZE	NO REQ'D.	BENDING DIMENSION A	B	C	D	LENGTH
A640E	ENDWALL	6	2	33'-4"				33'-4"
A641E	ENDWALL	6	74	3'-8"				3'-8"
B570E	PARAPET	5	68	2'-8"				3'-3"
B640E	ENDWALL	6	2	5'-0"				5'-8"
F640E	P.A.B.E	6	31	1'-1"	1'-3"	1'-1"	1'-3"	4'-0"
H400E	WINGWALLS	4	6	'-10 1/2"	3'-11"			8'-9"
H401E	WINGWALLS	4	2	'-9 5/8"	3'-10"			8'-6"
H402E	WINGWALLS	4	2	'-8 3/4"	3'-9"			8'-3"
H403E	WINGWALLS	4	2	'-7 5/8"	3'-8"			8'-0"
H404E	WINGWALLS	4	2	'-6 1/2"	3'-7"			7'-9"
HD400E	WINGWALLS	4	2	3'-11"	9"	*		32'-11 3/8"
				* DIM C. VARIES FROM 5 7/8" TO 3 3/4" IN INC. OF 11/16" (4 BARS)				
HD401E	WINGWALLS	4	2	3'-11"	9"	*		42'-7 1/4"
				* DIM C. VARIES FROM 10" TO 6 1/2" IN INC. OF 7/8" (5 BARS)				
R604E	ENDWALL/SLAB	6	31	2'-0"	2'-0"			4'-0"

ABUTMENT NO. 2

BAR	LOCATION	SIZE	NO REQ'D.	BENDING DIMENSION A	B	C	D	LENGTH
A440	ROADWAY BRACKET	4	1	29'-11"				29'-11"
A441	WINGWALLS	4	37	3'-8"				3'-8"
A442	WINGWALLS	4	5	19'-5"				19'-5"
A443	WINGWALLS	4	5	19'-9"				19'-9"
A540	ABUTMENT BEAM	5	2	35'-1"				35'-1"
A541	WING BEAMS	5	1	21'-8"				21'-8"
A542	WING BEAMS	5	1	20'-2"				20'-2"
A543	WING BEAMS	5	1	21'-1"				21'-1"
A544	WING BEAMS	5	1	22'-6"				22'-6"
A640	ENDWALL	6	8	33'-4"				33'-4"
A641	WINGWALLS	6	37	3'-8"				3'-8"
A642	WINGWALLS	6	5	18'-10"				18'-10"
A643	WINGWALLS	6	5	20'-3"				20'-3"
A644	ENDWALL/ABUTMENT BEAM	6	12	3'-6"				3'-5"
A740	ABUTMENT BEAM	7	8	35'-1"				35'-1"
A741	WING BEAMS	7	2	21'-8"				21'-8"
A742	WING BEAMS	7	2	20'-2"				20'-2"
A743	WING BEAMS	7	2	21'-1"				21'-1"
A744	WING BEAMS	7	2	22'-6"				22'-6"
A745	WING BEAMS	7	2	21'-2"				21'-2"
A746	WING BEAMS	7	2	20'-8"				20'-8"
A747	WING BEAMS	7	2	21'-6"				21'-6"
A748	WING BEAMS	7	2	22'-0"				22'-0"
B640	ENDWALL	6	8	5'-0"				5'-8"
H540	ROADWAY BRACKET/ENDWAL	5	31	2'-6"	0'-6"			3'-5"
H640	ABUTMENT BEAM	6	31	1'-4"	3'-6"			8'-4"
H641	WING BEAMS	6	37	1'-2"	3'-6"			8'-2"
L640	ABUTMENT BEAM	6	33	3'-1"	2'-8"			12'-10"
L641	WING BEAMS	6	37	2'-8"	2'-8"			12'-0"
VA840	ABUTMENT BEAM	8	12	2'-5"	2'-5"			4'-10"

ABUTMENT NO. 2 (EPOXY)

BAR	LOCATION	SIZE	NO REQ'D.	BENDING DIMENSION A	B	C	D	LENGTH
A640E	ENDWALL	6	2	33'-4"				33'-4"
A641E	ENDWALL	6	74	3'-8"				3'-8"
B570E	PARAPET	5	68	2'-8"				3'-3"
B640E	ENDWALL	6	2	5'-0"				5'-8"
F640E	P.A.B.E	6	31	1'-1"	1'-3"	1'-1"	1'-3"	4'-0"
H400E	WINGWALLS	4	6	'-10 1/2"	3'-11"			8'-9"
H401E	WINGWALLS	4	2	'-9 5/8"	3'-10"			8'-6"
H402E	WINGWALLS	4	2	'-8 3/4"	3'-9"			8'-3"
H403E	WINGWALLS	4	2	'-7 5/8"	3'-8"			8'-0"
H404E	WINGWALLS	4	2	'-6 1/2"	3'-7"			7'-9"
HD400E	WINGWALLS	4	2	3'-11"	9"	*		32'-11 3/8"
				* DIM C. VARIES FROM 5 7/8" TO 3 3/4" IN INC. OF 11/16" (4 BARS)				
HD401E	WINGWALLS	4	2	3'-11"	9"	*		42'-7 1/4"
				* DIM C. VARIES FROM 10" TO 6 1/2" IN INC. OF 7/8" (5 BARS)				
R604E	ENDWALL/SLAB	6	31	2'-0"	2'-0"			4'-0"



CONST. NO.:

PROJECT NO.	YEAR	SHEET NO.
38S180-S3-008	2026	

REVISIONS

NO.	DATE	BY	BRIEF DESCRIPTION
	- -		
	- -		
	- -		
	- -		
	- -		

SEALED BY

COREY D. GILREATH REGISTERED ENGINEER AGRICULTURE COMMERCE No. 132497 STATE OF TENNESSEE

06-30-2025

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

BILL OF STEEL
STATE ROUTE 180 OVER OVERFLOW
BRIDGE I.D NO. 38S80510007
STATION 105+91.00
LOG MILE 4.57
HAYWOOD COUNTY
2026

U-97-980

PIN NO.: 136185.06
DESIGN BY: ATH DATE: 06/07/2025
DRAWN BY: TMT DATE: 06/13/2025
SUPERVISED BY: CDG DATE: 06/16/2025
CHECKED BY: CDG DATE: 06/16/2025

AMERICAN STRUCTUREPOINT INC.

6/27/2025 10:43:03 AM
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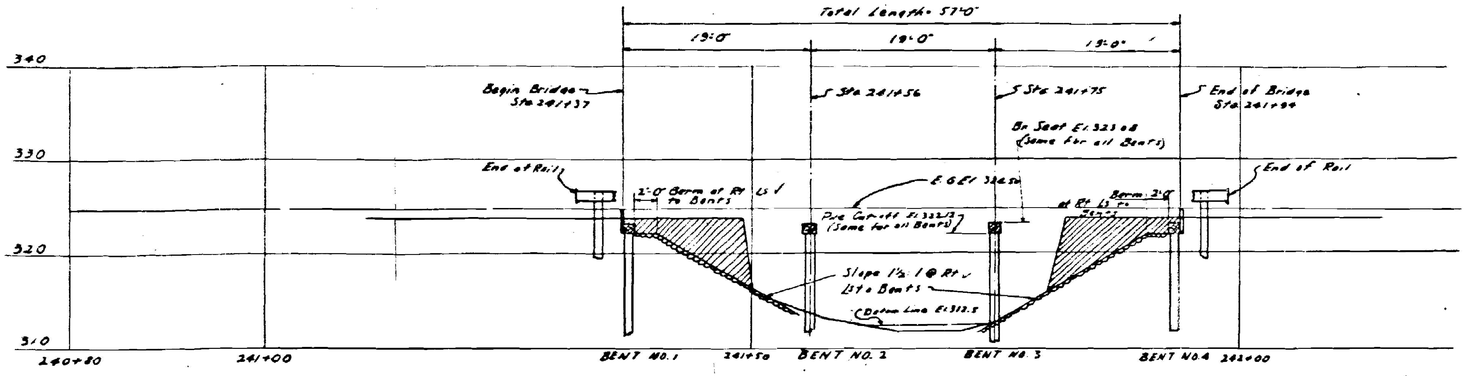
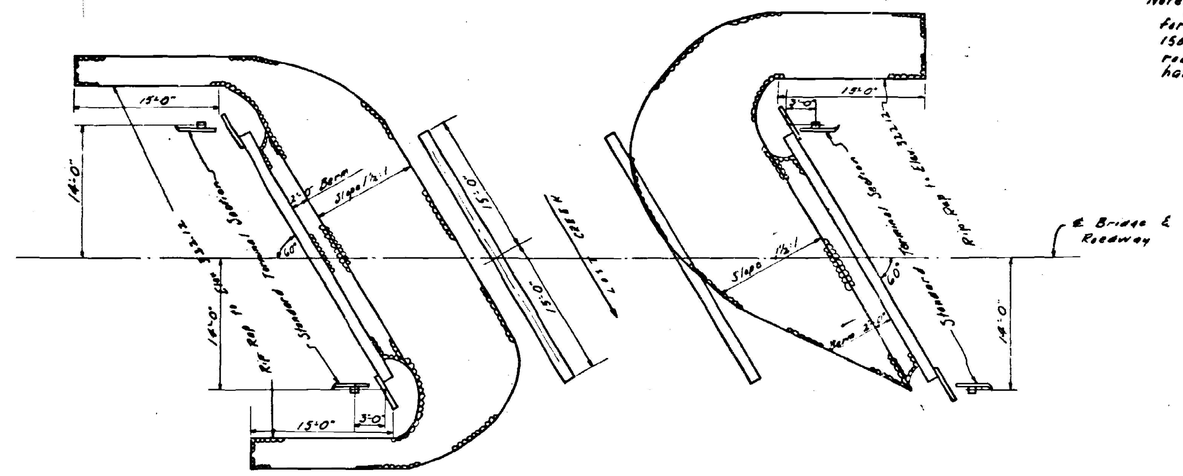
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
3	TENN.		19		

S-805: (1)



SECTION ALONG ℄ BRIDGE & ROADWAY

Note:
Fills at the ends of the Bridge shall be in place & thoroughly compacted before driving the End Bent Piles.



PLAN

Note:
Roadway Contractor to excavate channel for a distance of 150 ft upstream and 150 ft downstream, and excavate present roadway embankment as shown by cross-hatched area above.

BILL OF MATERIAL FOR SUBSTRUCTURE

	Treated Timber	
No.	Description	Location
4	12"x14"x30'-0"	Caps
8	3"x9"x4'-0"	Bulkhead
4	3"x12"x4'-0"	Bulkhead
4	6"x6"x7'-0"	Rail Post
8	2"x4"x2'-6"	Batter
4	4"x9"x23'-0"	Bracing-Bents 2 & 3
4	4"x9"x9'-0"	Bracing-Bents 2 & 3
	Hardware	
4	⅞"x1'-10" Bolts	Bents 2 & 3
4	¾"x1'-8" Bolts	Bents 2 & 3
8	⅝"x1'-6" Bolts	Bents 2 & 3
32	Malleable Washers	For ⅞" Bolts
20	¾"x1'-9" Drift Pins	Caps & Piles
10	⅛"x1½" Bands	Bents No 1 & 4
42	⅞"x2'-0" Dowels	Decks & Caps
6 lbs.	7" Spikes	Bulkhead

ESTIMATED QUANTITIES

ITEM	Hand Rail Lin. Ft.	Precast Concrete Curb Units No	Precast Concrete Int. Units No	Treated Timber M.B.M.	Treated Timber Piles Size 1 Lin. Ft.	Timber Test Piles Lin. Ft.	Rip-Rap Cu. Yds.
Handrail	133						
Deck 3@19' ℄ Spans		6	15				
Substructure							
Total	133	6	15	2.28	640	40	80

Lump Sum: For complete removal of present 2 span Timber Bridge 32'-0" long

DESIGN DATA

Drainage Area: 1020 Acs.
Length of Bridge determined by field inspection.

SPECIAL NOTE: TEST PILES

Before any piles are ordered, a timber test Pile 40'-0" long shall be driven at Sta 241+65. From the results obtained treated timber Piles shall be ordered of such lengths as to provide a minimum bearing of 15 tons.

GENERAL NOTES:

Specifications: Standard Road and Bridge Specifications of the Tennessee Department of Highways.
LOADING: H-15-44
CONCRETE To be Class "A"
REINFORCING STEEL See Specifications.
FORMS & FINISH: See Specifications.
CAPS & PILES To be Treated Timber.
RIP-RAP: See Specifications.

LIST OF DRAWINGS

DECKS: 3@19'-0" Precast ℄ Spans F-10-31
BENTS No 1-4 Timber Piles with Timber Caps F-10-32

38-8051-458

24'-0" ROADWAY

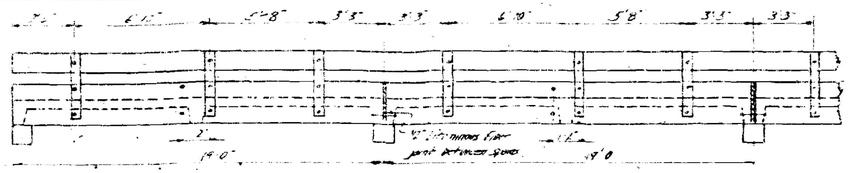
STATE OF TENNESSEE
DEPARTMENT OF HIGHWAYS AND PUBLIC WORKS
NASHVILLE

LAYOUT OF BRIDGE LOST CREEK STATION 241+37 HAYWOOD COUNTY 1960

CHECKED BY J Schroeder DATE 10-7-60
CHECKED BY A.K.Bailey DATE 6-16-61
CHECKED BY DATE

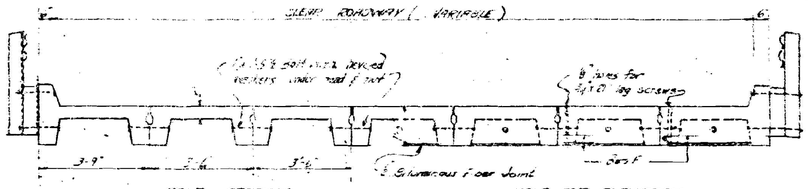
CORRECT Fred Gurley K-4-3
APPROVED exOfficio

K-4-3



END SPAN — INTERMEDIATE SPAN

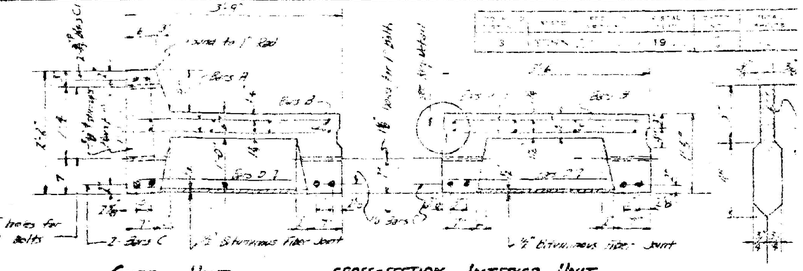
SIDE ELEVATION



HALF SECTION

HALF END ELEVATION

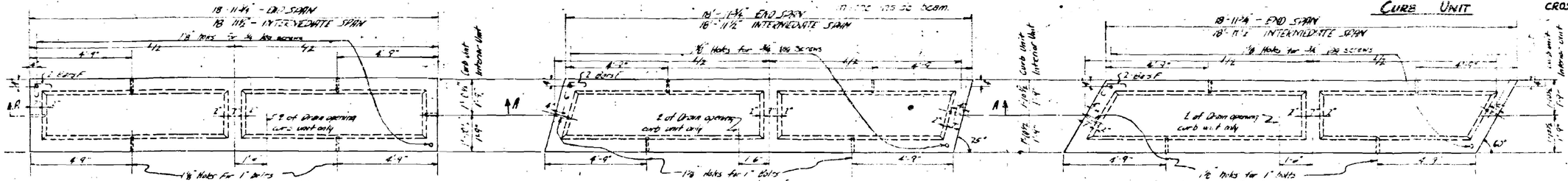
NOTE
Vertical holes for lag screws to be in opposite corners except for curb units where they shall be in the same corners.



CURB UNIT

CROSS-SECTION INTERIOR UNIT

KEY DETAIL



PLAN - ONE UNIT - SKEW 90°

PLAN - ONE UNIT - SKEW 75° LT.

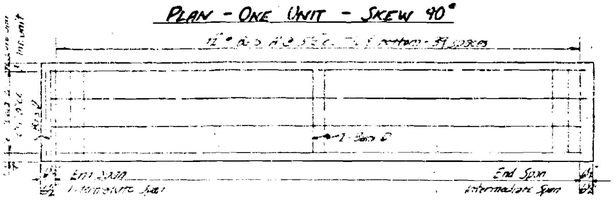
SKEW 75° RT - opposite hand

PLAN - ONE UNIT - SKEW 60° LEFT

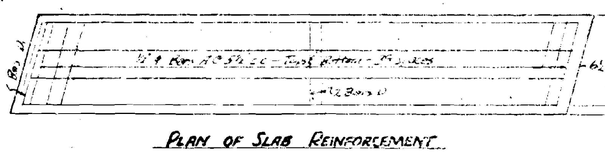
SKEW 60° RT - opposite hand

BARS F

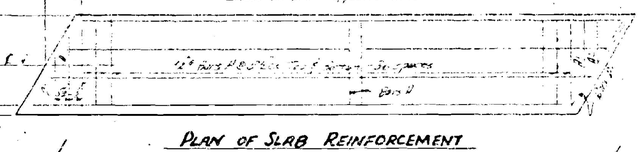
BARS E



PLAN OF SLAB REINFORCEMENT



PLAN OF SLAB REINFORCEMENT



PLAN OF SLAB REINFORCEMENT

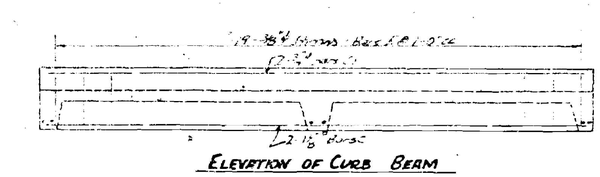
TYPICAL DETAIL

CURB DETAILS AT END OF BRIDGE

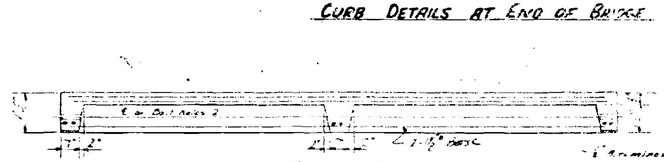
BILL OF STEEL
END SPAN

MARK	SIZE	NO.	LENGTH	NO.	LENGTH
		CURB UNIT		INTERIOR UNIT	
		SKEW 90°			
L	#5	2	5'-3"	2	10'-6"
C	#5	2	5'-3"	2	10'-6"
		SKEW 75°			
L	#5	2	5'-3"	2	10'-6"
C	#5	2	5'-3"	2	10'-6"
		SKEW 60°			
L	#5	2	5'-3"	2	10'-6"
C	#5	2	5'-3"	2	10'-6"
		SKEW 45°			
A	#5	2	5'-3"	2	10'-6"
A	#5	4	3'-0"	4	12'-0"
B	#5	4	2'-7"	4	10'-4"
B1	#5	2	2'-1"	2	4'-2"
C	#5	2	1'-8"	4	6'-8"
D	#5	3	10'-0"	3	10'-0"
E	#5	2	6'-0"	2	12'-0"
F	#5	2	9'-5"	2	18'-10"
G	#5	2	1'-8"	2	3'-4"
H	#5	4	3'-1"	4	12'-4"
J	#5	4	2'-7"	4	10'-4"
K	#5	2	1'-5"	4	5'-8"

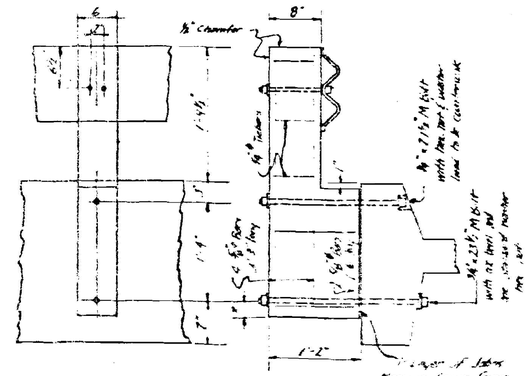
NOTE Bill of steel for intermediate span same as above



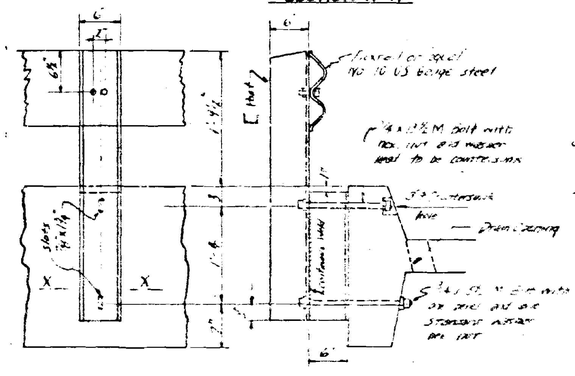
ELEVATION OF CURB BEAM



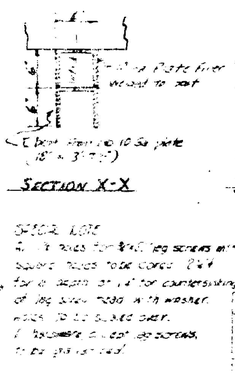
SECTION A-A



ALTERNATE PRECAST CONCRETE RAIL POST

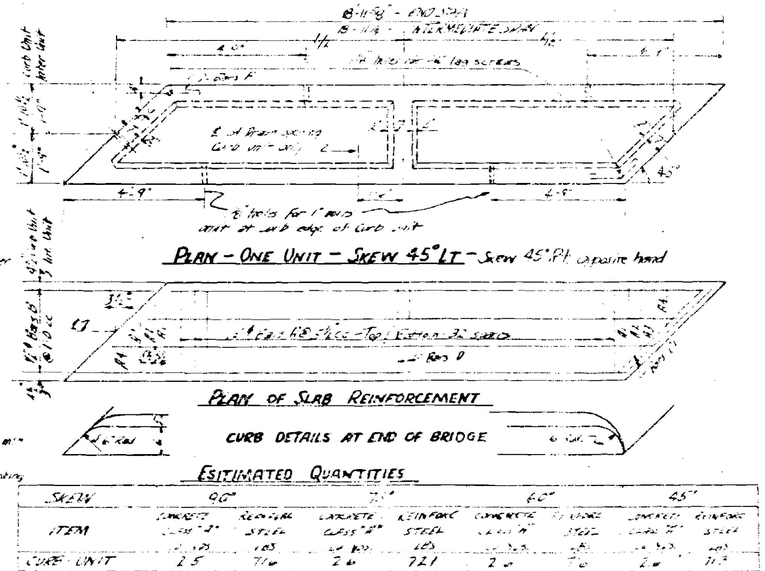


METAL HANDRAIL POST DETAILS AND ROADWAY DRAIN



SECTION X-X

SPECIAL NOTE
4 - ⅞" holes for ⅝" lag screws with square holes 7/16" cores 2'-6" for a depth of 3'-1" for countersinking of lag screw head with washer. Holes to be slanted as shown. If holes are drilled on bevel they shall be drilled perpendicular to face.



PLAN - ONE UNIT - SKEW 45° LT - SKEW 45° RT opposite hand

PLAN OF SLAB REINFORCEMENT

CURB DETAILS AT END OF BRIDGE

ESTIMATED QUANTITIES

SKEW	90°		75°		60°		45°	
ITEM	CONCRETE CLASS "A"	REINFORCING STEEL	CONCRETE CLASS "A"	REINFORCING STEEL	CONCRETE CLASS "A"	REINFORCING STEEL	CONCRETE CLASS "A"	REINFORCING STEEL
	C.Y.	LBS.	C.Y.	LBS.	C.Y.	LBS.	C.Y.	LBS.
CURB UNIT	2.5	716	2.6	721	2.6	716	2.6	712
INTERIOR UNIT	2.1	468	2.1	472	2.2	474	2.2	465

STATE OF TENNESSEE
DEPARTMENT OF HIGHWAYS AND PUBLIC WORKS
DIVISION

STANDARD
PRECAST SLAB BRIDGE
SPAN 19'-0" SKEW 90°-75°-60°-45°
1956

GENERAL NOTES

CONSTRUCTION ... Section 8 and 9 Specifications of the Tennessee Department of Highways ... of June 1953.

CONCRETE ... f'c = ... psi ... Class "A".

REINFORCING STEEL ... Intermediate Grade ... Specifications.

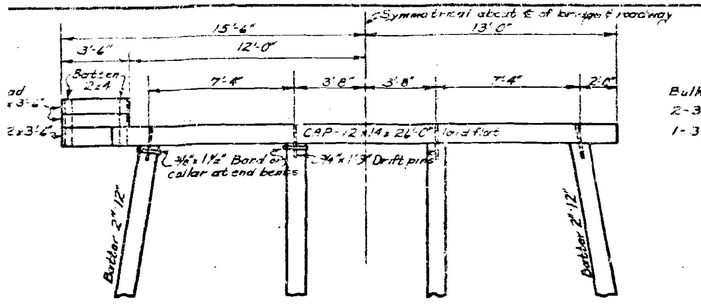
ENGINEER OF RECORD ... DATE ...

DESIGNED BY ...
DETAILED BY ...
CHECKED BY ...
TRACED BY ...

CORRECT ...

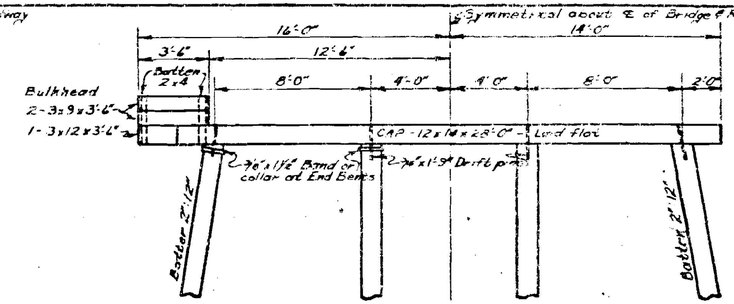
F-10-31

STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
TENN.		19		



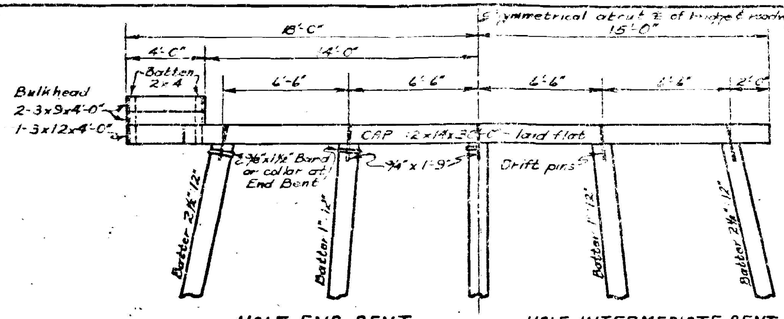
HALF END BENT — HALF INTERMEDIATE BENT

SKEW 90°



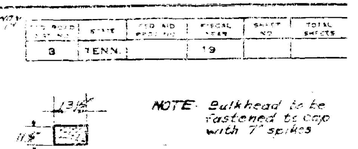
HALF END BENT — HALF INTERMEDIATE BENT

SKEW 75°



HALF END BENT — HALF INTERMEDIATE BENT

SKEW 60°



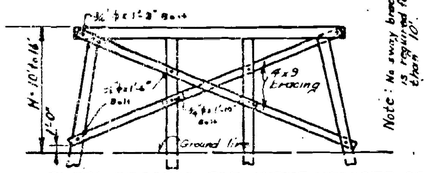
SECT THRU CAP

All SKEWS

NOTE: Bulkhead to be fastened to cap with 7" spikes

NOTE: Top of piles to be covered with 20ga galvanized iron.

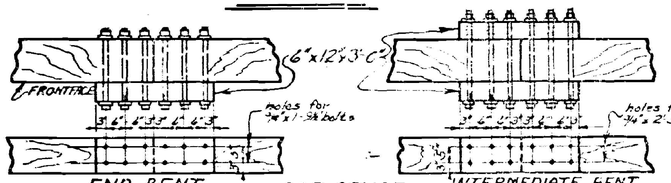
NOTE: Sway bracing for bents with H = 10' 2 over are detailed on a layout sheet for each bridge.



SWAY BRACING FOR INTERMEDIATE BENT

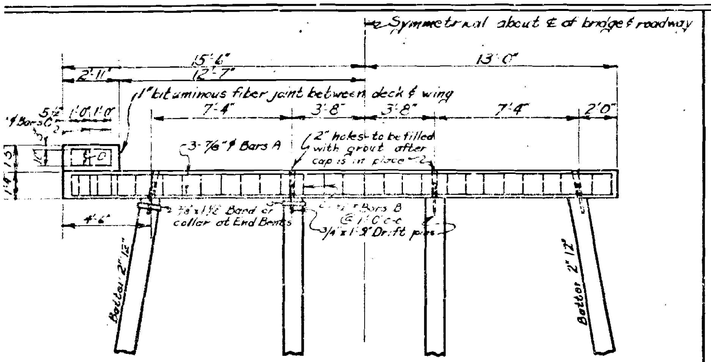
Note: No sway bracing is required for less than 10'.

TIMBER PILE BENT WITH TIMBER CAP



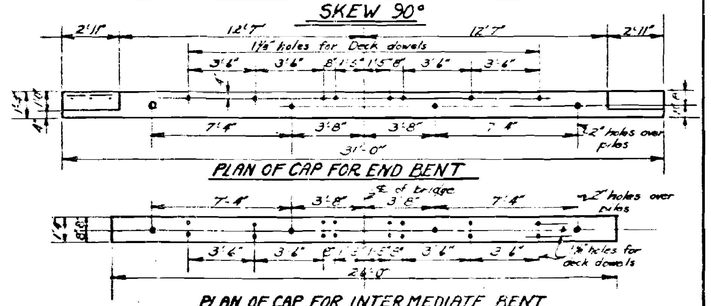
END BENT — CAP SPLICE — INTERMEDIATE BENT

NOTE: Cap splice shall be located over pile.



HALF END BENT — HALF INTERMEDIATE BENT

SKEW 90°



PLAN OF CAP FOR END BENT

PLAN OF CAP FOR INTERMEDIATE BENT

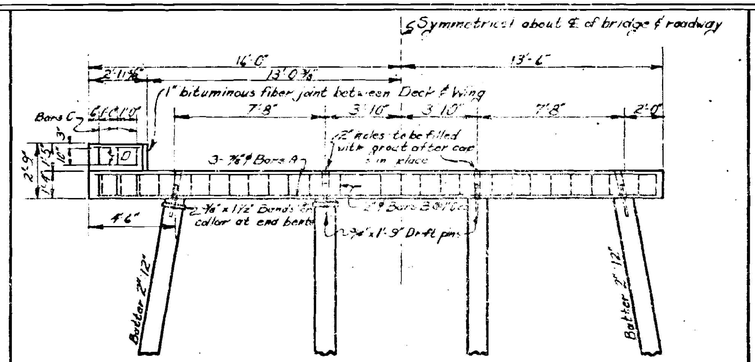
BILL OF STEEL

CAP	End Bent			Interm Bent		
Bar	Size	No.	Length	No.	Length
A	7/8" ϕ	6	31'-6"	6	24'-6"
B	1" ϕ	29	5'-0"	25	5'-0"
C	" ϕ	4	2'-3"	—	—
D	3/4" ϕ	2	2'-6"	—	—

ESTIMATED QUANTITIES

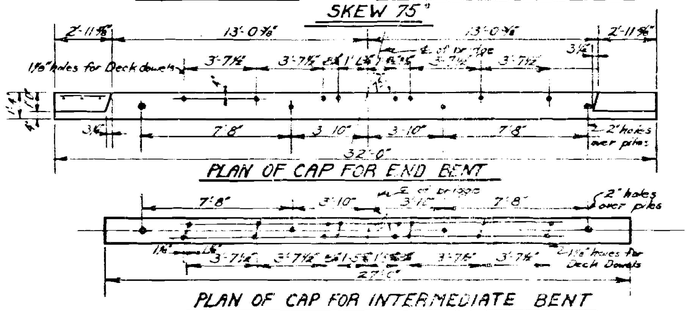
CAP FOR	END BENT	INTERM BENT
Concrete Class 'A' Cu Yds	23	19
Reinforc Steel Lbs	463	396

SKEW 90°



HALF END BENT — HALF INTERMEDIATE BENT

SKEW 75°



PLAN OF CAP FOR END BENT

PLAN OF CAP FOR INTERMEDIATE BENT

CAPS ARE SHOWN FOR 75° SKEW RIGHT — CAPS FOR 75° SKEW LEFT - OPPOSITE HAND

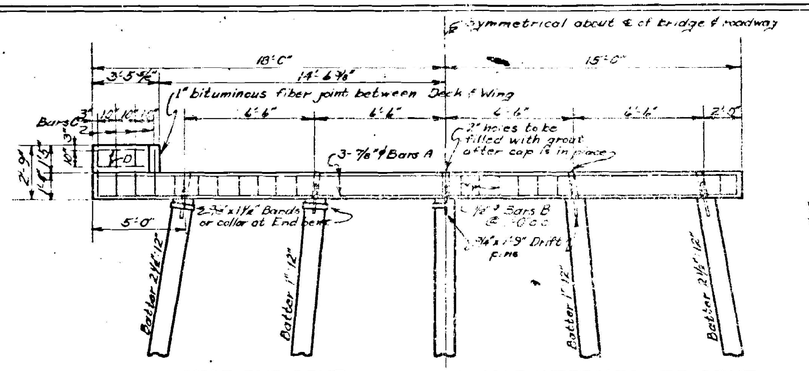
BILL OF STEEL

CAP	End Bent			Interm Bent		
Bar	Size	No.	Length	No.	Length
A	7/8" ϕ	6	31'-6"	6	24'-6"
B	1" ϕ	29	5'-0"	25	5'-0"
C	" ϕ	4	2'-3"	—	—
D	3/4" ϕ	4	2'-6"	—	—

ESTIMATED QUANTITIES

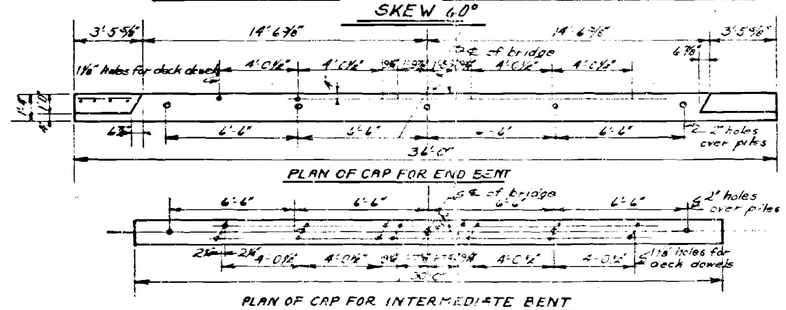
CAP FOR	End Bent	Interm Bent
Concrete Class 'A' Cu Yds	23	19
Reinforc Steel Lbs	463	396

SKEW 75°



HALF END BENT — HALF INTERMEDIATE BENT

SKEW 60°



PLAN OF CAP FOR END BENT

PLAN OF CAP FOR INTERMEDIATE BENT

CAPS ARE SHOWN FOR 60° SKEW RIGHT — CAPS FOR 60° SKEW LEFT - OPPOSITE HAND

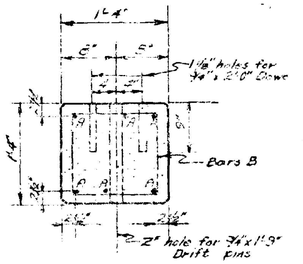
BILL OF STEEL

CAP	END BENT			INTERM BENT		
Bar	Size	No.	Length	No.	Length
A	7/8" ϕ	6	35'-0"	6	25'-6"
B	1" ϕ	34	5'-0"	28	5'-0"
C	" ϕ	8	2'-3"	—	—
D	3/4" ϕ	4	2'-9"	—	—

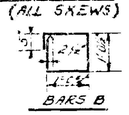
ESTIMATED QUANTITIES

CAP FOR	End Bent	Interm Bent
Concrete Class 'A' Cu Yds	27	20
Reinforc Steel — Lbs	516	455

SKEW 60°



TYPICAL SECTION THRU CAP (ALL SKEWS)



BARS B

TIMBER PILE BENT WITH PRECAST CONCRETE CAP

GENERAL NOTES

Specifications — STANDARD ROAD & BRIDGE SPECIFICATIONS OF THE TENNESSEE DEPARTMENT OF HIGHWAYS & PUBLIC WORKS
LOADING — H15-44
CONCRETE in caps to be class 'A'
REINFORCING STEEL: see specifications
TIMBER CAPS: to be treated

NOTE: Top of timber piles to be covered with 20ga galvanized iron

STATE OF TENNESSEE
DEPARTMENT OF HIGHWAYS AND PUBLIC WORKS
NASHVILLE

STANDARD
TIMBER PILE BENTS
WITH
TIMBER CAP & CONCRETE CAP
FOR
PRECAST CONCRETE DECK
24'-0" ROADWAY
SKEW 90°-75°-60°
1956

CORRECT Fred Gumm — F-10-32
APPROVED Richard M. Dixon — F-10-32

DRAWN BY [illegible] DATE 11/7/56
TRACED BY [illegible] DATE 11/7/56
CHECKED BY [illegible] DATE 11/7/56
APPROVED BY [illegible] DATE

THIS DOCUMENT HAS BEEN DIGITALLY SIGNED AND SEALED BY:

Ruth Park
2025.12.09 13:41:22 -06'00'

PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED. THE SIGNATURE MUST BE VERIFIED ON THE ELECTRONIC DOCUMENTS.

GRESHAM SMITH
222 2ND AVE. SOUTH, SUITE 1400
NASHVILLE, TN 37201-2308
RUTH MARIA PARK, P.E. NO. 126968

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 SHEETS	STRUCTURE-SIGN1
INDEX OF DRAWINGS	B-1
LAYOUT OF BRIDGE	U-97-981
ESTIMATED BRIDGE QUANTITIES	U-97-982
BRIDGE GENERAL NOTES	U-97-983
SUPERSTRUCTURE	U-97-987
SUPERSTRUCTURE DETAILS	U-97-988
SUPERSTRUCTURE DETAILS	U-97-989
PRESTRESSED BULB-TEE BEAM DETAILS	U-97-990
ABUTMENT NO.1	U-97-991
ABUTMENT NO.1 DETAILS	U-97-992
ABUTMENT NO.2	U-97-993
ABUTMENT NO.2 DETAILS	U-97-994
FINAL FOUNDATION DATA	U-97-995
BILL OF STEEL	U-97-996

THIS DOCUMENT HAS BEEN DIGITALLY SIGNED AND SEALED BY:

Conway, Eric 2025.07.01 08:07:16 -05'00'

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TERRACON
1922 OLD MURFREESBORO PIKE, SUITE 905
NASHVILLE, TN 37217
ERIC CONWAY, P.E. NO. 127025

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.
FOUNDATION DATA	U-97-984
FOUNDATION DATA	U-97-985
FOUNDATION DATA	U-97-986

YEAR	PROJECT NO.	SHEET NO.
2026	38S180-M3-007	STRUCTURE-SIGN 1

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

SIGNATURE SHEET

6/30/2025 7:02:11 PM
C:\TMP\PWISE\D0160785\38S180-SHT-BRIDGE SIGNATURE SHEET 1.DGN

CONST. NO.:

PROJECT NO.	YEAR	SHEET NO.
38S180-M3-007	2026	B-1

REVISIONS

NO.	DATE	BY	BRIEF DESCRIPTION
	- -		
	- -		
	- -		
	- -		
	- -		

LIST OF DRAWINGS

TITLE	DWG. NO.	LAST REV. DATE
SIGNATURE SHEET	STRUCTURE-SIGN1	
INDEX OF DRAWINGS	B-1	
LAYOUT OF BRIDGE	U-97-981	
ESTIMATED BRIDGE QUANTITIES	U-97-982	
BRIDGE GENERAL NOTES	U-97-983	
FOUNDATION DATA	U-97-984	
FOUNDATION DATA	U-97-985	
FOUNDATION DATA	U-97-986	
SUPERSTRUCTURE	U-97-987	
SUPERSTRUCTURE DETAILS	U-97-988	
SUPERSTRUCTURE DETAILS	U-97-989	
PRESTRESSED BULB-TEE BEAM DETAILS	U-97-990	
ABUTMENT NO. 1	U-97-991	
ABUTMENT NO. 1 DETAILS	U-97-992	
ABUTMENT NO. 2	U-97-993	
ABUTMENT NO. 2 DETAILS	U-97-994	
FINAL FOUNDATION DATA	U-97-995	
BILL OF STEEL	U-97-996	

LIST OF STANDARD DRAWINGS

TITLE	DWG. NO.	LAST REV. DATE
BRIDGE RAILING SINGLE SLOPE CONCRETE PARAPET	STD-1-1SS	07-24-24
REINFORCED CONCRETE PAVEMENT AT BRIDGE ENDS	STD-1-5	06-05-23
STANDARD PRECAST PRESTRESSED BRIDGE DECK PANELS GENERAL DETAILS	STD-4-1	04-08-05
STANDARD PRECAST PRESTRESSED BRIDGE DECK PANELS DESIGN CRITERIA	STD-4-2	04-08-05
STANDARD PRECAST PRESTRESSED BRIDGE DECK PANELS GENERAL DETAILS	STD-4-3	03-02-02
STANDARD PRECAST PRESTRESSED BRIDGE DECK PANELS CONSTRUCTION DETAILS	STD-4-4	06-10-96
STANDARD PILE DETAILS	STD-5-1	
STANDARD SEISMIC DETAILS	STD-6-1	12-08-23
STANDARD SEISMIC DETAILS	STD-6-2	11-07-94
STANDARD REINFORCING BAR SUPPORT DETAILS FOR CONCRETE SLABS	STD-9-1	10-07-08
MISCELLANEOUS ABUTMENT AND DRAINAGE DETAILS	STD-10-1	06-05-23
MISC. ABUTMENT AND PAVEMENT AT BRIDGE ENDS BACKFILL DETAILS	STD-10-2	06-05-23
STANDARD DETAILS AND INTERMEDIATE DIAPHRAGM DETAILS FOR BULB -TEE AND WIDE BULB-TEE BEAMS	STD-14-1	06-05-23

LIST OF SPECIAL PROVISIONS

TITLE	SPEC. PROV. NO.	REV. DATE
REMOVAL OF ASBESTOS CONTAINING MATERIAL (ACM)	202ACM	07-07-14

LIST OF REFERENCE DRAWINGS

(TO BE PRINTED WITH PLANS)

TITLE	DWG. NO.
LAYOUT OF BRIDGE LOST CREEK	K-4-4
PRECAST SLAB BRIDGE	F-10-31
STANDARD TIMBER PILE BENTS WITH TIMBER CAP & CONCRETE CAP FOR PRECAST CONCRETE DECK	F-10-32

SEALED BY

PIN NO.: 136347.07

DESIGN BY:	R. Park	DATE: 06/27/2025
DRAWN BY:	R. Palmer	DATE: 06/27/2025
SUPERVISED BY:	D. McCrary	DATE: 06/27/2025
CHECKED BY:	A. Allsbrook	DATE: 06/27/2025

Gresham Smith

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

INDEX OF DRAWINGS
S.R.180 OVER LOST CREEK
BRIDGE I.D. NO. 38S80510009
STATION 115+74.17
LOG MILE 4.75
HAYWOOD COUNTY
2026

6/30/2025 11:32:01 PM
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CONST. NO.:

PROJECT NO.	YEAR	SHEET NO.
38S180-M3-007	2026	

REVISIONS

NO.	DATE	BY	BRIEF DESCRIPTION
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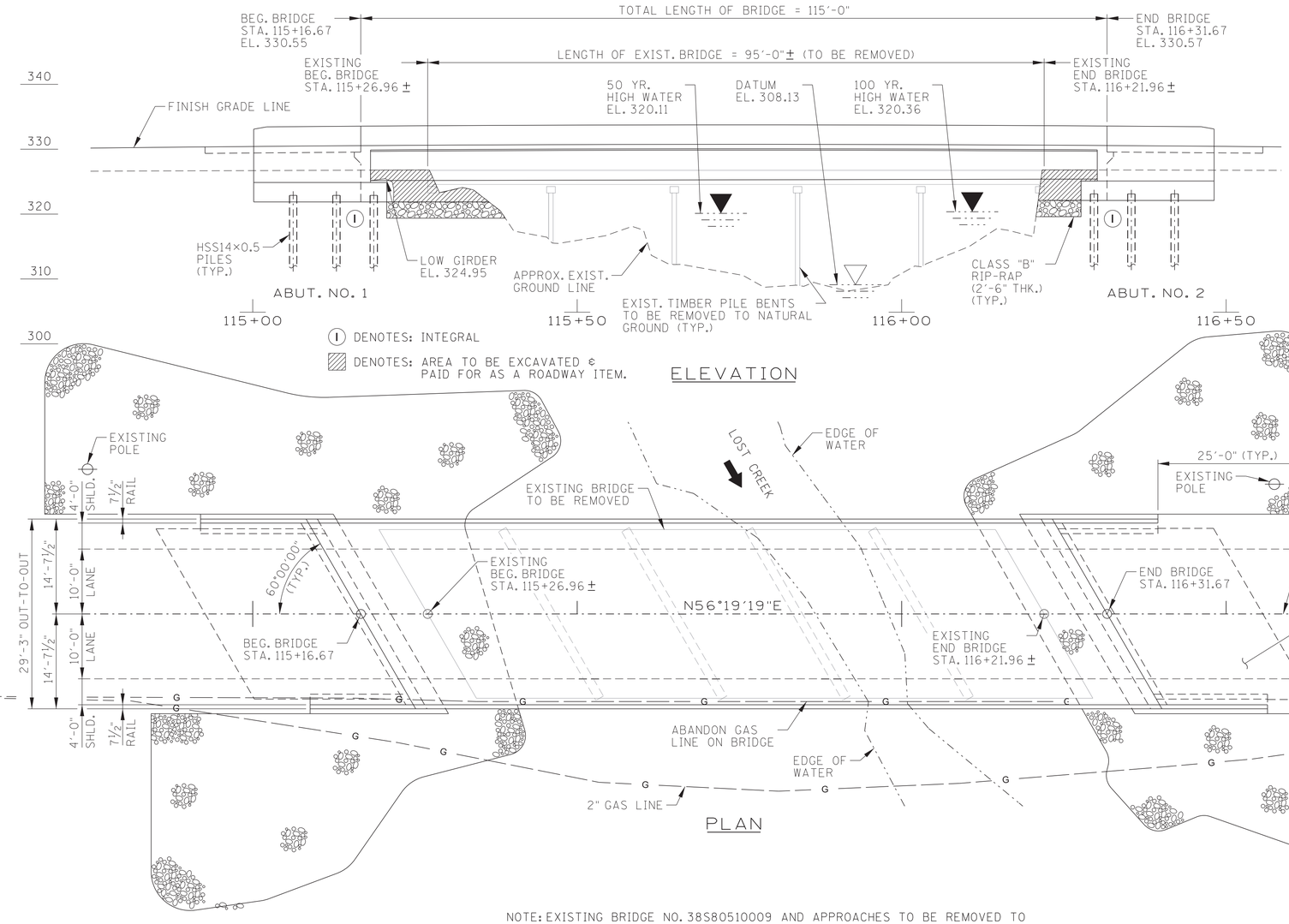
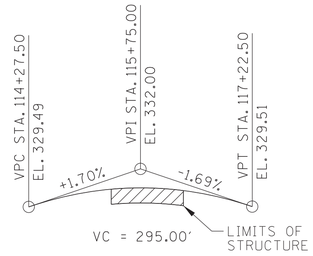


NOTE: EXISTING BRIDGE NO. 38S80510009 AND APPROACHES TO BE REMOVED TO NATURAL GROUND BETWEEN STATIONS 115+26.96± AND 116+21.96±



GRADE SKETCH
STATE ROUTE 180

HYDRAULIC DATA

DRAINAGE AREA = 5.33 MI.²
DESIGN DISCHARGE (50 YR.) = 3,180 FT³/SC
WATER AREA PROVIDED BELOW 50-YR. = 399.55 FT²
50 YR. VELOCITY = 4.68 FT/SC
50 YR. BRIDGE BACKWATER = -0.02 FT @ EL. 320.11
ROADWAY OVERTOPPER EL. 326.72
100 YR. DISCHARGE = 3,521 FT³/SC @ EL. 320.36

2049 ADT = 1,180
20'-0" ROADWAY,
4'-0" SHOULDER EACH SIDE,
AND STD-1-1SS PARAPET
DESIGN SPEED = 50 MPH

SEALED BY

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

LAYOUT OF BRIDGE S.R. 180 OVER LOST CREEK BRIDGE I.D. NO. 38S80510009 STATION 115+74.17 LOG MILE 4.75 HAYWOOD COUNTY 2026

U-97-981

PIN NO.: 136347.07

DESIGN BY:	R. Park	DATE: 06/27/2025
DRAWN BY:	R. Palmer	DATE: 06/27/2025
SUPERVISED BY:	D. McCrary	DATE: 06/27/2025
CHECKED BY:	A. Allsbrook	DATE: 06/27/2025

Gresham Smith

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CONST. NO.:

PROJECT NO.	YEAR	SHEET NO.
38S180-M3-007	2026	

REVISIONS

NO.	DATE	BY	BRIEF DESCRIPTION
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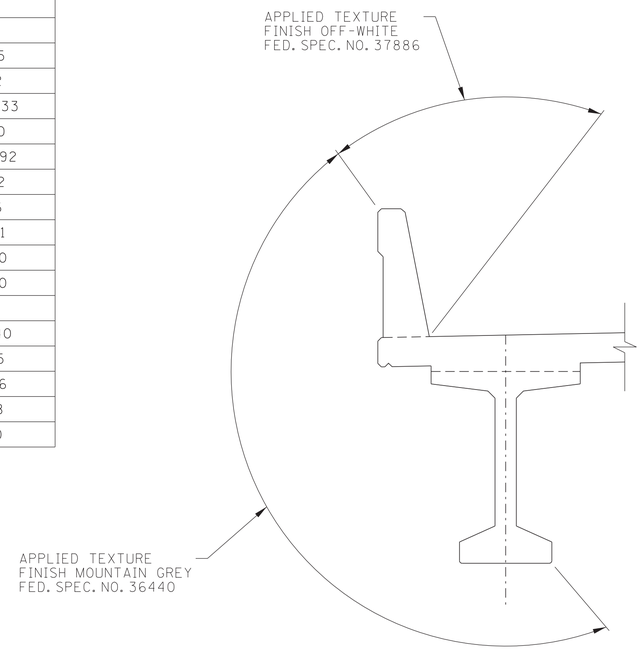
ESTIMATED BRIDGE QUANTITIES

	ITEM NO.	DESCRIPTION	UNIT	SUPER-STRUCTURE	ABUTMENT NO. 1	ABUTMENT NO. 2	TOTAL QUANTITY
(3)	202-01.02	REMOVAL OF ASBESTOS	LS				1
(2)	202-04.01	REMOVAL OF STRUCTURES (EXIST. BR. NO. 38-SR180-0475)	LS				1
(4)	204-02.01	DRY EXCAVATION (BRIDGES)	C.Y.		75	50	125
(10)	303-01.02	GRANULAR BACKFILL (BRIDGES)	TON		16	16	32
(9)	604-02.03	EPOXY COATED REINFORCING STEEL	LB.	35,059	1,487	1,487	38,033
	604-03.01	CLASS A CONCRETE (BRIDGES)	C.Y.		50	50	100
(9)	604-03.02	STEEL BAR REINFORCEMENT (BRIDGES)	LB.		6,246	6,246	12,492
(1)	604-03.04	PAVEMENT @ BRIDGE ENDS	S.Y.		81	81	162
	604-03.09	CLASS D CONCRETE (BRIDGE DECK)	C.Y.	96			96
	604-04.01	APPLIED TEXTURE FINISH (NEW STRUCTURES)	S.Y.	503	64	64	631
	604-05.31	BRIDGE DECK GROOVING (MECHANICAL)	S.Y.	450			450
	606-18.01	TEST PILES (STEEL PIPE PILES, 14-INCH)	L.F.		100	100	200
	606-18.02	LOADING TEST (STEEL PIPE PILES, 14-INCH)	EACH		1	1	2
	606-18.03	STEEL PIPE PILES (14-INCH)	L.F.		1170	1170	2340
(6)	615-01.20	ERECTION OF BRIDGE BEAMS	LS	0.5			0.5
	620-05.01	CONC PARAPET SINGLE SLOPE (STD-1-1SS)	L.F.	296			296
(8)	710-09.01	6" PERFORATED PIPE WITH VERTICAL DRAIN SYSTEM	L.F.		59	59	118
	710-09.02	6" PIPE UNDERDRAIN	L.F.		10	10	20

FOOT NOTES:

1. PRIOR TO CONSTRUCTION OF THE PAVEMENT AT BRIDGE ENDS, THE CONTRACTOR SHALL SUBMIT A PROPOSED BILL OF STEEL TO THE ENGINEER FOR APPROVAL.
2. LUMP SUM (BRIDGE NO. 38-SR180-0475): EXISTING BRIDGE CONSISTS OF 5 PRE-CAST DECK SPANS ON TIMBER SUBSTRUCTURES. OUT-TO-OUT WIDTH = 25'-0", TOTAL LENGTH = 95'-0", SPANS ARE 5 @ 19'-0".
3. SEE PROJECT COMMITMENTS AND SPECIAL PROVISION 202ACM.
4. EXCAVATION BASED ON FINAL PROFILE AT ABUTMENTS.
6. THE DEPARTMENT PROCURED THE BEAMS AHEAD OF LETTING THIS JOB, WHICH INCLUDES DELIVERY TO THE PROJECT SITE. THE UNIT PRICE BID FOR THE ERECTION OF BRIDGE BEAMS SHALL INCLUDE ALL LABOR, MATERIALS, AND EQUIPMENT NECESSARY TO ERECT THE BEAMS. THIS INCLUDES ALL WORK NECESSARY TO COORDINATE BEAM DELIVERY, OFFLOAD THE BEAMS, AND SET THE BEAMS INTO FINAL POSITION. COST OF ELASTOMERIC PADS AND RUBBER BONDING CEMENT TO BE INCLUDED IN THE UNIT PRICE BID FOR THE ERECTION OF BRIDGE BEAMS.
7. INTERMEDIATE DIAPHRAGMS SHALL BE PAID FOR IN ACCORDANCE WITH STANDARD DRAWING STD-14-1.
8. COST OF POLYETHYLENE SHEETING AND ALL MISCELLANEOUS ITEMS NECESSARY FOR INSTALLATION TO BE INCLUDED IN THE UNIT PRICE BID FOR PERFORATED PIPE.
9. 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.
10. GRANULAR BACKFILL SHALL BE TYPE "A" GRADING "D" MATERIAL. SEE STANDARD DRAWING STD-10-1.
11. THE COST OF BITUMINOUS-FIBERBOARD, AND ALL MISCELLANEOUS JOINT MATERIAL TO BE INCLUDED IN THE UNIT PRICE BID FOR OTHER ITEMS.



LIMITS OF TEXTURE FINISH

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

NOTE: COST OF TEXTURE COATING SHALL BE INCLUDED IN ITEM NO. 604-04.01.

NOTE: BEFORE APPLYING ANY TEXTURE FINISH, ALL SURFACES SHALL BE COMPLETELY CLEANED OF ALL DEBRIS AND FOREIGN MATERIALS.

NOTE: THE CONTRACTOR SHALL USE CONTAINMENT SCREENS OR OTHER MEASURES AS NECESSARY TO PREVENT ANY TEXTURE COATING FORM ENTERING THE ENVIRONMENT. CONTAINMENT MEASURES SHALL BE APPROVED BY THE ENGINEER AND COST SHALL BE INCLUDED ITEMS BID ON.

PILE DATA TABLE

LOCATION	DESIGN LOAD (TONS)	TEST PILE CUT-OFF ELEVATION	ESTIMATED PILE LENGTH (FT.)	TEST PILE LENGTH (FT.)	MINIMUM PILE TIP ELEVATION
ABUTMENT 1	100	322.64	90	100	234
ABUTMENT 2	100	322.64	90	100	234

SEALED BY

PIN NO.: 136347.07

DESIGN BY:	R. Park	DATE: 06/27/2025
DRAWN BY:	R. Park	DATE: 06/27/2025
SUPERVISED BY:	D. McCrary	DATE: 06/27/2025
CHECKED BY:	H. Neal	DATE: 06/27/2025

Gresham Smith

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

ESTIMATED BRIDGE QUANTITIES
S.R.180 OVER LOST CREEK
BRIDGE I.D. NO. 38S80510009
STATION 115+74.17
LOG MILE 4.75
HAYWOOD COUNTY
2026

U-97-982

8/19/2025 11:48:23 AM
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GENERAL NOTES

SPECIFICATIONS & LOADING

(1) **CONSTRUCTION SPECIFICATIONS**: TENNESSEE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (JANUARY 1, 2021 EDITION).

(2) **DESIGN SPECIFICATIONS:** 9TH EDITION (2020) AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS AND THE 2ND EDITION (2011) AASHTO GUIDE SPECIFICATIONS FOR LRFD SEISMIC BRIDGE DESIGN WITH INTERIMS.

(3) **LOADING**:

A. HL-93 LIVE LOAD INCREASED BY 10% (MULTIPLIED BY 1.1) IN ADDITION TO ALL LOAD FACTORS SPECIFIED BY AASHTO FOR ALL APPLICABLE LOAD COMBINATIONS

B. SEISMIC DESIGN CATEGORY "C" WITH A_S= 0.538, S_{DS}=1.085, S_{D1}=0.466, (1000 YEAR RETURN PERIOD)

C. DEAD LOAD INCLUDES 35 LB/SQ. FT. FOR FUTURE WEARING SURFACE.

CONCRETE, REINFORCING & FORMING

(4) **CONCRETE**: TO BE CLASS A (CAST-IN-PLACE) F'C = 3000 PSI EXCEPT AS NOTED OTHERWISE.

(5) **BRIDGE DECKS:** CLASS D CONCRETE FOR BRIDGE DECKS SHALL BE IN ACCORDANCE WITH SECTION 604 OF THE STANDARD SPECIFICATIONS.

(6) **BRIDGE DECK SURFACE FINISH**: TO BE IN ACCORDANCE WITH METHOD 3 IN ARTICLE 604.22 OF THE STANDARD SPECIFICATIONS.

(7) **BRIDGE DECK FORMS**: BRIDGE DECK FORMS FOR CONCRETE DECKS SHALL BE CONSTRUCTED USING EITHER REMOVABLE FORMS OR PERMANENT FORMS. PERMANENT FORMS MAY BE EITHER REMAIN-IN-PLACE STEEL OR PRECAST, PRESTRESSED CONCRETE PANELS. IN EITHER CASE, FORMS SHALL BE ATTACHED BY MEANS OTHER THAN WELDING TO MAIN STRUCTURAL MEMBERS OR REINFORCING STEEL. TEMPORARY ERECTION DIAPHRAGMS MUST BE USED AT THE ENDS OF PRECAST CONCRETE GIRDERS WHERE END DIAPHRAGMS, SUPPORT DIAPHRAGMS, OR ABUTMENT ENDWALLS ARE TO BE POURED CONCURRENTLY WITH THE DECK AND SHALL BE PROVIDED ELSEWHERE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS TO PREVENT GIRDER ROTATION. SEE STANDARD DRAWINGS STD-4-1 THRU 4, STD-14-1, AND ARTICLE 604.05 OF THE STANDARD SPECIFICATIONS.

(8) **REINFORCING STEEL**: SHALL BE ASTM A615 GRADE 60 UNLESS NOTED OTHERWISE. SEE SECTIONS 604 AND 907 OF THE STANDARD SPECIFICATIONS.

FOUNDATION ELEMENTS

(9) **FOUNDATION PREPARATION**: SEE SECTION 204 OF THE STANDARD SPECIFICATIONS. IF IT IS DETERMINED THAT COFFERDAMS ARE REQUIRED, THEY SHALL BE IN ACCORDANCE WITH SECTION 204.09 OF THE STANDARD SPECIFICATIONS.

(10) **ABUTMENT SUPPORT**: THE CONTRACTOR SHALL SUPPORT THE ABUTMENTS UNTIL THE SUPERSTRUCTURE IS IN PLACE, FALSEWORK HAS BEEN REMOVED, AND BACKFILLING HAS BEEN COMPLETED.

(11) **FRICTION PILES**: TO BE HSS 14" x 0.5". AFTER EXCAVATION TO THE PROPOSED FOOTING ELEVATIONS, A TEST PILE SHALL BE DRIVEN AT EACH SUBSTRUCTURE AT THE LOCATION DESIGNATED ON DRAWING NO. U-97-995. A LOAD TEST WILL THEN BE APPLIED TO THE TEST PILES. FROM THE RESULTS OF THE LOAD TEST, THE ENGINEER OF STRUCTURES WILL DETERMINE THE REQUIRED LENGTH OF THE PRODUCTION PILES AND MINIMUM REQUIRED BEARING. FOR PILE DESIGN LOADS AND CUT-OFF ELEVATIONS, SEE TABLE ON DRAWING NO. U-97-982. THE CONTRACTOR SHALL INSTALL PILING SUCH THAT ALL THE FOLLOWING REQUIREMENTS ARE MET. THE TIP ELEVATION FOR ALL TEST PILES AND PRODUCTION PILES SHALL BE EQUAL TO OR BELOW THE MINIMUM PILE TIP ELEVATION SHOWN ON THE PLANS. IN ADDITION, TEST PILES TO BE LOAD TESTED SHALL BE INSTALLED TO AT LEAST THE SPECIFIED BEARING SHOWN ON THE PLANS OR FULL LENGTH, WHICHEVER OCCURS FIRST. ALL OTHER TEST PILES SHALL BE INSTALLED TO AT LEAST 1.5 TIMES THE SPECIFIED BEARING SHOWN ON THE PLANS OR FULL LENGTH, WHICHEVER OCCURS FIRST. ALL PRODUCTION PILES SHALL BE INSTALLED FULL LENGTH UNLESS EXCESSIVELY HARD DRIVING WHICH MIGHT DAMAGE THE PILES IS ENCOUNTERED. IF THE PRODUCTION PILES DO NOT ACHIEVE THE MINIMUM REQUIRED BEARING, THE ENGINEER OF STRUCTURES WILL DETERMINE IF ADDITIONAL PILES ARE REQUIRED.

IN THE EVENT THAT DRIVING THE TEST PILE TO AT LEAST THE MINIMUM TIP ELEVATION OR DRIVING THE PRODUCTION PILE FULL LENGTH MIGHT DAMAGE THE PILE BECAUSE OF EXCESSIVELY HARD DRIVING, THE CONTRACTOR SHALL USE OTHER METHODS APPROVED BY THE ENGINEER FOR INSTALLING THE PILES SUCH AS JETTING OR PRE-DRILLING HOLES. HOWEVER, ALL PILES MUST BE DRIVEN BY HAMMER FOR THE LAST TEN FEET OF PENETRATION. NO MEASUREMENT FOR PAYMENT WILL BE MADE FOR PRE-DRILLING HOLES OR FOR JETTING PILING TO OBTAIN THE REQUIRED PILE PENETRATION.

THE PILE LOAD TEST SHALL BE A QUICK LOAD TEST CONDUCTED IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS. THE PILE LOAD TEST APPARATUS FOR APPLYING LOADS AND MEASURING MOVEMENT SHALL MEET THE REQUIREMENTS OF ASTM D1143, STANDARD TEST METHODS FOR DEEP FOUNDATION ELEMENTS UNDER STATIC AXIAL COMPRESSIVE LOAD. WHEN INSUFFICIENT CLEARANCE IS AVAILABLE WITHIN AN EXCAVATION, THE CLEARANCE REQUIREMENTS IN ARTICLE 9.1.1 MAY BE REDUCED, BUT ONLY WITH PRIOR APPROVAL OF THE ENGINEER.

(12) **ALTERNATE FRICTION PILES**: WITH THE EXCEPTION OF PILE BENTS THE CONTRACTOR MAY USE AN ALTERNATE PILE TYPE OR SIZE FROM THAT SHOWN ON THE PLANS PROVIDED THE SUBSTITUTION MEETS MINIMUM DESIGN STANDARDS AND SPECIFICATIONS AND IS APPROVED BY THE ENGINEER.

(13) **PIPE PILES**: SHALL BE HSS 14" x 0.5", GRADE 3 MODIFIED WITH A MINIMUM YIELD STRESS OF 50 KSI IN ACCORDANCE WITH ASTM A252. WEATHERING STEEL WILL NOT BE ALLOWED FOR PIPE PILES. ANY PIPE PILE HAVING BENDS, KINKS OR OTHER DEFORMATIONS DURING THE PROCESS OF DRIVING THAT WOULD IMPAIR THE STRENGTH (10% REDUCTION AS DETERMINED BY THE ENGINEER) EFFICIENCY OF THE COMPLETED PILE SHALL BE EITHER REMOVED AND REPLACED OR REPAIRED BY THE CONTRACTOR IN A MANNER SATISFACTORY TO THE ENGINEER. THE CONTRACTOR WILL NOT BE REIMBURSED FOR ANY SUCH PIPE PILE ORDERED, REMOVED OR REPLACED BY THE ENGINEER.

(14) **PIPE PILE SPLICES**: FULL LENGTH PILES SHALL BE USED WHERE PRACTICAL. PILES MAY BE SPLICED WITH THE PRIOR APPROVAL OF THE ENGINEER. SPLICES SHALL USE FULL PENETRATION WELDS DESIGNED TO DEVELOP THE FULL STRENGTH OF THE PILE CROSS-SECTION IN TENSION AND COMPRESSION. ONLY ONE SPLICE PER 40 LINEAR FEET OF PILE WILL BE ALLOWED. DRIVE-ON SPLICES SHALL NOT BE USED AND ONLY COMMERCIALLY MANUFACTURED SPLICES WILL BE ALLOWED. SPLICING DETAILS MUST BE SUBMITTED TO THE ENGINEER FOR APPROVAL. COST TO BE INCLUDED IN THE COST OF PILES ITEM NO. 606-18.03.

(15) **STREAM CHANNEL:** ANY WORK WITHIN THE STREAM CHANNEL AREA (E.G. PIER/BENT FOOTING, RIP-RAP PLACEMENT, ETC.) SHALL BE SEPARATED FROM FLOWING WATER OR EXPECTED FLOW PATH AND PERFORMED DURING LOW FLOW CONDITIONS. ALL ITEMS USED WITHIN THE STREAM CHANNEL AREA FOR DIVERSION OF FLOW (OR EXPECTED FLOW), UNLESS SPECIFIED IN THE PLANS, SHALL NOT BE PAID FOR DIRECTLY BUT SHALL BE INCLUDED IN THE COST OF OTHER ITEMS. THIS NOTE EXCLUDES ANY ITEMS SPECIFIED IN THE PLANS FOR TEMPORARY DIVERSION CHANNELS (EC-STR-31).

PRECAST SUPERSTRUCTURES

(16) **SLAB OVERHANGS:** IT IS RECOMMENDED THAT SPACING OF OVERHANG BRACKETS FOR BEAMS NOT EXCEED 2'-0" CENTER-TO-CENTER.

MISCELLANEOUS GENERAL NOTES

(17) **UTILITIES**: IT IS INTENDED THAT THE COST OF MATERIALS AND LABOR NECESSARY FOR THE COMPLETE INSTALLATION OF UTILITIES SHALL BE BORNE BY OTHERS AND SHALL NOT BE PAID FOR AS A PART OF THIS CONTRACT. THE CONTRACTOR SHALL COOPERATE WITH OTHERS IN THE INSTALLATION OF UTILITIES WITH NO ADDITIONAL COMPENSATION ALLOWED THE CONTRACTOR AS A RESULT.

(18) **SHOP DRAWINGS:** SEE SECTION 105.02 OF THE STANDARD SPECIFICATIONS.

(19) **PARAPET SYSTEM**: BUILD PARAPETS ACCORDING TO STANDARD DRAWING STD-1-1SS. THE PARAPETS SHALL BE FORMED AND CAST PLUMB, NOT PERPENDICULAR TO THE SLAB. THE DIMENSIONS AT THE TRAFFIC FACE SHALL BE KEPT CONSTANT, WITH VARIATION DUE TO CROSS-SLOPE ACCOMMODATED AT THE REAR FACE.

(20) **RIP-RAP:** MACHINED RIP-RAP SHALL BE CLASS B IN ACCORDANCE WITH SECTION 709 OF THE STANDARD SPECIFICATIONS AND SHALL BE MEASURED AND PAID FOR UNDER ROADWAY ITEM NO. 709-05.08.

(21) **FINISHING CONCRETE SURFACES:** CONCRETE FINISHING SHALL BE IN ACCORDANCE WITH SECTION 604.21 OF THE STANDARD SPECIFICATIONS. A CLASS I FINISH FOLLOWED BY AN APPLIED TEXTURE FINISH SHALL BE USED IN LIEU OF A CLASS II FINISH. NO TEXTURE FINISH SHALL BE APPLIED PRIOR TO COMPLETION OF PAVING AND HAULING OPERATIONS AT THE BRIDGE SITE. THE APPLIED TEXTURE FINISH SHALL BE MEASURED AND PAID FOR UNDER ITEM NO. 604-04.01.

SPECIAL NOTES

(22) CONTRACTOR IS RESPONSIBLE FOR AND SHOULD TAKE ALL PRECAUTIONS TO ENSURE THE STABILITY OF THE STRUCTURE DURING CONSTRUCTION OPERATIONS.

(23) THE CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS AND QUANTITIES PRIOR TO ORDERING ANY MATERIALS.

(24) CONTRACTOR SHALL USE EXTREME CARE AND TAKE ANY MEASURES NECESSARY TO ENSURE THAT NO DEBRIS IS DROPPED INTO THE STREAM. ANY DEBRIS WHICH IS ALLOWED TO DROP ON THE BANKS BELOW THE BRIDGE SHALL NOT BE ALLOWED TO ENTER THE STREAM AND SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR. COST OR REMOVAL AND DISPOSAL OF DEBRIS SHALL BE INCLUDED IN THE UNIT PRICE BID FOR OTHER ITEMS.

(25) **FALL PROTECTION**: THE CONTRACTOR SHALL PROVIDE 100% CONVENTIONAL FALL PROTECTION FOR WORKERS INSTALLING DECKING ABOVE 15 FEET.

CONST. NO.:

PROJECT NO.	YEAR	SHEET NO.
38S180-M3-007	2026	

REVISIONS

NO.	DATE	BY	BRIEF DESCRIPTION
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SEALED BY

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

BRIDGE GENERAL NOTES
S.R.180 OVER LOST CREEK
BRIDGE I.D. NO. 38S80510009
STATION 115+74.17
LOG MILE 4.75
HAYWOOD COUNTY
2026

U-97-983

PIN NO.: 136347.07
DESIGN BY: R. Park DATE: 06/27/2025
DRAWN BY: R. Park DATE: 06/27/2025
SUPERVISED BY: D. McCrary DATE: 06/27/2025
CHECKED BY: H. Neal DATE: 06/27/2025

Gresham Smith

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REVISIONS

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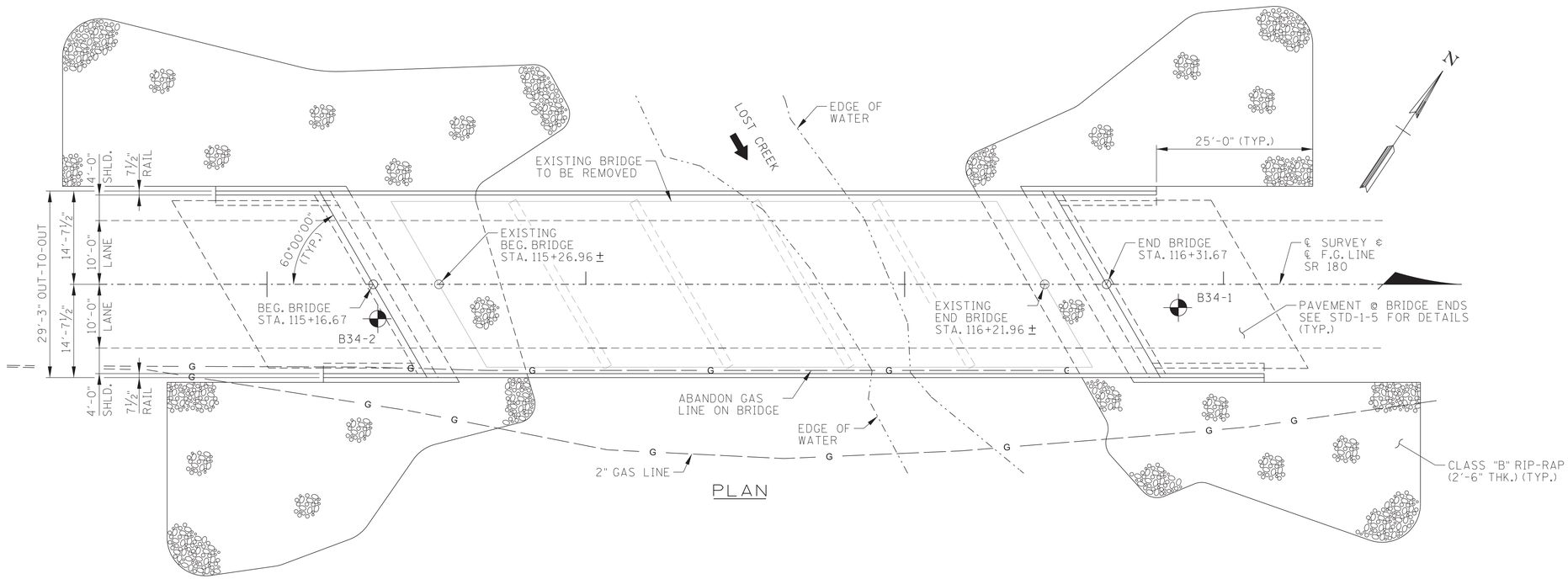

PLAN

DENOTES: GEOTECH BORING LOCATIONS

THIS DRAWING IS FOR FOUNDATION DATA ONLY AND IS NOT TO BE USED AS A LAYOUT.

BORING TABLE

BORING NO.	STATION	OFFSET	GROUND ELEVATION	ROCK ELEVATION	TOTAL DEPTH
B34-1	116+42.93	3.67 RT.	326.76	N/A	100.0'
B34-2	115+17.39	5.41 RT.	326.63	N/A	100.0'

SEALED BY

ERIC C. CONWAY
REGISTERED ENGINEER
AGRICULTURE
No. 127025
STATE OF TENNESSEE
07-01-25

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

FOUNDATION DATA

S.R.180 OVER LOST CREEK
BRIDGE I.D. NO. 38S80510009
STATION 115+74.17
LOG MILE 4.75
HAYWOOD COUNTY
2026

U-97-984

PIN NO.: 136347.07
DESIGN BY: TERRACON DATE: 06/27/2025
DRAWN BY: DATE: 06/27/2025
SUPERVISED BY: DATE: 06/27/2025
CHECKED BY: DATE: 06/27/2025

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SOIL BORING LOGS

Timber Bridge Replacement
SR-180
Terracon Project No. 1A255072

Terracon

Boring Log No. B-34-1

Location: See Exploration Plan
Latitude: 35.7300° Longitude: -89.8900°
Northing: 834208.621 Eastbing: 962715.396

Depth (Ft.)	Graphic Log	Material Description	Water Level Observations	Sample Type	Field Test Results	Strength Test: Test Type	Strength Test: Compressive Strength (psf)	Strength Test: Strain (%)	Water Content (%)	Dry Unit Weight (pcf)	Atterberg Limits: LL	PL	PI
0.5		ASPHALT											
1.0		FILL - SILT (ML), gray, dry			12-19-6 N=19								
3.0		FILL - POORLY GRADED SAND WITH GRAVEL (SP), gray, dry											
5.0		SILT (ML), gray, moist, medium stiff to stiff			5-3-3 N=6				22.7				
Fs: 0.24 Qb: 8					0-2-4 N=6				25.6				
					3-4-5 N=10				21.2				
12.0		SILTY CLAY (CL-ML), brown gray, moist, stiff	▽		3-4-5 N=9				27.1				
15						UC	1529	3.1	26.4	97	29	22	7
17.0		SILTY CLAY (CL-ML), brown and gray to light yellow brown, moist, soft to medium stiff			2-3-4 N=7								
Fs: 0.17 Qb: 2					2-2-2 N=4				25.4		29	10	8
					2-3-3 N=6								
30.0		SILTY CLAYEY SAND (SC), light gray and brown, wet, loose											
Fs: 0.09 Qb: 15					3-3-4 N=7				16.7		18	14	4
35.0													

See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (If any).
See Supporting Information for explanation of symbols and abbreviations.

Water Level Observations: ▽ While drilling
Drill Rig: CME-75
Hammer Type: Automatic
Driller:
Logged by: RVW
Boring Started: 05-13-2025
Boring Completed: 05-13-2025
Advancement Method: HSA/Mud Rotary
Abandonment Method: Boring backfilled with Auger Cuttings and/or Bentonite
Notes:

Facilities | Environmental | Geotechnical | Materials

Timber Bridge Replacement
SR-180
Terracon Project No. 1A255072

Terracon

Boring Log No. B-34-1

Location: See Exploration Plan
Latitude: 35.7300° Longitude: -89.8900°
Northing: 834208.621 Eastbing: 962715.396

Depth (Ft.)	Graphic Log	Material Description	Water Level Observations	Sample Type	Field Test Results	Strength Test: Test Type	Strength Test: Compressive Strength (psf)	Strength Test: Strain (%)	Water Content (%)	Dry Unit Weight (pcf)	Atterberg Limits: LL	PL	PI
		LEAN CLAY WITH SAND (CL), light gray, moist, very soft											
Fs: 0.04 Qb: 0					0-0-1 N=1				23.5		30	15	15
40.0		POORLY GRADED SAND WITH GRAVEL (SP) coarse grained, rounded, gray to yellow brown, wet, medium dense to dense											
					6-6-11 N=17								
Fs: 0.64 Qb: 10					3-19-15 N=34								
55.0		SILT (ML), dark gray, moist, medium stiff to stiff			5-6-7 N=15								
Fs: 0.2 Qb: 9					4-5-5 N=10				25.7				
					3-3-4 N=7				35.1				
70.0		SILT (ML), dark gray and brown, moist, very stiff, trace clay and organics											
Fs: 0.53 Qb: 23					5-8-12 N=20				32.9				

See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (If any).
See Supporting Information for explanation of symbols and abbreviations.

Water Level Observations: ▽ While drilling
Drill Rig: CME-75
Hammer Type: Automatic
Driller:
Logged by: RVW
Boring Started: 05-12-2025
Boring Completed: 05-13-2025
Advancement Method: HSA/Mud Rotary
Abandonment Method: Boring backfilled with Auger Cuttings and/or Bentonite
Notes:

Facilities | Environmental | Geotechnical | Materials

Timber Bridge Replacement
SR-180
Terracon Project No. 1A255072

Terracon

Boring Log No. B-34-1

Location: See Exploration Plan
Latitude: 35.7300° Longitude: -89.8900°
Northing: 834208.621 Eastbing: 962715.396

Depth (Ft.)	Graphic Log	Material Description	Water Level Observations	Sample Type	Field Test Results	Strength Test: Test Type	Strength Test: Compressive Strength (psf)	Strength Test: Strain (%)	Water Content (%)	Dry Unit Weight (pcf)	Atterberg Limits: LL	PL	PI
		SILT (ML), dark gray and brown, moist, very stiff, trace clay and organics (continued)											
Fs: 0.53 Qb: 23					5-10-13 N=23				37.9				
75.0		SILT (ML), dark gray, moist, stiff											
					3-4-5 N=9				33.0				
Fs: 0.29 Qb: 12					3-6-7 N=13				27.4				
90.0		SILT (ML), dark gray, wet, hard, trace fine sand			4-5-8 N=13				30.1				
Fs: 0.71 Qb: 33					15-17-25 N=42				30.2				
96.5		POORLY GRADED SAND (SP), gray, wet, dense											
Fs: 0.39 Qb: 65					23-37-21 N=58								
100.0		FAT CLAY (CH), light brown, moist, hard											
Fs: 0.83 Qb: 12		Boring Terminated at 100 Feet											

See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (If any).
See Supporting Information for explanation of symbols and abbreviations.

Water Level Observations: ▽ While drilling
Drill Rig: CME-75
Hammer Type: Automatic
Driller:
Logged by: RVW
Boring Started: 05-12-2025
Boring Completed: 05-12-2025
Advancement Method: HSA/Mud Rotary
Abandonment Method: Boring backfilled with Auger Cuttings and/or Bentonite
Notes:

Facilities | Environmental | Geotechnical | Materials

LEGEND

Fill	Asphalt	Silt	Fat Clay	Lean Clay with Sand	Sandy Silt
Silty Clayey Sand	Poorly-graded Sand	Poorly-graded Sand with Gravel	Silty Sand	Silty Clay	

Split Spoon	Water Level During Drilling	N	Standard Penetration Test Resistance (Blows/Ft.)
Shelby Tube	Water Level Immediately After Drilling	(HP)	Hand Penetrometer
	Water Level >24 Hours After Drilling	(DCP)	Dynamic Cone Penetrometer
	Cave In Recorded		

Terracon	REVISIONS:	PLAN SUBMITTAL	PREPARED BY:		SHEET TITLE	ROUTE
	NOT FOR CONSTRUCTION		TERRACON	NOT TO SCALE	SOIL BORING LOGS	

$FILE$ $USER NAME$ $TIME$ $DATE$

SEALED BY

ERIC C. CONWAY
REGISTERED ENGINEER
AGRICULTURE
No. 127025
STATE OF TENNESSEE
07-01-25

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
FOUNDATION DATA

S.R.180 OVER LOST CREEK
BRIDGE I.D. NO. 38S80510009
STATION 115+74.17
LOG MILE 4.75
HAYWOOD COUNTY
2026

U-97-985

PIN NO.: 136347.07
DESIGN BY: TERRACON DATE: 06/27/2025
DRAWN BY: DATE: 06/27/2025
SUPERVISED BY: DATE: 06/27/2025
CHECKED BY: DATE: 06/27/2025

6/30/2025 11:22:37 PM
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CONST. NO.:

PROJECT NO.	YEAR	SHEET NO.
38S180-M3-007	2026	

REVISIONS

NO.	DATE	BY	BRIEF DESCRIPTION
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	- -		
	- -		

SOIL BORING LOGS

Timber Bridges Replacement
TBR-180
Terracon Project No. 1A255072

Boring Log No. B-34-2

Location: See Exploration Plan
Latitude: 35.7300° Longitude: -89.8900°
Northing: 534327.549 Easting: 962611.851

Depth (Ft.)	Graphic Log	Water Level Observations	Sample Type	Field Test Results	Strength Test: Test Type	Strength Test: Compressive Strength (psf)	Strength Test: Strain (%)	Water Content (%)	Dry Unit Weight (pcf)	Atterberg Limits: LL PL PI
0.3										
ASPHALT										
FILL - SILT (ML), gray, moist, petroleum odor, some well graded gravel with sand				2-21-17 N=38						
4.0										
SILT (ML), gray, dry, stiff				3-3-6 N=9				21.3		
7.0										
SILT (ML), gray, moist to wet, very soft to soft, some fine sand				1-2-2 N=4				27.4		
				0-0-0 N=0				27.1		27-23-4
13.0										
SILTY CLAY (CL-ML), yellow brown and gray mottling, moist, medium stiff to stiff				0-0-0 N=0				24.3		
				1-2-4 N=6				18.8		
				3-4-4 N=8				26.6		
					UU	5792	15			25-21-4
				4-4-6 N=10				19.1		
22.9										
SILTY SAND (SM), fine grained, light brown, moist, dense				8-8-7 N=15				27.2		
30.0										
LEAN CLAY WITH SAND (CL), fine grained, yellow brown, wet, loose, trace gravel				2-20-28 N=48				17.5		
				6-5-5 N=8				22.5		27-14-13
45.0										

Fs: 0.22 Qb: 9
Fs: 0.00 Qb: 0
Fs: 0.00 Qb: 0
Fs: 0.39 Qb: 8
Fs: 0.39 Qb: 65
Fs: 0.36 Qb: 5

See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (If any).
See Supporting Information for explanation of symbols and abbreviations.

Water Level Observations: While drilling; At completion of drilling
Drill Rig: CME-75
Hammer Type: Automatic
Driller:
Logged by: RVW
Boring Started: 05-12-2025
Boring Completed: 05-12-2025
Advancement Method: HSA/Mud Rotary
Abandonment Method: Boring backfilled with Auger Cuttings and/or Bentonite

Notes:

Facilities | Environmental | Geotechnical | Materials

Timber Bridges Replacement
TBR-180
Terracon Project No. 1A255072

Boring Log No. B-34-2

Location: See Exploration Plan
Latitude: 35.7300° Longitude: -89.8900°
Northing: 534327.549 Easting: 962611.851

Depth (Ft.)	Graphic Log	Water Level Observations	Sample Type	Field Test Results	Strength Test: Test Type	Strength Test: Compressive Strength (psf)	Strength Test: Strain (%)	Water Content (%)	Dry Unit Weight (pcf)	Atterberg Limits: LL PL PI
SILTY SAND (SM), gray with light brown mottling, moist, very loose										
0-0-0 N=0								18.2		17-14-3
40.0										
POORLY GRADED SAND WITH GRAVEL (SP), gray, moist, medium stiff, fine and coarse grained										
45.0				1-2-6 N=9				13.4		
SILTY SAND WITH GRAVEL (SM), coarse grained light brown, wet, medium dense, trace clay										
50.0				6-13-11 N=24						
SANDY SILT (ML), dark gray, moist, medium stiff o stiff				4-3-5 N=8				32.7		
				3-4-6 N=10				34.7		
59.9										
SILT (ML), dark grey to grey brown, moist, medium stiff to very stiff, trace sand and clay				3-5-7 N=12				38.1		
				4-8-12 N=20				34.6		

Fs: 0.00 Qb: 0
Fs: 0.15 Qb: 26
Fs: 0.39 Qb: 65
Fs: 0.32 Qb: 13
Fs: 0.49 Qb: 21

See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (If any).
See Supporting Information for explanation of symbols and abbreviations.

Water Level Observations: While drilling; At completion of drilling
Drill Rig: CME-75
Hammer Type: Automatic
Driller:
Logged by: RVW
Boring Started: 05-12-2025
Boring Completed: 05-12-2025
Advancement Method: HSA/Mud Rotary
Abandonment Method: Boring backfilled with Auger Cuttings and/or Bentonite

Notes:

Facilities | Environmental | Geotechnical | Materials

Timber Bridges Replacement
TBR-180
Terracon Project No. 1A255072

Boring Log No. B-34-2

Location: See Exploration Plan
Latitude: 35.7300° Longitude: -89.8900°
Northing: 534327.549 Easting: 962611.851

Depth (Ft.)	Graphic Log	Water Level Observations	Sample Type	Field Test Results	Strength Test: Test Type	Strength Test: Compressive Strength (psf)	Strength Test: Strain (%)	Water Content (%)	Dry Unit Weight (pcf)	Atterberg Limits: LL PL PI
SILT (ML), dark gray to gray brown, moist, medium stiff to very stiff, trace sand and clay (continued)										
				6-7-13 N=20				30.4		28-25-3
				3-4-6 N=10				31.7		
				4-7-9 N=16				31.9		
				3-4-5 N=9				32.3		
89.4										
LEAN CLAY (CL), dark yellow brown, moist, hard, trace organics				4-7-7 N=14				30.7		
100.0										
Boring Terminated at 100 Feet				20-24-22 N=46						

Fs: 0.49 Qb: 21
Fs: 0.83 Qb: 14

See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (If any).
See Supporting Information for explanation of symbols and abbreviations.

Water Level Observations: While drilling; At completion of drilling
Drill Rig: CME-75
Hammer Type: Automatic
Driller:
Logged by: RVW
Boring Started: 05-12-2025
Boring Completed: 05-12-2025
Advancement Method: HSA/Mud Rotary
Abandonment Method: Boring backfilled with Auger Cuttings and/or Bentonite

Notes:

Facilities | Environmental | Geotechnical | Materials

LEGEND

Fill; Asphalt; Silt; Fat Clay; Lean Clay with Sand; Sandy Silt; Silty Clayey Sand; Poorly-graded Sand; Poorly-graded Sand with Gravel; Silty Sand; Silty Clay

Split Spoon; Shelby Tube

Water Level During Drilling
Water Level Immediately After Drilling
Water Level > 24 Hours After Drilling
Cave In Recorded

N Standard Penetration Test Resistance (Blows/Ft.)
(HP) Hand Penetrometer
(DCP) Dynamic Cone Penetrometer

Terracon	REVISIONS:	PLAN SUBMITTAL	PREPARED BY:		SHEET TITLE	ROUTE
	NOT FOR CONSTRUCTION		TERRACON	NOT TO SCALE	SOIL BORING LOGS	

$FILESS
$USER NAMES
$TIMES
$DATES

SEALED BY

ERIC C. CONWAY
REGISTERED ENGINEER
AGRICULTURE
COMMISSION No. 127025
STATE OF TENNESSEE
07-01-25

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
FOUNDATION DATA

S.R.180 OVER LOST CREEK
BRIDGE I.D. NO. 38S80510009
STATION 115+74.17
LOG MILE 4.75
HAYWOOD COUNTY
2026

U-97-986

PIN NO.: 136347.07
DESIGN BY: TERRACON DATE: 06/27/2025
DRAWN BY: DATE: 06/27/2025
SUPERVISED BY: DATE: 06/27/2025
CHECKED BY: DATE: 06/27/2025

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CONST. NO.:

PROJECT NO.	YEAR	SHEET NO.
38S180-M3-007	2026	

REVISIONS

NO.	DATE	BY	BRIEF DESCRIPTION
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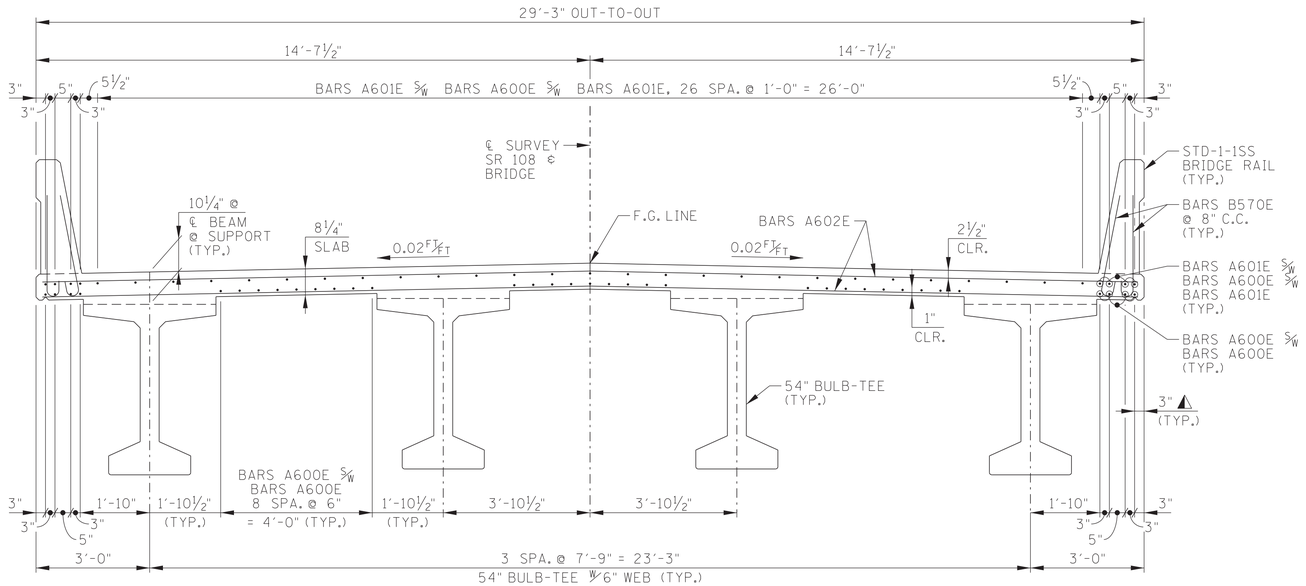
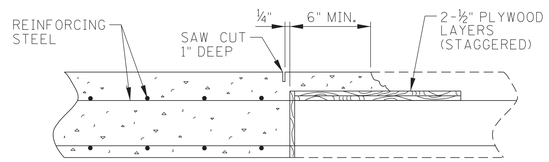


TYPICAL CROSS-SECTION

◭ DENOTES: 1" TRIANGULAR DRIP NOTCH TO RUN FULL LENGTH OF SLAB (TYP.)

ALL SLAB CONSTRUCTION JOINTS SHALL BE IN ACCORDANCE WITH THE SLAB CONSTRUCTION JOINT DETAIL SHOWN BELOW



SLAB CONSTRUCTION JOINT DETAIL

(N.T.S.)

DECK CONCRETE POURING SEQUENCE: SLAB CONSTRUCTION JOINTS MAY BE LOCATED AT THE CONTRACTOR'S OPTION SUBJECT TO THE FOLLOWING:

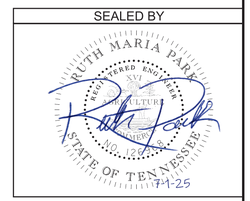
NO CONSTRUCTION JOINT SHALL BE LOCATED CLOSER THAN 10 FEET OR FURTHER THAN 15 FEET FROM AN ABUTMENT.

NOTES:

1. NO PORTION OF THE PARAPETS SHALL BE POURED UNTIL THE ENTIRE DECK SLAB IS IN PLACE.
2. WHEN POURING SLAB, PROVISIONS SHALL BE MADE FOR SETTING REINFORCING STEEL FOR PARAPET. THE PARAPET SHALL NOT BE POURED UNTIL THE SLAB IS POURED AND CURED. ALSO SEE STD. DWG. NO. STD-1-1SS.
3. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR SUPPORTING THE BEAMS TO PREVENT DAMAGE DUE TO TWISTING OR OVERTURNING DURING ALL PHASES OF CONSTRUCTION. WHILE IT IS STRONGLY RECOMMENDED THAT BOTH THE TEMPORARY ERECTION DIAPHRAGMS AND THE PERMANENT INTERMEDIATE DIAPHRAGMS BE INSTALLED PRIOR TO PLACING ANY LOADS ON THE BEAMS, IT IS REQUIRED THAT ALL TEMPORARY ERECTION DIAPHRAGMS AND ALL PERMANENT INTERMEDIATE DIAPHRAGMS IN A SPAN BE FULLY INSTALLED PRIOR TO POURING ANY PORTION OF THE SLAB IN THAT SPAN.

ESTIMATED QUANTITIES	
CLASS "D" CONCRETE (BRIDGE DECK) C.Y.	EPOXY COATED REINFORCING STEEL LB.
96	35,059

SEALED BY



STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

SUPERSTRUCTURE

S.R.180 OVER LOST CREEK
BRIDGE I.D. NO. 38S80510009
STATION 115+74.17
LOG MILE 4.75
HAYWOOD COUNTY
2026

U-97-987

PIN NO.: 136347.07

DESIGN BY:	R. Park	DATE:	06/27/2025
DRAWN BY:	R. Palmer	DATE:	06/27/2025
SUPERVISED BY:	D. McCrary	DATE:	06/27/2025
CHECKED BY:	H. Neal	DATE:	06/27/2025

Gresham Smith

6/30/2025 11:23:27 PM
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CONST. NO.:

PROJECT NO.	YEAR	SHEET NO.
38S180-M3-007	2026	

REVISIONS

NO.	DATE	BY	BRIEF DESCRIPTION
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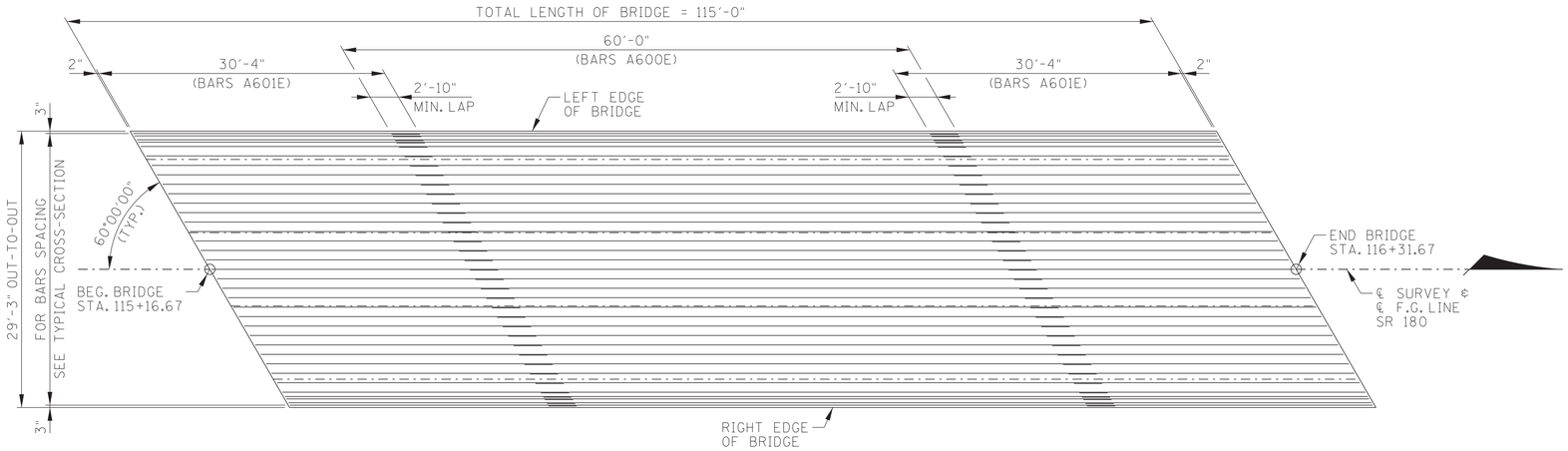
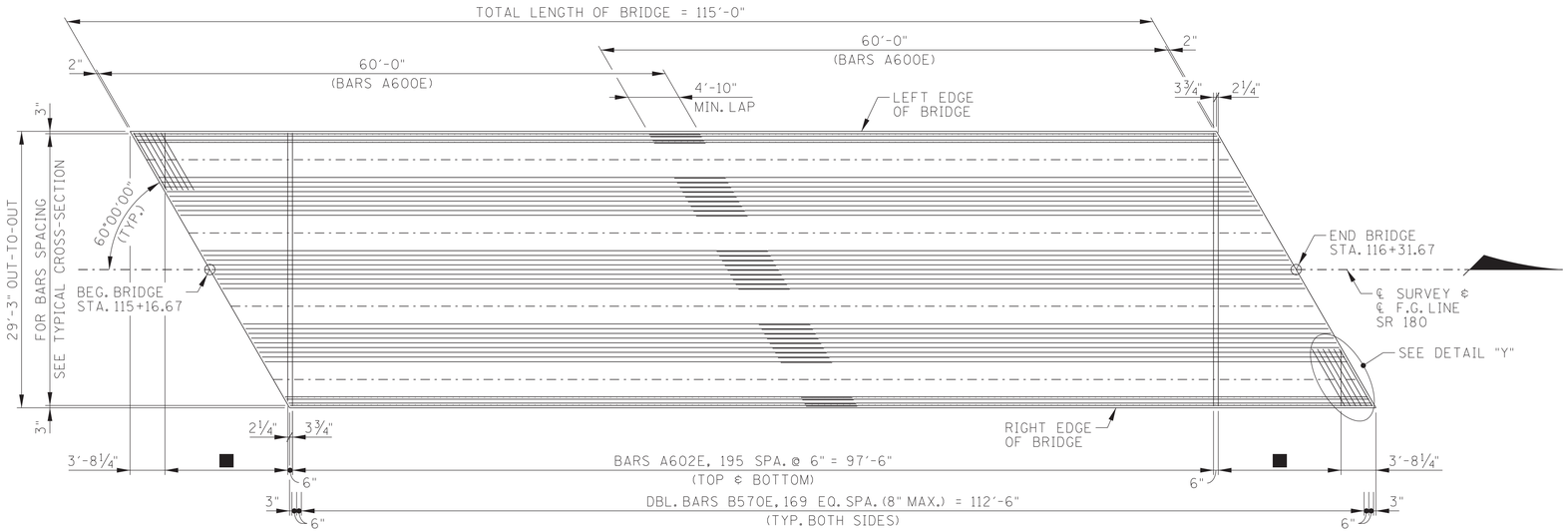
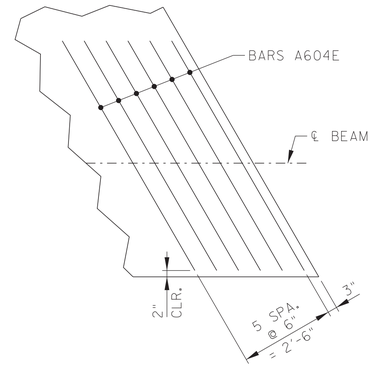


MAIN REINFORCEMENT PLAN



■ DENOTES: SER. BARS A603E, 26 SPA. @ 6" = 13'-0" (TYP. TOP & BOTTOM)

SLAB PLAN



DETAIL "Y"
TYPICAL IN ACUTE CORNERS
(TOP & BOTTOM)

SEALED BY

RUTH MARIA PARK
REGISTERED ENGINEER
No. 128...
STATE OF TENNESSEE
7-1-25

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

SUPERSTRUCTURE DETAILS
S.R.180 OVER LOST CREEK
BRIDGE I.D. NO. 38S80510009
STATION 115+74.17
LOG MILE 4.75
HAYWOOD COUNTY
2026

U-97-988

PIN NO.: 136347.07
DESIGN BY: R. Park DATE: 06/27/2025
DRAWN BY: R. Palmer DATE: 06/27/2025
SUPERVISED BY: D. McCrary DATE: 06/27/2025
CHECKED BY: H. Neal DATE: 06/27/2025

Gresham Smith

6/30/2025 11:23:35 PM
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CONST. NO.:

PROJECT NO.	YEAR	SHEET NO.
38S180-M3-007	2026	

REVISIONS

NO.	DATE	BY	BRIEF DESCRIPTION
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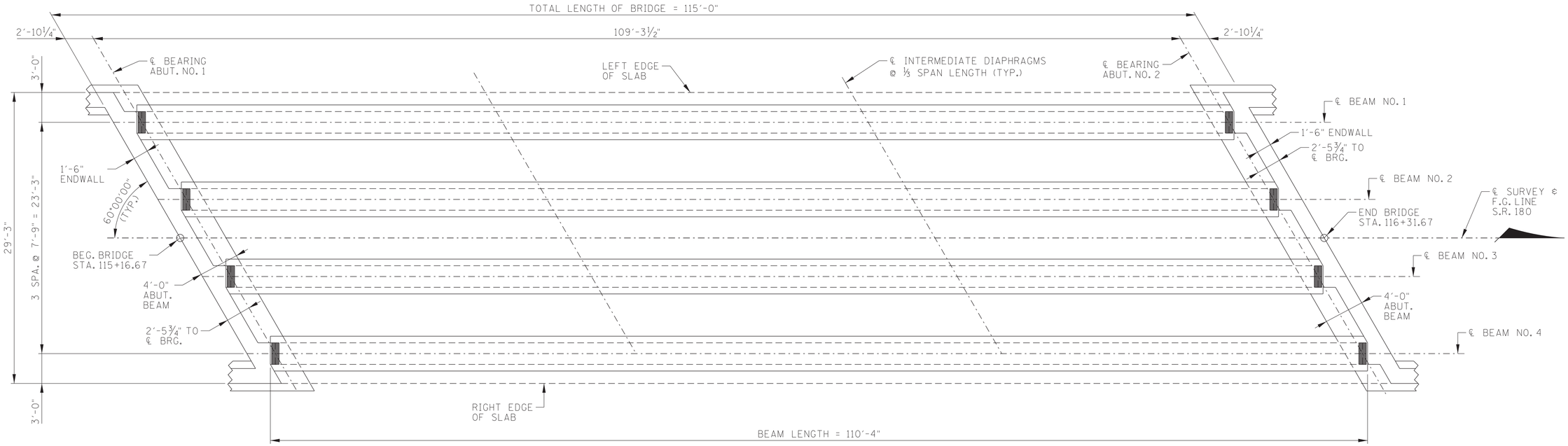
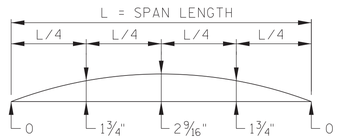


FRAMING PLAN



DEAD LOAD CORRECTION CURVE

THIS CURVE IS FOR DEAD LOAD SLAB AND ALL DEAD LOADS THAT ARE APPLIED AFTER SLAB IS IN PLACE AND SHALL BE CORRECTED TO COMPENSATE FOR THE EFFECTS DUE TO VERTICAL CURVE.

IF PRESTRESSED DECK PANELS ARE USED AND THE BEAMS ARE PROFILED AFTER THE PANELS ARE IN PLACE, REDUCE THE DEAD LOAD CORRECTION VALUES SHOWN BY 25%.

SEALED BY

RUTH MARIA PARK — REGISTERED ENGINEER — NO. 127... — STATE OF TENNESSEE — 7-1-25

PIN NO.:	136347.07	
DESIGN BY:	R. Park	DATE: 06/27/2025
DRAWN BY:	R. Palmer	DATE: 06/27/2025
SUPERVISED BY:	D. McCrary	DATE: 06/27/2025
CHECKED BY:	H. Neal	DATE: 06/27/2025

Gresham Smith

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

SUPERSTRUCTURE DETAILS
S.R.180 OVER LOST CREEK
BRIDGE I.D. NO. 38S80510009
STATION 115+74.17
LOG MILE 4.75
HAYWOOD COUNTY
2026

U-97-989

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CONST. NO.:

PROJECT NO.	YEAR	SHEET NO.
38S180-M3-007	2026	

REVISIONS

NO.	DATE	BY	BRIEF DESCRIPTION
	- -		
	- -		
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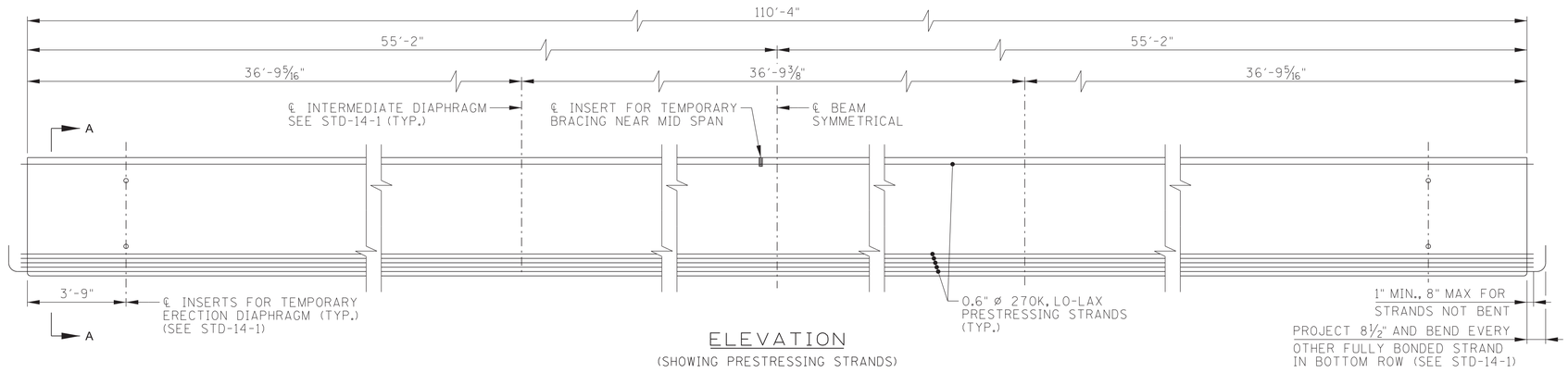
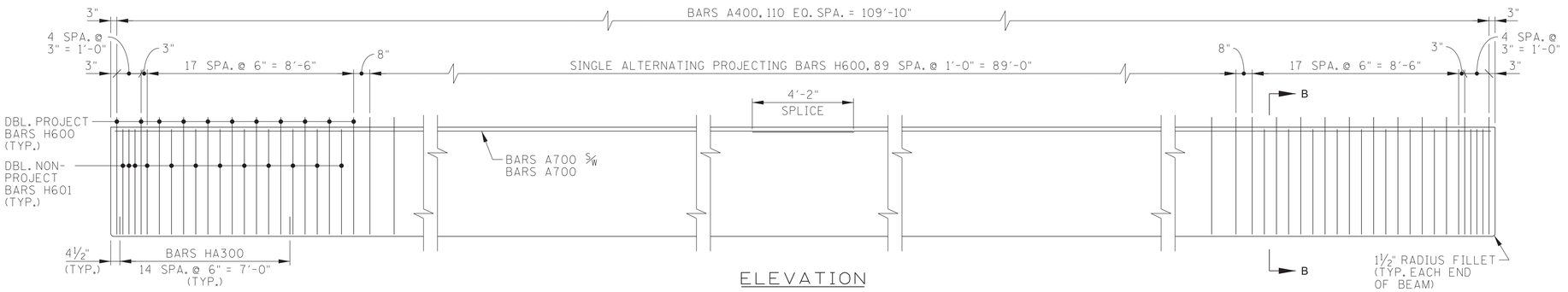
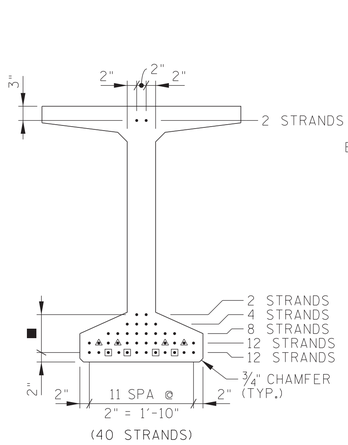


ELEVATION

(SHOWING PRESTRESSING STRANDS)



ELEVATION



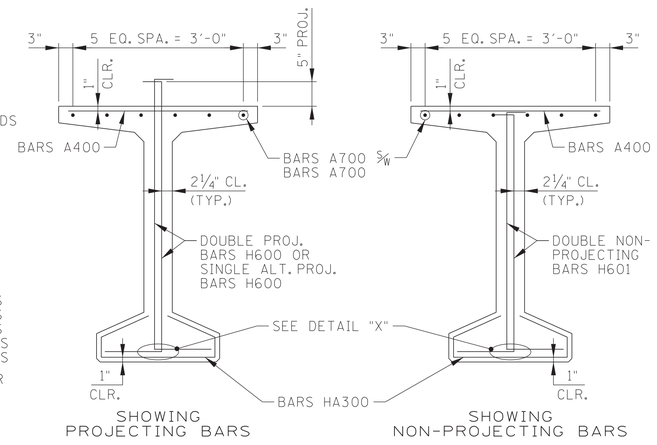
(40 STRANDS)

SECTION A-A

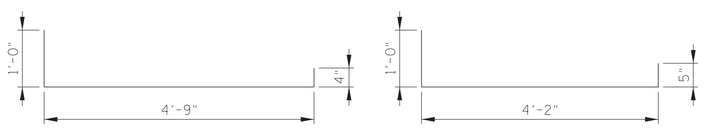
■ DENOTES: 4 SPA. @ 2" = 8"

⊡ DENOTES: BREAK BOND 10'-0" FROM END BEAM

⁂ DENOTES: BREAK BOND 6'-0" FROM BEAM END

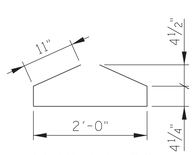


SECTION B-B

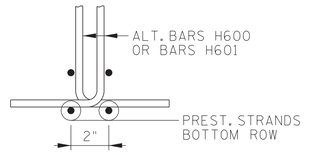


BARS H600 BARS H601

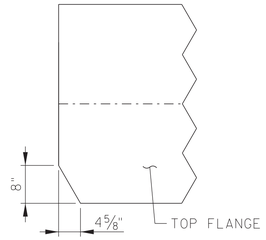
BARS A400, A500 OR A700



BARS HA300



DETAIL X



CLIP DETAIL

SIMILAR EA. END

ESTIMATED QUANTITIES

(PER BEAM)

NO. REQ'D	CLASS "P" CONCRETE C.Y.	REINFORCING STEEL LB.	PRESTRESSING STRANDS (LOW RELAXATION) LB.
4	18.8	3348	3320

BILL OF STEEL

(PER BEAM)

BAR	SIZE	NO. REQ'D	LENGTH
A400	4	111	3'-2"
A500	5	6	5'-6"
A700	7	12	57'-1"
H600	6	134	6'-1"
H601	6	48	5'-7"
HA300	3	30	4'-7"

PRESTRESSED BEAM NOTES

SEE STD-14-1 FOR BULB-TEE BEAM STANDARD DETAILS AND NOTES.

ALL BEAMS ARE BT-54.

THE PRESTRESSED BEAMS SHALL ATTAIN AN AGE OF AT LEAST 90 DAYS PRIOR TO POURING THE SUPPORT DIAPHRAGMS (EXCLUDING BOTTOM 15") AND DECK SLAB.

THE CONCRETE FOR THIS CONSTRUCTION SHALL BE OF SUCH PROPERTIES AS TO ATTAIN A COMPRESSIVE STRENGTH OF NOT LESS THAN 9,500 PSI AT THE AGE OF 28 DAYS AND STRESS TRANSFER SHALL NOT BE MADE TO THE BRIDGE MEMBER UNTIL THE TEST SPECIMENS INDICATE THAT THE CONCRETE HAS REACHED A COMPRESSIVE STRENGTH OF AT LEAST 8,000 PSI. SEE GENERAL NOTES FOR CONCRETE FINISHING NOTE.

PRESTRESSING STRANDS: ALL STRANDS SHALL BE 6/10" DIAMETER, UNCOATED 7- WIRE STRANDS, ASTM A416 GRADE 270, LOW-LAX, A = 0.217 SQ. IN. PULLED TO 43,943 LBS. PER STRAND UNLESS OTHERWISE NOTED.

PRESTRESSED BEAM DESIGN DATA (PER BEAM):
LIVE LOAD DISTRIBUTION FACTOR: MOMENT = 0.70 LANES
SHEAR = 0.87 LANES
COMPOSITE DEAD LOAD: DC = 188 LB/FT
DW = 235 LB/FT

COMPOSITE SLAB DESIGN STRENGTH: F'C = 4000 PSI.

ALL BEAMS SHALL HAVE UPWARD DEFLECTION OF AT LEAST ⅛" UNDER TOTAL DEAD LOAD.

SEALED BY

PIN NO.:	136347.07		
DESIGN BY:	R. Park	DATE:	06/27/2025
DRAWN BY:	R. Park	DATE:	06/27/2025
SUPERVISED BY:	D. McCrary	DATE:	06/27/2025
CHECKED BY:	H. Neal	DATE:	06/27/2025

Gresham Smith

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PRESTRESSED BULB-TEE BEAM DETAILS
S.R.180 OVER LOST CREEK
BRIDGE I.D. NO. 38S80510009
STATION 115+74.17
LOG MILE 4.75
HAYWOOD COUNTY
2026

U-97-990

6/30/2025 11:23:59 PM
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CONST. NO.:

PROJECT NO.	YEAR	SHEET NO.
38S180-M3-007	2026	

REVISIONS

NO.	DATE	BY	BRIEF DESCRIPTION
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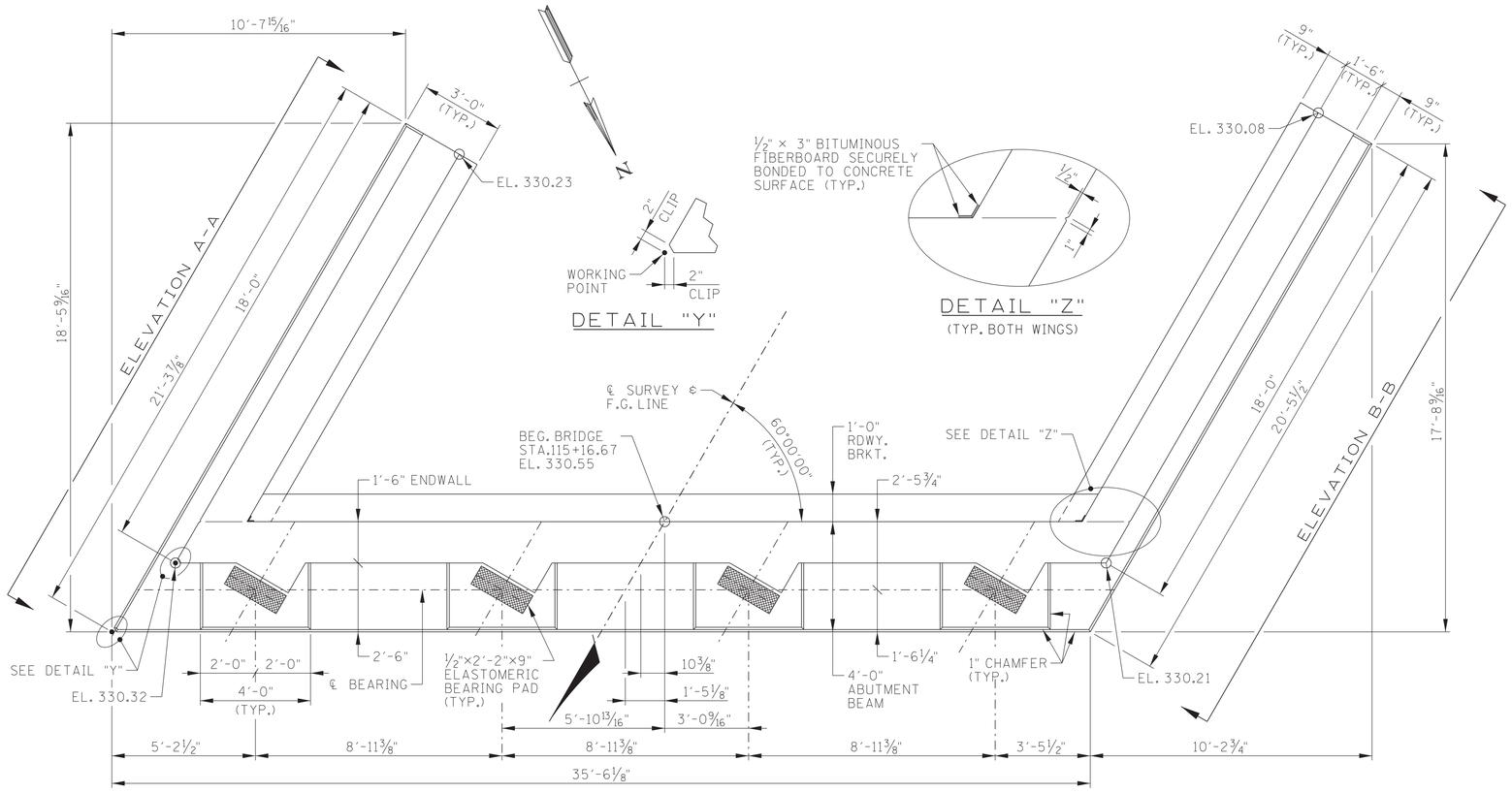
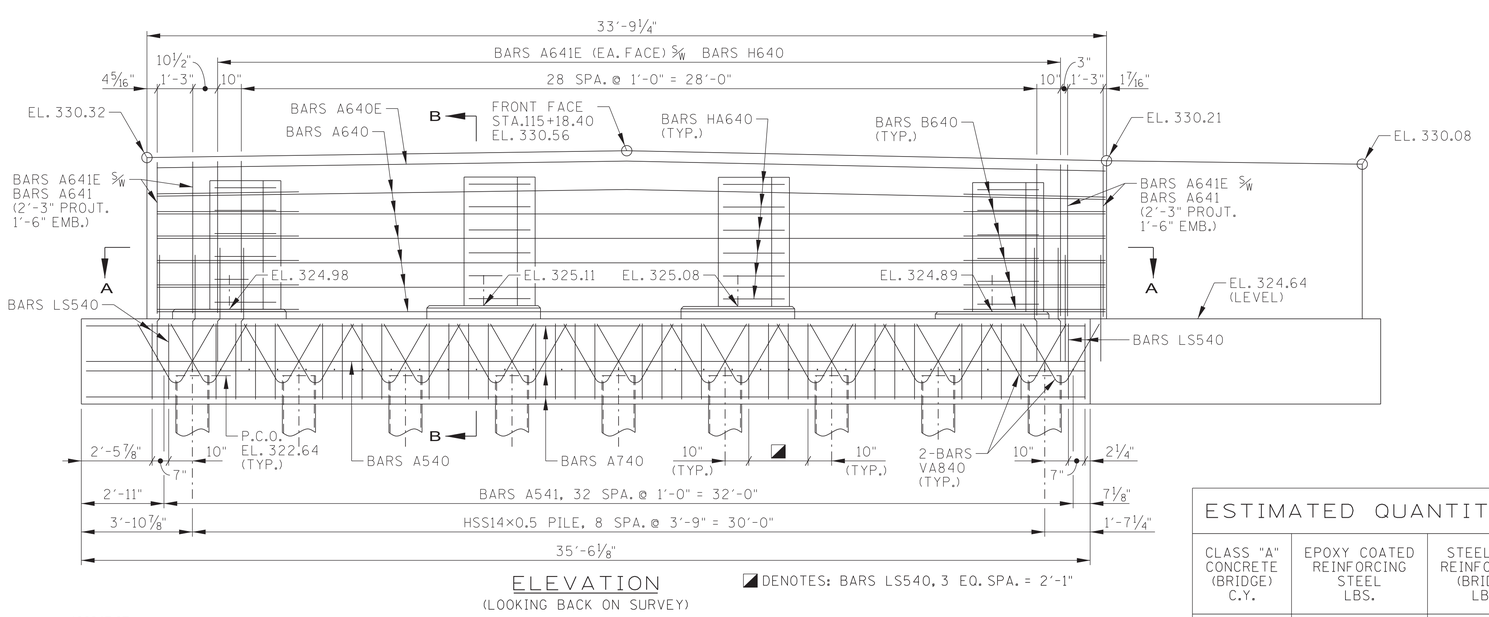




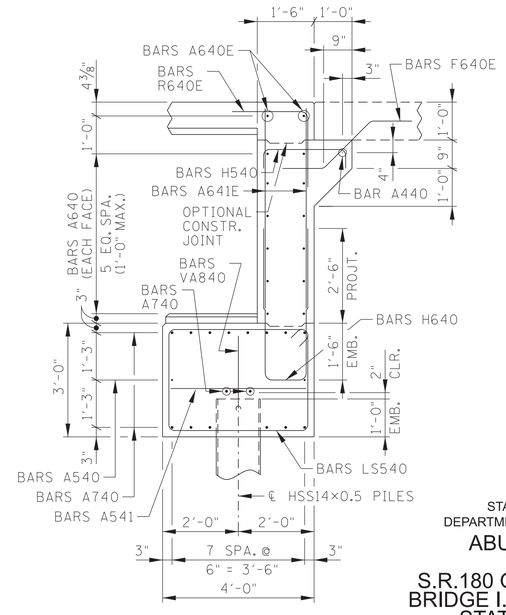
ELEVATION
(LOOKING BACK ON SURVEY)

◪ DENOTES: BARS LS540, 3 EQ. SPA. = 2'-1"

NOTES:

1. RISER BLOCKS SHALL BE POURED MONOLITHICALLY WITH THE ABUTMENT BEAM.
2. ELASTOMERIC PADS SHALL BE IN PLACE A MINIMUM OF ONE DAY BEFORE BEING DISTURBED BY SETTING BEAMS. PLACE RUBBER BONDING CEMENT IN SUCH A WAY THAT VISIBLE CONCRETE SURFACES WILL NOT BE STAINED.
3. WHEN POURING WINGWALLS, PROVISIONS SHALL BE MADE FOR SETTING REINFORCING STEEL FOR WINGPOSTS AND PARAPETS. FOR DETAILS OF WINGPOSTS AND PARAPETS, SEE STD. DWG. NO. STD-1-1SS.
4. NOT LESS THAN HALF OF THE SLAB SHALL BE POURED PRIOR TO, OR CONCURRENTLY WITH, PLACEMENT OF ANY PART OF THE ABUTMENT ENDWALLS. ONE ABUTMENT ENDWALL SHALL BE POURED FULL HEIGHT CONCURRENTLY WITH THE END OF SLAB. AT LEAST THE TOP 12 INCHES OF THE OTHER ENDWALL SHALL BE POURED CONCURRENTLY WITH THE END OF SLAB.
5. THE GIRDERS SHALL BE IN PLACE PRIOR TO POURING THE ABUTMENT ENDWALL.
6. COST OF PARAPET AND POST IS TO BE INCLUDED IN THE UNIT PRICE BID FOR THE PARAPET SYSTEM.
7. THE CONTRACTOR SHALL SUPPORT THE ABUTMENT UNTIL THE SUPERSTRUCTURE IS IN PLACE, FALSEWORK HAS BEEN REMOVED, AND BACKFILLING HAS BEEN COMPLETED.
8. SEE STANDARD DRAWING STD-6-1 FOR PILE SEISMIC ATTACHMENT DETAILS AND NOTES.
9. WINGBEAM PILES SHALL BE DRIVEN TO THE PLANS TIP ELEVATION OR REFUSAL. SEISMIC ATTACHMENT IS NOT REQUIRED FOR WINGBEAM PILES.

ESTIMATED QUANTITIES		
CLASS "A" CONCRETE (BRIDGE) C.Y.	EPOXY COATED REINFORCING STEEL LBS.	STEEL BAR REINFORCING (BRIDGE) LBS.
50	1,487	6,246



SECTION B-B

SEALED BY

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

ABUTMENT NO. 1

S.R.180 OVER LOST CREEK
BRIDGE I.D. NO. 38S80510009
STATION 115+74.17
LOG MILE 4.75
HAYWOOD COUNTY
2026

U-97-991

PIN NO.: 136347.07

DESIGN BY:	R. Park	DATE: 06/27/2025
DRAWN BY:	R. Palmer	DATE: 06/27/2025
SUPERVISED BY:	D. McCrary	DATE: 06/27/2025
CHECKED BY:	A. Allsbrook	DATE: 06/27/2025

Gresham Smith

6/30/2025 11:24:07 PM
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CONST. NO.:

PROJECT NO.	YEAR	SHEET NO.
38S180-M3-007	2026	

REVISIONS

NO.	DATE	BY	BRIEF DESCRIPTION
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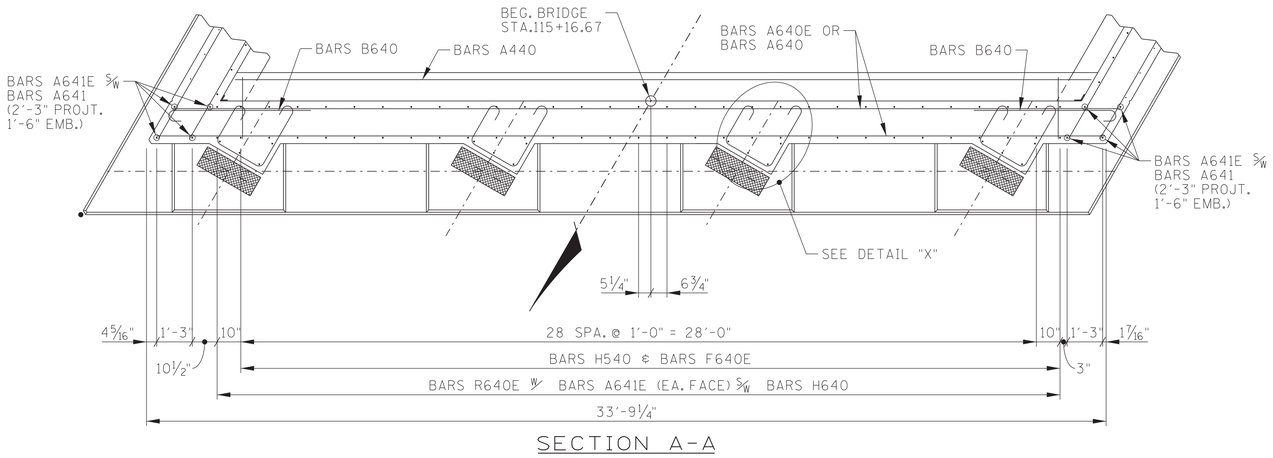
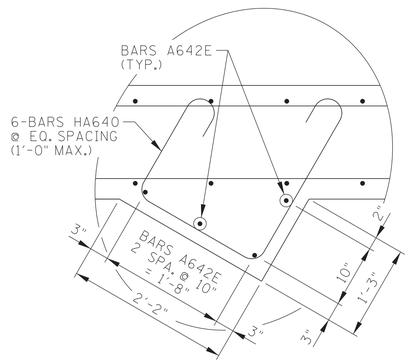
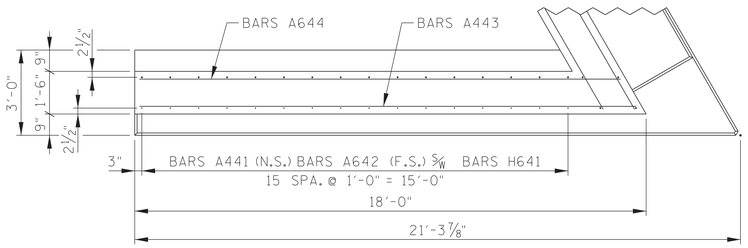


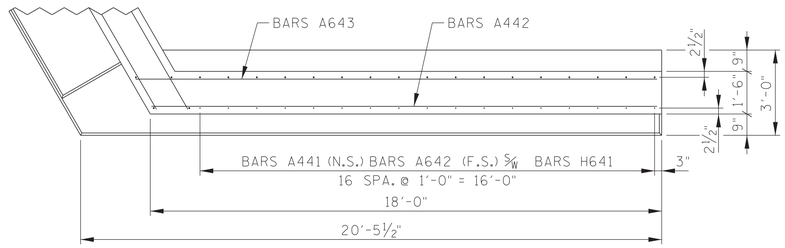
SECTION A-A



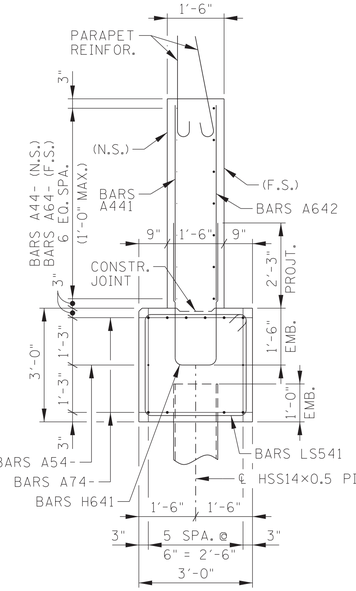
DETAIL "X"



SECTION E-E



SECTION D-D



SECTION C-C

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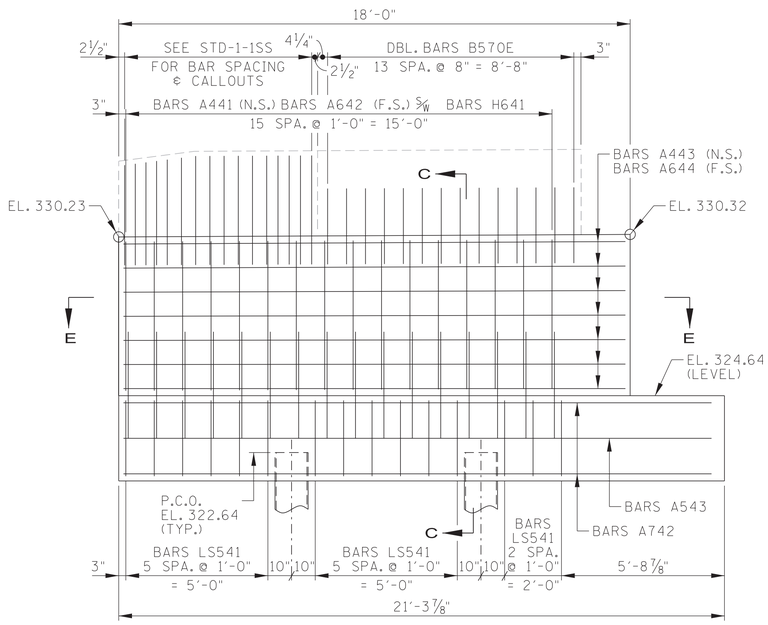
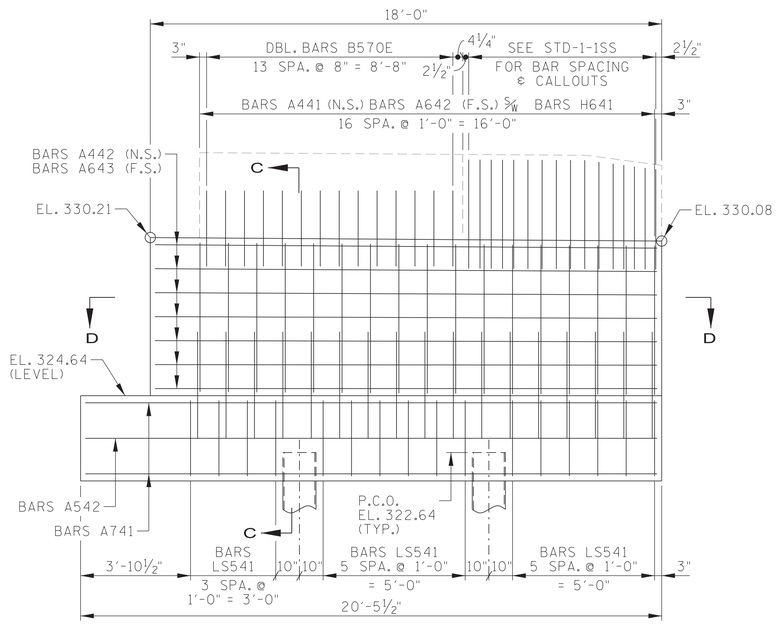
(F.S.) = FAR SIDE

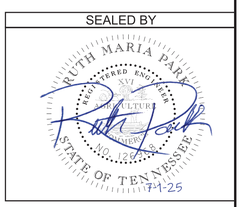


ELEVATION A-A



ELEVATION B-B

SEALED BY



PIN NO.:	136347.07	
DESIGN BY:	R. Park	DATE: 06/27/2025
DRAWN BY:	R. Palmer	DATE: 06/27/2025
SUPERVISED BY:	D. McCrary	DATE: 06/27/2025
CHECKED BY:	A. Allsbrook	DATE: 06/27/2025

Gresham Smith

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

ABUTMENT NO. 1 DETAILS
S.R.180 OVER LOST CREEK
BRIDGE I.D. NO. 38S80510009
STATION 115+74.17
LOG MILE 4.75
HAYWOOD COUNTY
2026

U-97-992

6/30/2025 11:24:15 PM
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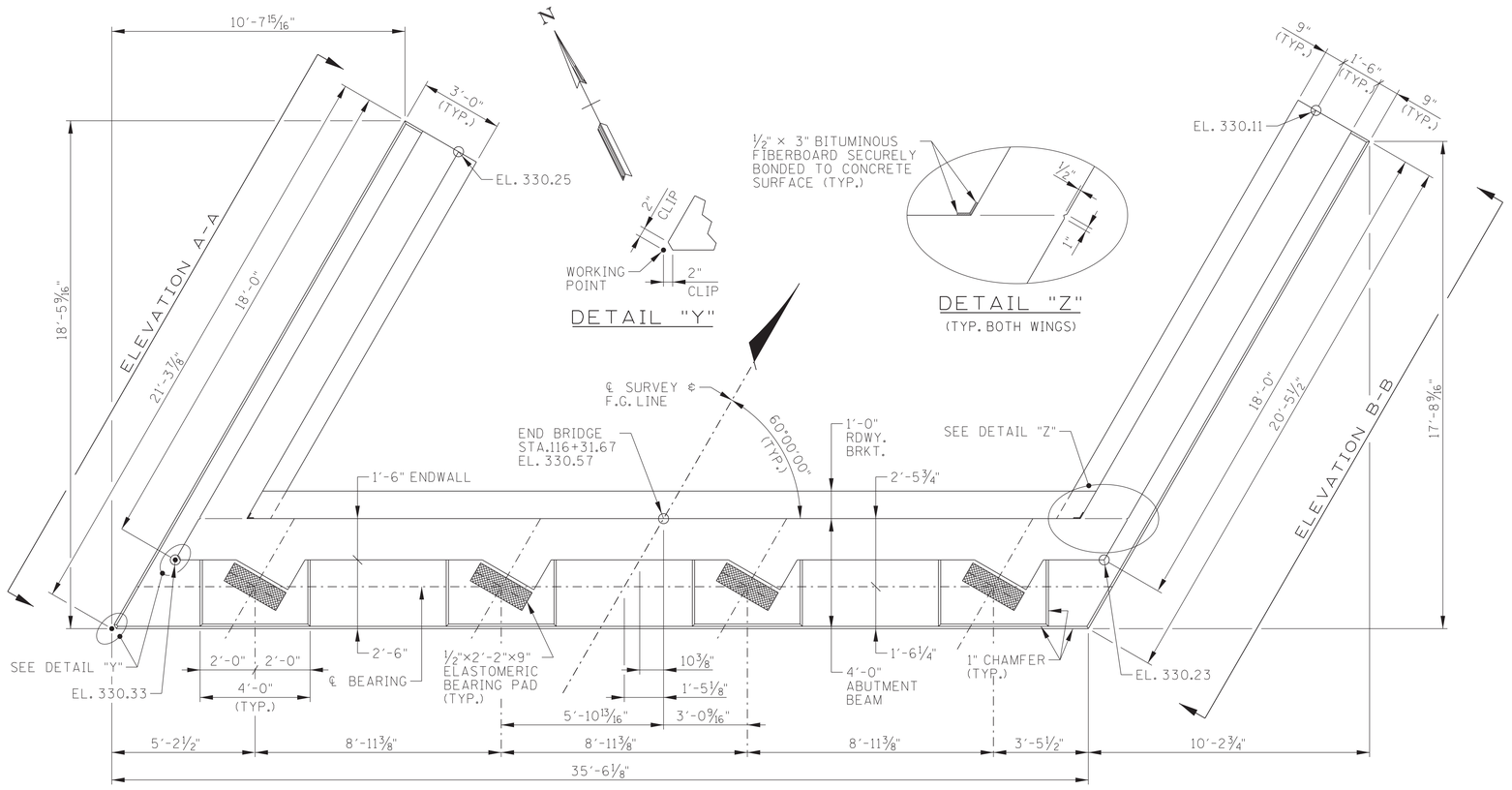

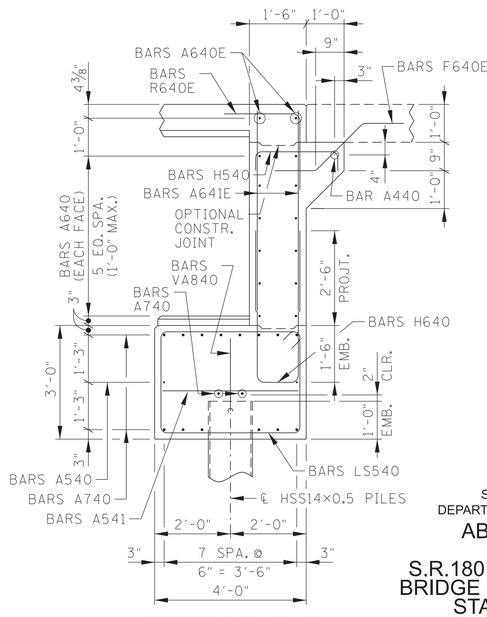

SECTION B-B

CONST. NO.:

PROJECT NO.	YEAR	SHEET NO.
38S180-M3-007	2026	

REVISIONS

NO.	DATE	BY	BRIEF DESCRIPTION
	- -		
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	- -		
	- -		
	- -		

NOTES:

1. RISER BLOCKS SHALL BE POURED MONOLITHICALLY WITH THE ABUTMENT BEAM.
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ESTIMATED QUANTITIES

CLASS "A" CONCRETE (BRIDGE) C.Y.	EPOXY COATED REINFORCING STEEL LBS.	STEEL BAR REINFORCING (BRIDGE) LBS.
50	1,487	6,246

SEALED BY

RUTH MARIA PARK — REGISTERED ENGINEER — STATE OF TENNESSEE — 7-1-25

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

ABUTMENT NO. 2

S.R.180 OVER LOST CREEK
BRIDGE I.D. NO. 38S80510009
STATION 115+74.17
LOG MILE 4.75
HAYWOOD COUNTY
2026

U-97-993

PIN NO.: 136347.07
DESIGN BY: R. Park DATE: 06/27/2025
DRAWN BY: R. Palmer DATE: 06/27/2025
SUPERVISED BY: D. McCrary DATE: 06/27/2025
CHECKED BY: A. Allsbrook DATE: 06/27/2025

Gresham Smith

6/30/2025 11:24:24 PM
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CONST. NO.:

PROJECT NO.	YEAR	SHEET NO.
38S180-M3-007	2026	

REVISIONS

NO.	DATE	BY	BRIEF DESCRIPTION
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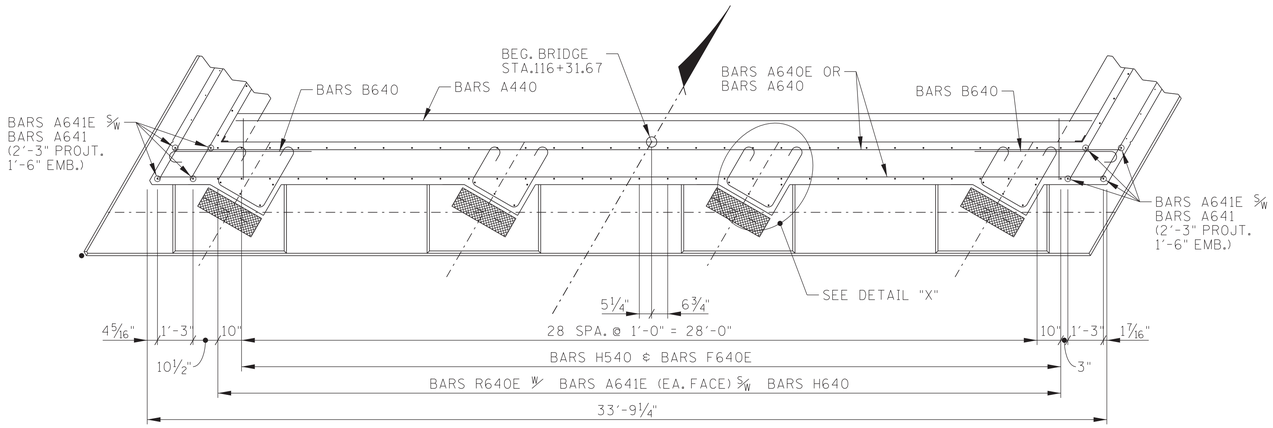
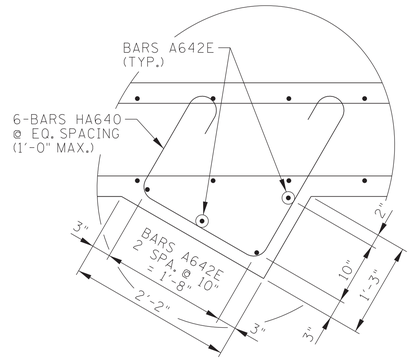
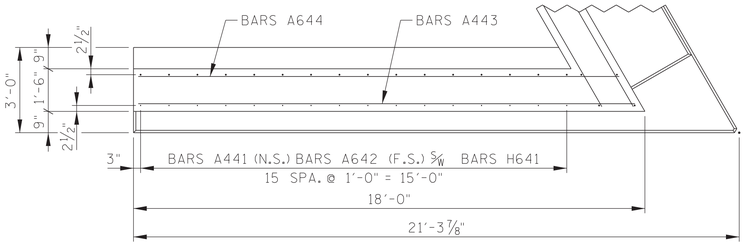


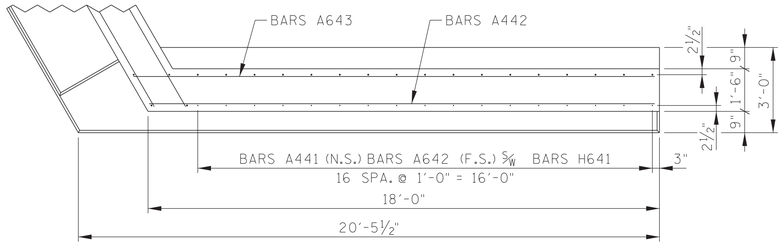
SECTION A-A



DETAIL "X"



SECTION E-E



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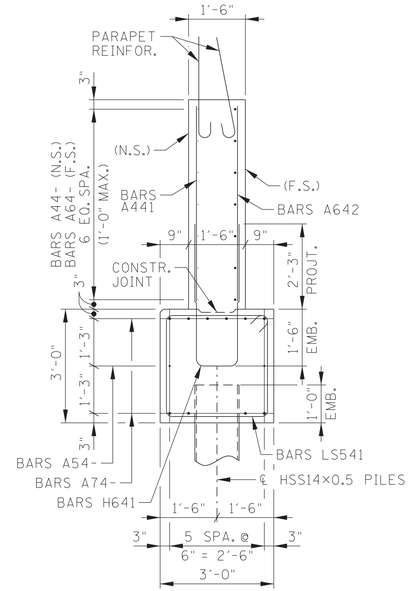
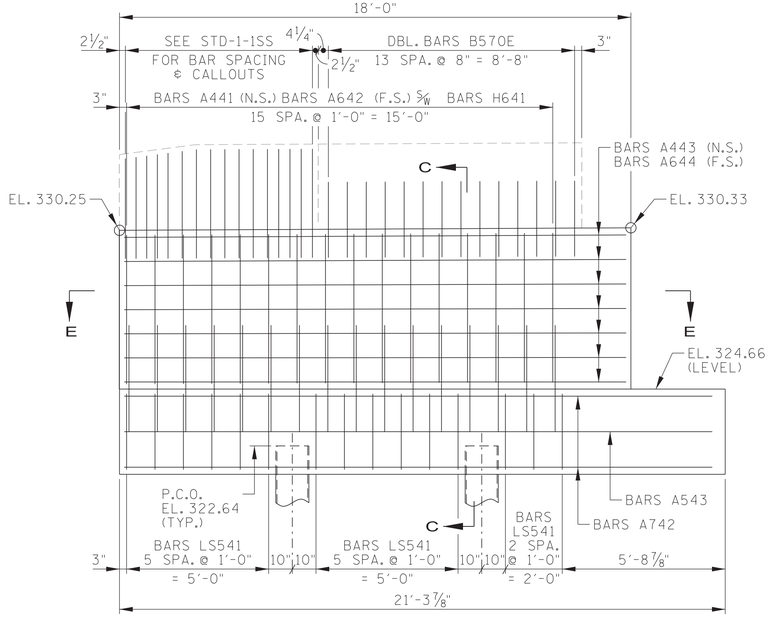
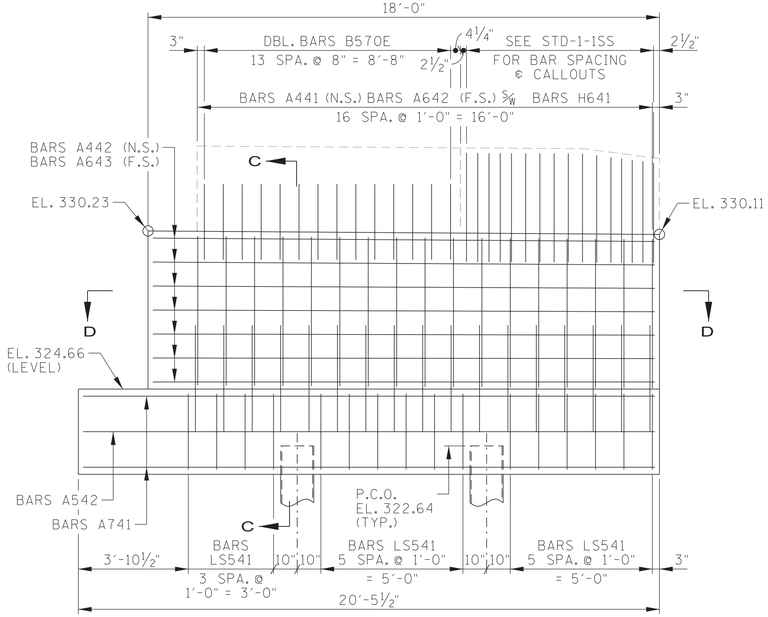


SECTION C-C

(N.S.) = NEAR SIDE
(F.S.) = FAR SIDE



ELEVATION A-A



ELEVATION B-B

SEALED BY

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

ABUTMENT NO. 2 DETAILS
S.R.180 OVER LOST CREEK
BRIDGE I.D. NO. 38S80510009
STATION 115+74.17
LOG MILE 4.75
HAYWOOD COUNTY
2026

U-97-994

PIN NO.: 136347.07

DESIGN BY:	R. Park	DATE: 06/27/2025
DRAWN BY:	R. Palmer	DATE: 06/27/2025
SUPERVISED BY:	D. McCrary	DATE: 06/27/2025
CHECKED BY:	A. Allsbrook	DATE: 06/27/2025

Gresham Smith

6/30/2025 11:24:32 PM
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CONST. NO.:

PROJECT NO.	YEAR	SHEET NO.
38S180-M3-007	2026	

REVISIONS

NO.	DATE	BY	BRIEF DESCRIPTION
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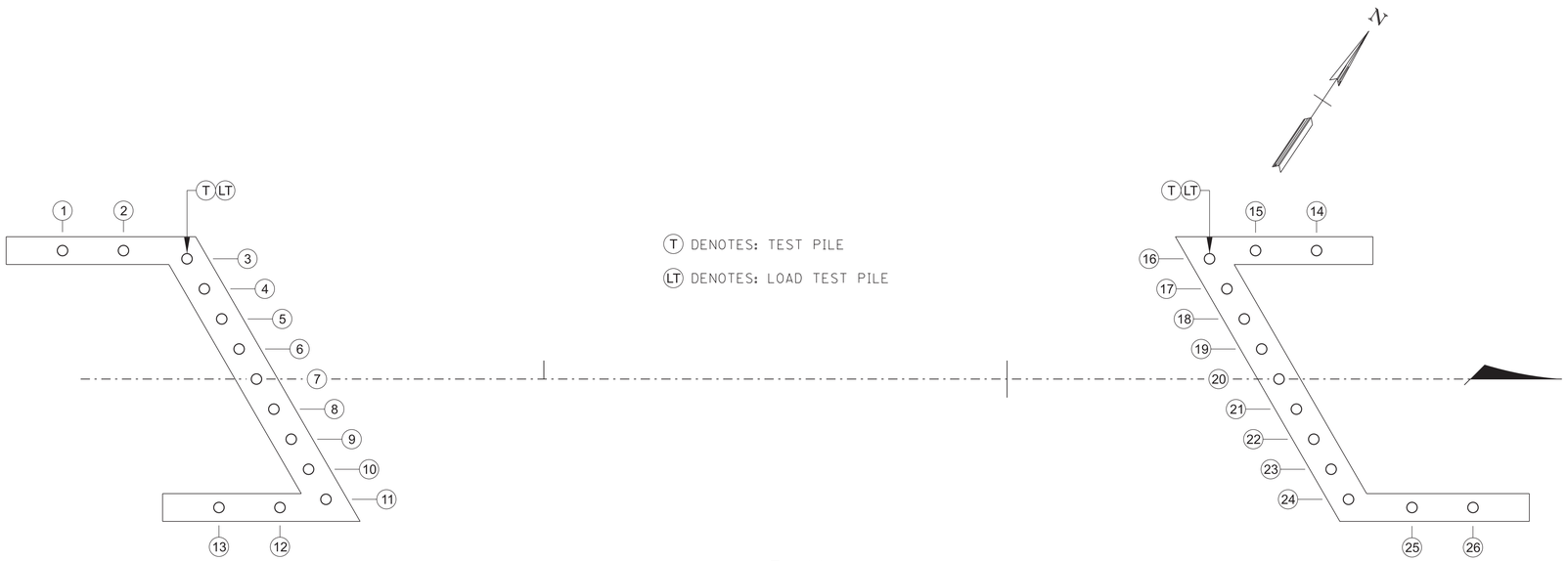

T DENOTES: TEST PILE

LT DENOTES: LOAD TEST PILE

ABUTMENT NO. 1

PLAN

ABUTMENT NO. 2

PILE DATA TABLES

ABUTMENT NO. 1

PILE NO.	PILE CUT-OFF ELEVATION	PILE TIP ELEVATION
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		
13		

ABUTMENT NO. 2

PILE NO.	PILE CUT-OFF ELEVATION	PILE TIP ELEVATION
14		
15		
16		
17		
18		
19		
20		
21		
22		
23		
24		
25		
26		

NOTE TO CONTRACTOR & CONSTRUCTION OFFICE:
THE BLANKS ON THIS SHEET ARE TO BE FILLED IN BY THE CONSTRUCTION OFFICE AND/OR FIELD ENGINEER GIVING AS BUILT CONDITIONS. AFTER COMPLETION IT IS TO BE SENT TO THE DIVISION OF STRUCTURES TO BECOME PART OF THE FINAL BRIDGE DOCUMENTS.

SEALED BY

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

FINAL FOUNDATION DATA

S.R.180 OVER LOST CREEK
BRIDGE I.D. NO. 38S80510009
STATION 115+74.17
LOG MILE 4.75
HAYWOOD COUNTY
2026

U-97-995

PIN NO.: 136347.07
DESIGN BY: R. Park DATE: 06/27/2025
DRAWN BY: R. Palmer DATE: 06/27/2025
SUPERVISED BY: D. McCrary DATE: 06/27/2025
CHECKED BY: A. Allsbrook DATE: 06/27/2025

Gresham Smith

6/30/2025 11:24:40 PM
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CONST. NO.:

PROJECT NO.	YEAR	SHEET NO.
38S180-M3-007	2026	

REVISIONS

NO.	DATE	BY	BRIEF DESCRIPTION
	- -		
	- -		
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	- -		
	- -		

SUPERSTRUCTURE (EPOXY)

BAR	LOCATION	SIZE	NO REQ'D.	BENDING DIMENSION A	B	C	D	LENGTH
A600E	SLAB	6	105	60'-0"				60'-0"
A601E	SLAB	6	70	30'-4"				30'-4"
A602E	SLAB	6	392	28'-11"				28'-11"
SER. A603E	SLAB	6	4	*DIM. A VARIES FROM 5'-10 3/4" TO 28'-5" IN INC. OF 10 3/8" (27 BARS)				463'-3"
A604E	SLAB	6	24	7'-0"				7'-0"
B570E	SLAB	5	692	2'-8"				3'-3"

ABUTMENT NO. 1 (EPOXY)

BAR	LOCATION	SIZE	NO REQ'D.	BENDING DIMENSION A	B	C	D	LENGTH
A640E	ENDWALL	6	2	33'-4 1/2"				33'-5"
A641E	ENDWALL	6	70	5'-4"				5'-4"
A642E	ENDWALL	6	16	4'-4"				4'-4"
B570E	WING/PARAPET	5	54	2'-8"				3'-3"
F640E	RDWY. BRKT	6	29	1'-1"	1'-3"	1'-1"	1'-3"	4'-0"
H400E	WING/PARAPET	4	6	0'-10 1/2"	3'-11"			8'-9"
H401E	WING/PARAPET	4	2	0'-9 7/8"	3'-10"			8'-6"
H402E	WING/PARAPET	4	2	0'-8 3/4"	3'-9"			8'-3"
H403E	WING/PARAPET	4	2	0'-7 5/8"	3'-8"			8'-0"
H404E	WING/PARAPET	4	2	0'-6 1/2"	3'-7"			7'-9"
SER. HD400E	WING/PARAPET	4	2	*	3'-11"	0'-9"		33'-0"
				*DIM. A VARIES FROM 0'-3 3/4" TO 0'-5 7/8" IN INC. OF 3/4" (4 BARS)				
SER. HD401E	WING/PARAPET	4	2	*	3'-11"	0'-9"		42'-8"
				*DIM. A VARIES FROM 0'-6 1/2" TO 0'-10" IN INC. OF 7/8" (5 BARS)				
R640E	ENDWALL	6	31	2'-0"	2'-0"			4'-0"

ABUTMENT NO. 2 (EPOXY)

BAR	LOCATION	SIZE	NO REQ'D.	BENDING DIMENSION A	B	C	D	LENGTH
A640E	ENDWALL	6	2	33'-4 1/2"				33'-5"
A641E	ENDWALL	6	70	5'-4"				5'-4"
A642E	ENDWALL	6	16	4'-4"				4'-4"
B570E	WING/PARAPET	5	54	2'-8"				3'-3"
F640E	RDWY. BRKT	6	29	1'-1"	1'-3"	1'-1"	1'-3"	4'-0"
H400E	WING/PARAPET	4	6	0'-10 1/2"	3'-11"			8'-9"
H401E	WING/PARAPET	4	2	0'-9 7/8"	3'-10"			8'-6"
H402E	WING/PARAPET	4	2	0'-8 3/4"	3'-9"			8'-3"
H403E	WING/PARAPET	4	2	0'-7 5/8"	3'-8"			8'-0"
H404E	WING/PARAPET	4	2	0'-6 1/2"	3'-7"			7'-9"
SER. HD400E	WING/PARAPET	4	2	*	3'-11"	0'-9"		33'-0"
				*DIM. A VARIES FROM 0'-3 3/4" TO 0'-5 7/8" IN INC. OF 3/4" (4 BARS)				
SER. HD401E	WING/PARAPET	4	2	*	3'-11"	0'-9"		42'-8"
				*DIM. A VARIES FROM 0'-6 1/2" TO 0'-10" IN INC. OF 7/8" (5 BARS)				
R640E	ENDWALL	6	31	2'-0"	2'-0"			4'-0"

ABUTMENT NO. 1 (REGULAR)

BAR	LOCATION	SIZE	NO REQ'D.	BENDING DIMENSION A	B	C	D	LENGTH
A440	RDWY. BRKT	4	1	30'-1"				30'-1"
A441	WINGWALL	4	33	5'-3"				5'-3"
A442	WINGWALL	4	7	17'-9"				17'-9"
A443	WINGWALL	4	7	17'-6"				17'-6"
A540	ABUT. BEAM	5	2	35'-2"				35'-2"
A541	ABUT. BEAM	5	33	3'-8"				3'-8"
A542	WING BEAM	5	2	20'-2"				20'-2"
A543	WING BEAM	5	2	19'-4"				19'-4"
A640	ENDWALL	6	12	33'-4 1/2"				33'-5"
A641	ENDWALL	6	8	3'-9"				3'-9"
A642	WINGWALL	6	33	5'-3"				5'-3"
A643	WINGWALL	6	7	18'-4"				18'-4"
A644	WINGWALL	6	7	16'-11"				16'-11"
A740	ABUT. BEAM	7	16	35'-2"				35'-2"
A741	WING BEAM	7	10	20'-2"				20'-2"
A742	WING BEAM	7	10	19'-4"				19'-4"
B640	ENDWALL	6	12	5'-0"				5'-8"
H540	RDWY. BRKT	5	30	2'-2"	0'-6"			3'-2"
H640	ENDWALL	6	31	1'-1"	4'-0"			9'-1"
H641	WINGWALL	6	33	1'-1"	3'-9"			8'-7"
HA640	ENDWALL	6	24	1'-6 1/4"	1'-10"	2'-4 1/2"		7'-1"
LS540	ABUT. BEAM	5	36	3'-8"	2'-8"			13'-7"
LS541	WING BEAM	5	31	2'-8"	2'-8"			11'-7"
VA840	ABUT. BEAM	8	18	2'-6"	2'-6"			5'-0"

ABUTMENT NO. 2 (REGULAR)

BAR	LOCATION	SIZE	NO REQ'D.	BENDING DIMENSION A	B	C	D	LENGTH
A440	RDWY. BRKT	4	1	30'-1"				30'-1"
A441	WINGWALL	4	33	5'-3"				5'-3"
A442	WINGWALL	4	7	17'-9"				17'-9"
A443	WINGWALL	4	7	17'-6"				17'-6"
A540	ABUT. BEAM	5	2	35'-2"				35'-2"
A541	ABUT. BEAM	5	33	3'-8"				3'-8"
A542	WING BEAM	5	2	20'-2"				20'-2"
A543	WING BEAM	5	2	19'-4"				19'-4"
A640	ENDWALL	6	12	33'-4 1/2"				33'-5"
A641	ENDWALL	6	8	3'-9"				3'-9"
A642	WINGWALL	6	33	5'-3"				5'-3"
A643	WINGWALL	6	7	18'-4"				18'-4"
A644	WINGWALL	6	7	16'-11"				16'-11"
A740	ABUT. BEAM	7	16	35'-2"				35'-2"
A741	WING BEAM	7	10	20'-2"				20'-2"
A742	WING BEAM	7	10	19'-4"				19'-4"
B640	ENDWALL	6	12	5'-0"				5'-8"
H540	RDWY. BRKT	5	30	2'-2"	0'-6"			3'-2"
H640	ENDWALL	6	31	1'-1"	4'-0"			9'-1"
H641	WINGWALL	6	33	1'-1"	3'-9"			8'-7"
HA640	ENDWALL	6	24	1'-6 1/4"	1'-10"	2'-4 1/2"		7'-1"
LS540	ABUT. BEAM	5	36	3'-8"	2'-8"			13'-7"
LS541	WING BEAM	5	31	2'-8"	2'-8"			11'-7"
VA840	ABUT. BEAM	8	18	2'-6"	2'-6"			5'-0"

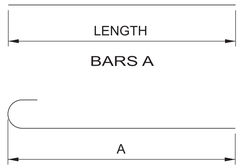
NOTE: BAR NUMBERS ARE REPEATED ON BILL OF STEEL FOR EACH SUBSTRUCTURE. THE SUPPLIER SHALL SHIP THE BARS TO THE JOB SITE WITH THE SUBSTRUCTURE DESIGNATION INCLUDED AS PART OF THE LABEL.

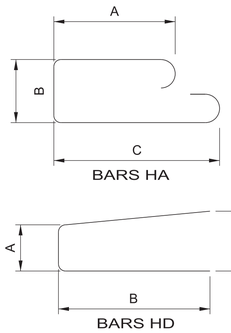
REINFORCING STEEL CODE

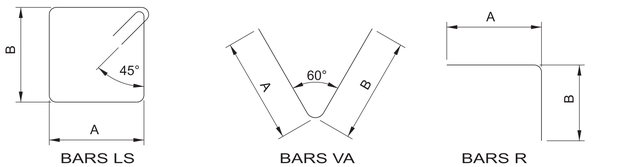
TYPE	SIZE	SERIES
A	5	06

NOTE: DIMENSIONS SHOWN ON THIS SHEET ARE OUTSIDE TO OUTSIDE OF BAR, STANDARD C.R.S.I. HOOK DETAILS SHALL APPLY, EXCEPT AS NOTED.

NOTE: THE SUFFIX "E" FOR BARS SO MARKED DENOTES EPOXY COATED REINFORCEMENT.







SEALED BY

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

BILL OF STEEL

S.R.180 OVER LOST CREEK
BRIDGE I.D. NO. 38S80510009
STATION 115+74.17
LOG MILE 4.75
HAYWOOD COUNTY
2026

U-97-996

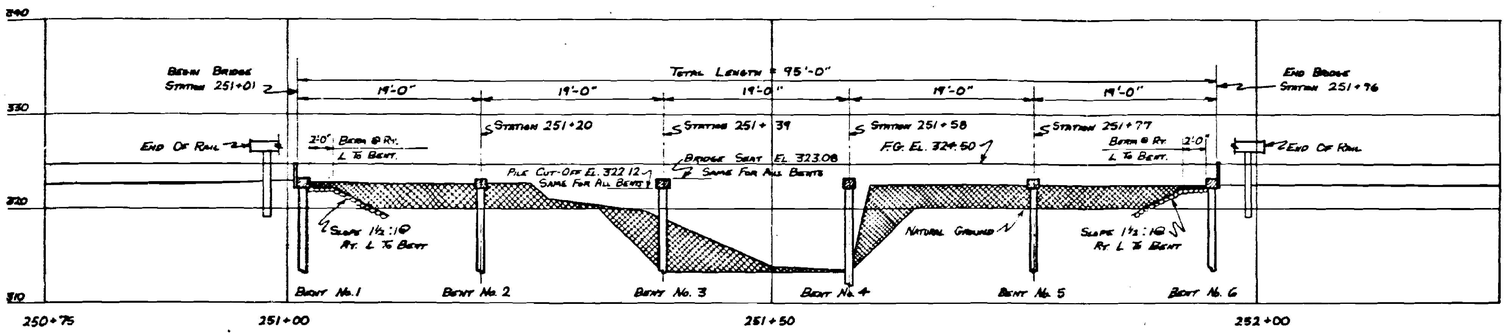
PIN NO.: 136347.07
DESIGN BY: R. Park DATE: 06/27/2025
DRAWN BY: R. Palmer DATE: 06/27/2025
SUPERVISED BY: D. McCrary DATE: 06/27/2025
CHECKED BY: A. Allsbrook DATE: 06/27/2025

Gresham Smith

6/30/2025 11:24:51 PM
C:\TMP\PWISE\D0160785\38S80510009-DES-BOS.DGN

FED. ROAD DIST. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
8	TENN.		19__		

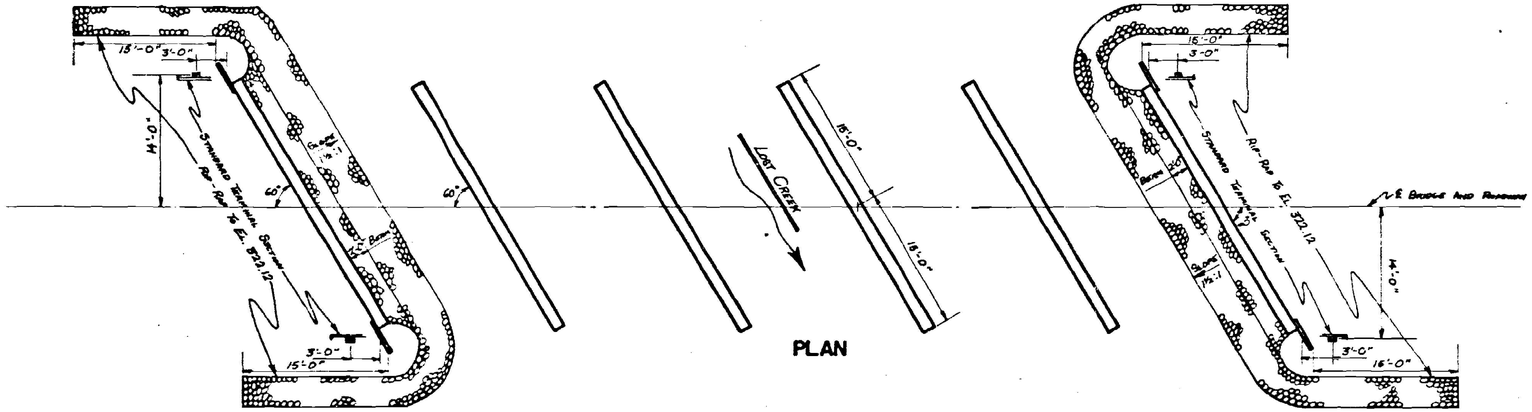
S-8051(1)



SECTION ALONG ℄ BRIDGE AND ROADWAY

Note:
Fills At The Ends Of The Bridge Shall Be In Place And Thoroughly Compacted Before Driving The End Bent Piles.

Note:
Roadway Contractor Shall Excavate Channel For A Distance Of 150 Feet Upstream And 150 Feet Downstream And Excavate Present Roadway Embankment As Shown By Cross-Hatched Area Above.



BILL OF MATERIAL FOR SUBSTRUCTURE

No	Description	Location
	Treated Timber	
6	12"x14"x 30'-0"	Caps
8	3"x 9"x 4'-0"	Bulkhead
4	3"x 2"x 8'-0"	Bulkhead
4	6"x 6"x 7'-0"	Rail Post
8	2"x 4"x 2'-6"	Batten
	Hardware	
32	3/4"x 1'-9" Drift Pins	Cap And Piles
12	7/8"x 1'-3" Bands	Bents 1 And 6
72	3/4"x 21" Lag Screws	Piles And Caps
6 Lbs.	7" Spikes	Bulkhead

ESTIMATED QUANTITIES

Item	Handrail Lin. Ft.	Precast Concrete Curb Units No.	Precast Concrete Int. Units No.	Treated Timber M.B.M.	Treated Timber Piles - Size I Lin. Ft.	Timber Test Piles Lin. Ft.	Rip-Rap Cu. Yds.
Handrail	200						
Deck - 5@19'-0" C-Spans		10	25				
Substructure				2.737			
Totals	200	10	25	2.737	960	40	45

Lump Sum: For Complete Removal Of Present 2 Span Timber Bridge 34'-0" Long.

BY R. Sykes DATE 13 June 61
BY Joe B. Smith Jr. DATE 25 July 61
BY _____ DATE _____

DESIGN DATA

See Layout Of Bridge At Station 241+37

SPECIAL NOTE - TEST PILES

Before Any Piles Are Ordered .. Timber Test Pile 40'-0" Long Shall Be Driven At Station 251+50. From The Results Obtained Treated Timber Piles Shall Be Ordered Of Such Lengths As To Provide A Minimum Bearing Of 15 Tons.

GENERAL NOTES

Specifications: Standard Road And Bridge Specifications Of The Tennessee Department Of Highways.
Loading: H-15-44
Concrete: To Be Class "A".
Reinforcing Steel: See Specifications.
Forms And Finish: See Specifications.
Caps And Piles: To Be Treated Timber.
Rip-Rap: See Specifications.

LIST OF DRAWINGS

Decks: 5@19'-0" Precast I - Spans _____ F-10-31
Bents: No. 1-6 Timber Piles With Timber Caps _____ F-10-32

38-8051-4.77

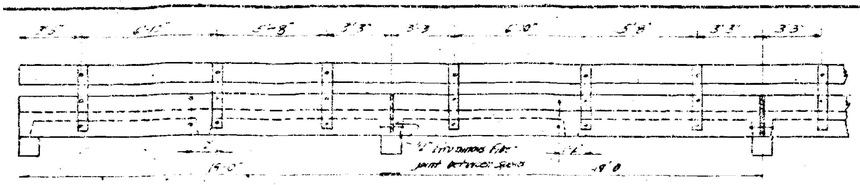
24'-0" ROADWAY

STATE OF TENNESSEE
DEPARTMENT OF HIGHWAYS AND PUBLIC WORKS
NASHVILLE

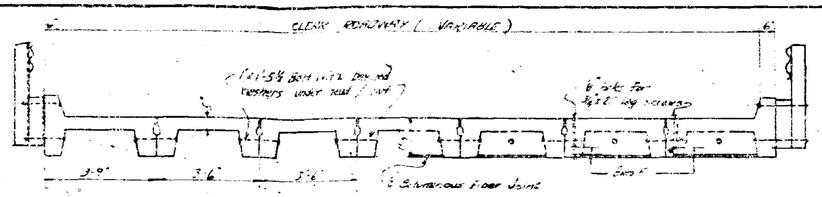
LAYOUT OF BRIDGE LOST CREEK STATION 251+01 HAYWOOD COUNTY 1961

CORRECT Fred Greene
BRIDGE ENGINEER
APPROVED _____
STATE HIGHWAY ENGINEER

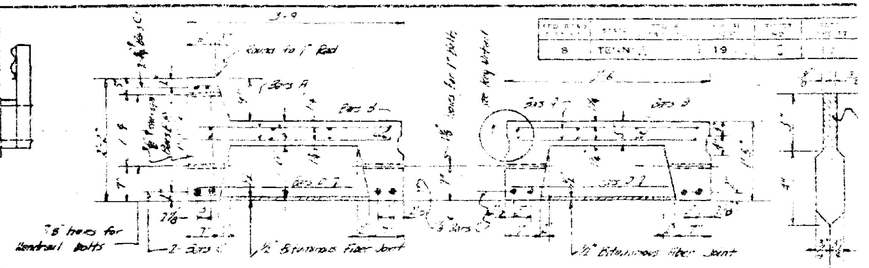
K-4-4



SIDE ELEVATION



HALF SECTION



HALF END ELEVATION

NOTE
Vertical holes for leg screws to be in opposite corners except for curb units where they shall be in the inside beam.

CURB UNIT

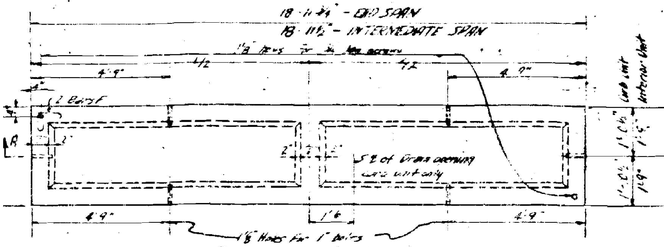
CROSS-SECTION INTERIOR UNIT

KEY DETAIL

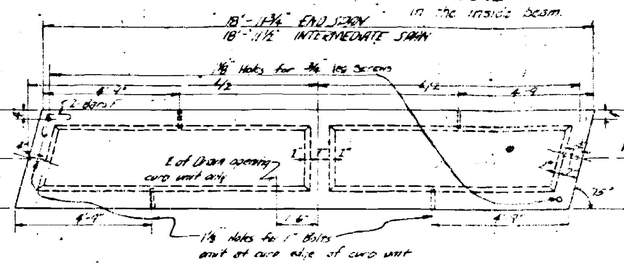
BARS F

NOTE: For Slab Jobs bend to fit.

BARS E

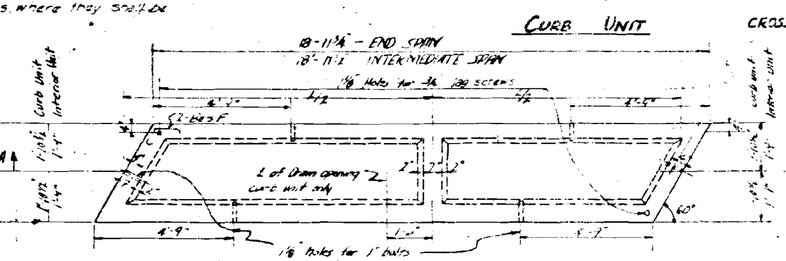


PLAN - ONE UNIT - SKEW 90°



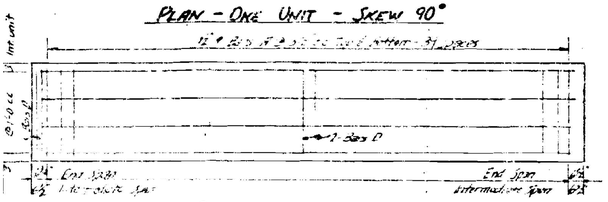
PLAN - ONE UNIT - SKEW 75° LT.

SKEW 75° Rt - opposite hand

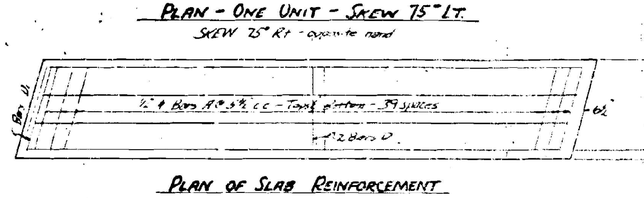


PLAN - ONE UNIT - SKEW 60° LEFT

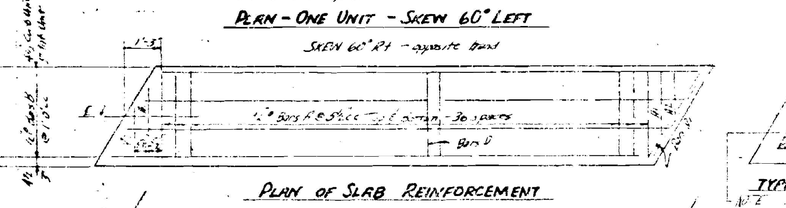
SKEW 60° Rt - opposite hand



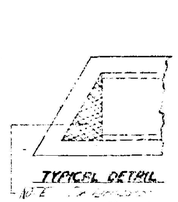
PLAN OF SLAB REINFORCEMENT



PLAN OF SLAB REINFORCEMENT



PLAN OF SLAB REINFORCEMENT



TYPICAL DETAIL

NOTE: [illegible]

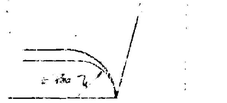
BILL OF STEEL
END SPAN

MK	SIZE	NO	LENGTH	WT	LENGTH	WT
		CURB UNIT			INTERIOR UNIT	
SKEW 90°						
A	#5	2	20'-3"	211	20'-3"	211
A1	#5	2	20'-3"	211	20'-3"	211
A2	#5	2	20'-3"	211	20'-3"	211
B	#5	2	19'-0"	198	19'-0"	198
C	#5	2	3'-6"	37	3'-6"	37
D	#5	2	3'-6"	37	3'-6"	37
E	#5	19	2'-3"	223	2'-3"	223
F	#5	2	2'-3"	12	2'-3"	12
SKEW 75° LT						
A	#5	2	20'-3"	211	20'-3"	211
A1	#5	4	20'-10"	433	20'-10"	433
A2	#5	4	21'-5"	446	21'-5"	446
B	#5	4	19'-0"	396	19'-0"	396
B1	#5	4	19'-9"	411	19'-9"	411
C	#5	4	3'-6"	73	3'-6"	73
C1	#5	4	3'-6"	73	3'-6"	73
D	#5	4	3'-6"	73	3'-6"	73
D1	#5	4	3'-6"	73	3'-6"	73
E	#5	38	2'-3"	446	2'-3"	446
F	#5	4	2'-3"	24	2'-3"	24
SKEW 60°						
A	#5	4	20'-3"	422	20'-3"	422
A1	#5	4	20'-10"	433	20'-10"	433
A2	#5	4	21'-5"	446	21'-5"	446
B	#5	4	19'-0"	396	19'-0"	396
B1	#5	4	19'-9"	411	19'-9"	411
C	#5	4	3'-6"	73	3'-6"	73
C1	#5	4	3'-6"	73	3'-6"	73
D	#5	4	3'-6"	73	3'-6"	73
D1	#5	4	3'-6"	73	3'-6"	73
E	#5	38	2'-3"	446	2'-3"	446
F	#5	4	2'-3"	24	2'-3"	24
SKEW 45°						
A	#5	4	20'-3"	422	20'-3"	422
A1	#5	4	20'-10"	433	20'-10"	433
A2	#5	4	21'-5"	446	21'-5"	446
B	#5	4	19'-0"	396	19'-0"	396
B1	#5	4	19'-9"	411	19'-9"	411
C	#5	4	3'-6"	73	3'-6"	73
C1	#5	4	3'-6"	73	3'-6"	73
D	#5	4	3'-6"	73	3'-6"	73
D1	#5	4	3'-6"	73	3'-6"	73
E	#5	38	2'-3"	446	2'-3"	446
F	#5	4	2'-3"	24	2'-3"	24

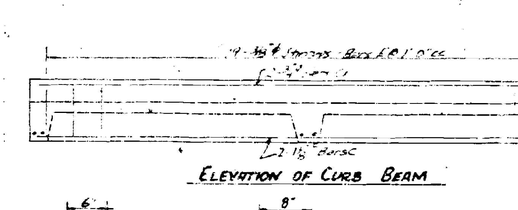
NOTE: Bill of steel for intermediate span same as above

ELEVATION OF CURB BEAM

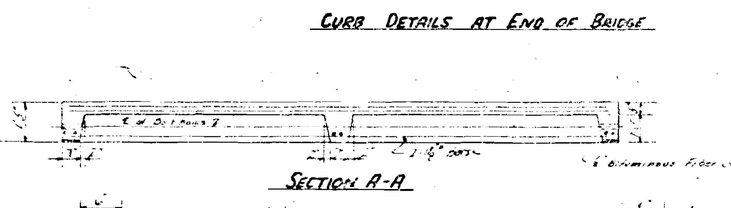
SECTION A-A



SECTION X-X

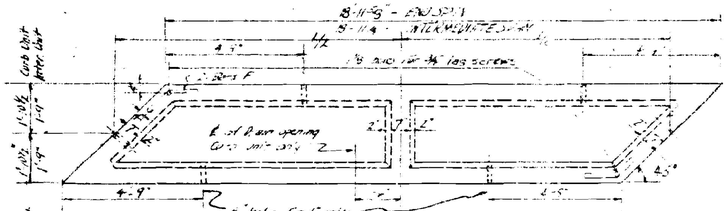


ALTERNATE PRECAST CONCRETE RAIL POST

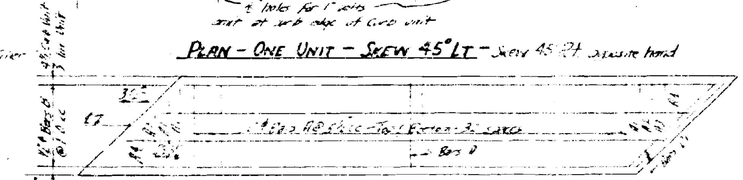


METAL HANDRAIL POST DETAILS AND ROADWAY DRAIN

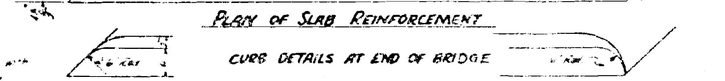
NOTE: [illegible]



PLAN - ONE UNIT - SKEW 45° LT - SKEW 45° Rt opposite hand



PLAN OF SLAB REINFORCEMENT



CURB DETAILS AT END OF BRIDGE

ESTIMATED QUANTITIES

SKEW	90°		75°		60°		45°	
ITEM	CONCRETE CLASS "A" CU. YDS.	REINFORCING STEEL LBS.	CONCRETE CLASS "A" CU. YDS.	REINFORCING STEEL LBS.	CONCRETE CLASS "A" CU. YDS.	REINFORCING STEEL LBS.	CONCRETE CLASS "A" CU. YDS.	REINFORCING STEEL LBS.
CURB UNIT	2.5	716	2.6	721	2.6	716	2.6	716
INTERIOR UNIT	2.1	668	2.1	672	2.2	684	2.2	684

GENERAL NOTES

SPECIFICATIONS: [illegible]

LOAD: [illegible]

CONCRETE: [illegible]

REINFORCING STEEL: [illegible]

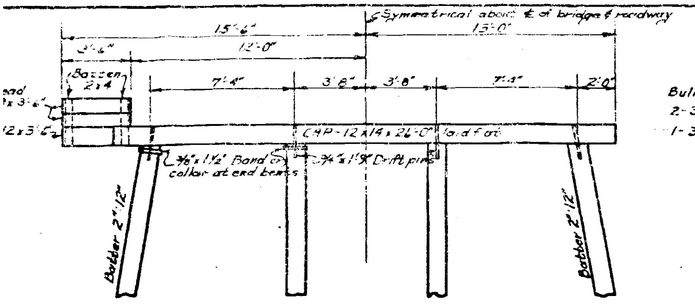
STATE OF TENNESSEE
DEPARTMENT OF HIGHWAYS AND PUBLIC WORKS
COMMISSIONER

STANDARD
PRECAST SLAB BRIDGE
SPANS 19'-0" SKEWS 90°-75°-60°-45°
1956

F-10.31

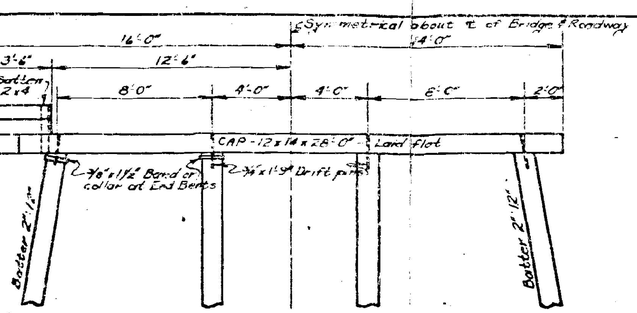
BY	DATE
[illegible]	
[illegible]	
[illegible]	

FED. AID PROJ. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
3	TENN.		19		



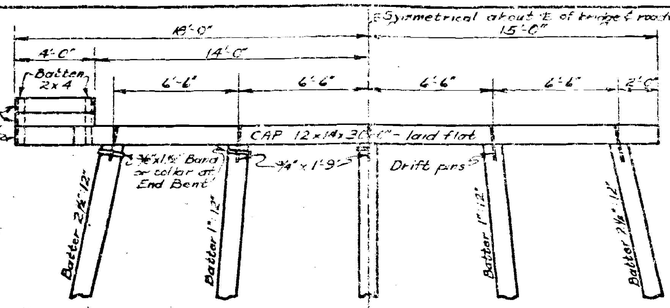
HALF END BENT — HALF INTERMEDIATE BENT

SKEW 90°



HALF END BENT — HALF INTERMEDIATE BENT

SKEW 75°

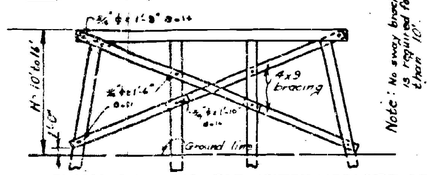


HALF END BENT — HALF INTERMEDIATE BENT

SKEW 60°

NOTE: Bulkhead to be fastened to cap with 7" spikes

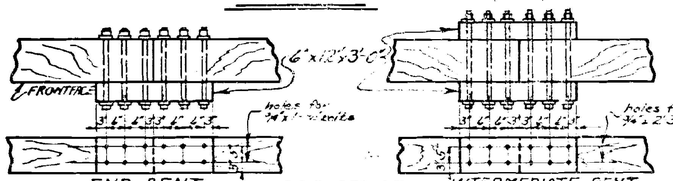
NOTE: Top of piles to be covered with 20ga galvanized iron.



NOTE: Sway bracing for bents with H = 10' ℄ over are detailed on a layout sheet for each bridge.

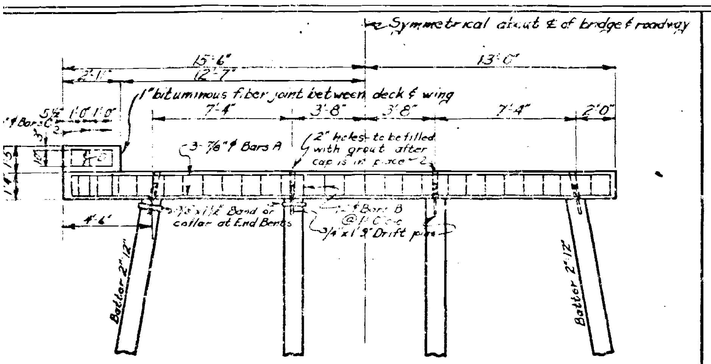
Note: No sway bracing is required for bents H=10' or less

SWAY BRACING FOR INTERMEDIATE BENT



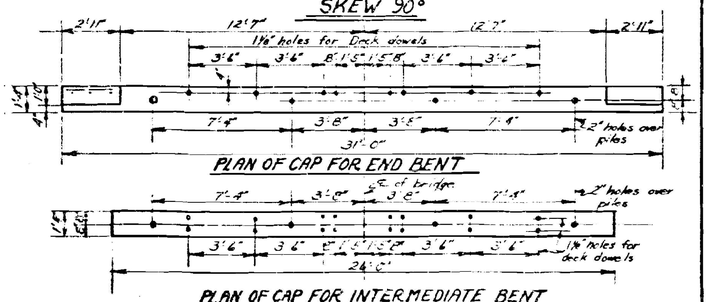
NOTE: Cap splice shall be located over pile

TIMBER PILE BENT WITH TIMBER CAP



HALF END BENT — HALF INTERMEDIATE BENT

SKEW 90°



PLAN OF CAP FOR INTERMEDIATE BENT

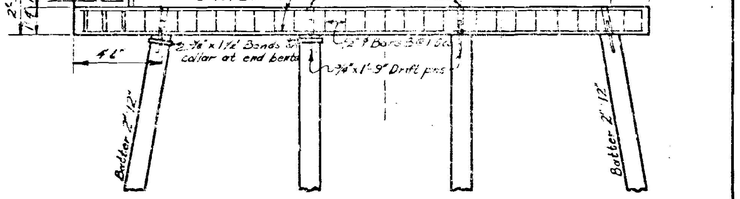
BILL OF STEEL

CAP	End Bent			Interm Bent		
Bar	Size	No.	Length	No.	Length
A	⅞"	6	30'-6"	6	25'-6"
B	1¼"	29	5'-0"	25	5'-0"
C	"	6	2'-3"	—	—
D	1¼"	2	2'-6"	—	—

ESTIMATED QUANTITIES

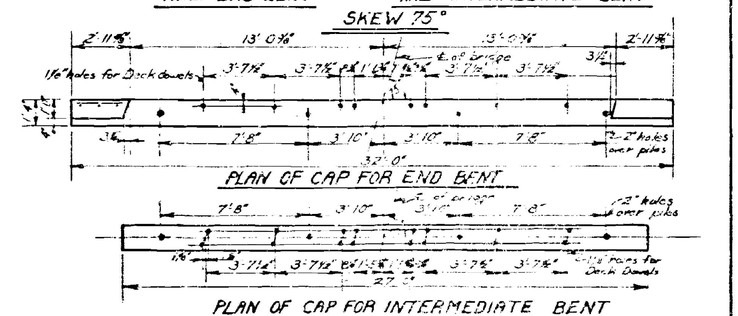
CAP FOR	End Bent	Interm Bent
Concrete Class 'A' Cu. Yds.	2.3	1.7
Reinforc. Steel Lbs.	423	336

SKEW 90°



HALF END BENT — HALF INTERMEDIATE BENT

SKEW 75°



PLAN OF CAP FOR INTERMEDIATE BENT

CAPS ARE SHOWN FOR 75° SKEW RIGHT — CAPS FOR 75° SKEW LEFT - OPPOSITE HAND

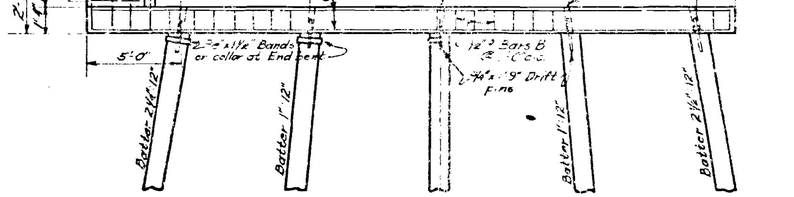
BILL OF STEEL

CAP	End Bent			Interm Bent		
Bar	Size	No.	Length	No.	Length
A	⅞"	6	31'-6"	6	26'-6"
B	1¼"	29	5'-0"	25	5'-0"
C	"	6	2'-3"	—	—
D	1¼"	4	2'-6"	—	—

ESTIMATED QUANTITIES

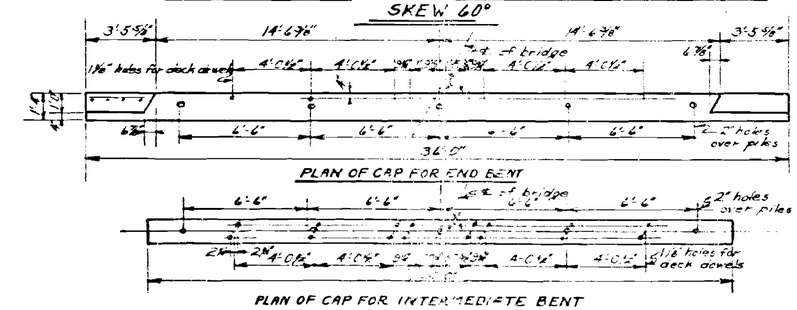
CAP FOR	End Bent	Interm Bent
Concrete Class 'A' Cu. Yds.	2.5	1.8
Reinforc. Steel Lbs.	452	336

SKEW 75°



HALF END BENT — HALF INTERMEDIATE BENT

SKEW 60°



PLAN OF CAP FOR INTERMEDIATE BENT

CAPS ARE SHOWN FOR 60° SKEW RIGHT — CAPS FOR 60° SKEW LEFT OPPOSITE HAND

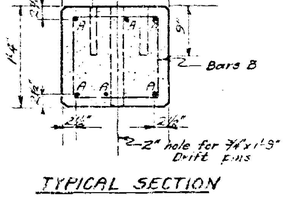
BILL OF STEEL

CAP	End Bent			Interm Bent		
Bar	Size	No.	Length	No.	Length
A	⅞"	6	35'-6"	6	29'-6"
B	1¼"	34	5'-0"	28	5'-0"
C	"	6	2'-3"	—	—
D	1¼"	4	2'-6"	—	—

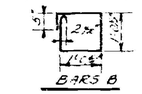
ESTIMATED QUANTITIES

CAP FOR	End Bent	Interm Bent
Concrete Class 'A' Cu. Yds.	2.7	2.0
Reinforc. Steel Lbs.	542	455

SKEW 60°



TYPICAL SECTION THRU CAP (ALL SKEWS)



TIMBER PILE BENT WITH PRECAST CONCRETE CAP

GENERAL NOTES

Specifications STANDARD ROAD & BRIDGE SPECIFICATIONS OF THE TENNESSEE DEPARTMENT OF HIGHWAYS & PUBLIC WORKS
LOADING — H 5-44
CONCRETE in caps to be class 'A'
REINFORCING STEEL see specifications
TIMBER CAPS to be treated

NOTE: Top of timber piles to be covered with 20ga galvanized iron

STATE OF TENNESSEE
DEPARTMENT OF HIGHWAYS AND PUBLIC WORKS

STANDARD
TIMBER PILE BENTS
WITH
TIMBER CAP & CONCRETE CAP
FOR
PRECAST CONCRETE DECK
24'-0" ROADWAY
SKEW 90°-75°-60°
1956

CORRECT Fred Groce
RECOMMENDED Gardner & McFarland

F-10-32
F-10-32

ED BY ... DATE ...
BY R. Sutton DATE ...
BY J. A. Kimzey DATE 12-20-56
D BY ... DATE ...

TYPE	YEAR	PROJECT NO.	SHEET NO.
PS&E	2026	38S180-S3-007	S-1
		38S180-M3-007	
		38S180-S3-008	

SWPPP INDEX OF SHEETS

DESCRIPTION	SHT.
1. SWPPP REQUIREMENTS (5.0.)	1
2. SITE DESCRIPTION (5.5.1.)	1
3. ORDER OF CONSTRUCTION ACTIVITIES (5.5.1.a)	1
4. STREAM, OUTFALL, WETLAND, TMDL AND ECOLOGY INFORMATION	1-2
5. EROSION PREVENTION AND SEDIMENT CONTROL (EPSC) MEASURES (5.5.3.)	2-3
6. FLOCCULANTS (3.5.3.1.b)	3
7. UTILITY RELOCATION	3-4
8. MAINTENANCE AND INSPECTION	4
9. SITE ASSESSMENTS (5.5.3.8.)	4
10. STORMWATER MANAGEMENT (5.5.3.11.h)	4-5
11. NON-STORMWATER DISCHARGES (5.5.3.12.)	5
12. SPILL PREVENTION, MANAGEMENT AND NOTIFICATION (5.5.3.7.c, 6.1)	5-6
13. RECORD-KEEPING	6-7
14. SITE WIDE/PRIMARY PERMITTEE CERTIFICATION (8.7.5.)	7
15. SECONDARY PERMITTEE (OPERATOR) CERTIFICATION (8.7.6.)	7
16. ENVIRONMENTAL PERMITS (1.5.2.)	7
17. OUTFALL TABLE (5.5.1.c, 6.4.1.e, 6.4.1.f)	8

NOTE: CITATIONS IN PARENTHESIS INDICATE SECTIONS OF THE CURRENT CGP.

1. SWPPP REQUIREMENTS (5.0.)

1.1. HAS THE SWPPP TEMPLATE BEEN PREPARED BY AN INDIVIDUAL THAT HAS THE FOLLOWING LICENSING AND/OR CERTIFICATIONS (5.2)?

☒ YES (CHECK ALL THAT APPLY BELOW) OR ☐ NO

- ☐ CERTIFIED PROFESSIONAL IN EROSION AND SEDIMENT CONTROL (CPESC)
- ☒ A TN LICENSED PROFESSIONAL ENGINEER OR LANDSCAPE ARCHITECT
- ☐ HAS SUCCESSFULLY COMPLETED TDEC LEVEL II COURSE

1.2. DO THE EPSC PLANS INVOLVE STRUCTURAL DESIGN, HYDRAULIC, HYDROLOGIC OR OTHER ENGINEERING CALCULATIONS FOR EPSC STRUCTURAL MEASURES (E.G. SEDIMENT BASINS) (5.2.)? YES ☐ NO ☒

IF YES, HAVE THE EPSC PLANS BEEN PREPARED, STAMPED AND CERTIFIED BY A TN LICENSED PROFESSIONAL ENGINEER OR LANDSCAPE ARCHITECT? ☐ YES ☐ NO

1.3. DO THE PROJECT STORMWATER OUTFALLS DISCHARGE INTO THE FOLLOWING (6.4.1.)? ☐ YES (CHECK ALL THAT APPLY BELOW) ☒ NO

- ☐ WATERS WITH UNAVAILABLE PARAMETERS (303d FOR SILTATION)
- ☐ EXCEPTIONAL TENNESSEE WATERS (ETW)

2. SITE DESCRIPTION (5.5.1.)

2.1. PROJECT LIMITS (5.5.1.f): REFER TO TITLE SHEET

2.2. TOTAL PROJECT AREA (5.5.1.b): 4.30 ACRES

2.3. TOTAL AREA TO BE DISTURBED (5.5.1.b): 3.65 ACRES

2.4. PROJECT DESCRIPTION (5.5.1.a):

TITLE: SR 180 Emergency Bridge Replacements
COUNTY: Haywood
PIN: 136185.06 and 136347.07

2.5. SITE MAP(S) (3.2.2.): REFER TO TITLE SHEET

2.6. DESCRIPTION OF EXISTING SITE TOPOGRAPHY (5.5.1.c): REFER TO EXISTING CONTOURS SHEET(S) 9-10, DRAINAGE MAP SHEET(S) 7, USGS QUAD MAP, AND THE OUTFALL TABLE IN SECTION 4.2.

2.7. MAJOR SOIL DISTURBING ACTIVITIES (5.5.1.a) (CHECK ALL THAT APPLY):

- ☒ CLEARING AND GRUBBING
- ☒ EXCAVATION
- ☒ CUTTING AND FILLING
- ☒ FINAL GRADING AND SHAPING
- ☐ UTILITIES
- ☐ OTHER (DESCRIBE): _____

2.8. NO MORE THAN 50 ACRES OF ACTIVE SOIL DISTURBANCE IS ALLOWED AT ANY TIME DURING THE CONSTRUCTION OF THE PROJECT.

2.9. ARE THERE ANY SEASONAL LIMITATIONS ON WORK? ☐ YES ☒ NO

IF YES, LIST THE CORRESPONDING PLAN SHEET: _____

2.10. WAS ROW FINALIZED PRIOR TO FEBRUARY 1, 2010 (4.1.2.2)?

☐ YES _____ (DATE) ☒ NO

IF ROW WAS FINALIZED PRIOR TO FEBRUARY 1, 2010, THIS PROJECT IS CONSIDERED A PRE-APPROVED SITE (4.1.2.2)

2.11. SOIL PROPERTIES (5.5.1.d, 5.5.3.3.d, 5.5.3.6.b).

SOIL PROPERTIES FOR THE PRIMARY SOILS ARE LISTED IN THE TABLE BELOW.

SOIL PROPERTIES			
PRIMARY SOIL NAME	HSG	% OF SITE	ERODIBILITY (k value)
CONVENT SILT LOAM	C	100	

2.12. IS ACID PRODUCING ROCK (APR) (i.e. PYRITE) LOCATED WITHIN THE PROJECT LIMITS? ☐ YES ☒ NO

2.12.1. IF YES TO SECTION 2.13, HAVE APR LOCATIONS BEEN IDENTIFIED WITHIN THE CONSTRUCTION PLANS AND/OR THE GEOTECHNICAL REPORT? ☐ YES ☐ NO; AND

2.12.2. IF YES TO SECTION 2.12.1, HAS A SPECIAL HANDLING PLAN AND/OR ADAPTIVE MANAGEMENT PLAN (AMP) BEEN PREPARED FOR THE PROJECT? ☐YES ☐ NO ☒ N/A (TDOT SP107L WILL BE APPLIED.)

2.13. PROJECT RUNOFF COEFFICIENTS AND AREA PERCENTAGES (5.5.3.6.a).

RUNOFF COEFFICIENTS FOR EXISTING CONDITIONS				
AREA TYPE	AREA(AC)	PERCENTAGE OF TOTAL AREA (%)	RUNOFF CN	C FACTOR
IMPERVIOUS	1.09	25.3	98	
PERVIOUS	3.21	74.7	82	
WEIGHTED CURVE NUMBER OR C-FACTOR =			86.1	

RUNOFF COEFFICIENTS FOR POST-CONSTRUCTION CONDITIONS				
AREA TYPE	AREA(AC)	PERCENTAGE OF TOTAL AREA (%)	RUNOFF CN	C FACTOR
IMPERVIOUS	1.26	29.3	98	
PERVIOUS	3.04	70.7	82	
WEIGHTED CURVE NUMBER OR C-FACTOR =			86.7	

3. ORDER OF CONSTRUCTION ACTIVITIES (5.5.1.a)

CONSTRUCTION SHALL BE SEQUENCED AND STAGED TO: MINIMIZE THE EXPOSURE TIME OF GRADED OR DENUDED SOIL AREAS, PRESERVE TOPSOIL, AND MINIMIZE SOIL COMPACTION. NO WORK SHALL BE STARTED UNTIL THE CONTRACTOR'S PLAN FOR THE STAGING OF THEIR OPERATIONS, INCLUDING THE PLAN FOR STAGING OF TEMPORARY AND PERMANENT EPSC MEASURES, HAS BEEN ACCEPTED BY THE ENGINEER. THE CONTRACTOR'S EPSC PLAN SHALL INCORPORATE AND SUPPLEMENT, AS ACCEPTABLE, THE ORDER OF CONSTRUCTION ACTIVITIES AND THE BASIC EPSC DEVICES DEPICTED ON THE EPSC PLAN CONTAINED WITHIN THE APPROVED SWPPP.

3.1. SPECIAL SEQUENCING REQUIREMENTS (SEE SHEETS 9)

3.2. INSTALL STABILIZED CONSTRUCTION EXITS.

3.3. INSTALL PERIMETER PROTECTION WHERE RUNOFF SHEET FLOWS FROM THE SITE.

3.4. INSTALL INITIAL EPSC MEASURES BEFORE CLEARING, GRUBBING, EXCAVATION, GRADING, CULVERT OR BRIDGE CONSTRUCTION, CUTTING, FILLING, OR ANY OTHER EARTHWORK OCCURS, EXCEPT AS SUCH WORK MAY BE NECESSARY TO INSTALL EPSC MEASURES.

3.5. PERFORM CLEARING AND GRUBBING (NOT MORE THAN TWO WEEKS PRIOR TO GRADING OR EARTH-MOVING. REFER TO THE STABILIZATION PRACTICES BELOW.).

3.6. REMOVE AND STORE TOPSOIL.

3.7. STABILIZE DISTURBED AREAS WITHIN 2 WEEKS OF COMPLETING ANY STAGE AND/OR PHASE OF ACTIVITY (STEEP SLOPES SHALL BE STABILIZED WITHIN 1 WEEK AFTER CONSTRUCTION ACTIVITY HAS TEMPORARY OR PERMANENTLY CEASED).

3.8. INSTALL UTILITIES, STORM SEWERS, CULVERTS AND BRIDGE STRUCTURES.

3.9. INSTALL INLET AND CULVERT PROTECTION ONCE STRUCTURES ARE IN PLACE AND CAPABLE OF INTERCEPTING FLOW.

3.10. PERFORM FINAL GRADING AND INSTALL BASE STONE.

3.11. COMPLETE FINAL PAVING AND SEALING OF CONCRETE.

3.12. INSTALL TRAFFIC CONTROL AND PROTECTION DEVICES.

3.13. COMPLETE PERMANENT STABILIZATION (TOPSOIL, SEEDING, MULCH, EROSION CONTROL BLANKET, SOD, ETC.)

3.14. REMOVE TEMPORARY EROSION CONTROLS AND ACCUMULATED SEDIMENT FROM AREAS THAT HAVE ESTABLISHED AT LEAST 70 PERCENT UNIFORM PERMANENT VEGETATIVE COVER.

3.15. RE-STABILIZE AREAS DISTURBED BY REMOVAL ACTIVITIES.

4. STREAM, OUTFALL, WETLAND, TMDL AND ECOLOGY INFORMATION

4.1. STREAM INFORMATION (5.5.1.h, 5.5.1.i)

4.1.1. WILL CONSTRUCTION AND/OR EROSION PREVENTION AND SEDIMENT CONTROLS IMPACT ANY STREAMS WITHIN THE PROJECT LIMITS? ☒ YES ☐ NO

IF YES, THE IMPACT(S) HAVE BEEN INCLUDED IN THE TOTAL PROJECT IMPACTS AND HAVE BEEN INCLUDED IN THE WATER QUALITY PERMITS.

4.1.2. HAVE ANY OF THE RECEIVING STATE WATERS LESS THAN OR EQUAL TO 1 FLOW MILE DOWN GRADIENT OF THE PROJECT LIMITS BEEN CLASSIFIED BY TDEC AS FOLLOWS (CHECK ALL THAT APPLY):

- ☒ 303d WITH UNAVAILABLE PARAMETERS FOR SILTATION
- ☐ EXCEPTIONAL TENNESSEE WATERS (ETW)

4.1.3. RECEIVING WATERS OF THE STATE (5.5.1.h, 5.5.1.j, 5.5.1.k).

RECEIVING WATERS OF THE STATE INFORMATION					
TDOT STATE WATER LABEL FROM EBR	NAME OF RECEIVING STATE WATER	303d WITH UNAVAILABLE PARAMETERS FOR SILTATION (YES OR NO)	ETW (YES OR NO)	LOCATED WITHIN PROJECT LIMITS (YES OR NO)	LOCATED WITHIN ≤ 1 FLOW MILE DOWN GRADIENT OF PROJECT LIMITS (YES OR NO)
STR-1	LOST CREEK	NO	NO	YES	YES
STR-2	LOST CREEK	YES	NO	YES	YES
STR-1	LOST CREEK	YES	NO	YES	YES
STR-2	LOST CREEK	NO	NO	NO	YES
STR-3	LOST CREEK	NO	NO	NO	YES

4.1.4. RECEIVING WATERS OF THE US (NON STATE WATERS) (4.1.2). LIST ANY FEATURE THAT IS IDENTIFIED AS A WET WEATHER CONVEYANCE (TDEC) AND IDENTIFIED AS WATERS OF THE US BY THE ARMY CORPS OF ENGINEERS.

SEALED BY

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

STORM WATER POLLUTION PREVENTION PLAN

12/9/2025 2:28:00 PM
C:\TMP\PWISE\D0160785\38S180-SHT-SWPPP.DGN

TYPE	YEAR	PROJECT NO.	SHEET NO.
PS&E	2026	38S180-S3-007	S-2
		38S180-M3-007	
		38S180-S3-008	

WET WEATHER CONVEYANCES THAT ARE WATERS OF THE US		
TDOT STATE WATER LABEL FROM EBR	LOCATED WITHIN PROJECT LIMITS (YES OR NO)	LOCATED WITHIN ≤ 1 FLOW MILE DOWN GRADIENT OF PROJECT LIMITS (YES OR NO)

4.1.5. ARE THERE ANY WATER QUALITY RIPARIAN BUFFER ZONES REQUIRED FOR WATERS OF THE STATE? (5.5.1.l, 6.4.2.)

☐ YES ☒ NO

BUFFER ZONE REQUIREMENTS ARE NOT REQUIRED FOR PRE-APPROVED SITES (4.1.2.2.)

IF YES, THEY HAVE BEEN INCLUDED ON PLAN SHEET(S) _____.

IF YES, CHECK THE APPROPRIATE BOX BELOW FOR SIZE OF BUFFER.

☐ 60-FEET FOR WATERS WITH UNAVAILABLE PARAMETERS AND EXCEPTIONAL TENNESSEE WATERS (ETW) (AVERAGE WIDTH PER SIDE WITH A MINIMUM OF 30-FEET).

A 60 FOOT NATURAL WATER QUALITY RIPARIAN BUFFER ZONE ADJACENT TO AND ON BOTH SIDES OF THE RECEIVING STATE STREAM WITH THIS DESIGNATION SHALL BE PRESERVED TO THE MAXIMUM EXTENT PRACTICABLE DURING CONSTRUCTION ACTIVITIES AT THE SITE. THE 60 FOOT CRITERION FOR THE WIDTH OF THE BUFFER ZONE CAN BE ESTABLISHED ON AN AVERAGE WIDTH BASIS AT A PROJECT, AS LONG AS THE MINIMUM WIDTH OF THE BUFFER ZONE IS MORE THAN 30 FEET AT ANY MEASURED LOCATION. IF THE CONSTRUCTION SITE ENCOMPASSES BOTH SIDES OF A STREAM, BUFFER AVERAGING CAN BE APPLIED TO BOTH SIDES, BUT MUST BE APPLIED INDEPENDENTLY.

☐ 30-FEET FOR ALL OTHER STREAMS (AVERAGE WIDTH PER SIDE WITH A MINIMUM OF 15-FEET).

A 30 FOOT NATURAL WATER QUALITY RIPARIAN BUFFER ZONE ADJACENT TO AND ON BOTH SIDES OF THE RECEIVING STATE STREAM SHALL BE PRESERVED TO THE MAXIMUM EXTENT PRACTICABLE DURING CONSTRUCTION ACTIVITIES AT THE SITE. THE 30 FOOT CRITERION FOR THE WIDTH OF THE BUFFER ZONE CAN BE ESTABLISHED ON AN AVERAGE WIDTH BASIS AT A PROJECT, AS LONG AS THE MINIMUM WIDTH OF THE BUFFER ZONE IS MORE THAN 15 FEET AT ANY MEASURED LOCATION. IF THE CONSTRUCTION SITE ENCOMPASSES BOTH SIDES OF A STREAM, BUFFER AVERAGING CAN BE APPLIED TO BOTH SIDES, BUT MUST BE APPLIED INDEPENDENTLY.

☐ 15-FEET FOR ANY WET WEATHER CONVEYANCES IDENTIFIED AS WATERS OF THE US BY THE US ARMY CORPS OF ENGINEERS.

4.1.6. ARE THERE ANY WATER QUALITY RIPARIAN BUFFER ZONES NOT REQUIRED FOR STATE WATERS DUE TO A TDEC ARAP? (1.5.2.)

☒ YES ☐ NO

4.1.7. ARE THERE WATER QUALITY RIPARIAN BUFFER ZONE EXEMPTIONS? (4.1.2.1.) ☐ YES ☒ NO

IF YES, EXISTING CONDITIONS DESCRIPTION:_____

4.1.8. EVERY ATTEMPT SHOULD BE MADE FOR CONSTRUCTION ACTIVITIES TO NOT TAKE PLACE WITHIN THE WATER QUALITY RIPARIAN BUFFER ZONE AND FOR EXISTING FORESTED AREAS TO BE PRESERVED. (4.1.2., 6.4.2.)

4.1.9. BECAUSE OF HEAVY SEDIMENT LOAD ASSOCIATED WITH CONSTRUCTION SITE RUNOFF, WATER QUALITY RIPARIAN BUFFER ZONES ARE NOT SEDIMENT CONTROL MEASURES AND SHOULD NOT BE RELIED UPON AS PRIMARY SEDIMENT CONTROL MEASURES. THE WATER QUALITY RIPARIAN BUFFER ZONE SHALL BE ESTABLISHED BETWEEN THE TOP OF THE STREAM BANK AND THE DISTURBED CONSTRUCTION AREA.

4.1.10. WHERE IT IS NOT PRACTICABLE TO MAINTAIN A FULL WATER QUALITY RIPARIAN BUFFER, BEST MANAGEMENT PRACTICES (BMPS) PROVIDING EQUIVALENT PROTECTION AS THE NATURAL RIPARIAN ZONE MUST BE USED. A JUSTIFICATION FOR USE AND DESIGN EQUIVALENCY SHALL BE DOCUMENTED WITHIN THE SWPPP. THE ENVIRONMENTAL AND ROADWAY DESIGN DIVISIONS SHALL REVIEW AND APPROVE THIS REVISION OF THE SWPPP BEFORE DISTURBANCE OF THE SITE PROCEEDS, UNLESS PREVIOUSLY EXEMPT IN THE NPDES CGP. WHERE ISSUED, ARAP/401 REQUIREMENTS WILL PREVAIL IF IN CONFLICT WITH THESE BUFFER ZONE REQUIREMENTS.

4.2. OUTFALL INFORMATION

4.2.1. OUTFALL TABLE (5.5.1.c). SEE SWPPP SHEET S-8 FOR OUTFALL INFORMATION.

4.2.2. HAVE ALL OUTFALLS BEEN LABELED ON THE EPSC PLAN SHEETS (5.5.1.f)? ☒ YES ☐ NO

4.2.3. HAVE ALL OUTFALLS BEEN LABELED ON A USGS TOPOGRAPHIC MAP INCLUDED IN THE "DOCUMENTATION AND PERMITS" BINDER (3.2.2.)? ☐YES ☒ NO

4.2.4. WHERE POSSIBLE, HAS NON-PROJECT RUN-ON BEEN DIVERTED AROUND OR THROUGH THE PROJECT TO ELIMINATE CONTACT WITH DISTURBED AREAS OF THE PROJECT AND SEPARATE IT FROM PROJECT RUN-OFF THEREBY REDUCING THE DRAINAGE AREA OF TO THE OUTFALLS IN THIS AREA?

☐ YES ☐ NO ☒ N/A

4.2.5. ARE EQUIVALENT MEASURES BEING SUBSTITUTED FOR A SEDIMENT BASIN(S) OR SEDIMENT TRAP(S)? (5.5.3.5.)

☐ YES ☐ NO ☒ N/A

4.2.6. A SEDIMENT BASIN, OR EQUIVALENT MEASURE(S) WILL BE PROVIDED FOR ANY OUTFALL IN A DRAINAGE AREA:

OF TEN ACRES OR MORE FOR AN OUTFALL(S) THAT DOES NOT DISCHARGE TO A STATE STREAM WITH UNAVAILABLE PARAMETERS OR EXCEPTIONAL TENNESSEE WATERS (ETW). A TEMPORARY (OR PERMANENT) SEDIMENT BASIN OR EQUIVALENT CONTROL MEASURES THAT PROVIDES STORAGE FOR A CALCULATED VOLUME OF RUNOFF FROM A MINIMUM 2-YEAR/ 24-HOUR STORM EVENT, SHALL BE PROVIDED UNTIL PERMANENT STABILIZATION OF THE SITE. (5.5.3.5)

OR

OF FIVE ACRES OR MORE FOR AN OUTFALL(S) THAT DISCHARGES TO A STATE STREAM WITH UNAVAILABLE PARAMETERS OR EXCEPTIONAL TENNESSEE WATERS (ETW). A TEMPORARY (OR PERMANENT) SEDIMENT BASIN THAT PROVIDES STORAGE FOR A CALCULATED VOLUME OF RUNOFF FROM A 5-YEAR/ 24-HOUR STORM EVENT AND RUNOFF FROM EACH ACRE DRAINED, OR EQUIVALENT CONTROL MEASURES, SHALL BE PROVIDED UNTIL PERMANENT STABILIZATION OF THE SITE. (6.4.1.e).

ALL CALCULATIONS RELATED TO DRAINAGE AREAS, RUNOFF COEFFICIENTS, BASIN VOLUMES AND EQUIVALENT CONTROL MEASURES MUST BE PROVIDED IN THE SWPPP (5.5.3.5.)

4.2.7. A SEDIMENT TRAP, OR EQUIVALENT MEASURE(S) WILL BE PROVIDED FOR ANY OUTFALL IN A DRAINAGE AREA:

OF 3.5 - 4.9 ACRES FOR AN OUTFALL(S) THAT DISCHARGES TO A STATE STREAM WITH UNAVAILABLE PARAMETERS (303d SILTATION) OR EXCEPTIONAL TENNESSEE WATERS (ETW). A SEDIMENT TRAP THAT PROVIDES STORAGE FOR A CALCULATED VOLUME OF RUNOFF FROM A 5-YEAR/24-HOUR STORM EVENT AND RUNOFF FROM EACH ACRE DRAINED, OR EQUIVALENT CONTROL MEASURES, SHALL BE PROVIDED UNTIL PERMANENT STABILIZATION OF THE SITE. (6.4.1.f).

IN BOTH INSTANCES, THE ENVIRONMENTAL AND ROADWAY DESIGN DIVISIONS MAY BE CONTACTED TO REVIEW AND CONCUR WITH ANY REVISION OF THE SWPPP BEFORE DISTURBANCE OF THE OUTFALL PROCEEDS.

4.2.8. SEDIMENT STRUCTURES TREATING DRAINAGE AREAS IN EXCESS OF 25 ACRES REQUIRE A SITE-SPECIFIC DESIGN THAT ACCURATELY DEFINES THE SITE HYDROLOGY, SITE-SPECIFIC SEDIMENT LOADING, HYDRAULICS OF THE SITE, AND ADHERES TO ALL TENNESSEE EROSION AND SEDIMENT CONTROL HANDBOOK DESIGN RECOMMENDATIONS FOR SEDIMENT BASINS. (5.5.3.5.)

4.3. WETLAND INFORMATION

WILL CONSTRUCTION AND/OR EROSION AND SEDIMENT CONTROLS IMPACT ANY WETLANDS? ☒ YES ☐ NO

IF YES, THE STRUCTURAL EPSC MEASURES HAVE BEEN INCLUDED IN THE TOTAL PROJECT IMPACTS AND IN THE WATER QUALITY PERMITS.

WETLAND INFORMATION				
TDOT WETLAND LABEL	FROM STATION LT OR RT	TO STATION LT OR RT	TEMPORARY IMPACTS (AC)	PERMANENT IMPACTS (AC)
WTL-1	STA 117+13 LT	STA 122+00 LT	0.14	0.07

4.4. TOTAL MAXIMUM DAILY LOADS (TMDL) INFORMATION (1.3.j)

4.4.1. IS THIS PROJECT LOCATED IN A HUC-8 WATERSHED THAT MAINTAINS AN EPA APPROVED TMDL FOR SILTATION AND HABITAT ALTERATION?

☐YES ☒ NO

4.4.2. IF YES, IS THIS PROJECT LOCATED WITHIN A HUC-12 SUBWATERSHED WITH A WASTE LOAD ALLOCATION (WLA)?

☒ YES ☐ NO

4.4.3. IF YES, DOES THE PROJECT HAVE A DIRECT DISCHARGE TO A 303(d) LISTED STREAM FOR SILTATION?

☒ YES ☐ NO

IF YES, SWPPP INCORPORATES MEASURES OR CONTROLS CONSISTENT WITH THE ASSUMPTIONS AND REQUIREMENTS OF THE TMDL.

4.5. ECOLOGY INFORMATION (3.5.5.e)

DOES THE TDOT ENVIRONMENTAL BOUNDARIES REPORT SPECIFY SPECIAL NOTES TO BE ADDED TO THE PLAN SHEETS?

☐ YES ☒ NO

IF YES, THEY HAVE BEEN INCLUDED ON PLAN SHEET(S) _____.

4.6. ENVIRONMENTAL COMMITMENTS

ARE THERE ANY NOTES ON THE ENVIRONMENTAL COMMITMENT SHEET?

☒ YES ☐ NO

IF YES, THEY HAVE BEEN INCLUDED ON PLAN SHEET(S) 1B.

5. EROSION PREVENTION AND SEDIMENT CONTROL (EPSC) MEASURES (5.5.3.)

5.1. EPSC MEASURES MUST BE DESIGNED, INSTALLED AND MAINTAINED TO CONTROL STORMWATER VOLUME AND VELOCITY WITHIN THE SITE TO MINIMIZE EROSION (4.1.1).

5.2. EPSC MEASURES MUST CONTROL STORMWATER DISCHARGES, INCLUDING BOTH PEAK FLOWS AND TOTAL STORMWATER VOLUME, TO MINIMIZE EROSION AT OUTLETS, STREAM CHANNELS, AND STREAM BANKS. (4.1.1)

5.3. HAVE THE CONTROL MEASURES BEEN DESIGNED PER THE SIZE AND SLOPE OF THE DISTURBED DRAINAGE AREA (5.5.3.5.)?

☒YES ☐ NO

5.4. THE CONTROL MEASURES HAVE, AT A MINIMUM, BEEN DESIGNED FOR THE 5-YEAR, 24 HOUR STORM EVENT (5.5.3.5., 6.4.1.b).

5.5. ARE THE LIMITS OF DISTURBANCE CLEARLY MARKED ON THE EPSC PLANS (5.5.1.f)? ☒ YES ☐ NO

5.6. AREAS TO BE UNDISTURBED SHALL BE CLEARLY MARKED IN THE FIELD BEFORE CONSTRUCTION ACTIVITIES BEGIN.

5.7. UNLESS OTHERWISE NOTED IN THE PLANS, THE CONTRACTOR SHALL NOT CLEAR/DISTURB ANY AREA BEYOND 15 FEET FROM SLOPE LINES OR ROW/ EASEMENT LINE, WHICHEVER IS LESSER.

5.8. CLEARING, GRUBBING, AND OTHER DISTURBANCE TO RIPARIAN VEGETATION SHALL BE LIMITED TO THE MINIMUM NECESSARY FOR SLOPE CONSTRUCTION AND EQUIPMENT OPERATIONS. EXISTING VEGETATION, INCLUDING STREAM AND WETLAND BUFFERS (UNLESS PERMITTED), SHOULD BE PRESERVED TO THE MAXIMUM EXTENT POSSIBLE. UNNECESSARY VEGETATION REMOVAL IS PROHIBITED.

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DEPARTMENT OF TRANSPORTATION

STORM WATER POLLUTION PREVENTION PLAN

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TYPE	YEAR	PROJECT NO.	SHEET NO.
PS&E	2026	38S180-S3-007	S-3
		38S180-M3-007	
		38S180-S3-008	

5.9. HAS A THREE STAGED EPSC PLAN BEEN PREPARED FOR THE PROJECT (5.5.2.)?

YES ☒ NO ☐

PLEASE NOTE THAT A THREE STAGED EPSC PLAN IS REQUIRED FOR ALL TDOT PROJECTS FOR WHICH AN NPDES PERMIT IS REQUIRED.

5.10. STEEP SLOPES ARE DEFINED AS A NATURAL OR CREATED SLOPE OF 35% GRADE OR GREATER REGARDLESS OF HEIGHT. HAVE STEEP SLOPES BEEN MINIMALLY DISTURBED AND/OR PROTECTED BY CONVEYING RUNOFF NON-EROSIVELY AROUND OR OVER THE SLOPE (5.5.3.4.) (10. "STEEP SLOPE")? ☒ YES ☐ NO ☐ N/A

5.11. THE STRUCTURAL EPSC MEASURES HAVE BEEN INCLUDED IN THE TOTAL PROJECT IMPACTS AND HAVE BEEN INCLUDED IN THE AQUATIC RESOURCE ALTERATION (ARAP) PERMIT OR SECTION 401 CERTIFICATION (5.5.1.h). REFER TO THE LIST OF APPLICABLE ENVIRONMENTAL PERMITS LOCATED ON SWPPP SHEET 7. ALL PERMITS WILL BE MAINTAINED ON SITE WITHIN THE "DOCUMENTATION AND PERMITS" BINDER.

5.12. THE EPSC CONTROL MEASURES LISTED IN THE QUANTITIES TABLE ON SHEET 8 HAVE BEEN SELECTED IN ACCORDANCE WITH TDOT STANDARD DRAWINGS AND GOOD ENGINEERING PRACTICES (5.1., 5.5.3.1.b, 5.5.3.5.).

5.13. EPSC MEASURES SHALL BE INSTALLED PER TDOT STANDARDS (i.e. STANDARD DRAWINGS) AND SHALL BE FUNCTIONAL PRIOR TO ANY EARTH MOVING OPERATIONS.

5.14. EPSC MEASURES WILL NOT BE INSTALLED WITHIN A STREAM WITHOUT FIRST OBTAINING APPROVAL FROM THE PERMITS SECTION.

5.15. TEMPORARY EPSC MEASURES MAY BE REMOVED AT THE BEGINNING OF THE WORKDAY, BUT MUST BE REINSTALLED AT THE END OF THE WORKDAY OR BEFORE A PRECIPITATION EVENT.

5.16. EPSC MEASURES LOCATED IN WOTUS (EPHEMERAL STREAMS) MUST BE CONSIDERED TEMPORARY AND SHALL BE REMOVED AT THE END OF CONSTRUCTION.

5.17. THE CONTRACTOR SHALL ESTABLISH AND MAINTAIN A PROACTIVE METHOD TO PREVENT THE OFF-SITE MIGRATION OR DEPOSIT OF SEDIMENT OFF THE PROJECT LIMITS (E.G. R.O.W., EASEMENTS, ETC.), INTO WATERS OF THE STATE/U.S., OR ONTO ROADWAYS USED BY THE PUBLIC. IF SEDIMENT ESCAPES THE CONSTRUCTION SITE, OFF-SITE ACCUMULATIONS OF SEDIMENT THAT HAVE NOT REACHED A STREAM MUST BE REMOVED TO A LEVEL SUFFICIENT TO MINIMIZE OFF-SITE IMPACTS (E.G., FUGITIVE SEDIMENT THAT HAS ESCAPED THE CONSTRUCTION SITE AND HAS COLLECTED IN A STREET MUST BE REMOVED SO THAT IT IS NOT SUBSEQUENTLY WASHED INTO STORM SEWERS AND STREAMS BY THE NEXT RAIN AND/OR SO THAT IT DOES NOT POSE A SAFETY HAZARD TO USERS OF PUBLIC STREETS). ARRANGEMENTS CONCERNING REMOVAL OF SEDIMENT ON ADJOINING PROPERTY MUST BE SETTLED WITH THE ADJOINING PROPERTY OWNER BEFORE REMOVAL OF SEDIMENT. SEDIMENT THAT MIGRATES INTO WATERS OF THE STATE/US SHALL NOT BE REMOVED WITHOUT GUIDANCE FROM TDOT ENVIRONMENTAL PERSONNEL.

5.18. OFFSITE VEHICLE TRACKING OF SEDIMENTS AND THE GENERATION OF DUST SHALL BE MINIMIZED. A STABILIZED CONSTRUCTION EXIT (A POINT OF ENTRANCE/EXIT TO THE CONSTRUCTION PROJECT) SHALL BE PROVIDED TO REDUCE THE TRACKING OF MUD AND DIRT ONTO PUBLIC ROADS BY CONSTRUCTION VEHICLES.

5.19. THE QUANTITIES REQUIRED FOR STABILIZED CONSTRUCTION EXITS PER TDOT STANDARDS HAVE BEEN SPECIFIED ON SHEET 8 (5.5.3.1.j).

5.20. DISCHARGES FROM DEWATERING ACTIVITIES ARE PROHIBITED UNLESS MANAGED BY APPROPRIATE CONTROLS THAT PROVIDE THE LEVEL OF TREATMENT (FILTRATION) NECESSARY TO COMPLY WITH PERMIT REQUIREMENTS. (4.1.3.).

5.21. SETTLING BASINS AND SEDIMENT TRAPS SHALL BE PROPERLY DESIGNED PER THE SIZE OF THE DRAINAGE AREAS OR VOLUME OF WATER TO BE TREATED. TREATED WATER MUST BE DISCHARGED THROUGH A PIPE OR WELL VEGETATED OR LINED CHANNEL, SO THAT THE DISCHARGE DOES NOT CAUSE EROSION OR SEDIMENT TRANSPORT.

5.22. DISCHARGES FROM SEDIMENT BASINS AND IMPOUNDMENTS SHALL UTILIZE OUTLET STRUCTURES THAT ONLY WITHDRAW WATER FROM NEAR THE SURFACE OF THE BASIN OR IMPOUNDMENT. TREATED WATER MUST BE DISCHARGED THROUGH A PIPE, WELL- VEGETATED AND/OR LINED CHANNEL, SO THAT THE DISCHARGE DOES NOT CAUSE EROSION OR SEDIMENT TRANSPORT. (5.5.3.5.).

5.23. THE DEWATERING OF WORK AREAS, TRENCHES, FOUNDATIONS, EXCAVATIONS, ETC. THAT HAVE COLLECTED STORMWATER, WATER FROM VEHICLE WASH AREAS, OR GROUNDWATER SHALL BE EITHER HELD IN SETTLING BASINS OR TREATED BY FILTRATION AND/OR CHEMICAL TREATMENT PRIOR TO ITS DISCHARGE. ALL CHEMICAL TREATMENTS MUST BE APPLIED PER SECTION 6 FLOCCULANTS.

5.24. WATER DISCHARGED FROM DEWATERING ACTIVITIES SHALL NOT CAUSE AN OBJECTIONABLE COLOR CONTRAST WITHIN THE RECEIVING NATURAL RESOURCE. WATER MUST BE HELD WITHIN SETTLING BASINS UNTIL IT IS AT LEAST AS CLEAR AS THE RECEIVING WATERS.

5.25. DEWATERING STRUCTURES, SEDIMENT FILTER BAGS, SEDIMENT BASINS AND TRAPS SHALL NOT BE LOCATED CLOSER THAN 30 FEET (60 FEET DESIRABLE VEGETATIVE BUFFER) FOR WATERS WITH UNAVAILABLE PARAMETERS AND EXCEPTIONAL TENNESSEE WATERS (ETW) AND 15 FEET (30 FEET DESIRABLE VEGETATIVE BUFFER) FOR ALL OTHER FEATURES FROM THE TOP BANK OF A STREAM, WOTUS (EPHEMERAL), WETLAND OR OTHER NATURAL RESOURCE AND SHALL BE PROPERLY DESIGNED PER THE SIZE OF THE DRAINAGE AREAS OR VOLUME OF WATER TO BE TREATED.

5.26. STABILIZATION PRACTICES: PRE-CONSTRUCTION VEGETATIVE COVER WILL NOT BE DESTROYED, REMOVED OR DISTURBED MORE THAN 2 WEEKS PRIOR TO GRADING OR EARTH MOVING UNLESS THE AREA WILL BE SEEDED AND/OR MULCHED OR OTHER TEMPORARY COVER IS INSTALLED (5.5.3.5.f).

5.27. STABILIZATION MEASURES WILL BE INITIATED AS SOON AS POSSIBLE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED. TEMPORARY OR PERMANENT STABILIZATION WILL BE COMPLETED WITHIN 2 WEEKS AFTER ACTIVITY HAS TEMPORARILY OR PERMANENTLY CEASED IN THAT AREA. PERMANENT STABILIZATION WILL REPLACE TEMPORARY MEASURES AS SOON AS PRACTICABLE (5.5.3.4.).

5.28. PRIORITY SHALL BE GIVEN TO FINISHING OPERATIONS AND PERMANENT EPSC MEASURES OVER TEMPORARY EPSC MEASURES ON ALL PROJECTS. UNPACKED GRAVEL CONTAINING FINES (SILT AND CLAY SIZED PARTICLES) OR CRUSHER-RUN WILL NOT BE CONSIDERED A NON-ERODIBLE SURFACE

5.29. DELAYING THE PLANTING OF COVER VEGETATION UNTIL WINTER MONTHS OR DRY MONTHS SHOULD BE AVOIDED, IF POSSIBLE.

5.30. STEEP SLOPES SHALL BE TEMPORARILY STABILIZED NOT LATER THAN 1 WEEK AFTER CONSTRUCTION ACTIVITY ON THE SLOPE HAS TEMPORARILY OR PERMANENTLY CEASED. (5.5.3.4.).

6. FLOCCULANTS (3.5.3.1.b)

IS ADDITIONAL PHYSICAL OR CHEMICAL TREATMENT OF STORMWATER RUNOFF NECESSARY (5.5.3.5.)? ☐ YES ☒ NO

IF YES, THE FOLLOWING NOTES APPLY:

6.1. ENSURE THE FLOCCULANT EMULSIONS AND POWDERS ARE OF THE ANIONIC TYPE (5.5.3.5.). AND MEET THE FOLLOWING REQUIREMENTS:

6.1.1. MEETS THE EPA AND FDA ACRYLAMIDE MONOMER LIMITS OF EQUAL TO OR GREATER THAN 0.005% ACRYLAMIDE MONOMER.

6.1.2. HAS A DENSITY OF 10% TO 55% BY WEIGHT AND A MOLECULAR WEIGHT OF 16 TO 24 MG/MOLE (MILLIGRAM PER MOLE).

6.1.3. MIXTURE IS NON-COMBUSTIBLE.

6.1.4. CONTAINS ONLY MANUFACTURER'S RECOMMENDED ADDITIVES.

6.2. FLOCCULANT SHALL BE MIXED AND APPLIED IN ACCORDANCE WITH ALL OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) MATERIAL SAFETY DATA SHEET REQUIREMENTS AND THE MANUFACTURER'S RECOMMENDATIONS FOR THE SPECIFIED USES CONFORMING TO ALL FEDERAL, STATE, AND LOCAL LAWS, RULES, AND REGULATIONS.

6.3. ALL VENDORS AND SUPPLIERS OF FLOCCULANT BLENDS SHALL PRESENT OR SUPPLY A WRITTEN TOXICITY REPORT WHICH VERIFIES ACCEPTABLE TOXICITY PARAMETERS WHICH MEET OR EXCEED THE EPS REQUIREMENTS FOR THE STATE AND FEDERAL WATER QUALITY STANDARDS. WHOLE EFFLUENT TESTING DOES NOT MEET THIS REQUIREMENT AS PRIMARY REACTIONS HAVE OCCURRED AND TOXIC POTENTIALS HAVE BEEN REDUCED. CATIONIC FORMS OF FLOCCULANTS ARE NOT ALLOWED UNDER THIS SECTION DUE TO HIGH LEVELS OF TOXICITY TO AQUATIC ORGANISMS. FLOCCULANT EMULSIONS SHALL NEVER BE APPLIED DIRECTLY TO STORMWATER RUNOFF OR RIPARIAN WATERS DUE TO SURFACTANT TOXICITY. THE CONTRACTOR MUST SEEK THE APPROVAL OF THE EPSC DESIGN ENGINEER AND TDOT IF CHITOSAN IS PROPOSED FOR THIS PROJECT.

6.4. ALL VENDORS AND SUPPLIERS OF FLOCCULANT BLENDS SHALL SUPPLY WRITTEN "SITE SPECIFIC" TESTING RESULTS DEMONSTRATING A PERFORMANCE OF 95% OR GREATER REDUCTION OF NTU OR TSS FROM STORMWATER DISCHARGES.

6.5. EMULSION BATCHES SHALL BE MIXED FOLLOWING RECOMMENDATIONS OF THE TESTING LABORATORY THAT DETERMINES THE PROPER PRODUCT AND RATE TO MEET SITE REQUIREMENTS. APPLICATION METHODS SHALL ENSURE UNIFORM COVERAGE TO THE TARGET AREA. EMULSIONS SHALL NEVER BE APPLIED DIRECTLY TO STORMWATER RUNOFF OR RIPARIAN BUFFERS.

6.6. FLOCCULANT POWDER MAY BE APPLIED BY A HAND OR MECHANICAL SPREADER. MIXING OF THE FLOCCULANT POWDER WITH DRY SILICA SAND WILL AID IN SPREADING.

6.7. PREMIXING OF FLOCCULANT POWDER INTO FERTILIZER, SEED, OR OTHER SOIL AMENDMENTS IS ALLOWED WHEN SPECIFIED IN THE DESIGN PLAN. APPLICATION METHOD SHALL ENSURE UNIFORM COVERAGE TO THE TARGET AREA.

6.8. FLOCCULANT LOGS OR BLOCKS SHALL BE APPLIED FOLLOWING SITE TESTING RESULTS TO ENSURE PROPER PLACEMENT AND PERFORMANCE AND SHALL MEET OR EXCEED STATE AND FEDERAL WATER QUALITY REQUIREMENTS.

6.9. DO NOT APPLY FLOCCULANTS DIRECTLY TO, OR WITHIN 60 FEET, OF ANY STREAMS, WETLANDS, OR OTHER NATURAL WATER RESOURCE LOCATED ON OR ADJACENT TO THE CONSTRUCTION SITE. DO NOT APPLY FLOCCULANTS DIRECTLY INTO WATERS CONTAINED WITHIN SEDIMENT PONDS OR TO SLOPES THAT PRODUCE RUNOFF DIRECTLY INTO A STREAM, WETLAND, OR OTHER NATURAL WATER RESOURCE. DO NOT APPLY FLOCCULANTS IMMEDIATELY AT A STORMWATER OUTFALL WHERE RUNOFF LEAVES THE PROJECT LIMITS.

7. UTILITY RELOCATION

ARE UTILITIES INCLUDED IN THE CONTRACT? ☐ YES ☒ NO

IF YES, THE FOLLOWING APPLY:

7.1. STORMWATER WHICH COLLECTS IN THE UTILITY TRENCH SHALL BE PUMPED INTO A DEWATERING STRUCTURE OR SEDIMENT FILTER BAG AND TREATED PRIOR TO DISCHARGE.

7.2. SILT FENCE SHALL BE INSTALLED ON THE DOWNGRADIENT SIDE OF STOCKPILED SOIL. ANY TRENCHING ACROSS WET WEATHER CONVEYANCES SHALL BE DONE DURING DRY CONDITIONS, REMOVED AND STABILIZED BY THE END OF THE WORK DAY.

7.3. UTILITY CROSSINGS IN ENVIRONMENTAL FEATURES SHALL BE CONSTRUCTED IN ACCORDANCE WITH TDOT STANDARDS AND NO WORK SHALL BE CONDUCTED IN FLOWING WATERS. ENVIRONMENTAL PERMITS APPLY TO UTILITIES IN THIS PROJECT. THE STATE CONTRACTOR SHALL COMPLY WITH ALL REQUIREMENTS OF THE PERMITS.

7.4. IT IS THE RESPONSIBILITY OF THE STATE UTILITY CONTRACTOR TO PROTECT EXPOSED EARTH FROM EROSION AND TO PROVIDE FOR CONTAINMENT OF SEDIMENT THAT MAY RESULT FROM THEIR WORK. PRIOR TO BEGINNING WORK, ADEQUATE EPSC MEASURES MUST BE IN PLACE TO TRAP ANY SEDIMENT THAT MAY TRAVEL OFF-SITE IN THE EVENT OF RAIN. DURING THE PROGRESSION OF THEIR WORK, EXPOSED EARTH AREAS SHALL BE STABILIZED AS SOON AS POSSIBLE TO PREVENT EROSION. AT NO TIME, SHALL EXPOSED EARTH RESULTING FROM THEIR OPERATIONS HAVE UNPROTECTED ACCESS TO FLOWING OFF-SITE AND ENTERING WATERS OF THE STATE/U.S.

7.5. FOR THE INSTALLATION OF BURIED UTILITIES (PIPES AND CABLES), TRENCHES SHALL BE BACKFILLED DAILY AS CONSTRUCTION PROCEEDS. BACKFILLED TRENCHES SHALL BE SEEDED AND MULCHED OR SODDED DAILY IF POSSIBLE, BUT NO LATER THAN FOURTEEN DAYS AFTER BEING BACKFILLED. ANY TEMPORARY SPOILS OF EXCAVATED EARTH SHALL BE LOCATED WITHIN TDOT EPSC MEASURES OR RECEIVE SEPARATE EPSC MEASURES. IF TRENCHES ARE NOT BACKFILLED OVERNIGHT, APPROPRIATE EPSC MEASURES WILL BE INSTALLED BY THE STATE UTILITY CONTRACTOR UNTIL THE TRENCH IS BACKFILLED.

7.6. IN REGARDS TO EPSC, TDEC REGULATIONS APPLY TO THE STATE UTILITY CONTRACTORS ON THIS PROJECT. THE STATE CONTRACTOR IS RESPONSIBLE FOR EPSC MEASURES RELATED TO UTILITY CONSTRUCTION INCLUDED IN THE STATE CONTRACT.

7.7. TRENCHES FORMED FOR THE INSTALLATION OF BURIED UTILITIES MAY CAUSE STORMWATER RUNOFF TO CONCENTRATE AT THE TRENCH LINE. ADDITIONAL EPSC MEASURES MAY BE REQUIRED TO BE INSTALLED AS APPROVED BY THE TDOT PROJECT ENGINEER.

7.8. FOR THE INSTALLATION OF UNDERGROUND UTILITIES OUTSIDE OF THE TDOT RIGHT-OF-WAY, EPSC MEASURES SHALL BE INSTALLED PRIOR TO CLEARING (TRENCHING AND ASSOCIATED BLASTING) IN THOSE AREAS

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STORM WATER POLLUTION PREVENTION PLAN

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TYPE	YEAR	PROJECT NO.	SHEET NO.
PS&E	2026	38S180-S3-007	S-4
		38S180-M3-007	
		38S180-S3-008	

NECESSARY TO PREVENT SEDIMENT FROM LEAVING THE CONSTRUCTION AREA. THESE EPSC MEASURES SHALL REMAIN UNTIL THE BACKFILLED TRENCH IS STABILIZED WITH PERMANENT VEGETATIVE COVER.

7.9. THE UTILITY CONTRACTOR SHALL RESTORE ALL AFFECTED WET WEATHER CONVEYANCES TO THE EXISTING TOPOGRAPHIC CONDITIONS AS APPROVED BY THE TDOT RESPONSIBLE PARTY.

7.10. THE UTILITY CONTRACTOR WILL PROVIDE APPROPRIATE EPSC MEASURES TO REPLACE ONSITE EPSC MEASURES REMOVED TO FACILITATE THE INSTALLATION OF UTILITIES. REPLACEMENT OF EPSC MEASURES WILL BE COORDINATED WITH THE TDOT ENGINEER BEFORE COMMENCING WORK.

7.11. FOR UTILITY CROSSINGS THAT UTILIZE HORIZONTAL DIRECTIONAL DRILLING THE FOLLOWING SHALL APPLY:

7.11.1. THE ENTRY AND EXIT POINTS SHALL BE AT LEAST 50 FEET FROM THE STREAM BANK OR WETLAND BOUNDARY.

7.11.2. THE DEPTH OF BORE BELOW THE STREAMBED IS SUFFICIENT TO PREVENT RELEASE OF DRILLING FLUID, BASED ON THE PARENT MATERIAL.

7.11.3. A SITE-SPECIFIC CONTINGENCY AND CONTAINMENT PLAN FOR INADVERTENT RELEASE OF DRILLING FLUID SHALL BE ESTABLISHED PRIOR TO COMMENCEMENT OF WORK. THIS PLAN SHALL BE SUBMITTED TO THE TDOT PROJECT ENGINEER AND THE TDOT ENVIRONMENTAL DIVISION PERMITS AND/OR COMPLIANCE AND FIELD SERVICES OFFICE FOR REVIEW AND APPROVAL.

8. MAINTENANCE AND INSPECTION

8.1. INSPECTION PRACTICES (5.5.3.9.)

8.1.1. PROJECT EPSC INSPECTORS AND ENGINEERS (INCLUDING TDOT STAFF, CONSULTANTS AND CONTRACTOR STAFF) RESPONSIBLE FOR THE INSPECTION, IMPLEMENTATION, MAINTENANCE. AND/OR REPAIR OF EPSC MEASURES SHALL MEET ONE OF THE FOLLOWING REQUIREMENTS (5.5.3.10.):

8.1.1.1. SUCCESSFULLY COMPLETED THE TDOT EPSC INSPECTIONS TRAINING AND ANY RECERTIFICATION COURSE AS REQUIRED.

8.1.1.2. SUCCESSFULLY COMPLETED THE TDEC "LEVEL I - FUNDAMENTALS OF EROSION PREVENTION AND SEDIMENT CONTROL" COURSE AND ANY RECERTIFICATION COURSES AS REQUIRED.

8.1.1.3. BE A CURRENT TN LICENSED PROFESSIONAL ENGINEER OR LANDSCAPE ARCHITECT.

8.1.1.4. BE A CURRENT CERTIFIED PROFESSIONAL IN EROSION AND SEDIMENT CONTROL (CPESC).

8.1.1.5. SUCCESSFULLY COMPLETED TDEC "LEVEL II – DESIGN PRINCIPLES FOR EROSION PREVENTION AND SEDIMENT CONTROL FOR CONSTRUCTION SITES" COURSE AND ANY RECERTIFICATION COURSE AS REQUIRED.

8.1.2. THE TDOT CONSTRUCTION ENGINEER (OR THEIR DULY AUTHORIZED REPRESENTATIVE) AND THE CONTRACTOR'S SITE SUPERINTENDENT ARE RESPONSIBLE FOR INSPECTIONS. MAINTENANCE AND REPAIR ACTIVITIES ARE THE RESPONSIBILITY OF THE CONTRACTOR. THE TDOT CONSTRUCTION ENGINEER OR THEIR DULY AUTHORIZED REPRESENTATIVE SHALL COMPLETE THE EPSC INSPECTION REPORTS AND DISTRIBUTE COPIES PER THE CONTRACT.

8.1.3. THE INSPECTOR SHALL CONDUCT PRE-CONSTRUCTION INSPECTIONS TO VERIFY AREAS THAT ARE NOT TO BE DISTURBED HAVE BEEN MARKED IN THE SWPPP AND IN THE FIELD BEFORE LAND DISTURBANCE ACTIVITIES BEGIN AND INITIAL MEASURES HAVE BEEN INSTALLED (10 "INSPECTOR") (5.5.1.f).

8.1.4. EPSC CONTROLS SHALL BE INSPECTED TO VERIFY MEASURES HAVE BEEN INSTALLED AND MAINTAINED IN ACCORDANCE WITH TDOT STANDARD DRAWINGS, SPECIFICATIONS, AND GOOD ENGINEERING PRACTICES. EPSC INSPECTIONS SHALL BE DOCUMENTED ON THE TDOT EPSC INSPECTION REPORT FORM AND THE TDEC CONSTRUCTION STORMWATER INSPECTION CERTIFICATION (TWICE-WEEKLY INSPECTIONS) FORM.

8.1.5. OUTFALL POINTS SHALL BE INSPECTED TO ASCERTAIN WHETHER EPSC MEASURES ARE EFFECTIVE IN PREVENTING EROSION AND CONTROLLING SEDIMENT INCLUDING SIGNIFICANT IMPACTS TO SURROUNDING STATE WATERS, WOTUS (EPHEMERAL), WETLANDS, OTHER NATURAL RESOURCES AND ADJACENT PROPERTY OWNERS. WHERE DISCHARGE LOCATIONS ARE INACCESSIBLE, NEARBY DOWN GRADIENT LOCATIONS SHALL BE INSPECTED. LOCATIONS WHERE VEHICLES ENTER AND EXIT THE SITE SHALL BE INSPECTED FOR EVIDENCE OF OFF-SITE ROADWAY SEDIMENT TRACKING.

8.1.6. INSPECTIONS WILL BE CONDUCTED AT LEAST TWICE EVERY CALENDAR WEEK AND AT LEAST 72 HOURS APART (5.5.3.11.a). A CALENDAR WEEK IS DEFINED AS SUNDAY THROUGH SATURDAY. QUALITY ASSURANCE INSPECTIONS OF TDOT EPSC, NPDES AND WATER QUALITY PERMIT REQUIREMENTS SHALL BE PERFORMED PER THE TDOT ENVIRONMENTAL DIVISION COMPLIANCE AND FIELD SERVICES OFFICE.

8.1.7. THE FREQUENCY OF EPSC INSPECTIONS MAY BE REDUCED TO ONCE A MONTH WHERE SITES OR PORTIONS OF SITES HAVE BEEN TEMPORARILY STABILIZED UNTIL CONSTRUCTION ACTIVITIES RESUME WITH WRITTEN NOTIFICATION BY THE TDOT REGIONAL ENGINEER TO TDEC NASHVILLE CENTRAL OFFICE AND SUBSEQUENT TDEC APPROVAL. WRITTEN NOTIFICATION MUST INCLUDE THE INTENT TO CHANGE FREQUENCY AND JUSTIFICATION (5.5.3.11.a).

8.1.8. ALL DISTURBED AREAS OF THE SITE THAT HAVE NOT BEEN PERMANENTLY STABILIZED, AREAS USED FOR MATERIAL STORAGE THAT ARE EXPOSED TO PRECIPITATION, STRUCTURAL CONTROL MEASURES, AND LOCATIONS WHERE VEHICLES ENTER OR EXIT THE SITE, AND EACH OUTFALL WILL BE INSPECTED (5.5.3.11.b).

8.1.9. THE INSPECTOR WILL OVERSEE THE REQUIREMENTS OF OTHER CONSTRUCTION-RELATED WATER QUALITY PERMITS (I.E. TDEC ARAP, USACE SECTION 404, AND TVA SECTION 26a PERMITS) FOR CONSTRUCTION ACTIVITIES AROUND WATERS OF THE STATE (10 "INSPECTOR").

8.1.10. THE SWPPP WILL BE REVISED AS NECESSARY BASED ON THE RESULTS OF THE INSPECTION. REVISION(S) WILL BE RECORDED WITHIN 1 WEEK OF THE INSPECTION. REVISION(S) WILL BE IMPLEMENTED WITHIN 2 WEEKS OF THE INSPECTION (5.5.3.11.e AND 5.5.3.11.f).

8.1.11. DOCUMENTATION OF INSPECTIONS WILL BE MAINTAINED ON SITE IN THE "DOCUMENTATION AND PERMITS" BINDER. REPORTS WILL BE SUBMITTED TO THE TDOT PROJECT ENGINEER PER THE CONTRACT.

8.1.12. THESE INSPECTION REQUIREMENTS DO NOT APPLY TO DEFINABLE AREAS OF THE SITE THAT HAVE MET PERMANENT STABILIZATION REQUIREMENTS AND HAVE BEEN NOTED IN THE SWPPP.

8.1.13. TRAINED CERTIFIED INSPECTORS SHALL COMPLETE INSPECTION TO THE BEST OF THEIR ABILITY. FALSIFYING INSPECTION RECORDS OR OTHER DOCUMENTATION OR FAILURE TO COMPLETE INSPECTION DOCUMENTATION SHALL RESULT IN A VIOLATION OF THIS PERMIT AND ANY OTHER APPLICABLE ACTS OR RULES (5.5.3.11.h).

8.2. DULY AUTHORIZED REPRESENTATIVE (8.7.3.)

THE PROJECT ENGINEER MAY DELEGATE AN INDIVIDUAL AND/OR CONSULTANT TO SIGN EPSC INSPECTIONS REPORTS. FOR SATISFYING SIGNATORY REQUIREMENTS FOR EPSC INSPECTION REPORTS, THE PROJECT ENGINEER AND NEWLY AUTHORIZED INDIVIDUAL ACCEPTING RESPONSIBILITY MUST COMPLETE AND SIGN THE TDOT CONSTRUCTION DIVISION EPSC DELEGATION OF AUTHORITY.

8.3. MAINTENANCE PRACTICES (5.1 AND 8.13.)

8.3.1. ALL CONTROLS WILL BE MAINTAINED IN GOOD AND EFFECTIVE OPERATING ORDER AND IN ACCORDANCE WITH TDOT STANDARD DRAWINGS AND GOOD ENGINEERING PRACTICES. (5.1. AND 5.5.3.1.b)

8.3.2. MAINTENANCE AND REPAIR ACTIVITIES ARE THE RESPONSIBILITY OF THE CONTRACTOR.

8.3.3. UPON CONCLUSION OF THE INSPECTIONS, EPSC MEASURES FOUND TO BE INEFFECTIVE SHALL BE REPAIRED, REPLACED, OR MODIFIED BEFORE THE NEXT RAIN EVENT, IF POSSIBLE, BUT IN NO CASE, MORE THAN 24 HOURS AFTER THE INSPECTION OR WHEN THE CONDITION IS IDENTIFIED. IF THE REPAIR, REPLACEMENT OR MODIFICATION IS NOT PRACTICAL WITHIN THE 24-HOUR TIMEFRAME, WRITTEN DOCUMENTATION PROVIDED BY THE CONTRACTOR SHALL BE PLACED IN THE FIELD DIARY AND EPSC INSPECTION REPORT. AN ESTIMATED REPAIR, REPLACEMENT OR MODIFICATION SCHEDULE SHALL BE DOCUMENTED WITHIN 24 HOURS AFTER IDENTIFICATION. (5.5.3.11.e).

8.3.4. SEDIMENT SHALL BE REMOVED FROM SEDIMENT CONTROL STRUCTURES (SEDIMENT TRAPS, SILT FENCE, SEDIMENT BASINS, OTHER CONTROLS, ETC.) WHEN THE DESIGN CAPACITY HAS BEEN REDUCED BY FIFTY PERCENT (50%). (5.5.3.1.d).

8.3.5. DURING SEDIMENT REMOVAL, THE CONTRACTOR SHALL TAKE STEPS TO ENSURE THAT STRUCTURAL COMPONENTS OF EPSC MEASURES ARE NOT DAMAGED AND THUS MADE INEFFECTIVE. IF DAMAGE DOES OCCUR, THE CONTRACTOR SHALL REPAIR THE EPSC MEASURES AT THE CONTRACTOR'S OWN EXPENSE.

8.3.6. CHECK DAMS WILL BE INSPECTED FOR STABILITY. SEDIMENT WILL BE REMOVED WHEN DEPTH REACHES ONE-HALF (½) THE HEIGHT OF THE DAM.

8.3.7. SEDIMENT REMOVED FROM SEDIMENT CONTROL STRUCTURES SHALL BE PLACED AND TREATED IN A MANNER SO THAT THE SEDIMENT IS CONTAINED WITHIN THE PROJECT LIMITS, DOES NOT MIGRATE INTO FEATURES REMOVED FROM, AND DOES NOT MIGRATE ONTO ADJACENT PROPERTIES AND/OR INTO WATERS OF THE STATE/U.S.

8.3.8. LITTER, CONSTRUCTION DEBRIS, AND CONSTRUCTION CHEMICALS EXPOSED TO STORMWATER WILL BE PICKED UP AND REMOVED FROM STORMWATER EXPOSURE PRIOR TO ANTICIPATED STORM EVENTS OR BEFORE BEING CARRIED OFF THE SITE BY WIND, OR OTHERWISE PREVENTED FROM BECOMING A POLLUTANT SOURCE FOR STORMWATER DISCHARGES. AFTER USE, MATERIALS USED FOR EROSION CONTROL WILL BE REMOVED (5.5.3.7.a).

8.3.9. ALL SEEDED AREAS WILL BE CHECKED FOR BARE SPOTS, EROSION WASHOUTS, AND VIGOROUS GROWTH FREE OF SIGNIFICANT WEED INFESTATIONS.

9. SITE ASSESSMENTS (5.5.3.8.)

QUALITY ASSURANCE SITE ASSESSMENTS OF EROSION PREVENTION AND SEDIMENT CONTROLS SHALL BE PERFORMED PER THE TDOT ENVIRONMENTAL DIVISION COMPLIANCE AND FIELD SERVICES OFFICE GUIDELINES.

10. STORMWATER MANAGEMENT (5.5.3.11.h)

10.1. STORMWATER MANAGEMENT WILL BE HANDLED BY TEMPORARY CONTROLS OUTLINED IN THIS SWPPP AND ANY PERMANENT CONTROLS NEEDED TO MEET PERMANENT STORMWATER MANAGEMENT NEEDS IN THE POST CONSTRUCTION PERIOD. PERMANENT CONTROLS WILL BE DEPICTED ON THE PLANS AND NOTED AS PERMANENT.

10.2. DESCRIBE ANY SPECIFIC POST-CONSTRUCTION MEASURES THAT WILL CONTROL VELOCITY, POLLUTANTS, AND/OR EROSION (5.5.3.6.c): RIRAP CHANNEL LINING AND BANK STABILIZATION

10.3. OTHER ITEMS NEEDING CONTROL (5.5.3.7.)

CONSTRUCTION MATERIALS: THE FOLLOWING MATERIALS OR SUBSTANCES ARE EXPECTED TO BE PRESENT ON THE SITE DURING THE CONSTRUCTION PERIOD. (CHECK ALL THAT APPLY).

- ☒ LUMBER, GUARDRAIL, TRAFFIC CONTROL DEVICES
- ☒ CONCRETE WASHOUT
- ☒ PIPE CULVERTS (I.E. CONCRETE, CORRUGATED METAL, HDPE, ETC.)
- ☒ MINERAL AGGREGATES, ASPHALT
- ☒ EARTH
- ☒ LIQUID TRAFFIC STRIPING MATERIALS, PAINT
- ☒ ROCK
- ☒ CURING COMPOUND
- ☐ EXPLOSIVES
- ☐ OTHER _____

THESE MATERIALS WILL BE HANDLED AS NOTED IN THIS SWPPP.

10.4. WASTE MATERIALS (5.5.3.7.c)

WASTE MATERIAL (EARTH, ROCK, ASPHALT, CONCRETE, ETC.) NOT REQUIRED FOR THE CONSTRUCTION OF THE PROJECT WILL BE DISPOSED OF BY THE CONTRACTOR IN ACCORDANCE WITH THE TDOT CONSTRUCTION CONTRACT AND FEDERAL AND STATE REGULATIONS. IMPACTS TO WATERS OF THE STATE/U.S. SHALL BE AVOIDED IF POSSIBLE. IF UNAVOIDABLE, THE CONTRACTOR WILL OBTAIN ALL NECESSARY PERMITS INCLUDING, BUT NOT LIMITED TO NPDES, AQUATIC RESOURCES ALTERATION PERMIT(S) CORPS OF ENGINEERS SECTION 404 PERMITS, AND TVA SECTION 26A PERMITS TO DISPOSE OF WASTE MATERIALS.

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STORM WATER POLLUTION PREVENTION PLAN

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TYPE	YEAR	PROJECT NO.	SHEET NO.
PS&E	2026	38S180-S3-007	S-5
		38S180-M3-007	
		38S180-S3-008	

10.5. HAZARDOUS WASTE (5.5.3.7.c) (8.8)

ALL HAZARDOUS WASTE MATERIALS WILL BE DISPOSED OF IN A MANNER WHICH IS COMPLIANT WITH LOCAL OR STATE REGULATIONS. SITE PERSONNEL WILL BE INSTRUCTED IN THESE PRACTICES, AND THE INDIVIDUAL DESIGNATED AS THE CONTRACTOR'S ON-SITE REPRESENTATIVE WILL BE RESPONSIBLE FOR SEEING THAT THESE PRACTICES ARE FOLLOWED. THE CONTRACTOR WILL OBTAIN ALL NECESSARY PERMITS TO DISPOSE OF HAZARDOUS MATERIAL.

10.6. SANITARY WASTE (5.5.3.7.b)

PORTABLE SANITARY FACILITIES WILL BE PROVIDED ON ALL CONSTRUCTION SITES. SANITARY WASTE WILL BE COLLECTED FROM THE PORTABLE UNITS IN A TIMELY MANNER BY A LICENSED WASTE MANAGEMENT CONTRACTOR OR AS REQUIRED BY ANY LOCAL REGULATIONS. THE CONTRACTOR WILL OBTAIN ALL NECESSARY PERMITS TO DISPOSE OF SANITARY WASTE.

10.7. OTHER MATERIALS

THE FOLLOWING MATERIALS OR SUBSTANCES ARE EXPECTED TO BE PRESENT ON THE SITE DURING THE CONSTRUCTION PERIOD. (CHECK ALL THAT APPLY).

☐ FERTILIZERS AND LIME

☐ PESTICIDES AND/OR HERBICIDES

☒ DIESEL AND GASOLINE

☒ MACHINERY LUBRICANTS (OIL AND GREASE)

THESE MATERIALS WILL BE HANDLED AS NOTED IN THIS SWPPP.

11. NON-STORMWATER DISCHARGES (5.5.3.12.)

11.1. THE FOLLOWING NON-STORMWATER DISCHARGES ARE ANTICIPATED DURING THE CONSTRUCTION OF THIS PROJECT (CHECK ALL THAT APPLY):

☐ DEWATERING OF WORK AREAS OF COLLECTED STORMWATER AND GROUND WATER.

☒ WATERS USED TO WASH VEHICLES (OF DUST AND SOIL) WHERE DETERGENTS ARE NOT USED AND DETENTION AND/OR FILTERING IS PROVIDED BEFORE THE WATER LEAVES THE SITE.

☒ WATER USED TO CONTROL DUST. (3.5.3.1.n)

☐ POTABLE WATER SOURCES INCLUDING WATERLINE FLUSHING FROM WHICH CHLORINE HAS BEEN REMOVED TO THE MAXIMUM EXTENT PRACTICABLE.

☒ UNCONTAMINATED GROUNDWATER OR SPRING WATER.

☐ FOUNDATION OR FOOTING DRAINS WHERE FLOWS ARE NOT CONTAMINATED WITH POLLUTANTS.

☐ OTHER: _____

11.2. ALL ALLOWABLE NON-STORMWATER DISCHARGES WILL BE DIRECTED TO STABLE DISCHARGE STRUCTURES PRIOR TO LEAVING THE SITE. FILTERING OR CHEMICAL TREATMENT MAY BE NECESSARY PRIOR TO DISCHARGE. ALL CHEMICAL TREATMENTS MUST BE APPLIED PER SECTION 6 FLOCCULANTS.

11.3. THE DESIGN OF ALL IMPACTED EPSC MEASURES RECEIVING FLOW FROM ALLOWABLE NON-STORMWATER DISCHARGES MUST BE DESIGNED TO HANDLE THE VOLUME OF THE NON-STORMWATER COMPONENT.

11.4. WASH DOWN OR WASTE DISCHARGE OF CONCRETE TRUCKS WILL NOT BE PERMITTED ON-SITE UNLESS PROPER SETTLEMENT AREAS HAVE BEEN PROVIDED IN ACCORDANCE WITH BOTH STATE AND FEDERAL REGULATIONS.

11.5. ARE ANY DISCHARGES ASSOCIATED WITH INDUSTRIAL (NON-CONSTRUCTION STORMWATER) ACTIVITY EXPECTED (5.5.1.g)?

☐ YES ☒ NO

IF YES, SPECIFY THE LOCATION OF THE ACTIVITY AND ITS PERMIT NUMBER: _____

12. SPILL PREVENTION, MANAGEMENT AND NOTIFICATION (5.5.3.7.c, 6.1)

12.1. SPILL PREVENTION (5.5.3.7.c)

12.1.1. CONTRACTOR'S BULK FUEL AND PETROLEUM PRODUCTS STORED ON-SITE OR ADJACENT TO THE R.O.W. IN ABOVE GROUND STORAGE TANKS WITH AGGREGATE STORAGE CAPACITY IN EXCESS OF 1,320 GALLONS SHALL HAVE SECONDARY CONTAINMENT.

12.1.2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PREPARING A SPILL PREVENTION CONTROL AND COUNTERMEASURE (SPCC) PLAN AS REQUIRED BY TDOT SPECIAL PROVISION 107FP (REGARDING WATER QUALITY AND STORM WATER PERMITS) AND THE LAW PRIOR TO STORING 1320 GALLONS ON SITE.

12.1.3. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR OBTAINING ANY NECESSARY LOCAL, STATE, AND FEDERAL PERMITS. THE SPCC PLAN AND/OR PERMITS SHALL BE KEPT ON-SITE AND A COPY PROVIDED TO THE TDOT CONSTRUCTION ENGINEER.

12.2. MATERIAL MANAGEMENT

12.2.1. HOUSEKEEPING

ONLY CONSTRUCTION PRODUCTS NEEDED SHALL BE STORED ON-SITE BY THE CONTRACTOR. EXCEPT FOR BULK MATERIALS THE CONTRACTOR WILL STORE ALL MATERIALS UNDER COVER AND IN APPROPRIATE CONTAINERS. PRODUCTS MUST BE STORED IN ORIGINAL CONTAINERS AND LABELED. MATERIAL MIXING WILL BE CONDUCTED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. WHEN POSSIBLE, ALL PRODUCTS WILL BE USED COMPLETELY BEFORE PROPERLY DISPOSING OF THE CONTAINER OFF SITE. THE MANUFACTURER'S DIRECTIONS FOR DISPOSAL OF MATERIALS AND CONTAINERS WILL BE FOLLOWED. THE CONTRACTOR'S SITE SUPERINTENDENT WILL INSPECT MATERIALS STORAGE AREAS REGULARLY TO ENSURE PROPER USE AND DISPOSAL. DUST GENERATED WILL BE CONTROLLED IN AN ENVIRONMENTALLY SAFE MANNER. VEGETATION AREAS NOT ESSENTIAL TO THE CONSTRUCTION PROJECT WILL BE PRESERVED AND MAINTAINED AS NOTED ON THE PLANS.

12.2.2. HAZARDOUS MATERIALS

PRODUCTS MUST BE STORED IN ORIGINAL CONTAINERS UNLESS THE CONTAINER IS NOT RE-SEALABLE. ORIGINAL LABELS AND MATERIAL SAFETY DATA SHEETS WILL BE RETAINED IN A SAFE PLACE TO RELAY IMPORTANT PRODUCT INFORMATION. IF SURPLUS PRODUCT MUST BE DISPOSED OF, MANUFACTURER'S LABEL DIRECTIONS FOR DISPOSAL WILL BE FOLLOWED. MAINTENANCE AND REPAIR OF ALL EQUIPMENT AND VEHICLES INVOLVING OIL CHANGES, HYDRAULIC SYSTEM DRAIN DOWN, DE-GREASING OPERATIONS, FUEL TANK DRAIN DOWN AND REMOVAL, AND OTHER ACTIVITIES WHICH MAY RESULT IN THE ACCIDENTAL RELEASE OF CONTAMINANTS WILL BE CONDUCTED ON AN IMPERVIOUS SURFACE AND UNDER COVER DURING WET WEATHER TO PREVENT THE RELEASE OF CONTAMINANTS ONTO THE GROUND. WHEEL WASH WATER WILL BE COLLECTED AND ALLOWED TO SETTLE OUT SUSPENDED SOLIDS PRIOR TO DISCHARGE. WHEEL WASH WATER WILL NOT BE DISCHARGED DIRECTLY INTO ANY STORMWATER SYSTEM OR STORMWATER TREATMENT SYSTEM. POTENTIAL pH-MODIFYING MATERIALS SUCH AS: BULK CEMENT, CEMENT KILN DUST, FLY ASH, NEW CONCRETE WASHINGS AND CURING WATERS, CONCRETE PUMPING, AND MIXER WASHOUT WATERS WILL BE COLLECTED ON SITE AND MANAGED TO PREVENT CONTAMINATION OF STORMWATER RUNOFF.

12.3. PRODUCT SPECIFIC PRACTICES

12.3.1. PETROLEUM PRODUCTS: ALL ON-SITE VEHICLES WILL BE MONITORED FOR LEAKS AND RECEIVE REGULAR PREVENTIVE MAINTENANCE TO REDUCE THE CHANCE OF LEAKAGE. PETROLEUM PRODUCTS WILL BE STORED IN TIGHTLY SEALED CONTAINERS WHICH ARE CLEARLY LABELED.

12.3.2. FERTILIZERS: FERTILIZERS WILL BE APPLIED ONLY IN THE AMOUNTS SPECIFIED BY TDOT. ONCE APPLIED, FERTILIZERS WILL BE WORKED INTO THE SOIL TO LIMIT THE EXPOSURE TO STORMWATER. FERTILIZERS WILL BE STORED IN AN ENCLOSED AREA UNDER COVER. THE CONTENTS OF PARTIALLY USED FERTILIZER BAGS WILL BE TRANSFERRED TO SEALABLE CONTAINERS TO AVOID SPILLS.

12.3.3. PAINTS: ALL CONTAINERS WILL BE TIGHTLY SEALED AND STORED WHEN NOT REQUIRED FOR USE. THE EXCESS WILL BE DISPOSED OF PER THE MANUFACTURER'S INSTRUCTIONS AND APPLICABLE STATE AND LOCAL REGULATIONS.

12.3.4. CONCRETE TRUCKS: CONTRACTORS WILL PROVIDE DESIGNATED TRUCK WASHOUT AREAS ON THE SITE. THESE AREAS MUST BE SELF CONTAINED AND NOT CONNECTED TO ANY STORMWATER OUTLET OF THE SITE, AND PROPERLY SIGNED. UPON COMPLETION OF CONSTRUCTION WASHOUT AREAS WILL BE PROPERLY STABILIZED.

12.4. SPILL MANAGEMENT

IN ADDITION TO THE PREVIOUS HOUSEKEEPING AND MANAGEMENT PRACTICES, THE FOLLOWING PRACTICES WILL BE FOLLOWED FOR SPILL PREVENTION AND CLEANUP IF NECESSARY:

12.4.1. ALL ONSITE VEHICLES SHALL BE MONITORED FOR LEAKS AND RECEIVE REGULAR PREVENTATIVE MAINTENANCE TO REDUCE THE CHANGE OF LEAKAGE AND SPILLS.

12.4.2. FOR ALL HAZARDOUS MATERIALS STORED ON SITE, THE MANUFACTURER'S RECOMMENDED METHODS FOR SPILL CLEAN UP WILL BE CLEARLY POSTED. SITE PERSONNEL WILL BE MADE AWARE OF THE PROCEDURES AND THE LOCATIONS OF THE INFORMATION AND CLEANUP SUPPLIES.

12.4.3. APPROPRIATE CLEANUP MATERIALS AND EQUIPMENT WILL BE MAINTAINED BY THE CONTRACTOR IN THE MATERIALS STORAGE AREA ON-SITE AND UNDER COVER. SPILL RESPONSE EQUIPMENT SHALL BE INSPECTED AND MAINTAINED BY THE CONTRACTOR AS NECESSARY TO REPLACE ANY MATERIALS USED IN SPILL RESPONSE ACTIVITIES.

12.4.4. ALL SPILLS SHALL BE CLEANED IMMEDIATELY AFTER DISCOVERY AND THE MATERIALS DISPOSED OF PROPERLY. THE SPILL AREA WILL BE KEPT WELL VENTILATED AND PERSONNEL WILL WEAR APPROPRIATE PROTECTIVE CLOTHING TO PREVENT INJURY FROM CONTACT WITH A HAZARDOUS SUBSTANCE.

12.4.5. THE CONTRACTOR'S RESPONSIBLE PARTY WILL BE THE SPILL PREVENTION AND CLEANUP COORDINATOR. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT THE SITE SUPERINTENDENT HAS HAD APPROPRIATE TRAINING FOR HAZARDOUS MATERIALS HANDLING, SPILL MANAGEMENT, AND CLEANUP.

12.4.6. IF SPILLS REPRESENT AN IMMINENT THREAT OF ESCAPING THE SITE AND ENTERING RECEIVING WATERS, PERSONNEL WILL RESPOND IMMEDIATELY TO CONTAIN THE RELEASE AND NOTIFY THE SUPERINTENDENT AFTER THE SITUATION HAS BEEN STABILIZED.

12.4.7. IF AN OIL SHEEN IS OBSERVED ON SURFACE WATER (E.G. SETTLING PONDS, DETENTION PONDS, SWALES), ACTION WILL BE TAKEN IMMEDIATELY TO REMOVE THE MATERIAL CAUSING THE SHEEN. THE CONTRACTOR WILL USE APPROPRIATE MATERIALS TO CONTAIN AND ABSORB THE SPILL. THE SOURCE OF THE OIL SHEEN WILL ALSO BE IDENTIFIED AND REMOVED OR REPAIRED AS NECESSARY TO PREVENT FURTHER RELEASES.

12.4.8. IF A SPILL OCCURS THE CONTRACTOR'S RESPONSIBLE PARTY SHALL BE RESPONSIBLE FOR COMPLETING THE SPILL REPORTING FORM AND FOR REPORTING THE SPILL TO THE TDOT PROJECT RESPONSIBLE PARTY. 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.

12.5. SPILL NOTIFICATION (6.1)

WHERE A RELEASE CONTAINING A HAZARDOUS SUBSTANCE IN AN AMOUNT EQUAL TO, OR MORE THAN A REPORTABLE QUANTITY ESTABLISHED UNDER EITHER 40 CFR 117 OR 40 CFR 302 OCCURS DURING A 24 HOUR PERIOD:

12.5.1. THE TDOT PROJECT ENGINEER IS RESPONSIBLE FOR NOTIFYING THE REGIONAL PROJECT DEVELOPMENT OFFICE (E.G. TRANSPORTATION ENVIRONMENTAL STUDIES SPECIALIST) AS SOON AS HE OR SHE HAS KNOWLEDGE OF THE DISCHARGE.

12.5.2. THE TDOT REGIONAL PROJECT DEVELOPMENT OFFICE WILL NOTIFY THE LOCAL TDEC ENVIRONMENTAL FIELD OFFICE AND ANY OTHER APPLICABLE REGULATORY AGENCIES WITHIN 24 HOURS OF THE SPILL.

12.5.3. IN ADDITION TO ANY FOLLOW UP NOTIFICATIONS REQUIRED BY FEDERAL LAW, A WRITTEN DESCRIPTION OF THE RELEASE, DATE OF RELEASE AND CIRCUMSTANCES LEADING TO THE RELEASE, WHAT ACTIONS WERE TAKEN TO MITIGATE EFFECTS OF THE RELEASE, AND STEPS TAKEN TO MINIMIZE THE CHANCE OF FUTURE OCCURRENCES WILL BE SUBMITTED TO THE APPROPRIATE TDEC ENVIRONMENTAL FIELD OFFICE WITHIN 2 WEEKS OF KNOWLEDGE OF THE RELEASE.

12.5.4. THE SWPPP MUST BE MODIFIED WITHIN 2 WEEKS OF KNOWLEDGE OF THE RELEASE PROVIDING A DESCRIPTION OF THE RELEASE, CIRCUMSTANCES LEADING TO THE RELEASE, AND THE DATE OF RELEASE. THE SWPPP WILL BE REVIEWED AND MODIFIED AS

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STORM WATER POLLUTION PREVENTION PLAN

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TYPE	YEAR	PROJECT NO.	SHEET NO.
PS&E	2026	38S180-S3-007	S-6
		38S180-M3-007	
		38S180-S3-008	

NECESSARY TO IDENTIFY MEASURES TO PREVENT THE REOCCURRENCE OF SUCH RELEASES AND TO RESPOND TO SUCH RELEASES.

13. RECORD-KEEPING

13.1. REQUIRED RECORDS

TDOT OR THEIR DULY AUTHORIZED REPRESENTATIVE WILL MAINTAIN AT THE SITE THE FOLLOWING RECORDS OF CONSTRUCTION ACTIVITIES (7.2.1.) (7.2.1.):

13.1.1. THE DATES WHEN MAJOR GRADING ACTIVITIES OCCUR.

13.1.2. THE DATES WHEN CONSTRUCTION ACTIVITIES TEMPORARILY OR PERMANENTLY CEASE ON A PORTION OF THE SITE.

13.1.3. THE DATES WHEN STABILIZATION MEASURES ARE INITIATED.

13.1.4. RECORDS EPSC INSPECTION REPORTS AND CORRECTIVE MEASURES.

13.1.5. RECORDS OF QUALITY ASSURANCE SITE ASSESSMENTS.

13.1.6. COPY OF SITE EPSC INSPECTOR'S CERTIFICATION AND/OR LICENSING

13.1.7. A COPY OF ANY REGULATORY CORRESPONDENCE REGARDING THE EFFECTIVENESS OF THE SWPPP OR EPSC CONTROLS.

13.2. RAINFALL MONITORING PLAN (7.2.1.):

13.2.1. EQUIPMENT

AT A MINIMUM, THE CONTRACTOR WILL INSTALL A FENCE POST TYPE RAIN GAUGE TO MEASURE RAINFALL. THE STANDARD FENCE POST RAIN GAUGE WILL BE A WEDGE-SHAPED GAUGE THAT MEASURES UP TO 6 INCHES OF RAINFALL. AN ENGLISH SCALE WILL BE PROVIDED ON ONE FACE, WITH A METRIC SCALE ON THE OTHER FACE. GRADUATION WILL BE PERMANENTLY MOLDED IN DURABLE WEATHER-RESISTANT PLASTIC. THE MINIMUM GRADUATION WILL BE 0.01 INCH (OR 0.1MM). AN ALUMINUM BRACKET WITH SCREWS MAY BE USED TO MOUNT THE GAUGE ON A WOODEN SUPPORT.

13.2.2. LOCATION

THE RAIN GAUGE WILL BE LOCATED AT OR ALONG THE PROJECT SITE, AS DEFINED IN THE NOI OF THE NPDES PERMIT, IN AN OPEN AREA SUCH THAT THE MEASUREMENT WILL NOT BE INFLUENCED BY OUTSIDE FACTORS (I.E. OVERHANGS, GUTTER, TREES, ETC.). AT LEAST ONE RAIN GAUGE PER LINEAR MILE IS REQUIRED ALONG (AS MEASURED ALONG THE CENTERLINE OF THE PRIMARY ALIGNMENT) THE PROJECT WHERE CLEARING, GRUBBING, EXCAVATION, GRADING, CUTTING OR FILLING IS ACTIVELY PERFORMED, OR EXPOSED SOIL HAS NOT YET BEEN PERMANENTLY STABILIZED.

13.2.3. METHODS

RAINFALL MONITORING WILL BE INITIATED PRIOR TO CLEARING, GRUBBING, EXCAVATION, GRADING, CUTTING, OR FILLING, EXCEPT AS SUCH MINIMAL CLEARING MAY BE NECESSARY TO INSTALL A RAIN GAUGE IN AN OPEN AREA. THE RAIN GAUGE WILL BE CHECKED FOR OPERATIONAL SOUNDNESS DAILY (DURING NORMAL BUSINESS HOURS) IN WET TIMES AND WEEKLY IN DRY TIMES. GAUGES WILL BE REPAIRED OR REPLACED ON THE SAME DAY IF FOUND TO BE NON-OPERATIONAL OR MISSING.

13.2.4. EACH RAIN GAUGE WILL BE READ (FOR DETAILED RECORDS OF RAINFALL) AND EMPTIED AFTER EVERY RAINFALL EVENT OCCURRING ON THE PROJECT SITE AT APPROXIMATELY THE SAME TIME OF THE DAY (DURING NORMAL BUSINESS HOURS). DURING PERIODS OF DRY CONDITIONS, IT WILL NOT BE NECESSARY TO READ THE RAIN GAUGE EVERY DAY. IN LIEU OF THIS REQUIREMENT ON WEEKENDS AND ON STATE HOLIDAYS, THE RAIN GAUGES CAN BE EMPTIED THE NEXT BUSINESS DAY AND A REFERENCE SITE USED FOR A RECORD OF DAILY AMOUNT OF PRECIPITATION FOR THOSE DAYS. A REFERENCE SITE IS THE DOCUMENTATION FROM THE CLOSEST GAUGE WITHIN PROXIMITY OF THE PROJECT FROM A RECOGNIZED SOURCE SUCH AS THE NOAA NATIONAL WEATHER SERVICE.

13.2.5. DETAILED RECORDS WILL BE RECORDED OF RAINFALL EVENTS INCLUDE DATES, AMOUNTS OF RAINFALL, AND THE APPROXIMATE DURATION (OR THE STARTING AND ENDING TIMES). THE RAINFALL RECORDS SHALL BE RECORDED ON THE TDOT RAINFALL RECORD SHEET AND SHALL BE MAINTAINED IN THE "DOCUMENTATION AND PERMITS" BINDER.

13.2.6. IF THE RAINFALL EVENT IS STILL IN PROGRESS AT THE DAILY RECORDING TIME, THE GAUGE WILL BE EMPTIED AND THE RECORD WILL INDICATE THAT THE STORM EVENT WAS STILL IN PROGRESS.

13.2.7. RAIN GAUGE INFORMATION (DETAILED RECORDS), INCLUDING THE LOCATION OF THE NEAREST OUTFALL, WILL BE RECORDED ON THE EPSC INSPECTION REPORT FORMS AT THE TIME OF MEASUREMENT.

13.3. KEEPING PLANS CURRENT (5.4.)

13.3.1. THE EPSC PLAN IS TO SERVE AS AN INITIAL GUIDE FOR SITE PERSONNEL AS THE CONSTRUCTION PROCESS DEVELOPS. IT MUST BE AMENDED, MODIFIED, AND UPDATED WHENEVER EPSC INSPECTIONS INDICATE, OR WHERE STATE OR FEDERAL REGULATORY OFFICIALS DETERMINE EPSC MEASURES ARE PROVING INEFFECTIVE IN ELIMINATING OR SIGNIFICANTLY MINIMIZING POLLUTANT SOURCES OR ARE OTHERWISE NOT ACHIEVING THE GENERAL OBJECTIVES OF CONTROLLING POLLUTANTS IN STORMWATER DISCHARGES ASSOCIATED WITH THE CONSTRUCTION ACTIVITY.

13.3.2. THE STAGES DEPICTED WITHIN THE EPSC PLANS MAY NOT COINCIDE WITH THE ACTUAL STAGES OF CONSTRUCTION ESTABLISHED BY THE CONTRACTOR DURING CONSTRUCTION, THUS MODIFICATIONS WILL BE REQUIRED TO ENSURE THE EPSC PLAN IS MAINTAINED TO DEPICT CURRENT SITE CONDITIONS. IT SHOULD BE MAINTAINED SUCH THAT IT WILL ALWAYS REFLECT THE MEASURES THAT ARE INSTALLED DURING THE VARIOUS STAGES OF CONSTRUCTION. IT IS IMPRACTICAL TO DETERMINE ALL THE INTERMEDIATE STAGES OF CONSTRUCTION THAT WILL OCCUR, THUS THESE DOCUMENTS MUST BE UPDATED THROUGHOUT THE LIFE OF THE CONSTRUCTION PROJECT.

13.3.3. THE TDOT EPSC INSPECTOR OR THEIR DULY AUTHORIZED REPRESENTATIVE WILL MODIFY AND UPDATE THE SWPPP WHEN ANY OF THE FOLLOWING CONDITIONS APPLY:

13.3.3.1. WHENEVER THERE IS A CHANGE IN THE SCOPE OF THE PROJECT THAT WOULD BE EXPECTED TO HAVE A SIGNIFICANT EFFECT ON THE DISCHARGE OF POLLUTANTS TO THE WATERS OF THE STATE AND WHICH HAS NOT OTHERWISE BEEN ADDRESSED IN THE SWPPP;

13.3.3.2. WHENEVER INSPECTIONS OR INVESTIGATIONS BY SITE OPERATORS, LOCAL, STATE, OR FEDERAL OFFICIALS INDICATE THE SWPPP IS PROVING INEFFECTIVE IN ELIMINATING OR SIGNIFICANTLY MINIMIZING POLLUTANTS FROM CONSTRUCTION ACTIVITY SOURCES, OR IS OTHERWISE NOT ACHIEVING THE GENERAL OBJECTIVES OF CONTROLLING POLLUTANTS IN STORMWATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITY; WHERE LOCAL, STATE, OR FEDERAL OFFICIALS DETERMINE THAT THE SWPPP IS INEFFECTIVE IN ELIMINATING OR SIGNIFICANTLY MINIMIZING POLLUTANT SOURCES, A COPY OF ANY CORRESPONDENCE TO THAT EFFECT MUST BE RETAINED IN THE SWPPP;

13.3.3.3. WHEN ANY NEW OPERATOR AND/OR SUB-OPERATOR IS ASSIGNED OR RELIEVED OF THEIR RESPONSIBILITY TO IMPLEMENT A PORTION OF THE SWPPP;

13.3.3.4. TO PREVENT A NEGATIVE IMPACT TO LEGALLY PROTECTED STATE OR FEDERALLY LISTED OR PROPOSED THREATENED OR ENDANGERED AQUATIC FAUNA;

13.3.3.5. WHEN THERE IS A CHANGE IN CHEMICAL TREATMENT METHODS INCLUDING: USE OF DIFFERENT TREATMENT CHEMICALS, DIFFERENT DOSAGE OR APPLICATION RATES OR A DIFFERENT AREA OF APPLICATION NOT SPECIFIED ON THE EPSC PLANS.

13.3.3.6. ALL SWPPP REVISION(S) SHALL BE RECORDED WITHIN 1 WEEK BY THE PROJECT EPSC INSPECTOR.

13.3.3.7. WHEN A TMDL IS DEVELOPED FOR THE RECEIVING WATERS FOR A POLLUTANT OF CONCERN (SILTATION AND/OR HABITAT ALTERATION), CONSTRUCTION SHALL NOTIFY THE PERMITS SECTION FOR PROPER COORDINATION.

13.4. MAKING PLANS ACCESSIBLE

13.4.1. TDOT WILL RETAIN A COPY OF THIS SWPPP (INCLUDING A COPY OF THE "DOCUMENTATION AND PERMITS" BINDER AT THE CONSTRUCTION SITE (OR OTHER LOCATION ACCESSIBLE TO TDEC AND THE PUBLIC) FROM THE DATE CONSTRUCTION COMMENCES TO THE DATE OF PERMANENT STABILIZATION. TDOT WILL HAVE A COPY OF THE SWPPP AVAILABLE AT THE LOCATION WHERE WORK IS OCCURRING ON-SITE FOR THE USE OF OPERATORS AND THOSE IDENTIFIED AS HAVING RESPONSIBILITIES UNDER THE SWPPP WHENEVER THEY ARE ON THE CONSTRUCTION SITE (7.2.).

13.4.2. PRIOR TO THE INITIATION OF LAND DISTURBING ACTIVITIES AND UNTIL THE SITE HAS MET THE PERMANENT STABILIZATION CRITERIA, TDOT OR THEIR DULY AUTHORIZED REPRESENTATIVE WILL POST A NOTICE NEAR THE MAIN ENTRANCE OF THE CONSTRUCTION SITE WITH THE FOLLOWING INFORMATION (5.3.4.) (7.2.1.):

13.4.2.1. A COPY OF THE NOTICE OF COVERAGE (NOC) WITH THE NPDES PERMIT NUMBER FOR THE PROJECT;

13.4.2.2. THE INDIVIDUAL NAME, COMPANY NAME, E-MAIL ADDRESS (IF APPLICABLE) AND TELEPHONE NUMBER OF THE LOCAL PROJECT SITE OWNER AND OPERATOR CONTACT;

13.4.2.3. A BRIEF DESCRIPTION OF THE PROJECT; AND

13.4.2.4. THE LOCATION OF THE SWPPP.

13.4.3. ALL INFORMATION DESCRIBED IN SECTION 13.4.2 MUST BE MAINTAINED IN LEGIBLE CONDITION. IF POSTING THIS INFORMATION NEAR A MAIN ENTRANCE IS INFEASIBLE DUE TO SAFETY CONCERNS, THE NOTICE SHALL BE POSTED IN A LOCAL BUILDING. THE NOTICE MUST BE PLACED IN A PUBLICLY ACCESSIBLE LOCATION WHERE CONSTRUCTION IS ACTIVELY UNDERWAY AND MOVED AS NECESSARY.

13.5. NOTICE OF TERMINATION (9.0.)

13.5.1. WHEN ALL STORMWATER DISCHARGES FROM CONSTRUCTION ACTIVITIES THAT ARE AUTHORIZED BY THE PERMIT ARE ELIMINATED BY PERMANENT STABILIZATION, THE TDOT REGIONAL ENGINEER WILL SUBMIT A NOTICE OF TERMINATION (NOT) THAT IS SIGNED IN ACCORDANCE WITH THE PERMIT TO THE TDEC CENTRAL OFFICE IN NASHVILLE, TN.

13.5.2. FOR THE PURPOSES OF THE CERTIFICATION REQUIRED BY THE NOT, THE ELIMINATION OF STORMWATER DISCHARGES ASSOCIATED WITH THE CONSTRUCTION ACTIVITY MEANS THE

13.5.2.1. ALL EARTH-DISTURBING ACTIVITIES ON THE SITE ARE COMPLETED AND ALL DISTURBED SOILS AT THE PORTION OF THE CONSTRUCTION SITE WHERE THE OPERATOR HAD CONTROL HAVE BEEN PERMANENTLY STABILIZED; AND

13.5.2.2. ALL CONSTRUCTION MATERIALS, WASTE AND WASTE HANDLING DEVICES, AND ALL EQUIPMENT, AND VEHICLES THAT WERE USED DURING CONSTRUCTION HAVE BEEN REMOVED AND PROPERLY DISPOSED; AND

13.5.2.3. ALL STORMWATER CONTROLS THAT WERE INSTALLED AND MAINTAINED DURING CONSTRUCTION, EXCEPT THOSE THAT ARE INTENDED FOR LONG-TERM USE FOLLOWING TERMINATION OF PERMIT COVERAGE, HAVE BEEN REMOVED; AND

13.5.2.4. ALL POTENTIAL POLLUTANTS AND POLLUTANT GENERATING ACTIVITIES ASSOCIATED WITH CONSTRUCTION HAVE BEEN REMOVED; AND

13.5.2.5. THE PERMITTEE HAS IDENTIFIED WHO IS RESPONSIBLE FOR ONGOING MAINTENANCE OF ANY STORMWATER CONTROLS LEFT ON THE SITE FOR LONG-TERM USE FOLLOWING TERMINATION OF PERMIT COVERAGE; AND

13.5.2.6. TEMPORARY EPSC MEASURES HAVE BEEN OR WILL BE REMOVED AT AN APPROPRIATE TIME TO ENSURE PERMANENT STABILIZATION IS MAINTAINED; AND

13.5.2.7. ALL STORMWATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITIES FROM THE IDENTIFIED SITE THAT ARE AUTHORIZED BY A NPDES GENERAL PERMIT HAVE OTHERWISE BEEN ELIMINATED FROM THE PORTION OF THE CONSTRUCTION SITE WHERE THE OPERATOR HAD CONTROL.

13.6. RETENTION OF RECORDS (7.1.)

TDOT WILL RETAIN COPIES OF THE SWPPP, ALL REPORTS REQUIRED BY THE PERMIT, AND RECORDS OF ALL DATA USED TO COMPLETE THE

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DEPARTMENT OF TRANSPORTATION

STORM WATER POLLUTION PREVENTION PLAN

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TYPE	YEAR	PROJECT NO.	SHEET NO.
PS&E	2026	38S180-S3-007	S-7
		38S180-M3-007	
		38S180-S3-008	

NOTICE OF INTENT FOR THE PROJECT FOR A PERIOD OF AT LEAST THREE (3) YEARS FROM THE DATE THE NOT WAS FILED.

14. SITE WIDE/PRIMARY PERMITTEE CERTIFICATION (8.7.5.)

I CERTIFY UNDER PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED BY ME, OR UNDER MY DIRECTION OR SUPERVISION. THE SUBMITTED INFORMATION IS TO THE BEST OF MY KNOWLEDGE AND BELIEF, TRUE, ACCURATE, AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT. AS SPECIFIED IN TENNESSEE CODE ANNOTATED SECTION 39-16-702(a)(4), THIS DECLARATION IS MADE UNDER PENALTY OF PERJURY.

AUTHORIZED TDOT PERSONNEL SIGNATURE (5.3.3.)

ROBBIE STEPHENS
PRINTED NAME

STATEWIDE TRANSPORTATION ENGINEER
TITLE

JULY 26, 2025
DATE

15. SECONDARY PERMITTEE (OPERATOR) CERTIFICATION (8.7.6.)

I CERTIFY UNDER PENALTY OF LAW THAT I HAVE REVIEWED THIS DOCUMENT, ANY ATTACHMENTS, AND THE SWPPP REFERENCED ABOVE. BASED ON MY INQUIRY OF THE CONSTRUCTION SITE OWNER/DEVELOPER IDENTIFIED ABOVE AND/OR MY INQUIRY OF THE PERSON DIRECTLY RESPONSIBLE FOR ASSEMBLING THIS NOI AND SWPPP, I BELIEVE THE INFORMATION SUBMITTED IS ACCURATE. I AM AWARE THAT THIS NOI, IF APPROVED, MAKES THE ABOVE-DESCRIBED CONSTRUCTION ACTIVITY SUBJECT TO NPDES PERMIT NUMBER TNR100000, AND THAT CERTAIN OF MY ACTIVITIES ONSITE ARE THEREBY REGULATED. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR KNOWING VIOLATIONS, AND FOR FAILURE TO COMPLY WITH THESE PERMIT REQUIREMENTS. AS SPECIFIED IN TENNESSEE CODE ANNOTATED SECTION 39-16-702(a)(4), THIS DECLARATION IS MADE UNDER PENALTY OF PERJURY.

AUTHORIZED CONTRACTOR PERSONNEL SIGNATURE (5.3.3.)

PRINTED NAME

TITLE

DATE

16. ENVIRONMENTAL PERMITS (1.5.2.)

LIST ALL ENVIRONMENTAL PERMITS AND EXPIRATION DATES FOR PROJECT **(TO BE COMPLETED AT THE ENVIRONMENTAL PRECONSTRUCTION MEETING BY TDOT CONSTRUCTION OR THEIR DULY AUTHORIZED REPRESENTATIVE)**:

ENVIRONMENTAL PERMITS			
PERMIT	**YES OR NO**	**PERMIT OR TRACKING NO.**	**EXPIRATION DATE***
TDEC ARAP	YES	NRS25.148	August 3, 2030
CORPS OF ENGINEERS (USACE)	YES	MVM-2025-193	
TVA 26A			
TDEC CGP	YES	TNR192382	September 30, 2026
OTHER:			

*THE TDOT ENVIRONMENTAL DIVISION MUST BE NOTIFIED SIX MONTHS PRIOR TO PERMIT EXPIRATION DATE.

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STORM WATER POLLUTION PREVENTION PLAN

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TYPE	YEAR	PROJECT NO.	SHEET NO.
PS&E	2026	38S180-S3-007	S-8
		38S180-M3-007	
		38S180-S3-008	

17. **OUTFALL TABLE (5.5.1.c, 6.4.1.e, 6.4.1.f)**

OUTFALL LABEL	SUB OUT-FALL	STATION CL, LT OR RT	SLOPE WITHIN ROW (%)	STAGE 1 DRAINAGE AREA (AC)	STAGE 2 DRAINAGE AREA (AC)	STAGE 3 DRAINAGE AREA (AC)	SEDIMENT BASIN OR EQUIVALENT MEASURE(S) (YES, NO OR N/A)	SEDIMENT TRAP OR EQUIVALENT MEASURE(S) (YES, NO OR N/A)	RECEIVING RESOURCE (TDOT EBR LABEL) OR OTHER	COMMENTS
1 & 2	1		2.45	2.71	2.71	N/A	N/A	N/A	LOST CREEK	
1 & 2	2		3.16	1.96	1.96	N/A	N/A	N/A	LOST CREEK	

ALL UNUSED FIELDS WITHIN THE OUTFALL TABLE ARE TO BE SHADED, HATCHED, OR REMOVED TO INDICATE THEIR NON-USAGE.

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DEPARTMENT OF TRANSPORTATION

STORM WATER
POLLUTION
PREVENTION
PLAN

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