

02/10/2026

THIS DOCUMENT HAS BEEN DIGITALLY SIGNED AND SEALED BY:

Jeffrey Lee

Digitally signed by Jeffrey Lee
Date: 2026.02.10 13:18:08 -06'00'

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PALMER ENGINEERING
2817 ERICA PLACE
NASHVILLE, TN 37204
J. BRIAN LEE, P.E. 107296

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

SHEET NAME	SHEET NO.
SIGNATURE SHEET	ROADWAY-SIGN1
TITLE SHEET	1
ROADWAY INDEX AND STANDARD ROADWAY DRAWINGS	1A
STANDARD ROADWAY DRAWINGS	1A1
STANDARD TRAFFIC DESIGN AND STRUCTURE DRAWINGS	1A2
ESTIMATED ROADWAY QUANTITIES	2, 2-1
ESTIMATED BOX BRIDGE QUANTITIES	2A
TYPICAL SECTIONS	2B - 2B10
PAVEMENT SCHEDULE	2B11 - 2B12
GENERAL NOTES	2C, 2C1
SPECIAL NOTES	2D
ENVIRONMENTAL NOTES	2E
TABULATED QUANTITIES	2F - 2F3
DITCH DETAIL SHEETS	2G, 2G1
TRENCH DRAIN DETAIL	2G2
MITIGATION NOTES AND QUANTITIES	2G3
RIGHT-OF-WAY NOTES, UTILITY NOTES AND UTILITY OWNERS	3
RIGHT-OF-WAY ACQUISITION TABLES	3A
PROPERTY MAPS	3B - 3C
PRESENT LAYOUTS	4 - 15
RIGHT OF WAY DETAILS	4A - 15A
RIGHT OF WAY DETAILS BRIDGE #1	7D - 7F
PROPOSED LAYOUTS	4B - 15B
PROPOSED PROFILES	4C - 15C
SIDE ROADS PROFILES	16 - 18
HAUL ROAD PROFILES	19
PRIVATE DRIVE, BUSINESS, AND FIELD ENTRANCE PROFILES	20 - 22
DRAINAGE MAPS	23 - 24
CULVERT SECTIONS	25 - 32
EROSION PREVENTION AND SEDIMENT CONTROL NOTES	33
EROSION PREVENTION & SEDIMANT CONTROL (EPSC) LEGEND & TABULATION	34
EROSION PREVENTION & SEDIMENT CONTROL (EPSC) PLANS	35 - 37L
SIGNING AND PAVEMENT MARKING PLANS	38 - 49
SIGN SCHEDULE SHEETS	50 - 52
ROADWAY CROSS SECTIONS	53 - 189
SIDE ROAD CROSS SECTIONS	190 - 209
PAVEMENT EDGE DROP-OFF NOTES FOR TRAFFIC CONTROL	T1
TRAFFIC CONTROL TABULATION QUANTITIES	T2
TRAFFIC CONTROL PLANS	T3 - T4L
CAR DETOUR MAP	T5
TRUCK DETOUR MAP	T5A

YEAR	PROJECT NO.	SHEET NO.
2026	NH-54(48)	ROADWAY-SIGN1

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

SIGNATURE SHEET

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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
RAILROAD INVOLVEMENT	YES X	NO

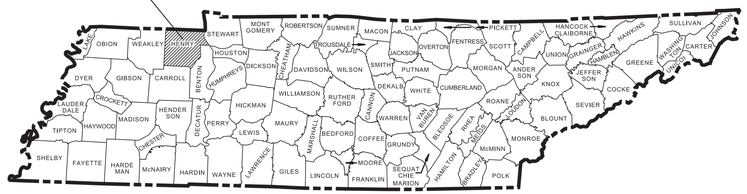
TENN.	YEAR	SHEET NO.
	2026	1
FED. AID PROJ. NO.	NH-54(48)	
STATE PROJ. NO.	40S054-F3-004	

REV. 03/26/24: REVISED END OF PROJECT STATIONING FROM STA. 247+47.60 TO STA. 247+50.14.

HENRY COUNTY

SR-54
FROM: NEAR HOWARD ROAD
TO: KENTUCKY STATE LINE (IA)

PROJECT LOCATION
BRIDGE ID. # 40SR0540027



PS&E

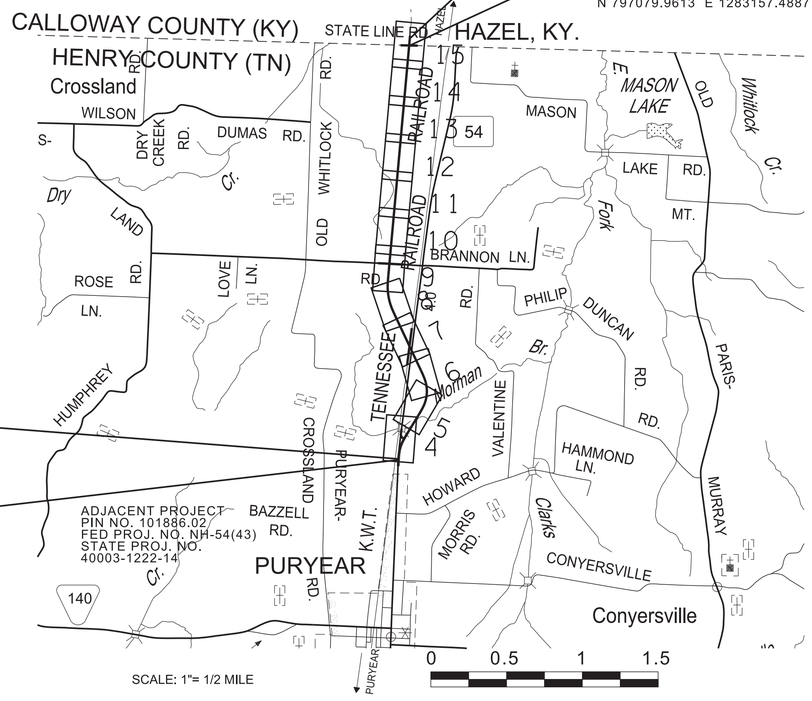
GRADE, DRAIN, PAVING, BRIDGE, SIGNS, GUARDRAIL, AND PAVEMENT MARKING

STATE HIGHWAY NO. 54 U.S. ROUTE NO. 641

40S054-F3-004
END PROJECT NO. NH-54(48) (CONST.)
STA. 250+00.00 SR-54
N 797328.7992 E 1283180.0156

40S054-F2-002
END PROJECT NO. NH-54(48) R.O.W.
STA. 247+50.14 SR-54
N 797079.9613 E 1283157.4887

CALLOWAY CO, KY
US 641
PRJ.# NHPP 6411 (039)
FD52 018 0641 000-006



SCALE: 1"= 1/2 MILE
0 0.5 1 1.5

N

NO EXCLUSIONS

40S054-F3-004
BEGIN PROJECT NO. NH-54(48) (CONST.)
STA. 98+00.00 SR-54
N 782682.8032 E 1282783.9372

40S054-F2-002
BEGIN PROJECT NO. NH-54(48) R.O.W.
STA. 97+65.59 SR-54
N 782648.4566 E 1282781.8515

SEALED BY
BRIAN LEE
REGISTERED ENGINEER
AGRICULTURE
02/10/2026
DATE
NUMBER 107296
STATE OF TENNESSEE

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 ARRIL 1, 2026 AND ADDITIONAL SPECIFICATIONS AND SPECIAL PROVISIONS CONTAINED IN THE PLANS AND IN THE PROPOSAL CONTRACT.

R.O.W. LENGTH	2.837 MILES
ROADWAY LENGTH	2.756 MILES
BRIDGE LENGTH	0.122 MILES
BOX BRIDGE LENGTH	0.006 MILES ▲
PROJECT LENGTH	2.878 MILES

▲ Not included in the project length (Non Riding Surface).

SURVEY 10-07-20	TRAFFIC DATA	
UPDATED 10-20-22	ADT (2026)	5170
UPDATED 11-28-22	ADT (2046)	6200
UPDATED 09-21-23	DHV (2046)	620
	D	60 - 40
	T (ADT)	14 %
	T (DHV)	9 %
	V	60 MPH

COORDINATES ARE NAD 83(2011), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00002 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988 WITH GEOID 12B.

TDOT PROJECT MANAGER: SETH HENDREN, P.E.
DESIGNED BY : PALMER ENGINEERING COMPANY
DESIGNER : BRIAN LEE, P.E. CHECKED BY TODD KEMP, P.E.
P.E. NO. 40003-1225-14 (DESIGN)
PIN NO. 101886.05

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TYPE	YEAR	PROJECT NO.	SHEET NO.
PIH	2025	NH-54(48)	1A
PS&E	2026	NH-54(48)	1A

ROADWAY INDEX

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CAR DETOUR MAP	T5
TRUCK DETOUR MAP	T5A
BRIDGE PLANS	B-1
GEOTECHNICAL PLANS	G-1
NATURAL STREAM DESIGN PLANS	NS-1

STANDARD ROADWAY DRAWINGS

DWG.	REV.	DESCRIPTION
STORM WATER POLLUTION PREVENTION PLAN (SWPPP) PLANS		S-1
UTILITIES PLANS		U1-1

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

NO PROJECT COMMITMENTS FOR THIS PROJECT.

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

DWG.	REV.	DESCRIPTION
RD-TP-1	09-26-16	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	01-30-26	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
RD-L-8	02-20-20	STANDARD LEGEND FOR NATURAL STREAM DESIGN

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-1A	06-28-19	DESIGN STANDARDS FOR LOCAL ROADS AND STREETS
RD11-TS-3A	06-28-19	DESIGN STANDARDS FOR ARTERIAL HIGHWAYS WITH DEPRESSED MEDIAN (4 AND 6 LANE)
RD11-TS-3B		DESIGN STANDARDS FOR ARTERIAL HIGHWAYS WITH FLUSH MEDIAN (4 AND 6 LANE)
RD11-TS-7B	06-12-25	DESIGN STANDARDS 2-LANE HIGHWAYS WITH CONTINUOUS 2-WAY LEFT-TURN LANE
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-SA-1	01-09-24	SAFETY APPROACH TO UNDERPASSES GRADING DESIGN AND SLOPE PROTECTION
RD11-SD-1		INTERSECTION SIGHT DISTANCE DESIGN AND GENERAL NOTES
RD11-SD-2		INTERSECTION SIGHT DISTANCE LANDSCAPE AND OBSTRUCTION
RD11-SD-3		INTERSECTION SIGHT DISTANCE 2-LANE ROADWAYS
RD11-SD-4		INTERSECTION SIGHT DISTANCE 4-LANE AND 5-LANE UNDIVIDED ROADWAYS
RD-UD-3	01-09-24	UNDERDRAIN DETAILS
RD-UD-4	06-28-19	UNDERDRAIN LATERAL DETAILS
RD-UD-7	06-28-19	LATERAL UNDERDRAIN ENDWALL DETAIL FOR 3:1 & 4:1 SLOPES
RD-UD-8	06-28-19	LATERAL UNDERDRAIN ENDWALL DETAIL FOR 5:1 SLOPES
RD-UD-9	06-28-19	LATERAL UNDERDRAIN ENDWALL DETAIL FOR 6:1 SLOPES

10-102.00 AQUATIC ORGANISM PASSAGE (AOP) DESIGN, PIPE CULVERTS, AND ENDWALLS

DWG.	REV.	DESCRIPTION
D-AOP-3		AOP DESIGN EMBEDDED BOX CULVERTS
D-FLU-3	04-14-25	BRIDGE END DRAIN FLUME DETAILS
D-PB-1	03-01-23	STANDARD DETAILS FOR CONCRETE PIPE INSTALLATION
D-PB-2	03-01-23	STANDARD DETAILS FOR FLEXIBLE PIPE INSTALLATION
D-PB-3	11-30-20	INDUCED TRENCH SOIL EMBANKMENT FOR PIPE CULVERT INSTALLATION
D-PB-4	01-09-24	PIPE COLLAR DETAILS
D-PE-18A	06-28-19	TYPE "U" CROSS DRAIN ENDWALL FOR 18" PIPE (FOR 3:1, 4:1 & 6:1 SLOPES)
D-PE-18B	06-28-19	TYPE "U" CROSS DRAIN ENDWALL FOR 18" PIPE, BILL OF STEEL AND PRECAST NOTES
D-PE-24A	06-28-19	TYPE "U" CROSS DRAIN ENDWALL FOR 24" PIPE (FOR 3:1, 4:1 & 6:1 SLOPES)
D-PE-24B	06-28-19	TYPE "U" CROSS DRAIN ENDWALL FOR 24" PIPE, BILL OF STEEL AND PRECAST NOTES
D-PE-36A	06-28-19	TYPE "U" CROSS DRAIN ENDWALL FOR 36" PIPE WITH STEEL PIPE GRATE (FOR 3:1, 4:1 & 6:1 SLOPES)
D-PE-36B	06-28-19	TYPE "U" CROSS DRAIN ENDWALL FOR 36" PIPE, BILL OF STEEL AND PRECAST NOTES
D-PE-42A	06-28-19	TYPE "U" CROSS DRAIN ENDWALL FOR 42" PIPE WITH STEEL PIPE GRATE (FOR 3:1, 4:1 & 6:1 SLOPES)
D-PE-42B	06-28-19	TYPE "U" CROSS DRAIN ENDWALL FOR 42" PIPE, BILL OF STEEL AND PRECAST NOTES
D-PE-99	03-04-21	TYPE "U" CROSS DRAIN ENDWALL DETAILS, PIPE GRATE & SKEWED CONNECTION
D-SEW-1A	01-30-26	TYPE "SAFETY" SIDE DRAIN ENDWALL WITH STEEL PIPE GRATE, FOR 15" THRU 48" PIPES, 6:1 SLOPE
D-PEW-1		PROTECTED ENDWALLS FOR ROUND & OVAL PIPES (PIPE SIZES 18” TO 72”, ALL SKEWS, 2:1 & 3:1 SLOPES)
D-PEW-2		PROTECTED ENDWALLS FOR ROUND PIPES DETAILS & QUANTITIES (PIPE SIZES 18” TO 72”, ALL SKEWS, 2:1 & 3:1 SLOPES)

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02/19/2026

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

ROADWAY INDEX AND STANDARD ROADWAY DRAWINGS

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TYPE	YEAR	PROJECT NO.	SHEET NO.
PIH	2025	NH-54(48)	1A1
PS&E	2026	NH-54(48)	1A1

STANDARD ROADWAY DRAWINGS

DWG.	REV.	DESCRIPTION
10-104.00		**CATCH BASINS AND MANHOLES**
D-CB-38S	03-04-21	STANDARD 32" X 32" SQUARE CONCRETE NO. 38 CATCH BASIN
D-CB-42RB	02-20-20	STANDARD PRECAST CIRCULAR NO. 42 CATCH BASIN
D-CB-42S	02-20-20	STANDARD 32" X 32" SQUARE CONCRETE NO. 42 CATCH BASIN
D-CB-99	02-20-20	MISCELLANEOUS DETAILS FOR RECTANGULAR STRUCTURES
D-CB-99R	01-28-22	MISCELLANEOUS DETAILS FOR ROUND STRUCTURES
D-CB-99RA	10-29-21	BILL OF STEEL FOR ROUND CATCH BASIN LIDS
D-CBB-42	10-29-21	CAST IRON GRATE DETAILS FOR NOS. 42, 43 & 44 TYPE CATCH BASINS
D-RL-3		ROUND LID DETAILS FOR SINGLE OPENING AREA DRAIN
D-RS-1		PRECAST ROUND STRUCTURES (48" THRU 120")
D-RS-2		PRECAST ROUND STRUCTURES REINFORCEMENT DETAILS
D-RS-3	01-30-26	MISCELLANEOUS DETAILS FOR ROUND STRUCTURES
D-TD-1	07-07-23	TRENCH DRAIN
10-105.00		**ROADWAY, PAVEMENT APPURTENANCES, AND FENCES**
RP-I-5	05-01-20	EXAMPLES OF STREET & ALLEY INTERSECTIONS
RP-R-1	04-21-25	STANDARD RAMP DETAILS FOR ROADWAYS AND DRIVEWAYS
RP-R-1A	04-21-25	STANDARD RAMP DETAILS FOR LOW VOLUME RURAL ROADWAYS
S-F-1	03-01-23	HIGH VISIBILITY FENCE
S-RP-2	06-28-19	STANDARD CONCRETE RIGHT-OF-WAY MARKERS
10-107.00		**SAFETY DESIGN AND GUARDRAILS**
S-CZ-1	06-28-19	CLEAR ZONE CRITERIA
S-PL-1	03-01-23	SAFETY PLAN FOR BARRIER LENGTH OF NEED
S-PL-1A	03-01-23	SAFETY PLAN FOR BARRIER LENGTH OF NEED (FOR RIGID OBJECTS)
S-PL-1B	03-01-23	SAFETY PLAN FOR BARRIER LENGTH OF NEED ON CURVED ROADWAYS
S-PL-3	03-01-23	SAFETY PLAN MINIMUM INSTALLATION AT BRIDGE ENDS
S-PL-4	01-09-24	SAFETY PLAN FOR BRIDGE PIERS IN DEPRESSED MEDIAN
S-PL-4A	01-09-24	SAFETY PLAN TO FOR BRIDGE PIERS/ ABUTMENTS OUTSIDE THE SHOULDER
S-PL-5	06-28-19	SAFETY PLAN FOR BRIDGE ENDS IN MEDIANS
S-PL-6	07-30-24	SAFETY PLAN SAFETY HARDWARE PLACEMENT ON OUTSIDE EDGE
S-PL-6A	06-28-19	SAFETY PLAN SAFETY HARDWARE PLACEMENT IN MEDIAN
S-PL-7		SAFETY PLAN HARDWARE PLACEMENT AT INTERSECTIONS
S-GR31-1	10-31-25	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-GR31-1D	03-01-23	GUARDRAIL POST PLACEMENT IN ROCK
S-GRC-4	10-31-25	GUARDRAIL CONNECTION TO BRIDGE RAILING CONCRETE PARAPET
S-GRS-7A	07-30-24	SHORT-RADIUS-GUARDRAIL SYSTEM (SRGS) ANCHOR DETAILS
S-GRS-7B		SHORT-RADIUS-GR SYSTEM (SRGS) EYE-BOLT SPACING DETAILS
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-GRA-4	03-01-23	IN-LINE GUARDRAIL ANCHOR TO PRIVATE DRIVE
S-GRA-5	06-28-19	FLARED GUARDRAIL ANCHOR
10-108.00		**EROSION PREVENTION AND SEDIMENT CONTROL**
EC-STR-2	08-01-12	SEDIMENT FILTER BAG
EC-STR-3B	06-15-21	SILT FENCE
EC-STR-3C	03-01-23	SILT FENCE WITH WIRE BACKING
EC-STR-3E	04-01-08	SILT FENCE FABRIC JOINING DETAILS
EC-STR-6	11-30-20	ROCK CHECK DAM
EC-STR-6A	05-06-16	ENHANCED ROCK CHECK DAM
EC-STR-8	06-10-14	FILTER SOCK
EC-STR-11	03-16-17	CULVERT PROTECTION TYPE 1
EC-STR-19	04-01-08	CATCH BASIN PROTECTION
EC-STR-25	08-01-12	TEMPORARY CULVERT CROSSING, CONSTRUCTION EXIT, CONSTRUCTION FORD
EC-STR-27	08-01-12	TEMPORARY SLOPE DRAIN AND BERM
EC-STR-30		INSTREAM DIVERSION (WITHOUT TRAFFIC)
EC-STR-31	05-04-22	TEMPORARY DIVERSION CHANNEL
EC-STR-31A	04-01-08	TEMPORARY DIVERSION CHANNEL DESIGN
EC-STR-34	05-04-22	EROSION CONTROL BLANKET FOR SLOPE INSTALLATION
EC-STR-36	05-04-22	TURF REINFORCEMENT MAT FOR CHANNEL INSTALLATION
EC-STR-37	06-10-14	SEDIMENT TUBE
EC-STR-41		CATCH BASIN FILTER ASSEMBLY (TYPE 1)
EC-STR-41A		CATCH BASIN FILTER ASSEMBLY (TYPE 1) SLIPCOVER DETAILS
EC-STR-42		CATCH BASIN FILTER ASSEMBLY (TYPE 2)
EC-STR-42A		CATCH BASIN FILTER ASSEMBLY (TYPE 2) SLIPCOVER DETAILS
EC-STR-43		CATCH BASIN FILTER ASSEMBLY (TYPE 3)
EC-STR-43A		CATCH BASIN FILTER ASSEMBLY (TYPE 3) SLIPCOVER DETAILS
10-109.00		**NATURAL STREAM DESIGN**
D-NSD-33	05-01-20	COIR FIBER EROSION CONTROL BLANKET AND COIR FIBER ROLLS

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

STANDARD ROADWAY DRAWINGS

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TYPE	YEAR	PROJECT NO.	SHEET NO.
PIH	2025	NH-54(48)	1A2
PS&E	2026	NH-54(48)	1A2

STANDARD TRAFFIC DESIGN AND STRUCTURE DRAWINGS

DWG.	REV.	DESCRIPTION
10-200.00	**SIGNS**	
T-S-6	07-30-25	STANDARD MOUNTING DETAILS - BOLTED EXTRUDED PANELS
T-S-9	07-30-25	STANDARD LAYOUT GROUND MOUNTED SIGNS
T-S-10	07-30-25	STANDARD MOUNTING DETAILS FLAT SHEET SIGNS ALUMINUM-STEEL DESIGN
T-S-11	07-30-25	DELINEATOR AND MILEPOST DETAILS
T-S-12	07-30-25	STANDARD STEEL GROUND MOUNTED SIGNS, BREAK-AWAY TYPE POST FOOTING DETAILS, SQUARE TUBES
T-S-13	07-30-25	I-BEAM BREAK-AWAY LARGE SIGN SUPPORT DETAILS
T-S-15	07-30-25	STANDARD CONDUIT & GROUND DETAILS FOR OVERHEAD & CANTILEVER SIGN STRUCTURES
T-S-16	07-30-25	GROUND MOUNTED ROADSIDE SIGN PLACEMENT DETAILS
T-S-16A	07-02-15	GROUND MOUNTED ROADSIDE SIGN PLACEMENT DETAILS
T-S-17	07-30-25	STANDARD GROUND MOUNTED SIGN USING PERFORATED/KNOCKOUT SQUARE TUBE
T-S-18	07-30-25	END OF ROADWAY, DEAD END SIGNS, AND METAL BARRICADES (TYPE III)
T-S-19	07-30-25	STANDARD STEEL SIGN SUPPORTS
T-S-20	07-30-25	SIGN DETAILS
T-S-23A	07-30-25	MULTI-DIRECTIONAL SLIP BASE BREAKAWAY P-POST SIGN SUPPORT
T-S-23B	07-30-25	MULTI-DIRECTIONAL SLIP BASE BREAKAWAY STRUCTURAL PIPE SIGN SUPPORT
T-S-23C	07-30-25	BREAKWAY POST SIGN SUPPORTS
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-3	01-24-25	MARKING STANDARDS FOR TRAFFIC ISLANDS, PAVED SHOULDERS AND MEDIANS FOR CONVENTIONAL ROADS
T-M-4	01-24-25	STANDARD INTERSECTION PAVEMENT MARKINGS
T-M-5	01-24-25	MARKING DETAIL FOR FREEWAYS
T-M-15A	01-24-25	ASPHALT SHOULDER RUMBLE STRIP INSTALLATION DETAILS FOR NON-ACCESS CONTROLLED RURAL ROUTES
T-M-16B		MUMBLE STRIP/STRIPE DETAILS FOR EDGE OF PAVEMENT
T-WZ-10	03-26-25	ADVANCE ROAD WORK SIGNING ON HIGHWAYS AND FREEWAYS
T-WZ-FAB1	03-26-25	FLASHING YELLOW ARROW BOARD
T-WZ-PBR1	03-26-25	INTERCONNECTED PORTABLE BARRIER RAIL
T-WZ-PBR2	03-26-25	DETAILS FOR WORK ZONE CHANNELIZATION DEVICES
T-WZ-PCB1	03-26-25	10 FOOT PORTABLE CONCRETE BARRIER RAIL
T-WZ-PCB3	03-26-25	PORTABLE CONCRETE BARRIER RAIL DETAILS
T-WZ-PCB4	07-22-25	PORTABLE CONCRETE BARRIER RAIL ANCHOR PIN DETAILS

DWG.	REV.	DESCRIPTION

STANDARD STRUCTURE DRAWINGS

10-300.00	**NEW STRUCTURES**	
STD-1-1SS	07-09-25	BRIDGE RAILING SINGLE SLOPE CONCRETE PARAPET
STD-1-5	06-05-23	REINFORCED CONCRETE PAVEMENT AT BRIDGE ENDS
10-301.00	**LRFD BOX CULVERTS**	
STD-17-1		INDEX OF DRAWINGS
STD-17-2		TERMINOLOGY OF DRAWINGS
STD-17-3		GENERAL NOTES
STD-17-4		DESIGN SECTION LIMITS
STD-17-5		TYPICAL SECTIONS AND DETAILS
STD-17-6		TYPICAL ELEVATION
STD-17-7		CURB, RAIL & EDGE BEAM DETAILS - SKEW NOT LESS THAN 45 DEG.
STD-17-8		EDGE BEAM DETAILS FOR FILLS GREATER THAN 3' - 6"
STD-17-9		INTERIOR WALL END TREATMENTS
STD-17-10		TYPICAL WINGWALL DETAILS AND NOTES
STD-17-11		WINGWALL DIMENSIONS AND QUANTITIES
STD-17-12		WINGWALL DIMENSIONS AND QUANTITIES
STD-17-13		WINGWALL DIMENSIONS AND QUANTITIES
STD-17-14		WINGWALL DIMENSIONS AND QUANTITIES
STD-17-15		WINGWALL AND SPECIAL RETAINING WALL DESIGN SECTIONS
STD-17-16		WINGWALL DESIGN SECTIONS
STD-17-17	06-01-11	BACKFILL AND DRAINAGE DETAILS
STD-17-18		BACKFILL DETAILS
STD-17-20		LOW FLOW CHANNEL CONSTRUCTION DETAILS FOR CULVERT INLET AND OUTLET
STD-17-24		WARPED SLOPE DETAIL
STD-17-51	05-01-14	BOX BRIDGE, 1 BARREL AT 6', CLEAR HTS. 3' - 6', 0 - 60' FILL
STD-17-83		BOX BRIDGE, 2 BARRELS AT 16', CLEAR HTS. 9' - 12', 0 - 60' FILL

SEALED BY

J. BRIAN LEE
REGISTERED ENGINEER
STRUCTURE
NUMBER
107290
STATE OF TENNESSEE

02/10/2026

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

STANDARD TRAFFIC DESIGN AND STRUCTURE DRAWINGS

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	2
PIH	2025	NH-54(48)	2
PS&E	2026	NH-54(48)	2

ESTIMATED ROADWAY QUANTITIES

	ITEM NO.	DESCRIPTION	UNIT	QUANTITY 40S054-F3-004
	105-01	CONSTRUCTION STAKES, LINES AND GRADES	LS	1
	201-01	CLEARING AND GRUBBING	LS	1
(40)	202-06.01	REMOVAL OF BUILDINGS (TRACT NO. 4)	LS	1
(40)	202-06.02	REMOVAL OF BUILDINGS (TRACT NO. 17)	LS	1
(3)(4)(28)(41)	203-01	ROAD & DRAINAGE EXCAVATION (UNCLASSIFIED)	C.Y.	360613
	203-04	PLACING AND SPREADING TOPSOIL	C.Y.	25497
	203-08	CHANNEL EXCAVATION (UNCLASSIFIED)	C.Y.	1427
(27)	203-20.01	CHANNEL SUBSTRATE	C.Y.	180
(37)	203-50	CONSTRUCTION OF HAUL ROAD	LS	1
(19)(22)	204-08	FOUNDATION FILL MATERIAL	C.Y.	367
(5)	204-08.01	BACKFILL MATERIAL (FLOWABLE FILL)	C.Y.	10
(1)(5)	209-02.07	18" TEMPORARY SLOPE DRAIN	L.F.	400
(1)(5)	209-03.22	FILTER SOCK (18 INCH)	L.F.	300
(25)(32)	209-03.99	PROTECTED AREA MARKER (WHITE WITH DECAL)	EACH	51
(1)(5)	209-05	SEDIMENT REMOVAL	C.Y.	2280
(1)(5)	209-06.02	12" DIA COIR LOG (LOW FLOW CHANNEL)	L.F.	471
(1)(5)(33)	209-08.02	TEMPORARY SILT FENCE (WITH BACKING)	L.F.	50416
(1)(5)	209-08.03	TEMPORARY SILT FENCE (WITHOUT BACKING)	L.F.	48288
(1)(5)	209-08.08	ENHANCED ROCK CHECK DAM	EACH	48
(1)(5)	209-08.09	FILTER SOCK CHECK DAM	EACH	1035
(1)(5)	209-09.01	SANDBAGS	BAG	3517
(1)(5)(39)	209-09.03	SEDIMENT FILTER BAG (15' X 15')	EACH	7
(1)(5)(14)	209-20.03	POLYETHYLENE SHEETING (6 MIL. MINIMUM)	S.Y.	500
(1)(5)(20)	209-20.04	POLYETHYLENE SHEETING (10 MIL.)	S.Y.	500
(1)(5)	209-40.41	CATCH BASIN FILTER ASSEMBLY(TYPE 1)	EACH	5
(1)(5)	209-40.43	CATCH BASIN FILTER ASSEMBLY(TYPE 3)	EACH	1
(1)(5)	209-65.03	TEMPORARY DIVERSION CHANNEL	L.F.	1442
(1)(5)	209-65.04	TEMPORARY IN STREAM DIVERSION	L.F.	110
	303-01.01	GRANULAR BACKFILL (ROADWAY)	TON	5615
(1)(5)(21)(23)	303-10.01	MINERAL AGGREGATE (SIZE 57)	TON	2924
(20)	303-10.03	MINERAL AGGREGATE (SIZE 68)	TON	177
	307-01.08	ASPHALT CONCRETE MIX (PG64-22) (BPMB-HM) GRADING B-M2	TON	3838
	307-01.21	ASP. CONC. MIX(PG70-22) (BPMB-HM) GR. A-S	TON	17228
	307-02.01	ASPHALT CONCRETE MIX (PG70-22) (BPMB-HM) GRADING A	TON	18518
	307-02.08	ASPHALT CONCRETE MIX (PG70-22) (BPMB-HM) GRADING B-M2	TON	12136
	402-01	BITUMINOUS MATERIAL FOR PRIME COAT (PC)	TON	205
(5)	402-02	AGGREGATE FOR COVER MATERIAL (PC)	TON	723
	403-01	BITUMINOUS MATERIAL FOR TACK COAT (TC)	TON	82
	407-20.05	SAW CUTTING ASPHALT PAVEMENT	L.F.	1500
	411-01.07	ACS MIX (PG64-22) GRADING E SHOULDER	TON	2172
	411-01.10	ACS MIX(PG64-22) GRADING D	TON	97
	411-02.10	ACS MIX(PG70-22) GRADING D	TON	7141
	411-12.01	SCORING SHOULDERS (CONTINUOUS) (16IN WIDTH)	L.M.	0.3
	411-12.02	SCORING SHOULDERS (NON-CONTINUOUS) (16IN WIDTH)	L.M.	5.1
	415-01.01	COLD PLANING BITUMINOUS PAVEMENT	TON	309
	604-01.01	CLASS A CONCRETE (ROADWAY)	C.Y.	330
	604-01.02	STEEL BAR REINFORCEMENT (ROADWAY)	LB.	66444
(9)	607-03.02	18" CONCRETE PIPE CULVERT (CLASS III)	L.F.	730
(9)	607-05.02	24" CONCRETE PIPE CULVERT (CLASS III)	L.F.	170
(9)	607-07.02	36" CONCRETE PIPE CULVERT (CLASS III)	L.F.	726
(9)	607-39.02	18" PIPE CULVERT (SIDE DRAIN)	L.F.	242
(9)	607-39.03	24" PIPE CULVERT (SIDE DRAIN)	L.F.	66
	611-05.01	TRENCH DRAINS	L.F.	211
	611-05.02	12IN PVC PIPE FOR TRENCH DRAINS	L.F.	5
	611-07.01	CLASS A CONCRETE (PIPE ENDWALLS)	C.Y.	10
	611-07.02	STEEL BAR REINFORCEMENT (PIPE ENDWALLS)	LB.	378
	611-07.31	18IN ENDWALL (SIDE DRAIN)	EACH	16
	611-07.32	24IN ENDWALL (SIDE DRAIN)	EACH	4
	611-07.54	18IN ENDWALL (CROSS DRAIN) 3:1	EACH	2

ESTIMATED ROADWAY QUANTITIES

	ITEM NO.	DESCRIPTION	UNIT	QUANTITY 40S054-F3-004
	611-07.55	18IN ENDWALL (CROSS DRAIN) 4:1	EACH	1
	611-07.58	24IN ENDWALL (CROSS DRAIN) 4:1	EACH	1
	611-07.59	24IN ENDWALL (CROSS DRAIN) 6:1	EACH	1
	611-07.65	36IN ENDWALL (CROSS DRAIN) 6:1	EACH	2
	611-07.67	42IN ENDWALL (CROSS DRAIN) 4:1	EACH	1
	611-07.68	42IN ENDWALL (CROSS DRAIN) 6:1	EACH	1
	611-38.01	CATCH BASINS, TYPE 38, 0' - 4' DEPTH	EACH	1
	611-38.02	CATCH BASINS, TYPE 38, > 4' - 8' DEPTH	EACH	1
	611-42.01	CATCH BASINS, TYPE 42, 0'-4' DEPTH	EACH	1
	611-42.02	CATCH BASINS, TYPE 42, > 4' - 8' DEPTH	EACH	2
	611-42.03	CATCH BASINS, TYPE 42, > 8' - 12' DEPTH	EACH	1
(1)(5)	621-03.02	18" TEMPORARY DRAINAGE PIPE	L.F.	100
	705-06.01	W BEAM GR (TYPE 2) MASH TL3	L.F.	5214
	705-06.19	SHORT-RADIUS GUARDRAIL SYSTEM MASH TL-3 (1 @ R=48')	EACH	1
	705-06.20	TANGENT ENERGY ABSORBING TERM MASH TL-3	EACH	20
	705-06.25	THRIE BEAM BRIDGE TRANSITION MASH TL-3	EACH	4
(1)(5)	707-08.11	HIGH-VISIBILITY CONSTRUCTION FENCE	L.F.	25438
	708-02.01	MARKERS (CONCRETE R.O.W. POSTS)	EACH	84
(1)(5)(12)	709-05.05	MACHINED RIP-RAP (CLASS A-3)	TON	2150
(2)	709-05.06	MACHINED RIP-RAP (CLASS A-1)	TON	1530
(15)	709-05.08	MACHINED RIP-RAP (CLASS B)	TON	1144
	710-02	AGGREGATE UNDERDRAINS (WITH PIPE)	L.F.	24689
	710-05	LATERAL UNDERDRAIN	L.F.	3807
	710-06.12	LATERAL UNDERDRAIN ENDWALL (3:1)	EACH	9
	710-06.13	LATERAL UNDERDRAIN ENDWALL (4:1)	EACH	18
	710-06.15	LATERAL UNDERDRAIN ENDWALL (6:1)	EACH	114
(20)	710-10.02	6" PERFORATED PLASTIC PIPE	L.F.	260
	712-01	TRAFFIC CONTROL	LS	1
	712-02.10	PORTABLE BARRIER RAIL (MASH TL-3)	L.F.	1340
(38)	712-02.60	TEMPORARY WORK ZONE CRASH CUSHION (MASH TL-3)	EACH	4
	712-04.01	FLEXIBLE DRUMS (CHANNELIZING)	EACH	171
	712-04.50	BARRIER RAIL DELINEATOR	EACH	32
	712-05.01	WARNING LIGHTS (TYPE A)	EACH	62
	712-06	SIGNS (CONSTRUCTION)	S.F.	2661
	712-07.03	TEMPORARY BARRICADES (TYPE III)	L.F.	372
(5)	712-08.03	ARROW BOARD (TYPE C)	EACH	6
	712-09.30	REMOVABLE BLACK-OUT TAPE (6")	L.F.	4800
	713-01.01	CLASS A CONCRETE (FOUNDATION FOR SIGN SUPPORTS)	C.Y.	0.4
	713-01.02	STEEL BAR REINFORCEMENT(FOUNDATION FOR SIGN SUPPORTS)	LB.	98
	713-02.21	SIGN POST DELINEATION ENHANCEMENT	L.F.	55
	713-06	STEEL I-BEAMS & WF-BEAMS(BREAKAWAY) SIGN SUPPORT	LB.	428
	713-11.01	"U" SECTION STEEL POSTS	LB.	182
	713-11.02	PERFORATED/KNOCKOUT SQUARE TUBE POST	LB.	2236
	713-13.02	FLAT SHEET ALUMINUM SIGNS (0.080" THICK)	S.F.	351
	713-13.03	FLAT SHEET ALUMINUM SIGNS (0.100" THICK)	S.F.	126
	713-14	EXTRUDED ALUMINUM PANEL SIGNS	S.F.	90
	713-14.21	STREET NAME SIGN (RIGID 0.100IN THICK	S.F.	14
	713-15	REMOVAL OF SIGNS, POSTS AND FOOTINGS	LS	1
	713-16.01	CHANGEABLE MESSAGE SIGN UNIT	EACH	21
	716-01.21	SNOWPLOWABLE RAISED PAVEMENT MARKERS (BI-DIR) (1 COLOR)	EACH	445
	716-01.22	SNOWPLOWABLE RAISED PAVMENT MARKERS (MONO-DIR) (1 COLOR)	EACH	444
	716-01.23	SNOWPLOWABLE RAISED PAVEMENT MARKERS (BI-DIR) (2 COLOR)	EACH	76
(36)	716-02.04	PLASTIC PAVEMENT MARKING (CHANNELIZATION STRIPING)	S.Y.	4461
(36)	716-02.05	PLASTIC PAVEMENT MARKING (STOP LINE)	L.F.	106
(36)	716-02.06	PLASTIC PAVEMENT MARKING (TURN LANE ARROW)	EACH	24
(36)	716-02.08	PLASTIC PAVEMENT MARKING (8" DOTTED LINE)	L.F.	460
(36)	716-02.12	PLASTIC PAVEMENT MARKING (8IN LINE)	L.M.	0.1

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02/10/2026

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

ESTIMATED ROADWAY QUANTITIES

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	2-1
PIH	2025	NH-54(48)	2-1
PS&E	2026	NH-54(48)	2-1

ESTIMATED ROADWAY QUANTITIES

	ITEM NO.	DESCRIPTION	UNIT	QUANTITY 40S054-F3-004
(5)(13)	716-05.01	PAINTED PAVEMENT MARKING (4" LINE)	L.M.	20
(6)	716-12.02	ENHANCED FLATLINE THERMO PVMT MRKNG (6IN LINE)	L.M.	16.7
	717-01	MOBILIZATION	LS	1
	740-07.04	GEOGRID REINFORCEMENT TYPE 2	S.Y.	3714
(1)(5)(30)	740-10.03	GEOTEXTILE (TYPE III)(EROSION CONTROL)	S.Y.	6156
(16)(17)(31)	740-10.04	GEOTEXTILE (TYPE IV)(STABILIZATION)	S.Y.	286839
(1)(5)	740-11.04	TEMPORARY SEDIMENT TUBE 20IN	L.F.	5617
(10)	801-01	SEEDING (WITH MULCH)	UNIT	76
(10)	801-01.07	TEMPORARY SEEDING (WITH MULCH)	UNIT	2642
	801-01.34	GRASS SEED MIX (RIPZN/FLPL)	UNIT	42
(24)	801-01.36	SPECIAL WETLAND SEED MIXTURE	UNIT	32
(26)	801-01.38	NATVE SEED MX FINAL STABLIZATN OF SLOPES	UNIT	39
	801-01.65	TEMPORARY MULCH	UNIT	2642
(10)	801-02	SEEDING (WITHOUT MULCH)	UNIT	353
(7)	801-03	WATER (SEEDING & SODDING)	M.G.	1775
(10)	801-07	SEED (SUPPLEMENTAL APPLICATION)	LB.	131
(11)	801-08	FERTILIZER (SUPPLEMENTAL APPLICATION)	TON	2
	802-12.02	ACER RUBRUM (RED MAPLE SEEDLNG B.R.)	EACH	42
(34)	802-12.26	PLATANUS OCCIDENTALIS (SYCAMORE SEEDLNG B.R.)	EACH	92
	802-12.40	SALIX NIGRA (BLACK WILLOW SEEDLNG B.R.)	EACH	42
	802-12.44	ULMUS AMERICANA (AMERICAN ELM SEEDLNG B.R.)	EACH	42
(29)	803-01	SODDING (NEW SOD)	S.Y.	164646
	805-01.03	TURF REINFORCEMENT MAT (CLASS III)	S.Y.	5791
	805-12.02	EROSION CONTROL BLANKET (TYPE II)	S.Y.	32399
(35)	805-12.08	700 GRAM COIR FIBER EROSION BLANKET	S.Y.	613
(8)	806-02.03	PROJECT MOWING	CYCL	5

ESTIMATED ROADWAY QUANTITIES

	ITEM NO.	DESCRIPTION	UNIT	QUANTITY 40S054-F3-004
		ALTERNATE AA1		
(18)	303-01	MINERAL AGGREGATE, TYPE A BASE, GRADING D	TON	149433
		ALTERNATE AA2		
(18)	303-01	MINERAL AGGREGATE, TYPE A BASE, GRADING D	TON	83500
	309-01.01	MINERAL AGGREGATE (A-CBC)	TON	35051
	309-01.02	PORTLAND CEMENT (A-CBC)	TON	1591
	309-02	BITUMINOUS MATERIAL (A-CBC)	TON	94

FOOTNOTES

(1) SEE SUBSECTION 209.07 OF THE STANDARD SPECIFICATION FOR MAINTENANCE REPLACEMENT.
(2) INCLUDES 610 TONS FOR EPSC, 501 TONS FOR SPECIAL DITCHES, 61 TONS FOR OUTLET DITCH LINING, AND 358 TONS FOR BRIDGE FLUMES.
(3) INCLUDES 794 C.Y. FOR EPSC, 333 C.Y. FOR BRIDGE FLUMES, AND 359,486 C.Y. FOR GRADING.
(4) SEE GRADING SPECIAL NOTES ON SHEET "2D".
(5) ALL QUANTITIES ARE TO BE USED AS DIRECTED BY THE ENGINEER.
(6) CONTRACTOR SHALL USE THE EXTRUDED OR RIBBON METHOD FOR APPLICATION.
(7) INCLUDES 276 THOUSAND GALLONS FOR EROSION PREVENTION AND SEDIMENT CONTROL.
(8) ITEM INCLUDES LITTER AND TRASH REMOVAL. THIS WORK WILL NOT BE MEASURED AND PAID FOR DIRECTLY BUT WILL BE INCLUDED IN THE COST OF ITEM NO. 806-02.03, PROJECT MOWING.
(9) THE BEDDING MATERIAL SHALL BE INCLUDED IN THE COST OF THE PROPOSED PIPE CULVERT. SEE STANDARD DRAWINGS D-PB-1 AND D-PB-2 FOR ADDITIONAL DETAILS.
(10) THE COST OF FERTILIZER AND LIME USED IN INITIAL SEED BED PREPARATION IS TO BE INCLUDED IN THE COST OF SEEDING. SEE SECTION 801 OF TDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.
(11) THE COST OF ANY NECESSARY LIME TO BE USED IN CONJUNCTION WITH SUPPLEMENT FERTILIZER IS TO BE INCLUDED IN THE COST OF THE SUPPLEMENTAL FERTILIZER. SEE SECTION 801 OF TDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.
(12) INCLUDES 300 TONS FOR EROSION PREVENTION AND SEDIMENT CONTROL AND 1850 TONS FOR BRIDGE SLOPE STABILIZATION.

FOOTNOTES

(13) FOR TEMPORARY MARKINGS FOR TRAFFIC CONTROL AND FOR STRIPING ON INTERMEDIATE PAVEMENT LAYERS.
(14) TO BE USED WITH SANDBAGS FOR TEMPORARY STREAM PLUGS
(15) TO BE USED FOR OUTLET DITCH LINING. 638 TONS FOR CROSS DRAINS AND 506 TONS FOR BOX CULVERTS AND BOX BRIDGES.
(16) THIS ITEM TO BE USED FOR STATION RANGES AS LISTED IN SHEET G1A, GEOTECHNICAL NOTE 3 OR OTHERWISE AS DIRECTED BY ENGINEER FOR THE STABILIZATION OF SUBGRADE.
(17) THIS ITEM TO BE USED FOR STATION RANGES AS LISTED IN SHEET G1A, GEOTECHNICAL NOTE 4 OR OTHERWISE AS DIRECTED BY ENGINEER FOR EMBANKMENT STABILIZATION.
(18) INCLUDES 2252 TONS FOR SHOULDER WIDENING ALONG EXIST. SR-54. SEE TRAFFIC CONTROL PLANS.
(19) THIS ITEM TO BE USED FOR CULVERTS AS DIRECTED IN SHEET G1A, GEOTECHNICAL NOTES 7, 9, AND 10.
(20) USED FOR BOX CULVERT AND BOX BRIDGE WINGWALL CONSTRUCTION.
(21) INCLUDES 224 TONS FOR EPSC, CONTROL, 667 TONS FOR GEOTECH, 2018 FOR PABE, AND 15 TONS FOR NATURAL STREAM DESIGN.
(22) INCLUDES 314 C.Y. FOR BOX CULVERTS AND BOX BRIDGES AND 53 C.Y. FOR GEOTECH.
(23) FOR PAVEMENT AT BRIDGE ENDS AS DETAILED ON STD-10-2, OTHER ALLOWABLE GRADATIONS ARE ACCEPTABLE PER THE STANDARD DRAWING.
(24) SEE SHEET 2G3 FOR SEEDING MIXTURE.
(25) POSTS CAN BE ORDERED THROUGH CARSONITE, A VALMONT COMPANY. ITEM NUMBERS ARE 72" BY 3.9" DUAL-SIDED FIBERGLASS MARKER (CIB307201), CUSTOM PROTECTED AREA DECAL PRE-APPLIED ON BOTH SIDES (21374NM-A).
(26) PERMANENT STABILIZATION WITH NATIVE OR NATURALIZED PERENNIAL VEGETATION IS REQUIRED REQUIRED IN ALL AREAS AUTHORIZED FOR TEMPORARY AND PERMANENT IMPACTS TO STREAMS AND RIPARIAN AREAS, INCLUDING ADJACENT BUFFER ZONES WITHIN 60 FT OF THE EDGE OF WATER. THE APPROPRIATE SEED MIXTURE FOR THE REGION AND SITE CONDITIONS SHALL BE SELECTED FROM TABLE 7.9-1 (PREFERRED SEED MIXES USING NATIVES OR NATURALIZED PLANTS AND PLANTING DATES) FOUND IN CHAPTER 7.9 (PERMANENT VEGETATION) OF THE TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION (TDEC) TENNESSEE EROSION & SEDIMENT CONTROL HANDBOOK 4TH EDITION.
(27) QUANTITY FOR BACKFILL MATERIAL PROPOSED FOR EMBEDDED CULVERTS. TO BE USED IF SUITABLE NATURAL MATERIAL IS NOT AVAILABLE ON SITE.
(28) THE CONTRACTOR SHALL MAKE PROVISIONS FOR THE SATISFACTORY DISPOSAL OF 237918 C.Y. OF EXCESS MATERIAL. ITEM SHALL INCLUDE ANY OSTRUCTIONS AND DRAINAGE STRUCTURES.
(29) INCLUDES 17753 S.Y. FOR SPECIAL DITCHES, 54 S.Y. FOR BOX CULVERTS, 106 S.Y. FOR ENDWALLS, AND 146733 S.Y. FOR SLOPE STABILIZATION.
(30) INCLUDES 5617 S.Y. FOR EROSION PREVENTION AND SEDIMENT CONTROL, 527 S.Y. FOR BRIDGE FLUMES, AND 12 S.Y. FOR NATURAL STREAM DESIGN.
(31) INCLUDES 1076 S.Y. FOR PAVEMENT AT BRIDGE ENDS, AND 285763 S.Y. FOR GEOTECH.
(32) INCLUDES 33 EACH FOR ROADWAY WETLAND MITIGATION, AND 18 EACH FOR NATURAL STREAM DESIGN.
(33) INCLUDES 49400 L.F. FOR EROSION PREVENTION AND SEDIMENT CONTROL, AND 1016 L.F. FOR NATURAL STREAM DESIGN.
(34) INCLUDES 42 EACH FOR ROADWAY WETLAND MITIGATION, AND 50 EACH FOR NATURAL STREAM DESIGN.
(35) INCLUDES 215 S.Y. FOR EROSION PREVENTION AND SEDIMENT CONTROL, AND 398 S.Y. FOR NATURAL STREAM DESIGN.
(36) CONTRACTOR MAY ELECT TO SUBSTITUTE PREFORMED PLASTIC FOR PREFORMED THERMOPLASTIC. PREFORMED PLASTIC SHALL BE PAID FOR AT THE SAME UNIT PRICE AS BID FOR THERMOPLASTIC.
(37) SHALL INCLUDE GEOTEXTILE (TYPE IV), BORROW EXCAVATION (GRADED SOLID ROCK), OR MACHINED RIP-RAP (CLASS A-1, CLASS B, OR CLASS C), MINERAL AGGREGATE (SIZE 57), AND TEMPORARY DRAINAGE PIPE (IF APPLICABLE). THE MINERAL AGGREGATE INCLUDES AN ADDITIONAL TEN (10) PERCENT FOR MAINTENANCE.
(38) SHALL BE A PORTABLE ENERGY ABSORBING TERMINAL MEETING THE REQUIREMENTS OF AASHTO MASH FOR TEST LEVEL 3. THE PAY ITEM WILL INCLUDE FURNISHING AND INSTALLING ALL COMPONENTS AS SHOWN ON THE MANUFACTURES DRAWINGS.
(39) INCLUDES 5 FOR EPSC AND 2 FOR NSD.
(40) BID PRICE INCLUDES ALL SALVAGE VALUE OF MATERIAL. INCLUDES REMOVAL OF THE HOUSE, MOBILE HOME, AND SEPTIC SYSTEMS. SEE REMOVAL OF BUILDINGS AND OBSTRUCTIONS BLOCK, SHEET 2F1, FOR FURTHER DETAILS.
(41) SHALL INCLUDE THE COST OF GUARDRAIL TERMINAL EARTH PADS.

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

ESTIMATED ROADWAY QUANTITIES

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TYPE	YEAR	PROJECT NO.	SHEET NO.
PIH	2025	NH-54(48)	2A
PS&E	2026	NH-54(48)	2A

ESTIMATED BOX BRIDGE QUANTITIES

ITEM NO.	DESCRIPTION	UNIT	QUANTITY 40S054-F2-002
604-02.01	CLASS A CONCRETE (BOX BRIDGES)	C.Y.	463
604-02.02	STEEL BAR REINFORCEMENT (BOX BRIDGES)	LB.	93904

SEALED BY

J. BRIAN LEE
REGISTERED ENGINEER
LICENSE NUMBER
107290
STATE OF TENNESSEE

02/10/2026

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

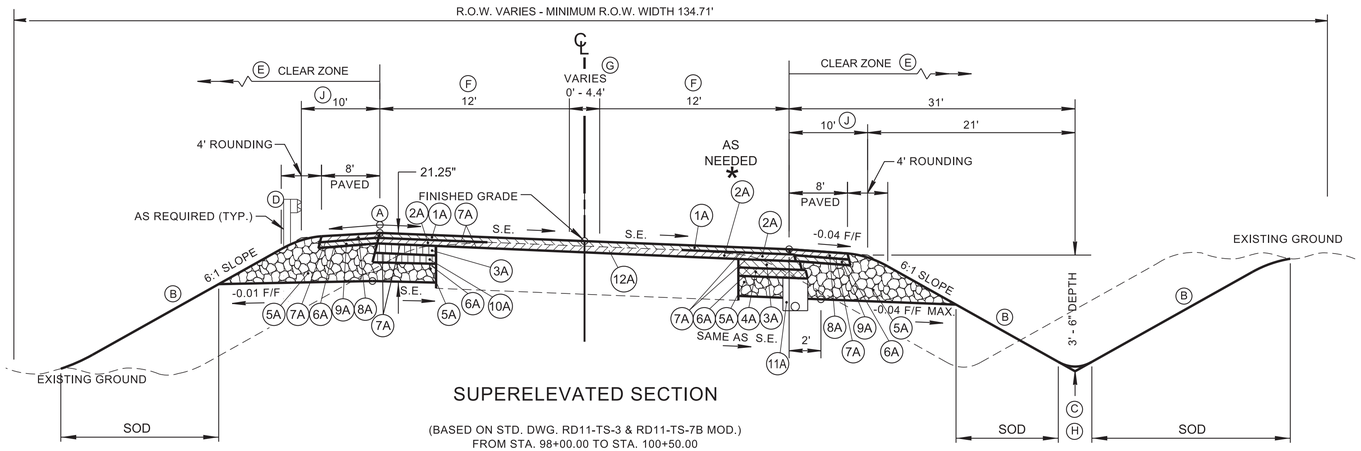
ESTIMATED
BOX BRIDGE
QUANTITIES

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	2B
PIH	2025	NH-54(48)	2B
PS&E	2026	NH-54(48)	2B

SR-54

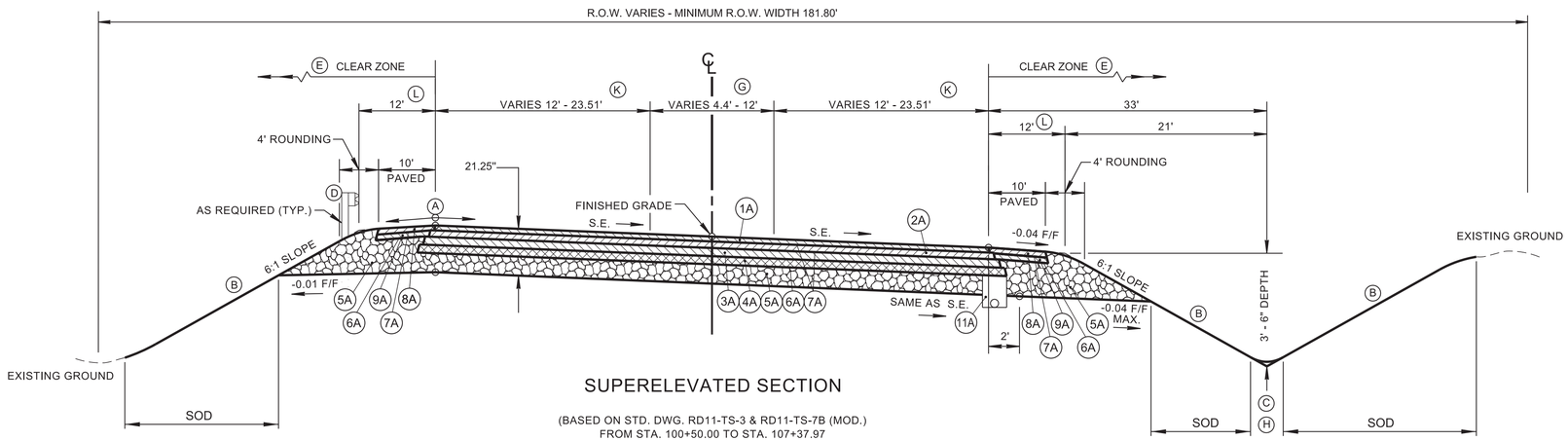
ALTERNATE AA1



SUPERELEVATED SECTION

(BASED ON STD. DWG. RD11-TS-3 & RD11-TS-7B MOD.)
FROM STA. 98+00.00 TO STA. 100+50.00

SEE SHEET 2B11 FOR PAVEMENT SCHEDULE



SUPERELEVATED SECTION

(BASED ON STD. DWG. RD11-TS-3 & RD11-TS-7B (MOD.)
FROM STA. 100+50.00 TO STA. 107+37.97

(A) THE SLOPE OF THE SHOULDER AND THE ROADWAY PAVEMENT SHOULD NOT EXCEED AN ALGEBRAIC DIFFERENCE OF 7%.

(B) SEE STANDARD DRAWING RD11-S-11 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.

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

(D) SEE STANDARD DRAWINGS S-PL-6 AND S-PL-6A FOR TYPICAL GUARDRAIL PLACEMENT.

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

(F) LANES TRANSITION FROM 11.64 LT. AND 11.45' RT. AT STA. 98+00 TO 12' AT STA. 98+20

(G) LANE TRANSITIONS FROM 0' AT STA. 99+50 TO 12' AT STA. 102+20

(H) SEE DITCH LINING DETAIL SHEETS 2G-2G1.

(J) SHOULDERS TRANSITION FROM 0.53' LT. AND 0.79' RT. AT STA. 98+00 TO 10' AT STA. 98+50

(K) LANES TRANSITION FROM 12' AT STA. 102+20 TO 23.51' AT STA. 107+37.97.

(L) SHOULDER TRANSITIONS FROM 10' GRADED (8' PAVED) AT STA. 103+50 TO 12' GRADED (10' PAVED) AT STA. 104+00.

SEALED BY

BRIAN LEE
REGISTERED ENGINEER
AGRICULTURE
NUMBER
107290
STATE OF TENNESSEE

02/10/2026

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

TYPICAL SECTIONS

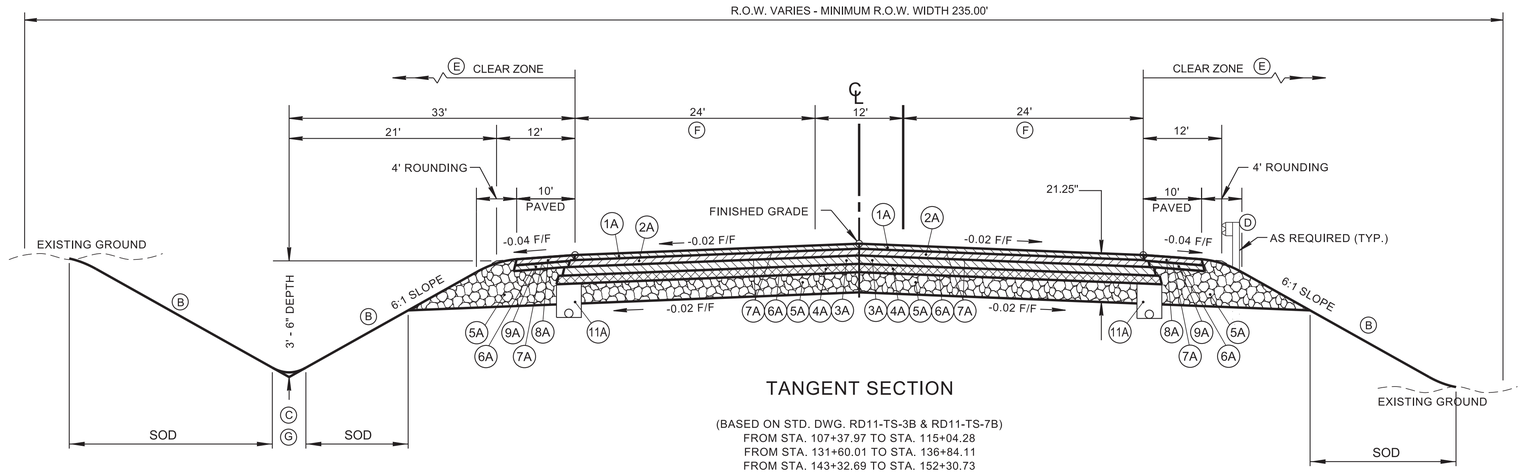
SHEET 1 OF 11

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	2B1
PIH	2025	NH-54(48)	2B1
PS&E	2026	NH-54(48)	2B1

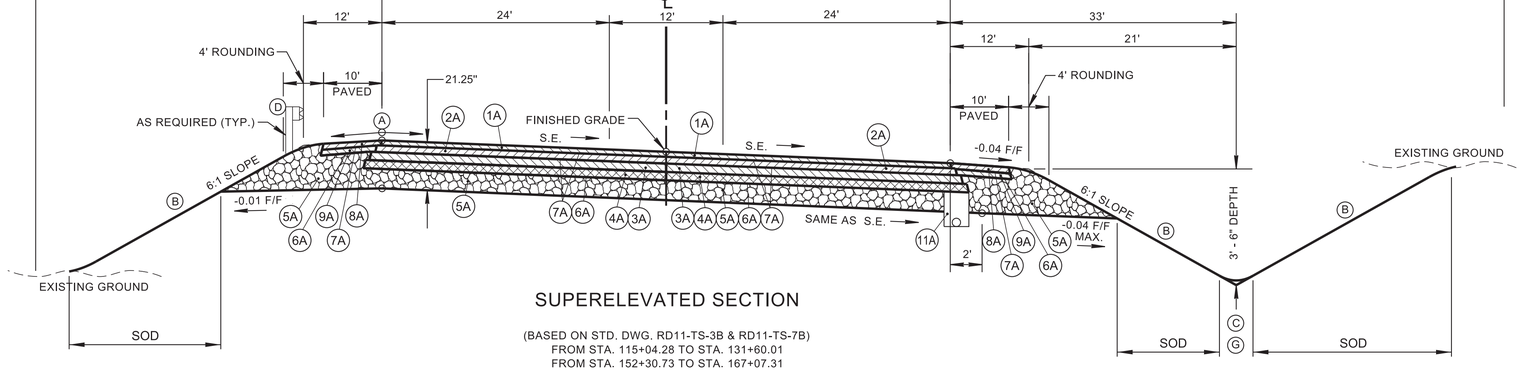
SR-54

ALTERNATE AA1



TANGENT SECTION

(BASED ON STD. DWG. RD11-TS-3B & RD11-TS-7B)
FROM STA. 107+37.97 TO STA. 115+04.28
FROM STA. 131+60.01 TO STA. 136+84.11
FROM STA. 143+32.69 TO STA. 152+30.73
FROM STA. 167+07.31 TO STA. 228+20.00



SUPERELEVATED SECTION

(BASED ON STD. DWG. RD11-TS-3B & RD11-TS-7B)
FROM STA. 115+04.28 TO STA. 131+60.01
FROM STA. 152+30.73 TO STA. 167+07.31

SEE SHEET 2B11 FOR PAVEMENT SCHEDULE

(A) THE SLOPE OF THE SHOULDER AND THE ROADWAY PAVEMENT SHOULD NOT EXCEED AN ALGEBRAIC DIFFERENCE OF 7%.

(B) SEE STANDARD DRAWING RD11-S-11 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.

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

(D) SEE STANDARD DRAWINGS S-PL-6 AND S-PL-6A FOR TYPICAL GUARDRAIL PLACEMENT.

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

(F) LANES VARY FROM 23.51' TO 24' AT STA. 107+37.97 TO 107+60.

(G) SEE DITCH LINING DETAIL SHEETS 2G-2G1.

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

TYPICAL SECTIONS

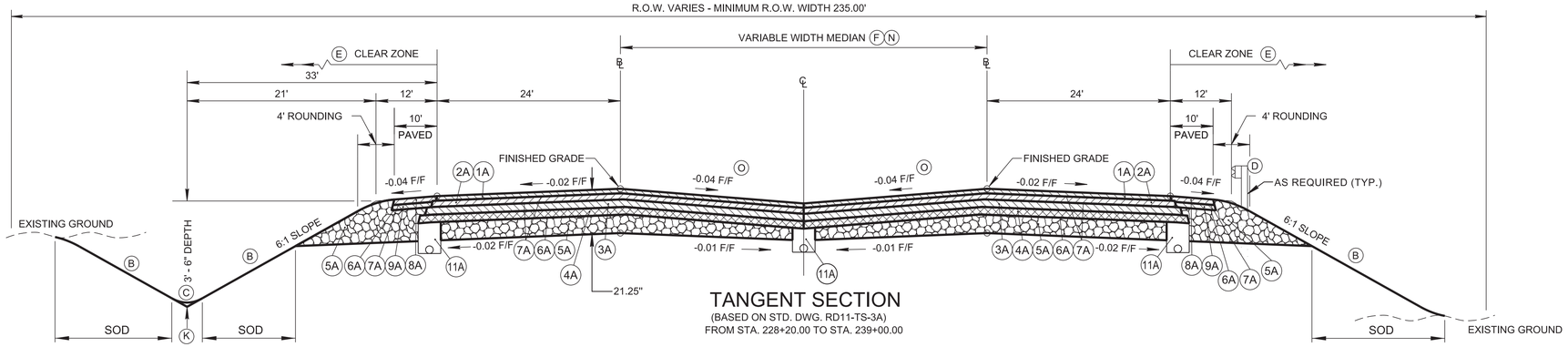
SHEET 2 OF 11

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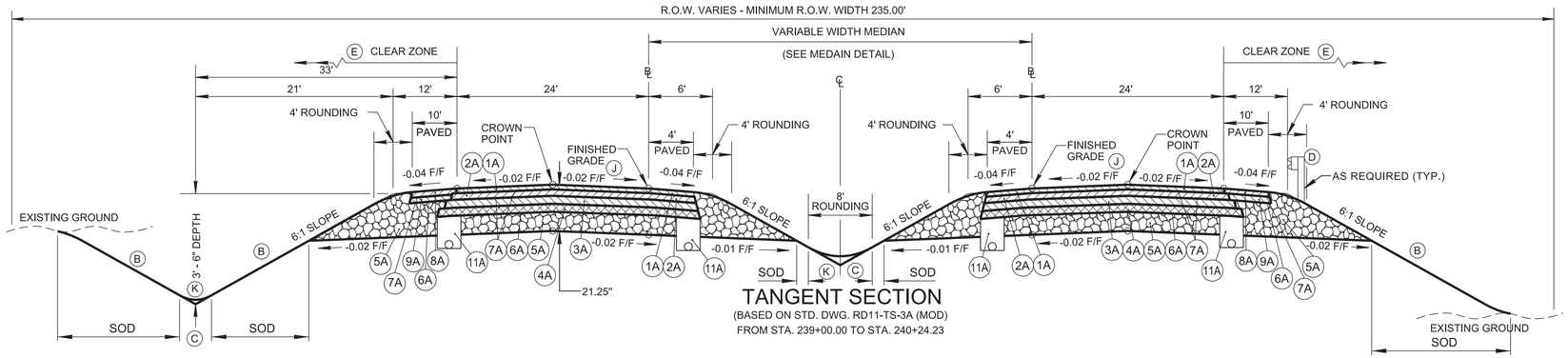
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	2B2
PIH	2025	NH-54(48)	2B2
PS&E	2026	NH-54(48)	2B2

SR-54

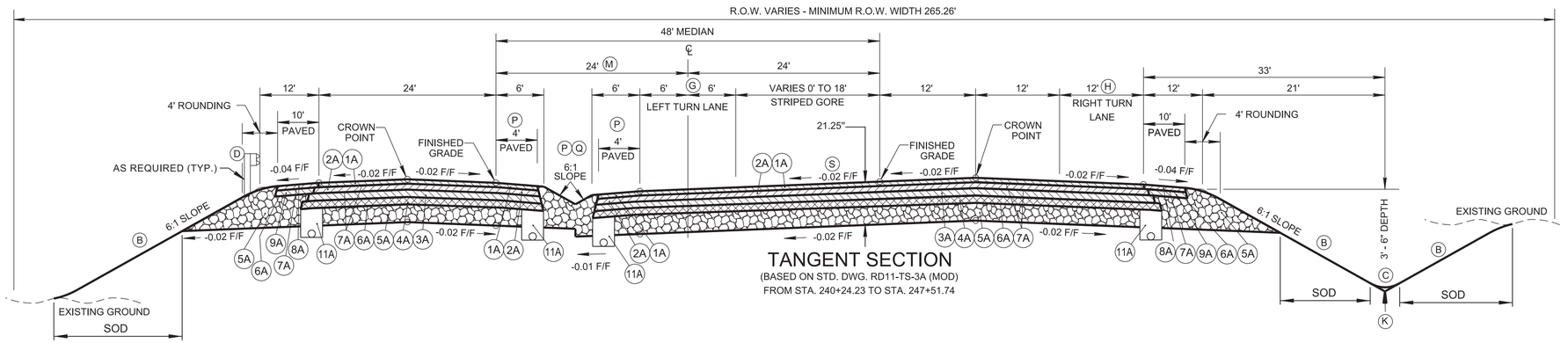
ALTERNATE AA1



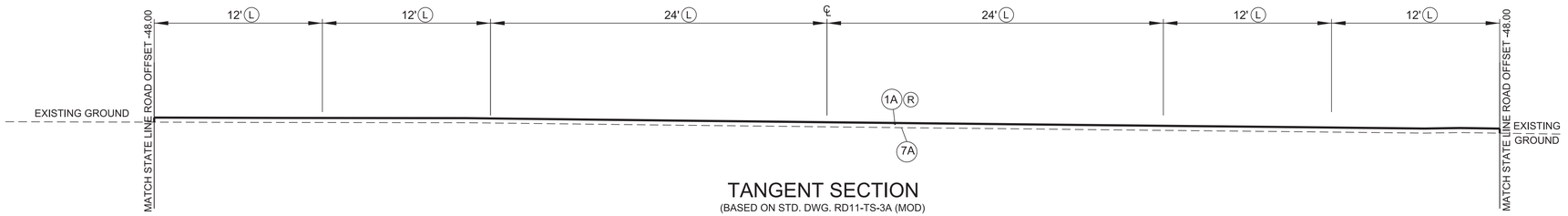
TANGENT SECTION
(BASED ON STD. DWG. RD11-TS-3A)
FROM STA. 228+20.00 TO STA. 239+00.00



TANGENT SECTION
(BASED ON STD. DWG. RD11-TS-3A (MOD)
FROM STA. 239+00.00 TO STA. 240+24.23



TANGENT SECTION
(BASED ON STD. DWG. RD11-TS-3A (MOD)
FROM STA. 240+24.23 TO STA. 247+51.74



TANGENT SECTION
(BASED ON STD. DWG. RD11-TS-3A (MOD)
FROM STA. 247+51.74 TO STA. 250+00.00

SEE SHEET 2B11 FOR PAVEMENT SCHEDULE

(A) THE SLOPE OF THE SHOULDER AND THE ROADWAY PAVEMENT SHOULD NOT EXCEED AN ALGEBRAIC DIFFERENCE OF 7%.

(B) SEE STANDARD DRAWING RD11-S-11 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.

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

(D) SEE STANDARD DRAWINGS S-PL-6 AND S-PL-6A FOR TYPICAL GUARDRAIL PLACEMENT.

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

(F) MEDIAN TRANSITIONS FROM 12' IN THE 3-LANE SECTION TO 48' IN THE 4-LANE DIVIDED SECTION STA. 228+20 TO STA. 239+00 AND FROM 48' TO 18' STA. 240+24.23 TO STA. 245+74.23.

(G) BEGIN PAVEMENT TAPER FOR LT. TURN LANE STA. 240+24.23 (24' RT.) TO STA. 245+74.23 (6' LT.). LT. TURN LANE CONTINUES FROM STA. 245+74.23 TO INTERSECTION WITH STATE LINE RD.

(H) BEGIN PAVEMENT TAPER FOR RT. TURN LANE STA. 241+11.57 (48' RT.) TO STA. 243+51.57 (60' RT.). RT. TURN LANE CONTINUES FROM STA. 243+51.57 TO INTERSECTION WITH STATE LINE RD.

(J) SUPERELEVATION TRANSITION FROM FINISHED GRADE TO CROWN POINT FROM +0.02 F/F AT STA. 236+50 TO -0.02 F/F AT STA. 239+00.

(K) SEE DITCH LINING DETAIL SHEETS 2G-2G1.

(L) PROPOSED LANE WIDTHS TRANSITION FROM 12' AT STA. 247+24.23 TO 11' AT STA. 248+00.00 TO MATCH THE ADJACENT KENTUCKY PROJECT.

(M) MEDIAN TRANSITIONS FROM STA. 240+24.23 (24' RT.) TO STA. 245+74.23 (6' LT.).

(N) MEDIAN TRANSITION FROM 12' AT STA. 228+20 TO 48' AT STA. 239+00

(O) INSIDE SHOULDER CROSS-SLOPE TRANSITIONS FROM +0.02 F/F AT STA. 228+20 TO -0.04 FT/FT AT STA. 231+03

(P) ELIMINATE MEDIAN DITCH, PAVE FULL DEPTH, STA. 247+24.23 TO STA. 247+51.54.

(Q) TRENCH DRAIN FROM STA. 245+07.02 TO STA. 247+18.

(R) MATCH GRADE WITH KENTUCKY PROJECT USING BM-2 AND SURFACE MIX AS NEEDED.

(S) -0.01 F/F CROSS SLOPE STA. 245+50 TO STA. 247+00.

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

TYPICAL SECTIONS

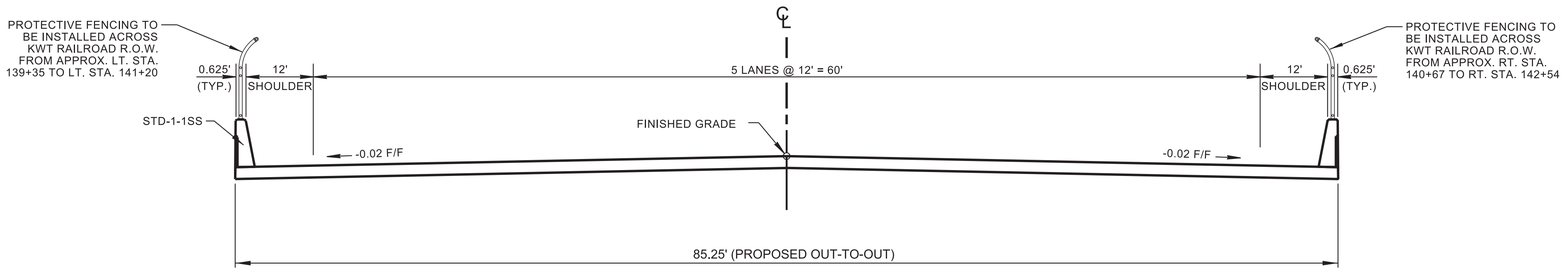
SHEET 3 OF 11

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	2B3
PIH	2025	NH-54(48)	2B3
PS&E	2026	NH-54(48)	2B3

SR-54

ALTERNATE AA1



BRIDGE TANGENT SECTION
(SR-54)

FROM STA. 136+84.11 TO STA. 143+32.69

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COMMERCE
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STATE OF TENNESSEE

02/10/2026

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

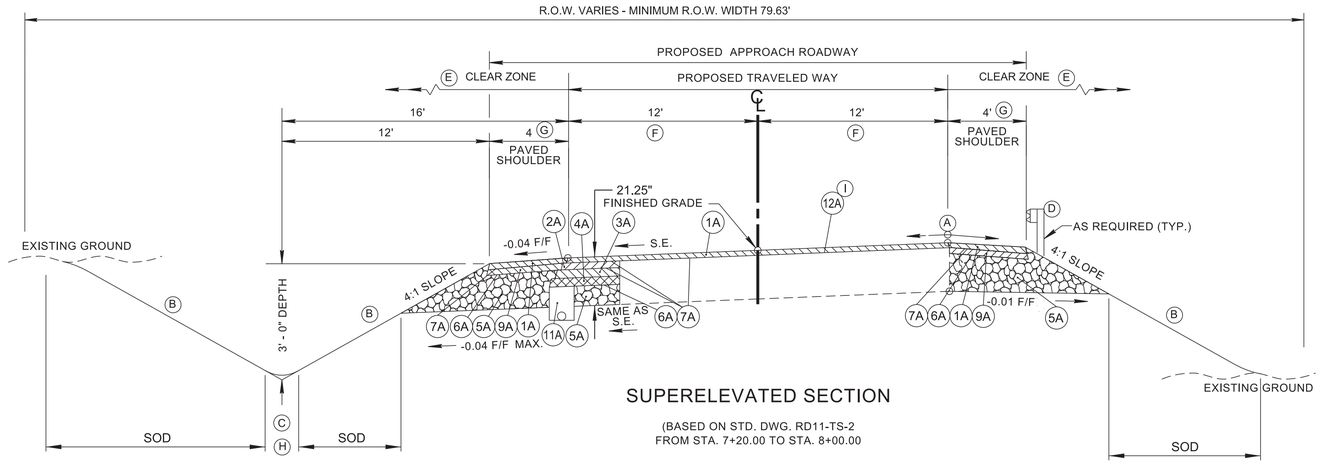
TYPICAL SECTIONS

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	2B4
PIH	2025	NH-54(48)	2B4
PS&E	2026	NH-54(48)	2B4

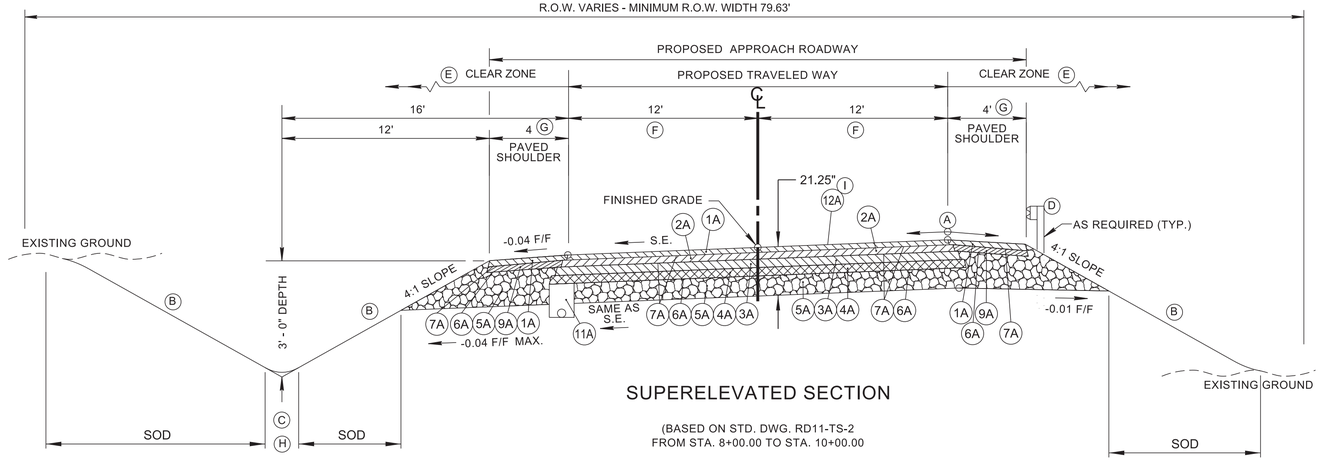
SR-54 TIE

ALTERNATE AA1



SUPERELEVATED SECTION

(BASED ON STD. DWG. RD11-TS-2
FROM STA. 7+20.00 TO STA. 8+00.00



SUPERELEVATED SECTION

(BASED ON STD. DWG. RD11-TS-2
FROM STA. 8+00.00 TO STA. 10+00.00

SEE SHEET 2B11 FOR PAVEMENT SCHEDULE

(A) THE SLOPE OF THE SHOULDER AND THE ROADWAY PAVEMENT SHOULD NOT EXCEED AN ALGEBRAIC DIFFERENCE OF 7%.

(B) SEE STANDARD DRAWING RD11-S-11 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.

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

(D) SEE STANDARD DRAWINGS S-PL-6 AND S-PL-6A FOR TYPICAL GUARDRAIL PLACEMENT.

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

(F) LANES VARY FROM 11.6' RT. AT STA. 7+20.00 TO 12' RT. AT STA. 7+70.00 CONTINUING 12' RT. TO BEGINNING OF RADIUS AT STA. 9+34.62 AND 11.5' LT. AT STA. 7+20.00 TO 12' LT. AT STA. 7+70.00 CONTINUING 12' LT. TO BEGINNING OF RADIUS AT STA. 9+13.59.

(G) SHOULDERS VARY FROM MATCH EXISTING AT STA. 7+20.00 LT. & RT. TO 4' AT STA. 7+70.00 LT. & RT.

(H) SEE DITCH LINING DETAIL SHEETS 2G-2G1.

(I) COLD PLANE EXISTING PAVEMENT APPROX. STA. 7+20.00 TO 8+00.00, UNTIL FULL DEPTH PAVING BEGINS.

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

TYPICAL SECTIONS

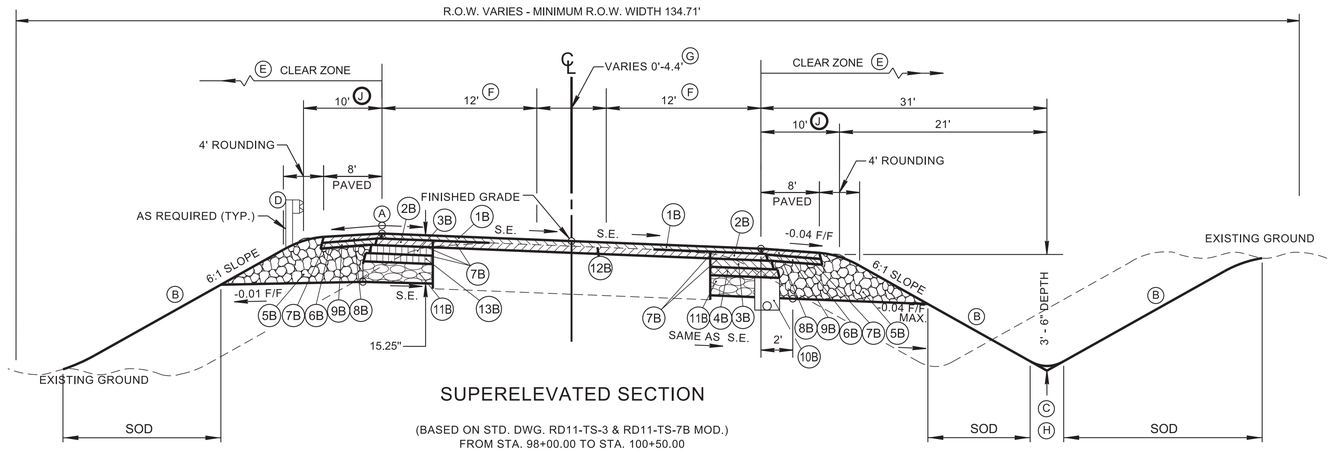
SHEET 5 OF 11

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	2B5
PIH	2025	NH-54(48)	2B5
PS&E	2026	NH-54(48)	2B5

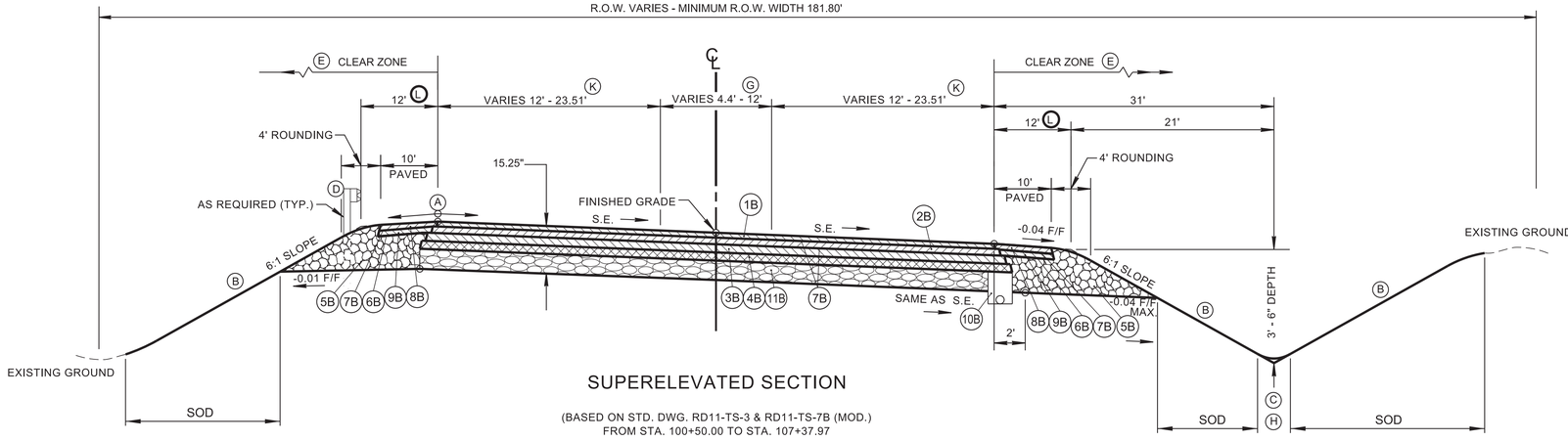
SR-54

ALTERNATE AA2



SUPERELEVATED SECTION

(BASED ON STD. DWG. RD11-TS-3 & RD11-TS-7B MOD.)
FROM STA. 98+00.00 TO STA. 100+50.00



SUPERELEVATED SECTION

(BASED ON STD. DWG. RD11-TS-3 & RD11-TS-7B (MOD.)
FROM STA. 100+50.00 TO STA. 107+37.97

SEE SHEET 2B11 FOR PAVEMENT SCHEDULE

(A) THE SLOPE OF THE SHOULDER AND THE ROADWAY PAVEMENT SHOULD NOT EXCEED AN ALGEBRAIC DIFFERENCE OF 7%.

(B) SEE STANDARD DRAWING RD11-S-11 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.

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

(D) SEE STANDARD DRAWINGS S-PL-6 AND S-PL-6A FOR TYPICAL GUARDRAIL PLACEMENT.

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

(F) LANES TRANSITION FROM 11.64 LT. AND 11.45' RT. AT STA. 98+00 TO 12' AT STA. 98+20

(G) LANE TRANSITIONS FROM 0' AT STA. 99+50 TO 12' AT STA. 102+20

(H) SEE DITCH LINING DETAIL SHEETS 2G-2G1.

(J) SHOULDERS TRANSITION FROM 0.53' LT. AND 0.79' RT. AT STA. 98+00 TO 10' AT STA. 98+50

(K) LANES TRANSITION FROM 12' AT STA. 102+20 TO 23.51' AT STA. 107+37.97.

(L) SHOULDER TRANSITIONS FROM 10' GRADED (8' PAVED) AT STA. 103+50 TO 12' GRADED (10' PAVED) AT STA. 104+00.

SEALED BY

J. BRIAN LEE
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PROFESSIONAL ENGINEER
No. 107729
STATE OF TENNESSEE

02/10/2026

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

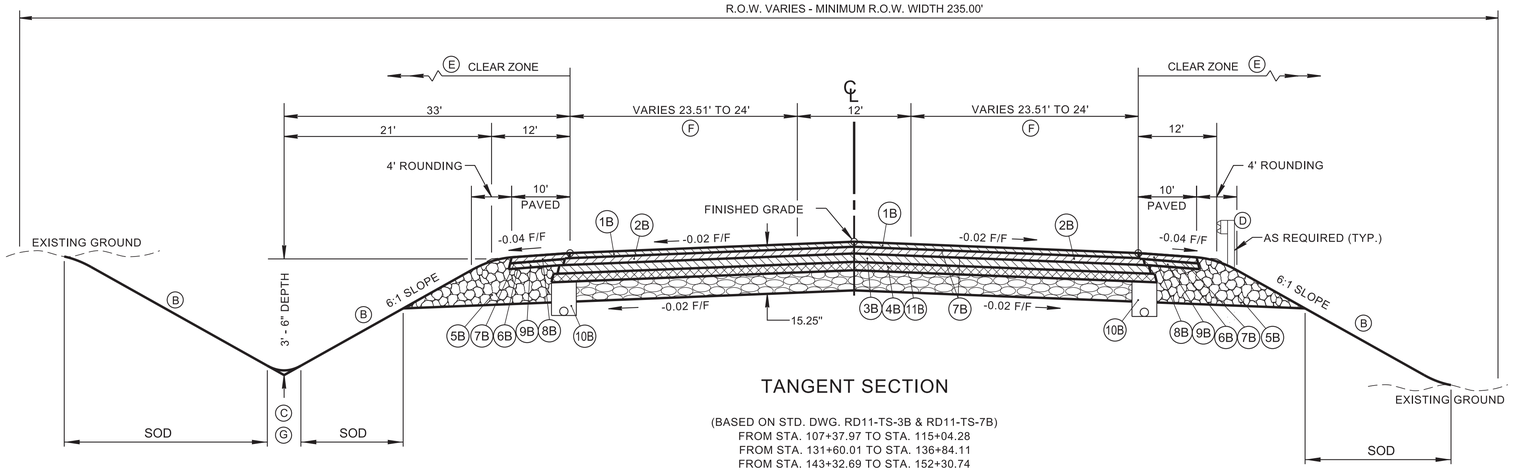
TYPICAL SECTIONS

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	2B6
PIH	2025	NH-54(48)	2B6
PS&E	2026	NH-54(48)	2B6

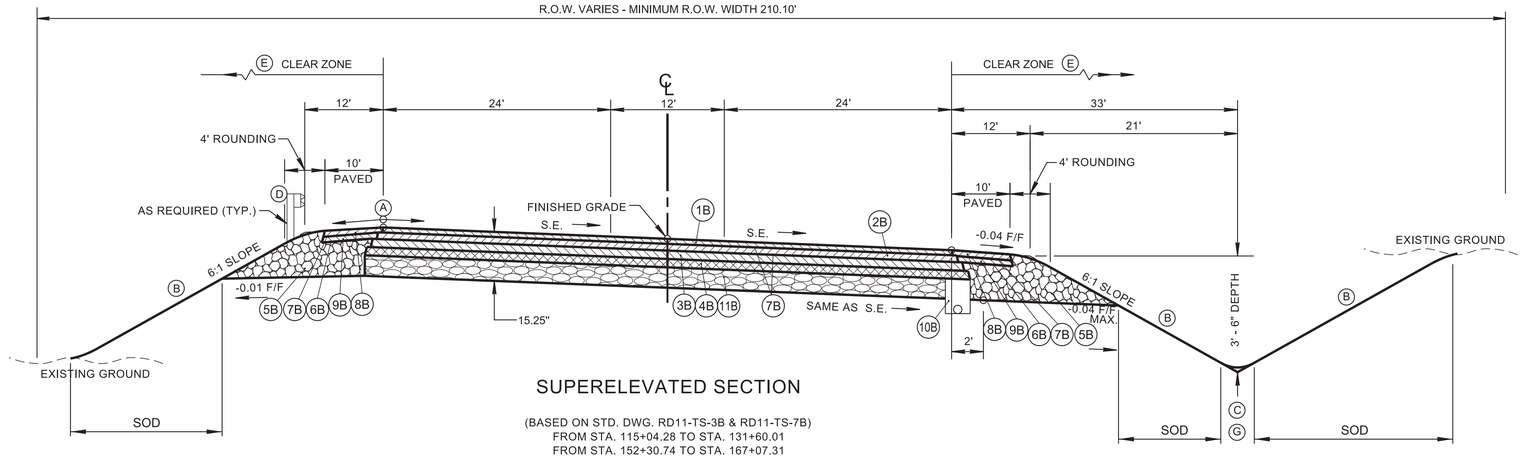
SR-54

ALTERNATE AA2



TANGENT SECTION

(BASED ON STD. DWG. RD11-TS-3B & RD11-TS-7B)
FROM STA. 107+37.97 TO STA. 115+04.28
FROM STA. 131+60.01 TO STA. 136+84.11
FROM STA. 143+32.69 TO STA. 152+30.74
FROM STA. 167+07.31 TO STA. 228+20.00



SUPERELEVATED SECTION

(BASED ON STD. DWG. RD11-TS-3B & RD11-TS-7B)
FROM STA. 115+04.28 TO STA. 131+60.01
FROM STA. 152+30.74 TO STA. 167+07.31

SEE SHEET 2B11 FOR PAVEMENT SCHEDULE

- (A) THE SLOPE OF THE SHOULDER AND THE ROADWAY PAVEMENT SHOULD NOT EXCEED AN ALGEBRAIC DIFFERENCE OF 7%.
- (B) SEE STANDARD DRAWING RD11-S-11 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.
- (C) SEE STANDARD DRAWING RD11-S-11A FOR ROUNDING OF ROADSIDE DITCH SLOPES.
- (D) SEE STANDARD DRAWINGS S-PL-6 AND S-PL-6A FOR TYPICAL GUARDRAIL PLACEMENT.
- (E) SEE STANDARD DRAWING S-CZ-1 FOR CLEAR ZONE CRITERIA. SEE THE "ROADSIDE DESIGN GUIDE", AASHTO, 2011, FOR FURTHER INFORMATION REGARDING CLEAR ZONES.
- (F) LANES VARY FROM 23.51' AT STA. 107+37.97 TO 24' AT STA. 107+60.
- (G) SEE DITCH LINING DETAIL SHEETS 2G-2G1.

SEALED BY

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ENGINEER
No. 107729
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02/10/2026

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

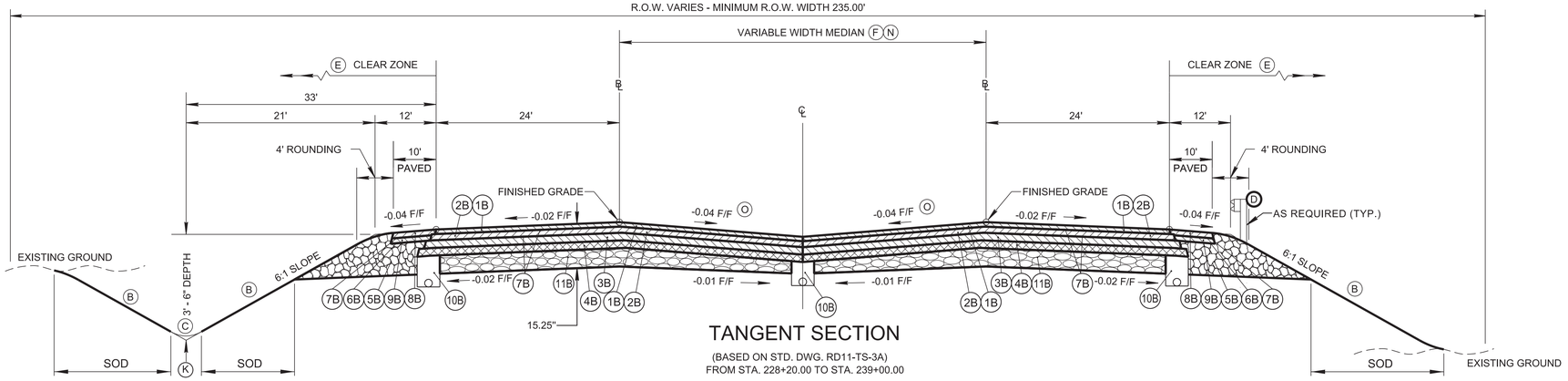
TYPICAL SECTIONS

SHEET 7 OF 11

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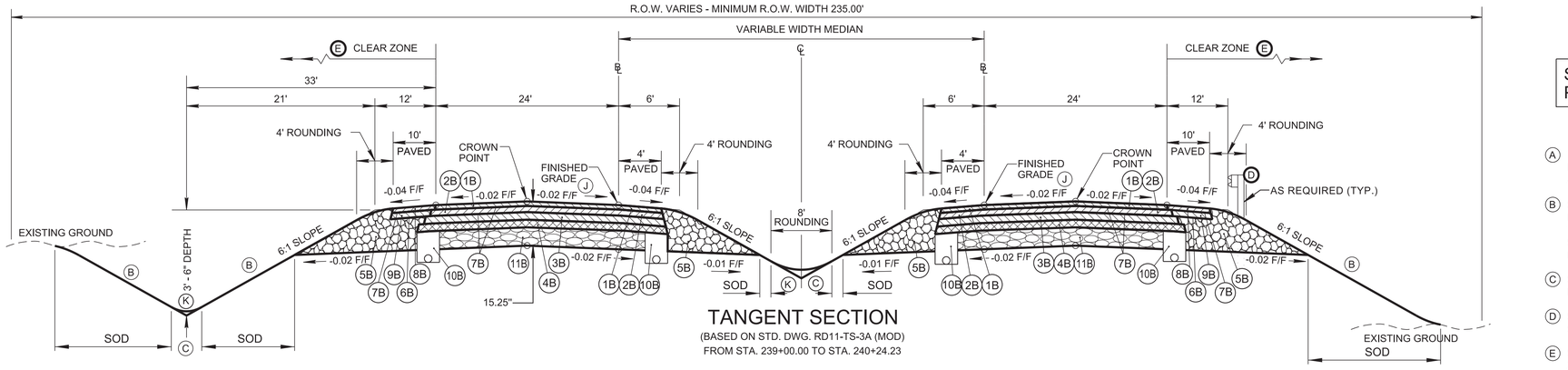
SR-54 ALTERNATE AA2

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	2B7
PIH	2025	NH-54(48)	2B7
PS&E	2026	NH-54(48)	2B7



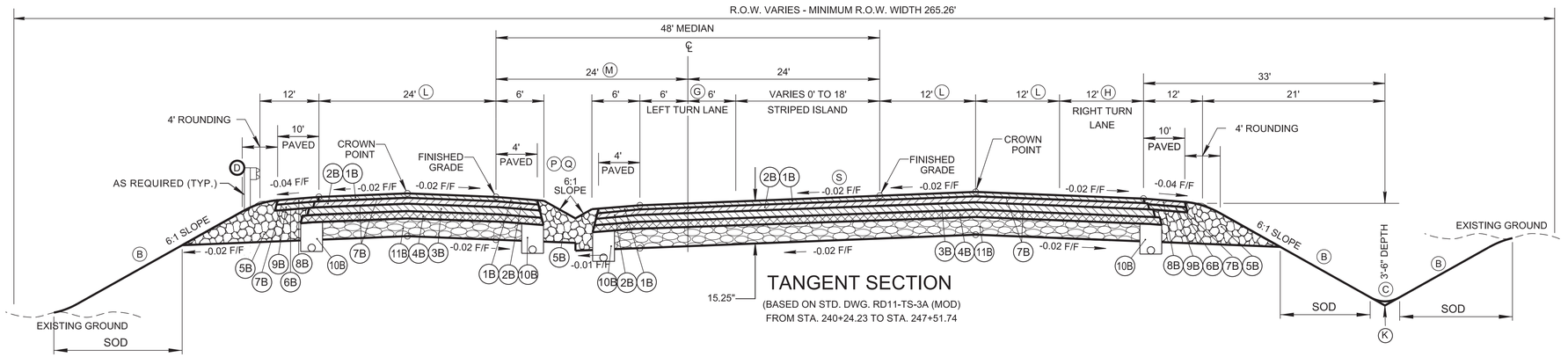
TANGENT SECTION

(BASED ON STD. DWG. RD11-TS-3A)
FROM STA. 228+20.00 TO STA. 239+00.00



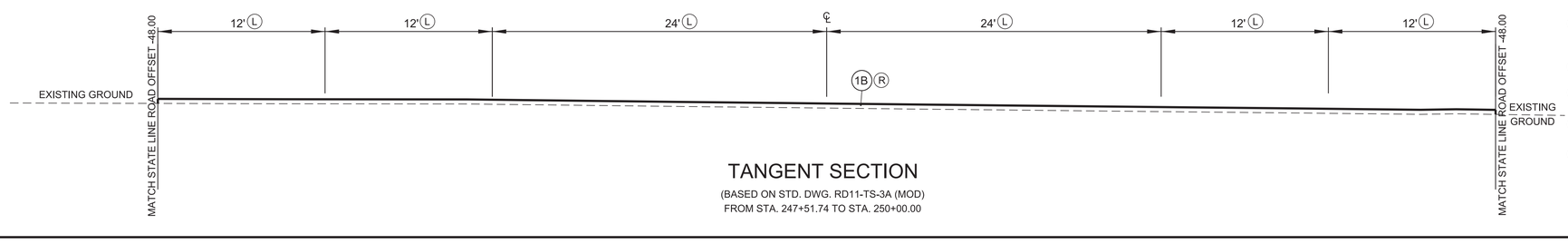
TANGENT SECTION

(BASED ON STD. DWG. RD11-TS-3A (MOD)
FROM STA. 239+00.00 TO STA. 240+24.23



TANGENT SECTION

(BASED ON STD. DWG. RD11-TS-3A (MOD)
FROM STA. 240+24.23 TO STA. 247+51.74



TANGENT SECTION

(BASED ON STD. DWG. RD11-TS-3A (MOD)
FROM STA. 247+51.74 TO STA. 250+00.00

SEE SHEET 2B11 FOR PAVEMENT SCHEDULE

(A) THE SLOPE OF THE SHOULDER AND THE ROADWAY PAVEMENT SHOULD NOT EXCEED AN ALGEBRAIC DIFFERENCE OF 7%.

(B) SEE STANDARD DRAWING RD11-S-11 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.

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

(D) SEE STANDARD DRAWINGS S-PL-6 AND S-PL-6A FOR TYPICAL GUARDRAIL PLACEMENT.

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

(F) MEDIAN TRANSITIONS FROM 12' IN THE 3-LANE SECTION TO 48' IN THE 4-LANE DIVIDED SECTION STA. 228+20 TO STA. 239+00 AND FROM 48' TO 18' STA. 240+24.23 TO STA. 245+74.23.

(G) BEGIN PAVEMENT TAPER FOR LT. TURN LANE STA. 240+24.23 (24' RT.) TO STA. 245+74.23 (6' LT.). LT. TURN LANE CONTINUES FROM STA. 245+74.23 TO INTERSECTION WITH STATE LINE RD.

(H) BEGIN PAVEMENT TAPER FOR RT. TURN LANE STA. 241+11.57 (48' RT.) TO STA. 243+51.57 (60' RT.). RT. TURN LANE CONTINUES FROM STA. 243+51.57 TO INTERSECTION WITH STATE LINE RD.

(J) SUPERELEVATION TRANSITION FROM FINISHED GRADE TO CROWN POINT FROM +0.02 F/F AT STA. 236+50 TO -0.02 F/F AT STA. 239+00.

(K) SEE DITCH LINING DETAIL SHEETS 2G-2G1.

(L) PROPOSED LANE WIDTHS TRANSITION FROM 12' AT STA. 247+24.23 TO 11' AT STA. 248+00.00 TO MATCH THE ADJACENT KENTUCKY PROJECT.

(M) MEDIAN TRANSITIONS FROM STA. 240+24.23 (24' RT.) TO STA. 245+74.23 (6' LT.).

(N) MEDIAN TRANSITIONS FROM 12' AT STA. 228+20 TO 48' AT STA. 239+00.

(O) INSIDE SHOULDER CROSS-SLOPE TRANSITIONS FROM +0.02 F/F AT STA. 228+20 TO -0.04 F/F AT STA. 231+03

(P) ELEMINATE MEDIAN DITCH, PAVE FULL DEPTH, STA. 247+24.33 TO STA. 247+51.54

(Q) TRENCH DRAIN FROM STA. 245+07.02 TO STA. 247+18.

(R) MATCH GRADE WITH KENTUCKY PROJECT USING BM-2 AND SURFACE MIX.

(S) -0.01 F/F CROSS SLOPE STA. 245+50 TO STA. 247+00.

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TYPICAL SECTIONS

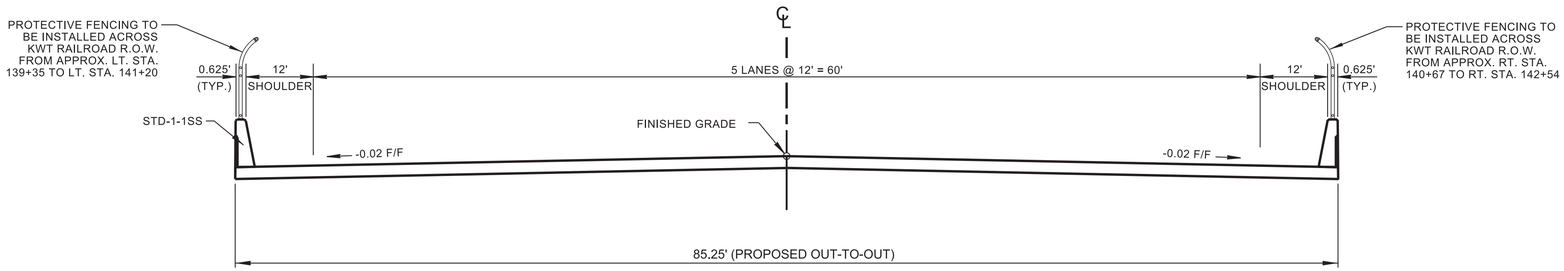
SHEET 8 OF 11

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	2B8
PIH	2025	NH-54(48)	2B8
PS&E	2026	NH-54(48)	2B8

SR-54

ALTERNATE AA2



BRIDGE TANGENT SECTION
(SR-54)

FROM STA. 136+84.11 TO STA. 143+32.69

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02/10/2026

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DEPARTMENT OF TRANSPORTATION

TYPICAL SECTIONS

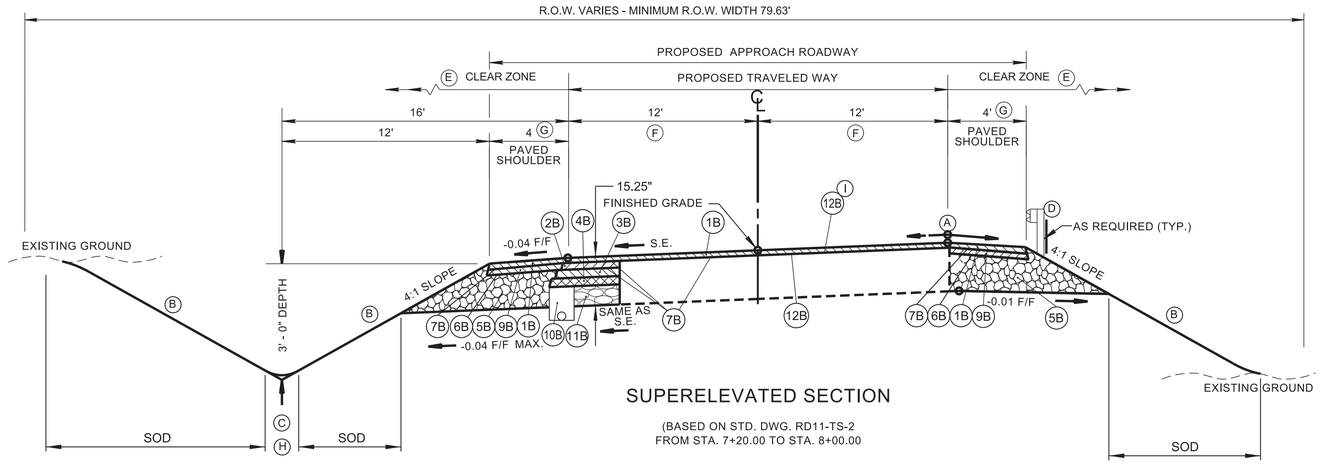
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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	2B9
PIH	2025	NH-54(48)	2B9
PS&E	2026	NH-54(48)	2B9

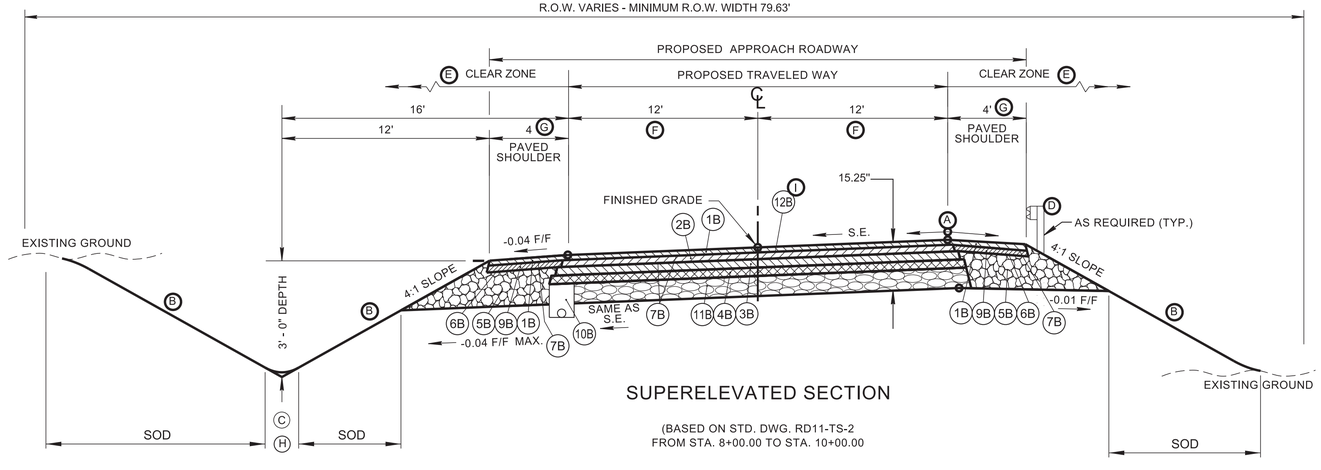
SR-54 TIE

ALTERNATE AA2



SUPERELEVATED SECTION

(BASED ON STD. DWG. RD11-TS-2
FROM STA. 7+20.00 TO STA. 8+00.00



SUPERELEVATED SECTION

(BASED ON STD. DWG. RD11-TS-2
FROM STA. 8+00.00 TO STA. 10+00.00

SEE SHEET 2B11 FOR PAVEMENT SCHEDULE

(A) THE SLOPE OF THE SHOULDER AND THE ROADWAY PAVEMENT SHOULD NOT EXCEED AN ALGEBRAIC DIFFERENCE OF 7%.

(B) SEE STANDARD DRAWING RD11-S-11 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.

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

(D) SEE STANDARD DRAWINGS S-PL-6 AND S-PL-6A FOR TYPICAL GUARDRAIL PLACEMENT.

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

(F) LANES VARY FROM 11.6' RT. AT STA. 7+20.00 TO 12' RT. AT STA. 7+70.00 CONTINUING 12' RT. TO BEGINNING OF RADIUS AT STA. 9+34.62 AND 11.5' LT. AT STA. 7+20.00 TO 12' LT. AT STA. 7+70.00 CONTINUING 12' LT. TO BEGINNING OF RADIUS AT STA. 9+13.59.

(G) SHOULDERS VARY FROM MATCH EXISTING AT STA. 7+20.00 LT. & RT. TO 4' AT STA. 7+70.00 LT. & RT. AND IN RADUIS WITH SR-54.

(H) SEE DITCH LINING DETAIL SHEETS 2G-2G1.

(I) COLD PLANE EXISTING PAVEMENT APPROX. STA. 7+20.00 TO 8+00.00, UNTIL FULL DEPTH PAVING BEGINS.

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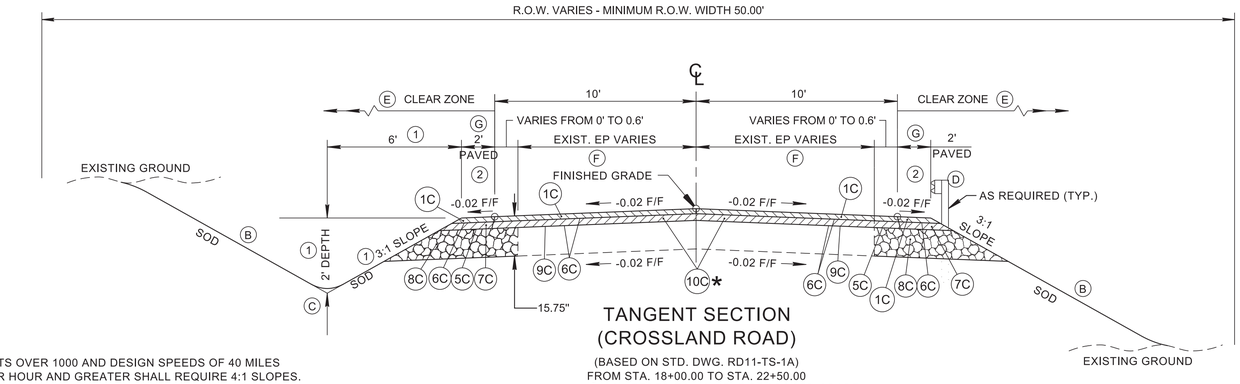
TYPICAL SECTIONS

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	2B10
PIH	2025	NH-54(48)	2B10
PS&E	2026	NH-54(48)	2B10

SEE SHEET 2B12 FOR PAVEMENT SCHEDULE

SIDEROADS

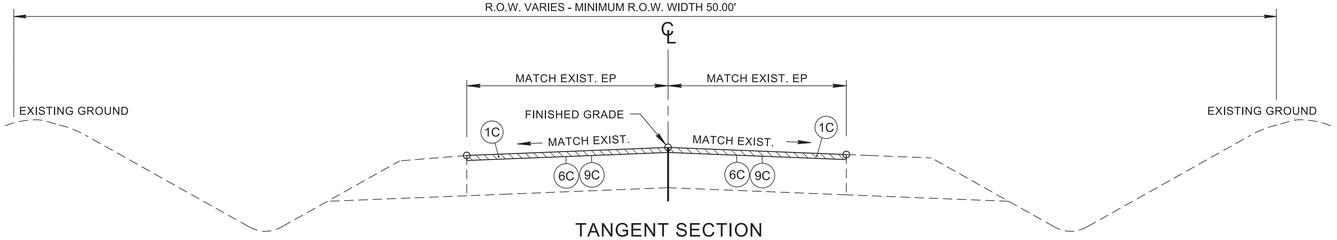


TANGENT SECTION (CROSSLAND ROAD)

(BASED ON STD. DWG. RD11-TS-1A)
FROM STA. 18+00.00 TO STA. 22+50.00
✱ AS NEEDED TO ACHIEVE PROPOSED GRADE

(1) ADTS OVER 1000 AND DESIGN SPEEDS OF 40 MILES PER HOUR AND GREATER SHALL REQUIRE 4:1 SLOPES.
3:1 SLOPE REQUIRE A 6' DITCH WIDTH AND A MIN. DEPTH OF 2'-0".
4:1 SLOPE REQUIRE A 8' DITCH WIDTH AND A MIN. DEPTH OF 2'-0".

(2) WHEN THE PROPOSED SHOULDER WIDTH IS 2' OR 4' THE SHOULDER SLOPE SHOULD MATCH THE ROADWAY PAVEMENT CROSS SLOPE.



TANGENT SECTION (CROSSLAND ROAD)

(BASED ON STD. DWG. RD11-TS-1A)
FROM STA. 22+50.00 TO STA. 24+75.00

(A) THE SLOPE OF THE SHOULDER AND THE ROADWAY PAVEMENT SHOULD NOT EXCEED AN ALGEBRAIC DIFFERENCE OF 7%.

(B) SEE STANDARD DRAWING RD11-S-11 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.

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

(D) SEE STANDARD DRAWINGS S-PL-6 AND S-PL-6A FOR TYPICAL GUARDRAIL PLACEMENT.

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

(F) CROSSLAND RD. LT. LANES VARY FROM 9.4' LT. & 9.6' RT. AT STA. 18+00 TO 10' LT. & RT. AT STA. 18+50.
CROSSLAND RD. RT. LANES VARY FROM 10' LT. & RT. AT STA. 22+00 TO 9.9' LT. & RT. AT STA. 22+50.
STATE LINE RD. LT. LANES VARY FROM 9.5' LT. & RT. AT STA. 28+50 TO 10' LT. & RT. AT STA. 28+97.22.
STATE LINE RD. RT. LANES VARY FROM 10' LT. AT STA. 31+06.00 AND 10' RT. AT STA. 31+34.39 TO 8.7' LT. & 10.1' RT. AT STA. 31+50.

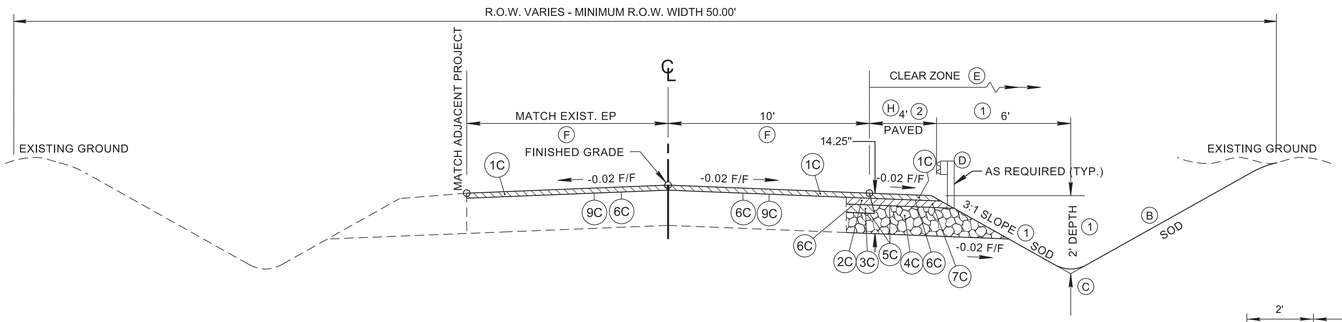
(G) SHOULDER WIDTH VARIES FROM 0' AT STA. 18+00.00 TO 2' AT STA. 18+50.00 AND FROM 2' AT STA. 22+00.00 TO 0' AT STA. 22+50.00.

(H) SHOULDER WIDTH VARIES FROM 0' AT STA. 28+50.00 TO 4' AT STA. 28+75.00 AND FROM 4' AT LT STA. 31+25.00 AND RT STA. 31+38.34 TO 0' AT STA. 31+50.00.

TYPICAL SECTION

HAUL ROAD

**NOTE:
IF CONSTRUCTION IN AREAS THAT ARE EITHER DRY OR UNSATURATED, HAUL ROAD SHALL BE CONSTRUCTED OF MACHINED RIP-RAP (CLASS (A-1, B, OR C)). IF CONSTRUCTED IN WATER OR IN AN AREA WITH THE FLOODPLAIN IN THE CASE OF A 5 YEAR STORM EVENT, THE BORROW EXCAVATION (GRADED SOLID ROCK) SHALL BE USED IN PLACE OF THE MACHINED RIP-RAP.



TANGENT SECTION (STATELINE ROAD)

(BASED ON STD. DWG. RD11-TS-1A)
FROM STA. 28+50.00 TO STA. 31+50.00

(1) ADTS OVER 1000 AND DESIGN SPEEDS OF 40 MILES PER HOUR AND GREATER SHALL REQUIRE 4:1 SLOPES.
3:1 SLOPE REQUIRE A 6' DITCH WIDTH AND A MIN. DEPTH OF 2'-0".
4:1 SLOPE REQUIRE A 8' DITCH WIDTH AND A MIN. DEPTH OF 2'-0".

(2) WHEN THE PROPOSED SHOULDER WIDTH IS 2' OR 4' THE SHOULDER SLOPE MATCHES THE ROADWAY PAVEMENT CROSS SLOPE.

FIELD ENTRANCE
SURFACE - 1½"
BINDER - 2"
BASE - 4"

NOTE: DITCH TO BE CONSTRUCTED WHERE DIRECTED BY THE ENGINEER

CUT SECTION FILL SECTION

TYPICAL SECTION

FIELD ENTRANCE

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SEAL
NUMBER
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STATE OF TENNESSEE

02/10/2026

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

TYPICAL SECTIONS

SHEET 11 OF 11

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	2B11
PIH	2025	NH-54(48)	2B11
PS&E	2026	NH-54(48)	2B11

PROPOSED SR-54 ALTERNATE "AA1" PAVEMENT SCHEDULE

1A GRADING "D" SURFACE @ 1.25" THICK (132.5 +/- LB/SY) 411-02.10 - ACS MIX (PG70-22) GRADING D	7A TACK COAT 403-01 - BITUMINOUS MATERAL FOR TACK COAT (TC) (SEE 403.05 FOR DETERMINING APPLICATION RATE IN THE FIELD) (GENERAL USE)
2A GRADING "B-M2" MIXTURE (BINDER) @ 2" THICK (226 +/- LB/SY) 307-02.08 - ASPHALT CONCRETE MIX (PG70-22) (BPMB-HM) GRADING B-M2	8A GRADING "E" SHOULDERS @ 1.25" THICK (132.5 +/- LB/SY) (SHOULDER) 411-01.07 - ASPHALT CONCRETE MIX (PG64-22) GRADING E
3A GRADING "A" MIXTURE (BLACK BASE) @ 3" THICK (345 +/- LB/SY) 307-02.01 - ASPHALT CONCRETE MIX (PG70-22) (BPMB-HM) GRADING A	9A GRADING "B-M2" MIXTURE (BINDER) @ 2" THICK (226 +/- LB/SY) 307-01.08 - ASPHALT CONCRETE MIX (PG64-22) GRADING B-M2
4A GRADING "A-S" MIXTURE (BLACK BASE) @ 3" THICK (318 +/- LB/SY) 307-01.21 - ASPHALT CONCRETE MIX (PG70-22) (BPMB-HM) GRADING A-S	10A GRADING "A" MIXTURE (BLACK BASE) @ 3" THICK (345 +/- LB/SY) 307-02.01 - ASPHALT CONCRETE MIX (PG70-22) (BPMB-HM) GRADING A
5A MINERAL AGGREGATE BASE @ 12" THICK (ROADWAY), 18" THICK (SHOULDER) 303-01 - MINERAL AGGREGATE, TYPE A BASE, GRADING D	11A UNDERDRAIN 710-02 - AGGREGATE UNDERDRAIN W/PIPE
6A PRIME COAT 402-01 - BITUMINOUS MATERIAL FOR PRIME COAT (PC) (0.30-0.35 GAL./SY) 402-02 - AGGREGATE FOR COVER MATERIAL (PC) (8-12 LB/SY)	12A COLD PLANING @ 1.25" THICK 415-01.01 - COLD PLANING BITUMINOUS PAVEMENT

PROPOSED SR-54 ALTERNATE "AA2" PAVEMENT SCHEDULE

1B GRADING "D" SURFACE @ 1.25" THICK (132.5 +/- LB/SY) 411-02.10 - ACS MIX (PG70-22) GRADING D	7B TACK COAT 403-01 - BITUMINOUS MATERAL FOR TACK COAT (TC) (SEE 403.05 FOR DETERMINING APPLICATION RATE IN THE FIELD) (GENERAL USE)
2B GRADING "B-M2" MIXTURE (BINDER) @ 2" THICK (226 +/- LB/SY) 307-02.08 - ASPHALT CONCRETE MIX (PG70-22) (BPMB-HM) GRADING B-M2	8B GRADING "E" SHOULDERS @ 1.25" THICK (132.5 +/- LB/SY) (SHOULDER) 411-01.07 - ASPHALT CONCRETE MIX (PG64-22) GRADING E
3B GRADING "A" MIXTURE (BLACK BASE) @ 3" THICK (345 +/- LB/SY) 307-02.01 - ASPHALT CONCRETE MIX (PG70-22) (BPMB-HM) GRADING A	9B GRADING "B-M2" MIXTURE (BINDER) @ 2" THICK (226 +/- LB/SY) 307-01.08 - ASPHALT CONCRETE MIX (PG64-22) (BPMB-HM) GRADING B-M2
4B GRADING "A-S" MIXTURE (BLACK BASE) @ 3" THICK (318 +/- LB/SY) 307-01.21 - ASPHALT CONCRETE MIX (PG70-22) (BPMB-HM) GRADING A-S	10B UNDERDRAIN 710-02 - AGGREGATE UNDERDRAIN W/PIPE
5B MINERAL AGGREGATE BASE @ 12" THICK (SHOULDER) 303-01 - MINERAL AGGREGATE, TYPE A BASE, GRADING D	11B AGGREGATE CEMENT BASE COURSE @ 6" THICK (ROADWAY) 309-01.01 - MINERAL AGGREGATE (A-CBC) 309-1.02 - PORTLAND CEMENT (A-CBC) 309-02 - BITUMINOUS MATERIAL (A-CBC)
6B PRIME COAT 402-01 - BITUMINOUS MATERIAL FOR PRIME COAT (PC) (0.30-0.35 GAL./SY) 402-02 - AGGREGATE FOR COVER MATERIAL (PC) (8-12 LB/SY)	12B COLD PLANING @ 1.25" THICK 415-01.01 - COLD PLANING BITUMINOUS PAVEMENT
	13B GRADING "A" MIXTURE (BLACK BASE) @ 3" THICK (345 +/- LB/SY) 307-02.01 - ASPHALT CONCRETE MIX (PG70-22) (BPMB-HM) GRADING A

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PAVEMENT SCHEDULE

SHEET 1 OF 2

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	2B12
PIH	2025	NH-54(48)	2B12
PS&E	2026	NH-54(48)	2B12

PROPOSED STATELINE RD. & CROSSLAND RD. PAVEMENT SCHEDULE

1C GRADING "D" SURFACE @ 1.25" THICK (132.5 +/- LB/SY) 411-02.10 - ACS MIX (PG70-22) GRADING D	6C TACK COAT 403-01 - BITUMINOUS MATERAL FOR TACK COAT (TC) (SEE 403.05 FOR DETERMINING APPLICATION RATE IN THE FIELD) (GENERAL USE)
2C GRADING "B-M2" MIXTURE (BINDER) @ 2" THICK (226 +/- LB/SY) 307-02.08 - ASPHALT CONCRETE MIX (PG70-22) (BPMB-HM) GRADING B-M2	7C GRADING "B-M2" MIXTURE (BINDER) @ 2" THICK (226 +/- LB/SY) 307-01.08 - ASPHALT CONCRETE MIX (PG64-22) (BPMB-HM) GRADING B-M2
3C GRADING "A" MIXTURE (BLACK BASE) @ 3" THICK (345 +/- LB/SY) 307-02.01 - ASPHALT CONCRETE MIX (PG70-22) (BPMB-HM) GRADING A	8C MINERAL AGGREGATE BASE @ 12" THICK (ROADWAY), 12.5" THICK (SHOULDER) 303-01 - MINERAL AGGREGATE, TYPE A BASE, GRADING D
4C MINERAL AGGREGATE BASE @ 8" THICK (ROADWAY), 11" THICK (SHOULDER) 303-01 - MINERAL AGGREGATE, TYPE A BASE, GRADING D	9C COLD PLANING @ 1.25" THICK 415-01.01 - COLD PLANING BITUMINOUS PAVEMENT
5C PRIME COAT 402-01 - BITUMINOUS MATERIAL FOR PRIME COAT (PC) (0.30-0.35 GAL./SY) 402-02 - AGGREGATE FOR COVER MATERIAL (PC) (8-12 LB/SY)	10C GRADING "B-M2" MIXTURE (BINDER) @ 2.5" THICK (282.5 +/- LB/SY) 307-02.08 - ASPHALT CONCRETE MIX (PG70-22) (BPMB-HM) GRADING B-M2

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02/10/2026

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PAVEMENT SCHEDULE

SHEET 2 OF 2

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TYPE	YEAR	PROJECT NO.	SHEET NO.
PIH	2025	NH-54(48)	2C
PS&E	2026	NH-54(48)	2C

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) ALL EXISTING ROADS WITHIN THE RIGHT-OF-WAY AND NOT IN THE GRADED AREA THAT ARE TO BE ABANDONED SHALL BE SCARIFIED, OBLITERATED, TOPSOILED AND SEEDED. SCARIFYING AND OBLITERATING THE PAVEMENT WILL NOT BE MEASURED AND PAID FOR DIRECTLY, BUT THE COST WILL BE INCLUDED IN THE COST OF OTHER ITEMS. TOPSOIL, IN ACCORDANCE WITH SECTION 203 OF THE STANDARD SPECIFICATIONS, WILL BE MEASURED AND PAID FOR UNDER ITEM NO. 203-04 AND/OR 203-07. SEEDING, IN ACCORDANCE WITH SECTION 801 OF THE STANDARD SPECIFICATIONS, WILL BE MEASURED AND PAID FOR UNDER ITEM NO. 801-01.

(2) 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.

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

(5) ITEM NO. 801-02, SEEDING (WITHOUT MULCH) AND EROSION CONTROL BLANKET, SHALL BE PLACED AT LOCATIONS SHOWN ON THE PLANS AS WELL AS LOCATIONS DIRECTED BY THE ENGINEER.

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.

(3) 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.

(4) 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) EXCAVATION FOR PIPE CULVERTS, STORM SEWERS, CONDUITS, ALL OTHER CULVERTS WILL NOT BE MEASURED AND PAID FOR DIRECTLY, BUT WILL BE INCLUDED IN THE PRICE BID PER LINEAR FOOT OF PIPE.

(3) 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.

(4) THE CUTTING OF INLET AND OUTLET DITCHES WHERE SHOWN ON PLANS OR AS DIRECTED BY THE ENGINEER WILL BE MEASURED AND PAID FOR AS ITEM NO. 203-01 ROAD AND DRAINAGE EXCAVATION (UNCLASSIFIED).

(5) WHERE A CULVERT (PIPE, SLAB OR BOX) IS MOVED TO A NEW LOCATION OTHER THAN THAT SHOWN ON THE PLANS, INCREASING OR DECREASING THE AMOUNT OF CULVERT EXCAVATION WILL NOT RESULT IN AN INCREASE OR DECREASE IN THE AMOUNT OF PAYMENT THAT WILL BE MADE DUE TO SUCH CHANGE.

(6) DURING CONSTRUCTION OF DRAINAGE STRUCTURES ALL COST ASSOCIATED WITH MAINTAINING THE FLOW OF WATER AND TRAFFIC, AT THESE STRUCTURES, DURING THE PHASED CONSTRUCTION OF THIS PROJECT ARE TO BE INCLUDED IN THE UNIT PRICE OF THE DRAINAGE STRUCTURES AND TRAFFIC CONTROL ITEMS.

(7) ALL EXISTING PIPES AS SHOWN ON PLANS OR AS DIRECTED BY THE ENGINEER THAT ARE TO BE LEFT IN PLACE AND ABANDONED MUST BE BACKFILLED AND PLUGGED. ALL COST FOR THIS WORK SHALL BE INCLUDED IN ITEM NO. 204-08.01, BACKFILL MATERIAL (FLOWABLE FILL), C.Y.

MISCELLANEOUS

(1) ALL DETOUR, ACCESS, SERVICE AND FRONTAGE ROADS SHALL BE CONSTRUCTED WITH A MINIMUM OF ONE (1) COURSE OF BASE MATERIAL BEFORE TRAFFIC IS INTERRUPTED ON EXISTING ROADS.

(2) 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.

(3) 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

(8) 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.

(13) PERMANENT PAVEMENT LINE MARKINGS SHALL BE REFLECTORIZED PAINT INSTALLED TO PERMANENT STANDARDS AT THE END OF EACH DAY’S WORK. SHORT, UNMARKED SECTIONS SHALL NOT BE ALLOWED. THESE MARKINGS WILL BE MEASURED AND PAID FOR UNDER ITEM NO. 716-05.01, PAINTED PAVEMENT MARKING (4IN LINE), L.M.

DETOURS, LANE SHIFTS AND MEDIAN CROSS-OVERS

(16) THE PAVEMENT MARKING ON THE **LANE SHIFT** FOR **CENTERLINE, EDGELINES** WILL BE INSTALLED AND MAINTAINED TO THE SAME STANDARDS AS FOR PERMANENT MARKINGS ON THE MAIN ROADWAY. THESE MARKINGS SHALL BE IN PLACE PRIOR TO ALLOWING TRAFFIC ONTO THE PAVEMENT. THESE PAVEMENT MARKINGS WILL BE MEASURED AND PAID FOR UNDER ITEM NO. **716-05.01 PAINTED PAVEMENT MARKING (4IN LINE)**, L.M.

(18) BEFORE OPENING THE LANE SHIFT TO TRAFFIC, THE TRANSITIONAL MARKINGS ON THE EXISTING ROADWAY MUST BE IN PLACE. ALL EXISTING MARKINGS IN THE AREA OF THESE TRANSITIONAL MARKINGS SHALL BE OBLITERATED AND ALL EXISTING RAISED PAVEMENT MARKERS SHALL BE REMOVED TO ELIMINATE CONFLICTING MARKINGS. REMOVAL OF THE EXISTING CONFLICTING MARKINGS AND RAISED PAVEMENT MARKERS WILL NOT BE MEASURED AND PAID FOR DIRECTLY, BUT THE COST WILL BE INCLUDED IN ITEM NO. 712-01, TRAFFIC CONTROL, LUMP SUM.

SNOWPLOWABLE REFLECTIVE PAVEMENT MARKERS

(19) REMOVE EXISTING SNOWPLOWABLE MARKERS PRIOR TO PAVING AND/OR COLD 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.

PAVEMENT

PAVING

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

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

(3) 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.

GRADED SOLID ROCK

(1) THE ROCK FILL (GRADED SOLID ROCK) MATERIAL SHALL CONSIST OF SOUND, NON-DEGRADABLE LIMESTONE OR SANDSTONE WITH A MAXIMUM SIZE OF 3’-0”. AT LEAST 50% (BY WEIGHT) OF THE ROCK SHALL BE UNIFORMLY DISTRIBUTED BETWEEN 1’-0” AND 3’-0” IN DIAMETER, AND NO GREATER THAN 10% (BY WEIGHT) SHALL BE LESS THAN 2” IN DIAMETER. THE MATERIAL SHALL BE ROUGHLY EQUIDIMENSIONAL; THIN, SLABBY MATERIALS WILL NOT BE ACCEPTED. THE CONTRACTOR SHALL BE REQUIRED TO PROCESS THE MATERIAL WITH AN ACCEPTABLE MECHANICAL MEANS (A SCREENING PROCESS CAPABLE OF PRODUCING THE REQUIRED GRADATION). THE ROCK SHALL BE APPROVED BY A REPRESENTATIVE OF THE DIVISION OF MATERIALS AND TESTS BEFORE USE.

(2) THIS GRADED SOLID ROCK MATERIAL SHALL BE PLACED IN LAYERS NOT EXCEEDING FIVE FEET IN DEPTH.

SIGNING

(1) 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. THE LETTERS, DIGITS, ARROWS, BORDERS, AND ALPHABET ACCESSORIES ON ALL EXTRUDED PANEL SIGNS SHALL BE DIRECT APPLIED OR DEMOUNTABLE. ALL EXTRUDED PANEL SIGNS SHALL BE ATTACHED TO THE SIGN FACE, AS OUTLINED IN THE STANDARD SPECIFICATIONS. ALL SHIELDS ON GUIDE SIGNS SHALL BE DIRECT APPLIED OR DEMOUNTABLE AND ATTACHED TO THE SIGN FACE AS OUTLINED IN THE STANDARD SPECIFICATIONS.

(2) 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.

(3) 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.

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

(5) 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.

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02/10/2026

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

GENERAL NOTES

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GENERAL NOTES (CONTINUED)

SIGNING (CONTINUED)

(6) THE CONTRACTOR SHALL BE REQUIRED TO FURNISH LAYOUT DRAWINGS OF ALL EXTRUDED PANEL SIGNS WITH SPACING OF ALL LETTERS, NUMERALS, SHIELDS, AND ARROWS. ONE PDF SET OF THE LAYOUT DRAWINGS SHALL BE SENT TO THE TRAFFIC DESIGN DIVISION, SIGNING SECTION (TDOT.TrafficDesign.SignsandMarking@tn.gov) FOR REVIEW. ONE PDF SET OF THE LAYOUT DRAWINGS SHALL BE SENT TO THE REGIONAL SIGN DESIGNER FOR REVIEW.

(7) 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.

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

(9) 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.

(10) 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.

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

(12) 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.

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.
PIH	2025	NH-54(48)	2C1
PS&E	2026	NH-54(48)	2C1

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GENERAL NOTES

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TYPE	YEAR	PROJECT NO.	SHEET NO.
PIH	2025	NH-54(48)	2D
PS&E	2026	NH-54(48)	2D

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.

RAILWAY - KWT

(1) THE RAILWAY RESERVES THE RIGHT TO COMMENT / APPROVE THE ROADWAY AUTHORITY CONTRUCTION PLANS AFFECTING THE RAILWAY PROPERTY OR FACILITIES ANY TIME PRIOR TO THE START OF CONSTRUCTION REGARDLESS OF IF PREVIOUS CONSTRUCTION PLAN APPROVAL HAS BEEN GRANTED.

(2) THIS RESERVATION WILL BE INVOKED ONLY IF THE RAILWAY HAS EITHER BY INTERNAL POLICY OR MANDATE OF LAW REVISED ITS STANDARDS AS APPLICABLE TO THIS PROJECT. THE RAILWAY SHALL NOTIFY THE ROADWAY AUTHORITY OF CHANGES AS FAR AS POSSIBLE IN ADVANCE OF CONTRUCTION.

(3) THE ROADWAY AUTHORITY SHALL, PRIOR TO THE START OF CONSTRUCTION, VERIFY WITH THE RAILWAY IF ANY REVISIONS TO STANDARDS ARE APPLICABLE TO THIS PROJECT.

(4) THE FOLLOWING MINIMUM TEMPORARY CLEARANCES SHALL BE MAINTAINED DURING CONSTRUCTION.

- VERTICAL – 21.5 FEET ABOVE TOP OF RAIL (ATR) (TEMPORARY).
- HORIZONTAL – 15 FEET IN TANGENT SECTIONS OF TRACK MEASURED PERPENDICULAR TO THE TRACK (TEMPORARY).
- HORIZONTAL – 20 FEET IN CURVED SECTIONS OF TRACK MEASURED PERPENDICULAR TO THE TRACK (TEMPORARY).

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SPECIAL NOTES

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	2E
PIH	2025	NH-54(48)	2E
PS&E	2026	NH-54(48)	2E

ENVIRONMENTAL NOTES

SUBSECTION 1 – ENVIRONMENTAL GENERAL 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

(13) 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).

(14) 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.

(15) 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.

(16) 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.

(17) 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

(18) 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.

STREAMS, WETLANDS & BUFFER ZONES

(19) ONCE WATER IS DIVERTED INTO A NEWLY CONSTRUCTED AND STABILIZED RELOCATED STREAM / CHANNEL, THE ECOLOGY SECTION SHALL BE NOTIFIED. THE STREAM NAME, STREAM NUMBER, AND DATE THE WATER WAS DIVERTED INTO THE NEWLY CONSTRUCTED STREAM / CHANNEL SHALL BE SUPPLIED WITH THE NOTIFICATION.

ENVIRONMENTAL

(20) 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.

SUBSECTION 2 – ENVIRONMENTAL SPECIAL NOTES

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 PRE-CONSTRUCTION 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 PRE-CONSTRUCTION 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.

SCOPE OF WORK

(6) PROJECT INCLUDES GRADE, DRAIN, PAVING, BRIDGE, SIGNS, GUARDRAIL, AND PAVEMENT MARKINGS TO CONSTRUCT SR-54 ON NEW ALIGNMENT AS INDICATED ON THE PLANS AND CROSS SECTIONS AS DIRECTED BY THE ENGINEER. INCLUDES A NEW BRIDGE OVER EXISTING SR-54 AND THE KWT RAILROAD.

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

ENVIRONMENTAL NOTES

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	2F
PIH	2025	NH-54(48)	2F
PS&E	2026	NH-54(48)	2F

CATCH BASINS

SHEET NO.	LOCATION	STATION	OFFSET (FT.)	DRAINAGE CODE	GRATE ELEV.	INVERT ELEV.	DEPTH (FT.)	INSIDE DIM. (INCHES)	STANDARD DRAWING NO.	PAY ITEMS				
										TYPE 38 611-38.01 0'-4'	TYPE 38 611-38.02 4'-8'	TYPE 42 611-42.01 0'-4'	TYPE 42 611-42.02 4'-8'	TYPE 42 611-42.03 8'-12'
14B	SR-54	232+13.00	CL	15	569.90	559.02	10.88	60	D-CB-42RB					1
14B	SR-54	232+82.00	CL	16	569.48	561.76	7.72	32	D-CB-42S				1	
14B	SR-54	234+82.00	CL	17	568.27	562.88	5.39	32	D-CB-42S				1	
14B	SR-54	236+82.00	CL	18	567.06	564.00	3.06	32	D-CB-42S			1		
15B	SR-54	243+50.00	7.82 LT.	10	562.83	558.27	4.56	32	D-CB-38S		1			
15B	SR-54	245+00.00	11.96 LT.	12	562.68	559.15	3.53	32	D-CB-38S	1				
TOTALS										1	1	1	2	1

PAVEMENT QUANTITIES

LOCATION (ROADWAY)	TYPE - GRADE - PAY ITEM (TON)																										
	MINERAL AGG.	MINERAL AGG.	MINERAL AGG.	BITUMINOUS PLANT MIX BASE (HOT MIX)								CEMENT TREATED BASE			PRIME COAT				TACK COAT		ASPHALTIC CONCRETE SURFACE (HOT MIX)						COLD PLANE
				PG-64-22		PG-70-22															PG-64-22				PG 70-22		
	D	D	57 STONE	B-M2	B-M2	A	A	A-S	A-S	B-M	B-M2	A-Cbc									D	D	E	E	D	D	
	303-01 ALT. "AA1"	303-01 ALT. "AA2"	303-10.01	307-01.08 ALT. "AA1"	307-01.08 ALT. "AA2"	307-02.01 ALT. "AA1"	307-02.01 ALT. "AA2"	307-01.21 ALT. "AA1"	307-01.21 ALT. "AA2"	307-02.08 ALT. "AA1"	307-02.08 ALT. "AA2"	309-01.01 ALT. "AA2"	309-01.02 ALT. "AA2"	309-02 ALT. "AA2"	402-01 ALT. "AA1"	402-01 ALT. "AA2"	402-02 ALT. "AA1"	402-02 ALT. "AA2"	403-01 ALT. "AA1"	403-01 ALT. "AA2"	411-01.10 ALT. "AA1"	411-01.10 ALT. "AA2"	411-01.07 ALT. "AA1"	411-01.07 ALT. "AA2"	411-02.10 ALT. "AA1"	411-02.10 ALT. "AA2"	415-01.01
SR-54	143627	78286		3780	3780	18253	18253	17092	17092	11796	11796	34774	1580	93	198	198	704	704	79	79			2172	2172	6853	6853	228
SR-54 TIE	1297	705		28	28	145	145	136	136	94	94	277	11	1	2	2	6	6	1	1					71	71	22
CROSSLAND RD	1167	1167		30	30					168	168				3	3	8	8	1	1					111	111	17
STATELINE RD	620	620				120	120			78	78				2	2	5	5	1	1					106	106	42
MAINTENANCE OF TRAFFIC	2252	2252																									
DRIVEWAYS	470	470																			97	97					
TOTALS	149433	83500		3838	3838	18518	18518	17228	17228	12136	12136	35051	1591	94	205	205	723	723	82	82	97	97	2172	2172	7141	7141	309

PROPOSED GUARDRAIL

SHEET NO.	LOCATION	SIDE		STATIONS		GUARDRAIL			TERMINAL ANCHORS			REMARKS
		LT	RT	FROM	TO	THRIE BEAM BRIDGE TRAN. MASH TL-3 (20.65') 705-06.25 EACH	W BEAM GR (TYPE 2) MASH TL3 705-06.01 (L.F.)	SHORT-RADIUS GUARDRAIL SYSTEM (SRGS) 705-06.19 (EACH)	TYPE 12 VARIES 705-04.02 (EACH)	TYPE 38 MASH TL3 (46.875') 705-06.20 (EACH)	TYPE 21 MASH TL2 (21.875') 705-06.30 (EACH)	
	SR-54		X	104+58.00	108+83.00		331.25			2		
	SR- 54 TIE / SR-54	X		6+71.73	109+07.50		420.00	1		2		SRGS R=48'
	SR-54		X	114+02.50	118+90.00		393.75			2		
	SR-54	X		114+70.00	119+32.50		368.75			2		
	SR-54		X	130+06.52	137+36.55	1	662.50			1		
	SR-54	X		130+35.38	136+02.91	1	500.00			1		
	SR-54	X		142+80.26	149+60.29	1	612.50			1		
	SR-54		X	144+13.90	149+81.43	1	500.00			1		
	SR-54		X	197+97.00	202+47.00		356.25			2		
	SR-54	X		198+50.00	203+00.00		356.25			2		
	SR-54		X	225+09.00	229+59.00		356.25			2		
	SR-54	X		225+44.00	229+94.00		356.25			2		
TOTALS						4	5213.75	1		20		

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

TABULATED QUANTITIES

SHEET 1 OF 4

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	2F1
PIH	2025	NH-54(48)	2F1
PS&E	2026	NH-54(48)	2F1

REV. 08-14-24: UPDATED SIDE DRAIN ENDWALLS, RIGHT OF WAY MARKERS, AND SIDE DRAIN TABULATION TABLES.

REMOVAL OF BUILDINGS AND OBSTRUCTIONS DESCRIPTION BLOCK

PAY ITEM	TRACT NO.	DESCRIPTION
202-06.01	4	SINGLE FAMILY RESIDENCE, SHEDS, AND SEPTIC SYSTEM
202-06.02	17	MOBILE HOME AND SEPTIC SYSTEM

NO ADDITIONAL COMPENSATION WILL BE MADE FOR THESE REMOVALS.

SIDE DRAIN ENDWALLS

LOCATION	DRIVE OR ENTRANCE STATION	OFFSET (FT.)	TYPE	STANDARD DRAWING NO.	SKEW	ENDWALLS 18 IN. 6:1 611-07.31 (EACH)	ENDWALLS 24 IN. 6:1 611-07.32 (EACH)
101+92.00	FLD. ENT	74.34	"SAFETY"	D-SEW-1A	88° LT	1	
102+19.64	FLD. ENT	73.57	"SAFETY"	D-SEW-1A	88° LT	1	
123+83.64	FLD. ENT	62.84	"SAFETY"	D-SEW-1A	90°	1	
124+14.10	FLD. ENT	62.84	"SAFETY"	D-SEW-1A	90°	1	
191+84.30	FLD. ENT	-63.00	"SAFETY"	D-SEW-1A	90°	1	
192+16.37	FLD. ENT	-63.00	"SAFETY"	D-SEW-1A	90°	1	
207+84.01	FLD. ENT	-63.00	"SAFETY"	D-SEW-1A	90°	1	
208+16.68	FLD. ENT	-63.00	"SAFETY"	D-SEW-1A	90°	1	
211+33.65	FLD. ENT	63.00	"SAFETY"	D-SEW-1A	90°	1	
211+67.05	FLD. ENT	63.00	"SAFETY"	D-SEW-1A	90°	1	
219+84.33	FLD. ENT	63.00	"SAFETY"	D-SEW-1A	90°		1
219+85.09	FLD. ENT	-63.00	"SAFETY"	D-SEW-1A	90°		1
220+15.55	FLD. ENT	-63.00	"SAFETY"	D-SEW-1A	90°		1
220+16.34	FLD. ENT	63.00	"SAFETY"	D-SEW-1A	90°		1
233+83.59	FLD. ENT	80.51	"SAFETY"	D-SEW-1A	84°	1	
234+15.22	FLD. ENT	77.17	"SAFETY"	D-SEW-1A	84°	1	
CROSSLAND RD. RT. 23+25.50 LT.	FLD. ENT	-16.00	"SAFETY"	D-SEW-1A	90°	1	
CROSSLAND RD. RT. 23+54.48 LT.	FLD. ENT	-16.11	"SAFETY"	D-SEW-1A	90°	1	
CROSSLAND RD. RT. 24+35.72 RT.	FLD. ENT	15.53	"SAFETY"	D-SEW-1A	90°	1	
CROSSLAND RD. RT. 24+64.79 RT.	FLD. ENT	15.82	"SAFETY"	D-SEW-1A	90°	1	
TOTALS						16	4

RIGHT OF WAY MARKERS

SHEET NO.	Item #: 708-02.01 QUANTITIES "A"	"B"	"C"	TOTALS
4A	4	2	3	9
5A	7			7
6A	7		1	8
7A	1		3	4
8A	5			5
9A	8		8	16
10A	4			4
11A	6			6
12A	4			4
13A	2	1	1	4
14A	4	2	3	9
15A	2	2	4	8
TOTALS	54	7	23	84

SIDE DRAIN TABULATION

STATION	LOCATION LT.	LOCATION RT.	DESCRIPTION	SURFACE WIDTH FT.	SKEW	RCP CLASS III OR CMP 16 GA OR PVC OR SRTRP OR HDPE OR PP (L.F.) FILL HEIGHT ≤ 10 FT. 18"	24"	30"	36"	42"	48"	END TREATMENT INLET TYPE	INLET DRAWING NO.	OUTLET TYPE	OUTLET DRAWING NO.	REMARKS
SR-54 102+05.00		X	FIELD ENTRANCE	20	88° LT	28						"SAFETY"	D-SEW-1A	"SAFETY"	D-SEW-1A	
SR-54 124+00.00		X	FIELD ENTRANCE	20	90°	32						"SAFETY"	D-SEW-1A	"SAFETY"	D-SEW-1A	
SR-54 192+00.00	X		FIELD ENTRANCE	20	90°	34						"SAFETY"	D-SEW-1A	"SAFETY"	D-SEW-1A	
SR-54 208+00.00	X		FIELD ENTRANCE	20	90°	34						"SAFETY"	D-SEW-1A	"SAFETY"	D-SEW-1A	
SR-54 211+65.00		X	FIELD ENTRANCE	20	90°	34						"SAFETY"	D-SEW-1A	"SAFETY"	D-SEW-1A	
SR-54 220+00.00	X		FIELD ENTRANCE	20	90°		32					"SAFETY"	D-SEW-1A	"SAFETY"	D-SEW-1A	
SR-54 220+00.00		X	FIELD ENTRANCE	20	90°		34					"SAFETY"	D-SEW-1A	"SAFETY"	D-SEW-1A	
SR-54 234+00.00		X	FIELD ENTRANCE	20	84° LT	32						"SAFETY"	D-SEW-1A	"SAFETY"	D-SEW-1A	
CROSSLAND RD. 23+40.00	X		FIELD ENTRANCE	20	90°	24						"SAFETY"	D-SEW-1A	"SAFETY"	D-SEW-1A	
CROSSLAND RD. 24+50.00		X	FIELD ENTRANCE	20	90°	24						"SAFETY"	D-SEW-1A	"SAFETY"	D-SEW-1A	
TOTALS						242	66									

Pipe Tabulation For Private Drives, Business & Field Entrances

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DEPARTMENT OF TRANSPORTATION

TABULATED QUANTITIES

SHEET 2 OF 4

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	2F2
PIH	2025	NH-54(48)	2F2
PS&E	2026	NH-54(48)	2F2

STORM DRAINAGE PIPES

SHEET NO.	INLET		OUTLET		% GRADE	REINFORCED CONCRETE PIPE - CLASS, ITEM NO., SIZE & LENGTH (FT.)						
	CODE NO.	OUTLET ELEV.	CODE NO.	INLET ELEV.			CLASS III 607-03.02 18"	CLASS III 607-05.02 24"	CLASS III 607-06.02 30"	CLASS III 607-07.02 36"	CLASS III 607-08.02 42"	
14B	7	560.00	15	559.16	0.91%					94'		
14B	15	559.02	8	558.21	0.81%					100'		
14B	16	561.76	19	558.45	3.86%		86'					
14B	17	562.88	16	561.88	0.50%		196'					
14B	18	564.00	17	563.00	0.50%		196'					
15B	9	558.78	10	558.39	0.42%			94'				
15B	10	558.27	11	557.87	0.53%			76'				
15B	12	559.15	10	558.39	0.52%		148'					
TOTALS							626'	170'		194'		

CROSS DRAIN \ MEDIAN DRAIN \ STORM DRAIN ENDWALLS

LOCATION	STATION	OFFSET (FT.)	SKEW	CODE	TYPE	STANDARD DRAWING NO.	SODDING 803-01 (S.Y.)	RIP-RAP CLASS "A-1" 709-05.06 (TON)	RIP-RAP CLASS "B" 709-05.08 (TON)	PROTECTED ENDWALLS		SAFETY ENDWALLS (ITEM NO. 611-07.54 THRU 611-07.71 SERIES)								
										CLASS "A" CONCRETE 611-07.01 (C.Y.)	STEEL BAR REINFORCING 611-07.02 (LB.)	18 IN. 3:1 07.54 (EACH)	18 IN. 4:1 07.55 (EACH)	18 IN. 6:1 07.56 (EACH)	24" IN. 3:1 07.57 (EACH)	24" IN. 4:1 07.58 (EACH)	24" IN. 6:1 07.59 (EACH)	36" IN. 6:1 07.65 (EACH)	42" IN. 4:1 07.67 (EACH)	42" IN. 6:1 07.68 (EACH)
SR-54	143+05.35	-147.69	41° RT	4	"PEW"	D-PEW-1&2	30.6		257	5	189									
SR-54	146+12.63	118.22	41° RT	3	"PEW"	D-PEW-1&2	4.9	25		5	189									
SR-54	190+22.00	-64.8	90º	6	"U"	D-PE-36 (A&B)	21.3		154.1									1		
SR-54	190+22.00	59.54	90º	5	"U"	D-PE-36 (A&B)	2.2		16.1									1		
SR-54	231+55.65	74.46	52° LT	7	"U"	D-PE-42 (A&B)	2.2		16											1
SR-54	232+74.57	-81.02	52° LT	8	"U"	D-PE-42 (A&B)	6.7		25.1										1	
SR-54	232+82.00	-87	90º	19	"U"	D-PE-18 (A&B)	4.4		32.1				1							
SR-54	243+50.00	-87.74	90º	11	"U"	D-PE-24 (A&B)	6.7	20									1			
SR-54	243+50.00	88.04	90º	9	"U"	D-PE-24 (A&B)	2.2	16								1				
SR-54 TIE	8+53.50	-34.03	53° RT	14	"U"	D-PE-18 (A&B)	17.8		98.4			1								
SR-54 TIE	9+15.86	47.53	53° RT	13	"U"	D-PE-18 (A&B)	7		38.9			1								
TOTALS							106	61	638	10	378	2	1			1	1	2	1	1

CROSS DRAIN TABULATION

STATION	SKEW	RCP CLASS III OR CMP 10 GA OR PVC OR SRTRP OR HDPE OR PP FILL HEIGHT ≤ 16 FT. (L.F.)						END TREATMENT				REMARKS
								INLET		OUTLET		
		18"	24"	30"	36"	42"	48"	TYPE	DRAWING NO.	TYPE	DRAWING. NO.	
SR-54 144+76.02	40° 52' 17" RT				406			"PEW"	D-PEW-1&2	"PEW"	D-PEW-1&2	
SR-54 190+22.00	90°				126			"U"	D-PE-36 (A&B)	"U"	D-PE-36 (A&B)	
SR-54 TIE 8+90.00	53° RT	104						"U"	D-PE-18 (A&B)	"U"	D-PE-18 (A&B)	
TOTALS		104			532							

Pipe Tabulation For Arterial Roadways

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J. BRIAN LEE REGISTERED ENGINEER STATE OF TENNESSEE 107229

02/10/2026

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

TABULATED QUANTITIES

SHEET 3 OF 4

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	2F3
PIH	2025	NH-54(48)	2F3
PS&E	2026	NH-54(48)	2F3

BOX CULVERT \ BRIDGE TABULATION

STATION	LOCATION	TYPE		SKEW	NO. BARRELS	WIDTH	HEIGHT	LENGTH	DRAINAGE AREA ACRES	STANDARD DRAWING NO.	CULVERT ≤ 20 FT.		BRIDGE > 20 FT.		STD. DWG. STD-17-17 & 18		SODDING 803-01 (S.Y.)	RIP-RAP CLASS B 709-05.08 TON	CHANNEL EXC. 203-08 CU. YD.	CULVERT EXC. ▲ 204-01 CU. YD.
		BOX	SLAB								CLASS "A" CONCRETE 604-01.01 CU. YD.	STEEL BAR REINF. 604-01.02 LB.	CLASS "A" CONCRETE 604-02.01 CU. YD.	STEEL BAR REINF. 604-02.02 LB.	FOUNDATION FILL MATERIAL 204-08 CU. YD.	GRANULAR BACKFILL 303-01.01 TONS				
106+70.00	SR-54	X		85° RT	1	6	6	129.50	55.2	STD-17-51	109	22215			55	1308	13	121		▲
116+80.00	SR-54	X		86° 59' 58" LT	2	16	10	106.00	1.29 SQ.MI.	STD-17-83			463	93904	150	1562	25	315	1427	▲
200+48.00	SR-54	X		83° 21' 17" LT	1	6	6	132.40	36.9	STD-17-51	115	22835			56	1163	16	70		▲
227+51.81	SR-54	X		90°	1	6	6	124.30	72.3	STD-17-51	106	21394			53	1582				▲
TOTALS											330	66444	463	93904	314	5615	54	506	1427	

▲ ALL COST OF CULVERT EXCAVATION WILL BE INCLUDED IN THE COST OF OTHER ITEMS.

TOPSOIL

IF EXISTING TOPSOIL IS SUITABLE FOR REUSE

PROPOSED SLOPE AREA S.F.	EXISTING TOPSOIL (EXC.)	EXISTING TOPSOIL (EMB.)	EXISTING TOPSOIL (TOTAL) C.Y.	REQUIRED TOPSOIL C.Y.	PLACING TOPSOIL 203-04 C.Y.	FURNISHED TOPSOIL 203-07 C.Y.	EXCESS TOPSOIL C.Y.
1376823	32735	21083	53818	25497	25497	0	28321

IF EXISTING TOPSOIL IS NOT SUITABLE FOR REUSE

PROPOSED SLOPE AREA S.F.	EXISTING TOPSOIL (EXC.)	EXISTING TOPSOIL (EMB.)	EXISTING TOPSOIL (TOTAL) C.Y.	REQUIRED TOPSOIL C.Y.	PLACING TOPSOIL 203-04 C.Y.	FURNISHED TOPSOIL 203-07 C.Y.	EXCESS TOPSOIL C.Y.
0	N/A	N/A	N/A	0	N/A	0	N/A

NOTE: TOPSOIL NOT REQUIRED IN ROCK FILLS AND RIP-RAP AREAS.

ESTIMATED GRADING QUANTITIES

DESCRIPTION	UNADJUSTED VOLUMES (CY)		ADJUSTED VOLUMES (CY)
	EXC.	EMB.	EXC.
MAINLINE	322,558	206,109	274174
SIDE ROADS	354	2,247	301
PVT. DRIVES, BUSINESS AND FIELD ENTRANCES	3,839	1,508	3264
EPSC + FLUMES	1127	0	958
BORROW EXCAVATION (GRADED SOLID ROCK) 203-02.01	0	47547	
BORROW EXCAVATION (SELECT MATERIAL) 203-03.01	0	68447	
TOPSOIL (EMB.)	0		
TOPSOIL (EXC.)	32,735		
TOPSOIL TOTALS (SEE TOPSOIL TABLE)			

ROCK (C.Y.)		TOTALS (C.Y.)				
EXC.	EMB.	EXC. (UNCL.)	EMB. (UNCL.)	EXC (COMMON)	EXC. (AVAIL.)	EXC. (ADJ.)
0	47937	360613	209475	360613	327878	278697

NOTE: WASTE MATERIAL SHOWN ABOVE DOES NOT INCLUDE 62,498 C.Y. FOR UNDERCUTTING.

BALANCE SUMMARY

SHRINK = 15 % SWELL = 25 %

EXC.		EMB.
278697	VS.	-209475
AVAILABLE	=	185216
WASTE MATERIAL	=	212999
BORROW SELECT MATERIAL	=	115994

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02/03/2026

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

TABULATED QUANTITIES

SHEET 4 OF 4

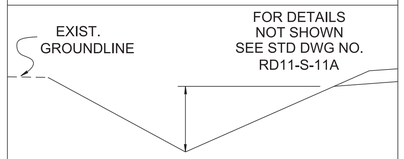
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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	2G
PIH	2025	NH-54(48)	2G
PS&E	2026	NH-54(48)	2G

SPECIAL DITCHES

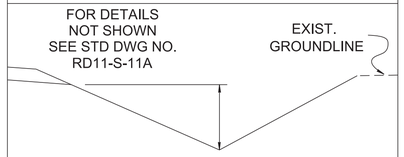
ROADWAY	STATION		SIDE	DETAIL NO.	BOTTOM			CLASS A-1 RIP-RAP 709-05.06 (TONS)	CLASS III TRM 805-01.03 (S.Y.)	SODDING NEW SOD 803-01 (S.Y.)
	FROM	TO			BACK (H/V)	WIDTH (FT.)	FORE (H/V)			
SR-54	098+50	99+50	RT	2	4:1		6:1			113
SR-54	099+50	104+50	RT	4	4:1	2	6:1			678
SR-54	104+50	105+00	RT	4	4:1	4	6:1			79
SR-54	105+00	105+49.97	RT	4	4:1	4	7:1			84
SR-54	105+49.97	106+72.47	RT	4	3:1	4	3:1			105
SR-54	106+60.64	110+00	LT	1	4:1		6:1			385
SR-54	106+79.83	107+50	RT	2	4:1		6:1			80
SR-54	107+50	108+00	RT	2	3:1		6:1			51
SR-54	108+00	109+00	RT	2	4:1		6:1			113
SR-54	109+00	111+00	RT	4	3:1	2	6:1			250
SR-54	110+00	110+50	LT	1	3:1		6:1			51
SR-54	111+00	114+50	RT	4	3:1	4	6:1			515
SR-54	113+50	116+50	LT	1	4:1		6:1		422	133
SR-54	114+50	115+00	RT	4	4:1	4	6:1			79
SR-54	115+00	116+75	RT	4	4:1	4	6:1		334	78
SR-54	116+50	116+82.24	LT	1	4:1		6:1	47		14
SR-54	117+00	122+00	LT	3	4:1	4	6:1		954	222
SR-54	117+00	122+00	RT	4	4:1	4	4:1		730	222
SR-54	122+00	122+50	RT	4	4:1	4	6:1			79
SR-54	122+00	126+50	LT	3	4:1	2	6:1		860	200
SR-54	122+50	123+50	RT	4	4:1	2	6:1			136
SR-54	126+50	128+50	LT	1	4:1		6:1		338	89
SR-54	126+00	129+50	RT	2	4:1		6:1			340
SR-54	128+50	130+00	LT	1	4:1		6:1			170
SR-54	129+50	132+50	RT	2	4:1		4:1			275
SR-54	131+00	133+18.41	LT	3	3:1	2	3:1		323	97
SR-54	132+50	133+50	RT	2	3:1		3:1			70
SR-54	134+70.35	135+75	LT	3	3:1	4	3:1			157
SR-54	135+75	135+96.74	LT	3	3:1	4	3:1	54		18
SR-54	143+00	147+00	LT	3	3:1	8	3:1			621
SR-54	144+25	146+08.19	RT	4	3:1	2	3:1			211
SR-54	135+61.46	137+25.00	RT	4	3:1	4	3:1			189
SR-54	144+20.13	144+41.72	RT	4	3:1	4	3:1	62		21
SR-54	144+41.72	149+00	RT	4	3:1	4	3:1			687
SR-54	147+00	148+00	LT	3	3:1	6	3:1			137
SR-54	148+00	152+00	LT	3	3:1	4	3:1			459
SR-54	149+00	151+00	RT	4	4:1	4	4:1			272
SR-54	151+00	154+00	RT	4	4:1	4	6:1			474
SR-54	152+00	153+00	LT	3	3:1	2	3:1			93
SR-54	153+00	170+50	LT	1	4:1		6:1			1985
SR-54	154+00	160+50	RT	4	4:1	2	6:1			882
SR-54	163+50	170+50	RT	2	4:1		6:1			794
SR-54	187+00	190+21	LT	3	4:1	2	6:1			435
SR-54	188+00	191+00	RT	4	4:1	2	6:1			407
SR-54	190+22	191+00	LT	1	4:1		6:1			89
SR-54	193+00	194+50	LT	1	4:1		6:1		253	67
SR-54	194+50	195+00	LT	1	4:1		4:1		74	22
SR-54	195+00	195+50	LT	3	4:1		4:1			34
SR-54	195+50	196+00	LT	3	4:1	2	4:1			46
SR-54	196+00	196+50	LT	3	4:1	4	4:1			57
SR-54	196+50	196+76.17	LT	3	3:1	6	3:1	34		32
SR-54	196+50	198+00	RT	2	4:1		6:1			170
SUBTOTAL 1								198	4288	13064

DETAIL NO. 1



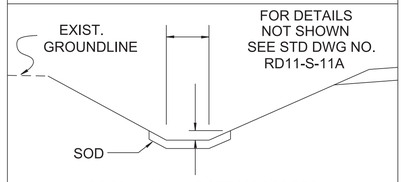
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TURF REINFORCEMENT MAT (CLASS III),
OR RIP-RAP DITCH

DETAIL NO. 2



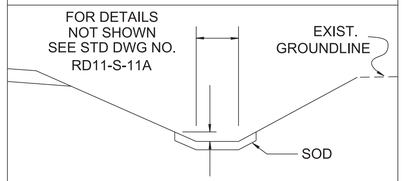
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TURF REINFORCEMENT MAT (CLASS III),
OR RIP-RAP DITCH

DETAIL NO. 3



PROP. LT FLAT BOTTOM SODDED,
TURF REINFORCEMENT MAT (CLASS III),
OR RIP-RAP DITCH

DETAIL NO. 4



PROP. RT FLAT BOTTOM SODDED,
TURF REINFORCEMENT MAT (CLASS III),
OR RIP-RAP DITCH

SEALED BY



STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

DITCH DETAIL SHEET

SHEET 1 OF 2

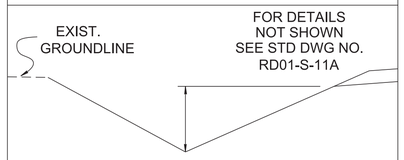
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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	2G1
PIH	2025	NH-54(48)	2G1
PS&E	2026	NH-54(48)	2G1

SPECIAL DITCHES

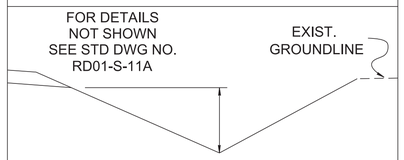
ROADWAY	STATION FROM	STATION TO	SIDE	DETAIL NO.	CONFIGURATION FORE (H/V)	CONFIGURATION BOTTOM WIDTH (FT.)	CONFIGURATION BACK (H/V)	CLASS A-1 RIP-RAP 709-05.06 (TONS)	CLASS III TRM 805-01.03 (S.Y.)	SODDING NEW SOD 803-01 (S.Y.)
SR-54	198+00	200+00	RT	4	4:1	2	6:1		337	89
SR-54	200+00	200+39.35	RT	4	4:1	2	4:1	55		18
SR-54	200+39.35	201+00	RT	4	4:1	2	4:1	85		27
SR-54	201+00	201+50	RT	4	4:1	2	6:1		96	22
SR-54	201+50	203+50	RT	2	4:1		6:1			227
SR-54	202+00	204+00	LT	1	4:1		6:1			227
SR-54	221+00	224+50	RT	4	4:1	4	6:1			553
SR-54	223+50	224+50	LT	3	4:1	2	6:1			136
SR-54	224+50	227+00	LT	3	4:1	4	6:1		462	111
SR-54	224+50	227+50	RT	4	3:1	4	6:1		608	133
SR-54	227+00	227+50	LT	3	4:1	4	4:1	80		22
SR-54	227+50	231+00	RT	2	4:1		6:1			397
SR-54	231+00	231+50	RT	4	4:1	2	6:1	84		22
SR-54	231+50	232+00	RT	4	4:1	2	6:1			68
SR-54	232+00	234+50	RT	2	4:1		6:1			284
SR-54	236+50	245+50	RT	2	4:1		6:1			1021
SR-54	244+71.70	246+00	LT	1	4:1		6:1			146
SR-54	245+50	246+00	RT	2	4:1		6.9:1			68
SR-54	246+00	246+50	LT	1	4:1		6.2:1			58
SR-54	246+00	246+50	RT	2	4:1		9.6:1			68
SR-54	246+50	247+00	LT	1	4:1		11.6:1			68
SR-54	246+50	247+00	RT	2	4:1		15.5:1			68
SR-54	247+00	247+25	LT	1	4:1		72.2:1			34
SR-54	247+00	247+38	RT	2	4:1		52.6:1			68
CLANDLT	18+00	19+50	LT	1	4:1		3:1			121
CLANDLT	18+00	19+50	RT	2	4:1		3:1			121
CLANDRT	20+50	22+50	LT	1	4:1		3:1			162
CLANDRT	20+50	22+50	RT	2	4:1		3:1			162
STLINELT	27+99.59	29+14	RT	2	4:1		3:1			93
STLINERT	31+00	32+00	RT	2	4:1		4.2:1			94
STLINERT	32+00	32+01.50	RT	2	4:1		18.4:1			4
SUBTOTAL 1								198	4288	13064
SUBTOTAL 2								304	1503	4688
TOTALS								501	5791	17753

DETAIL NO. 1



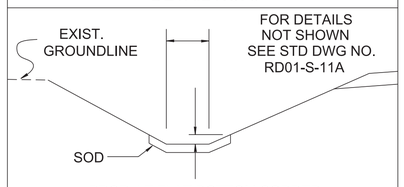
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TURF REINFORCEMENT MAT (CLASS III),
OR RIP-RAP DITCH

DETAIL NO. 2



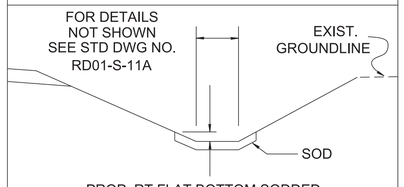
PROP. RT "V" BOTTOM SODDED,
TURF REINFORCEMENT MAT (CLASS III),
OR RIP-RAP DITCH

DETAIL NO. 3



PROP. LT FLAT BOTTOM SODDED,
TURF REINFORCEMENT MAT (CLASS III),
OR RIP-RAP DITCH

DETAIL NO. 4



PROP. RT FLAT BOTTOM SODDED,
TURF REINFORCEMENT MAT (CLASS III),
OR RIP-RAP DITCH

SEALED BY



02/03/2026

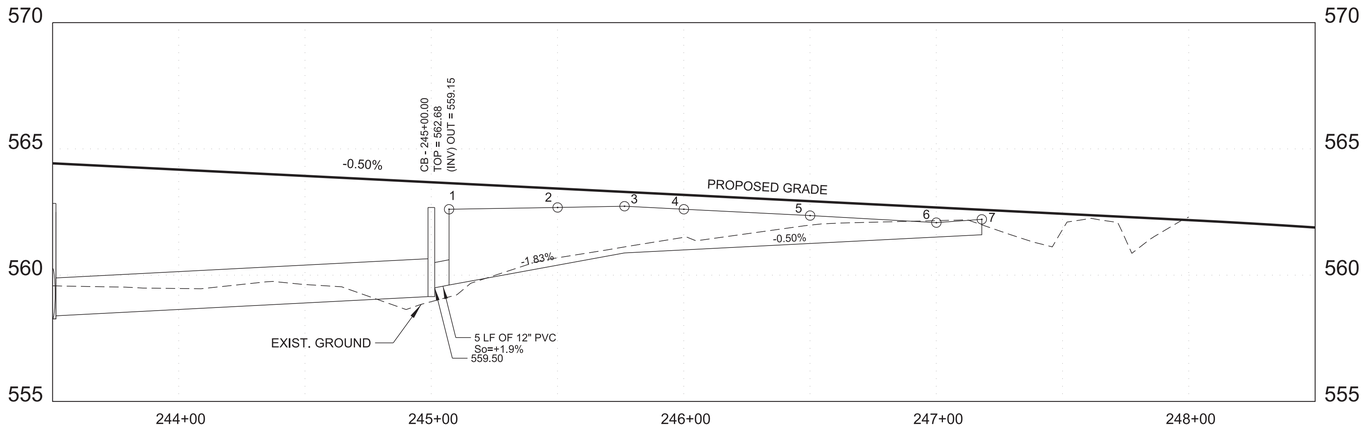
STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

DITCH DETAIL SHEET

SHEET 2 OF 2

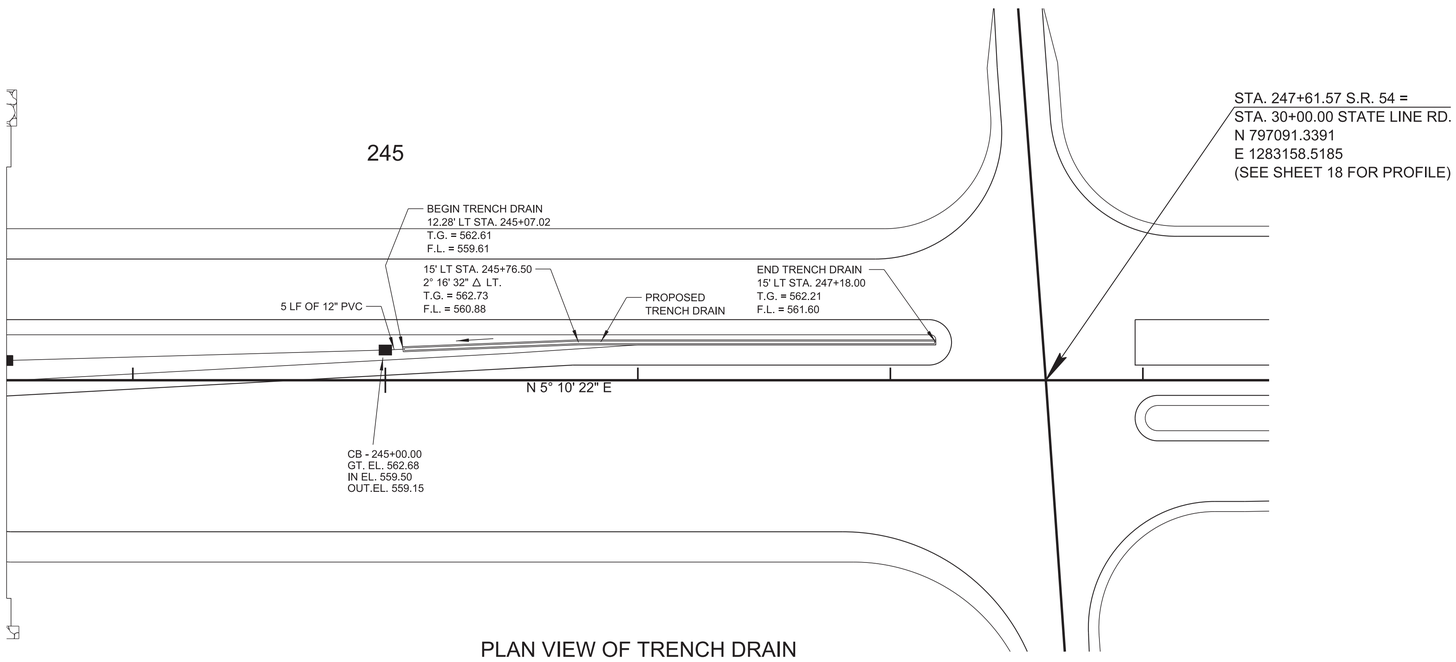
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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	2G2
PIH	2025	NH-54(48)	2G2
PS&E	2026	NH-54(48)	2G2



PROFILE VIEW OF TRENCH DRAIN

NO.	SR-54 CENTERLINE STATION	TOP OF GRATE	FLOW LINE
1	245+07.02	562.61	559.61
2	245+50.00	562.68	560.40
3	245+76.50	562.73	560.88
4	246+00.00	562.61	561.00
5	246+50.00	562.36	561.25
6	247+00.00	562.08	561.50
7	247+18.00	562.21	561.60



PLAN VIEW OF TRENCH DRAIN

SEALED BY

J. BRIAN LEE
REGISTERED ENGINEER
ENGINEER
No. 107299
STATE OF TENNESSEE

02/10/2026

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

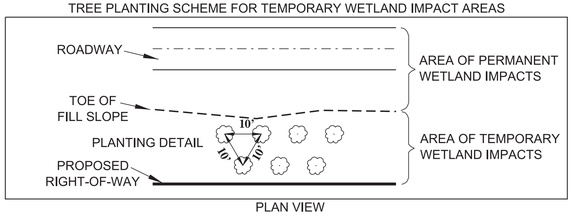
TRENCH DRAIN DETAIL

SCALE: 1"=30'

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TYPE	YEAR	PROJECT NO.	SHEET NO.
PIH	2025	NH-54(48)	2G3
PS&E	2026	NH-54(48)	2G3

TREE PLANTING SCHEME FOR TEMPORARY WETLAND IMPACT AREAS



PLAN VIEW

ON-SITE MITIGATION FOR TEMPORARY WETLAND IMPACT AREAS PROPOSED TREES WTL-5 (STA. 133+11 +/- RT. TO STA. 135+60 +/- RT.) (STA. 133+20 +/- LT. TO STA. 134+67 +/- LT.)

TREES ARE TO BE BARE ROOT SPECIMENS. TREES ARE TO BE PLANTED ON 10' CENTERS THROUGHOUT THE TEMPORARY WETLAND IMPACT AREAS AS SPACE ALLOWS. NO SUBSTITUTIONS WILL BE ACCEPTED WITHOUT WRITTEN PERMISSION FROM THE ENVIRONMENTAL PLANNING AND PERMITS DIVISION.



NOTE:
THE COLOR OF THE REFLECTIVE SHEETING SHALL CONFORM TO THE COLOR OF EDGE LINES STIPULATED IN SUBSECTION 3B-6 (PAGE 3B-8 AND 3B-11) OF THE CURRENTEDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

SEE STD. DWG. T-M-18 FOR ADDITIONAL INFORMATION.

GENERAL WETLAND NOTES

1. REMOVE THE TOP 12 INCHES OF TOPSOIL AND STOCKPILE IT UNTIL CONSTRUCTION IS COMPLETE.
2. ONCE CONSTRUCTION ACTIVITIES ARE COMPLETED, RESTORE ALL TEMPORARY WETLAND IMPACT AREAS TO PRE-CONSTRUCTION CONDITIONS. THIS INCLUDES REMOVING HAUL ROADS (IF APPLICABLE), RESTORING THE SITE TO THE ORIGINAL (PRE-CONSTRUCTION) ELEVATION, AND SPREADING STOCKPILED TOPSOIL BACK OVER THE WETLAND SITE.
3. THE AREA OF TEMPORARY IMPACTS WILL BE STABILIZED WITH WETLAND SEED MIXTURE 801-01.36 ONLY. (IF PLANTINGS ARE REQUIRED, DELETE THE RED TEXT)
4. WETLAND AREA LOCATED OUTSIDE OF PROPOSED RIGHT-OF-WAY AND CONSTRUCTION EASEMENTS ARE TO BE CLEARLY MARKED AND NOT TO BE DISTURBED."

TREES

1. THE AREA OF TEMPORARY IMPACTS SHOULD BE STABILIZED AS SOON AS PRACTICABLE. NO SUBSTITUTIONS OF TREE SPECIES OR SIZES SHALL BE ALLOWED WITHOUT THE WRITTEN APPROVAL OF TDOT MITIGATION OFFICE. TREES SHALL BE THE VARIETY REQUESTED AND FIRST QUALITY. NO CLONES OR CULTIVARS WILL BE ACCEPTED. ANY FOUND TO BE INCORRECT SPECIES, OR IMPROPERLY PLANTED, AT ANY TIME PRIOR TO TERMINATION OF THE CONTRACT SHALL BE REMOVED AND REPLACED AT THE CONTRACTOR'S EXPENSE. STAKES AND WIRES SHALL BE REMOVED IMMEDIATELY PRIOR TO CONTRACT TERMINATION. UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
2. THE CONTRACTOR SHOULD ARRANGE SEVERAL MONTHS AHEAD OF TIME TO OBTAIN THE CORRECT TREE SPECIES, AS SOME MAY REQUIRE TIME TO LOCATE.
3. TREES SHALL BE WATERED AS REQUIRED THROUGH THE PERIOD OF ESTABLISHMENT TO ENSURE SURVIVAL.

HENRY CO. / WTL-5 ESTIMATED TREE QUANTITIES

ITEM NO.	DESCRIPTION	QUANTITY	UNIT
802-12.02	ACER RUBRUM (RED MAPLE SEEDLING B.R.)	25	EACH
802-12.26	PLATANUS OCCIDENTALIS (SYCAMORE SEEDLING B.R.)	25	EACH
802-12.40	SALIX NIGRA (BLACK WILLOW SEEDLING B.R.)	25	EACH
802-12.44	ULMUS AMERICANA (AMERICAN ELM SEEDLING B.R.)	25	EACH
TOTAL		100	

HENRY CO. / WTL-10 ESTIMATED TREE QUANTITIES

ITEM NO.	DESCRIPTION	QUANTITY	UNIT
802-12.02	ACER RUBRUM (RED MAPLE SEEDLING B.R.)	4	EACH
802-12.26	PLATANUS OCCIDENTALIS (SYCAMORE SEEDLING B.R.)	4	EACH
802-12.40	SALIX NIGRA (BLACK WILLOW SEEDLING B.R.)	4	EACH
802-12.44	ULMUS AMERICANA (AMERICAN ELM SEEDLING B.R.)	4	EACH
TOTAL		16	

HENRY CO. / WTL-12 ESTIMATED TREE QUANTITIES

ITEM NO.	DESCRIPTION	QUANTITY	UNIT
802-12.02	ACER RUBRUM (RED MAPLE SEEDLING B.R.)	13	EACH
802-12.26	PLATANUS OCCIDENTALIS (SYCAMORE SEEDLING B.R.)	13	EACH
802-12.40	SALIX NIGRA (BLACK WILLOW SEEDLING B.R.)	13	EACH
802-12.44	ULMUS AMERICANA (AMERICAN ELM SEEDLING B.R.)	13	EACH
TOTAL		52	

801-01.36 SPECIAL WETLAND SEED MIXTURE

COMMON NAME	SCIENTIFIC NAME
SEDGES	CAREX SP.
SMARTWEED	POLYGONUM SP. OR PERSICARIA SP.
RUSHES	JUNCUS SP.
AT LEAST ONE OF THE FOLLOWING IS TO BE USED:	
SPIKERUSHES	ELEOCHARIS SP.
SEDGES	CYPERUS SP.
GREEN BULRUSH	SCIRPUS ATROVIRENS
SWAMP MILKWEED	ASCLEPIAS INCARNATA
SEEDBOX	LUDWIGIA ALTERNIFOLIA
LATE BONEST	EUPATORIUM SEROTINAM

NOTE:
34 LB/ACRE OF SEED MIX SHALL BE USED. SEED SPECIES LISTED ABOVE SHOULD BE EQUALLY DISTRIBUTED IN THE SEED MIXTURE.

STRUCTURE EMBEDMENT NOTE

"DURING CONSTRUCTION OF THE STREAM CONVEYANCE STRUCTURE, THE CONTRACTOR SHALL GATHER COARSE ALLUVIUM FROM PORTIONS OF THE STREAM CHANNEL THAT IS BEING EXCAVATED OR FILLED AND STOCKPILE THE MATERIAL IN A NON-WETLAND/AQUATIC SITE. FOLLOWING THE INSTALLATION OF THE STRUCTURE, THE STOCKPILED ALLUVIUM SHALL BE BACKFILLED WITHIN THE STRUCTURE TO SATISFY THE REQUIRED EMBEDMENT DEPTH AS DEPICTED IN THE PLANS. WHEN THESE MATERIALS ARE NOT PRESENT OR SUFFICIENT TO PROVIDE THE REQUIRED EMBEDMENT DEPTH, THE REMAINDER OF THE FILL FOR EMBEDMENT WILL BE COMPRISED OF MATERIALS THAT ARE APPROXIMATELY THE SAME SIZE AND COMPOSITION AS THE UPSTREAM AND DOWNSTREAM CHANNEL MATERIALS. THE STANDARD DRAWING FOR SUBSTRATE RESTORATION D-NSD-30 SHOULD BE USED."

RIPRAP EMBEDMENT NOTE

RIPRAP SHALL BE PLACED AS TO MIMIC THE EXISTING CONTOURS OF THE STREAM CHANNEL. THE TOP OF THE PROPOSED RIPRAP SHALL BE AT GRADE WITH THE BOTTOM OF THE EXISTING STREAM CHANNEL. VOIDS WITHIN THE RIPRAP SHALL BE FILLED WITH STREAM BED SUBSTRATE, IF AVAILABLE, TO PREVENT LOSS OF STREAM WITHIN RIP-RAP AREAS. STREAM BED SUBSTRATE CAN BE REMOVED FROM RIP-RAP EMBEDMENT AREA. IF STREAM BED SUBSTRATE IS NOT AVAILABLE, THE FOLLOWING SHOULD BE USED. PRIOR TO PLACEMENT OF RIPRAP, IT SHOULD BE MIXED WITH A MIXTURE OF 70 % CREEK GRAVEL AND 30 % SAND TO FILL THE VOIDS. ONCE THE RIP-RAP MIXTURE HAS BEEN INSTALLED THE AREA SHOULD BE THOROUGHLY COMPACTED. ONCE COMPACTED AN ADDITIONAL 1 -2 INCHES OF SAND AND CREEK GRAVEL SHALL BE ADDED TO FILL IN THE REMAINING VOIDS IF NEEDED. THE CONTRACTOR SHALL ENSURE THAT WATER WILL FLOW OVER THE RIPRAP AND THAT FLOW IS NOT LOST BELOW OR WITHIN THE ROCK."

LOW FLOW CHANNEL WITH SINGLE BARREL EMBEDDED STRUCTURE

THE STREAM AT THE INLET AND OUTLET OF PROPOSED EMBEDDED STREAM CONVEYANCE STRUCTURES SHALL BE RESTORED TO THE PRECONSTRUCTION STREAM CHANNEL CROSS-SECTION MATCHING THE CHANNEL BOTTOM WIDTH AND BANK HEIGHT AND WIDTH. THE RESTORED STREAM CHANNEL WILL BE CONSTRUCTED FROM THE EXCAVATED STREAM AND STREAM BANK MATERIALS, OR OTHER MATERIALS IF SPECIFIED, ONCE THE CONSTRUCTION OF THE STREAM CONVEYANCE STRUCTURE IS COMPLETE. REFER TO THE "EMBEDDING OF STRUCTURES" NOTE FOR SPECIFICATIONS OF EXCAVATED STREAM MATERIALS TO BE USED, IF APPLICABLE." WHEN RECONSTRUCTING THE STREAM BANK, USE A COIR FIBER ROLL AT THE TOE OF THE BANK TO PROVIDE BANK STABILITY WHILE NATIVE VEGETATION ESTABLISHES. STANDARD DRAWING D-NSD-33 MUST BE USED FOR COIR FIBER ROLL INSTALLATION. STREAM BANK MATERIALS EXCAVATED DURING THE CONSTRUCTION OF THE STREAM CONVEYANCE STRUCTURE, OR OTHER MATERIALS IF SPECIFIED, SHOULD BE USED WHEN RECONSTRUCTING THE STREAM BANK ONCE THE STRUCTURE IS COMPLETE. NATIVE SEED MIXTURES AS SPECIFIED IN STANDARD DRAWING STD-17-20 SHALL BE PLANTED ONCE THE BANK CONSTRUCTION IS COMPLETE. IF NATURAL CHANNEL DESIGN IS PROPOSED AT THE STRUCTURE INLET, OUTLET, OR BOTH, IMPLEMENT THE DESIGN AS SHOWN IN THE NATURAL CHANNEL DESIGN PLANS INSTEAD OF RESTORING THE CHANNEL TO THE PRECONSTRUCTION CROSS-SECTION.

LOW FLOW WITH MULTIPLE BARREL EMBEDDED STRUCTURE:

THE STREAM CHANNEL SHALL BE CONSTRUCTED SO THAT IT ALIGNS WITH A SINGLE BARREL OF THE STREAM CONVEYANCE STRUCTURE. THE STREAM AT THE INLET AND OUTLET OF PROPOSED EMBEDDED STREAM CONVEYANCE STRUCTURES SHALL BE RESTORED TO THE PRECONSTRUCTION STREAM CHANNEL CROSS-SECTION MATCHING THE CHANNEL BOTTOM WIDTH WITH BANK BY USING THE EXCAVATED STREAM AND STREAM BANK MATERIALS, OR OTHER MATERIALS IF SPECIFIED, ONCE THE CONSTRUCTION OF THE STREAM CONVEYANCE STRUCTURE IS COMPLETE. ALL BARRELS SHALL BE BACKFILLED, SUCH AS DESCRIBED IN THE "EMBEDDING OF STRUCTURES" NOTE.

WHEN RECONSTRUCTING THE STREAM BANK, USE A COIR FIBER ROLL AT THE TOE OF THE BANK TO PROVIDE BANK STABILITY WHILE NATIVE VEGETATION ESTABLISHES. STANDARD DRAWING D-NSD-33 MUST BE USED FOR COIR FIBER ROLL INSTALLATION. THE BANK HEIGHT SHOULD BE CONSTRUCTED ONE (1) FOOT HIGHER THAN THE STREAM BED AT THE CULVERT WITH THE ADDITIONAL FOOT OF MATERIAL INSTALLED IN THE BARREL(S) OF THE STRUCTURE THAT DO NOT CONVEY THE NORMAL STREAM FLOW. THE ADDITIONAL MATERIAL IN THE ADJACENT BARREL(S) WILL PREVENT NORMAL STREAM FLOW FROM ENTERING THE (THOSE) BARREL(S). TAPER THE ONE-FOOT BANK HEIGHT FROM THE CULVERT TO THE EXISTING BANK HEIGHT WITHIN 25 FEET OF BOTH ENDS OF THE STRUCTURE TO TIE BACK TO THE EXISTING STREAM CHANNEL BANK. STREAM BANK MATERIALS EXCAVATED DURING THE CONSTRUCTION OF THE STREAM CONVEYANCE STRUCTURE, OR OTHER MATERIALS IF SPECIFIED, SHOULD BE USED WHEN RECONSTRUCTING THE STREAM BANK ONCE THE STRUCTURE IS COMPLETE. NATIVE SEED MIXTURES AS SPECIFIED IN STANDARD DRAWING STD-17-20 SHALL BE PLANTED ONCE THE BANK CONSTRUCTION IS COMPLETE.

IF NATURAL CHANNEL DESIGN IS PROPOSED AT THE STRUCTURE INLET, OUTLET, OR BOTH, IMPLEMENT THE DESIGN AS SHOWN IN THE NATURAL CHANNEL DESIGN PLANS INSTEAD OF RESTORING THE CHANNEL TO THE PRECONSTRUCTION CROSS-SECTION.

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02/09/2026

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

MITIGATION NOTES AND QUANTITIES

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	3
PIH	2025	NH-54(48)	3
PS&E	2026	NH-54(48)	3

RIGHT-OF-WAY

(1) IT IS INTENDED THAT ALL BUILDINGS AND/OR PORTIONS OF BUILDINGS THAT ARE WITHIN THE PROPOSED RIGHT-OF-WAY AND/OR EASEMENT LINES FOR THE PROJECT BE REMOVED THERE FROM IN THE PROCESS OF RIGHT-OF-WAY ACQUISITION. IF ANY SUCH BUILDINGS OR IMPROVEMENTS ARE NOT REMOVED IN THE COURSE OF RIGHT-OF-WAY ACQUISITION, THE CIVIL ENGINEERING MANAGER 2, PROJECT DEVELOPMENT DIVISION AND THE CIVIL ENGINEERING MANAGER 1, REGIONAL PROJECT DEVELOPMENT OFFICE, ARE TO BE NOTIFIED IN SUFFICIENT TIME TO PERMIT HAVING SUCH REMOVALS DESIGNATED AS A PART OF THE CONSTRUCTION CONTRACT.

(2) ALL RAMPS MUST CONFORM TO THE DEPARTMENT'S "POLICY ON FINANCING CONSTRUCTION OF PUBLIC ROAD INTERSECTIONS AND DRIVEWAYS ON HIGHWAY RESURFACING, RECONSTRUCTION AND CONSTRUCTION PROJECTS ON NEW LOCATIONS", THE MANUAL ON RULES AND REGULATIONS FOR CONSTRUCTING DRIVEWAYS ON STATE HIGHWAY RIGHT-OF-WAY, STANDARD DRAWING RP-R-1, AND OTHER ACCEPTED DESIGN AND SAFETY STANDARDS.

(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.

(8) NEW DRIVEWAYS PROVIDED IN THE PLANS WILL BE PAVED BASED ON THE 7 PERCENT CRITERIA. THOSE 7 PERCENT OR STEEPER IN GRADE WILL BE PAVED AND THOSE FLATTER THAN 7 PERCENT WILL BE COVERED WITH BASE STONE.

(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.

(11) ON NON-STATE ROUTES, ADDITIONAL DRIVEWAYS AND FIELD ENTRANCES OTHER THAN THOSE PROVIDED IN THE PLANS SHALL REQUIRE A PERMIT ONLY IF THE LOCAL AGENCY SPECIFIES THE NEED FOR THAT PERMIT.

(12) EASEMENT REQUIRED FOR THE RAILROAD CROSSING IS TO BE OBTAINED BY THE UTILITIES ENGINEER BY PROVISIONS CONTAINED IN THE CROSSING AGREEMENT NEGOTIATED WITH THE RAILROAD.

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.

(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.

(6) NO WORK SHALL OCCUR IN THE AREA MARKED ON THE PLANS AS STREAM/WETLAND MITIGATION RIGHT-OF-WAY OR MITIGATION AREA. NO UTILITY RELOCATION OR OTHER LAND DISTURBANCE IS AUTHORIZED. ONLY ACTIVITIES PERTAINING TO THE CONSTRUCTION OR MANAGEMENT OF THE STREAM/WETLAND MITIGATION SITE MAY OCCUR, WHICH WILL BE INDICATED ON THE STREAM MITIGATION PLANS (NS-1-XX). ANY VIOLATIONS OF THE ABOVE MENTIONED WILL RESULT IN NON-COMPLIANCE WITH THE ENVIRONMENTAL PERMIT REQUIREMENTS.

UTILITY OWNERS

CABLE:
ZITO MEDIA
1718 Barlow Road
Wickliffe, KY 42087
CONTACT: Darryl Caldwell
OFFICE PHONE: 814 260 9575 EXT. 313
CELL PHONE: 270 445 1584
Email: darryl.caldwell@zitomedia.com

CABLE:
CHARTER COMMUNICATIONS
24 Circle Drive
McKenzie, TN 38201
CONTACT: Keith Chesser
OFFICE PHONE: 731 352 1146
CELL PHONE: 731 621 9552
Email: keith.chesser@charter.com

ELECTRIC:
PARIS BOARD OF PUBLIC UTILITIES
117 E Washington St.
Paris, TN 38242
CONTACT: Josh McCaslin
OFFICE PHONE: 731 642 1322 EXT. 117
CELL PHONE: 731 499 2361
Email: jmccaslin@parisbpu.org

GAS:
PARIS HENRY COUNTY PUBLIC UTILITY DISTRICT
215 W Wood St.
Paris, TN 38242
CONTACT: Jeff Hill
OFFICE PHONE: 731 363 6314

Email: jeff@parisnaturalgas.com

TELEPHONE:
WK&T
100 WK&T Technology Drive
Mayfield, KY 42066
CONTACT: Darren Duke
OFFICE PHONE: 270 856 1877
CELL PHONE: 270 970 2307
Email: dduke@mywkt.coop

WATER:
SOUTH 641 WATER DISTRICT
207 Main St.
Hazel, KY 42049
CONTACT: Hank Stanfield
OFFICE PHONE: 270 492 8857
CELL PHONE: 270 293 0117
Email: So641@wk.net

RAILWAY:
KWT RAILWAY, INC
908 Depot St.
Paris, TN 38242
CONTACT: Richard Bevins - Roadmaster
OFFICE PHONE: 731 336 4279

Email: richard.bevins@gwrr.com
CONTACT: Rob Lowery – Dir. Signals & Com
OFFICE PHONE: 229 869 2074
Email: rob.lowey@gwrr.com

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02/10/2026

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.
R.O.W.	2023	NH-54(48)	3A
PIH	2025	NH-54(48)	3A
PS&E	2026	NH-54(48)	3A

REV. 03-26-24: UPDATED OWNER NAME, DEED BOOK, PAGE NO., TOTAL AREA, AREA TO BE ACQUIRED, AREA REMAINING, AND CONST. ESMT. FOR TRACT 17, AND ADDED TRACT 20.

REV. 08-14-24: UPDATED CONST. ESMT. FOR TRACTS 9 AND 14, AND UPDATED AREA TO BE ACQUIRED FOR TRACT 15.

REV. 12-18-25: UPDATED OWNER NAME, DEED BOOK, AND PAGE NO. FOR TRACTS 1, 15, AND 16, AND UPDATED PAGE NO. FOR TRACTS 11 AND 14.

REV. 01-21-25: ADDED TRACT 17S.

R.O.W. ACQUISITION TABLE

TRACT NO.	PROPERTY OWNERS	COUNTY RECORDS				TOTAL AREA (ACRES)			AREA TO BE ACQUIRED (ACRES)			AREA REMAINING (ACRES)		EASEMENT (SQUARE FEET)					
		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	LEEF EXPRESS, LLC	18	29.01	663	56	1.120		1.120	0.134		0.134	0.986							
2	KEVIN KENNEDY	18	23.03	365	955	1.286	62.124	63.410	1.286	2.232	3.518		59.892						
~~3~~	~~CHARLES M. ALLEN AND WIFE, MARY E. ALLEN~~	~~17~~	~~17~~	~~452~~	~~833~~	~~1305.600~~		~~1305.600~~				~~1305.600~~							
4	MICHAEL TYMON AND WIFE, KRISTY O. TYMON	18	13.01	603	431	0.113	1.887	2.000	0.113	0.893	1.006		0.994			2682 S.F.	①		
5	JERRY KEVIN KENNEDY	18	14	335	956	1.503	181.697	183.200	1.503	2.095	3.598		179.602						
6	JOHNNY BRANNON; TRUSTEE OF THE JOHNNY BRANNON	18	11	545; 305	110; 861	26.846	58.654	85.500	7.934	7.468	15.402	18.912	51.186			2135 S.F.	①		
	REVOCABLE TRUST (1/2 INTEREST); LARRY HAMPTON																		
	BRANNON (1/2 INTEREST)																		
~~7~~	~~CHARLES M. ALLEN AND WIFE, MARY E. ALLEN~~	~~17~~	~~6~~	~~338~~	~~639~~	~~59.800~~		~~59.800~~				~~59.800~~							
8	JAMES E. UNDERWOOD AND CHARLIE J. UNDERWOOD	18	12	81	243	64.944	2418 S.F.	65.000	1.002	2418 S.F.	1.058	63.942							
9	TIMOTHY DEE BRANNON AND TONY LEE BRANNON	18	1	257	28	49.193	25.807	75.000	8.495	6.842	15.337	40.698	18.965			2251 S.F.	①		
10	TONY BRANNON AND WIFE, LISA BRANNON AND TIM	18	2	88	647	0.311	180.189	180.500	0.311	1.352	1.663		178.837						
	BRANNON AND WIFE, DEBBIE BRANNON																		
11	DUKE VEAZEY AND WIFE, LUCRETIA P. VEAZEY	10	40	573	775	58.910	21.090	80.000	5.279	5.095	10.374	53.631	15.995			1848 S.F.	①		
12	TONY L. BRANNON AND WIFE, LISA W. BRANNON	9	73	208	233	14.566	100.934	115.500	2.424	2.716	5.140	12.142	98.218			888 S.F.	①		
13	JOE BILL FRIDY AND WIFE, BEVERLY FRIDY	10	38	395	981	220.900		220.900	0.327		0.327	220.573							
	AND WILLIAM G. FRIDY																		
14	STORY FAMILY PROPERTIES, LLC	9	58	339	8	19.740	95.220	114.960	3.243	3.546	6.789	16.497	91.674			0.159	①		
15	RANDALL PATTERSON, HARRY PATTERSON, AND LOYD W.	9	57	655	847-848	74.175	79.625	153.800	7.879	9.426	17.305	66.296	70.199			0.325	③		
	PATTERSON																		
16	GREG STORY AND KAREN STORY LIVING TRUST (1/3 INTEREST)	9	1	645	813	15.891	1.608	17.499	2.636	1.608	4.244	13.255							
	GARY STORY AND TAMMY STORY FAMILY TRUST (1/3 INTEREST)																		
	TOMMY D. STORY LIVING TRUST (1/3 INTEREST)																		
17	RICKY J. BURTON AND WIFE, JENNIFER BURTON	9A	"A" 1	242	391		0.520	0.520		0.223	0.223		0.297			224 S.F.	②		
18	STEVEN DUANE MAYNARD AND WIFE, KIMBERLY ANNE	9	2	526	154	1.250		1.250				1.250				248 S.F.	②		
	MAYNARD																		
19	KWT RAILWAY, INC.			192	846											1.101	②	0.365	3738 S.F.
~~20~~	~~BRIAN PING~~	~~9A~~	~~"A" 1.01~~	~~607~~	~~198~~		~~0.330~~	~~0.330~~					~~0.330~~						
17S	RICKY J. BURTON AND WIFE, JENNIFER BURTON	9A	"A" 1	242	391		0.297	0.297					0.297			0.292	④		
ACQUISITION TOTALS (ACRES)										**86.118**						**2.113**		**0.365**	**3738 S.F.**

① USED TO CONSTRUCT PVT. DR / FLD. ENT.

② USED FOR WORKING ROOM

③ 10790 S.F. TO CONSTRUCT PVT. DR / FLD. & 3372 S.F. FOR EPSC

④ USED FOR REMOVAL OF IMPROVEMENTS

DISTURBED AREA

IN BETWEEN SLOPE LINES	67.788	(AC)
15 FOOT WIDE STRIP (OUT SIDE SLOPE LINES)	10.904	(AC)
TOTAL DISTURBED AREA	78.692	(AC)
TOTAL PROJECT AREA	93.069	(AC)

SEALED BY

BRIAN LEE REGISTERED ENGINEER AGRICULTURE NUMBER 107290 STATE OF TENNESSEE SEAL

02/03/2026

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

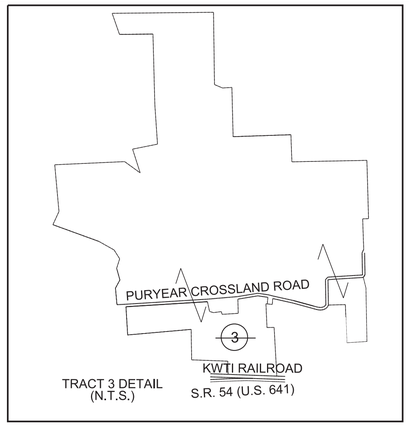
RIGHT-OF-WAY ACQUISITION TABLE

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	3B
PIH	2025	NH-54(48)	3B
PS&E	2026	NH-54(48)	3B

REV. 03-26-24: REVISED R.R. MILEPOST FROM 51.23 TO 51.26 AND ADDED TRACT 12.

REV. 08-14-24: REVISED CONST. ESMT. FOR TRACT 9.



TRACT 3 DETAIL
(N.T.S.)

40S054-F3-004
BEGIN PROJ. NO. NH-54(48) CONST.
STA. 98+00.00 S.R. 54
N 782682.8032
E 1282783.9372

40S054-F2-002
BEGIN PROJ. NO. NH-54(48) R.O.W.
STA. 97+65.59 S.R. 54
N 782648.4566
E 1282781.8515

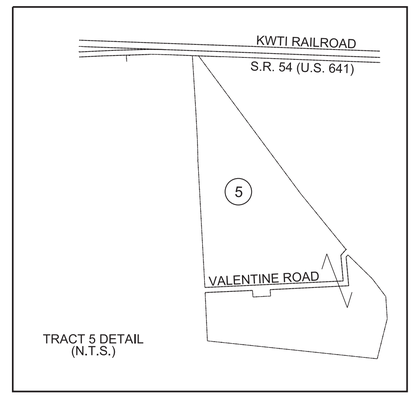
STA. 105+35.00 S.R. 54 =
STA. 10+00.00 S.R. 54 TIE
N 783382.4897
E 1282982.2132
(SEE SHEET 16 FOR PROFILE)

STA. 171+22.00 S.R. 54 =
STA. 20+00.00 CROSSLAND RD.
N 789482.8826
E 1282469.7490
(SEE SHEET 17 FOR PROFILE)

STA. 140+92.66 S.R. 54 =
STA. 40+00.00 C.L.
KWT RAILROAD
DOT CROSSING NO. NONE
R.R. MILEPOST 51.26
N 786611.2836
E 1283170.4910

SEE SHEET NO. 3C
STA. 175+00
MATCH LINE

SR-54 - 3 LANE CENTERLINE
FUTURE SR-54 5 LANE CENTERLINE
PURYEAR CITY LIMITS
KWT RAILROAD
CROSSLAND RD.
S.R. 54 (U.S. 641)
RAILWAY R.O.W.
PRES. R.O.W.
PROP. R.O.W.
CONST. ESMT.
TEMP. CONST. ESMT.
PERM. ESMT.
AIR RIGHTS EASEMENT (OUTSIDE EDGE OF DECK)
100' RAILROAD R.O.W.
MILE POST #51 1215' FROM INTERSECTION SR-54 & KWT RAILROAD
POND
STR-02 (MORMAN BRANCH -PERENNIAL)
WWC-64/EPH-64
WWC-02/EPH-02
WWC-01/EPH-01
WWC-04/EPH-04
WWC-03/EPH-03
WWC-62/EPH-62
WWC-63/EPH-63
WWC-05/EPH-05
WWC-06/EPH-06
WWC-07/EPH-07
WWC-08/EPH-08
WTL-44
WTL-01
WTL-02
WTL-03
WTL-04
WTL-05
WTL-06
WTL-07A
WTL-07B
WTL-08
WTL-09



TRACT 5 DETAIL
(N.T.S.)

AIR RIGHTS EASEMENT
PERMANENT EASEMENT
TEMPORARY CONSTRUCTION EASEMENT

SEE SHEETS 7D-7F FOR ADDITIONAL RAILROAD EASEMENT DETAILS

SEALED BY

BRIAN LEE
REGISTERED ENGINEER
AGRICULTURE
ENGINEER
STATE OF TENNESSEE
02/09/2026

COORDINATES ARE NAD 83(2011), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00002 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988 WITH GEOID 12B MODEL.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PROPERTY MAP

STA.95+50.00 TO STA.175+00
SCALE: 1"=400'

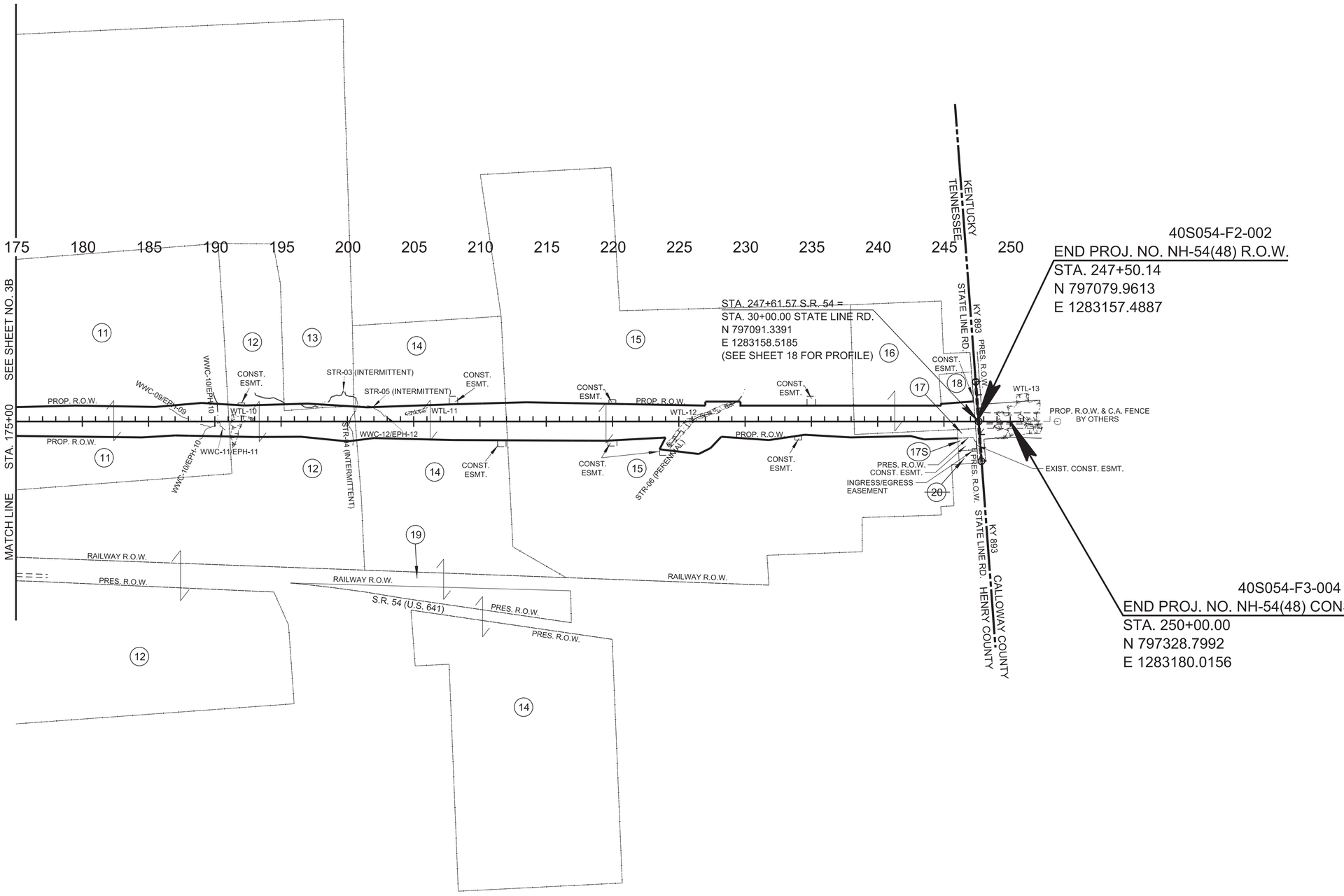
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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	3C
PIH	2025	NH-54(48)	3C
PS&E	2026	NH-54(48)	3C

REV. 03-26-24: UPDATED TRACT 12 AND TRACT 17, ADDED TRACT 20, AND REVISED END OF PROJECT STATIONING FROM STA. 247+47.60 TO STA. 247+50.14.

REV. 08-14-24: REVISED CONST. ESMT'S FOR TRACT 14.

REV. 01-21-25: ADDED TRACT 17S.



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COORDINATES ARE NAD 83(2011), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00002 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988 WITH GEOID 12B MODEL.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PROPERTY MAP

STA.175+00 TO STA.250+00
SCALE: 1"=400'

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CONTROL POINTS					
POINT	NORTH	EAST	ELEV.	STATION	OFFSET
S1	782316.7654	1282791.9925	596.12	N/A	N/A
S2	782740.4116	1282814.3566	595.85	98+59.89	26.18′ (RT)
S3	784586.2104	1283024.9746	584.13	115+88.71	587.57′ (LT)
S4	785095.2110	1283086.7553	595.20	125+24.57	686.19′ (LT)
S5	786947.4399	1283319.8490	601.53	143+33.04	278.44′ (RT)
S6	787536.9515	1283394.5749	602.12	148+34.41	597.39′ (RT)
S7	789466.1025	1282996.8369	609.42	171+52.81	526.45′ (RT)
S8	789488.9653	1282005.1181	609.99	170+86.17	463.29′ (LT)
S9	797074.1076	1282677.8943	555.55	247+01.08	477.11′ (LT)
S10	797076.6660	1283205.0996	561.63	247+51.16	47.71′ (RT)

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	4
PIH	2025	NH-54(48)	4
PS&E	2026	NH-54(48)	4

REV. 12-18-25: UPDATED PROPERTY OWNER NAME FOR TRACT 1.

LEGEND	WETLAND IMPACTS (WTL-44)
	AREA OF PERMANENT IMPACT = 0.000 AC.
	VOLUME OF PERMANENT IMPACT = 0 C.Y.
	AREA OF TEMPORARY IMPACT = 0.009 AC.
	VOLUME OF TEMPORARY IMPACT = 15 C.Y.

S.R. 54
CURVE DC400
PI 102+11.97
N 783,094.3064
E 1,282,803.5816
Δs 28° 33′ 08″ (RT)
θs 11° 13′ 14″
Δc 6° 06′ 41″ (RT)
Dc 4° 46′ 29″
Rc 1,200.00
Lc 128.00
Ts 541.99
Ls 470.00
SE 0.080 FT/FT
DESIGN SPEED 60 MPH
TRANS. LENGTH 470

SR-54 TIE
CURVE DC121
PI 8+81.00
N 783,452.9935
E 1,282,856.4899
Δ 68° 08′ 02″ (LT)
D 37° 12′ 18″
R 154.00
L 183.13
T 104.14
SE 0.040 FT/FT
DESIGN SPEED 25 MPH
TRANS. LENGTH 110

S.R. 54 (FUTURE)
CURVE DC204
PI 102+49.63
N 783,126.4595
E 1,282,823.1892
Δs 28° 33′ 08″ (RT)
θs 11° 13′ 14″
Δc 6° 06′ 41″ (RT)
Dc 4° 46′ 29″
Rc 1,200.00
Lc 128.00
Ts 541.99
Ls 470.00
SE 0.080 FT/FT
DESIGN SPEED 60 MPH
TRANS. LENGTH 470

TRACT 4 NOTE:
WELL WAS CAPPED AND ABANDONED IN THE R.O.W. PHASE. THE CONTRACTOR SHALL REMOVE THE BUILDING, SHEDS, AND SEPTIC SYSTEM.

STA. 105+35.00 S.R. 54 =
STA. 10+00.00 S.R. 54 TIE
N 783382.4897
E 1282982.2132
(SEE SHEET 16 FOR PROFILE)

SEALED BY

BRIAN LEE
REGISTERED ENGINEER
AGRICULTURE
NUMBER
107296
STATE OF TENNESSEE
02/10/2026

COORDINATES ARE NAD 83(2011), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00002 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988 WITH GEOID 12B MODEL.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PRESENT LAYOUT

STA.97+65.59 TO STA.110+00
SCALE: 1"=50'

2/10/2026 8:26:59 AM
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CONTROL POINTS					
POINT	NORTH	EAST	ELEV.	STATION	OFFSET
S1	782316.7654	1282791.9925	596.12	N/A	N/A
S2	782740.4116	1282814.3566	595.85	98+59.89	26.18' (RT)
S3	784586.2104	1283024.9746	584.13	115+88.71	587.57' (LT)
S4	785095.2110	1283086.7553	595.20	125+24.57	686.19' (LT)
S5	786947.4399	1283319.8490	601.53	143+33.04	278.44' (RT)
S6	787536.9515	1283394.5749	602.12	148+34.41	597.39' (RT)
S7	789466.1025	1282996.8369	609.42	171+52.81	526.45' (RT)
S8	789488.9653	1282005.1181	609.99	170+86.17	463.29' (LT)
S9	797074.1076	1282677.8943	555.55	247+01.08	477.11' (LT)
S10	797076.6660	1283205.0996	561.63	247+51.16	47.71' (RT)

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	4A
PIH	2025	NH-54(48)	4A
PS&E	2026	NH-54(48)	4A

REV. 08-14-24: ADDED BEARING AND DISTANCE LT. STA. 98+00, UPDATED TEMP. CONST. ESMT. FOR TRACT 4, AND UPDATED DISTANCE RT. STA. 109+50 FROM 282.71' TO 282.70'.

REV. 12-18-25: UPDATED OWNER NAME FOR TRACT 1.

LEGEND	WETLAND IMPACTS (WTL-44)
	AREA OF PERMANENT IMPACT = 0.000 AC.
	VOLUME OF PERMANENT IMPACT = 0 C.Y.
	AREA OF TEMPORARY IMPACT = 0.009 AC.
	VOLUME OF TEMPORARY IMPACT = 15 C.Y.

N 1282500
N 783000

100

40S054-F2-002

BEGIN PROJ. NO. NH-54(48) R.O.W.
STA. 97+65.59 S.R. 54
N 782648.4566
E 1282781.8515

(3) CHARLES M. ALLEN AND WIFE, MARY E. ALLEN

(19) KWT RAILWAY, INC.

KWT R.R. R.O.W.
N 7° 15' 39" E 790.84'
103+30.28 212.93'
N 7° 13' 41" E 751.40'
105
100' RAILROAD R.O.W.
50'
50'
STR-02 (MORMAN BRANCH-PERENNIAL)
WWC-01/EPH-01 USACE NON-JURISDICTIONAL
WWC-02/EPH-02 USACE NON-JURISDICTIONAL
N 7° 13' 41" E 761.95'
EXIST. & PROP. R.O.W.
FILL CUT
LIMIT OF CONST. 6+40.99
S 7° 25' 01" W
PRES. & PROP. R.O.W.

N 3° 41' 25" E 200.92'
98+00.00 64.18'
(1) LEEF EXPRESS, LLC
PROP. R.O.W.
N 7° 15' 39" E 782.53'
N 7° 15' 39" E 587.48'
N 3° 41' 25" E 311.73'
S 86° 19' 02" E 26.21'
98+00.00 37.97'
B
C
FUTURE SR-54 CENTERLINE
101+03.92 57.50'
PRES. & PROP. R.O.W.
N 5° 16' 17" E 160.51'
SR-54 CENTERLINE
102+52.88 87.12'
103+55.30 116.90'
N 6° 40' 28" E 114.31'
WWC-64/EPH-64 USACE NON-JURISDICTIONAL
WTL-44
WWC-63/EPH-63
FILL CUT
N 2° 49' 24" E
N 2° 49' 24" E
N 6° 12' 23" E 93.84'
102+35.39 0.00'
N 6° 12' 23" E 188.47'
104+13.16 53.14'
USACE NON-JURISDICTIONAL WWC-62/EPH-62
104+34.10 0.00'
N 7° 16' 55" E 392.46'
STR-01 (INTERMITTENT)
N 7° 16' 55" E 17.00'
N 7° 16' 55" E 98.02'
108+71.76 249.96'
N 7° 16' 55" E 215.87'
PRES. R.O.W.
107+66.75 203.00'
108+56.23 243.02'
WTL-01
WTL-02
N 98° 24' 34" W 233.90'
N 60° 58' 10" E 202.62'
110
USACE NON-JURISDICTIONAL
N 55° 38' 28" E 530.48'
PROP. R.O.W.
STA. 110+00.00 SEE SHEET NO. 5A

GPS 40-054-02 CP-S2
N 3° 20' 52" E 345.84'
97+65.59 43.97'
N 3° 24' 43" E 350.19'
PC PRES. R.O.W.
EIP S 88° 31' 40" E 80.00'
97+68.18 123.93'
B
PROP. R.O.W.
N 8° 2' 19" E 358.60'
S 88° 31' 40" E 255.01'
S 3° 24' 53" W 350.00'
EIP
CUSTOM SURVEILLANCE AND ELECTRIC, LLC

101+16.22 21.52'
N 2° 40' 48" E 26.20'
101+42.36 16.59'
EIP
N 85° 26' 33" W 112.62'
N 20° 39' 49" E 2.44'
A
101+52.15 126.45'
N 20° 39' 49" E 10.09'
101+63.38 127.46'
101+66.10 127.69'
S 85° 26' 33" E 47.89'
101+76.54 174.71'
TEMP. CONST. ESMT.
N 85° 26' 33" W 196.40'
E 1283000
N 783000
N 20° 39' 49" E 70.53'
102+45.05 131.99'
N 20° 39' 49" E 97.30'
N 59° 34' 18" W 43.58'
102+35.00 174.68'
103+53.37 130.46'
N 17° 8' 55" E 49.94'
N 85° 26' 18" W 57.23'
N 85° 26' 18" W 157.15'
N 85° 26' 18" W 94.26'
N 6° 7' 46" E 282.28'
N 32° 24' 14" E 134.13'
104+97.73 144.63'
N 32° 24' 14" E 4.64'
105+02.66 144.95'
N 24° 18' 16" E 191.79'
S 60° 43' 01" E
N 31° 22' 32" E
107+00.00 125.00'
STR-01 (INTERMITTENT)
N 88° 24' 34" W 172.15'
N 36° 34' 12" E 268.40'
109+68.46 149.41'
N 36° 34' 12" E 282.70'
N 88° 24' 34" W 464.25'
PROP. R.O.W.

(2) KEVIN KENNEDY

40S054-F3-004

BEGIN PROJ. NO. NH-54(48) CONST.
STA. 98+00.00
N 782682.8032
E 1282783.9372

(4) MICHAEL TYMON AND WIFE KRISTY O. TYMON

(2) KEVIN KENNEDY

(5) JERRY KEVIN KENNEDY

108+82.94 0.00'

STA. 105+35.00 S.R. 54 = STA. 10+00.00 S.R. 54 TIE
N 783382.4897
E 1282982.2132
(SEE SHEET 16 FOR PROFILE)

(6) JOHNNY BRANNON; TRUSTEE OF THE JOHNNY BRANNON REVOCABLE TRUST (1/2 INTEREST); LARRY HAMPTON BRANNON (1/2 INTEREST)

SEALED BY

J. BRIAN LEE
REGISTERED ENGINEER
AGRICULTURE
NUMBER
1077209
STATE OF TENNESSEE
02/10/2026

COORDINATES ARE NAD 83(2011), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00002 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988 WITH GEOID 12B MODEL.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

RIGHT-OF-WAY DETAILS

STA.97+65.59 TO STA.110+00
SCALE: 1"=50'

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	4B
PIH	2025	NH-54(48)	4B
PS&E	2026	NH-54(48)	4B

LEGEND	WETLAND IMPACTS (WTL-44)
	AREA OF PERMANENT IMPACT = 0.000 AC.
	VOLUME OF PERMANENT IMPACT = 0 C.Y.
	AREA OF TEMPORARY IMPACT = 0.009 AC.
	VOLUME OF TEMPORARY IMPACT = 15 C.Y.

NOTE:
SEE SHEET 2G3 FOR STREAM AND WETLAND MITIGATION NOTES, DETAILS, AND QUANTITIES.

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, STR-2, WTL-01, OR WTL-02 AND THAT THE STREAM AND SURROUNDING VEGETATION WILL NOT BE DISTURBED AND ARE PROTECTED FROM SEDIMENT AND OTHER POLLUTANTS EXCEPT AT THE PERMITTED LOCATIONS.

100

40S054-F2-002
BEGIN PROJ. NO. NH-54(48) R.O.W.
STA. 97+65.59 S.R. 54
N 782648.4566
E 1282781.8515

105

KWT RAILROAD

FUTURE SR-54 CENTERLINE

PROTECTED AREA SIGNS (100' SPACING) ITEM NO. 209-03.99

TEMP. WETLAND IMPACT TO BE SEEDED

WTL-44

SR-54 CENTERLINE

PROTECTED AREA SIGNS (100' SPACING) ITEM NO. 209-03.99

USACE NON-JURISDICTIONAL

WWC-63/EPH-63

WWC-64/EPH-64 USACE NON-JURISDICTIONAL

TOP OF BANK

STR-02 (MORMAN BRANCH-PERENNIAL)

TOP OF BANK

WWC-01/EPH-01 USACE NON-JURISDICTIONAL

WWC-04/E USACE NON-JUR

WWC-02/EPH-02 USACE NON-JURISDICTIONAL

STA. 7+20.00 (LT & RT) BEGIN PVMT & SH TAPER

STA. 7+70.00 (LT & RT) END PVMT (LT & RT) & SH TAPER (RT.)

LIMIT OF CONST. 6+40.99

SR-54/US-641 (ASP.)

N 2° 49' 24" E

N 2° 49' 24" E

45:1 TAPER

45:1 TAPER

12' 12' 12' 12'

STA. 98+50.00 (LT & RT) END SH TAPER

STA. 98+00.00 (LT & RT) BEGIN PVMT & SH TAPER

BEGIN SPECIAL DITCH STA. 98+50.00 OFF 50.61'

STA. 99+50.00 (LT & RT) BEGIN PVMT TAPER

STA. 98+20.00 (LT & RT) END PVMT TAPER

STA. 102+20 (6' RT.) BEGIN BAY TAPER

STA. 104+00 (6' LT.) END BAY TAPER

4' F.B. DT. CLASS "B" RIP-RAP 15.8' LENGTH 10' WIDTH

IN. EL. 580.34

WWC-62/EPH-62 USACE NON-JURISDICTIONAL

104' OF 18" RCP

OUT.EL. 577.50

S 7° 25' 01" W

S 60° 43' 01" E

60R

50R

13 EW

14 EW

12' 6' 16' 6' 16' 12' 12' 11.6' 11.5' 12'

SOD V 2' T 2' T 2' T 2' T SOD 2' T SOD 2' T 2' T SOD 2' T 2' T SOD 4' T SOD 4' T SOD V

DRIVEWAY RADII ARE 15' RADIUS UNLESS OTHERWISE NOTED.

LIMIT OF CONST. 1+60.00
20' FLD. ENT. STA. 102+05.00
28' of 18" SD REQD.

STA. 103+50.00 (LT & RT) BEGIN SH. TAPER

STA. 104+00.00 (LT & RT) END SH. TAPER

BEGIN GUARDRAIL STA. 104+58.00 37.33' RT. TYPE 38

STR-01 (INTERMITTENT)

INV-572.74

INV-572.67

4' F.B. DT. CLASS "B" RIP-RAP 40' LENGTH 10' WIDTH

BEGIN GUARDRAIL STA. 6+71.73 16.5' LT. TYPE 38

BEGIN SPECIAL DITCH STA. 106+60.64 OFF 92.01'

END STR-01 IMPACT

6' F.B. DT. CLASS "B" RIP-RAP 15' LENGTH 12' WIDTH

OUT.EL. 573.68 F.L. EL. 575.68

20' OF 3' X 3' RCBC

28' OF 3 @ 10' X 6' RCBB

TOP OF BANK

WTL-02

WTL-01

TOP OF BANK

110

AREA OF SOFT SOILS AS NOTED IN GEOTECHNICAL REPORT. (SEE SOILS REPORT FOR DETAILS OF EXCAVATION AND ADDING BACK SELECT MATERIAL)

END GUARDRAIL STA. 109+07.50 43' LT. TYPE 38

USACE NON-JURISDICTIONAL WWC-03/EPH-03

RCBC 15' OF 8"

IN. EL. 575.21 F.L. EL. 577.21

N 11° 22' 32" E

6' F.B. DT. CLASS "B" RIP-RAP 15' LENGTH 12' WIDTH

BEGIN STR-01 IMPACT

STA. 107+60.00 (LT & RT) END PVMT TAPER

TOP OF BANK

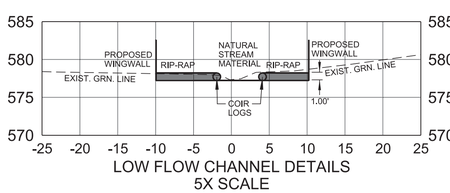
STR-01 (INTERMITTENT)

END GUARDRAIL STA. 108+83.00 43' RT. TYPE 38

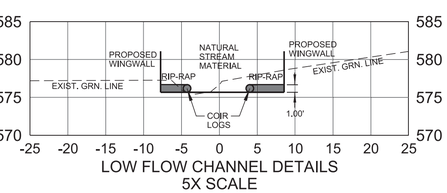
STA. 110+00.00 SEE SHEET NO. 5B

40S054-F3-004
BEGIN PROJ. NO. NH-54(48) CONST.
STA. 98+00.00
N 782682.8032
E 1282783.9372

STA. 105+35.00 S.R. 54 =
STA. 10+00.00 S.R. 54 TIE
N 783382.4897
E 1282982.2132
(SEE SHEET 16 FOR PROFILE)



LOW FLOW CHANNEL DETAILS
5X SCALE
SECTION A-A



LOW FLOW CHANNEL DETAILS
5X SCALE
SECTION B-B

SEALED BY



COORDINATES ARE NAD 83(2011), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00002 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988 WITH GEOID 12B MODEL.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PROPOSED LAYOUT

STA.97+65.59 TO STA.110+00
SCALE: 1"=50'

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	4C
PIH	2025	NH-54(48)	4C
PS&E	2026	NH-54(48)	4C

VPI 98+55.61
EL. 599.60
VPC 98+60.33
EL. 599.62

VPI 100+60.33
EL. 600.30

VPT 102+60.33
EL. 595.86

PROPOSED GRADE (FUTURE)

0.34%

-2.22%

EXIST. GROUND (FUTURE)

VC = 400.00'
K = 156

-2.22%

STA. 107+75.63 SR-54 =
STA. 107+75.63 FUTURE SR-54

S.R. 54 (FUTURE)

40S054-F2-002
BEGIN PROJ. NO. NH-54(48) R.O.W.
STA. 97+65.59
N 782648.4566
E 1282781.8515

40S054-F2-002
BEGIN PROJ. NO. NH-54(48) CONST.
STA. 98+00.00
N 782682.8032
E 1282783.9372

VPC 98+82.00
EL. 599.00

VPI 100+82.00
EL. 599.81

VPT 102+82.00
EL. 595.38

S.R.-54 STA. 105+35.00 =
S.R.-54 TIE STA. 10+00.00
N 783382.4807
E 1282982.2132
ELEV. 589.76

PROPOSED GRADE

0.41%

-2.22%

VPI 98+00.00
EL. 598.66

-0.50%
V-DT RT.

V-DT RT.

-0.50%
2' F.B. DT. RT.

-0.50%

-1.94%

-2.00%

-1.98%
2' F.B. DT. RT.

-2.20%

-1.46%

-1.32%

-1.32%
2' F.B.
DT. RT.

-5.36%
4' F.B.
DT. RT.

-5.34%

-5.59%

-1.00%

-1.14%
4' F.B.
DT. RT.

-2.22%

XCP-S2
STA. 98+59.89, 26.18'(RT)
N 782740.4116
E 1282814.3566
ELEV 595.85
ALUM. DISK
TDOT GPS# 40-054-02

BEGIN SPECIAL DT. RT.
98+50.00
EL. 593.46

VC = 400.00'
K = 152

STA. 101+41.31
TELE. (UG)

STA. 102+60.59
TELE. (UG)

EXIST. GROUND

7.30%
V-DT RT.

0.64%
V-DT LT.

2.84%

3.00%

-2.24%

2.60%

V-DT RT.

-2.22%
V-DT LT.

-2.20%

-2.20%

-2.22%

-2.22%

2' F.B. DT. RT.

-2.22%

-2.22%
V-DT LT.

S.R. 54

STA. 98+00.00 LT. & RT.
+0.003 LT.
-0.023 RT.

STA. 98+57.98 LT.
+0.020 LT.

STA. 101+39.98 LT. & RT.
+0.080 LT.
-0.080 RT.

STA. 102+67.97 LT. & RT.

STA. 105+49.97 LT.
+0.020 LT.

BEGIN SPECIAL DT. LT.
106+60.64
EL. 576.25

STA. 107+37.97 LT. & RT.
-0.020 RT.

-0.020 LT.

-0.020 RT.

610
605
600
595
590
585
580
575
570
565
560

97+00 98+00 99+00 100+00 101+00 102+00 103+00 104+00 105+00 106+00 107+00 108+00 109+00 110+00

BOX CULVERT
STATION: 106+70.00
STRUCTURE: 129.5' OF 6'X6' RCBC (2.0' EMBEDDED)

SKEW	**85° 00' 00" RT**	**DEG.**
DRAINAGE AREA	**55.22**	**AC.**
DESIGN DISCHARGE (Q50)	**77.50**	**CFS**
DESIGN DISCHARGE (Q100)	**83.70**	**CFS**
OVERTOPPING ELEV.	**586.77**	**ELEV.**
ALLOWABLE HEADWATER ELEV.	**584.76**	**ELEV.**
Q50 HEADWATER ELEV.	**579.86**	**ELEV.**
Q100 HEADWATER ELEV.	**580.00**	**ELEV.**
VELOCITY (Q50)	**9.00**	**FT/S**
VELOCITY (Q100)	**9.25**	**FT/S**
INLET ELEVATION	**575.21**	**ELEV.**
OUTLET ELEVATION	**573.68**	**ELEV.**

STANDARD DRAWING NOS.:
STD-17-51
QUANTITIES:

CLASS "A" CONCRETE	**109.0**	**C.Y.**
STEEL BAR REINFORCING	**22215**	**LB.**
BACKFILL	**1308**	**TONS**
FOUNDATION FILL MATERIAL	**55.0**	**C.Y.**

SEALED BY

J. BRIAN LEE
REGISTERED ENGINEER
AGRICULTURE
NUMBER
102929
STATE OF TENNESSEE
02/09/2026

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PROPOSED PROFILE

STA.97+65.59 TO STA.110+00

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

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	5
PIH	2025	NH-54(48)	5
PS&E	2026	NH-54(48)	5

REV. 01-25-24: APPLIED PRESENT LAYOUT FILTER TO SHEET.

7
CHARLES M. ALLEN AND WIFE, MARY E. ALLEN

19
KWT RAILWAY, INC.

KWT RAILROAD

WOODS

SR-54/US-641 (ASP.)

11.5+/-

11.5+/-

T (UC)

P/CATV

E 1283000

N 784500

GPS 40-054-03

CB-53

NO EASEMENT PER UTILITY

WTL-03

TEL PED

STR-02 (MORMAN BRANCH-PERENNIAL)

E 1283000

N 784000

6
JOHNNY BRANNON; TRUSTEE OF THE JOHNNY BRANNON REVOCABLE TRUST (1/2 INTEREST); LARRY HAMPTON BRANNON (1/2 INTEREST)

BARN

WTL-04

GRASS FIELD

115

120

WOODS

TS 115+04.28

SC 119+74.28

WWC-05/ERH-05 USACE NON-JURISDICTIONAL

PROP. R.O.W.

STA. 123+00.00 SEE SHEET NO. 6

CUT

TOP OF BANK

E 1283500

N 784000

BEGIN STR-02 IMPACT

106' OF 2 @ 16' X 6' RCBB

END STR-02 IMPACT

FIELD

WWC-06/EPH-06 USACE NON-JURISDICTIONAL

STA. 110+00.00 SEE SHEET NO. 4

CULTIVATED

N 31° 22' 32" E

TREE

5
JERRY KEVIN KENNEDY

6
JOHNNY BRANNON; TRUSTEE OF THE JOHNNY BRANNON REVOCABLE TRUST (1/2 INTEREST); LARRY HAMPTON BRANNON (1/2 INTEREST)

STR-02 (MORMAN BRANCH-PERENNIAL)

E 1284000

N 784500

SEALED BY

J. BRIAN LEE
REGISTERED ENGINEER
AGRICULTURE
NUMBER
E 107299
STATE OF TENNESSEE

02/10/2026

COORDINATES ARE NAD 83(2011), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00002 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988 WITH GEOID 12B MODEL.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PRESENT LAYOUT

STA.110+00 TO STA.123+00
SCALE: 1"=50'

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	5A
PIH	2025	NH-54(48)	5A
PS&E	2026	NH-54(48)	5A

REV. 08-14-24: UPDATED DISTANCE RT. STA. 111+00 FROM 282.71' TO 282.70'.

7

CHARLES M. ALLEN AND WIFE, MARY E. ALLEN

19

KWT RAILWAY, INC.

KWT R.R. R.O.W.

N 7° 13' 0" E
618.73'

100' RAILROAD R.O.W.

50'

50'

KWT R.R. R.O.W.
PRES. R.O.W.

115+95.93
659.79'

N 7° 19' 34" E
1328.06'

PRES. R.O.W.

116+32.28
586.45'

CP-S3
GPS 40-054-03

E 1283000
N 784500

WTL-03

KWT R.R. R.O.W.
PRES. & PROP. R.O.W.

N 07°12'59" E
608.22'

110+36.09
411.08'

N 7° 13' 41" E
761.95'

110+68.81
338.08'

PRES. R.O.W.

N 7° 16' 55" E
215.82'

STR-02 (MORMAN BRANCH-PERENNIAL)

E 1283000
N 784000

STR-02 (MORMAN BRANCH-PERENNIAL)

115

6

JOHNNY BRANNON; TRUSTEE OF THE JOHNNY BRANNON REVOCABLE TRUST (1/2 INTEREST); LARRY HAMPTON BRANNON (1/2 INTEREST)

120

WWC-05/ERH-05
USACE NON-JURISDICTIONAL

WTL-04

121+50.00
145.00'

PROP. R.O.W.

R=800.00'
L=493.40'

STA. 123+00.00 SEE SHEET NO. 6A

A

CUT

N 60° 56' 10" E
202.62'

110+48.00
150.00'

PROP. R.O.W.

N 32° 30' 44" E
252.05'

113+00.00
145.00'

N 29° 36' 15" E
409.06'

117+15.00
155.00'

N 60° 3' 48" E
94.41'

E 1283500
N 784000

118+00.00
105.00'

N 12° 45' 26" E
318.01'

CUT

CUT

CUT

CUT

CUT

STA. 110+00.00 SEE SHEET NO. 4A

N 58° 38' 28" E
530.48'

N 31° 22' 32" E

113+27.77
0.00'

123+00.00
100.00'

WWC-06/EPH-06
USACE NON-JURISDICTIONAL

N 25° 50' E
326.21'

PROP. R.O.W.

5

JERRY KEVIN KENNEDY

CUT

CUT

CUT

E 1283500
N 784000

N 58° 38' 28" E
338.99'

N 28° 24' 1" E
23.85'

N 21° 1' 39" E
377.83'

120+00.00
125.00'

N 36° 34' 12" E
282.70'

PROP. R.O.W.

112+50.00
175.00'

N 28° 24' 1" E
379.61'

116+27.02
155.86'

116+50.00
155.00'

6

JOHNNY BRANNON; TRUSTEE OF THE JOHNNY BRANNON REVOCABLE TRUST (1/2 INTEREST); LARRY HAMPTON BRANNON (1/2 INTEREST)

STR-02 (MORMAN BRANCH-PERENNIAL)

N 58° 39' 28" E
1837.15'

E 1284000
N 784500

N 88° 24' 34" W
464.25'

SEALED BY

A. BRIAN LEE
REGISTERED ENGINEER
LICENSE NUMBER
115072.0
STATE OF TENNESSEE

02/01/2026

COORDINATES ARE NAD 83(2011), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00002 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988 WITH GEOID 12B MODEL.

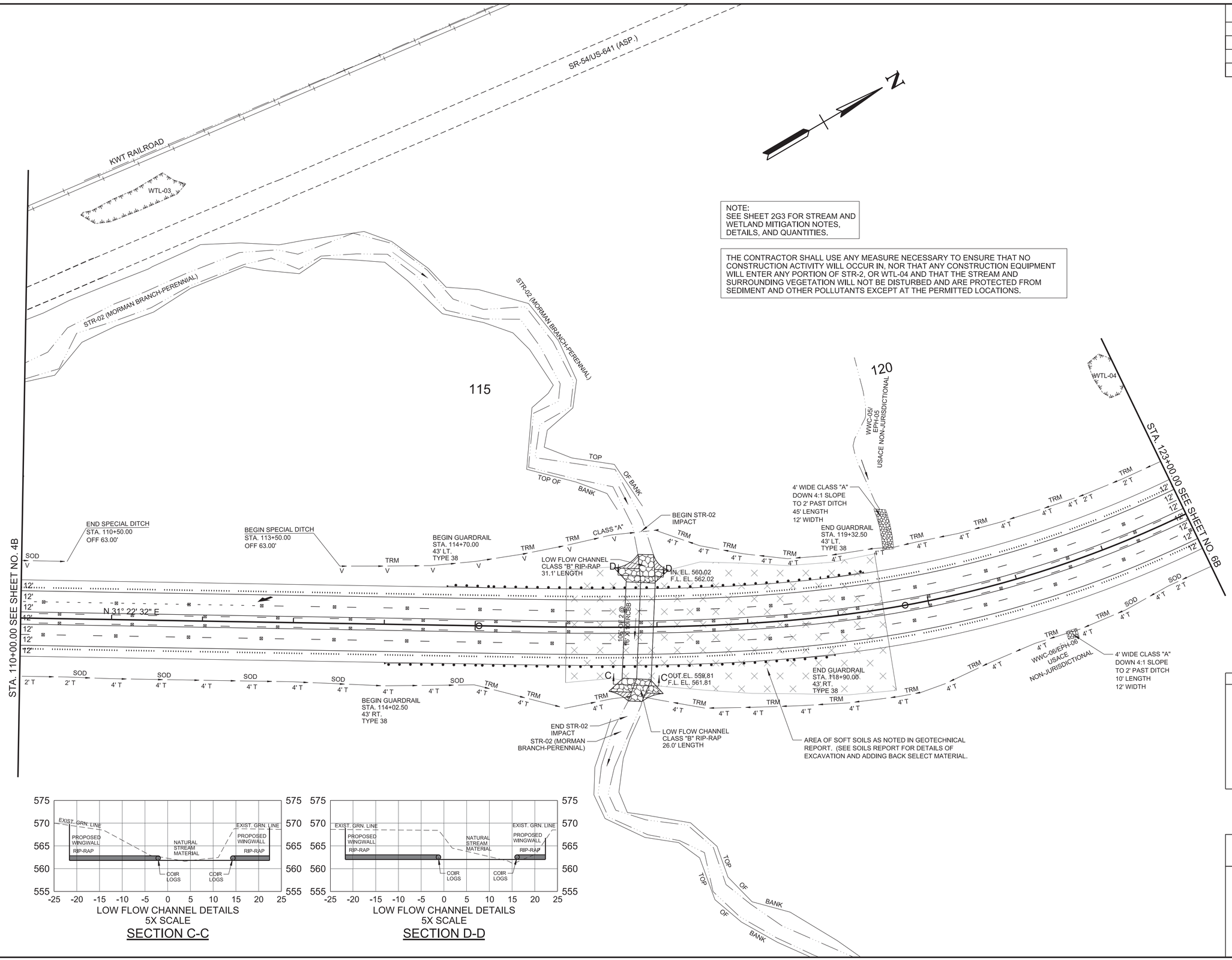
STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

RIGHT-OF-WAY DETAILS

STA.110+00 TO STA.123+00
SCALE: 1"=50'

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	5B
PIH	2025	NH-54(48)	5B
PS&E	2026	NH-54(48)	5B



NOTE:
SEE SHEET 2G3 FOR STREAM AND WETLAND MITIGATION NOTES, DETAILS, AND QUANTITIES.

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, OR WTL-04 AND THAT THE STREAM AND SURROUNDING VEGETATION WILL NOT BE DISTURBED AND ARE PROTECTED FROM SEDIMENT AND OTHER POLLUTANTS EXCEPT AT THE PERMITTED LOCATIONS.

LOW FLOW CHANNEL DETAILS
5X SCALE
SECTION C-C

LOW FLOW CHANNEL DETAILS
5X SCALE
SECTION D-D

SEALED BY

J. BRIAN LEE
REGISTERED ENGINEER
AGRICULTURE
NUMBER
115079
STATE OF TENNESSEE
02/09/2026

COORDINATES ARE NAD 83(2011), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00002 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988 WITH GEOID 12B MODEL.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PROPOSED LAYOUT

STA.110+00 TO STA.123+00
SCALE: 1"=50'

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	5C
PIH	2025	NH-54(48)	5C
PS&E	2026	NH-54(48)	5C

BOX BRIDGE
STATION: 116+80.00
STRUCTURE: 106' OF 2@16'X10' RCBB (2' EMBEDDED), 90° SKEW

SKEW	86° 59' 58" LT.	DEG.
DRAINAGE AREA	1.29	SQ. MI.
TOTAL DESIGN DISCHARGE (100 YR)	1250	CFS
100 YR BACKWATER	0.74	FT AT EL. 570.22
100 YR VELOCITY	4.99	FT/S
500 YR DISCHARGE (THIS STRUCT.)	1520	CFS AT EL. 571.00
INLET ELEVATION	560.02	ELEV.
OUTLET ELEVATION	559.81	ELEV.
APPROACH OVERTOPPING ELEVATION	573.38	ELEV.

STANDARD DRAWING NUMBERS.:
STD-17-83
QUANTITIES:

CLASS "A" CONCRETE	463.0	C.Y.
STEEL BAR REINFORCING	93904.0	LB.
BACKFILL	1561.3	TONS
FOUNDATION FILL MATERIAL	150.0	C.Y.

VC = 250.00'
K = 154

VC = 470.00'
K = 136

VPC 110+25.00
EL. 578.89

END SPECIAL DT LT.
110+50.00
EL 573.78

VPT 112+75.00
EL. 575.37

VPC 115+65.00
EL. 573.63

VPT 120+35.00
EL. 578.92

XCP-S3
STA. 115+88.71, -587.57' (LT)
N 784586.2104
E 1283024.9746
ELEV 584.13
ALUM. DISK
TDOT GPS# 40-054-03

EXIST. GROUND

PROPOSED GRADE

VPI 111+50.00
EL. 576.12

BEGIN SPECIAL DT. LT.
110+50.00
EL. 570.34

STA. 115+04.28 LT. & RT.

STA. 116+92.28 RT.
+0.020 RT.

STA. 119+74.28 LT. & RT.

+0.080 RT.

-0.020 LT.

-0.020 RT.

-0.080 LT.

110+00 111+00 112+00 113+00 114+00 115+00 116+00 117+00 118+00 119+00 120+00 121+00 122+00 123+00

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SEALED BY

BRIAN LEE
REGISTERED ENGINEER
AGRICULTURE
NUMBER
107290
STATE OF TENNESSEE

02/09/2026

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

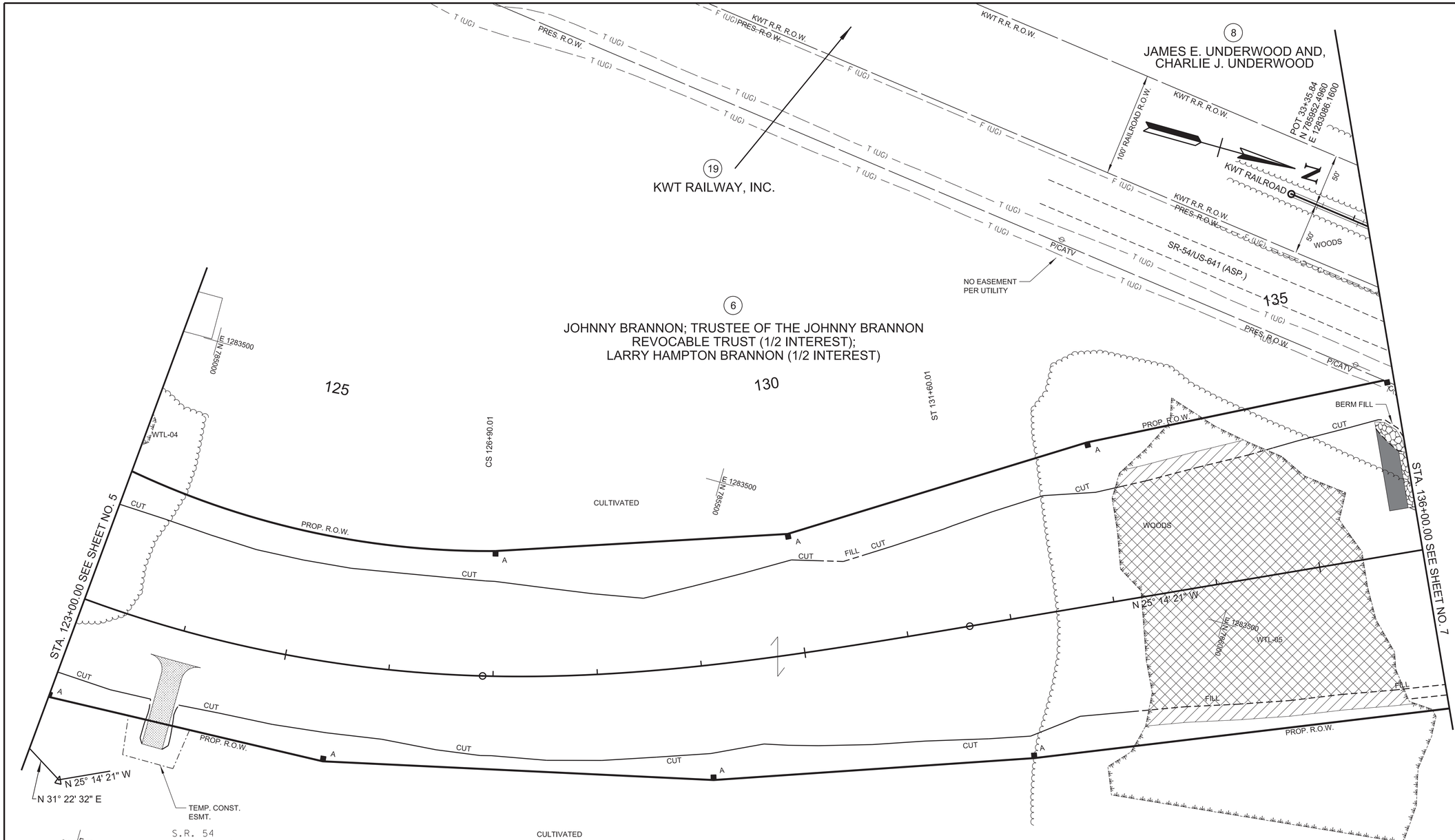
PROPOSED PROFILE

STA.110+00 TO STA.123+00

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

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	6
PIH	2025	NH-54(48)	6
PS&E	2026	NH-54(48)	6

REV. 03-26-24: LABELED PRES. R.O.W., KWT R.R. R.O.W., AND KWT R.R. R.O.W. WIDTH.



S.R. 54
CURVE DC104
PI 123+89.44
N 784,967.0168
E 1,283,945.5975
Δs 56° 36′ 53″ (LT)
θs 11° 13′ 14″
Δc 34° 10′ 26″ (LT)
Dc 4° 46′ 29″
Rc 1,200.00
Lc 715.74
Ts 885.16
Ls 470.00
SE 0.080 FT/FT
DESIGN SPEED 60 MPH
TRANS. LENGTH 470

6
JOHNNY BRANNON; TRUSTEE OF THE JOHNNY BRANNON REVOCABLE TRUST (1/2 INTEREST); LARRY HAMPTON BRANNON (1/2 INTEREST)

LEGEND	WETLAND IMPACTS (WTL-05)
	AREA OF PERMANENT IMPACT = 1.151 AC.
	VOLUME OF PERMANENT IMPACT = 1858 C.Y.
	AREA OF TEMPORARY IMPACT = 0.133 AC.
	VOLUME OF TEMPORARY IMPACT = 214 C.Y.

LEGEND
CLASS "A-3" RIP-RAP

NOTE:
SLOPES STEEPER THAN 3:1 SHALL HAVE CLASS "A-3" RIP-RAP INSTALLED ON SURFACE

SEALED BY

J. BRIAN LEE
REGISTERED ENGINEER
AGRICULTURE
No. 107299
STATE OF TENNESSEE
02/09/2026

COORDINATES ARE NAD 83(2011), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00002 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988 WITH GEOID 12B MODEL.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

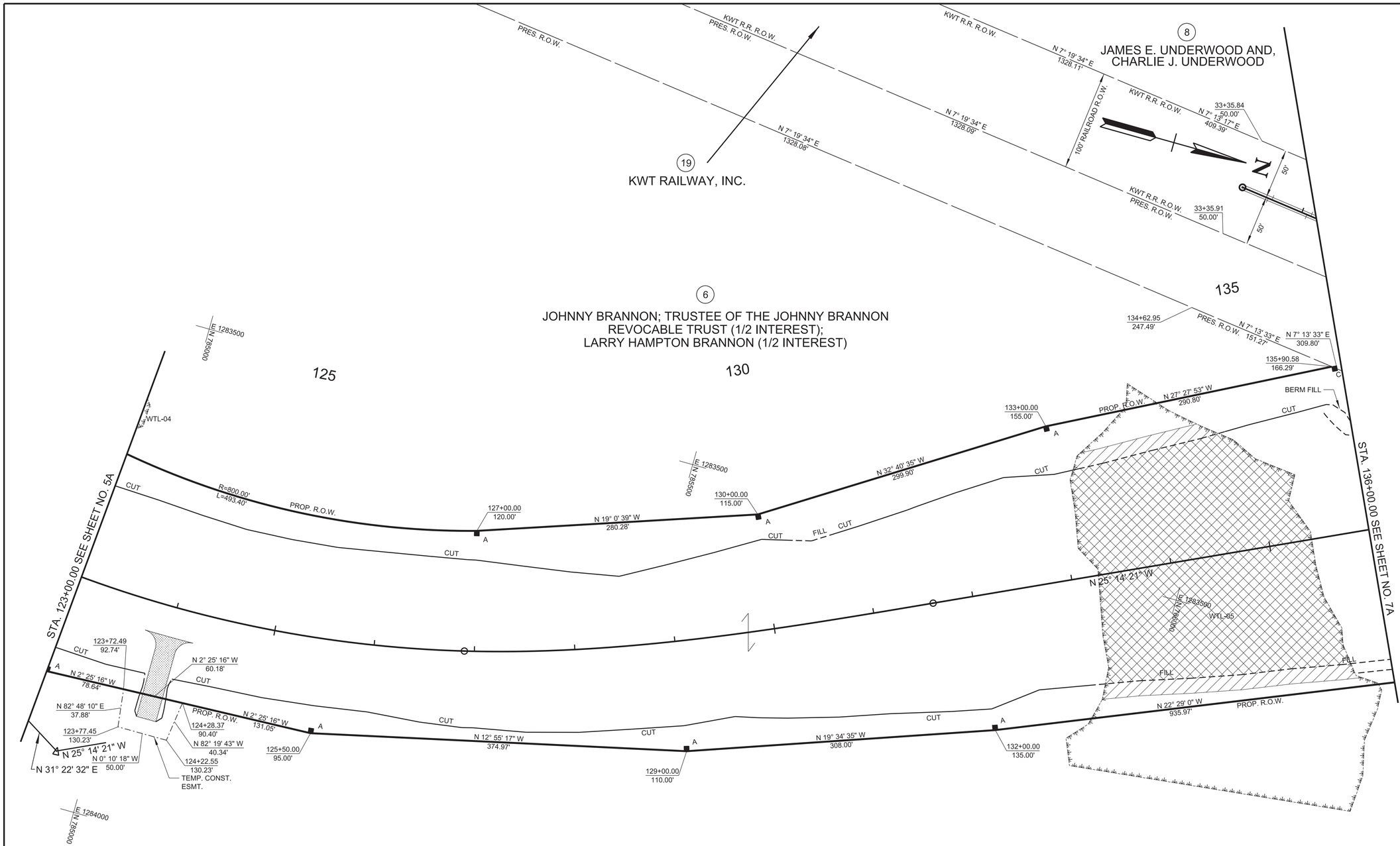
PRESENT LAYOUT

STA.123+00 TO STA.136+00
SCALE: 1"=50'

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	6A
PIH	2025	NH-54(48)	6A
PS&E	2026	NH-54(48)	6A

REV. 08-14-24: UPDATED DISTANCES RT. STA. 123+50 FROM 83.27' TO 78.64', RT. STA. 124+00 FROM 50.04' TO 60.18', AND RT. STA. 125+00 FROM 136.56' TO 131.05'.



6

JOHNNY BRANNON; TRUSTEE OF THE JOHNNY BRANNON
REVOCABLE TRUST (1/2 INTEREST);
LARRY HAMPTON BRANNON (1/2 INTEREST)

LEGEND	WETLAND IMPACTS (WTL-05)
	AREA OF PERMANENT IMPACT = 1.151 AC.
	VOLUME OF PERMANENT IMPACT = 1858 C.Y.
	AREA OF TEMPORARY IMPACT = 0.133 AC.
	VOLUME OF TEMPORARY IMPACT = 214 C.Y.

SEALED BY

J. BRIAN LEE
REGISTERED ENGINEER
LICENSE NUMBER
No. 107299
STATE OF TENNESSEE

02/10/2026

COORDINATES ARE NAD 83(2011), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00002 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988 WITH GEOID 12B MODEL.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

RIGHT-OF-WAY DETAILS

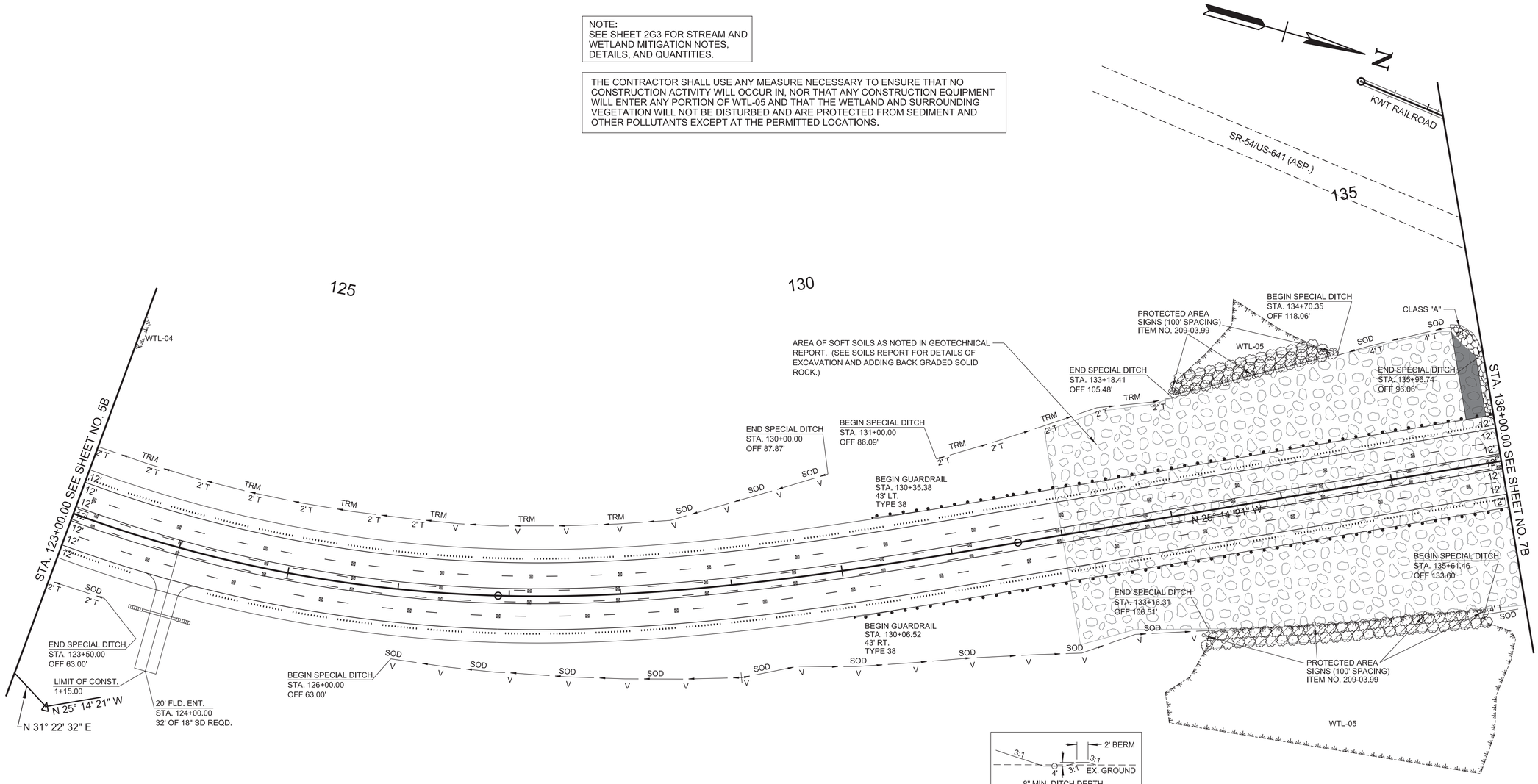
STA.123+00 TO STA.136+00
SCALE: 1"=50'

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	6B
PIH	2025	NH-54(48)	6B
PS&E	2026	NH-54(48)	6B

NOTE:
SEE SHEET 2G3 FOR STREAM AND WETLAND MITIGATION NOTES, DETAILS, AND QUANTITIES.

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 WTL-05 AND THAT THE WETLAND AND SURROUNDING VEGETATION WILL NOT BE DISTURBED AND ARE PROTECTED FROM SEDIMENT AND OTHER POLLUTANTS EXCEPT AT THE PERMITTED LOCATIONS.



BERM DETAIL
RT. STA. 135+60.30 TO RT. STA. 137+25.00
BERM ADDED TO ACHIEVE A MINIMUM 8" DITCH DEPTH

DRIVEWAY RADII ARE 15' RADIUS UNLESS OTHERWISE NOTED.

LEGEND	WETLAND IMPACTS (WTL-05)
	AREA OF PERMANENT IMPACT = 1.151 AC.
	VOLUME OF PERMANENT IMPACT = 1858 C.Y.
	AREA OF TEMPORARY IMPACT = 0.133 AC.
	VOLUME OF TEMPORARY IMPACT = 214 C.Y.

LEGEND
CLASS "A-3" RIP-RAP

NOTE:
SLOPES STEEPER THAN 3:1 SHALL HAVE CLASS "A-3" RIP-RAP INSTALLED ON SURFACE

SEALED BY



COORDINATES ARE NAD 83(2011), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00002 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988 WITH GEOID 12B MODEL.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PROPOSED LAYOUT

STA.123+00 TO STA.136+00
SCALE: 1"=50'

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	6C
PIH	2025	NH-54(48)	6C
PS&E	2026	NH-54(48)	6C

XCP-S4
STA. 125+24.57, -686.19'(LT)
N 785095.2110
E 1288086.7553
ELEV 595.20
ALUM. DISK
TDOT GPS# 40-054-04

PROPOSED GRADE

EXIST. GROUND

END SPECIAL DT. RT. 123+50.00 EL. 586.91

BEGIN SPECIAL DT. RT. 126+00.00 EL. 594.04

END SPECIAL DT. LT. 130+00.00 EL. 598.00

BEGIN SPECIAL DT. LT. 131+00.00 EL. 598.25

END SPECIAL DT. LT. 133+16.31 EL. 594.80

END SPECIAL DT. LT. 133+45.47 EL. 595.00

BEGIN SPECIAL DT. LT. 134+70.35 EL. 595.07

BEGIN SPECIAL DT. RT. 135+60.30 EL. 594.25

END SPECIAL DT. LT. 135+90.74 EL. 596.00

STA. 126+90.01 LT. & RT.

STA. 129+72.01 RT. +0.020 RT.

STA. 131+60.01 LT. & RT.

+0.080 RT.

-0.080 LT.

-0.020 LT.

-0.020 LT.

-0.020 RT.

SEALED BY

J. BRIAN LEE
REGISTERED ENGINEER
LICENSE NUMBER
107209
STATE OF TENNESSEE

02/10/2026

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PROPOSED PROFILE

STA.123+00 TO STA.136+00

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

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LEGEND	WETLAND IMPACTS (WTL-07B)
	AREA OF PERMANENT IMPACT = 1.291 AC.
	VOLUME OF PERMANENT IMPACT = 2082 C.Y.
	AREA OF TEMPORARY IMPACT = 0.111 AC.
	VOLUME OF TEMPORARY IMPACT = 178 C.Y.

LEGEND	WETLAND IMPACTS (WTL-07A)
	AREA OF PERMANENT IMPACT = 0.052 AC.
	VOLUME OF PERMANENT IMPACT = 84 C.Y.
	AREA OF TEMPORARY IMPACT = 0.272 AC.
	VOLUME OF TEMPORARY IMPACT = 438 C.Y.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	7
PIH	2025	NH-54(48)	7
PS&E	2026	NH-54(48)	7

8

JAMES E. UNDERWOOD AND,
CHARLIE J. UNDERWOOD

9

TIMOTHY DEE BRANNON AND,
TONY LEE BRANNON

HAUL ROAD 1
CURVE DC365
PI 5+44.36
N 786,248.2576
E 1,283,157.8905
Δ 91° 35′ 43″ (RT)
D 143° 14′ 22″
R 40.00
L 63.95
T 41.13

STA. 140+92.66 S.R. 54 =
STA. 40+00.00 KWT RAILROAD
DOT CROSSING NO. NONE
R.R. MILEPOST 51.26
N 786611.2836
E 1283170.4910

SEE SHEETS 7D-7F FOR RR ESMT. DETAILS

CULTIVATED
WOODS
GRAVEL
RAILROAD CROSSING
KWT R.R. R.O.W.
KWT RAILROAD
N 82° 41′ 37″ W
N 7° 17′ 41″ E
PT 5+69.18
48"OAK
140
145
48"OAK WITH FENCE WIRE
PROP. R.O.W.
CUT
CULTIVATED
PROP. R.O.W.
CUT
TEMP. CONST. ESMT.
PC 5+03.23
POT 5+00.00
11.9'+/-
BERM FILL
APPROX. LOCATION TOE OF SLOPE
N 8° 54′ 06″ E
WTL-07A
POT 7+69.09
AIR RIGHTS EASEMENT (OUTSIDE EDGE OF DECK)
BENT NO. 2
STA. 140+12.90
BENT NO. 3
STA. 141+90.99
FILL
WTL-07B
PAVEMENT AT BRIDGE END
END BRIDGE
STA. 143+32.69
WOODS
PERM. ESMT.
N 25° 14′ 21″ W
PERM. ESMT.
AIR RIGHTS EASEMENT (OUTSIDE EDGE OF DECK)
INV-593.35
INV-593.76
INV-593.10
INV-594.45
INV-595.00
EXIST. TO REMAIN 18" RCP
S 17° 17′ 41″ W
TEMP. CONST. ESMT.
PC 10+00.14
POT 10+00.00
N 82° 35′ 12″ W
WOODS
APPROX. LOCATION TOE OF SLOPE
WWC-08/EPH-08 USACE NON-JURISDICTIONAL
408' OF 36" RCP
FILL
BERM FILL
CUT
PROP. R.O.W.
C
KWT RAILROAD
N 7° 17′ 41″ E
45
100' RAILROAD R.O.W.
50'
50'
POT 46+35.37
N 787241 3.5078
E 1283251.1655
KWT R.R. R.O.W.
PRES. R.O.W.
12.2'+/-
12.2'+/-
P/CATV
T (UC)
F (UC)
OHP
INV-595.00
PICATV
BENT NO. 1
STA. 138+29.40
PAVEMENT AT BRIDGE END
BEGIN BRIDGE
STA. 136+84.11
CULTIVATED
FILL
BERM FILL
PROP. R.O.W.
WTL-06
NO EASEMENT PER UTILITY
SR-54/US-641 (ASP.)
GPS 40-054-05
CP-S5
P/CATV
PRES. R.O.W.
KWT R.R. R.O.W.
PRES. R.O.W.
T (UC)
F (UC)
P/CATV
T (UC)
F (UC)
T (UC)
F (UC)
T (UC)
F (UC)

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	7A
PIH	2025	NH-54(48)	7A
PS&E	2026	NH-54(48)	7A

LEGEND	WETLAND IMPACTS (WTL-07B)
	AREA OF PERMANENT IMPACT = 1.291 AC.
	VOLUME OF PERMANENT IMPACT = 2082 C.Y.
	AREA OF TEMPORARY IMPACT = 0.111 AC.
	VOLUME OF TEMPORARY IMPACT = 178 C.Y.

LEGEND	WETLAND IMPACTS (WTL-07A)
	AREA OF PERMANENT IMPACT = 0.052 AC.
	VOLUME OF PERMANENT IMPACT = 84 C.Y.
	AREA OF TEMPORARY IMPACT = 0.272 AC.
	VOLUME OF TEMPORARY IMPACT = 438 C.Y.

8
JAMES E. UNDERWOOD AND,
CHARLIE J. UNDERWOOD

9
TIMOTHY DEE BRANNON AND,
TONY LEE BRANNON

HAUL ROAD 1
CURVE DC365
PI 5+44.36
N 786,248.2576
E 1,283,157.8905
Δ 91° 35' 43" (RT)
D 143° 14' 22"
R 40.00
L 63.95
T 41.13

N 86° 57' 13" W
100.80'

48" OAK WITH SIGN
OF OLD WIRE FENCE

SEE SHEETS 7D-7F FOR
RR ESMT. DETAILS

STA. 140+92.66 S.R. 54 =
STA. 40+00.00 KWT RAILROAD
DOT CROSSING NO. NONE
R.R. MILEPOST 51.26
N 786611.2836
E 1283170.4910

140

145

35
KWT R.R. R.O.W.
50'
50'
N 7° 13' 17" E
409.39'
PT 5+69.18
N 82° 41' 37" W
KWT R.R. R.O.W.
PRES. R.O.W.
PRES. R.O.W.
5
PC 5+03.23
POT 5+00.00
N 7° 17' 41" E
TEMP. CONST. ESMT.
N 8° 54' 06" E
WTL-07A
N 7° 13' 33" E
586.91'
N 7° 13' 17" E
334.69'
POT 7+69.09
BERM FILL
APPROX. LOCATION TOE OF SLOPE
N 7° 13' 33" E
308.80'
AIR RIGHTS EASEMENT
(OUTSIDE EDGE OF DECK)
138+51.96
0.00'
140+01.00
0.00'
PERM. ESMT.
AIR RIGHTS EASEMENT
(OUTSIDE EDGE OF DECK)
N 7° 12' 17" E
93.54'
142+88.30
50.19'
N 7° 13' 33" E
335.33'
FILL
FILL
BERM FILL
PROP. R.O.W.
N 22° 29' 0" W
935.97'
WTL-06
139+05.00
179.63'
PROP. R.O.W.
N 26° 34' 25" W
272.92'
C
141+77.85
185.99'
141+34.89
180.00'
C
N 7° 13' 33" E
16.13'
141+48.50
188.66'
10
PC 10+04.14
POT 10+00.00
N 7° 17' 41" E
N 82° 35' 12" W
45
N 2° 54' 15" E
332.58'
N 2° 54' 15" E
165.79'
FILL
143+21.69
109.04'
METAL FENCE POST
N 53° 56' 34" E
115.45'
WTL-07B
N 2° 9' 14" E
247.00'
143+50.00
190.00'
A
N 26° 34' 25" W
172.20'
CUT
N 19° 53' 0" W
803.51'
PROP. R.O.W.
CUT
145+32.12
0.00'
N 25° 14' 21" W
142+88.78
0.00'
N 83° 56' 34" E
53.14'
METAL FENCE POST
WITH IP AT BOTTOM
APPROX. LOCATION TOE OF SLOPE
N 7° 19' 4" E
230.05'
FILL
BERM FILL
144+60.20
173.99'
C
CUT
PROP. R.O.W.
N 28° 22' 5" W
369.33'
WWC-08/EPH-08 USACE NON-JURISDICTIONAL
N 2° 9' 14" E
394.34'
CUT
148+28.97
153.83'
N 28° 22' 5" W
618.51'
N 2° 9' 14" E
2084.01'
10
TONY BRANNON AND WIFE,
LISA BRANNON AND TIM BRANNON
AND WIFE, DEBBIE BRANNON
19
KWT RAILWAY, INC.
100' RAILROAD R.O.W.
50'
50'
N 7° 19' 4" E
2405.45'
KWT R.R. R.O.W.
N 7° 19' 4" E
2667.56'
N 7° 19' 0" E
2639.35'
KWT R.R. R.O.W.
PRES. R.O.W.
PRES. R.O.W.

STA. 136+00.00 SEE SHEET NO. 6A

STA. 149+00.00 SEE SHEET NO. 8A

005986 N 1283500
005986 N 1283000
000787 N 1283500
000787 N 1283000
000787 N 1282500

HAUL ROAD 2
CURVE DC368
PI 10+44.22
N 786,845.3039
E 1,283,234.1156
Δ 90° 07' 07" (LT)
D 143° 14' 22"
R 40.00
L 62.91
T 40.08

CP-S5
GPS 40-054-05

N 85° 49' 40" W
1107.62'

6
JOHNNY BRANNON; TRUSTEE OF THE JOHNNY BRANNON
REVOCABLE TRUST (1/2 INTEREST);
LARRY HAMPTON BRANNON (1/2 INTEREST)

10
TONY BRANNON AND WIFE,
LISA BRANNON AND TIM BRANNON
AND WIFE, DEBBIE BRANNON

SEALED BY

J. BRIAN LEE
REGISTERED ENGINEER
AGRICULTURE
No. 107299
STATE OF TENNESSEE
02/09/2026

COORDINATES ARE NAD 83(2011), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00002 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988 WITH GEOID 12B MODEL.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

RIGHT-OF-WAY DETAILS

STA.136+00 TO STA.149+00
SCALE: 1"=50'

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	7B
PIH	2025	NH-54(48)	7B
PS&E	2026	NH-54(48)	7B

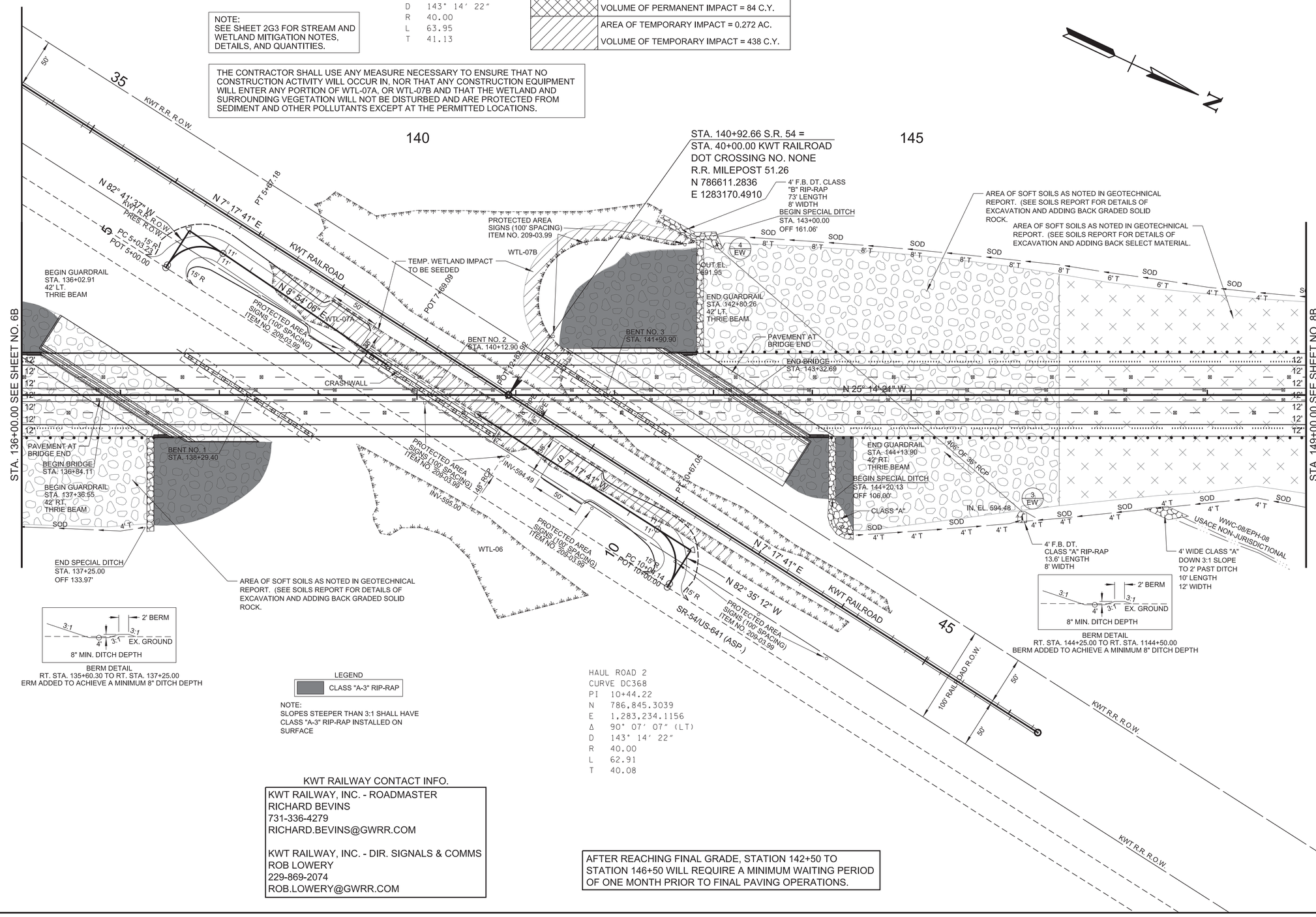
LEGEND	WETLAND IMPACTS (WTL-07B)
	AREA OF PERMANENT IMPACT = 1.291 AC.
	VOLUME OF PERMANENT IMPACT = 2082 C.Y.
	AREA OF TEMPORARY IMPACT = 0.111 AC.
	VOLUME OF TEMPORARY IMPACT = 178 C.Y.

LEGEND	WETLAND IMPACTS (WTL-07A)
	AREA OF PERMANENT IMPACT = 0.052 AC.
	VOLUME OF PERMANENT IMPACT = 84 C.Y.
	AREA OF TEMPORARY IMPACT = 0.272 AC.
	VOLUME OF TEMPORARY IMPACT = 438 C.Y.

HAUL ROAD 1
CURVE DC365
PI 5+44.36
N 786,248.2576
E 1,283,157.8905
Δ 91° 35′ 43″ (RT)
D 143° 14′ 22″
R 40.00
L 63.95
T 41.13

NOTE:
SEE SHEET 2G3 FOR STREAM AND WETLAND MITIGATION NOTES, DETAILS, AND QUANTITIES.

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 WTL-07A, OR WTL-07B AND THAT THE WETLAND AND SURROUNDING VEGETATION WILL NOT BE DISTURBED AND ARE PROTECTED FROM SEDIMENT AND OTHER POLLUTANTS EXCEPT AT THE PERMITTED LOCATIONS.



BERM DETAIL
RT. STA. 135+60.30 TO RT. STA. 137+25.00
ERM ADDED TO ACHIEVE A MINIMUM 8" DITCH DEPTH

BERM DETAIL
RT. STA. 144+25.00 TO RT. STA. 1144+50.00
BERM ADDED TO ACHIEVE A MINIMUM 8" DITCH DEPTH

LEGEND
CLASS "A-3" RIP-RAP

NOTE:
SLOPES STEEPER THAN 3:1 SHALL HAVE CLASS "A-3" RIP-RAP INSTALLED ON SURFACE

HAUL ROAD 2
CURVE DC368
PI 10+44.22
N 786,845.3039
E 1,283,234.1156
Δ 90° 07′ 07″ (LT)
D 143° 14′ 22″
R 40.00
L 62.91
T 40.08

KWT RAILWAY CONTACT INFO.

KWT RAILWAY, INC. - ROADMASTER
RICHARD BEVINS
731-336-4279
RICHARD.BEVINS@GWRR.COM

KWT RAILWAY, INC. - DIR. SIGNALS & COMMS
ROB LOWERY
229-869-2074
ROB.LOWERY@GWRR.COM

AFTER REACHING FINAL GRADE, STATION 142+50 TO STATION 146+50 WILL REQUIRE A MINIMUM WAITING PERIOD OF ONE MONTH PRIOR TO FINAL PAVING OPERATIONS.

SEALED BY



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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PROPOSED LAYOUT

STA.136+00 TO STA.149+00
SCALE: 1"=50'

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	7C
PIH	2025	NH-54(48)	7C
PS&E	2026	NH-54(48)	7C

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ROB LOWERY
229-869-2074
ROB.LOWERY@GWRR.COM

PIPE CULVERT
STATION: 144+76.02
STRUCTURE: 406' OF 36" RCP

SKEW	**40° 52' 17" RT**	**DEG.**
DRAINAGE AREA	**25.87**	**AC.**
DESIGN DISCHARGE (Q50)	**29.80**	**CFS**
DESIGN DISCHARGE (Q100)	**32.60**	**CFS**
OVERTOPPING ELEV.	**604.44**	**ELEV.**
ALLOWABLE HEADWATER ELEV.	**597.45**	**ELEV.**
Q50 HEADWATER ELEV.	**597.16**	**ELEV.**
Q100 HEADWATER ELEV.	**597.32**	**ELEV.**
VELOCITY (Q50)	**8.17**	**FT/S**
VELOCITY (Q100)	**8.31**	**FT/S**

ENDWALLS REQUIRED:
PROTECTED ENDWALLS
STANDARD DRAWING NOS.:
D-PB-1, D-PEW-1, & D-PEW-2

QUANTITIES:

CLASS "A" CONCRETE	**10.0**	**C.Y.**
STEEL BAR REINFORCING	**378**	**LB.**
BEDDING MATERIAL	**122.7**	**C.Y.**

ENDWALL ITEM NOS.: 611-07.01 & 611-07.02

VPC 136+40.00
EL. 624.66

VPI 141+00.00
EL. 637.77

VPT 145+60.00
EL. 623.74

C.L. BENT NO. 1
STA. 138+29.40
F.G. ELEV. 628.91

C.L. BENT NO. 2
STA. 140+12.90
F.G. ELEV. 630.83

C.L. BENT NO. 3
STA. 141+90.90
F.G. ELEV. 630.63

BEGIN BRIDGE
STA. 136+54.11
F.G. ELEV. 625.85

END BRIDGE
STA. 143+32.69
F.G. ELEV. 629.02

2.85%
-3.05%
-3.05%

VC = 920.00'
K = 155

PROPOSED GRADE

OH WIRE
STA. 138+51.88
LOW WIRE EL 616.56'
TEMP. 50 DEG.
3 POWER
2 CABLE

2:1 CLASS "A-3" RIP-RAP APRON

2:1 CLASS "A-3" RIP-RAP APRON

CRASHWALL

STA. 140+92.66 S.R. 54 =
STA. 40+00.00 KWT RAILROAD
DOT CROSSING NO. NONE
R.R. MILEPOST 51.26
N 786611.2886
E 1283170.4910
ELEV. 599.29

XCP-S5
STA. 143+33.04, 278.44'(RT)
N 786947.4399
E 1283319.8490
ELEV 601.53
ALUM. DISK
TDOT GPS# 40-054-05

XCP-S6
STA. 148+34.33, 597.39'(RT)
N 787586.9515
E 1283894.5749
ELEV 602.12
ALUM. DISK
TDOT GPS# 40-054-06

EXIST. GROUND

BEGIN SPECIAL DT. RT.
144+20.18
EL. 595.05

END SPECIAL DT. RT.
137+25.00
EL. 596.02

BEGIN SPECIAL DT. LT.
143+00.00
EL. 591.90

STA. 138+27.94
TELE. (UG)

STA. 138+69.22
TELE. (UG)

STA. 139+71.04
FIBER (UG)

STA. 139+83.54
2" GAS

1.62%
1.08%
1.08%
4' F.B. DT. RT.

0.00%
0.30%
0.30%
0.30%
8' F.B. DT. LT.

-0.37%
0.36%
-0.30%
-0.30%
4' F.B. DT. RT.
-0.30%
-0.73%
0.50%
4' F.B. DT. RT.
0.72%
0.40%
0.50%
8' F.B. DT. LT.
1.54%
1.54%
6' F.B. DT. LT.
6' F.B. DT. LT.
1.54%
4' F.B. DT. LT.
0.50%
4' F.B. DT. RT.
0.40%

4 EW — 146+12.63 (118.22' RT.)
INLET EL. 594.44

3 EW — 143+05.35 (147.69 LT.)
OUTLET EL. 591.95
406' PROP. 36"
RCP 0.62%

-0.020 LT. -0.020 RT.

① DENOTES: PROPOSED POINT OF MIN. VERTICAL CLEARANCE (ROAD)
SR-54 STA. 138+42.73
ACTUAL VERTICAL CLEARANCE = 19'-7"
MINIMUM REQUIRED CLEARANCE = 16'-6"
PER PRELIM. DRAWINGS FROM TDOT STRUCTURE DEPT.
DATED 2025

② DENOTES: PROPOSED POINT OF MIN. VERTICAL CLEARANCE
SR-54 STA. 142+47.06
ACTUAL VERTICAL CLEARANCE = 23'-0 3/4"
MINIMUM REQUIRED CLEARANCE = 23'-0"
PER PRELIM. DRAWINGS FROM TDOT STRUCTURE DEPT.
DATED 2025

655 650 645 640 635 630 625 620 615 610 605 600 595 590 585 580 575 570 565 560

136+00 137+00 138+00 139+00 140+00 141+00 142+00 143+00 144+00 145+00 146+00 147+00 148+00 149+00

SEALED BY

BRIAN LEE
REGISTERED ENGINEER
AGRICULTURE
ENGINEER
101729
STATE OF TENNESSEE
02/03/2026

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

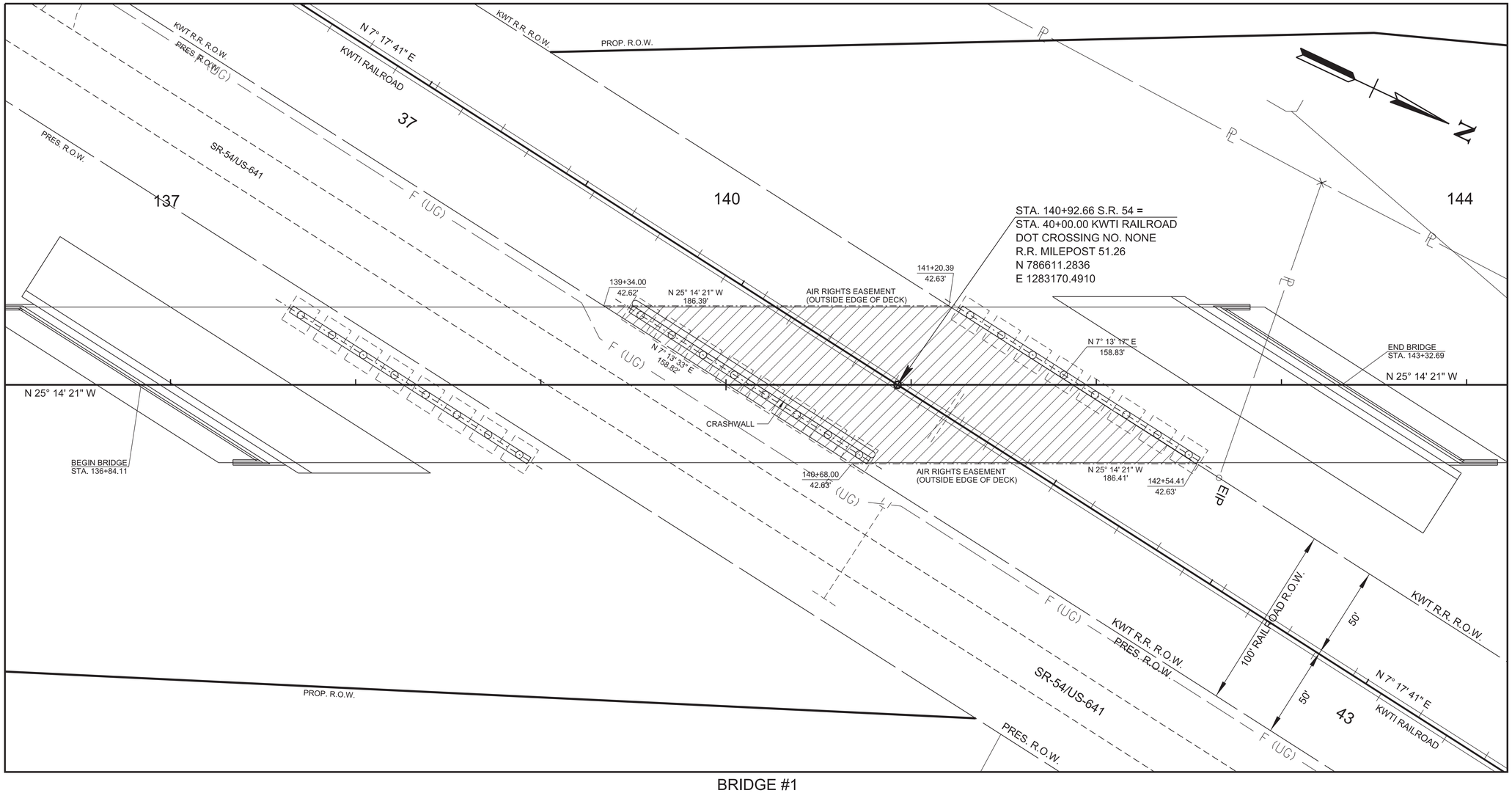
PROPOSED PROFILE

STA.136+00 TO STA.149+00

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

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	7D
PIH	2025	NH-54(48)	7D
PS&E	2026	NH-54(48)	7D



BRIDGE #1
AIR RIGHTS EASEMENT

AIR RIGHTS EASEMENT

KWT RAILWAY CONTACT INFO.

KWT RAILWAY, INC. - ROADMASTER
RICHARD BEVINS
731-336-4279
RICHARD.BEVINS@GWRR.COM

KWT RAILWAY, INC. - DIR. SIGNALS & COMMS
ROB LOWERY
229-869-2074
ROB.LOWERY@GWRR.COM

SEALED BY

BRIAN LEE
REGISTERED ENGINEER
AGRICULTURE
NUMBER
115729
STATE OF TENNESSEE

02/10/2026

COORDINATES ARE NAD 83(2011), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00002 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988 WITH GEOID 12B MODEL.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

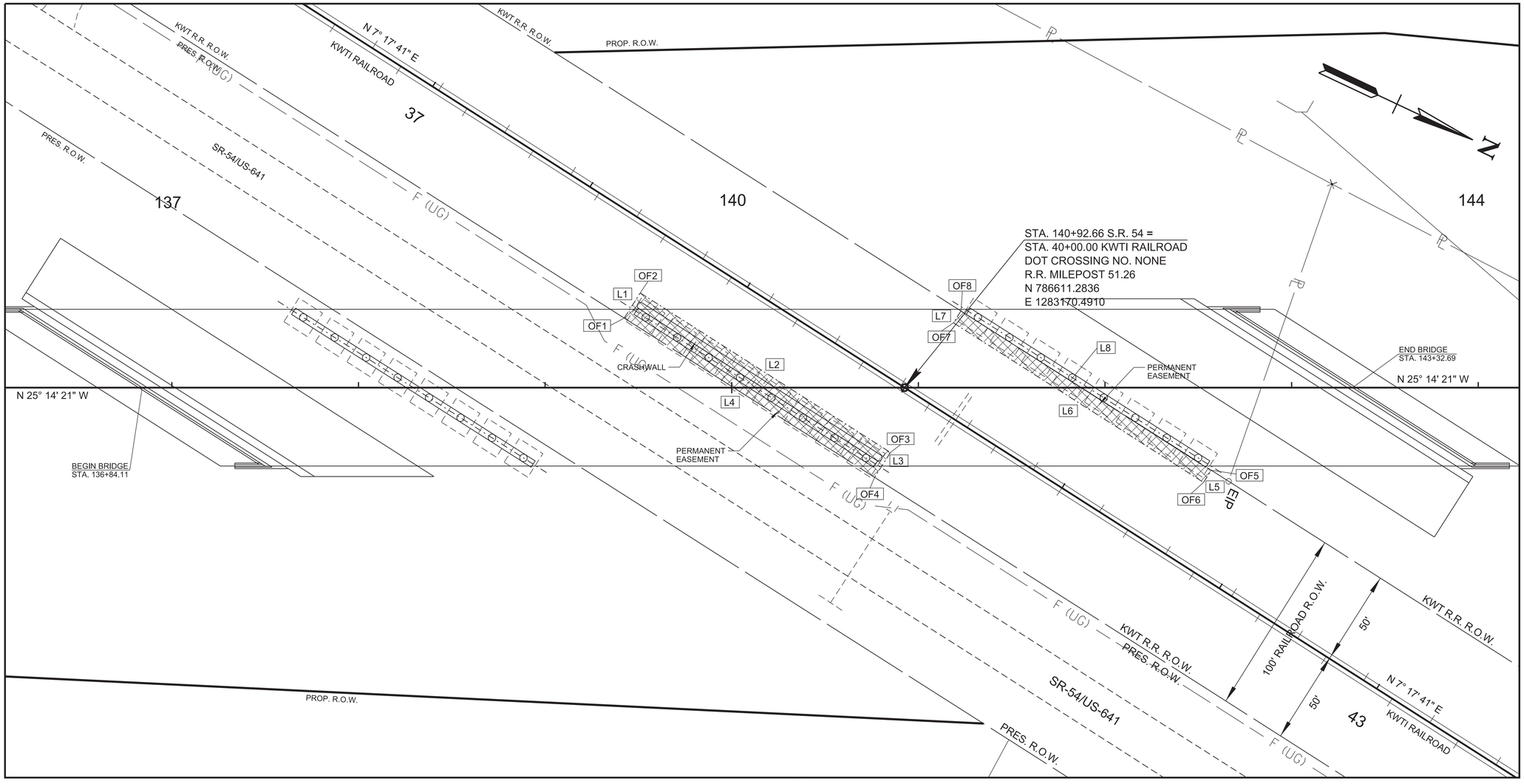
RIGHT-OF-WAY DETAILS

BRIDGE #1
STA.136+00 TO STA.149+00
SCALE: 1"=30'

TRACT #19

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	7E
PIH	2025	NH-54(48)	7E
PS&E	2026	NH-54(48)	7E



BRIDGE #1
PERMANENT EASEMENT

PERMANENT EASEMENT

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RICHARD BEVINS
731-336-4279
RICHARD.BEVINS@GWRR.COM

KWT RAILWAY, INC. - DIR. SIGNALS & COMMS
ROB LOWERY
229-869-2074
ROB.LOWERY@GWRR.COM

LINE TABLE

LINE	BEARING	DISTANCE
L1	N 82° 42' 19" W	15.98'
L2	N 7° 17' 41" E	159.00'
L3	S 82° 42' 19" E	15.79'
L4	N 7° 13' 33" E	159.00'
L5	S 82° 42' 19" E	7.72'
L6	S 7° 17' 41" W	159.00'
L7	N 82° 42' 19" W	7.52'
L8	N 7° 13' 17" E	159.00'

STATION / OFFSET TABLE

LABEL	STATION	OFFSET
OF1	139+42.39	-37.29'
OF2	139+50.98	-50.76
OF3	140+85.03	34.75
OF4	140+76.54	48.06
OF5	142+56.96	44.25
OF6	142+52.81	50.76
OF7	141+18.76	-34.75
OF8	141+22.81	-41.09

SEALED BY

BRIAN LEE
REGISTERED ENGINEER
AGRICULTURE
NUMBER
115729
STATE OF TENNESSEE

02/10/2026

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

RIGHT-OF-WAY DETAILS

BRIDGE #1
STA.136+00 TO STA.149+00
SCALE: 1"=30'

TRACT #19

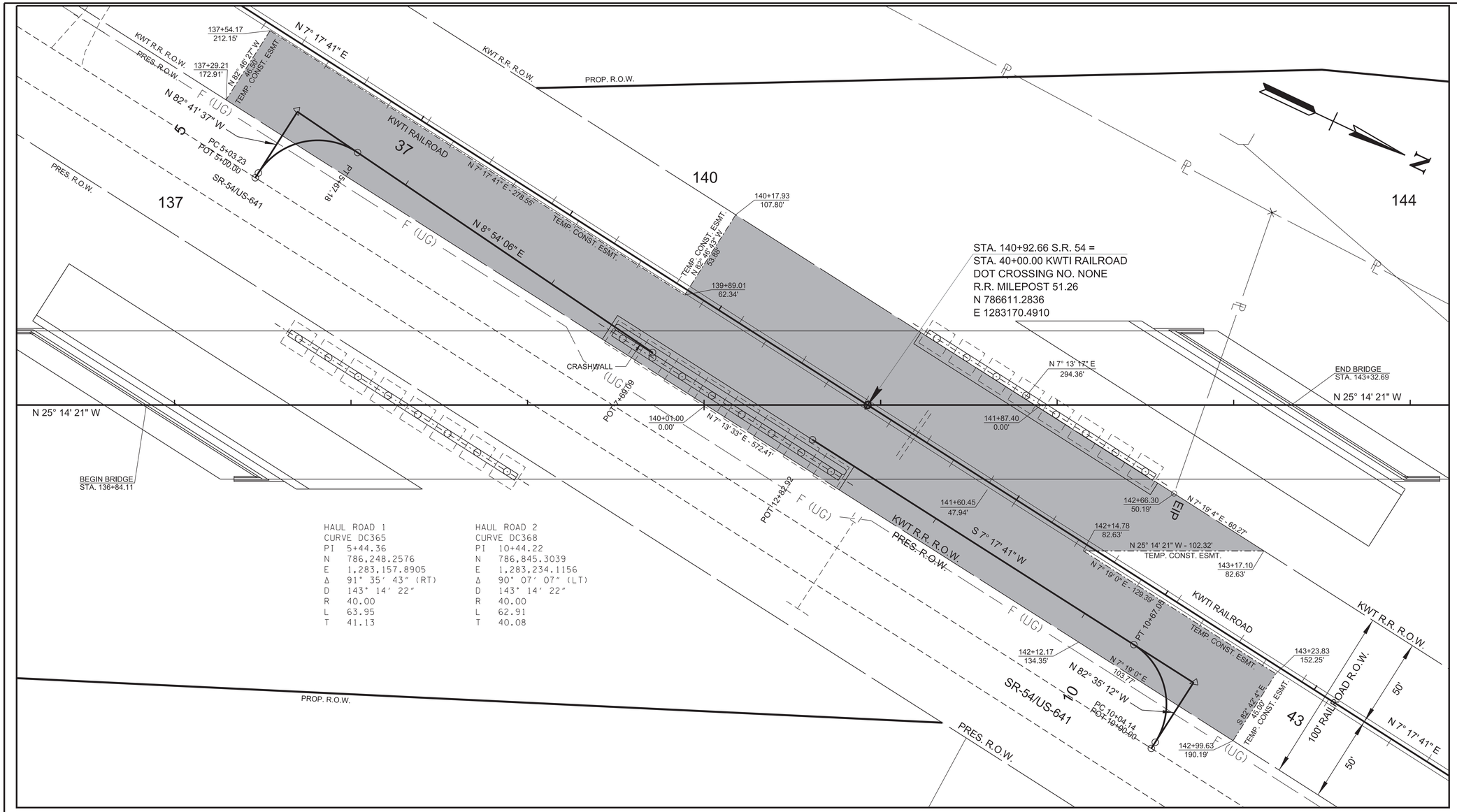
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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	7F
PIH	2025	NH-54(48)	7F
PS&E	2026	NH-54(48)	7F

REV. 01-25-24: ADJUSTED TEMP. CONST. ESMT. BOUNDARY TO INCLUDE BRIDGE PIERS.

REV. 03-26-24: UPDATED TEMP. CONST. ESMT. PATTERN.

REV. 08-14-24: REMOVED BEARING AND DISTANCE FLAG RT. STA. 142+60.



HAUL ROAD 1
CURVE DC365
PI 5+44.36
N 786,248.2576
E 1,283,157.8905
Δ 91° 35′ 43″ (RT)
D 143° 14′ 22″
R 40.00
L 63.95
T 41.13

HAUL ROAD 2
CURVE DC368
PI 10+44.22
N 786,845.3039
E 1,283,234.1156
Δ 90° 07′ 07″ (LT)
D 143° 14′ 22″
R 40.00
L 62.91
T 40.08

BRIDGE #1
TEMPORARY CONSTRUCTION EASEMENT

TEMPORARY CONSTRUCTION EASEMENT

KWT RAILWAY CONTACT INFO.

KWT RAILWAY, INC. - ROADMASTER
RICHARD BEVINS
731-336-4279
RICHARD.BEVINS@GWRR.COM

KWT RAILWAY, INC. - DIR. SIGNALS & COMMS
ROB LOWERY
229-869-2074
ROB.LOWERY@GWRR.COM

TRACT #19

SEALED BY

J. BRIAN LEE
REGISTERED ENGINEER
AGRICULTURE
02/09/2026
STATE OF TENNESSEE

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

RIGHT-OF-WAY DETAILS

BRIDGE #1
STA.136+00 TO STA.149+00
SCALE: 1"=30'

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	8
PIH	2025	NH-54(48)	8
PS&E	2026	NH-54(48)	8

13

JOE B. FRIDY AND
WIFE, BEVERLY FRIDY
AND WILLIAM G. FRIDY

9

TIMOTHY DEE BRANNON AND,
TONY LEE BRANNON

155

160

150

CULTIVATED

N

N 1282080
E 2985000

N 1282500
E 2978500

PROP. R.O.W.

A

CUT

N 5° 10' 22" E

N 1282500
E 2980000

STA. 149+00.00 SEE SHEET NO. 7

STA. 162+00.00 SEE SHEET NO. 9

N 25° 14' 21" W

N 1282500
E 2985000

CULTIVATED

PROP. R.O.W.

TS 152+30.73

SC 156+45.73

9

TIMOTHY DEE BRANNON AND,
TONY LEE BRANNON

N 1283000
E 2978500

N 1283000
E 2980000

10

TONY BRANNON AND WIFE,
LISA BRANNON AND TIM BRANNON
AND WIFE, DEBBIE BRANNON

KWT R.R. R.O.W.
N 7° 19' 4" E
2405.45'

S.R. 54
CURVE DC105
PI 159+82.75
N 788,320.9360
E 1,282,364.5617
Δs 30° 24′ 43″ (RT)
Θs 5° 56′ 40″
Δc 18° 31′ 23″ (RT)
Dc 2° 51′ 53″
Rc 2,000.00
Lc 646.57
Ts 752.01
Ls 415.00
SE 0.068 FT/FT
DESIGN SPEED 60 MPH
TRANS. LENGTH 415

SEALED BY

J. BRIAN LEE
REGISTERED ENGINEER
AGRICULTURE
NUMBER
115729
STATE OF TENNESSEE

02/10/2026

COORDINATES ARE NAD 83(2011), ARE
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ALL ELEVATIONS ARE REFERENCED
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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PRESENT LAYOUT

STA.149+00 TO STA.162+00
SCALE: 1"=50'

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	8A
PIH	2025	NH-54(48)	8A
PS&E	2026	NH-54(48)	8A

13

JOE B. FRIDY AND
WIFE, BEVERLY FRIDY
AND WILLIAM G. FRIDY

℄ N 1° 30' 56" E 2510.00' ℄

N 1282080.00 E 2985000.00

9

TIMOTHY DEE BRANNON AND,
TONY LEE BRANNON

155

160

150

N

N 1282500.00 E 2978500.00

PROP. R.O.W.

N 19° 53' 0" W
803.51'

151+50.00
115.00'

A

N 26° 12' 0" W
355.46'

155+00.00
125.00'

A

N 22° 16' 11" W
318.70'

158+00.00
143.00'

A

R=1700.00'
L=693.52'

PROP. R.O.W.

CUT

CUT

CUT

CUT

N 1282500.00 E 2980000.00

N 5° 10' 22" E

STA. 149+00.00 SEE SHEET NO. 7A

N 25° 14' 21" W

STA. 162+00.00 SEE SHEET NO. 9A

PROP. R.O.W.

N 28° 22' 5" W
618.51'

CUT

154+50.00
118.00'

A

N 21° 9' 12" W
182.13'

A

156+40.77
119.83'

CUT

R=1880.00'
L=617.18'

PROP. R.O.W.

N 1282500.00 E 2985982.00

9

TIMOTHY DEE BRANNON AND,
TONY LEE BRANNON

N 1283000.00 E 2978500.00

℄ ℄ ℄ ℄ ℄ ℄ ℄

N 1283000.00 E 2980000.00

10

TONY BRANNON AND WIFE,
LISA BRANNON AND TIM BRANNON
AND WIFE, DEBBIE BRANNON

KWT R.R. R.O.W.
N 7° 19' 4" E
2405.45'

N 2° 9' 14" E
2084.01'

SEALED BY

BRIAN LEE
REGISTERED ENGINEER
AGRICULTURE
NUMBER
107296
STATE OF TENNESSEE

02/10/2026

COORDINATES ARE NAD 83(2011), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00002 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988 WITH GEOID 12B MODEL.

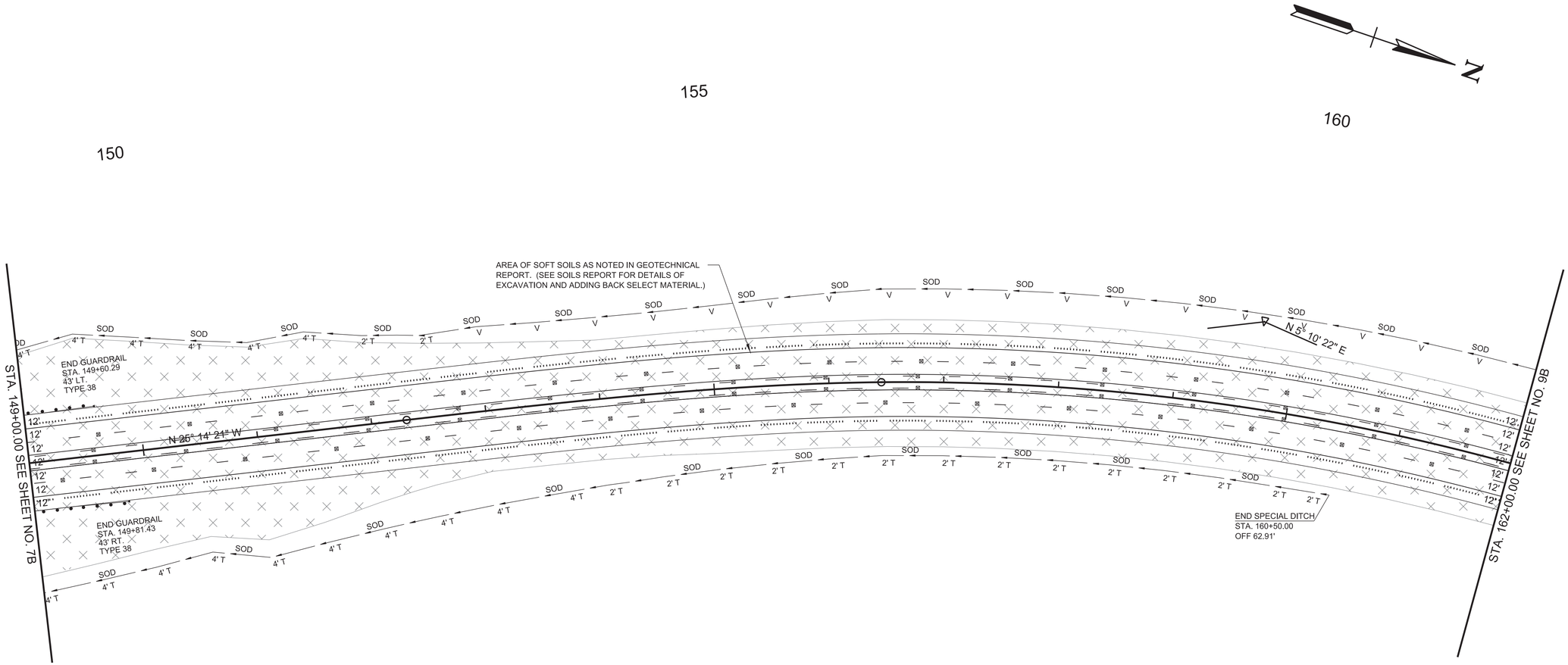
STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

RIGHT-OF-WAY DETAILS

STA.149+00 TO STA.162+00
SCALE: 1"=50'

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	8B
PIH	2025	NH-54(48)	8B
PS&E	2026	NH-54(48)	8B



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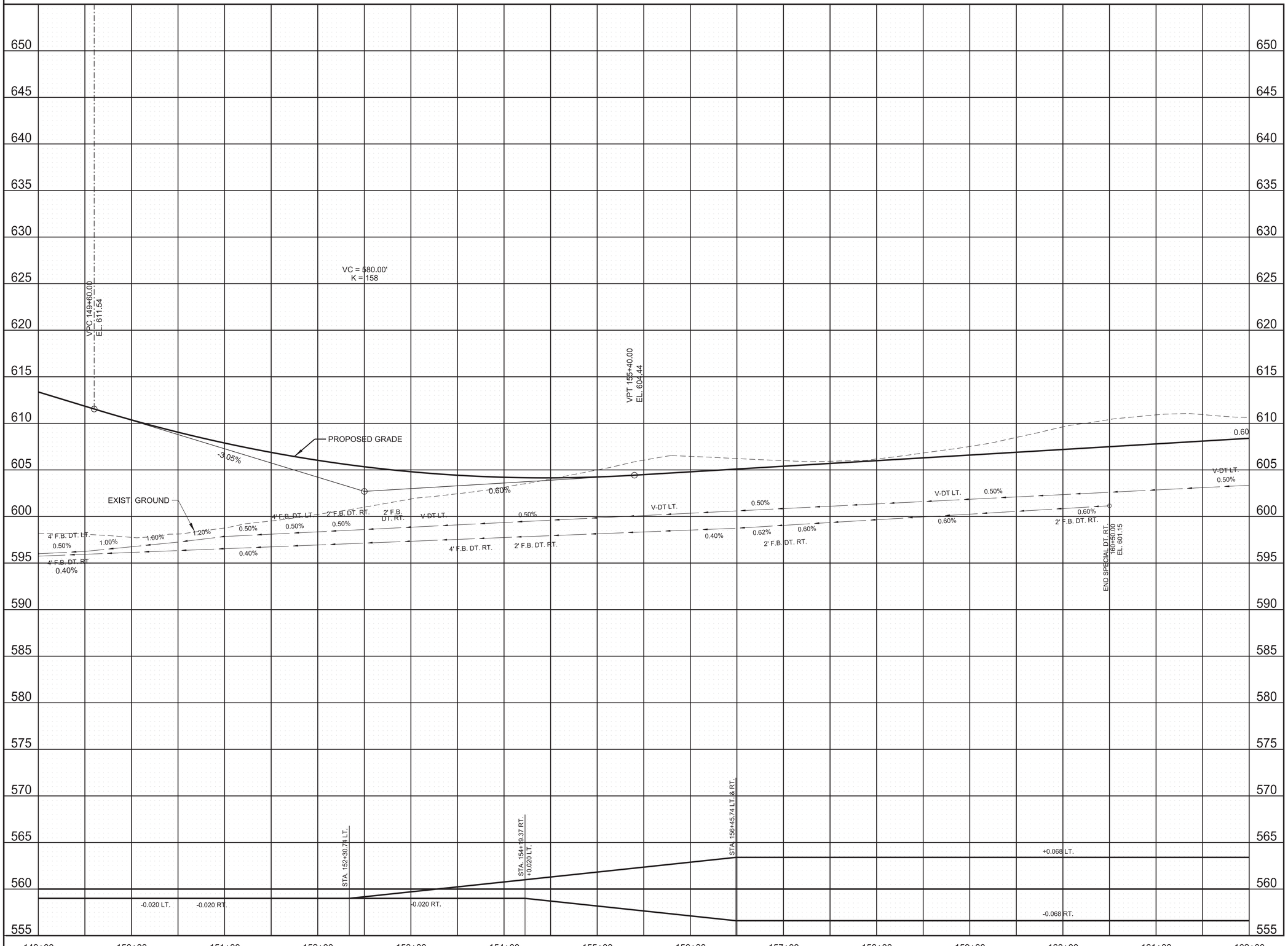
STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PROPOSED LAYOUT

STA.149+00 TO STA.162+00
SCALE: 1"=50'

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	8C
PIH	2025	NH-54(48)	8C
PS&E	2026	NH-54(48)	8C



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SEALED BY

J. BRIAN LEE
REGISTERED ENGINEER
AGRICULTURE
NUMBER
1 0 7 2 9 0
STATE OF TENNESSEE

02/10/2026

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PROPOSED PROFILE

STA.149+00 TO STA.162+00

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

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	9
PIH	2025	NH-54(48)	9
PS&E	2026	NH-54(48)	9

REV. 01-25-24: REVISED TOE OF SLOPES AT INTERSECTION OF SR-54 AND CROSSLAND RD.

REV. 08-14-24: MOVED CROSSLAND RD, FLD. ENT. RT. STA. 23+50 TO RT. STA. 24+50 AND UPDATED CONST. ESMT, AND MOVED LIMIT OF CONST. FROM STA. 23+74.94 TO STA. 24+74.74.

13
JOE B. FRIDY AND
WIFE, BEVERLY FRIDY
AND WILLIAM G. FRIDY

9
TIMOTHY DEE BRANNON AND,
TONY LEE BRANNON

11
DUKE VEAZEY AND WIFE,
LUCRETIA P. VEAZEY

165 170 175

N

E 1282000
N 789500
CP-S8
GPS 40-054-08
19.5'+/-
CROSSLAND RD (ASP.)
BLOCK BARN
1-S-F
SHED
SHED
WELL
WELL INFORMATION
DRILLER: UNKNOWN
DATE DRILLED: UNKNOWN
DEPTH: 60'-70'
OWNER WHEN DRILLED: UNKNOWN
GRAVEL
SHED
POT 16+00.00
N 789504.4464
E 1282070.3307
GRAVEL
CMP
INV-608.55
12" CMP
INV-608.84
INV-608.91
CMP
INV-608.75
S 86° 54' 35" E
LIMIT OF CONST.
18+00.00
WTL-09
CULTIVATED
POND
CULTIVATED
CULTIVATED
STA. 171+22.00 S.R. 54 =
STA. 20+00.00 CROSSLAND RD.
N 789482.8826
E 1282469.7490
(SEE SHEET 17 FOR PROFILE)
PROP. R.O.W.
PROP. R.O.W.
PROP. R.O.W.
PROP. R.O.W.
PROP. R.O.W.
PROP. R.O.W.
CUT
CUT
CUT
CUT
CUT
CUT
CUT
CUT
A
C
STA. 162+00.00 SEE SHEET NO. 8
STA. 175+00.00 SEE SHEET NO. 10
N 5° 10' 22" E
E 1282500
N 789000
E 1282500
N 789500
S 86° 55' 46" E
CS 162+92.31
ST 167+07.31
WTL-08
WTL-09
TEMP. CONST. ESMT.
TEMP. CONST. ESMT.
19.5'+/-
19.5'+/-
POT 25+00.00
N 789456.0998
E 1282969.0312
LIMIT OF CONST.
24+75.00
CP-S7
GPS 40-054-07
25
N 789500
E 1283000

LEGEND	WETLAND IMPACTS (WTL-08)
	AREA OF PERMANENT IMPACT = 0.019 AC.
	VOLUME OF PERMANENT IMPACT = 30 C.Y.
	AREA OF TEMPORARY IMPACT = 0.026 AC.
	VOLUME OF TEMPORARY IMPACT = 41 C.Y.

LEGEND	WETLAND IMPACTS (WTL-09)
	AREA OF PERMANENT IMPACT = 0.112 AC.
	VOLUME OF PERMANENT IMPACT = 181 C.Y.
	AREA OF TEMPORARY IMPACT = 0.088 AC.
	VOLUME OF TEMPORARY IMPACT = 142 C.Y.

SEALED BY

A. BRIAN LEE
REGISTERED ENGINEER
LICENSE NUMBER
102107
STATE OF TENNESSEE
02/10/2026

COORDINATES ARE NAD 83(2011), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00002 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988 WITH GEOID 12B MODEL.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PRESENT LAYOUT

STA.162+00 TO STA.175+00
SCALE: 1"=50'

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	9A
PIH	2025	NH-54(48)	9A
PS&E	2026	NH-54(48)	9A

REV. 01-25-24: REVISED TOE OF SLOPES AT INTERSECTION OF SR-54 AND CROSSLAND RD.

REV. 08-14-24: MOVED CROSSLAND RD, FLD. ENT. FROM RT. STA. 23+50 TO RT. STA. 24+50 AND MOVED LIMIT OF CONST. FROM STA. 23+74.94 TO STA. 24+74.74, UPDATED STA. FLAG FROM STA. 171+47.15 TO STA. 171+47.14, AND FROM STA. 23+75 TO STA. 24+75.

(13) JOE B. FRIDY AND WIFE, BEVERLY FRIDY AND WILLIAM G. FRIDY

(9) TIMOTHY DEE BRANNON AND, TONY LEE BRANNON

(11) DUKE VEAZEY AND WIFE, LUCRETIA P. VEAZEY

165 170 175

N 86° 54' 35" W 1670.52'

CP-S8 GPS 40-054-08

N 789500 E 1282000

E 1282000 N 789000

N 1° 30' 56" E 2510.00'

PRES. R.O.W.

POND

PROP. R.O.W. R=1700.00' L=693.52'

164+50.00 123.00'

167+00.00 105.00'

N 8° 25' 30" E 255.27'

CUT

STA. 171+22.00 S.R. 54 = STA. 20+00.00 CROSSLAND RD. N 789482.8826 E 1282469.7490 (SEE SHEET 17 FOR PROFILE)

N 3° 37' 28" E 370.14'

170+70.00 115.00'

N 86° 55' 16" W 199.05'

LIMIT OF CONST. 18+00.00

N 86° 55' 16" W 244.46'

18+00.00 24.95'

S 61° 33' 0" E 51.95'

18+46.95 47.20'

S 85° 59' 40" E 36.24'

S 86° 54' 35" E

N 86° 54' 57" W 490.19'

WTL-09

18+00.00 25.11'

N 70° 8' 57" E 51.04'

18+47.00 45.00'

N 86° 54' 57" W 200.91'

N 86° 13' 3" E 55.21'

171+70.00 100.00'

N 3° 42' 14" E 780.26'

STA. 162+00.00 SEE SHEET NO. 8A

STA. 175+00.00 SEE SHEET NO. 10A

N 5° 10' 22" E

170+97.07 0.00'

171+47.14 0.00'

E 1282500 N 789000

R=1880.00' L=617.18'

N 0° 37' 46" W 145.56'

162+97.28 119.83'

164+50.00 115.00'

N 3° 57' 6" E 625.52'

N 86° 55' 16" W 250.91'

170+80.00 105.00'

S 88° 33' 2" E 99.65'

N 86° 54' 57" W 249.08'

S 2° 41' 20" E 96.21'

171+80.00 105.00'

N 5° 50' 58" E 1270.09'

22+03.00 43.00'

N 72° 3' 35" E 50.35'

22+50.00 24.95'

WTL-08

22+03.00 47.00'

S 61° 54' 54" E 51.86'

22+50.00 25.07'

N 86° 54' 57" W 65.00'

23+15.00 25.05'

N 3° 4' 14" E 36.95'

23+15.00 62.00'

TEMP. CONST. ESMT.

S 86° 55' 46" E 50.00'

23+65.00 62.00'

N 86° 54' 57" W 50.00'

S 3° 4' 14" W 36.96'

23+65.00 25.04'

N 86° 54' 57" W 541.95'

N 86° 55' 16" W 175.00'

24+25.00 24.97'

S 3° 4' 14" W 45.03'

24+25.00 70.00'

S 86° 55' 46" E 50.00'

TEMP. CONST. ESMT.

N 86° 55' 16" W 50.00'

N 3° 4' 14" E 45.02'

24+75.00 70.00'

24+75.00 24.98'

LIMIT OF CONST. 24+75.00

CP-S7 GPS 40-054-07

N 789500 E 1283000

25

LEGEND	WETLAND IMPACTS (WTL-08)
	AREA OF PERMANENT IMPACT = 0.019 AC.
	VOLUME OF PERMANENT IMPACT = 30 C.Y.
	AREA OF TEMPORARY IMPACT = 0.026 AC.
	VOLUME OF TEMPORARY IMPACT = 41 C.Y.

LEGEND	WETLAND IMPACTS (WTL-09)
	AREA OF PERMANENT IMPACT = 0.112 AC.
	VOLUME OF PERMANENT IMPACT = 181 C.Y.
	AREA OF TEMPORARY IMPACT = 0.088 AC.
	VOLUME OF TEMPORARY IMPACT = 142 C.Y.

SEALED BY

BRIAN LEE SUMMERS REGISTERED ENGINEER AGRICULTURE ALL 107296 STATE OF TENNESSEE

02/09/2026

COORDINATES ARE NAD 83(2011), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00002 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988 WITH GEOID 12B MODEL.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

RIGHT-OF-WAY DETAILS

STA.162+00 TO STA.175+00
SCALE: 1"=50'

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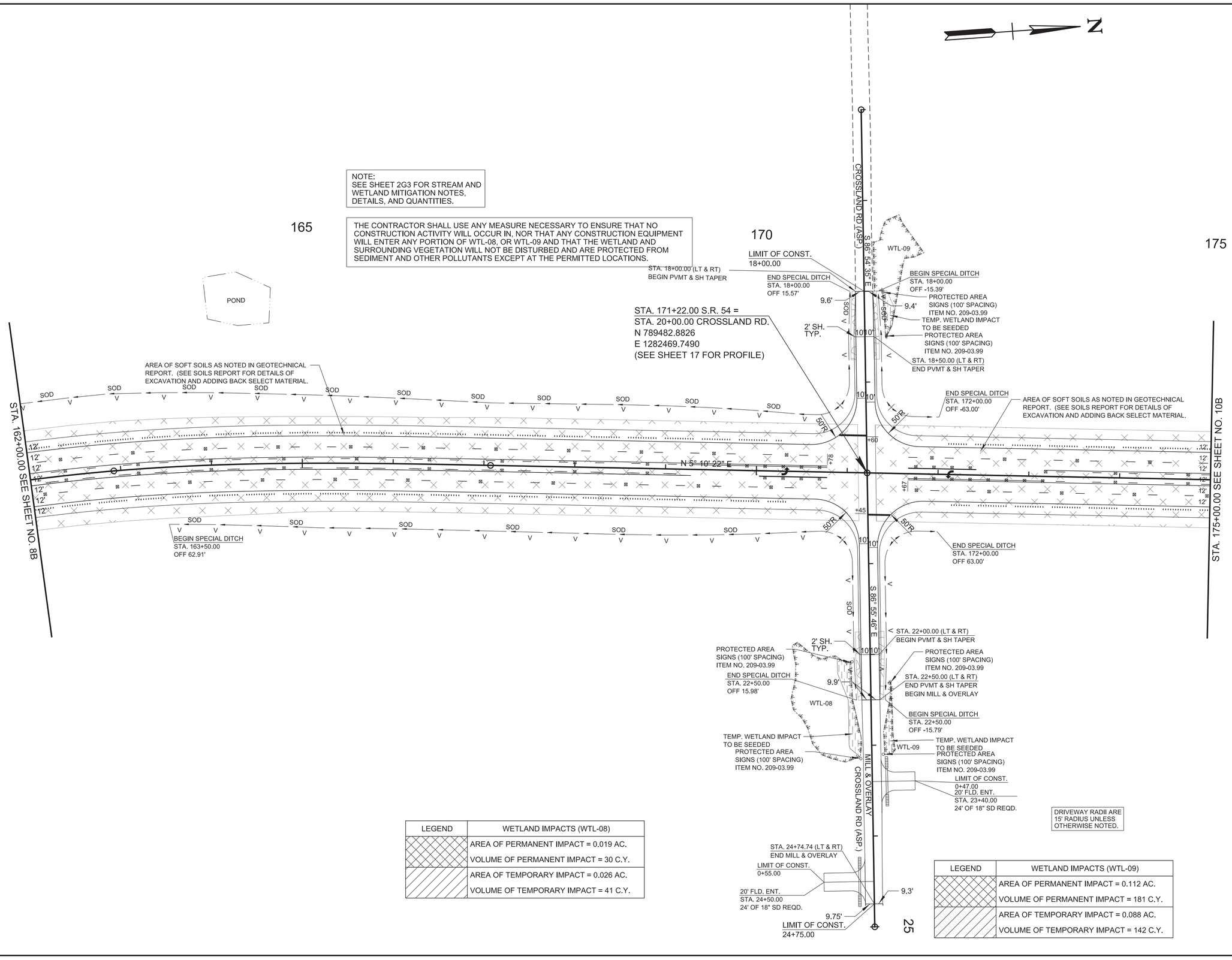
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	9B
PIH	2025	NH-54(48)	9B
PS&E	2026	NH-54(48)	9B

REV. 01-25-24: REVISED ROADWAY DITCHES AT INTERSECTION OF SR-54 AND CROSSLAND RD.

REV. 08-14-24: MOVED CROSSLAND RD. FLD. ENT. RT. STA. 23+50 TO RT. STA. 24+50 AND MOVED LIMIT OF CONST. FROM STA. 23+74.94 TO STA. 24+74.74.

NOTE:
SEE SHEET 2G3 FOR STREAM AND WETLAND MITIGATION NOTES, DETAILS, AND QUANTITIES.

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 WTL-08, OR WTL-09 AND THAT THE WETLAND AND SURROUNDING VEGETATION WILL NOT BE DISTURBED AND ARE PROTECTED FROM SEDIMENT AND OTHER POLLUTANTS EXCEPT AT THE PERMITTED LOCATIONS.



LEGEND	WETLAND IMPACTS (WTL-08)
	AREA OF PERMANENT IMPACT = 0.019 AC.
	VOLUME OF PERMANENT IMPACT = 30 C.Y.
	AREA OF TEMPORARY IMPACT = 0.026 AC.
	VOLUME OF TEMPORARY IMPACT = 41 C.Y.

LEGEND	WETLAND IMPACTS (WTL-09)
	AREA OF PERMANENT IMPACT = 0.112 AC.
	VOLUME OF PERMANENT IMPACT = 181 C.Y.
	AREA OF TEMPORARY IMPACT = 0.088 AC.
	VOLUME OF TEMPORARY IMPACT = 142 C.Y.

DRIVEWAY RADII ARE 15' RADIUS UNLESS OTHERWISE NOTED.

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COORDINATES ARE NAD 83(2011), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00002 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988 WITH GEOID 12B MODEL.

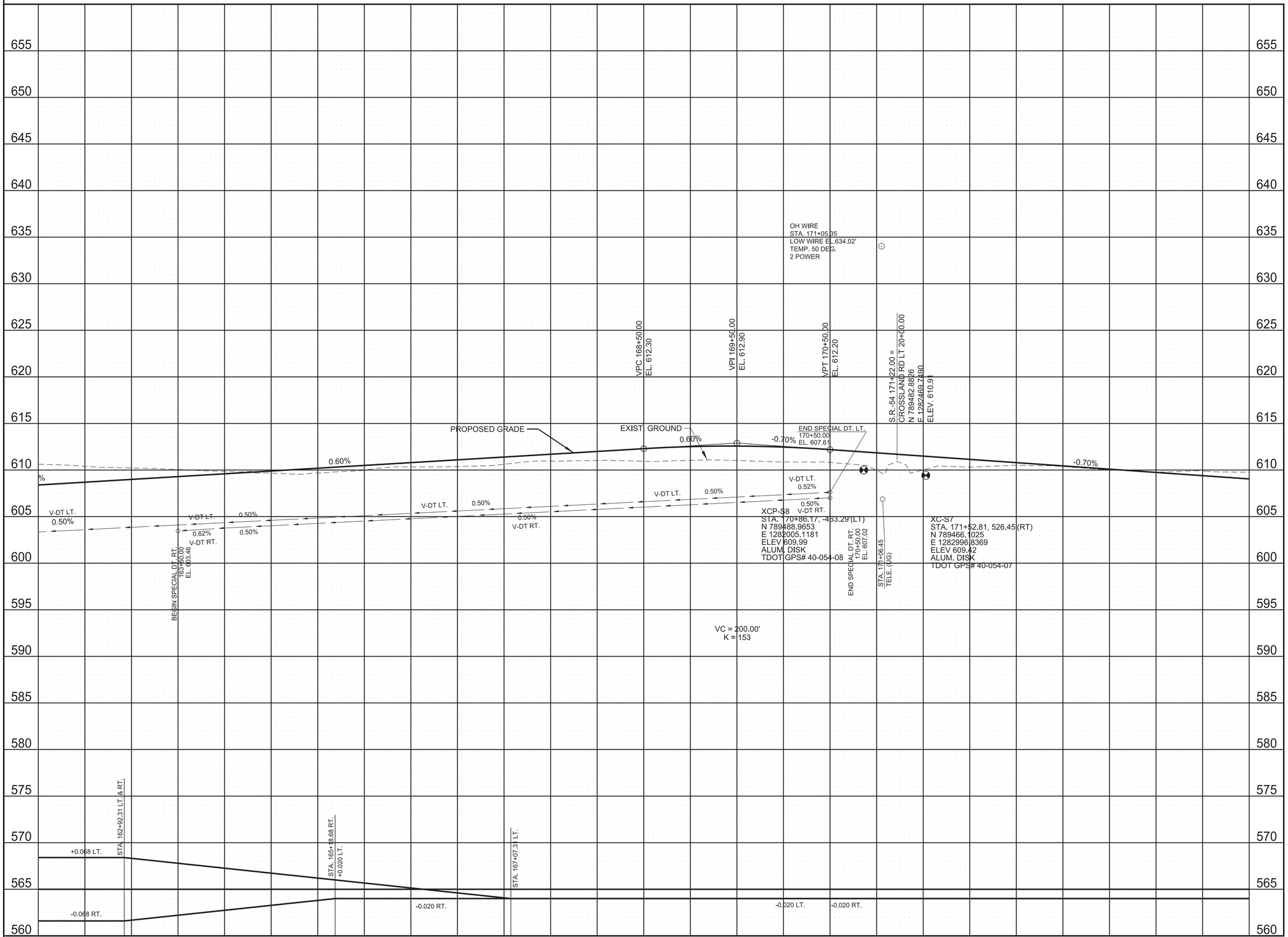
STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PROPOSED LAYOUT

STA.162+00 TO STA.175+00
SCALE: 1"=50'

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	9C
PIH	2025	NH-54(48)	9C
PS&E	2026	NH-54(48)	9C



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02/9/2026

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PROPOSED PROFILE

STA.162+00 TO STA.175+00

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

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	10
PIH	2025	NH-54(48)	10
PS&E	2026	NH-54(48)	10

E 1282000
N 790000

BLOCK BARN

SHED

(11)
DUKE VEAZEY AND WIFE,
LUCRETIA P. VEAZEY

N

175 180 185

CULTIVATED

PROP. R.O.W.

A

CUT

E 1282500
N 790500

E 1282500
N 790000

N 5° 10' 22" E

E 1282500
N 791000

WWC-09/EPH-09
USACE NON-JURISDICTIONAL

STA. 175+00.00 SEE SHEET NO. 9

STA. 188+00.00 SEE SHEET NO. 11

CULTIVATED

(11)
DUKE VEAZEY AND WIFE,
LUCRETIA P. VEAZEY

E 1283000
N 790000

E 1283000
N 790500

E 1283000
N 791000

℄

(12)
TONY L. BRANNON AND WIFE,
LISA W. BRANNON

SEALED BY

A. BRIAN LEE
REGISTERED ENGINEER
LICENSE NUMBER
1 0 7 2 9 6
STATE OF TENNESSEE

02/10/2026

COORDINATES ARE NAD 83(2011), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00002 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988 WITH GEOID 12B MODEL.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

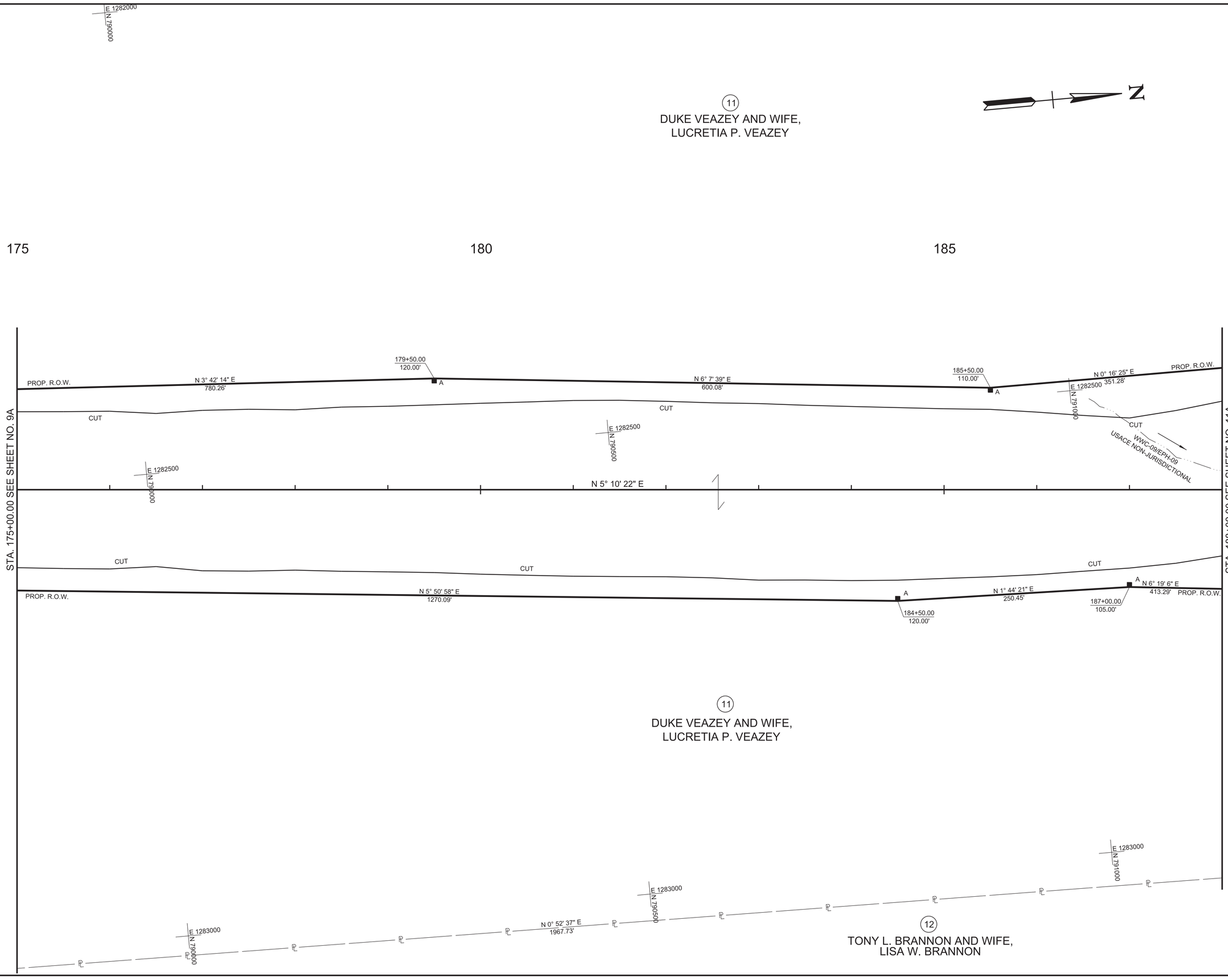
PRESENT LAYOUT

STA.175+00 TO STA.188+00
SCALE: 1"=50'

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	10A
PIH	2025	NH-54(48)	10A
PS&E	2026	NH-54(48)	10A

REV. 08-14-24: CHANGED "^" TO "°" FOR BEARING RT. STA. 182+50.



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J. BRIAN LEE
REGISTERED ENGINEER
AGRICULTURE
COMMERCE
No. 107299
STATE OF TENNESSEE

02/10/2026

COORDINATES ARE NAD 83(2011), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00002 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988 WITH GEOID 12B MODEL.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

RIGHT-OF-WAY DETAILS

STA.175+00 TO STA.188+00
SCALE: 1"=50'

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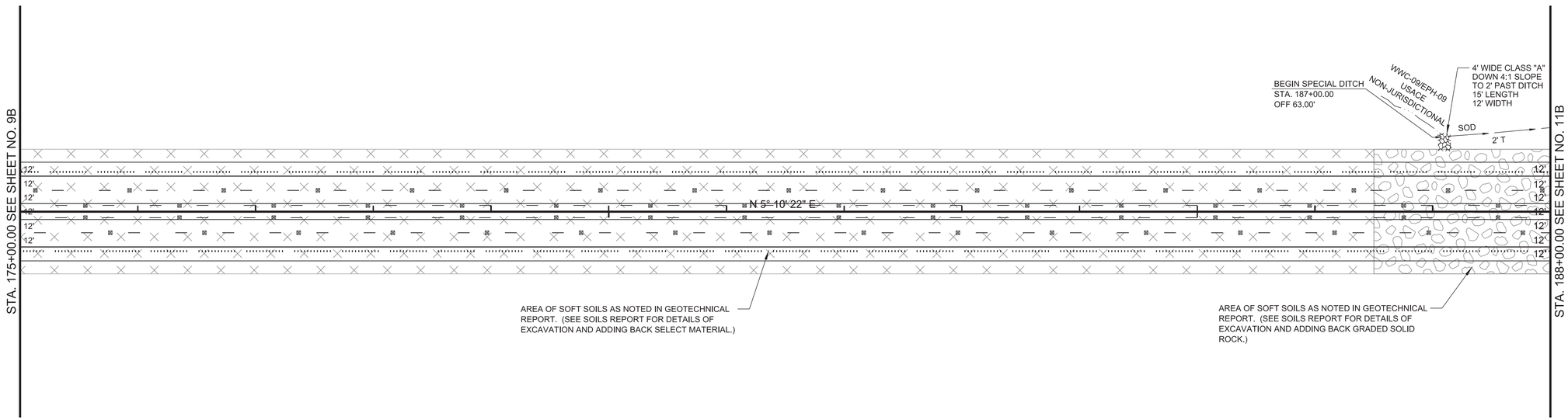
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	10B
PIH	2025	NH-54(48)	10B
PS&E	2026	NH-54(48)	10B



175

180

185



SEALED BY



COORDINATES ARE NAD 83(2011), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00002 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988 WITH GEOID 12B MODEL.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PROPOSED LAYOUT

STA.175+00 TO STA.188+00
SCALE: 1"=50'

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	10C
PIH	2025	NH-54(48)	10C
PS&E	2026	NH-54(48)	10C

650 645 640 635 630 625 620 615 610 605 600 595 590 585 580 575 570 565 560 555

EXIST. GROUND

PROPOSED GRADE

-0.70%

-1.62%

-2.24%

2 F.B. DT. RT.

BEGIN SPECIAL DT. RT.
188+00.00
EL. 594.37

BEGIN SPECIAL DT. LT.
184+00.00
EL. 596.07

-0.020 LT.

-0.020 RT.

175+00 176+00 177+00 178+00 179+00 180+00 181+00 182+00 183+00 184+00 185+00 186+00 187+00 188+00

SEALED BY

J. BRIAN LEE
REGISTERED ENGINEER
AGRICULTURE
NUMBER
1 0 7 2 9 0
STATE OF TENNESSEE

02/10/2026

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PROPOSED PROFILE

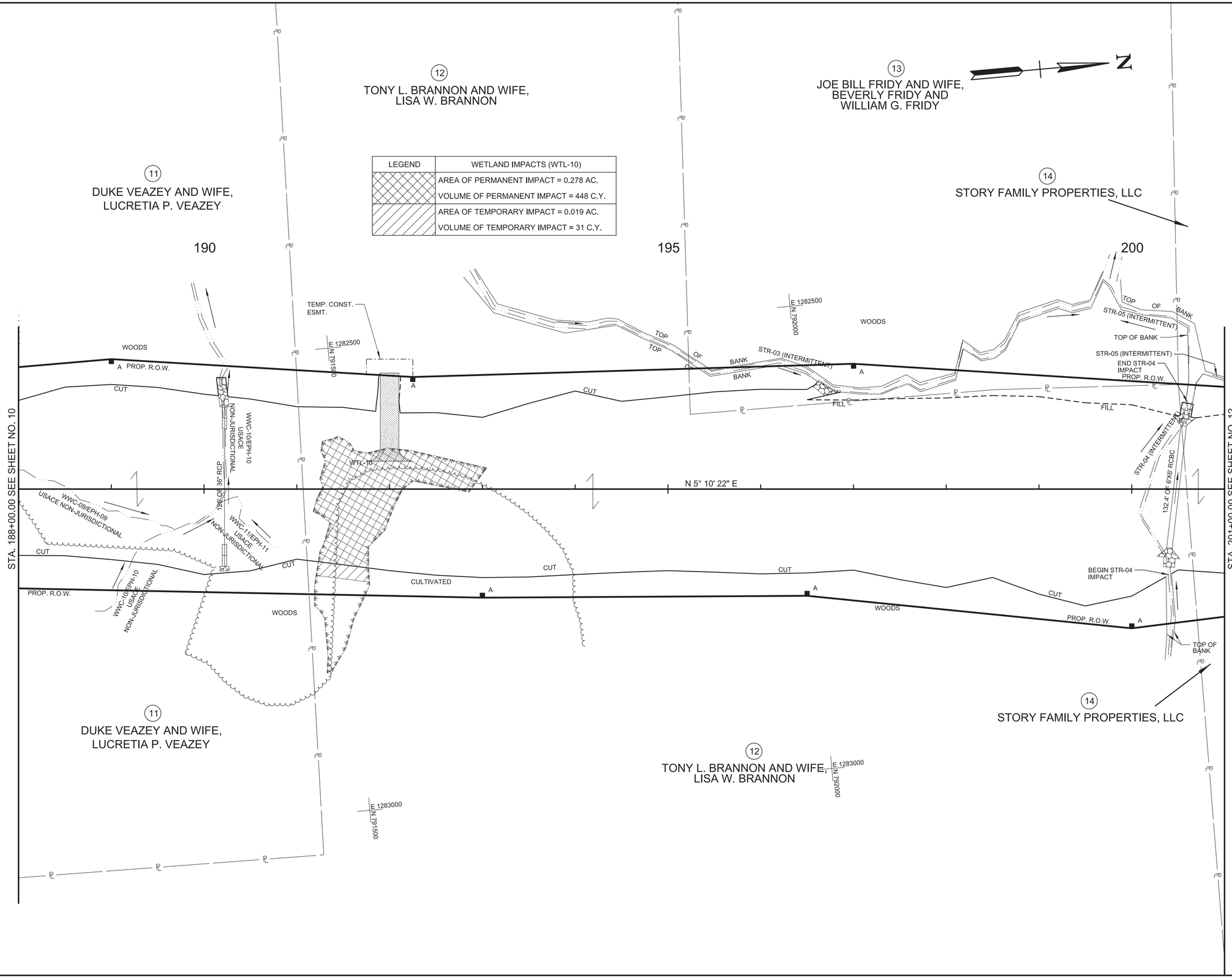
STA.175+00 TO STA.188+00

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

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	11
PIH	2025	NH-54(48)	11
PS&E	2026	NH-54(48)	11

LEGEND	WETLAND IMPACTS (WTL-10)
	AREA OF PERMANENT IMPACT = 0.278 AC.
	VOLUME OF PERMANENT IMPACT = 448 C.Y.
	AREA OF TEMPORARY IMPACT = 0.019 AC.
	VOLUME OF TEMPORARY IMPACT = 31 C.Y.



(11) DUKE VEAZEY AND WIFE, LUCRETIA P. VEAZEY
(12) TONY L. BRANNON AND WIFE, LISA W. BRANNON
(14) STORY FAMILY PROPERTIES, LLC

SEALED BY

J. BRIAN LEE — REGISTERED ENGINEER — LICENSED — NUMBER — 107229 — STATE OF TENNESSEE

02/10/2026

COORDINATES ARE NAD 83(2011), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00002 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988 WITH GEOID 12B MODEL.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PRESENT LAYOUT

STA.188+00 TO STA.201+00
SCALE: 1"=50'

2/9/2026 2:36:49 PM
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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	11A
PIH	2025	NH-54(48)	11A
PS&E	2026	NH-54(48)	11A

REV. 08-14-24: UPDATED STA. AND OFFSET FLAGS FROM STA. 191+06.81 TO STA. 191+06.80, FROM STA. 198+52.67 TO STA. 198+52.66, FROM STA. 200+50.23 TO STA. 200+50.22, AND FROM STA. 200+59.29 TO STA. 200+59.28, AND UPDATED DISTANCE LT. STA. 192+00 FROM 50.08' TO 50.09'.

LEGEND	WETLAND IMPACTS (WTL-10)
	AREA OF PERMANENT IMPACT = 0.278 AC.
	VOLUME OF PERMANENT IMPACT = 448 C.Y.
	AREA OF TEMPORARY IMPACT = 0.019 AC.
	VOLUME OF TEMPORARY IMPACT = 31 C.Y.

(11) DUKE VEAZEY AND WIFE, LUCRETIA P. VEAZEY

(12) TONY L. BRANNON AND WIFE, LISA W. BRANNON

(13) JOE BILL FRIDY AND WIFE, BEVERLY FRIDY AND WILLIAM G. FRIDY

(14) STORY FAMILY PROPERTIES, LLC

190 195 200

STA. 188+00.00 SEE SHEET NO. 10A

STA. 201+00.00 SEE SHEET NO. 12A

N 88° 3' 49" W 538.73'

N 86° 32' 20" W 904.23'

N 85° 57' 34" W 608.94'

189+00.00 140.00'

N 0° 16' 25" E 351.28'

A PROP. R.O.W.

N 8° 33' 45" E 199.91'

CUT

NON-JURISDICTIONAL USACE WWC-10/EPH-10

N 8° 33' 45" E 75.58'

190+99.56 128.18'

TEMP. CONST. ESMT. 191+75.00 140.00'

E 1282500 N 791500

N 5° 10' 22" E 50.00'

N 8° 33' 45" E 50.09'

192+25.00 140.00'

S 84° 49' 38" E 19.25'

N 84° 49' 38" W 16.29'

A 192+25.00 120.75'

191+75.00 123.71'

N 88° 3' 49" W 128.38'

WTL-10

N 3° 27' 16" E 297.77'

CUT

195+22.64 129.68'

E 1282500 N 792000

STR-03 (INTERMITTENT)

N 3° 27' 16" E 177.44'

197+00.00 135.00'

A

N 86° 32' 20" W 49.23'

N 0° 32' 40" E 329.63'

FILL

195+24.11 80.47'

N 8° 44' 0" E 350.89'

198+52.66 107.07'

STR-05 (INTERMITTENT)

N 8° 44' 0" E 99.98'

STR-05 (INTERMITTENT)

END STR-04 IMPACT PROP. R.O.W.

N 3° 32' 35" E 197.64'

200+50.21 113.21'

200+50.22 112.69'

FILL

N 85° 57' 34" W 0.52'

STR-04 (INTERMITTENT)

N 89° 25' 24" W 113.05'

200+59.28 0.00'

N 89° 25' 24" W 141.53'

WWC-09/EPH-09 USACE NON-JURISDICTIONAL

WWC-11/EPH-11 USACE NON-JURISDICTIONAL

191+06.80 0.00'

N 88° 3' 49" W 113.45'

CUT

WWC-10/EPH-10 USACE NON-JURISDICTIONAL

PROP. R.O.W.

N 6° 19' 6" E 413.29'

191+13.21 113.26'

N 6° 19' 6" E 186.83'

A 193+00.00 117.00'

CUT

N 4° 50' 43" E 350.01'

A 196+50.00 115.00'

CUT

N 10° 53' 0" E 351.75'

BEGIN STR-04 IMPACT

200+70.63 141.17'

PROP. R.O.W.

A N 1° 57' 8" W 71.18'

200+00.00 150.00'

N 1° 57' 8" W 130.38'

N 89° 25' 24" W 436.05'

N 88° 3' 49" W 281.38'

E 1283000 N 791500

N 0° 52' 37" E 1967.73'

(11) DUKE VEAZEY AND WIFE, LUCRETIA P. VEAZEY

(12) TONY L. BRANNON AND WIFE, LISA W. BRANNON

E 1283000 N 792000

(14) STORY FAMILY PROPERTIES, LLC

SEALED BY

BRIAN LEE — REGISTERED ENGINEER — AGRICULTURE — NUMBER 107290 — STATE OF TENNESSEE

02/10/2026

COORDINATES ARE NAD 83(2011), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00002 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988 WITH GEOID 12B MODEL.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

RIGHT-OF-WAY DETAILS

STA.188+00 TO STA.201+00
SCALE: 1"=50'

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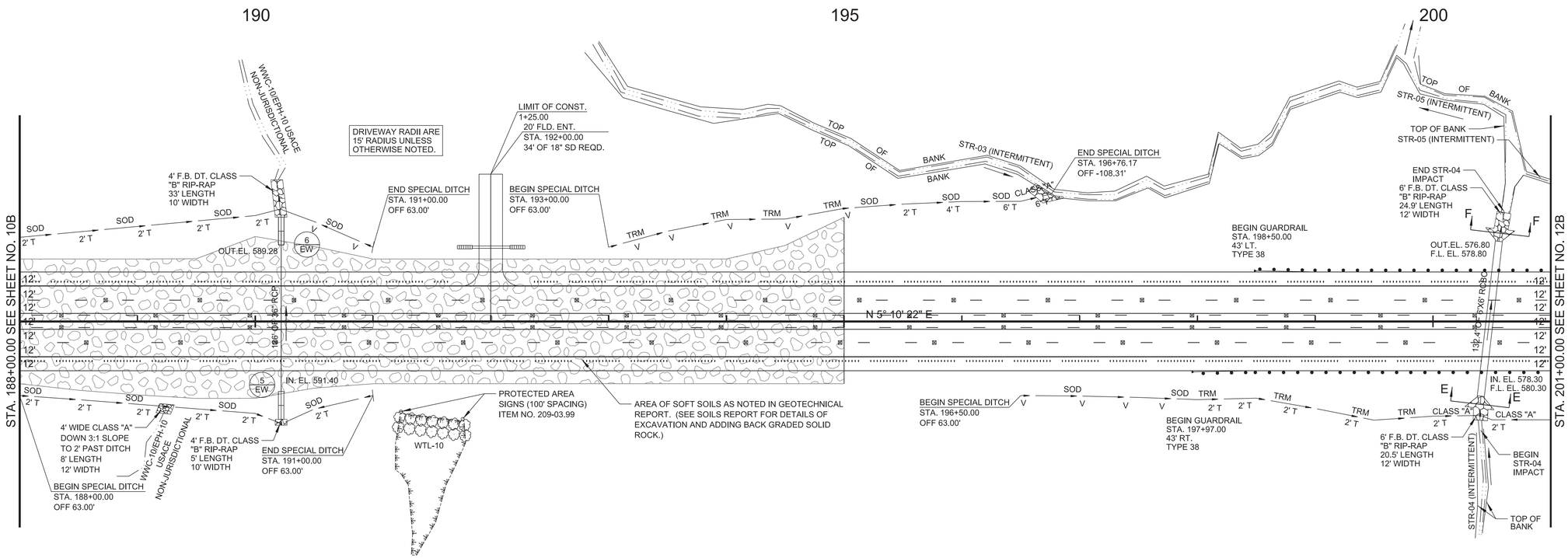
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	11B
PIH	2025	NH-54(48)	11B
PS&E	2026	NH-54(48)	11B

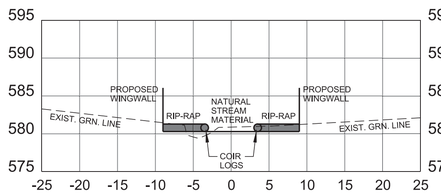
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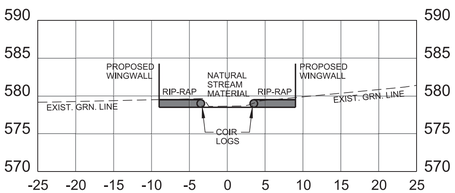
LEGEND	WETLAND IMPACTS (WTL-10)
	AREA OF PERMANENT IMPACT = 0.278 AC.
	VOLUME OF PERMANENT IMPACT = 448 C.Y.
	AREA OF TEMPORARY IMPACT = 0.019 AC.
	VOLUME OF TEMPORARY IMPACT = 31 C.Y.

NOTE:
SEE SHEET 2G3 FOR STREAM AND WETLAND MITIGATION NOTES, DETAILS, AND QUANTITIES.

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-3, STR-4, STR-5, OR WTL-10 AND THAT THE STREAM AND SURROUNDING VEGETATION WILL NOT BE DISTURBED AND ARE PROTECTED FROM SEDIMENT AND OTHER POLLUTANTS EXCEPT AT THE PERMITTED LOCATIONS.







SEALED BY



COORDINATES ARE NAD 83(2011), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00002 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988 WITH GEOID 12B MODEL.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PROPOSED LAYOUT

STA.188+00 TO STA.201+00
SCALE: 1"=50'

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	11C
PIH	2025	NH-54(48)	11C
PS&E	2026	NH-54(48)	11C

PIPE CULVERT
STATION: 190+22.00
STRUCTURE: 126' OF 36" RCP

SKEW	90° LT	DEG.
DRAINAGE AREA	19.40	AC.
DESIGN DISCHARGE (Q50)	27.70	CFS
DESIGN DISCHARGE (Q100)	30.30	CFS
OVERTOPPING ELEV.	598.39	ELEV.
ALLOWABLE HEADWATER ELEV.	595.95	ELEV.
Q50 HEADWATER ELEV.	593.45	ELEV.
Q100 HEADWATER ELEV.	593.60	ELEV.
VELOCITY (Q50)	10.03	FT/S
VELOCITY (Q100)	10.28	FT/S

ENDWALLS REQUIRED:
TYPE "U" LT. & RT.
STANDARD DRAWING NOS.:
D-PB-1 & D-PE-36 (A&B)

QUANTITIES:

CLASS "A" CONCRETE	N/A	C.Y.
STEEL BAR REINFORCING	N/A	LB.
BEDDING MATERIAL	29.6	C.Y.

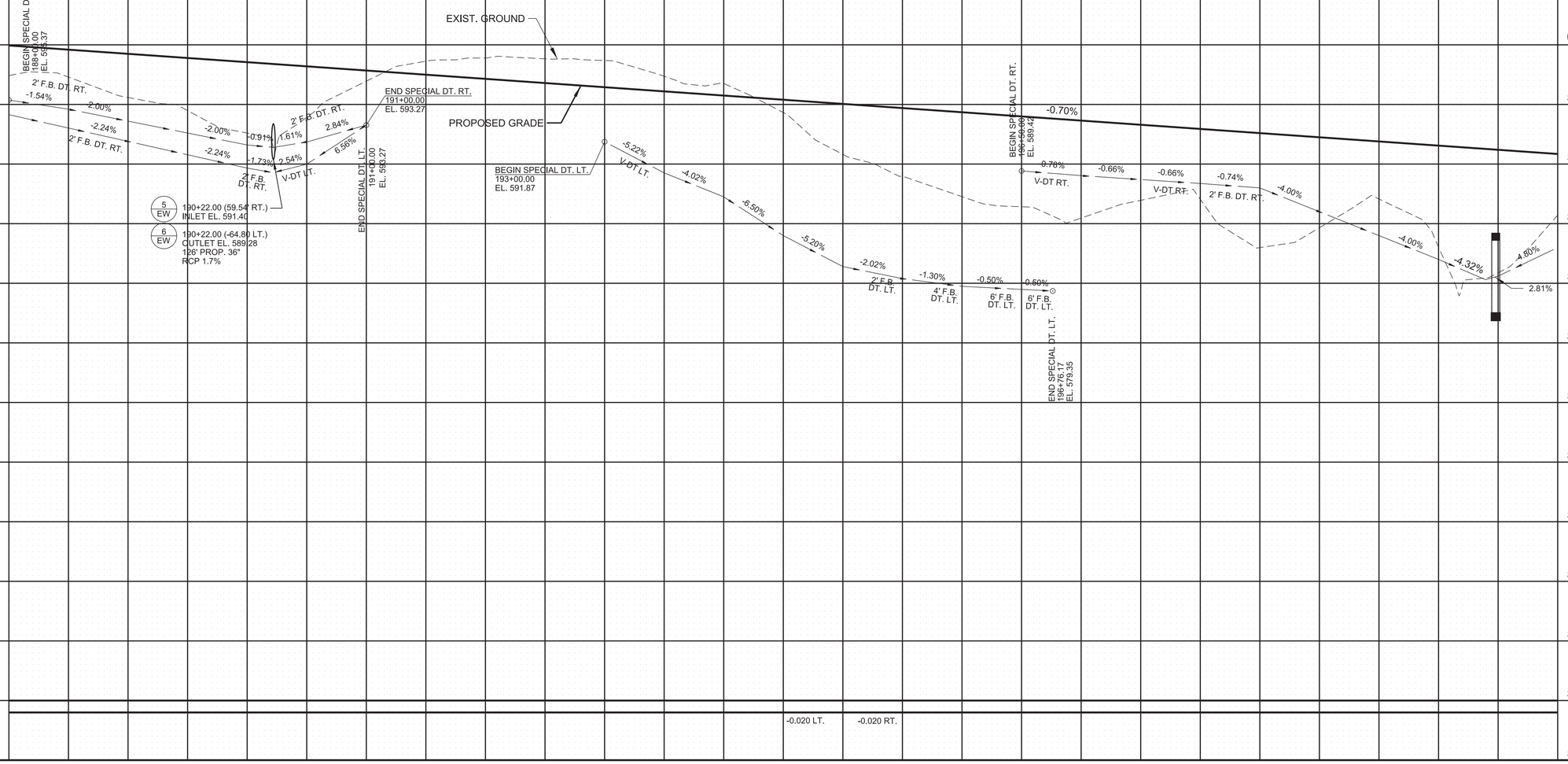
ENDWALL ITEM NOS.: 611-07.65

BOX CULVERT
STATION: 200+48.00
STRUCTURE: 132.4' OF 6'X6' RCBC (2' EMBEDDED)

SKEW	83° 21' 17" LT	DEG.
DRAINAGE AREA	36.90	AC.
DESIGN DISCHARGE (Q50)	55.10	CFS
DESIGN DISCHARGE (Q100)	59.50	CFS
OVERTOPPING ELEV.	591.21	ELEV.
ALLOWABLE HEADWATER ELEV.	588.22	ELEV.
Q50 HEADWATER ELEV.	582.66	ELEV.
Q100 HEADWATER ELEV.	582.78	ELEV.
VELOCITY (Q50)	4.37	FT/S
VELOCITY (Q100)	4.54	FT/S
INLET ELEVATION	578.30	ELEV.
OUTLET ELEVATION	576.80	ELEV.

STANDARD DRAWING NOS.:
STD-17-51
QUANTITIES:

CLASS "A" CONCRETE	115.0	C.Y.
STEEL BAR REINFORCING	22835	LB.
BACKFILL	1163.00	TONS
FOUNDATION FILL MATERIAL	56.0	C.Y.



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02/07/2026

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PROPOSED PROFILE

STA.188+00 TO STA.201+00

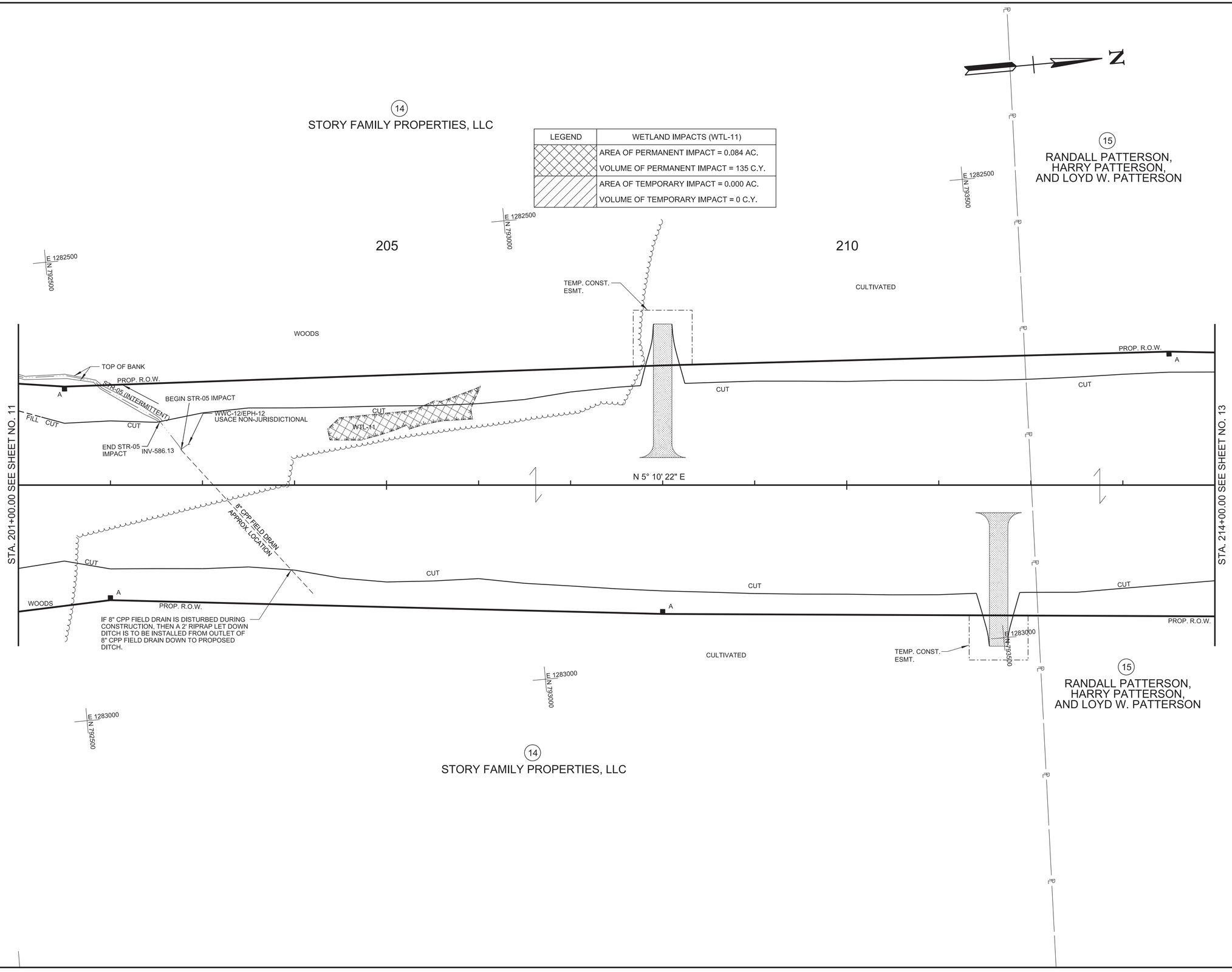
SCALE: 1"=50' HORIZ.
1"=5' VERT.

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	12
PIH	2025	NH-54(48)	12
PS&E	2026	NH-54(48)	12

REV. 08-14-24: MOVED FLD. ENT'S AND UPDATED CONST. ESMT'S FOR FLD. ENT. LT. STA. 210+00 TO LT. STA. 208+00 AND RT. STA. 210+00 TO RT. STA. 211+65, REVISED 8" CPP FIELD DRAIN LOCATION, ADDED NOTE, AND REMOVED R.O.W. MARKER LT. STA. 208+00.

REV. 12-18-25: UPDATED OWNER NAME FOR TRACT 15.



SEALED BY



COORDINATES ARE NAD 83(2011), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00002 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988 WITH GEOID 12B MODEL.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PRESENT LAYOUT

STA.201+00 TO STA.214+00
SCALE: 1"=50'

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	12A
PIH	2025	NH-54(48)	12A
PS&E	2026	NH-54(48)	12A

REV. 08-14-24: MOVED FLD. ENT'S AND UPDATED CONST. ESMT'S FOR FLD. ENT. LT. STA. 210+00 TO LT. STA. 208+00 AND RT. STA. 210+00 TO RT. STA. 211+65, REMOVED R.O.W. MARKER LT. STA. 208+00, UPDATED TEMP. CONST. ESMT'S FOR TRACT 14, AND UPDATED DISTANCE LT. STA. 213+75 FROM 625.10' TO 622.61'.

REV. 12-18-25: UPDATED OWNER NAME FOR TRACT 15.

(14)
STORY FAMILY PROPERTIES, LLC

LEGEND	WETLAND IMPACTS (WTL-11)
	AREA OF PERMANENT IMPACT = 0.084 AC.
	VOLUME OF PERMANENT IMPACT = 135 C.Y.
	AREA OF TEMPORARY IMPACT = 0.000 AC.
	VOLUME OF TEMPORARY IMPACT = 0 C.Y.

(15)
RANDALL PATTERSON,
HARRY PATTERSON,
AND LOYD W. PATTERSON

205

210

E 1282500
N 793000

E 1282500
N 792500

E 1282500
N 793500

N

N 87° 45' 34" W
653.05'

TEMP. CONST. ESMT.
207+68.00
190.00'
N 5° 10' 22" E
64.00'
208+32.00
190.00'
N 84° 49' 38" W
61.13'
S 84° 49' 38" E
59.13'
208+00.00
130.00'
207+68.00
128.87'
208+32.00
130.87'
N 3° 8' 46" E
32.02'
N 3° 36' 38" E
32.01'
N 3° 8' 46" E
618.39'
N 3° 36' 38" E
361.49'
211+93.36
140.73'
213+50.00
145.00'
N 6° 14' 1" E
622.61'
N 3° 36' 38" E
156.70'
PROP. R.O.W.
A
N 8° 44' 0" E
99.98'
A
201+50.00
107.00'
PROP. R.O.W.
STR-05 (INTERMITTENT)
BEGIN STR-05 IMPACT
WWC-12/EPH-12
USACE NON-JURISDICTIONAL
FILL
CUT
CUT
END STR-05
IMPACT
CUT
WTL-11
CUT
CUT

STA. 201+00.00 SEE SHEET NO. 11A

N 5° 10' 22" E

STA. 214+00.00 SEE SHEET NO. 13A

N 87° 45' 34" W
140.91'
212+00.57
0.00'
N 87° 45' 34" W
141.96'
211+97.00
141.73'
CUT
N 5° 25' 19" E
64.00'
211+33.00
141.45'
N 5° 25' 19" E
10.83'
N 5° 25' 19" E
742.17'
PROP. R.O.W.
212+07.83
141.77'
S 84° 49' 38" E
48.55'
E 1283000
N 793500
N 84° 49' 38" W
48.27'
TEMP. CONST. ESMT.
211+33.00
190.00'
N 5° 10' 22" E
64.00'
211+97.00
190.00'
N 87° 45' 34" W
805.98'
CUT
A
N 1° 57' 8" W
130.38'
202+00.00
125.00'
PROP. R.O.W.
N 6° 36' 17" E
600.18'
A
208+00.00
140.00'
N 5° 25' 19" E
333.01'

E 1283000
N 793000

E 1283000
N 792500

(14)
STORY FAMILY PROPERTIES, LLC

(15)
RANDALL PATTERSON,
HARRY PATTERSON,
AND LOYD W. PATTERSON

SEALED BY

J. BRIAN LEE
REGISTERED ENGINEER
AGRICULTURE
NUMBER
107299
STATE OF TENNESSEE

02/10/2026

COORDINATES ARE NAD 83(2011), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00002 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988 WITH GEOID 12B MODEL.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

RIGHT-OF-WAY DETAILS

STA.201+00 TO STA.214+00
SCALE: 1"=50'

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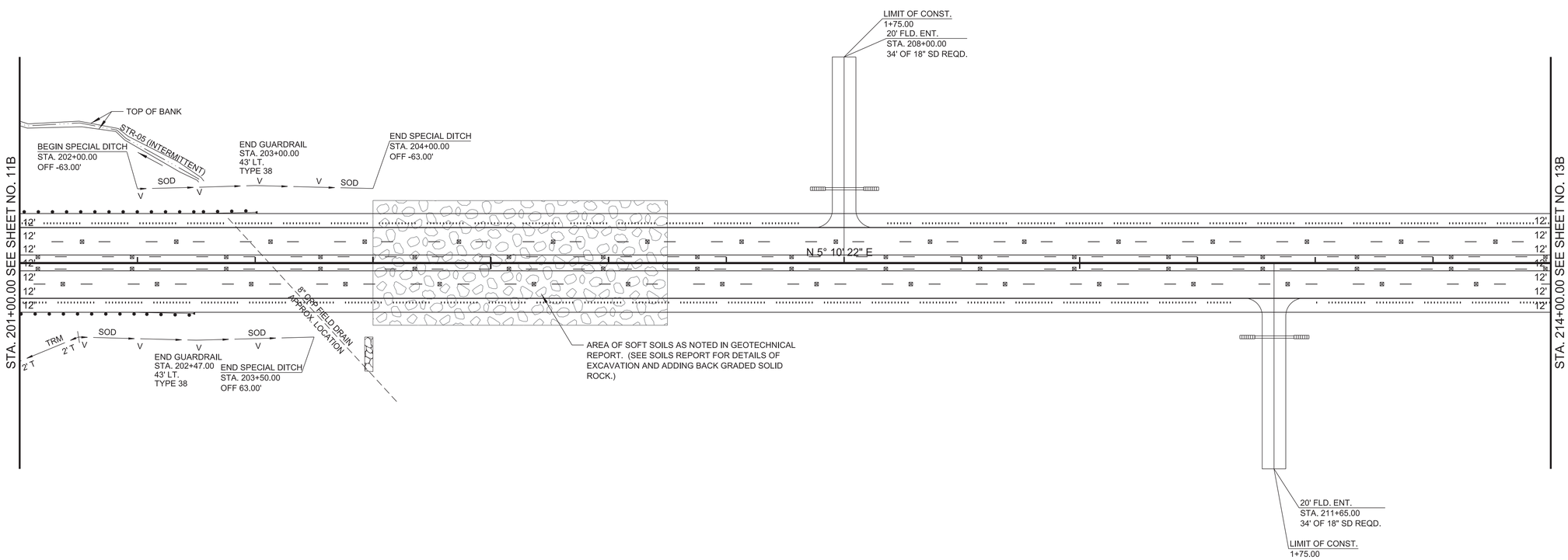
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	12B
PIH	2025	NH-54(48)	12B
PS&E	2026	NH-54(48)	12B

REV. 08-14-24: MOVED FLD. ENT'S LT. STA. 210+00 TO LT. STA. 208+00 AND RT. STA. 210+00 TO RT. STA. 211+65 AND ADDED 8" CPP FIELD DRAIN AND NOTE.

NOTE:
SEE SHEET 2G3 FOR STREAM AND WETLAND MITIGATION NOTES, DETAILS, AND QUANTITIES.

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-5 AND THAT THE STREAM AND SURROUNDING VEGETATION WILL NOT BE DISTURBED AND ARE PROTECTED FROM SEDIMENT AND OTHER POLLUTANTS EXCEPT AT THE PERMITTED LOCATIONS.

LEGEND	WETLAND IMPACTS (WTL-11)
	AREA OF PERMANENT IMPACT = 0.084 AC. VOLUME OF PERMANENT IMPACT = 135 C.Y.
	AREA OF TEMPORARY IMPACT = 0.000 AC. VOLUME OF TEMPORARY IMPACT = 0 C.Y.



DRIVEWAY RADII ARE 15' RADIUS UNLESS OTHERWISE NOTED.

SEALED BY

J. BRIAN LEE
REGISTERED ENGINEER
LICENSE NO. 107299
STATE OF TENNESSEE
02/09/2026

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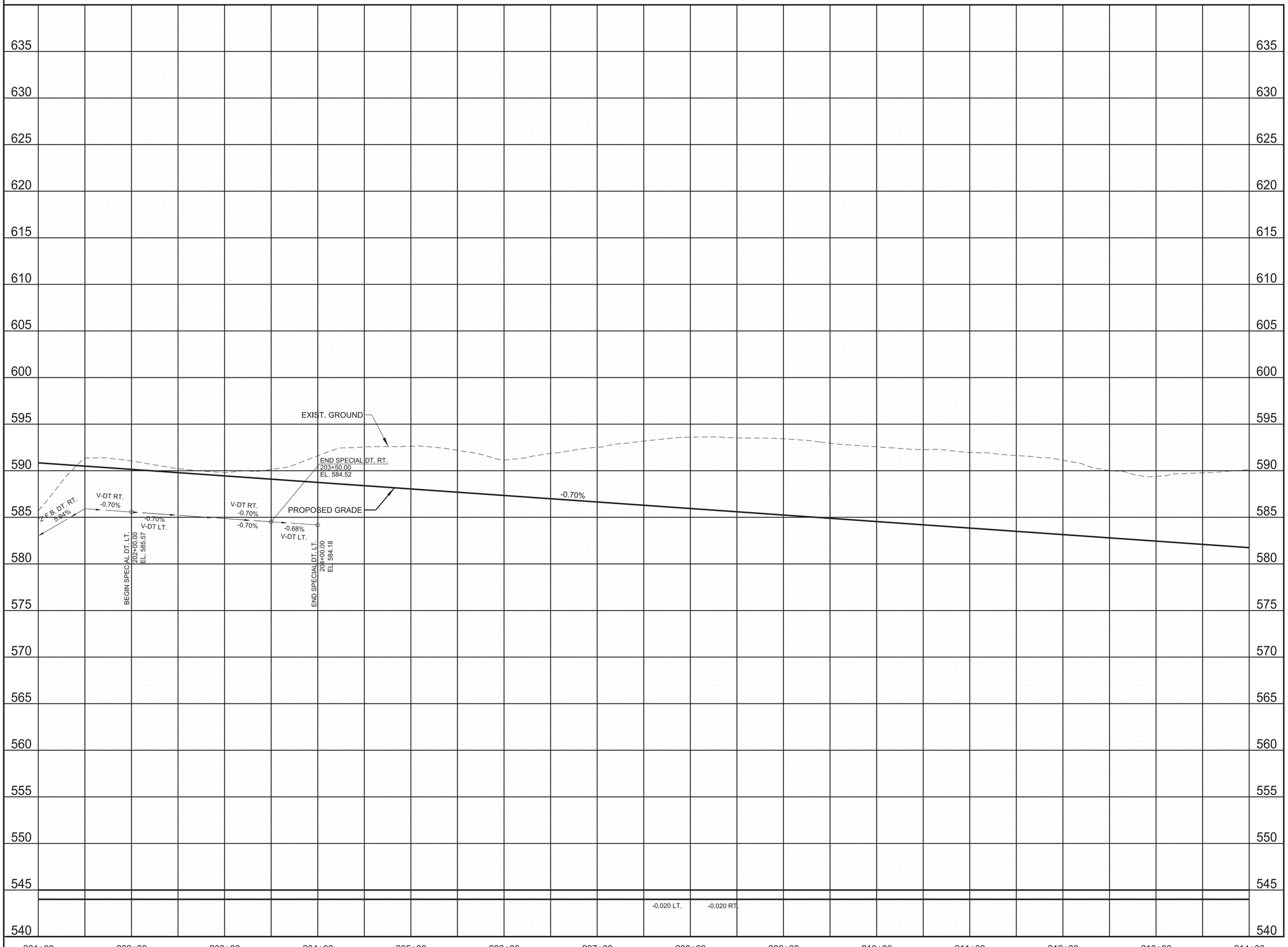
STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PROPOSED LAYOUT

STA.201+00 TO STA.214+00
SCALE: 1"=50'

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	12C
PIH	2025	NH-54(48)	12C
PS&E	2026	NH-54(48)	12C



SEALED BY



02/10/2026

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PROPOSED PROFILE

STA.201+00 TO STA.214+00

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

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	13
PIH	2025	NH-54(48)	13
PS&E	2026	NH-54(48)	13

REV. 12-18-25: UPDATED OWNER NAME FOR TRACT 15.

E 1282500
N 794000

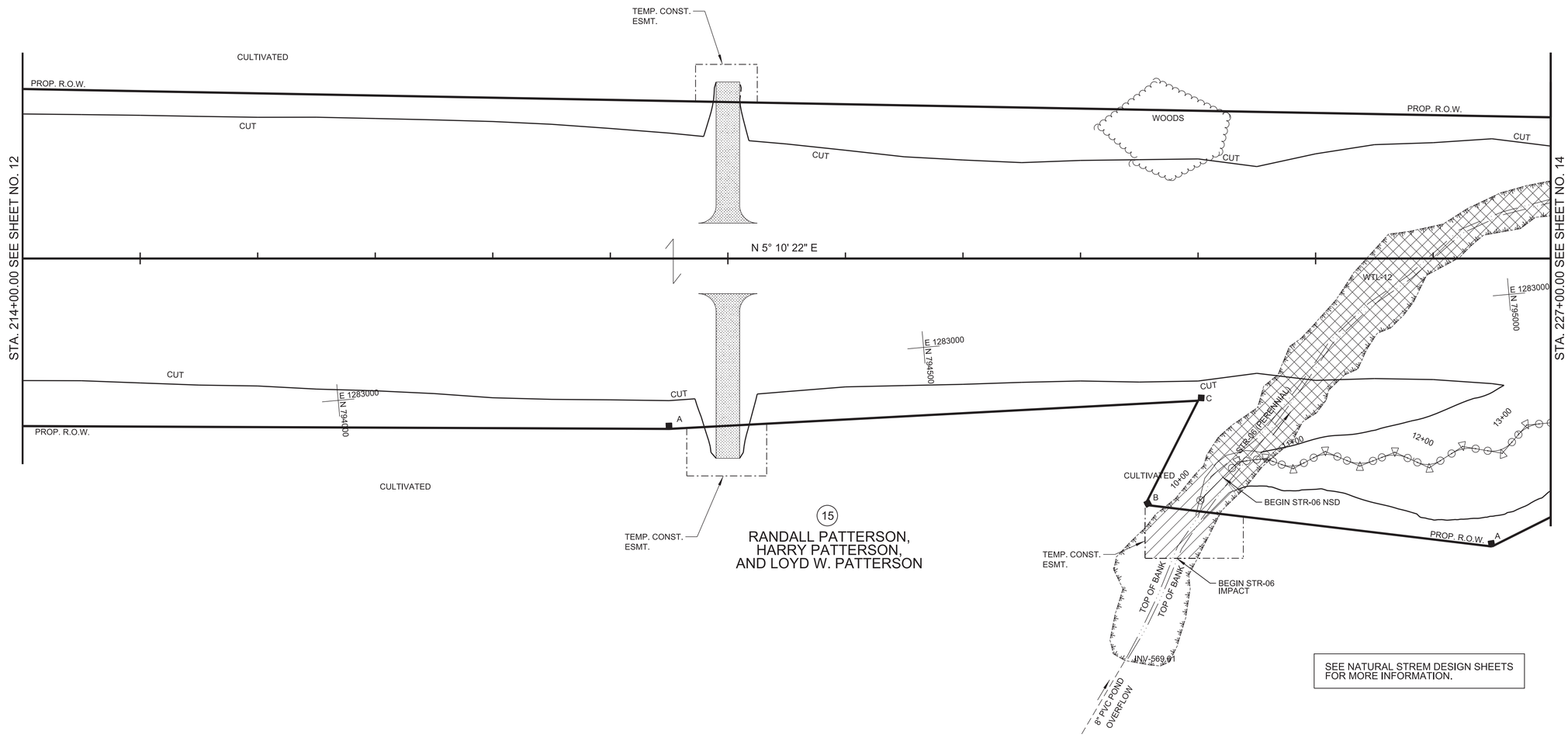
E 1282500
N 794500

E 1282500
N 795000

N

LEGEND	WETLAND IMPACTS (WTL-12)
	AREA OF PERMANENT IMPACT = 0.486 AC.
	VOLUME OF PERMANENT IMPACT = 784 C.Y.
	AREA OF TEMPORARY IMPACT = 0.124 AC.
	VOLUME OF TEMPORARY IMPACT = 200 C.Y.

215 220 225



SEE NATURAL STREM DESIGN SHEETS FOR MORE INFORMATION.

SEALED BY

J. BRIAN LEE
REGISTERED ENGINEER
AGRICULTURE
No. 107299
STATE OF TENNESSEE
02/10/2026

COORDINATES ARE NAD 83(2011), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00002 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988 WITH GEOID 12B MODEL.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PRESENT LAYOUT

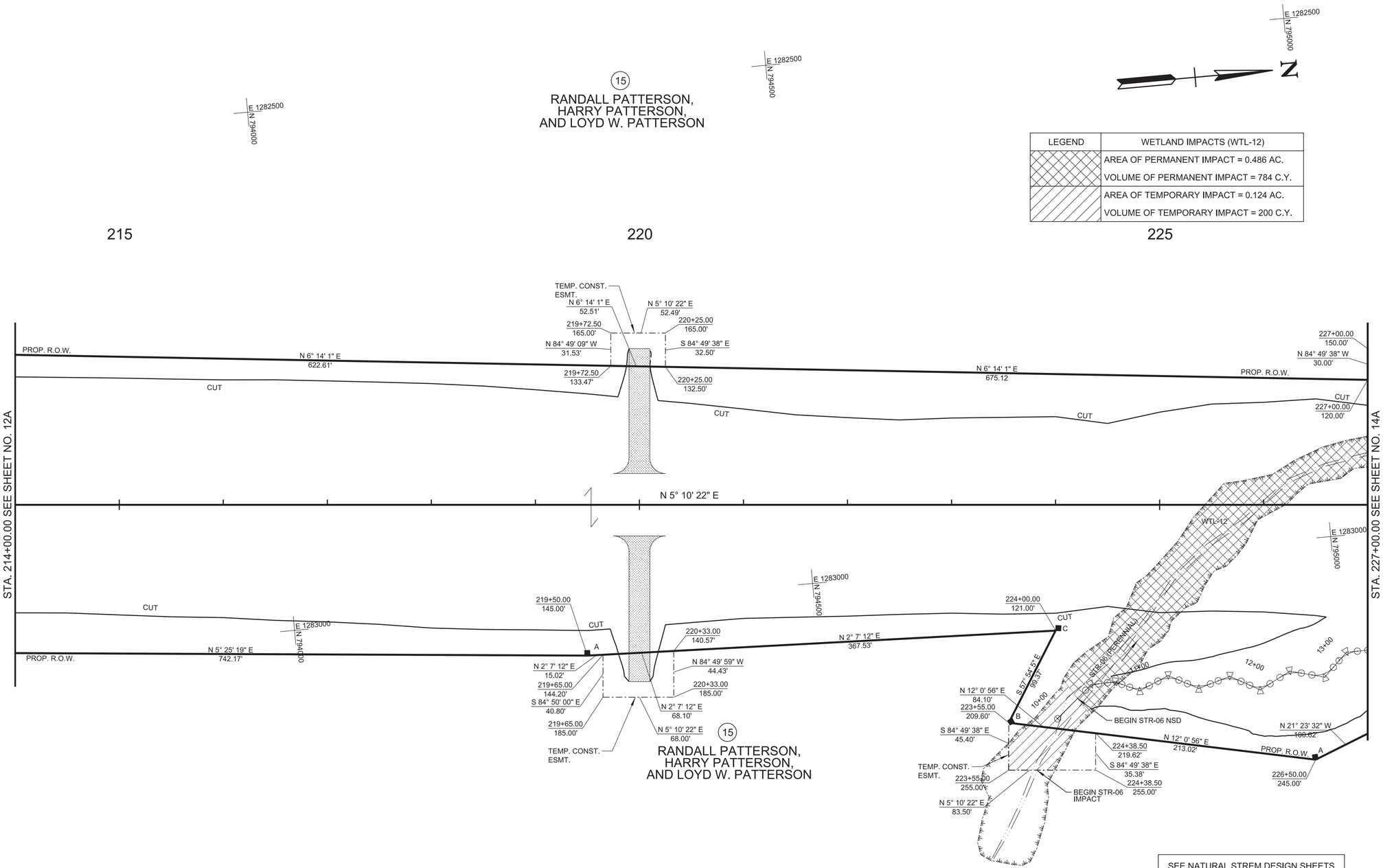
STA.214+00 TO STA.227+00
SCALE: 1"=50'

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	13A
PIH	2025	NH-54(48)	13A
PS&E	2026	NH-54(48)	13A

REV. 08-14-24: UPDATED DISTANCE LT. STA. 217+00 FROM 625.10' TO 622.61' AND LT. STA. 223+50 FROM 672.12' TO 675.12', AND UPDATED RT. TEMP. CONST. ESMT. FOR TRACT 15.

REV. 12-18-25: UPDATED OWNER NAME FOR TRACT 15.



SEE NATURAL STREM DESIGN SHEETS FOR MORE INFORMATION.

SEALED BY

J. BRIAN LEE
REGISTERED ENGINEER
AGRICULTURE
NUMBER
107209
STATE OF TENNESSEE
02/09/2026

COORDINATES ARE NAD 83(2011), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00002 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988 WITH GEOID 12B MODEL.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

RIGHT-OF-WAY DETAILS

STA.214+00 TO STA.227+00
SCALE: 1"=50'

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	13B
PIH	2025	NH-54(48)	13B
PS&E	2026	NH-54(48)	13B

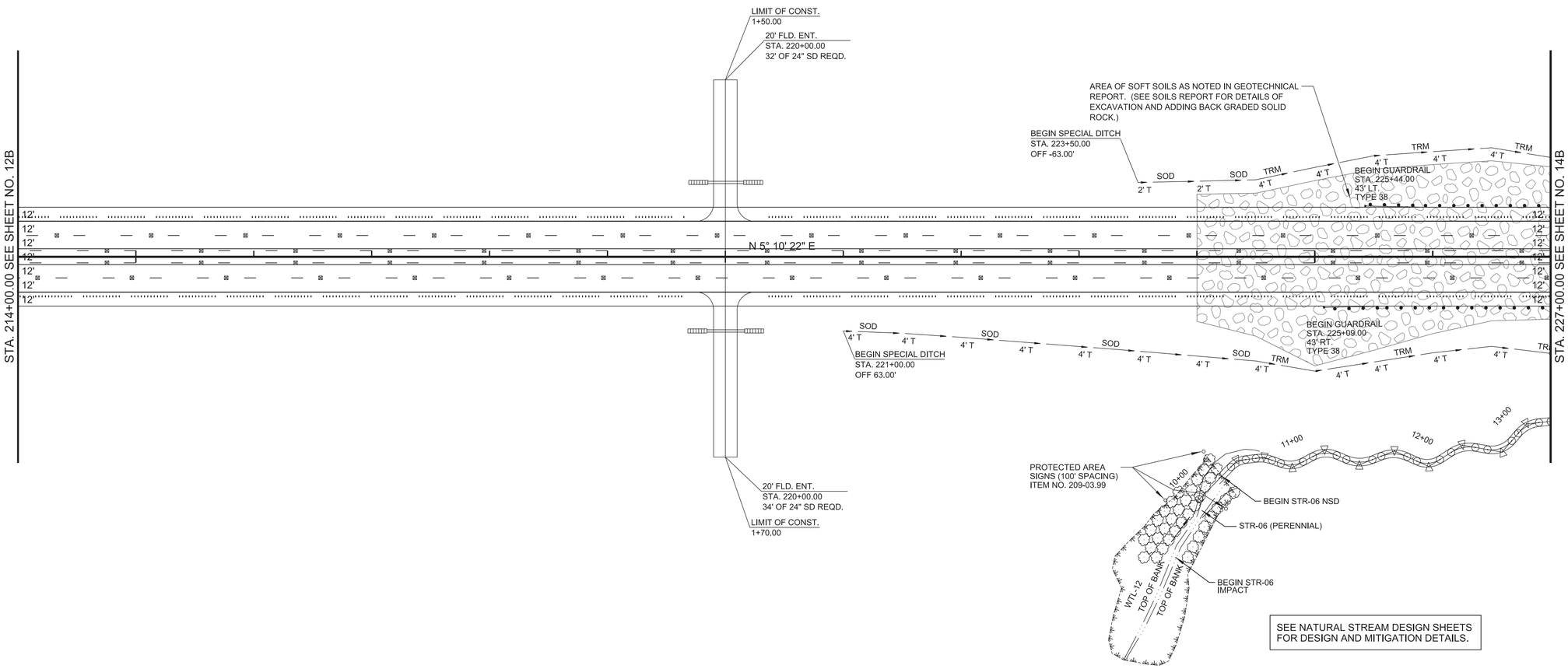
NOTE:
SEE SHEET 2G3 FOR STREAM AND WETLAND MITIGATION NOTES, DETAILS, AND QUANTITIES.

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-6, OR WTL-12 AND THAT THE STREAM AND SURROUNDING VEGETATION WILL NOT BE DISTURBED AND ARE PROTECTED FROM SEDIMENT AND OTHER POLLUTANTS EXCEPT AT THE PERMITTED LOCATIONS.

N

LEGEND	WETLAND IMPACTS (WTL-12)
	AREA OF PERMANENT IMPACT = 0.486 AC.
	VOLUME OF PERMANENT IMPACT = 784 C.Y.
	AREA OF TEMPORARY IMPACT = 0.124 AC.
	VOLUME OF TEMPORARY IMPACT = 200 C.Y.

215 220 225



SEE NATURAL STREAM DESIGN SHEETS FOR DESIGN AND MITIGATION DETAILS.

SEALED BY

J. BRIAN LEE
REGISTERED ENGINEER
AGRICULTURE
NUMBER
115072
STATE OF TENNESSEE
02/09/2026

COORDINATES ARE NAD 83(2011), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00002 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988 WITH GEOID 12B MODEL.

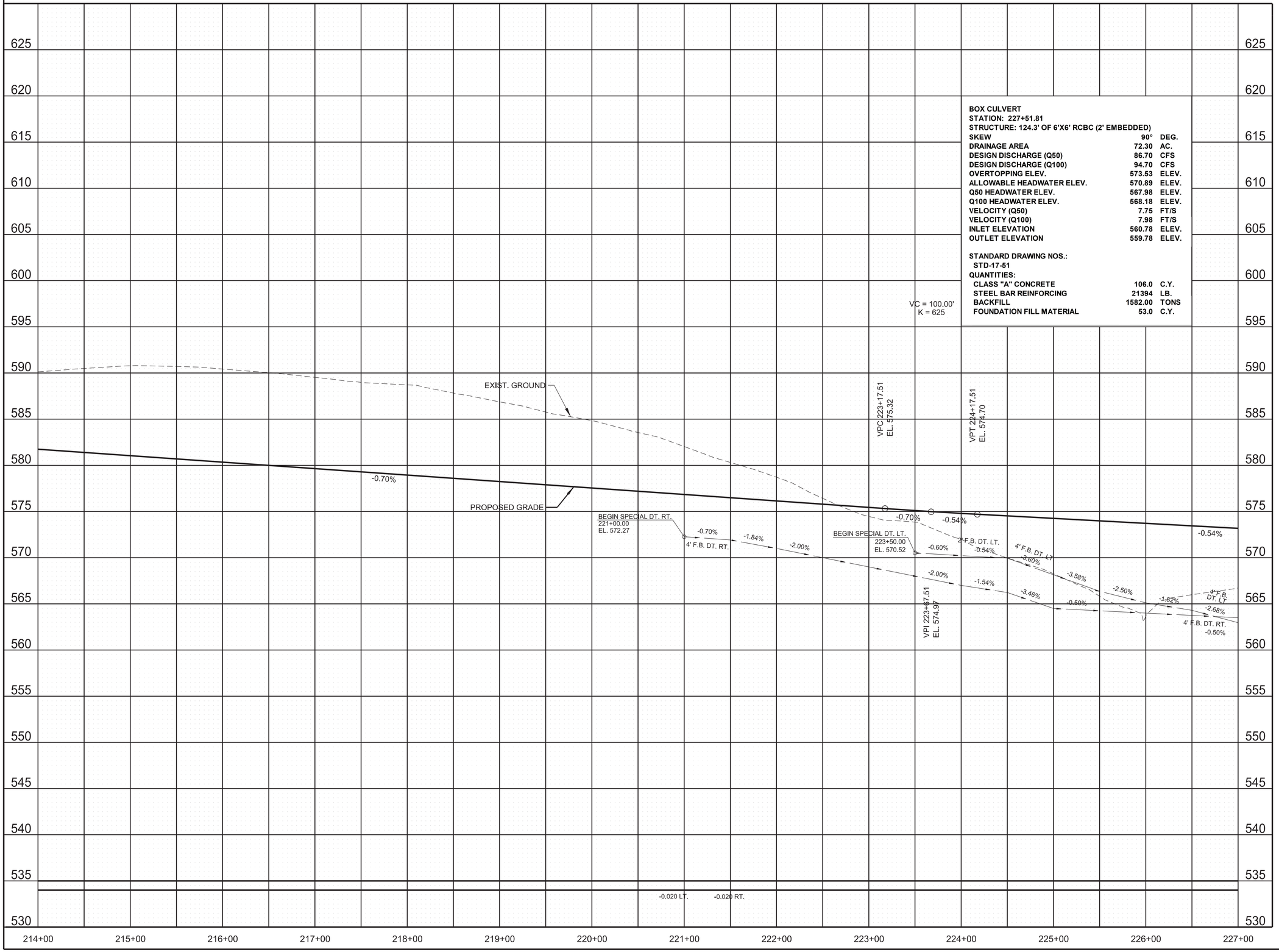
STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PROPOSED LAYOUT

STA.214+00 TO STA.227+00
SCALE: 1"=50'

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	13C
PIH	2025	NH-54(48)	13C
PS&E	2026	NH-54(48)	13C



BOX CULVERT
STATION: 227+51.81
STRUCTURE: 124.3' OF 6'X6' RCBC (2' EMBEDDED)

SKEW	**90°**	**DEG.**
DRAINAGE AREA	**72.30**	**AC.**
DESIGN DISCHARGE (Q50)	**86.70**	**CFS**
DESIGN DISCHARGE (Q100)	**94.70**	**CFS**
OVERTOPPING ELEV.	**573.53**	**ELEV.**
ALLOWABLE HEADWATER ELEV.	**570.89**	**ELEV.**
Q50 HEADWATER ELEV.	**567.98**	**ELEV.**
Q100 HEADWATER ELEV.	**568.18**	**ELEV.**
VELOCITY (Q50)	**7.75**	**FT/S**
VELOCITY (Q100)	**7.98**	**FT/S**
INLET ELEVATION	**560.78**	**ELEV.**
OUTLET ELEVATION	**559.78**	**ELEV.**

STANDARD DRAWING NOS.:
STD-17-51
QUANTITIES:

CLASS "A" CONCRETE	**106.0**	**C.Y.**
STEEL BAR REINFORCING	**21394**	**LB.**
BACKFILL	**1582.00**	**TONS**
FOUNDATION FILL MATERIAL	**53.0**	**C.Y.**

SEALED BY

J. BRIAN LEE
REGISTERED ENGINEER
No. 107299
STATE OF TENNESSEE

02/10/2026

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PROPOSED PROFILE

STA.214+00 TO STA.227+00

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

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	14
PIH	2025	NH-54(48)	14
PS&E	2026	NH-54(48)	14

REV. 12-18-25: UPDATED OWNER NAME FOR TRACTS 15 & 16.

E 1282500
N 795500

(15)
RANDALL PATTERSON,
HARRY PATTERSON,
AND LOYD W. PATTERSON

LEGEND	WETLAND IMPACTS (WTL-12)
	AREA OF PERMANENT IMPACT = 0.486 AC.
	VOLUME OF PERMANENT IMPACT = 784 C.Y.
	AREA OF TEMPORARY IMPACT = 0.124 AC.
	VOLUME OF TEMPORARY IMPACT = 200 C.Y.

(16)
GREG STORY AND KAREN STORY LIVING TRUST (1/3 INTEREST)
GARY STORY AND TAMMY STORY LIVING TRUST (1/3 INTEREST)
TOMMY D. STORY LIVING TRUST (1/3 INTEREST)

N

230 235 240

STA. 227+00.00 SEE SHEET NO. 13

STA. 240+00.00 SEE SHEET NO. 15

CULTIVATED
END STR-06 IMPACT
END STR-06 NSD
TOP OF BANK
TOP OF BANK
PROP. R.O.W.
B
B
C
C
16+00
17+00
STR-06 (PERENNIAL)
WTL-12
FILL
FILL
FILL
FILL
FILL
TEMP. CONST. ESMT.
CULTIVATED
PROP. R.O.W.
E 1283000
N 796000
5+00
124.3' OF 6' X 6' RCBC
E 1283000
N 795500
100' OF 36" RCP
86' OF 18" RCP
196' OF 18" RCP
N 5° 10' 22" E
196' OF 18" RCP
14+00
94' OF 36" RCP
CUT
C
CUT
PROP. R.O.W.
A
CUT
CUT
A
CUT
A
PROP. R.O.W.
CULTIVATED
A
CULTIVATED
TEMP. CONST. ESMT.

(15)
RANDALL PATTERSON,
HARRY PATTERSON,
AND LOYD W. PATTERSON

(16)
GREG STORY AND KAREN STORY LIVING TRUST (1/3 INTEREST)
GARY STORY AND TAMMY STORY LIVING TRUST (1/3 INTEREST)
TOMMY D. STORY LIVING TRUST (1/3 INTEREST)

SEE NATURAL STREM DESIGN SHEETS FOR MORE INFORMATION.

E 1283500
N 795500

E 1283500
N 796000

E 1283500

SEALED BY

J. BRIAN LEE
REGISTERED ENGINEER
LICENSE NUMBER
NO. 107299
STATE OF TENNESSEE
02/09/2026

COORDINATES ARE NAD 83(2011), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00002 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988 WITH GEOID 12B MODEL.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PRESENT LAYOUT

STA.227+00 TO STA.240+00
SCALE: 1"=50'

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	14A
PIH	2025	NH-54(48)	14A
PS&E	2026	NH-54(48)	14A

REV. 08-14-24: UPDATED DISTANCE LT. STA. 239+00 FROM 660.25' TO 660.24', AND UPDATED BEARING AND DISTANCE RT. STA. 238+50 FROM N 2° 25' 43" E - 783.26' TO N 2° 24' 58" E - 775.47'.

REV. 12-18-25: UPDATED OWNER NAME FOR TRACTS 15 & 16.

(15)
RANDALL PATTERSON,
HARRY PATTERSON,
AND LOYD W. PATTERSON

LEGEND	WETLAND IMPACTS (WTL-12)
	AREA OF PERMANENT IMPACT = 0.486 AC.
	VOLUME OF PERMANENT IMPACT = 784 C.Y.
	AREA OF TEMPORARY IMPACT = 0.124 AC.
	VOLUME OF TEMPORARY IMPACT = 200 C.Y.

(16)
GREG STORY AND KAREN STORY LIVING TRUST (1/3 INTEREST)
GARY STORY AND TAMMY STORY LIVING TRUST (1/3 INTEREST)
TOMMY D. STORY LIVING TRUST (1/3 INTEREST)

N

230 235 240

STA. 227+00.00 SEE SHEET NO. 13A

STA. 240+00.00 SEE SHEET NO. 15A

END STR-06 IMPACT
END STR-06 NSD
227+00.00 150.00' PROP. R.O.W.
N 84° 49' 38" W 30.00'
227+00.00 120.00'
N 5° 10' 21" E 265.00'
229+65.00 150.00'
S 84° 49' 38" E 30.00'
229+65.00 120.00'
B B C C
A=0.05 AC PERENNIAL STR-06
WTL-12
FILL
17+00
16+00
15+00
14+00
N 5° 10' 22" E 502.09'
FILL
FILL
234+67.09 190.00'
N 5° 10' 22" E 65.45'
TEMP. CONST. ESMT. 235+32.54 190.00'
N 84° 49' 38" W 70.00'
N 5° 10' 22" E 65.45'
S 84° 49' 38" E 70.00'
235+32.54 120.00'
234+67.09 120.00'
FILL
N 5° 10' 22" E 286.31'
FILL
238+18.85 120.00'
N 5° 10' 22" E 660.24'
PROP. R.O.W.
N 96° 39' 46" W 760.34'
N 96° 39' 46" W 120.06'
N 5° 10' 22" E
238+22.70 0.00'
N 86° 39' 49" W 98.82'
N 3° 15' 16" W 50.55'
N 3° 15' 16" W 25.27'
CUT
233+75.00 111.11'
CUT
A
234+50.00 100.00'
234+25.00 103.70'
N 84° 49' 38" W 36.30'
234+25.00 140.00'
TEMP. CONST. ESMT.
CUT
N 8° 26' 36" E 350.57'
CUT
238+00.00 120.00'
N 2° 24' 58" E 775.47'
A
238+25.86 98.57'
PROP. R.O.W.
N 3° 53' 59" E 450.11'
CUT C
228+20.00 115.00'
N 9° 8' 43" E PROP. R.O.W. 360.87'
A
231+80.00 140.00'
N 3° 15' 16" W 197.13'
S 84° 49' 38" E 28.89'
233+75.00 140.00'
N 5° 10' 22" E 50.00'
A
227+40.00 200.00'
N 41° 33' 47" W 116.73'
N 21° 23' 32" W 100.62'

(15)
RANDALL PATTERSON,
HARRY PATTERSON,
AND LOYD W. PATTERSON

(16)
GREG STORY AND KAREN STORY LIVING TRUST (1/3 INTEREST)
GARY STORY AND TAMMY STORY LIVING TRUST (1/3 INTEREST)
TOMMY D. STORY LIVING TRUST (1/3 INTEREST)

SEE NATURAL STREM DESIGN SHEETS FOR MORE INFORMATION.

SEALED BY

BRIAN LEE
REGISTERED ENGINEER
AGRICULTURE
NUMBER
115729
STATE OF TENNESSEE
02/09/2026

COORDINATES ARE NAD 83(2011), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00002 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988 WITH GEOID 12B MODEL.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

RIGHT-OF-WAY DETAILS

STA.227+00 TO STA.240+00
SCALE: 1"=50'

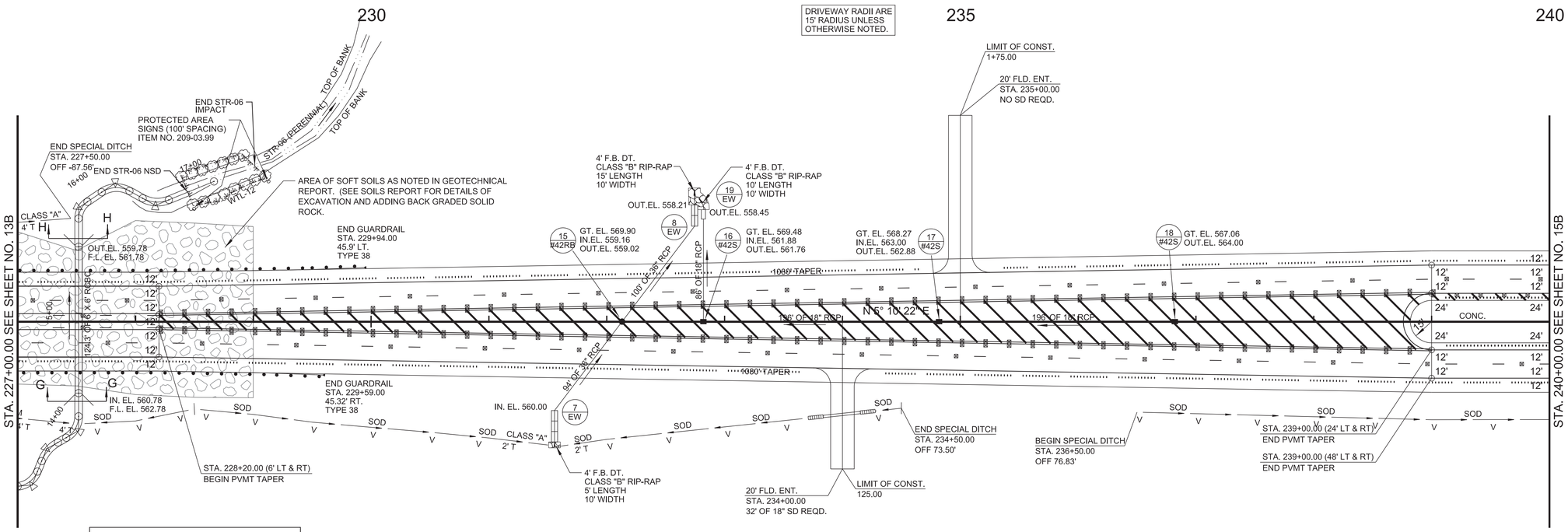
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NOTE:
SEE SHEET 2G3 FOR STREAM AND WETLAND MITIGATION NOTES, DETAILS, AND QUANTITIES.

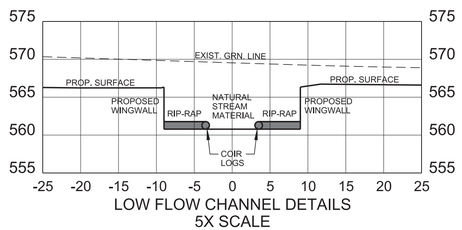
THE CONTRACTOR SHALL USE ANY MEASURE NECESSARY TO ENSURE THAT NO CONSTRUCTION ACTIVITY WILL OCCUR IN, NOR THAT ANY CONSTRUCTION EQUIPMENT WILL ENTER ANY PORTION OF STR-6, AND THAT THE STREAM AND SURROUNDING VEGETATION WILL NOT BE DISTURBED AND ARE PROTECTED FROM SEDIMENT AND OTHER POLLUTANTS EXCEPT AT THE PERMITTED LOCATIONS.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	14B
PIH	2025	NH-54(48)	14B
PS&E	2026	NH-54(48)	14B

LEGEND	WETLAND IMPACTS (WTL-12)
	AREA OF PERMANENT IMPACT = 0.486 AC.
	VOLUME OF PERMANENT IMPACT = 784 C.Y.
	AREA OF TEMPORARY IMPACT = 0.124 AC.
	VOLUME OF TEMPORARY IMPACT = 200 C.Y.

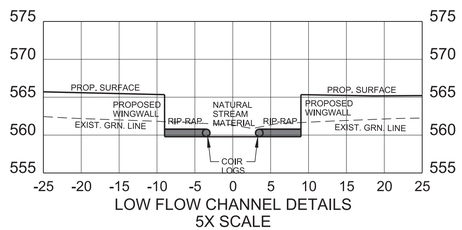


SEE NATURAL STREAM DESIGN SHEETS FOR DESIGN AND MITIGATION DETAILS.



LOW FLOW CHANNEL DETAILS
5X SCALE

SECTION G-G



LOW FLOW CHANNEL DETAILS
5X SCALE

SECTION H-H

SEALED BY



COORDINATES ARE NAD 83(2011), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00002 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988 WITH GEOID 12B MODEL.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PROPOSED LAYOUT

STA.227+00 TO STA.240+00
SCALE: 1"=50'

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	14C
PIH	2025	NH-54(48)	14C
PS&E	2026	NH-54(48)	14C

BOX CULVERT
STATION: 227+51.81
STRUCTURE: 124.3' OF 6'X6' RCBC (2' EMBEDDED)

SKEW	90°	DEG.
DRAINAGE AREA	72.30	AC.
DESIGN DISCHARGE (Q50)	86.70	CFS
DESIGN DISCHARGE (Q100)	94.70	CFS
OVERTOPPING ELEV.	573.53	ELEV.
ALLOWABLE HEADWATER ELEV.	570.89	ELEV.
Q50 HEADWATER ELEV.	567.98	ELEV.
Q100 HEADWATER ELEV.	568.18	ELEV.
VELOCITY (Q50)	7.75	FT/S
VELOCITY (Q100)	7.98	FT/S
INLET ELEVATION	560.78	ELEV.
OUTLET ELEVATION	559.78	ELEV.

STANDARD DRAWING NOS.:
STD-17-51

QUANTITIES:

CLASS "A" CONCRETE	106.0	C.Y.
STEEL BAR REINFORCING	21394	LB.
BACKFILL	1582.00	TONS
FOUNDATION FILL MATERIAL	53.0	C.Y.

PIPE CULVERT
STATION: 232+13.00
STRUCTURE: #42RB @ C.L. 100' OF 36" RCP

SKEW	52° 45' 59" LT	DEG.
DRAINAGE AREA	17.66	AC.
DESIGN DISCHARGE (Q50)	32.04	CFS
DESIGN DISCHARGE (Q100)	34.40	CFS
OVERTOPPING ELEV.	570.28	ELEV.
ALLOWABLE HEADWATER ELEV.	570.12	ELEV.
Q50 HEADWATER ELEV.	570.04	ELEV.
Q100 HEADWATER ELEV.	570.05	ELEV.
VELOCITY (Q50)	8.93	FT/S
VELOCITY (Q100)	9.09	FT/S

ENDWALLS REQUIRED:
TYPE "U" LT.
STANDARD DRAWING NOS.:
D-PB-1, D-CB-42RB, & D-PE-42 (A&B)

QUANTITIES:

CLASS "A" CONCRETE	N/A	C.Y.
STEEL BAR REINFORCING	N/A	LB.
BEDDING MATERIAL	30.2	C.Y.

ENDWALL ITEM NOS.: 611-07.67

PIPE CULVERT
STATION: 232+13.00
STRUCTURE: 94' OF 36" RCP

SKEW	52° 45' 59" LT	DEG.
DRAINAGE AREA	17.52	AC.
DESIGN DISCHARGE (Q50)	31.00	CFS
DESIGN DISCHARGE (Q100)	33.30	CFS
OVERTOPPING ELEV.	570.38	ELEV.
ALLOWABLE HEADWATER ELEV.	568.10	ELEV.
Q50 HEADWATER ELEV.	562.75	ELEV.
Q100 HEADWATER ELEV.	562.88	ELEV.
VELOCITY (Q50)	8.70	FT/S
VELOCITY (Q100)	8.85	FT/S

ENDWALLS REQUIRED:
TYPE "U" RT.
STANDARD DRAWING NOS.:
D-PB-1 & D-PE-42 (A&B)

QUANTITIES:

CLASS "A" CONCRETE	N/A	C.Y.
STEEL BAR REINFORCING	N/A	LB.
BEDDING MATERIAL	28.4	C.Y.

ENDWALL ITEM NOS.: 611-07.68

PIPE CULVERT
STATION: 232+82.00
STRUCTURE: @42S @ C.L. 86' OF 18" RCP

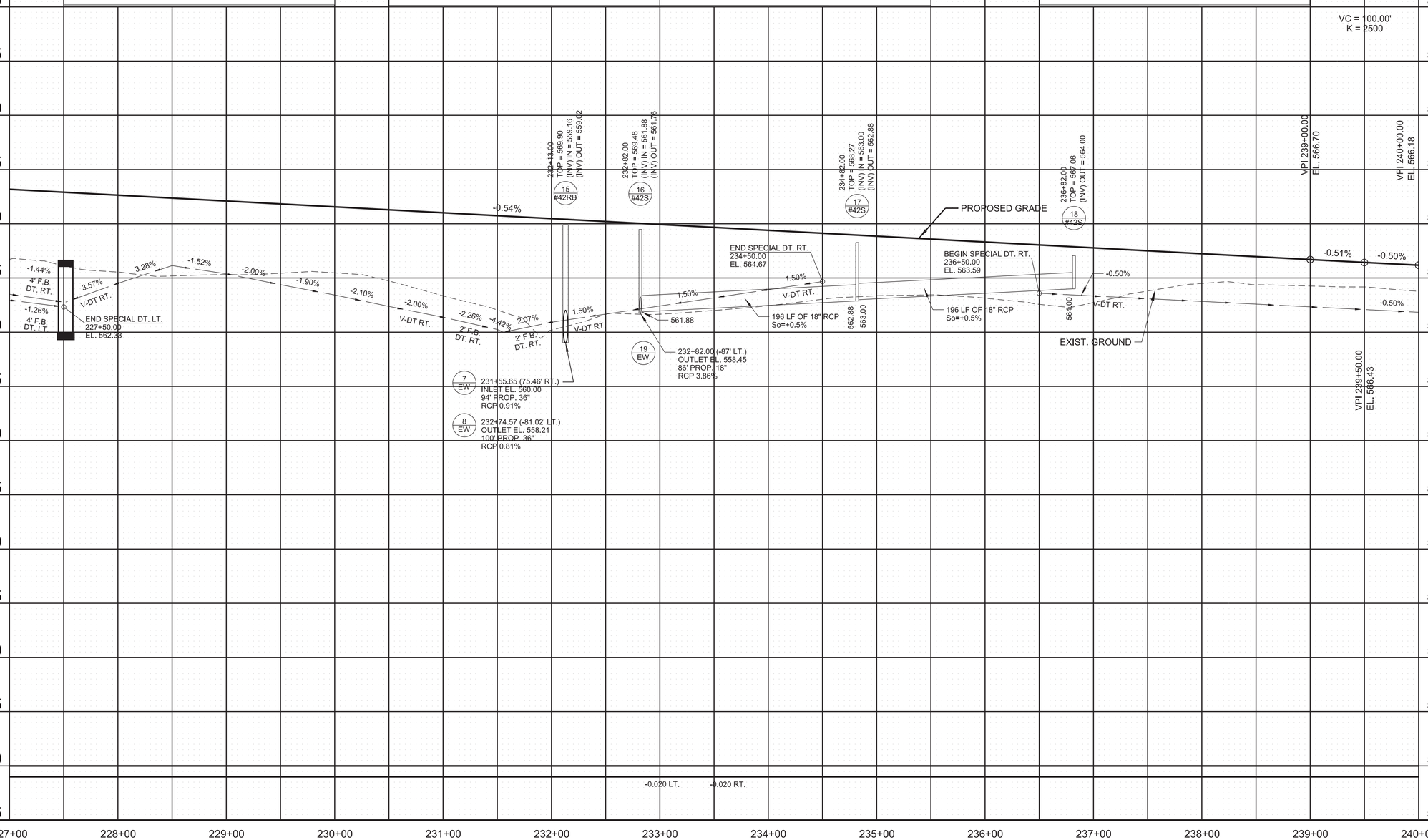
SKEW	90° LT	DEG.
DRAINAGE AREA	0.35	AC.
DESIGN DISCHARGE (Q50)	2.46	CFS
DESIGN DISCHARGE (Q100)	2.61	CFS
OVERTOPPING ELEV.	569.79	ELEV.
ALLOWABLE HEADWATER ELEV.	569.97	ELEV.
Q50 HEADWATER ELEV.	569.62	ELEV.
Q100 HEADWATER ELEV.	569.63	ELEV.
VELOCITY (Q50)	7.99	FT/S
VELOCITY (Q100)	8.14	FT/S

ENDWALLS REQUIRED:
TYPE "U" LT.
STANDARD DRAWING NOS.:
D-PB-1, D-CB-42S, & D-PE-18 (A&B)

QUANTITIES:

CLASS "A" CONCRETE	N/A	C.Y.
STEEL BAR REINFORCING	N/A	LB.
BEDDING MATERIAL	18.6	C.Y.

ENDWALL ITEM NOS.: 611-07.55



SEALED BY



02/10/2026

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PROPOSED PROFILE

STA.227+00 TO STA.240+00

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

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	15
PIH	2025	NH-54(48)	15
PS&E	2026	NH-54(48)	15

REV. 03-26-24: UPDATED PROPERTY OWNER NAME, ADJUSTED PROP. R.O.W. TAKE, AND PROP. CONST. ESMT. FOR TRACT 17, ADDED TRACT 20, AND REVISED END OF PROJECT STATIONING FROM STA. 247+47.60 TO STA. 247+50.14.

REV. 12-18-25: UPDATED OWNER NAME FOR TRACTS 15 & 16.

REV. 01-21-26: ADDED TRACT 17S.

16

GREG STORY AND KAREN STORY LIVING TRUST (1/3 INTEREST)
GARY STORY AND TAMMY STORY LIVING TRUST (1/3 INTEREST)
TOMMY D. STORY LIVING TRUST (1/3 INTEREST)

18

STEVEN DUANE MAYNARD AND WIFE, KIMBERLY ANNE MAYNARD

240

245

CULTIVATED

CP-S9
GPS 40-054-09

KENTUCKY
TENNESSEE
STATE LINE RD (ASP.)
(KY 893)

EIP

WELL HOUSE

WELL INFORMATION
DRILLER: UNKNOWN
DATE DRILLED: UNKNOWN
DEPTH: UNKNOWN
OWNER WHEN DRILLED: UNKNOWN

INV-556.03
15" CMP
INV-556.95

GRAVEL

POT 27+00.00
N 797096.1211
E 1282858.5566

P/T

NO EASEMENT PER UTILITY

SEPT

LIMIT OF CONST.
27+99.59
1-S-F

9.2'+/-

INV-556.68
15" CMP

ASPHALT

METAL GARAGE

PROP. CONST. ESMT.

LAWN

P/T/CATV

E 1283000
N 797000

PROP. R.O.W.

S 89° 05' 12" E

TEL. PED.

SPEED LIMIT 35

P/T/CATV

CUT W.V.

BB
C

SPEED LIMIT 35

40S054-F2-002
END PROJ. NO. NH-54(48) R.O.W.
STA. 247+50.14
N 797079.9613 250
E 1283157.4887

STA. 247+61.57 S.R. 54 =
STA. 30+00.00 STATE LINE RD. (KY 893)
N 797091.3391
E 1283158.5185
(SEE SHEET 18 FOR PROFILE)

E 1283000
N 797500

PROP. R.O.W.

FILL

CUT

PROPOSED TRENCH DRAIN

76' OF 24" RCP

148' OF 18" RCP

N 5° 10' 22" E

94' OF 24" RCP

CALLOWAY CO, KY
US 641
PRJ.# NHPP 6411 (039)
FD52 018 0641 000-006

STA. 240+00.00 SEE SHEET NO. 14

CP-S10
GPS 40-054-10

CULTIVATED

CUT

PROP. R.O.W.

A

PRES. R.O.W.

SEPT

MOBILE HOME

STEPS

FLAG

S 88° 49' 45" E

INV-559.71
15" CMP
INV-559.94
15" CMP
INV-559.74

INV-559.59

P/T

FIELD FENCE

LIMIT OF CONST.
31+50.00
EXIST. CONST. ESMT.

GRV

NO EASEMENT PER UTILITY

40S054-F3-004
END PROJ. NO. NH-54(48) CONST.
STA. 250+00.00
N 797328.7992
E 1283180.0156

15

RANDALL PATTERSON,
HARRY PATTERSON,
AND LOYD W. PATTERSON

17

RICKY J. BURTON & WIFE, JENNIFER BURTON

PROP. CONST. ESMT.

17S

RICKY J. BURTON & WIFE, JENNIFER BURTON

SHED

METAL GARAGE

20

~~BRIAN PING~~

WOODEN FENCE

POT 33+00.00
N 797085.2091
E 1283458.2091

110.0'+/-

NO EASEMENT PER UTILITY

TRACT 17/17S NOTE:
MOBILE HOME AND SEPTIC SYSTEM TO BE REMOVED IN CONSTRUCTION PHASE.

LEGEND

PROP. CONST. ESMT.

CALLOWAY COUNTY
HENRY COUNTY

SEALED BY

J. BRIAN LEE
REGISTERED ENGINEER
AGRICULTURE
NUMBER
107209
STATE OF TENNESSEE

02/10/2026

COORDINATES ARE NAD 83(2011), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00002 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988 WITH GEOID 12B MODEL.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PRESENT LAYOUT

STA.240+00 TO STA.250+00
SCALE: 1"=50'

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	15A
PIH	2025	NH-54(48)	15A
PS&E	2026	NH-54(48)	15A

REV. 03-26-24: UPDATED PROPERTY OWNER NAME, ADJUSTED PROP. R.O.W. TAKE, AND PROP. CONST. ESMT. FOR TRACT 17, ADDED TRACT 20, AND REVISED END OF PROJECT STATIONING FROM STA. 247+47.60 TO STA. 247+50.14.

REV. 08-14-24: UPDATED DISTANCE LT. STA. 242+00 FROM 660.25' TO 660.24', LT. STA. 247+00 FROM 6.48' TO 6.47', RT. STA. 247+35 FROM 149.14' TO 96.97', UPDATED STA. AND OFFSET FLAG FROM STA. 246+00.44 TO STA. 246+00.43, AND FROM STA. 246+04.04 - 126.07' TO STA. 246+04.33 - 126.06'.

REV. 12-18-25: UPDATED OWNER NAME FOR TRACTS 15 & 16.

REV. 01-21-26: ADDED TRACT 17S.

16

GREG STORY AND KAREN STORY LIVING TRUST (1/3 INTEREST)
GARY STORY AND TAMMY STORY LIVING TRUST (1/3 INTEREST)
TOMMY D. STORY LIVING TRUST (1/3 INTEREST)

18

STEVEN DUANE MAYNARD AND WIFE, KIMBERLY ANNE MAYNARD

240

245

N 2° 48' 55" E
201.01'

CP-S9
GPS 40-054-09

KENTUCKY
TENNESSEE

S 89° 5' 5" E
148.11'

PRES. R.O.W.

EIP

N 0° 54' 2" E
246.18'

N 89° 6' 8" W
222.53'

S 89° 10' 44" E
173.94'

S 89° 10' 44" E
378.02'

S 89° 10' 44" E
48.37'

LIMIT OF CONST.
27+99.59
27+97.77
25.41'
N 4° 1' 29" E
3.76'
27+97.56
29.17'

PROP. CONST. ESMT.
S 85° 58' 31" E
48.66'
247+18.42
151.06'

BENT OVER

S 89° 05' 12" E

40S054-F2-002
END PROJ. NO. NH-54(48) R.O.W.
STA. 247+50.14
N 797079.9613 250
E 1283157.4887

STA. 247+61.57 S.R. 54 =
STA. 30+00.00 STATE LINE RD. (KY 893)
N 797091.3391
E 1283158.5185
(SEE SHEET 18 FOR PROFILE)

PRES. ROW

N 84° 49' 38" W
12.97'

PROP. R.O.W.

N 0° 50' 57" E
240.00'

N 0° 50' 57" E
6.47'
247+24.87
151.55'

CUT

PROP. R.O.W.

N 5° 10' 22" E
660.24'

BB
C

244+79.10
132.97'

244+79.10
120.00'

FILL

FILL

CUT

CUT

S 89° 2' 29" E
151.96'

247+36.04
0.00'

N 5° 10' 22" E

CALLOWAY CO, KY
US 641
PRJ.# NHPP 6411 (039)
FD52 018 0641 000-006

STA. 240+00.00 SEE SHEET NO. 14A

S 89° 2' 29" E
54.82'

246+00.43
61.28'

CP-S10
GPS 40-054-10

N 2° 27' 48" E
139.79'

EIPS 88° 16' 10" E
64.00'

247+40.07
54.67'

EIP S 88° 43' 32" E
96.97'

N 2° 24' 58" E
775.47'

CUT

CUT

CUT 247+20.00
122.00'

C

PRES. R.O.W.

N 3° 53' 59" E
450.11'

PROP. R.O.W.

A

242+50.00
110.00'

N 19° 12' 32" E
103.08'

A

243+50.00
135.00'

N 3° 9' 38" E
254.49'

PROP. R.O.W.

246+04.33
126.06'

S 88° 16' 10" E
96.04'

N 3° 9' 38" E
115.74'

PL1

POF2

POF3

B

C

POF1

PL2

PL3

L8

S 88° 49' 45" E

PROP. CONST. ESMT.

INGRESS/EGRESS EASEMENT

POF4

PL4

PL5

OF6

L2

L6

L7

L9

POF5

N 1° 43' 25" E
103.03'

L1

OF1

OF2

OF5

L3

L4

L5

OF3

OF4

246+10.09
221.93'

S 88° 16' 23" E
100.90'

PRES. R.O.W.
S 88° 35' 14" E
90.91'

S 89° 10' 44" W
308.37'

PRES. R.O.W.

N 1° 43' 37" E
141.60'

S 88° 7' 18" E
393.50'

CALLOWAY COUNTY
HENRY COUNTY

40S054-F3-004
END PROJ. NO. NH-54(48) CONST.
STA. 250+00.00
N 797328.7992
E 1283180.0156

PRES. ROW

LIMIT OF CONST.
31+50.00
EXIST. CONST. ESMT.

17

RICKY J. BURTON & WIFE, JENNIFER BURTON

17S

RICKY J. BURTON & WIFE, JENNIFER BURTON

15

RANDALL PATTERSON, HARRY PATTERSON, AND LOYD W. PATTERSON

20

~~BRIAN PING~~

LINE TABLE

LINE	BEARING	DISTANCE
L1	S 88° 39' 23" E	10.00'
L2	N 1° 43' 25" E	38.00'
L3	S 88° 39' 23" E	10.00'
L4	N 1° 43' 25" E	38.01'
L5	N 1° 43' 25" E	38.00'
L6	S 88° 43' 32" E	10.00'
L7	S 88° 35' 14" E	10.00'
L8	S 88° 43' 32" E	51.21'
L9	S 88° 43' 32" E	0.97'
PL1	N 65° 31' 34" E	34.61'
PL2	N 1° 10' 15" E	5.93'
PL3	N 1° 10' 15" E	3.63'

STATION / OFFSET TABLE

LABEL	STATION	OFFSET
OF1	32+02.17	25.53'
OF2	32+12.17	25.55'
OF3	32+22.17	25.59'
OF4	32+21.81	63.59'
OF5	32+11.81	63.56'
OF6	32+01.81	63.53'
POF1	247+37.12	152.08'
POF2	247+43.04	151.66'
POF3	31+50.00	25.44'

LEGEND

PROP. CONST. ESMT.

PROPOSED LINE TABLE

LINE	BEARING	DISTANCE
PL4	S 87° 1' 55" E	51.07'
PL5	N 2° 58' 5" E	5.14'

PROPOSED STATION / OFFSET TABLE

LABEL	STATION	OFFSET
POF4	32+01.05	30.67'
POF5	32+01.21	25.53'

SEALED BY

BRIAN LEE
REGISTERED ENGINEER
AGRICULTURE
02/03/2026
BRIAN LEE 107296
STATE OF TENNESSEE

COORDINATES ARE NAD 83(2011), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00002 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988 WITH GEOID 12B MODEL.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

RIGHT-OF-WAY DETAILS

STA.240+00 TO STA.250+00
SCALE: 1"=50'

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	15B
PIH	2025	NH-54(48)	15B
PS&E	2026	NH-54(48)	15B

REV. 03-26-24: REVISED END OF PROJECT STATIONING FROM STA. 247+47.60 TO STA. 247+50.14.

240

245

KENTUCKY
TENNESSEE

STATE LINE RD (ASP.) (KY 893)

N

STA. 240+00.00 SEE SHEET NO. 14B

2' F.B. DT.
CLASS "A" RIP-RAP
15' LENGTH
8' WIDTH

2' F.B. DT. CLASS
"A" RIP-RAP
15' LENGTH
8' WIDTH

11 EW

GT. EL. 562.83
IN.EL. 558.39
IN.EL. 558.39
OUT.EL. 558.27

10 #38S

OUT. EL. 557.87

76' OF 24" RCP

GT. EL. 562.68
IN EL. 559.50
OUT.EL. 559.15

12 #38S

BEGIN SPECIAL DITCH
STA. 244+71.70
OFF 94.13'

5 LF OF 12" PVC

FOR PROPOSED TRENCH DRAIN INFO AND DETAILS, SEE CROSS SECTIONS, DETAILS SHEET 2G2, AND STD. DWG. T-TD-1.

BEGIN TRENCH DRAIN
12.28' LT STA. 245+07.02
T.G. = 562.61
F.L. = 559.61

STA. 245+74.23 (6' LT)
END BAY TAPER

END TRENCH DRAIN
15' LT STA. 247+18.00
T.G. = 562.21
F.L. = 561.60

PROPOSED
TRENCH DRAIN

STA. 28+97.22 (LT & RT)
END PVMT TAPER

LIMIT OF CONST.
27+99.59

END SPECIAL DITCH
STA. 27+99.59
OFF 16.11'

INV-559.17

STA. 28+50.00 (LT & RT)
BEGIN PVMT & SH TAPER

STA. 28+75.00 (LT & RT)
END SH TAPER

INV-556.68'

15" CMP EXIST.
TO REMAIN

S 89° 05' 12" E

9.5'
4' SH.
9.5'
4' SH.

50'R
50'R

+41
+24.23
+00
+81.10
+62

12'
*12'
*11'
11'

148' OF 18" RCP

N 5° 10' 22" E

94' OF 24" RCP

9'R

180' TAPER

STA. 240+24.23 (24' RT)
BEGIN BAY TAPER

STA. 241+11.57 (48' RT)
BEGIN PAVMENT TAPER

STA. 242+44.23 (24' RT)
BEGIN STRIPING TAPER

STA. 243+51.57 (60' RT)
END PAVEMENT TAPER

2' F.B. DT. CLASS
"A" RIP-RAP
5' LENGTH
10' WIDTH

9 EW

IN. EL. 558.78

STA. 245+74.23 (6' RT)
END STRIPING TAPER

SOD

*NOTE:
PROPOSED LANE WIDTHS TRANSITION FROM 12' AT STA. 247+24.23 TO 11' AT STA. 248+00.00 TO MATCH THE ADJACENT KENTUCKY PROJECT.

NOTE: ELIMINATE MEDIAN DITCH, PAVE FULL DEPTH, STA. 247+24.23 TO STA. 247+51.54.

40S054-F2-002
END PROJ. NO. NH-54(48) R.O.W.
STA. 247+50.14
N 797079.9613 250
E 1283157.4887

STA. 247+61.57 S.R. 54 =
STA. 30+00.00 STATE LINE RD. (KY 893)
N 797091.3391
E 1283158.5185
(SEE SHEET 18 FOR PROFILE)

NOTE:
SIGNING, STRIPING, AND MARKINGS FOR SR-54 NORTH OF STATELINE ROAD ARE TO BE INSTALLED BY KYTC.

CALLOWAY CO, KY
US 641
PRJ.# NHPP 6411 (039)
FD52 018 0641 000-006

TO MURRAY, KENTUCKY
ADJACENT PROJECT BY OTHERS

40S054-F3-004
END PROJ. NO. NH-54(48) CONST.
STA. 250+00.00
N 797328.7992
E 1283180.0156

STA. 31+34.39 (RT)
BEGIN PVMT TAPER
STA. 31+38.34 (RT)
BEGIN SH TAPER
END SPECIAL DITCH
STA. 31+50.00
OFF 15.64'

S 88° 49' 45" E
INV-559.67
CMP INV-559.37

4' SH.
8.7'
10.1'

LIMIT OF CONST.
31+50.00

EXIST.
TO REMAIN

STATE LINE RD (ASP.) (KY 893)

CALLOWAY COUNTY
HENRY COUNTY

SEALED BY

J. BRIAN LEE
REGISTERED ENGINEER
LICENSURE
No. 107296
STATE OF TENNESSEE
02/09/2026

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PROPOSED LAYOUT

STA.240+00 TO STA.250+00
SCALE: 1"=50'

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	15C
PIH	2025	NH-54(48)	15C
PS&E	2026	NH-54(48)	15C

REV. 03-26-24: REVISED END OF PROJECT STATIONING FROM STA. 247+47.60 TO STA. 247+50.14.

PIPE CULVERT
STATION: 243+50.00
STRUCTURE: #38S CB @ 7.82' LT. C.L. 76' OF 24" RCP

	90° LT	DEG.
SKEW		
DRAINAGE AREA	6.65	AC.
DESIGN DISCHARGE (Q50)	14.20	CFS
DESIGN DISCHARGE (Q100)	15.40	CFS
OVERTOPPING ELEV.	564.07	ELEV.
ALLOWABLE HEADWATER ELEV.	563.91	ELEV.
Q50 HEADWATER ELEV.	563.43	ELEV.
Q100 HEADWATER ELEV.	563.45	ELEV.
VELOCITY (Q50)	6.30	FT/S
VELOCITY (Q100)	6.42	FT/S

ENDWALLS REQUIRED:
TYPE "U" LT.
STANDARD DRAWING NOS.:
D-PB-1, D-CB-38S, & D-PE-24 (A&B)

QUANTITIES:

CLASS "A" CONCRETE	N/A	C.Y.
STEEL BAR REINFORCING	N/A	LB.
BEDDING MATERIAL	20.2	C.Y.

ENDWALL ITEM NOS.: 611-07.59

PIPE CULVERT
STATION: 243+50.00
STRUCTURE: 94' OF 24" RCP

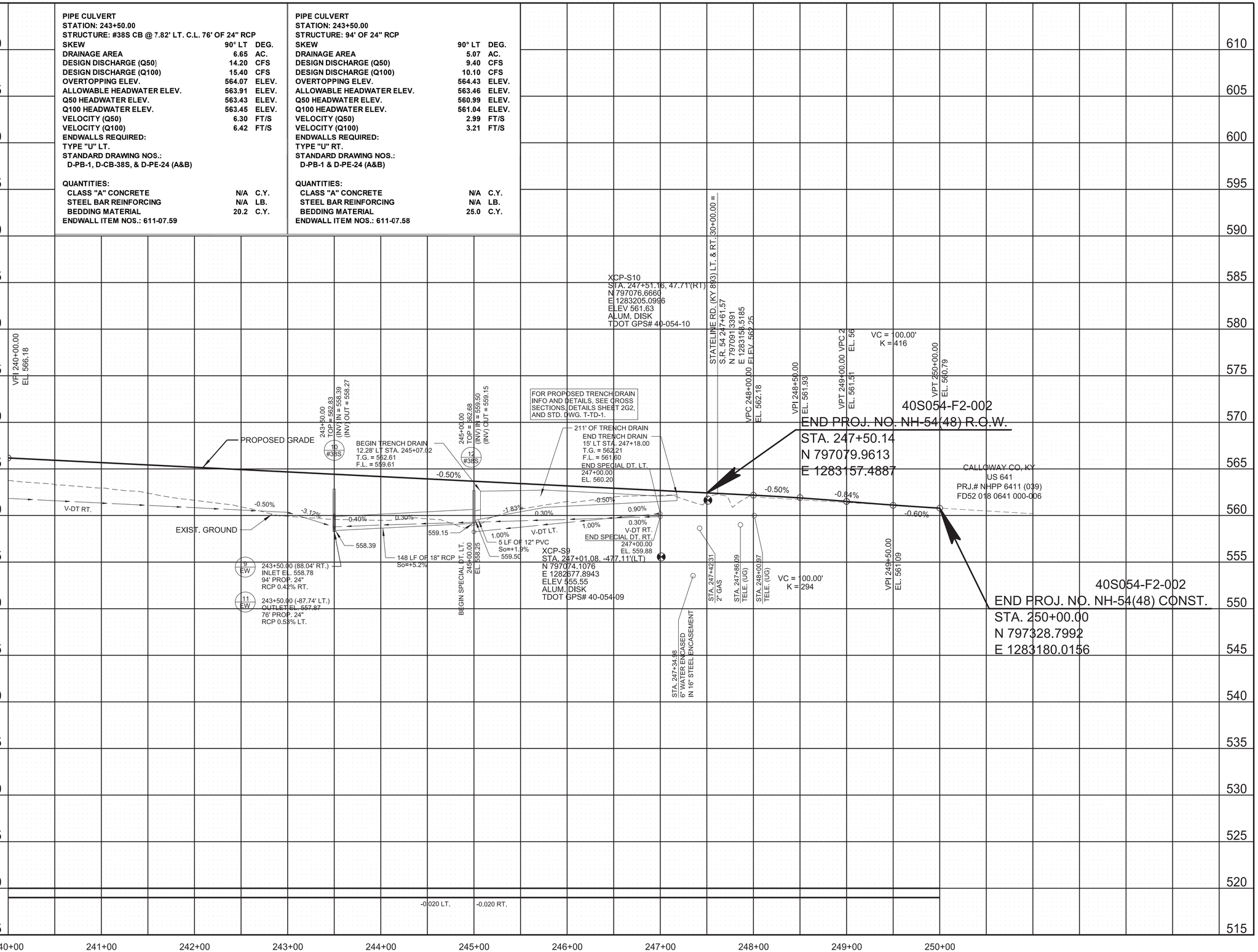
	90° LT	DEG.
SKEW		
DRAINAGE AREA	5.07	AC.
DESIGN DISCHARGE (Q50)	9.40	CFS
DESIGN DISCHARGE (Q100)	10.10	CFS
OVERTOPPING ELEV.	564.43	ELEV.
ALLOWABLE HEADWATER ELEV.	563.46	ELEV.
Q50 HEADWATER ELEV.	560.99	ELEV.
Q100 HEADWATER ELEV.	561.04	ELEV.
VELOCITY (Q50)	2.99	FT/S
VELOCITY (Q100)	3.21	FT/S

ENDWALLS REQUIRED:
TYPE "U" RT.
STANDARD DRAWING NOS.:
D-PB-1 & D-PE-24 (A&B)

QUANTITIES:

CLASS "A" CONCRETE	N/A	C.Y.
STEEL BAR REINFORCING	N/A	LB.
BEDDING MATERIAL	25.0	C.Y.

ENDWALL ITEM NOS.: 611-07.58



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02/10/2026

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PROPOSED PROFILE

STA.240+00 TO STA.250+00

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

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	16
PIH	2025	NH-54(48)	16
PS&E	2026	NH-54(48)	16

PIPE CULVERT
STATION: 8+90.00 SR-54 TIE
STRUCTURE: 104' OF 18" RCP

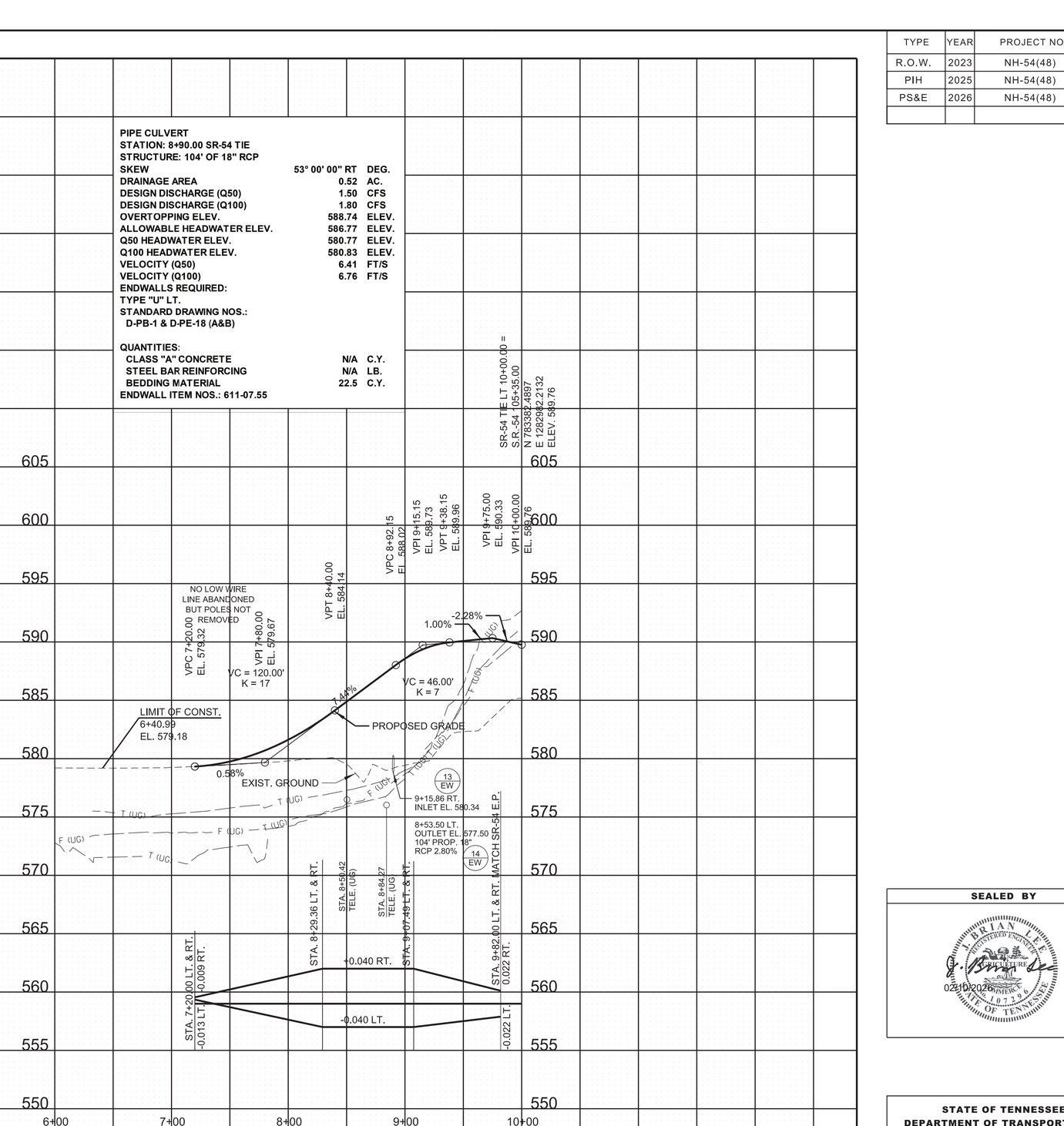
SKEW	53° 00' 00" RT	DEG.
DRAINAGE AREA	0.52	AC.
DESIGN DISCHARGE (Q50)	1.50	CFS
DESIGN DISCHARGE (Q100)	1.80	CFS
OVERTOPPING ELEV.	588.74	ELEV.
ALLOWABLE HEADWATER ELEV.	586.77	ELEV.
Q50 HEADWATER ELEV.	580.77	ELEV.
Q100 HEADWATER ELEV.	580.83	ELEV.
VELOCITY (Q50)	6.41	FT/S
VELOCITY (Q100)	6.76	FT/S

ENDWALLS REQUIRED:
TYPE "U" LT.
STANDARD DRAWING NOS.:
D-PB-1 & D-PE-18 (A&B)

QUANTITIES:

CLASS "A" CONCRETE	N/A	C.Y.
STEEL BAR REINFORCING	N/A	LB.
BEDDING MATERIAL	22.5	C.Y.

ENDWALL ITEM NOS.: 611-07.55



S.R. 54 TIE

LOCATED ON PRESENT LAYOUT SHEET 4.

SEALED BY

BRIAN LEE
REGISTERED ENGINEER
DEPARTMENT OF TRANSPORTATION
ENGINEER
STATE OF TENNESSEE
02/10/2026

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

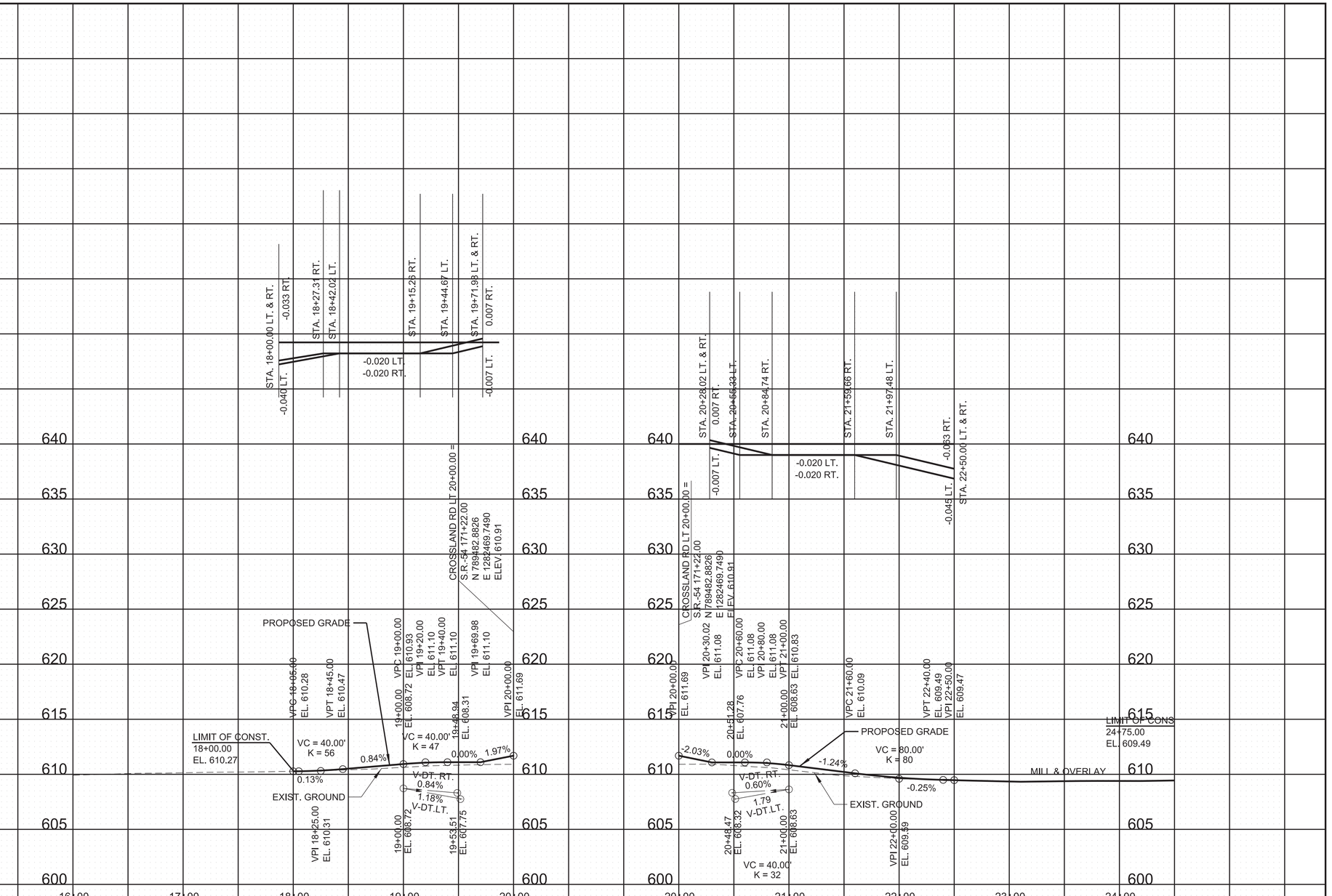
SIDE ROAD PROFILE

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

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	17
PIH	2025	NH-54(48)	17
PS&E	2026	NH-54(48)	17

REV. 08-14-24: REVISED LIMIT OF CONST. FOR CROSSLAND RD. RT. FROM STA. 23+74.94 TO STA. 24+74.74.



CROSSLAND RD. LT

LOCATED ON PRESENT LAYOUT SHEET 9.

CROSSLAND RD. RT

LOCATED ON PRESENT LAYOUT SHEET 9.

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J. BRIAN LEE
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AGRICULTURE
NUMBER
1 0 7 2 9 0
STATE OF TENNESSEE

02/10/2026

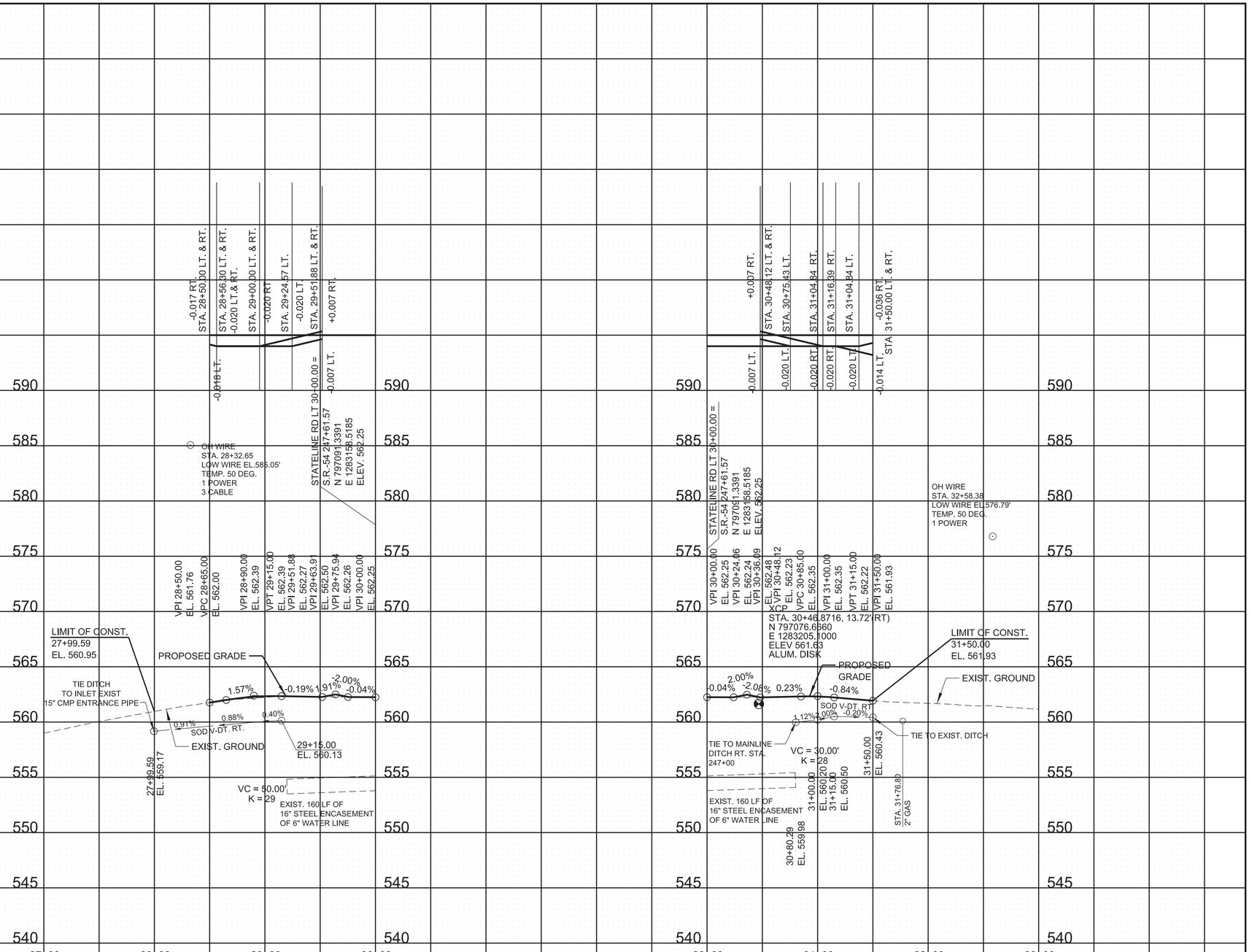
STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

SIDE ROAD PROFILE

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

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	18
PIH	2025	NH-54(48)	18
PS&E	2026	NH-54(48)	18



STATE LINE RD. LT

LOCATED ON PRESENT
LAYOUT SHEET 15.

STATE LINE RD. RT

LOCATED ON PRESENT
LAYOUT SHEET 15.

SEALED BY

BRIAN LEE
REGISTERED ENGINEER
AGRICULTURE
No. 107296
STATE OF TENNESSEE
02/03/2026

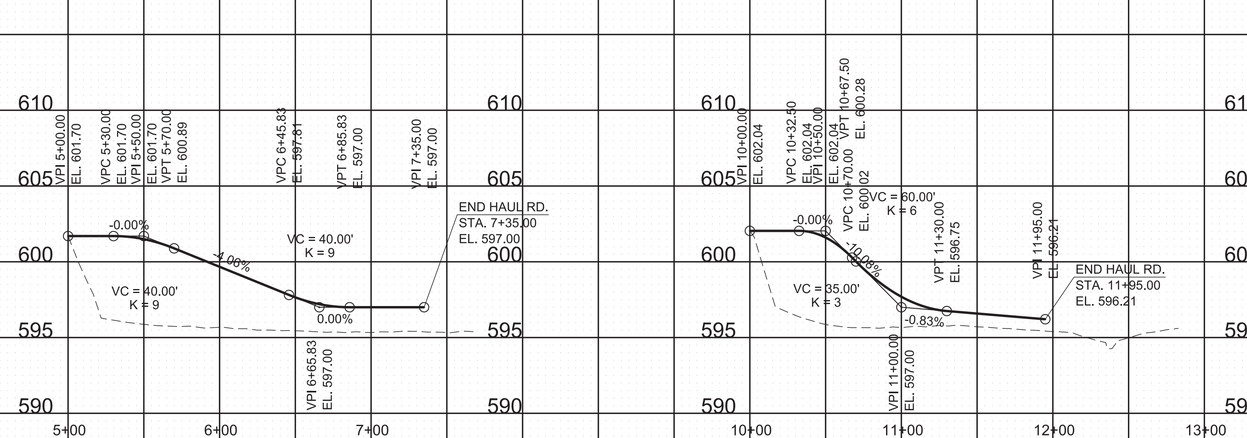
STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

SIDE ROAD PROFILE

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

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TYPE	YEAR	PROJECT NO.	SHEET NO.
PIH	2025	NH-54(48)	19
PS&E	2026	NH-54(48)	19



HAUL ROAD 1
STA. 138+30.21 - 75.18' LT.
KWT RAILROAD

HAUL ROAD 2
STA. 142+53.35 - 194.57' RT.
KWT RAILROAD

SEALED BY

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AGRICULTURE
No. 107729
STATE OF TENNESSEE

02/10/2026

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

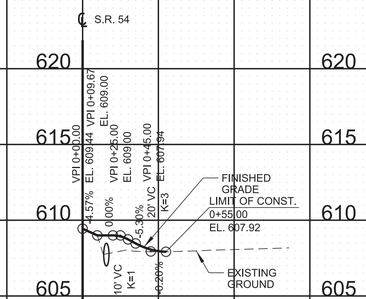
HAUL ROAD PROFILES

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

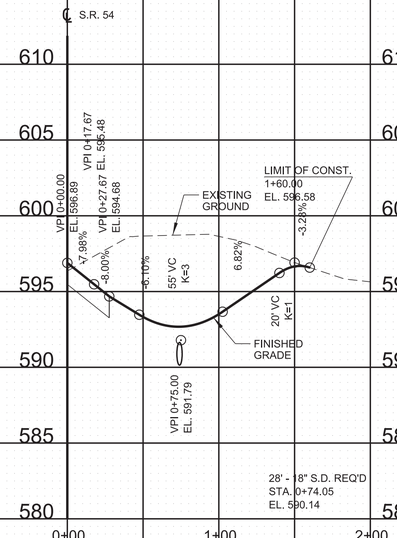
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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	19
PIH	2025	NH-54(48)	20
PS&E	2026	NH-54(48)	20

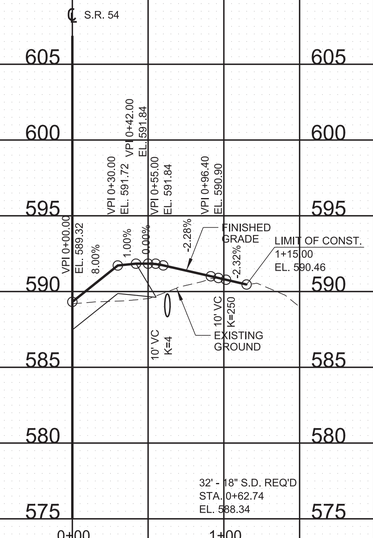
REV. 08-14-24: MOVED CROSSLAND RD. RT. FIELD ENT. FROM STA. 23+50 TO STA. 24+50 FOR TRACT 9.



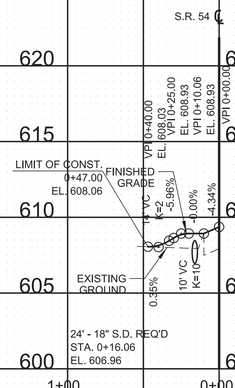
CROSSLAND RD. RT.
20' FIELD ENT. RT. 24+50.00
TRACT NO. 9



S.R. 54
20' FLD. ENT. RT. 102+05.00
TRACT NO. 4



S.R. 54
20' FIELD ENT. RT. 124+00.00
TRACT NO. 6



CROSSLAND RD. LT.
20' FIELD ENT. LT. 23+40.00
TRACT NO. 11

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02/10/2026

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

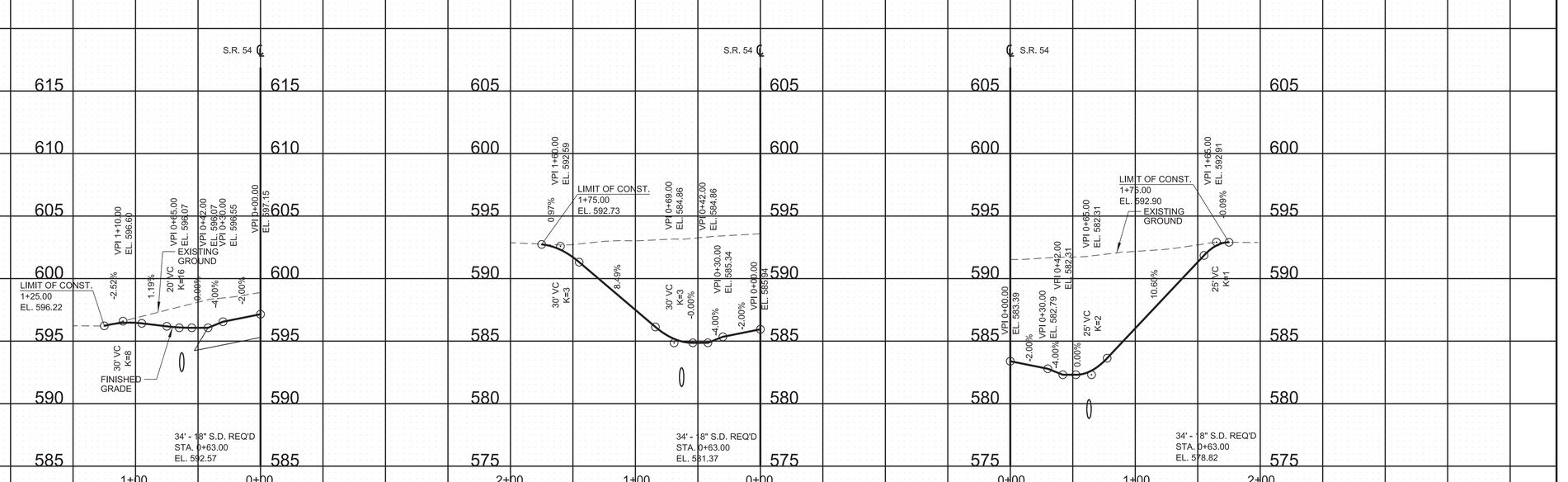
PRIVATE DRIVE, BUSINESS, AND FIELD ENTRANCE PROFILE

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

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	20
PIH	2025	NH-54(48)	21
PS&E	2026	NH-54(48)	21

REV. 08-14-24: MOVED FIELD ENT. FROM LT. STA. 210+00 TO LT. STA. 208+00 AND FROM RT. STA. 210+00 TO RT. STA. 211+65 FOR TRACT 14.



SEALED BY

J. BRIAN LEE
REGISTERED ENGINEER
ARCHITECTURE
NUMBER
101729
STATE OF TENNESSEE

02/10/2026

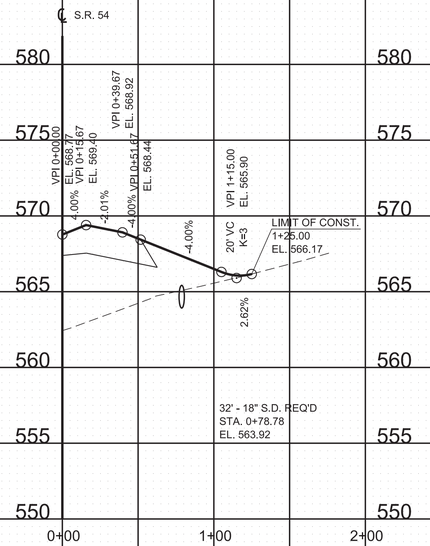
STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PRIVATE DRIVE, BUSINESS, AND FIELD ENTRANCE PROFILE

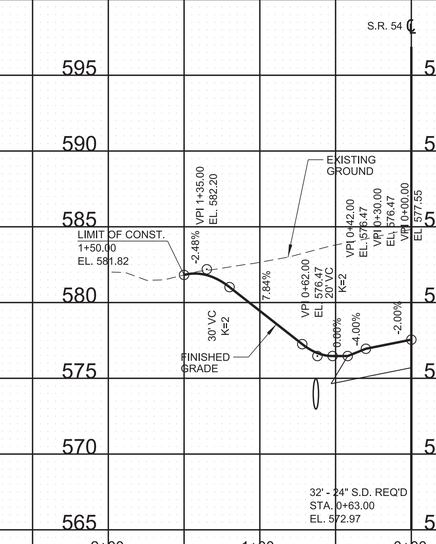
SCALE: 1"=50' HORIZ.
1"=5' VERT.

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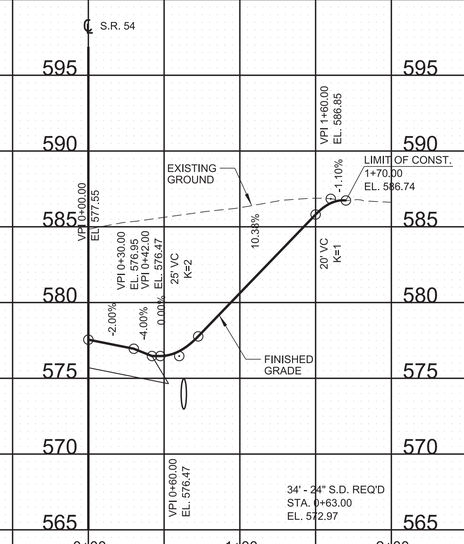
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	21
PIH	2025	NH-54(48)	22
PS&E	2026	NH-54(48)	22



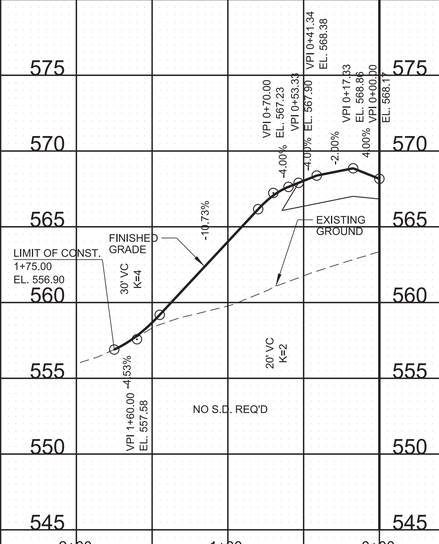
S.R. 54
20' FIELD ENT. RT. 234+00.00
TRACT NO. 15



S.R. 54
20' FIELD ENT. LT. 220+00.00
TRACT NO. 15



S.R. 54
20' FIELD ENT. RT. 220+00.00
TRACT NO. 15



S.R. 54
20' FIELD ENT. LT. 235+00.00
TRACT NO. 15

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02/10/2026

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

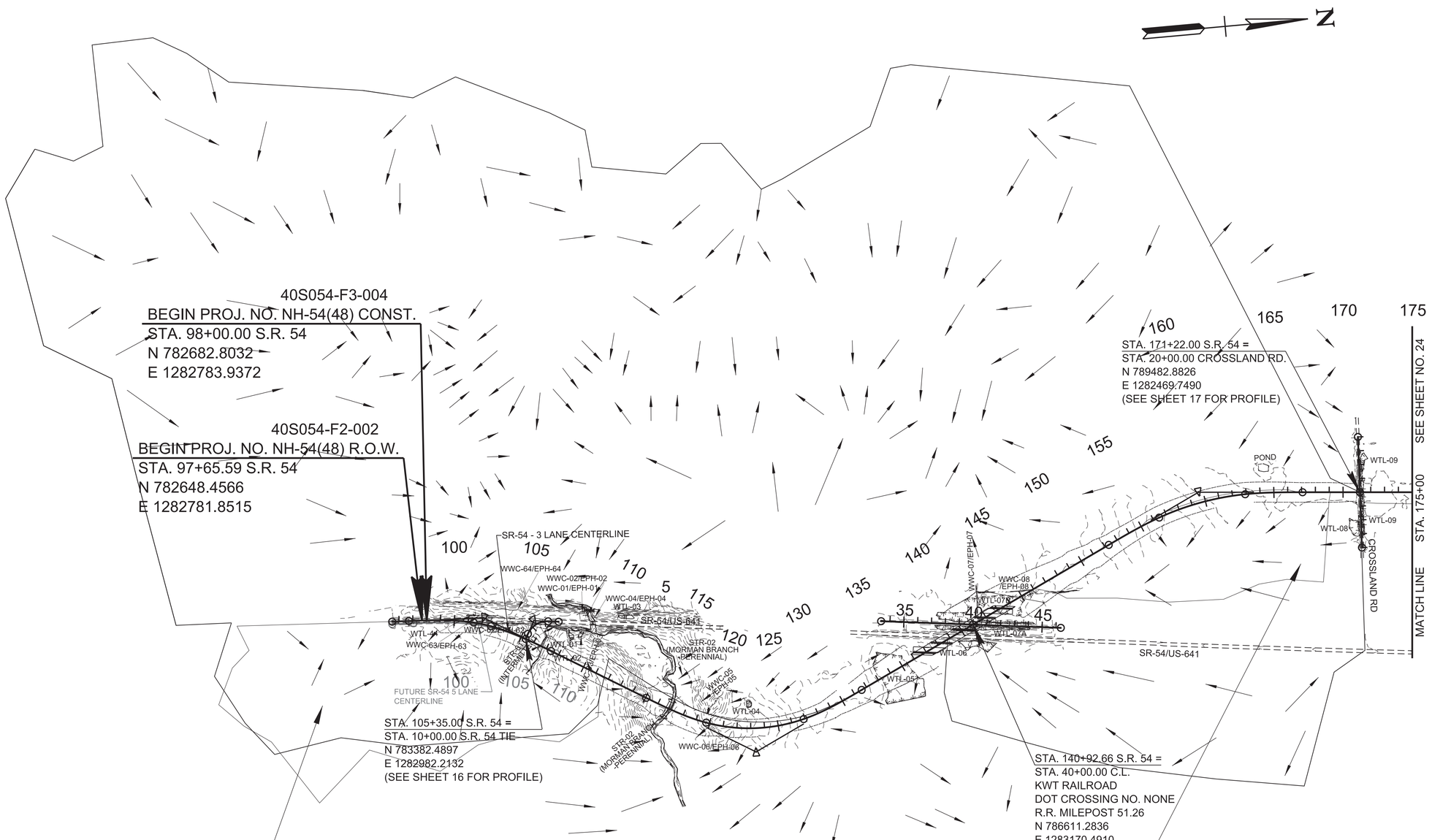
PRIVATE DRIVE, BUSINESS, AND FIELD ENTRANCE PROFILE

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

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	22
PIH	2025	NH-54(48)	23
PS&E	2026	NH-54(48)	23

REV. 03-26-24: REVISED R.R. MILEPOST FROM 51.23 TO 51.26 AND ADDED TRACT 12.



DRAINAGE / HYDRAULIC DATA FOR BRIDGE
STATION 7+38.18 SR-54 TIE , STREAM NAME: MORMAN BRANCH

STREAM BED LINING: SAND, LARGE GRAVEL
DIRECTION OF FLOW: LEFT
DRAINAGE AREA 857 AC.; (X) FLAT; ( ) ROLLING; ( ) HILLY; ( ) MTNS.
PRESENT STRUCTURE: SPAN 3 @ 10' , HEIGHT 6' , STRUCTURE: RCBB
BEGIN STATION - 8+47.61 OFFSET 245.10' RT. , END STATION - 8+57.94 OFFSET 223.87' RT.
LOW BEAM ELEV. N/A, LOCATION: N/A
INLET INVERT ELEV. : 569.10 , OUTLET INVERT ELEV. : 569.04
NORMAL WATER ELEV. 569.3 , EXTREME HIGHWATER ELEV. 570.1, DATE: UNKNOWN
HOW OBTAINED: FROM LOCAL PROPERTY OWNERS THAT THEY HAVE NOT SEEN CREEK OUT OF BANKS
(USED TOP OF BANK ELEVATION ON INLET SIDE)
BACKWATER FROM WHAT STREAM (IF APPLICABLE): N/A
EXISTING STRUCTURE CONDITION: FAIR
SEE STREAM CROSS-SECTIONS FOR VEGETATIVE COVER
SEE PRESENT LAYOUT (LEVEL 40) FOR STREAM ALIGNMENT AND CROSS-SECTION LOCATIONS.
SEE CENTERLINE PROFILE OR FIELD BOOK FOR EXISTING BRIDGE OPENING SKETCHES.
REMARKS: THE INLET OF THE EXISTING BOX IS HIGHER THAN THE CHANNEL. MORMAN BRANCH BACKS UP BEHIND THE BOX BUT DURING NORMAL FLOW ONLY A TRICKLE MAKES IT THROUGH THE BOX. DOWNSTREAM THERE IS NO FLOW EXCEPT DURING STORMS, ONLY SMALL POOLS WHICH COLLECT IN LOW AREAS ARE PRESENT.

DRAINAGE DATA FOR BOX
STATION 106+70.00

DIRECTION OF FLOW: RIGHT TO LEFT
DRAINAGE AREA 55.22 AC, ( ) FLAT; (X) ROLLING; ( ) HILLY; ( ) MTNS.
PRESENT STRUCTURE: NONE
EXISTING STRUCTURE CONDITION: N/A
REMARKS: NO EXISTING PIPE (DITCH))

DRAINAGE / HYDRAULIC DATA FOR BRIDGE
STATION 117+25.20 SR-54 , STREAM NAME: MORMAN BRANCH

STREAM BED LINING: SAND, LARGE GRAVEL
DIRECTION OF FLOW: RIGHT
DRAINAGE AREA 870 AC.; (X) FLAT; ( ) ROLLING; ( ) HILLY; ( ) MTNS.
PRESENT STRUCTURE: SPAN 3 @ 10' , HEIGHT 6' , STRUCTURE: RCBB
BEGIN STATION - 109+43.34 OFFSET 143.80' LT. , END STATION - 109+70.43 OFFSET 158.41' LT.
LOW BEAM ELEV. N/A, LOCATION: N/A
INLET INVERT ELEV. : 569.10 , OUTLET INVERT ELEV. : 569.04
NORMAL WATER ELEV. 569.3, EXTREME HIGHWATER ELEV. 570.1, DATE: UNKNOWN
HOW OBTAINED: FROM LOCAL PROPERTY OWNERS THAT THEY HAVE NOT SEEN CREEK OUT OF BANKS
(USED TOP OF BANK ELEVATION ON INLET SIDE)
BACKWATER FROM WHAT STREAM (IF APPLICABLE): N/A
EXISTING STRUCTURE CONDITION: FAIR
SEE STREAM CROSS-SECTIONS FOR VEGETATIVE COVER
SEE PRESENT LAYOUT (LEVEL 40) FOR STREAM ALIGNMENT AND CROSS-SECTION LOCATIONS.
SEE CENTERLINE PROFILE OR FIELD BOOK FOR EXISTING BRIDGE OPENING SKETCHES.
REMARKS: THE INLET OF THE EXISTING BOX IS HIGHER THAN THE CHANNEL. MORMAN BRANCH BACKS UP BEHIND THE BOX BUT DURING NORMAL FLOW ONLY A TRICKLE MAKES IT THROUGH THE BOX. DOWNSTREAM THERE IS NO FLOW EXCEPT DURING STORMS, ONLY SMALL POOLS WHICH COLLECT IN LOW AREAS ARE PRESENT.

DRAINAGE DATA FOR PIPE
STATION 144+76.02

DIRECTION OF FLOW: RIGHT TO LEFT
DRAINAGE AREA 25.87 AC, ( ) FLAT; (X) ROLLING; ( ) HILLY; ( ) MTNS.
PRESENT STRUCTURE: NONE
EXISTING STRUCTURE CONDITION: N/A
REMARKS: NO EXISTING PIPE (DITCH))

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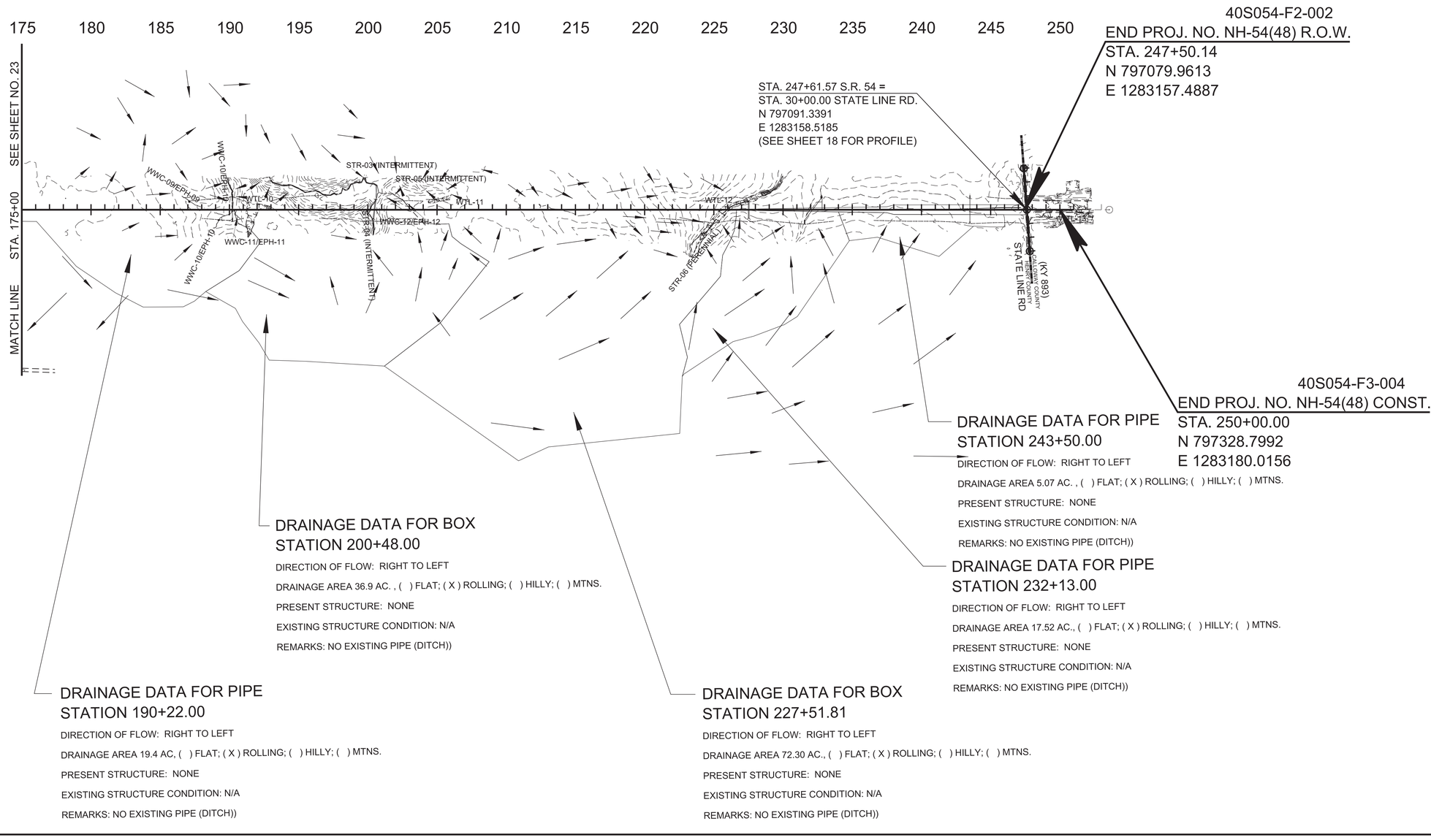
STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

DRAINAGE MAP
STA. 95+50.00 TO STA.175+00
SCALE: 1"=400'

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	23
PIH	2025	NH-54(48)	24
PS&E	2026	NH-54(48)	24

REV. 03-26-24: REVISED END OF PROJECT STATIONING FROM STA. 247+47.60 TO STA. 247+50.14.



DRAINAGE DATA FOR BOX
STATION 200+48.00

DIRECTION OF FLOW: RIGHT TO LEFT

DRAINAGE AREA 36.9 AC. , ( ) FLAT; (X) ROLLING; ( ) HILLY; ( ) MTNS.

PRESENT STRUCTURE: NONE

EXISTING STRUCTURE CONDITION: N/A

REMARKS: NO EXISTING PIPE (DITCH))

DRAINAGE DATA FOR PIPE
STATION 190+22.00

DIRECTION OF FLOW: RIGHT TO LEFT

DRAINAGE AREA 19.4 AC, ( ) FLAT; (X) ROLLING; ( ) HILLY; ( ) MTNS.

PRESENT STRUCTURE: NONE

EXISTING STRUCTURE CONDITION: N/A

REMARKS: NO EXISTING PIPE (DITCH))

DRAINAGE DATA FOR PIPE
STATION 243+50.00

DIRECTION OF FLOW: RIGHT TO LEFT

DRAINAGE AREA 5.07 AC. , ( ) FLAT; (X) ROLLING; ( ) HILLY; ( ) MTNS.

PRESENT STRUCTURE: NONE

EXISTING STRUCTURE CONDITION: N/A

REMARKS: NO EXISTING PIPE (DITCH))

DRAINAGE DATA FOR PIPE
STATION 232+13.00

DIRECTION OF FLOW: RIGHT TO LEFT

DRAINAGE AREA 17.52 AC., ( ) FLAT; (X) ROLLING; ( ) HILLY; ( ) MTNS.

PRESENT STRUCTURE: NONE

EXISTING STRUCTURE CONDITION: N/A

REMARKS: NO EXISTING PIPE (DITCH))

DRAINAGE DATA FOR BOX
STATION 227+51.81

DIRECTION OF FLOW: RIGHT TO LEFT

DRAINAGE AREA 72.30 AC., ( ) FLAT; (X) ROLLING; ( ) HILLY; ( ) MTNS.

PRESENT STRUCTURE: NONE

EXISTING STRUCTURE CONDITION: N/A

REMARKS: NO EXISTING PIPE (DITCH))

SEALED BY

J. BRIAN LEE
REGISTERED ENGINEER
STRUCTURE
02/10/2026
NO. 107299
STATE OF TENNESSEE

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

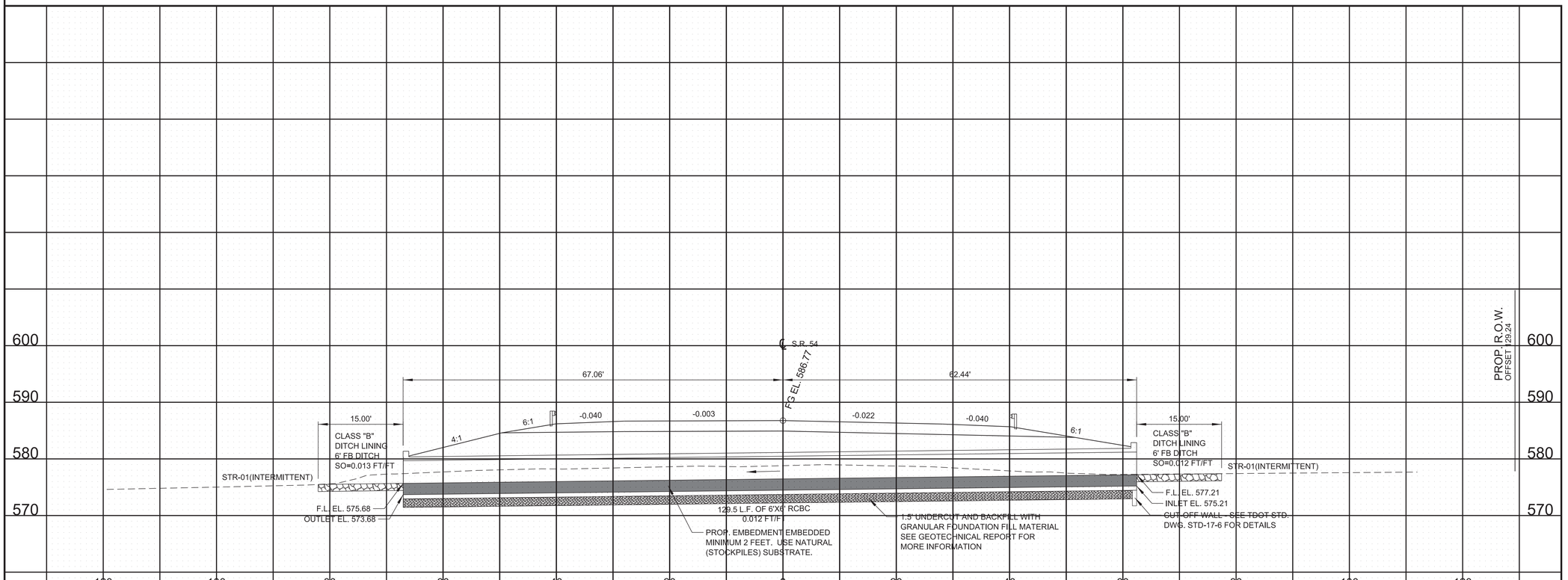
DRAINAGE MAP

STA.175+00 TO STA.250+00

SCALE: 1"=400'

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	24
PIH	2025	NH-54(48)	25
PS&E	2026	NH-54(48)	25



BOX TABULATION

STATION	STD. DWG.	NO. BARRELS	WIDTH	HEIGHT	LENGTH
106+70.00	STD-17-51	1	6'	6'	129.5

FILL HEIGHT	CALCULATION FACTORS		SECTION LENGTH FT.	QUANTITY	
	CONCRETE. CY/FT	REINF. STEEL LB/FT		CONCRETE. C.Y.	REINF. STEEL LB.
2.99' TO 0.00'				0	0
4.99' TO 3.00'				0.0	0
9.99' TO 5.00'	0.71	158	129.5	91.9	20461
19.99 TO 10.00'				0	0
29.99 TO 20.00'				0	0
39.99 TO 30.00'				0	0
49.99 TO 40.00'				0	0
59.99 TO 50.00'				0	0
> 60.00'				0	0
SUB TOTALS			129.5	91.9	20461.0

WINGWALL TABULATION

STD. DWG.	BOX/SLAB HEIGHT FT.	ST HEIGHT FT.	CURB HEIGHT FT.	TOTAL HEIGHT FT.	DESIGN HEIGHT FT.
STD-17-1 THRU	6	0.67	1	7.67	8
STD-17-10 & STD-17-16 THRU	WINGWALL STD. DWG.		FILL SLOPE	CONCRETE. C.Y.	REINF. STEEL LB.
STD-17-18	STD-17-11	90°	3:1	16.9	1754
TOTAL QUANTITY				109.0	22215.0

BOX CULVERT
STATION: 106+70.00
STRUCTURE: 129.5' OF 6'X6' RCBC (2.0' EMBEDDED)

SKEW	85° 00' 00" RT	DEG.
DRAINAGE AREA	55.22	AC.
DESIGN DISCHARGE (Q50)	77.50	CFS
DESIGN DISCHARGE (Q100)	83.70	CFS
OVERTOPPING ELEV.	586.77	ELEV.
ALLOWABLE HEADWATER ELEV.	584.76	ELEV.
Q50 HEADWATER ELEV.	579.86	ELEV.
Q100 HEADWATER ELEV.	580.00	ELEV.
VELOCITY (Q50)	9.00	FT/S
VELOCITY (Q100)	9.25	FT/S
INLET ELEVATION	575.21	ELEV.
OUTLET ELEVATION	573.68	ELEV.

STANDARD DRAWING NOS.:
STD-17-51
QUANTITIES:

CLASS "A" CONCRETE	109.0	C.Y.
STEEL BAR REINFORCING	22215	LB.
BACKFILL	1308	TONS
FOUNDATION FILL MATERIAL	55.0	C.Y.

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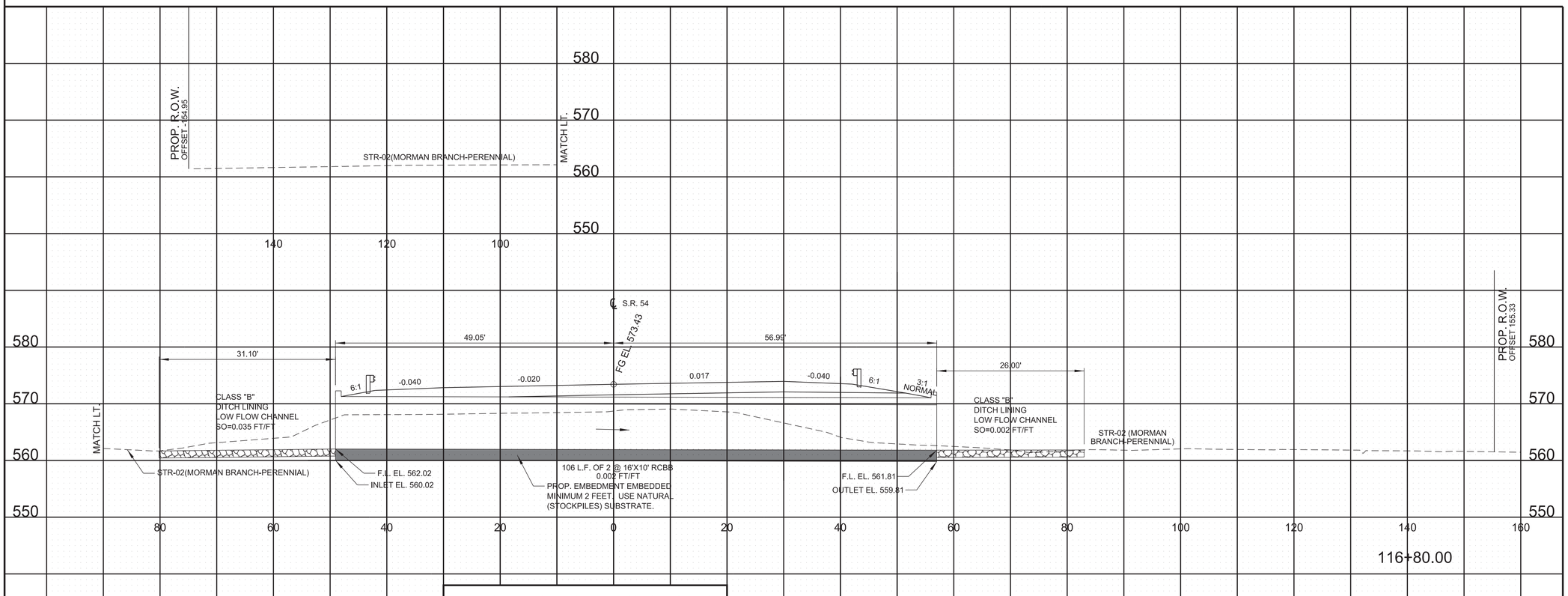
CULVERT SECTION

SCALE: 1"=10' HORIZ.
1"=10' VERT.

SR-54 CULVERT SECTIONS

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	25
PIH	2025	NH-54(48)	26
PS&E	2026	NH-54(48)	26



0.5' UNDERCUT AND BACKFILL WITH TYPE A AGGREGATE, GRADING D ALL BACKFILL SHALL BE WRAPPED IN TYPE IV GEOTEXTILE FABRIC SEE GEOTECHNICAL REPORT FOR MORE INFORMATION

BOX TABULATION

STATION	STD. DWG.	NO. BARRELS	WIDTH	HEIGHT	LENGTH
116+80.00	STD-17-83	2	16'	10'	106

FILL HEIGHT	CALCULATION FACTORS		SECTION LENGTH FT.	QUANTITY	
	CONCRETE. CY/FT	REINF. STEEL LB/FT		CONCRETE. C.Y.	REINF. STEEL LB.
2.99' TO 0.00'				0	0
4.99' TO 3.00'	3.94	835	106	417.6	88510
9.99' TO 5.00'				0	0
19.99 TO 10.00'				0	0
29.99 TO 20.00'				0	0
39.99 TO 30.00'				0	0
49.99 TO 40.00'				0	0
59.99 TO 50.00'				0	0
> 60.00'				0	0
SUB TOTALS			106	417.6	88510.0

WINGWALL TABULATION

STD. DWG.	BOX/SLAB HEIGHT FT.	ST HEIGHT FT.	CURB HEIGHT FT.	TOTAL HEIGHT FT.	DESIGN HEIGHT FT.
STD-17-1 THRU	10	1.25	1	12.25	12.5
STD-17-10 &	WINGWALL		FILL	CONCRETE.	REINF. STEEL
STD-17-16 THRU	STD. DWG.		SLOPE	C.Y.	LB.
STD-17-18	STD-17-11	90°	3:1	45.4	5394
TOTAL QUANTITY				463.0	93904.0

BOX BRIDGE
STATION: 116+80.00
STRUCTURE: 106' OF 2@16'X10' RCBB (2' EMBEDDED), 90° SKEW

SKEW	86° 59' 58" LT.	DEG.
DRAINAGE AREA	1.29	SQ. MI.
TOTAL DESIGN DISCHARGE (100 YR)	1250	CFS
100 YR BACKWATER	0.74	FT AT EL. 570.22
100 YR VELOCITY	4.99	FT/S
500 YR DISCHARGE (THIS STRUCT.)	1520	CFS AT EL. 571.00
INLET ELEVATION	560.02	ELEV.
OUTLET ELEVATION	559.81	ELEV.
APPROACH OVERTOPPING ELEVATION	573.38	ELEV.

STANDARD DRAWING NUMBERS.:
STD-17-83
QUANTITIES:

CLASS "A" CONCRETE	463.0	C.Y.
STEEL BAR REINFORCING	93904.0	LB.
BACKFILL	1561.3	TONS
FOUNDATION FILL MATERIAL	150.0	C.Y.

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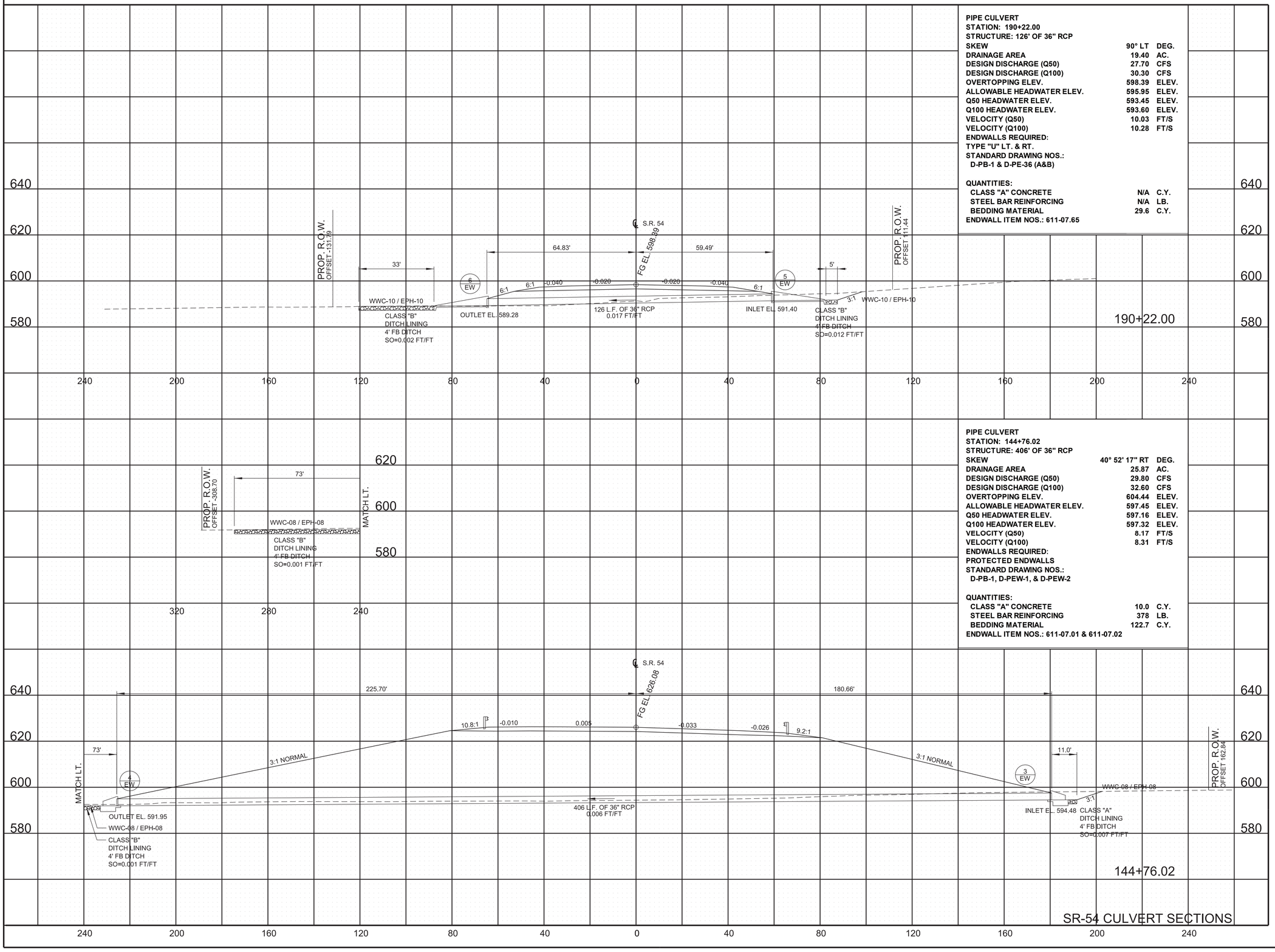
CULVERT SECTION

SCALE: 1"=10' HORIZ.
1"=10' VERT.

SR-54 CULVERT SECTIONS

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	26
PIH	2025	NH-54(48)	27
PS&E	2026	NH-54(48)	27



PIPE CULVERT
STATION: 190+22.00
STRUCTURE: 126' OF 36" RCP

SKEW	**90° LT**	**DEG.**
DRAINAGE AREA	**19.40**	**AC.**
DESIGN DISCHARGE (Q50)	**27.70**	**CFS**
DESIGN DISCHARGE (Q100)	**30.30**	**CFS**
OVERTOPPING ELEV.	**598.39**	**ELEV.**
ALLOWABLE HEADWATER ELEV.	**595.95**	**ELEV.**
Q50 HEADWATER ELEV.	**593.45**	**ELEV.**
Q100 HEADWATER ELEV.	**593.60**	**ELEV.**
VELOCITY (Q50)	**10.03**	**FT/S**
VELOCITY (Q100)	**10.28**	**FT/S**

ENDWALLS REQUIRED:
TYPE "U" LT. & RT.
STANDARD DRAWING NOS.:
D-PB-1 & D-PE-36 (A&B)

QUANTITIES:

CLASS "A" CONCRETE	**N/A**	**C.Y.**
STEEL BAR REINFORCING	**N/A**	**LB.**
BEDDING MATERIAL	**29.6**	**C.Y.**

ENDWALL ITEM NOS.: 611-07.65

PIPE CULVERT
STATION: 144+76.02
STRUCTURE: 406' OF 36" RCP

SKEW	**40° 52' 17" RT**	**DEG.**
DRAINAGE AREA	**25.87**	**AC.**
DESIGN DISCHARGE (Q50)	**29.80**	**CFS**
DESIGN DISCHARGE (Q100)	**32.60**	**CFS**
OVERTOPPING ELEV.	**604.44**	**ELEV.**
ALLOWABLE HEADWATER ELEV.	**597.45**	**ELEV.**
Q50 HEADWATER ELEV.	**597.16**	**ELEV.**
Q100 HEADWATER ELEV.	**597.32**	**ELEV.**
VELOCITY (Q50)	**8.17**	**FT/S**
VELOCITY (Q100)	**8.31**	**FT/S**

ENDWALLS REQUIRED:
PROTECTED ENDWALLS
STANDARD DRAWING NOS.:
D-PB-1, D-PEW-1, & D-PEW-2

QUANTITIES:

CLASS "A" CONCRETE	**10.0**	**C.Y.**
STEEL BAR REINFORCING	**378**	**LB.**
BEDDING MATERIAL	**122.7**	**C.Y.**

ENDWALL ITEM NOS.: 611-07.01 & 611-07.02

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

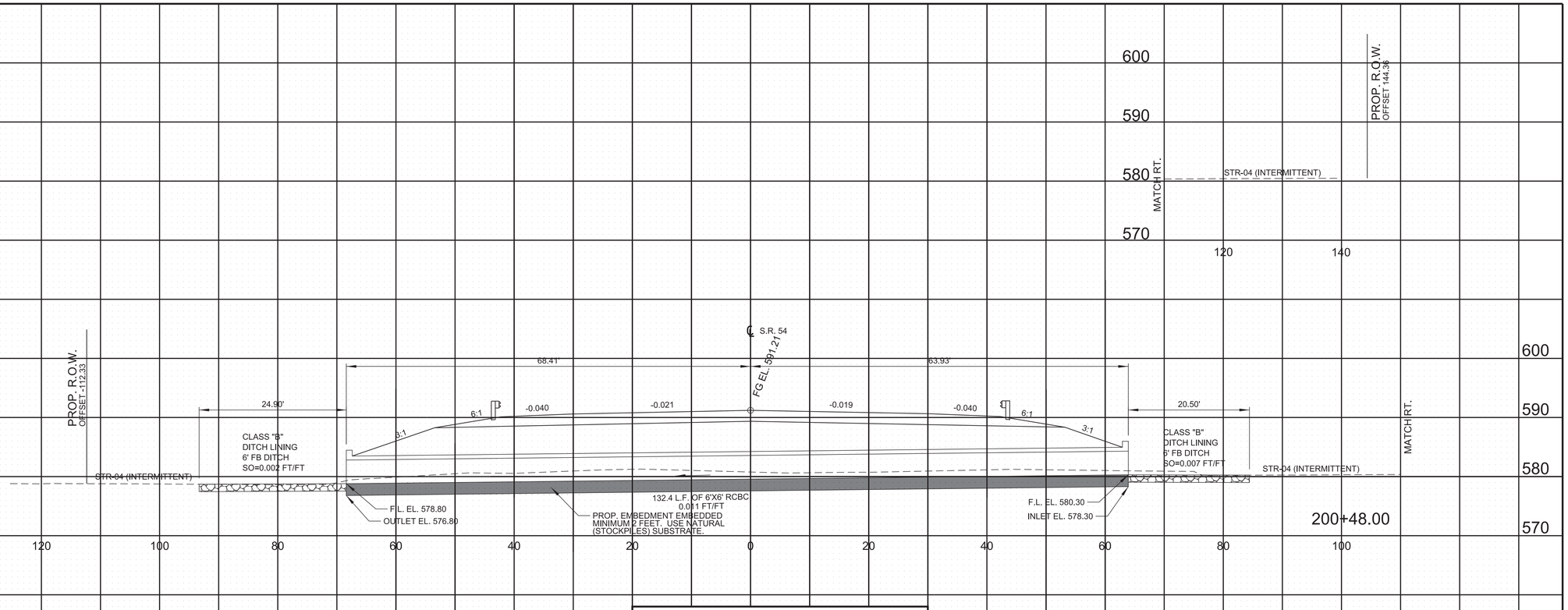
CULVERT SECTION

SCALE: 1"=20' HORIZ.
1"=20' VERT.

SR-54 CULVERT SECTIONS

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	27
PIH	2025	NH-54(48)	28
PS&E	2026	NH-54(48)	28



0.5' UNDERCUT AND BACKFILL WITH TYPE A AGGREGATE, GRADING D
ALL BACKFILL SHALL BE WRAPPED IN TYPE IV GEOTEXTILE FABRIC
SEE GEOTECHNICAL REPORT FOR MORE INFORMATION

BOX TABULATION

STATION	STD. DWG.	NO. BARRELS	WIDTH	HEIGHT	LENGTH
200+48.00	STD-17-51	1	6'	6'	132.4

FILL HEIGHT	CALCULATION FACTORS		SECTION LENGTH FT.	QUANTITY	
	CONCRETE. CY/FT	REINF. STEEL LB/FT		CONCRETE. C.Y.	REINF. STEEL LB.
2.99' TO 0.00'				0	0
4.99' TO 3.00'				0.0	0
9.99' TO 5.00'	0.71	158	132.4	94.0	20919
19.99 TO 10.00'				0	0
29.99 TO 20.00'				0	0
39.99 TO 30.00'				0	0
49.99 TO 40.00'				0	0
59.99 TO 50.00'				0	0
> 60.00'				0	0
SUB TOTALS			132.4	94.0	20919

WINGWALL TABULATION

STD. DWG.	BOX/SLAB HEIGHT FT.	ST HEIGHT FT.	CURB HEIGHT FT.	TOTAL HEIGHT FT.	DESIGN HEIGHT FT.
STD-17-1 THRU	6	0.67	1	7.67	8
STD-17-10 &	WINGWALL		FILL	CONCRETE.	REINF. STEEL
STD-17-16 THRU	STD. DWG.		SLOPE	C.Y.	LB.
STD-17-18	STD-17-11	90°	4:1	20.1	1915
TOTAL QUANTITY				115.0	22835.0

BOX CULVERT
STATION: 200+48.00
STRUCTURE: 132.4' OF 6'X6' RCBC (2' EMBEDDED)

SKEW	83° 21' 17" LT	DEG.
DRAINAGE AREA	36.90	AC.
DESIGN DISCHARGE (Q50)	55.10	CFS
DESIGN DISCHARGE (Q100)	59.50	CFS
OVERTOPPING ELEV.	591.21	ELEV.
ALLOWABLE HEADWATER ELEV.	588.22	ELEV.
Q50 HEADWATER ELEV.	582.66	ELEV.
Q100 HEADWATER ELEV.	582.78	ELEV.
VELOCITY (Q50)	4.37	FT/S
VELOCITY (Q100)	4.54	FT/S
INLET ELEVATION	578.30	ELEV.
OUTLET ELEVATION	576.80	ELEV.

STANDARD DRAWING NOS.:
STD-17-51
QUANTITIES:

CLASS "A" CONCRETE	115.0	C.Y.
STEEL BAR REINFORCING	22835	LB.
BACKFILL	1163.00	TONS
FOUNDATION FILL MATERIAL	56.0	C.Y.

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

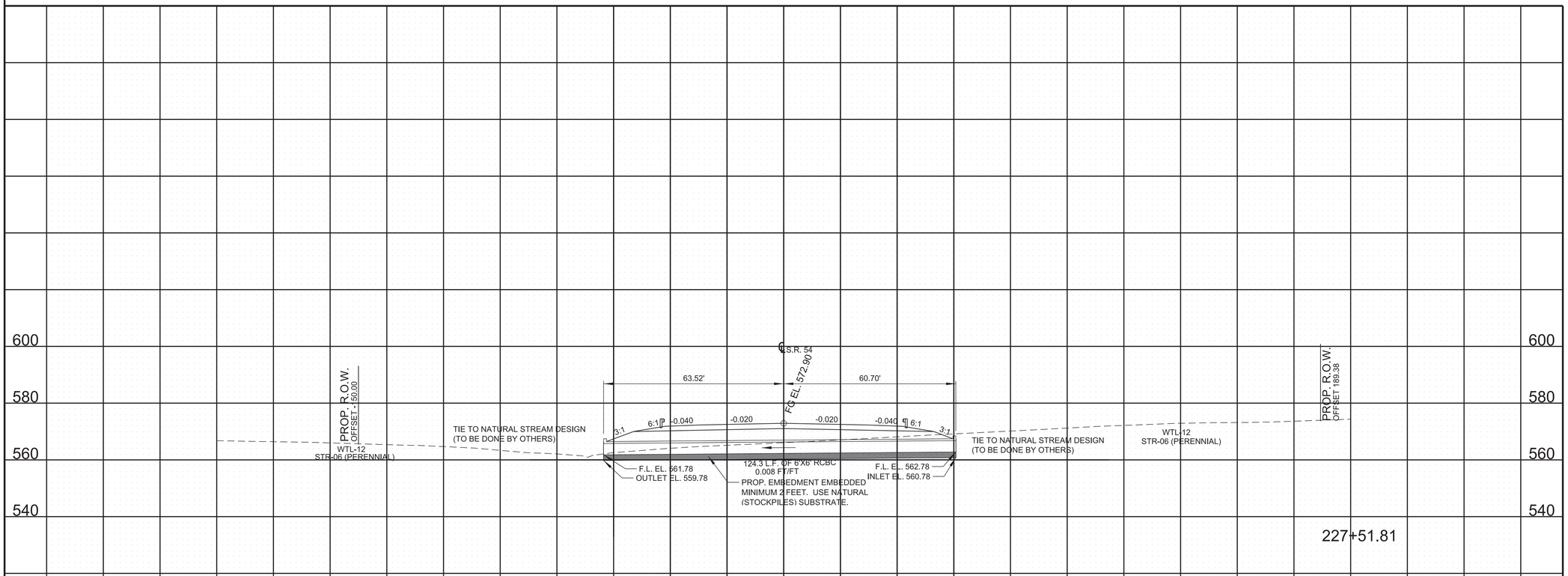
CULVERT SECTION

SCALE: 1"=10' HORIZ.
1"=10' VERT.

SR-54 CULVERT SECTIONS

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	28
PIH	2025	NH-54(48)	29
PS&E	2026	NH-54(48)	29



0.5' UNDERCUT AND BACKFILL WITH TYPE A AGGREGATE, GRADING D
ALL BACKFILL SHALL BE WRAPPED IN TYPE IV GEOTEXTILE FABRIC
SEE GEOTECHNICAL REPORT FOR MORE INFORMATION

BOX TABULATION

STATION	STD. DWG.	NO. BARRELS	WIDTH	HEIGHT	LENGTH
227+51.81	STD-17-51	1	6'	6'	124.3

FILL HEIGHT	CALCULATION FACTORS		SECTION LENGTH FT.	QUANTITY	
	CONCRETE. CY/FT	REINF. STEEL LB/FT		CONCRETE. C.Y.	REINF. STEEL LB.
2.99' TO 0.00'				0	0
4.99' TO 3.00'				0.0	0
9.99' TO 5.00'	0.71	158	124.3	88.3	19639.4
19.99 TO 10.00'				0	0
29.99 TO 20.00'				0	0
39.99 TO 30.00'				0	0
49.99 TO 40.00'				0	0
59.99 TO 50.00'				0	0
> 60.00'				0	0
SUB TOTALS			124.3	88.3	19639.4

WINGWALL TABULATION

STD. DWG.	BOX/SLAB HEIGHT FT.	ST HEIGHT FT.	CURB HEIGHT FT.	TOTAL HEIGHT FT.	DESIGN HEIGHT FT.
STD-17-1 THRU	6	0.67	1	7.67	8
STD-17-10 &	WINGWALL		FILL	CONCRETE.	REINF. STEEL
STD-17-16 THRU	STD. DWG.		SLOPE	C.Y.	LB.
STD-17-18	STD-17-11	90°	3:1	16.9	1754
TOTAL QUANTITY				106.0	21394.0

BOX CULVERT
STATION: 227+51.81
STRUCTURE: 124.3' OF 6'X6' RCBC (2' EMBEDDED)

SKEW	90°	DEG.
DRAINAGE AREA	72.30	AC.
DESIGN DISCHARGE (Q50)	86.70	CFS
DESIGN DISCHARGE (Q100)	94.70	CFS
OVERTOPPING ELEV.	573.53	ELEV.
ALLOWABLE HEADWATER ELEV.	570.89	ELEV.
Q50 HEADWATER ELEV.	567.98	ELEV.
Q100 HEADWATER ELEV.	568.18	ELEV.
VELOCITY (Q50)	7.75	FT/S
VELOCITY (Q100)	7.98	FT/S
INLET ELEVATION	560.78	ELEV.
OUTLET ELEVATION	559.78	ELEV.

STANDARD DRAWING NOS.:
STD-17-51
QUANTITIES:

CLASS "A" CONCRETE	106.0	C.Y.
STEEL BAR REINFORCING	21394	LB.
BACKFILL	1582.00	TONS
FOUNDATION FILL MATERIAL	53.0	C.Y.

SEALED BY

J. BRIAN LEE
REGISTERED ENGINEER
AGRICULTURE
NUMBER 107209
STATE OF TENNESSEE
02/10/2026

COORDINATES ARE NAD 83(2011), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00002 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988 WITH GEOID 12B MODEL.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

CULVERT SECTION

SCALE: 1"=20' HORIZ.
1"=20' VERT.

SR-54 CULVERT SECTIONS

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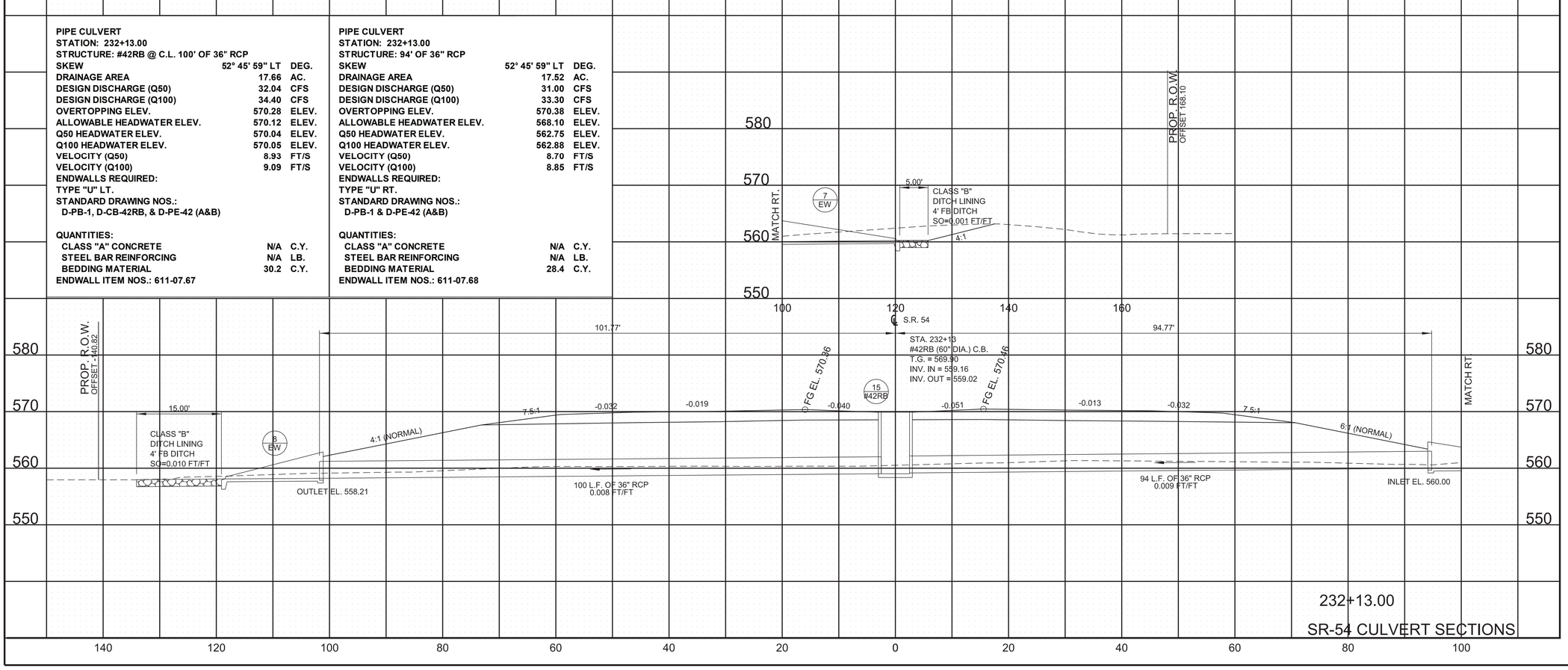
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	29
PIH	2025	NH-54(48)	30
PS&E	2026	NH-54(48)	30

PIPE CULVERT
STATION: 232+13.00
STRUCTURE: #42RB @ C.L. 100' OF 36" RCP

SKEW	52° 45' 59" LT	DEG.
DRAINAGE AREA	17.66	AC.
DESIGN DISCHARGE (Q50)	32.04	CFS
DESIGN DISCHARGE (Q100)	34.40	CFS
OVERTOPPING ELEV.	570.28	ELEV.
ALLOWABLE HEADWATER ELEV.	570.12	ELEV.
Q50 HEADWATER ELEV.	570.04	ELEV.
Q100 HEADWATER ELEV.	570.05	ELEV.
VELOCITY (Q50)	8.93	FT/S
VELOCITY (Q100)	9.09	FT/S
ENDWALLS REQUIRED:		
TYPE "U" LT.		
STANDARD DRAWING NOS.:		
D-PB-1, D-CB-42RB, & D-PE-42 (A&B)		
QUANTITIES:		
CLASS "A" CONCRETE	N/A	C.Y.
STEEL BAR REINFORCING	N/A	LB.
BEDDING MATERIAL	30.2	C.Y.
ENDWALL ITEM NOS.: 611-07.67		

PIPE CULVERT
STATION: 232+13.00
STRUCTURE: 94' OF 36" RCP

SKEW	52° 45' 59" LT	DEG.
DRAINAGE AREA	17.52	AC.
DESIGN DISCHARGE (Q50)	31.00	CFS
DESIGN DISCHARGE (Q100)	33.30	CFS
OVERTOPPING ELEV.	570.38	ELEV.
ALLOWABLE HEADWATER ELEV.	568.10	ELEV.
Q50 HEADWATER ELEV.	562.75	ELEV.
Q100 HEADWATER ELEV.	562.88	ELEV.
VELOCITY (Q50)	8.70	FT/S
VELOCITY (Q100)	8.85	FT/S
ENDWALLS REQUIRED:		
TYPE "U" RT.		
STANDARD DRAWING NOS.:		
D-PB-1 & D-PE-42 (A&B)		
QUANTITIES:		
CLASS "A" CONCRETE	N/A	C.Y.
STEEL BAR REINFORCING	N/A	LB.
BEDDING MATERIAL	28.4	C.Y.
ENDWALL ITEM NOS.: 611-07.68		



232+13.00

SR-54 CULVERT SECTIONS

SEALED BY

J. BRIAN LEE
REGISTERED ENGINEER
ARCHITECT
LICENSE NUMBER
E 1 0 7 7 2 9 0
STATE OF TENNESSEE

02/10/2026

COORDINATES ARE NAD 83(2011), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00002 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988 WITH GEOID 12B MODEL.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

CULVERT SECTION

SCALE: 1"=10' HORIZ.
1"=10' VERT.

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	30
PIH	2025	NH-54(48)	31
PS&E	2026	NH-54(48)	31

PIPE CULVERT
STATION: 243+50.00
STRUCTURE: #38S CB @ 7.82' LT. C.L. 76' OF 24" RCP

SKEW	90° LT	DEG.
DRAINAGE AREA	6.65	AC.
DESIGN DISCHARGE (Q50)	14.20	CFS
DESIGN DISCHARGE (Q100)	15.40	CFS
OVERTOPPING ELEV.	564.07	ELEV.
ALLOWABLE HEADWATER ELEV.	563.91	ELEV.
Q50 HEADWATER ELEV.	563.43	ELEV.
Q100 HEADWATER ELEV.	563.45	ELEV.
VELOCITY (Q50)	6.30	FT/S
VELOCITY (Q100)	6.42	FT/S

ENDWALLS REQUIRED:
TYPE "U" LT.
STANDARD DRAWING NOS.:
D-PB-1, D-CB-38S, & D-PE-24 (A&B)

QUANTITIES:

CLASS "A" CONCRETE	N/A	C.Y.
STEEL BAR REINFORCING	N/A	LB.
BEDDING MATERIAL	20.2	C.Y.

ENDWALL ITEM NOS.: 611-07.59

PIPE CULVERT
STATION: 243+50.00
STRUCTURE: 94' OF 24" RCP

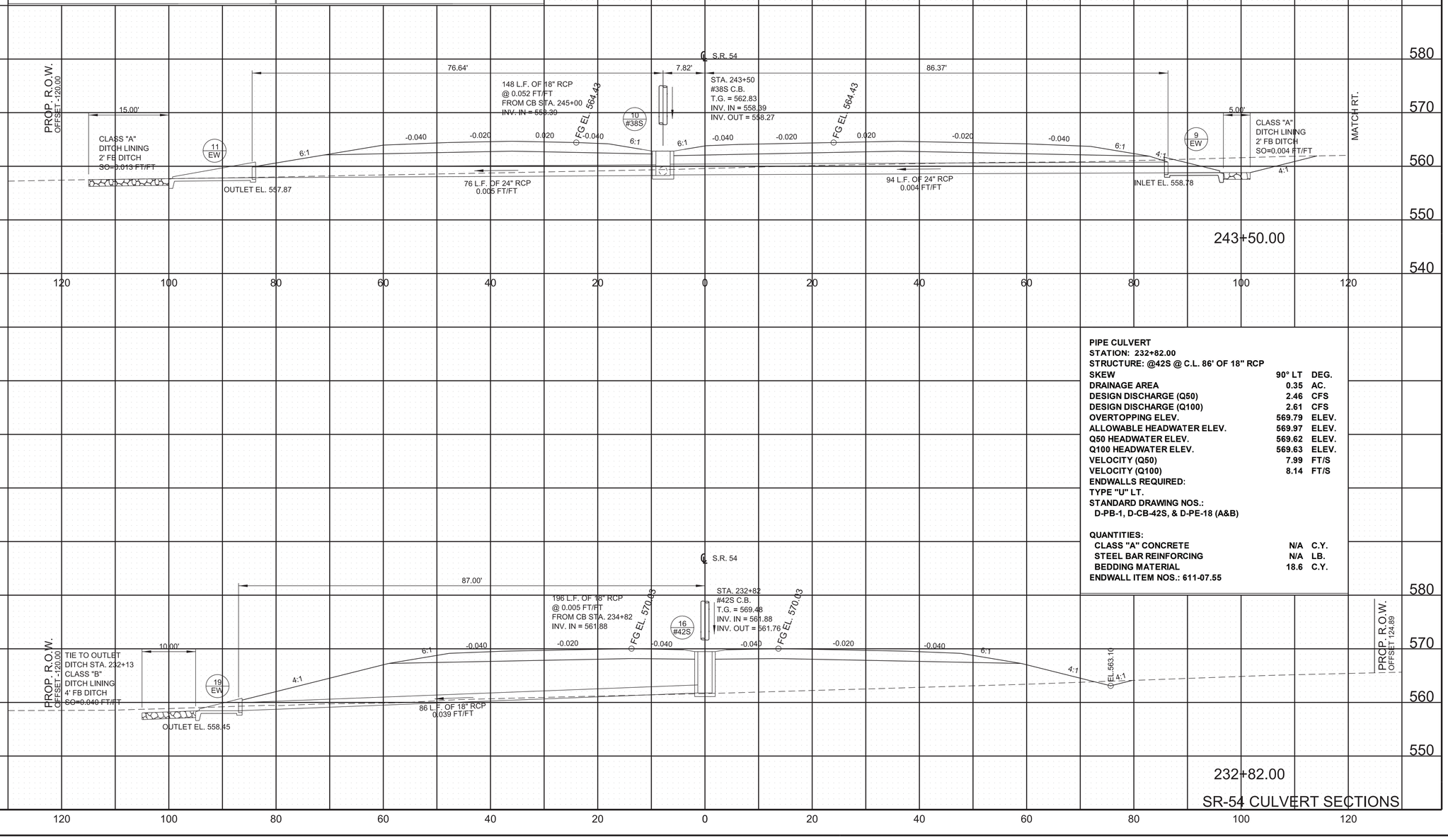
SKEW	90° LT	DEG.
DRAINAGE AREA	5.07	AC.
DESIGN DISCHARGE (Q50)	9.40	CFS
DESIGN DISCHARGE (Q100)	10.10	CFS
OVERTOPPING ELEV.	564.43	ELEV.
ALLOWABLE HEADWATER ELEV.	563.46	ELEV.
Q50 HEADWATER ELEV.	560.99	ELEV.
Q100 HEADWATER ELEV.	561.04	ELEV.
VELOCITY (Q50)	2.99	FT/S
VELOCITY (Q100)	3.21	FT/S

ENDWALLS REQUIRED:
TYPE "U" RT.
STANDARD DRAWING NOS.:
D-PB-1 & D-PE-24 (A&B)

QUANTITIES:

CLASS "A" CONCRETE	N/A	C.Y.
STEEL BAR REINFORCING	N/A	LB.
BEDDING MATERIAL	25.0	C.Y.

ENDWALL ITEM NOS.: 611-07.58



PIPE CULVERT
STATION: 232+82.00
STRUCTURE: @42S @ C.L. 86' OF 18" RCP

SKEW	90° LT	DEG.
DRAINAGE AREA	0.35	AC.
DESIGN DISCHARGE (Q50)	2.46	CFS
DESIGN DISCHARGE (Q100)	2.61	CFS
OVERTOPPING ELEV.	569.79	ELEV.
ALLOWABLE HEADWATER ELEV.	569.97	ELEV.
Q50 HEADWATER ELEV.	569.62	ELEV.
Q100 HEADWATER ELEV.	569.63	ELEV.
VELOCITY (Q50)	7.99	FT/S
VELOCITY (Q100)	8.14	FT/S

ENDWALLS REQUIRED:
TYPE "U" LT.
STANDARD DRAWING NOS.:
D-PB-1, D-CB-42S, & D-PE-18 (A&B)

QUANTITIES:

CLASS "A" CONCRETE	N/A	C.Y.
STEEL BAR REINFORCING	N/A	LB.
BEDDING MATERIAL	18.6	C.Y.

ENDWALL ITEM NOS.: 611-07.55

SR-54 CULVERT SECTIONS

SEALED BY

J. BRIAN LEE
REGISTERED ENGINEER
LICENSED
ARCHITECT
No. 107290
STATE OF TENNESSEE

02/10/2026

COORDINATES ARE NAD 83(2011), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00002 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988 WITH GEOID 12B MODEL.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

CULVERT SECTION

SCALE: 1"=10' HORIZ.
1"=10' VERT.

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	31
PIH	2025	NH-54(48)	32
PS&E	2026	NH-54(48)	32

PIPE CULVERT
STATION: 8+90.00 SR-54 TIE
STRUCTURE: 104' OF 18" RCP

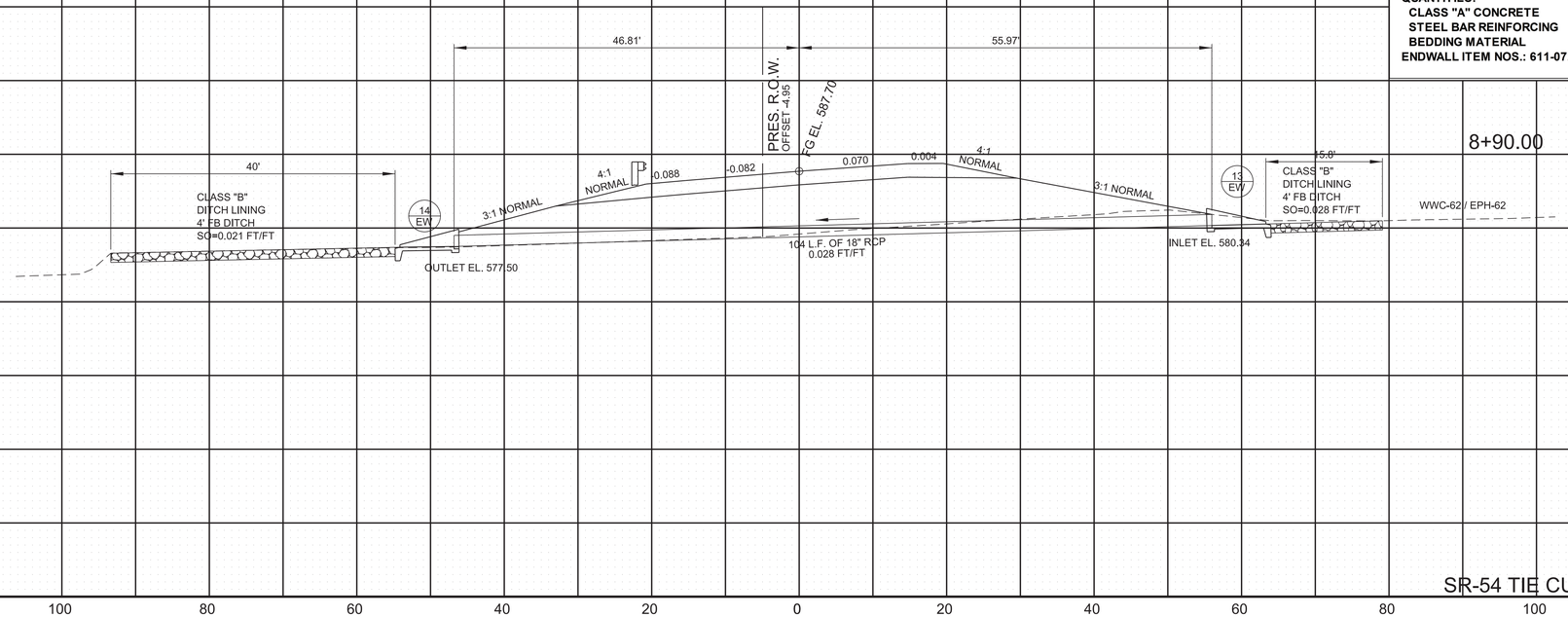
SKEW	**53° 00' 00" RT**	**DEG.**
DRAINAGE AREA	**0.52**	**AC.**
DESIGN DISCHARGE (Q50)	**1.50**	**CFS**
DESIGN DISCHARGE (Q100)	**1.80**	**CFS**
OVERTOPPING ELEV.	**588.74**	**ELEV.**
ALLOWABLE HEADWATER ELEV.	**586.77**	**ELEV.**
Q50 HEADWATER ELEV.	**580.77**	**ELEV.**
Q100 HEADWATER ELEV.	**580.83**	**ELEV.**
VELOCITY (Q50)	**6.41**	**FT/S**
VELOCITY (Q100)	**6.76**	**FT/S**

ENDWALLS REQUIRED:
TYPE "U" LT.
STANDARD DRAWING NOS.:
D-PB-1 & D-PE-18 (A&B)

QUANTITIES:

CLASS "A" CONCRETE	**N/A**	**C.Y.**
STEEL BAR REINFORCING	**N/A**	**LB.**
BEDDING MATERIAL	**22.5**	**C.Y.**

ENDWALL ITEM NOS.: 611-07.55



SR-54 TIE CULVERT SECTIONS

SEALED BY



02/10/2026

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

CULVERT SECTION

SCALE: 1"=10' HORIZ.
1"=10' VERT.

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	32
PIH	2025	NH-54(48)	33
PS&E	2026	NH-54(48)	33

ENVIRONMENTAL NOTES

SUBSECTION 3 – EROSION PREVENTION AND SEDIMENT CONTROL GENERAL NOTES

EROSION PREVENTION AND SEDIMENT CONTROL GENERAL NOTES

DISTURBED AREA

INSPECTION, MAINTENANCE & REPAIR

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

GOOD HOUSEKEEPING MEASURES & WASTE DISPOSAL

(29) 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.

(30) 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.

(31) 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.

(32) 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.

(33) 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.

(34) 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.

(35) 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.

(36) 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.

(37) 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.

(38) 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.

(39) 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.

(40) 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

(54) 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.

SUBSECTION 4 – EROSION PREVENTION AND SEDIMENT CONTROL SPECIAL NOTES

RAILROAD ENVIRONMENTAL

(15) THE CONTRACTOR SHALL MAINTAIN A COMPLETE AND COMPREHENSIVE EPSC PLAN AND SWPPP TO PREVENT ROADWAY AND/OR CONSTRUCTION SEDIMENT OR DEBRIS AND ANY PETROLEUM BASED PRODUCTS OR CHLORINATED SOLVENTS, PAINTS OR COATINGS ETC. FROM FALLING ONTO THE RAILROAD'S RIGHT-OF-WAY AND/OR FROM ENTERING THE DRAINAGE DITCHES OR DRAINAGE STRUCTURES OF THE RAILROAD, AND ANY SEDIMENT OR DEBRIS OR PETROLEUM BASED PRODUCTS OR CHLORINATED SOLVENTS, ETC. THAT DO ENTER SUCH DRAINAGE AREAS OF THE RAILROAD'S RIGHT-OF-WAY ARE TO BE REMOVED IN ACCORDANCE WITH RULES SET FORTH BY KWT RAILROAD AND AT THE CONTRACTOR'S EXPENSE.

SEALED BY

BRIAN LEE
REGISTERED ENGINEER
AGRICULTURE
NUMBER
107296
STATE OF TENNESSEE

02/10/2026

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

EROSION PREVENTION AND SEDIMENT CONTROL NOTES

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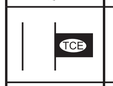
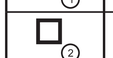
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	33
PIH	2025	NH-54(48)	34
PS&E	2026	NH-54(48)	34

TABULATED EPSC QUANTITIES

	ITEM NO.	DESCRIPTION	UNIT	QUANTITY 40S054-F3-004
	203-01	ROAD & DRAINAGE EXCAVATION (UNCLASSIFIED)	C.Y.	794
(1)(5)	209-02.07	18" TEMPORARY SLOPE DRAIN	L.F.	400
(1)(5)	209-03.22	FILTER SOCK (18 INCH)	L.F.	300
(1)(5)	209-05	SEDIMENT REMOVAL	C.Y.	2280
(1)(5)	209-06.02	12" DIA COIR LOG (LOW FLOW)	L.F.	471
(1)(5)	209-08.02	TEMPORARY SILT FENCE (WITH BACKING)	L.F.	49400
(1)(5)	209-08.03	TEMPORARY SILT FENCE (WITHOUT BACKING)	L.F.	48288
(1)(5)	209-08.08	ENHANCED ROCK CHECK DAM	EACH	48
(1)(5)	209-08.09	FILTER SOCK CHECK DAM	EACH	1035
(1)(5)	209-09.01	SANDBAGS	BAG	3517
(1)(5)	209-09.03	SEDIMENT FILTER BAG (15' X 15')	EACH	5
(1)(5)	209-20.03	POLYETHYLENE SHEETING (6 MIL. MINIMUM)	S.Y.	500
(1)(5)	209-20.04	POLYETHYLENE SHEETING (10 MIL.)	S.Y.	500
(1)(5)	209-40.41	CATCH BASIN FILTER ASSEMBLY(TYPE 1)	EACH	5
(1)(5)	209-40.43	CATCH BASIN FILTER ASSEMBLY(TYPE 3)	EACH	1
(1)(5)	209-65.03	TEMPORARY DIVERSION CHANNEL	L.F.	1442
(1)(5)	209-65.04	TEMPORARY IN STREAM DIVERSION	L.F.	110
(1)(5)	303-10.01	MINERAL AGGREGATE (SIZE 57)	TON	224
	621-03.02	18" TEMPORARY DRAINAGE PIPE	L.F.	100
(1)(5)	707-08.11	HIGH-VISIBILITY CONSTRUCTION FENCE	L.F.	25438
(1)(5)	709-05.05	MACHINED RIP-RAP (CLASS A-3)	TON	300
	709-05.06	MACHINED RIP-RAP (CLASS A-1)	TON	610
(1)(5)	740-10.03	GEOTEXTILE (TYPE III) (EROSION CONTROL)	S.Y.	5617
(1)(5)	740-11.04	TEMPORARY SEDIMENT TUBE 20IN	L.F.	1948
	803-01	SODDING (NEW SOD)	S.Y.	146733
	805-12.02	EROSION CONTROL BLANKET (TYPE II)	S.Y.	32399
	805-12.08	700 GRAM COIR FIBER EROSION BLANKET	S.Y.	215

(1) SEE SUBSECTION 209.07 OF THE STANDARD SPECIFICATION FOR MAINTENANCE REPLACEMENT.
(5) ALL QUANTITIES ARE TO BE USED AS DIRECTED BY THE ENGINEER.

EROSION PREVENTION AND SEDIMENT CONTROL LEGEND

SYMBOL	ITEM	STD. DWG.
	SEDIMENT FILTER BAG	EC-STR-2
✳ SF ✳ SF ✳ SF ✳	SILT FENCE	EC-STR-3B
✳ SFB✳ SFB✳ SFB✳	SILT FENCE WITH WIRE BACKING	EC-STR-3C
✳✳SOCK 24"✳✳SOCK 24"✳✳	24 INCH FILTER SOCK	EC-STR-8
	ENHANCED ROCK CHECK DAM (V-DITCH)	EC-STR-6A
	ENHANCED ROCK CHECK DAM (TRAPEZOIDAL DITCH)	EC-STR-6A
	CULVERT PROTECTION (TYPE 1)	EC-STR-11
	TEMPORARY CONSTRUCTION EXIT	EC-STR-25
	TEMPORARY BERM	EC-STR-27
	TEMPORARY DIVERSION CHANNEL (DESCRIBE-SIZE AND TYPE OF LINING)	EC-STR-31
	EROSION CONTROL BLANKET	EC-STR-34
✳✳ TUBE ✳✳ TUBE ✳✳	SEDIMENT TUBE	EC-STR-37
	CATCH BASIN FILTER ASSEMBLY (TYPE 1)	EC-STR-41
	CATCH BASIN FILTER ASSEMBLY (TYPE 2)	EC-STR-42
	CATCH BASIN FILTER ASSEMBLY (TYPE 3)	EC-STR-43
✳ HVF ✳ HVF ✳	HIGH VISIBILITY FENCE	S-F-1

NOTE: SF / SFB NOT ON CONTOUR SHOULD HAVE J-HOOKS ADDED.

TEMPORARY CONSTRUCTION EXITS TO BE LOCATED BY THE ENGINEER.

EPSC MEASURES FROM PREVIOUS STAGES SHALL REMAIN IN SUBSEQUENT STAGES UNTIL AREA IS FINAL STABILIZED OR THE MEASURES ARE NO LONGER NEEDED.

SEALED BY



STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

EROSION PREVENTION & SEDIMENT CONTROL (EPSC) LEGEND & TABULATION

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	34
PIH	2025	NH-54(48)	35
PS&E	2026	NH-54(48)	35

OUTFALL LABEL	DRAINAGE AREA (AC)	SLOPE WITHIN R.O.W. (%)
OUT-1	0.4	5
OUT-2	0.8	6

LEGEND	WETLAND IMPACTS (WTL-44)
	AREA OF PERMANENT IMPACT = 0.000 AC.
	VOLUME OF PERMANENT IMPACT = 0 C.Y.
	AREA OF TEMPORARY IMPACT = 0.009 AC.
	VOLUME OF TEMPORARY IMPACT = 15 C.Y.

100

40S054-F2-002

BEGIN PROJ. NO. NH-54(48) R.O.W.
STA. 97+65.59 S.R. 54
N 782648.4566
E 1282781.8515

105

110

CULTIVATED

WOODS

KWT RAILROAD

FUTURE SR-54 CENTERLINE

SR-54 CENTERLINE

WWC-64/EPH-64 USACE NON-JURISDICTIONAL

WWC-63/EPH-63 USACE NON-JURISDICTIONAL

WWC-01/EPH-01 USACE NON-JURISDICTIONAL

EXIST. 3 @ 10' X 6' - 28' LONG RCBB REINF. CONC @ LOG MILE 22.410
BRIDGE ID #40SR0540027

WWC-02/EPH-02 USACE NON-JURISDICTIONAL

STR-02 (MORMAN BRANCH-PERENNIAL)

LIMIT OF CONST. 6+40.99

N 2° 49' 24" E

S 7° 25' 01" W

SR-54/US-641 (ASP.)

11.8'+/-
11.5'+/-

PRES. R.O.W.

STR-01 (INTERMITTENT)

20' OF 3' X 3' RCBC

WWC-62/EPH-62 USACE NON-JURISDICTIONAL

12"CEDAR

40"OAK

36"HICKORY

30"PINE

26"PINE

24"PINE

WELL

24"ASPEN

LAWN

OUT - 1

OUT - 2

FWTL-01

S 60° 43' 01" E

N 31° 22' 32" E

STA. 110+00.00 SEE SHEET NO. 35A

40S054-F3-004

BEGIN PROJ. NO. NH-54(48) CONST.
STA. 98+00.00
N 782682.8032
E 1282783.9372

STA. 105+35.00 S.R. 54 =
STA. 10+00.00 S.R. 54 TIE
N 783382.4897
E 1282982.2132
(SEE SHEET 16 FOR PROFILE)

SEALED BY

BRIAN LEE
REGISTERED ENGINEER
AGRICULTURE
02/10/2026
NUMBER
107296
STATE OF TENNESSEE

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

EROSION PREVENTION & SEDIMENT CONTROL (EPSC) PLANS

STA.98+50.00 TO STA.110+00

SCALE: 1"=50'

STAGE 1
CLEARING & GRUBBING

EXISTING CONTOURS

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	34A
PIH	2025	NH-54(48)	35A
PS&E	2026	NH-54(48)	35A

N

SR-54/US-641 (ASP.)

11.5+/-

11.5+/-

WOODS

WOODS

WOODS

WTL-03

WWC-05/EPH-05 USACE NON-JURISDICTIONAL

STR-02/ (MORMAN BRANCH-PERENNIAL)

STR-02/ (MORMAN BRANCH-PERENNIAL)

115

120

GRASS FIELD

GRASS FIELD

WOODS

WTL-04

STA. 123+00.00 SEE SHEET NO. 35B

STA. 110+00.00 SEE SHEET NO. 35

CULTIVATED

N 31° 22' 32" E

TREE

FIELD

WWC-06/EPH-06 USACE NON-JURISDICTIONAL

CULTIVATED

WOODS

STR-02/ (MORMAN BRANCH-PERENNIAL)

SEALED BY

BRIAN LEE
REGISTERED ENGINEER
AGRICULTURE
NUMBER
115729
STATE OF TENNESSEE

02/10/2026

COORDINATES ARE NAD 83(2011), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00002 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988 WITH GEOID 12B MODEL.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

STAGE 1
CLEARING & GRUBBING

EXISTING CONTOURS

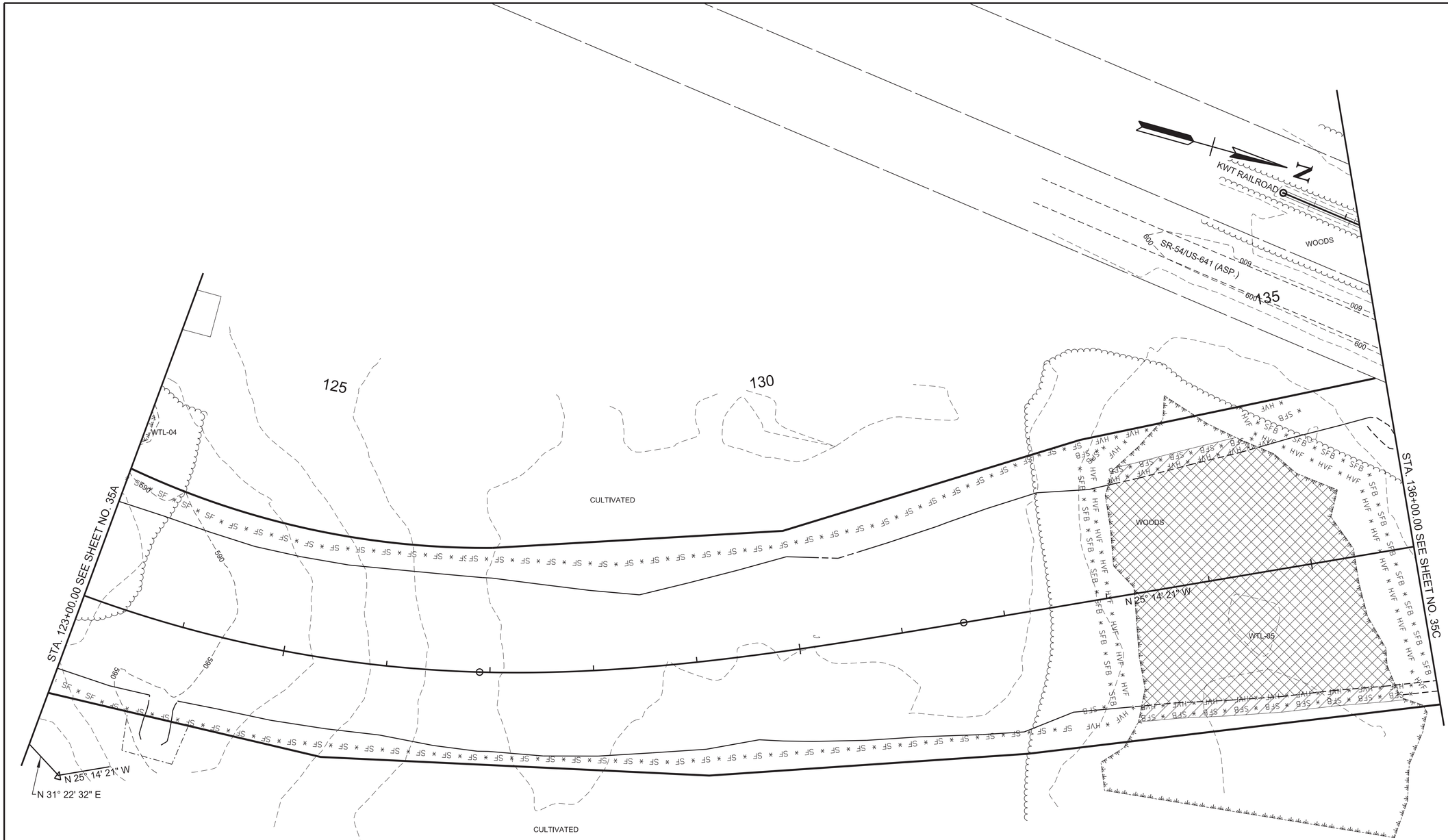
EROSION PREVENTION & SEDIMENT CONTROL (EPSC) PLANS

STA.110+00 TO STA.123+00

SCALE: 1"=50'

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	34B
PIH	2025	NH-54(48)	35B
PS&E	2026	NH-54(48)	35B



LEGEND	WETLAND IMPACTS (WTL-05)
	AREA OF PERMANENT IMPACT = 1.151 AC.
	VOLUME OF PERMANENT IMPACT = 1858 C.Y.
	AREA OF TEMPORARY IMPACT = 0.133 AC.
	VOLUME OF TEMPORARY IMPACT = 214 C.Y.

SEALED BY

BRIAN LEE
REGISTERED ENGINEER
AGRICULTURE
NUMBER
1 0 7 2 9 6
STATE OF TENNESSEE

02/10/2026

COORDINATES ARE NAD 83(2011), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00002 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988 WITH GEOID 12B MODEL.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

EROSION PREVENTION & SEDIMENT CONTROL (EPSC) PLANS

STA.123+00 TO STA.136+00

SCALE: 1"=50'

STAGE 1
CLEARING & GRUBBING

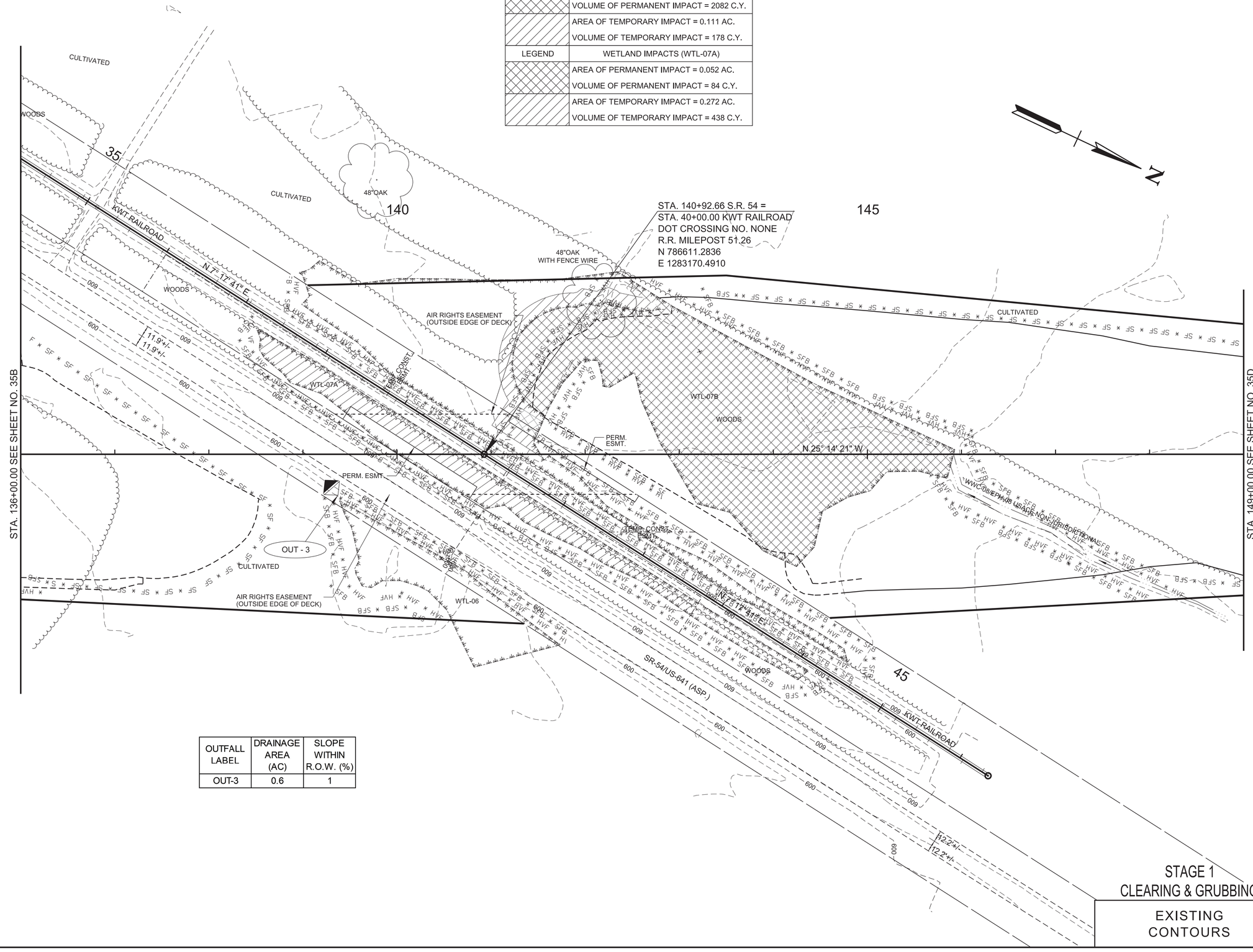
EXISTING CONTOURS

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LEGEND	WETLAND IMPACTS (WTL-07B)
	AREA OF PERMANENT IMPACT = 1.291 AC.
	VOLUME OF PERMANENT IMPACT = 2082 C.Y.
	AREA OF TEMPORARY IMPACT = 0.111 AC.
	VOLUME OF TEMPORARY IMPACT = 178 C.Y.

LEGEND	WETLAND IMPACTS (WTL-07A)
	AREA OF PERMANENT IMPACT = 0.052 AC.
	VOLUME OF PERMANENT IMPACT = 84 C.Y.
	AREA OF TEMPORARY IMPACT = 0.272 AC.
	VOLUME OF TEMPORARY IMPACT = 438 C.Y.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	34C
PIH	2025	NH-54(48)	35C
PS&E	2026	NH-54(48)	35C



OUTFALL LABEL	DRAINAGE AREA (AC)	SLOPE WITHIN R.O.W. (%)
OUT-3	0.6	1

STAGE 1
CLEARING & GRUBBING

EXISTING CONTOURS

SEALED BY

BRIAN LEE
REGISTERED ENGINEER
AGRICULTURE
NUMBER 107296
STATE OF TENNESSEE
02/10/2026

COORDINATES ARE NAD 83(2011), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00002 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988 WITH GEOID 12B MODEL.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

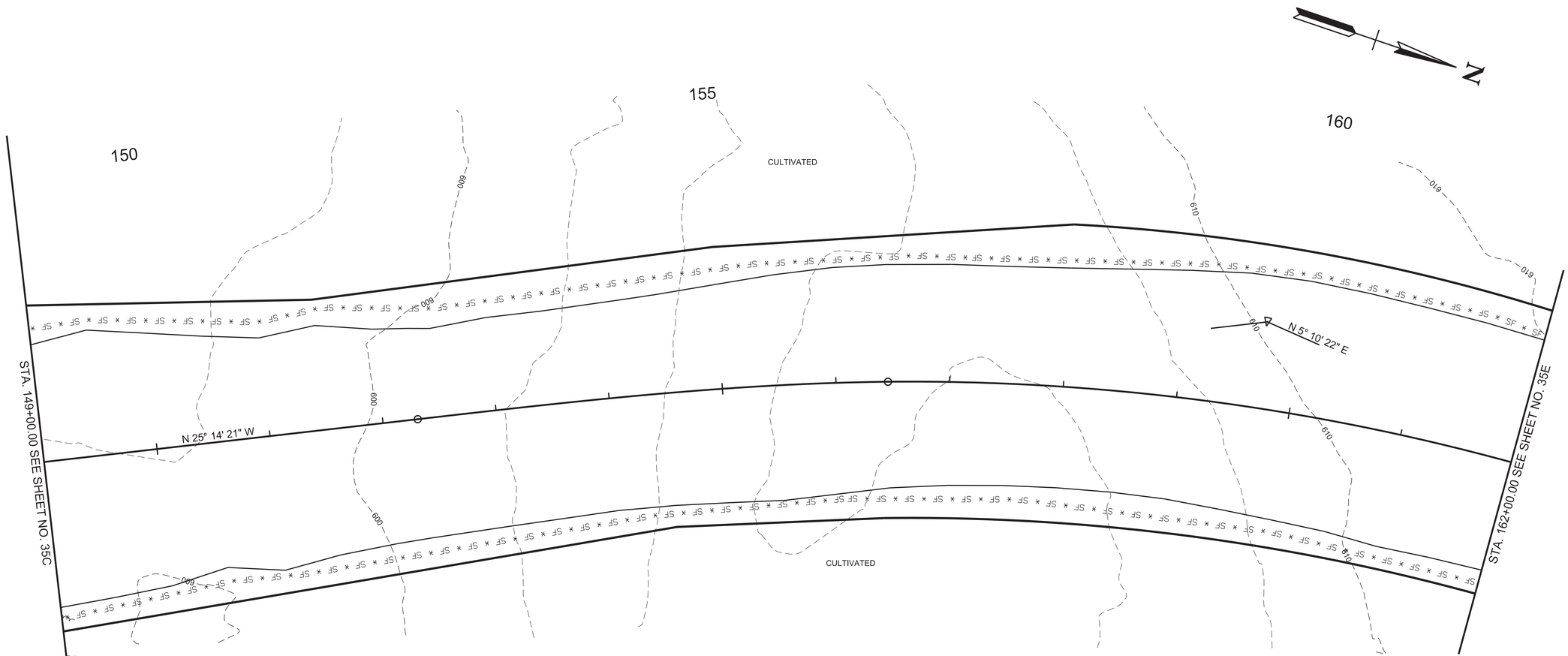
EROSION PREVENTION & SEDIMENT CONTROL (EPSC) PLANS

STA.136+00 TO STA.149+00

SCALE: 1"=50'

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	34D
PIH	2025	NH-54(48)	35D
PS&E	2026	NH-54(48)	35D



SEALED BY

BRIAN LEE
REGISTERED ENGINEER
AGRICULTURE
NUMBER
115729
STATE OF TENNESSEE

02/10/2026

COORDINATES ARE NAD 83(2011), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00002 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988 WITH GEOID 12B MODEL.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

EROSION PREVENTION & SEDIMENT CONTROL (EPSC) PLANS

STA.149+00 TO STA.162+00

SCALE: 1"=50'

STAGE 1
CLEARING & GRUBBING

EXISTING CONTOURS

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	34E
PIH	2025	NH-54(48)	35E
PS&E	2026	NH-54(48)	35E

REV. 08-14-24: MOVED CROSSLAND RD. FLD. ENT. RT. STA. 23+50 TO RT. STA. 24+50 AND UPDATED CONST. ESMT. MOVED LIMIT OF CONST. FROM STA. 23+74.94 TO STA. 24+74.74.

CROSSLAND STREET EPSC MEASURES
TO BE INSTALLED AS NEEDED OR
COINCIDE WITH TRAFFIC CONTROL PHASE 2.

165

170

175

STA. 162+00.00 SEE SHEET NO. 35D

STA. 175+00.00 SEE SHEET NO. 35F

CROSSLAND RD (ASP.)

19.5'+/-

POND

CULTIVATED

LIMIT OF CONST.
18+00.00

STA. 171+22.00 S.R. 54 =
STA. 20+00.00 CROSSLAND RD.
N 789482.8826
E 1282469.7490
(SEE SHEET 17 FOR PROFILE)

N 5° 10' 22" E

S 86° 55' 46" E

WELL

WTL-09

OUT - 33

OUT - 34

OUT - 35

OUT - 36

WTL-08

LIMIT OF CONST.
24+75.00

OUTFALL LABEL	DRAINAGE AREA (AC)	SLOPE WITHIN R.O.W. (%)
OUT-33	0.8	1
OUT-34	0.6	1
OUT-35	1.1	1
OUT-36	0.5	1

LEGEND	WETLAND IMPACTS (WTL-08)
	AREA OF PERMANENT IMPACT = 0.019 AC.
	VOLUME OF PERMANENT IMPACT = 30 C.Y.
	AREA OF TEMPORARY IMPACT = 0.026 AC.
	VOLUME OF TEMPORARY IMPACT = 41 C.Y.

LEGEND	WETLAND IMPACTS (WTL-09)
	AREA OF PERMANENT IMPACT = 0.112 AC.
	VOLUME OF PERMANENT IMPACT = 181 C.Y.
	AREA OF TEMPORARY IMPACT = 0.088 AC.
	VOLUME OF TEMPORARY IMPACT = 142 C.Y.

STAGE 1
CLEARING & GRUBBING

EXISTING
CONTOURS

SEALED BY

ABRIAN LEE
REGISTERED ENGINEER
LICENSE
NO. 107290
STATE OF TENNESSEE
02/10/2026

COORDINATES ARE NAD 83(2011), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00002 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988 WITH GEOID 12B MODEL.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

EROSION PREVENTION & SEDIMENT CONTROL (EPSC) PLANS

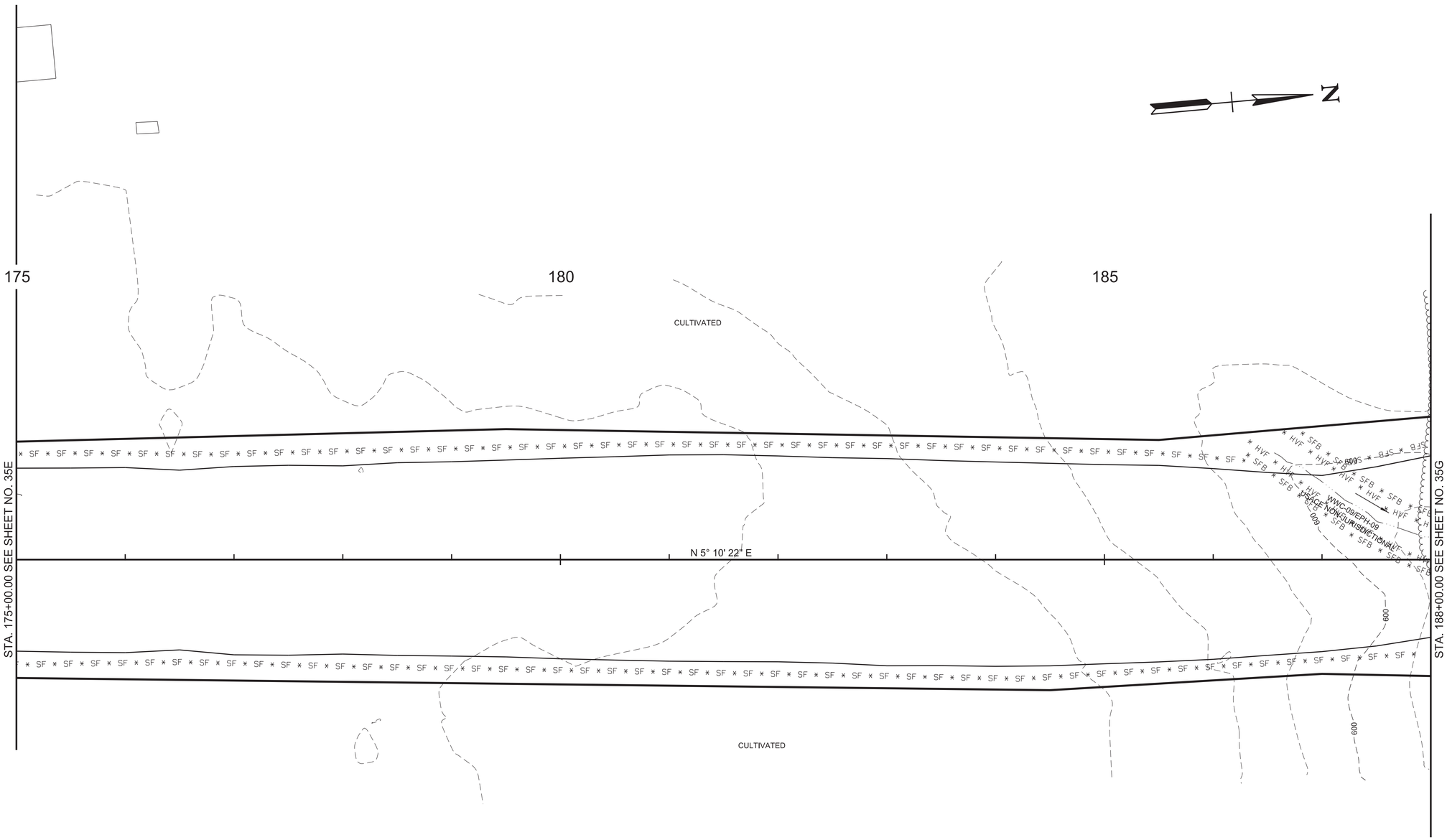
STA.162+00 TO STA.175+00

SCALE: 1"=50'

25

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	34F
PIH	2025	NH-54(48)	35F
PS&E	2026	NH-54(48)	35F



SEALED BY

A. BRIAN LEE
REGISTERED ENGINEER
No. 107209
STATE OF TENNESSEE

02/10/2026

COORDINATES ARE NAD 83(2011), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00002 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988 WITH GEOID 12B MODEL.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

EROSION PREVENTION & SEDIMENT CONTROL (EPSC) PLANS

STA.175+00 TO STA.188+00

SCALE: 1"=50'

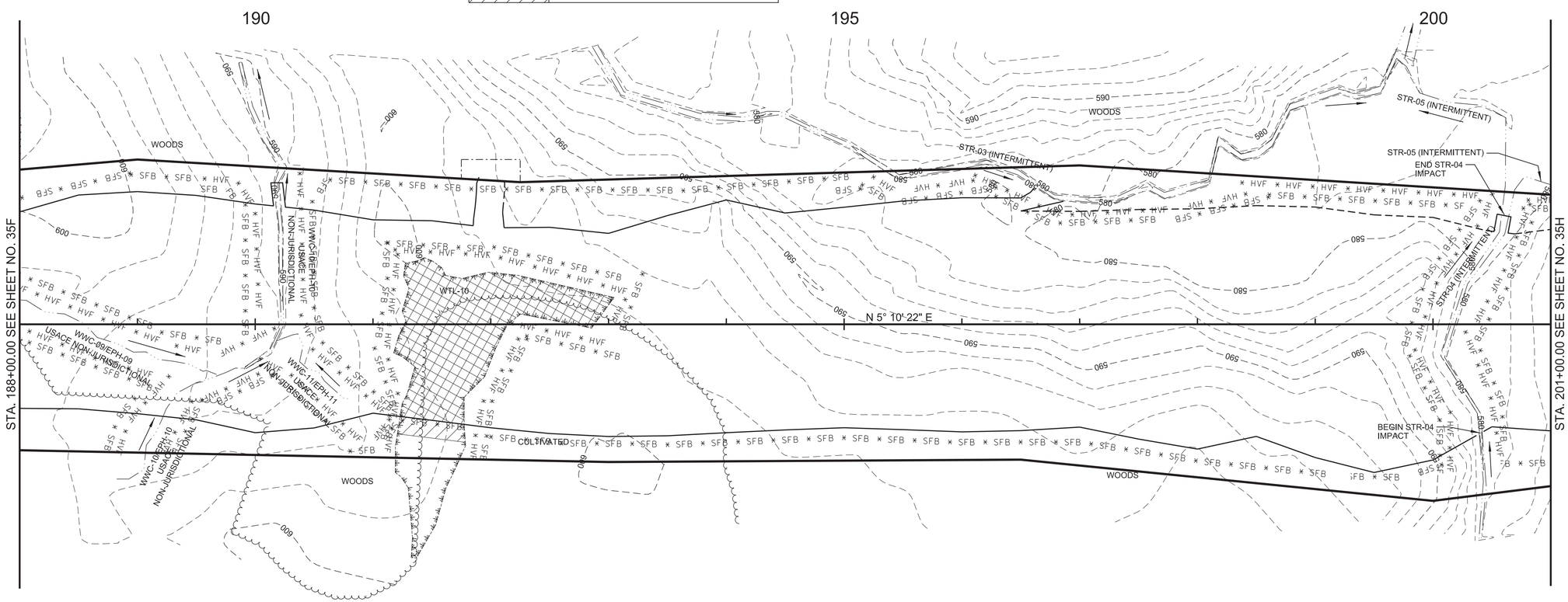
STAGE 1
CLEARING & GRUBBING

EXISTING CONTOURS

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	34G
PIH	2025	NH-54(48)	35G
PS&E	2026	NH-54(48)	35G

LEGEND	WETLAND IMPACTS (WTL-10)
	AREA OF PERMANENT IMPACT = 0.278 AC.
	VOLUME OF PERMANENT IMPACT = 448 C.Y.
	AREA OF TEMPORARY IMPACT = 0.019 AC.
	VOLUME OF TEMPORARY IMPACT = 31 C.Y.



SEALED BY

J. BRIAN LEE
REGISTERED ENGINEER
AGRICULTURE
No. 107299
STATE OF TENNESSEE

02/10/2026

COORDINATES ARE NAD 83(2011), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00002 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988 WITH GEOID 12B MODEL.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

EROSION PREVENTION & SEDIMENT CONTROL (EPSC) PLANS

STA.188+00 TO STA.201+00

SCALE: 1"=50'

STAGE 1
CLEARING & GRUBBING

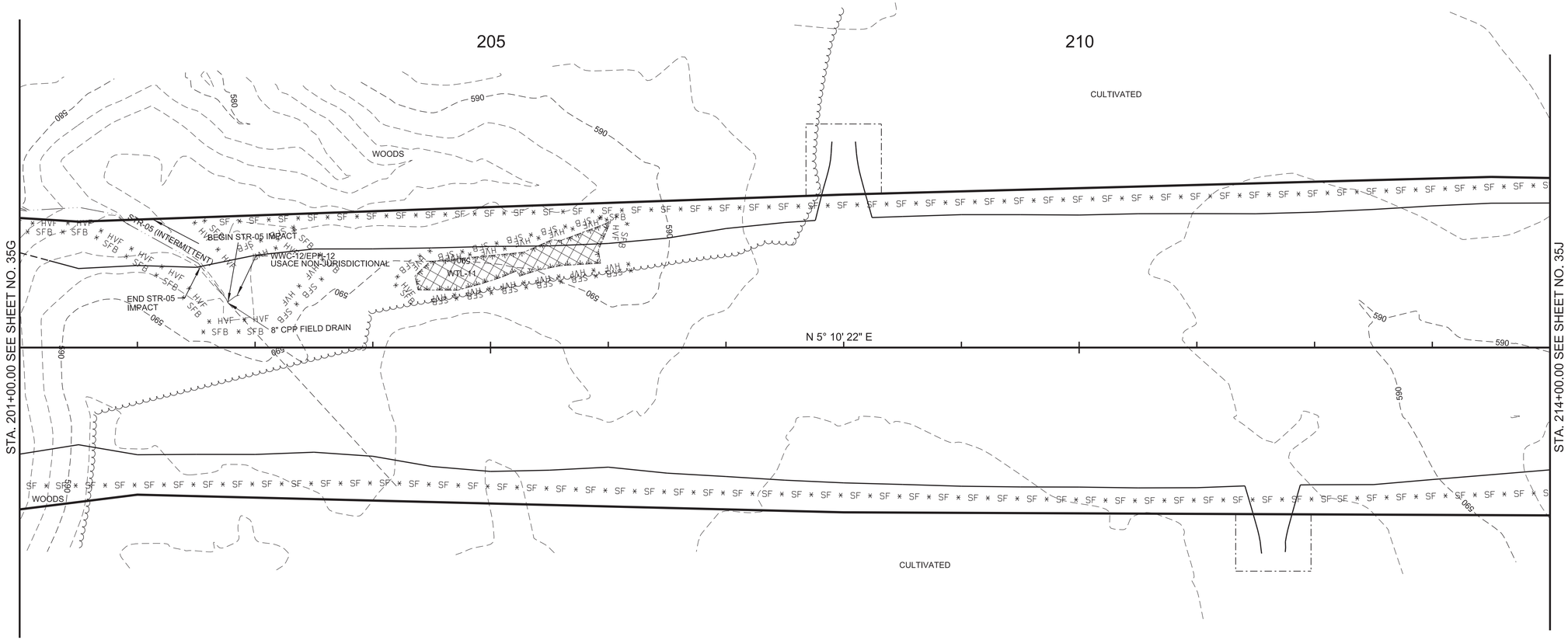
EXISTING CONTOURS

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	34H
PIH	2025	NH-54(48)	35H
PS&E	2026	NH-54(48)	35H

REV. 08-14-24: MOVED FLD. ENT'S AND UPDATED CONST. ESMT'S FOR FLD. ENT. LT. STA. 210+00 TO LT. STA. 208+00 AND RT. STA. 210+00 TO RT. STA. 211+65.

LEGEND	WETLAND IMPACTS (WTL-11)
	AREA OF PERMANENT IMPACT = 0.084 AC.
	VOLUME OF PERMANENT IMPACT = 135 C.Y.
	AREA OF TEMPORARY IMPACT = 0.000 AC.
	VOLUME OF TEMPORARY IMPACT = 0 C.Y.



SEALED BY

J. BRIAN LEE
REGISTERED ENGINEER
AGRICULTURE
COMMERCE
No. 107290
STATE OF TENNESSEE

02/10/2026

COORDINATES ARE NAD 83(2011), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00002 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988 WITH GEOID 12B MODEL.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

EROSION PREVENTION & SEDIMENT CONTROL (EPSC) PLANS

STA.201+00 TO STA.214+00

SCALE: 1"=50'

STAGE 1
CLEARING & GRUBBING

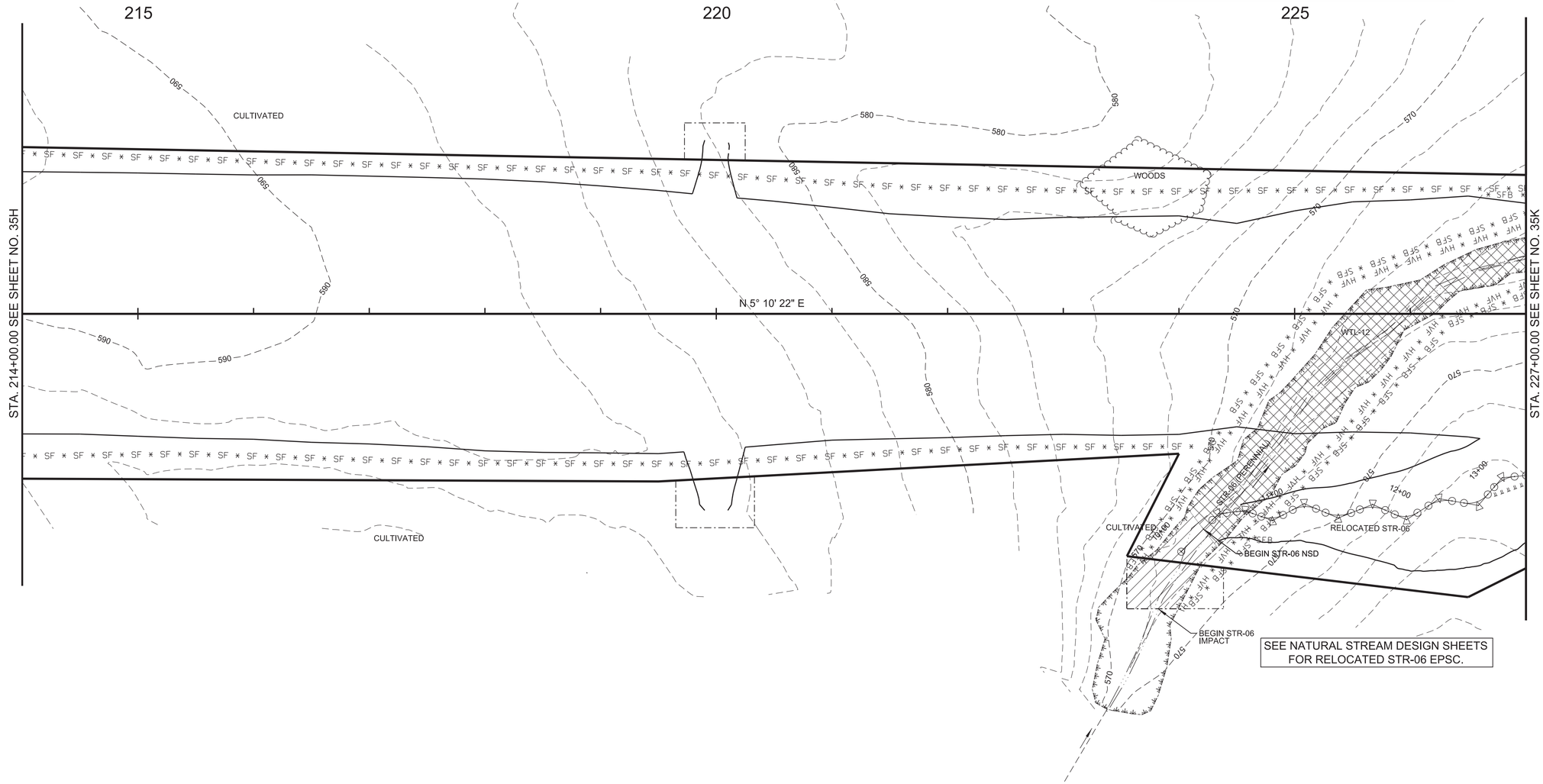
EXISTING CONTOURS

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	34J
PIH	2025	NH-54(48)	35J
PS&E	2026	NH-54(48)	35J

N

LEGEND	WETLAND IMPACTS (WTL-12)
	AREA OF PERMANENT IMPACT = 0.486 AC.
	VOLUME OF PERMANENT IMPACT = 784 C.Y.
	AREA OF TEMPORARY IMPACT = 0.124 AC.
	VOLUME OF TEMPORARY IMPACT = 200 C.Y.



SEALED BY

J. BRIAN LEE
REGISTERED ENGINEER
AGRICULTURE
COMMERCE
102209
STATE OF TENNESSEE

02/10/2026

COORDINATES ARE NAD 83(2011), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00002 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988 WITH GEOID 12B MODEL.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

EROSION PREVENTION & SEDIMENT CONTROL (EPSC) PLANS

STA.214+00 TO STA.227+00

SCALE: 1"=50'

STAGE 1
CLEARING & GRUBBING

EXISTING CONTOURS

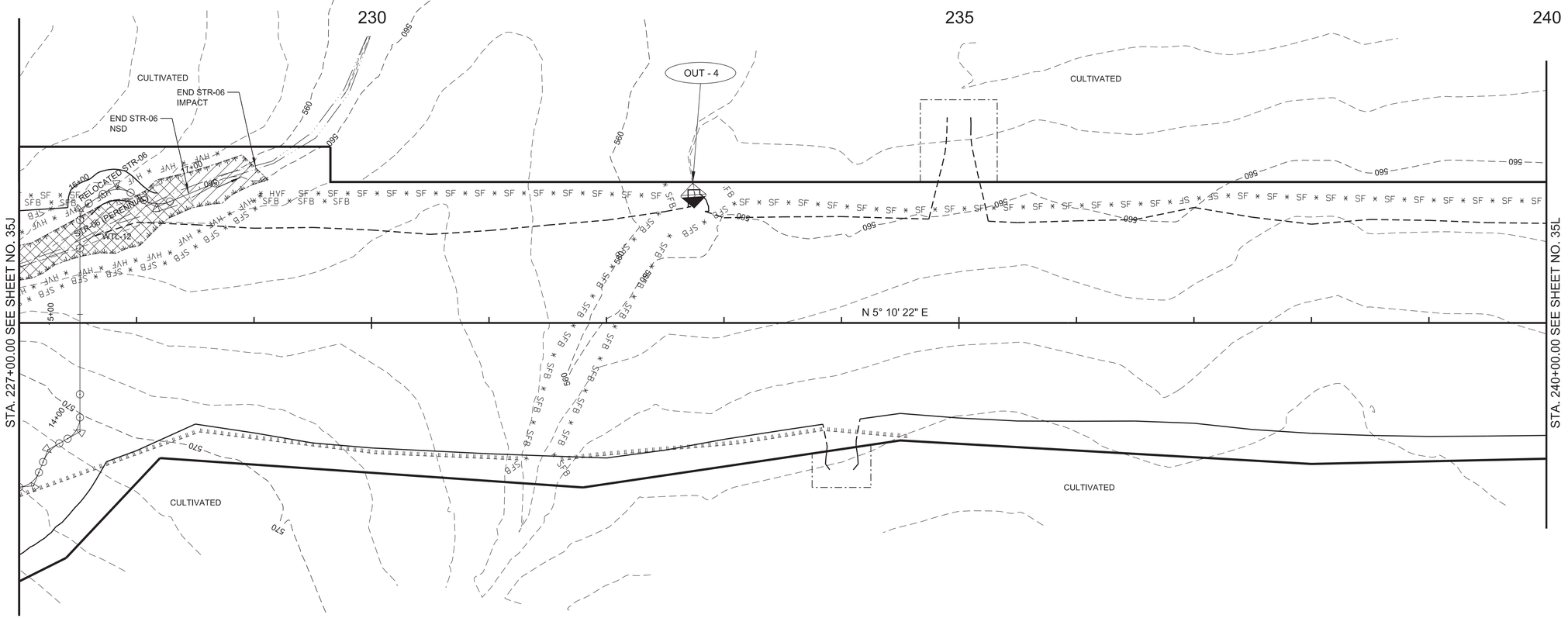
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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	34K
PIH	2025	NH-54(48)	35K
PS&E	2026	NH-54(48)	35K

SEE NATURAL STREAM DESIGN SHEETS FOR RELOCATED STR-06 EPSC.

LEGEND	WETLAND IMPACTS (WTL-12)
	AREA OF PERMANENT IMPACT = 0.486 AC.
	VOLUME OF PERMANENT IMPACT = 784 C.Y.
	AREA OF TEMPORARY IMPACT = 0.124 AC.
	VOLUME OF TEMPORARY IMPACT = 200 C.Y.

OUTFALL LABEL	DRAINAGE AREA (AC)	SLOPE WITHIN R.O.W. (%)
OUT-4	16.3 (PASS-THROUGH OF 14.4 AC.)	2



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SEALED BY



COORDINATES ARE NAD 83(2011), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00002 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988 WITH GEOID 12B MODEL.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

EROSION PREVENTION & SEDIMENT CONTROL (EPSC) PLANS

STA.227+00 TO STA.240+00

SCALE: 1"=50'

STAGE 1
CLEARING & GRUBBING

EXISTING CONTOURS

OUTFALL LABEL	DRAINAGE AREA (AC)	SLOPE WITHIN R.O.W. (%)
OUT-5	0.4	2
OUT-6	0.5	2

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	34L
PIH	2025	NH-54(48)	35L
PS&E	2026	NH-54(48)	35L

REV. 03-26-24: UPDATED PROP. R.O.W., CONST. ESMT. RT. STA. 247+47.60, REVISED END OF PROJECT STATIONING FROM STA. 247+47.60 TO STA. 247+50.14.

N

240

245

KENTUCKY
TENNESSEE
STATE LINE RD (ASP.)
(KY 893)

OUT - 5

SEPT

LIMIT OF CONST.
27+99.59

WELL

9.5+/-

9.2+/-

CULTIVATED

LAWN

S 89° 05' 12" E

40S054-F2-002
END PROJ. NO. NH-54(48) R.O.W.
STA. 247+50.14
N 797079.9613 250
E 1283157.4887

STA. 247+61.57 S.R. 54 =
STA. 30+00.00 STATE LINE RD. (KY 893)
N 797091.3391
E 1283158.5185
(SEE SHEET 18 FOR PROFILE)

CALLOWAY CO, KY
US 641
PRJ.# NHPP 6411 (039)
FD52 018 0641 000-006

STA. 240+00.00 SEE SHEET NO. 35K

N 5° 10' 22" E

CULTIVATED

40S054-F3-004
END PROJ. NO. NH-54(48) CONST.
STA. 250+00.00
N 797328.7992
E 1283180.0156

SEPT

MOBILE HOME

STEPS

OUT - 6

LIMIT OF CONST.
31+50.00

S 88° 49' 45" E

SHED

METAL GARAGE

110.0+/-

STATE LINE RD (ASP.)
(KY 893)

CALLOWAY COUNTY
HENRY COUNTY

SEALED BY

J. BRIAN LEE
REGISTERED ENGINEER
LICENSED
PROFESSIONAL ENGINEER
No. 110722
STATE OF TENNESSEE

02/10/2026

COORDINATES ARE NAD 83(2011), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00002 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988 WITH GEOID 12B MODEL.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

EROSION PREVENTION & SEDIMENT CONTROL (EPSC) PLANS

STA.240+00 TO STA.250+00

SCALE: 1"=50'

STAGE 1
CLEARING & GRUBBING

EXISTING CONTOURS

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	35
PIH	2025	NH-54(48)	36
PS&E	2026	NH-54(48)	36

OUTFALL LABEL	DRAINAGE AREA (AC)	SLOPE WITHIN R.O.W. (%)
OUT-7	2.2	4
OUT-8	0.1	3
OUT-9	1.0	3
OUT-10	0.3	6

LEGEND	WETLAND IMPACTS (WTL-44)
	AREA OF PERMANENT IMPACT = 0.000 AC.
	VOLUME OF PERMANENT IMPACT = 0 C.Y.
	AREA OF TEMPORARY IMPACT = 0.009 AC.
	VOLUME OF TEMPORARY IMPACT = 15 C.Y.

100

40S054-F2-002
BEGIN PROJ. NO. NH-54(48) R.O.W.
STA. 97+65.59 S.R. 54
N 782648.4566
E 1282781.8515

105

110

FUTURE SR-54 CENTERLINE

SR-54 CENTERLINE

SR-54/US-641 (ASP.)

11.8'+/-

11.5'+/-

PRES. R.O.W.

N 2° 49' 24" E

WTL-44

USACE NON-JURISDICTIONAL

WWC-63/EPH-63

WWC-64/EPH-64

WWC-62/EPH-62

WWC-01/EPH-01

WWC-02/EPH-02

EXIST. 3 @ 10'-X-6'-28' LONG RCBB
REINF. CONC @ LOG MILE 22.410
BRIDGE ID #40SR0540027

LIMIT OF CONST.
6+40.99

N 7° 25' 01" W

TOP OF BANK

STR-02 (MORMAN BRANCH-PERENNIAL)

STR-02 (INTERMITTENT)

20' OF
3' X 3' RCBC

104' OF 16" RCP

S 60° 43' 01" E

N 31° 22' 32" E

SEE 01 (INTERMITTENT)
16" RCBC
128'6" OF 6' X 6'

FWTL-01

WELL

OUT - 7

OUT - 8

OUT - 9

OUT - 10

SOCK 24"

TEMP. DIVERSION CHANNEL
WIDTH = 8'
DEPTH = 0.9' (MIN.)

40S054-F3-004
BEGIN PROJ. NO. NH-54(48) CONST.
STA. 98+00.00
N 782682.8032
E 1282783.9372

STA. 105+35.00 S.R. 54 =
STA. 10+00.00 S.R. 54 TIE
N 783382.4897
E 1282982.2132
(SEE SHEET 16 FOR PROFILE)

STA. 110+00.00 SEE SHEET NO. 36A

SEALED BY

BRIAN L. BRYANT
REGISTERED ENGINEER
AGRICULTURE
02/10/2026
LICENSE NO. 107396
STATE OF TENNESSEE

COORDINATES ARE NAD 83(2011), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00002 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988 WITH GEOID 12B MODEL.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

STAGE 2
INTERMEDIATE GRADING

EXISTING CONTOURS

EROSION PREVENTION & SEDIMENT CONTROL (EPSC) PLANS

STA.98+50.00 TO STA.110+00

SCALE: 1"=50'

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	35A
PIH	2025	NH-54(48)	36A
PS&E	2026	NH-54(48)	36A

SR-54/US-641 (ASP.)

11.5+/-

11.5+/-

N

WTL-03

EM/EPH-04
JURISDICTIONAL

STR-02 (MORMAN BRANCH-PERENNIAL)

115

120

WTL-04

JWMC-05ERH-05
USACE NON-JURISDICTIONAL

STA. 123+00.00 SEE SHEET NO. 36B

RIP-RAP LETDOWN DITCH

TOP OF BANK

OUT - 29

OUT - 30

OUT - 31

OUT - 32

TUBE 30

TUBE 29

10ft 2% 20ft RCBB

N 31° 22' 32" E

SWMC-06EPH-06
USACE NON-JURISDICTIONAL

STA. 110+00.00 SEE SHEET NO. 36

SILT FENCE

SOCK 24"

TEMP. DIVERSION CHANNEL
WIDTH = 20'
DEPTH = 2.4' (MIN.)

OUTFALL LABEL	DRAINAGE AREA (AC)	SLOPE WITHIN R.O.W. (%)
OUT-29	3.1	2
OUT-30	9.6	3
OUT-31	4.1	2
OUT-32	1.6	4

SEALED BY

JBRIAN LEE
REGISTERED ENGINEER
AGRICULTURE
NUMBER 107290
STATE OF TENNESSEE

02/10/2026

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

EROSION PREVENTION & SEDIMENT CONTROL (EPSC) PLANS

STA.110+00 TO STA.123+00

SCALE: 1"=50'

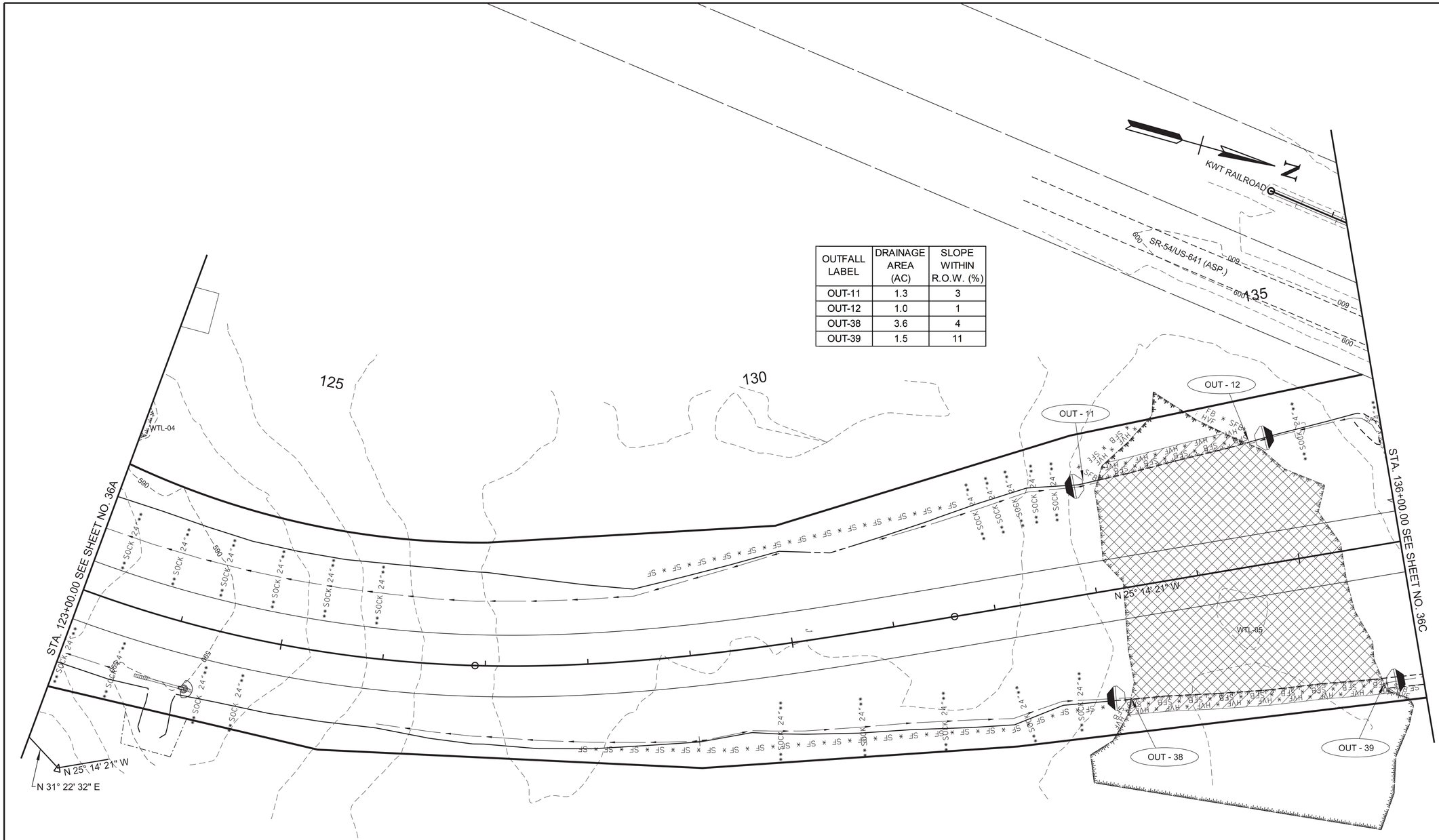
STAGE 2
INTERMEDIATE GRADING

EXISTING CONTOURS

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	35B
PIH	2025	NH-54(48)	36B
PS&E	2026	NH-54(48)	36B

OUTFALL LABEL	DRAINAGE AREA (AC)	SLOPE WITHIN R.O.W. (%)
OUT-11	1.3	3
OUT-12	1.0	1
OUT-38	3.6	4
OUT-39	1.5	11



LEGEND	WETLAND IMPACTS (WTL-05)
	AREA OF PERMANENT IMPACT = 1.151 AC.
	VOLUME OF PERMANENT IMPACT = 1858 C.Y.
	AREA OF TEMPORARY IMPACT = 0.133 AC.
	VOLUME OF TEMPORARY IMPACT = 214 C.Y.

STAGE 2
INTERMEDIATE GRADING

EXISTING CONTOURS

SEALED BY

BRIAN LEE
REGISTERED ENGINEER
AGRICULTURE
NUMBER
107296
STATE OF TENNESSEE

02/10/2026

COORDINATES ARE NAD 83(2011), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00002 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988 WITH GEOID 12B MODEL.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

EROSION PREVENTION & SEDIMENT CONTROL (EPSC) PLANS

STA.123+00 TO STA.136+00

SCALE: 1"=50'

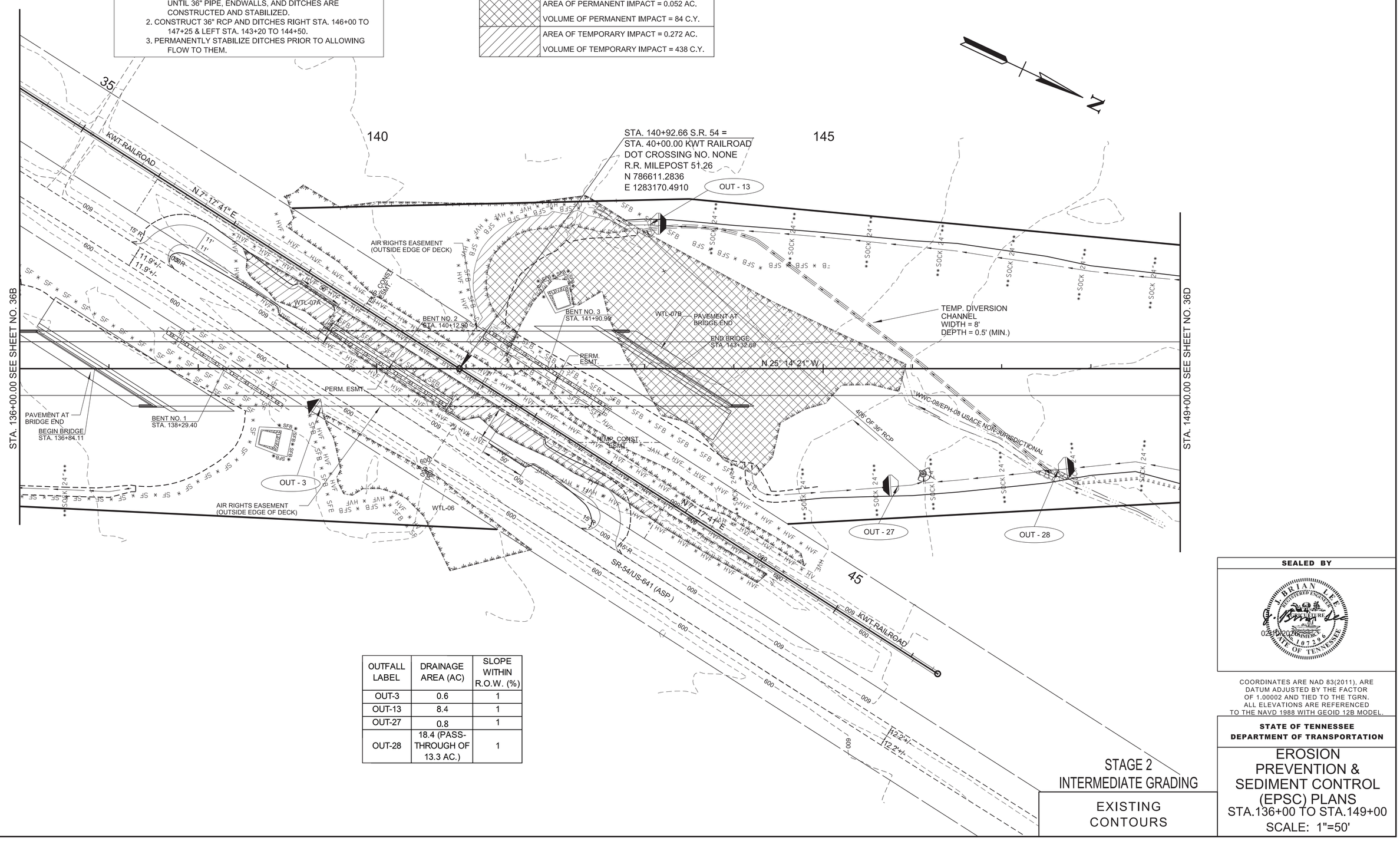
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LEGEND	WETLAND IMPACTS (WTL-07B)
	AREA OF PERMANENT IMPACT = 1.291 AC.
	VOLUME OF PERMANENT IMPACT = 2082 C.Y.
	AREA OF TEMPORARY IMPACT = 0.111 AC.
	VOLUME OF TEMPORARY IMPACT = 178 C.Y.
LEGEND	WETLAND IMPACTS (WTL-07A)
	AREA OF PERMANENT IMPACT = 0.052 AC.
	VOLUME OF PERMANENT IMPACT = 84 C.Y.
	AREA OF TEMPORARY IMPACT = 0.272 AC.
	VOLUME OF TEMPORARY IMPACT = 438 C.Y.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	35C
PIH	2025	NH-54(48)	36C
PS&E	2026	NH-54(48)	36C

STAGE 2:

1. INSTALL TEMPORARY DIVERSION CHANNEL AND MAINTAIN UNTIL 36" PIPE, ENDWALLS, AND DITCHES ARE CONSTRUCTED AND STABILIZED.
2. CONSTRUCT 36" RCP AND DITCHES RIGHT STA. 146+00 TO 147+25 & LEFT STA. 143+20 TO 144+50.
3. PERMANENTLY STABILIZE DITCHES PRIOR TO ALLOWING FLOW TO THEM.



OUTFALL LABEL	DRAINAGE AREA (AC)	SLOPE WITHIN R.O.W. (%)
OUT-3	0.6	1
OUT-13	8.4	1
OUT-27	0.8	1
OUT-28	18.4 (PASS-THROUGH OF 13.3 AC.)	1

STAGE 2
INTERMEDIATE GRADING

EXISTING CONTOURS

SEALED BY

J. BRIAN LEE
REGISTERED ENGINEER
No. 107209
STATE OF TENNESSEE
02/10/2026

COORDINATES ARE NAD 83(2011), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00002 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988 WITH GEOID 12B MODEL.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

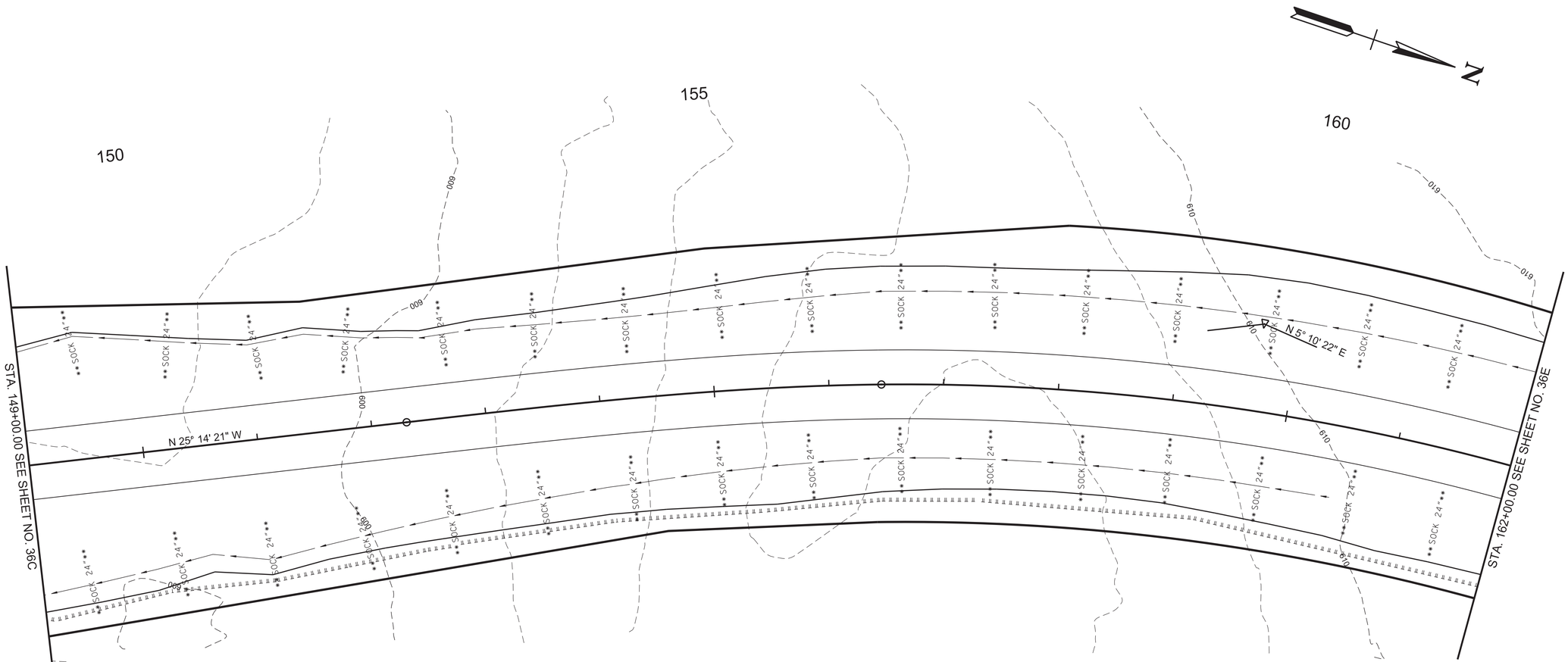
EROSION PREVENTION & SEDIMENT CONTROL (EPSC) PLANS

STA.136+00 TO STA.149+00

SCALE: 1"=50'

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	35D
PIH	2025	NH-54(48)	36D
PS&E	2026	NH-54(48)	36D



SEALED BY

J. BRIAN LEE
REGISTERED ENGINEER
LICENSE NUMBER
115729
STATE OF TENNESSEE

02/10/2026

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

STAGE 2
INTERMEDIATE GRADING

EXISTING CONTOURS

EROSION PREVENTION & SEDIMENT CONTROL (EPSC) PLANS

STA.149+00 TO STA.162+00

SCALE: 1"=50'

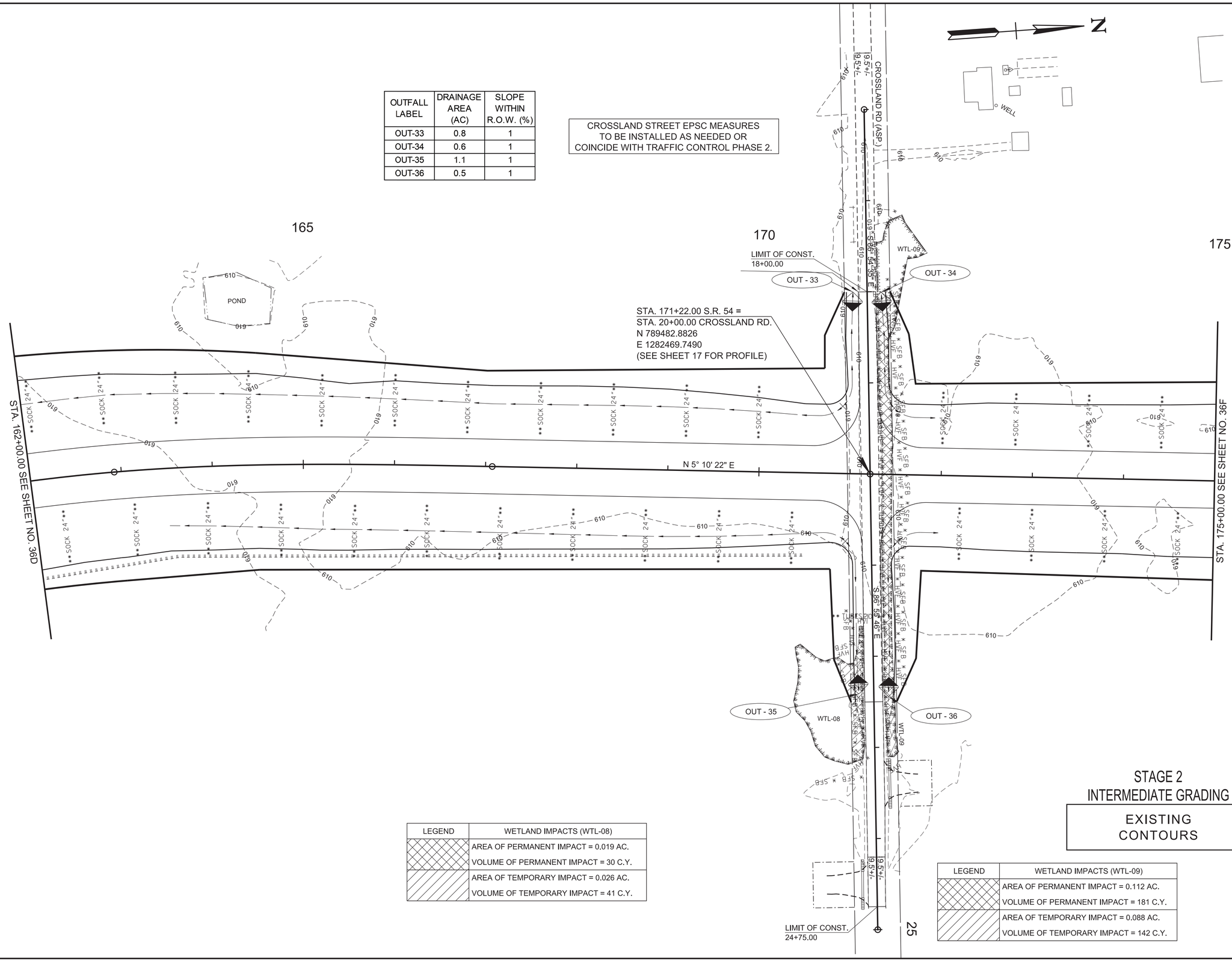
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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	35E
PIH	2025	NH-54(48)	36E
PS&E	2026	NH-54(48)	36E

REV. 08-14-24: MOVED CROSSLAND RD. FLD. ENT. RT. STA. 23+50 TO RT. STA. 24+50 AND UPDATED CONST. ESMT. MOVED LIMIT OF CONST. FROM STA. 23+74.94 TO STA. 24+74.74.

OUTFALL LABEL	DRAINAGE AREA (AC)	SLOPE WITHIN R.O.W. (%)
OUT-33	0.8	1
OUT-34	0.6	1
OUT-35	1.1	1
OUT-36	0.5	1

CROSSLAND STREET EPSC MEASURES TO BE INSTALLED AS NEEDED OR COINCIDE WITH TRAFFIC CONTROL PHASE 2.



LEGEND	WETLAND IMPACTS (WTL-08)
	AREA OF PERMANENT IMPACT = 0.019 AC.
	VOLUME OF PERMANENT IMPACT = 30 C.Y.
	AREA OF TEMPORARY IMPACT = 0.026 AC.
	VOLUME OF TEMPORARY IMPACT = 41 C.Y.

LEGEND	WETLAND IMPACTS (WTL-09)
	AREA OF PERMANENT IMPACT = 0.112 AC.
	VOLUME OF PERMANENT IMPACT = 181 C.Y.
	AREA OF TEMPORARY IMPACT = 0.088 AC.
	VOLUME OF TEMPORARY IMPACT = 142 C.Y.

STAGE 2
INTERMEDIATE GRADING

EXISTING CONTOURS

SEALED BY

J. BRIAN LEE
REGISTERED ENGINEER
AGRICULTURE
No. 107209
STATE OF TENNESSEE
02/10/2026

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

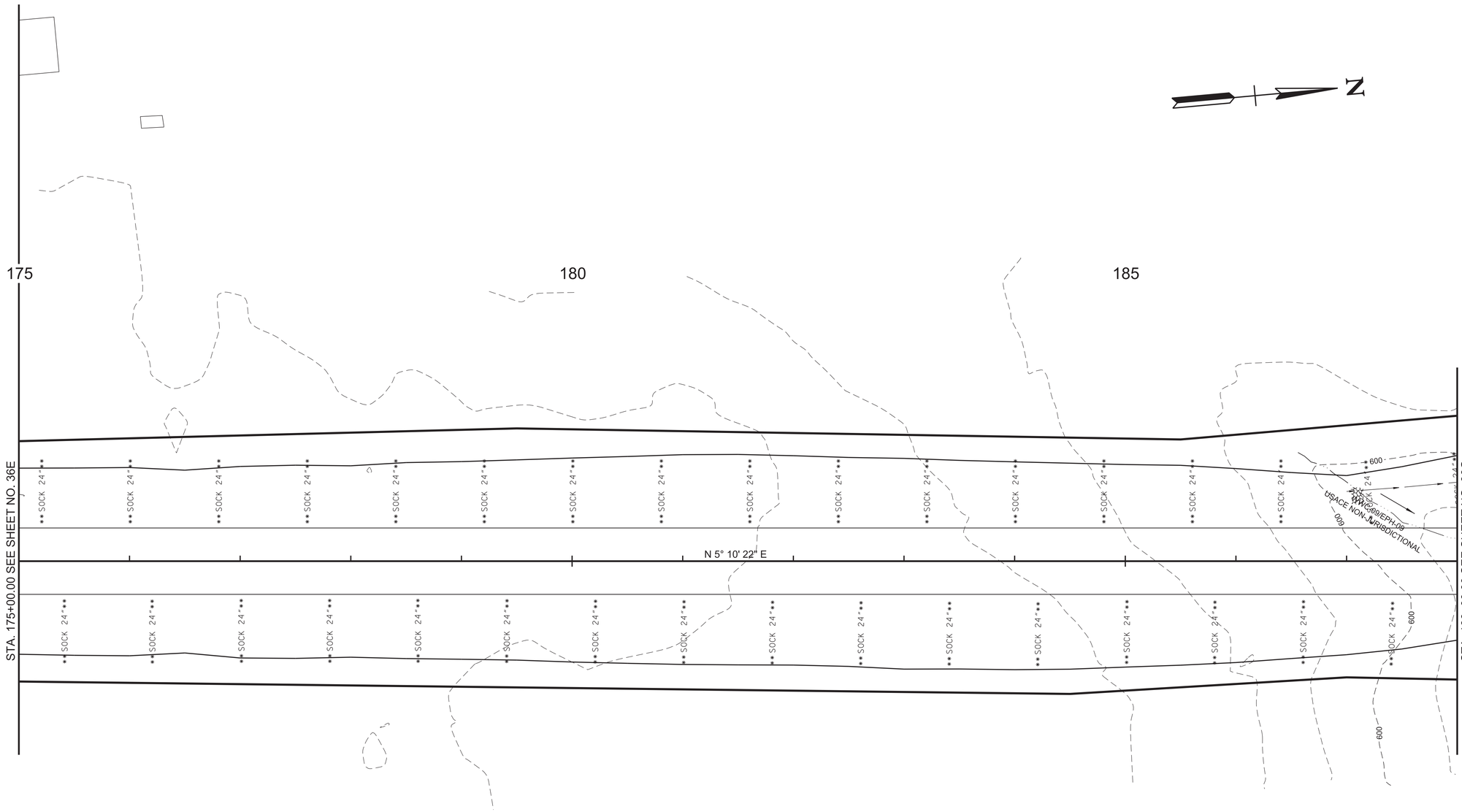
EROSION PREVENTION & SEDIMENT CONTROL (EPSC) PLANS

STA.162+00 TO STA.175+00

SCALE: 1"=50'

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	35F
PIH	2025	NH-54(48)	36F
PS&E	2026	NH-54(48)	36F



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J. BRIAN LEE
REGISTERED ENGINEER
No. 107209
STATE OF TENNESSEE

02/10/2026

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

EROSION PREVENTION & SEDIMENT CONTROL (EPSC) PLANS

STA.175+00 TO STA.188+00

SCALE: 1"=50'

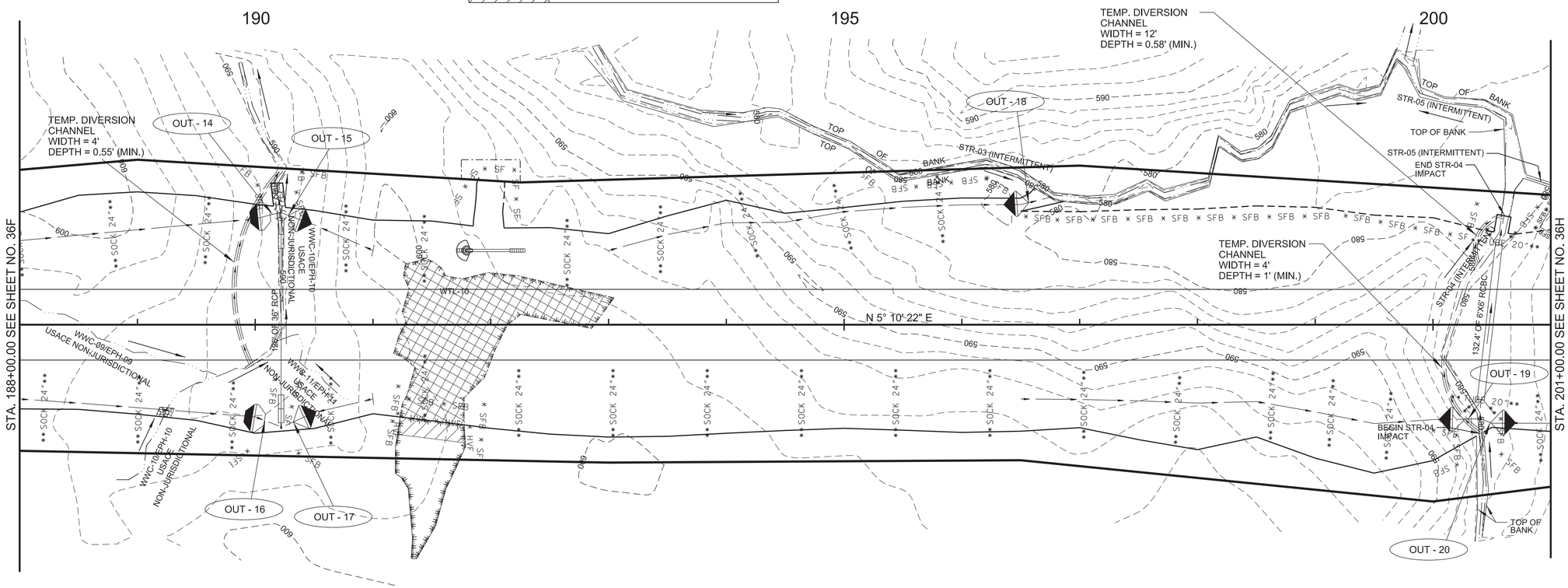
STAGE 2
INTERMEDIATE GRADING

EXISTING CONTOURS

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	35G
PIH	2025	NH-54(48)	36G
PS&E	2026	NH-54(48)	36G

LEGEND	WETLAND IMPACTS (WTL-10)
	AREA OF PERMANENT IMPACT = 0.278 AC.
	VOLUME OF PERMANENT IMPACT = 448 C.Y.
	AREA OF TEMPORARY IMPACT = 0.019 AC.
	VOLUME OF TEMPORARY IMPACT = 31 C.Y.



INSTALL 36" RCP, CONSTRUCT AND STABILIZE THE PROPOSED DITCH RT STA 189+25 TO STA 190+22 PRIOR TO PLACING FLOW FROM WWC-10/EPH-10 INTO IT TO THEN BE USED AS A CLEAN WATER DIVERSION.

OUTFALL LABEL	DRAINAGE AREA (AC)	SLOPE WITHIN R.O.W. (%)
OUT-14	6.4	2
OUT-15	0.1	4
OUT-16	5.5	3
OUT-17	0.1	2
OUT-18	1.0	4
OUT-19	4.2	2
OUT-20	0.3	5

SEALED BY

J. BRIAN LEE
REGISTERED ENGINEER
SIGNATURE
NUMBER
1 0 7 2 9 0
STATE OF TENNESSEE

02/10/2026

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

STAGE 2
INTERMEDIATE GRADING

EXISTING CONTOURS

EROSION PREVENTION & SEDIMENT CONTROL (EPSC) PLANS

STA.188+00 TO STA.201+00

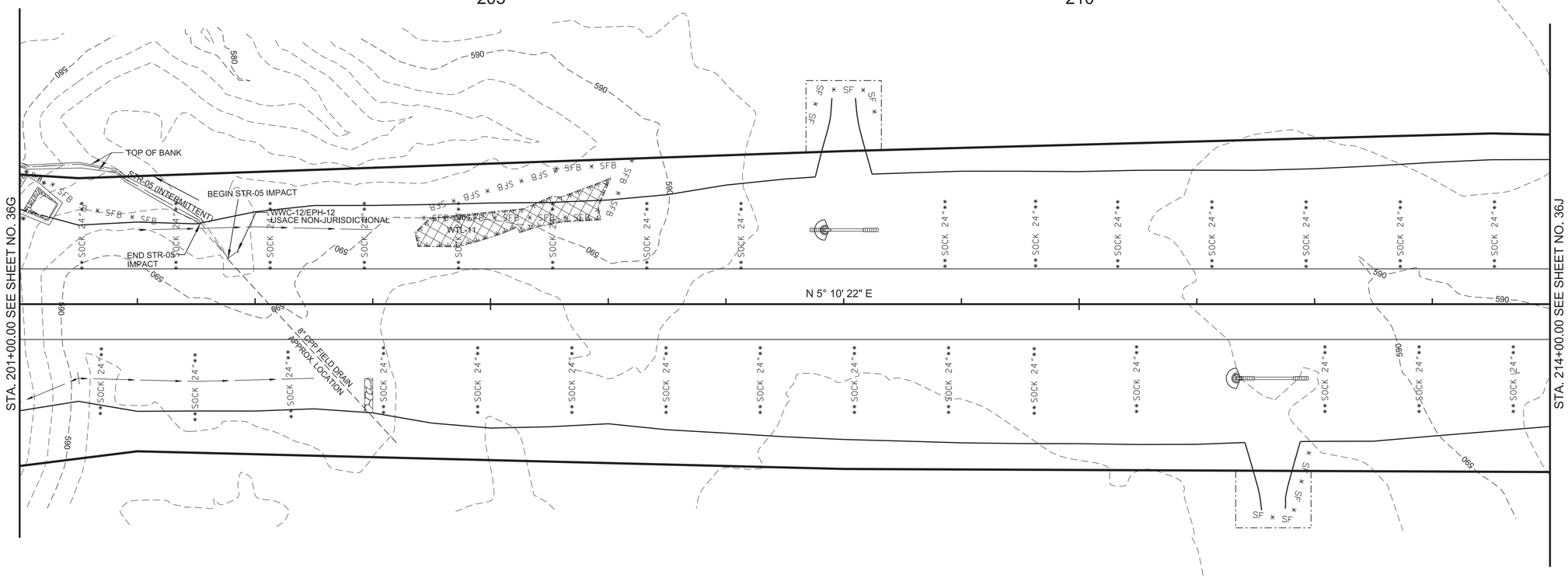
SCALE: 1"=50'

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	35H
PIH	2025	NH-54(48)	36H
PS&E	2026	NH-54(48)	36H

REV. 08-14-24: MOVED FLD. ENT'S AND UPDATED CONST. ESMT'S FOR FLD. ENT. LT. STA. 210+00 TO LT. STA. 208+00 AND RT. STA. 210+00 TO RT. STA. 211+65 AND ADJUSTED EPSC MEASURES.

LEGEND	WETLAND IMPACTS (WTL-11)
	AREA OF PERMANENT IMPACT = 0.084 AC.
	VOLUME OF PERMANENT IMPACT = 135 C.Y.
	AREA OF TEMPORARY IMPACT = 0.000 AC.
	VOLUME OF TEMPORARY IMPACT = 0 C.Y.



SEALED BY

BRIAN LEE
REGISTERED ENGINEER
AGRICULTURE
No. 107290
STATE OF TENNESSEE

02/10/2026

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

EROSION PREVENTION & SEDIMENT CONTROL (EPSC) PLANS

STA.201+00 TO STA.214+00

SCALE: 1"=50'

STAGE 2
INTERMEDIATE GRADING

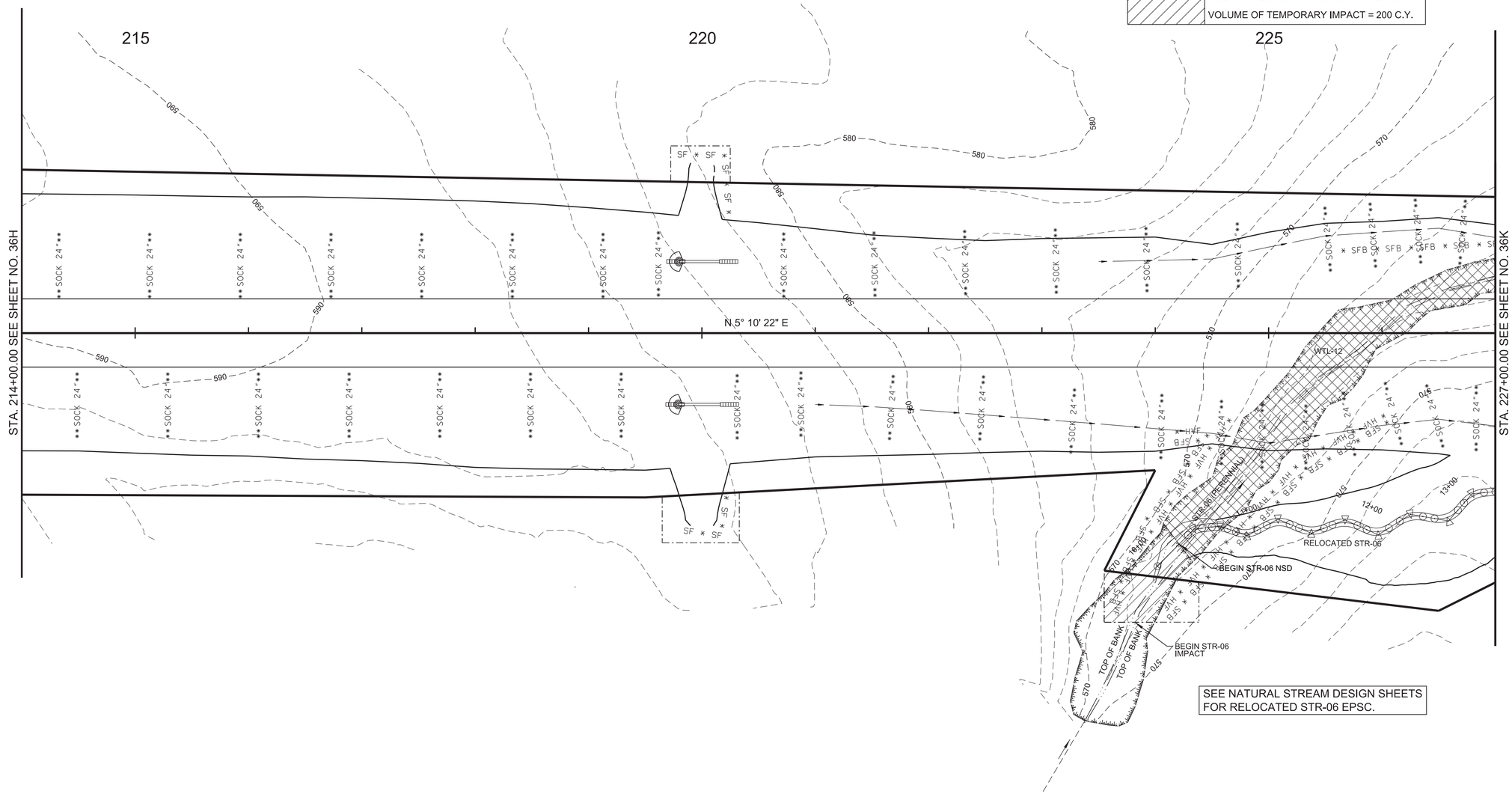
EXISTING CONTOURS

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	35J
PIH	2025	NH-54(48)	36J
PS&E	2026	NH-54(48)	36J

N

LEGEND	WETLAND IMPACTS (WTL-12)
	AREA OF PERMANENT IMPACT = 0.486 AC.
	VOLUME OF PERMANENT IMPACT = 784 C.Y.
	AREA OF TEMPORARY IMPACT = 0.124 AC.
	VOLUME OF TEMPORARY IMPACT = 200 C.Y.



SEE NATURAL STREAM DESIGN SHEETS FOR RELOCATED STR-06 EPSC.

SEALED BY

J. BRIAN LEE
REGISTERED ENGINEER
AGRICULTURE
02/10/2026
NUMBER
110729
STATE OF TENNESSEE

COORDINATES ARE NAD 83(2011), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00002 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988 WITH GEOID 12B MODEL.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

EROSION PREVENTION & SEDIMENT CONTROL (EPSC) PLANS

STA.214+00 TO STA.227+00

SCALE: 1"=50'

STAGE 2
INTERMEDIATE GRADING

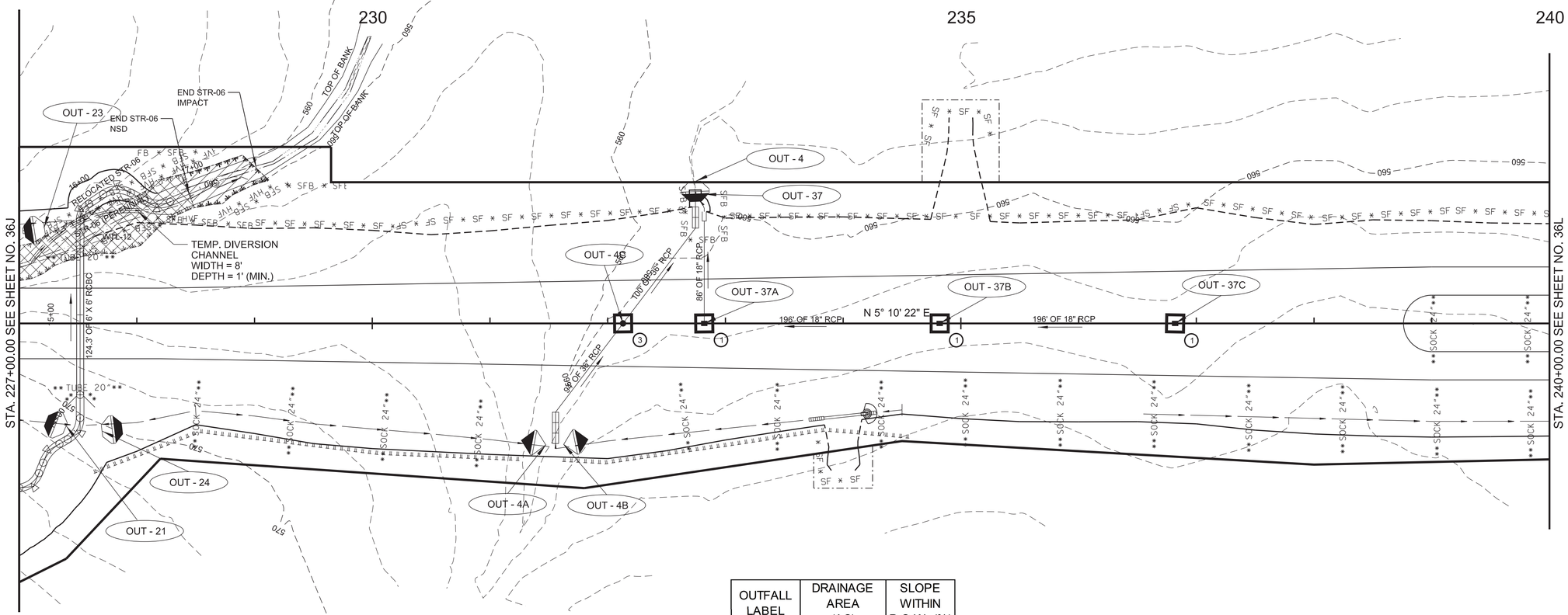
EXISTING CONTOURS

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	35K
PIH	2025	NH-54(48)	36K
PS&E	2026	NH-54(48)	36K

SEE NATURAL STREAM DESIGN SHEETS FOR RELOCATED STR-06 EPSC.

LEGEND	WETLAND IMPACTS (WTL-12)
	AREA OF PERMANENT IMPACT = 0.486 AC.
	VOLUME OF PERMANENT IMPACT = 784 C.Y.
	AREA OF TEMPORARY IMPACT = 0.124 AC.
	VOLUME OF TEMPORARY IMPACT = 200 C.Y.



OUTFALL LABEL	DRAINAGE AREA (AC)	SLOPE WITHIN R.O.W. (%)
OUT-4	17.3 (PASS-THROUGH OF 15.1 AC.)	2
OUT-4A	2.2 (PASS-THROUGH OF 1.4 AC.)	2
OUT-4B	1.3 (PASS-THROUGH OF 0.8 AC.)	1
OUT-4C	0.1	2
OUT-21	9.7	2
OUT-23	9.0	2
OUT-24	0.3	2
OUT-37	0.4	2
OUT-37A	0.1	2
OUT-37B	0.1	2
OUT-37C	0.2	2

SEALED BY



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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

STAGE 2
INTERMEDIATE GRADING

EXISTING CONTOURS

EROSION PREVENTION & SEDIMENT CONTROL (EPSC) PLANS

STA.227+00 TO STA.240+00

SCALE: 1"=50'

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	35L
PIH	2025	NH-54(48)	36L
PS&E	2026	NH-54(48)	36L

REV. 03-26-24: UPDATED PROP. R.O.W., CONST. ESMT. RT. STA. 247+47.60, REVISED END OF PROJECT STATIONING FROM STA. 247+47.60 TO STA. 247+50.14.

N

240

245

STA. 240+00.00 SEE SHEET NO. 36K

KENTUCKY
TENNESSEE
STATE LINE RD (ASP.) (KY 893)

40S054-F2-002
END PROJ. NO. NH-54(48) R.O.W.
STA. 247+50.14
N 797079.9613 250
E 1283157.4887

STA. 247+61.57 S.R. 54 =
STA. 30+00.00 STATE LINE RD. (KY 893)
N 797091.3391
E 1283158.5185
(SEE SHEET 18 FOR PROFILE)

OUT - 26
OUT - 5
OUT - 26A
OUT - 26C
OUT - 26D
OUT - 26B
OUT - 6

SEPT
LIMIT OF CONST.
27+99.59
9.5+/-
9.2+/-
WELL
MOBILE HOME
STEPS
SHED
METAL GARAGE
S 88° 06' 12" E
S 88° 49' 45" E
PROPOSED TRENCH DRAIN
76' OF 24" RCP
94' OF 24" RCP
148' OF 18" RCP
N 5° 10' 22" E
SOCK 24"
560

CALLOWAY-CO, KY
US 641
PRJ.# NHPP 6411 (039)
FD52 018 0641 000-006

40S054-F3-004
END PROJ. NO. NH-54(48) CONST.
STA. 250+00.00
N 797328.7992
E 1283180.0156

LIMIT OF CONST.
31+50.00

110.0+/-

CALLOWAY COUNTY
HENRY COUNTY

OUTFALL LABEL	DRAINAGE AREA (AC)	SLOPE WITHIN R.O.W. (%)
OUT-5	0.4	2
OUT-6	0.5	2
OUT-26	6.6	1
OUT-26A	1.0	1
OUT-26B	0.6	1
OUT-26C	4.4	1
OUT-26D	0.5	1

SEALED BY

J. BRIAN LEE
REGISTERED ENGINEER
ENGINEER
No. 107729
STATE OF TENNESSEE

02/10/2026

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

STAGE 2
INTERMEDIATE GRADING

EXISTING CONTOURS

EROSION PREVENTION & SEDIMENT CONTROL (EPSC) PLANS
STA.240+00 TO STA.250+00
SCALE: 1"=50'

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	36
PIH	2025	NH-54(48)	37
PS&E	2026	NH-54(48)	37

OUTFALL LABEL	DRAINAGE AREA (AC)	SLOPE WITHIN R.O.W. (%)
OUT-7	2.2	4
OUT-8	0.1	3
OUT-9	1.0	3
OUT-10	0.3	6

LEGEND	WETLAND IMPACTS (WTL-44)
	AREA OF PERMANENT IMPACT = 0.000 AC.
	VOLUME OF PERMANENT IMPACT = 0 C.Y.
	AREA OF TEMPORARY IMPACT = 0.009 AC.
	VOLUME OF TEMPORARY IMPACT = 15 C.Y.

LEGEND	
SYMBOL	DESCRIPTION
	EROSION CONTROL BLANKET

40S054-F2-002
BEGIN PROJ. NO. NH-54(48) R.O.W.
STA. 97+65.59 S.R. 54
N 782648.4566
E 1282781.8515

40S054-F3-004
BEGIN PROJ. NO. NH-54(48) CONST.
STA. 98+00.00
N 782682.8032
E 1282783.9372

NOTE: ALL EPSC MEASURES IN STAGE 2 SHALL REMAIN IN PLACE UNTIL STABILIZATION HAS STARTED AND/OR IS ESTABLISHED PRIOR TO STAGE 3.

STA. 105+35.00 S.R. 54 =
STA. 10+00.00 S.R. 54 TIE
N 783382.4897
E 1282982.2132
(SEE SHEET 16 FOR PROFILE)

STAGE 3
FINAL CONSTRUCTION

PROPOSED CONTOURS

FUTURE SR-54 CENTERLINE
SR-54 CENTERLINE
PRES. R.O.W.
WTL-44
WWC-64/EPH-64
WWC-63/EPH-63
WWC-62/EPH-62
N 2° 49' 24" E
N 2° 49' 24" E
S 7° 25' 01" W
N 60° 43' 01" E
N 31° 22' 32" E
104' OF 16' RCP
129' OF 6' X 6' RCBC
OUT - 9
OUT - 10
OUT - 7
OUT - 8
TOP OF BANK
STR-01 (INTERMITTENT)
STR-02 (MORMAN BRANCH-PERENNIAL)
WWC-01/EPH-01
WWC-04/EPH-04
WWC-02/EPH-02
WWC-03/EPH-03
LIMIT OF CONST. 6+40.99
20' OF 3' X 3' RCBC
WTL-01
WTL-02
STA. 110+00.00 SEE SHEET NO. 37A
100
105
110

SEALED BY

BRIAN LEE
REGISTERED ENGINEER
AGRICULTURE
02/05/2026
NUMBER 107296
STATE OF TENNESSEE

COORDINATES ARE NAD 83(2011), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00002 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988 WITH GEOID 12B MODEL.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

EROSION PREVENTION & SEDIMENT CONTROL (EPSC) PLANS

STA.98+50.00 TO STA.110+00

SCALE: 1"=50'

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	36A
PIH	2025	NH-54(48)	37A
PS&E	2026	NH-54(48)	37A

N

WTL-03

STR-02 (MORMAN BRANCH-PERENNIAL)

115

120

WTL-04

WWC-05/ERH-05
USACE NON-JURISDICTIONAL

STA. 123+00.00 SEE SHEET NO. 37B

TOP OF BANK

OUT - 30

OUT - 29

580 590 570 520

N 31° 22' 32" E

106' OF 2 @ 16" X 40' RCBB

STA. 110+00.00 SEE SHEET NO. 37

WWC-06/EPH-06
USACE NON-JURISDICTIONAL

OUT - 31

OUT - 32

STR-02 (MORMAN BRANCH-PERENNIAL)

OUTFALL LABEL	DRAINAGE AREA (AC)	SLOPE WITHIN R.O.W. (%)
OUT-29	3.1	2
OUT-30	9.6	3
OUT-31	4.1	2
OUT-32	1.6	4

LEGEND	
SYMBOL	DESCRIPTION
	EROSION CONTROL BLANKET

SEALED BY

J. BRIAN LEE
REGISTERED ENGINEER
AGRICULTURE
NUMBER
115729
STATE OF TENNESSEE

02/10/2026

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

EROSION PREVENTION & SEDIMENT CONTROL (EPSC) PLANS

STA.110+00 TO STA.123+00

SCALE: 1"=50'

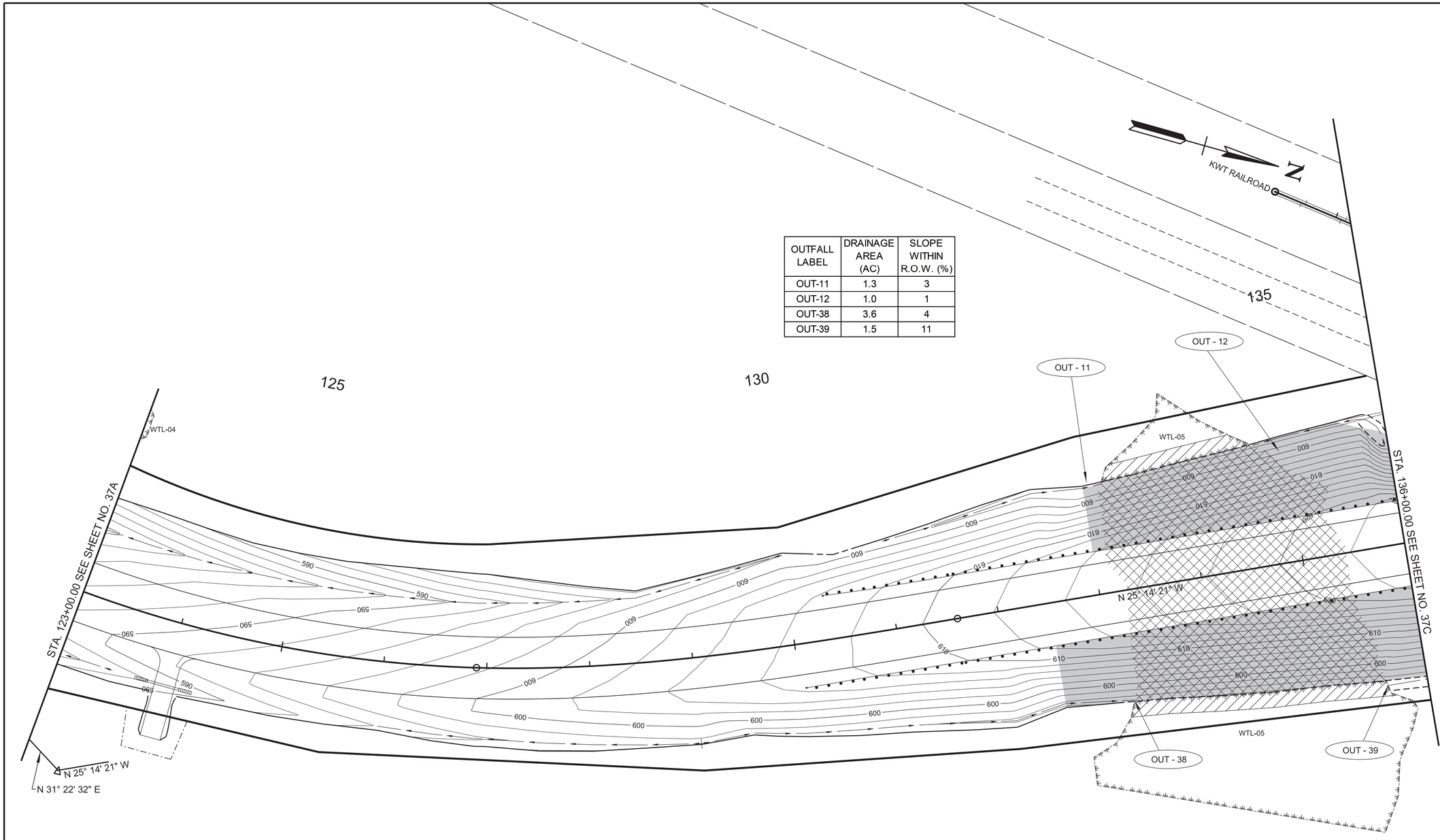
STAGE 3
FINAL CONSTRUCTION

PROPOSED CONTOURS

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	36B
PIH	2025	NH-54(48)	37B
PS&E	2026	NH-54(48)	37B

OUTFALL LABEL	DRAINAGE AREA (AC)	SLOPE WITHIN R.O.W. (%)
OUT-11	1.3	3
OUT-12	1.0	1
OUT-38	3.6	4
OUT-39	1.5	11



LEGEND	WETLAND IMPACTS (WTL-05)
	AREA OF PERMANENT IMPACT = 1.151 AC.
	VOLUME OF PERMANENT IMPACT = 1858 C.Y.
	AREA OF TEMPORARY IMPACT = 0.133 AC.
	VOLUME OF TEMPORARY IMPACT = 214 C.Y.

LEGEND	
SYMBOL	DESCRIPTION
	EROSION CONTROL BLANKET

STAGE 3
FINAL CONSTRUCTION

PROPOSED CONTOURS

SEALED BY

J. BRIAN LEE
REGISTERED ENGINEER
AGRICULTURE
NUMBER
107296
STATE OF TENNESSEE
02/05/2026

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

EROSION PREVENTION & SEDIMENT CONTROL (EPSC) PLANS

STA.123+00 TO STA.136+00

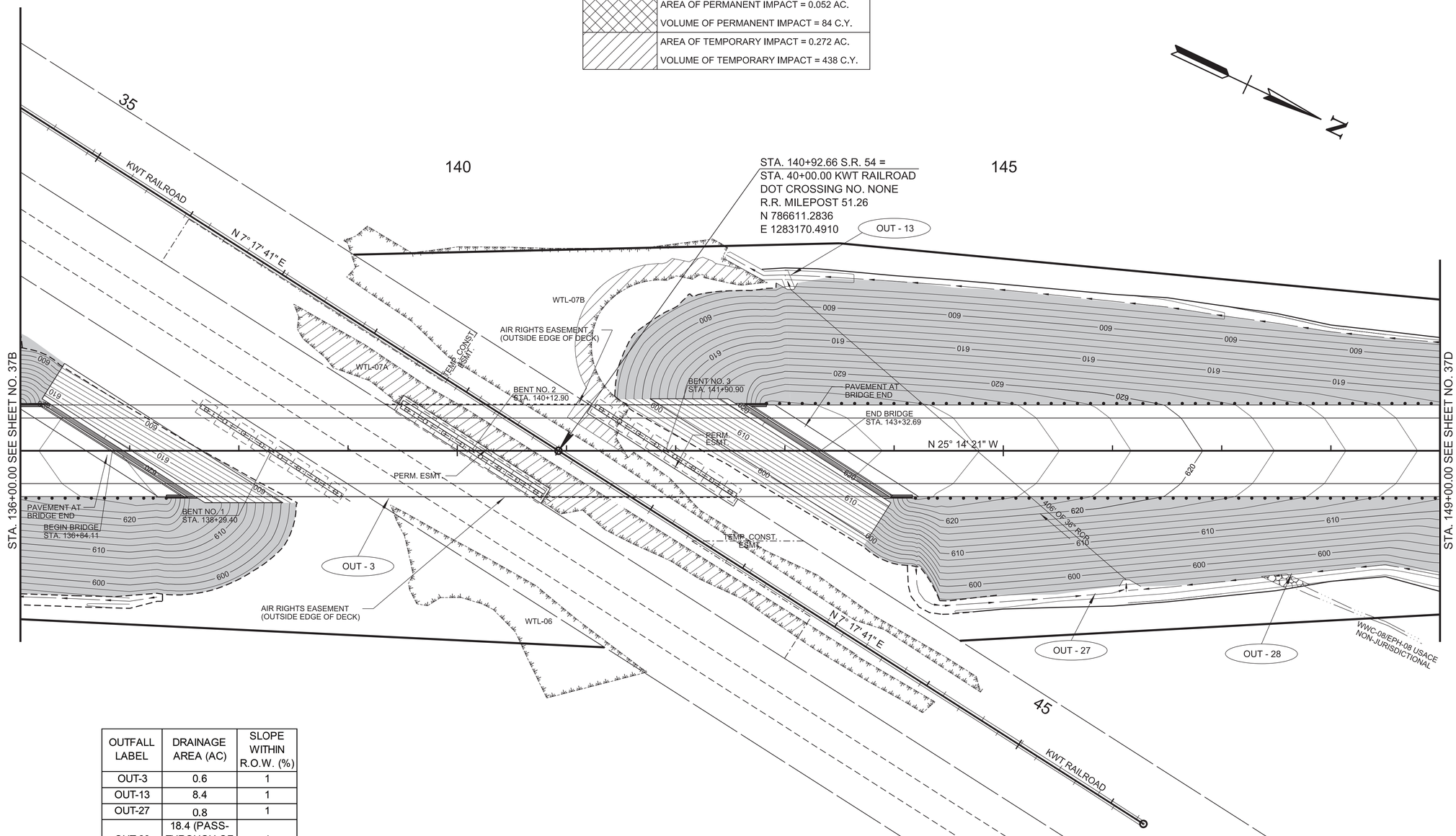
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LEGEND	WETLAND IMPACTS (WTL-07B)
	AREA OF PERMANENT IMPACT = 1.291 AC.
	VOLUME OF PERMANENT IMPACT = 2082 C.Y.
	AREA OF TEMPORARY IMPACT = 0.111 AC.
	VOLUME OF TEMPORARY IMPACT = 178 C.Y.

LEGEND	WETLAND IMPACTS (WTL-07A)
	AREA OF PERMANENT IMPACT = 0.052 AC.
	VOLUME OF PERMANENT IMPACT = 84 C.Y.
	AREA OF TEMPORARY IMPACT = 0.272 AC.
	VOLUME OF TEMPORARY IMPACT = 438 C.Y.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	36C
PIH	2025	NH-54(48)	37C
PS&E	2026	NH-54(48)	37C



OUTFALL LABEL	DRAINAGE AREA (AC)	SLOPE WITHIN R.O.W. (%)
OUT-3	0.6	1
OUT-13	8.4	1
OUT-27	0.8	1
OUT-28	18.4 (PASS-THROUGH OF 13.3 AC.)	1

LEGEND	
SYMBOL	DESCRIPTION
	EROSION CONTROL BLANKET

STAGE 3
FINAL CONSTRUCTION

PROPOSED CONTOURS

SEALED BY

J. BRIAN LEE
REGISTERED ENGINEER
No. 107209
STATE OF TENNESSEE
02/10/2026

COORDINATES ARE NAD 83(2011), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00002 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988 WITH GEOID 12B MODEL.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

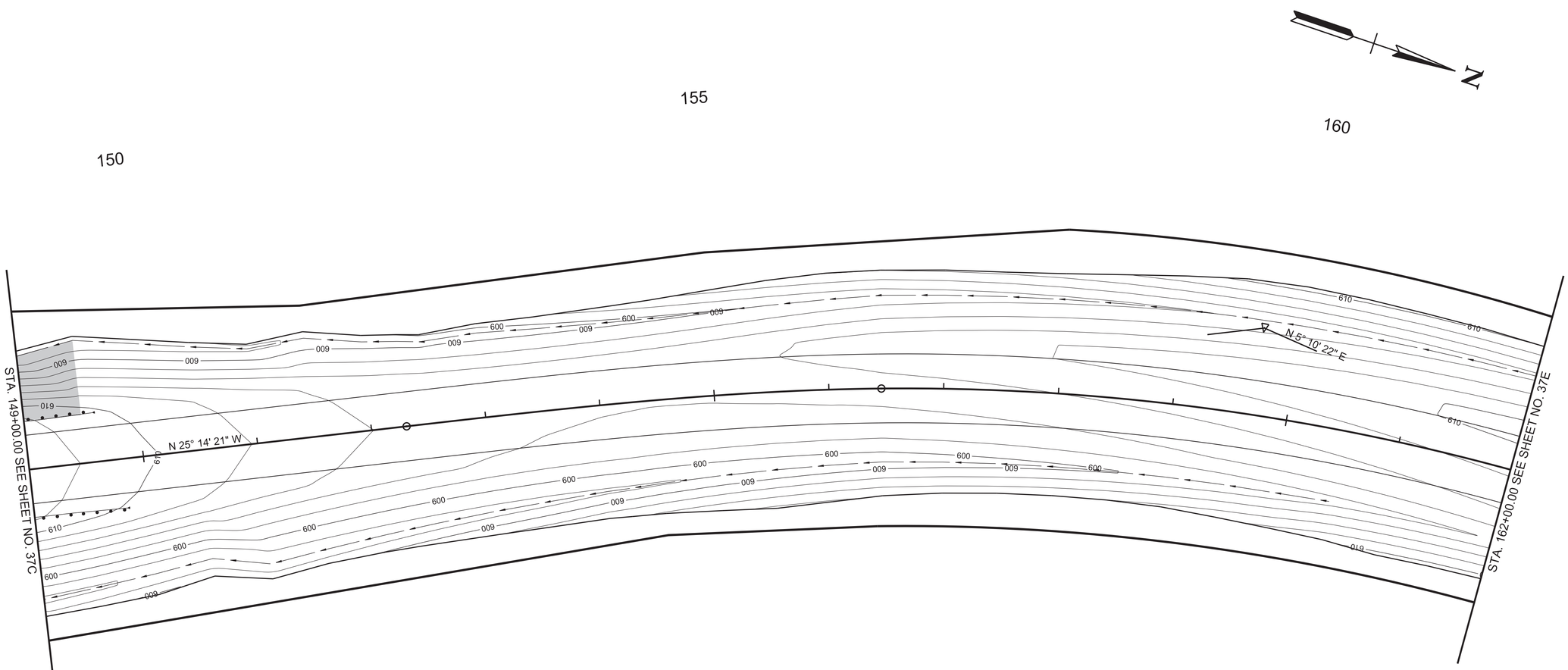
EROSION PREVENTION & SEDIMENT CONTROL (EPSC) PLANS

STA.136+00 TO STA.149+00

SCALE: 1"=50'

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	36D
PIH	2025	NH-54(48)	37D
PS&E	2026	NH-54(48)	37D



LEGEND	
SYMBOL	DESCRIPTION
	EROSION CONTROL BLANKET

SEALED BY

BRIAN LEE
REGISTERED ENGINEER
AGRICULTURE
02/10/2026
NUMBER
107296
STATE OF TENNESSEE

COORDINATES ARE NAD 83(2011), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00002 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988 WITH GEOID 12B MODEL.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

STAGE 3
FINAL CONSTRUCTION

PROPOSED CONTOURS

EROSION PREVENTION & SEDIMENT CONTROL (EPSC) PLANS

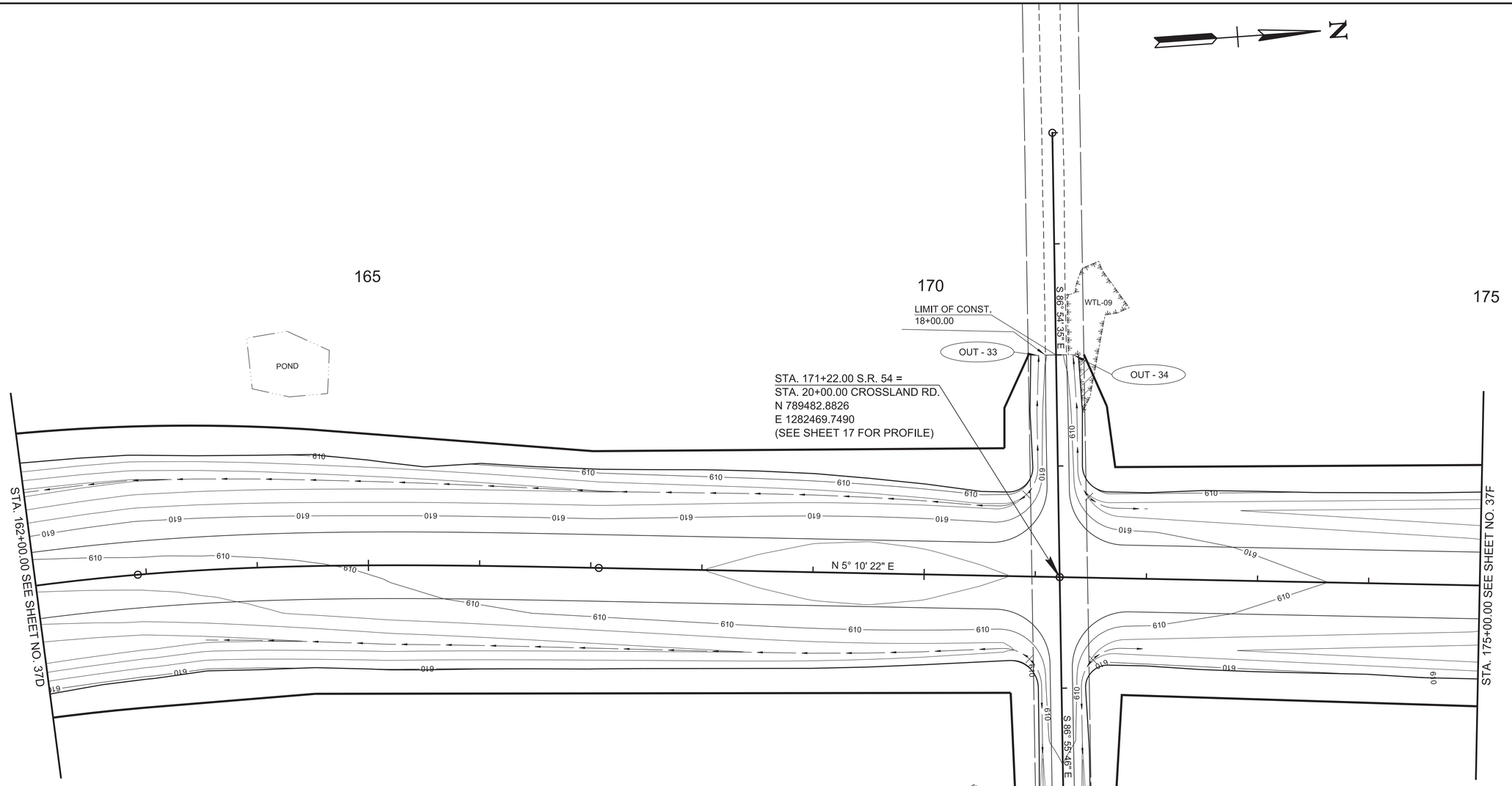
STA.149+00 TO STA.162+00

SCALE: 1"=50'

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	36E
PIH	2025	NH-54(48)	37E
PS&E	2026	NH-54(48)	37E

REV. 08-14-24: MOVED CROSSLAND RD. FLD. ENT. RT. STA. 23+50 TO RT. STA. 24+50 AND UPDATED CONST. ESMT. MOVED LIMIT OF CONST. FROM STA. 23+74.94 TO STA. 24+74.74.



OUTFALL LABEL	DRAINAGE AREA (AC)	SLOPE WITHIN R.O.W. (%)
OUT-33	0.8	1
OUT-34	0.6	1
OUT-35	1.1	1
OUT-36	0.5	1

LEGEND	WETLAND IMPACTS (WTL-08)
	AREA OF PERMANENT IMPACT = 0.019 AC.
	VOLUME OF PERMANENT IMPACT = 30 C.Y.
	AREA OF TEMPORARY IMPACT = 0.026 AC.
	VOLUME OF TEMPORARY IMPACT = 41 C.Y.

LEGEND	WETLAND IMPACTS (WTL-09)
	AREA OF PERMANENT IMPACT = 0.112 AC.
	VOLUME OF PERMANENT IMPACT = 181 C.Y.
	AREA OF TEMPORARY IMPACT = 0.088 AC.
	VOLUME OF TEMPORARY IMPACT = 142 C.Y.

STAGE 3
FINAL CONSTRUCTION

PROPOSED CONTOURS

SEALED BY

BRIAN LEE
REGISTERED ENGINEER
No. 107209
STATE OF TENNESSEE

02-10-2026

COORDINATES ARE NAD 83(2011), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00002 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988 WITH GEOID 12B MODEL.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

EROSION PREVENTION & SEDIMENT CONTROL (EPSC) PLANS

STA.162+00 TO STA.175+00

SCALE: 1"=50'

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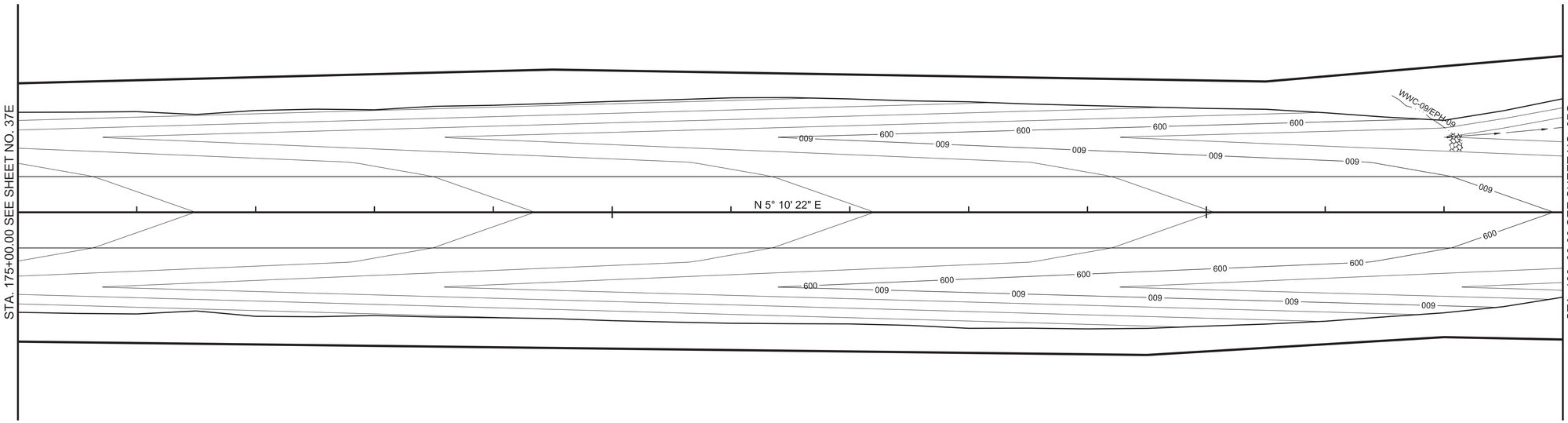
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	36F
PIH	2025	NH-54(48)	37F
PS&E	2026	NH-54(48)	37F

N

175

180

185



SEALED BY

A. BRIAN LEE
REGISTERED ENGINEER
SIGNATURE
DATE
NUMBER 107290
STATE OF TENNESSEE

02/10/2026

COORDINATES ARE NAD 83(2011), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00002 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988 WITH GEOID 12B MODEL.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

EROSION PREVENTION & SEDIMENT CONTROL (EPSC) PLANS

STA.175+00 TO STA.188+00

SCALE: 1"=50'

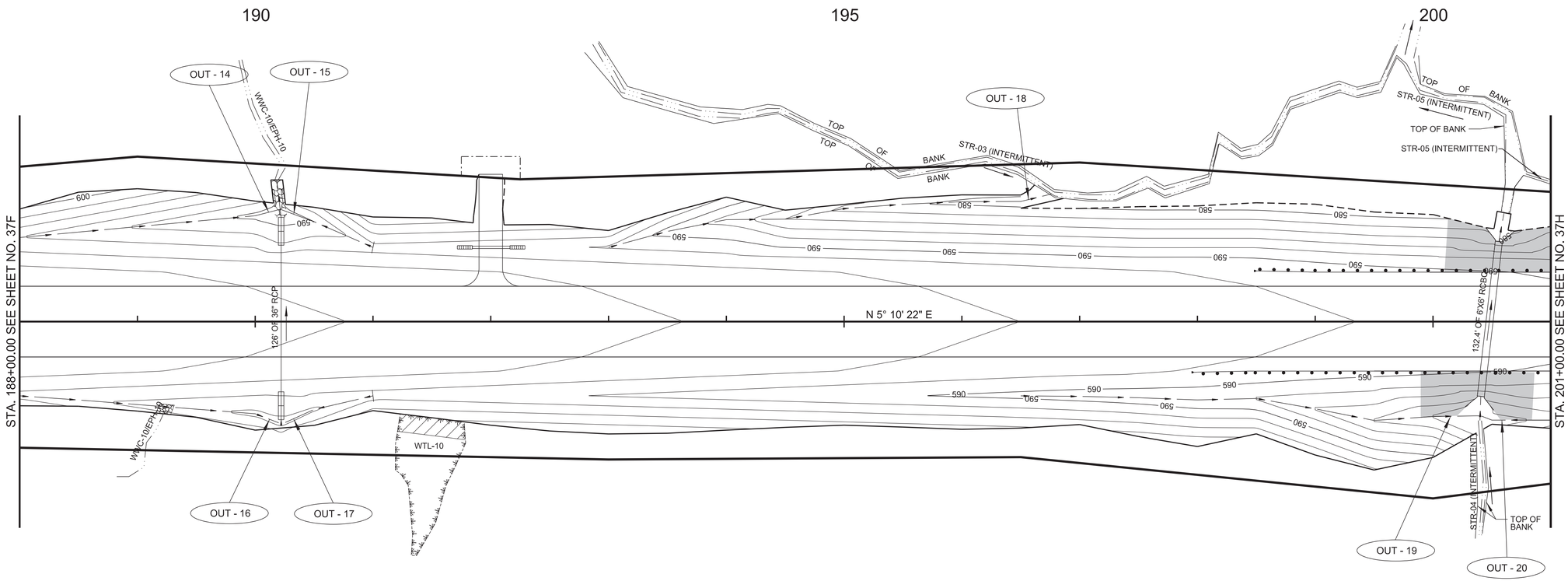
STAGE 3
FINAL CONSTRUCTION

PROPOSED CONTOURS

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	36G
PIH	2025	NH-54(48)	37G
PS&E	2026	NH-54(48)	37G

LEGEND	WETLAND IMPACTS (WTL-10)
	AREA OF PERMANENT IMPACT = 0.278 AC.
	VOLUME OF PERMANENT IMPACT = 448 C.Y.
	AREA OF TEMPORARY IMPACT = 0.019 AC.
	VOLUME OF TEMPORARY IMPACT = 31 C.Y.



OUTFALL LABEL	DRAINAGE AREA (AC)	SLOPE WITHIN R.O.W. (%)
OUT-14	6.4	2
OUT-15	0.1	4
OUT-16	5.5	3
OUT-17	0.1	2
OUT-18	1.0	4
OUT-19	4.2	2
OUT-20	0.3	5

LEGEND	
SYMBOL	DESCRIPTION
	EROSION CONTROL BLANKET

SEALED BY

BRIAN LEE
REGISTERED ENGINEER
AGRICULTURE
COMMERCE
1077296
STATE OF TENNESSEE

02/10/2026

COORDINATES ARE NAD 83(2011), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00002 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988 WITH GEOID 12B MODEL.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

STAGE 3
FINAL CONSTRUCTION

PROPOSED CONTOURS

EROSION PREVENTION & SEDIMENT CONTROL (EPSC) PLANS

STA.188+00 TO STA.201+00

SCALE: 1"=50'

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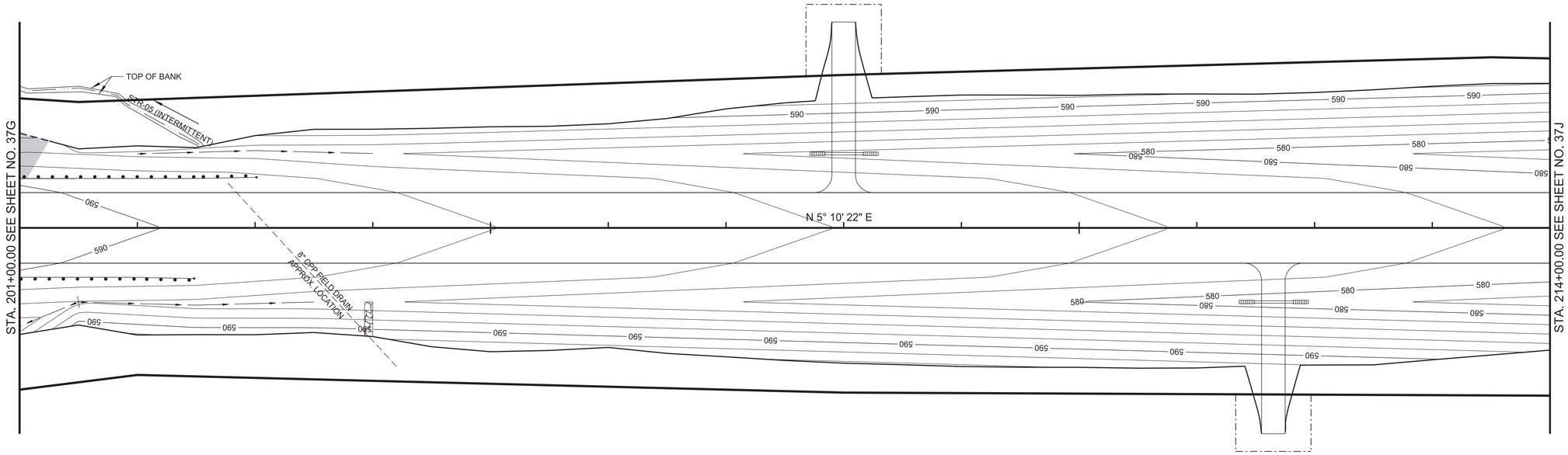
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	36H
PIH	2025	NH-54(48)	37H
PS&E	2026	NH-54(48)	37H

REV. 08-14-24: MOVED FLD. ENT'S AND UPDATED CONST. ESMT'S FOR FLD. ENT. LT. STA. 210+00 TO LT. STA. 208+00 AND RT. STA. 210+00 TO RT. STA. 211+65.

N

205

210



SEALED BY

BRIAN LEE
REGISTERED ENGINEER
AGRICULTURE
02/10/2026
NO. 107290
STATE OF TENNESSEE

COORDINATES ARE NAD 83(2011), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00002 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988 WITH GEOID 12B MODEL.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

STAGE 3
FINAL CONSTRUCTION

PROPOSED CONTOURS

EROSION PREVENTION & SEDIMENT CONTROL (EPSC) PLANS

STA.201+00 TO STA.214+00

SCALE: 1"=50'

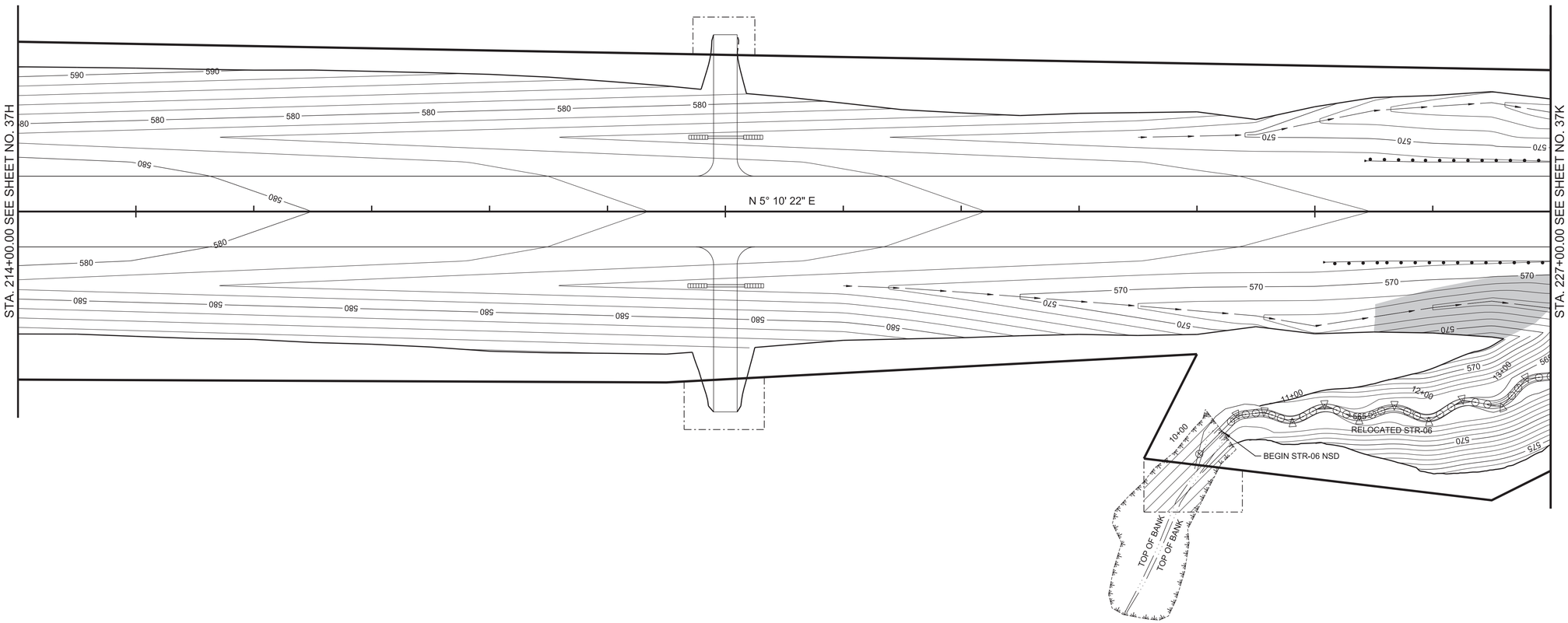
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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	36J
PIH	2025	NH-54(48)	37J
PS&E	2026	NH-54(48)	37J

N

LEGEND	WETLAND IMPACTS (WTL-12)
	AREA OF PERMANENT IMPACT = 0.486 AC.
	VOLUME OF PERMANENT IMPACT = 784 C.Y.
	AREA OF TEMPORARY IMPACT = 0.124 AC.
	VOLUME OF TEMPORARY IMPACT = 200 C.Y.

215 220 225



LEGEND	
SYMBOL	DESCRIPTION
	EROSION CONTROL BLANKET

SEE NATURAL STREAM DESIGN SHEETS FOR RELOCATED STR-06 EPSC.

STAGE 3
FINAL CONSTRUCTION

PROPOSED CONTOURS

SEALED BY

J. BRIAN LEE
REGISTERED ENGINEER
AGRICULTURE
COMMERCE
No. 107200
STATE OF TENNESSEE

02/10/2026

COORDINATES ARE NAD 83(2011), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00002 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988 WITH GEOID 12B MODEL.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

EROSION PREVENTION & SEDIMENT CONTROL (EPSC) PLANS

STA.214+00 TO STA.227+00

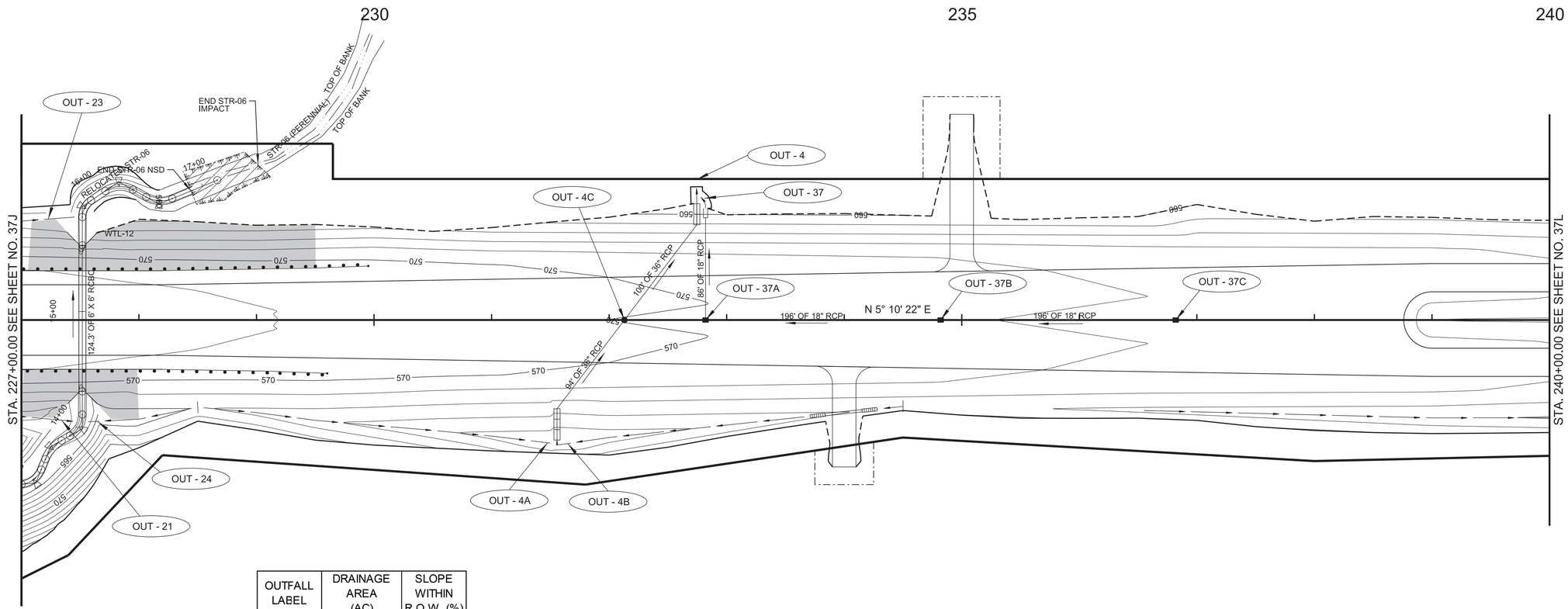
SCALE: 1"=50'

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	36K
PIH	2025	NH-54(48)	37K
PS&E	2026	NH-54(48)	37K

SEE NATURAL STREAM DESIGN SHEETS FOR RELOCATED STR-06 EPSC.

LEGEND	WETLAND IMPACTS (WTL-12)
	AREA OF PERMANENT IMPACT = 0.486 AC.
	VOLUME OF PERMANENT IMPACT = 784 C.Y.
	AREA OF TEMPORARY IMPACT = 0.124 AC.
	VOLUME OF TEMPORARY IMPACT = 200 C.Y.



OUTFALL LABEL	DRAINAGE AREA (AC)	SLOPE WITHIN R.O.W. (%)
OUT-4	17.3 (PASS-THROUGH OF 15.1 AC.)	2
OUT-4A	2.2 (PASS-THROUGH OF 1.4 AC.)	2
OUT-4B	1.3 (PASS-THROUGH OF 0.8 AC.)	1
OUT-4C	0.1	2
OUT-21	9.7	2
OUT-23	9.0	2
OUT-24	0.3	2
OUT-37	0.4	2
OUT-37A	0.1	2
OUT-37B	0.1	2
OUT-37C	0.2	2

LEGEND	
SYMBOL	DESCRIPTION
	EROSION CONTROL BLANKET

SEALED BY

J. BRIAN LEE
REGISTERED ENGINEER
AGRICULTURE
NUMBER
115729
STATE OF TENNESSEE
02/10/2026

COORDINATES ARE NAD 83(2011), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00002 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988 WITH GEOID 12B MODEL.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

STAGE 3
FINAL CONSTRUCTION

PROPOSED CONTOURS

EROSION PREVENTION & SEDIMENT CONTROL (EPSC) PLANS

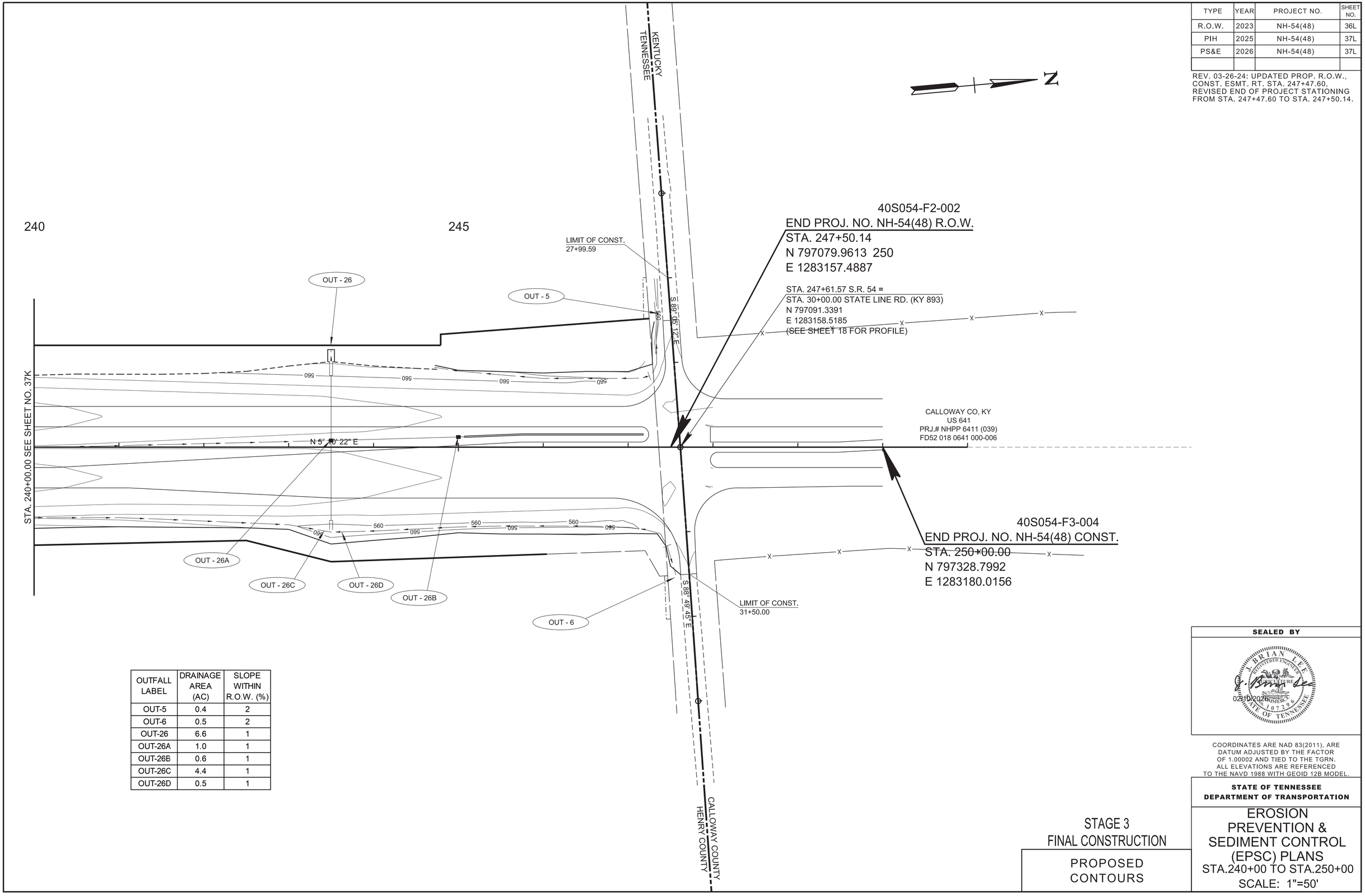
STA.227+00 TO STA.240+00

SCALE: 1"=50'

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	36L
PIH	2025	NH-54(48)	37L
PS&E	2026	NH-54(48)	37L

REV. 03-26-24: UPDATED PROP. R.O.W., CONST. ESMT. RT. STA. 247+47.60, REVISED END OF PROJECT STATIONING FROM STA. 247+47.60 TO STA. 247+50.14.



OUTFALL LABEL	DRAINAGE AREA (AC)	SLOPE WITHIN R.O.W. (%)
OUT-5	0.4	2
OUT-6	0.5	2
OUT-26	6.6	1
OUT-26A	1.0	1
OUT-26B	0.6	1
OUT-26C	4.4	1
OUT-26D	0.5	1

SEALED BY

J. BRIAN LEE
REGISTERED ENGINEER
ENGINEER
No. 110722
STATE OF TENNESSEE
02/10/2026

COORDINATES ARE NAD 83(2011), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00002 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988 WITH GEOID 12B MODEL.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

EROSION PREVENTION & SEDIMENT CONTROL (EPSC) PLANS

STA.240+00 TO STA.250+00

SCALE: 1"=50'

STAGE 3
FINAL CONSTRUCTION

PROPOSED CONTOURS

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TYPE	YEAR	PROJECT NO.	SHEET NO.
PIH	2025	NH-54(48)	38
PS&E	2026	NH-54(48)	38

MARKING ABBREVIATIONS
SSWL-SINGLE SOLID WHITE LINE
SSYL-SINGLE SOLID YELLOW LINE
SBWL-SINGLE BROKEN WHITE LINE
SBYL-SINGLE BROKEN YELLOW LINE
DSYL-DOUBLE SOLID YELLOW LINE
DBYL-DOUBLE BROKEN YELLOW LINE
DWL -DOTTED WHITE LINE

N

MATCH LINE STA. 97+00 SEE THIS SHEET

1

100

40S054-F2-002

BEGIN PROJ. NO. NH-54(48) R.O.W.
STA. 97+65.59 S.R. 54
N 782648.4566
E 1282781.8515

MATCH LINE STA. 97+00 SEE THIS SHEET

KWT RAILROAD

105

57 SOUTH 54 FUTURE SR-54 CENTERLINE

SR-54 CENTERLINE

STA. 98+00.00 (LT & RT)
BEGIN PVMT & SH TAPER

SR-54/US-641 (ASP.)

11.6'
11.5'

10' 12' 6" DSYL 6" SSWL 12' 10'

STA. 99+50.00 (LT & RT)
BEGIN PVMT TAPER

STA. 98+20.00 (LT & RT)
END PVMT TAPER

12" SSYL SEE TDOT. STD. DWG. T-M-3

STA. 102+20 (6' RT.)
BEGIN BAY TAPER

N 2° 49' 24" E

RUMBLE STRIP SEE TDOT STD. DWG. T-M-15A

STA. 104+00 (6' LT.)
END BAY TAPER

6" DSYL 8" DWL 6" SSWL 16' 12' 6'

2 Old US 641

LEFT TURN ARROW

24" STOP LINE

RUMBLE STRIP SEE TDOT STD. DWG. T-M-15A

30 SOUTH 54

29 NORTH 54

3 Old US 641 STOP

S 7° 25' 01" W

S 60° 43' 01" E

+00 +60 +70

50.00'

4

5 25 MPH

EXISTING TO REMAIN

STA. 7+20.00 (LT & RT)
BEGIN PVMT & SH TAPER

STA. 7+70.00 (LT & RT)
END PVMT (LT & RT)
& SH TAPER (RT.)

LIMIT OF CONST. 6+40.99

12' 11.6' 12' 11.5' SR-54/US-641 (ASP.)

6" SSWL 6" DSYL 12' 12'

EXISTING TO REMAIN

EXISTING TO REMAIN

110

6 Old US 641

12" SSYL SEE TDOT. STD. DWG. T-M-3

6" DSYL 6" SBYL

RUMBLE STRIP SEE TDOT STD. DWG. T-M-15A

6" SSWL 6" SBYL 12' 6' 12'

N 44° 23' 32" E

56 NORTH 54

STA. 107+60.00 (LT & RT)
END PVMT TAPER

STA. 110+00.00 SEE SHEET NO. 39

PAVEMENT MARKERS TO PLACED PER STD. DWG. T-M-1

40S054-F3-004

BEGIN PROJ. NO. NH-54(48) CONST.
STA. 98+00.00
N 782682.8032
E 1282783.9372

STA. 105+35.00 S.R. 54 =
STA. 10+00.00 S.R. 54 TIE
N 783382.4897
E 1282982.2132
(SEE SHEET 16 FOR PROFILE)

SEALED BY

BRIAN LEE
REGISTERED ENGINEER
AGRICULTURE
ENGINEER
STATE OF TENNESSEE

02/09/2026

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

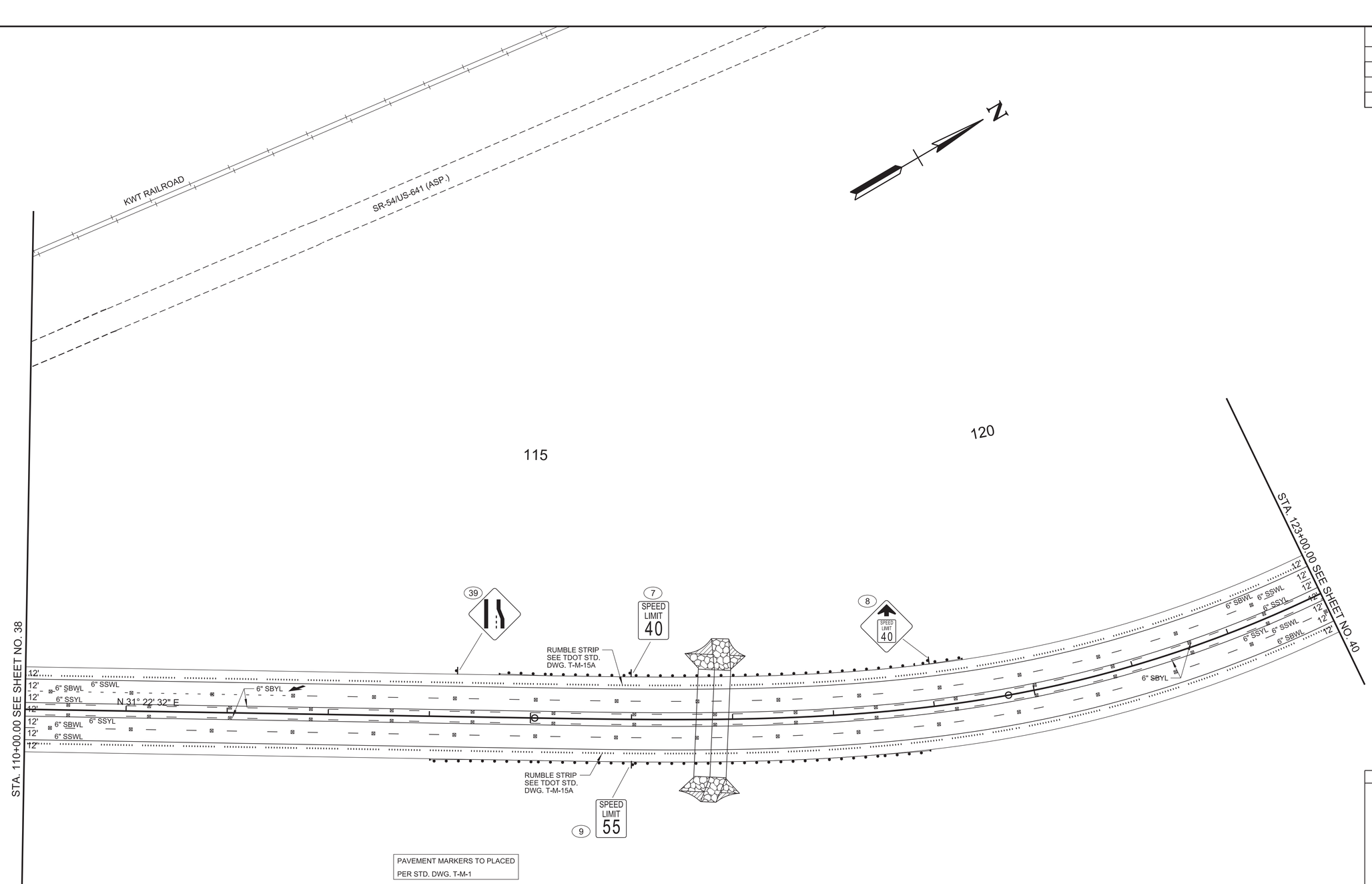
SIGNING AND PAVEMENT MARKING PLAN

STA.95+50.00 TO STA.110+00

SCALE: 1"=50'

2/9/2026 2:38:05 PM
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TYPE	YEAR	PROJECT NO.	SHEET NO.
PIH	2025	NH-54(48)	39
PS&E	2026	NH-54(48)	39



SEALED BY

J. BRIAN LEE
REGISTERED ENGINEER
AGENT
NUMBER 107296
STATE OF TENNESSEE

02/10/2026

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

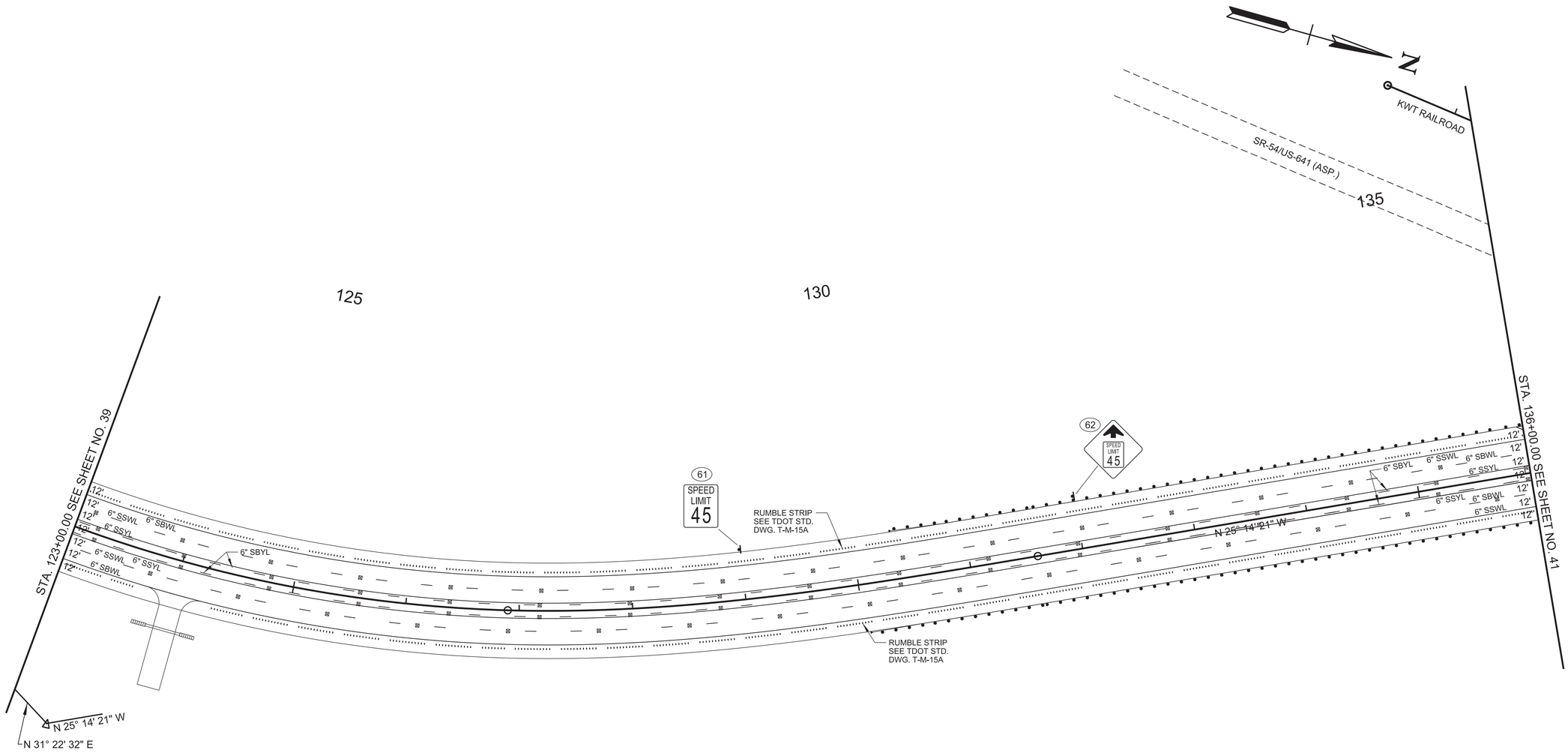
SIGNING AND PAVEMENT MARKING PLAN

STA.110+00 TO STA.123+00

SCALE: 1"=50'

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TYPE	YEAR	PROJECT NO.	SHEET NO.
PIH	2025	NH-54(48)	40
PS&E	2026	NH-54(48)	40



PAVEMENT MARKERS TO PLACED PER STD. DWG. T-M-1

SEALED BY

J. BRIAN LEE
REGISTERED ENGINEER
SIGNATURE
DATE
NUMBER
1072906
STATE OF TENNESSEE

02/10/2026

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

SIGNING AND PAVEMENT MARKING PLAN

STA.123+00 TO STA.136+00

SCALE: 1"=50'

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TYPE	YEAR	PROJECT NO.	SHEET NO.
PIH	2025	NH-54(48)	41
PS&E	2026	NH-54(48)	41

PAVEMENT MARKERS TO PLACED PER STD. DWG. T-M-1

N

140

145

STA. 140+92.66 S.R. 54 =
STA. 40+00.00 KWT RAILROAD
DOT CROSSING NO. NONE
R.R. MILEPOST 51.26
N 786611.2836
E 1283170.4910

STA. 136+00.00 SEE SHEET NO. 40

STA. 149+00.00 SEE SHEET NO. 42

35

50'

KWT R.R. R.O.W.

N 7° 17' 41" E

KWT RAILROAD

KWT R.R. R.O.W.
PRES. R.O.W.

RUMBLE STRIP
SEE TDOT STD.
DWG. T-M-15A

BEGIN BRIDGE
STA. 136+84.11

CONTRAST PAVEMENT
SHADOW MARKING. TYP. ON
ALL CONCRETE PAVEMENT
TRAFFIC LANES. SEE STD.
T-M-5 FOR DETAILS.

END BRIDGE
STA. 143+32.69

RUMBLE STRIP
SEE TDOT STD.
DWG. T-M-15A

N 25° 14' 24" W

12' 6" SSWL 6" SBYL 6" SSYL 6" SBWL 12'

RUMBLE STRIP
SEE TDOT STD.
DWG. T-M-15A

RUMBLE STRIP
SEE TDOT STD.
DWG. T-M-15A

N 7° 17' 41" E

KWT RAILROAD

45

100' RAILROAD R.O.W.

50'

50'

KWT R.R. R.O.W.

KWT R.R. R.O.W.

SR-54/US-641 (ASP.)

SEALED BY

J. BRIAN LEE
REGISTERED ENGINEER
AGRICULTURE
02/10/2026
DATE
STATE OF TENNESSEE

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

SIGNING AND PAVEMENT MARKING PLAN

STA.136+00 TO STA.149+00

SCALE: 1"=50'

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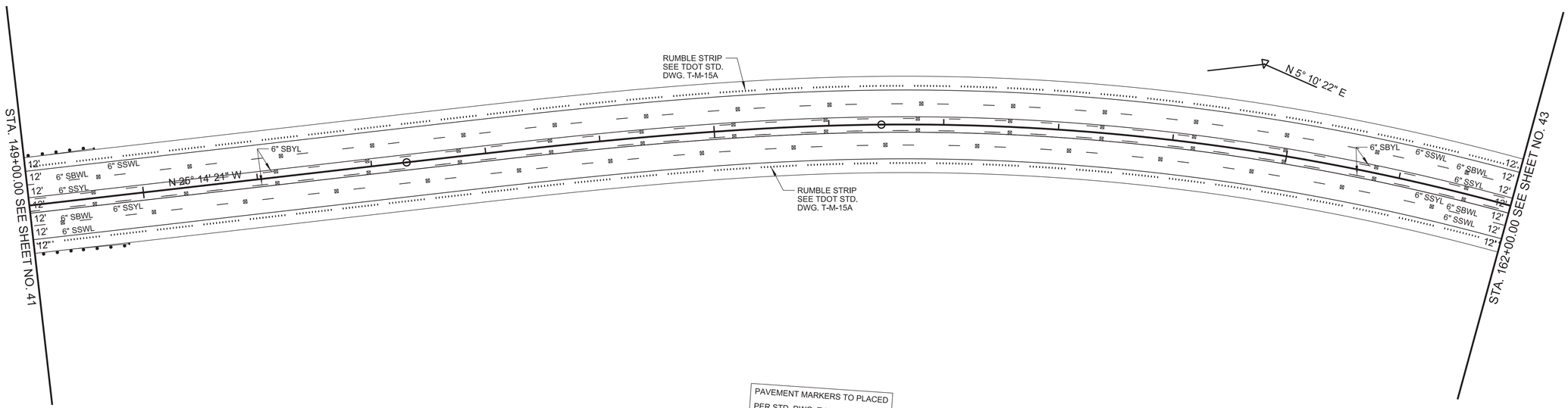
TYPE	YEAR	PROJECT NO.	SHEET NO.
PIH	2025	NH-54(48)	42
PS&E	2026	NH-54(48)	42

150

155

160

N



PAVEMENT MARKERS TO PLACED
PER STD. DWG. T-M-1

SEALED BY

J. BRIAN LEE
REGISTERED ENGINEER
AGRICULTURE
COMMERCE
No. 107299
STATE OF TENNESSEE

02/10/2026

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

SIGNING AND PAVEMENT MARKING PLAN

STA.149+00 TO STA.162+00

SCALE: 1"=50'

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TYPE	YEAR	PROJECT NO.	SHEET NO.
PIH	2025	NH-54(48)	43
PS&E	2026	NH-54(48)	43

N

165

170

175

CROSSLAND RD (ASP.)

S 86° 54' 35" E

LIMIT OF CONST.
18+00.00

9.6'

9.4'

2' SH. TYP.

10' 10'

STA. 171+22.00 S.R. 54 =
STA. 20+00.00 CROSSLAND RD.
N 789482.8826
E 1282469.7490
(SEE SHEET 17 FOR PROFILE)

STA. 18+50.00 (LT & RT)
END PVMT & SH TAPER

STA. 162+00.00 SEE SHEET NO. 42

STA. 175+00.00 SEE SHEET NO. 44

RUMBLE STRIP SEE TDOT STD. DWG. T-M-15A

6" SBYL
6" SBWL
6" SSWL
6" SSYL
6" DSYL

N 5° 10' 22" E

+78
+67
+60
+45

24" STOP LINE

LEFT TURN ARROW

Crossland Rd

STOP

SOUTH 54

NORTH 54

JCT 54

Crossland Rd

S 86° 55' 46" E

2' SH. TYP.

STA. 22+00.00 (LT & RT)
BEGIN PVMT & SH TAPER

STA. 22+50.00 (LT & RT)
END PVMT & SH TAPER
BEGIN MILL & OVERLAY

9.9'

9.3'

9.75'

LIMIT OF CONST.
24+75.00

PAVEMENT MARKERS TO PLACED PER STD. DWG. T-M-1

25

SEALED BY

J. BRIAN LEE
REGISTERED ENGINEER
LICENSE NUMBER
115,107,29
STATE OF TENNESSEE

02/10/2026

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

SIGNING AND PAVEMENT MARKING PLAN

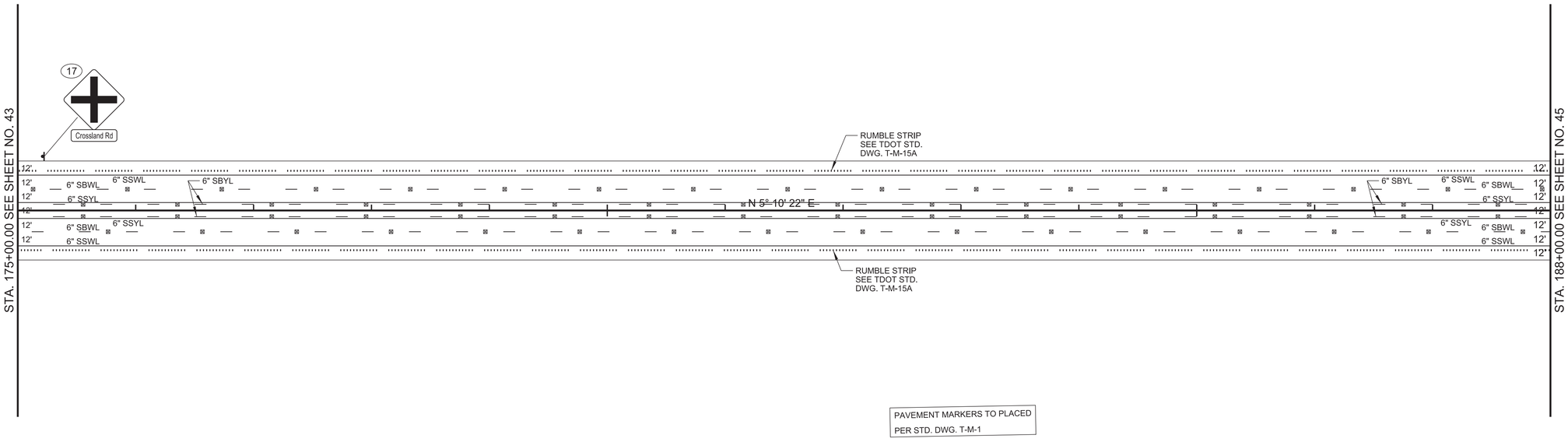
STA.162+00 TO STA.175+00

SCALE: 1"=50'

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TYPE	YEAR	PROJECT NO.	SHEET NO.
PIH	2025	NH-54(48)	44
PS&E	2026	NH-54(48)	44

175 180 185



PAVEMENT MARKERS TO PLACED
PER STD. DWG. T-M-1

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J. BRIAN LEE
REGISTERED ENGINEER
ARCHITECTURE
No. 107299
STATE OF TENNESSEE

02/10/2026

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

SIGNING AND PAVEMENT MARKING PLAN

STA.175+00 TO STA.188+00

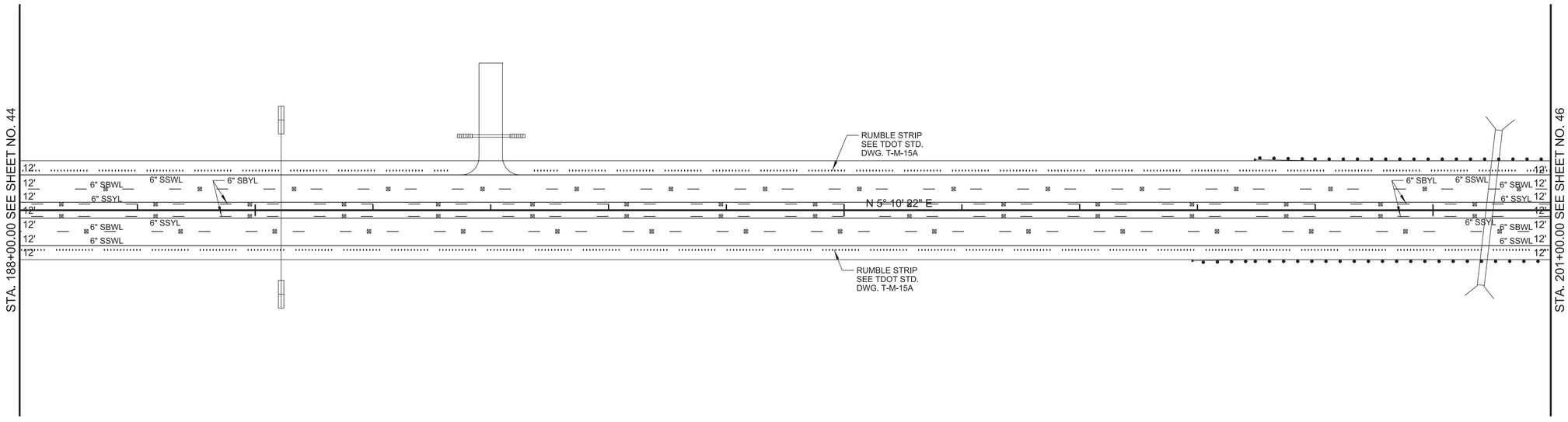
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TYPE	YEAR	PROJECT NO.	SHEET NO.
PIH	2025	NH-54(48)	45
PS&E	2026	NH-54(48)	45

N

190 195 200



PAVEMENT MARKERS TO PLACED
PER STD. DWG. T-M-1

SEALED BY

J. BRIAN LEE
REGISTERED ENGINEER
AGRICULTURE
No. 107299
STATE OF TENNESSEE

02/10/2026

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

SIGNING AND PAVEMENT MARKING PLAN

STA.188+00 TO STA.201+00

SCALE: 1"=50'

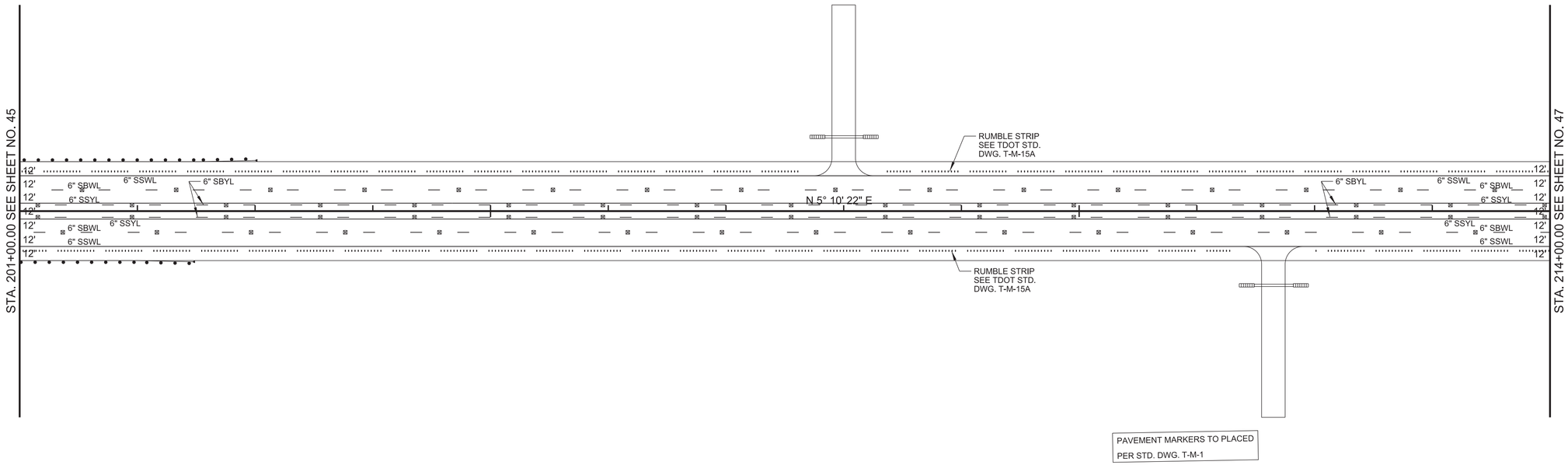
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TYPE	YEAR	PROJECT NO.	SHEET NO.
PIH	2025	NH-54(48)	46
PS&E	2026	NH-54(48)	46

N

205

210



PAVEMENT MARKERS TO PLACED PER STD. DWG. T-M-1

SEALED BY

J. BRIAN LEE
REGISTERED ENGINEER
CERTIFICATE
NUMBER
115072.0
STATE OF TENNESSEE

02/10/2026

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

SIGNING AND PAVEMENT MARKING PLAN

STA.201+00 TO STA.214+00

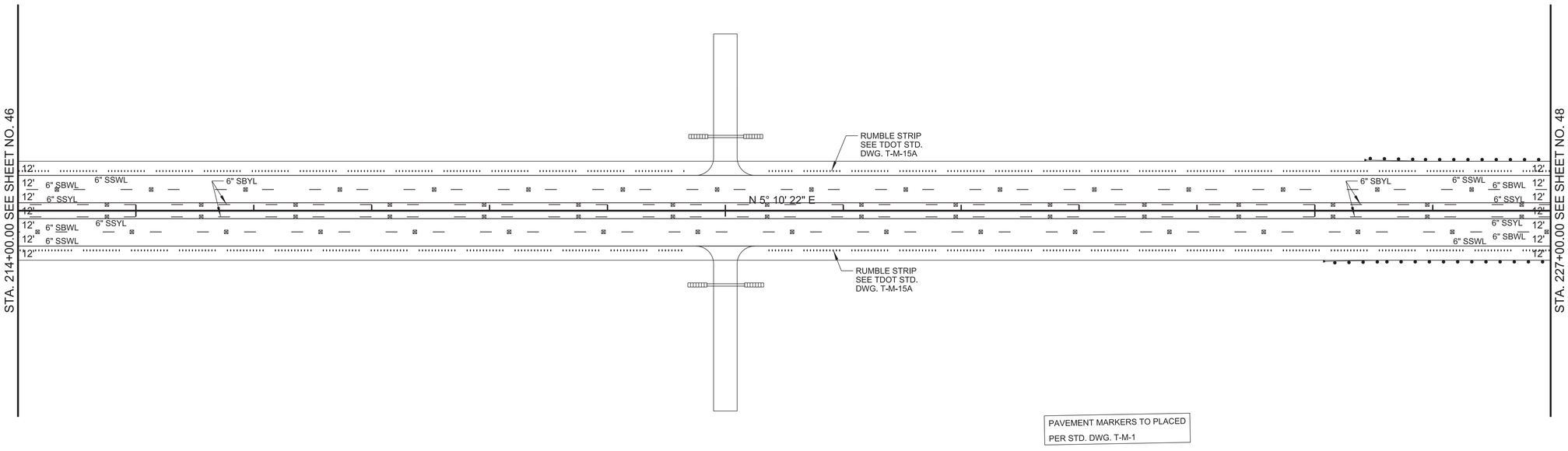
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TYPE	YEAR	PROJECT NO.	SHEET NO.
PIH	2025	NH-54(48)	47
PS&E	2026	NH-54(48)	47

N

215 220 225



PAVEMENT MARKERS TO PLACED PER STD. DWG. T-M-1

SEALED BY

J. BRIAN LEE
REGISTERED ENGINEER
SIGNATURE
NUMBER
115,107,29
STATE OF TENNESSEE

02/10/2026

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

SIGNING AND PAVEMENT MARKING PLAN

STA.214+00 TO STA.227+00

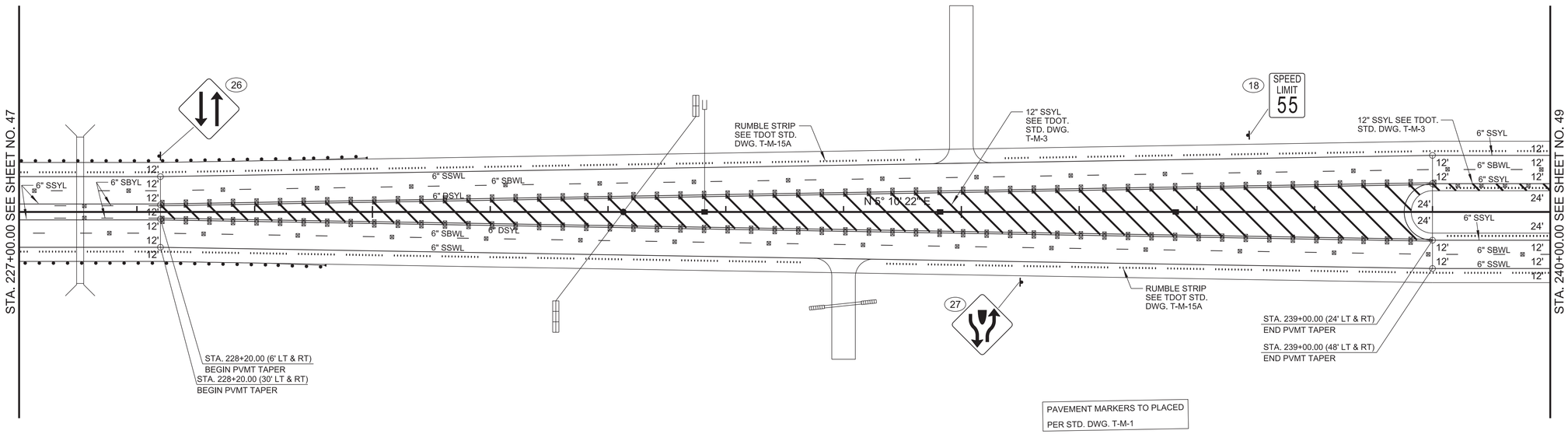
SCALE: 1"=50'

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TYPE	YEAR	PROJECT NO.	SHEET NO.
PIH	2025	NH-54(48)	48
PS&E	2026	NH-54(48)	48

N

230 235 240



SEALED BY



02/02/2026

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

SIGNING AND PAVEMENT MARKING PLAN

STA.227+00 TO STA.240+00

SCALE: 1"=50'

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TYPE	YEAR	PROJECT NO.	SHEET NO.
PIH	2025	NH-54(48)	49
PS&E	2026	NH-54(48)	49

240

245

STA. 240+00.00 SEE SHEET NO. 48

KENTUCKY
TENNESSEE

STATE LINE RD (ASP.)
(KY 893)

20

21 JCT 54

54 Tennessee The Volunteer State Welcomes You

LIMIT OF CONST.
27+99.59

36 SOUTH 54 | 35 NORTH 641 | 22 ONE WAY | STOP

47 ONE WAY

60 SOUTH 54

55 TENNESSEE STATE LINE

28

12" SSYL
SEE TDOT.
STD. DWG.
T-M-3

RUMBLE STRIP
SEE TDOT STD.
DWG. T-M-15A

STA. 245+74.23 (6' LT)
END BAY TAPER

45 46 Stateline Rd

STA. 28+97.22 (LT & RT)
END PVMT TAPER
24" STOP LINE

9.5'
4" DSYL
4' SH.
4" SSWL

S 89° 05' 12" E

9.5'
4" SSWL
4' SH.

+41

+24.23

+00

+81.10

+62

LEFT TURN ARROW (TYP.)

N 5° 10' 22" E

STA. 240+24.23 (24' RT)
BEGIN BAY TAPER

STA. 242+44.23 (24' RT)
BEGIN STRIPING TAPER

STA. 241+11.57 (48' RT)
BEGIN PAVMENT TAPER

STA. 243+51.57 (60' RT)
END PAVEMENT TAPER

RIGHT TURN
ARROW (TYP.)

19

Stateline Rd

RUMBLE STRIP
SEE TDOT STD.
DWG. T-M-15A

12" SSWL SEE TDOT. STD.
DWG. T-M-3

WRONG WAY
40 41

STA. 245+74.23 (6' RT)
END STRIPING TAPER

DO NOT ENTER
42 43

44 ONE WAY

STA. 31+34.39 (RT)
BEGIN PVMT TAPER
STA. 31+38.34 (RT)
BEGIN SH TAPER

4' SH.
4" SSWL
10.1'

24" STOP LINE

10'

8.7'

4" DSYL

S 88° 49' 45" E

LIMIT OF CONST.
31+50.00

PAVEMENT MARKERS TO PLACED
PER STD. DWG. T-M-1

24 JCT 54

25

STATE LINE RD (ASP.)
(KY 893)

CALLOWAY COUNTY
HENRY COUNTY

40S054-F2-002
END PROJ. NO. NH-54(48) R.O.W.
STA. 247+50.14
N 797079.9613 250
E 1283157.4887

STA. 247+61.57 S.R. 54 =
STA. 30+00.00 STATE LINE RD. (KY 893)
N 797091.3391
E 1283158.5185
(SEE SHEET 18 FOR PROFILE)

51 ONE WAY

52 53 DO NOT ENTER | WRONG WAY

NOTE:
SIGNING, STRIPING, AND MARKINGS
FOR SR-54 NORTH OF STATELINE
ROAD ARE TO BE INSTALLED BY KYTC.

CALLOWAY CO, KY
US 641
PRJ.# NHPP 6411 (039)
FD52 018 0641 000-006

TO MURRAY, KENTUCKY

40S054-F3-004
END PROJ. NO. NH-54(48) CONST.
STA. 250+00.00
N 797328.7992
E 1283180.0156

Stateline Rd 48 49 | 50 ONE WAY

ONE WAY | STOP 23

38 SOUTH 54 | 37 NORTH 641

12' | 12' | 24' | 12' | 12' | 12'

6" SBWL | 6" SSWL | 6" SSYL | 8" DWL | 8" SSWL

*11' | 11' | 8" SSWL | 6" SSYL | 6" SBWL

*12'

SEALED BY

J. BRIAN LEE
REGISTERED ENGINEER
LICENSE NUMBER
115,107,200
STATE OF TENNESSEE

02/10/2026

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

SIGNING AND PAVEMENT MARKING PLAN

STA.240+00 TO STA.250+00

SCALE: 1"=50'

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ALL SIGNS SHOWN WITH DESIGNATIONS ARE TO BE FABRICATED 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)

TYPE	YEAR	PROJECT NO.	SHEET NO.
PIH	2025	NH-54(48)	50
PS&E	2026	NH-54(48)	50

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		W1-2R	38	36"	36"									BLACK	YELLOW (FLOR.)	0.100" SHEET ALUM.	P4	h1=13'-9"				5'-0"	
2	 Old US 641	W2-2R W16-8P	38	30" 36"	30" 8"			4"			D			BLACK	YELLOW (REF.)	0.080" SHEET ALUM.	P4	h1=14'-0"				5'-0"	
3	ROAD NAME	D3-1	38	36"	8"									WHITE	GREEN (REF.)	0.100" SHEET ALUM.	P8	h1=13'-9"				5'-0"	SIGN NO 3 ROAD NAME - Old US 641
13 14	 STOP	R1-1	43	30"	30"									WHITE (REF.)	RED (REF.)	0.080" SHEET ALUM.							SIGN NO'S 13 & 14 ROAD NAME - Crossland Rd
4 11 16 20 25		W3-1	38 43 49	30"	30"									BLACK	YELLOW (FLOR.)	0.080" SHEET ALUM.	P3	h1=13'-9"				5'-0"	
5	 25 MPH	W1-2L W13-1P	38	30" 18"	30" 18"									BLACK	YELLOW (FLOR.)	0.080" SHEET ALUM.	P4	h1=14'-6"				5'-0"	
6	 Old US 641	W2-2L W16-8P	38	30" 36"	30" 8"			4"			D			BLACK	YELLOW (REF.)	0.080" SHEET ALUM.	P7	h1=12'-6"				5'-0"	
7	SPEED LIMIT 40	R2-1	38	30"	36"									BLACK	WHITE (REF.)	0.080" SHEET ALUM.	P7	h1=12'-6"				5'-0"	
8	 SPEED LIMIT 40	W3-5	39	36"	36"									BLACK	YELLOW (FLOR.)	0.100" SHEET ALUM.	P4	h1=13'-9"				5'-0"	
9 18	SPEED LIMIT 55	R2-1	39 48	24"	30"									BLACK	WHITE (REF.)	0.080" SHEET ALUM.	P1	h1=12'-3"				5'-0"	
12 15 21 24	JCT 54	M2-1P TN-6a	43 49	21" 24"	15" 24"									BLACK	WHITE (REF.)	0.080" SHEET ALUM.	P1	h1=13'-3"				5'-0"	

U-POST SUBSTITUTION TABLE

BID ITEM 713-11.01	SUBSTITUTION ALLOWED
2 /FT. U1	2'/FT. MUI OR 2'/FT. R1
2.5 /FT. U3	2.5'/FT. MU3 OR 3'/FT. R2*
3 /FT. U6	
4 /FT. U7	NO SUBSTITUTES

* PAID AT A RATE OF 2.5'/FT.

SEALED BY

J. BRIAN LEE REGISTERED ENGINEER LICENSE NUMBER 107299 STATE OF TENNESSEE

02/10/2026

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

SIGN SCHEDULE

2/9/2026 2:38:11 PM
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ALL SIGNS SHOWN WITH DESIGNATIONS ARE TO BE FABRICATED 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)

TYPE	YEAR	PROJECT NO.	SHEET NO.
PIH	2025	NH-54(48)	51
PS&E	2026	NH-54(48)	51

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.		
10	W2-1	43	30"	30"									BLACK	YELLOW (REF.)	0.080" SHEET ALUM.	P2	h1=13'-0"				5'-0"	SIGN NO'S 10 & 17 ROAD NAME - Crossland Rd
17	ROAD NAME	44																				
19	W16-8P	49	36"	8"			4"			D												SIGN NO 19 ROAD NAME - Stateline Rd
22	ONE WAY R6-1R	49	54"	18"									BLACK	WHITE (REF.) BLACK	0.080" SHEET ALUM.	P3	h1=15'-0"				5'-0"	
23	STOP R1-1		36"	36"									WHITE (REF.)	RED (REF.)	0.100" SHEET ALUM.							
26	W6-3	48	36"	36"									BLACK	YELLOW (FLOR.)	0.100" SHEET ALUM.	P4	h1=13'-6"				5'-0"	
27	W6-1	48	36"	36"									BLACK	YELLOW (FLOR.)	0.100" SHEET ALUM.	P4	h1=13'-9"				5'-0"	
28	W6-2	49	36"	36"									BLACK	YELLOW (FLOR.)	0.100" SHEET ALUM.	P4	h1=13'-9"				5'-0"	
29	NORTH M3-1P	38	24"	18"									BLACK	WHITE (REF.)	0.080" SHEET ALUM.	P3	h1=16'-9"				5'-0"	
	54 TN-6A		24"	24"																		
31	M6-1P	43	24"	18"																		
30	SOUTH M3-3P	38	24"	18"									BLACK	WHITE (REF.)	0.080" SHEET ALUM.	P3	h1=17'-3"				5'-0"	
32	54 TN-6A	43	24"	24"																		
36	M6-1P	49	24"	18"													h1=16'-0"					
33	NORTH M3-1P	43	24"	18"									BLACK	WHITE (REF.)	0.080" SHEET ALUM.	P3	h1=17'-3"				5'-0"	
	54 TN-6A		24"	24"																		
	M6-1P		24"	18"																		
34	SOUTH M3-3P	43	24"	18"									BLACK	WHITE (REF.)	0.080" SHEET ALUM.	P3	h1=16'-9"				5'-0"	
	54 TN-6A		24"	24"																		
38	M6-1P	49	24"	18"													h1=16'-3"					
35	NORTH M3-1P	49	24"	18"									BLACK	WHITE (REF.)	0.080" SHEET ALUM.	P7	h1=16'-0" h2=16'-3"				5'-0"	
	641 M1-4		30"	24"																		
	M6-1P		24"	18"																		

U-POST SUBSTITUTION TABLE	
BID ITEM 713-11.01	SUBSTITUTION ALLOWED
2 /FT. U1	2#/FT. MUI OR 2#/FT. R1
2.5 /FT. U3	2.5#/FT. MU3 OR 3#/FT. R2*
3 /FT. U6	
4 /FT. U7	NO SUBSTITUTES

* PAID AT A RATE OF 2.5#/FT.

SEALED BY

J. BRIAN LEE REGISTERED ENGINEER STATE OF TENNESSEE

02/10/2026

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

SIGN SCHEDULE

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ALL SIGNS SHOWN WITH DESIGNATIONS ARE TO BE FABRICATED 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)

TYPE	YEAR	PROJECT NO.	SHEET NO.
PIH	2025	NH-54(48)	52
PS&E	2026	NH-54(48)	52

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.		
37	NORTH 641	M3-1P M1-4 M6-1P	49	24" 30" 24"	18" 24" 18"									BLACK	WHITE (REF.)	0.080" SHEET ALUM.	P7	h1=16'-0" h2=16'-3"				5'-0"	
39		W4-2	39	30"	30"									BLACK	YELLOW (FLOR.)	0.080" SHEET ALUM.	P8	h1=13'-3"				5'-0"	
40	WRONG WAY	R5-1A	49	42"	30"									WHITE (REF.)	RED (REF.)	0.080" SHEET ALUM.	P1	h1=11'-6" h2=12'-3"				5'-0"	
41																		h1=12'-0" h2=12'-3"					
42	DO NOT ENTER	R5-1	49	36"	36"									WHITE (REF.)	WHITE (REF.) RED (REF.)	0.100" SHEET ALUM.	P7	h1=11'-6"				5'-0"	
43																		h1=12'-6"					
52																							
53																		h1=11'-6"					
44	ONE WAY	R6-1L	49	54"	18"									BLACK	WHITE (REF.) BLACK	0.080" SHEET ALUM.	P1	h1=13'-0" h2=13'-0"				7'-0"	
47																							MOUNTED ON SAME POST AS SIGN NO 22
50																							MOUNTED ON SAME POST AS SIGN NO 23
51																		h1=13'-0" h2=13'-0"					
45	Stateline Rd	D3-1	49	36"	8"			6"	4.5"		B			WHITE	GREEN (REF.)	0.100" SHEET ALUM.	P1	h1=12'-3"				7'-0"	
46																							MOUNTED ON SAME POST AS SIGN NO 45
48																							
49																							MOUNTED ON SAME POST AS SIGN NO 48
54	Tennessee The Volunteer State Welcomes You	TN-50B	49	180"	72"									WHITE (REF.)	BLUE (REF.)	6-12" ALUM. EXT.	S5 x 10.0	h1=20'-3" h2=22'-6"	TYPE 5 D=1'-3"	.36	97.21	7'-0"	
55	TENNESSEE STATE LINE	TN-1	49	72"	36"			10" 5"			C			WHITE (REF.)	GREEN (REF.)	0.100" SHEET ALUM.	P7	h1=15'-6" h2=16'-0" h3=16'-6"				7'-0"	
56	NORTH 54	M3-1P	38	24"	18"									BLACK	WHITE (REF.)	0.080" SHEET ALUM.	U2	h1=13'-6"				5'-0"	
59		TN-6A	43	24"	24"																		
57	SOUTH 54	M3-3P	38	24"	18"									BLACK	WHITE (REF.)	0.080" SHEET ALUM.	U2	h1=13'-6"				5'-0"	
58		TN-6A	43	24"	24"																		
60			49																				
61	SPEED LIMIT 45	R2-1	40	24"	30"									BLACK	WHITE (REF.)	0.080" SHEET ALUM.	U2	h1=13'-0"				5'-0"	
62	SPEED LIMIT 45	W3-5	40	36"	36"									BLACK	YELLOW (FLOR.)	0.100" SHEET ALUM.	P4	h1=14'-3"				5'-0"	

U-POST SUBSTITUTION TABLE

BID ITEM 713-11.01	SUBSTITUTION ALLOWED
2 /FT. U1	2'/FT. MUI OR 2'/FT. R1
2.5 /FT. U3	2.5'/FT. MU3 OR 3'/FT. R2*
3 /FT. U6	
4 /FT. U7	NO SUBSTITUTES

* PAID AT A RATE OF 2.5'/FT.

SEALED BY

J. BRIAN LEE REGISTERED ENGINEER 119072 STATE OF TENNESSEE

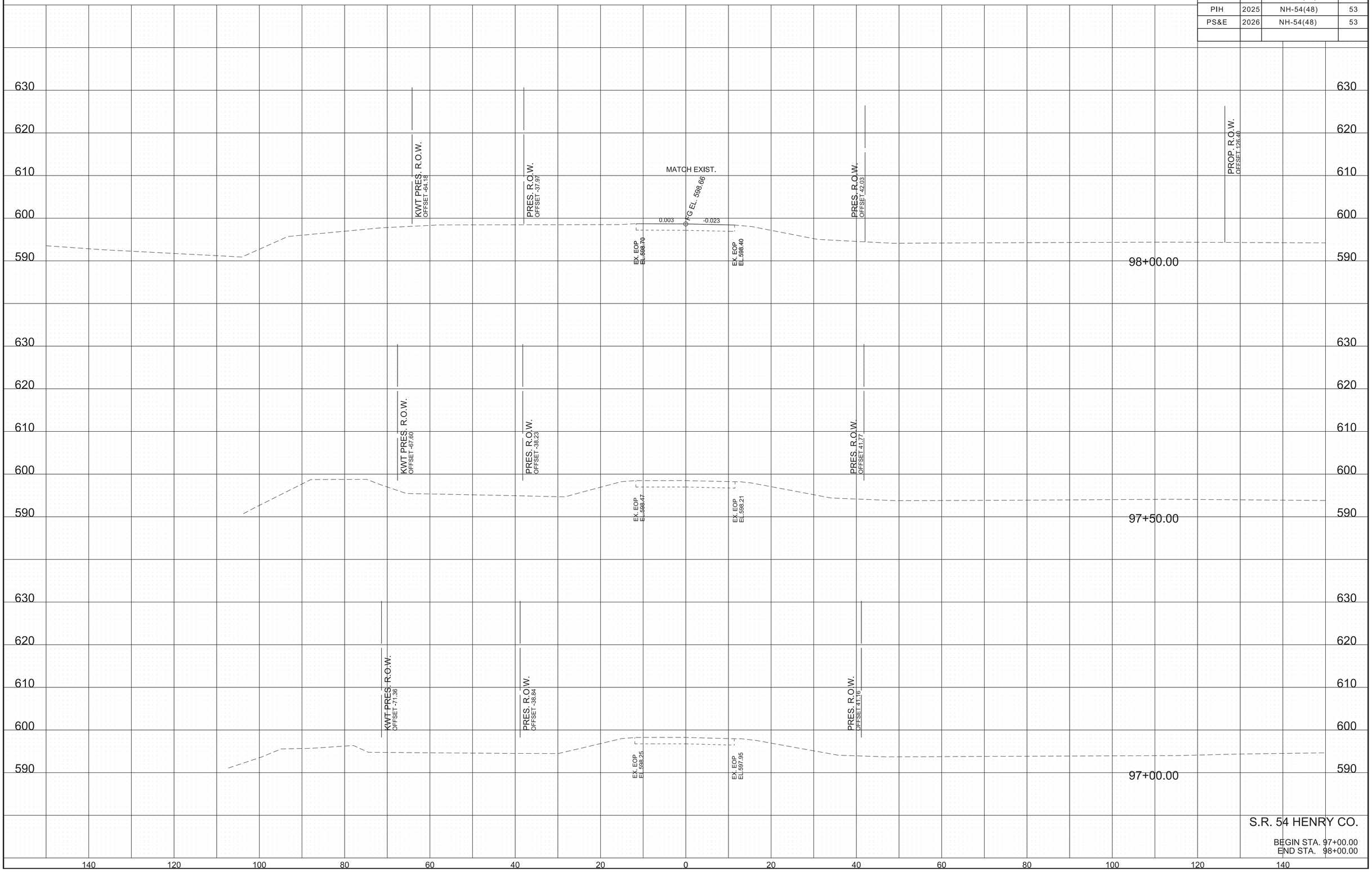
02/10/2026

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

SIGN SCHEDULE

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	37
PIH	2025	NH-54(48)	53
PS&E	2026	NH-54(48)	53

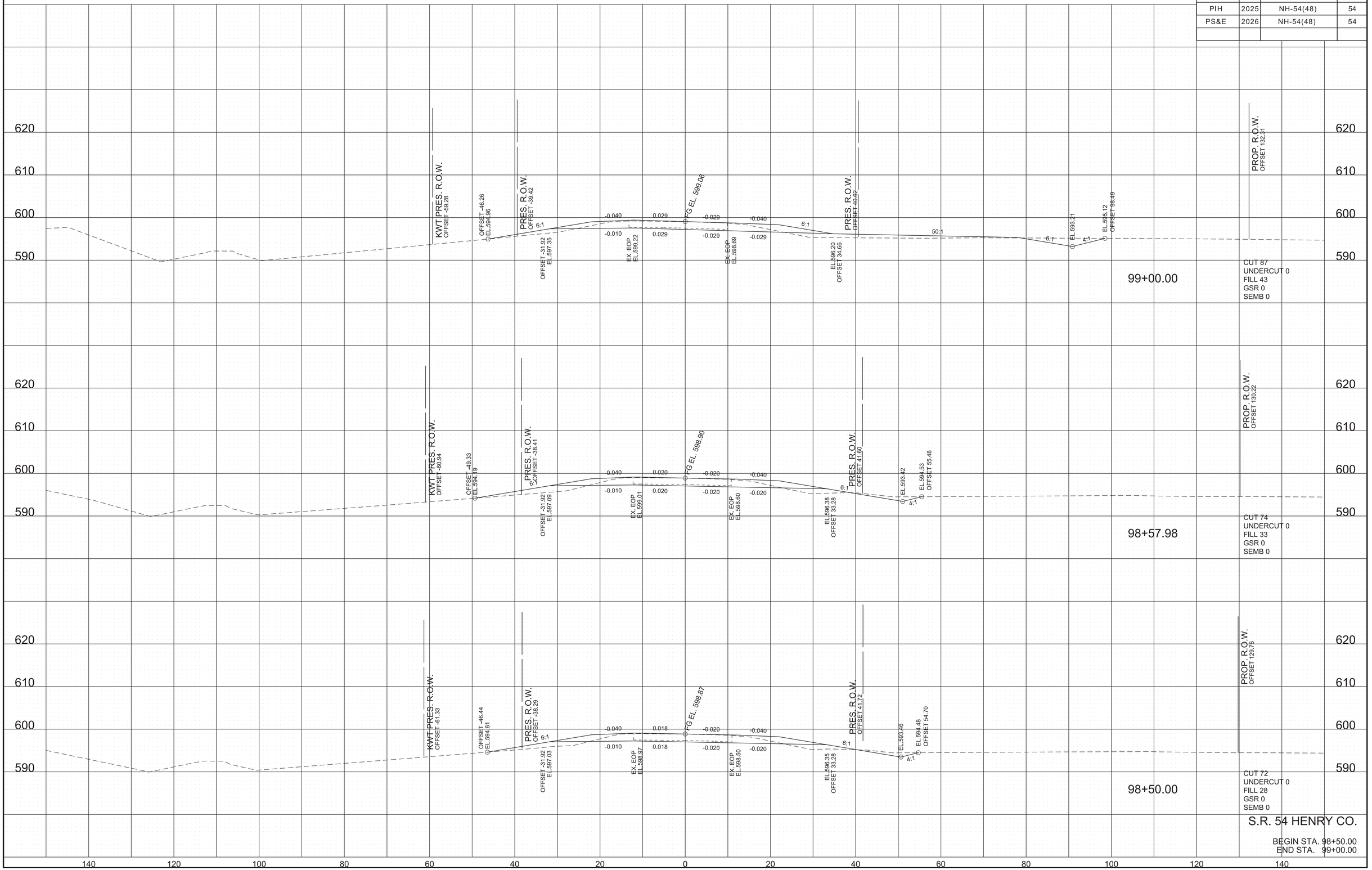


S.R. 54 HENRY CO.

BEGIN STA. 97+00.00
END STA. 98+00.00

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	38
PIH	2025	NH-54(48)	54
PS&E	2026	NH-54(48)	54

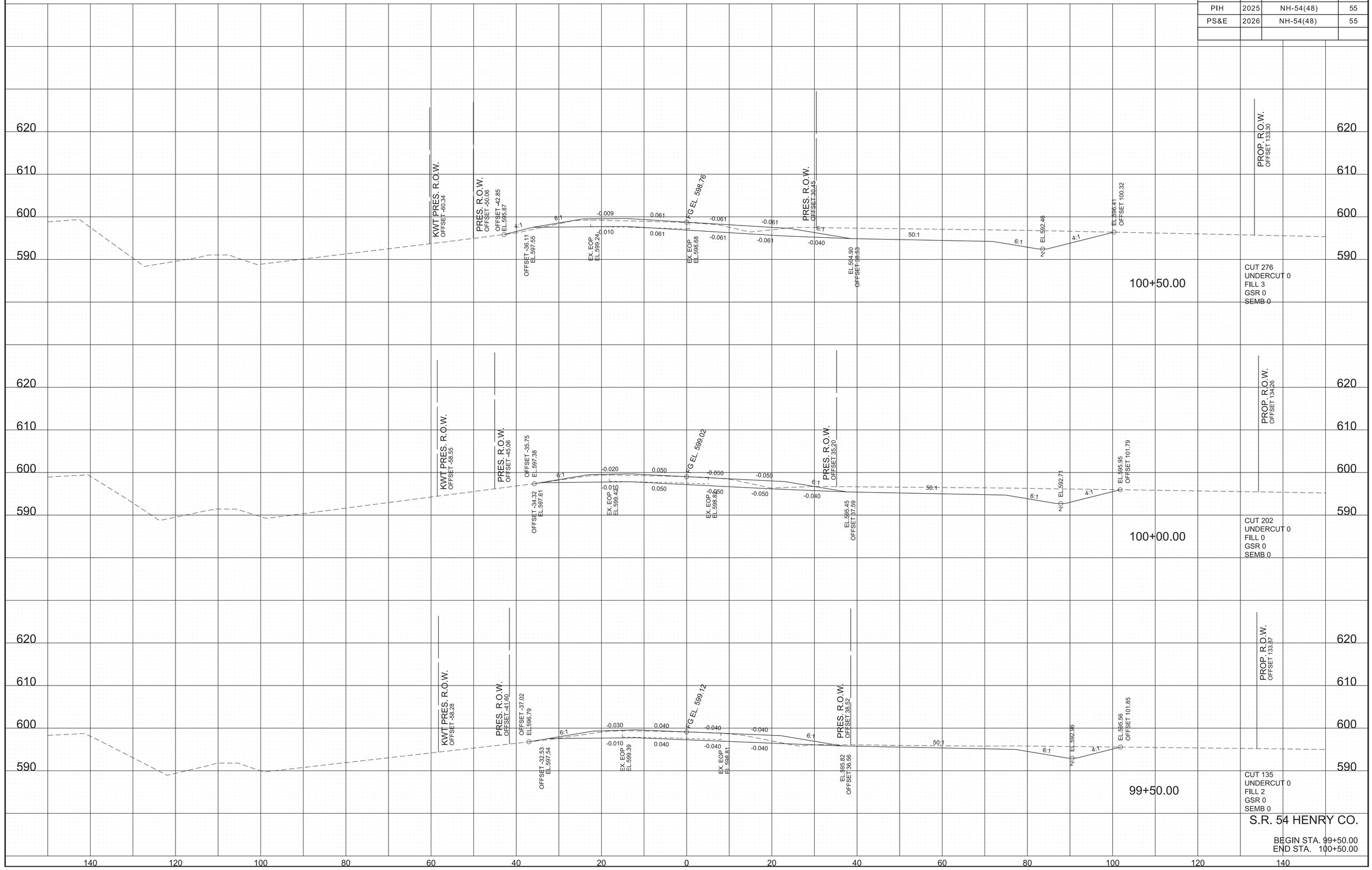


S.R. 54 HENRY CO.

BEGIN STA. 98+50.00
END STA. 99+00.00

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	39
PIH	2025	NH-54(48)	55
PS&E	2026	NH-54(48)	55

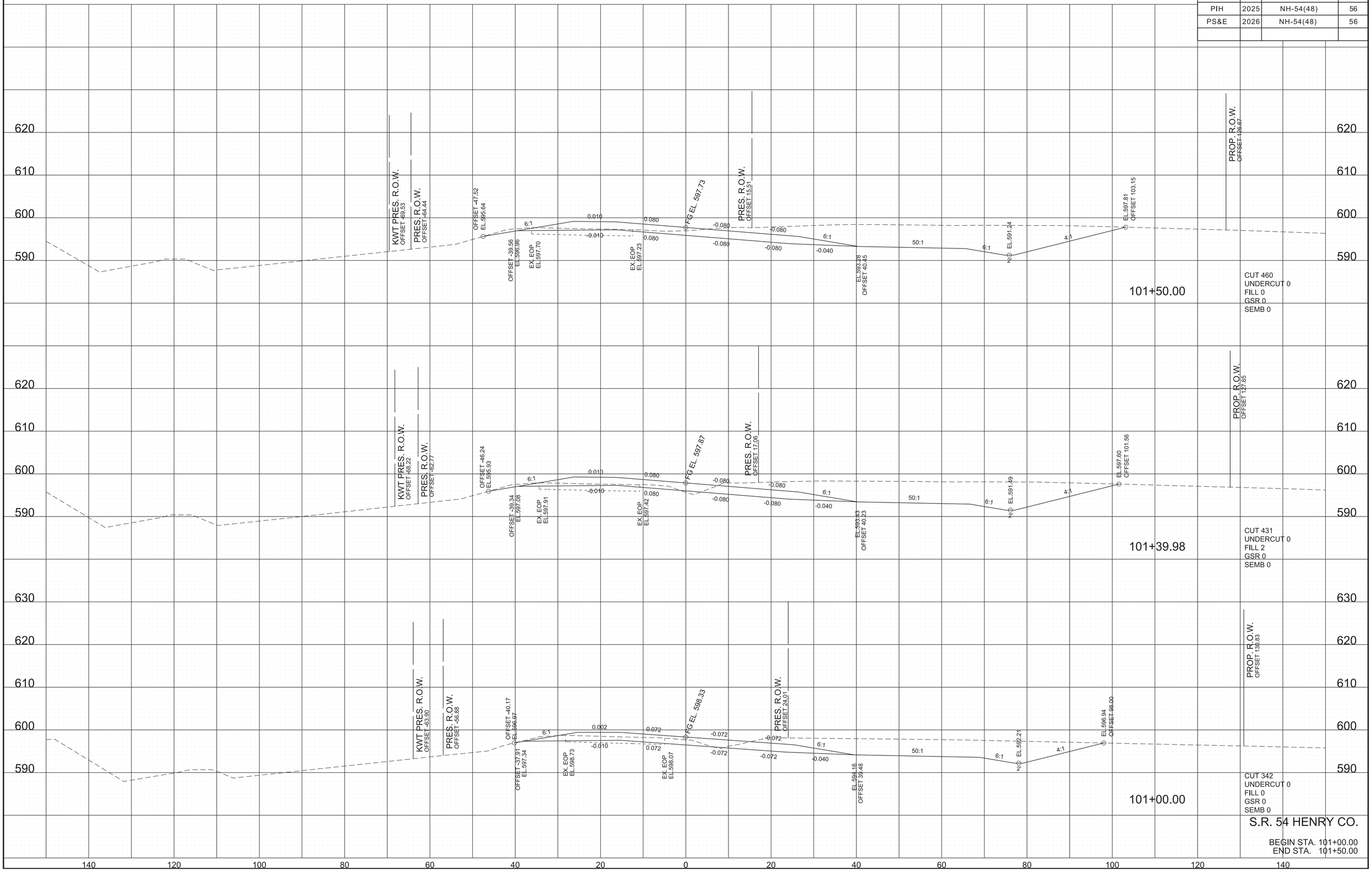


S.R. 54 HENRY CO.

BEGIN STA. 99+50.00
END STA. 100+50.00

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	40
PIH	2025	NH-54(48)	56
PS&E	2026	NH-54(48)	56

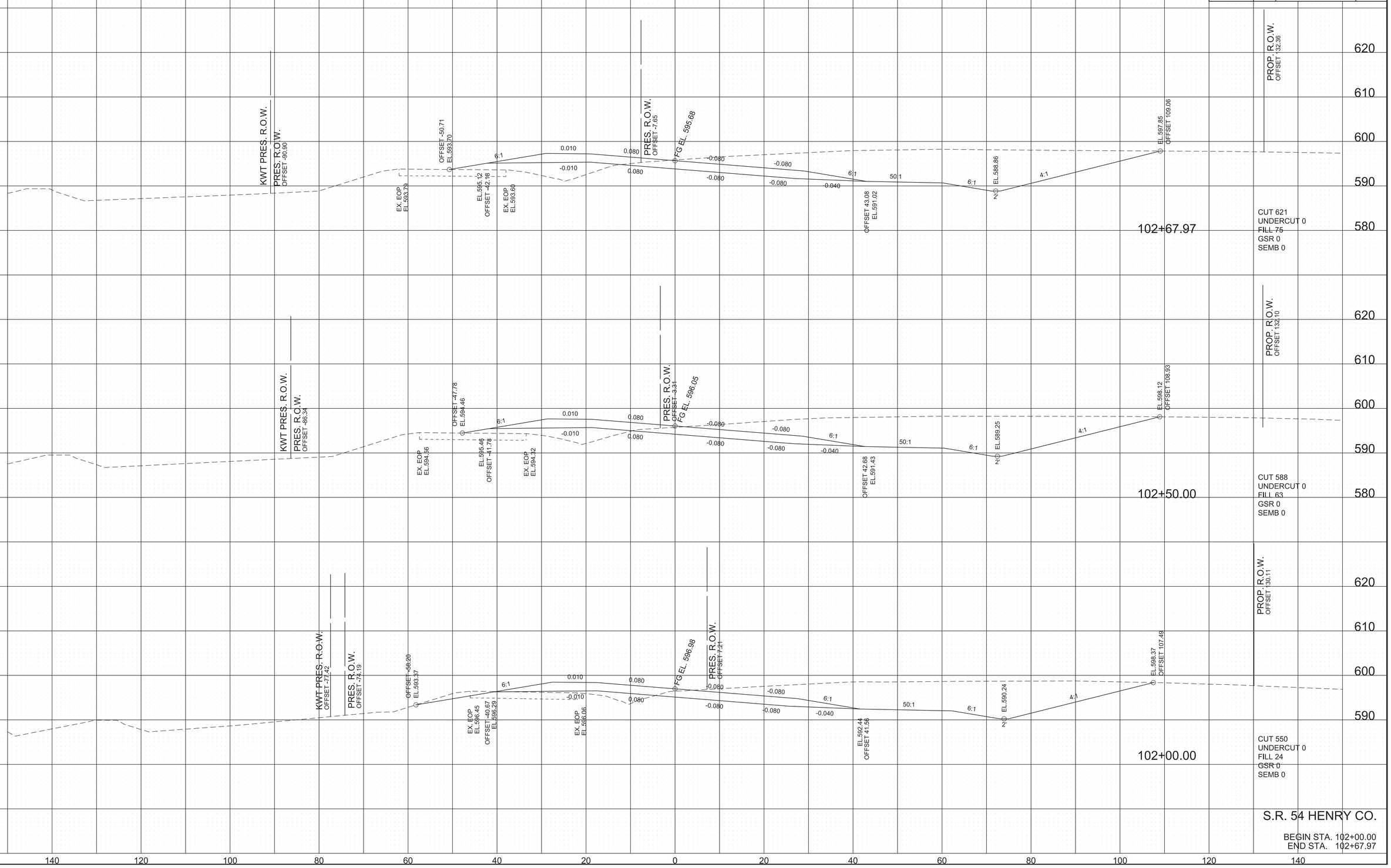


S.R. 54 HENRY CO.

BEGIN STA. 101+00.00
END STA. 101+50.00

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	41
PIH	2025	NH-54(48)	57
PS&E	2026	NH-54(48)	57

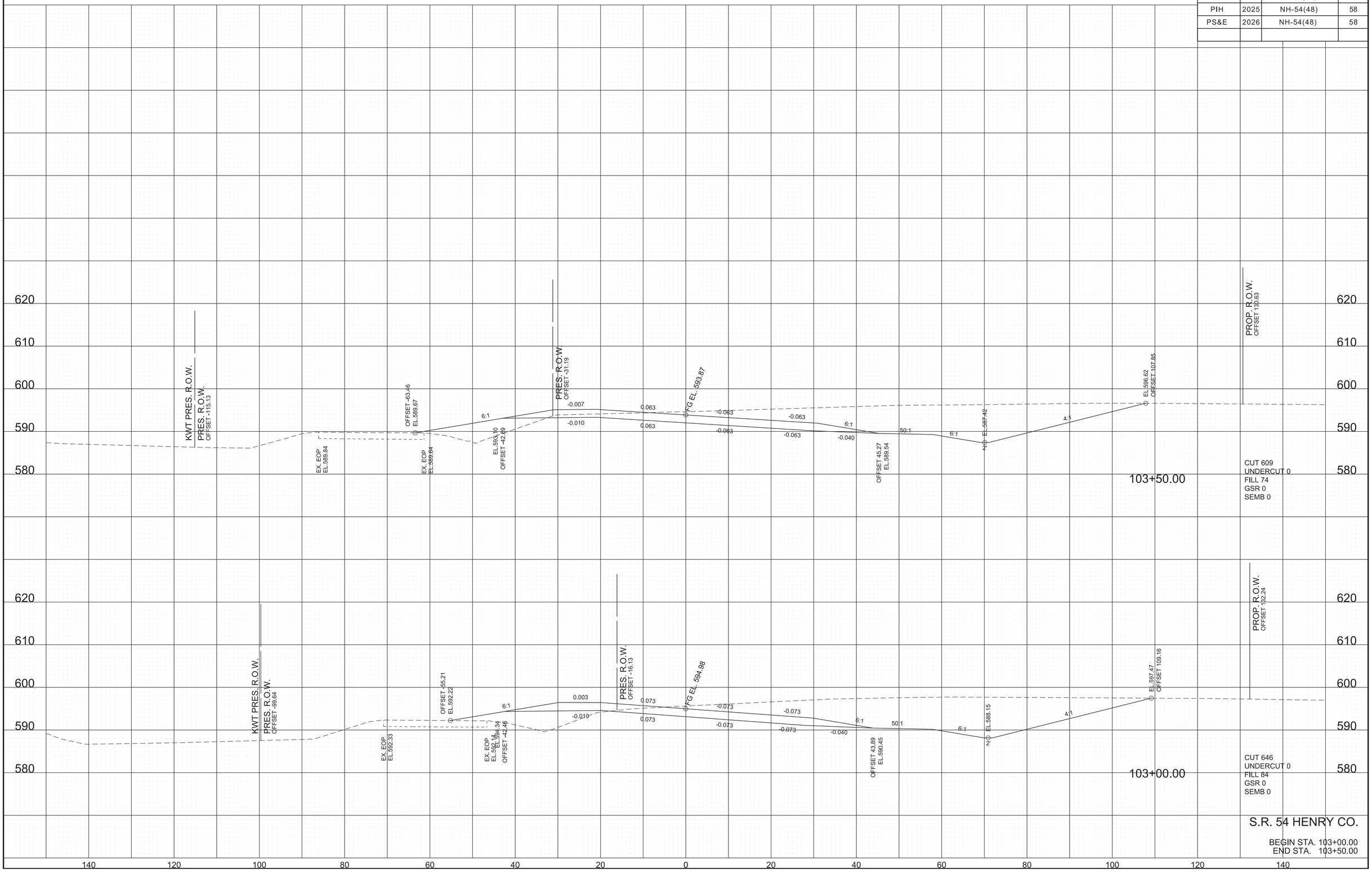


S.R. 54 HENRY CO.

BEGIN STA. 102+00.00
END STA. 102+67.97

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	42
PIH	2025	NH-54(48)	58
PS&E	2026	NH-54(48)	58

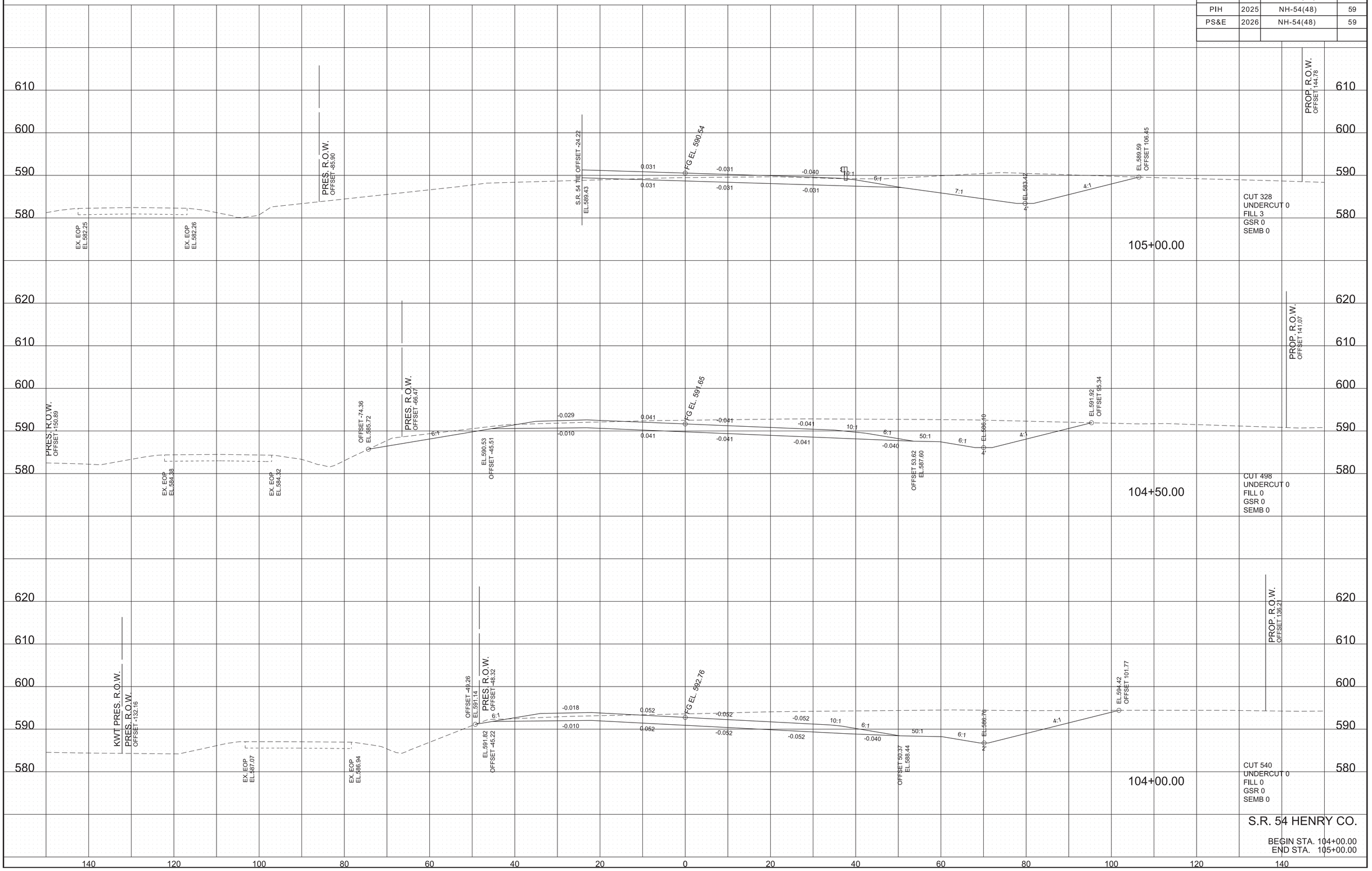


S.R. 54 HENRY CO.

BEGIN STA. 103+00.00
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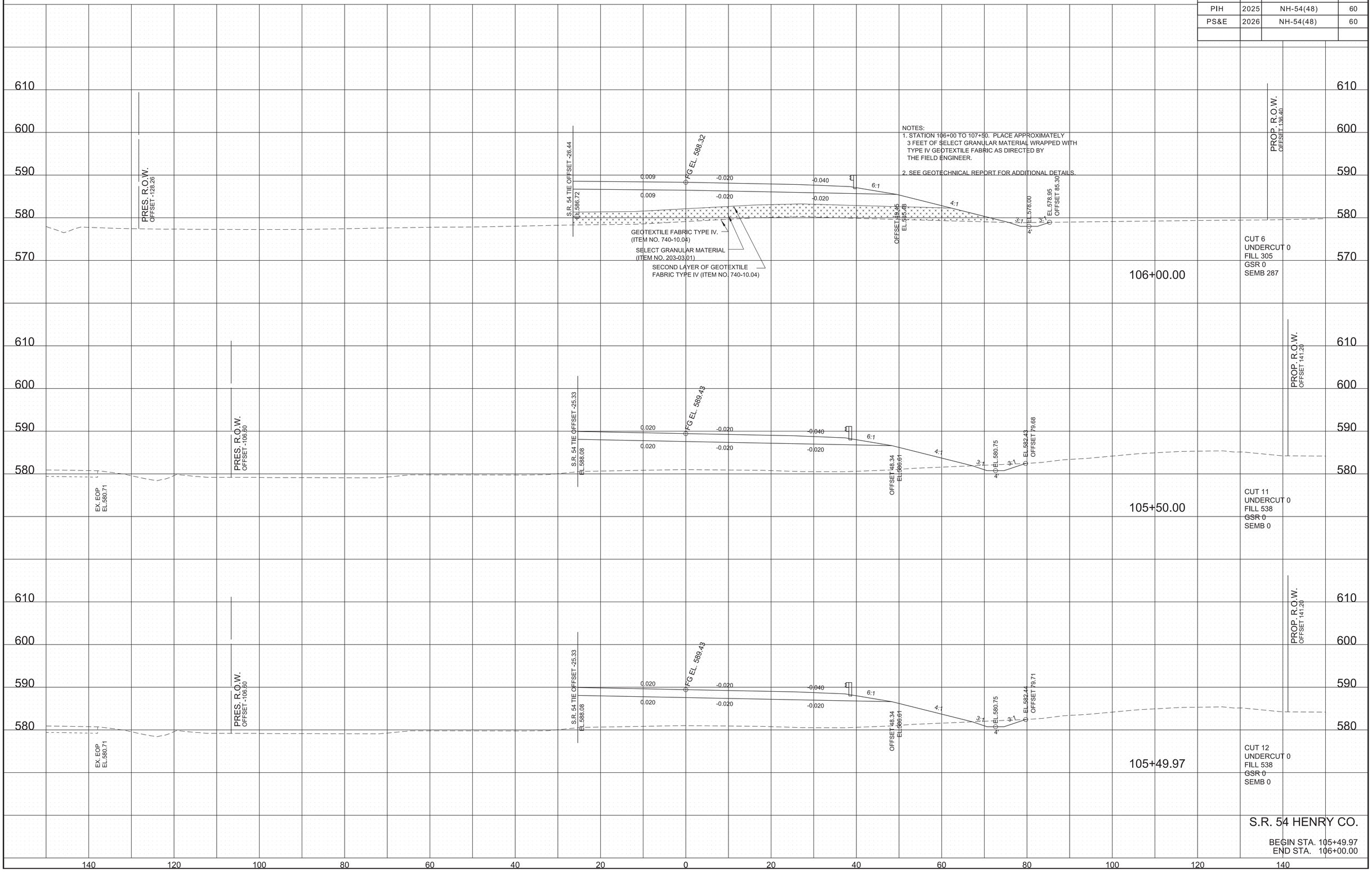
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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	43
PIH	2025	NH-54(48)	59
PS&E	2026	NH-54(48)	59



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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	44
PIH	2025	NH-54(48)	60
PS&E	2026	NH-54(48)	60

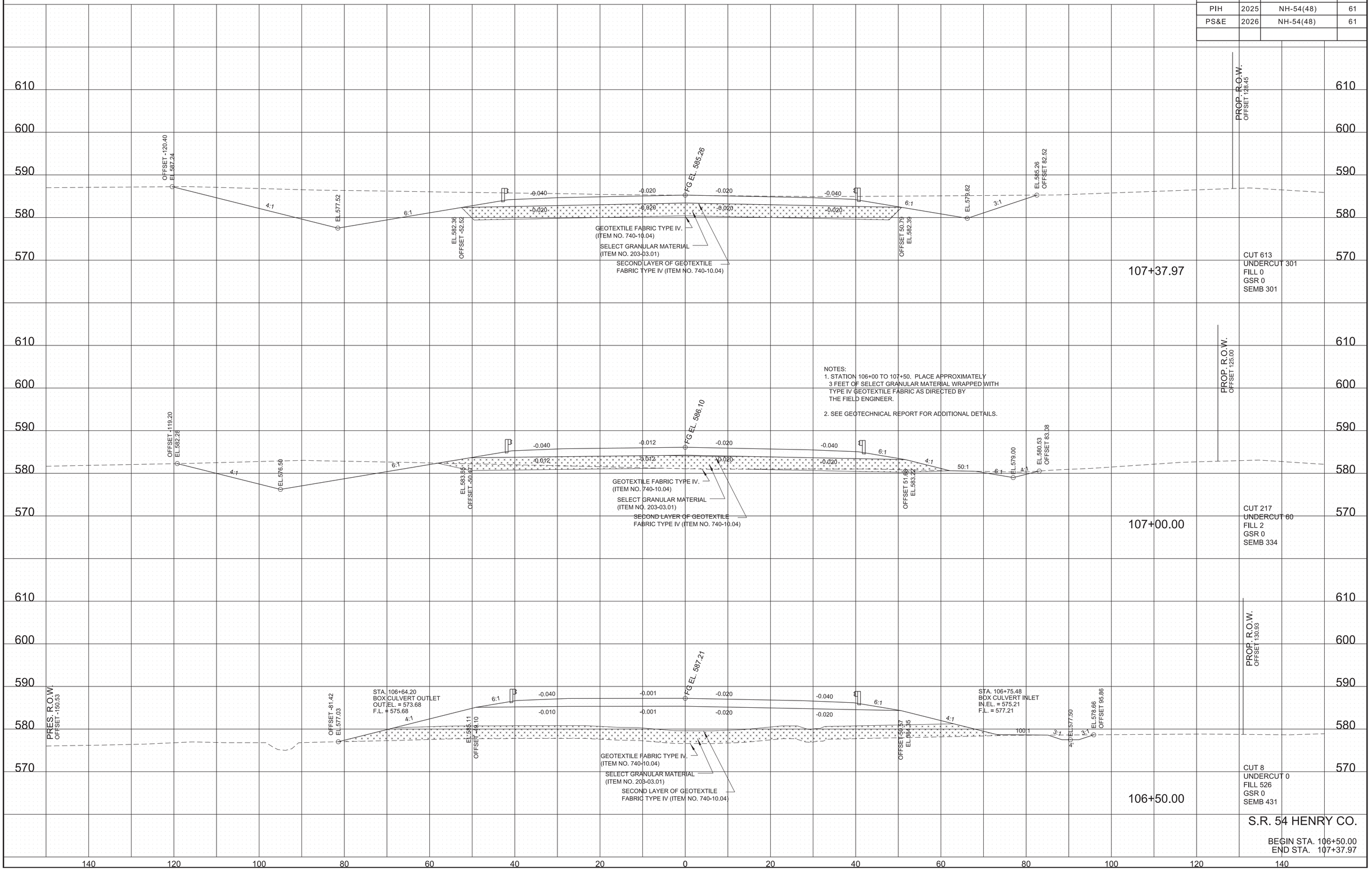


S.R. 54 HENRY CO.

BEGIN STA. 105+49.97
END STA. 106+00.00

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	45
PIH	2025	NH-54(48)	61
PS&E	2026	NH-54(48)	61



NOTES:
1. STATION 106+00 TO 107+50. PLACE APPROXIMATELY 3 FEET OF SELECT GRANULAR MATERIAL WRAPPED WITH TYPE IV GEOTEXTILE FABRIC AS DIRECTED BY THE FIELD ENGINEER.

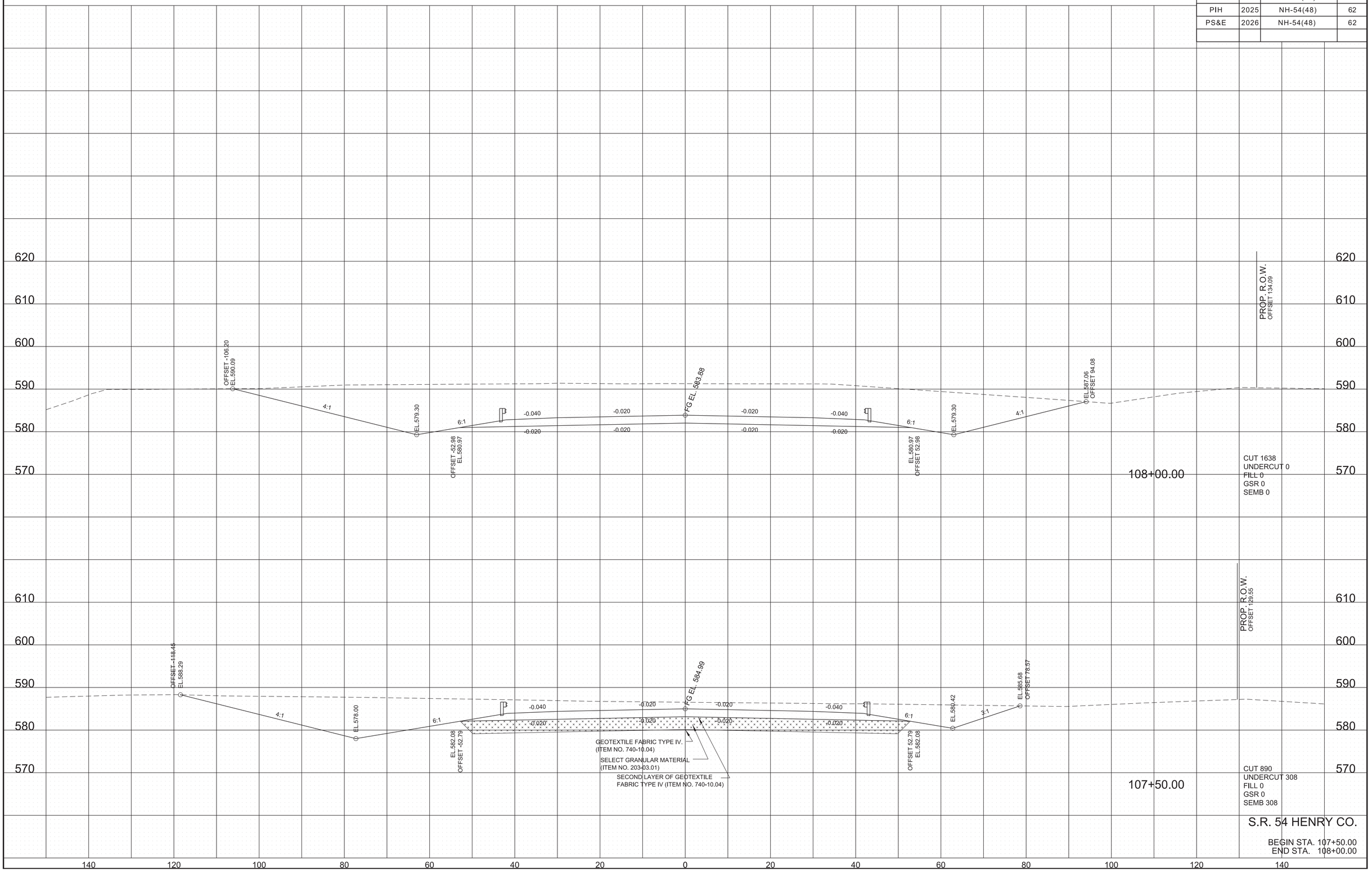
2. SEE GEOTECHNICAL REPORT FOR ADDITIONAL DETAILS.

S.R. 54 HENRY CO.

BEGIN STA. 106+50.00
END STA. 107+37.97

2/9/2026 2:38:51 PM
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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	46
PIH	2025	NH-54(48)	62
PS&E	2026	NH-54(48)	62

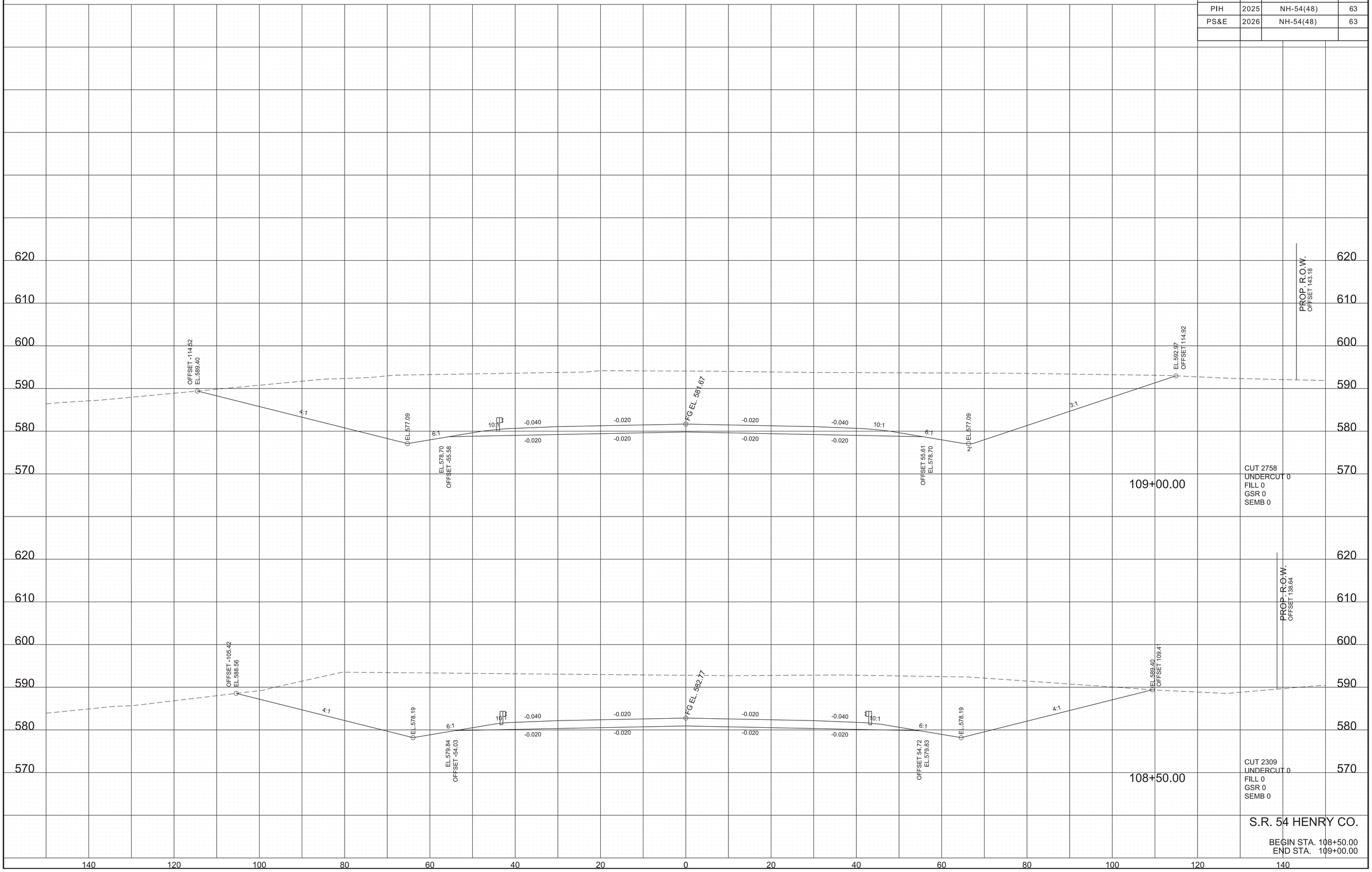


S.R. 54 HENRY CO.

BEGIN STA. 107+50.00
END STA. 108+00.00

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	47
PIH	2025	NH-54(48)	63
PS&E	2026	NH-54(48)	63

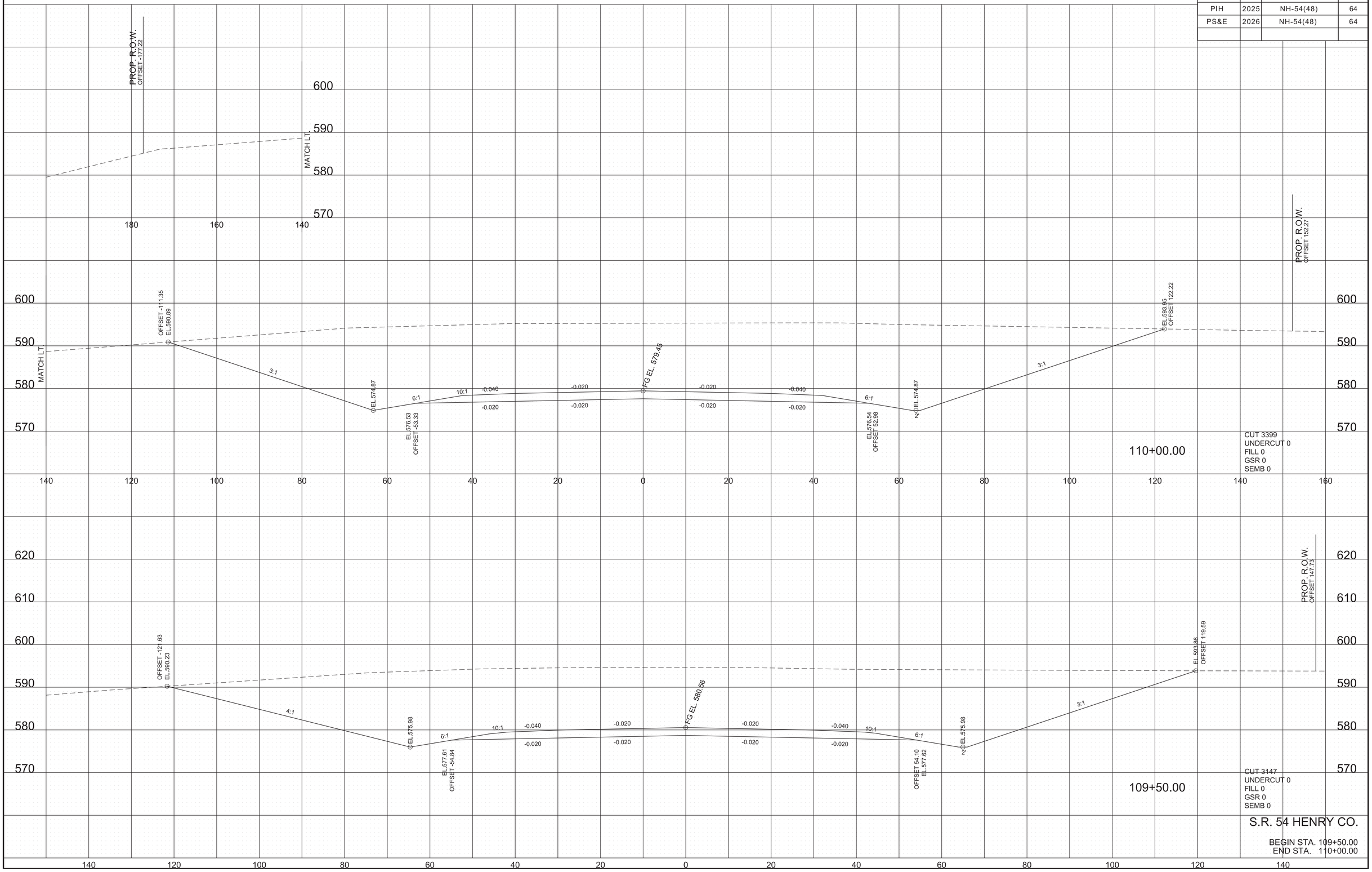


S.R. 54 HENRY CO.

BEGIN STA. 108+50.00
END STA. 109+00.00

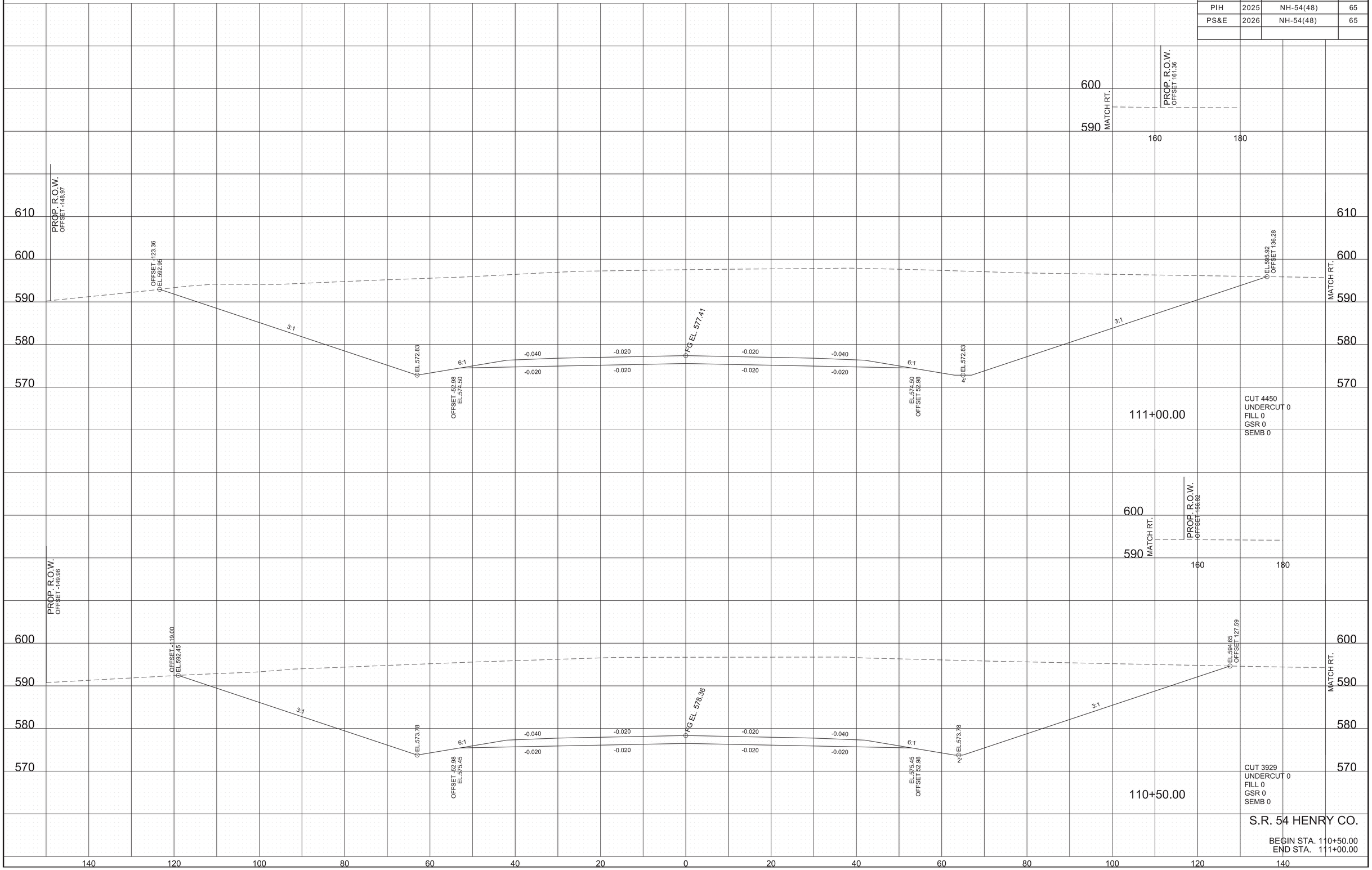
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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	48
PIH	2025	NH-54(48)	64
PS&E	2026	NH-54(48)	64



2/9/2026 2:39:02 PM
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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	49
PIH	2025	NH-54(48)	65
PS&E	2026	NH-54(48)	65

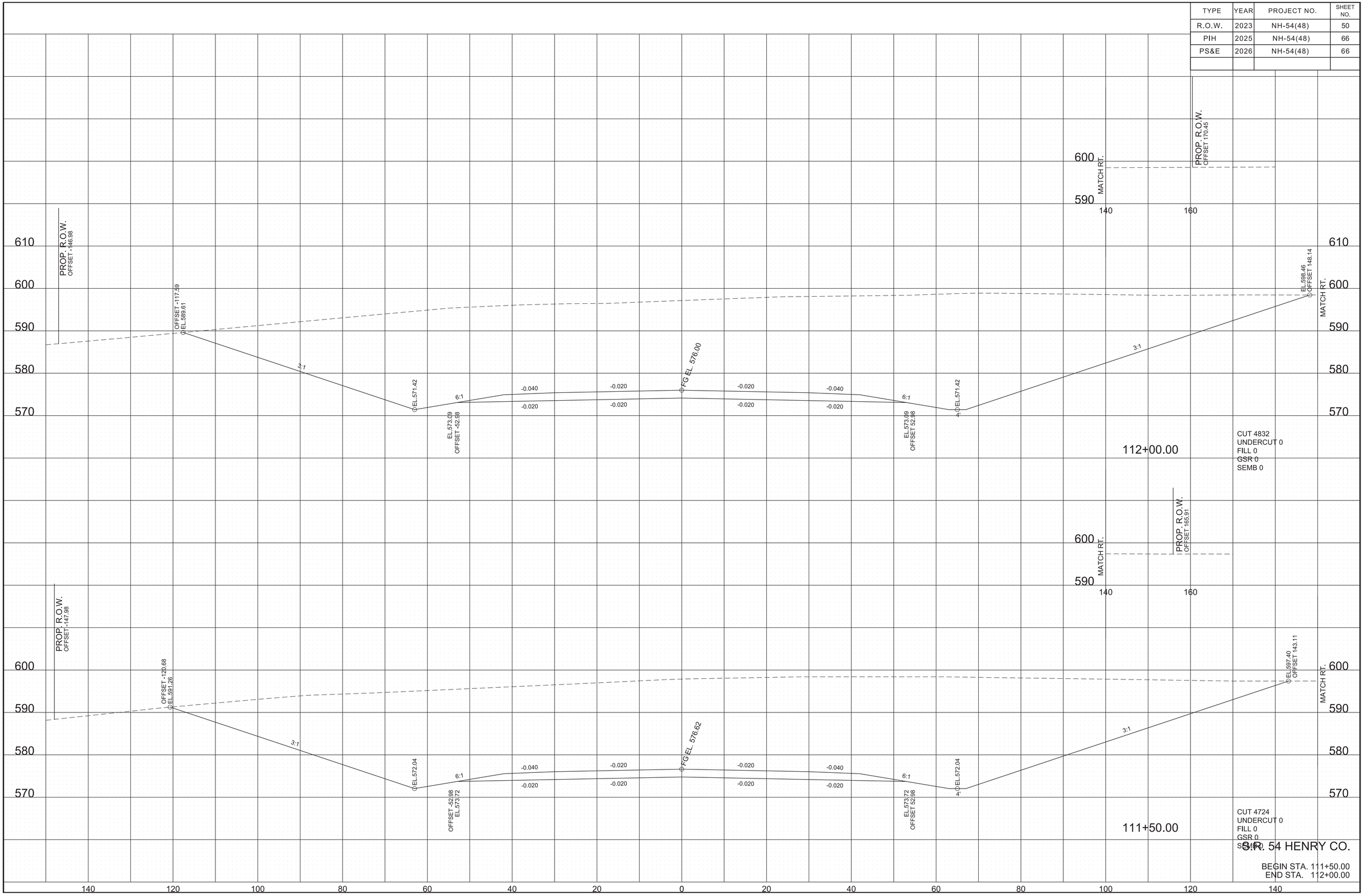


S.R. 54 HENRY CO.

BEGIN STA. 110+50.00
END STA. 111+00.00

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	50
PIH	2025	NH-54(48)	66
PS&E	2026	NH-54(48)	66

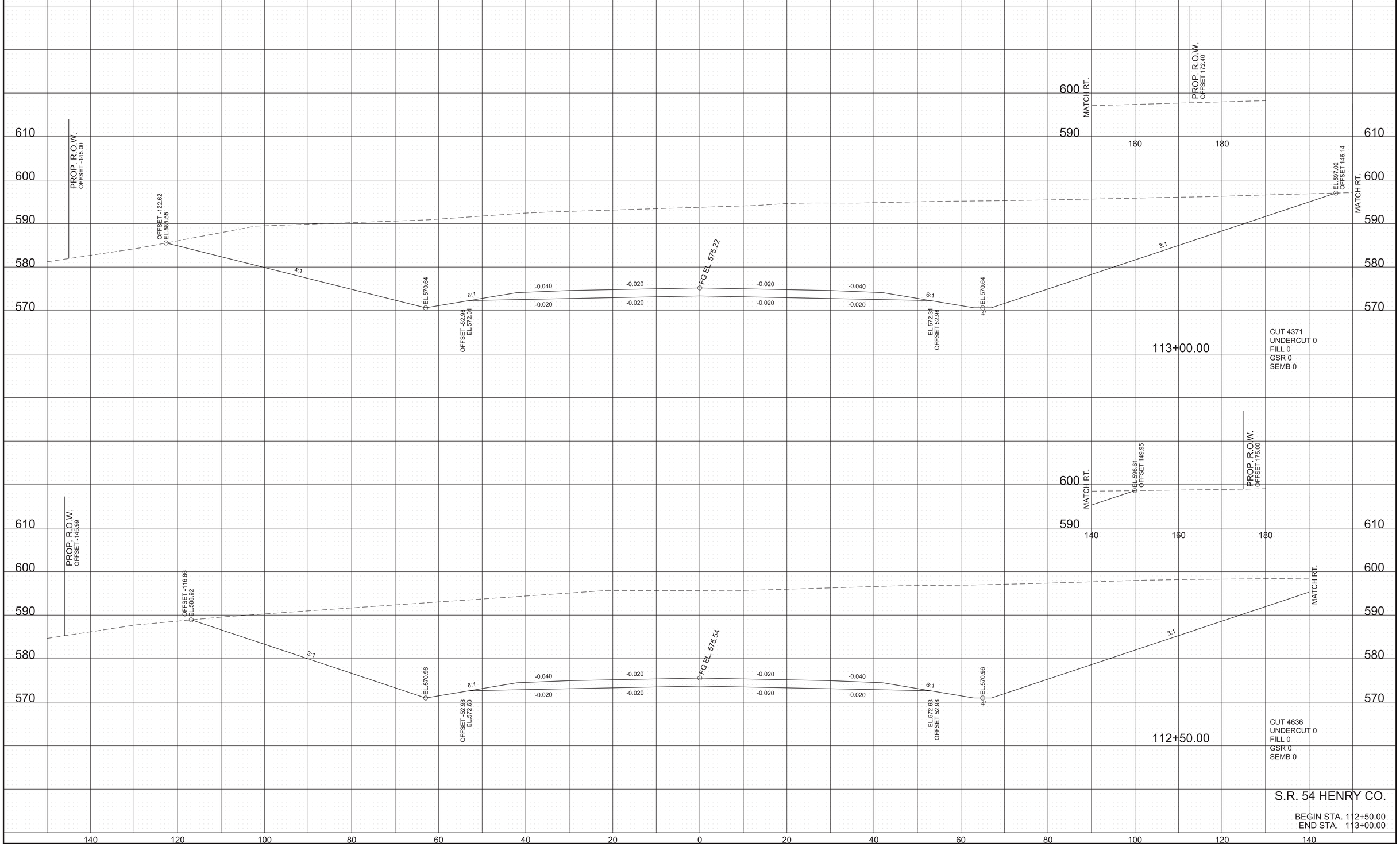


S.R. 54 HENRY CO.

BEGIN STA. 111+50.00
END STA. 112+00.00

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	51
PIH	2025	NH-54(48)	67
PS&E	2026	NH-54(48)	67

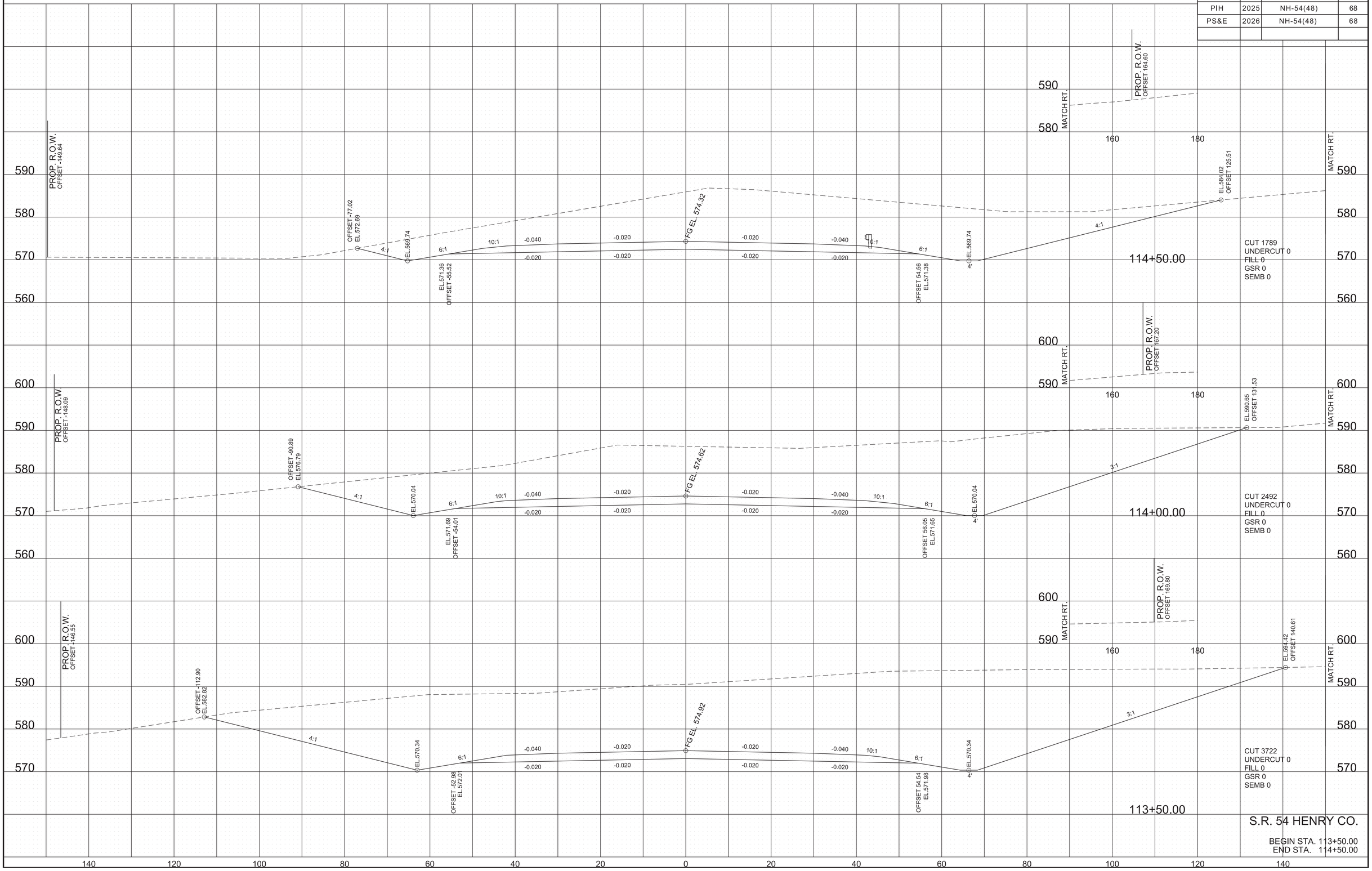


S.R. 54 HENRY CO.

BEGIN STA. 112+50.00
END STA. 113+00.00

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	52
PIH	2025	NH-54(48)	68
PS&E	2026	NH-54(48)	68

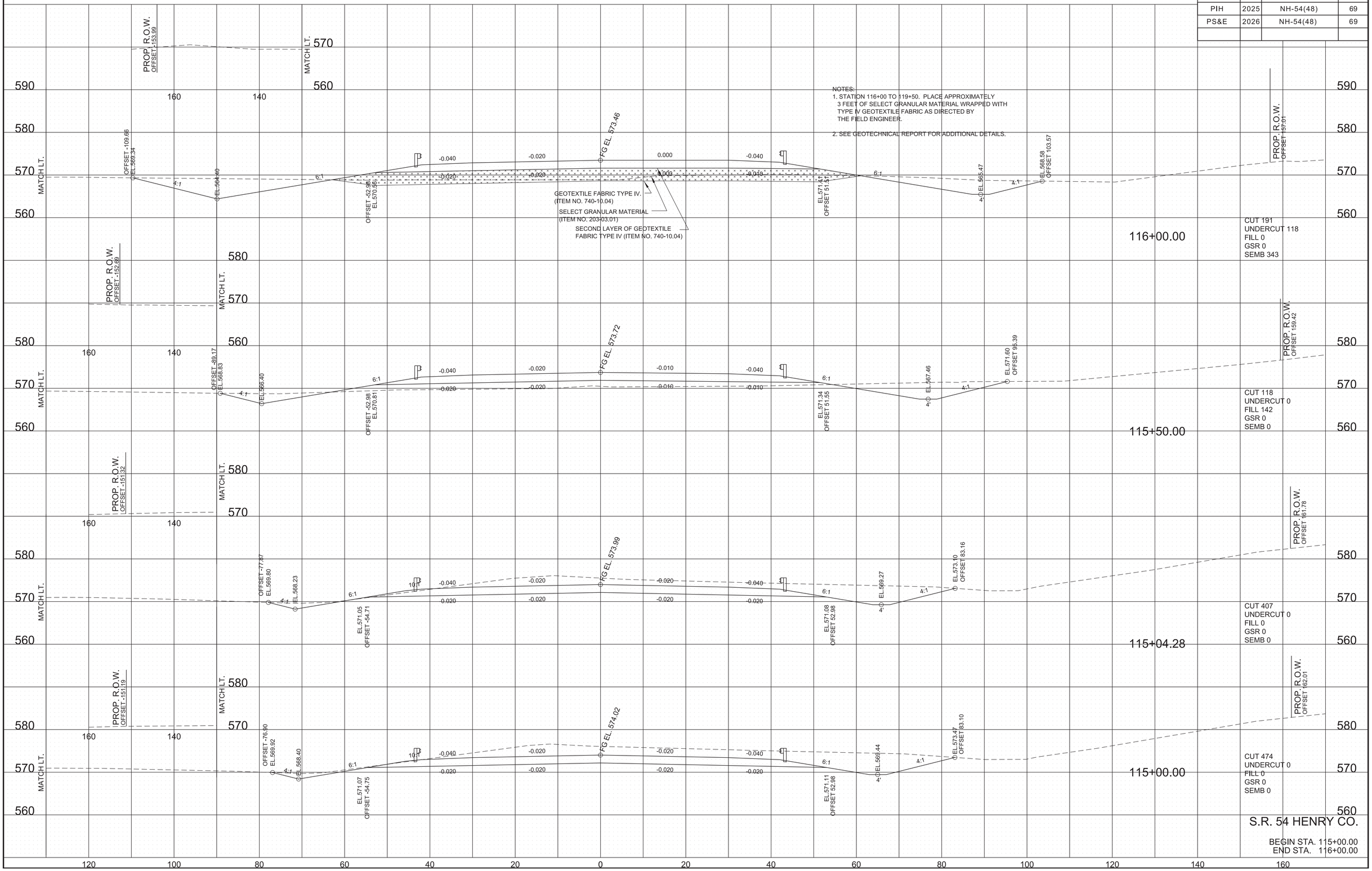


S.R. 54 HENRY CO.

BEGIN STA. 113+50.00
END STA. 114+50.00

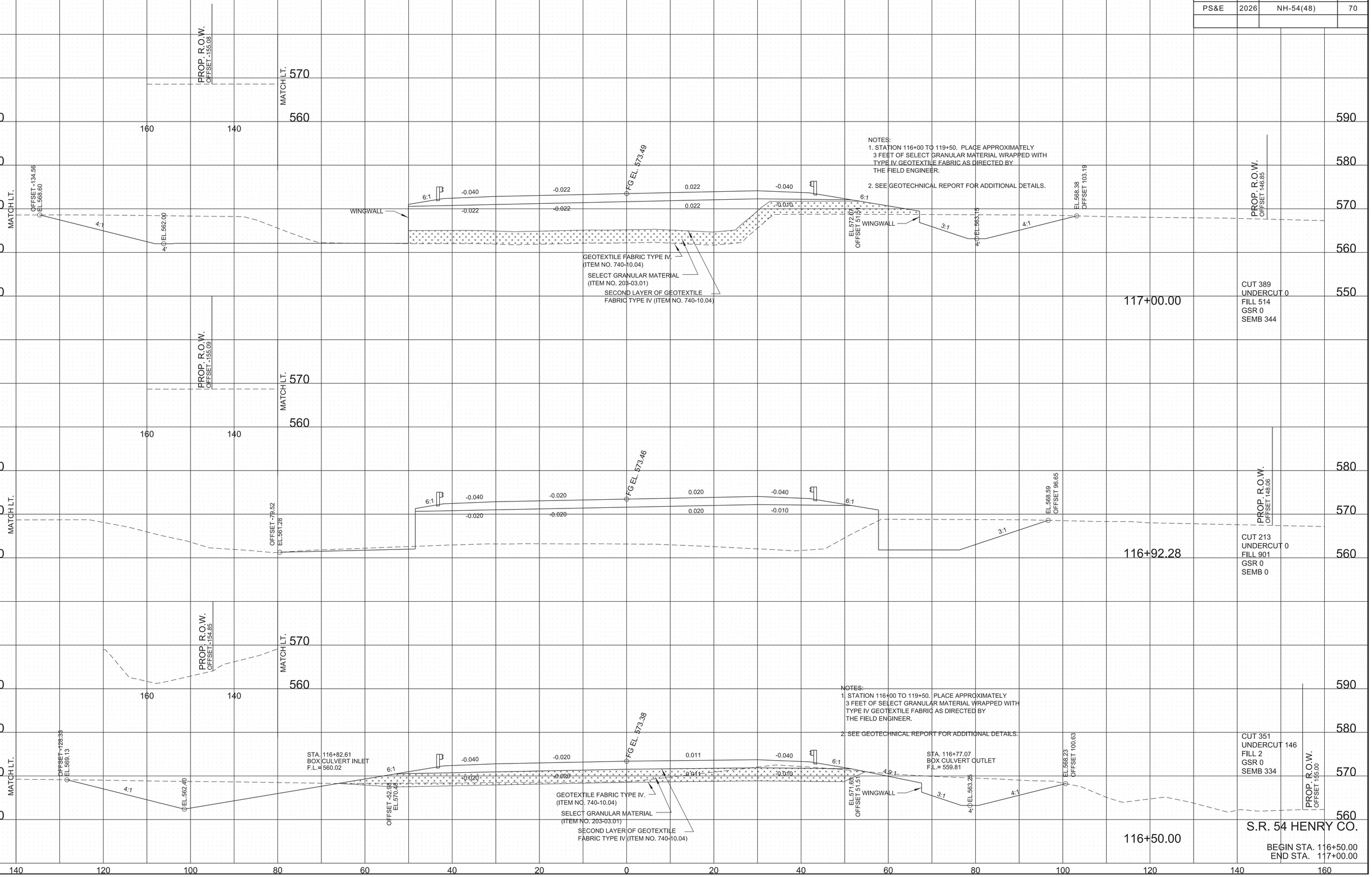
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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	53
PIH	2025	NH-54(48)	69
PS&E	2026	NH-54(48)	69



2/9/2026 2:39:20 PM
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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	54
PIH	2025	NH-54(48)	70
PS&E	2026	NH-54(48)	70



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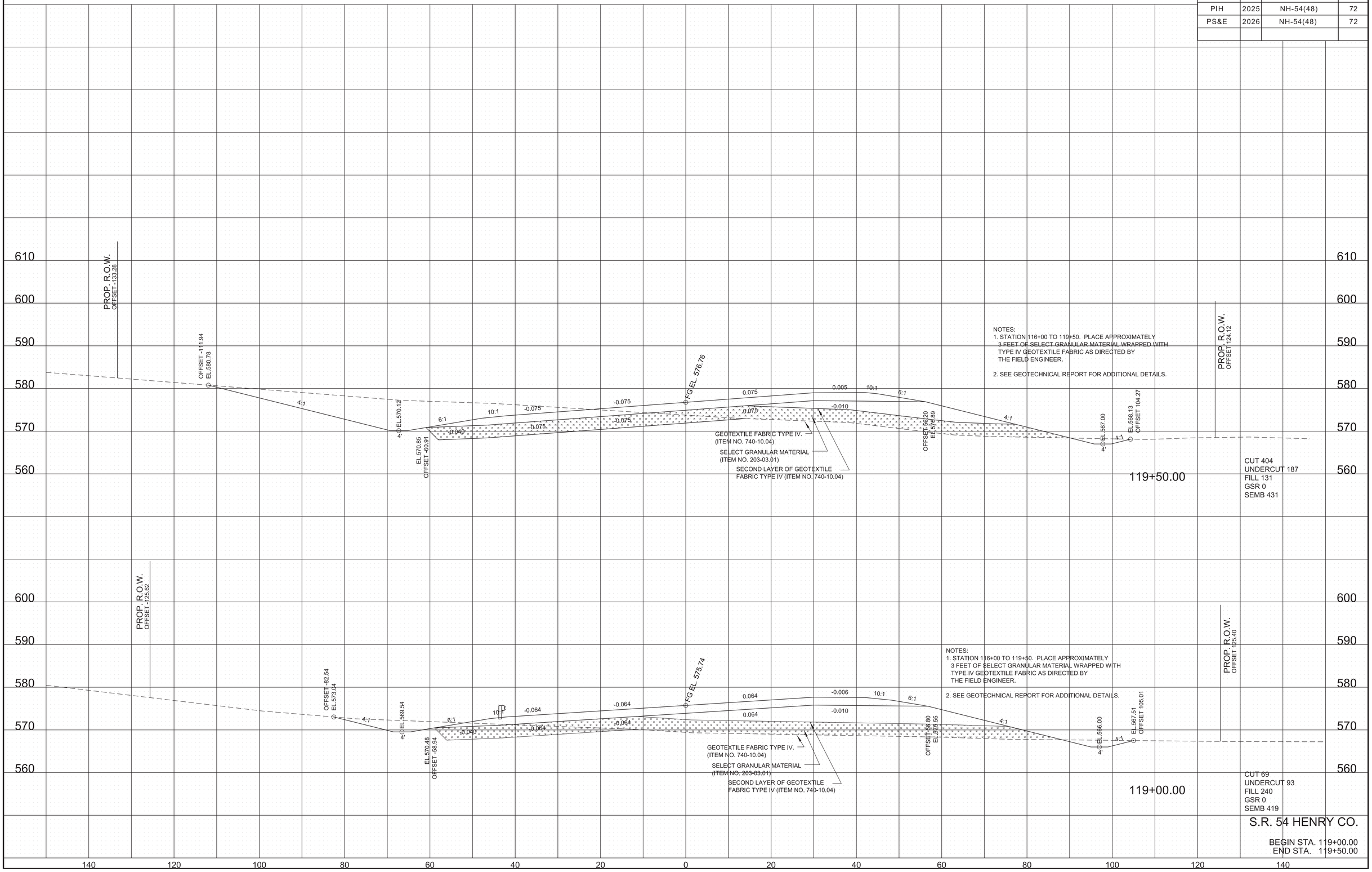
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	55
PIH	2025	NH-54(48)	71
PS&E	2026	NH-54(48)	71

S.R. 54 HENRY CO.

BEGIN STA. 117+50.00
END STA. 118+50.00

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	56
PIH	2025	NH-54(48)	72
PS&E	2026	NH-54(48)	72

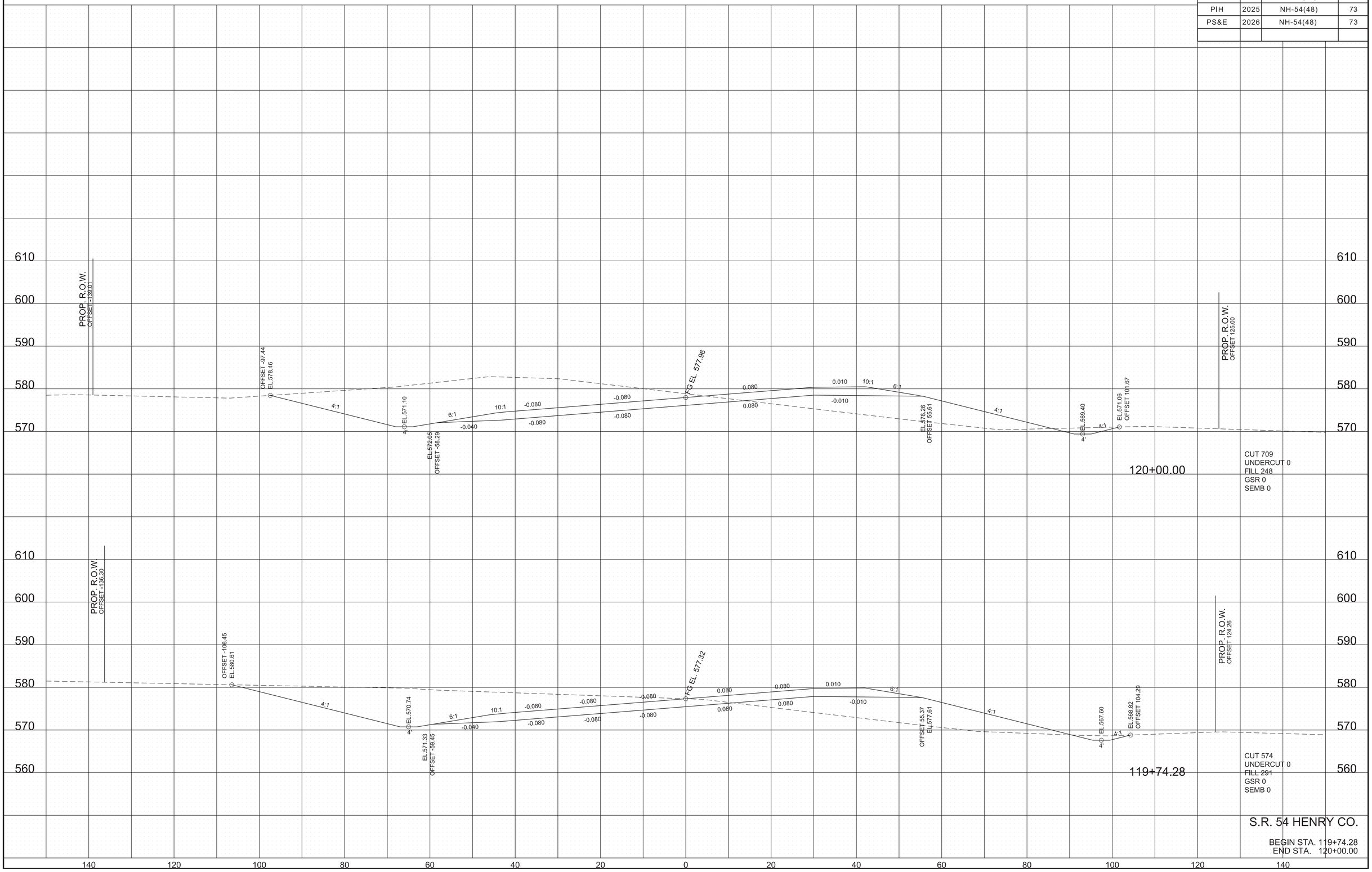


S.R. 54 HENRY CO.

BEGIN STA. 119+00.00
END STA. 119+50.00

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	57
PIH	2025	NH-54(48)	73
PS&E	2026	NH-54(48)	73

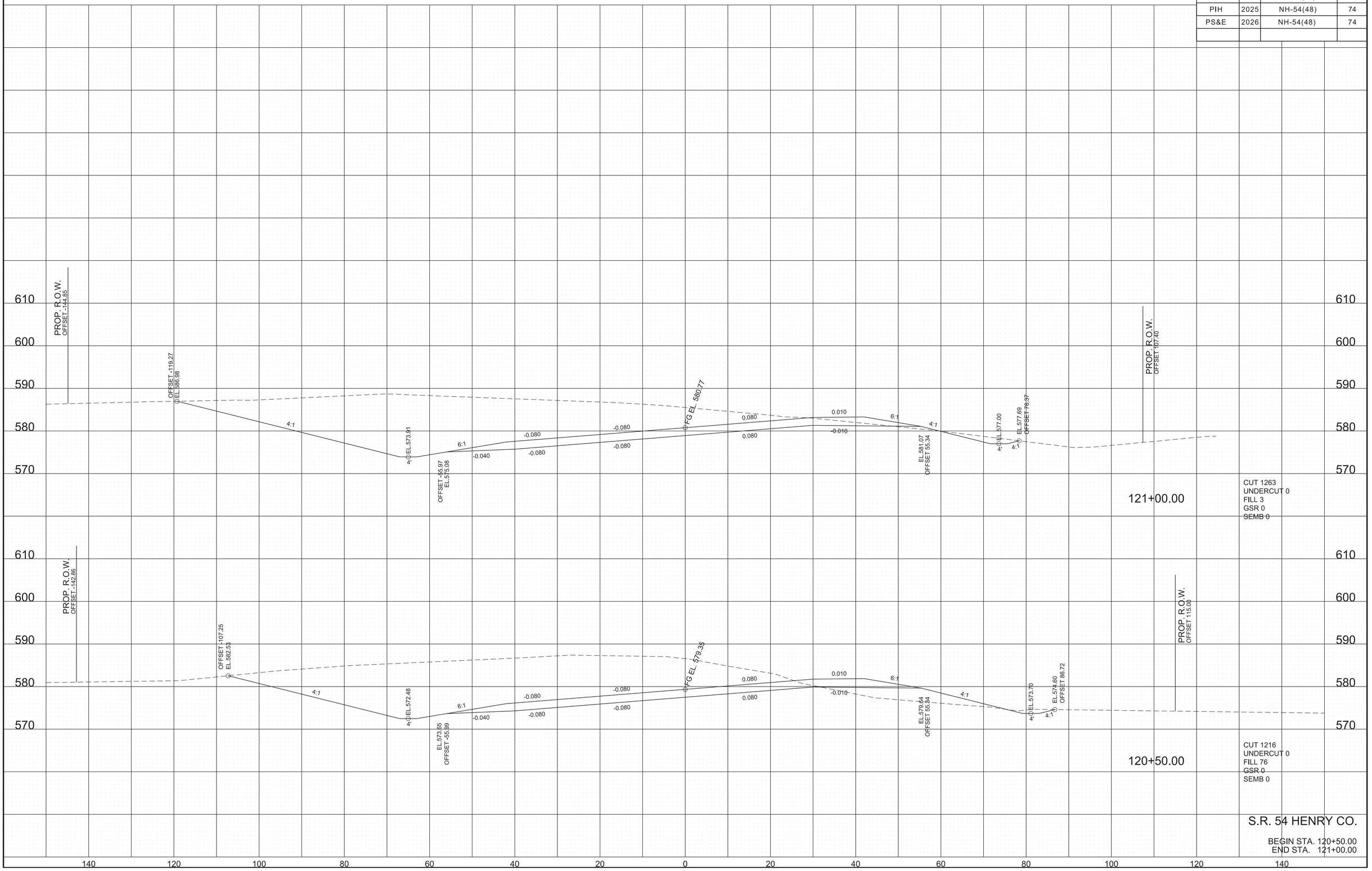


S.R. 54 HENRY CO.

BEGIN STA. 119+74.28
END STA. 120+00.00

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	58
PIH	2025	NH-54(48)	74
PS&E	2026	NH-54(48)	74

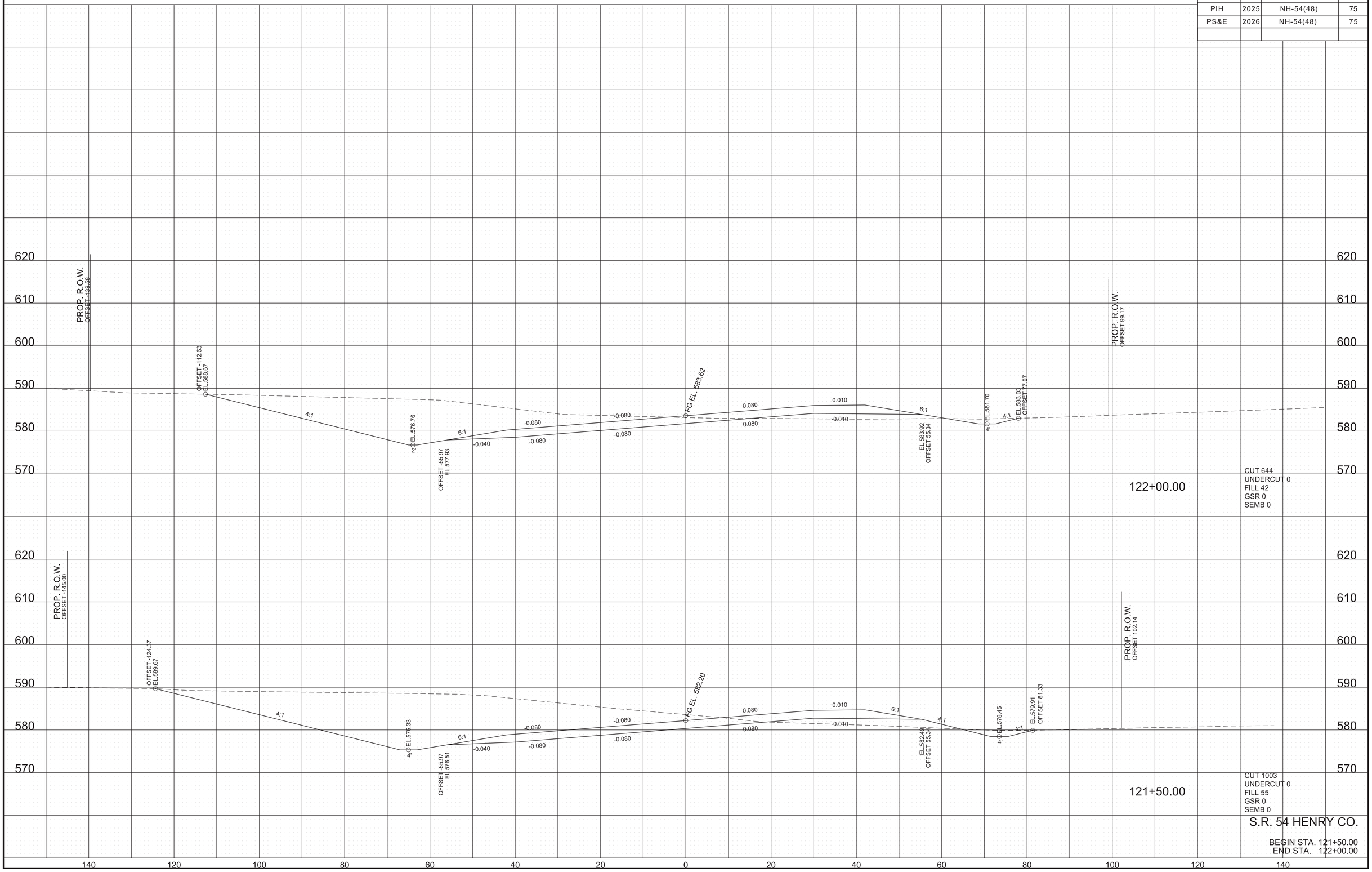


S.R. 54 HENRY CO.

BEGIN STA. 120+50.00
END STA. 121+00.00

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	59
PIH	2025	NH-54(48)	75
PS&E	2026	NH-54(48)	75

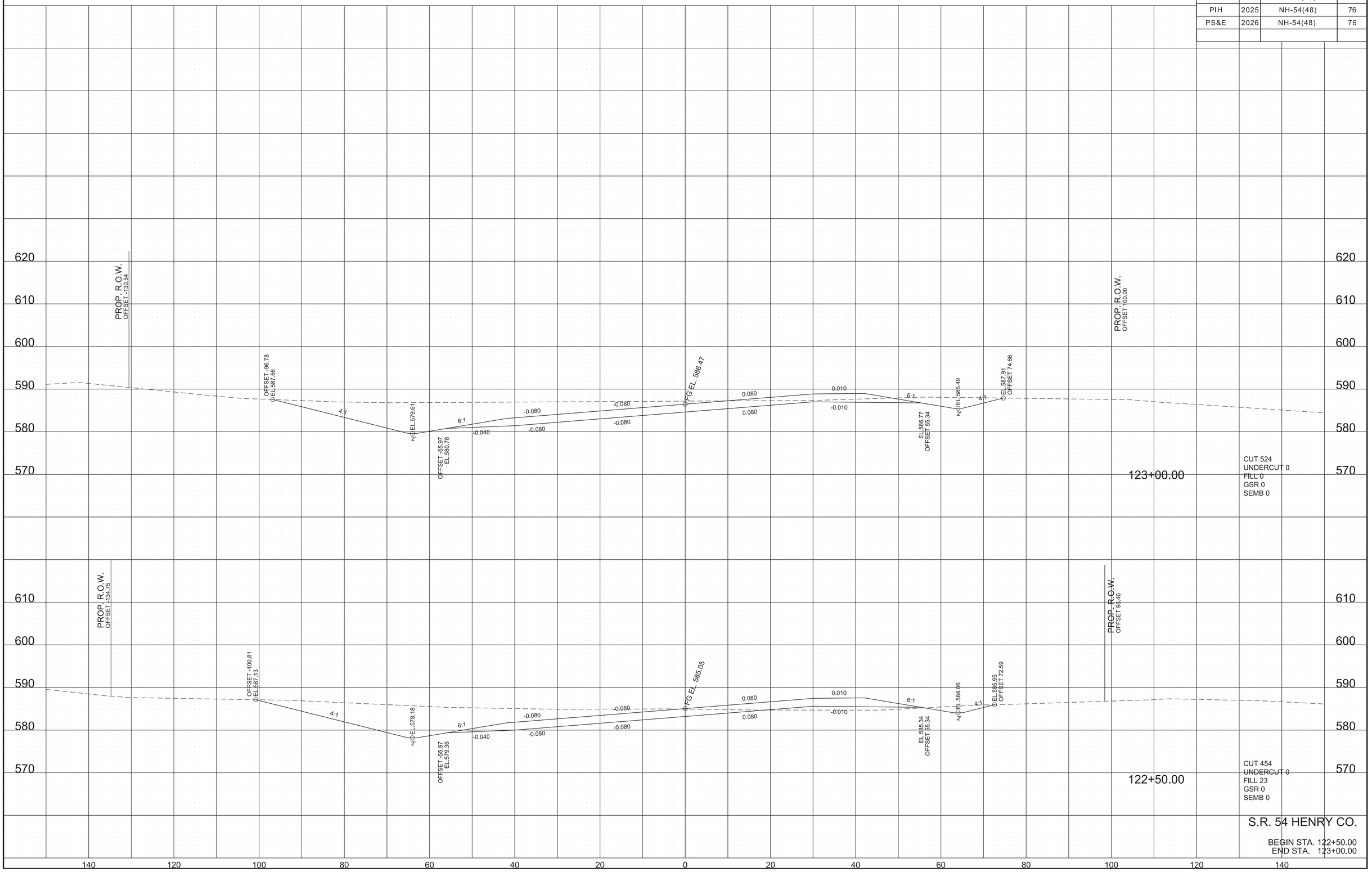


S.R. 54 HENRY CO.

BEGIN STA. 121+50.00
END STA. 122+00.00

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	60
PIH	2025	NH-54(48)	76
PS&E	2026	NH-54(48)	76

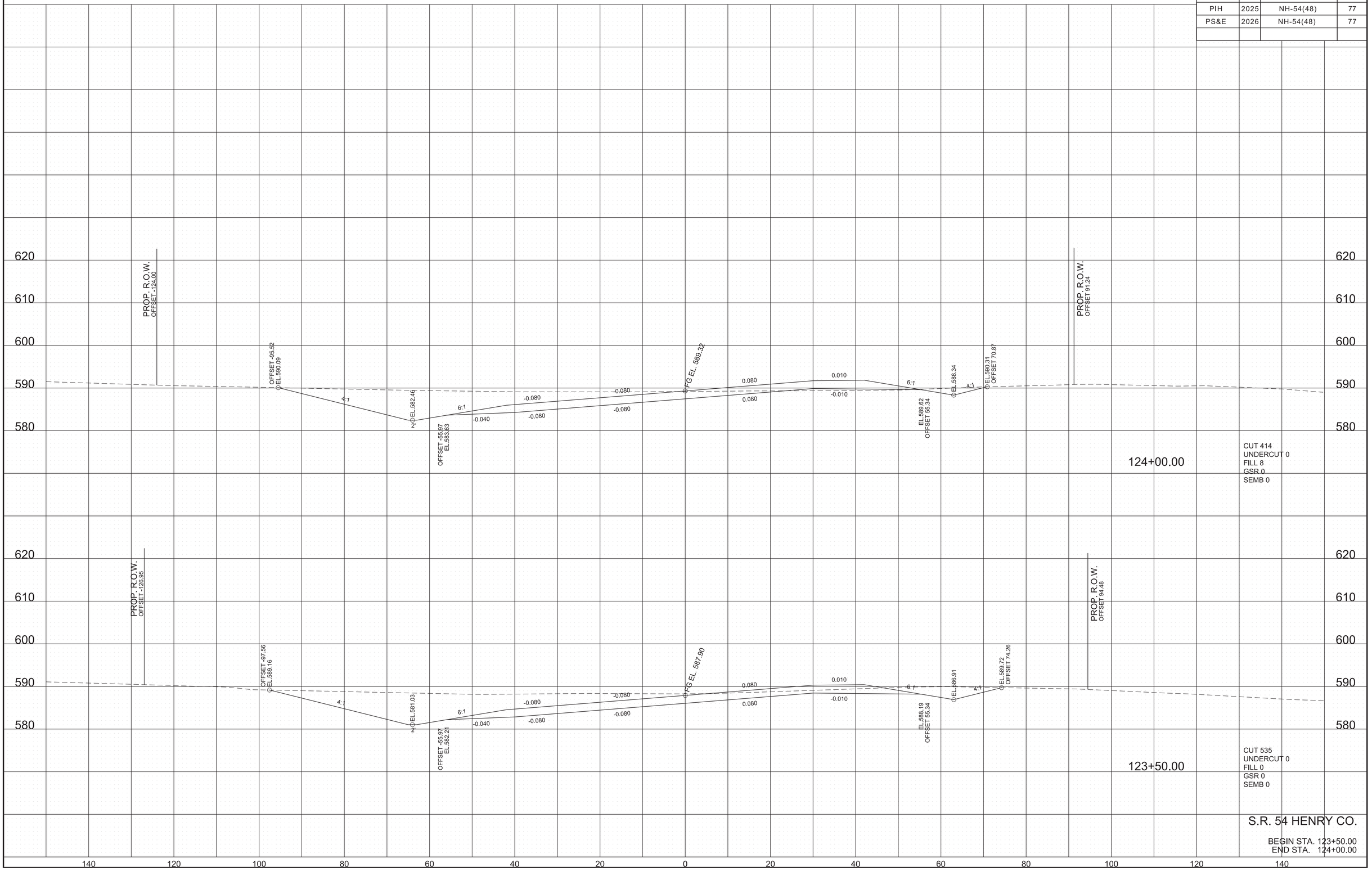


S.R. 54 HENRY CO.

BEGIN STA. 122+50.00
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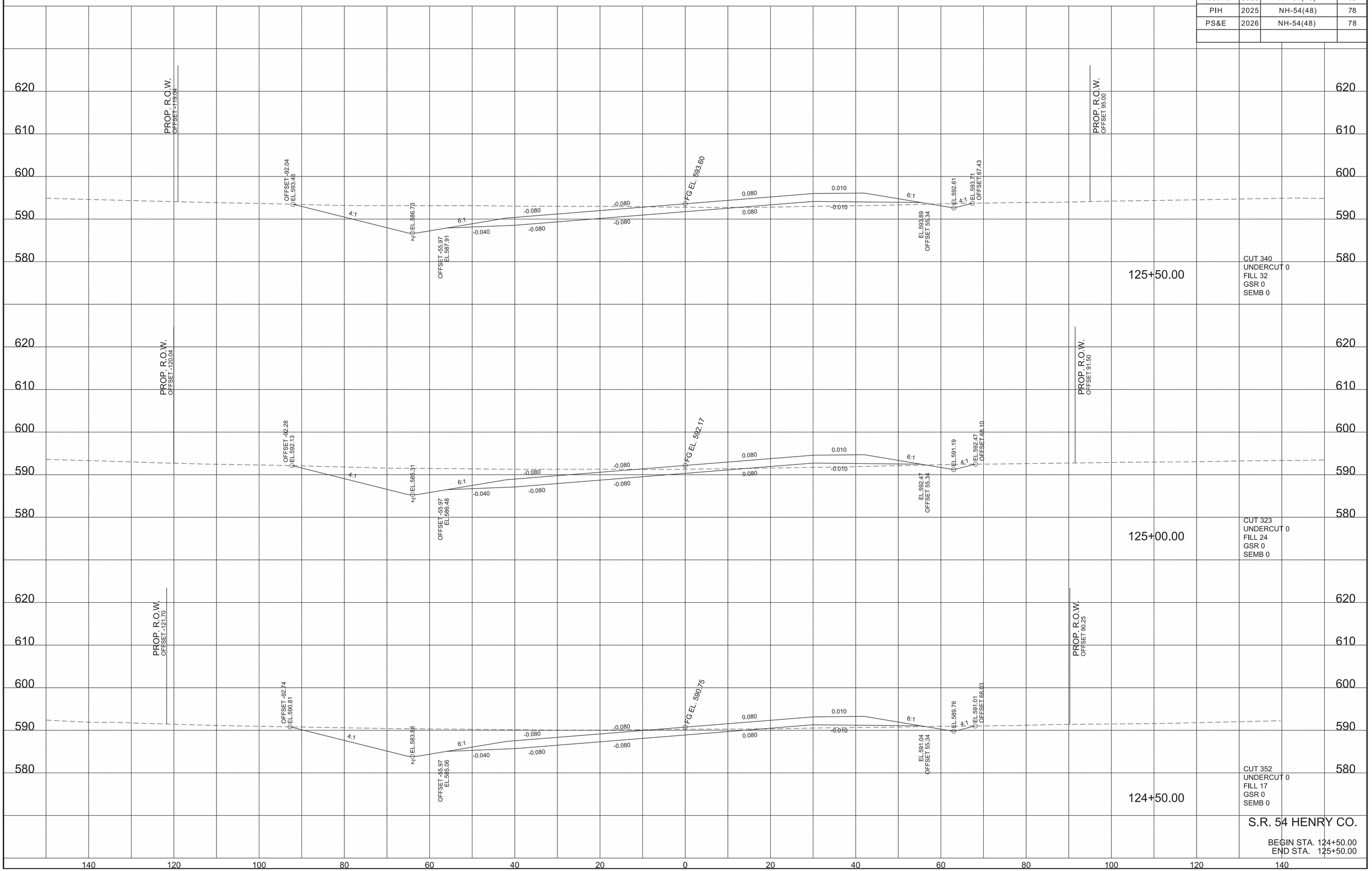
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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	61
PIH	2025	NH-54(48)	77
PS&E	2026	NH-54(48)	77



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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	62
PIH	2025	NH-54(48)	78
PS&E	2026	NH-54(48)	78

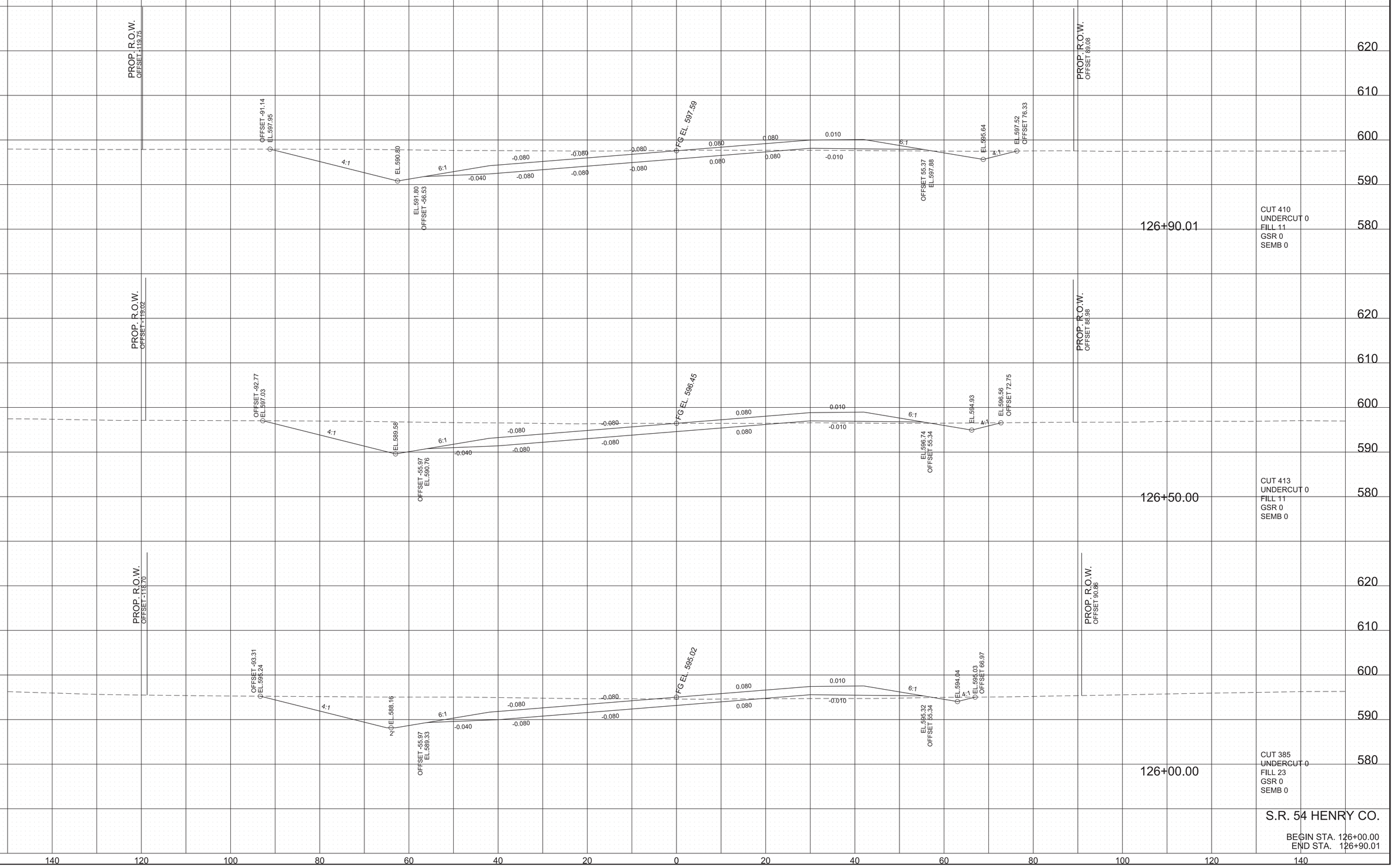


S.R. 54 HENRY CO.

BEGIN STA. 124+50.00
END STA. 125+50.00

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	63
PIH	2025	NH-54(48)	79
PS&E	2026	NH-54(48)	79

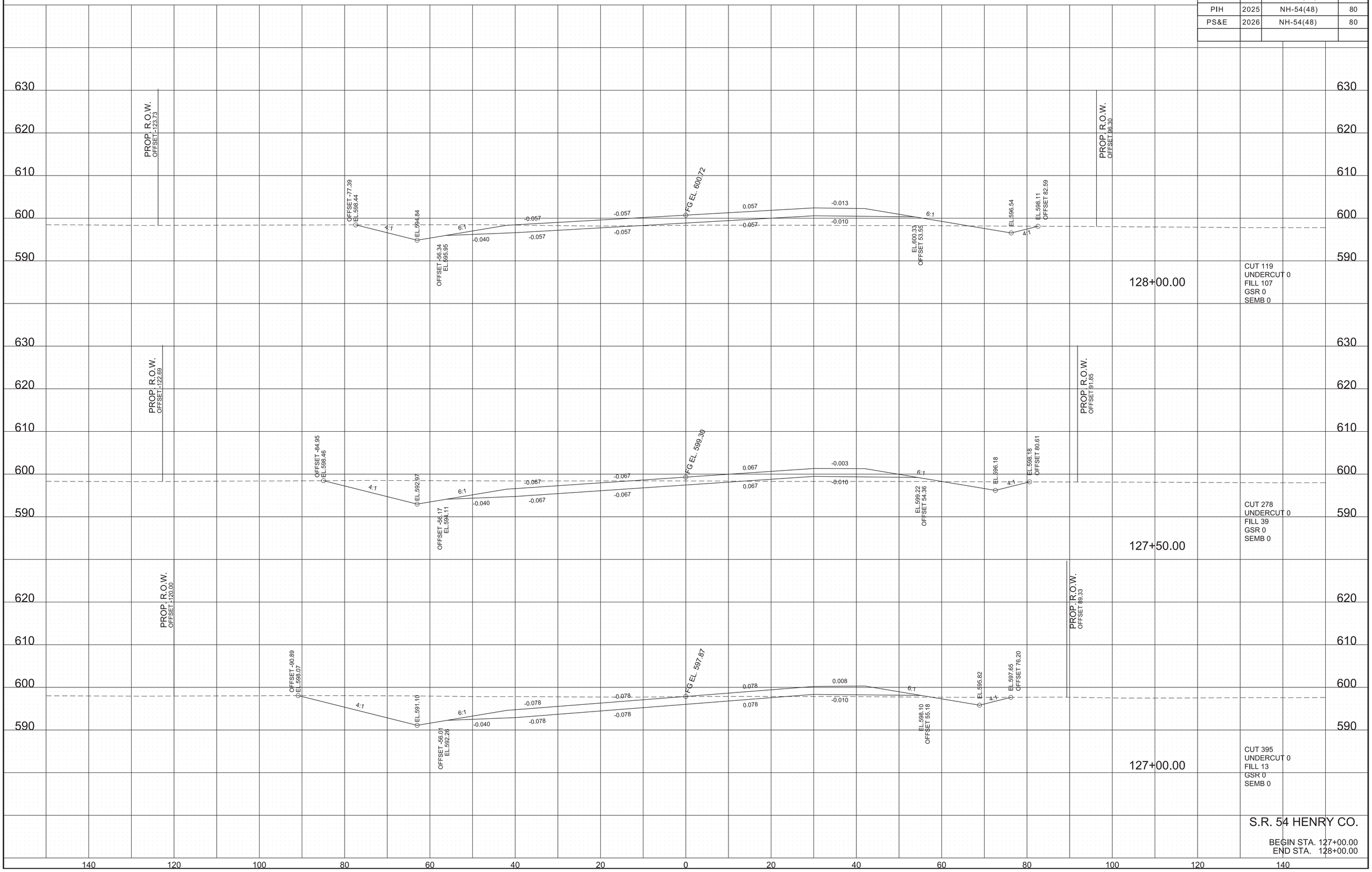


S.R. 54 HENRY CO.

BEGIN STA. 126+00.00
END STA. 126+90.01

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	64
PIH	2025	NH-54(48)	80
PS&E	2026	NH-54(48)	80

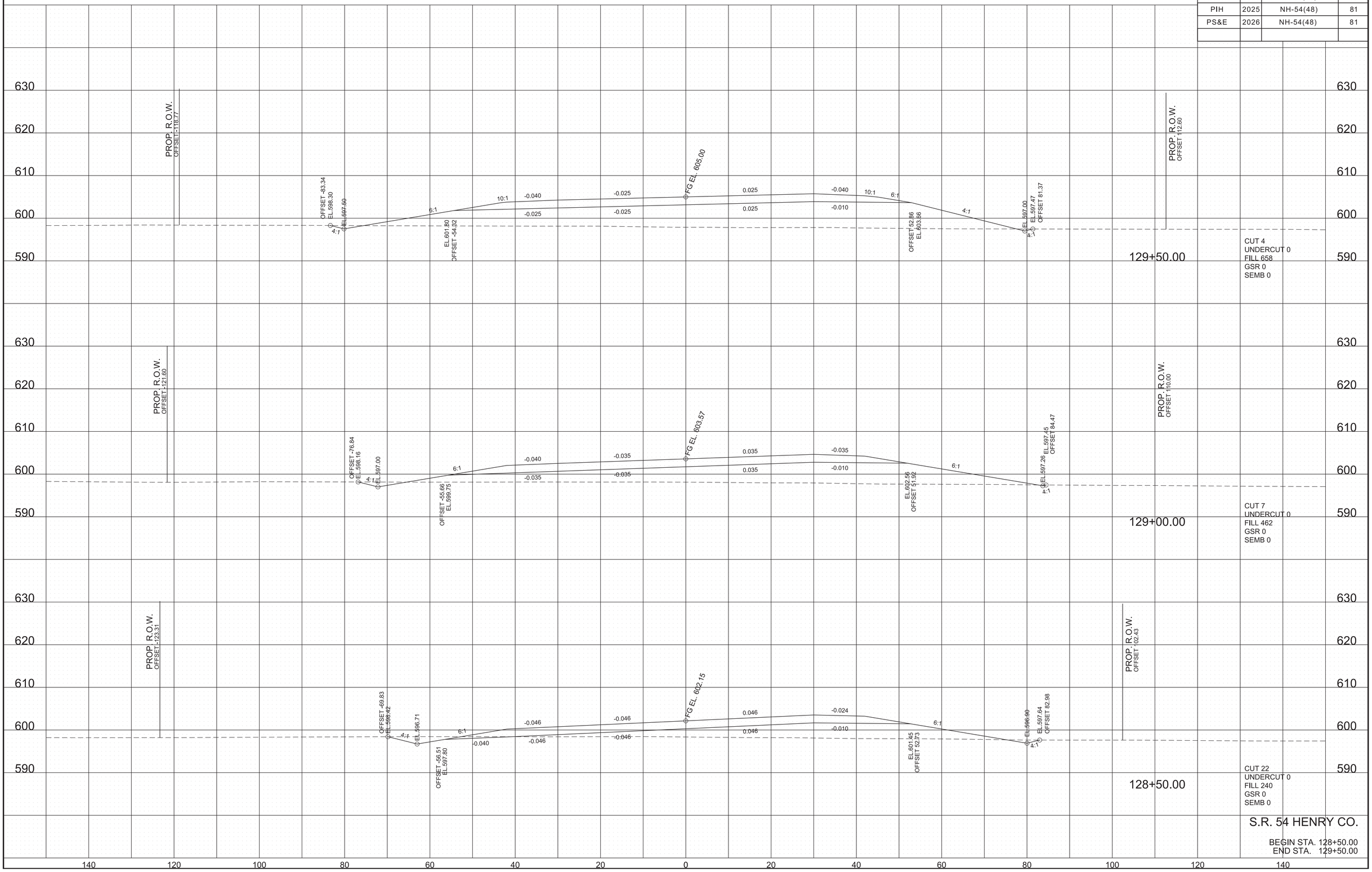


S.R. 54 HENRY CO.

BEGIN STA. 127+00.00
END STA. 128+00.00

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	65
PIH	2025	NH-54(48)	81
PS&E	2026	NH-54(48)	81

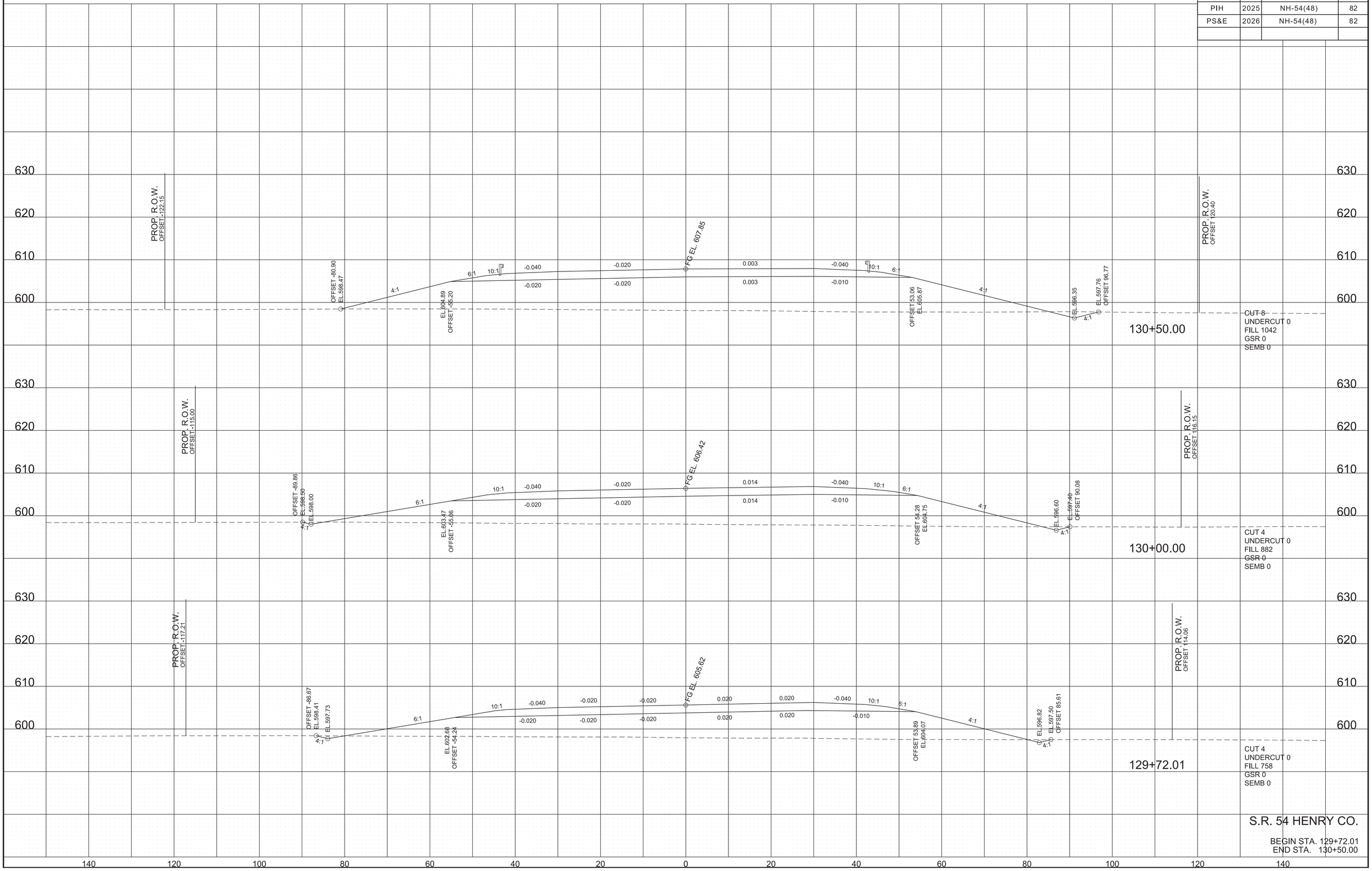


S.R. 54 HENRY CO.

BEGIN STA. 128+50.00
END STA. 129+50.00

2/9/2026 2:40:04 PM
T:\TDOT\Henry_SR54\SR54XSections.sht

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	66
PIH	2025	NH-54(48)	82
PS&E	2026	NH-54(48)	82

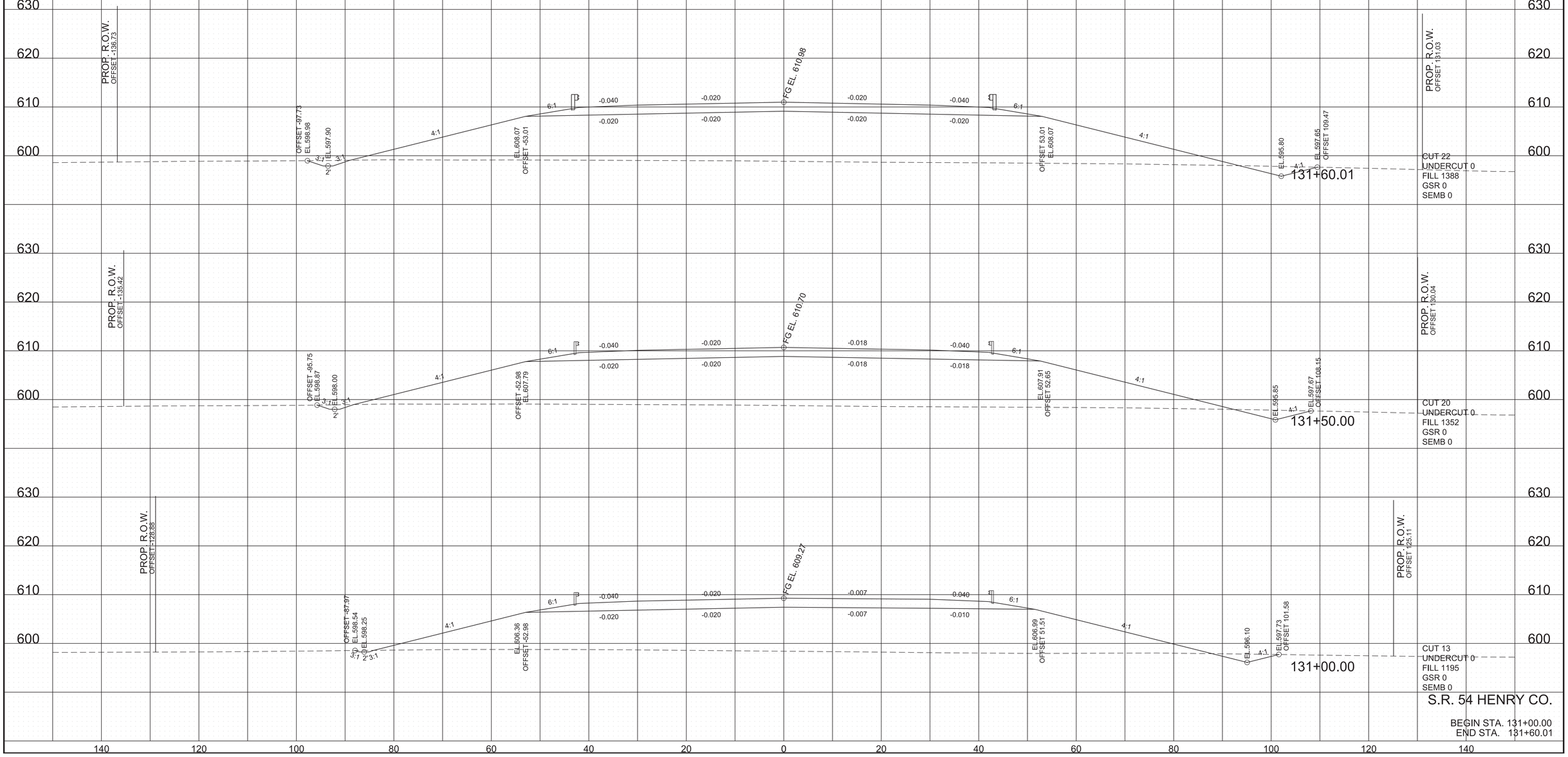


S.R. 54 HENRY CO.

BEGIN STA. 129+72.01
END STA. 130+50.00

2/9/2026 2:40:08 PM
T:\TDOT\Henry_SR54\SR54XSections.sht

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	67
PIH	2025	NH-54(48)	83
PS&E	2026	NH-54(48)	83

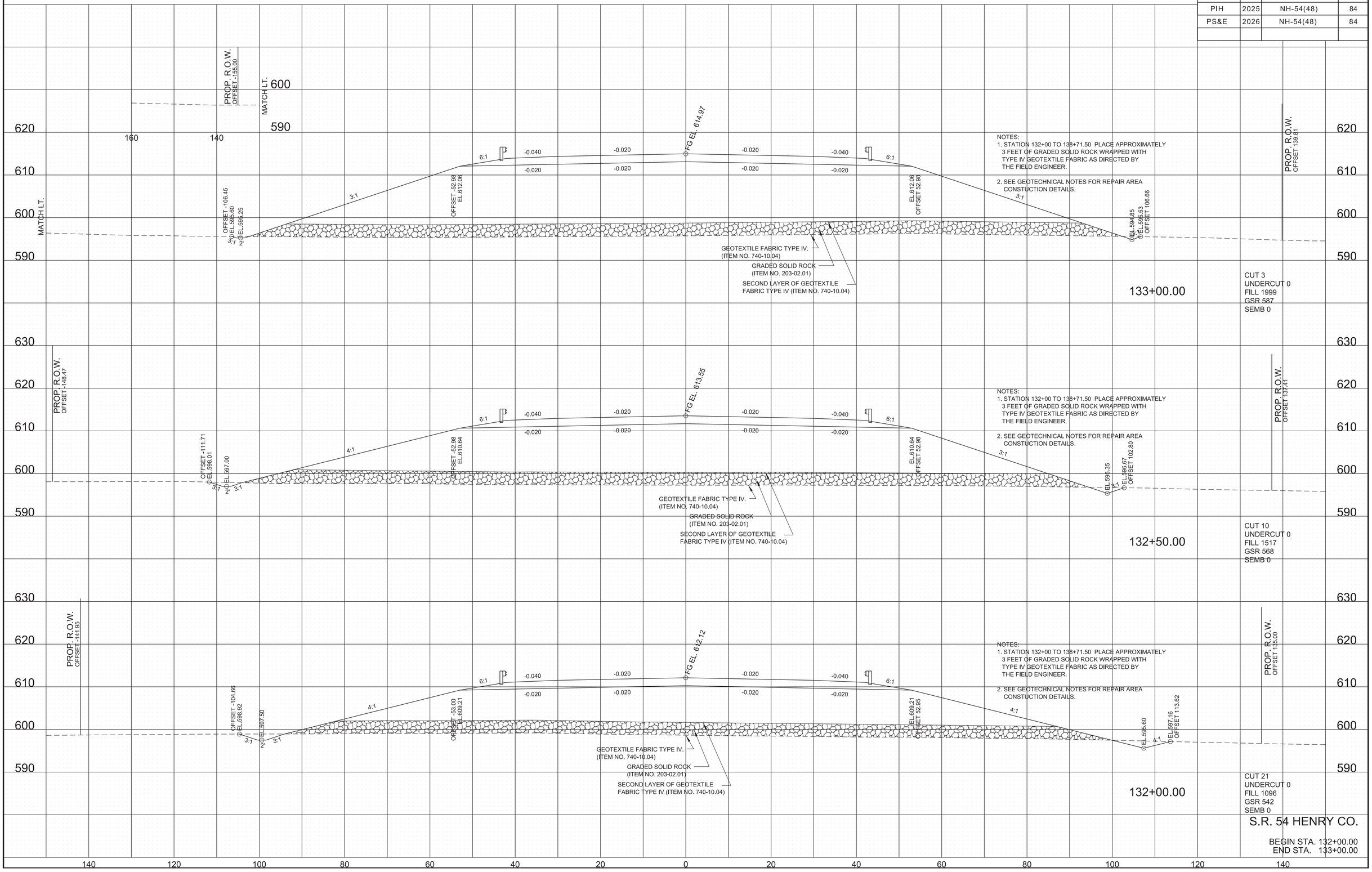


S.R. 54 HENRY CO.

BEGIN STA. 131+00.00
END STA. 131+60.01

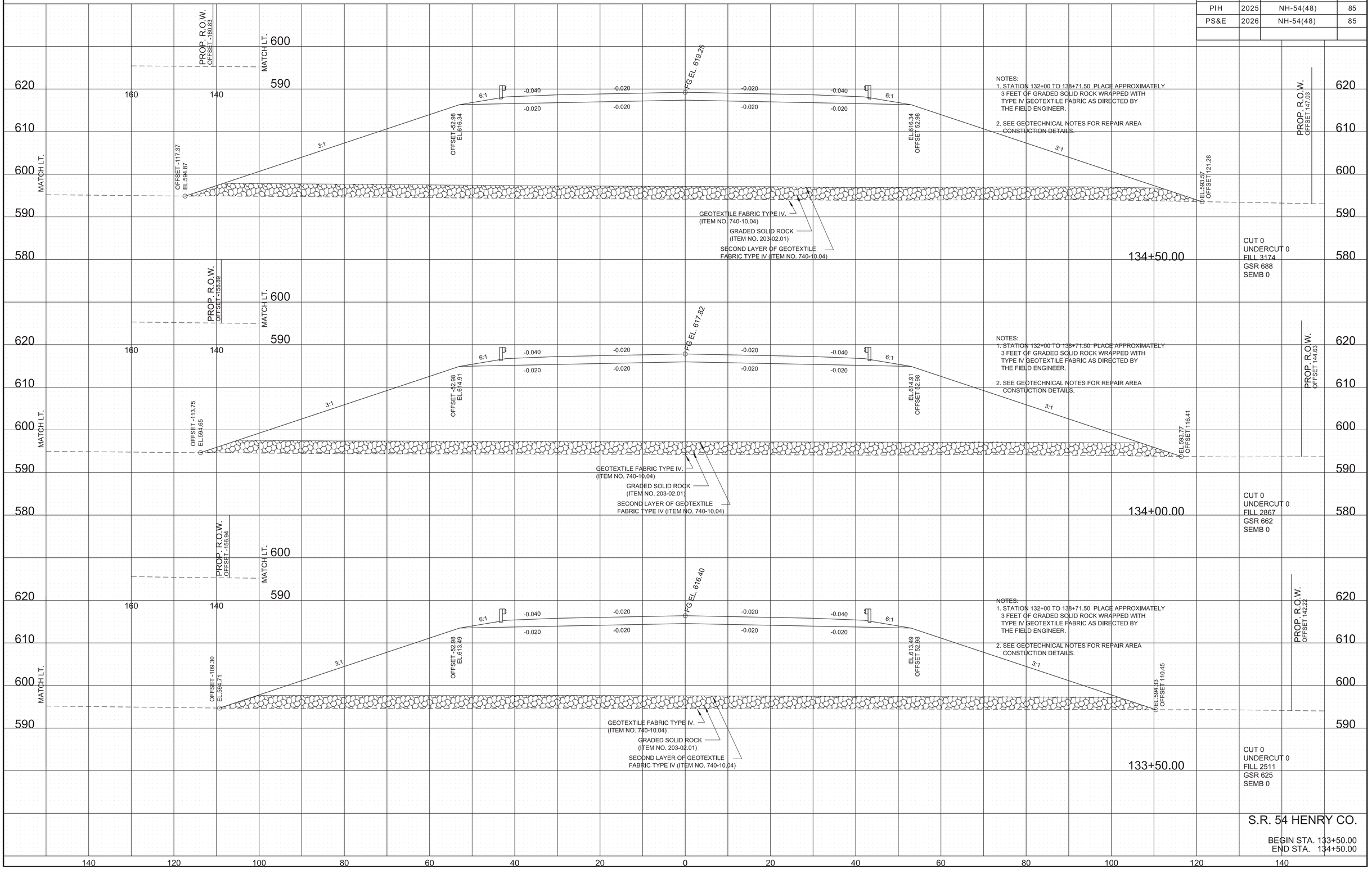
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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	68
PIH	2025	NH-54(48)	84
PS&E	2026	NH-54(48)	84



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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	69
PIH	2025	NH-54(48)	85
PS&E	2026	NH-54(48)	85

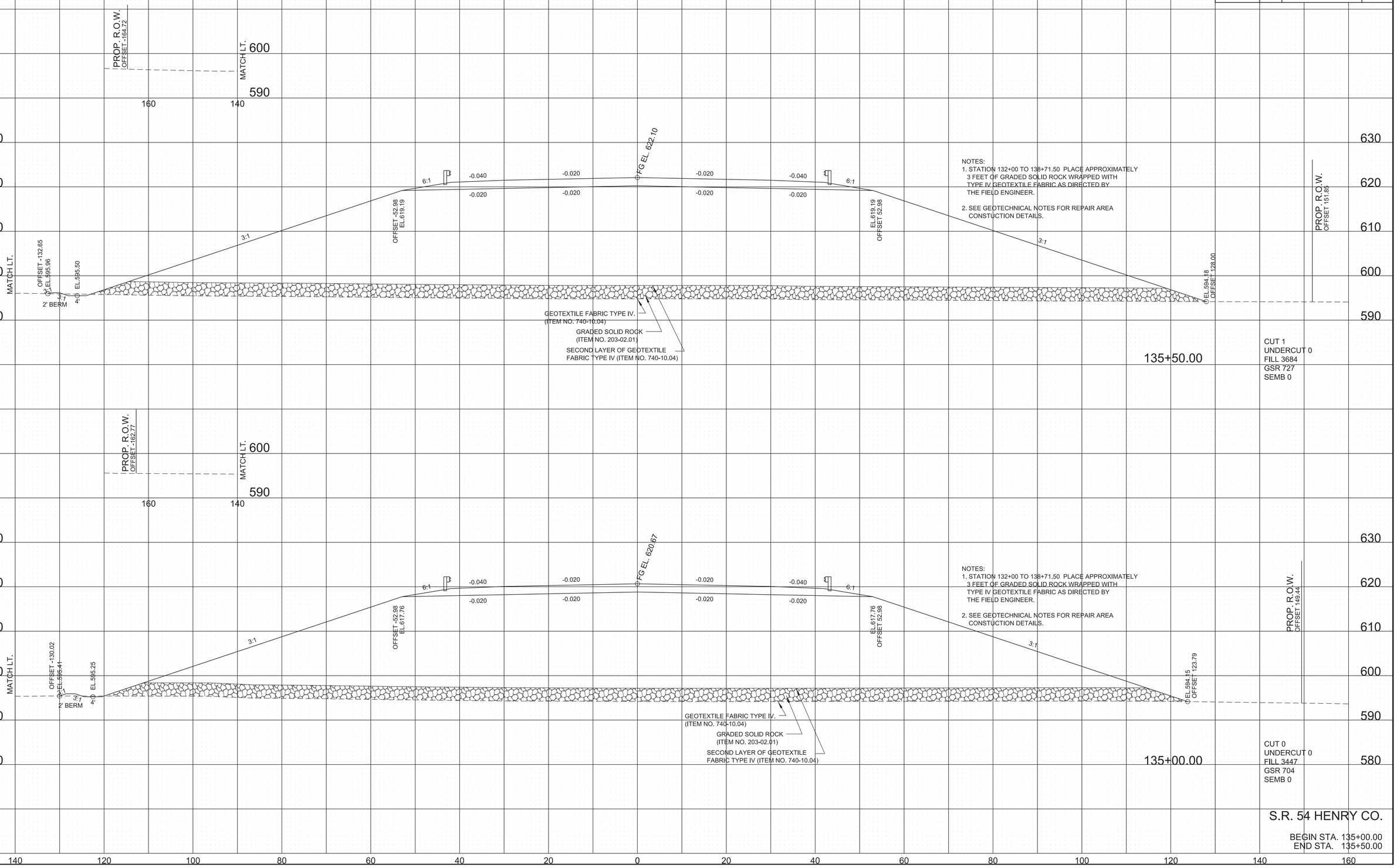


S.R. 54 HENRY CO.

BEGIN STA. 133+50.00
END STA. 134+50.00

2/9/2026 2:40:19 PM
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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	70
PIH	2025	NH-54(48)	86
PS&E	2026	NH-54(48)	86

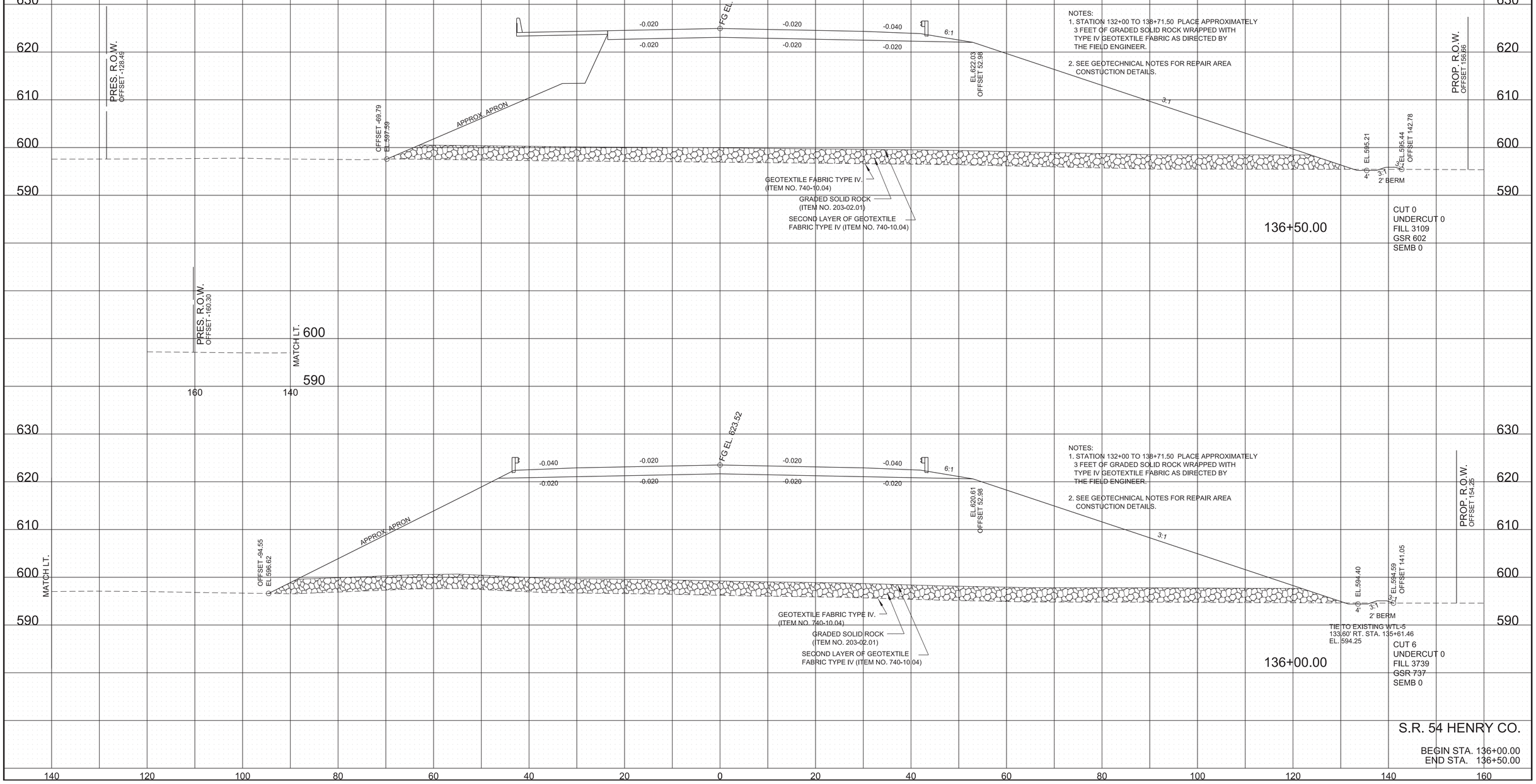


S.R. 54 HENRY CO.

BEGIN STA. 135+00.00
END STA. 135+50.00

2/9/2026 2:40:23 PM
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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	71
PIH	2025	NH-54(48)	87
PS&E	2026	NH-54(48)	87

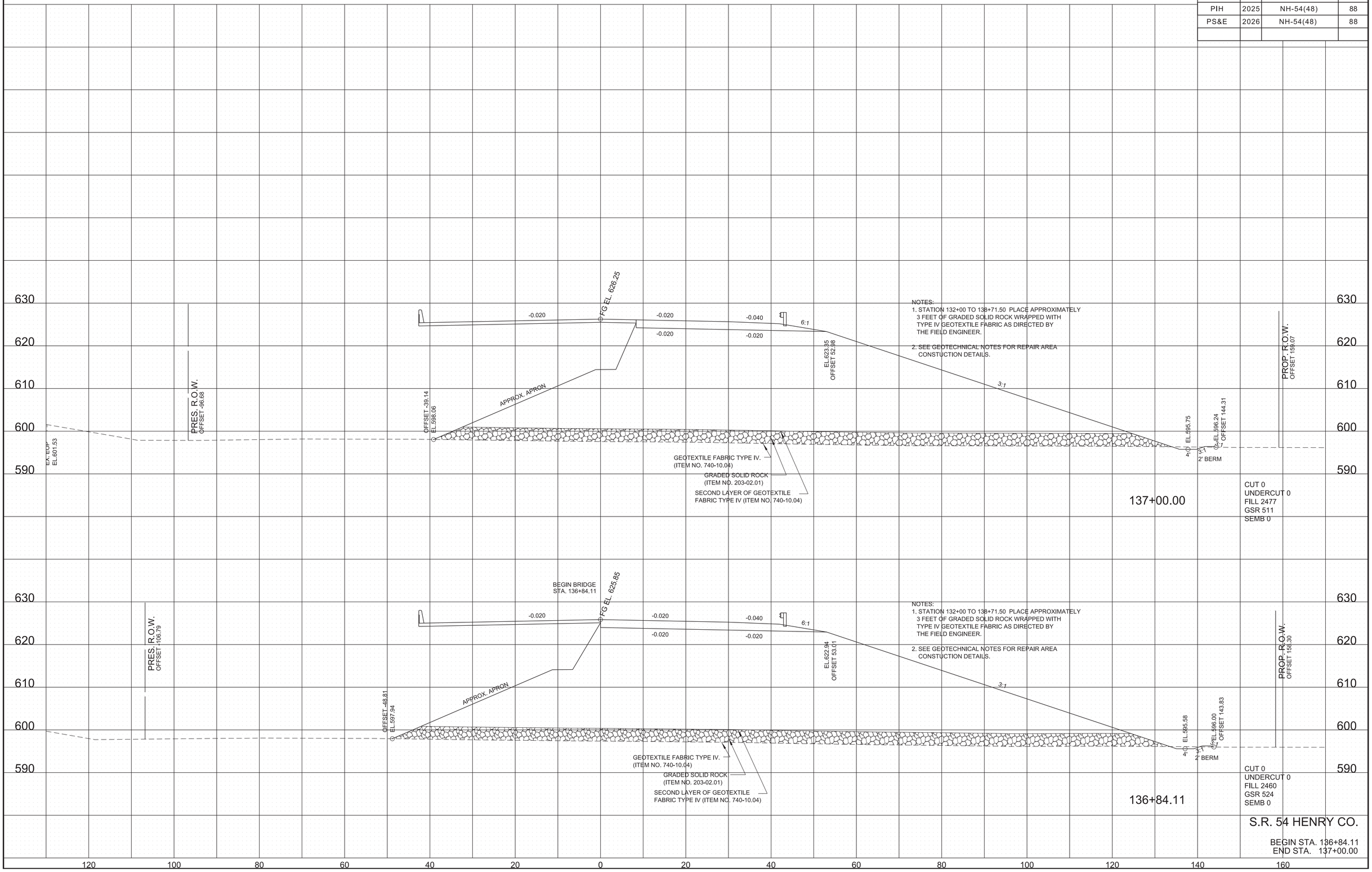


S.R. 54 HENRY CO.

BEGIN STA. 136+00.00
END STA. 136+50.00

2/9/2026 2:40:27 PM
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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	72
PIH	2025	NH-54(48)	88
PS&E	2026	NH-54(48)	88

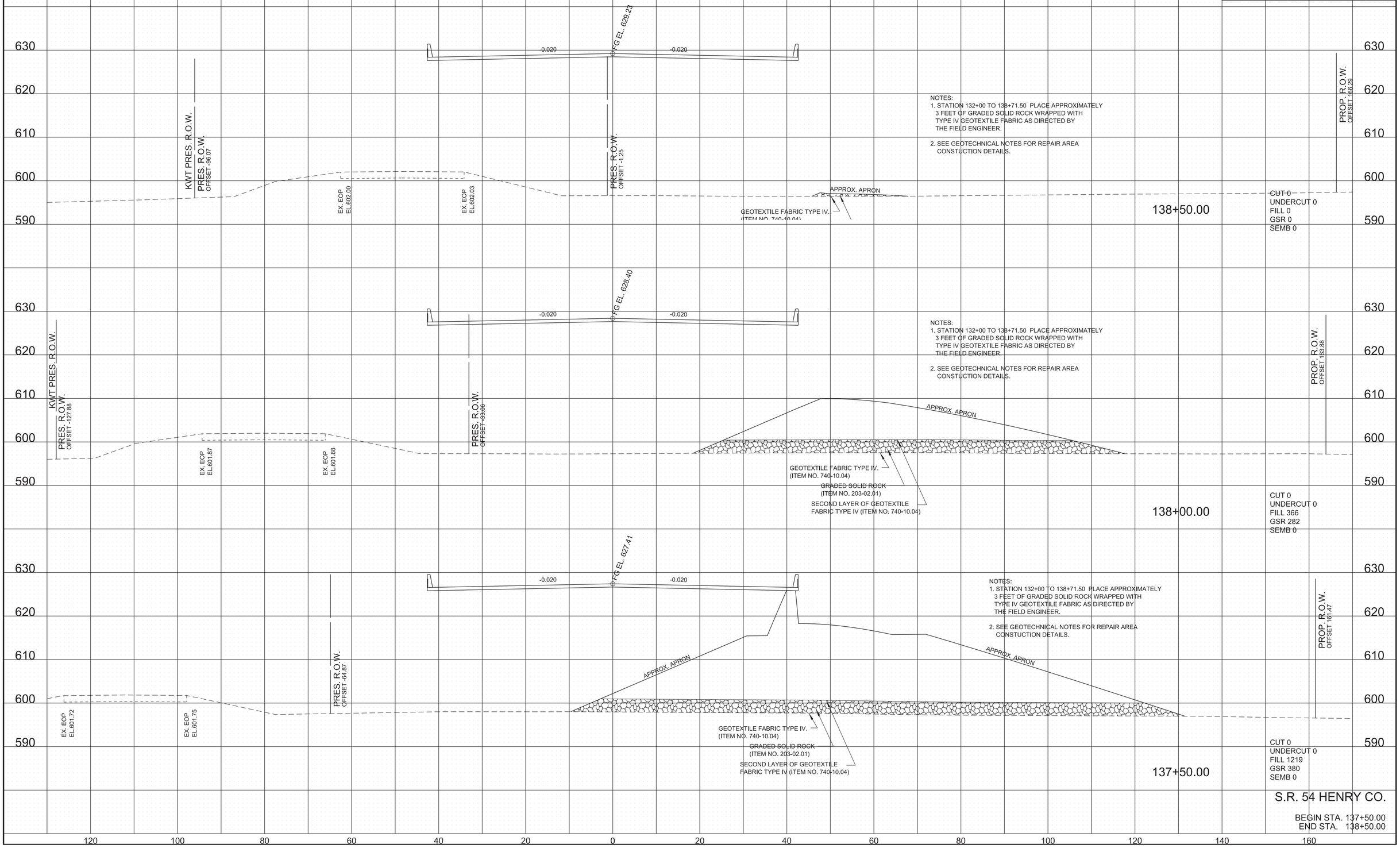


S.R. 54 HENRY CO.

BEGIN STA. 136+84.11
END STA. 137+00.00

2/9/2026 2:40:30 PM
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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	73
PIH	2025	NH-54(48)	89
PS&E	2026	NH-54(48)	89

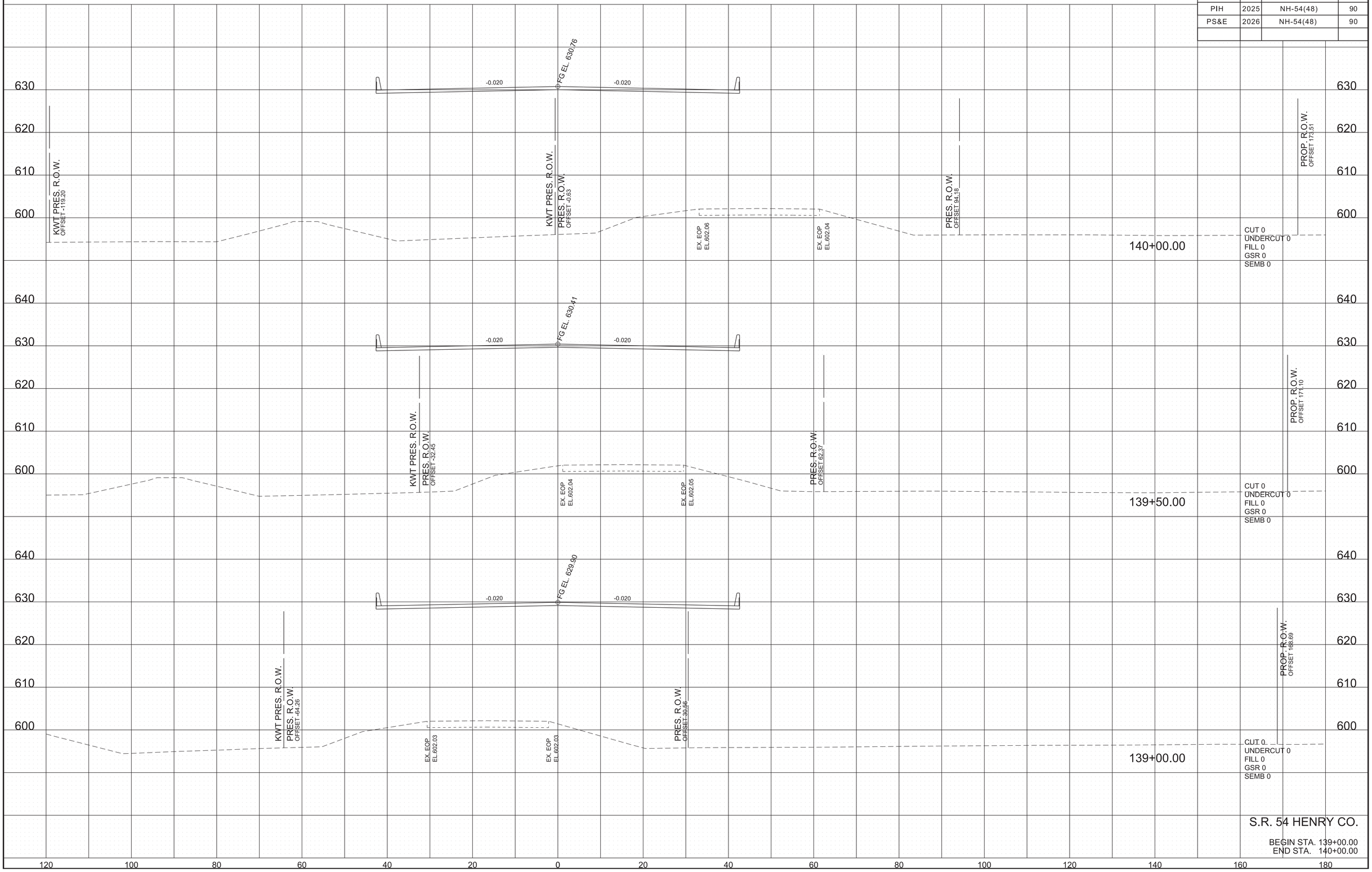


S.R. 54 HENRY CO.

BEGIN STA. 137+50.00
END STA. 138+50.00

2/9/2026 2:40:34 PM
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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	74
PIH	2025	NH-54(48)	90
PS&E	2026	NH-54(48)	90

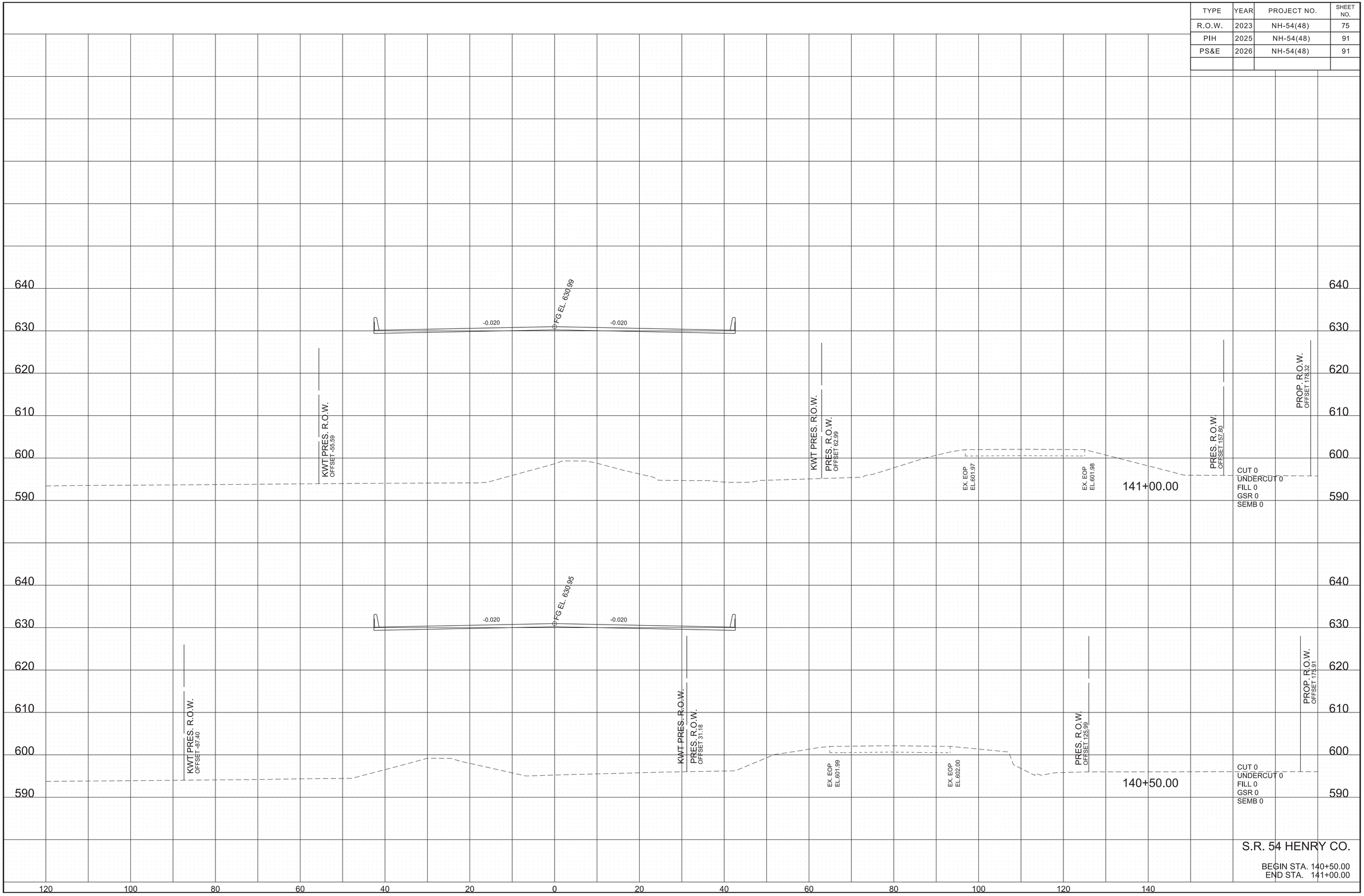


S.R. 54 HENRY CO.

BEGIN STA. 139+00.00
END STA. 140+00.00

2/9/2026 2:40:38 PM
T:\TDOT\Henry_SR54\SR54XSections.sht

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	75
PIH	2025	NH-54(48)	91
PS&E	2026	NH-54(48)	91

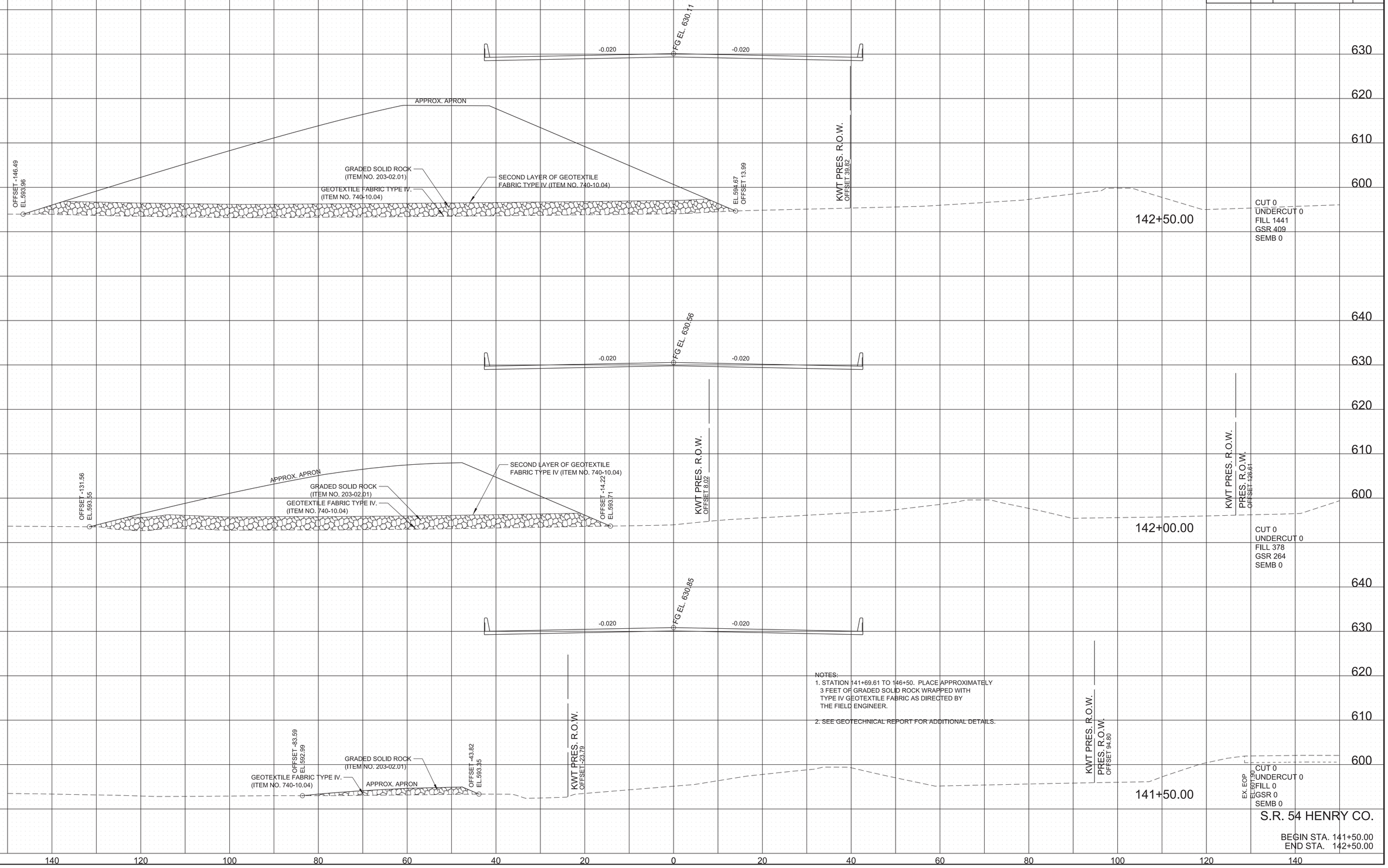


S.R. 54 HENRY CO.

BEGIN STA. 140+50.00
END STA. 141+00.00

2/9/2026 2:40:41 PM
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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	76
PIH	2025	NH-54(48)	92
PS&E	2026	NH-54(48)	92

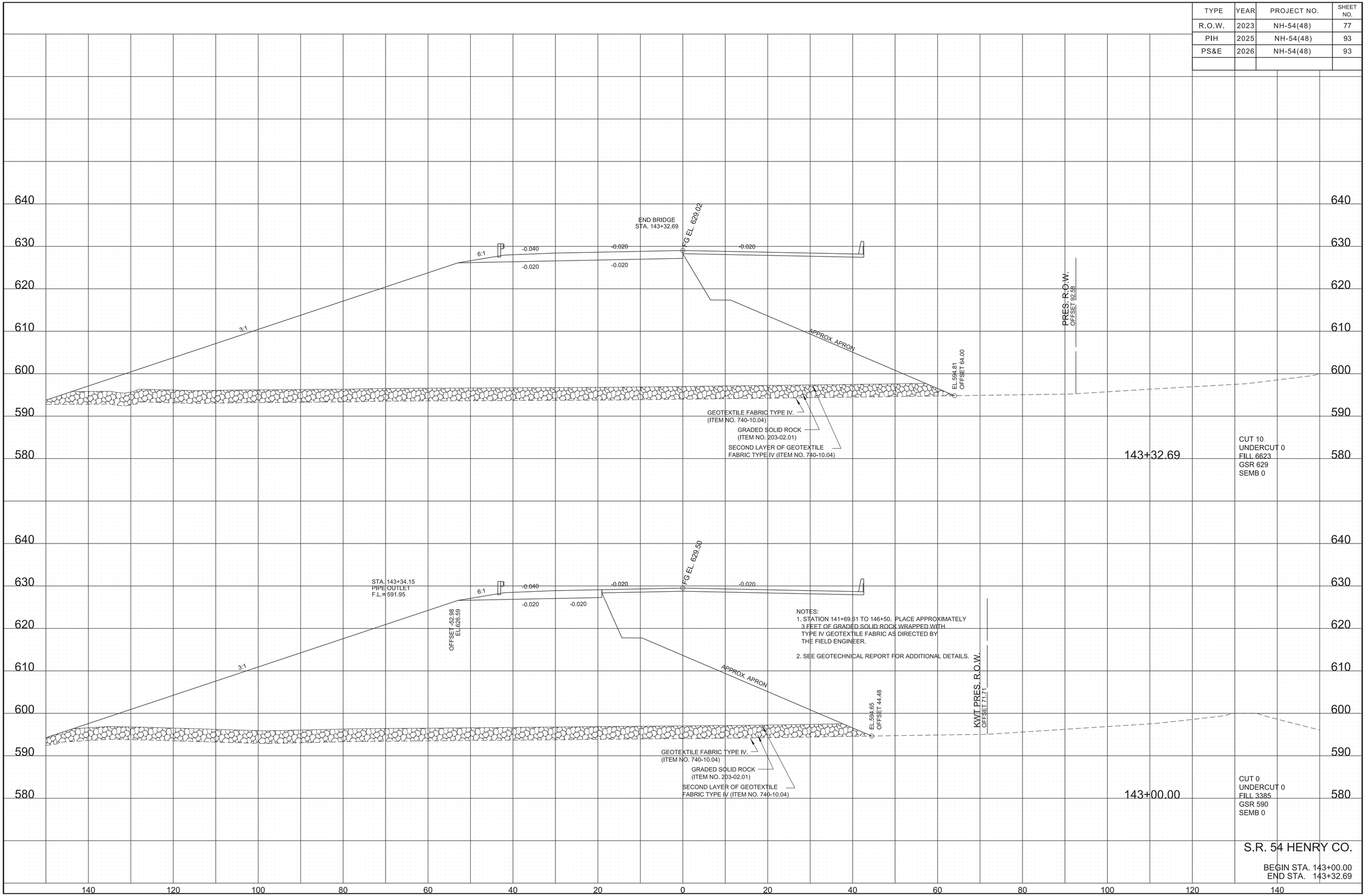


S.R. 54 HENRY CO.

BEGIN STA. 141+50.00
END STA. 142+50.00

2/9/2026 2:40:45 PM
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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	77
PIH	2025	NH-54(48)	93
PS&E	2026	NH-54(48)	93

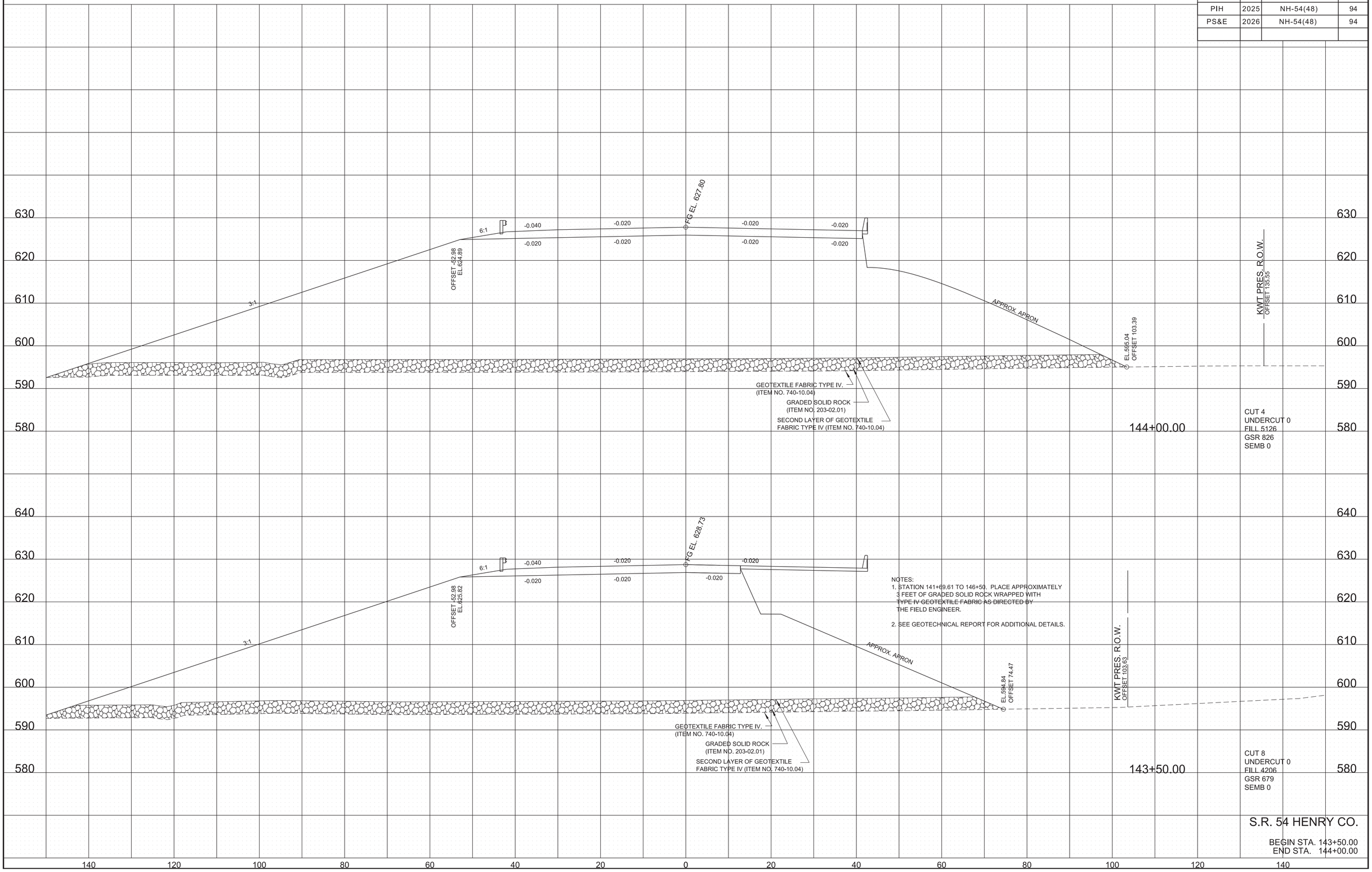


S.R. 54 HENRY CO.

BEGIN STA. 143+00.00
END STA. 143+32.69

2/9/2026 2:40:48 PM
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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	78
PIH	2025	NH-54(48)	94
PS&E	2026	NH-54(48)	94



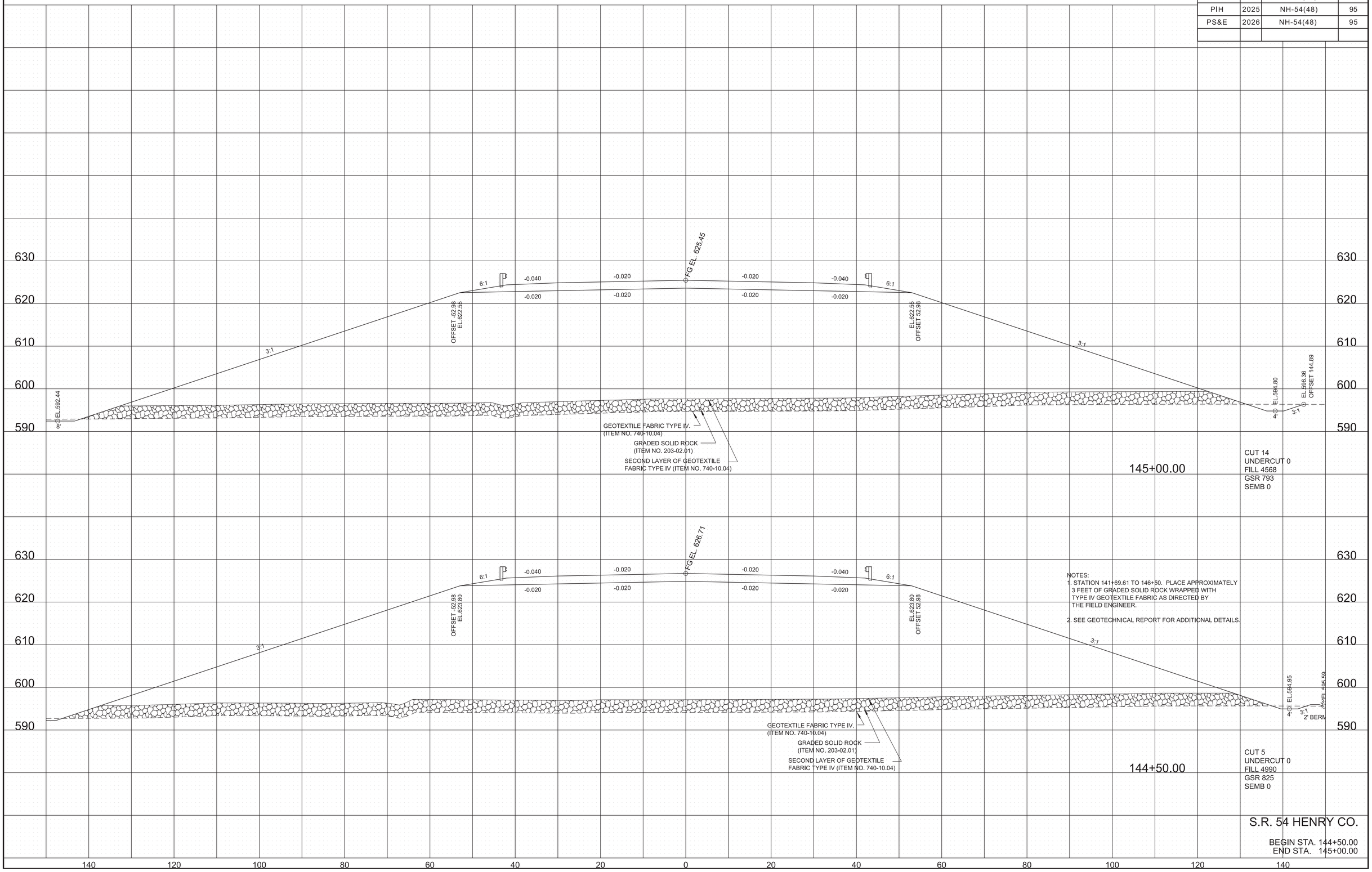
NOTES:
1. STATION 141+69.61 TO 146+50. PLACE APPROXIMATELY 3 FEET OF GRADED SOLID ROCK WRAPPED WITH TYPE IV GEOTEXTILE FABRIC AS DIRECTED BY THE FIELD ENGINEER.
2. SEE GEOTECHNICAL REPORT FOR ADDITIONAL DETAILS.

S.R. 54 HENRY CO.

BEGIN STA. 143+50.00
END STA. 144+00.00

2/9/2026 2:40:52 PM
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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	79
PIH	2025	NH-54(48)	95
PS&E	2026	NH-54(48)	95



NOTES:
1. STATION 141+69.61 TO 146+50. PLACE APPROXIMATELY 3 FEET OF GRADED SOLID ROCK WRAPPED WITH TYPE IV GEOTEXTILE FABRIC AS DIRECTED BY THE FIELD ENGINEER.

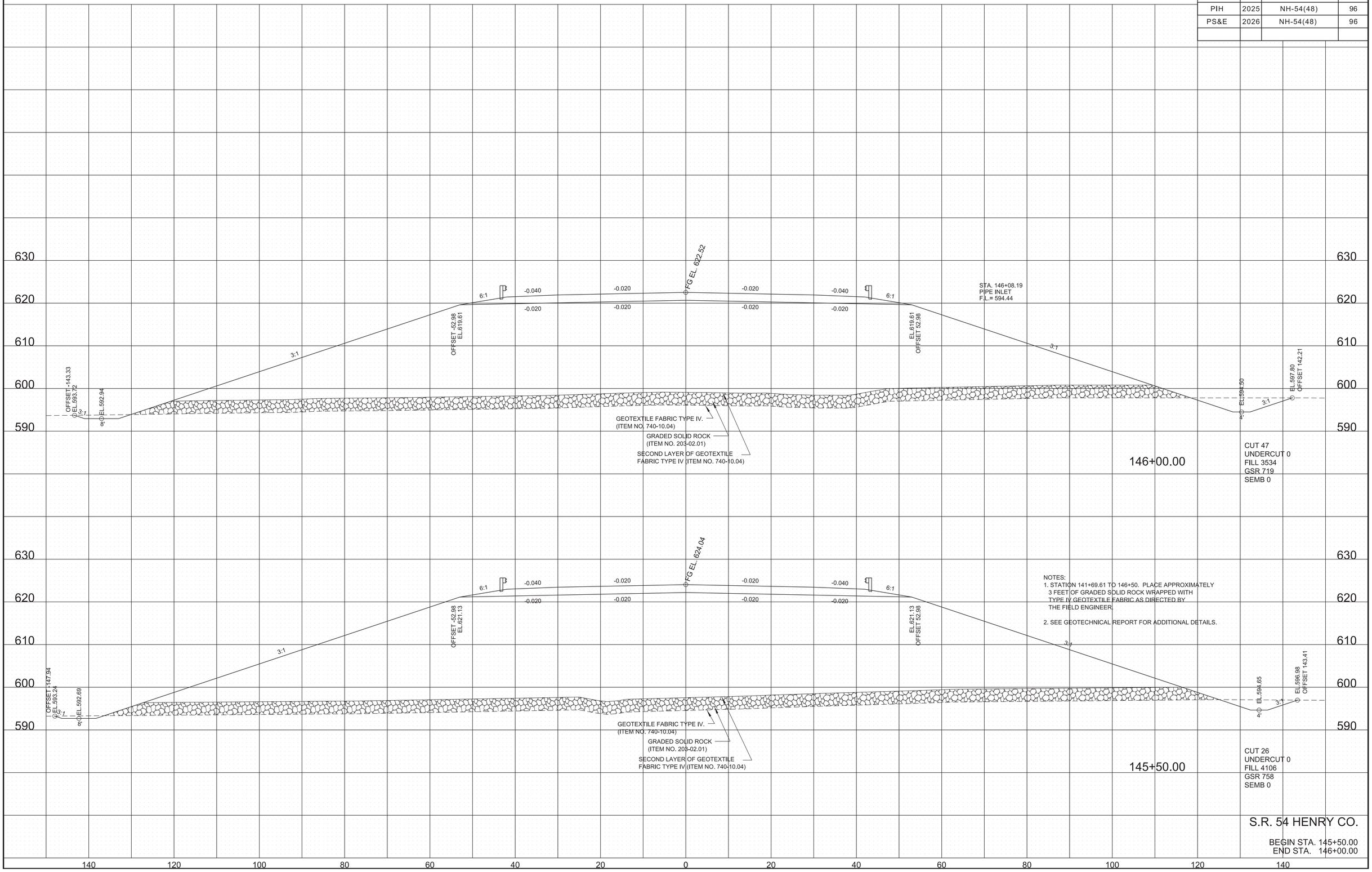
2. SEE GEOTECHNICAL REPORT FOR ADDITIONAL DETAILS.

S.R. 54 HENRY CO.

BEGIN STA. 144+50.00
END STA. 145+00.00

2/9/2026 2:40:56 PM
T:\TDOT\Henry_SR54\SR54XSections.sht

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	80
PIH	2025	NH-54(48)	96
PS&E	2026	NH-54(48)	96

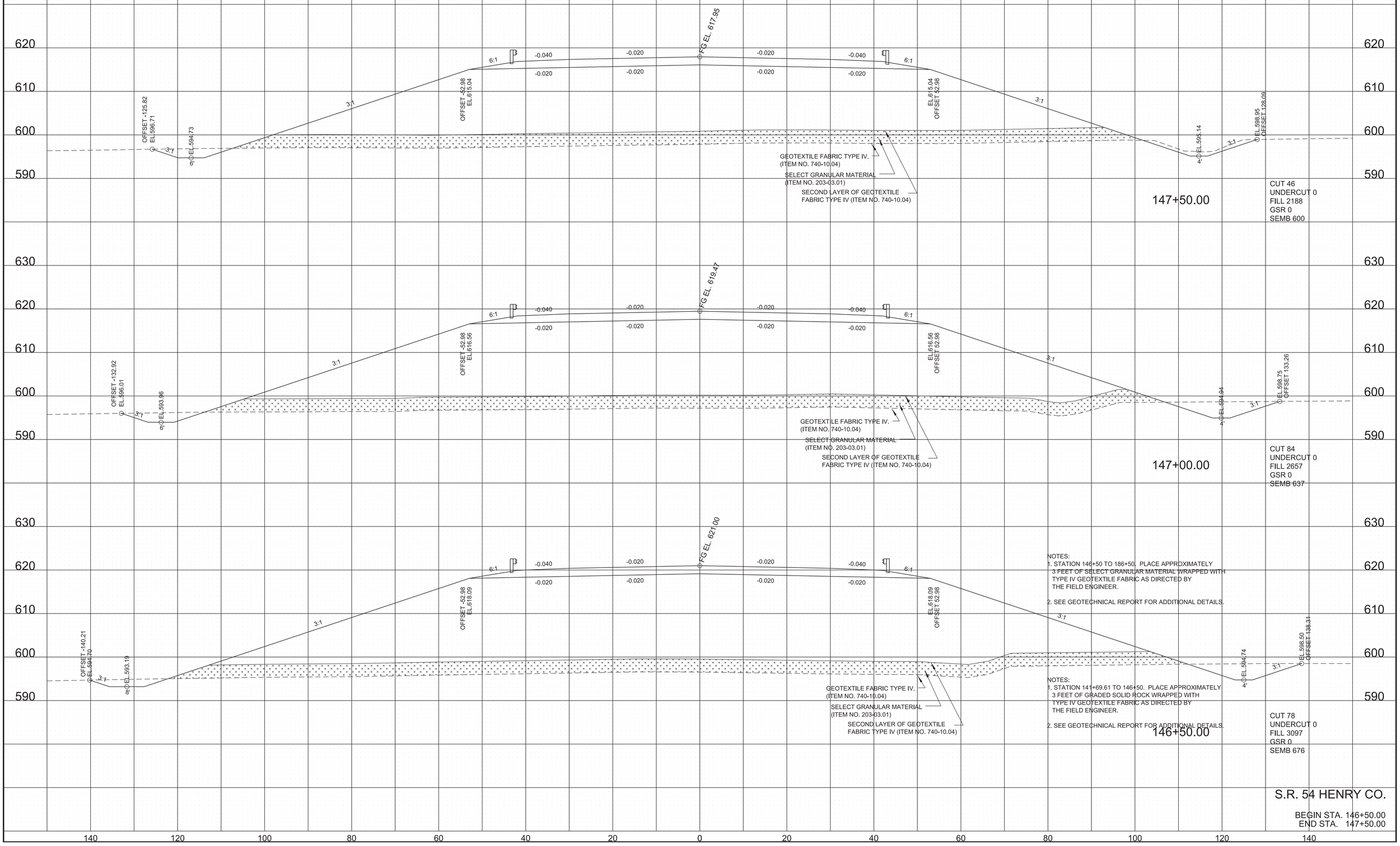


S.R. 54 HENRY CO.

BEGIN STA. 145+50.00
END STA. 146+00.00

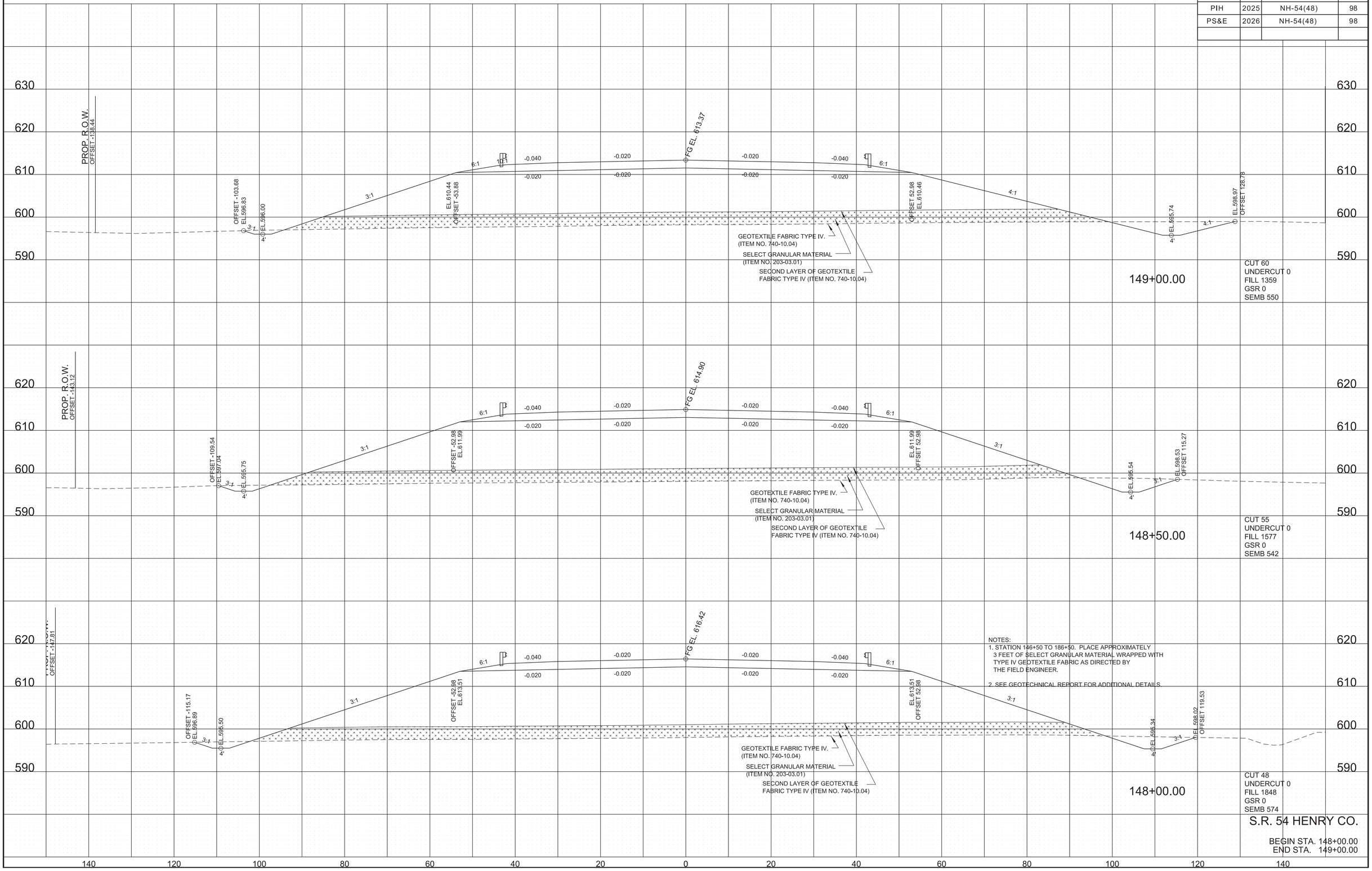
2/9/2026 2:41:00 PM
T:\TDOT\Henry_SR54\SR54XSections.sht

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	81
PIH	2025	NH-54(48)	97
PS&E	2026	NH-54(48)	97



2/9/2026 2:41:03 PM
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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	82
PIH	2025	NH-54(48)	98
PS&E	2026	NH-54(48)	98

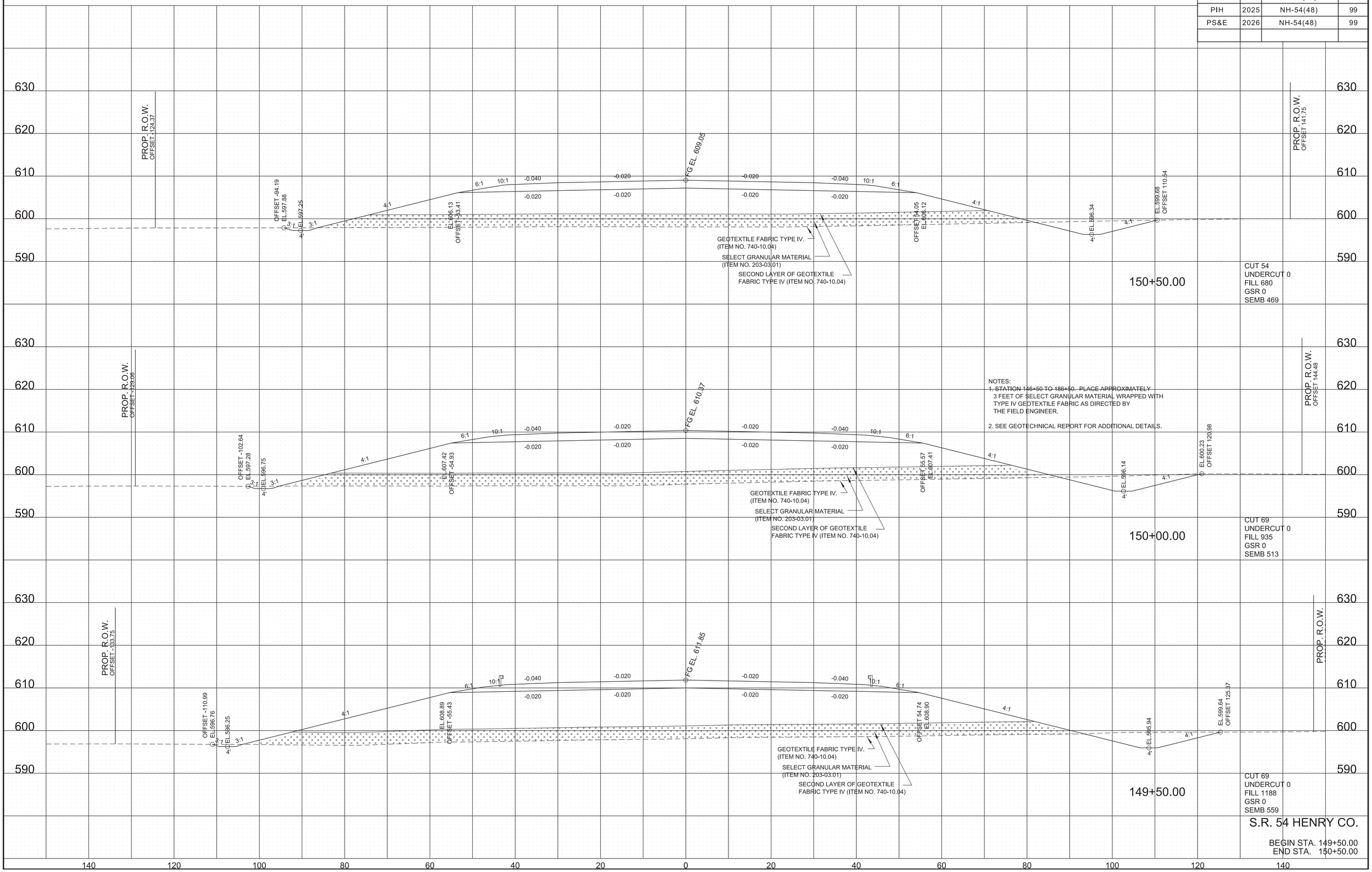


S.R. 54 HENRY CO.

BEGIN STA. 148+00.00
END STA. 149+00.00

2/9/2026 2:41:07 PM
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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	83
PIH	2025	NH-54(48)	99
PS&E	2026	NH-54(48)	99



NOTES:
1. STATION 146+50 TO 186+50. PLACE APPROXIMATELY 3 FEET OF SELECT GRANULAR MATERIAL WRAPPED WITH TYPE IV GEOTEXTILE FABRIC AS DIRECTED BY THE FIELD ENGINEER.

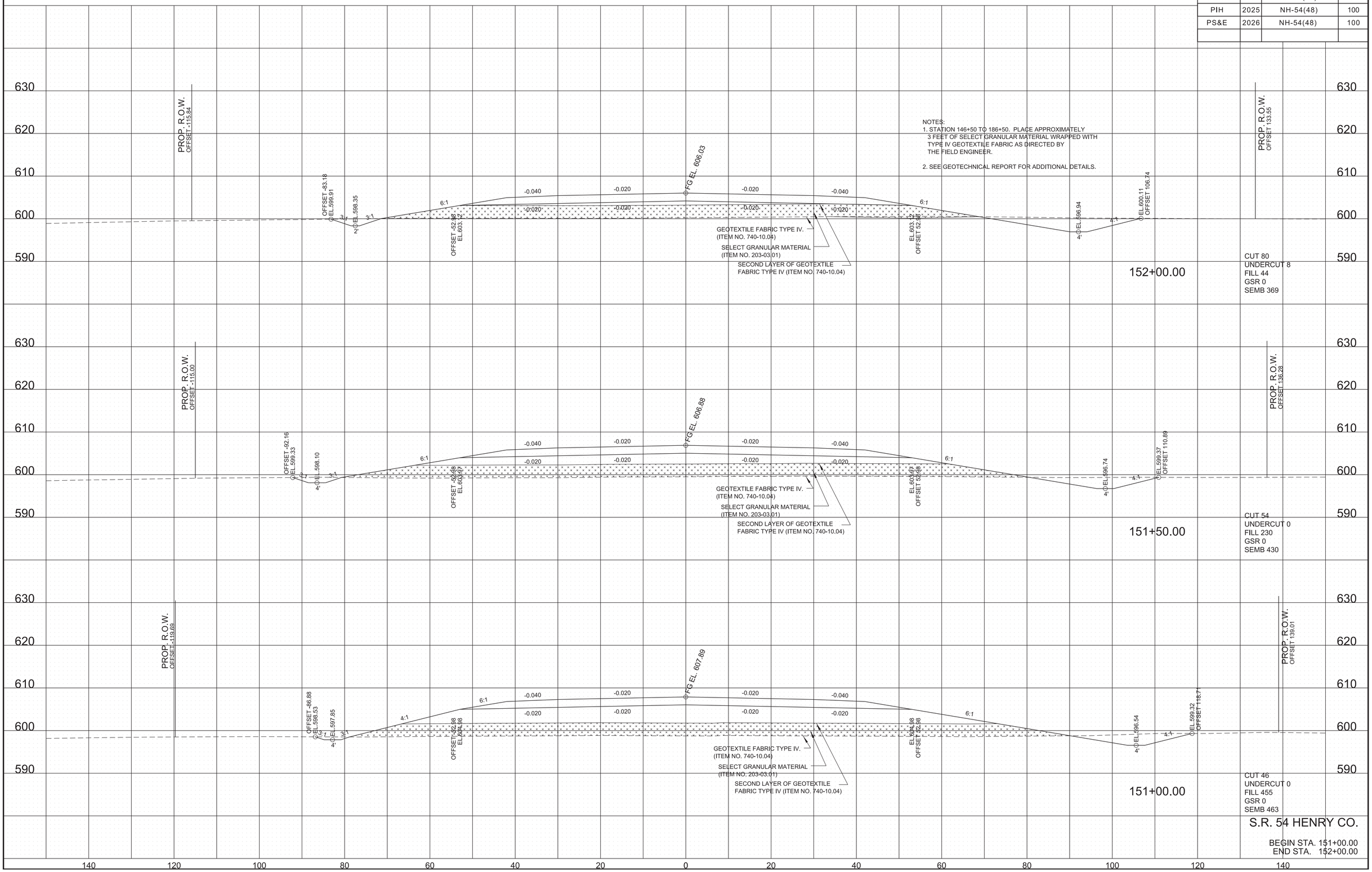
2. SEE GEOTECHNICAL REPORT FOR ADDITIONAL DETAILS.

S.R. 54 HENRY CO.

BEGIN STA. 149+50.00
END STA. 150+50.00

2/9/2026 2:41:11 PM
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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	84
PIH	2025	NH-54(48)	100
PS&E	2026	NH-54(48)	100



S.R. 54 HENRY CO.

BEGIN STA. 151+00.00
END STA. 152+00.00

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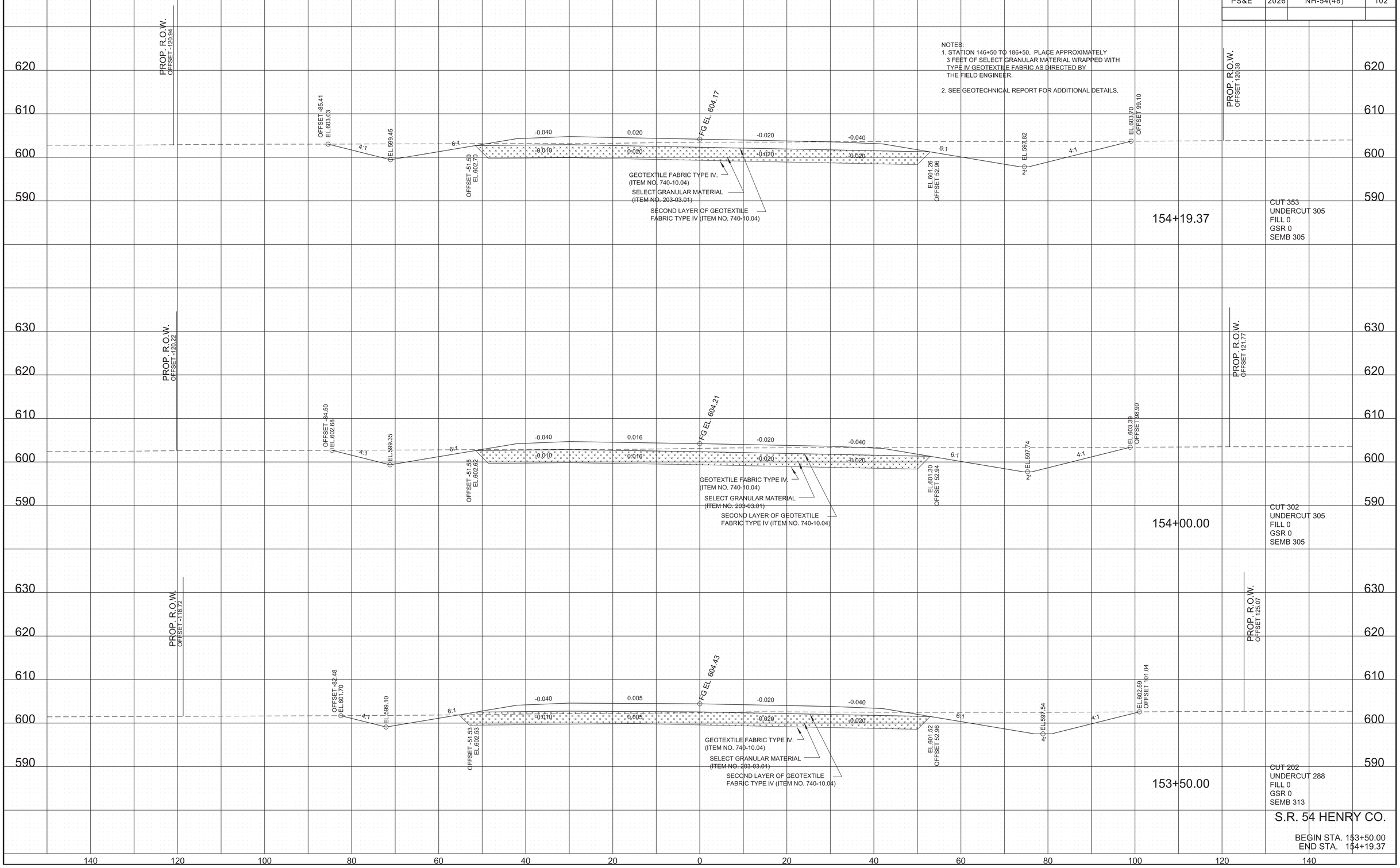
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	85
PIH	2025	NH-54(48)	101
PS&E	2026	NH-54(48)	101

S.R. 54 HENRY CO.

BEGIN STA. 152+30.73
END STA. 153+00.00

2/9/2026 2:41:18 PM
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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	86
PIH	2025	NH-54(48)	102
PS&E	2026	NH-54(48)	102



NOTES:
1. STATION 146+50 TO 186+50. PLACE APPROXIMATELY 3 FEET OF SELECT GRANULAR MATERIAL WRAPPED WITH TYPE IV GEOTEXTILE FABRIC AS DIRECTED BY THE FIELD ENGINEER.

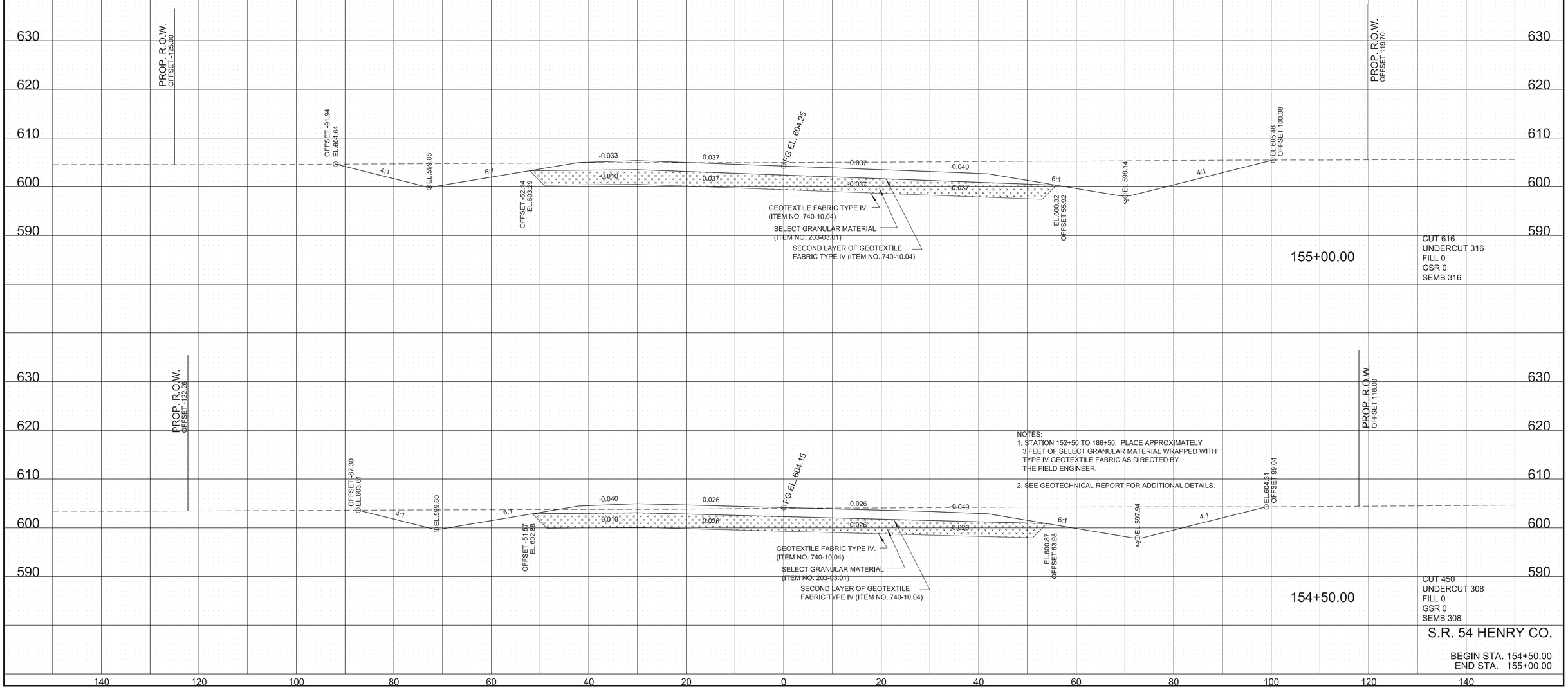
2. SEE GEOTECHNICAL REPORT FOR ADDITIONAL DETAILS.

S.R. 54 HENRY CO.

BEGIN STA. 153+50.00
END STA. 154+19.37

2/9/2026 2:41:22 PM
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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	87
PIH	2025	NH-54(48)	103
PS&E	2026	NH-54(48)	103

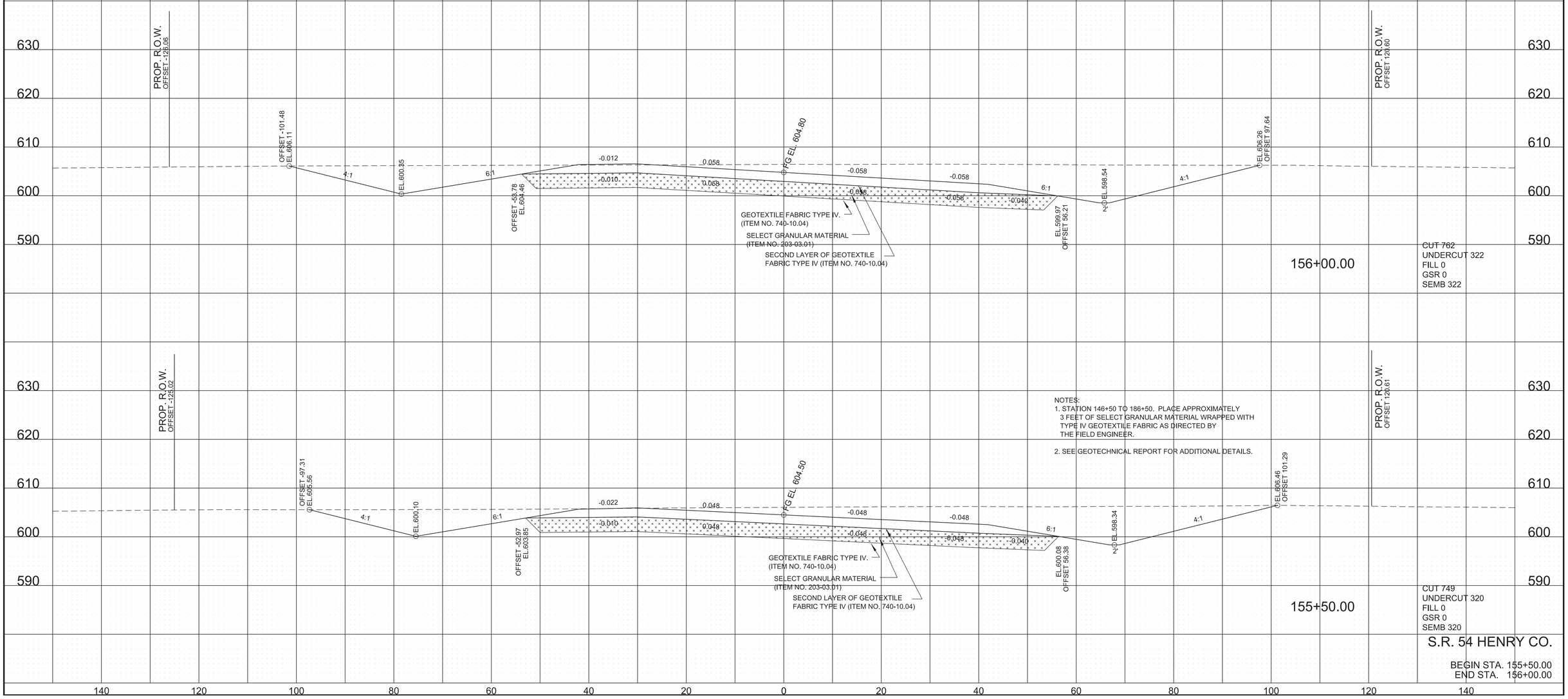


S.R. 54 HENRY CO.

BEGIN STA. 154+50.00
END STA. 155+00.00

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	88
PIH	2025	NH-54(48)	104
PS&E	2026	NH-54(48)	104



NOTES:
1. STATION 146+50 TO 186+50. PLACE APPROXIMATELY 3 FEET OF SELECT GRANULAR MATERIAL WRAPPED WITH TYPE IV GEOTEXTILE FABRIC AS DIRECTED BY THE FIELD ENGINEER.

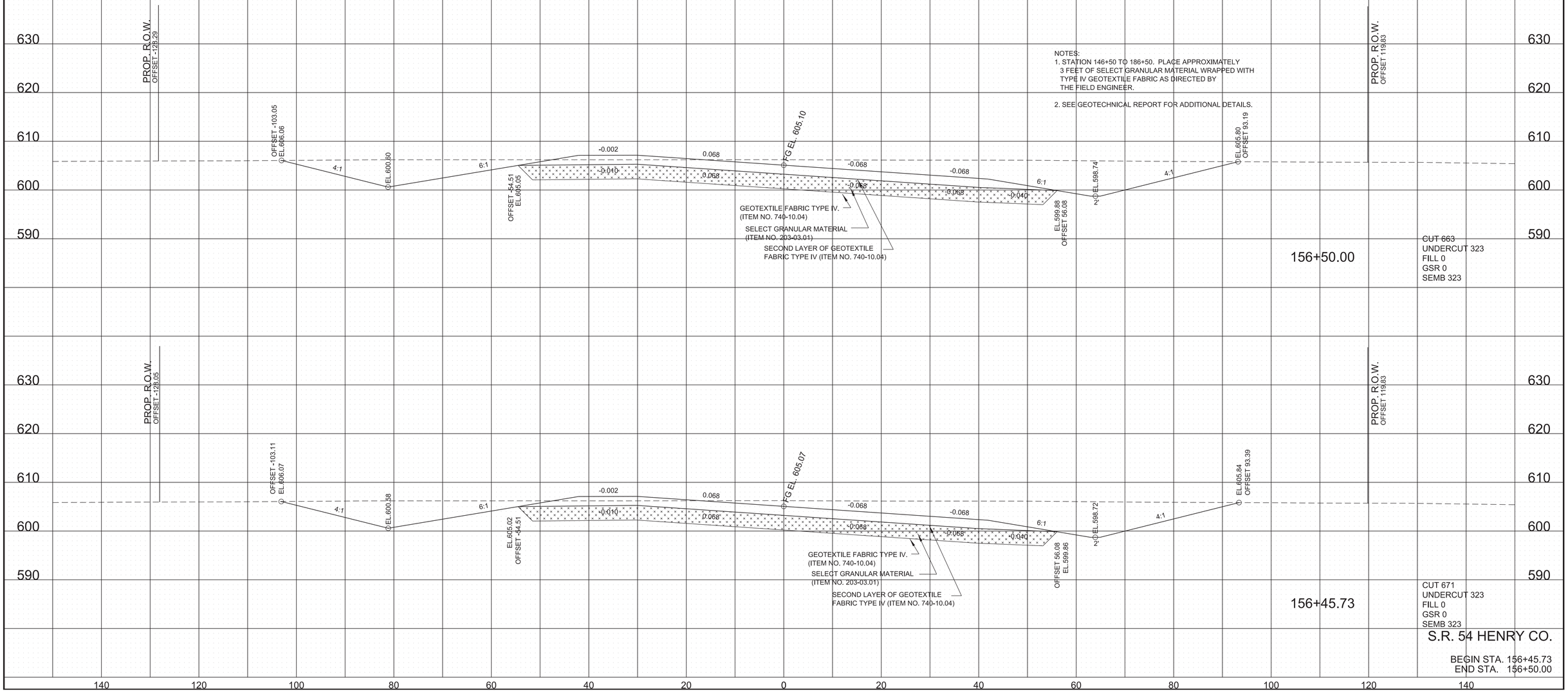
2. SEE GEOTECHNICAL REPORT FOR ADDITIONAL DETAILS.

S.R. 54 HENRY CO.

BEGIN STA. 155+50.00
END STA. 156+00.00

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	89
PIH	2025	NH-54(48)	105
PS&E	2026	NH-54(48)	105

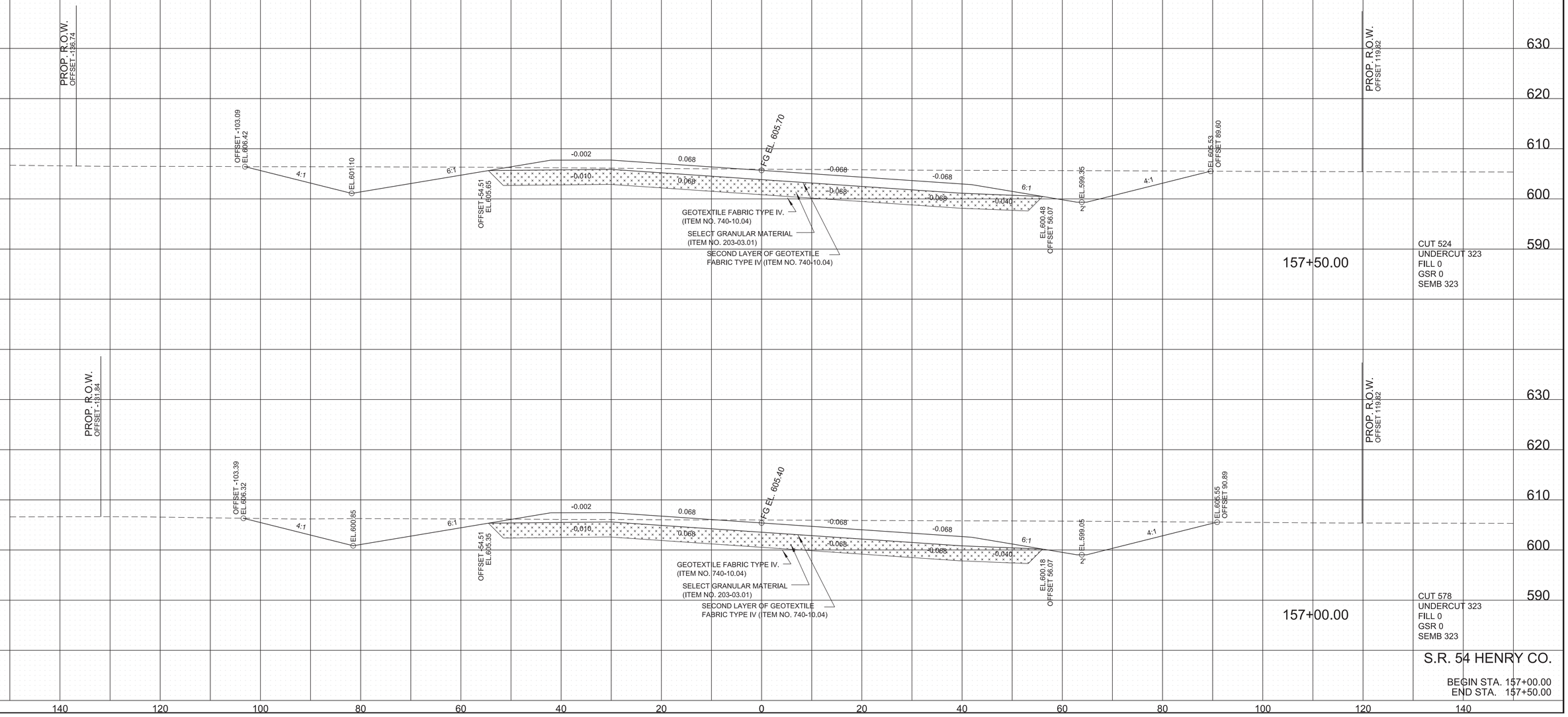


S.R. 54 HENRY CO.

BEGIN STA. 156+45.73
END STA. 156+50.00

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	90
PIH	2025	NH-54(48)	106
PS&E	2026	NH-54(48)	106

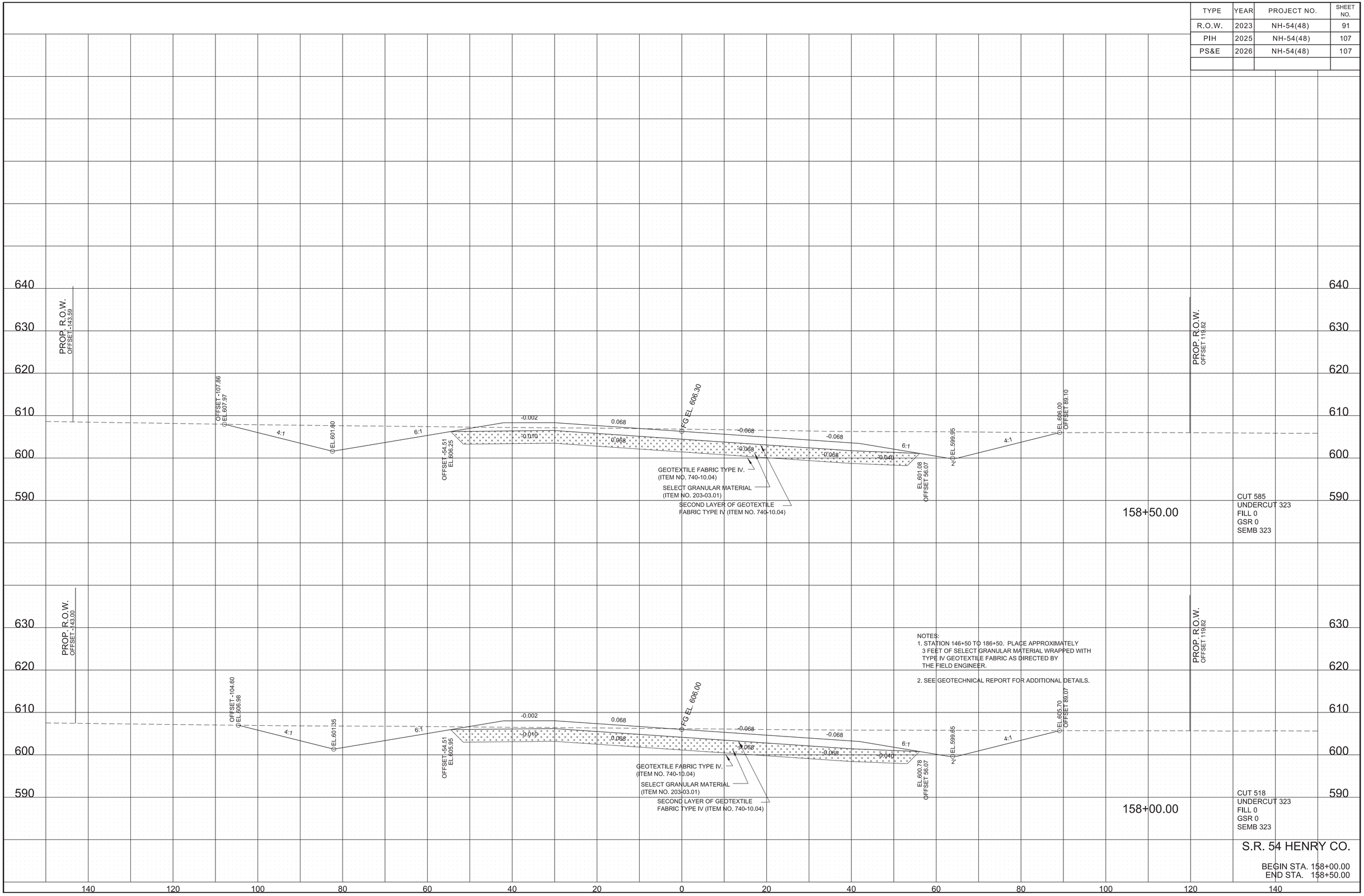


S.R. 54 HENRY CO.

BEGIN STA. 157+00.00
END STA. 157+50.00

2/9/2026 2:41:37 PM
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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	91
PIH	2025	NH-54(48)	107
PS&E	2026	NH-54(48)	107



NOTES:
1. STATION 146+50 TO 186+50. PLACE APPROXIMATELY 3 FEET OF SELECT GRANULAR MATERIAL WRAPPED WITH TYPE IV GEOTEXTILE FABRIC AS DIRECTED BY THE FIELD ENGINEER.

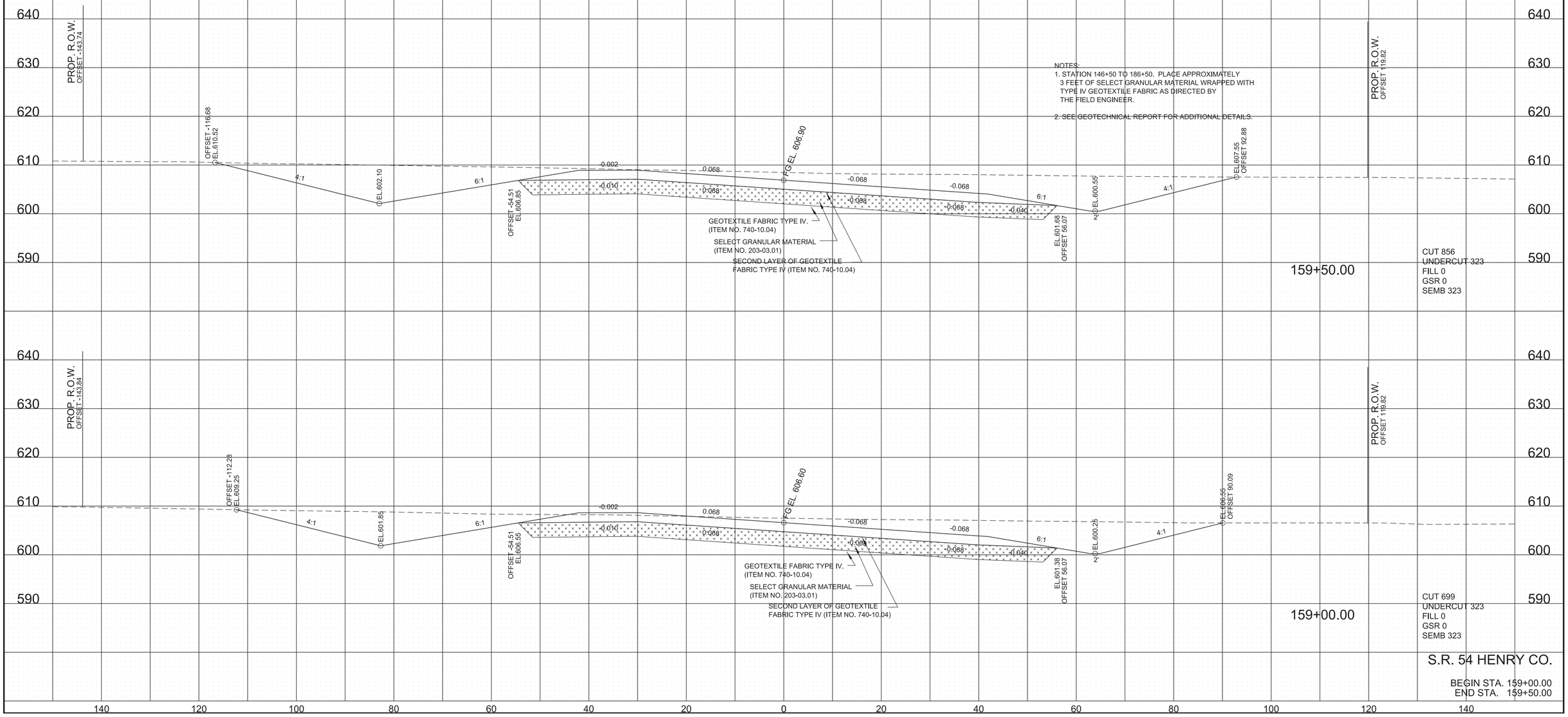
2. SEE GEOTECHNICAL REPORT FOR ADDITIONAL DETAILS.

S.R. 54 HENRY CO.

BEGIN STA. 158+00.00
END STA. 158+50.00

2/9/2026 2:41:40 PM
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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	92
PIH	2025	NH-54(48)	108
PS&E	2026	NH-54(48)	108

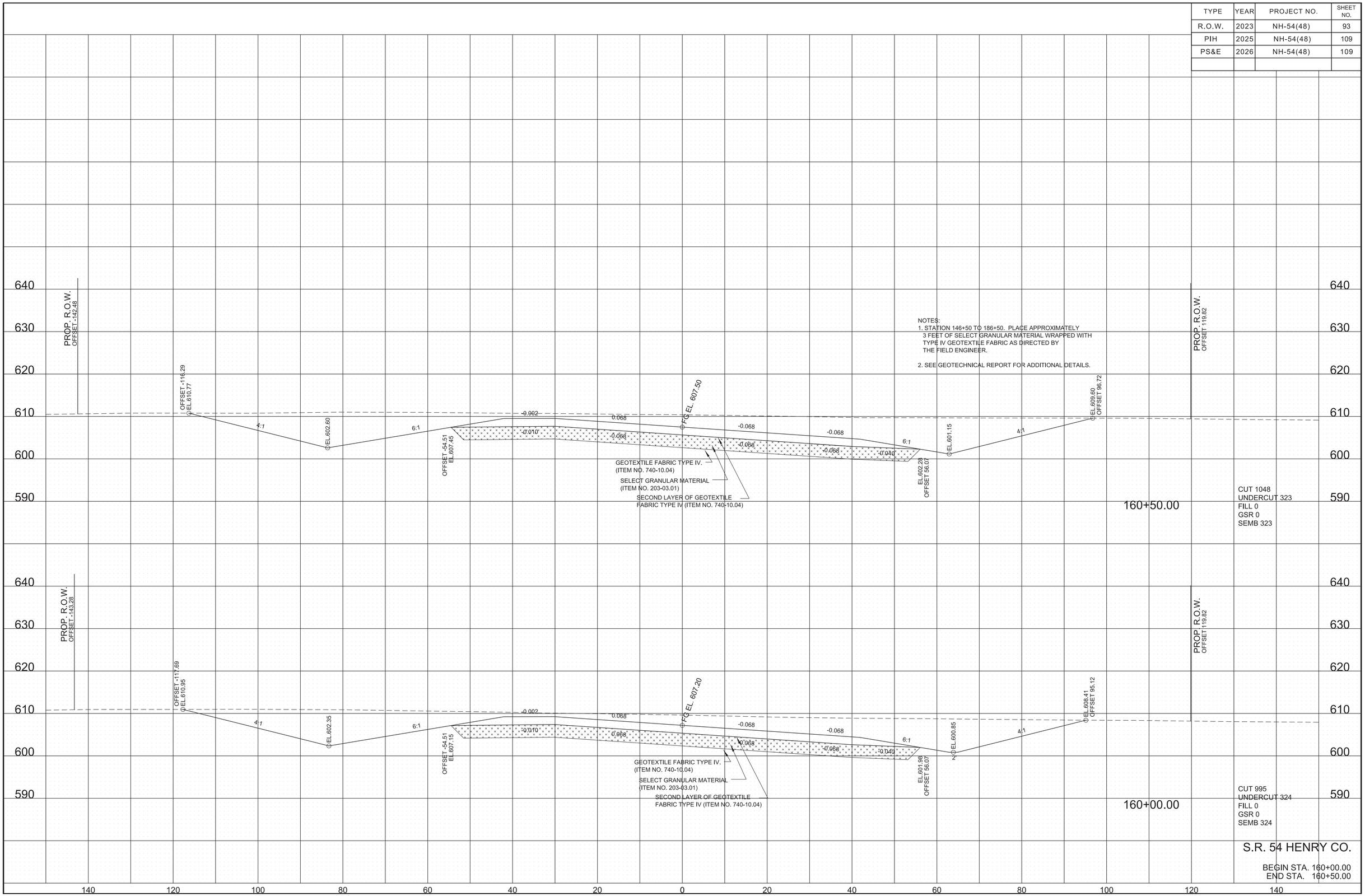


S.R. 54 HENRY CO.

BEGIN STA. 159+00.00
END STA. 159+50.00

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	93
PIH	2025	NH-54(48)	109
PS&E	2026	NH-54(48)	109

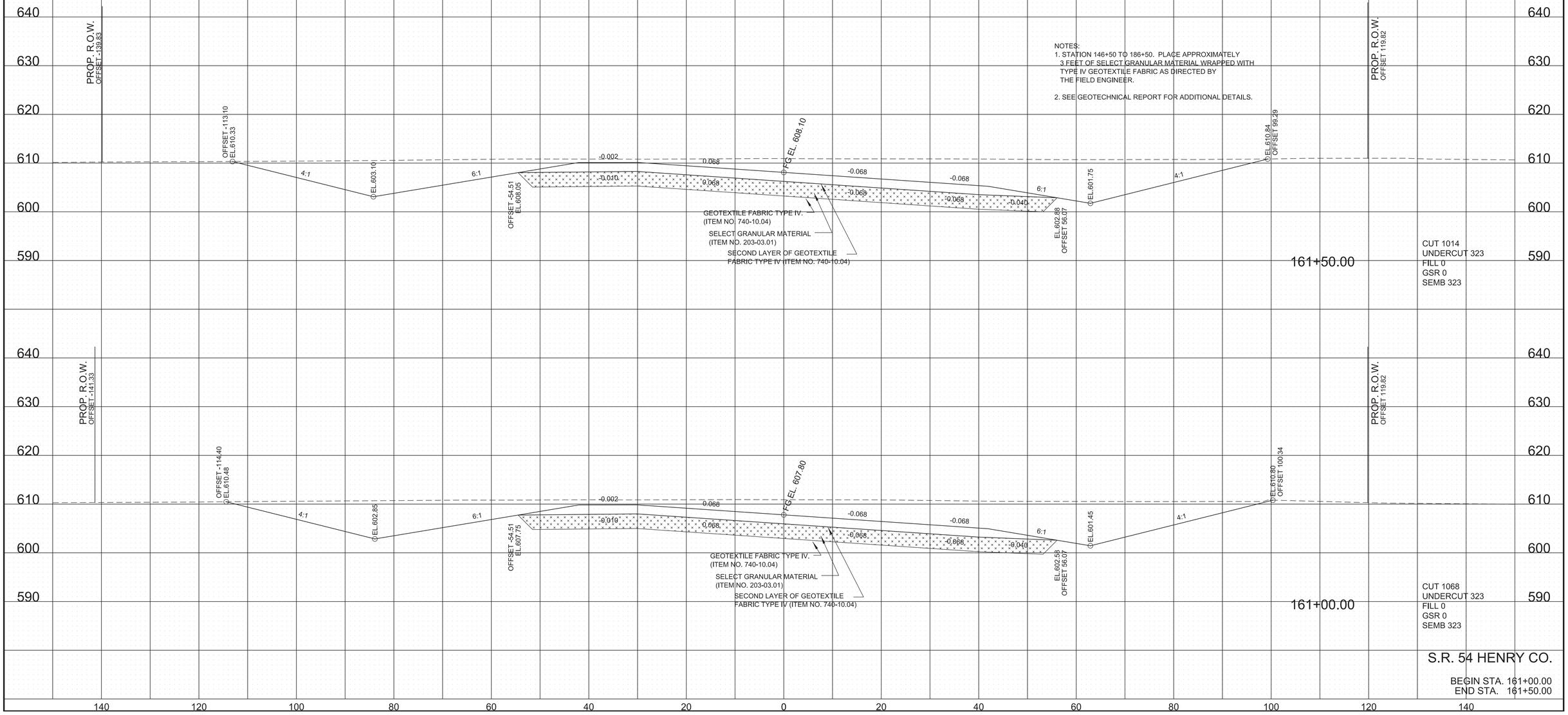


S.R. 54 HENRY CO.

BEGIN STA. 160+00.00
END STA. 160+50.00

2/9/2026 2:41:48 PM
T:\TDOT\Henry_SR54\SR54XSections.sht

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	94
PIH	2025	NH-54(48)	110
PS&E	2026	NH-54(48)	110



S.R. 54 HENRY CO.

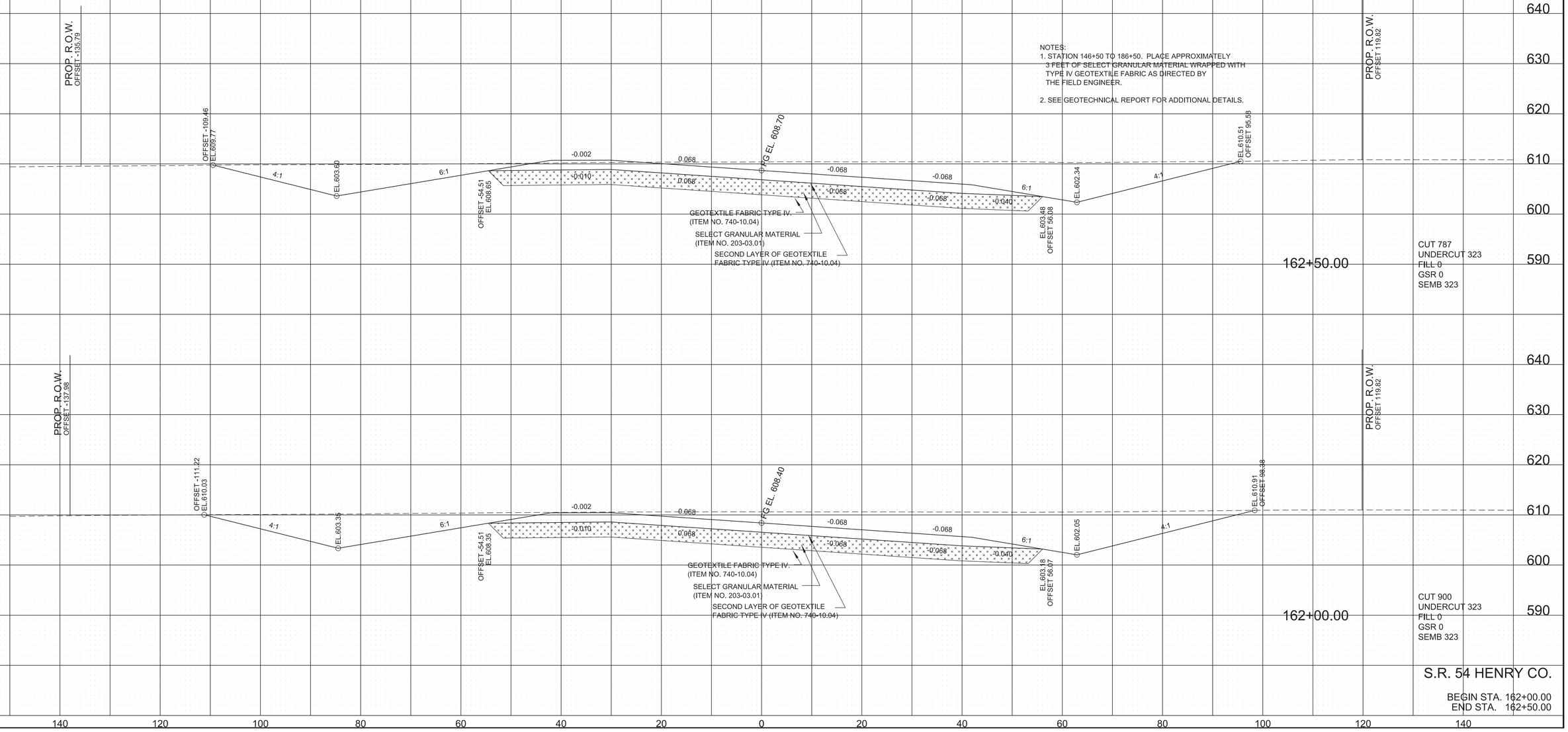
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END STA. 161+50.00

2/9/2026 2:41:51 PM
T:\TDOT\Henry_SR54\SR54XSections.sht

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	95
PIH	2025	NH-54(48)	111
PS&E	2026	NH-54(48)	111

NOTES:
1. STATION 146+50 TO 186+50. PLACE APPROXIMATELY 3 FEET OF SELECT GRANULAR MATERIAL WRAPPED WITH TYPE IV GEOTEXTILE FABRIC AS DIRECTED BY THE FIELD ENGINEER.

2. SEE GEOTECHNICAL REPORT FOR ADDITIONAL DETAILS.

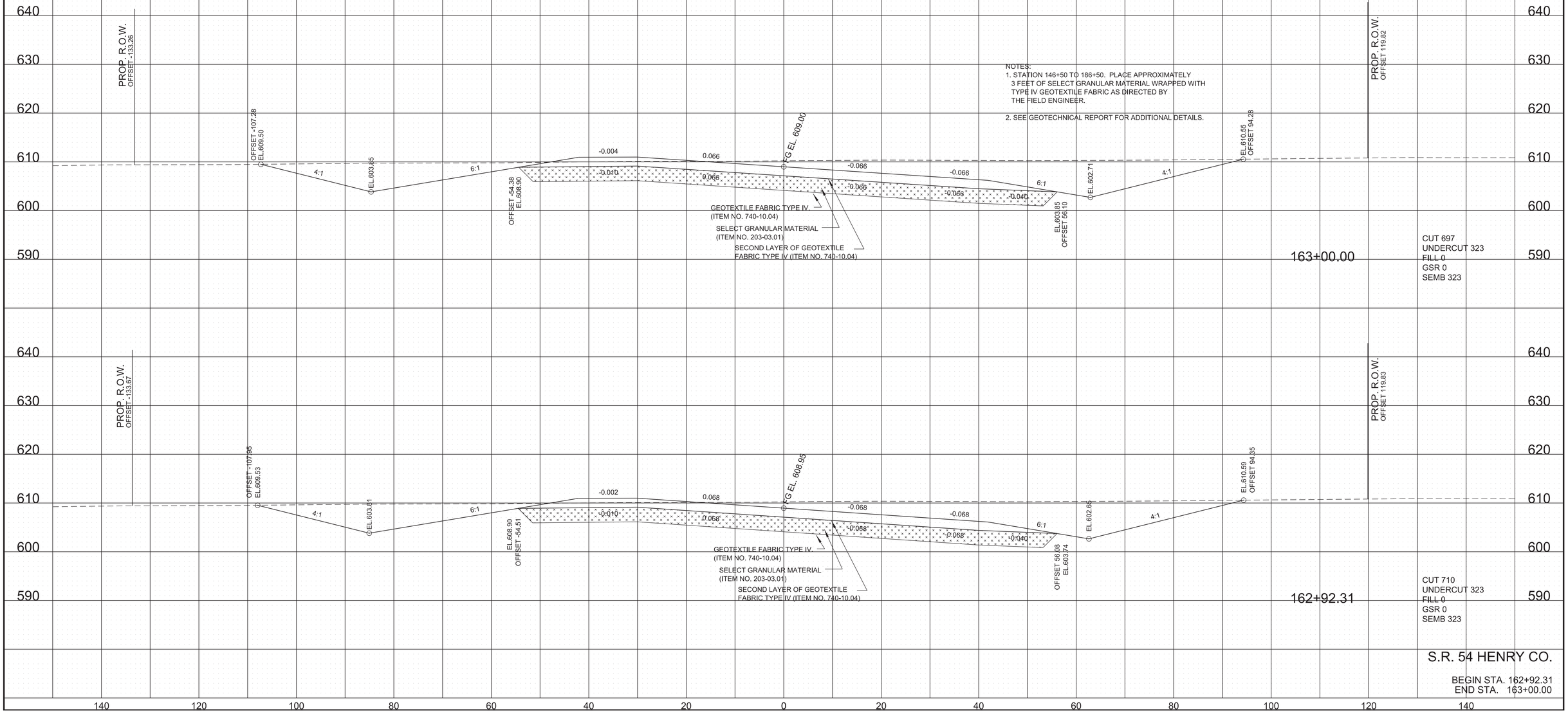


S.R. 54 HENRY CO.

BEGIN STA. 162+00.00
END STA. 162+50.00

2/9/2026 2:41:55 PM
T:\TDOT\Henry_SR54\SR54XSections.sht

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	96
PIH	2025	NH-54(48)	112
PS&E	2026	NH-54(48)	112



NOTES:
1. STATION 146+50 TO 186+50. PLACE APPROXIMATELY 3 FEET OF SELECT GRANULAR MATERIAL WRAPPED WITH TYPE IV GEOTEXTILE FABRIC AS DIRECTED BY THE FIELD ENGINEER.

2. SEE GEOTECHNICAL REPORT FOR ADDITIONAL DETAILS.

163+00.00

CUT 697
UNDERCUT 323
FILL 0
GSR 0
SEMB 323

162+92.31

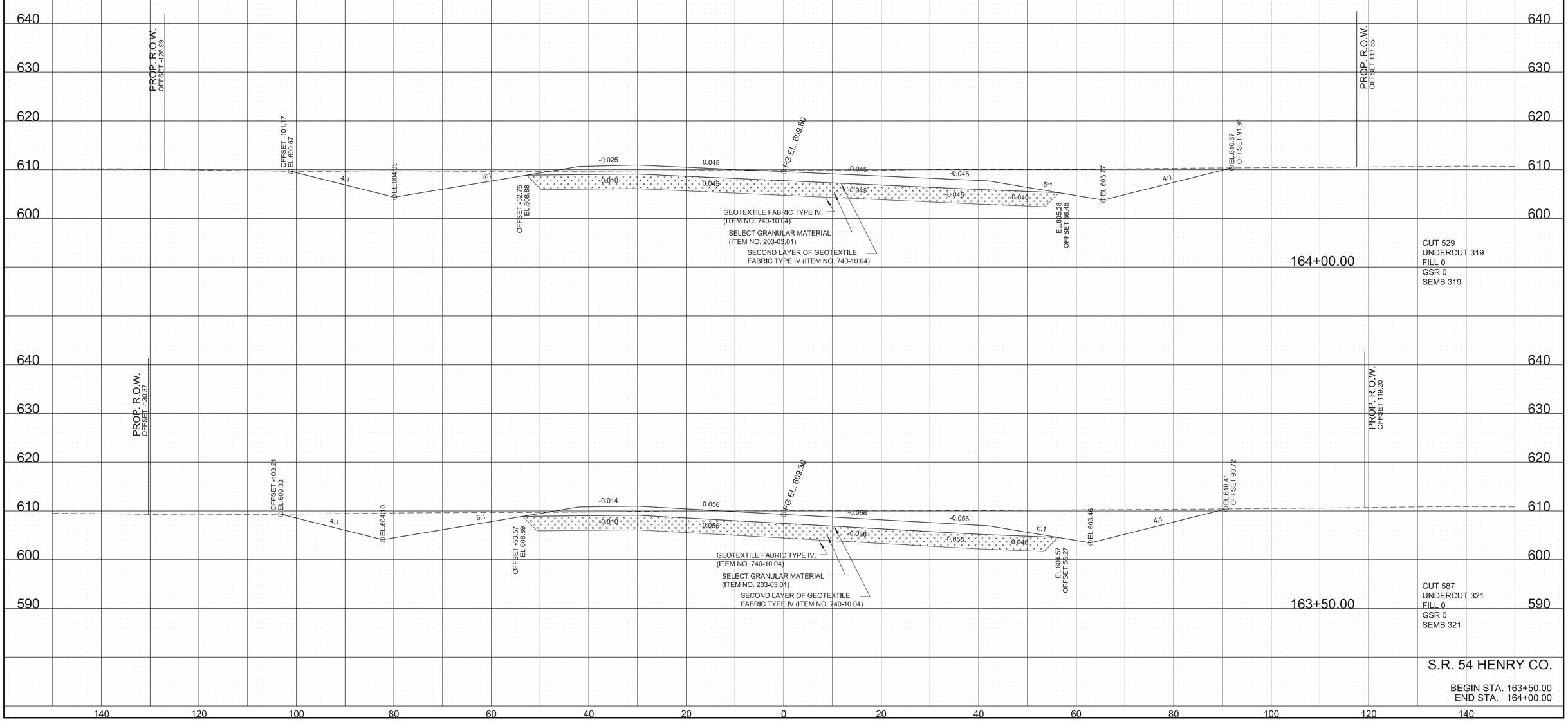
CUT 710
UNDERCUT 323
FILL 0
GSR 0
SEMB 323

S.R. 54 HENRY CO.

BEGIN STA. 162+92.31
END STA. 163+00.00

2/9/2026 2:41:59 PM
T:\TDOT\Henry_SR54\SR54XSections.sht

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	97
PIH	2025	NH-54(48)	113
PS&E	2026	NH-54(48)	113

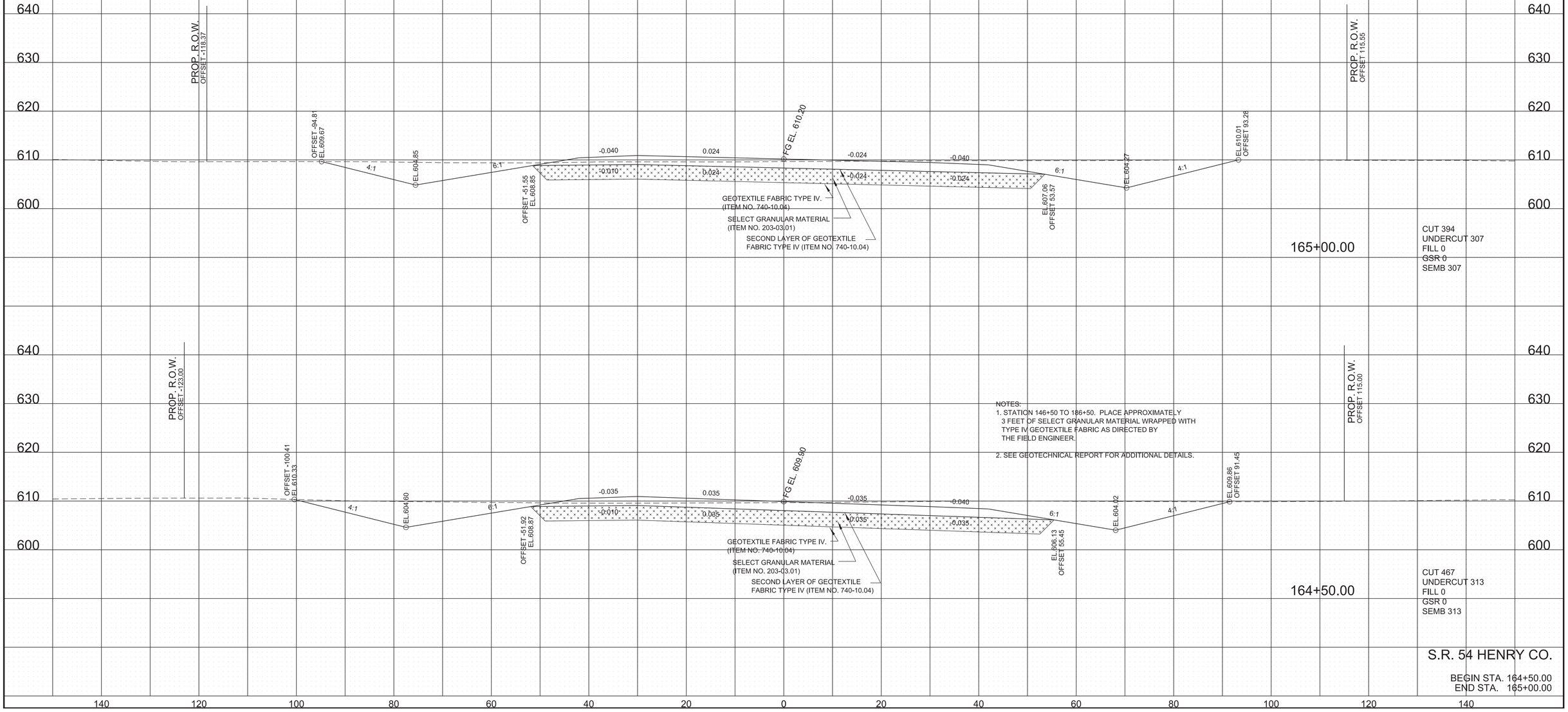


S.R. 54 HENRY CO.

BEGIN STA. 163+50.00
END STA. 164+00.00

2/9/2026 2:42:02 PM
T:\TDOT\Henry_SR54\SR54XSections.sht

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	98
PIH	2025	NH-54(48)	114
PS&E	2026	NH-54(48)	114

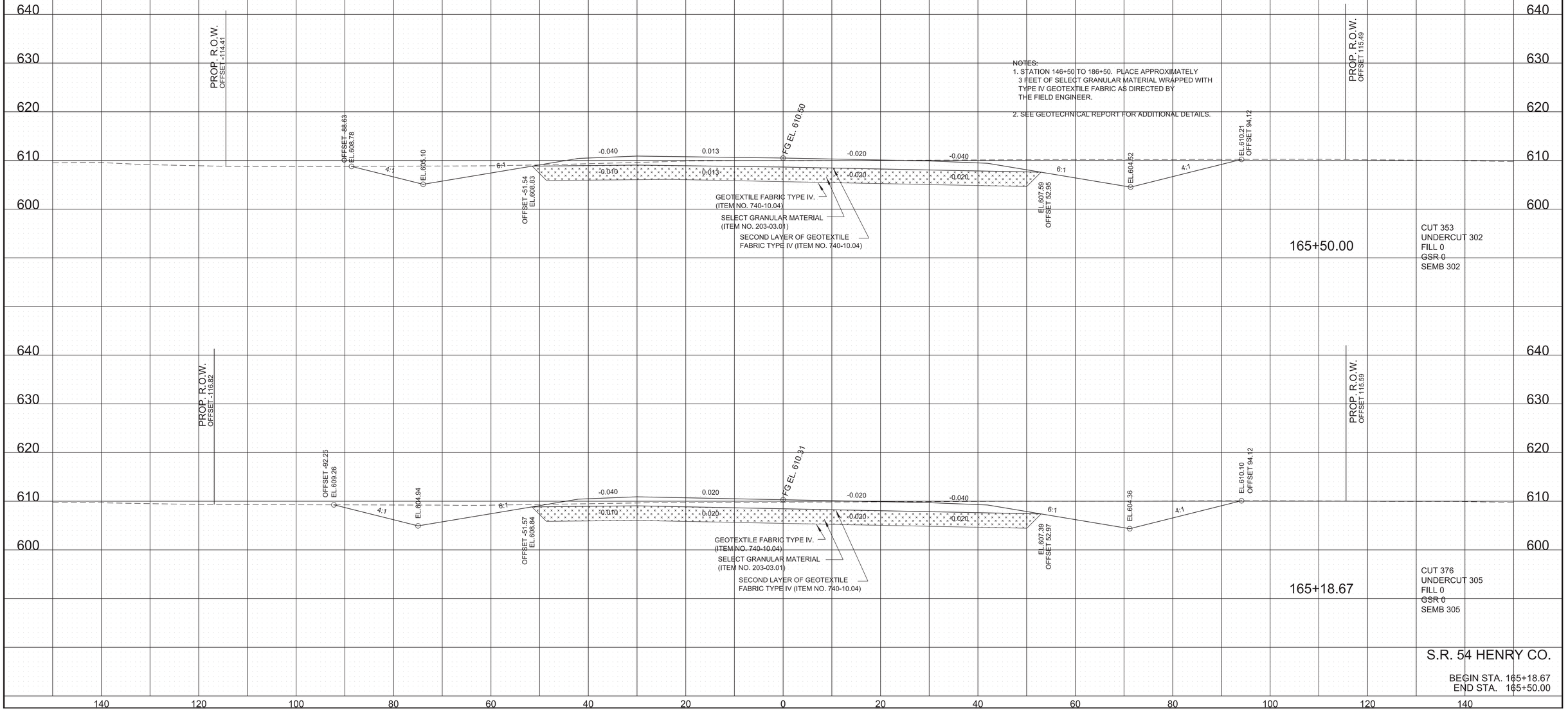


S.R. 54 HENRY CO.

BEGIN STA. 164+50.00
END STA. 165+00.00

2/9/2026 2:42:06 PM
T:\TDOT\Henry_SR54\SR54XSections.sht

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	99
PIH	2025	NH-54(48)	115
PS&E	2026	NH-54(48)	115

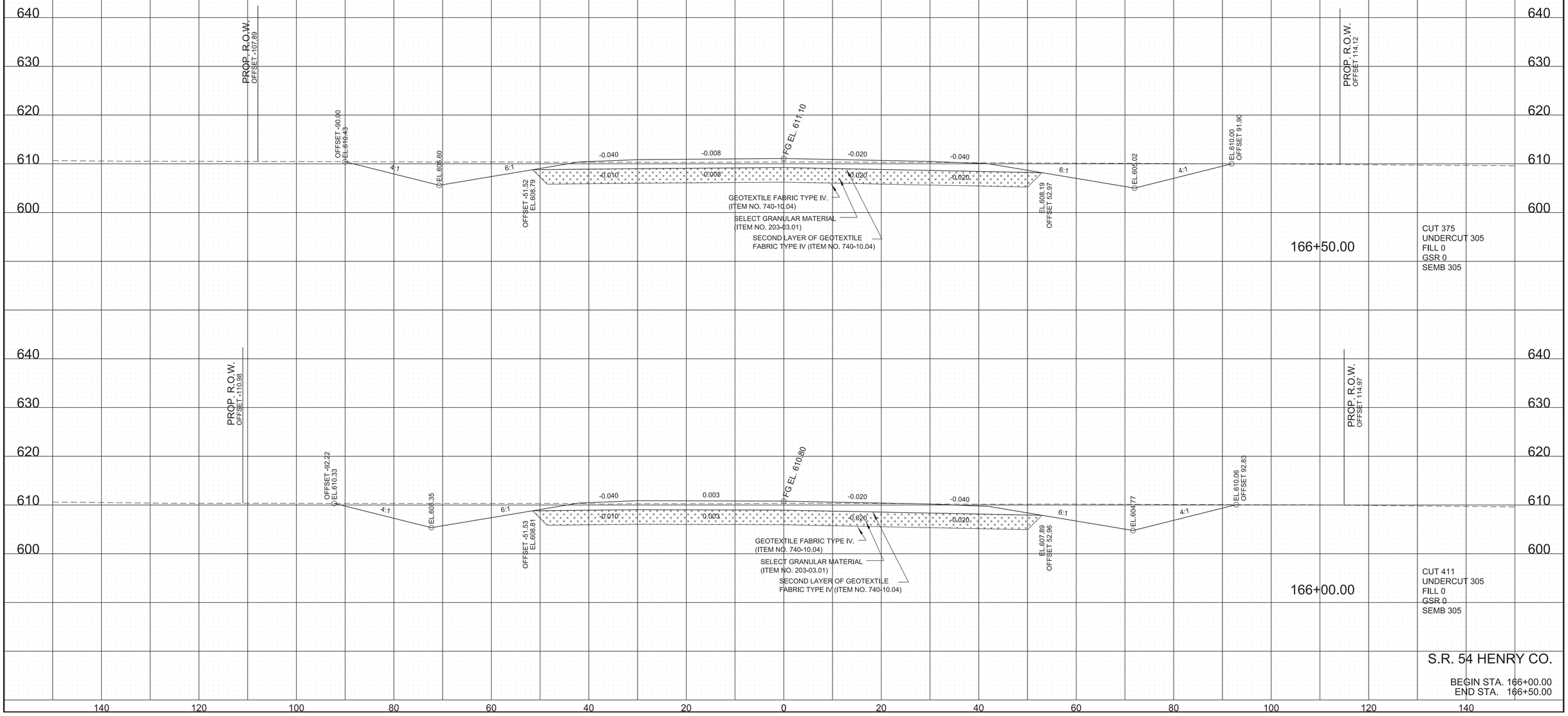


S.R. 54 HENRY CO.

BEGIN STA. 165+18.67
END STA. 165+50.00

2/9/2026 2:42:10 PM
T:\TDOT\Henry_SR54\SR54XSections.sht

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	100
PIH	2025	NH-54(48)	116
PS&E	2026	NH-54(48)	116

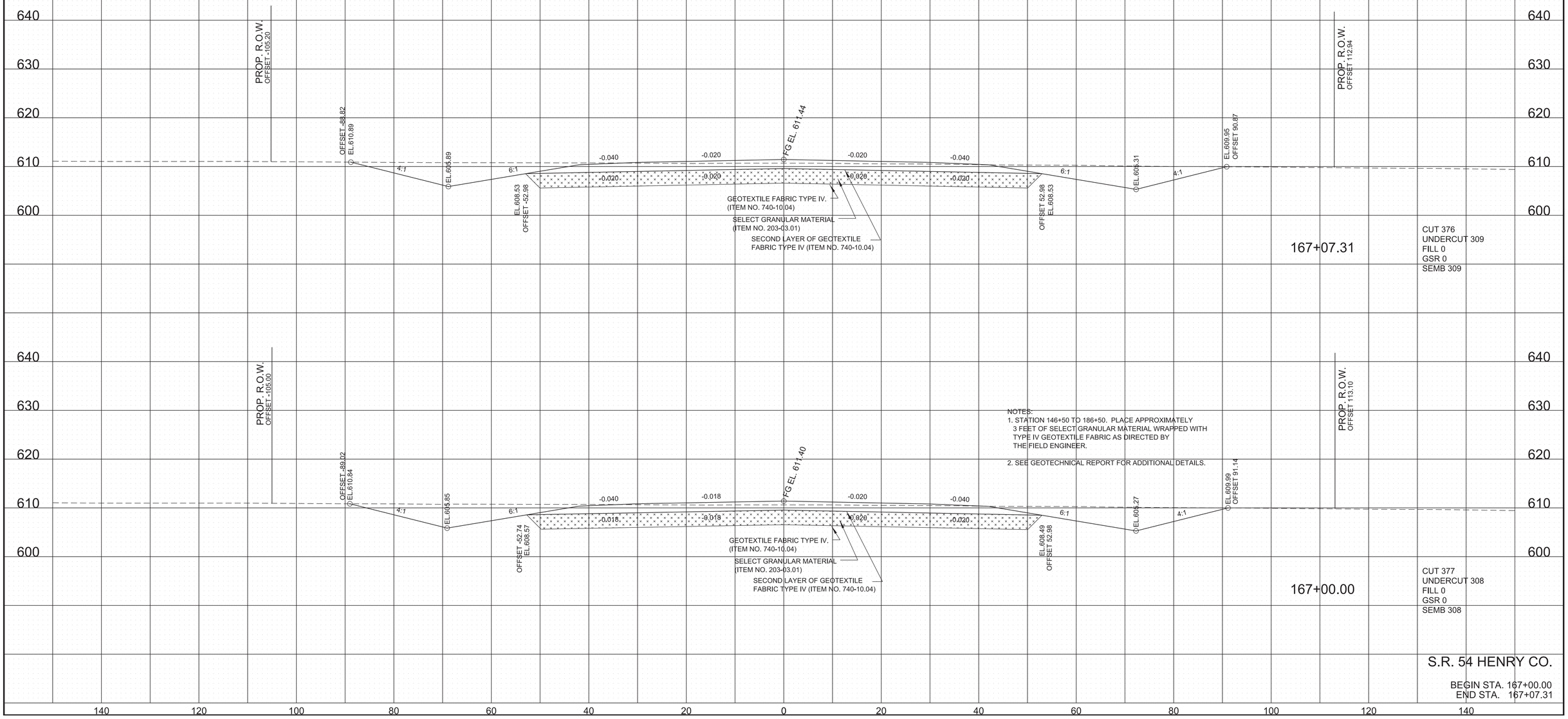


S.R. 54 HENRY CO.

BEGIN STA. 166+00.00
END STA. 166+50.00

2/9/2026 2:42:13 PM
T:\TDOT\Henry_SR54\SR54XSections.sht

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	101
PIH	2025	NH-54(48)	117
PS&E	2026	NH-54(48)	117



S.R. 54 HENRY CO.

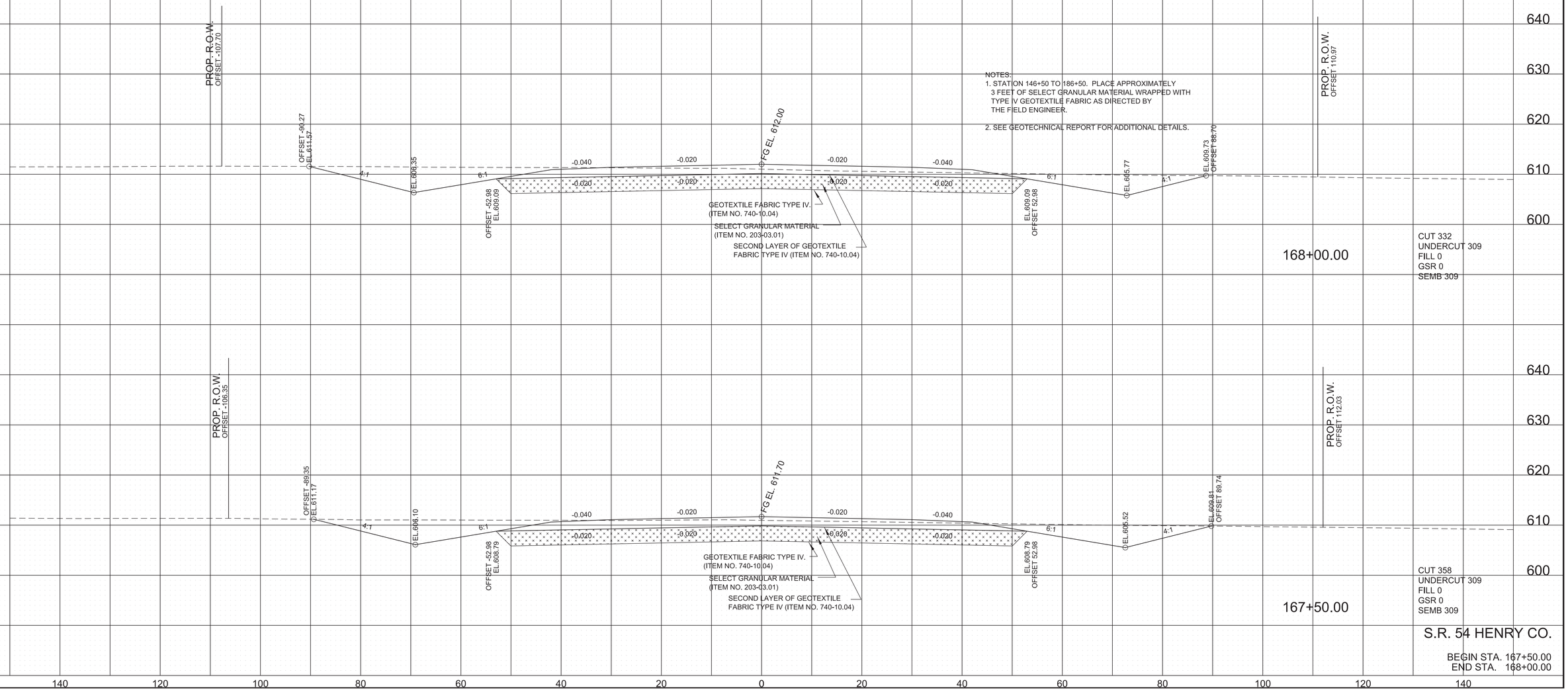
BEGIN STA. 167+00.00
END STA. 167+07.31

2/9/2026 2:42:17 PM
T:\TDOT\Henry_SR54\SR54XSections.sht

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	102
PIH	2025	NH-54(48)	118
PS&E	2026	NH-54(48)	118

NOTES:
1. STATION 146+50 TO 186+50. PLACE APPROXIMATELY 3 FEET OF SELECT GRANULAR MATERIAL WRAPPED WITH TYPE IV GEOTEXTILE FABRIC AS DIRECTED BY THE FIELD ENGINEER.

2. SEE GEOTECHNICAL REPORT FOR ADDITIVE DETAILS.

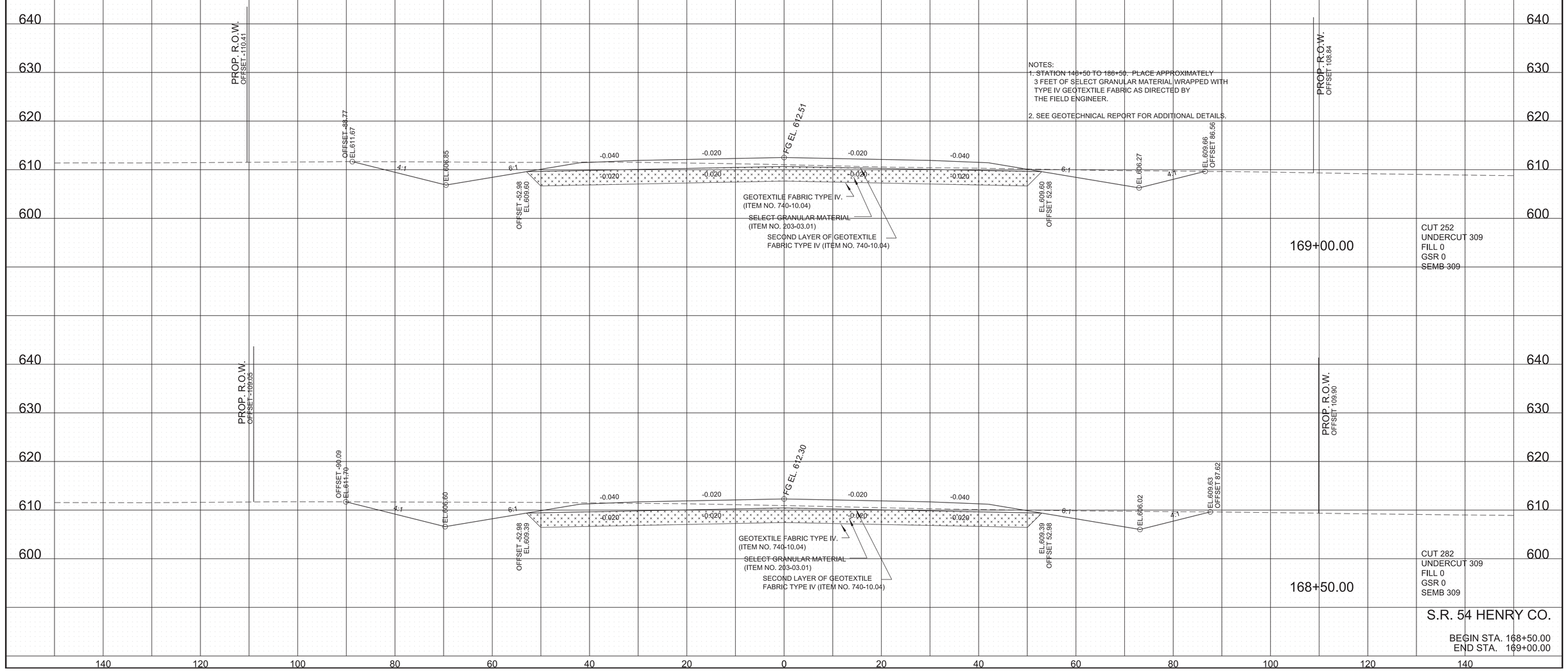


S.R. 54 HENRY CO.

BEGIN STA. 167+50.00
END STA. 168+00.00

2/9/2026 2:42:21 PM
T:\TDOT\Henry_SR54\SR54XSections.sht

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	103
PIH	2025	NH-54(48)	119
PS&E	2026	NH-54(48)	119



NOTES:
1. STATION 146+50 TO 186+50. PLACE APPROXIMATELY 3 FEET OF SELECT GRANULAR MATERIAL WRAPPED WITH TYPE IV GEOTEXTILE FABRIC AS DIRECTED BY THE FIELD ENGINEER.

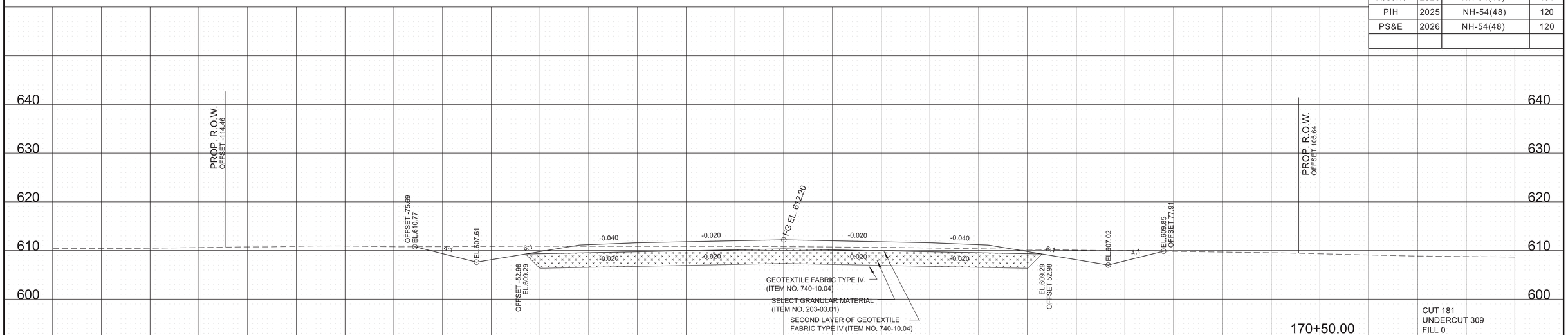
2. SEE GEOTECHNICAL REPORT FOR ADDITIONAL DETAILS.

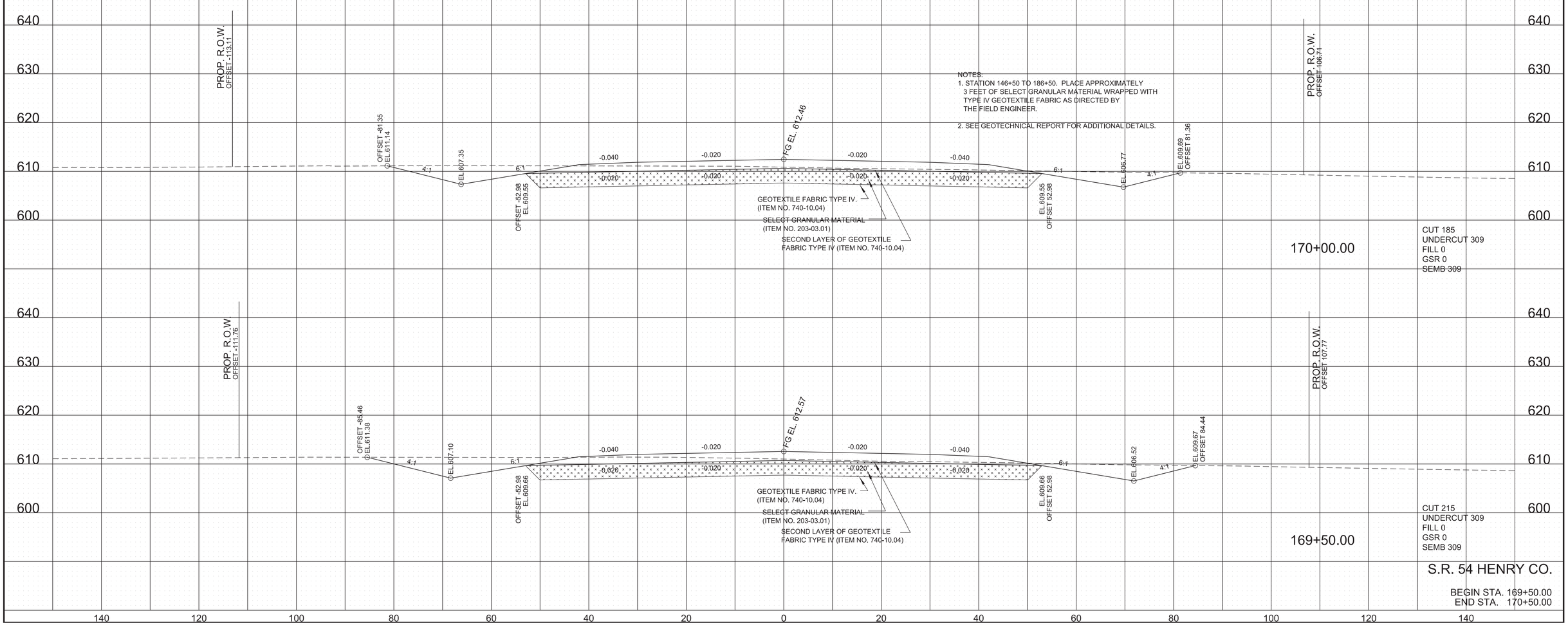
S.R. 54 HENRY CO.

BEGIN STA. 168+50.00
END STA. 169+00.00

2/9/2026 2:42:25 PM
T:\TDOT\Henry_SR54\SR54XSections.sht

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	104
PIH	2025	NH-54(48)	120
PS&E	2026	NH-54(48)	120





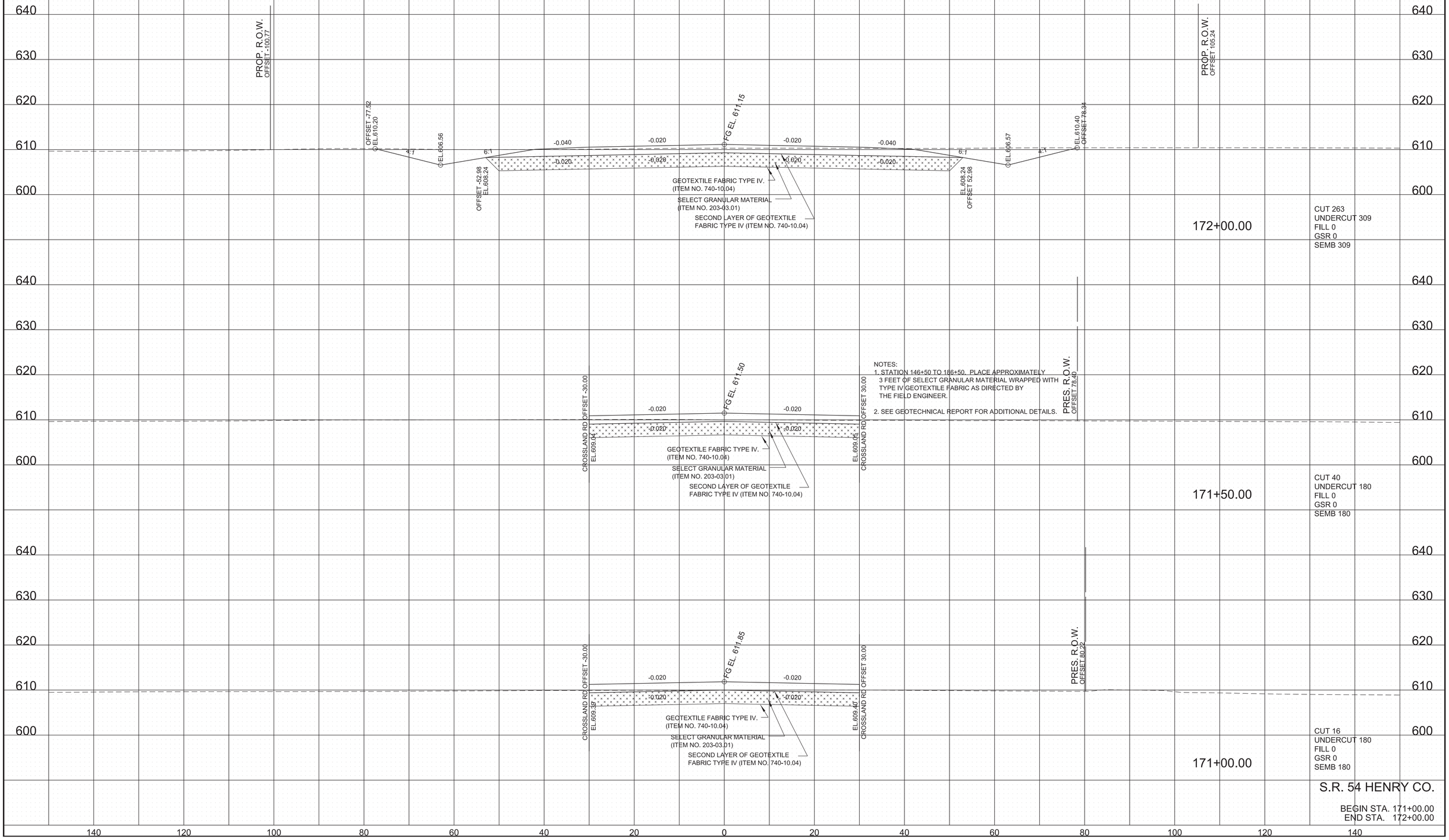
S.R. 54 HENRY CO.

BEGIN STA. 169+50.00
END STA. 170+50.00

140 120 100 80 60 40 20 0 20 40 60 80 100 120 140

2/9/2026 2:42:28 PM
T:\TDOT\Henry_SR54\SR54XSections.sht

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	105
PIH	2025	NH-54(48)	121
PS&E	2026	NH-54(48)	121

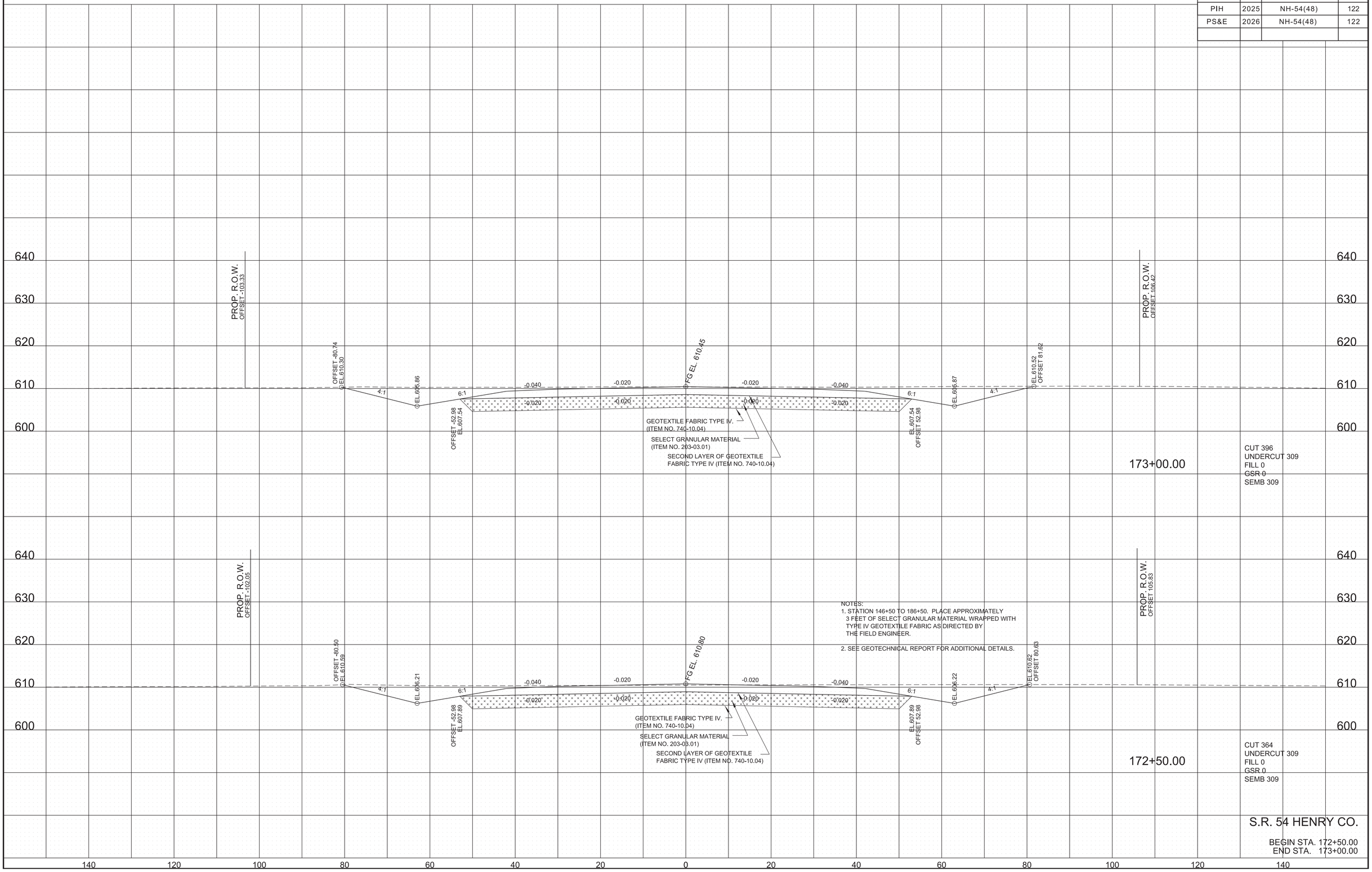


S.R. 54 HENRY CO.

BEGIN STA. 171+00.00
END STA. 172+00.00

2/9/2026 2:42:32 PM
T:\TDOT\Henry_SR54\SR54XSections.sht

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	106
PIH	2025	NH-54(48)	122
PS&E	2026	NH-54(48)	122

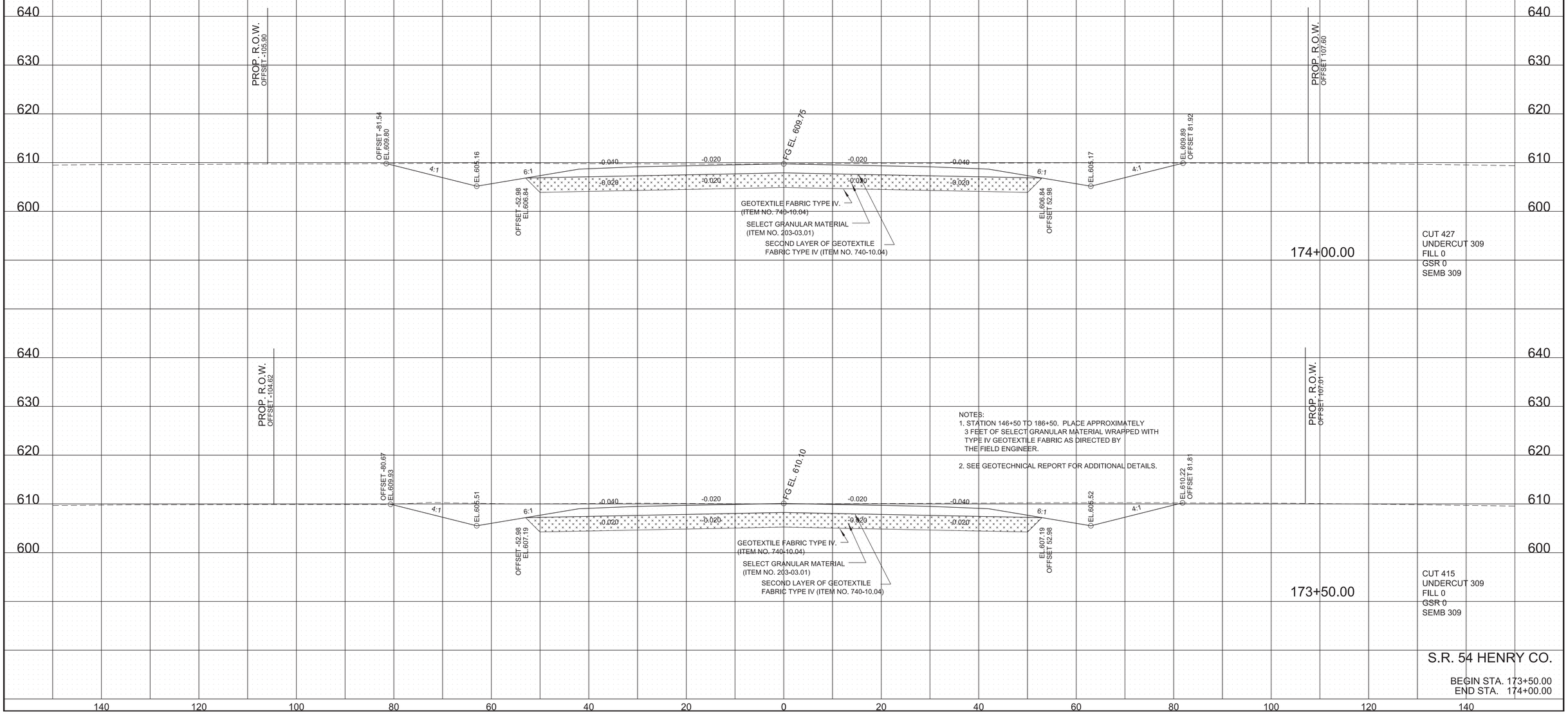


S.R. 54 HENRY CO.

BEGIN STA. 172+50.00
END STA. 173+00.00

2/9/2026 2:42:36 PM
T:\TDOT\Henry_SR54\SR54XSections.sht

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	107
PIH	2025	NH-54(48)	123
PS&E	2026	NH-54(48)	123

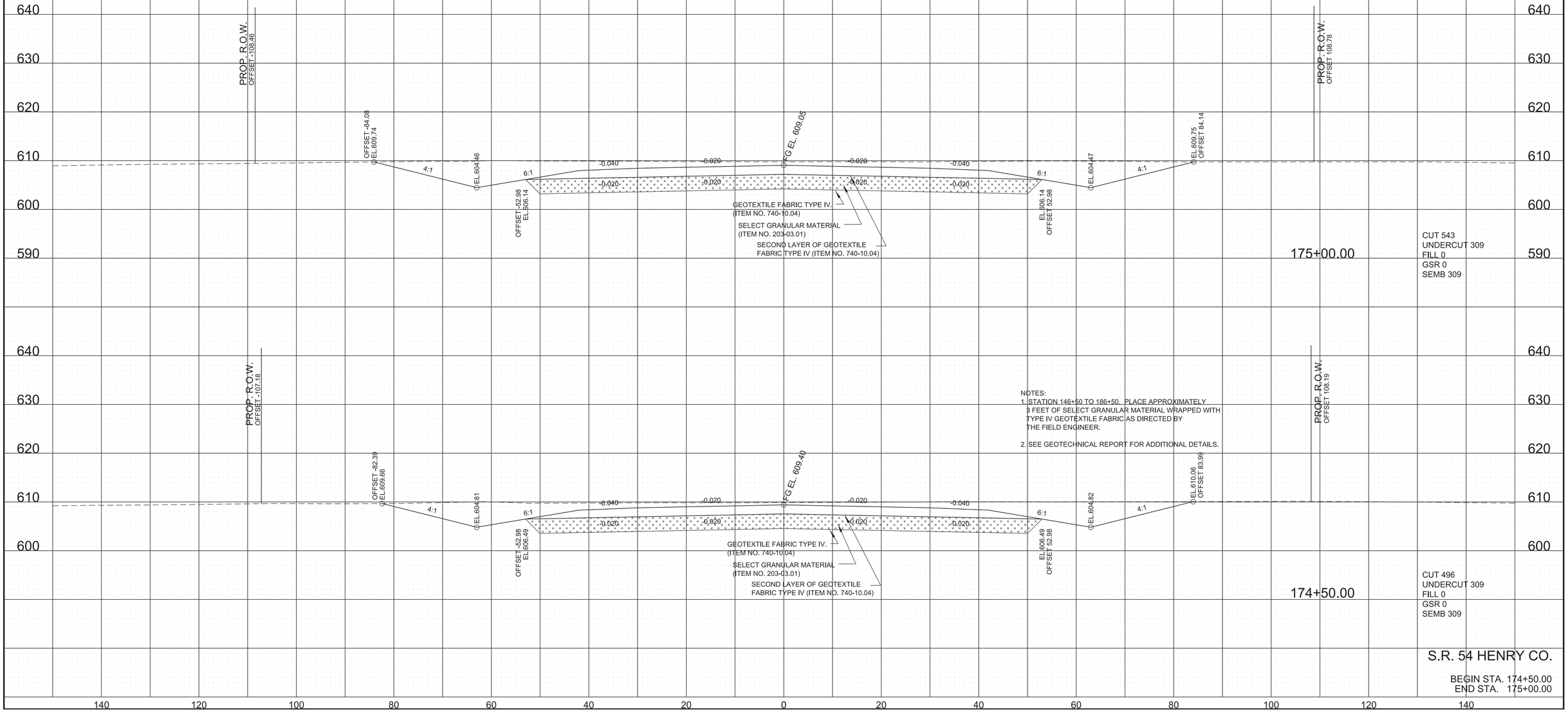


S.R. 54 HENRY CO.

BEGIN STA. 173+50.00
END STA. 174+00.00

2/9/2026 2:42:39 PM
T:\TDOT\Henry_SR54\SR54XSections.sht

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	108
PIH	2025	NH-54(48)	124
PS&E	2026	NH-54(48)	124



NOTES:
1. STATION 146+50 TO 186+50. PLACE APPROXIMATELY 3 FEET OF SELECT GRANULAR MATERIAL WRAPPED WITH TYPE IV GEOTEXTILE FABRIC AS DIRECTED BY THE FIELD ENGINEER.

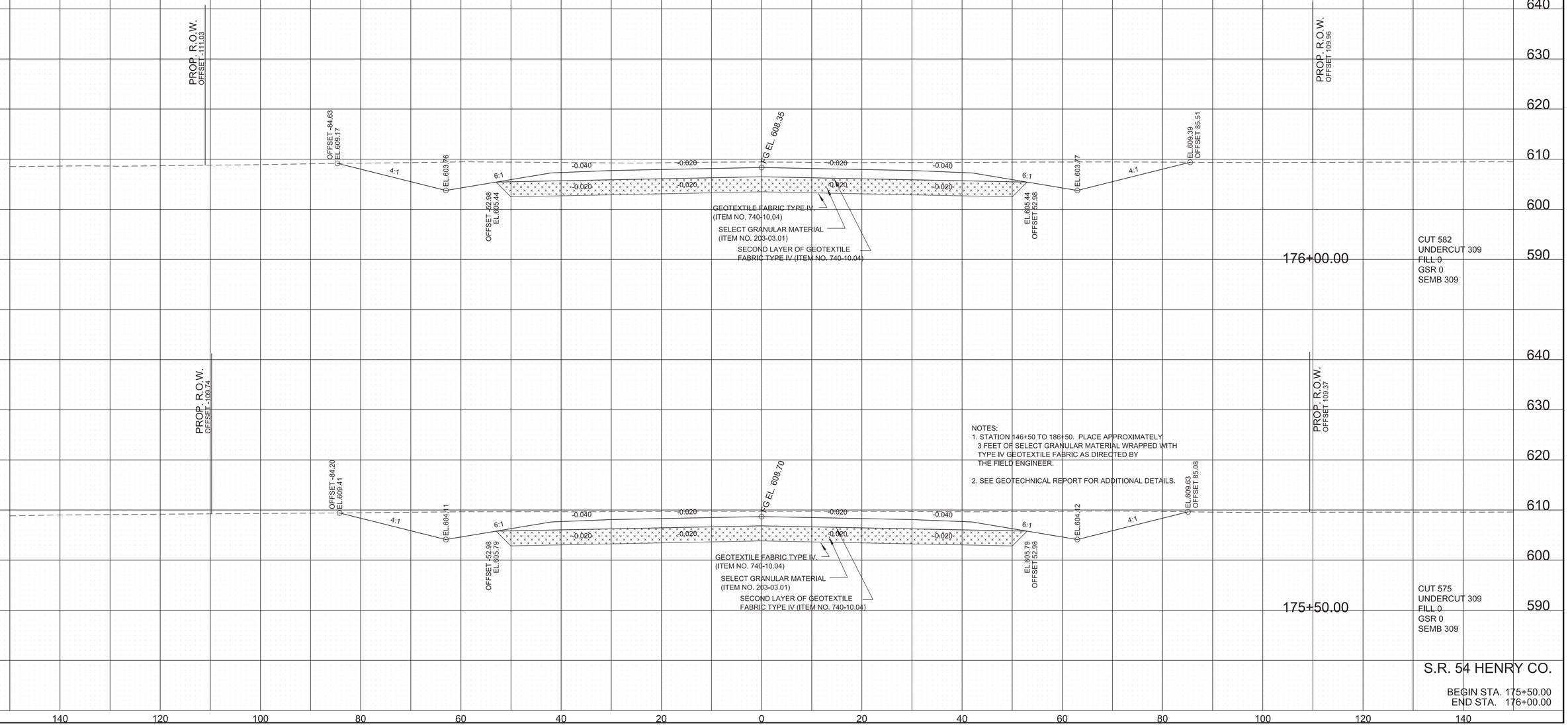
2. SEE GEOTECHNICAL REPORT FOR ADDITIONAL DETAILS.

S.R. 54 HENRY CO.

BEGIN STA. 174+50.00
END STA. 175+00.00

2/9/2026 2:42:43 PM
T:\TDOT\Henry_SR54\SR54XSections.sht

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	109
PIH	2025	NH-54(48)	125
PS&E	2026	NH-54(48)	125

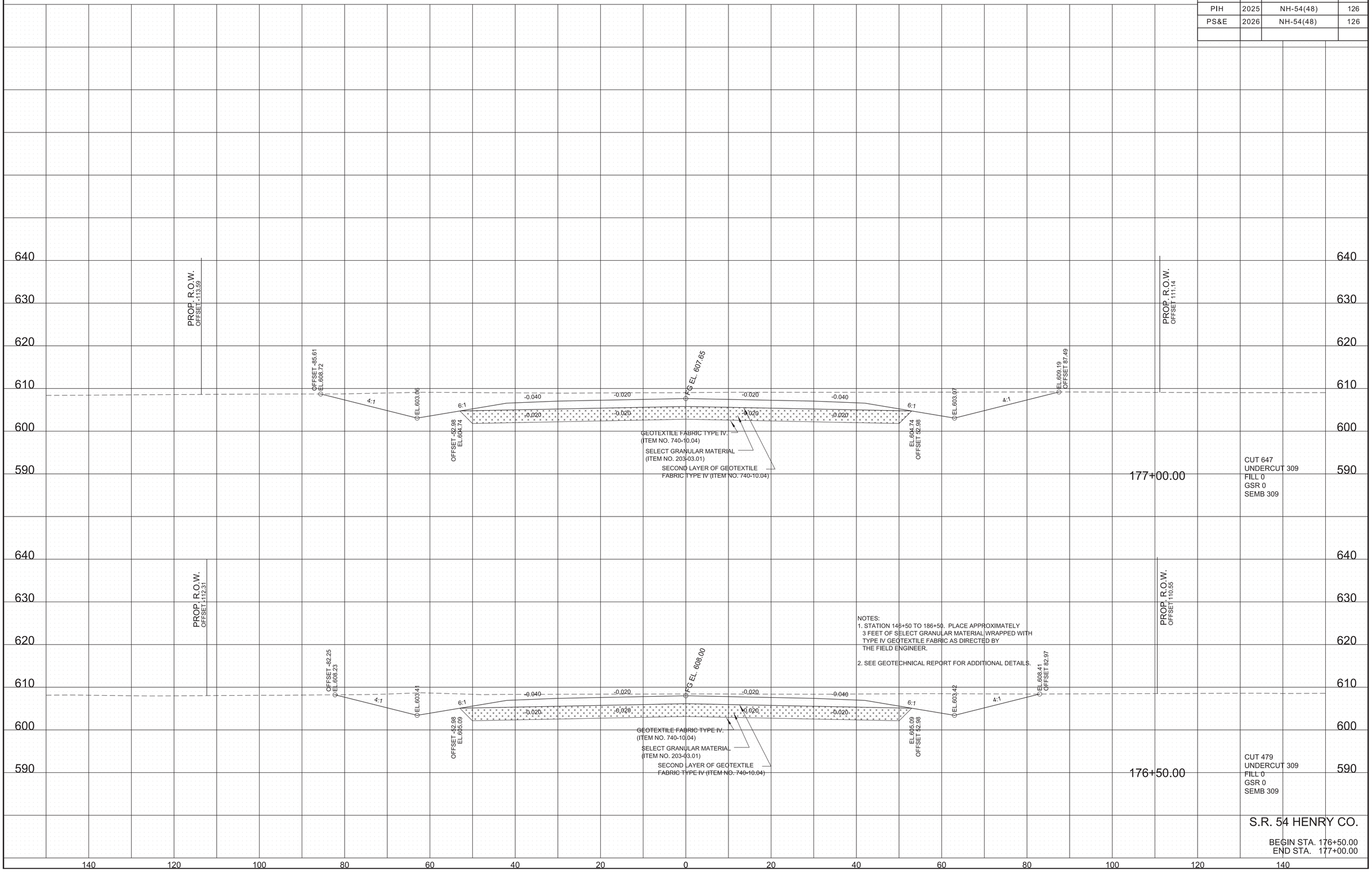


S.R. 54 HENRY CO.

BEGIN STA. 175+50.00
END STA. 176+00.00

2/9/2026 2:42:47 PM
T:\TDOT\Henry_SR54\SR54XSections.sht

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	110
PIH	2025	NH-54(48)	126
PS&E	2026	NH-54(48)	126

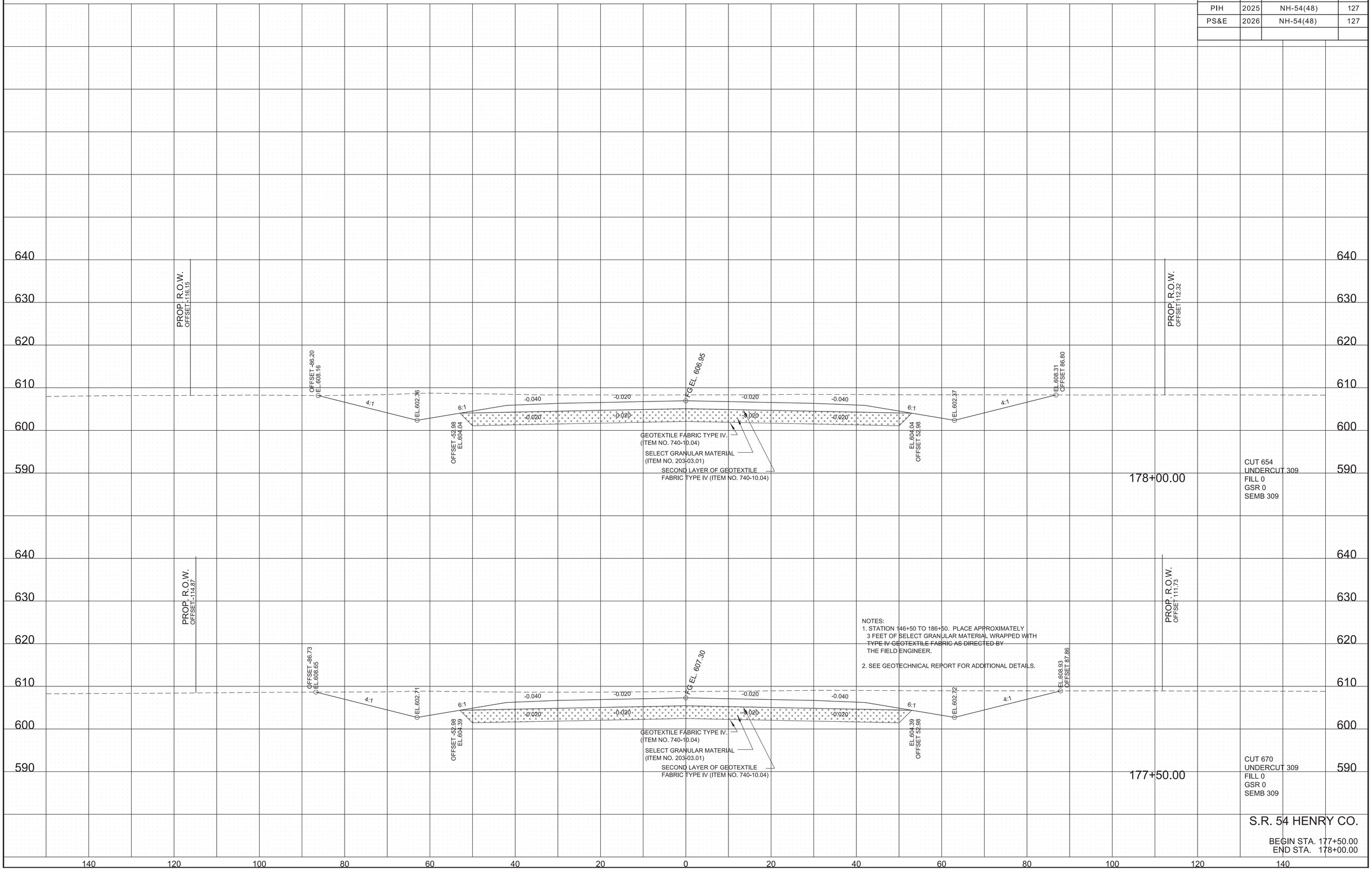


S.R. 54 HENRY CO.

BEGIN STA. 176+50.00
END STA. 177+00.00

2/9/2026 2:42:50 PM
T:\TDOT\Henry_SR54\SR54XSections.sht

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	111
PIH	2025	NH-54(48)	127
PS&E	2026	NH-54(48)	127



NOTES:
1. STATION 146+50 TO 186+50. PLACE APPROXIMATELY 3 FEET OF SELECT GRANULAR MATERIAL WRAPPED WITH TYPE IV GEOTEXTILE FABRIC AS DIRECTED BY THE FIELD ENGINEER.

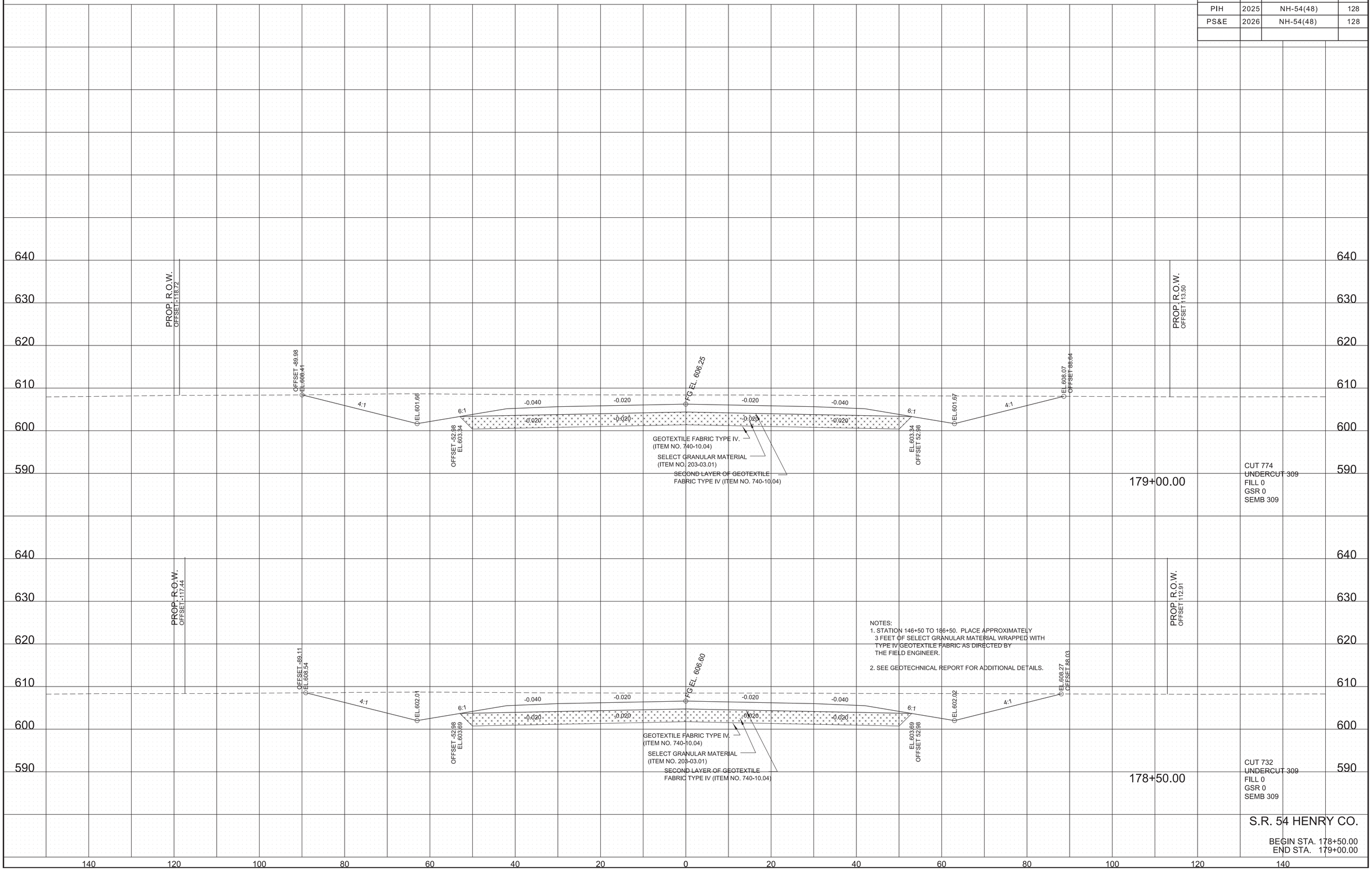
2. SEE GEOTECHNICAL REPORT FOR ADDITIONAL DETAILS.

S.R. 54 HENRY CO.

BEGIN STA. 177+50.00
END STA. 178+00.00

2/9/2026 2:42:54 PM
T:\TDOT\Henry_SR54\SR54XSections.sht

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	112
PIH	2025	NH-54(48)	128
PS&E	2026	NH-54(48)	128



NOTES:
1. STATION 146+50 TO 186+50. PLACE APPROXIMATELY 3 FEET OF SELECT GRANULAR MATERIAL WRAPPED WITH TYPE IV GEOTEXTILE FABRIC AS DIRECTED BY THE FIELD ENGINEER.

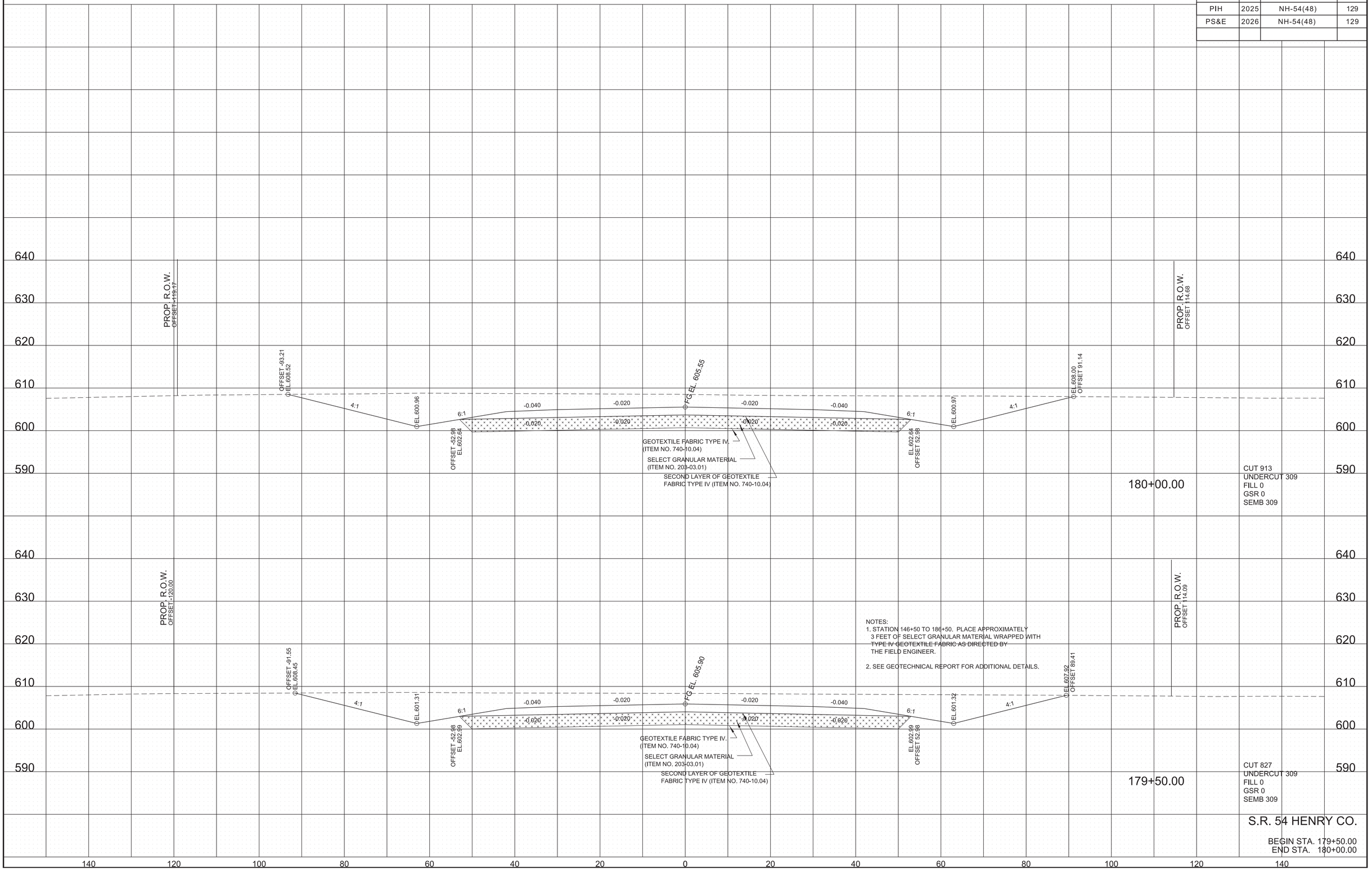
2. SEE GEOTECHNICAL REPORT FOR ADDITIONAL DETAILS.

S.R. 54 HENRY CO.

BEGIN STA. 178+50.00
END STA. 179+00.00

2/9/2026 2:42:58 PM
T:\TDOT\Henry_SR54\SR54XSections.sht

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	113
PIH	2025	NH-54(48)	129
PS&E	2026	NH-54(48)	129



NOTES:
1. STATION 146+50 TO 186+50, PLACE APPROXIMATELY 3 FEET OF SELECT GRANULAR MATERIAL WRAPPED WITH TYPE IV GEOTEXTILE FABRIC AS DIRECTED BY THE FIELD ENGINEER.

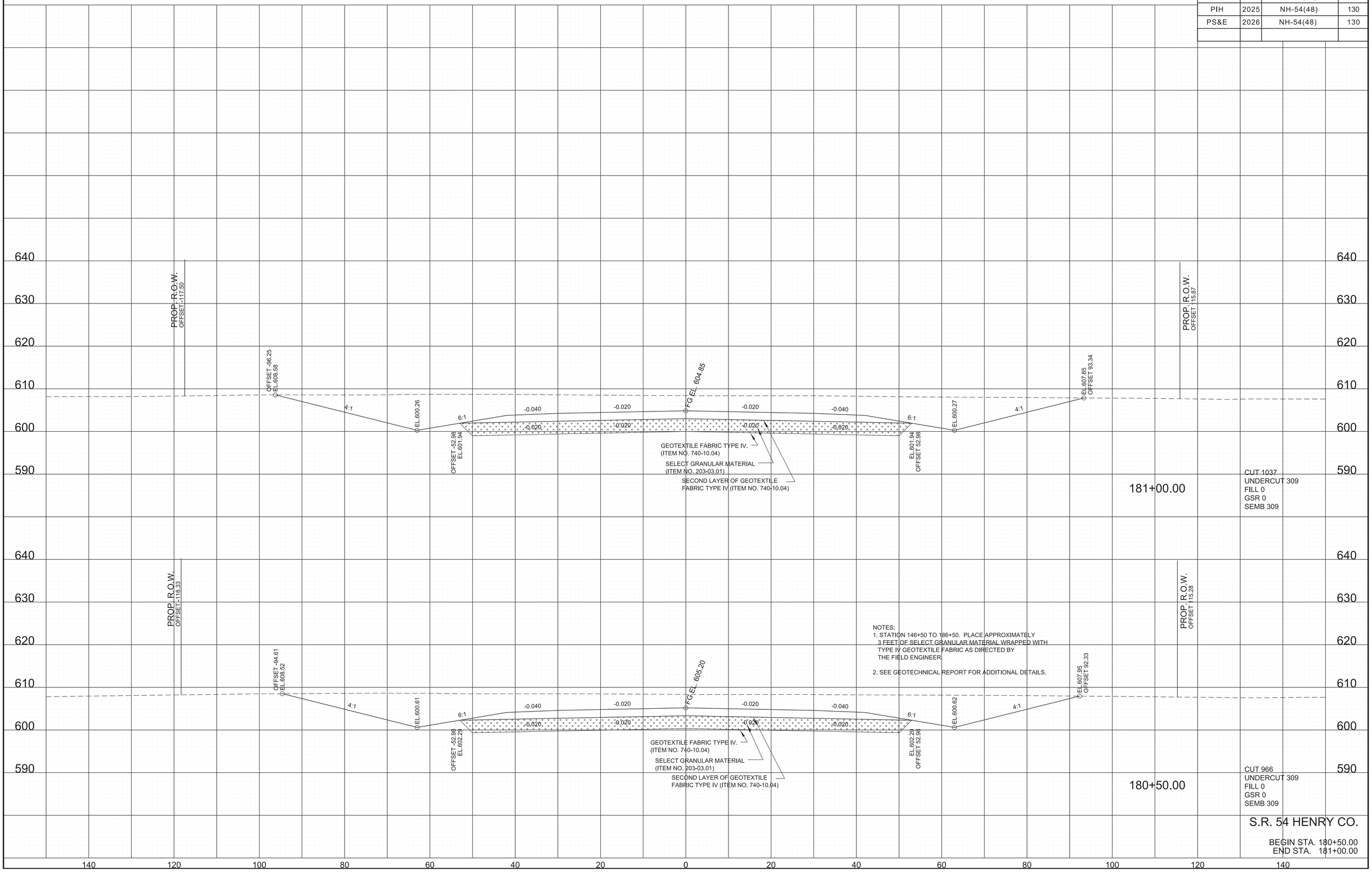
2. SEE GEOTECHNICAL REPORT FOR ADDITIONAL DETAILS.

S.R. 54 HENRY CO.

BEGIN STA. 179+50.00
END STA. 180+00.00

2/9/2026 2:43:01 PM
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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	114
PIH	2025	NH-54(48)	130
PS&E	2026	NH-54(48)	130

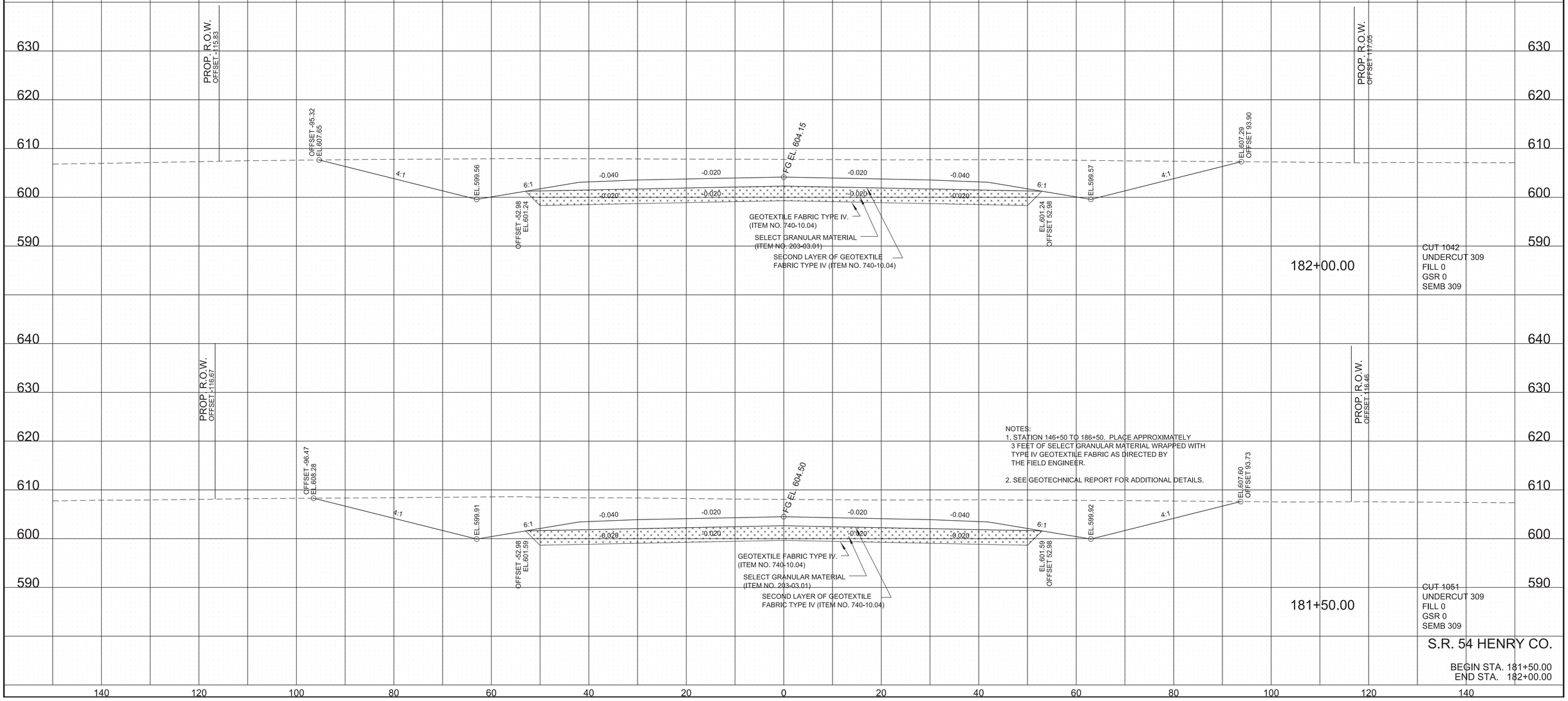


S.R. 54 HENRY CO.

BEGIN STA. 180+50.00
END STA. 181+00.00

2/9/2026 2:43:05 PM
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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	115
PIH	2025	NH-54(48)	131
PS&E	2026	NH-54(48)	131



NOTES:
1. STATION 146+50 TO 186+50. PLACE APPROXIMATELY 3 FEET OF SELECT GRANULAR MATERIAL WRAPPED WITH TYPE IV GEOTEXTILE FABRIC AS DIRECTED BY THE FIELD ENGINEER.

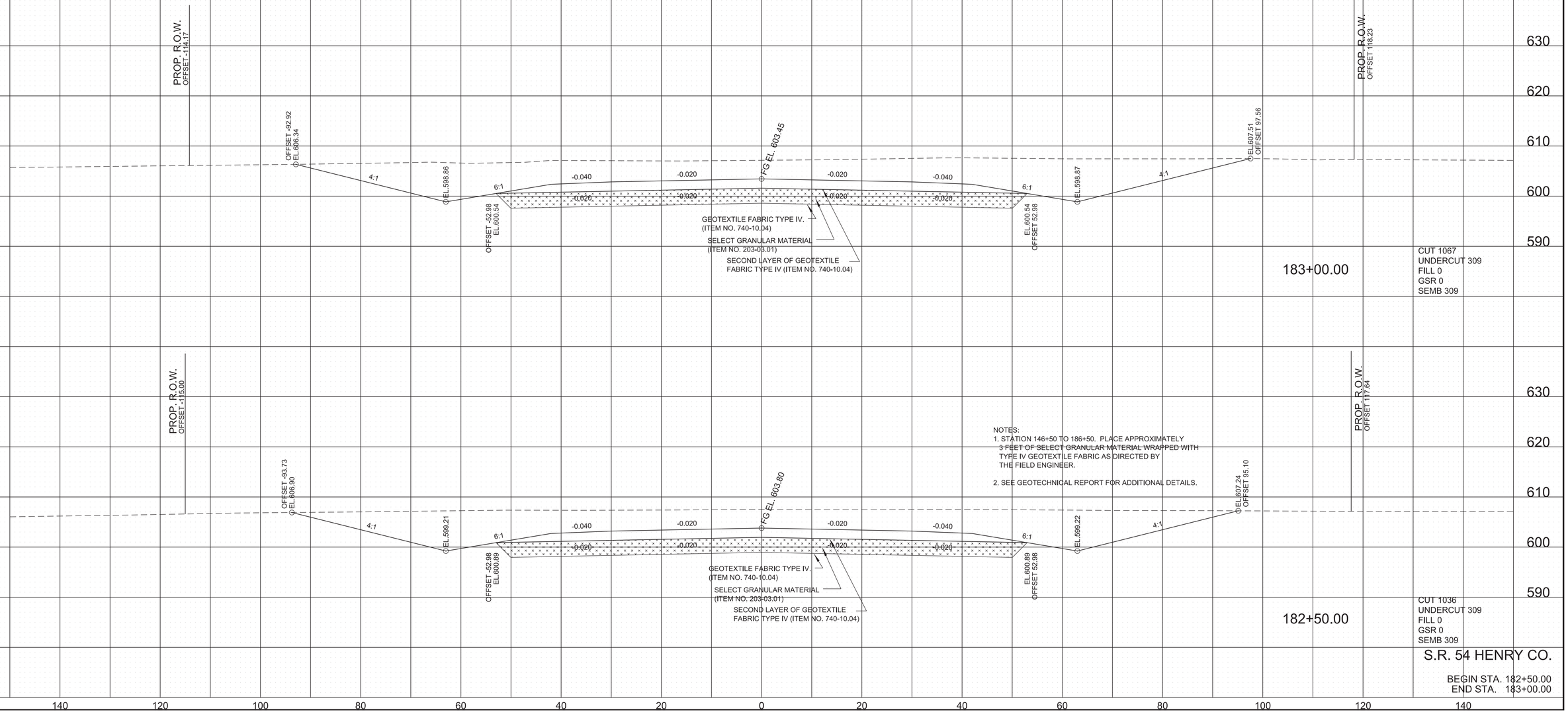
2. SEE GEOTECHNICAL REPORT FOR ADDITIONAL DETAILS.

S.R. 54 HENRY CO.

BEGIN STA. 181+50.00
END STA. 182+00.00

2/9/2026 2:43:09 PM
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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	116
PIH	2025	NH-54(48)	132
PS&E	2026	NH-54(48)	132



183+00.00

CUT 1067
UNDERCUT 309
FILL 0
GSR 0
SEMB 309

NOTES:
1. STATION 146+50 TO 186+50. PLACE APPROXIMATELY 3 FEET OF SELECT GRANULAR MATERIAL WRAPPED WITH TYPE IV GEOTEXTILE FABRIC AS DIRECTED BY THE FIELD ENGINEER.

2. SEE GEOTECHNICAL REPORT FOR ADDITIONAL DETAILS.

182+50.00

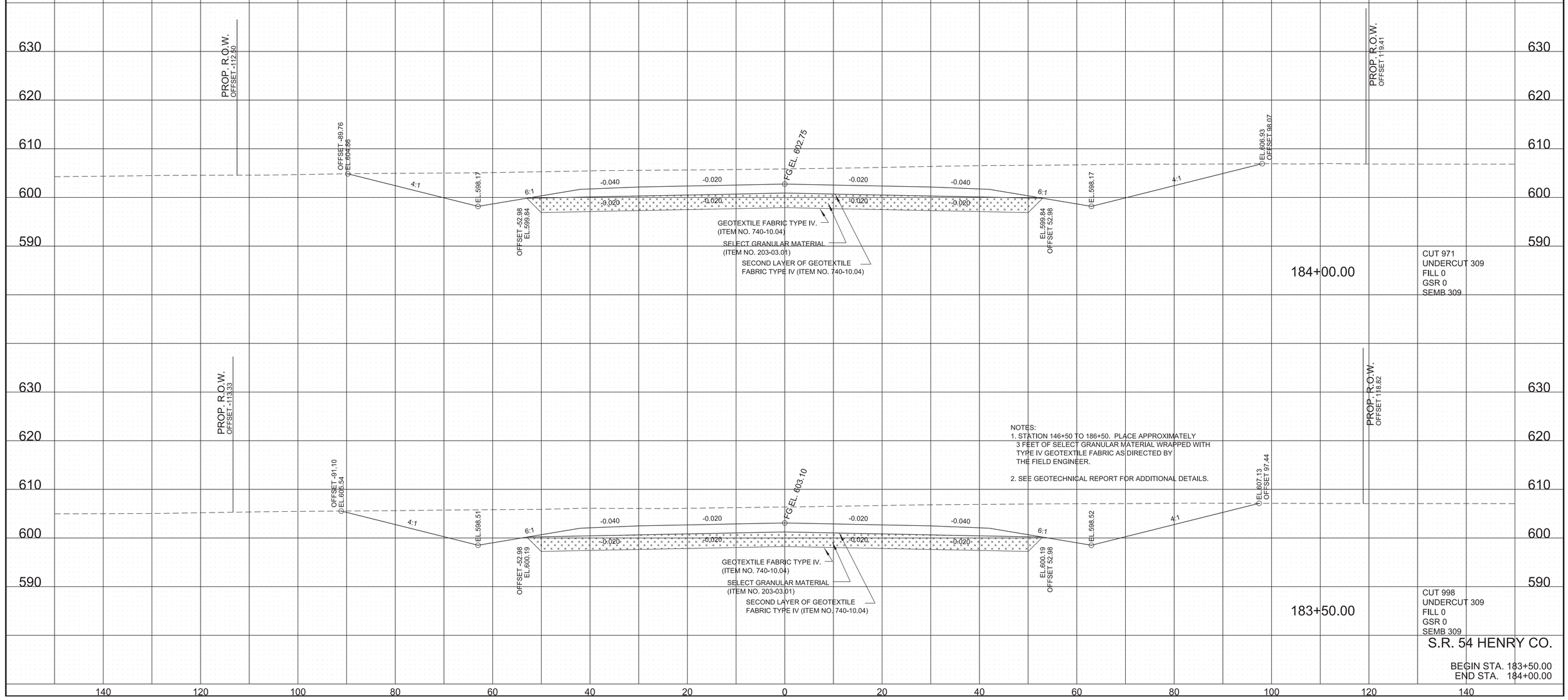
CUT 1036
UNDERCUT 309
FILL 0
GSR 0
SEMB 309

S.R. 54 HENRY CO.

BEGIN STA. 182+50.00
END STA. 183+00.00

2/9/2026 2:43:25 PM
T:\TDOT\Henry_SR54\SR54XSections.sht

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	117
PIH	2025	NH-54(48)	133
PS&E	2026	NH-54(48)	133



NOTES:
1. STATION 146+50 TO 186+50. PLACE APPROXIMATELY 3 FEET OF SELECT GRANULAR MATERIAL WRAPPED WITH TYPE IV GEOTEXTILE FABRIC AS DIRECTED BY THE FIELD ENGINEER.

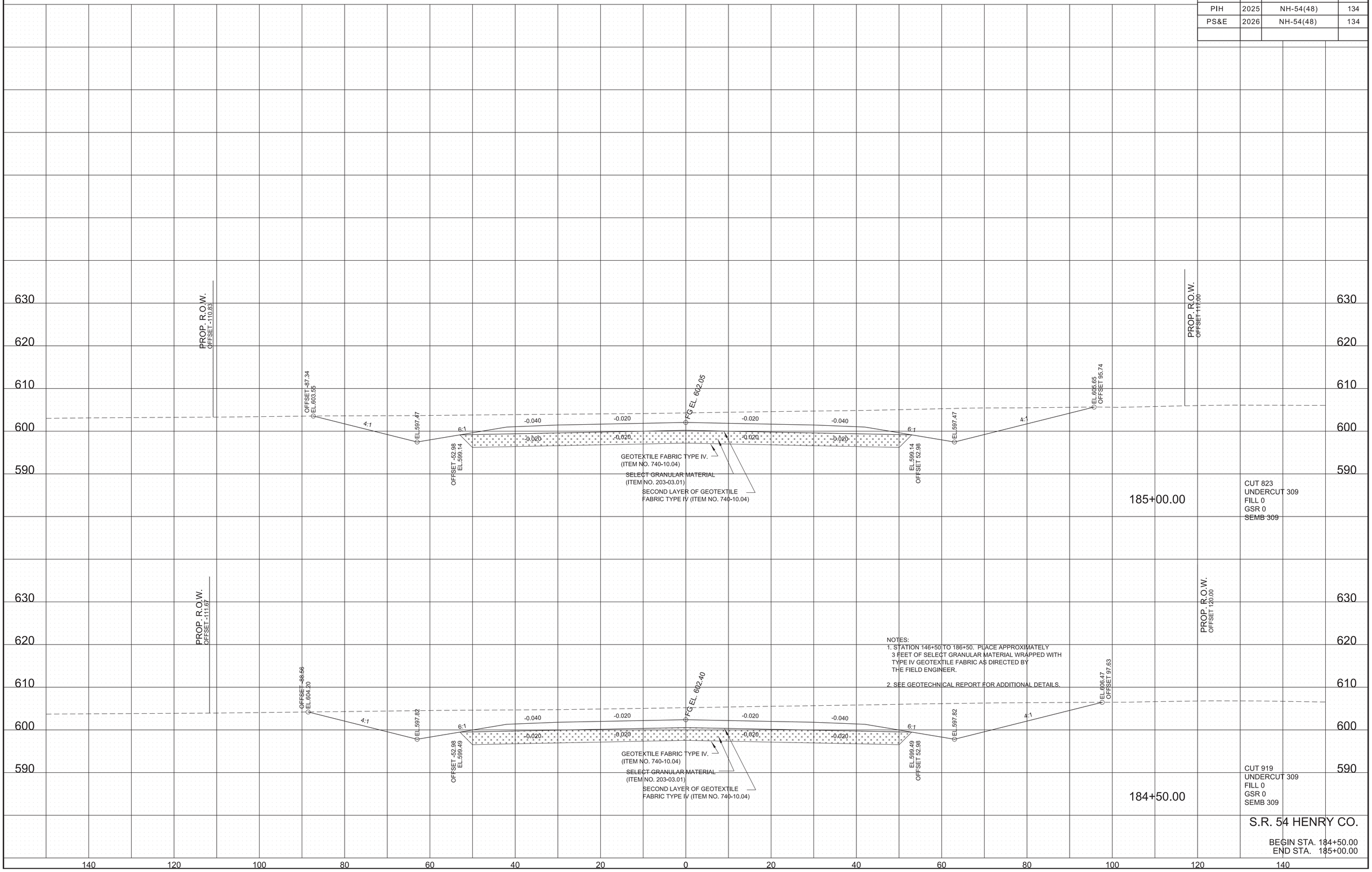
2. SEE GEOTECHNICAL REPORT FOR ADDITIONAL DETAILS.

S.R. 54 HENRY CO.

BEGIN STA. 183+50.00
END STA. 184+00.00

2/9/2026 2:43:29 PM
T:\TDOT\Henry_SR54\SR54XSections.sht

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	118
PIH	2025	NH-54(48)	134
PS&E	2026	NH-54(48)	134

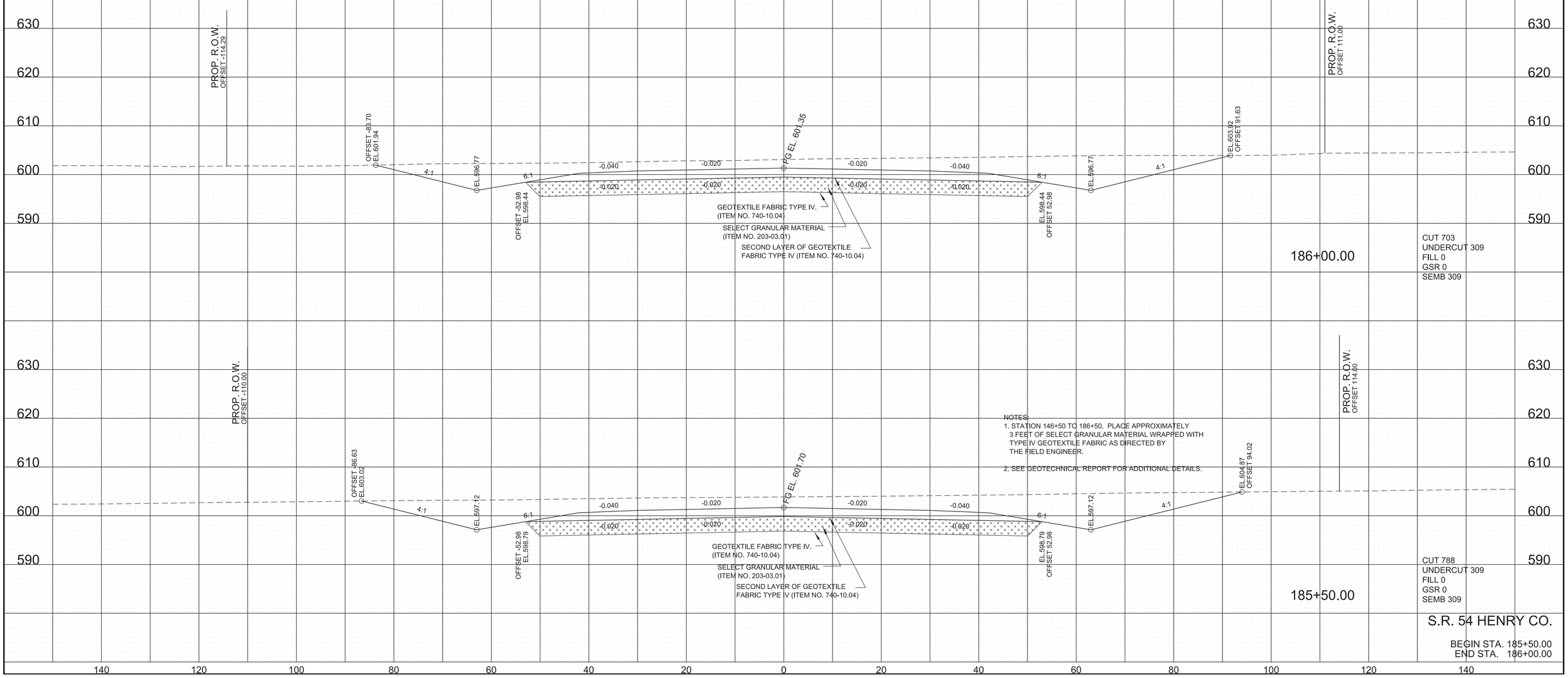


S.R. 54 HENRY CO.

BEGIN STA. 184+50.00
END STA. 185+00.00

2/9/2026 2:43:32 PM
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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	119
PIH	2025	NH-54(48)	135
PS&E	2026	NH-54(48)	135

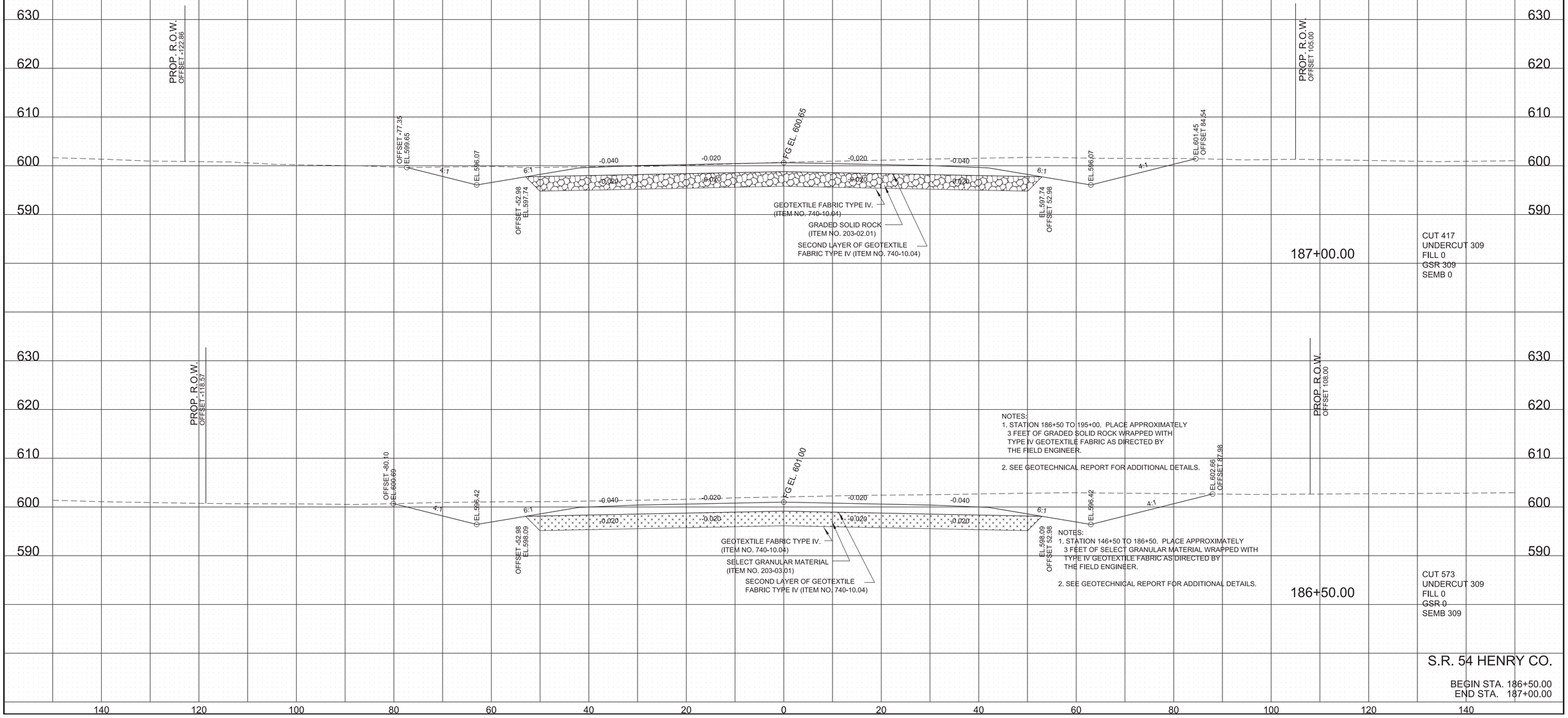


S.R. 54 HENRY CO.

BEGIN STA. 185+50.00
END STA. 186+00.00

2/9/2026 2:43:36 PM
T:\TDOT\Henry_SR54\SR54XSections.sht

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	120
PIH	2025	NH-54(48)	136
PS&E	2026	NH-54(48)	136

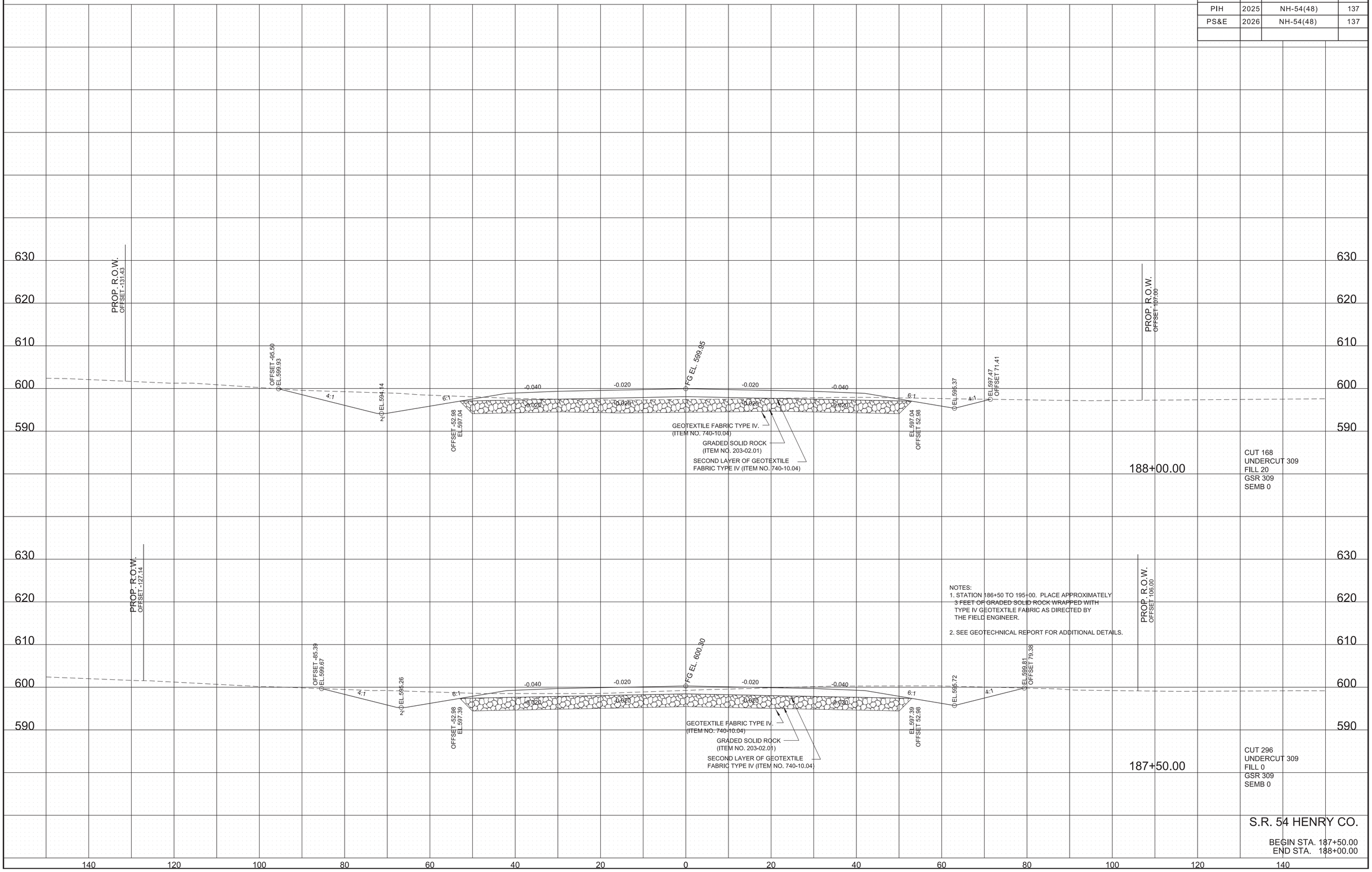


S.R. 54 HENRY CO.

BEGIN STA. 186+50.00
END STA. 187+00.00

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	121
PIH	2025	NH-54(48)	137
PS&E	2026	NH-54(48)	137

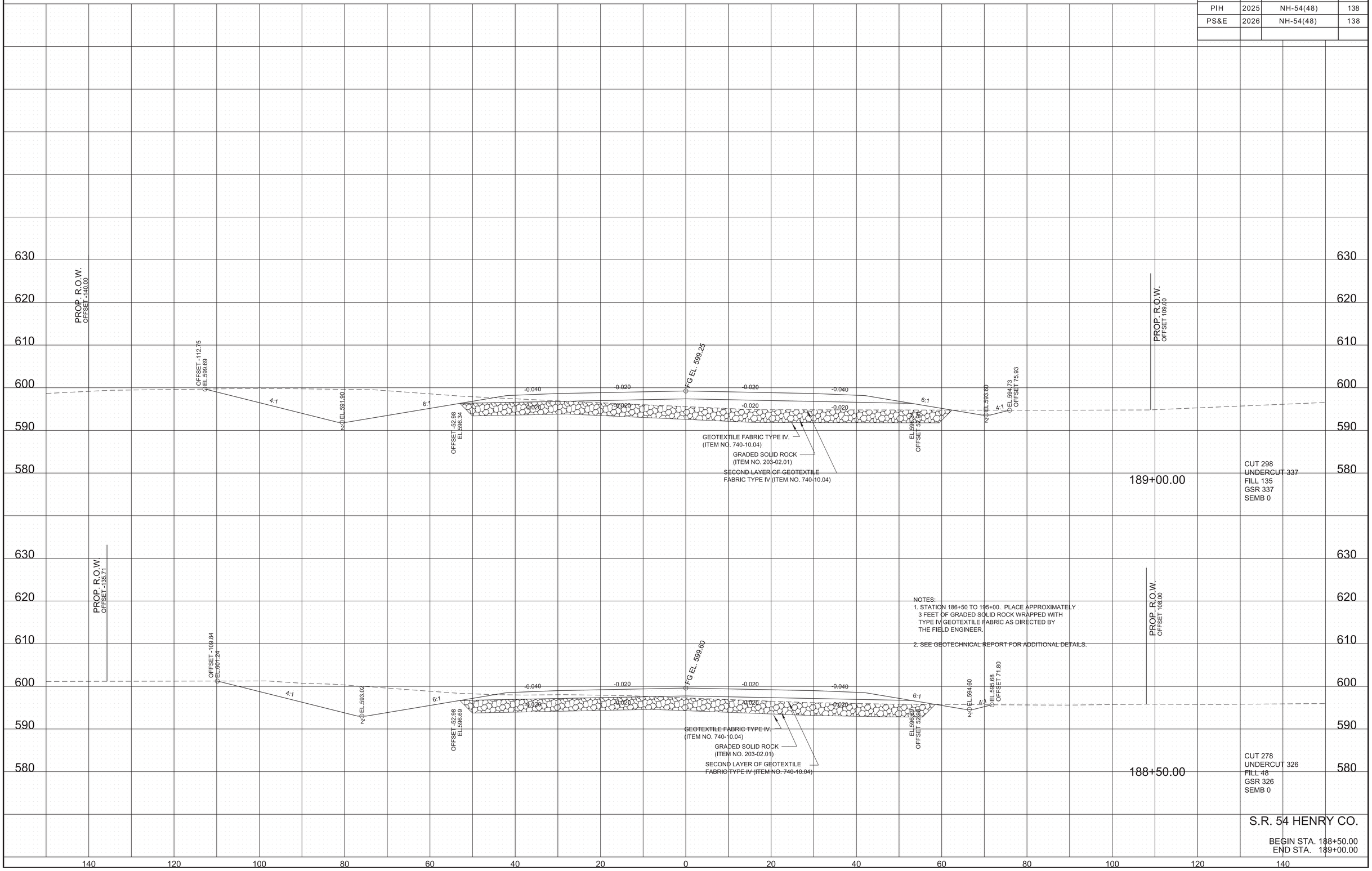


S.R. 54 HENRY CO.

BEGIN STA. 187+50.00
END STA. 188+00.00

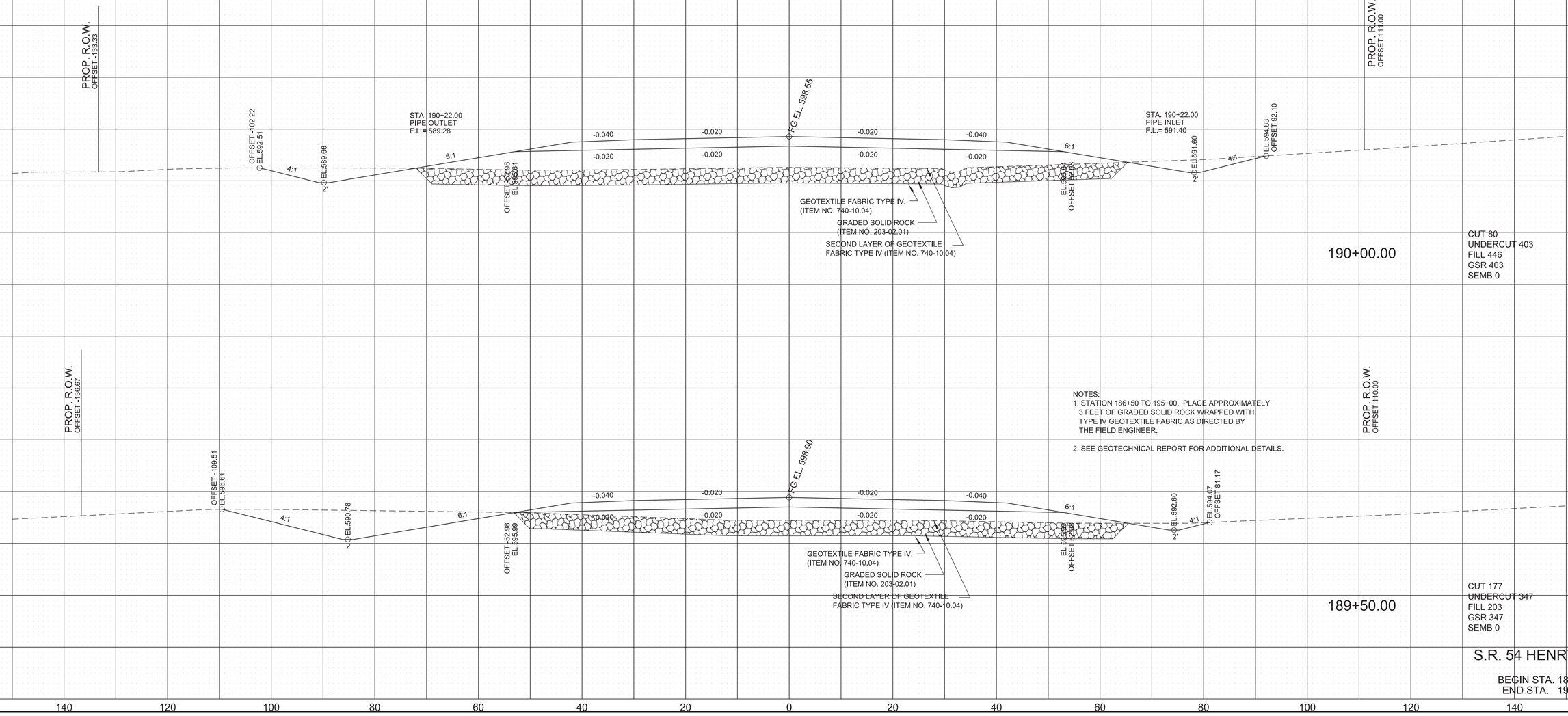
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T:\TDOT\Henry_SR54\SR54XSections.sht

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	122
PIH	2025	NH-54(48)	138
PS&E	2026	NH-54(48)	138



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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	123
PIH	2025	NH-54(48)	139
PS&E	2026	NH-54(48)	139



190+00.00

CUT 80
UNDERCUT 403
FILL 446
GSR 403
SEMB 0

NOTES:
1. STATION 186+50 TO 195+00. PLACE APPROXIMATELY 3 FEET OF GRADED SOLID ROCK WRAPPED WITH TYPE IV GEOTEXTILE FABRIC AS DIRECTED BY THE FIELD ENGINEER.
2. SEE GEOTECHNICAL REPORT FOR ADDITIONAL DETAILS.

189+50.00

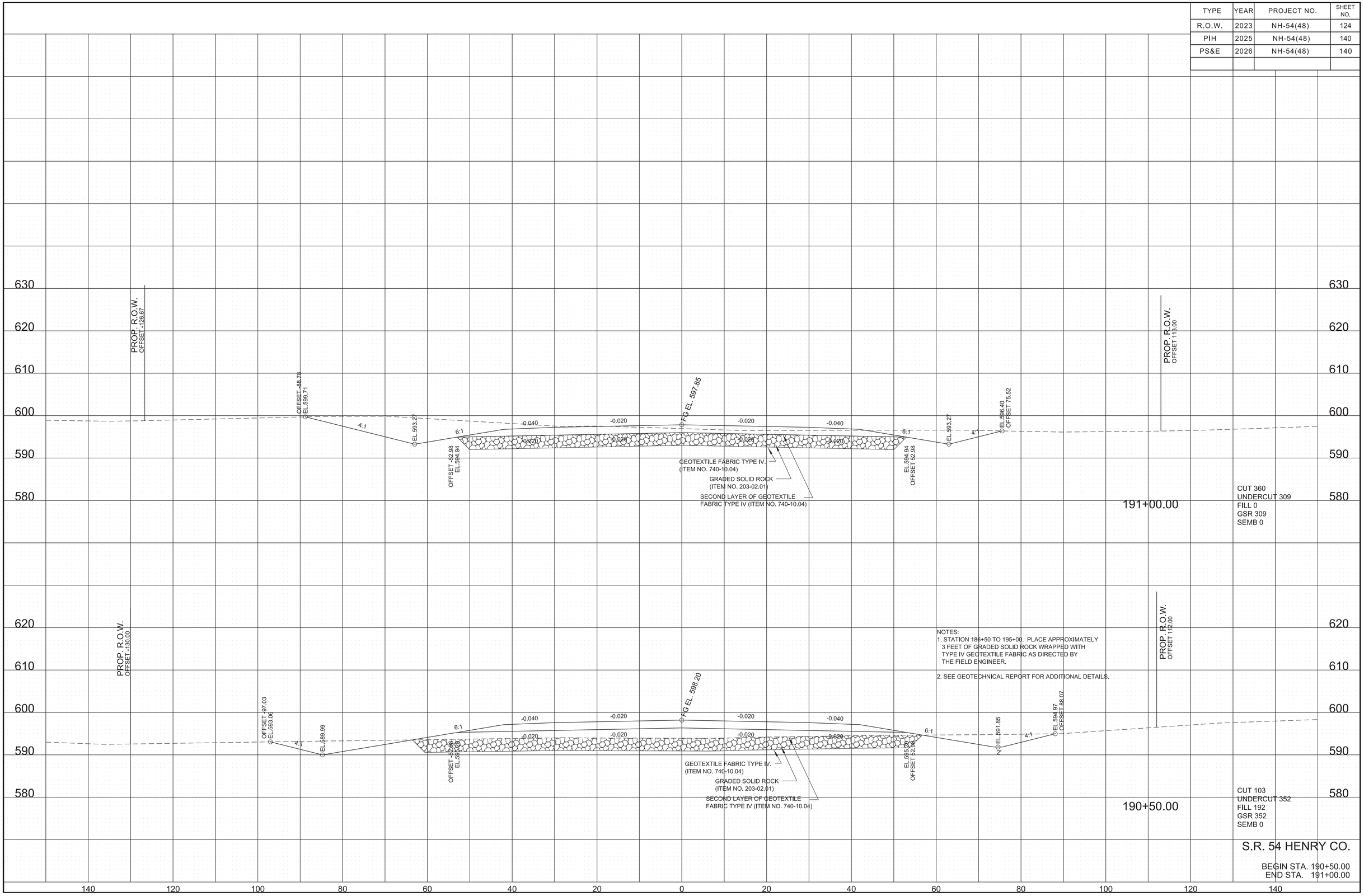
CUT 177
UNDERCUT 347
FILL 203
GSR 347
SEMB 0

S.R. 54 HENRY CO.

BEGIN STA. 189+50.00
END STA. 190+00.00

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T:\TDOT\Henry_SR54\SR54XSections.sht

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	124
PIH	2025	NH-54(48)	140
PS&E	2026	NH-54(48)	140



NOTES:
1. STATION 186+50 TO 195+00. PLACE APPROXIMATELY 3 FEET OF GRADED SOLID ROCK WRAPPED WITH TYPE IV GEOTEXTILE FABRIC AS DIRECTED BY THE FIELD ENGINEER.

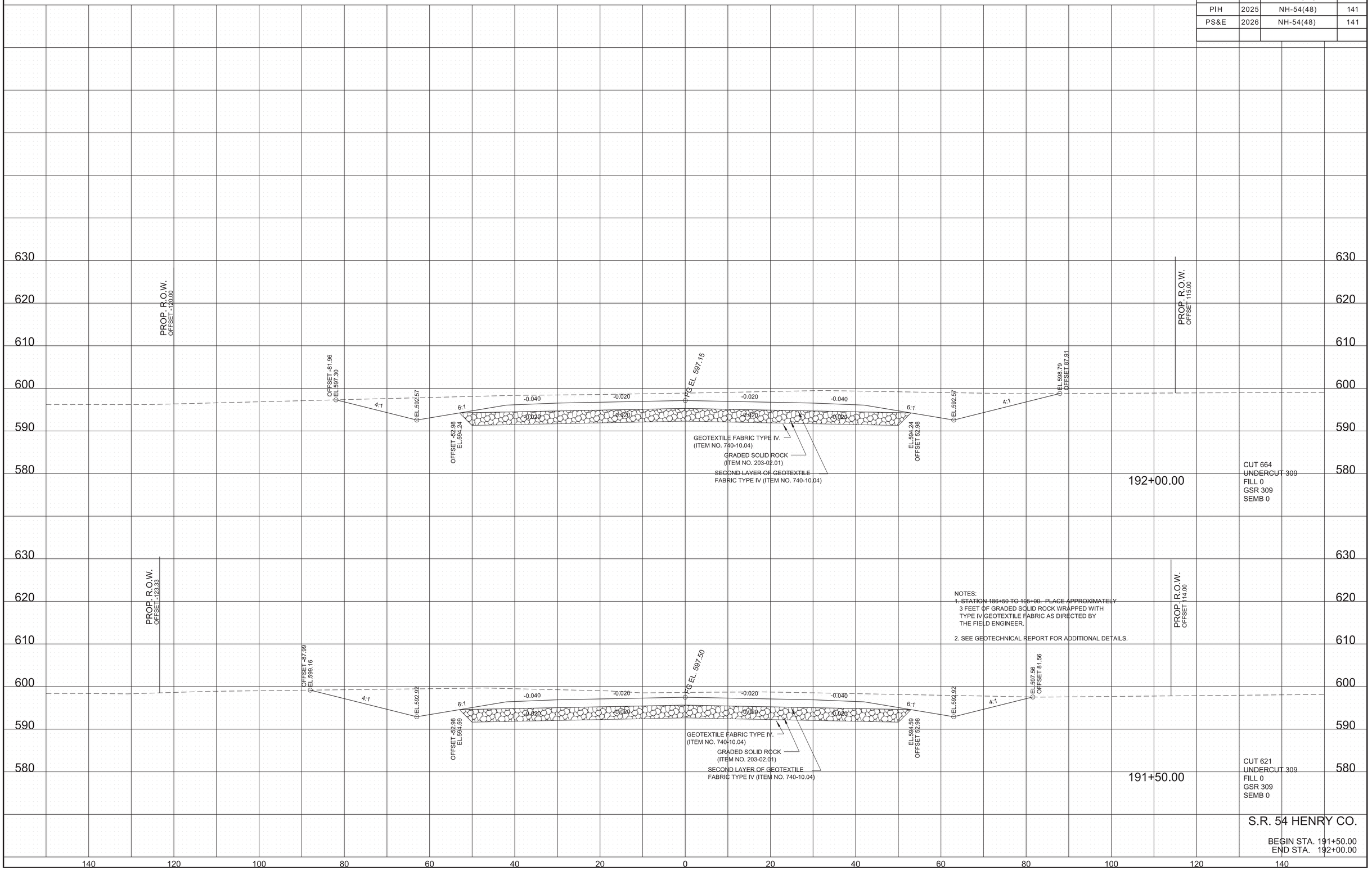
2. SEE GEOTECHNICAL REPORT FOR ADDITIONAL DETAILS.

S.R. 54 HENRY CO.

BEGIN STA. 190+50.00
END STA. 191+00.00

2/9/2026 2:43:54 PM
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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	125
PIH	2025	NH-54(48)	141
PS&E	2026	NH-54(48)	141



NOTES:
1. STATION 186+50 TO 195+00. PLACE APPROXIMATELY 3 FEET OF GRADED SOLID ROCK WRAPPED WITH TYPE IV GEOTEXTILE FABRIC AS DIRECTED BY THE FIELD ENGINEER.

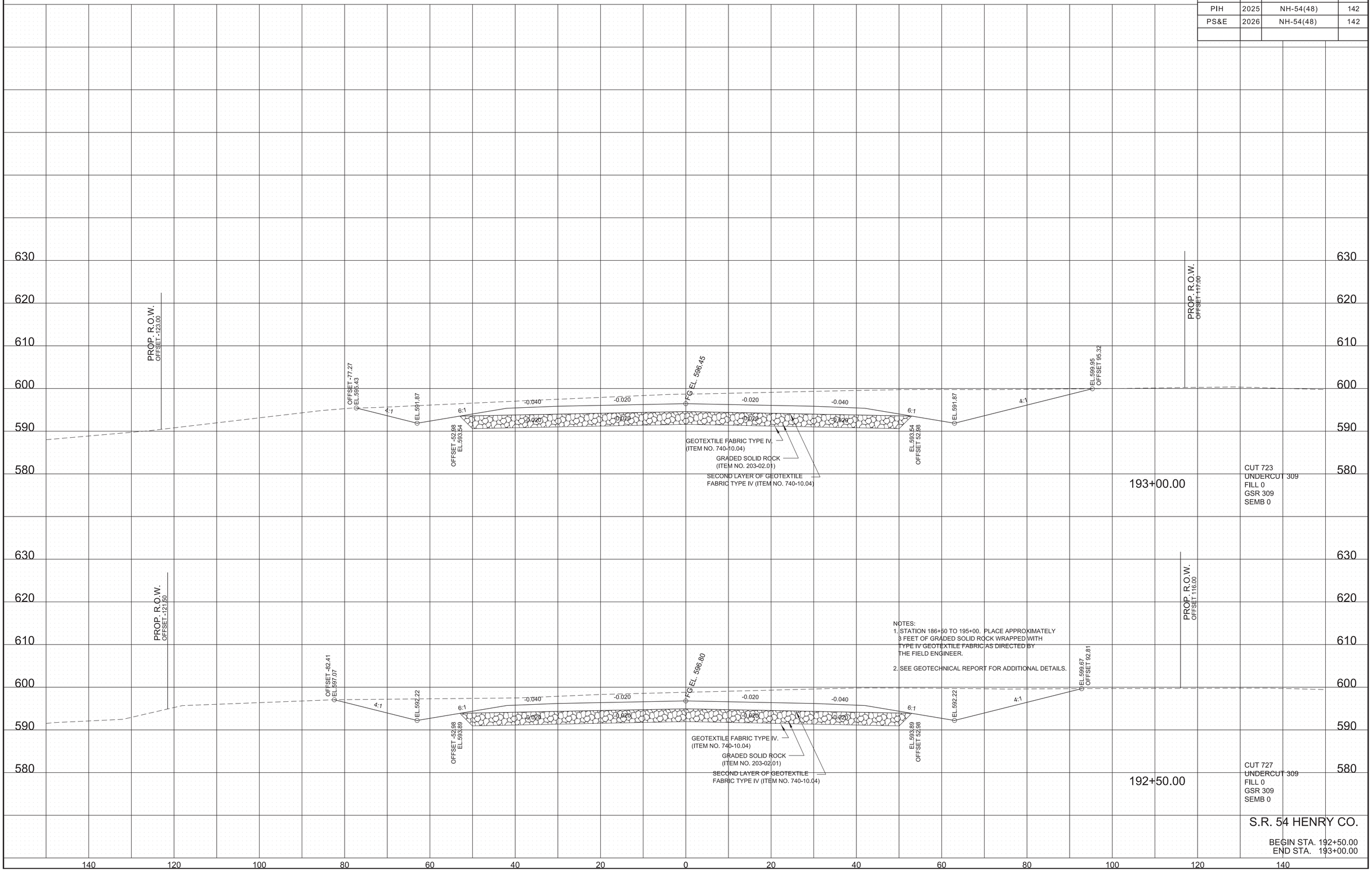
2. SEE GEOTECHNICAL REPORT FOR ADDITIONAL DETAILS.

S.R. 54 HENRY CO.

BEGIN STA. 191+50.00
END STA. 192+00.00

2/9/2026 2:43:58 PM
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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	126
PIH	2025	NH-54(48)	142
PS&E	2026	NH-54(48)	142



NOTES:
1. STATION 186+50 TO 195+00. PLACE APPROXIMATELY 3 FEET OF GRADED SOLID ROCK WRAPPED WITH TYPE IV GEOTEXTILE FABRIC AS DIRECTED BY THE FIELD ENGINEER.

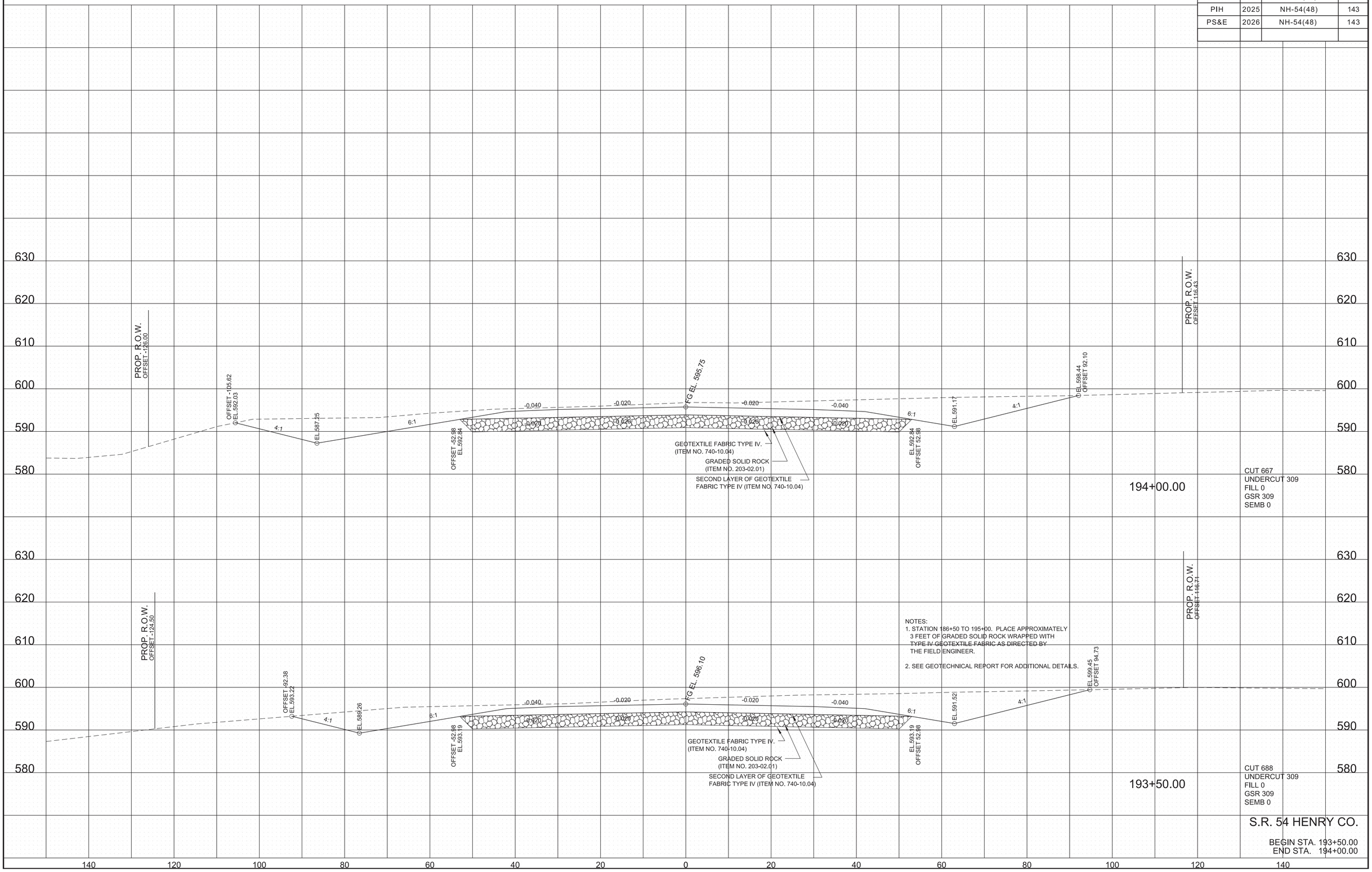
2. SEE GEOTECHNICAL REPORT FOR ADDITIONAL DETAILS.

S.R. 54 HENRY CO.

BEGIN STA. 192+50.00
END STA. 193+00.00

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	127
PIH	2025	NH-54(48)	143
PS&E	2026	NH-54(48)	143



NOTES:
1. STATION 186+50 TO 195+00. PLACE APPROXIMATELY 3 FEET OF GRADED SOLID ROCK WRAPPED WITH TYPE IV GEOTEXTILE FABRIC AS DIRECTED BY THE FIELD ENGINEER.

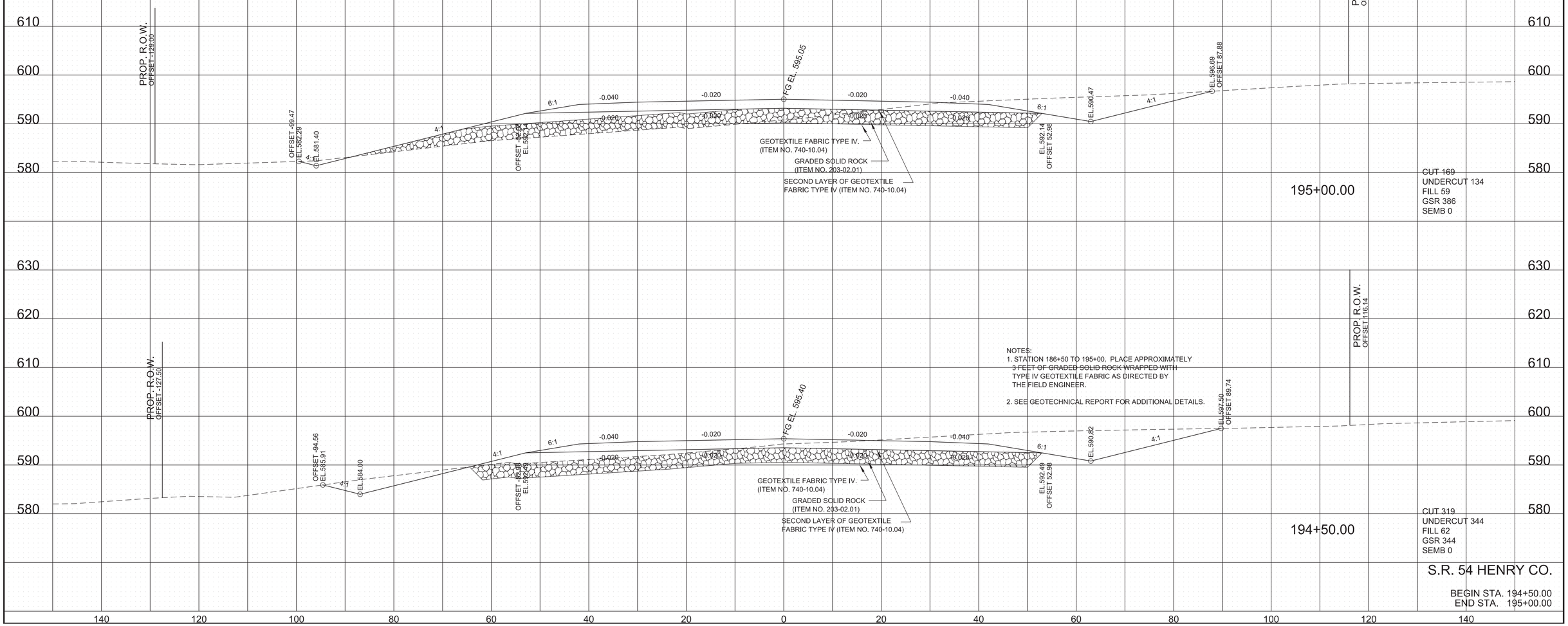
2. SEE GEOTECHNICAL REPORT FOR ADDITIONAL DETAILS.

S.R. 54 HENRY CO.

BEGIN STA. 193+50.00
END STA. 194+00.00

2/9/2026 2:44:05 PM
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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	128
PIH	2025	NH-54(48)	144
PS&E	2026	NH-54(48)	144

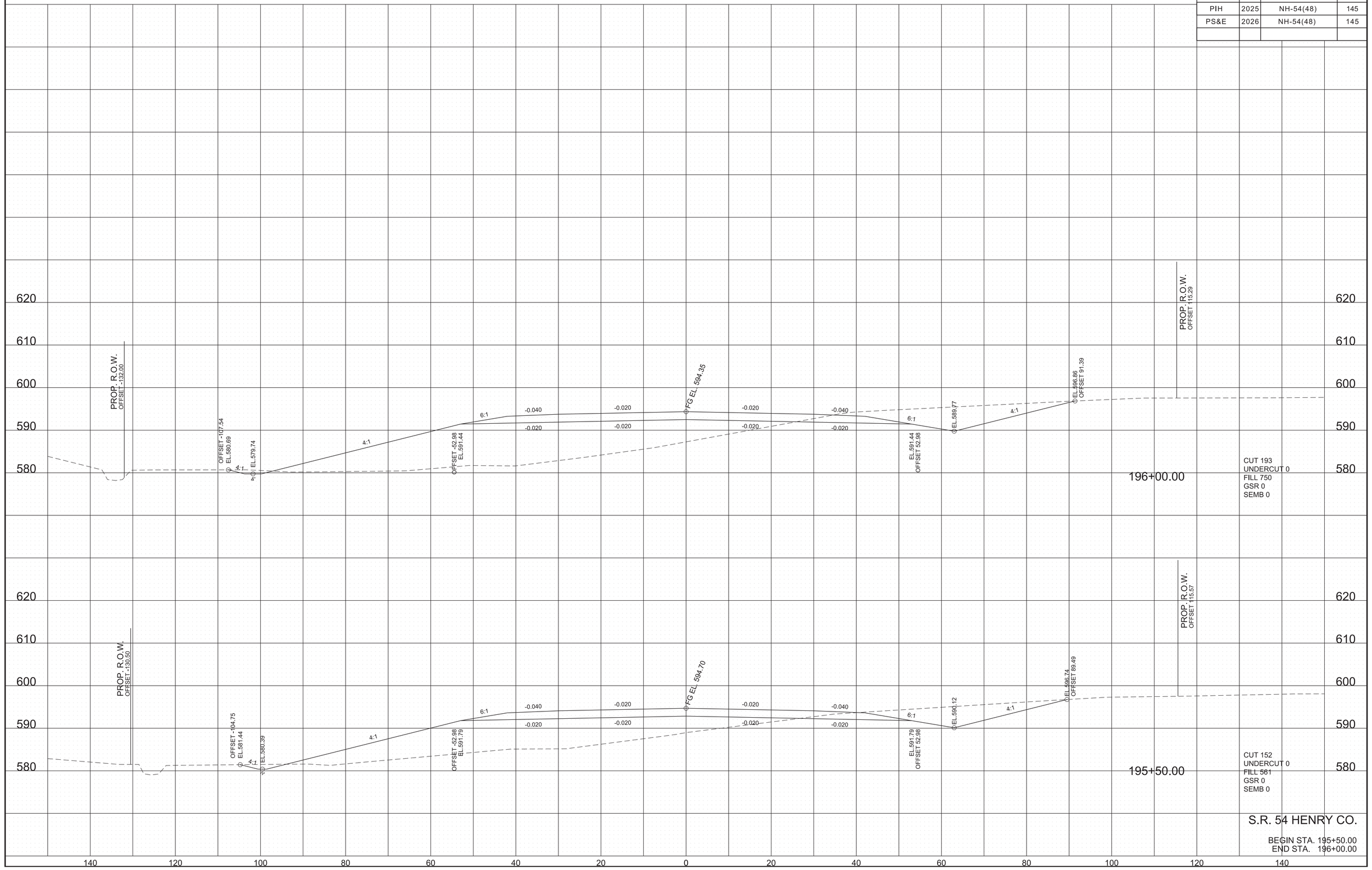


S.R. 54 HENRY CO.

BEGIN STA. 194+50.00
END STA. 195+00.00

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	129
PIH	2025	NH-54(48)	145
PS&E	2026	NH-54(48)	145

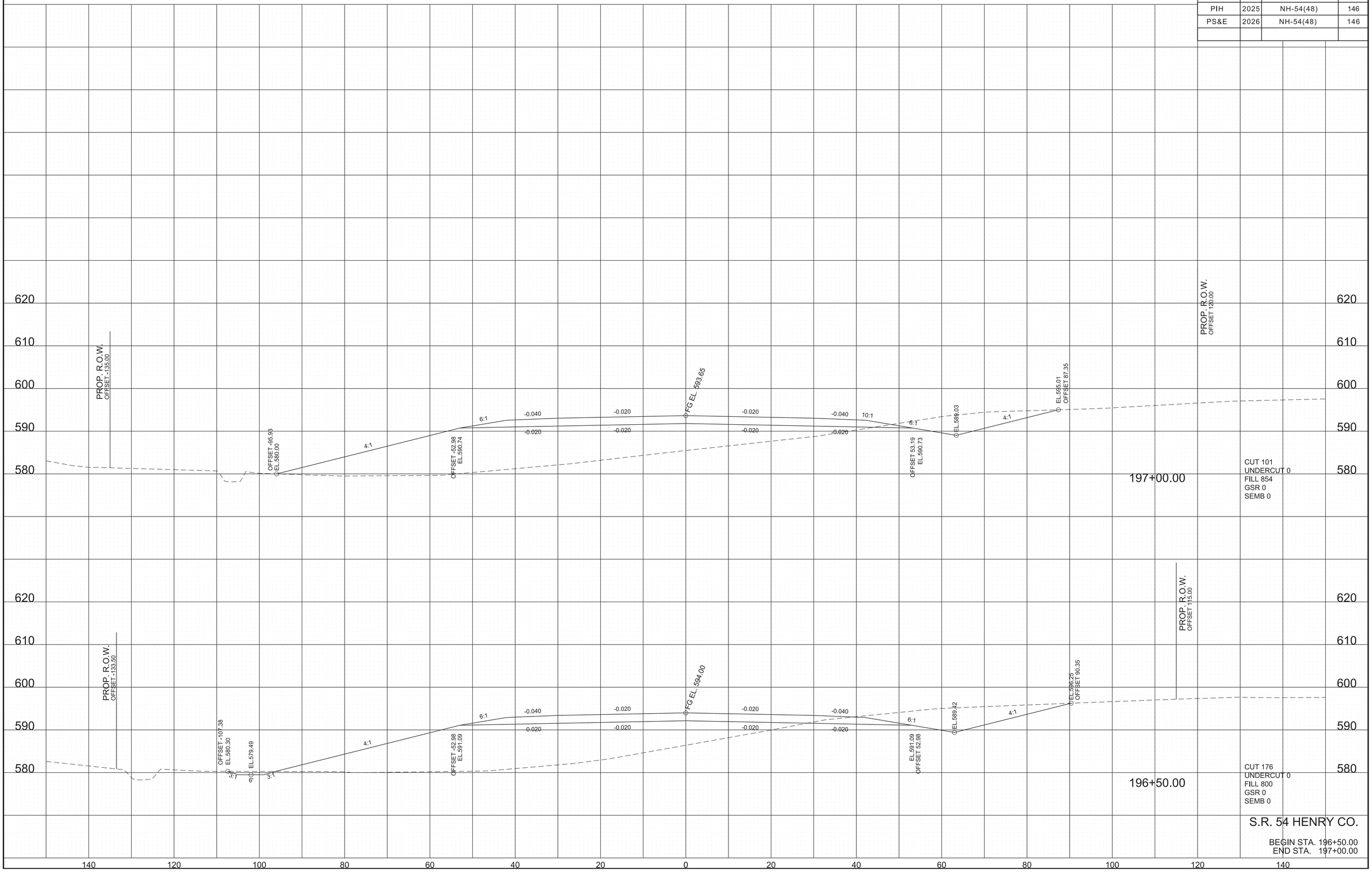


S.R. 54 HENRY CO.

BEGIN STA. 195+50.00
END STA. 196+00.00

2/9/2026 2:44:13 PM
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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	130
PIH	2025	NH-54(48)	146
PS&E	2026	NH-54(48)	146

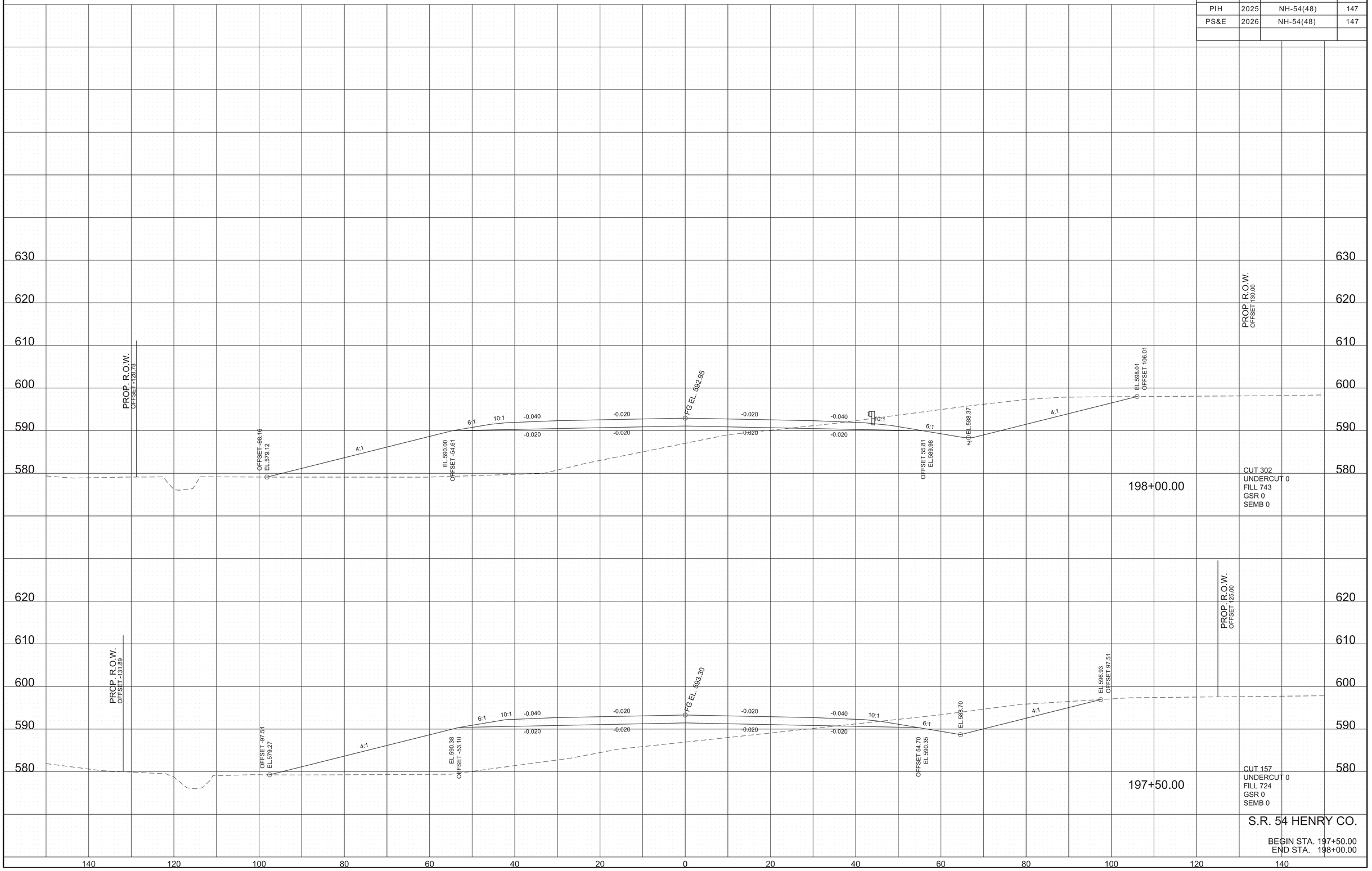


S.R. 54 HENRY CO.

BEGIN STA. 196+50.00
END STA. 197+00.00

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	131
PIH	2025	NH-54(48)	147
PS&E	2026	NH-54(48)	147

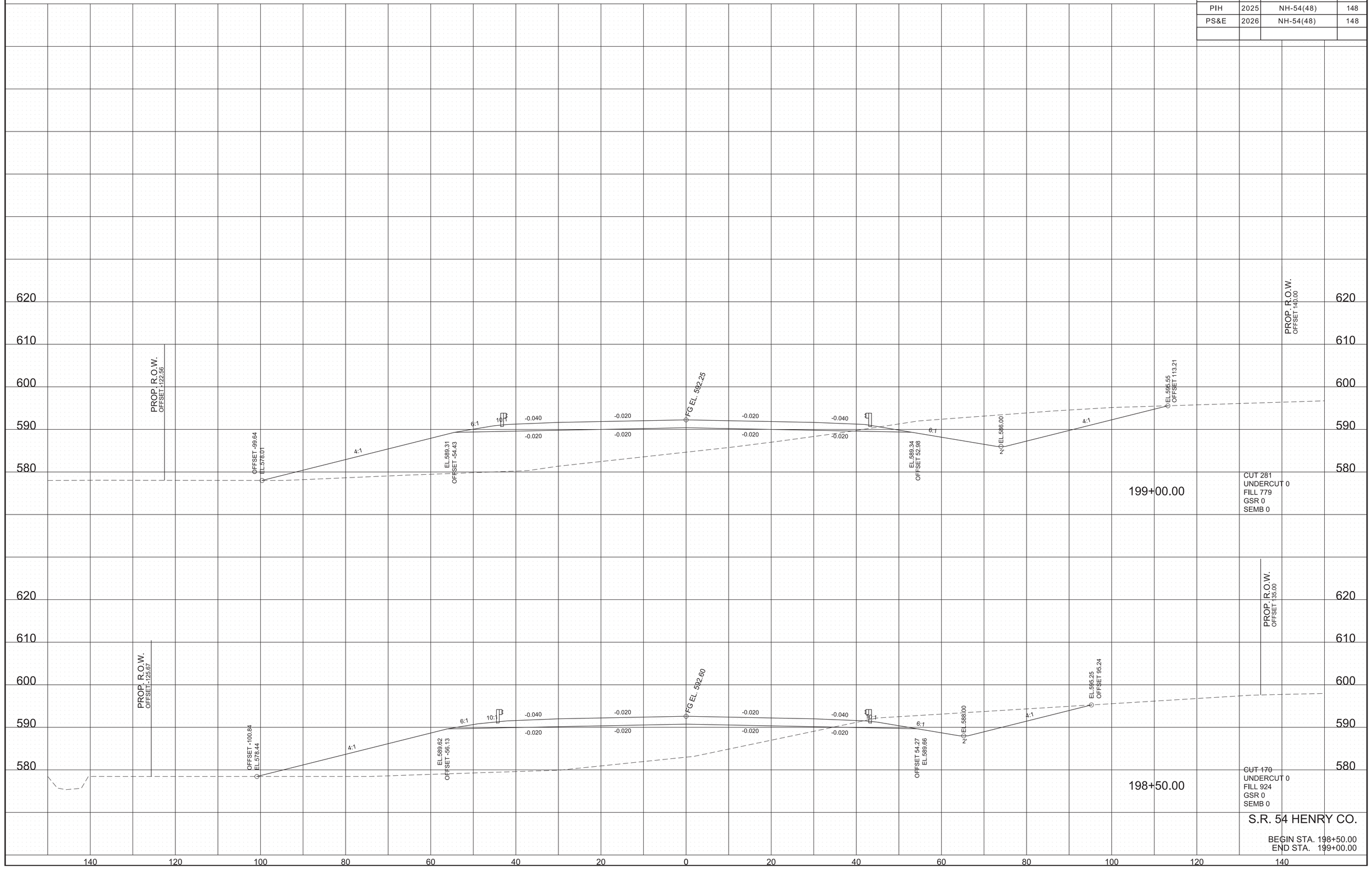


S.R. 54 HENRY CO.

BEGIN STA. 197+50.00
END STA. 198+00.00

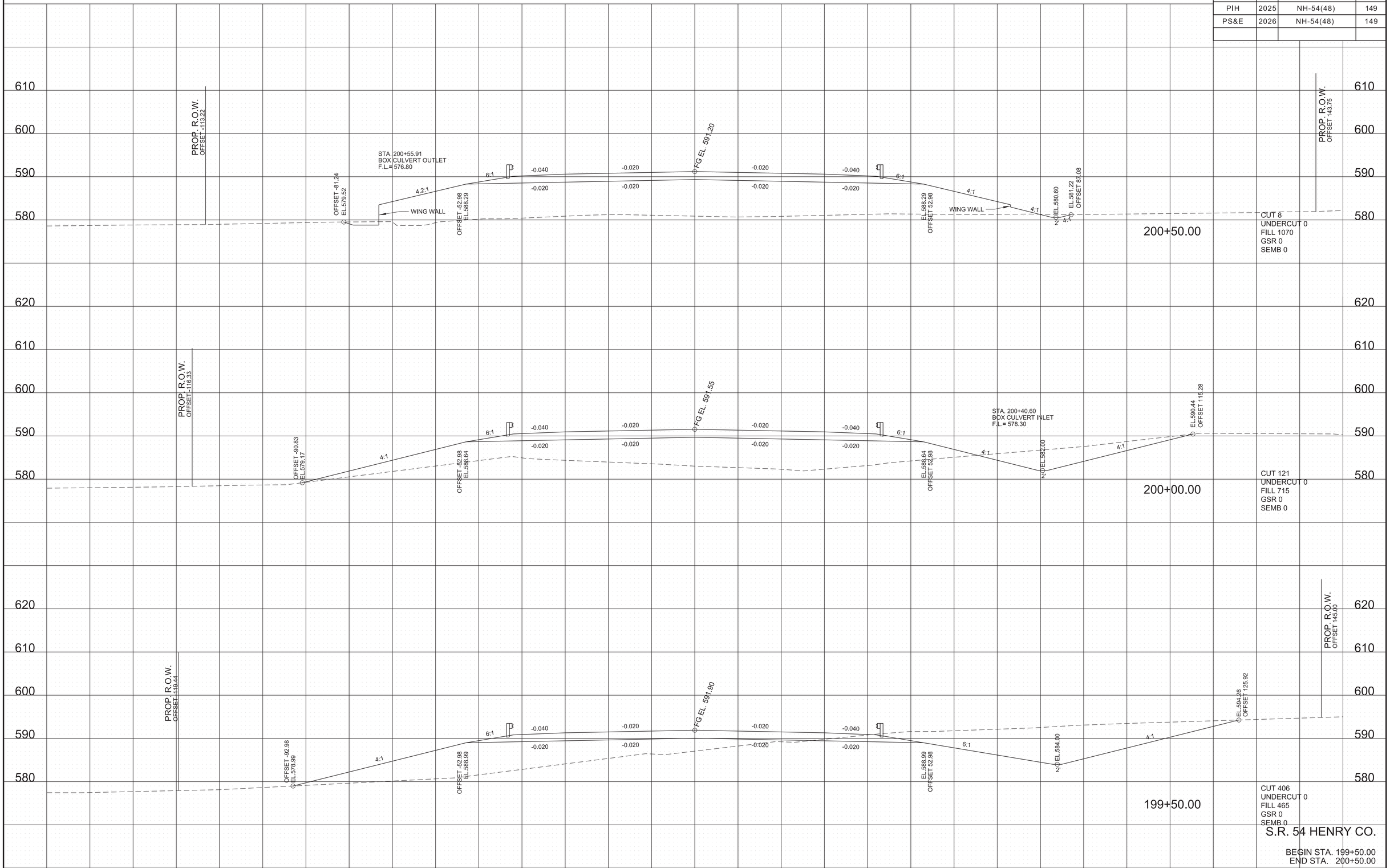
2/9/2026 2:44:20 PM
T:\TDOT\Henry_SR54\SR54XSections.sht

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	132
PIH	2025	NH-54(48)	148
PS&E	2026	NH-54(48)	148



2/9/2026 2:44:23 PM
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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	133
PIH	2025	NH-54(48)	149
PS&E	2026	NH-54(48)	149

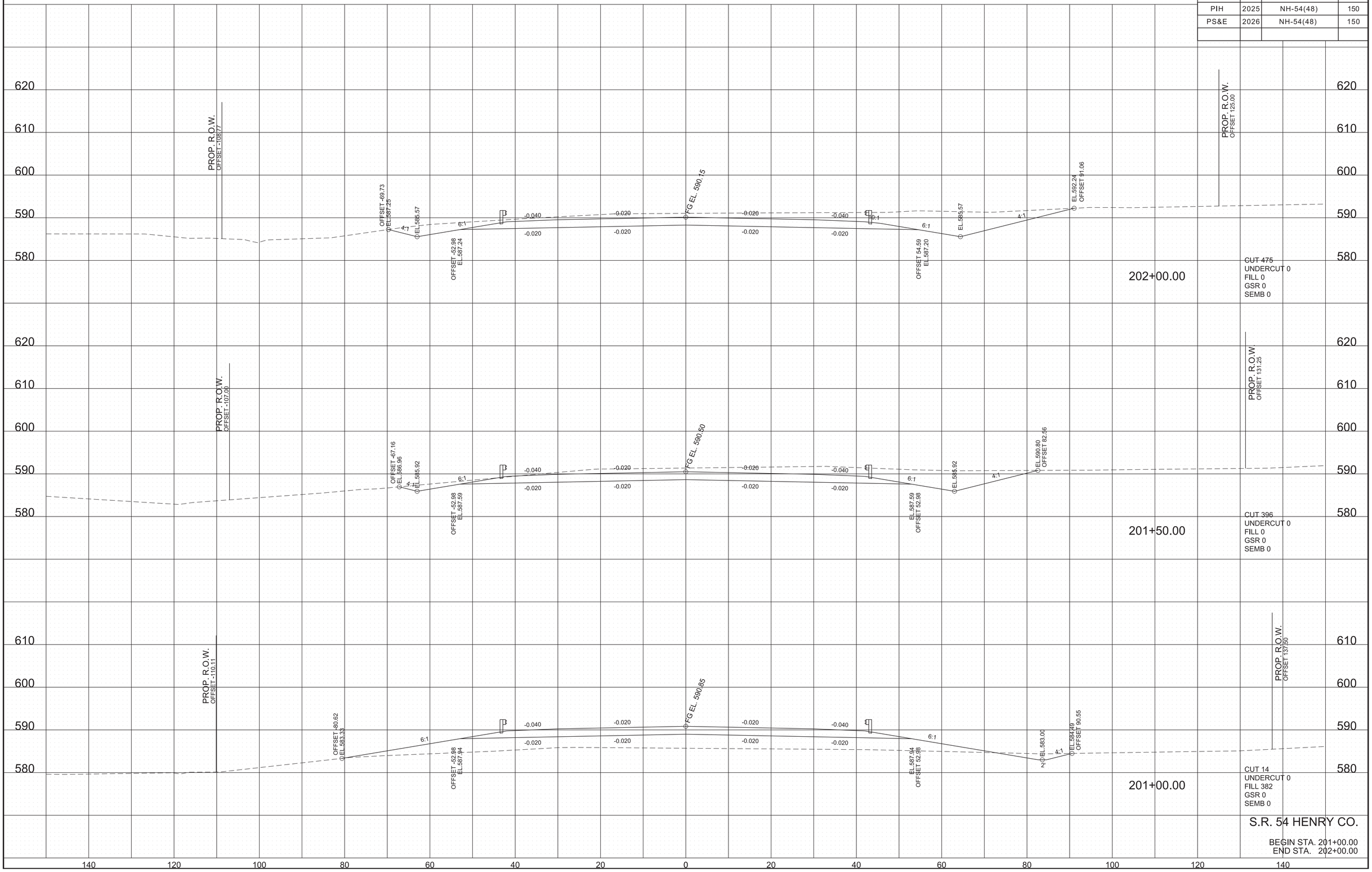


S.R. 54 HENRY CO.

BEGIN STA. 199+50.00
END STA. 200+50.00

2/9/2026 2:44:27 PM
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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	134
PIH	2025	NH-54(48)	150
PS&E	2026	NH-54(48)	150

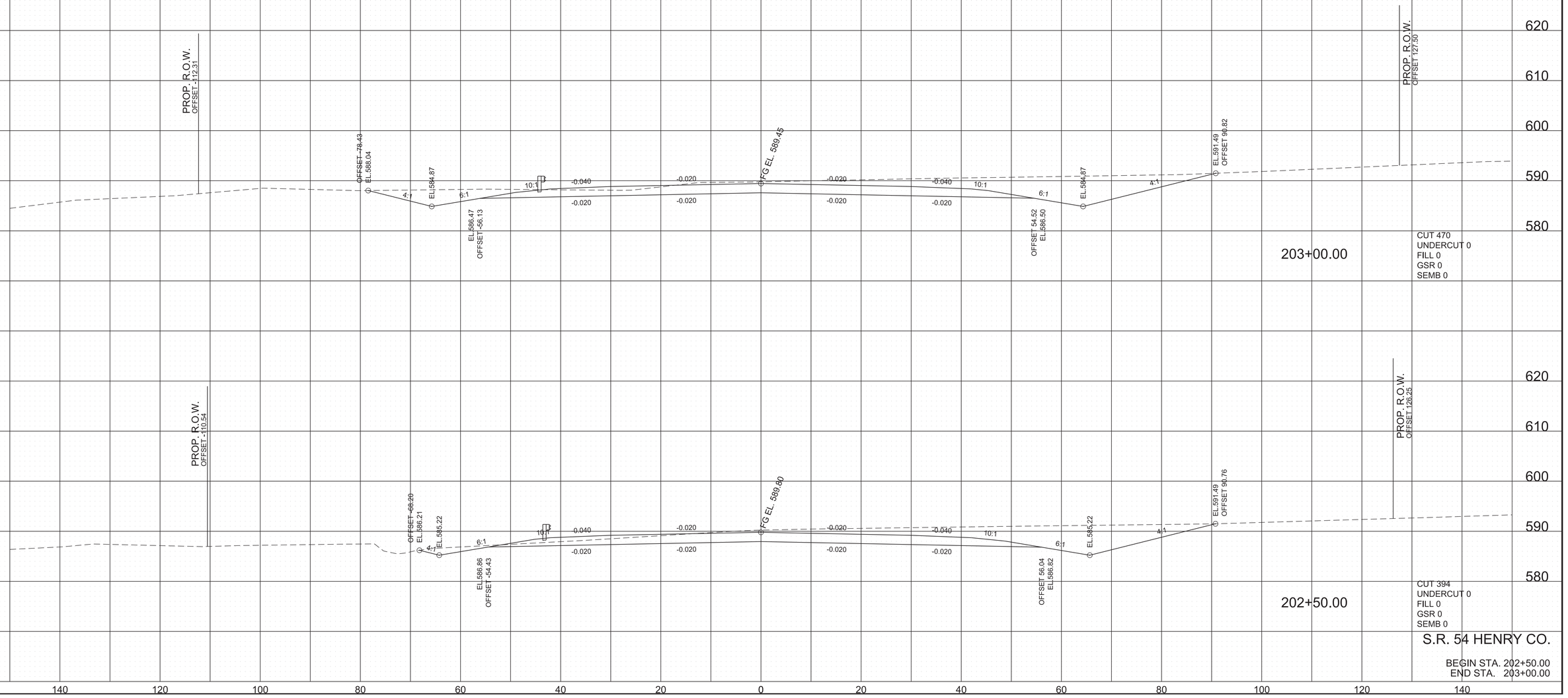


S.R. 54 HENRY CO.

BEGIN STA. 201+00.00
END STA. 202+00.00

2/9/2026 2:44:31 PM
T:\TDOT\Henry_SR54\SR54XSections.sht

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	135
PIH	2025	NH-54(48)	151
PS&E	2026	NH-54(48)	151



S.R. 54 HENRY CO.

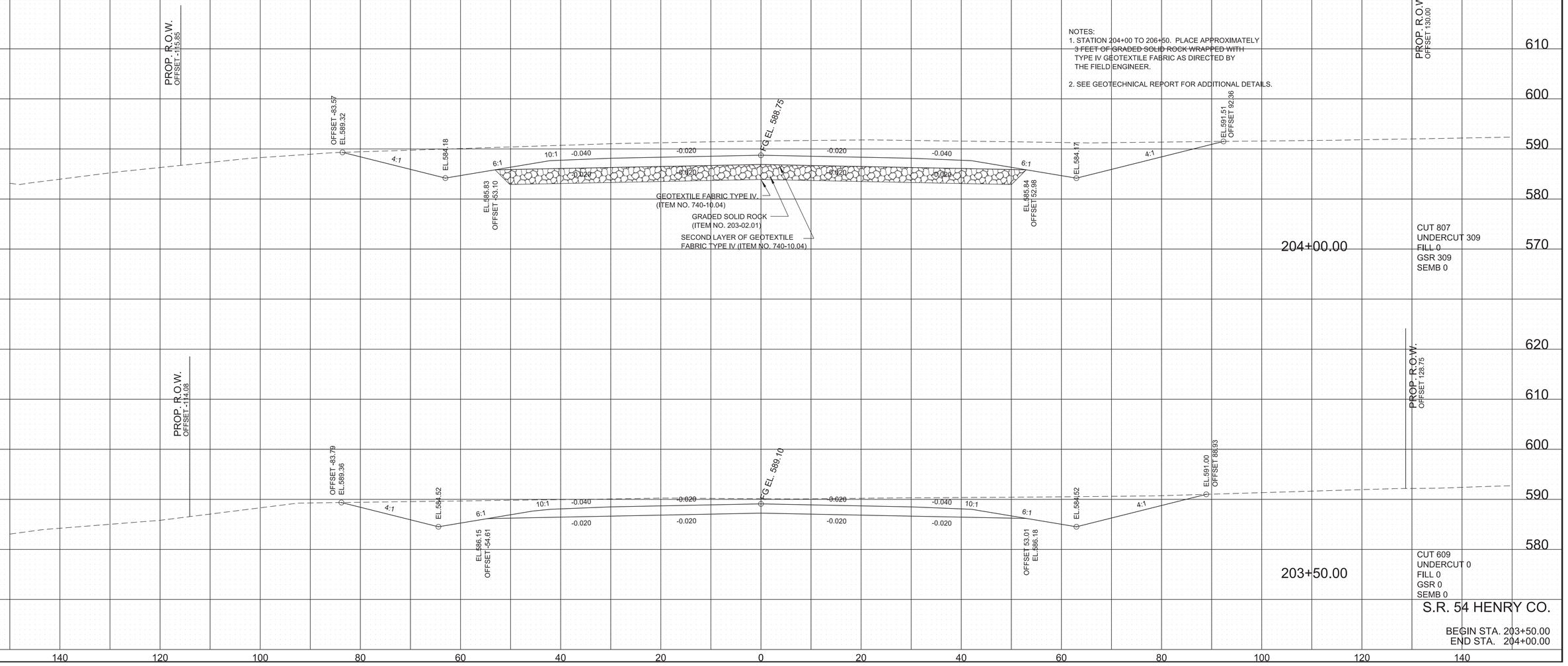
BEGIN STA. 202+50.00
END STA. 203+00.00

2/9/2026 2:44:34 PM
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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	136
PIH	2025	NH-54(48)	152
PS&E	2026	NH-54(48)	152

NOTES:
1. STATION 204+00 TO 206+50. PLACE APPROXIMATELY 3 FEET OF GRADED SOLID ROCK WRAPPED WITH TYPE IV GEOTEXTILE FABRIC AS DIRECTED BY THE FIELD ENGINEER.

2. SEE GEOTECHNICAL REPORT FOR ADDITIONAL DETAILS.

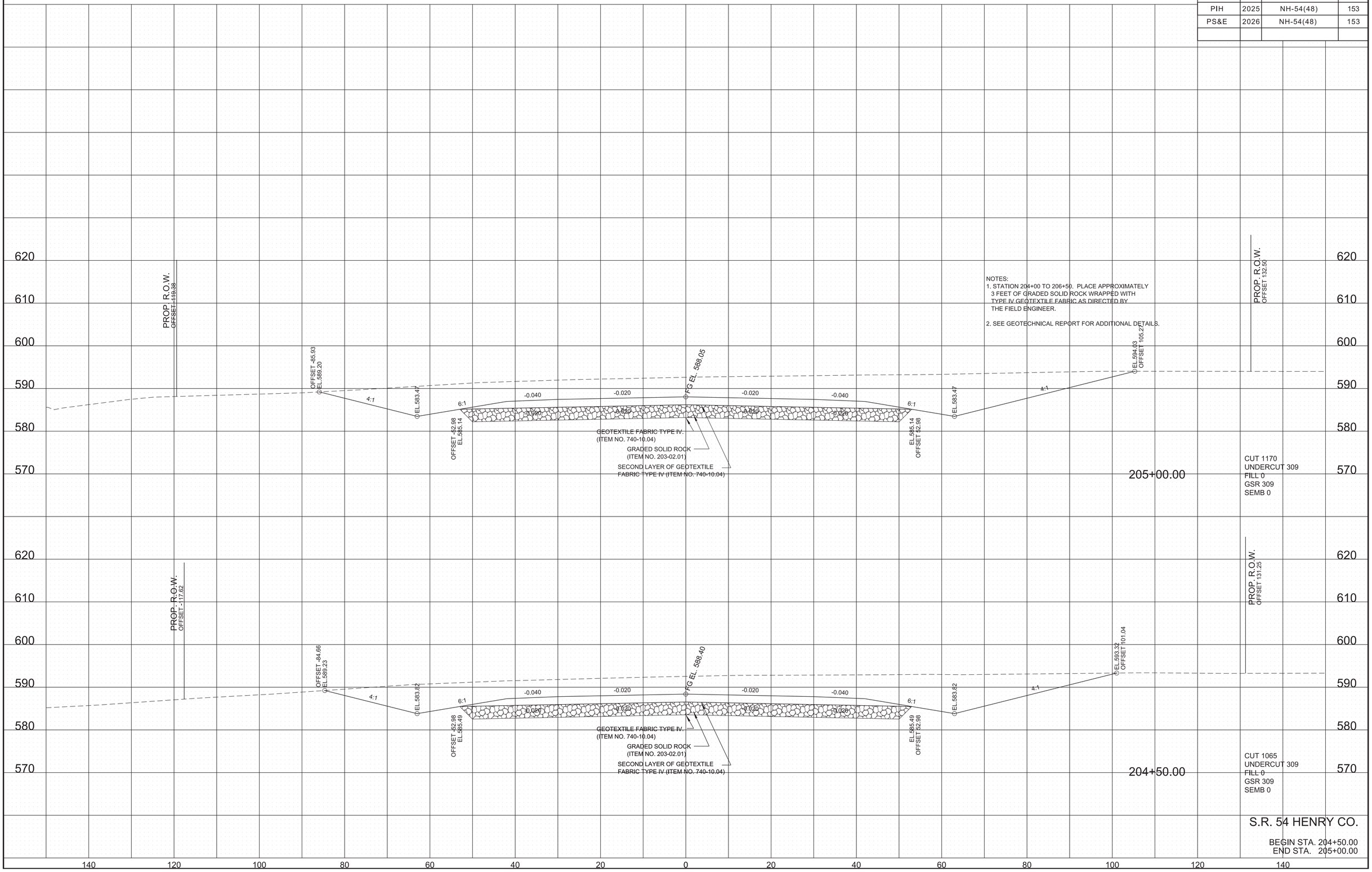


S.R. 54 HENRY CO.

BEGIN STA. 203+50.00
END STA. 204+00.00

2/9/2026 2:44:38 PM
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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	137
PIH	2025	NH-54(48)	153
PS&E	2026	NH-54(48)	153

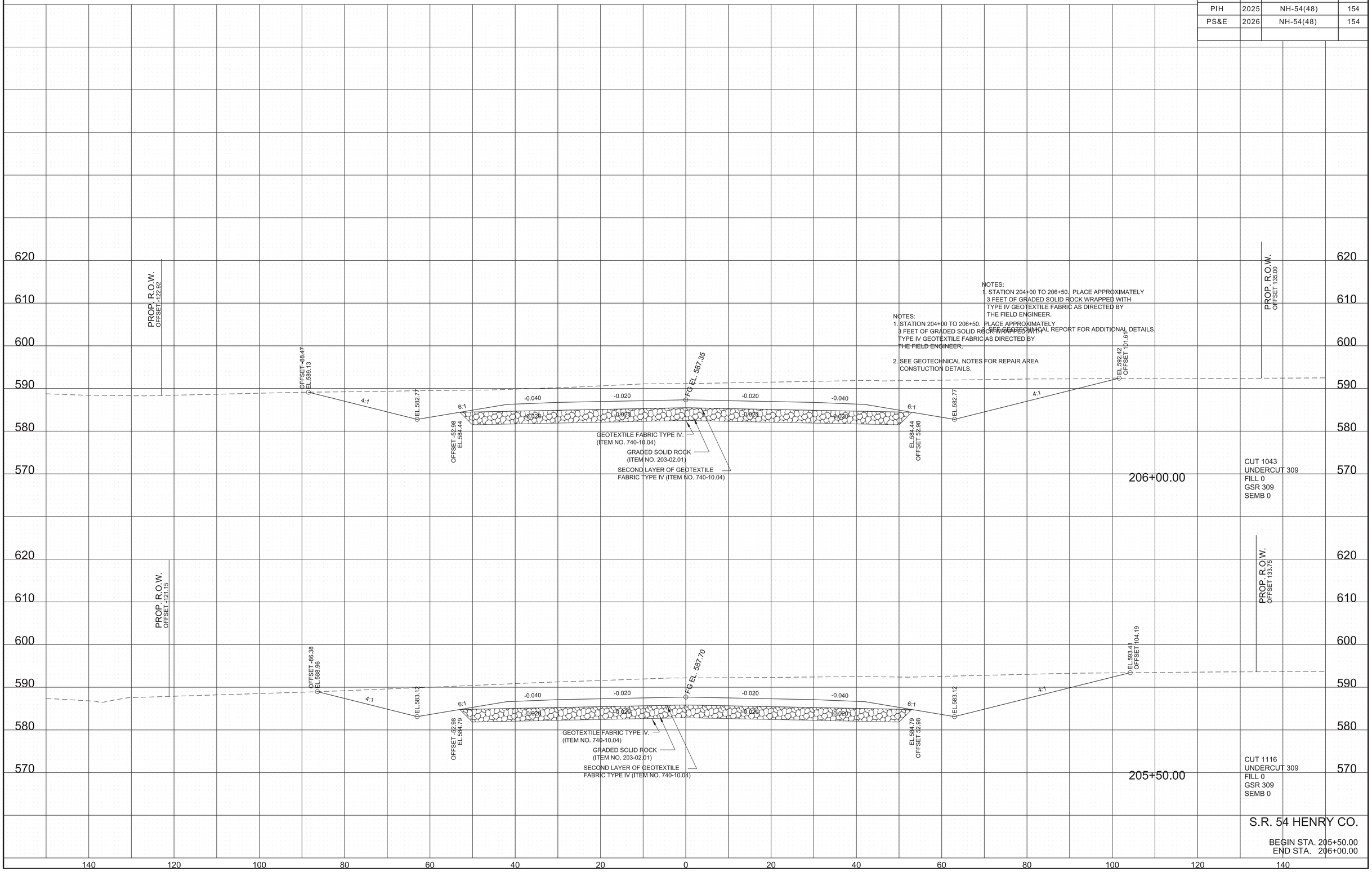


S.R. 54 HENRY CO.

BEGIN STA. 204+50.00
END STA. 205+00.00

2/9/2026 2:44:41 PM
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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	138
PIH	2025	NH-54(48)	154
PS&E	2026	NH-54(48)	154

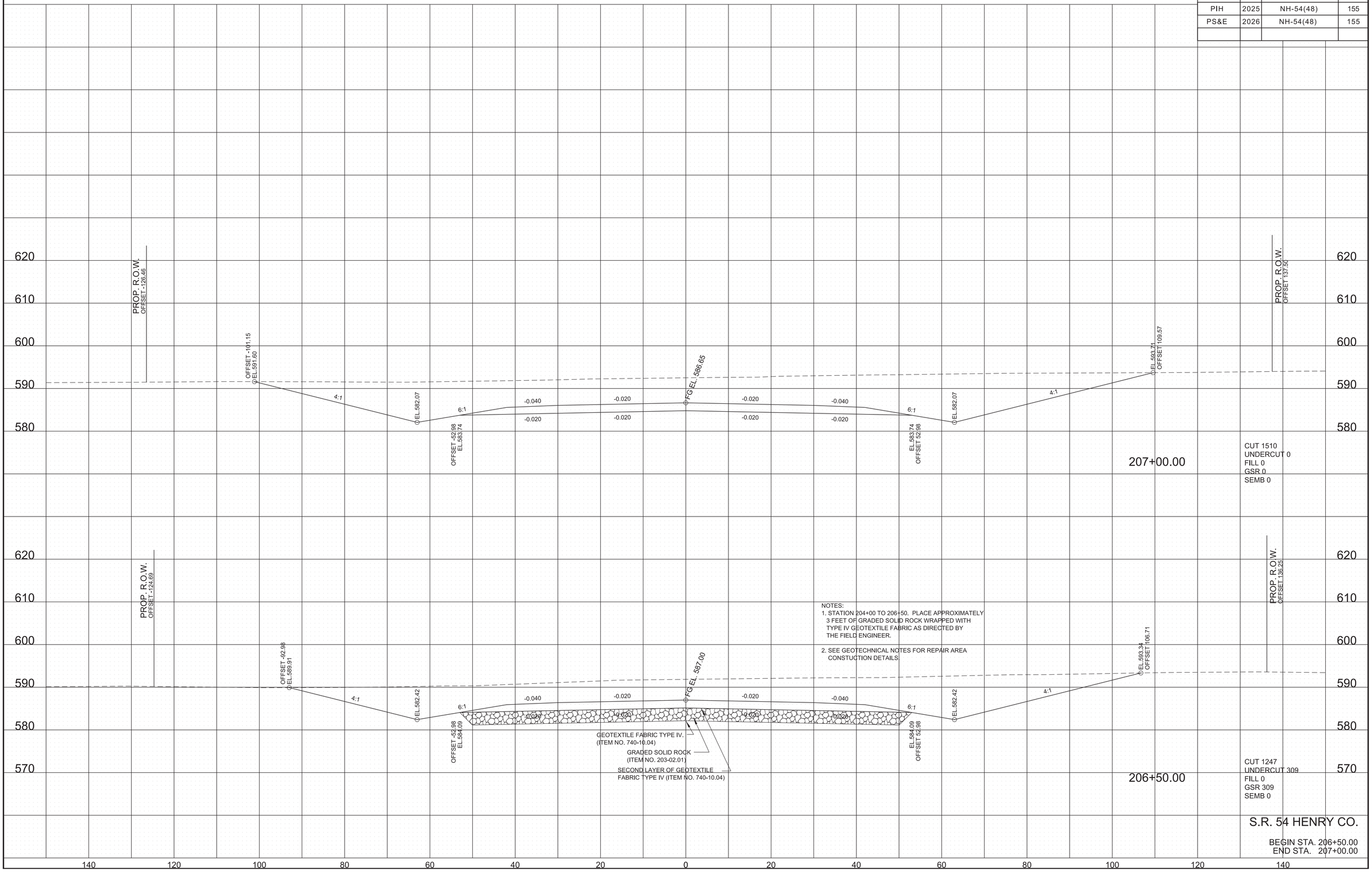


S.R. 54 HENRY CO.

BEGIN STA. 205+50.00
END STA. 206+00.00

2/9/2026 2:44:45 PM
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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	139
PIH	2025	NH-54(48)	155
PS&E	2026	NH-54(48)	155



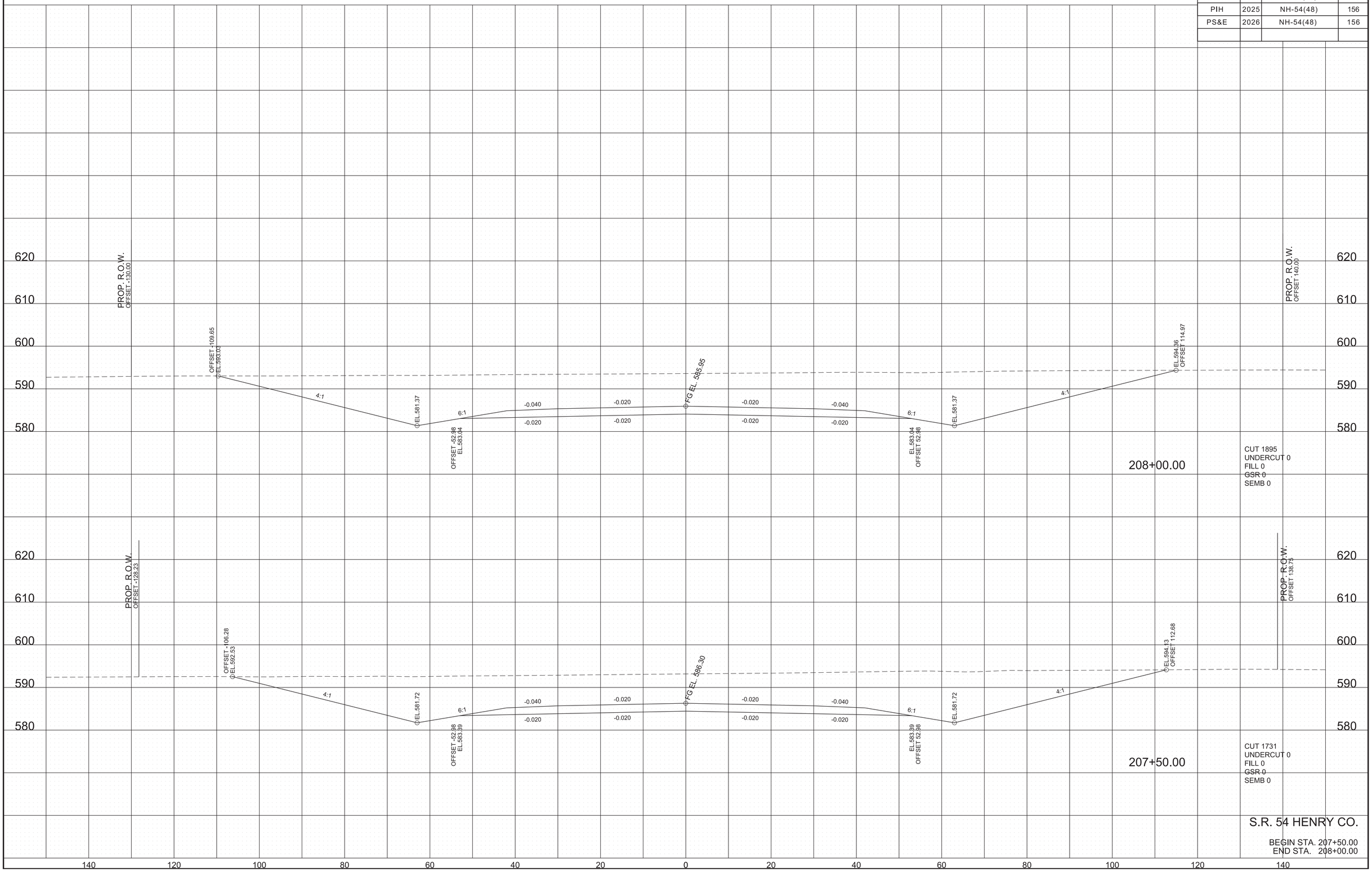
NOTES:
1. STATION 204+00 TO 206+50. PLACE APPROXIMATELY 3 FEET OF GRADED SOLID ROCK WRAPPED WITH TYPE IV GEOTEXTILE FABRIC AS DIRECTED BY THE FIELD ENGINEER.
2. SEE GEOTECHNICAL NOTES FOR REPAIR AREA CONSTUCTION DETAILS.

S.R. 54 HENRY CO.

BEGIN STA. 206+50.00
END STA. 207+00.00

2/9/2026 2:44:49 PM
T:\TDOT\Henry_SR54\SR54XSections.sht

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	140
PIH	2025	NH-54(48)	156
PS&E	2026	NH-54(48)	156

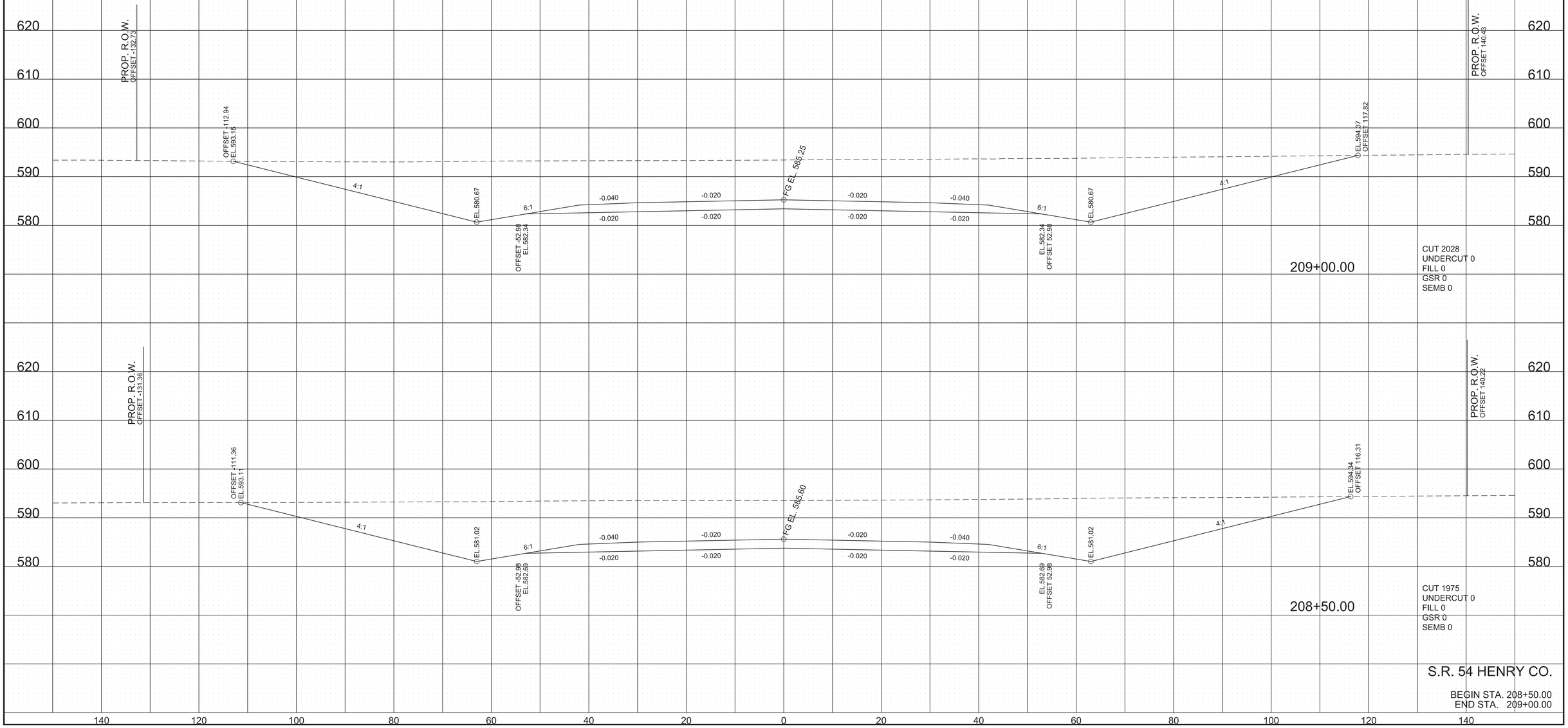


S.R. 54 HENRY CO.

BEGIN STA. 207+50.00
END STA. 208+00.00

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	141
PIH	2025	NH-54(48)	157
PS&E	2026	NH-54(48)	157

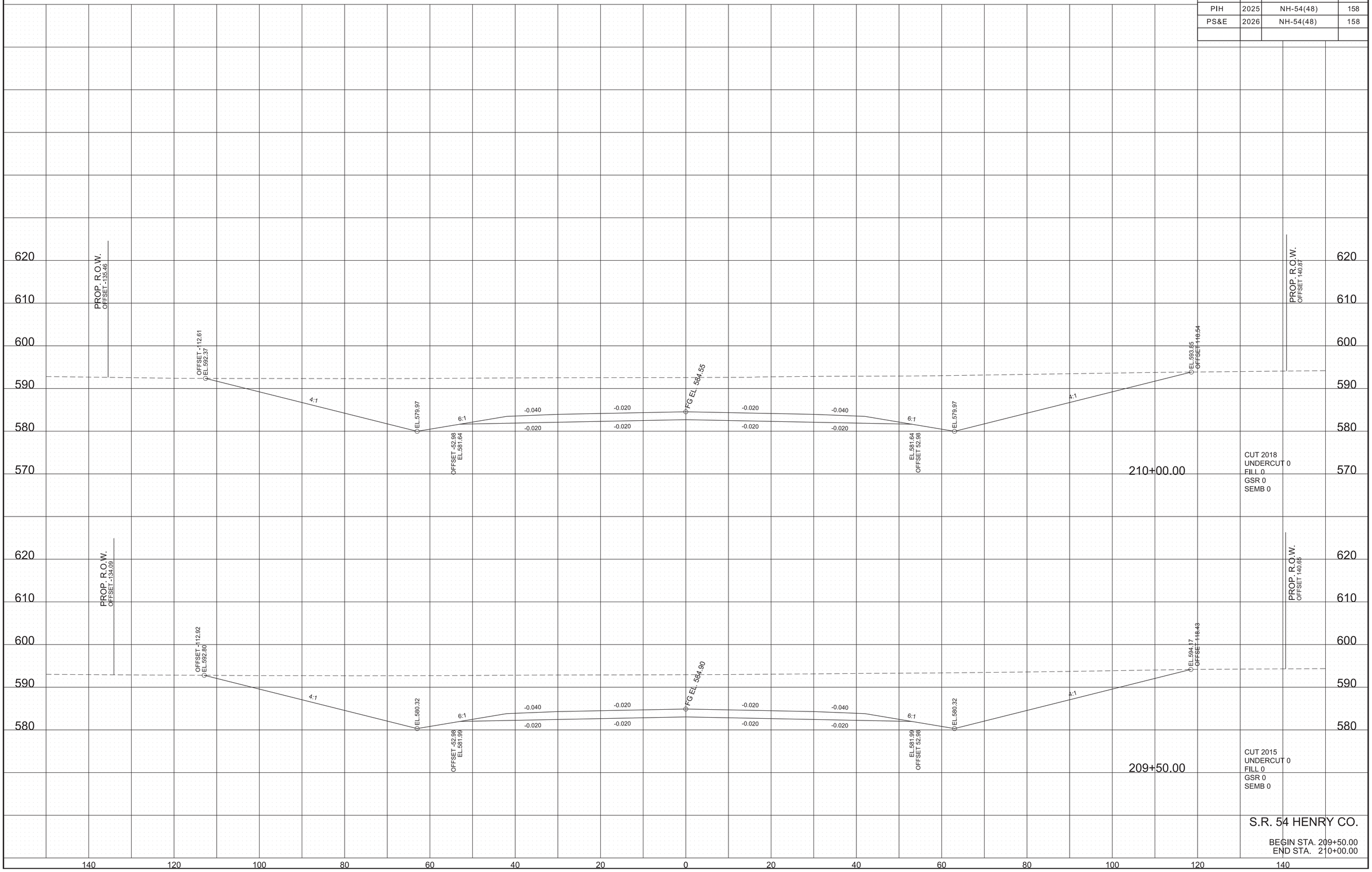


S.R. 54 HENRY CO.

BEGIN STA. 208+50.00
END STA. 209+00.00

2/9/2026 2:44:56 PM
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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	142
PIH	2025	NH-54(48)	158
PS&E	2026	NH-54(48)	158

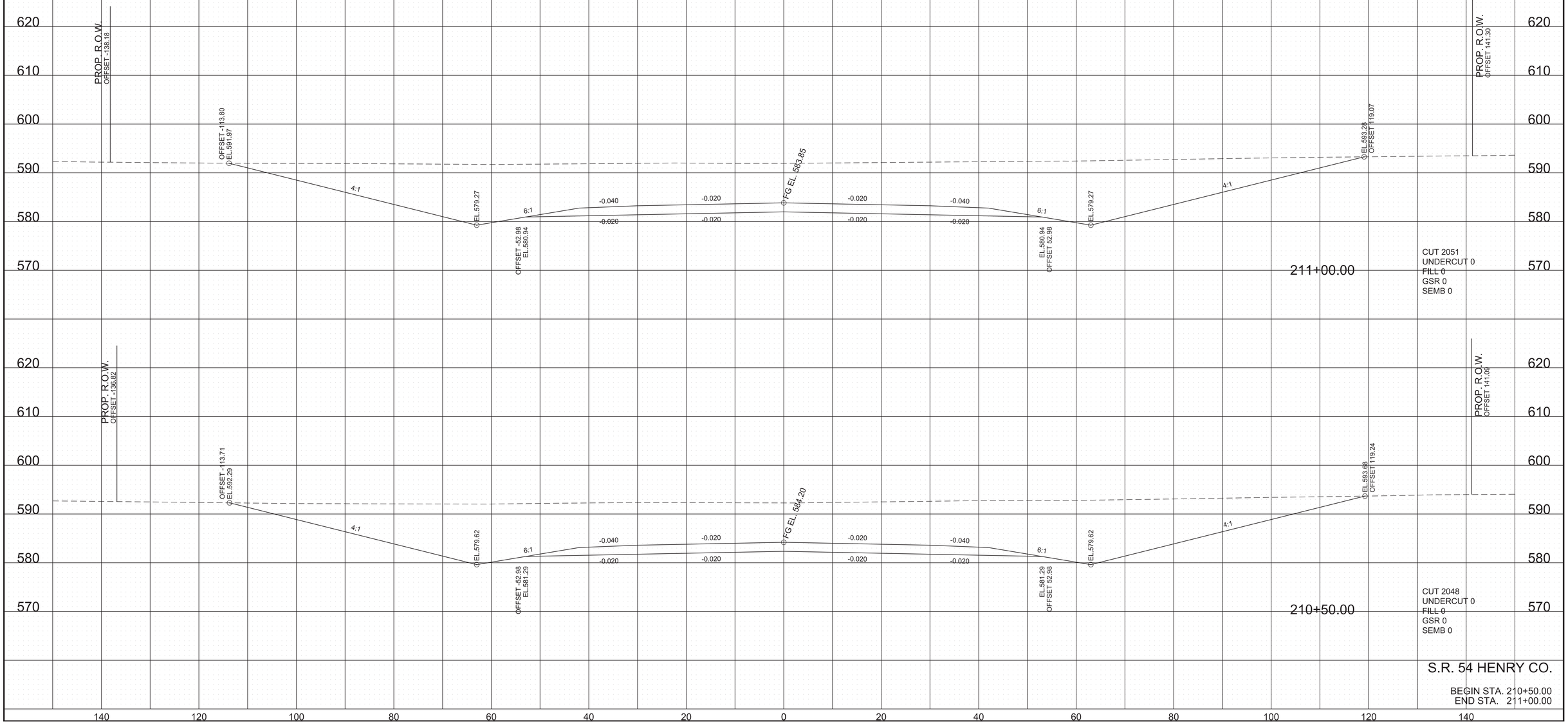


S.R. 54 HENRY CO.

BEGIN STA. 209+50.00
END STA. 210+00.00

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	143
PIH	2025	NH-54(48)	159
PS&E	2026	NH-54(48)	159

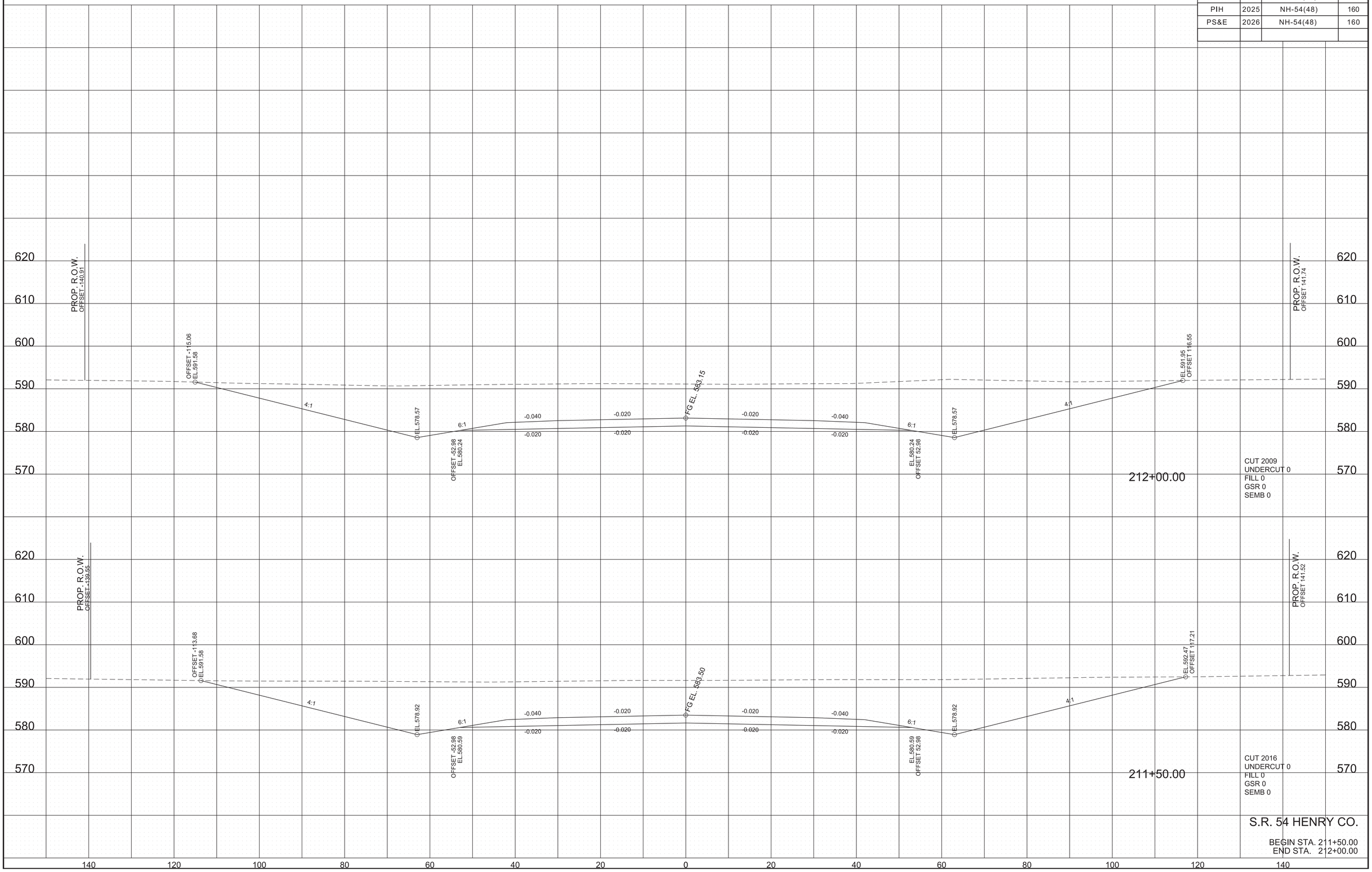


S.R. 54 HENRY CO.

BEGIN STA. 210+50.00
END STA. 211+00.00

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	144
PIH	2025	NH-54(48)	160
PS&E	2026	NH-54(48)	160

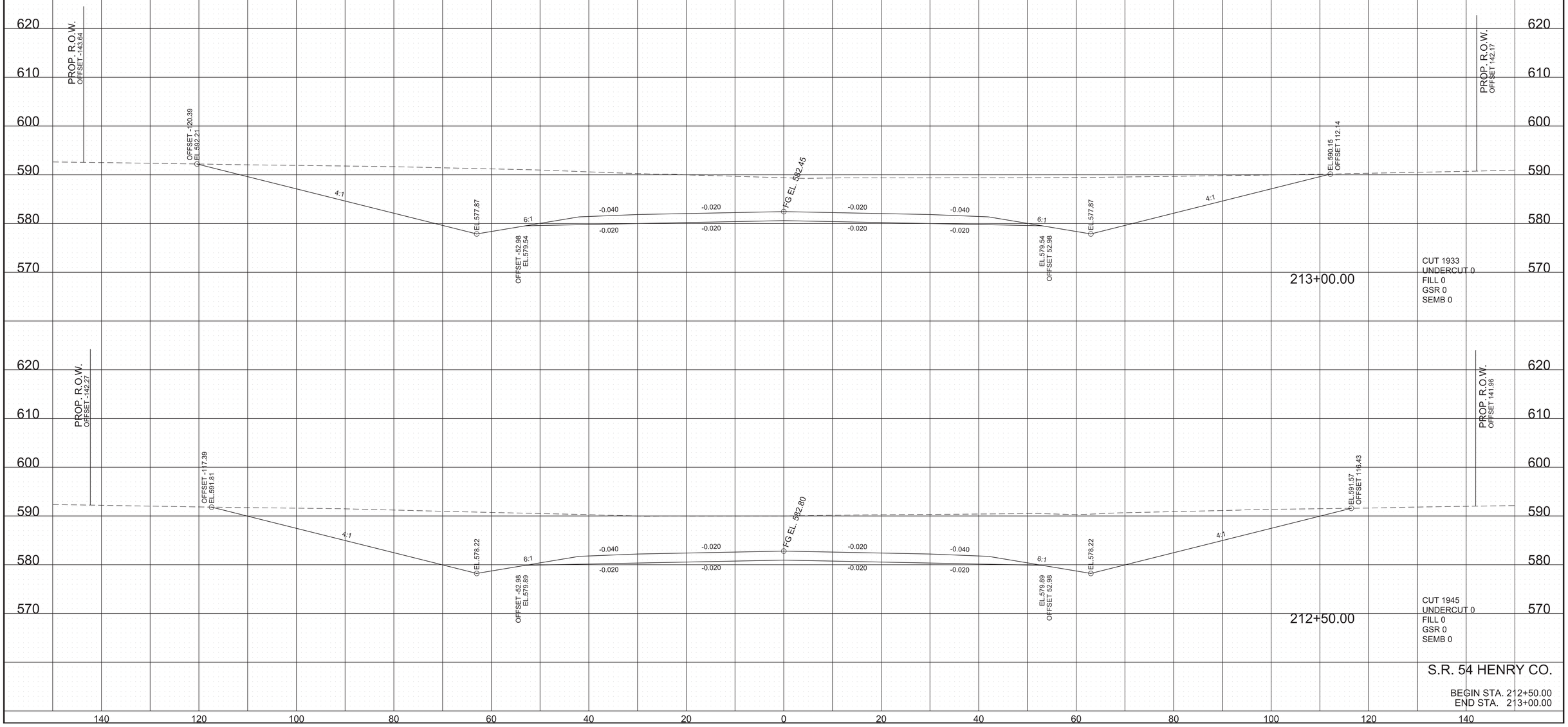


S.R. 54 HENRY CO.

BEGIN STA. 211+50.00
END STA. 212+00.00

2/9/2026 2:45:07 PM
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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	145
PIH	2025	NH-54(48)	161
PS&E	2026	NH-54(48)	161

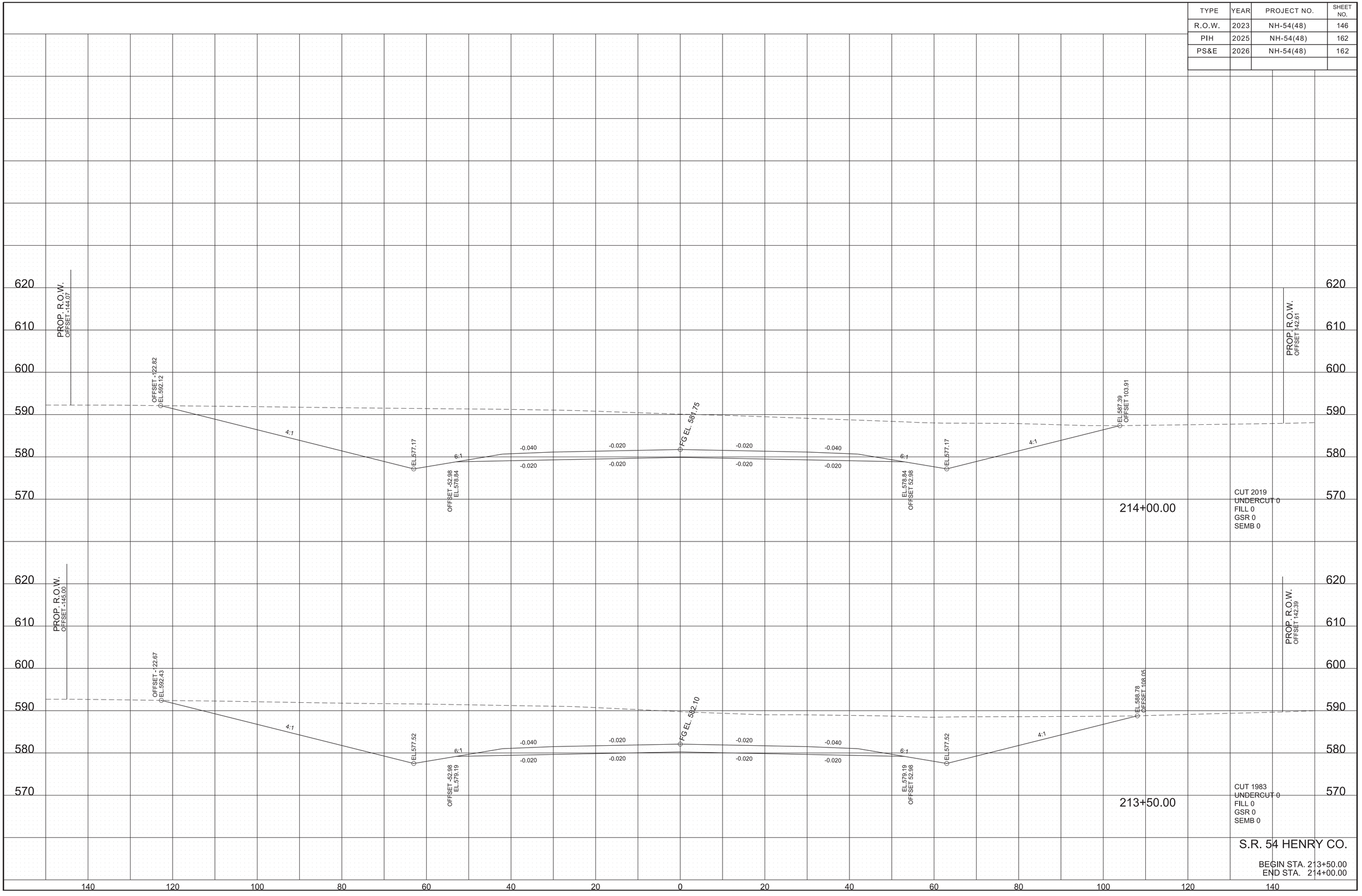


S.R. 54 HENRY CO.

BEGIN STA. 212+50.00
END STA. 213+00.00

2/9/2026 2:45:10 PM
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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	146
PIH	2025	NH-54(48)	162
PS&E	2026	NH-54(48)	162

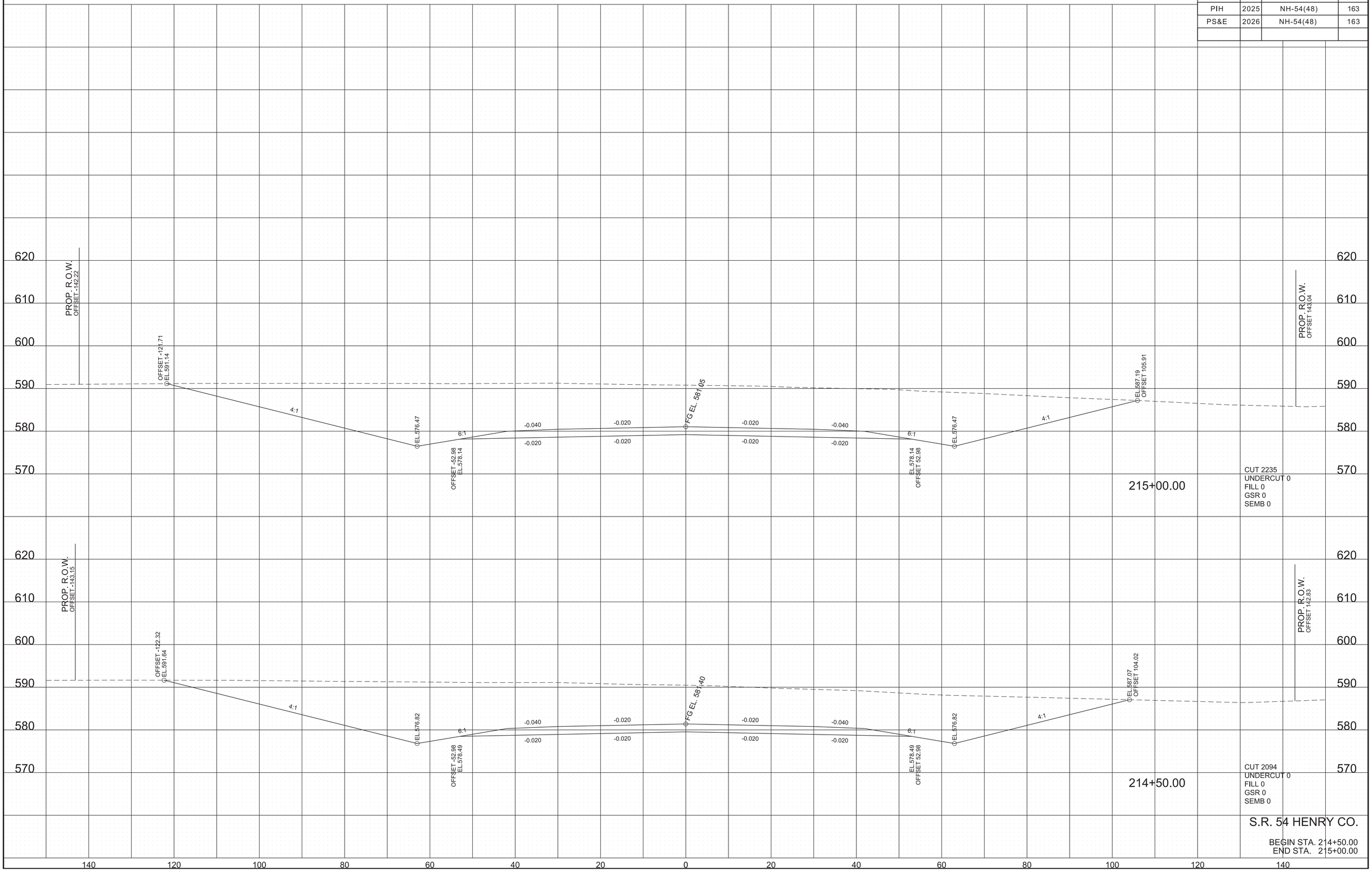


S.R. 54 HENRY CO.

BEGIN STA. 213+50.00
END STA. 214+00.00

2/9/2026 2:45:14 PM
T:\TDOT\Henry_SR54\SR54XSections.sht

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	147
PIH	2025	NH-54(48)	163
PS&E	2026	NH-54(48)	163

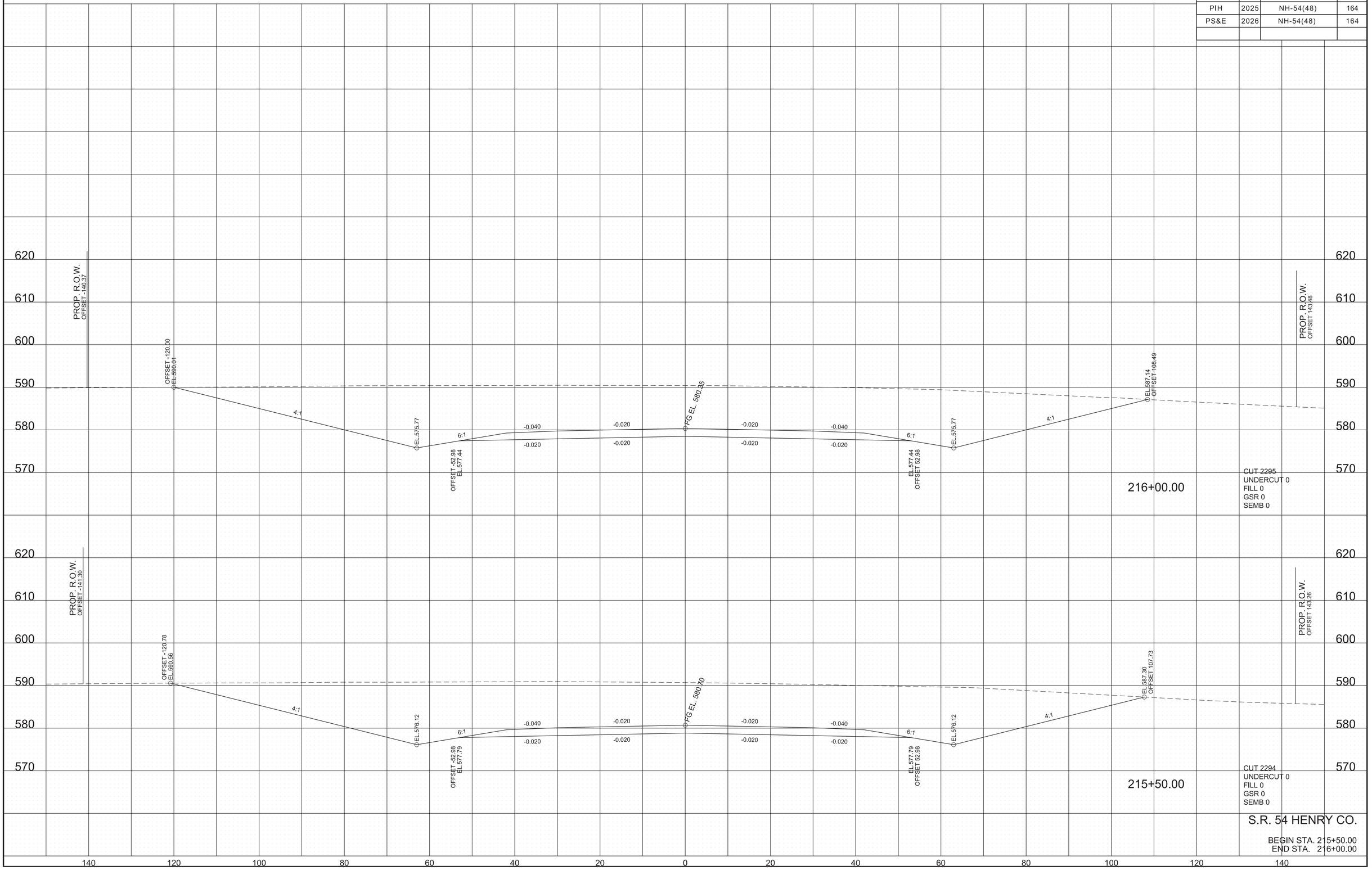


S.R. 54 HENRY CO.

BEGIN STA. 214+50.00
END STA. 215+00.00

2/9/2026 2:45:17 PM
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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	148
PIH	2025	NH-54(48)	164
PS&E	2026	NH-54(48)	164

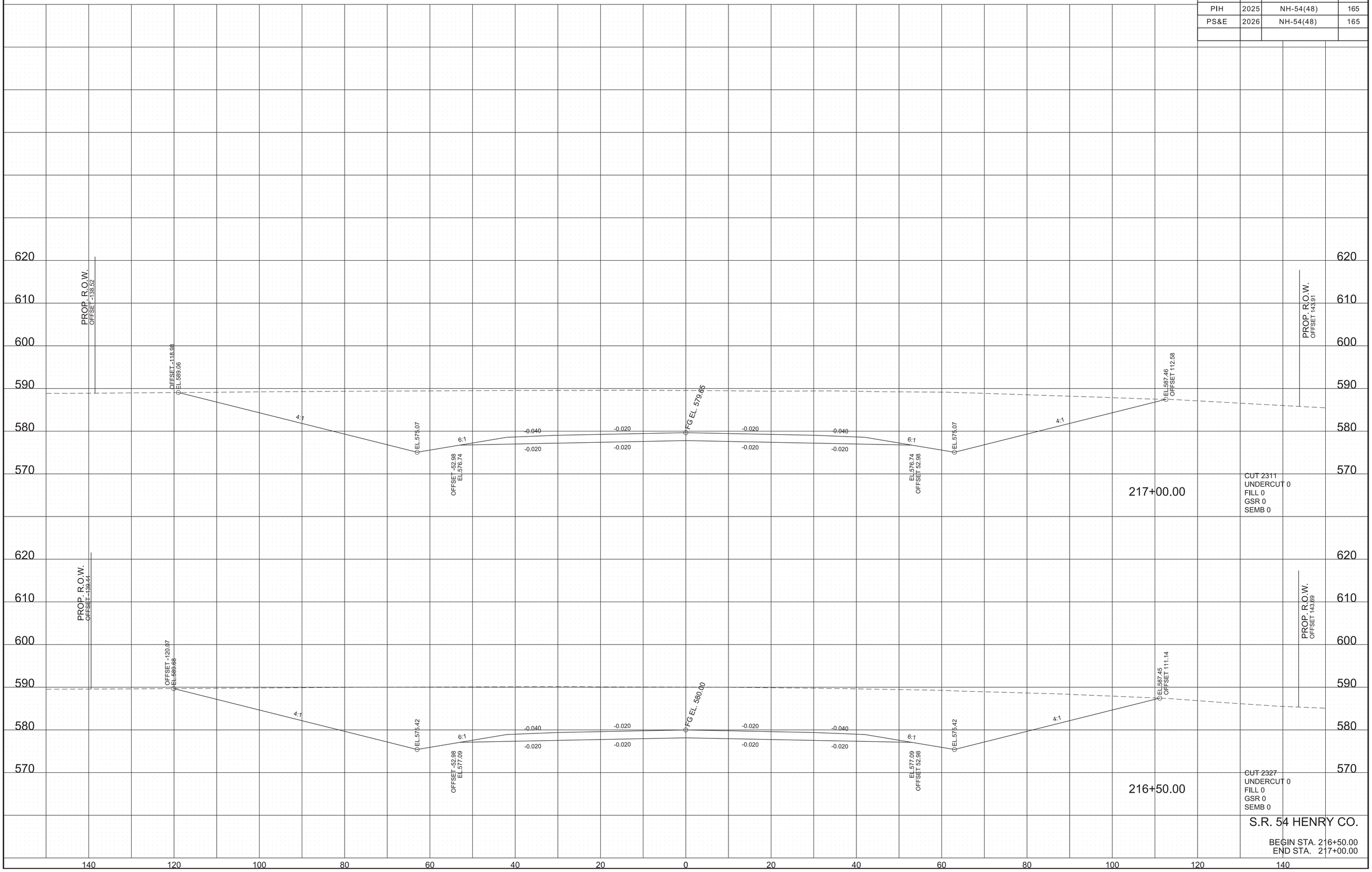


S.R. 54 HENRY CO.

BEGIN STA. 215+50.00
END STA. 216+00.00

2/9/2026 2:45:21 PM
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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	149
PIH	2025	NH-54(48)	165
PS&E	2026	NH-54(48)	165

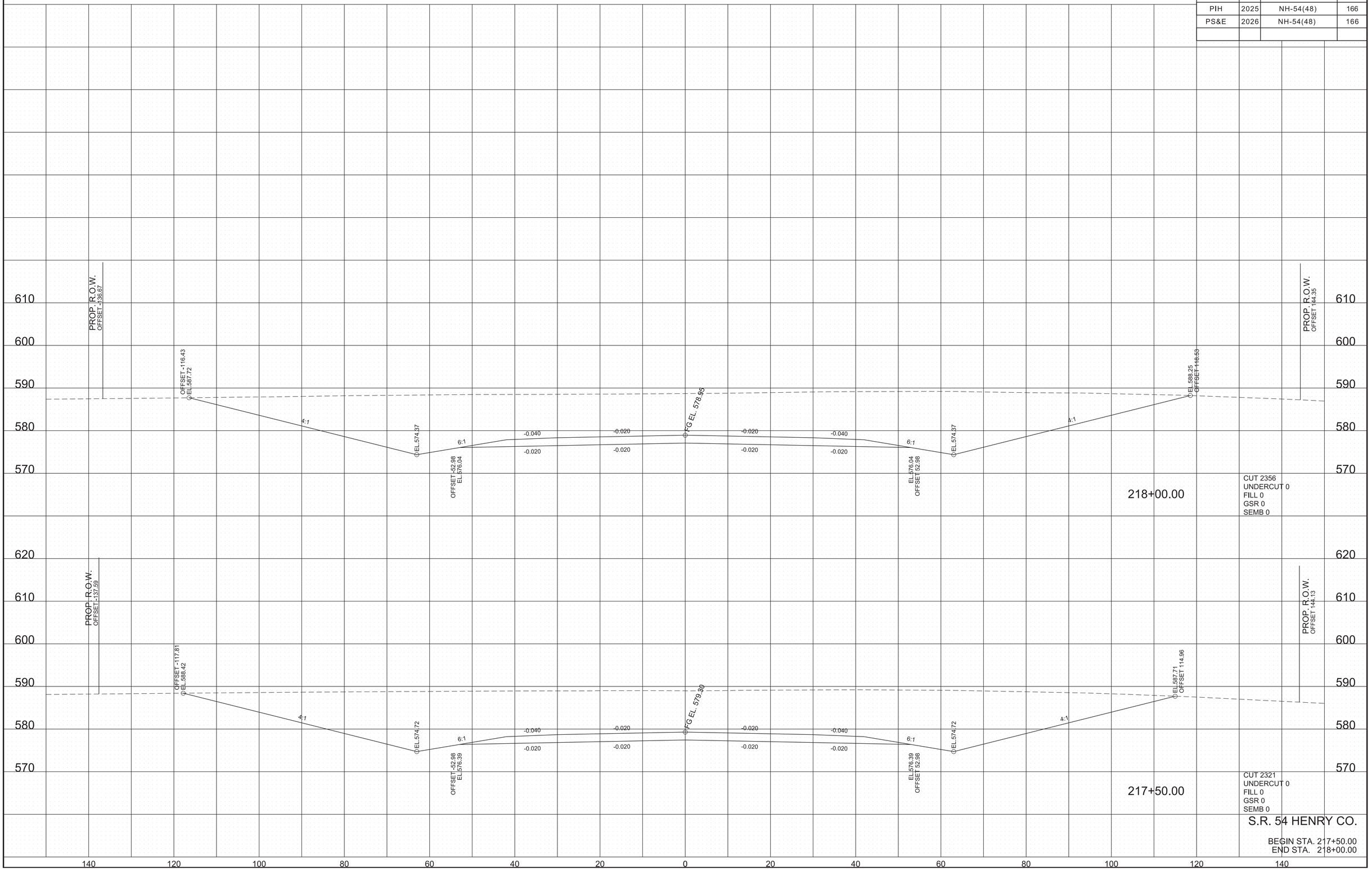


S.R. 54 HENRY CO.

BEGIN STA. 216+50.00
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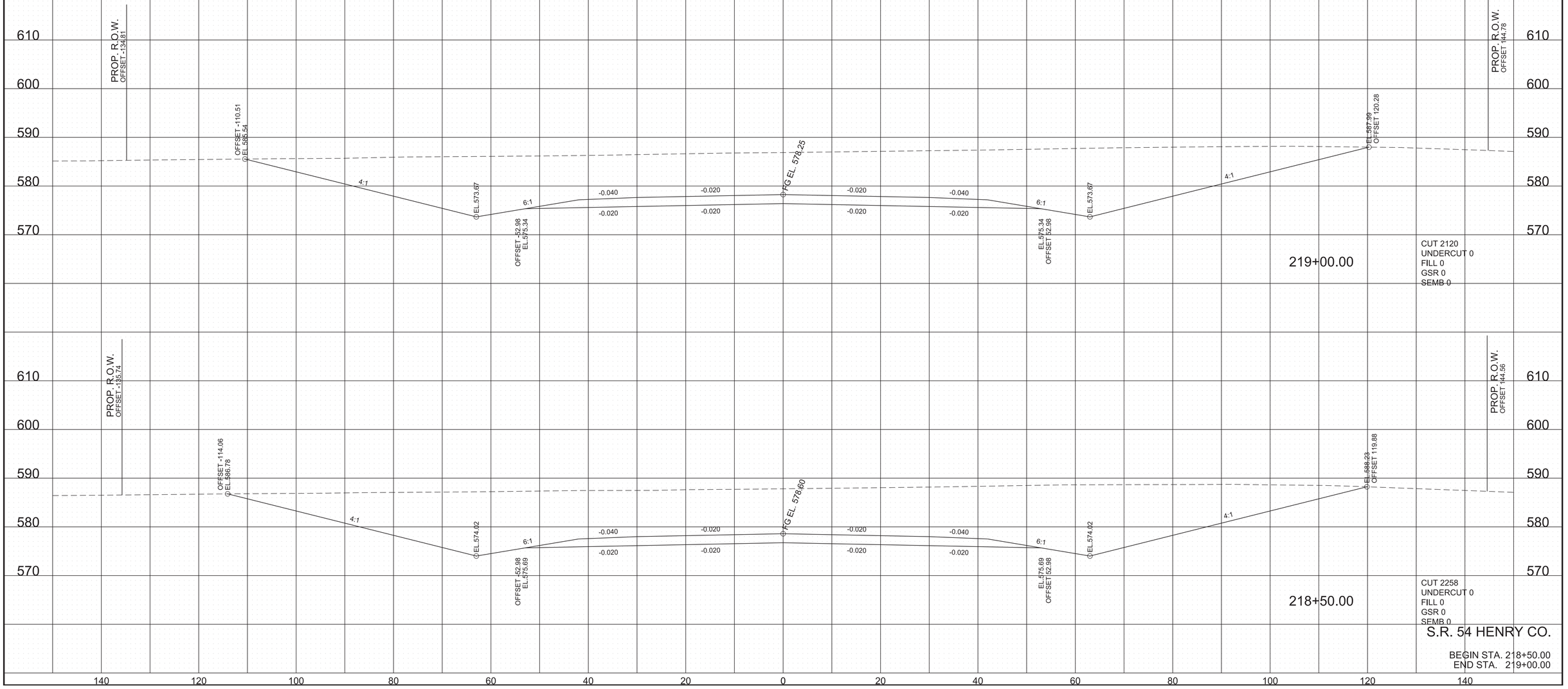
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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	150
PIH	2025	NH-54(48)	166
PS&E	2026	NH-54(48)	166



2/9/2026 2:45:28 PM
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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	151
PIH	2025	NH-54(48)	167
PS&E	2026	NH-54(48)	167

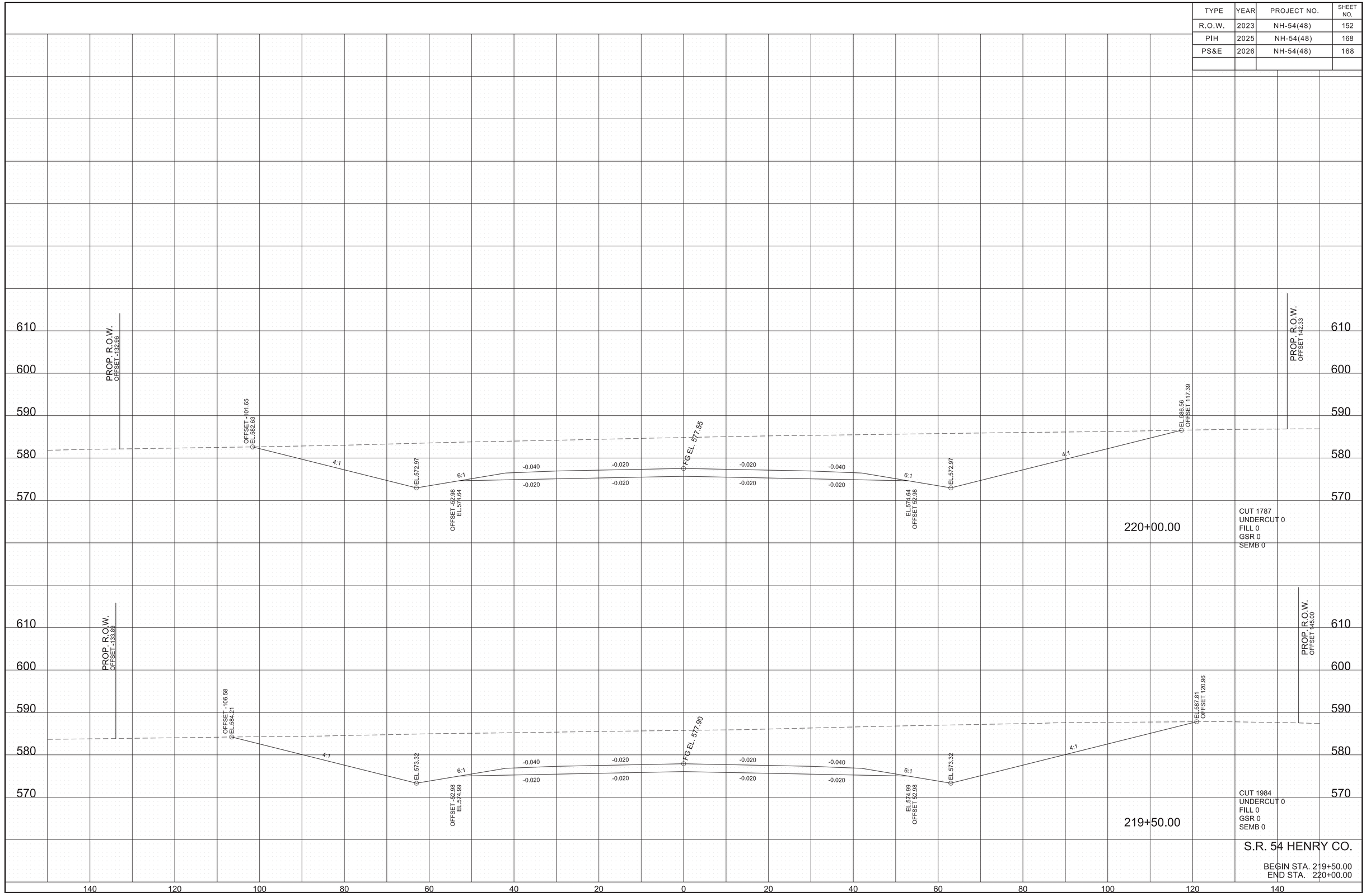


S.R. 54 HENRY CO.

BEGIN STA. 218+50.00
END STA. 219+00.00

2/9/2026 2:45:32 PM
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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	152
PIH	2025	NH-54(48)	168
PS&E	2026	NH-54(48)	168

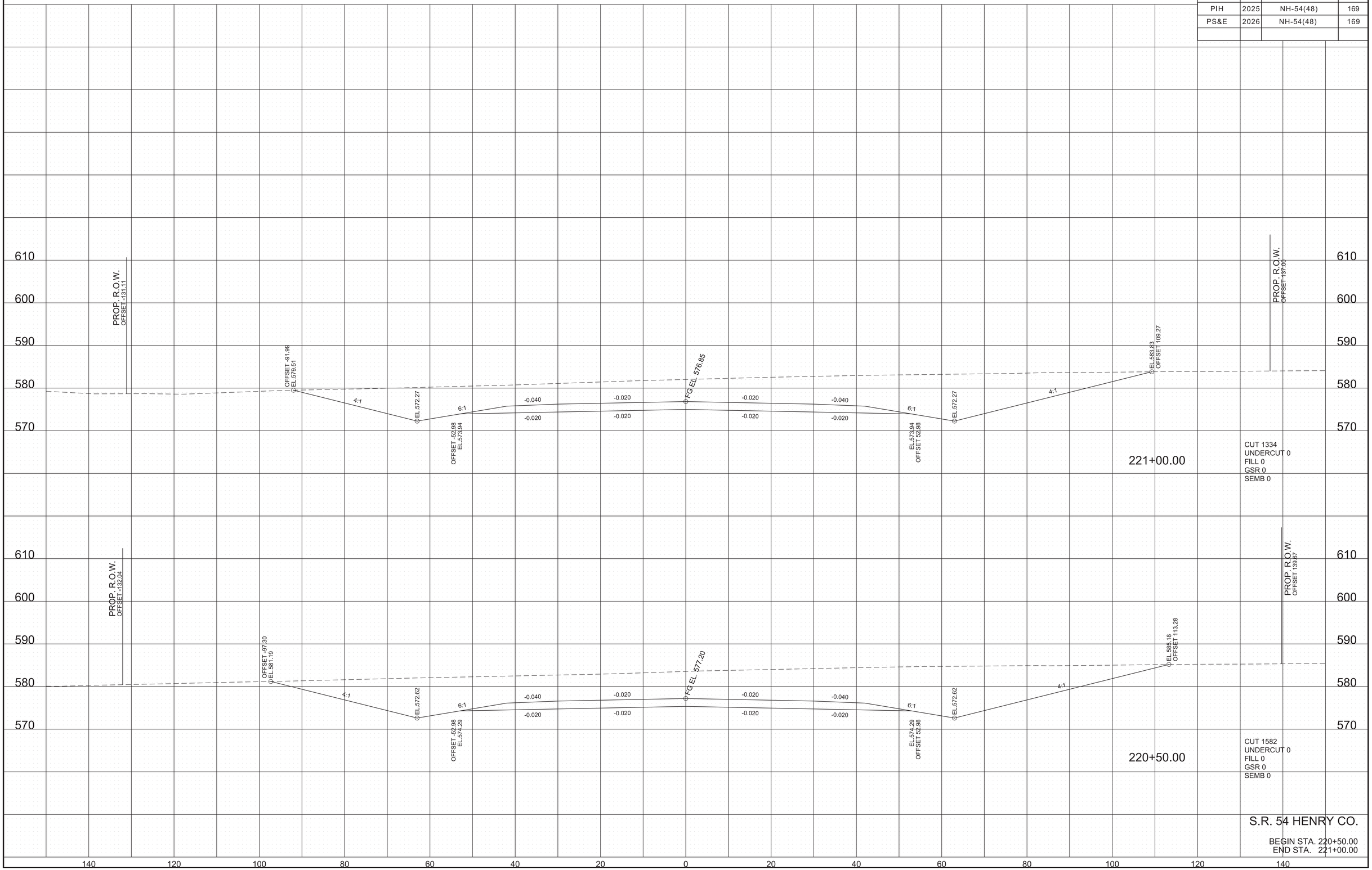


S.R. 54 HENRY CO.

BEGIN STA. 219+50.00
END STA. 220+00.00

2/9/2026 2:45:36 PM
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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	153
PIH	2025	NH-54(48)	169
PS&E	2026	NH-54(48)	169

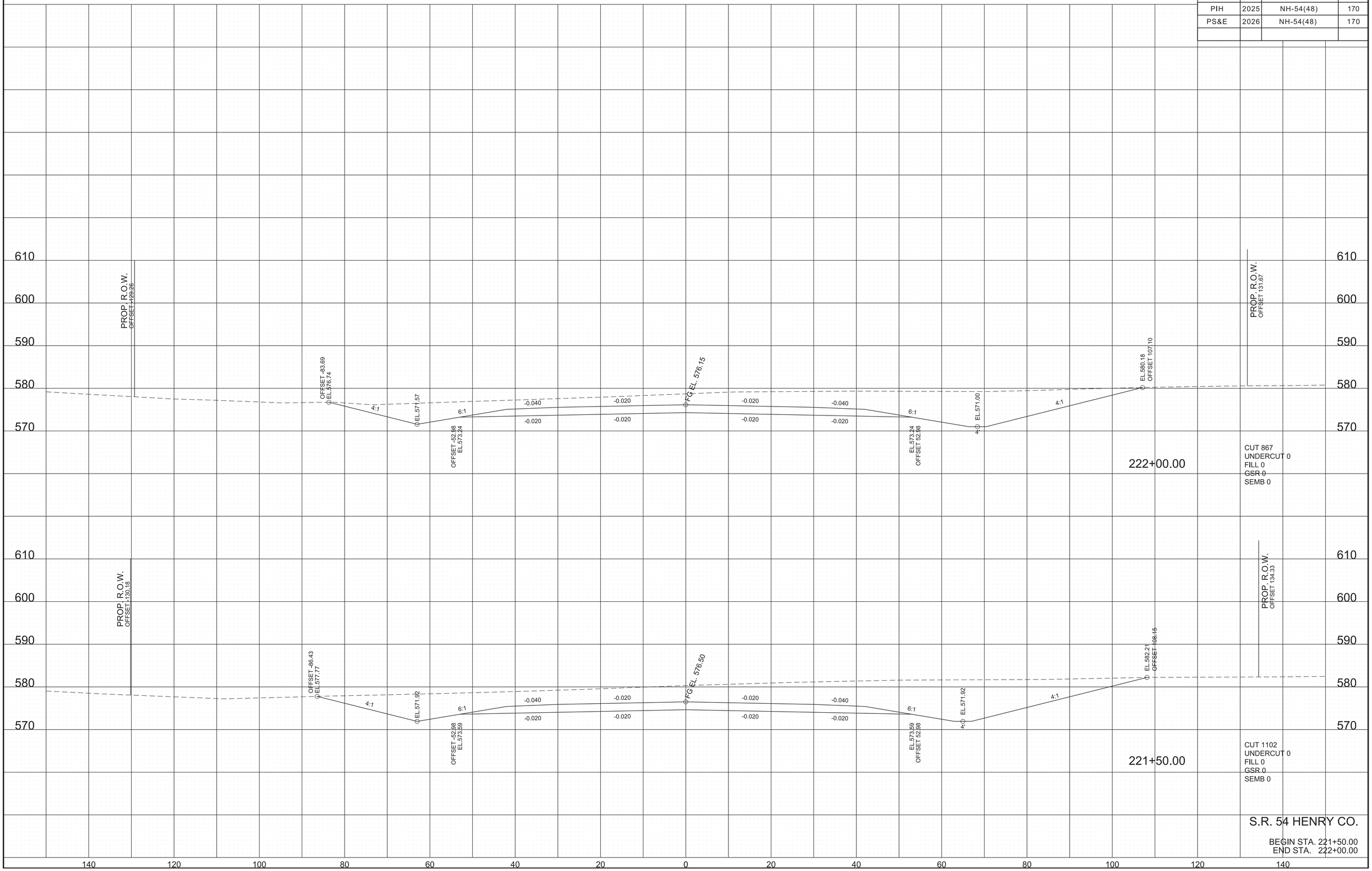


S.R. 54 HENRY CO.

BEGIN STA. 220+50.00
END STA. 221+00.00

2/9/2026 2:45:39 PM
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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	154
PIH	2025	NH-54(48)	170
PS&E	2026	NH-54(48)	170

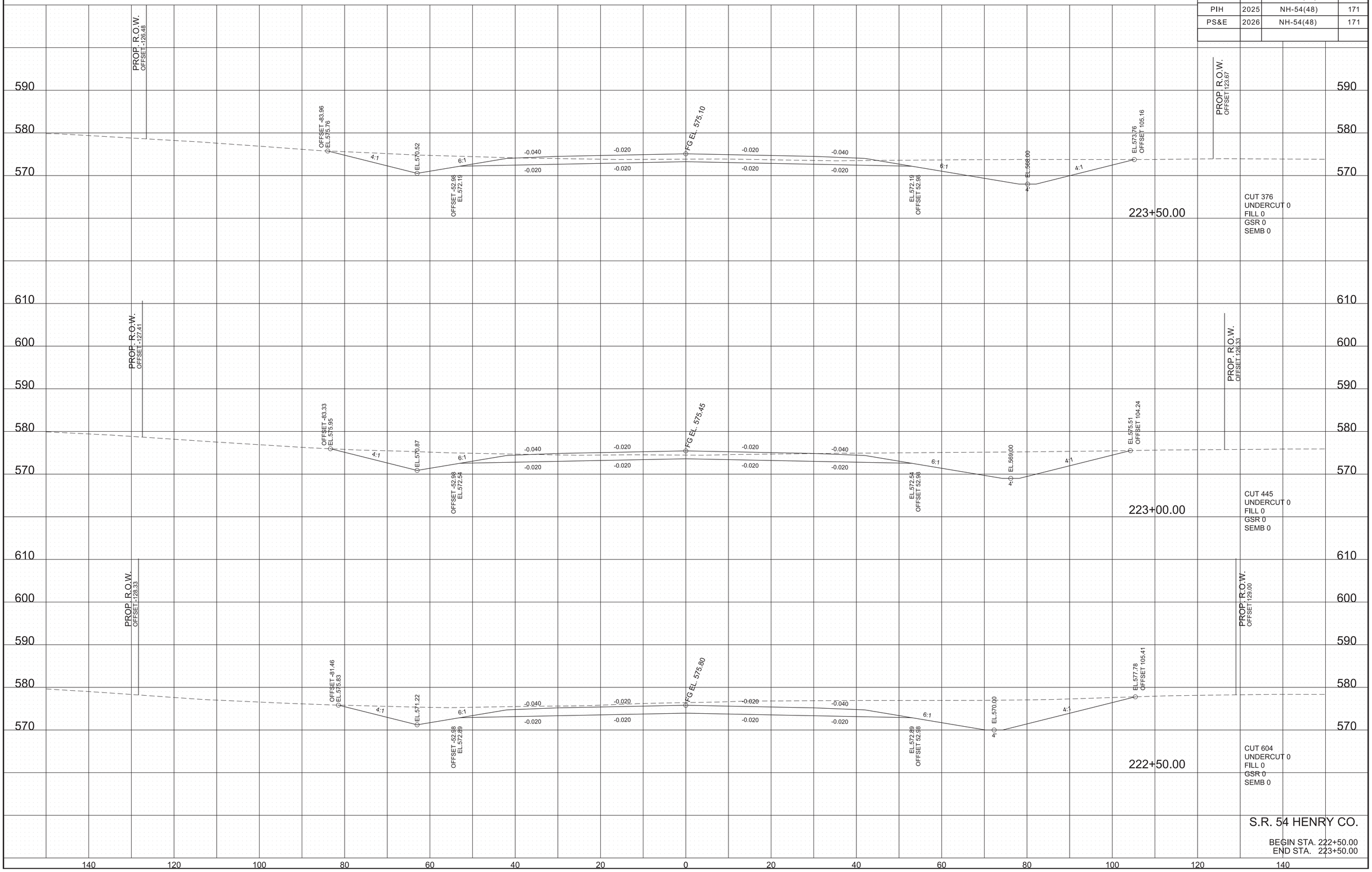


S.R. 54 HENRY CO.

BEGIN STA. 221+50.00
END STA. 222+00.00

2/9/2026 2:45:43 PM
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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	155
PIH	2025	NH-54(48)	171
PS&E	2026	NH-54(48)	171

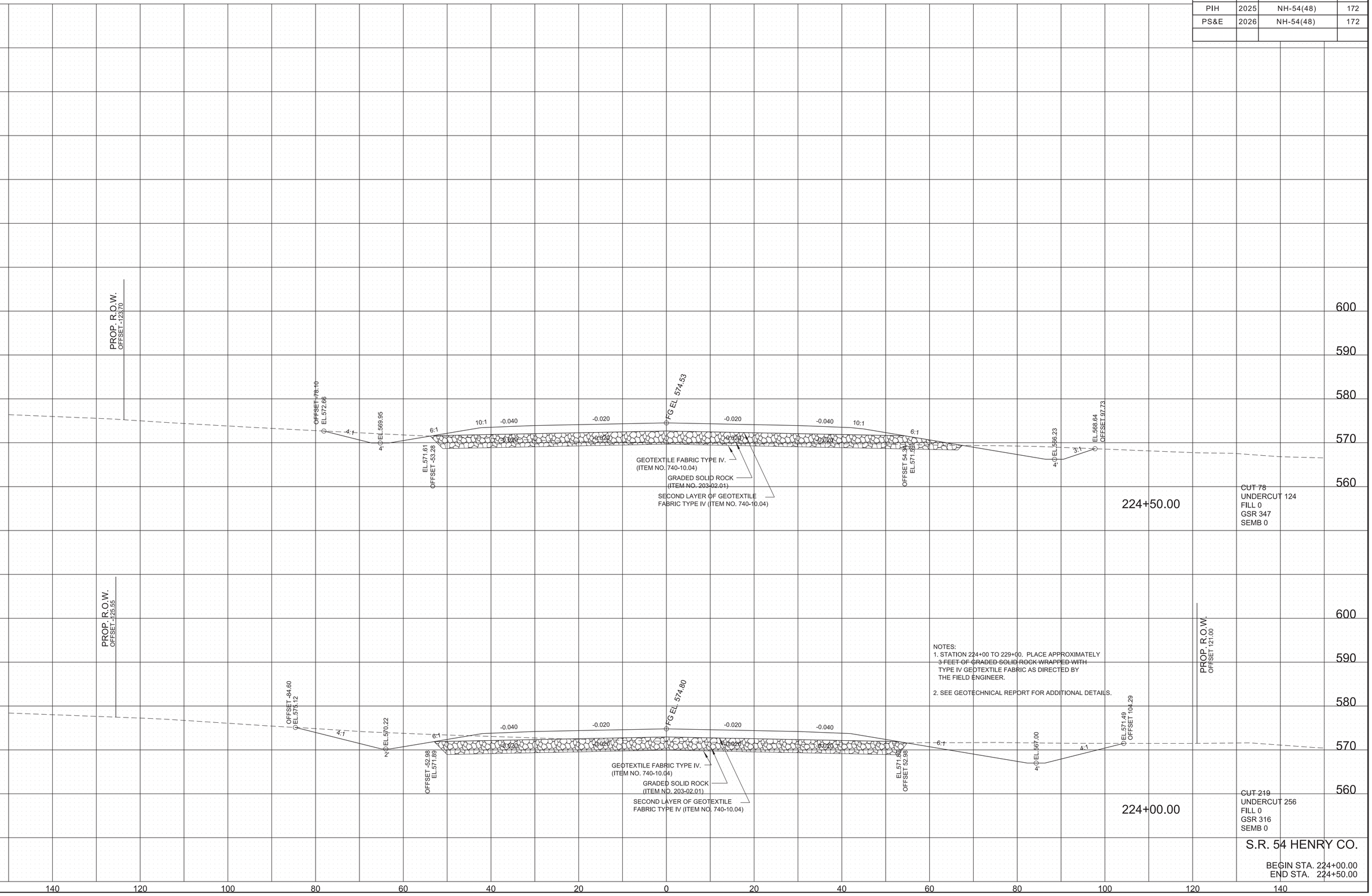


S.R. 54 HENRY CO.

BEGIN STA. 222+50.00
END STA. 223+50.00

2/9/2026 2:45:46 PM
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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	156
PIH	2025	NH-54(48)	172
PS&E	2026	NH-54(48)	172

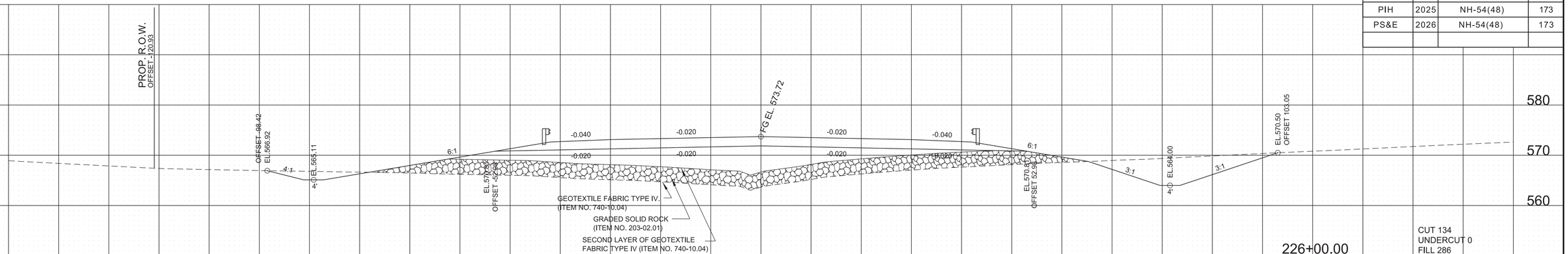


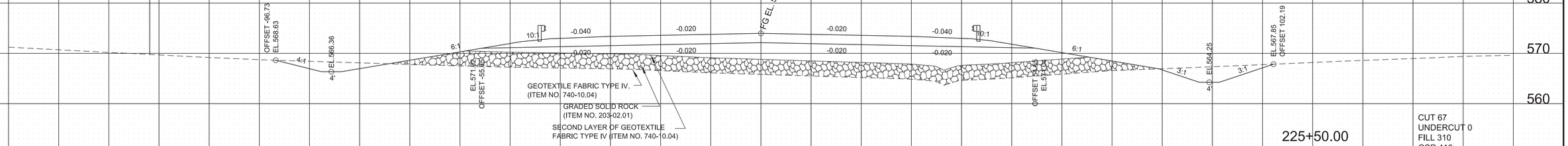
S.R. 54 HENRY CO.

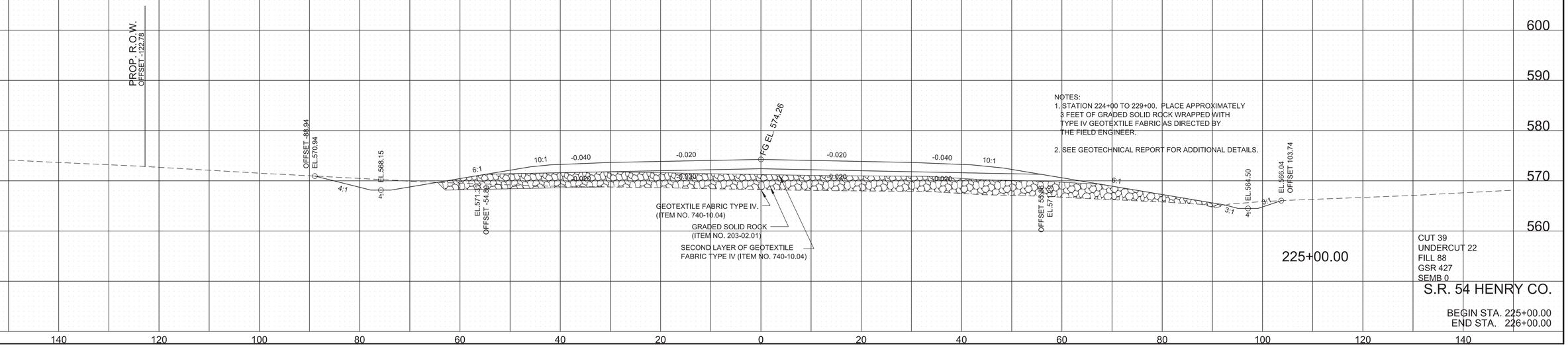
BEGIN STA. 224+00.00
END STA. 224+50.00

2/9/2026 2:45:50 PM
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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	157
PIH	2025	NH-54(48)	173
PS&E	2026	NH-54(48)	173







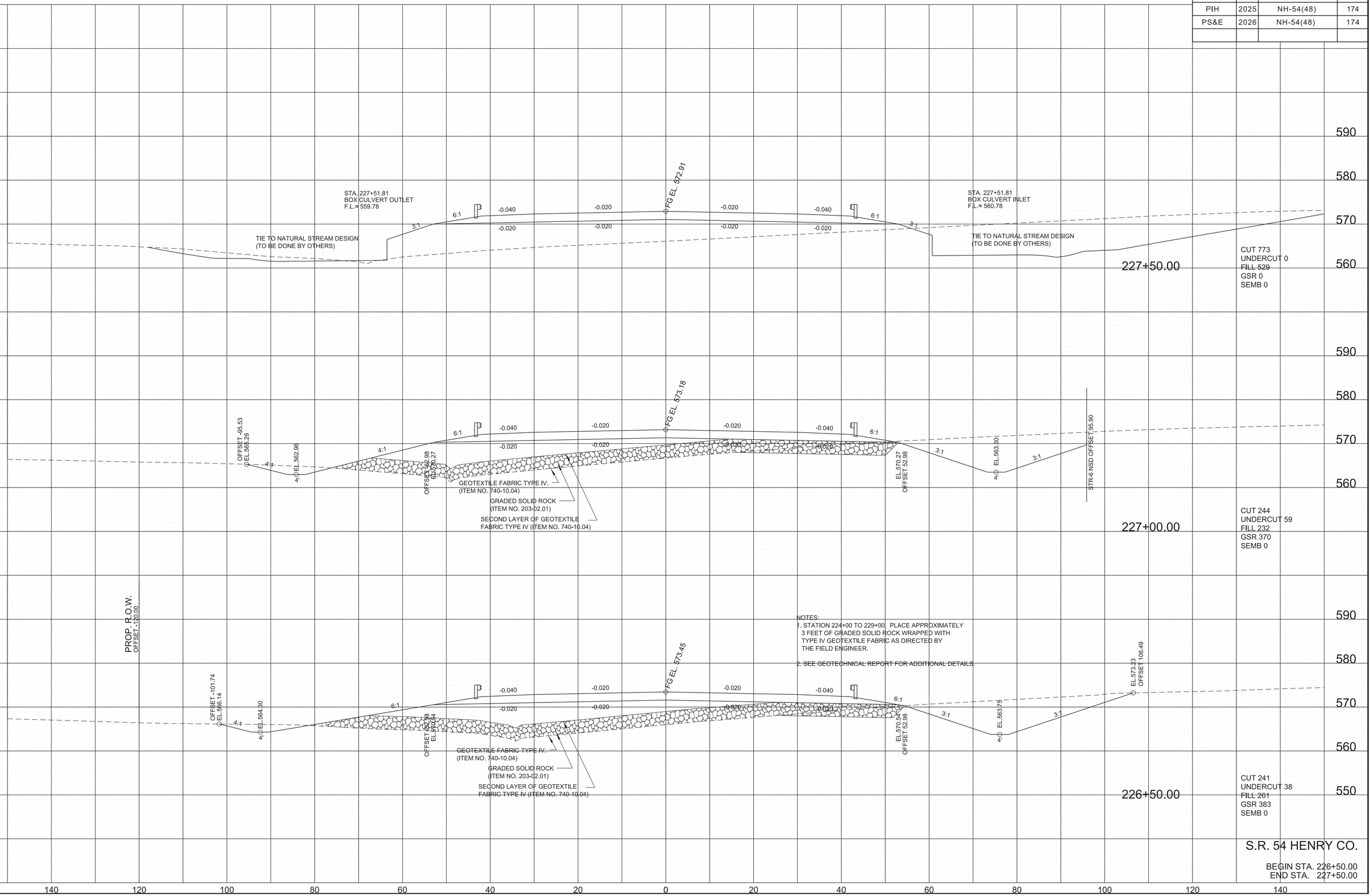
NOTES:
1. STATION 224+00 TO 229+00. PLACE APPROXIMATELY 3 FEET OF GRADED SOLID ROCK WRAPPED WITH TYPE IV GEOTEXTILE FABRIC AS DIRECTED BY THE FIELD ENGINEER.
2. SEE GEOTECHNICAL REPORT FOR ADDITIONAL DETAILS.

S.R. 54 HENRY CO.

BEGIN STA. 225+00.00
END STA. 226+00.00

2/9/2026 2:45:54 PM
T:\TDOT\Henry_SR54\SR54XSections.sht

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	158
PIH	2025	NH-54(48)	174
PS&E	2026	NH-54(48)	174



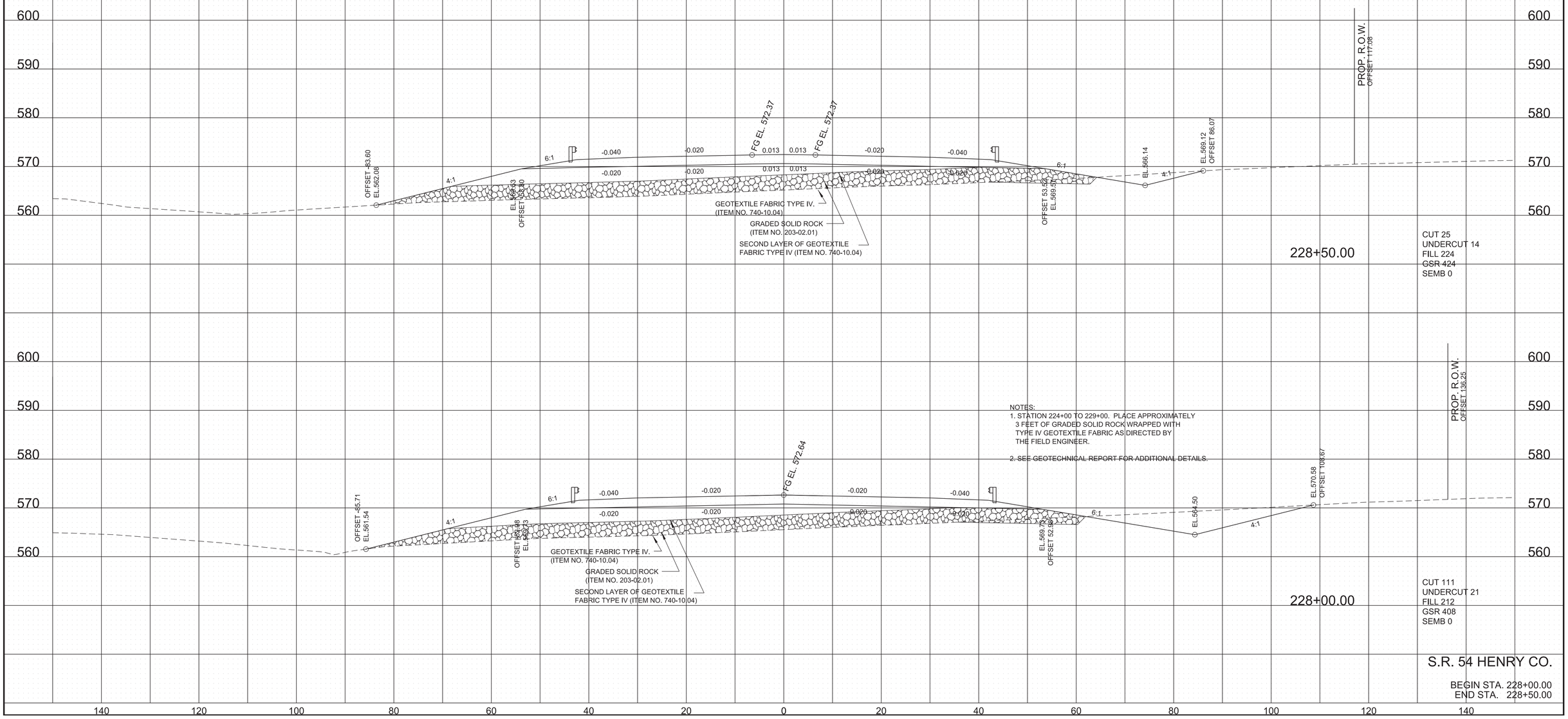
NOTES:
1. STATION 224+00 TO 229+00, PLACE APPROXIMATELY 3 FEET OF GRADED SOLID ROCK WRAPPED WITH TYPE IV GEOTEXTILE FABRIC AS DIRECTED BY THE FIELD ENGINEER.
2. SEE GEOTECHNICAL REPORT FOR ADDITIONAL DETAILS.

S.R. 54 HENRY CO.

BEGIN STA. 226+50.00
END STA. 227+50.00

2/9/2026 2:45:57 PM
T:\TDOT\Henry_SR54\SR54XSections.sht

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	159
PIH	2025	NH-54(48)	175
PS&E	2026	NH-54(48)	175

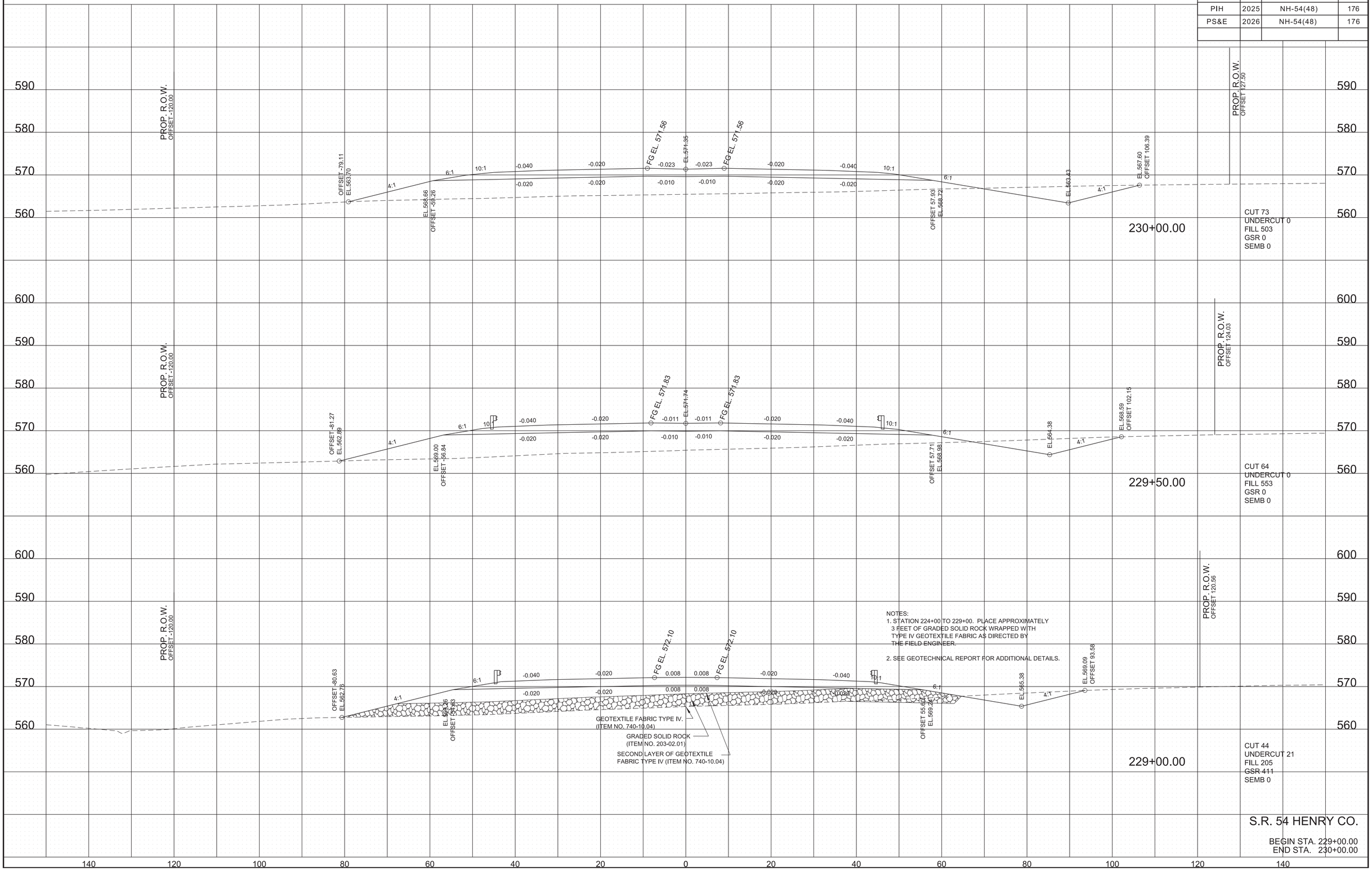


S.R. 54 HENRY CO.

BEGIN STA. 228+00.00
END STA. 228+50.00

2/9/2026 2:46:01 PM
T:\TDOT\Henry_SR54\SR54XSections.sht

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	160
PIH	2025	NH-54(48)	176
PS&E	2026	NH-54(48)	176

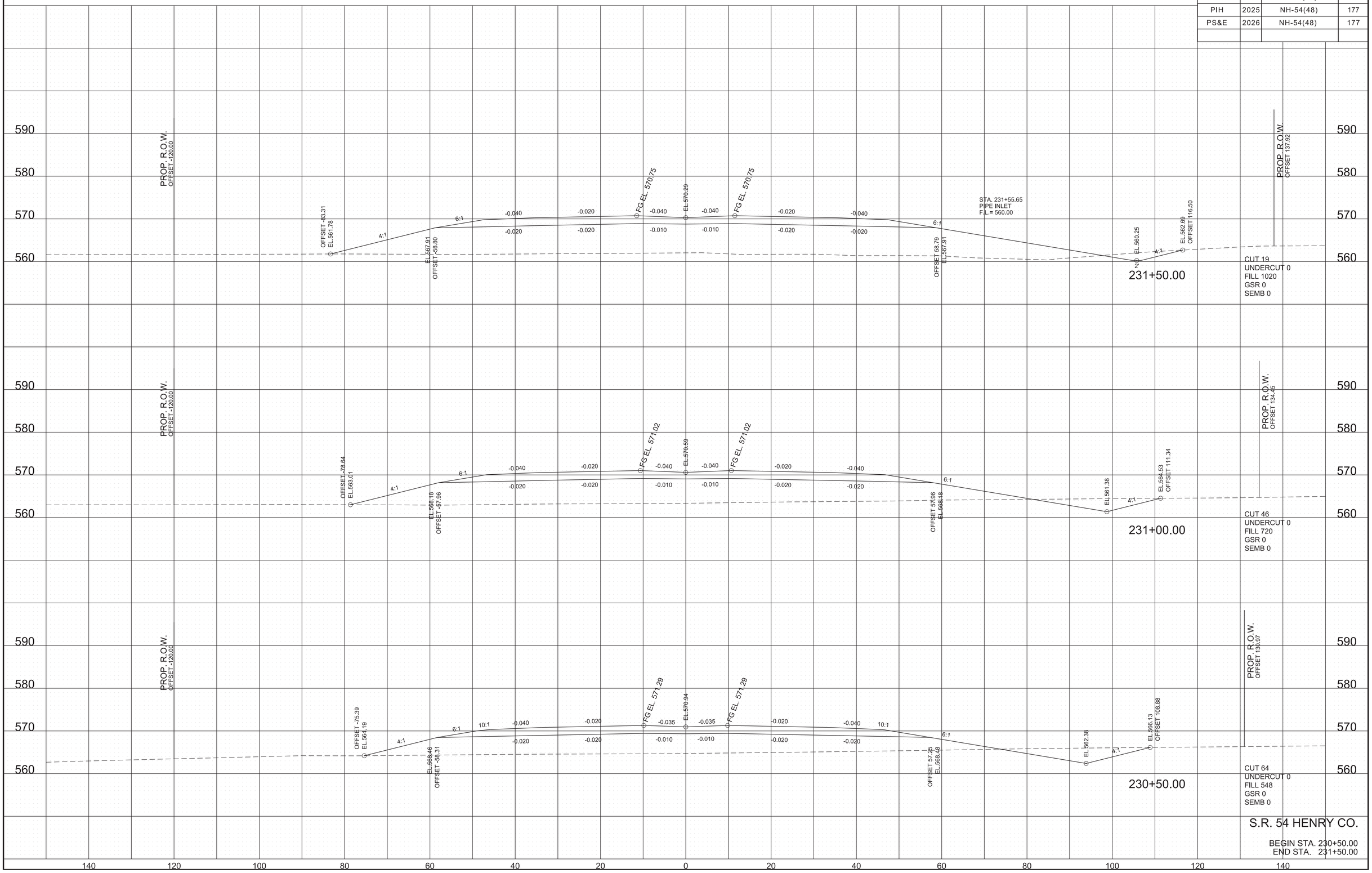


S.R. 54 HENRY CO.

BEGIN STA. 229+00.00
END STA. 230+00.00

2/9/2026 2:46:05 PM
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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	161
PIH	2025	NH-54(48)	177
PS&E	2026	NH-54(48)	177

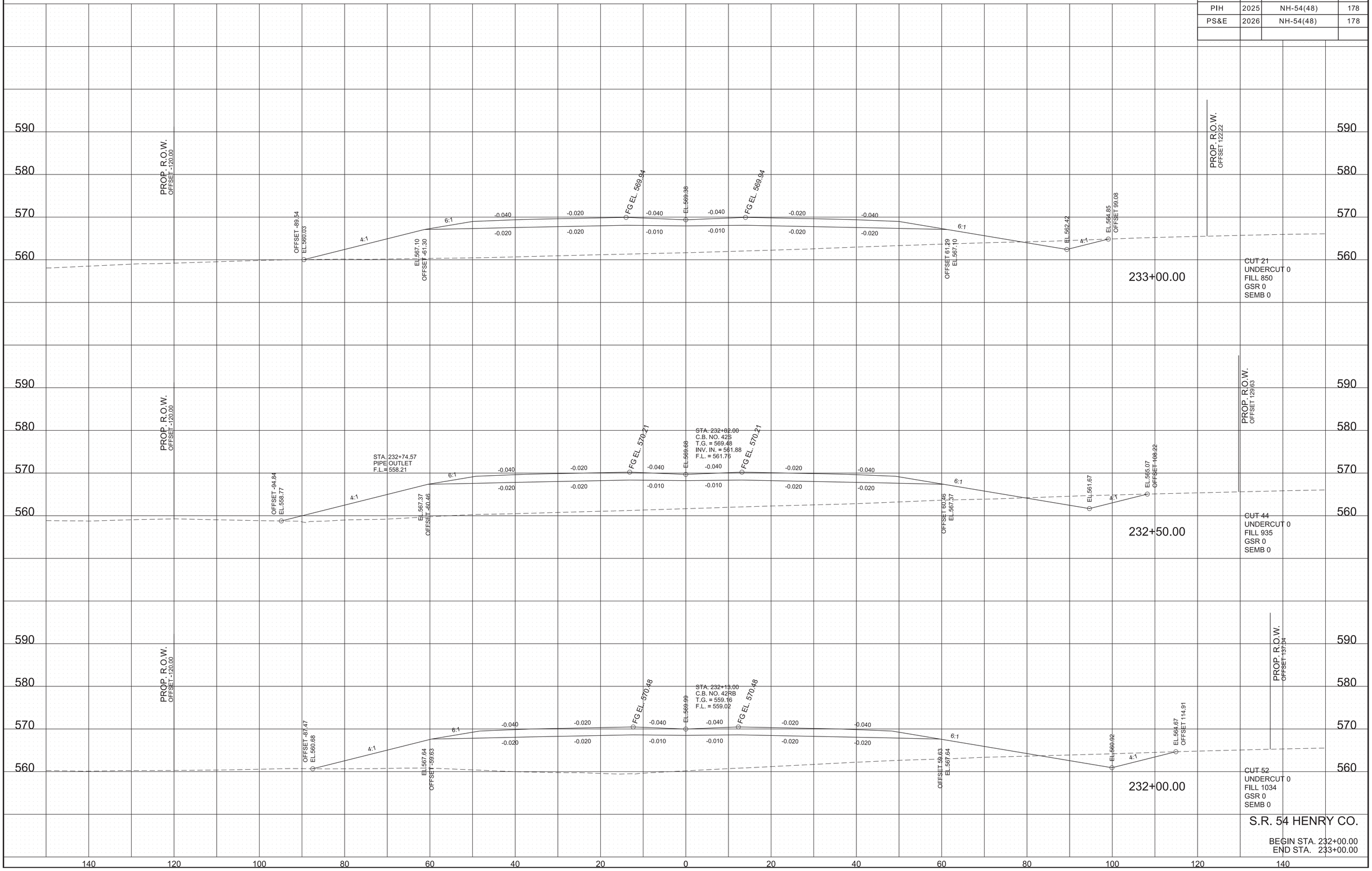


S.R. 54 HENRY CO.

BEGIN STA. 230+50.00
END STA. 231+50.00

2/9/2026 2:46:08 PM
T:\TDOT\Henry_SR54\SR54XSections.sht

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	162
PIH	2025	NH-54(48)	178
PS&E	2026	NH-54(48)	178

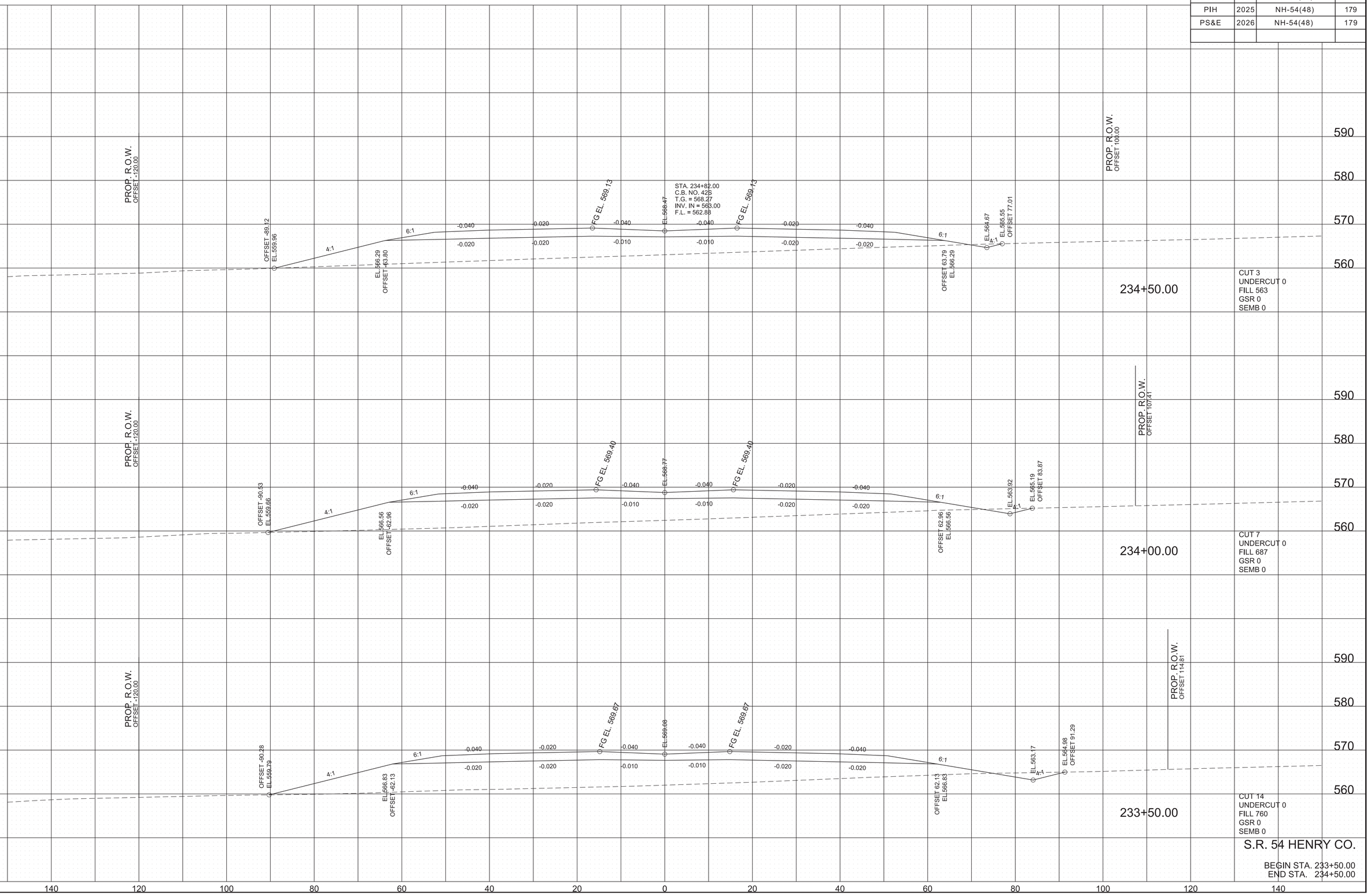


S.R. 54 HENRY CO.

BEGIN STA. 232+00.00
END STA. 233+00.00

2/9/2026 2:46:12 PM
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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	163
PIH	2025	NH-54(48)	179
PS&E	2026	NH-54(48)	179

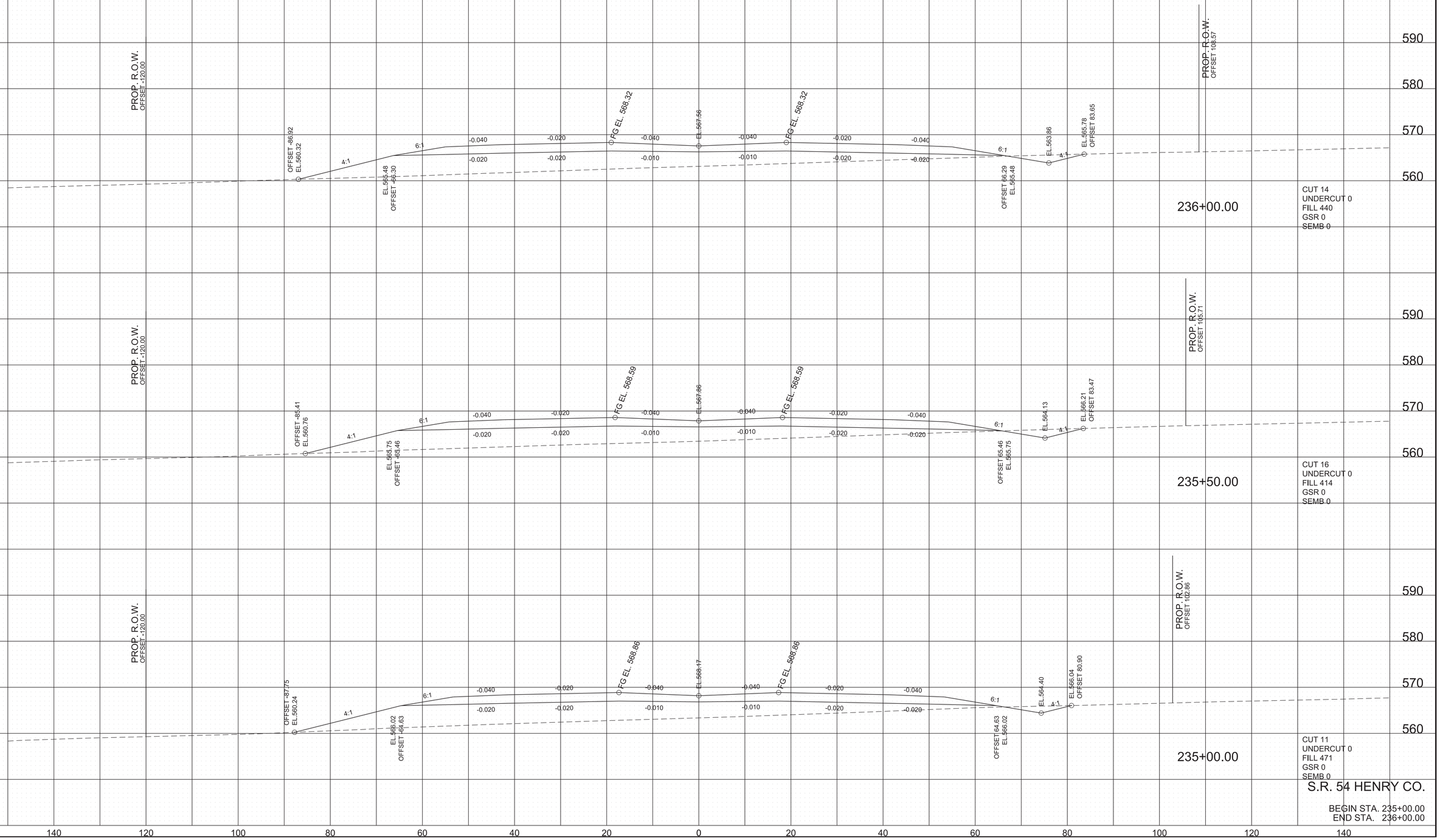


S.R. 54 HENRY CO.

BEGIN STA. 233+50.00
END STA. 234+50.00

2/9/2026 2:46:16 PM
T:\TDOT\Henry_SR54\SR54XSections.sht

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	164
PIH	2025	NH-54(48)	180
PS&E	2026	NH-54(48)	180



S.R. 54 HENRY CO.

BEGIN STA. 235+00.00
END STA. 236+00.00

2/9/2026 2:46:19 PM
T:\TDOT\Henry_SR54\SR54XSections.sht

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	165
PIH	2025	NH-54(48)	181
PS&E	2026	NH-54(48)	181

590
580
570
560

PROP. R.O.W.
OFFSET -120.00

OFFSET -89.96
EL. 561.33

6:1

-0.040 -0.020 -0.004 -0.040 -0.040 -0.004 -0.020 -0.040
-0.020 -0.020 -0.004 -0.010 -0.010 -0.004 -0.020 -0.020

FG EL. 567.51

EL. 566.65

FG EL. 567.51

EL. 564.86
OFFSET -48.79

OFFSET 68.79
EL. 564.86

6:1

EL. 563.19

4:1

EL. 565.92
OFFSET 90.71

PROP. R.O.W.
OFFSET 117.14

237+50.00

CUT 39
UNDERCUT 0
FILL 246
GSR 0
SEMB 0

590
580
570
560

PROP. R.O.W.
OFFSET -120.00

OFFSET -99.28
EL. 559.98

6:1

-0.040 -0.020 -0.012 -0.040 -0.040 -0.012 -0.020 -0.040
-0.020 -0.020 -0.012 -0.010 -0.010 -0.012 -0.020 -0.020

FG EL. 567.78

EL. 566.95

FG EL. 567.78

EL. 565.03
OFFSET -47.96

OFFSET 67.96
EL. 565.03

6:1

EL. 563.34

4:1

EL. 565.15
OFFSET 85.37

PROP. R.O.W.
OFFSET 114.28

237+00.00

CUT 12
UNDERCUT 0
FILL 452
GSR 0
SEMB 0

590
580
570
560

PROP. R.O.W.
OFFSET -120.00

OFFSET -87.88
EL. 559.99

4:1

6:1

-0.040 -0.020 -0.040 -0.040 -0.020 -0.040
-0.020 -0.020 -0.010 -0.010 -0.020 -0.020

FG EL. 568.05

STA. 236+82.00
C.B. NO. 425
T.G. = 567.06
F.L. = 564.00

EL. 567.26

FG EL. 568.05

EL. 565.21
OFFSET -47.12

OFFSET 67.12
EL. 565.21

6:1

EL. 563.59

4:1

EL. 565.26
OFFSET 83.50

PROP. R.O.W.
OFFSET 111.43

236+50.00

CUT 11
UNDERCUT 0
FILL 484
GSR 0
SEMB 0

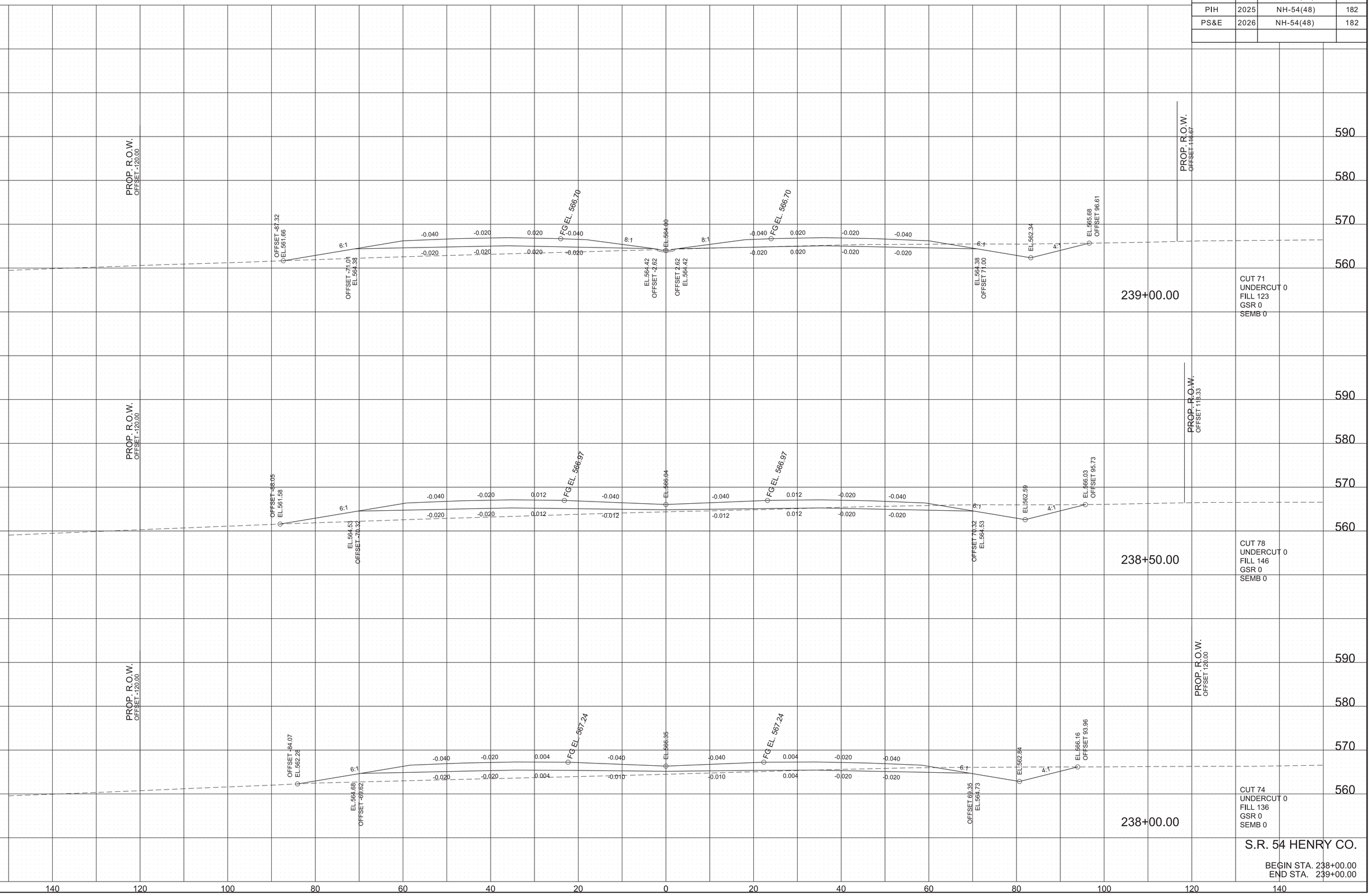
S.R. 54 HENRY CO.

BEGIN STA. 236+50.00
END STA. 237+50.00

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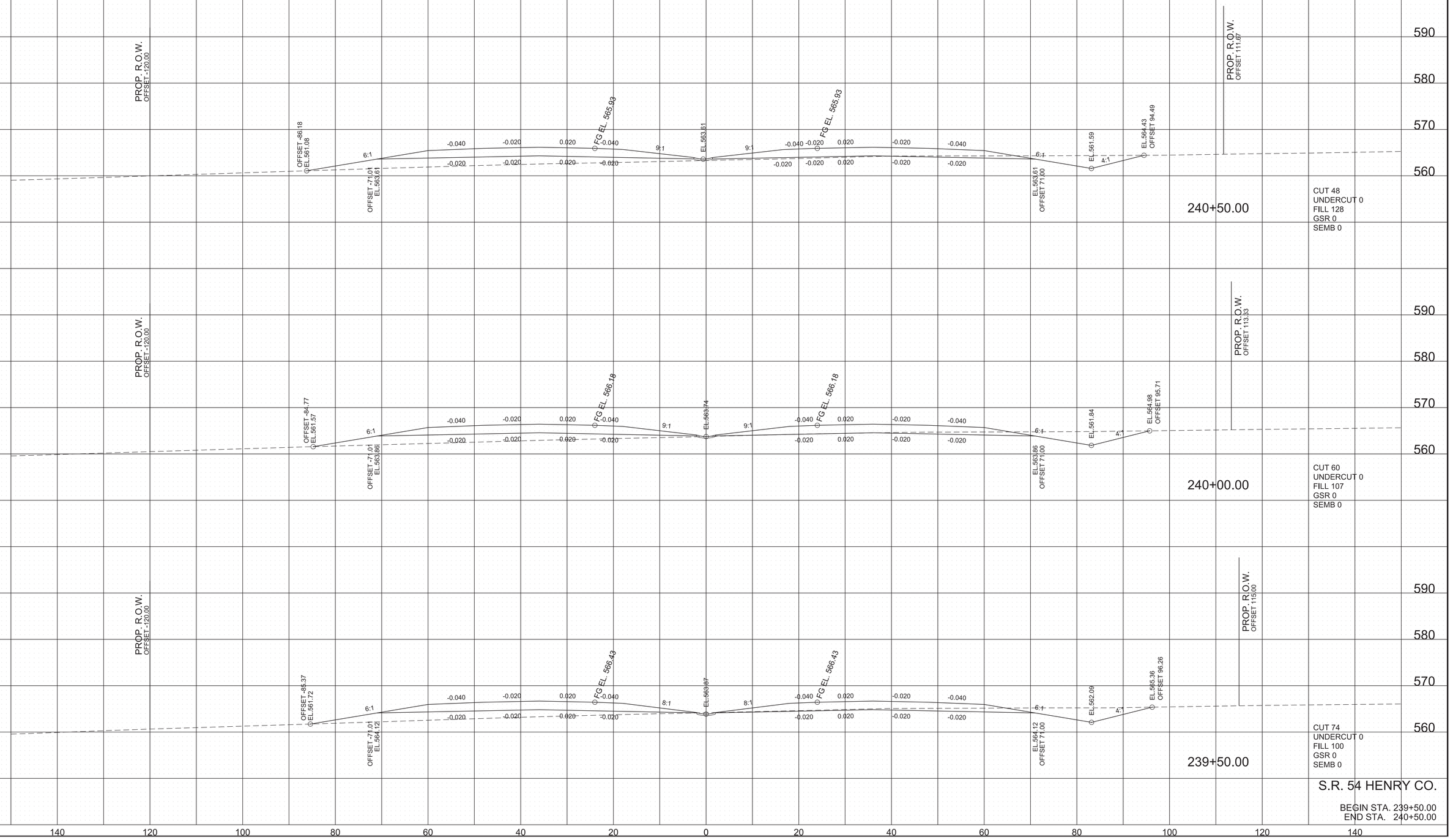
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T:\TDOT\Henry_SR54\SR54XSections.sht

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	166
PIH	2025	NH-54(48)	182
PS&E	2026	NH-54(48)	182



2/9/2026 2:46:27 PM
T:\TDOT\Henry_SR54\SR54XSections.sht

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	167
PIH	2025	NH-54(48)	183
PS&E	2026	NH-54(48)	183

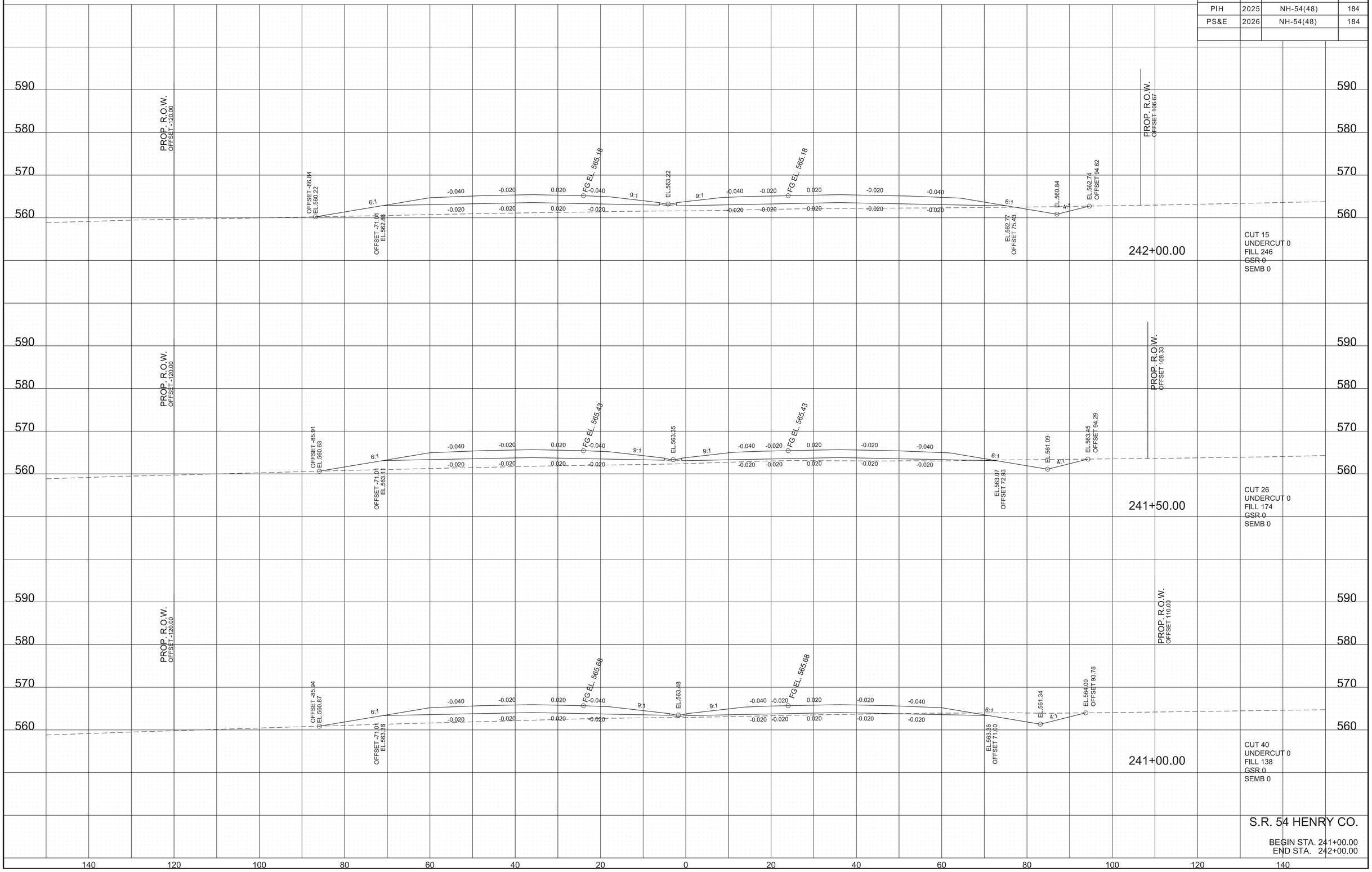


S.R. 54 HENRY CO.

BEGIN STA. 239+50.00
END STA. 240+50.00

2/9/2026 2:46:30 PM
T:\TDOT\Henry_SR54\SR54XSections.sht

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	168
PIH	2025	NH-54(48)	184
PS&E	2026	NH-54(48)	184

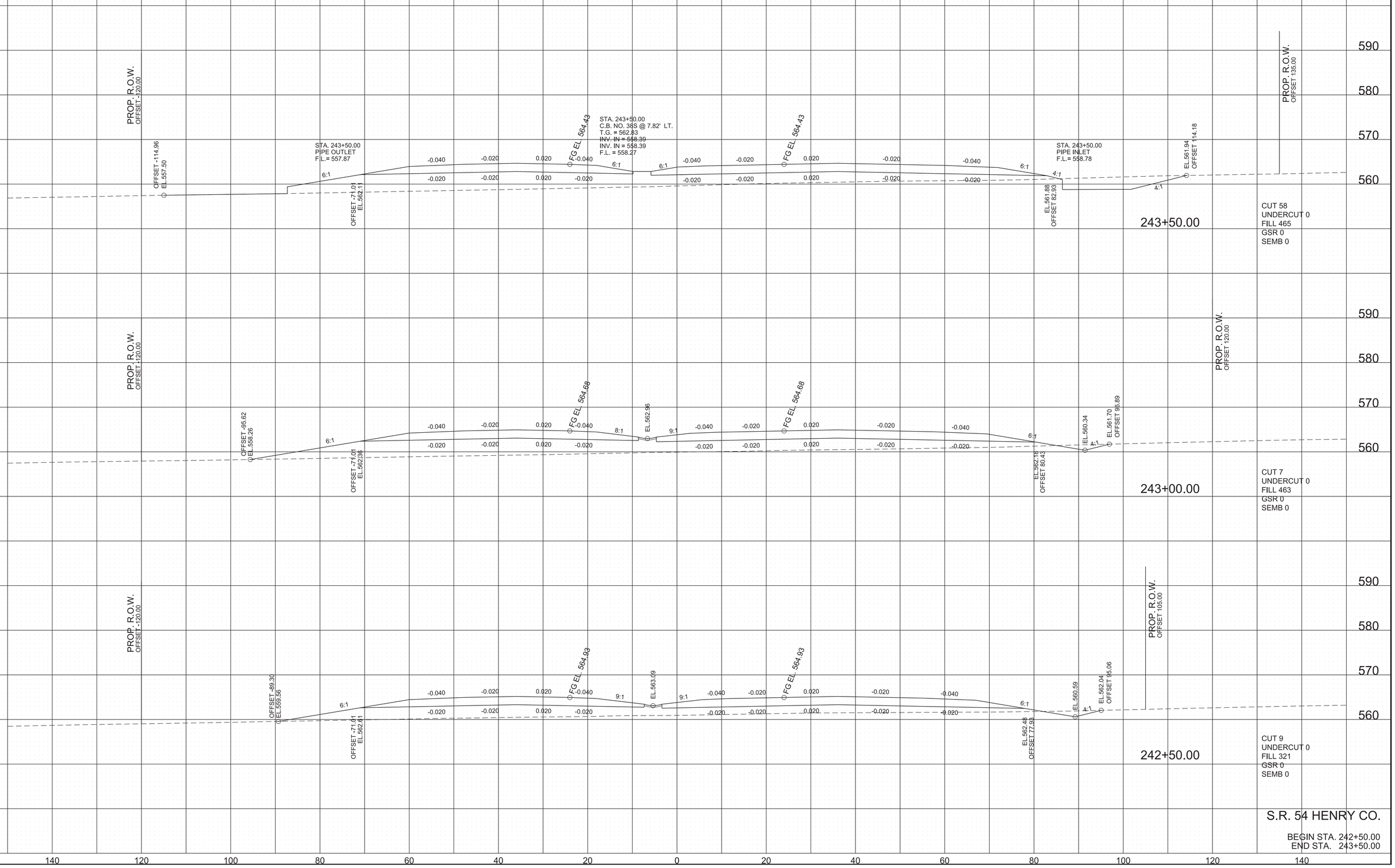


S.R. 54 HENRY CO.

BEGIN STA. 241+00.00
END STA. 242+00.00

2/9/2026 2:46:34 PM
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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	169
PIH	2025	NH-54(48)	185
PS&E	2026	NH-54(48)	185

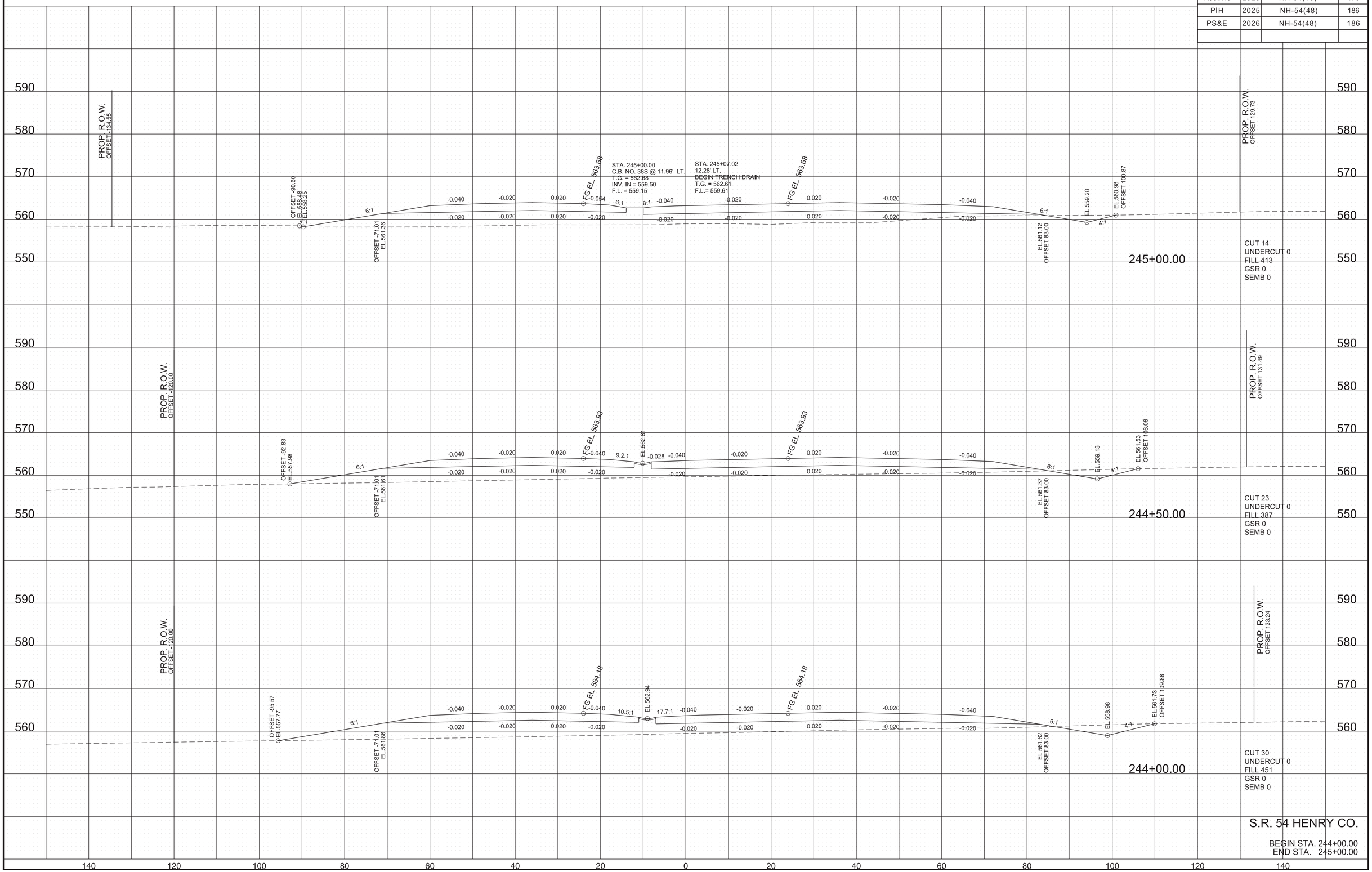


S.R. 54 HENRY CO.

BEGIN STA. 242+50.00
END STA. 243+50.00

2/9/2026 2:46:37 PM
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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	170
PIH	2025	NH-54(48)	186
PS&E	2026	NH-54(48)	186

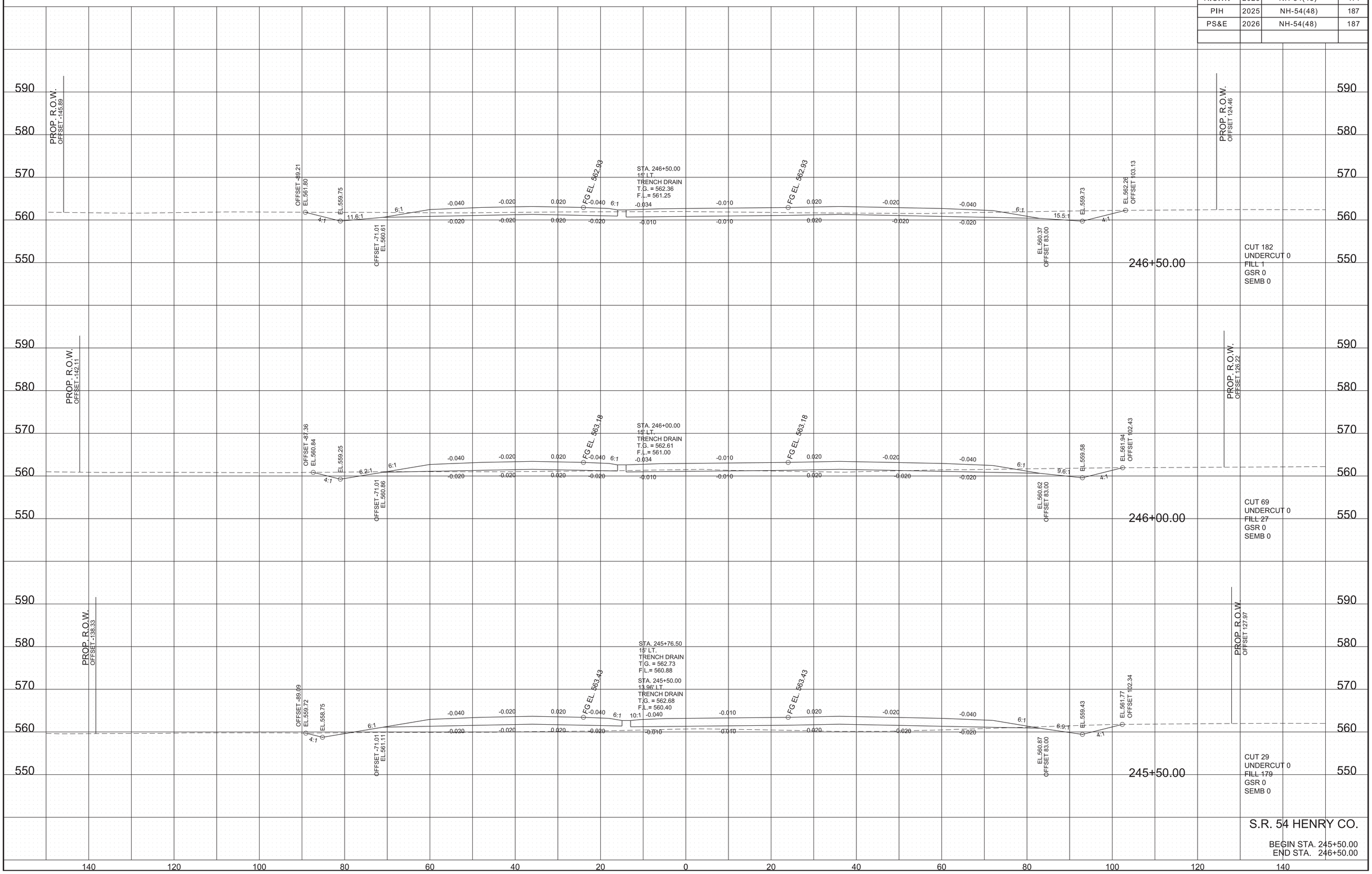


S.R. 54 HENRY CO.

BEGIN STA. 244+00.00
END STA. 245+00.00

2/9/2026 2:46:41 PM
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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	171
PIH	2025	NH-54(48)	187
PS&E	2026	NH-54(48)	187

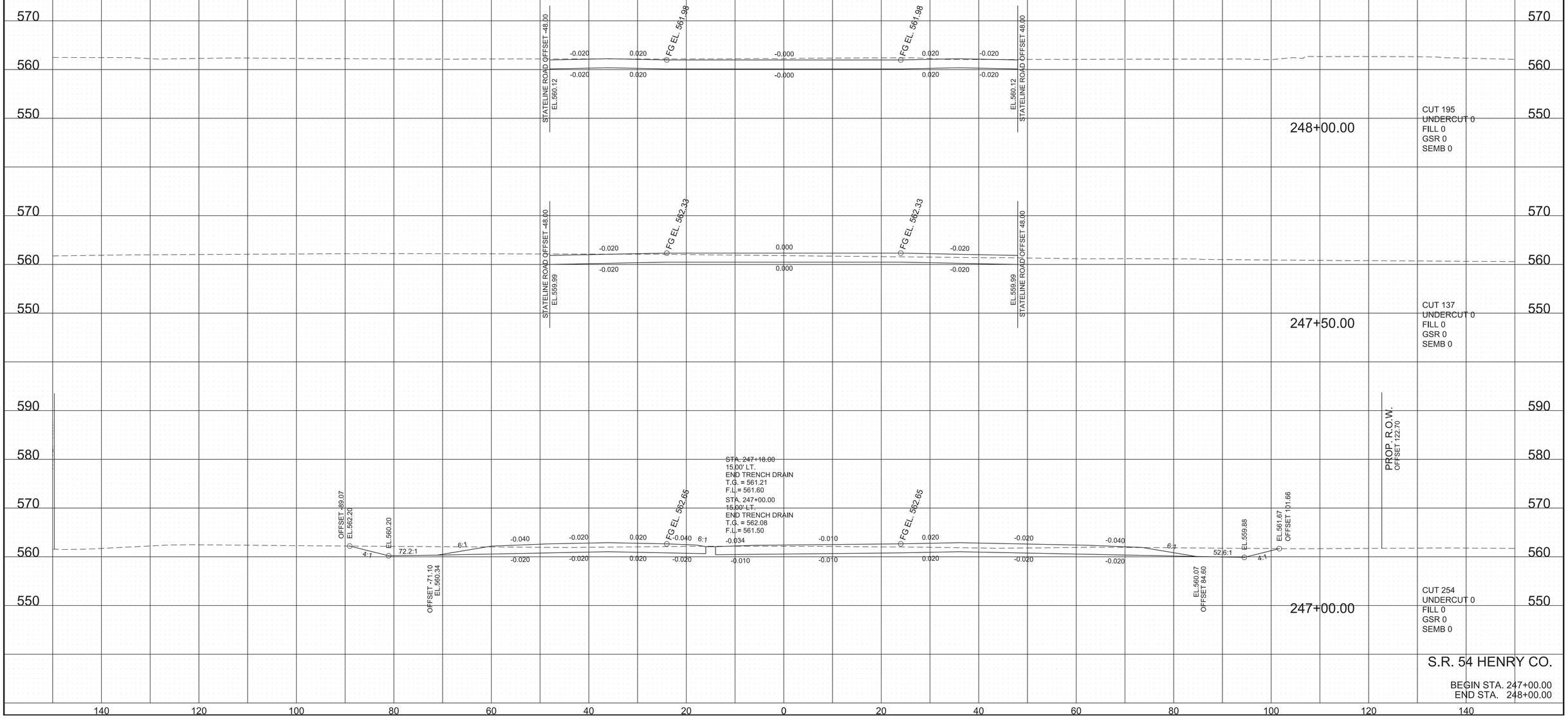


S.R. 54 HENRY CO.

BEGIN STA. 245+50.00
END STA. 246+50.00

2/9/2026 2:46:45 PM
T:\TDOT\Henry_SR54\SR54XSections.sht

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	172
PIH	2025	NH-54(48)	188
PS&E	2026	NH-54(48)	188



S.R. 54 HENRY CO.

BEGIN STA. 247+00.00
END STA. 248+00.00

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TYPE	YEAR	PROJECT NO.	SHEET NO.
PIH	2025	NH-54(48)	189
PS&E	2026	NH-54(48)	189

570
560
550

PRES. R.O.W.
OFFSET -140.64

OVERLAY EXISTING

EX. EOP
EL.560.31

EX. EOP
EL.561.72

EX. EOP
EL.561.05

EX. EOP
EL.561.74

250+00.00

PRES. R.O.W.
OFFSET 123.18

CUT 0
UNDERCUT 0
FILL 0
GSR 0
SEMB 0

570
560
550

PRES. R.O.W.
OFFSET -137.37

OVERLAY EXISTING

EX. EOP
EL.560.53

EX. EOP
EL.562.02

EX. EOP
EL.561.31

EX. EOP
EL.561.98

249+50.00

PRES. R.O.W.
OFFSET 126.49

CUT 0
UNDERCUT 0
FILL 0
GSR 0
SEMB 0

570
560
550

PRES. R.O.W.
OFFSET -137.37

OVERLAY EXISTING

EX. EOP
EL.560.53

EX. EOP
EL.562.02

EX. EOP
EL.561.31

EX. EOP
EL.561.98

249+00.00

PRES. R.O.W.
OFFSET 126.49

CUT 0
UNDERCUT 0
FILL 0
GSR 0
SEMB 0

570
560
550

PRES. R.O.W.
OFFSET -133.66

OVERLAY EXISTING

℄ FG EL. 561.89

℄ FG EL. 561.89

EX. EOP
EL.560.79

EX. EOP
EL.562.21

EX. EOP
EL.561.61

EX. EOP
EL.562.14

248+50.00

PRES. R.O.W.
OFFSET 129.99

CUT 0
UNDERCUT 0
FILL 0
GSR 0
SEMB 0

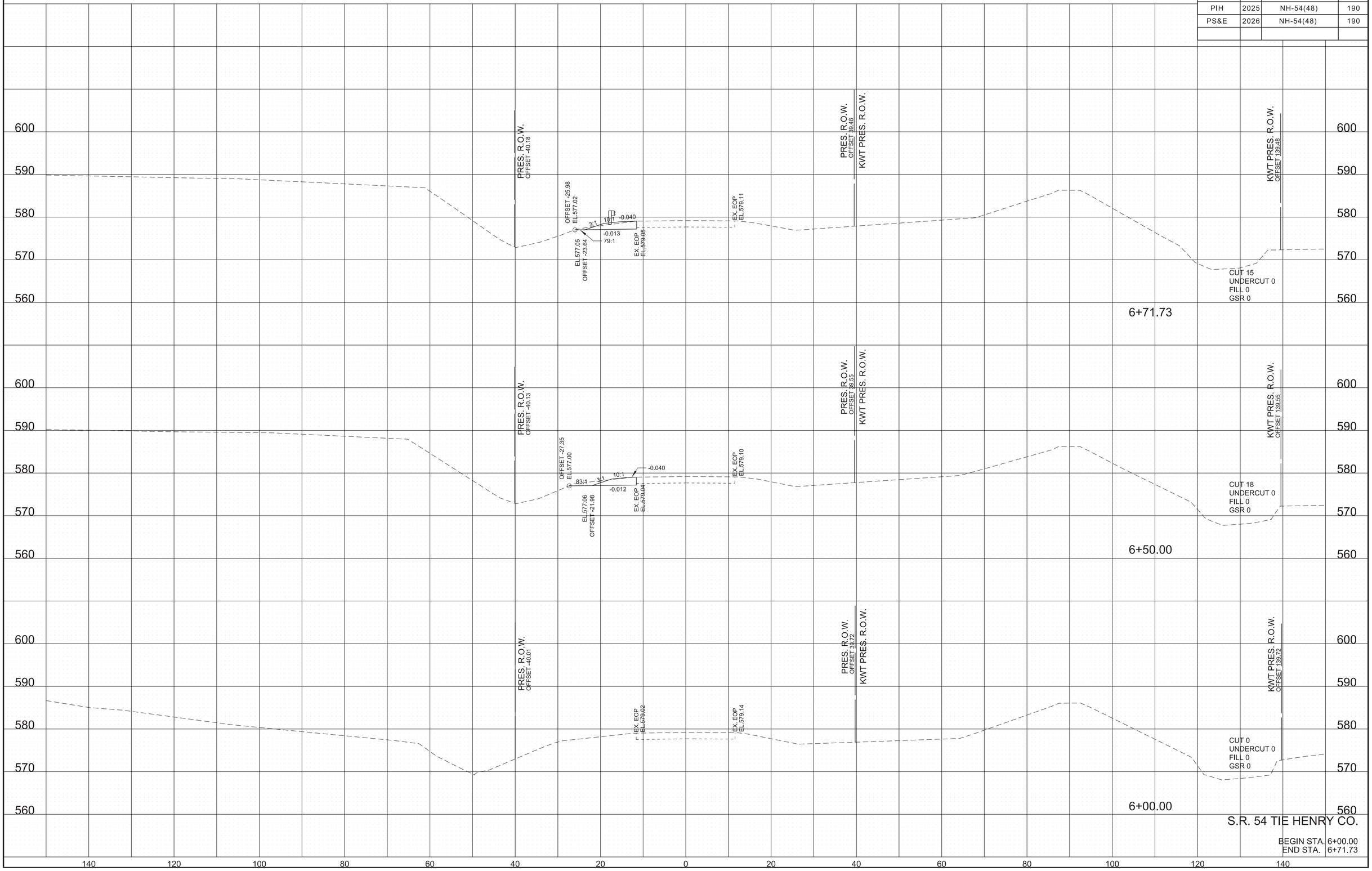
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S.R. 54 HENRY CO.

BEGIN STA. 248+50.00
END STA. 248+00.00

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	173
PIH	2025	NH-54(48)	190
PS&E	2026	NH-54(48)	190

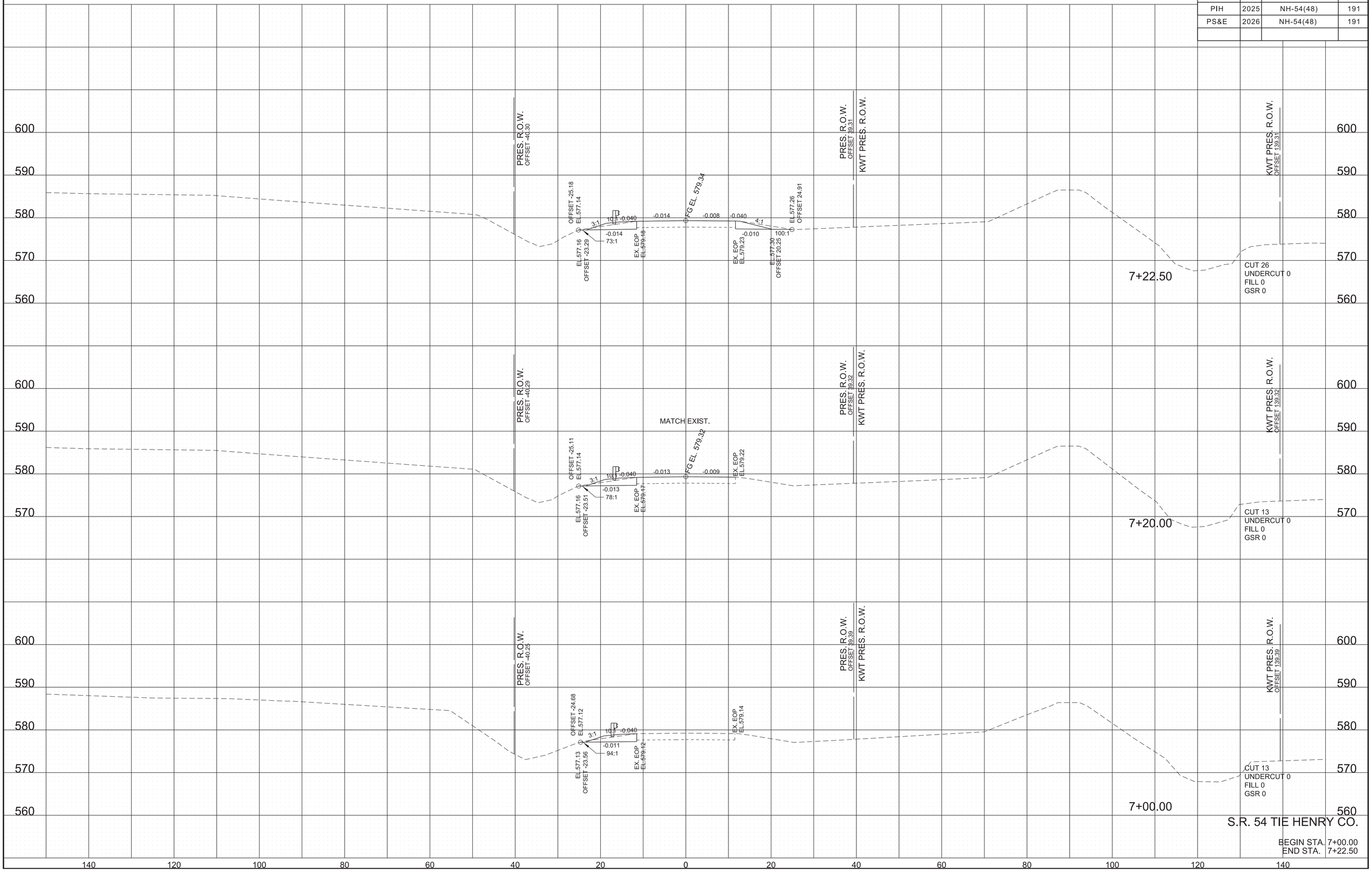


S.R. 54 TIE HENRY CO.

BEGIN STA. 6+00.00
END STA. 6+71.73

2/9/2026 2:46:53 PM
T:\TDOT\Henry_SR54\SR54TieLtXSections.sht

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	174
PIH	2025	NH-54(48)	191
PS&E	2026	NH-54(48)	191

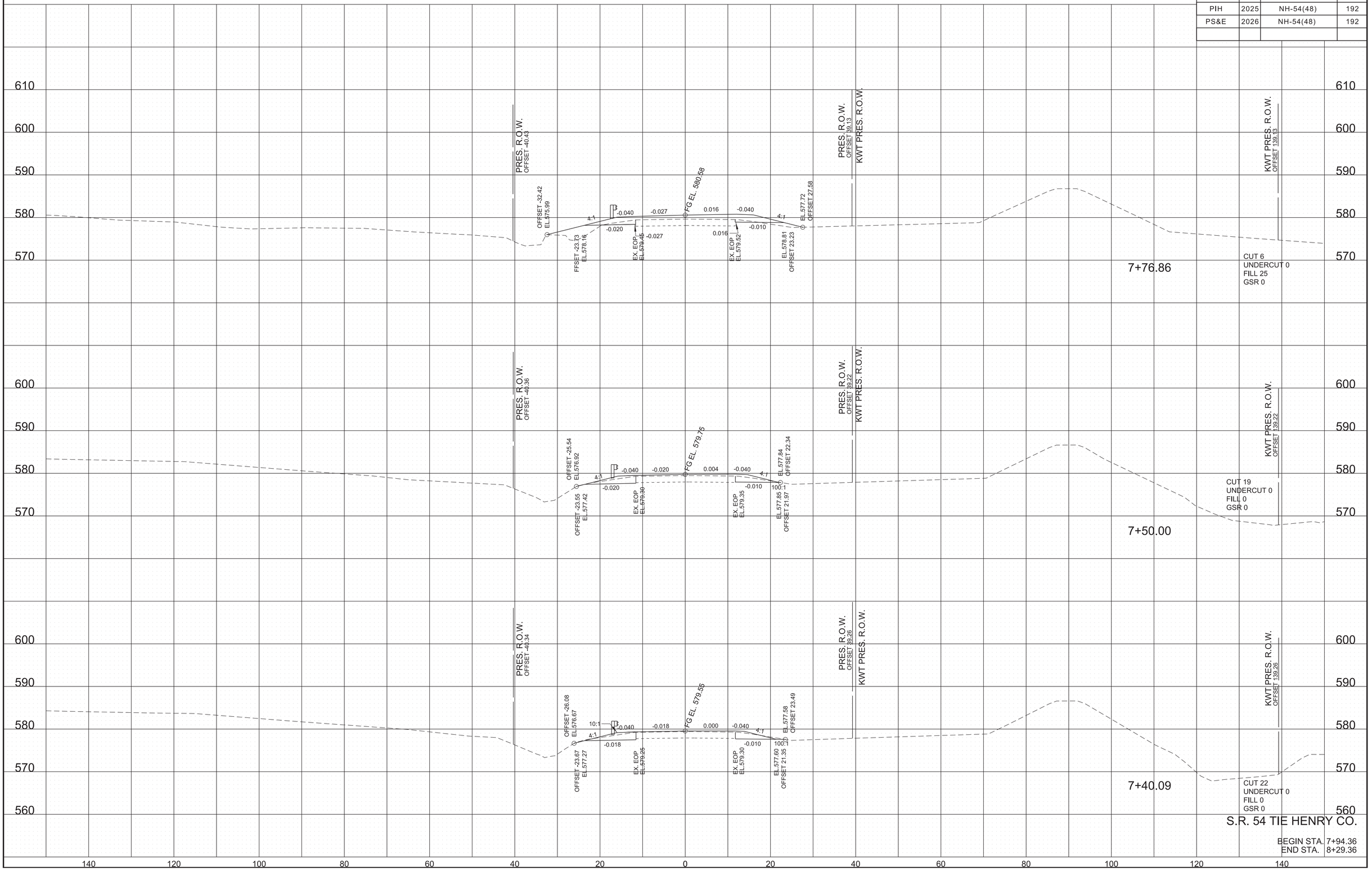


S.R. 54 TIE HENRY CO.

BEGIN STA. 7+00.00
END STA. 7+22.50

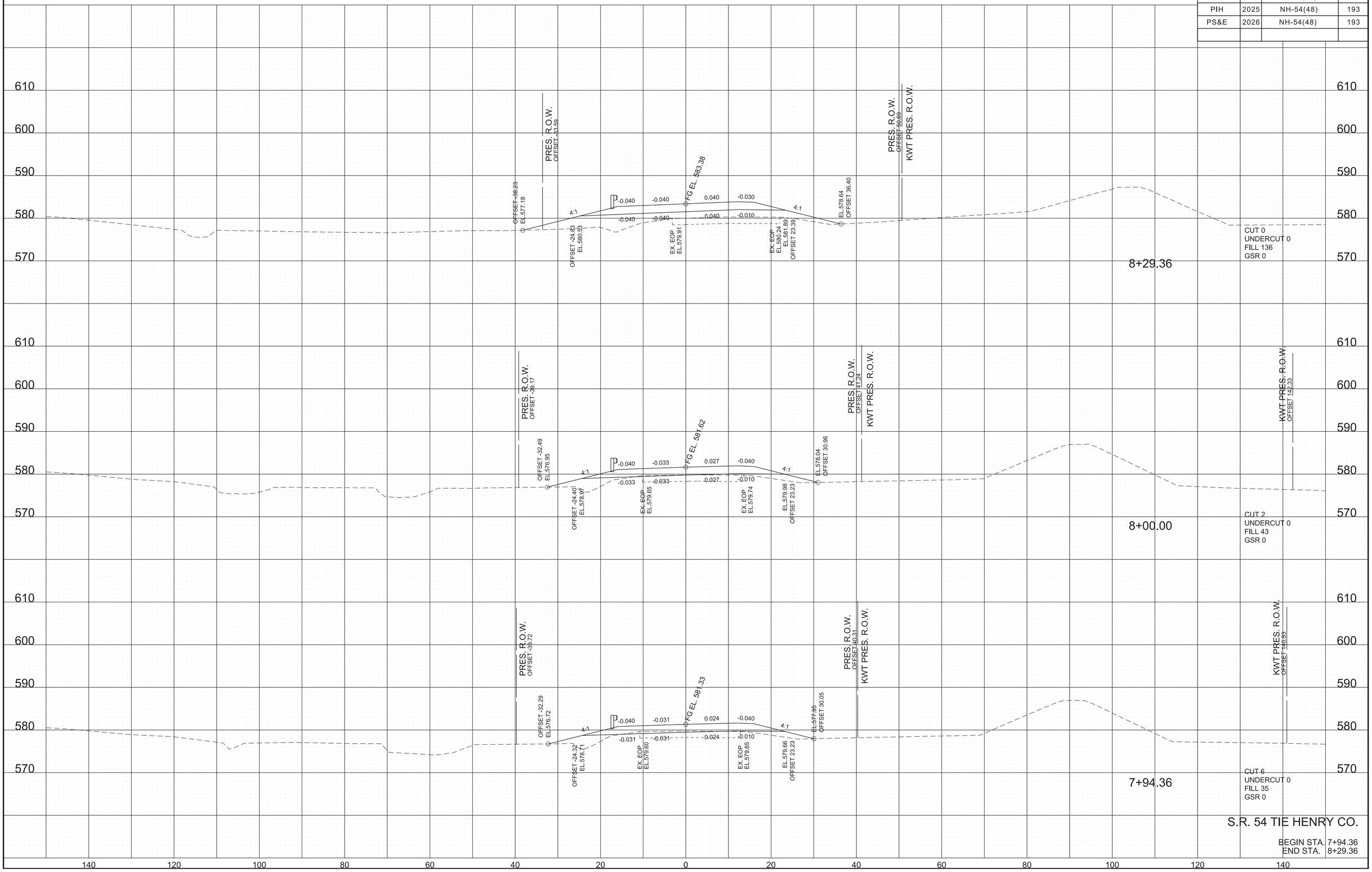
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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	175
PIH	2025	NH-54(48)	192
PS&E	2026	NH-54(48)	192



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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	176
PIH	2025	NH-54(48)	193
PS&E	2026	NH-54(48)	193

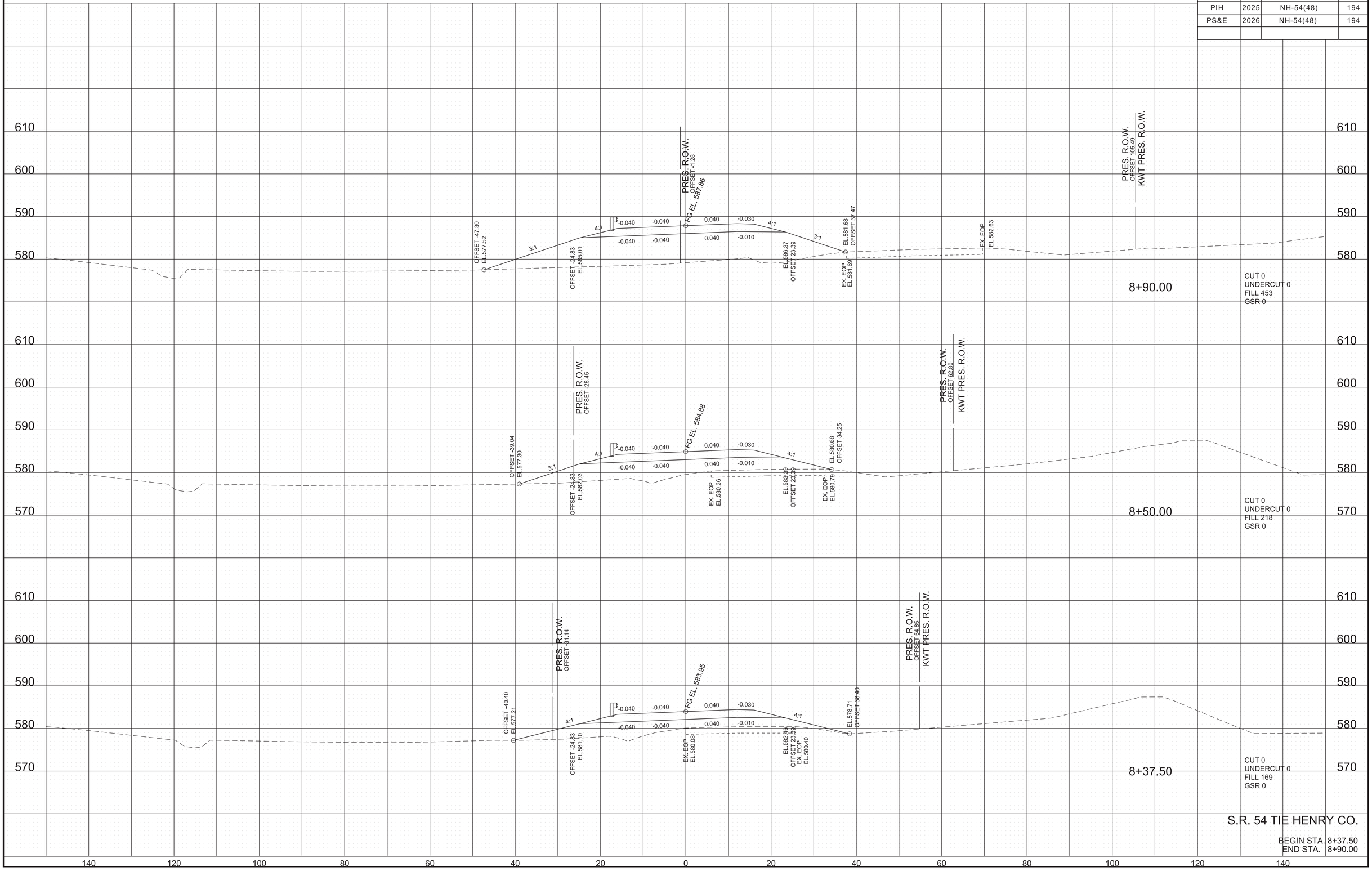


S.R. 54 TIE HENRY CO.

BEGIN STA. 7+94.36
END STA. 8+29.36

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	177
PIH	2025	NH-54(48)	194
PS&E	2026	NH-54(48)	194

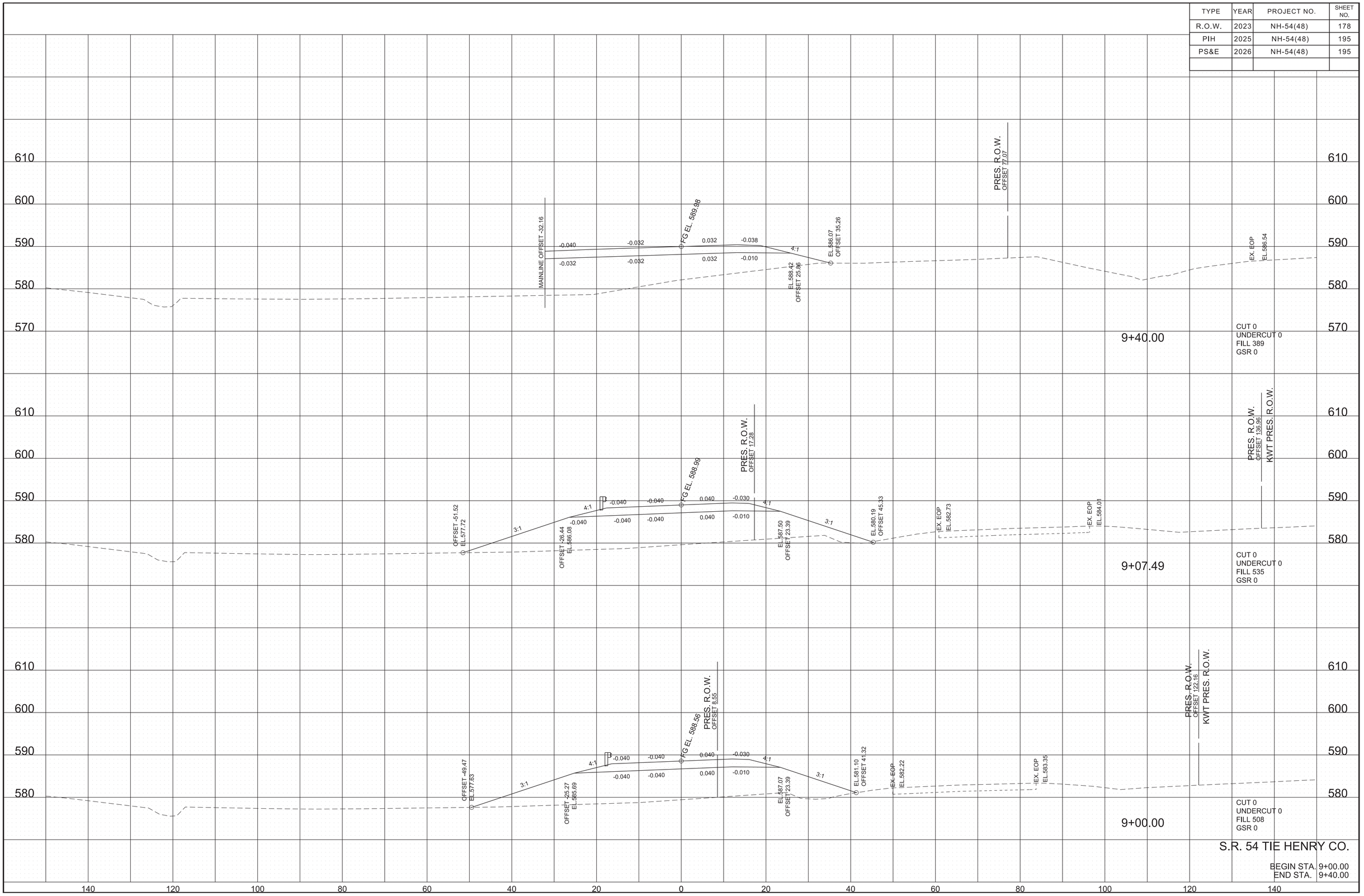


S.R. 54 TIE HENRY CO.

BEGIN STA. 8+37.50
END STA. 8+90.00

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	178
PIH	2025	NH-54(48)	195
PS&E	2026	NH-54(48)	195



S.R. 54 TIE HENRY CO.

BEGIN STA. 9+00.00
END STA. 9+40.00

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	179
PIH	2025	NH-54(48)	196
PS&E	2026	NH-54(48)	196

MATCH MAINLINE SECTIONS

10+00.00

CUT 0
UNDERCUT 0
FILL 0
GSR 0

PRES. R.O.W.
OFFSET 147.89

MAINLINE OFFSET -34.29

-0.027

-0.027

TG EL. 590.18

0.027

0.027

MAINLINE OFFSET 25.74

9+59.99

CUT 0
UNDERCUT 0
FILL 378
GSR 0

MAINLINE OFFSET -40.89

-0.040

-0.030

-0.030

TG EL. 590.08

0.030

0.030

-0.040

-0.010

MAINLINE OFFSET 25.49

PRES. R.O.W.
OFFSET 107.71

9+50.00

CUT 0
UNDERCUT 0
FILL 434
GSR 0

MAINLINE OFFSET -34.07

-0.040

-0.032

-0.032

TG EL. 590.00

0.032

0.032

-0.038

-0.010

4:1

EL 586.41
OFFSET 35.19

EL 588.45
OFFSET 27.00

PRES. R.O.W.
OFFSET 83.91

EX. EOP
EL 587.00

9+42.49

CUT 0
UNDERCUT 0
FILL 398
GSR 0

S.R. 54 TIE HENRY CO.

BEGIN STA. 9+42.49
END STA. 10+00.00

590 580 570 600 590 580 570

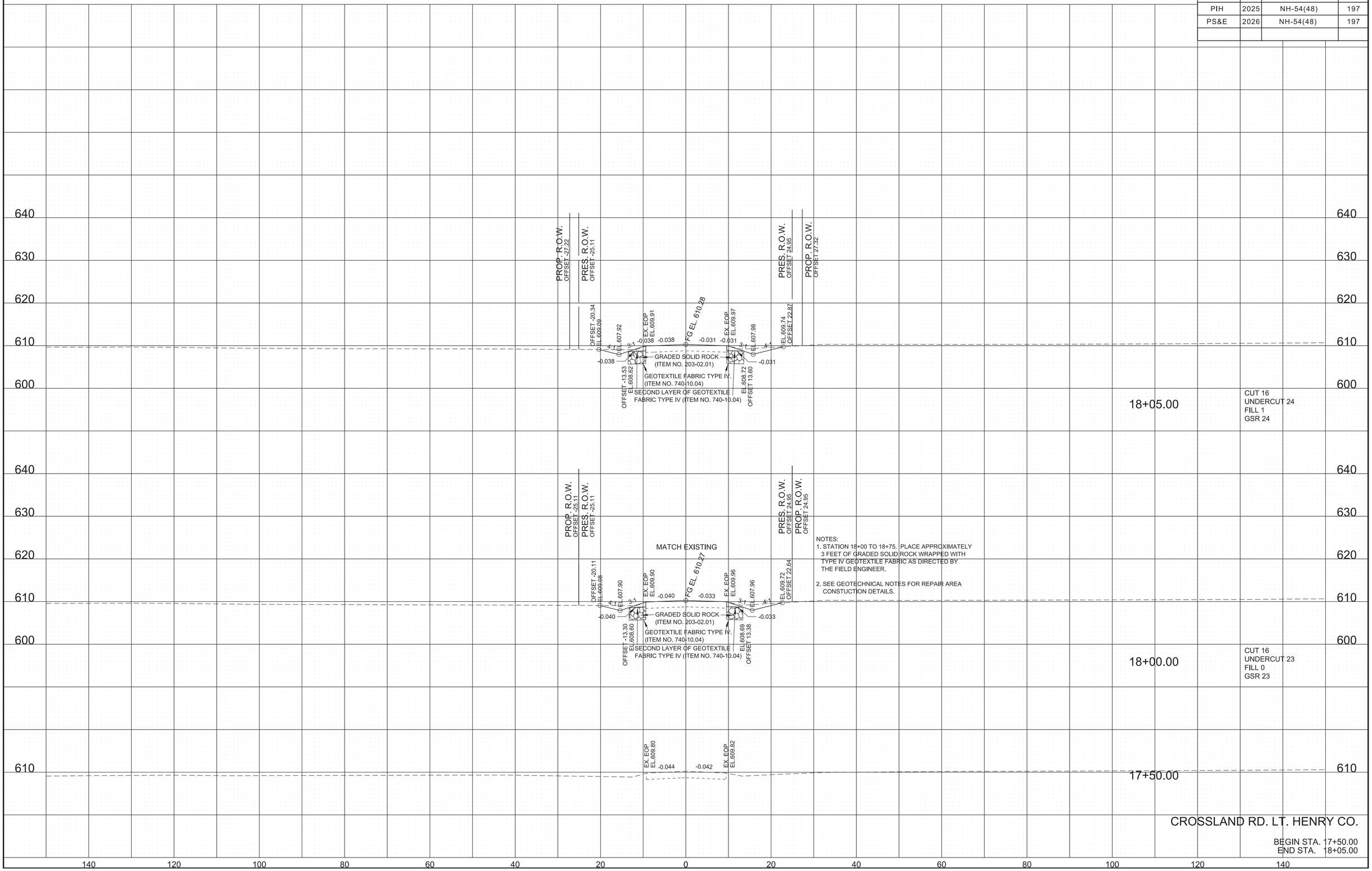
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600 590 580 570

140 120 100 80 60 40 20 0 20 40 60 80 100 120 140

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	180
PIH	2025	NH-54(48)	197
PS&E	2026	NH-54(48)	197

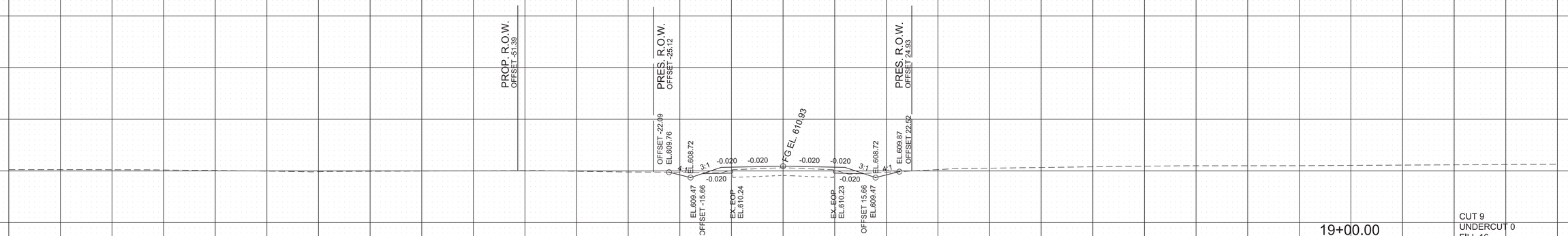


CROSSLAND RD. LT. HENRY CO.

BEGIN STA. 17+50.00
END STA. 18+05.00

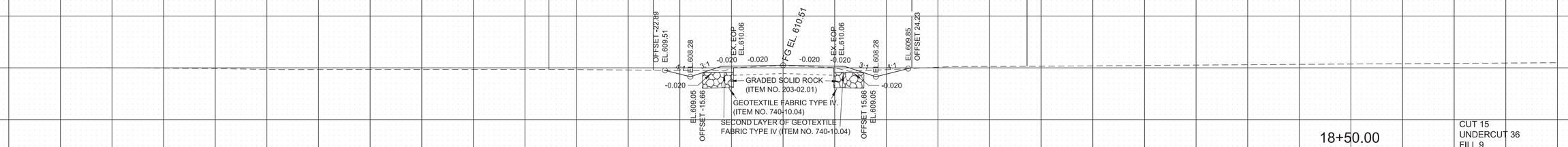
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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	181
PIH	2025	NH-54(48)	198
PS&E	2026	NH-54(48)	198



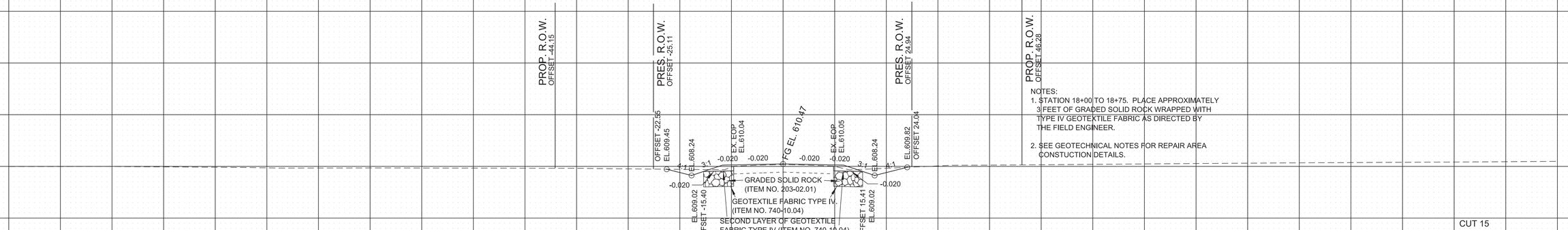
19+00.00

CUT 9
UNDERCUT 0
FILL 16
GSR 0



18+50.00

CUT 15
UNDERCUT 36
FILL 9
GSR 36



NOTES:
1. STATION 18+00 TO 18+75. PLACE APPROXIMATELY 3 FEET OF GRADED SOLID ROCK WRAPPED WITH TYPE IV GEOTEXTILE FABRIC AS DIRECTED BY THE FIELD ENGINEER.
2. SEE GEOTECHNICAL NOTES FOR REPAIR AREA CONSTUCTION DETAILS.

18+45.00

CUT 15
UNDERCUT 34
FILL 8
GSR 34

CROSSLAND RD. LT. HENRY CO.

BEGIN STA. 18+45.00
END STA. 19+00.00

2/9/2026 2:46:57 PM
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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	182
PIH	2025	NH-54(48)	199
PS&E	2026	NH-54(48)	199

640
630
620
610
600

PRES. R.O.W. OFFSET -25.13

PRES. R.O.W. OFFSET 24.91

MATCH MAINLINE SECTIONS

EX. EOP EL.610.55

EX. EOP EL.610.51

20+00.00

640
630
620
610

PRES. R.O.W. OFFSET -25.12

PRES. R.O.W. OFFSET 24.92

S.R. 54 OFFSET -18.49

-0.017

@TG EL. 611.10

-0.003

S.R. 54 OFFSET 21.78

EX. EOP EL.610.43

EX. EOP EL.610.42

640
630
620
610
600

19+50.00

CUT 11
UNDERCUT 0
FILL 34
GSR 0

PRES. R.O.W. OFFSET -25.12

PRES. R.O.W. OFFSET 24.92

S.R. 54 OFFSET -13.30

-0.020

@TG EL. 611.10

-0.008

S.R. 54 OFFSET 15.22

EX. EOP EL.610.39

EX. EOP EL.610.39

640
630
620
610
600

19+40.00

CUT 7
UNDERCUT 0
FILL 24
GSR 0

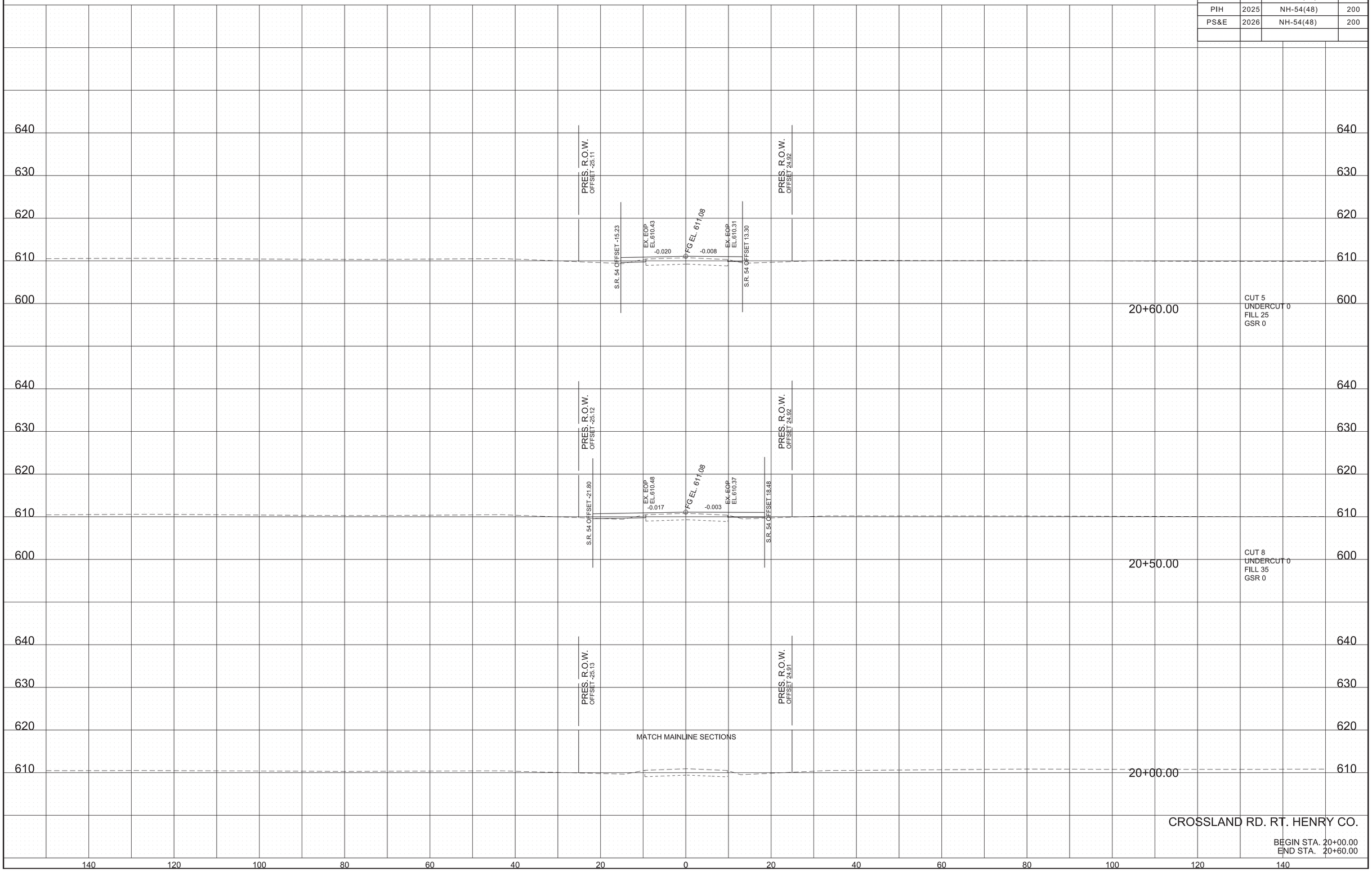
CROSSLAND RD. LT. HENRY CO.

BEGIN STA. 19+40.00
END STA. 20+00.00

140 120 100 80 60 40 20 0 20 40 60 80 100 120 140

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	183
PIH	2025	NH-54(48)	200
PS&E	2026	NH-54(48)	200

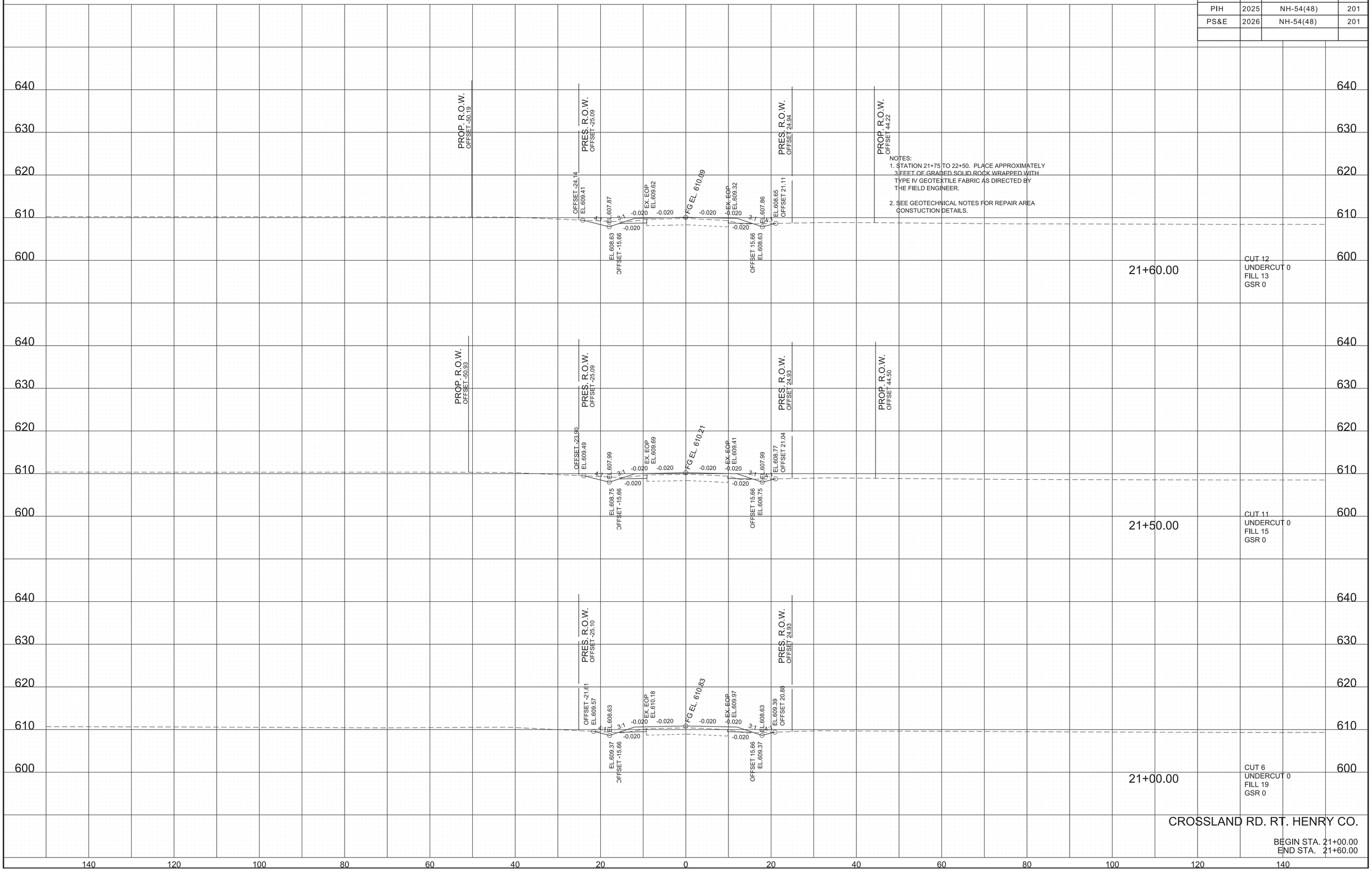


CROSSLAND RD. RT. HENRY CO.

BEGIN STA. 20+00.00
END STA. 20+60.00

2/9/2026 2:46:58 PM
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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	184
PIH	2025	NH-54(48)	201
PS&E	2026	NH-54(48)	201

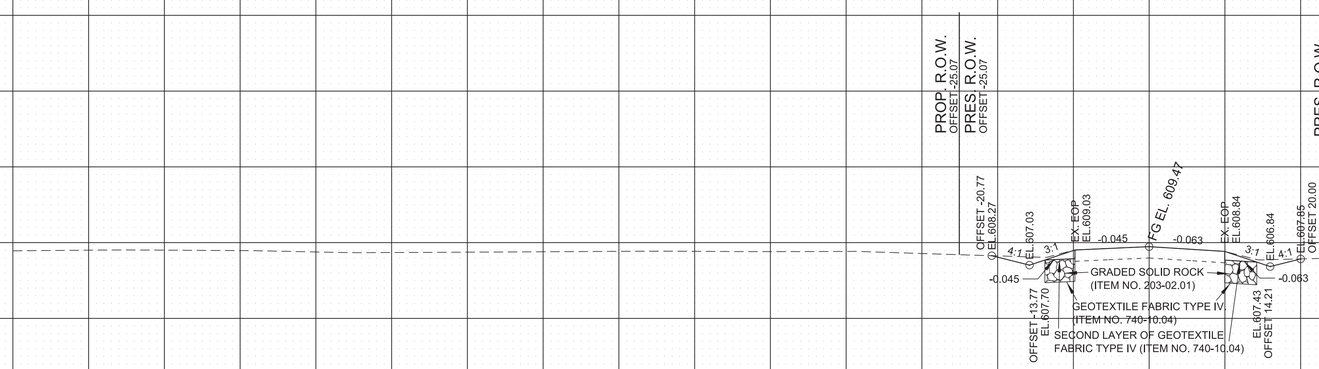


CROSSLAND RD. RT. HENRY CO.

BEGIN STA. 21+00.00
END STA. 21+60.00

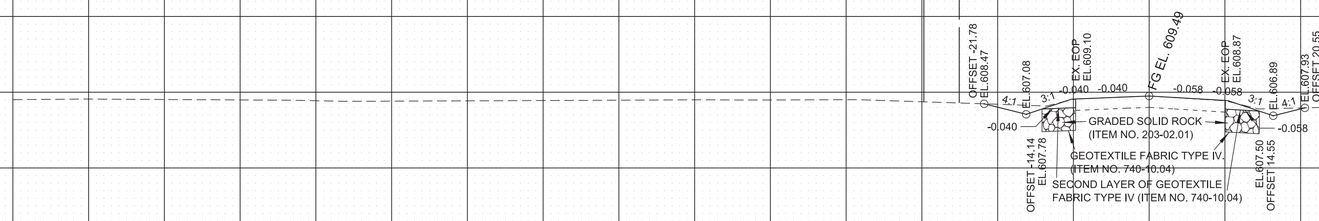
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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	185
PIH	2025	NH-54(48)	202
PS&E	2026	NH-54(48)	202



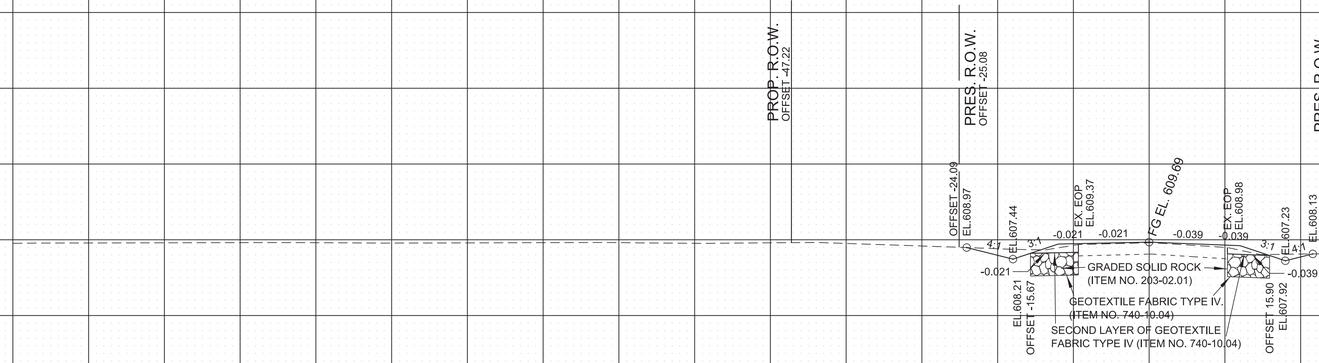
22+50.00

CUT 13
UNDERCUT 25
FILL 0
GSR 25



22+40.00

CUT 14
UNDERCUT 27
FILL 0
GSR 27



NOTES:
1. STATION 21+75 TO 22+50. PLACE APPROXIMATELY 3 FEET OF GRADED SOLID ROCK WRAPPED WITH TYPE IV GEOTEXTILE FABRIC AS DIRECTED BY THE FIELD ENGINEER.
2. SEE GEOTECHNICAL NOTES FOR REPAIR AREA CONSTUCTION DETAILS.

22+00.00

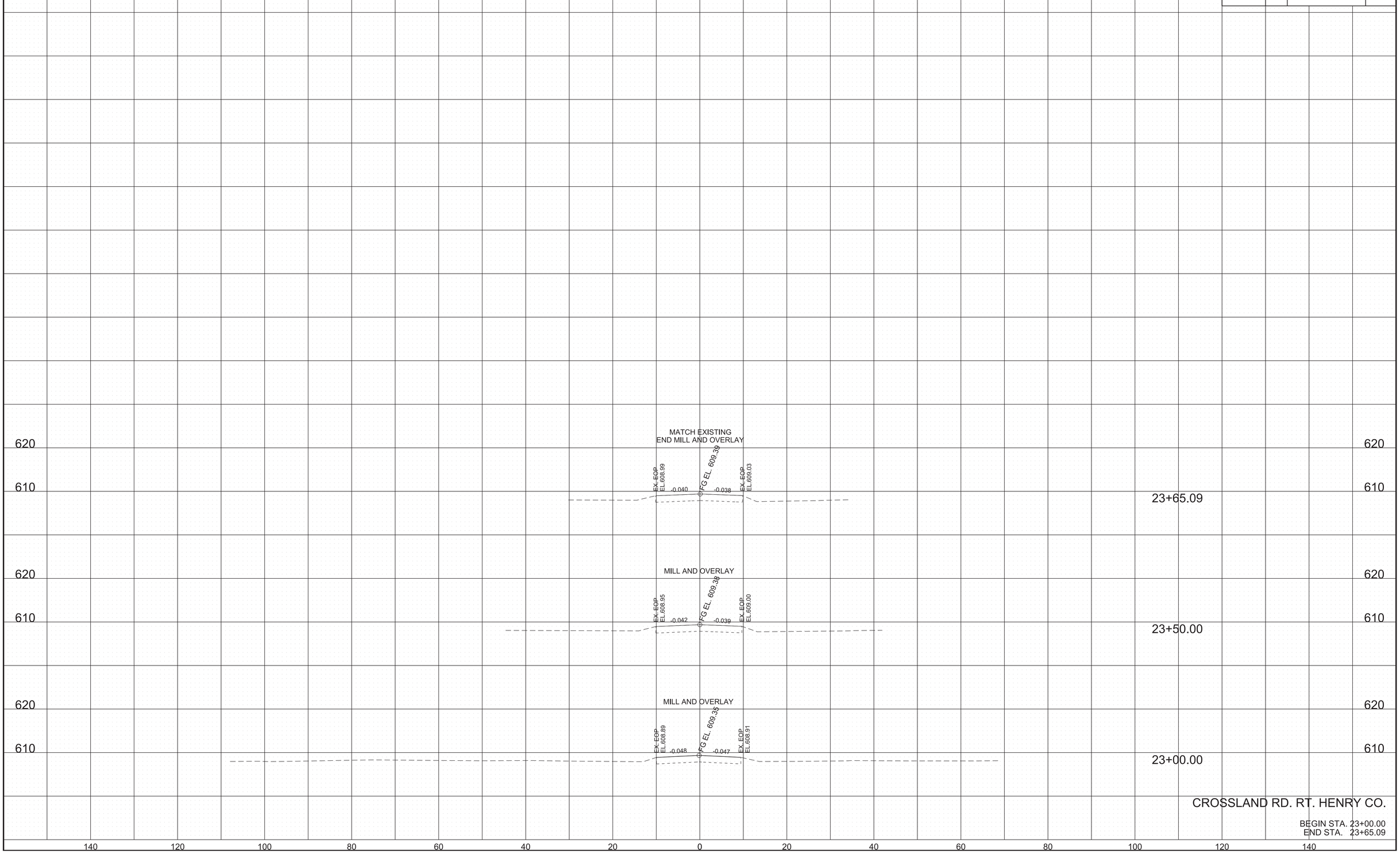
CUT 15
UNDERCUT 36
FILL 7
GSR 36

CROSSLAND RD. RT. HENRY CO.

BEGIN STA. 22+00.00
END STA. 22+50.00

2/9/2026 2:46:59 PM
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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	186
PIH	2025	NH-54(48)	203
PS&E	2026	NH-54(48)	203

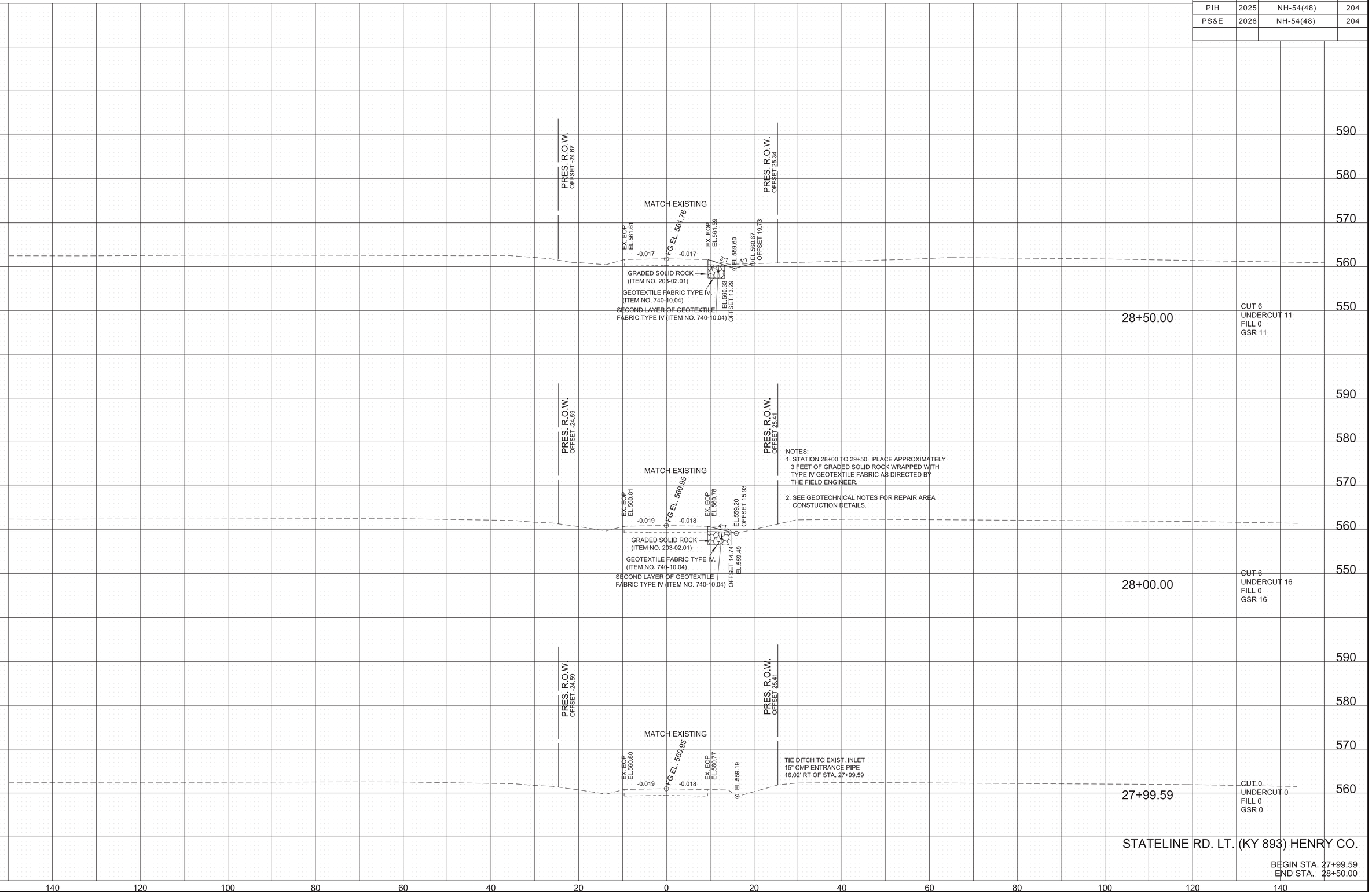


CROSSLAND RD. RT. HENRY CO.

BEGIN STA. 23+00.00
END STA. 23+65.09

2/9/2026 2:47:00 PM
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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	187
PIH	2025	NH-54(48)	204
PS&E	2026	NH-54(48)	204

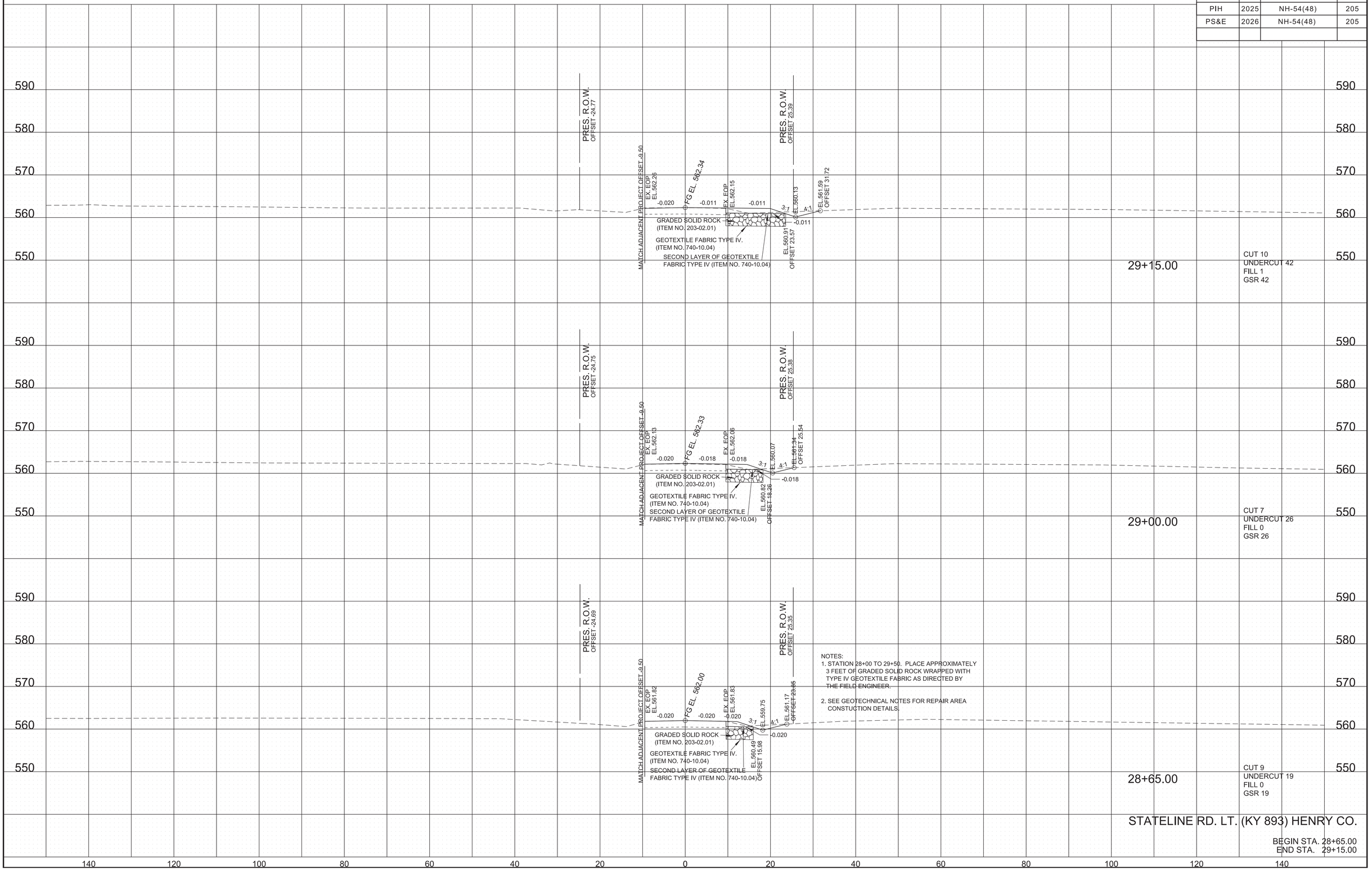


STATELINE RD. LT. (KY 893) HENRY CO.

BEGIN STA. 27+99.59
END STA. 28+50.00

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	188
PIH	2025	NH-54(48)	205
PS&E	2026	NH-54(48)	205



NOTES:
1. STATION 28+00 TO 29+50. PLACE APPROXIMATELY 3 FEET OF GRADED SOLID ROCK WRAPPED WITH TYPE IV GEOTEXTILE FABRIC AS DIRECTED BY THE FIELD ENGINEER.
2. SEE GEOTECHNICAL NOTES FOR REPAIR AREA CONSTUCTION DETAILS.

STATELINE RD. LT. (KY 893) HENRY CO.

BEGIN STA. 28+65.00
END STA. 29+15.00

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	189
PIH	2025	NH-54(48)	206
PS&E	2026	NH-54(48)	206

590
580
570
560
550

PRES. R.O.W.
OFFSET -24.91

PRES. R.O.W.
OFFSET 25.46

MATCH MAINLINE SECTIONS

EX. EOP
EL.562.09

EX. EOP
EL.562.10

30+00.00

CUT 0
UNDERCUT 0
FILL 0
GSR 0

PRES. R.O.W.
OFFSET -24.83

PRES. R.O.W.
OFFSET 25.42

NOTES:
1. STATION 28+00 TO 29+50. PLACE APPROXIMATELY 3 FEET OF GRADED SOLID ROCK WRAPPED WITH TYPE IV GEOTEXTILE FABRIC AS DIRECTED BY THE FIELD ENGINEER.

2. SEE GEOTECHNICAL NOTES FOR REPAIR AREA CONSTUCTION DETAILS.

MATCH ADJACENT PROJECT OFFSET -8.50

EX. EOP
EL.562.08

-0.005

@ FG EL. 562.27

EX. EOP
EL.562.12

0.005

GRADED SOLID ROCK
(ITEM NO. 203-02.01)

0.005

GEOTEXTILE FABRIC TYPE IV.
(ITEM NO. 740-10.04)

SECOND LAYER OF GEOTEXTILE
FABRIC TYPE IV (ITEM NO. 740-10.04)

EL.560.58

MATCH MAINLINE OFFSET 25.07

29+50.00

CUT 3
UNDERCUT 47
FILL 0
GSR 47

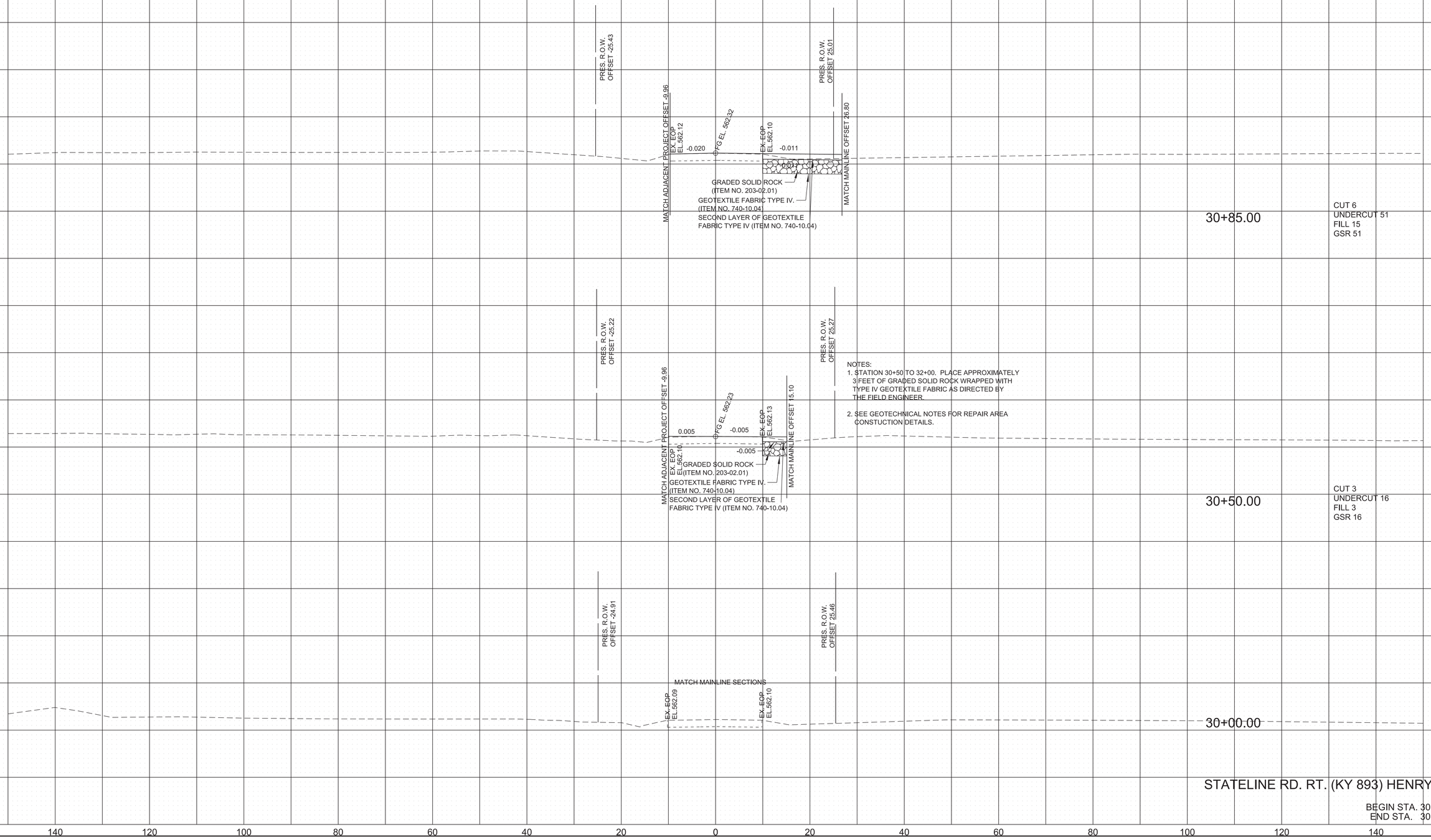
STATELINE RD. LT. (KY 893) HENRY CO.

BEGIN STA. 29+50.00
END STA. 30+00.00

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	190
PIH	2025	NH-54(48)	207
PS&E	2026	NH-54(48)	207

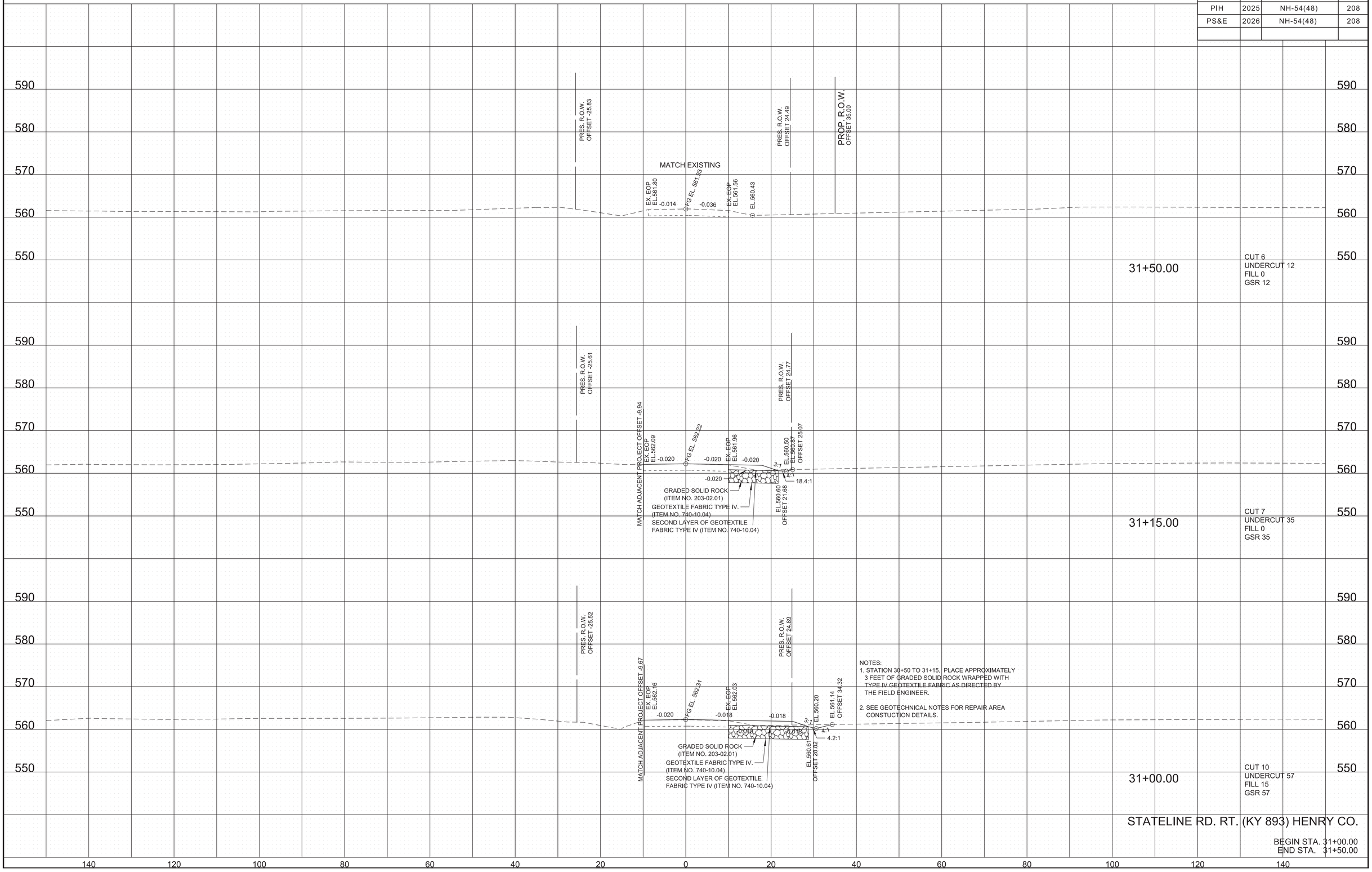


STATELINE RD. RT. (KY 893) HENRY CO.

BEGIN STA. 30+00.00
END STA. 30+85.00

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	191
PIH	2025	NH-54(48)	208
PS&E	2026	NH-54(48)	208

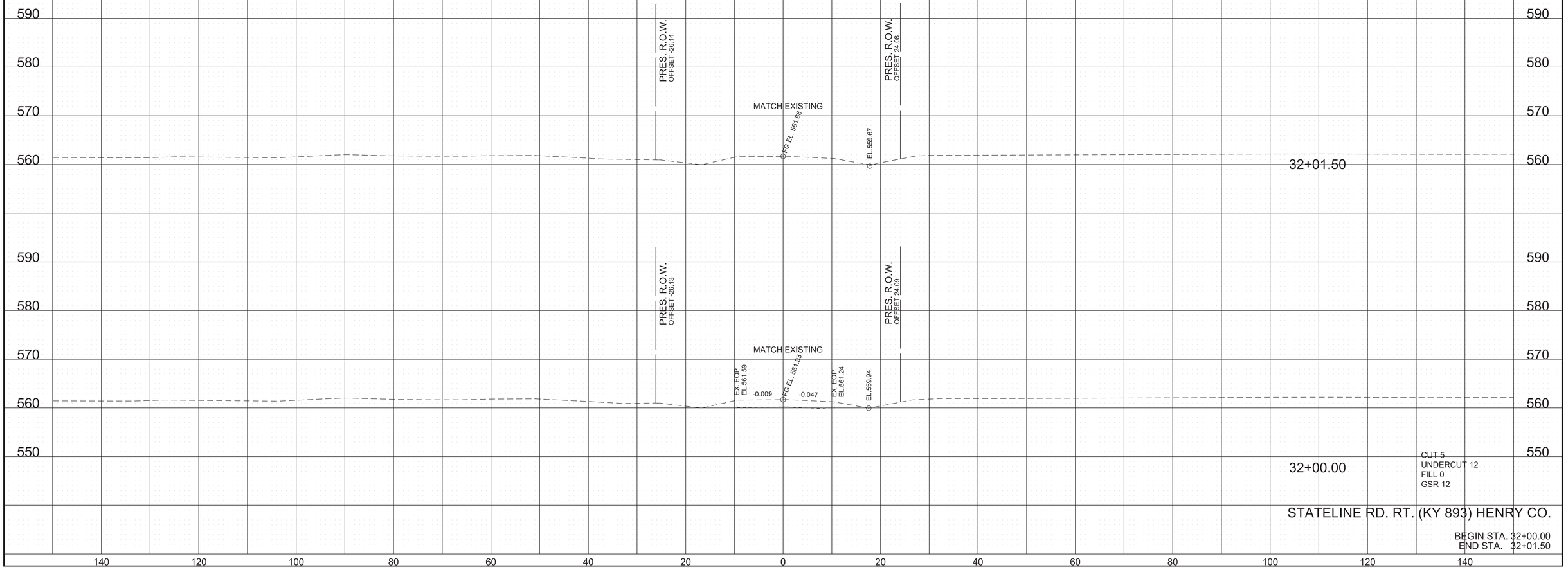


STATELINE RD. RT. (KY 893) HENRY CO.

BEGIN STA. 31+00.00
END STA. 31+50.00

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54(48)	192
PIH	2025	NH-54(48)	209
PS&E	2026	NH-54(48)	209



STATELINE RD. RT. (KY 893) HENRY CO.

BEGIN STA. 32+00.00
END STA. 32+01.50

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TYPE	YEAR	PROJECT NO.	SHEET NO.
PIH	2025	NH-54(48)	T1
PS&E	2026	NH-54(48)	T1

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 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.

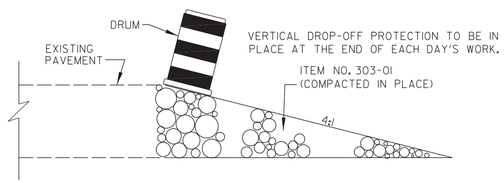
   d. THE CONTRACTOR SHALL PROVIDE SEPARATION BY PORTABLE BARRIER RAIL.

   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.



VERTICAL DROP-OFF PROTECTION DETAIL

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.

SEALED BY



02/10/2026

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PAVEMENT EDGE DROP-OFF NOTES FOR TRAFFIC CONTROL

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TYPE	YEAR	PROJECT NO.	SHEET NO.
PIH	2025	NH-54(48)	T2
PS&E	2026	NH-54(48)	T2

TABULATED TRAFFIC CONTROL QUANTITIES

	ITEM NO.	DESCRIPTION	UNIT	QUANTITY 40S054-F3-004
(18)	303-01	MINERAL AGGREGATE, TYPE A BASE, GRADING D	TON	2252
	712-01	TRAFFIC CONTROL	LS	1
	712-02.10	PORTABLE BARRIER RAIL (MASH TL-3)	L.F.	1340
(38)	712-02.60	TEMPORARY WORK ZONE CRASH CUSHION (MASH TL-3)	EACH	4
	712-04.01	FLEXIBLE DRUMS (CHANNELIZING)	EACH	171
	712-04.50	BARRIER RAIL DELINEATOR	EACH	32
	712-05.01	WARNING LIGHTS (TYPE A)	EACH	62
	712-06	SIGNS (CONSTRUCTION)	S.F.	2661
	712-07.03	TEMPORARY BARRICADES (TYPE III)	L.F.	372
(5)	712-08.03	ARROW BOARD (TYPE C)	EACH	6
	712-09.30	REMOVABLE BLACK-OUT TAPE (6")	L.F.	4800
	713-16.01	CHANGEABLE MESSAGE SIGN UNIT	EACH	21

FOOTNOTES

(5) ALL QUANTITIES ARE TO BE USED AS DIRECTED BY THE ENGINEER.

(18) INCLUDES 2252 TONS FOR SHOULDER WIDENING ALONG EXIST. SR-54. SEE TRAFFIC CONTROL PLANS.

(38) SHALL BE A PORTABLE ENERGY ABSORBING TERMINAL MEETING THE REQUIREMENTS OF AASHTO MASH FOR TEST LEVEL 3. THE PAY ITEM WILL INCLUDE FURNISHING AND INSTALLING ALL COMPONENTS AS SHOWN ON THE MANUFACTURES DRAWINGS.

TRAFFIC CONTROL SIGN TABULATION

M.U.T.C.D. SIGN NO.	LEGEND	SIZE IN INCHES L	X	W	S.F.	NO. REQUIRED PHASE I	NO. REQUIRED PHASE II	TOTAL NO. REQUIRED	ITEM NO. 712-06 S.F.	STANDARD DRAWING NO.	REMARKS
G20-2	SIGNS (CONSTRUCTION)	48"	X	24"	8	6	6	6	48		END ROAD WORK
M1-4	SIGNS (CONSTRUCTION)	30"	X	24"	5		94	94	470		U.S. ROUTE (3 DIGITS)
M3-1	SIGNS (CONSTRUCTION)	24"	X	12"	2		21	21	42		CARDINAL DIRECTION (NORTH)
M3-3	SIGNS (CONSTRUCTION)	24"	X	12"	2		18	18	36		CARDINAL DIRECTION (SOUTH)
M4-10L	SIGNS (CONSTRUCTION)	48"	X	18"	6		5	5	30		DETOUR (LEFT)
M4-10R	SIGNS (CONSTRUCTION)	48"	X	18"	6		5	5	30		DETOUR (RIGHT)
M4-4	SIGNS (CONSTRUCTION)	24"	X	12"	2		64	64	128		TRUCK
M4-8	SIGNS (CONSTRUCTION)	24"	X	12"	2		94	94	188		DETOUR
M4-8a	SIGNS (CONSTRUCTION)	30"	X	24"	5		8	8	40		END DETOUR
M4-9	SIGNS (CONSTRUCTION)	30"	X	24"	5		2	2	10		STATE LINE ROAD
M4-9L	SIGNS (CONSTRUCTION)	30"	X	24"	5		3	3	15		STATE LINE ROAD / DETOUR (WITH ARROW)
M4-9R	SIGNS (CONSTRUCTION)	30"	X	24"	5		3	3	15		STATE LINE ROAD / DETOUR (WITH ARROW)
M4-9	SIGNS (CONSTRUCTION)	30"	X	24"	5		2	2	10		CROSSLAND ROAD
M4-9L	SIGNS (CONSTRUCTION)	30"	X	24"	5		3	3	15		CROSSLAND ROAD / DETOUR (WITH ARROW)
M4-9R	SIGNS (CONSTRUCTION)	30"	X	24"	5		3	3	15		CROSSLAND ROAD / DETOUR (WITH ARROW)
M5-1L	SIGNS (CONSTRUCTION)	21"	X	15"	2.19		13	13	28		ADVANCE TURN ARROW (LEFT)
M5-1R	SIGNS (CONSTRUCTION)	21"	X	15"	2.19		14	14	31		ADVANCE TURN ARROW (RIGHT)
M6-1L	SIGNS (CONSTRUCTION)	21"	X	15"	2.19		13	13	28		DIRECTIONAL ARROW (LEFT)
M6-1R	SIGNS (CONSTRUCTION)	21"	X	15"	2.19		14	14	31		DIRECTIONAL ARROW (RIGHT)
M6-3	SIGNS (CONSTRUCTION)	21"	X	15"	2.19		1	1	2		DIRECTIONAL ARROW
R11-2	SIGNS (CONSTRUCTION)	48"	X	30"	10		17	17	170		ROAD CLOSED
R11-3	SIGNS (CONSTRUCTION)	60"	X	30"	12.5		1	1	13		ROAD CLOSED
R11-3A	SIGNS (CONSTRUCTION)	60"	X	30"	12.5		1	1	13		ROAD CLOSED 1.8 MILES(LOCAL TRAFFIC ONLY)
R11-3A	SIGNS (CONSTRUCTION)	60"	X	30"	12.5		1	1	13		ROAD CLOSED 1.6 MILES(LOCAL TRAFFIC ONLY)
R11-4	SIGNS (CONSTRUCTION)	60"	X	30"	12.5		4	4	50		ROAD CLOSED TO THRU TRAFFIC
R5-2	SIGNS (CONSTRUCTION)	24"	X	24"	4		4	4	16		NO TRUCKS
W5-1	SIGNS (CONSTRUCTION)	48"	X	48"	16	2		2	32		ROAD NARROWS
W7-3aP	SIGNS (CONSTRUCTION)	36"	X	30"	7.5	2		2	15		NEXT XX MILES (PLAQUE) (0.2)
W16-2P	SIGNS (CONSTRUCTION)	30"	X	24"	5		8	8	40		XX FEET (PLAQUE) (500 FEET)
W20-1	SIGNS (CONSTRUCTION)	48"	X	48"	16	2		2	32		ROAD WORK 1 MILE
W20-1	SIGNS (CONSTRUCTION)	48"	X	48"	16	5		5	80		ROAD WORK 1/2 MILE
W20-1	SIGNS (CONSTRUCTION)	48"	X	48"	16	4		4	64		ROAD WORK 500 FEET
W20-1	SIGNS (CONSTRUCTION)	48"	X	48"	16	6		6	96		ROAD WORK 1000 FEET
W20-1	SIGNS (CONSTRUCTION)	48"	X	48"	16		8	8	128		ROAD WORK 1500 FEET
W20-3	SIGNS (CONSTRUCTION)	48"	X	48"	16		2	2	32		ROAD CLOSED 1000 FT
W20-3	SIGNS (CONSTRUCTION)	48"	X	48"	16		2	2	32		ROAD CLOSED 500 FT
W20-3	SIGNS (CONSTRUCTION)	48"	X	48"	16		2	2	32		ROAD CLOSED AHEAD
W20-3	SIGNS (CONSTRUCTION)	48"	X	48"	16		5	5	80		DETOUR 1500FT
W20-3	SIGNS (CONSTRUCTION)	48"	X	48"	16		5	5	80		DETOUR AHEAD
W20-3	SIGNS (CONSTRUCTION)	48"	X	48"	16		7	7	112		DETOUR 1500 FT
W20-4	SIGNS (CONSTRUCTION)	48"	X	48"	16		8	8	128		ONE LANE ROAD 1000 FEET
W20-7	SIGNS (CONSTRUCTION)	48"	X	48"	16		8	8	128		FLAGGER (SYMBOL)
W21-5aR	SIGNS (CONSTRUCTION)	48"	X	48"	16	2		2	32		RIGHT SHOULDER CLOSED
W21-5bR	SIGNS (CONSTRUCTION)	48"	X	48"	16	2		2	32		RIGHT SHOULDER CLOSED 1500 FEET
								TOTAL	2661	S.F.	

TRAFFIC CONTROL LEGEND

SYMBOL	ITEM
	TEMPORARY BARRICADE (TYPE II)
	SIGN (CONSTRUCTION)
	CONSTRUCTION COMPLETED IN PHASE 1
	WORK ZONE
	TRAFFIC FLOW
	FLEXIBLE DRUMS (CHANNELIZING)
	PORTABLE BARRIER RAIL
	PORTABLE BARRIER RAIL (WITH BARRIER RAIL DELINEATORS)
	TEMPORARY ATTENUATOR
	CHANGEABLE MESSAGE SIGN



TYPE III BARRICADE ROAD CLOSURE
w/ TYPE A
WARNING LIGHTS



TYPE III BARRICADE
w/ TYPE A
WARNING LIGHTS

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL TABULATION QUANTITIES

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TYPE	YEAR	PROJECT NO.	SHEET NO.
PIH	2025	NH-54(48)	T3
PS&E	2026	NH-54(48)	T3

ALL PHASES

CONTRACTOR TO MAINTAIN ACCESS TO ALL ENTRANCES THROUGHOUT CONSTRUCTION.

PHASE 1

1. MAINTAIN TRAFFIC ON EXISTING ROADWAYS WHILE CONSTRUCTING AS MUCH AS POSSIBLE OF THE NEW ALIGNMENT OF SR-54 AND SR-54 TIE.

PHASE 1A & 1B

1. CONSTRUCT PERMANENT SHOULDER WIDENING ON EXISTING S.R. 54 FOR PLACEMENT OF PORTABLE BARRIER RAIL DURING CONSTRUCTION OF BRIDGE PIERS FROM RT. STA. 41+50 TO STA. 50+00 AND LT. STA. 44+50 TO STA. 52+00.

PHASE 2A

1. INSTALL TEMPORARY DETOUR FOR CROSSLAND ROAD WHILE PERFORMING THE WORK ON CROSSLAND ROAD.

PHASE 2B

1. INSTALL TEMPORARY DETOUR FOR STATE LINE ROAD WHILE PERFORMING THE WORK ON STATE LINE ROAD.

PHASE 2C

1. INSTALL TEMPORARY CAR AND TRUCK DETOURS WHILE SHUTTING DOWN SR-54 EXCEPT TO LOCAL TRAFFIC ONLY OR AS SPECIFIED IN SP108B WHILE CONSTRUCTING THE NEW BRIDGE OVER EXISTING SR-54 AND KWT RAILROAD.

TRAFFIC CONTROL IN KENTUCKY IS TO BE PROVIDE BY KYTC. CONTACT JASON LOOPER (JASON.LOOPER@KY.GOV, 270-210-2398) WITH KYTC TO COORDINATE.

TRAFFIC CONTROL LEGEND	
SYMBOL	ITEM
	TEMPORARY BARRICADE (TYPE II)
	SIGN (CONSTRUCTION)
	WORK ZONE
	TRAFFIC FLOW
	FLEXIBLE DRUMS (CHANNELIZING)
	PORTABLE BARRIER RAIL
	PORTABLE BARRIER RAIL (WITH BARRIER RAIL DELINEATORS)
	TEMPORARY ATTENUATOR
	CHANGEABLE MESSAGE SIGN
	ARROW BOARD TYPE C

S.R. 54
CURVE DC400
PI 102+11.97
N 783,094.3064
E 1,282,803.5816
Δs 28° 33′ 08″ (RT)
θs 11° 13′ 14″
Δc 6° 06′ 41″ (RT)
Dc 4° 46′ 29″
Rc 1,200.00
Lc 128.00
Ts 541.99
Ls 470.00
SE 0.080 FT/FT
DESIGN SPEED 60 MPH
TRANS. LENGTH 470

SR-54 TIE
CURVE DC121
PI 8+81.00
N 783,452.9935
E 1,282,856.4899
Δ 68° 08′ 02″ (LT)
D 37° 12′ 18″
R 154.00
L 183.13
T 104.14
SE 0.040 FT/FT
DESIGN SPEED 25 MPH
TRANS. LENGTH 110

POT 95+49.88
N 782437.0218
E 1282770.9680

POT 95+54.46
N 782432.1351
E 1282768.9461

100

40S054-F2-002
BEGIN PROJ. NO. NH-54(48) R.O.W.
STA. 97+65.59 S.R. 54
N 782648.4566
E 1282781.8515

G20-2
48" X 24"
END ROAD WORK

W20-1 48" X 48" ROAD WORK 1 MILE
W20-1 48" X 48" ROAD WORK 1/2 MILE
W20-1 48" X 48" ROAD WORK 1000 FT

500' NTS
2600' NTS
1600' NTS
1000' NTS
LOCATION AND MESSAGE TO BE DETERMINED BY THE ENGINEER

105

POT 6+00.00
N 783731.6415
E 1282892.7640

STR-02 (MORMAN BRANCH-PERENNIAL)
WWC-01/EPH-01
WWC-02/EPH-02
WWC-64/EPH-64
FUTURE SR-54 CENTERLINE
SR-54 CENTERLINE
WTL-44
WWC-63/EPH-63
N 2° 49' 24" E
N 2° 49' 24" E
80' (TYP.)
SR-54/US-641 (ASP.)
S 7° 25' 01" W
WWC-62/EPH-62
STR-01 (INTERMITTENT)
PC 7+76.96
S 60° 43' 01" E
PT 9+59.99
STR-01 (INTERMITTENT)
WTL-01
WTL-02
W21-5bR 48" X 48" RIGHT SHOULDER CLOSED 1500 FT
WWC-03/EPH-03
N 31° 22' 32" E
STR-01 (INTERMITTENT)
ST 107+37.97
ST 107+75.63
STA. 110+00.00 SEE SHEET NO. T3A

TS 96+69.98
TS 97+07.64
SC 101+39.98
SC 101+77.64
CS 102+67.97
CS 103+05.64

40S054-F3-004
BEGIN PROJ. NO. NH-54(48) CONST.
STA. 98+00.00
N 782682.8032
E 1282783.9372

S.R. 54 (FUTURE)
CURVE DC204
PI 102+49.63
N 783,126.4595
E 1,282,823.1892
Δs 28° 33′ 08″ (RT)
θs 11° 13′ 14″
Δc 6° 06′ 41″ (RT)
Dc 4° 46′ 29″
Rc 1,200.00
Lc 128.00
Ts 541.99
Ls 470.00
SE 0.080 FT/FT
DESIGN SPEED 60 MPH
TRANS. LENGTH 470

STA. 105+35.00 S.R. 54 =
STA. 10+00.00 S.R. 54 TIE
N 783382.4897
E 1282982.2132
(SEE SHEET 16 FOR PROFILE)

SEALED BY

J. BRIAN LEE
REGISTERED ENGINEER
LICENSED TO PRACTICE
ENGINEERING
No. 107296
STATE OF TENNESSEE
02/09/2026

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

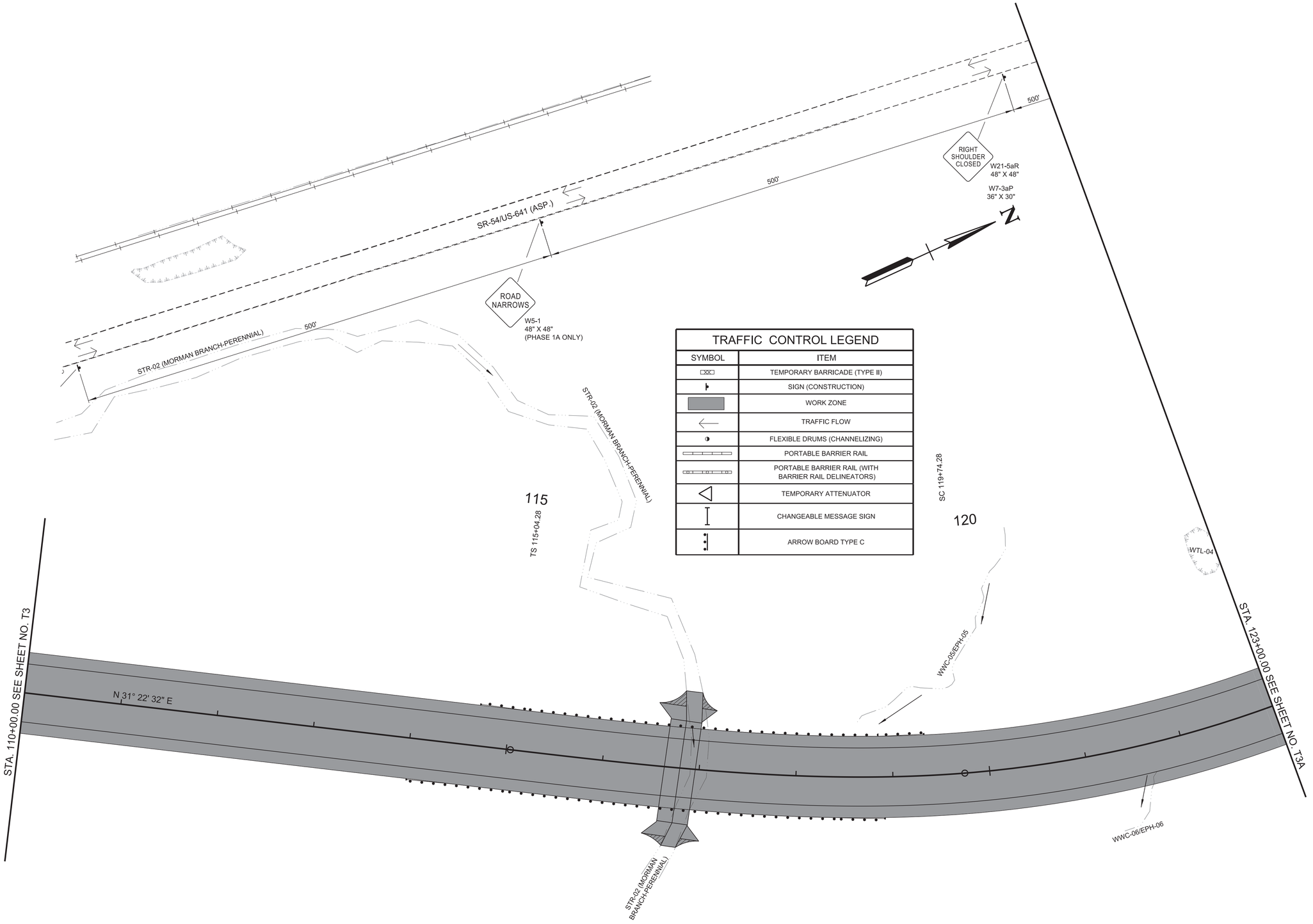
TRAFFIC CONTROL PLANS

STA.98+00.00 TO STA.110+00
SCALE: 1"=50'

PHASE 1

2/9/2026 2:48:04 PM
T:\TDOT\Henry_SR54\T3.sht

TYPE	YEAR	PROJECT NO.	SHEET NO.
PIH	2025	NH-54(48)	T3A
PS&E	2026	NH-54(48)	T3A



TRAFFIC CONTROL LEGEND

SYMBOL	ITEM
	TEMPORARY BARRICADE (TYPE II)
	SIGN (CONSTRUCTION)
	WORK ZONE
	TRAFFIC FLOW
	FLEXIBLE DRUMS (CHANNELIZING)
	PORTABLE BARRIER RAIL
	PORTABLE BARRIER RAIL (WITH BARRIER RAIL DELINEATORS)
	TEMPORARY ATTENUATOR
	CHANGEABLE MESSAGE SIGN
	ARROW BOARD TYPE C

SEALED BY

BRIAN LEE
REGISTERED ENGINEER
AGRICULTURE
ENGINEER
107296
STATE OF TENNESSEE
02/05/2026

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL PLANS

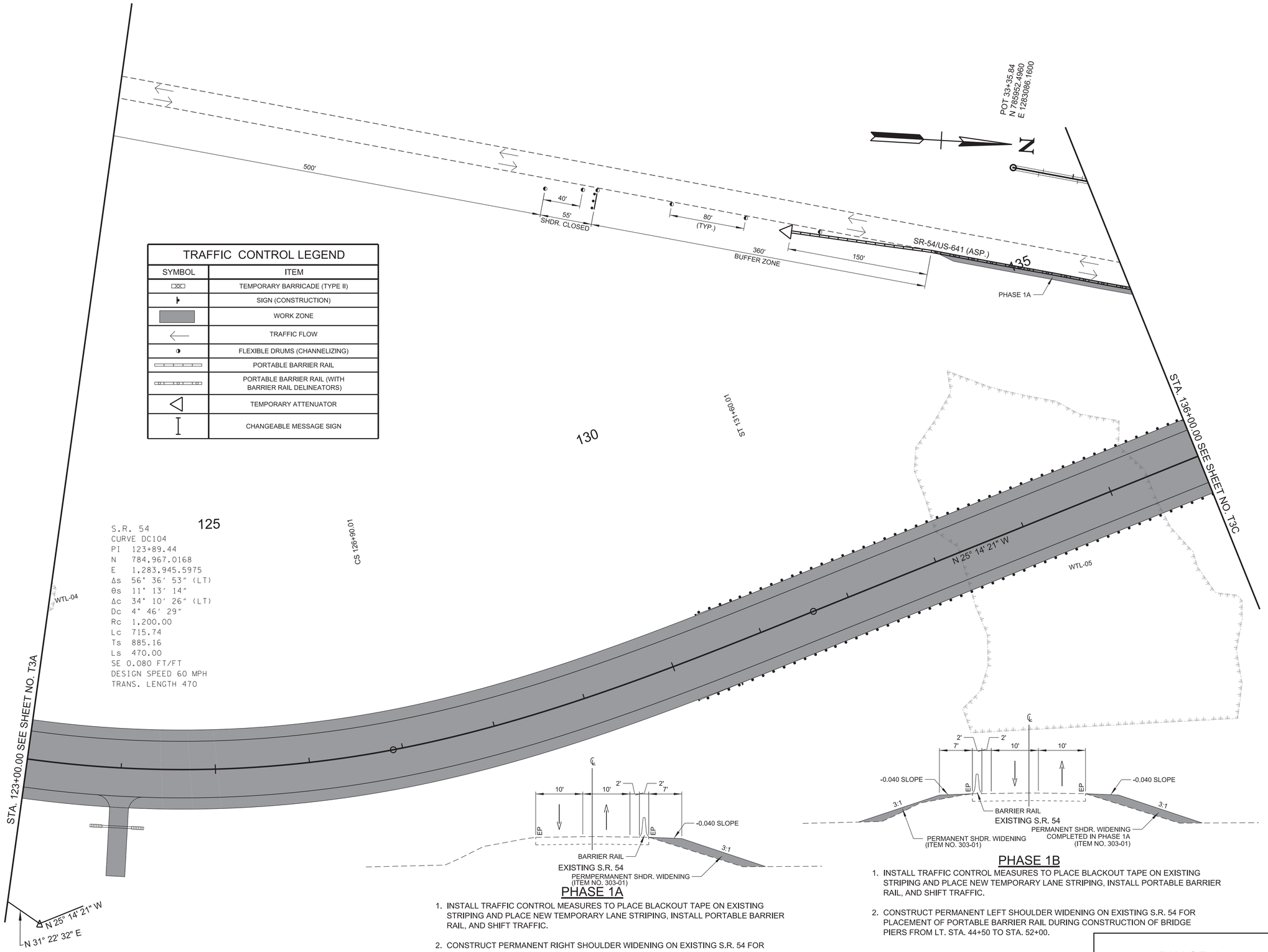
STA.110+00 TO STA.123+00

SCALE: 1"=50'

PHASE 1

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T:\TDOT\Henry_SR54\T3A.sht

TYPE	YEAR	PROJECT NO.	SHEET NO.
PIH	2025	NH-54(48)	T3B
PS&E	2026	NH-54(48)	T3B



TRAFFIC CONTROL LEGEND

SYMBOL	ITEM
	TEMPORARY BARRICADE (TYPE II)
	SIGN (CONSTRUCTION)
	WORK ZONE
	TRAFFIC FLOW
	FLEXIBLE DRUMS (CHANNELIZING)
	PORTABLE BARRIER RAIL
	PORTABLE BARRIER RAIL (WITH BARRIER RAIL DELINEATORS)
	TEMPORARY ATTENUATOR
	CHANGEABLE MESSAGE SIGN

PHASE 1A

1. INSTALL TRAFFIC CONTROL MEASURES TO PLACE BLACKOUT TAPE ON EXISTING STRIPING AND PLACE NEW TEMPORARY LANE STRIPING, INSTALL PORTABLE BARRIER RAIL, AND SHIFT TRAFFIC.
2. CONSTRUCT PERMANENT RIGHT SHOULDER WIDENING ON EXISTING S.R. 54 FOR PLACEMENT OF PORTABLE BARRIER RAIL DURING CONSTRUCTION OF BRIDGE PIERS FROM RT. STA. 41+50 TO STA. 50+00.

PHASE 1B

1. INSTALL TRAFFIC CONTROL MEASURES TO PLACE BLACKOUT TAPE ON EXISTING STRIPING AND PLACE NEW TEMPORARY LANE STRIPING, INSTALL PORTABLE BARRIER RAIL, AND SHIFT TRAFFIC.
2. CONSTRUCT PERMANENT LEFT SHOULDER WIDENING ON EXISTING S.R. 54 FOR PLACEMENT OF PORTABLE BARRIER RAIL DURING CONSTRUCTION OF BRIDGE PIERS FROM LT. STA. 44+50 TO STA. 52+00.

SEALED BY



STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL PLANS

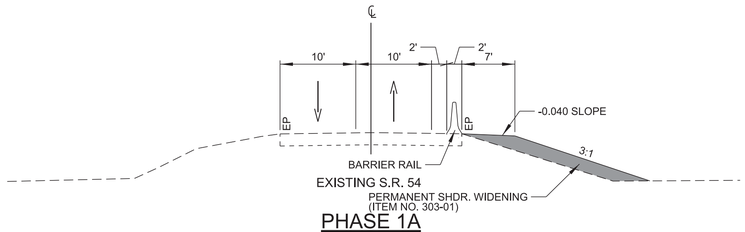
STA.123+00 TO STA.136+00

SCALE: 1"=50'

PHASE 1

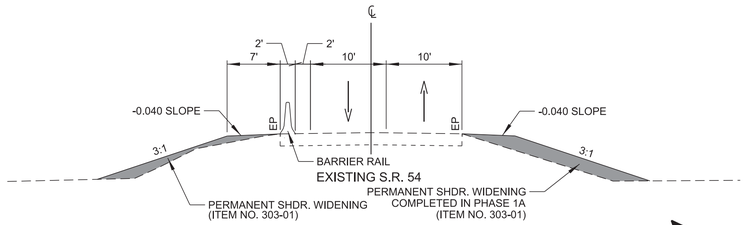
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TYPE	YEAR	PROJECT NO.	SHEET NO.
PIH	2025	NH-54(48)	T3C
PS&E	2026	NH-54(48)	T3C



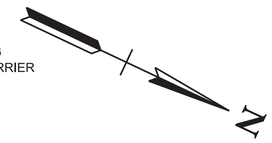
PHASE 1A

1. INSTALL TRAFFIC CONTROL MEASURES TO PLACE BLACKOUT TAPE ON EXISTING STRIPING AND PLACE NEW TEMPORARY LANE STRIPING, INSTALL PORTABLE BARRIER RAIL, AND SHIFT TRAFFIC.
2. CONSTRUCT PERMANENT RIGHT SHOULDER WIDENING ON EXISTING S.R. 54 FOR PLACEMENT OF PORTABLE BARRIER RAIL DURING CONSTRUCTION OF BRIDGE PIERS FROM RT. STA. 41+50 TO STA. 50+00.



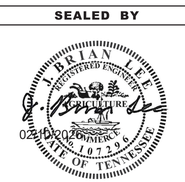
PHASE 1B

1. INSTALL TRAFFIC CONTROL MEASURES TO PLACE BLACKOUT TAPE ON EXISTING STRIPING AND PLACE NEW TEMPORARY LANE STRIPING, INSTALL PORTABLE BARRIER RAIL, AND SHIFT TRAFFIC.
2. CONSTRUCT PERMANENT LEFT SHOULDER WIDENING ON EXISTING S.R. 54 FOR PLACEMENT OF PORTABLE BARRIER RAIL DURING CONSTRUCTION OF BRIDGE PIERS FROM LT. STA. 44+50 TO STA. 52+00.



TRAFFIC CONTROL LEGEND	
SYMBOL	ITEM
	TEMPORARY BARRICADE (TYPE II)
	SIGN (CONSTRUCTION)
	WORK ZONE
	TRAFFIC FLOW
	FLEXIBLE DRUMS (CHANNELIZING)
	PORTABLE BARRIER RAIL
	PORTABLE BARRIER RAIL (WITH BARRIER RAIL DELINEATORS)
	TEMPORARY ATTENUATOR
	CHANGEABLE MESSAGE SIGN
	ARROW BOARD TYPE C

SEALED BY



STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL PLANS

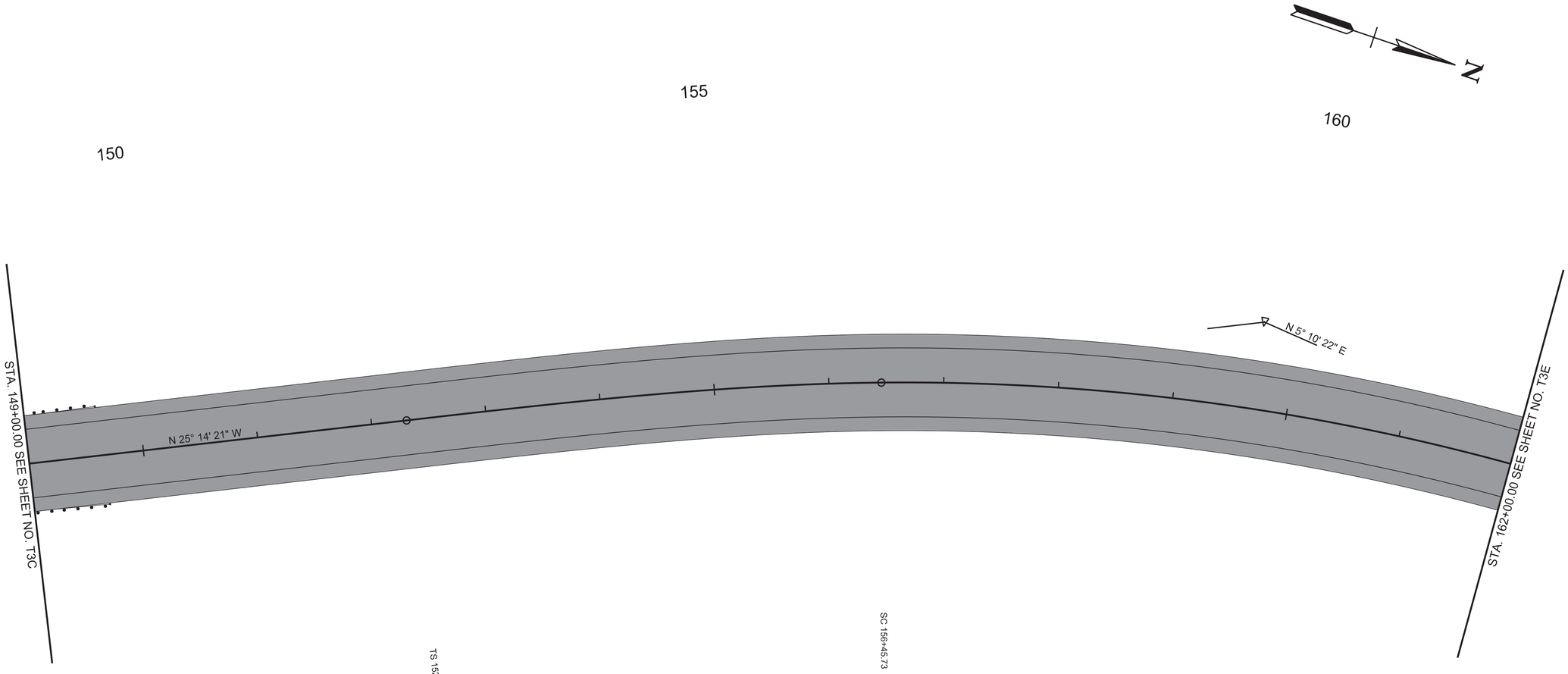
STA.136+00 TO STA.149+00

SCALE: 1"=50'

PHASE 1

2/9/2026 2:48:05 PM
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TYPE	YEAR	PROJECT NO.	SHEET NO.
PIH	2025	NH-54(48)	T3D
PS&E	2026	NH-54(48)	T3D



S.R. 54
CURVE DC105
PI 159+82.75
N 788,320.9360
E 1,282,364.5617
Δs 30° 24′ 43″ (RT)
θs 5° 56′ 40″
Δc 18° 31′ 23″ (RT)
Dc 2° 51′ 53″
Rc 2,000.00
Lc 646.57
Ts 752.01
Ls 415.00
SE 0.068 FT/FT
DESIGN SPEED 60 MPH
TRANS. LENGTH 415

TRAFFIC CONTROL LEGEND	
SYMBOL	ITEM
	TEMPORARY BARRICADE (TYPE II)
	SIGN (CONSTRUCTION)
	WORK ZONE
	TRAFFIC FLOW
	FLEXIBLE DRUMS (CHANNELIZING)
	PORTABLE BARRIER RAIL
	PORTABLE BARRIER RAIL (WITH BARRIER RAIL DELINEATORS)
	TEMPORARY ATTENUATOR
	CHANGEABLE MESSAGE SIGN
	ARROW BOARD TYPE C

SEALED BY



02/09/2026

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL PLANS

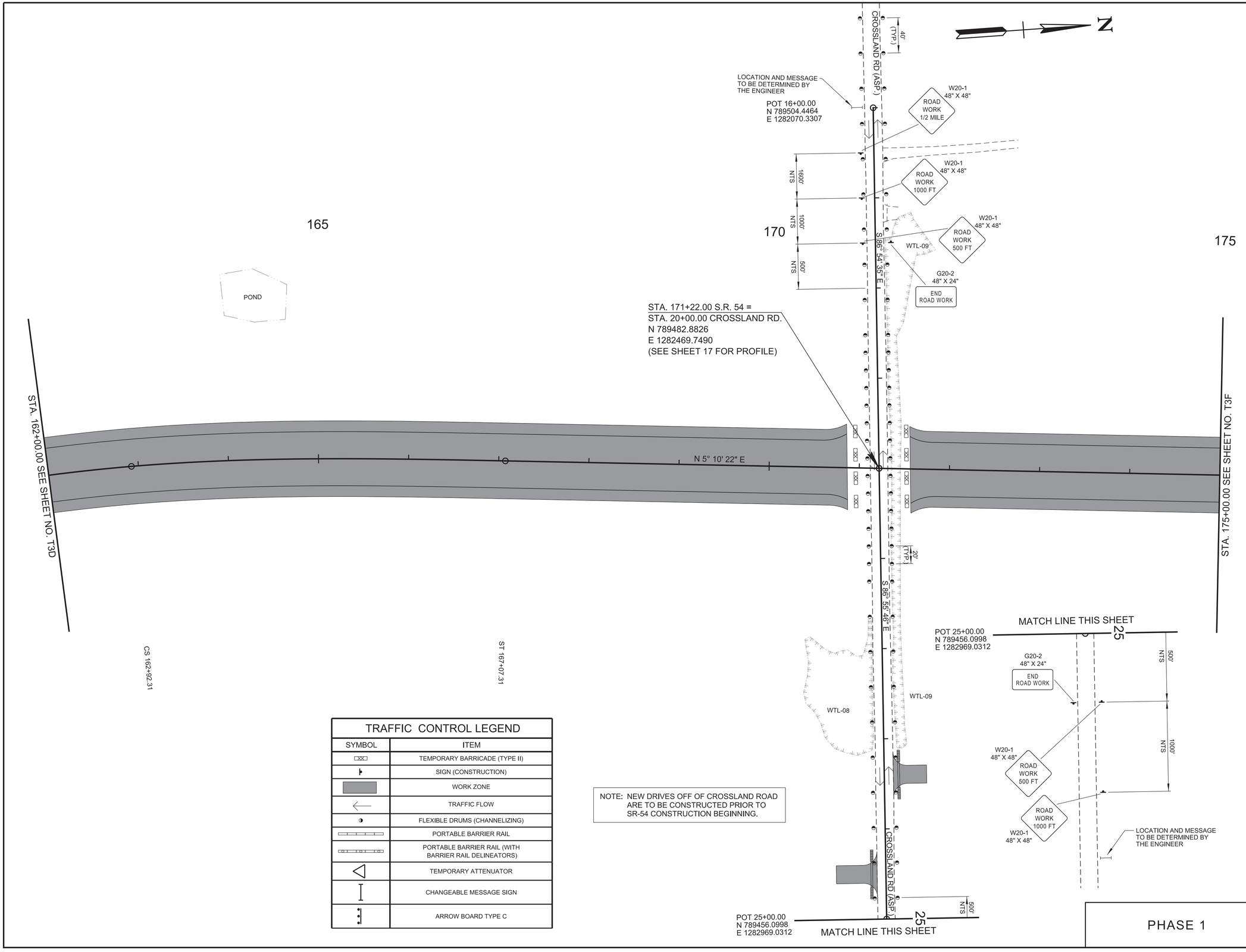
STA.149+00 TO STA.162+00

SCALE: 1"=50'

PHASE 1

2/9/2026 2:48:06 PM
T:\TDOT\Henry_SR54\T3D.sht

TYPE	YEAR	PROJECT NO.	SHEET NO.
PIH	2025	NH-54(48)	T3E
PS&E	2026	NH-54(48)	T3E



TRAFFIC CONTROL LEGEND

SYMBOL	ITEM
	TEMPORARY BARRICADE (TYPE II)
	SIGN (CONSTRUCTION)
	WORK ZONE
	TRAFFIC FLOW
	FLEXIBLE DRUMS (CHANNELIZING)
	PORTABLE BARRIER RAIL
	PORTABLE BARRIER RAIL (WITH BARRIER RAIL DELINEATORS)
	TEMPORARY ATTENUATOR
	CHANGEABLE MESSAGE SIGN
	ARROW BOARD TYPE C

NOTE: NEW DRIVES OFF OF CROSSLAND ROAD ARE TO BE CONSTRUCTED PRIOR TO SR-54 CONSTRUCTION BEGINNING.

SEALED BY



02/09/2026

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL PLANS

STA.162+00 TO STA.175+00

SCALE: 1"=50'

PHASE 1

2/9/2026 2:48:06 PM
T:\TDOT\Henry_SR54\T3E.sht

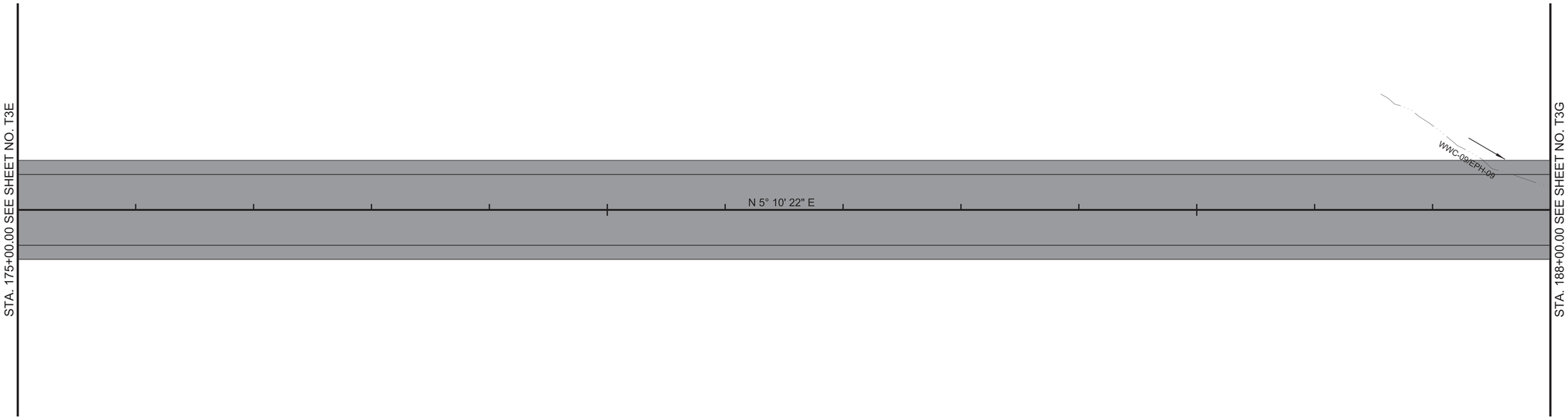
TYPE	YEAR	PROJECT NO.	SHEET NO.
PIH	2025	NH-54(48)	T3F
PS&E	2026	NH-54(48)	T3F

N

175

180

185



TRAFFIC CONTROL LEGEND

SYMBOL	ITEM
	TEMPORARY BARRICADE (TYPE II)
	SIGN (CONSTRUCTION)
	WORK ZONE
	TRAFFIC FLOW
	FLEXIBLE DRUMS (CHANNELIZING)
	PORTABLE BARRIER RAIL
	PORTABLE BARRIER RAIL (WITH BARRIER RAIL DELINEATORS)
	TEMPORARY ATTENUATOR
	CHANGEABLE MESSAGE SIGN
	ARROW BOARD TYPE C

SEALED BY

BRIAN LEE
REGISTERED ENGINEER
AGRICULTURE
NUMBER
115729
STATE OF TENNESSEE

02/09/2026

PHASE 1

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

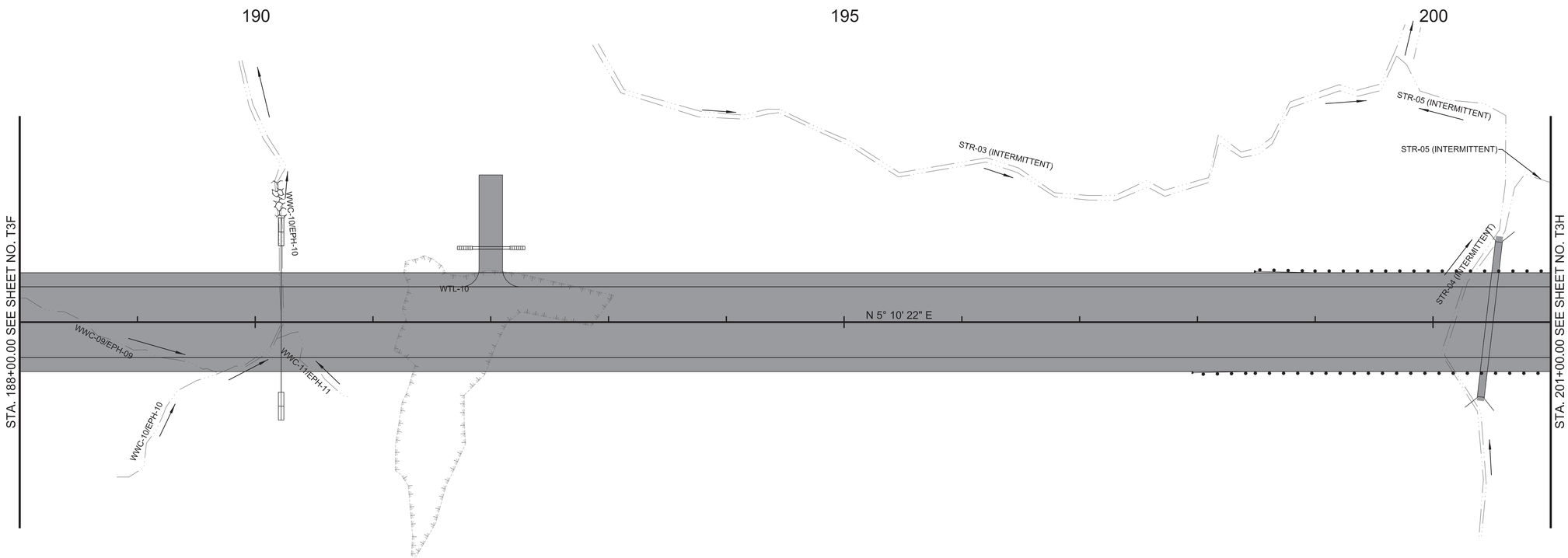
TRAFFIC CONTROL PLANS

STA.175+00 TO STA.188+00

SCALE: 1"=50'

2/9/2026 2:48:06 PM
T:\TDOT\Henry_SR54\T3F.sht

TYPE	YEAR	PROJECT NO.	SHEET NO.
PIH	2025	NH-54(48)	T3G
PS&E	2026	NH-54(48)	T3G



TRAFFIC CONTROL LEGEND

SYMBOL	ITEM
	TEMPORARY BARRICADE (TYPE II)
	SIGN (CONSTRUCTION)
	WORK ZONE
	TRAFFIC FLOW
	FLEXIBLE DRUMS (CHANNELIZING)
	PORTABLE BARRIER RAIL
	PORTABLE BARRIER RAIL (WITH BARRIER RAIL DELINEATORS)
	TEMPORARY ATTENUATOR
	CHANGEABLE MESSAGE SIGN
	ARROW BOARD TYPE C

SEALED BY

J. BRIAN LEE
REGISTERED ENGINEER
AGRICULTURE
COMMERCE
No. 107299
STATE OF TENNESSEE
02/10/2026

PHASE 1

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL PLANS

STA.188+00 TO STA.201+00

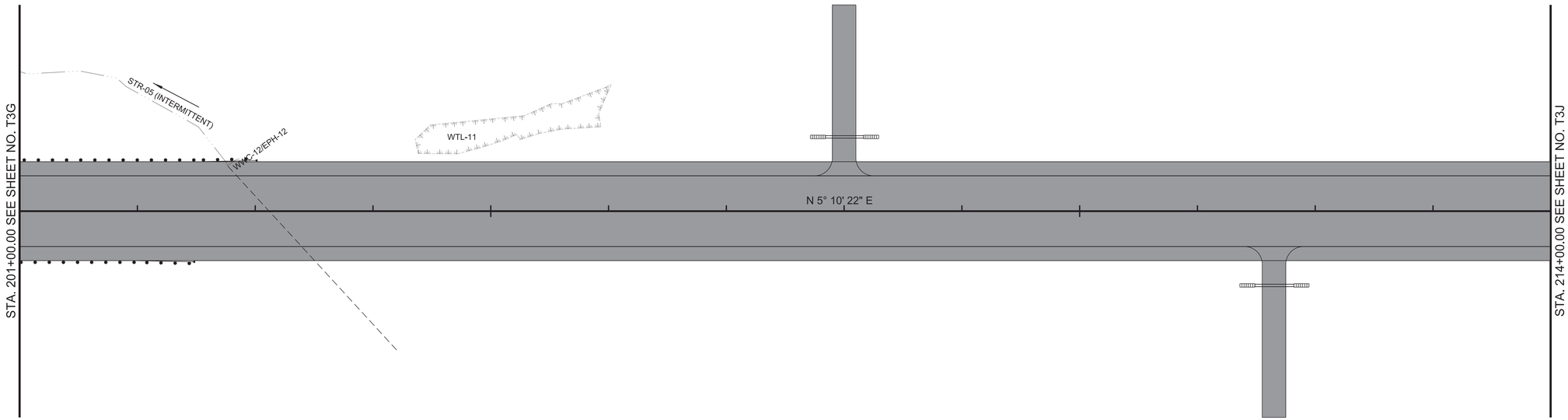
SCALE: 1"=50'

2/9/2026 2:48:07 PM
T:\TDOT\Henry_SR54\T3G.sht

TYPE	YEAR	PROJECT NO.	SHEET NO.
PIH	2025	NH-54(48)	T3H
PS&E	2026	NH-54(48)	T3H

205

210



TRAFFIC CONTROL LEGEND

SYMBOL	ITEM
	TEMPORARY BARRICADE (TYPE II)
	SIGN (CONSTRUCTION)
	WORK ZONE
	TRAFFIC FLOW
	FLEXIBLE DRUMS (CHANNELIZING)
	PORTABLE BARRIER RAIL
	PORTABLE BARRIER RAIL (WITH BARRIER RAIL DELINEATORS)
	TEMPORARY ATTENUATOR
	CHANGEABLE MESSAGE SIGN
	ARROW BOARD TYPE C

SEALED BY

J. BRIAN LEE
REGISTERED ENGINEER
AGRICULTURE
DAIRY
102299
STATE OF TENNESSEE
02/10/2026

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL PLANS

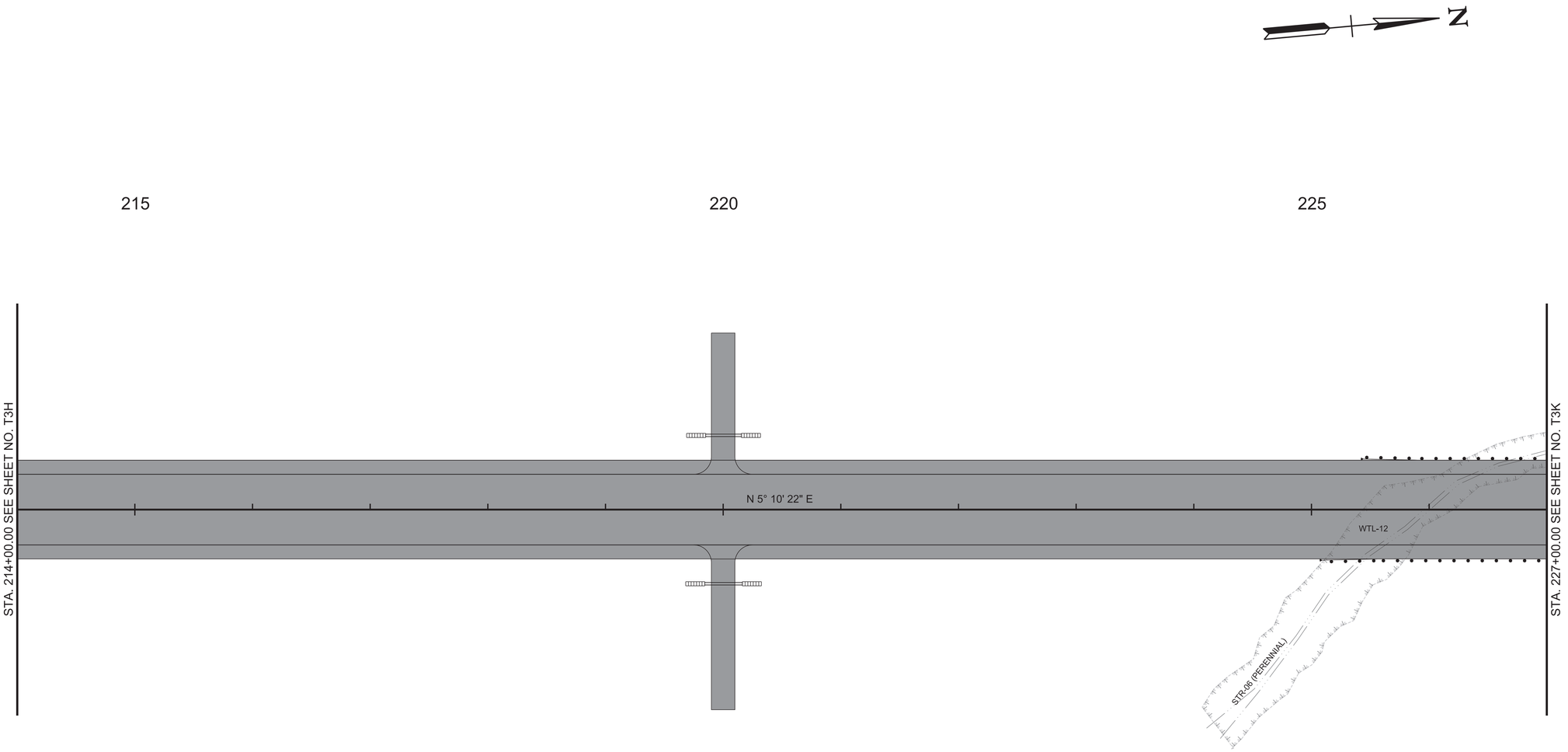
STA.201+00 TO STA.214+00

SCALE: 1"=50'

PHASE 1

2/9/2026 2:48:07 PM
T:\TDOT\Henry_SR54\T3H.sht

TYPE	YEAR	PROJECT NO.	SHEET NO.
PIH	2025	NH-54(48)	T3J
PS&E	2026	NH-54(48)	T3J



TRAFFIC CONTROL LEGEND	
SYMBOL	ITEM
	TEMPORARY BARRICADE (TYPE II)
	SIGN (CONSTRUCTION)
	WORK ZONE
	TRAFFIC FLOW
	FLEXIBLE DRUMS (CHANNELIZING)
	PORTABLE BARRIER RAIL
	PORTABLE BARRIER RAIL (WITH BARRIER RAIL DELINEATORS)
	TEMPORARY ATTENUATOR
	CHANGEABLE MESSAGE SIGN
	ARROW BOARD TYPE C

SEALED BY

J. BRIAN LEE
REGISTERED ENGINEER
AGRICULTURE
DATE OF COMMERCE
No. 107299
STATE OF TENNESSEE

02/09/2026

PHASE 1

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

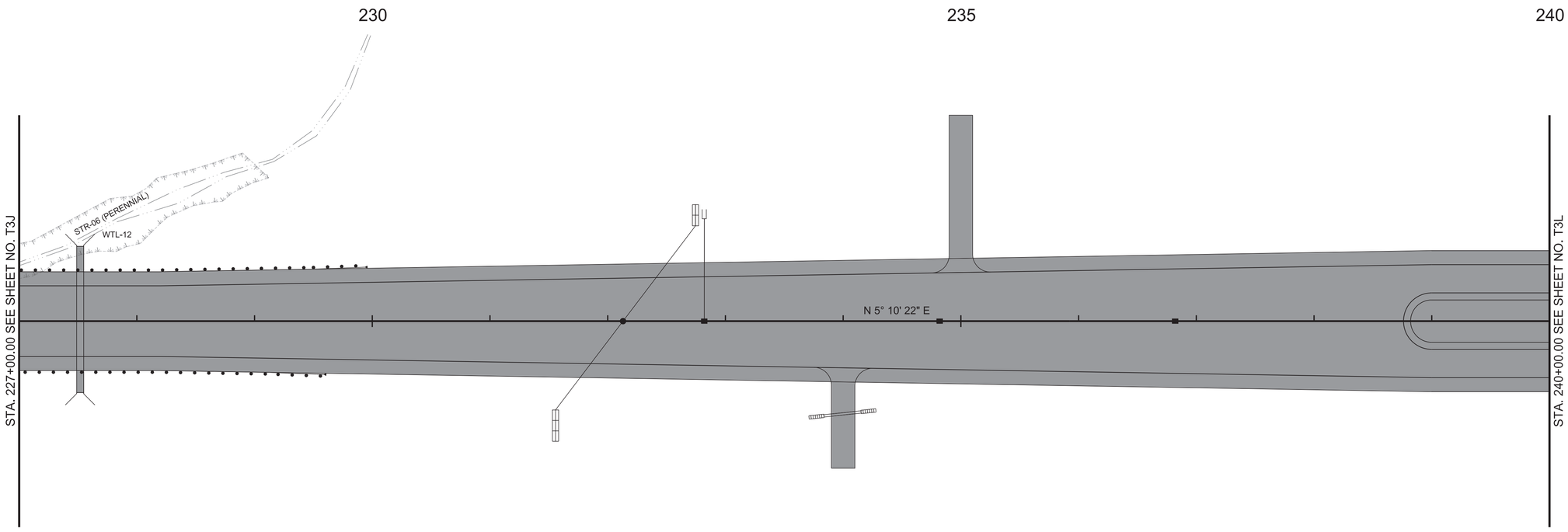
TRAFFIC CONTROL PLANS

STA.214+00 TO STA.227+00

SCALE: 1"=50'

2/9/2026 2:48:08 PM
T:\TDOT\Henry_SR54\T3J.sht

TYPE	YEAR	PROJECT NO.	SHEET NO.
PIH	2025	NH-54(48)	T3K
PS&E	2026	NH-54(48)	T3K



TRAFFIC CONTROL LEGEND	
SYMBOL	ITEM
	TEMPORARY BARRICADE (TYPE II)
	SIGN (CONSTRUCTION)
	WORK ZONE
	TRAFFIC FLOW
	FLEXIBLE DRUMS (CHANNELIZING)
	PORTABLE BARRIER RAIL
	PORTABLE BARRIER RAIL (WITH BARRIER RAIL DELINEATORS)
	TEMPORARY ATTENUATOR
	CHANGEABLE MESSAGE SIGN
	ARROW BOARD TYPE C

SEALED BY

J. BRIAN LEE
REGISTERED ENGINEER
AGRICULTURE
No. 107290
STATE OF TENNESSEE
02/10/2026

PHASE 1

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL PLANS

STA.227+00 TO STA.240+00
SCALE: 1"=50'

2/9/2026 2:48:08 PM
T:\TDOT\Henry_SR54\T3K.sht

TYPE	YEAR	PROJECT NO.	SHEET NO.
PIH	2025	NH-54(48)	T3L
PS&E	2026	NH-54(48)	T3L

240

245

N

KENTUCKY
TENNESSEE STATE LINE RD (ASP.) (KY 893)

LOCATION AND MESSAGE TO BE DETERMINED BY THE ENGINEER

W20-1
48" X 48"
ROAD WORK
1/2 MILE

ROAD WORK
1000 FT
W20-1
48" X 48"

POT 27+00.00
N 797096.1211
E 1282858.5566

1600'
NTS

1000'
NTS

ROAD WORK
500 FT
W20-1
48" X 48"

END ROAD WORK
G20-2
48" X 24"

500'
NTS

S 89° 05' 12" E

40S054-F2-002
END PROJ. NO. NH-54(48) R.O.W.
STA. 247+50.14
N 797079.9613 250
E 1283157.4887

STA. 247+61.57 S.R. 54 =
STA. 30+00.00 STATE LINE RD. (KY 893)
N 797091.3391
E 1283158.5185
(SEE SHEET 18 FOR PROFILE)

POND

STA. 240+00.00 SEE SHEET NO. T3K

N 5° 10' 22" E

CALLOWAY CO, KY
US 641
PRJ.# NHPP 6411 (039)
FD52 018 0641 000-006

WTL-13 ADJACENT PROJECT BY OTHERS

40S054-F3-004
END PROJ. NO. NH-54(48) CONST.
STA. 250+00.00
N 797328.7992
E 1283180.0156

END ROAD WORK
G20-2
48" X 24"

500'
NTS

S 88° 49' 45" E

ROAD WORK
500 FT
W20-1
48" X 48"

1000'
NTS

ROAD WORK
1000 FT
W20-1
48" X 48"

POT 33+00.00
N 797085.2091
E 1283458.2091

STATE LINE RD (ASP.) (KY 893)

LOCATION AND MESSAGE TO BE DETERMINED BY THE ENGINEER

CALLOWAY COUNTY
HENRY COUNTY

TRAFFIC CONTROL LEGEND

SYMBOL	ITEM
	TEMPORARY BARRICADE (TYPE II)
	SIGN (CONSTRUCTION)
	WORK ZONE
	TRAFFIC FLOW
	FLEXIBLE DRUMS (CHANNELIZING)
	PORTABLE BARRIER RAIL
	PORTABLE BARRIER RAIL (WITH BARRIER RAIL DELINEATORS)
	TEMPORARY ATTENUATOR
	CHANGEABLE MESSAGE SIGN
	ARROW BOARD TYPE C

SEALED BY

J. BRIAN LEE
REGISTERED ENGINEER
No. 107290
STATE OF TENNESSEE
02/09/2026

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL PLANS

STA.240+00 TO STA.250+00

SCALE: 1"=50'

PHASE 1

2/9/2026 2:48:08 PM
T:\TDOT\Henry_SR54\T3L.sht

TYPE	YEAR	PROJECT NO.	SHEET NO.
PIH	2025	NH-54(48)	T4
PS&E	2026	NH-54(48)	T4

PHASE 2A

INSTALL CROSSLAND RD. DETOUR WHILE PERFORMING WORK ON CROSSLAND RD., NO WORK ALONG STATE LINE RD. IS TO OCCUR WHILE CROSSLAND RD. DETOUR IS BEING USED.

PHASE 2B

INSTALL STATE LINE RD. DETOUR WHILE PERFORMING WORK ON STATE LINE RD., NO WORK ALONG CROSSLAND RD. IS TO OCCUR WHILE STATE LINE RD. DETOUR IS BEING USED.

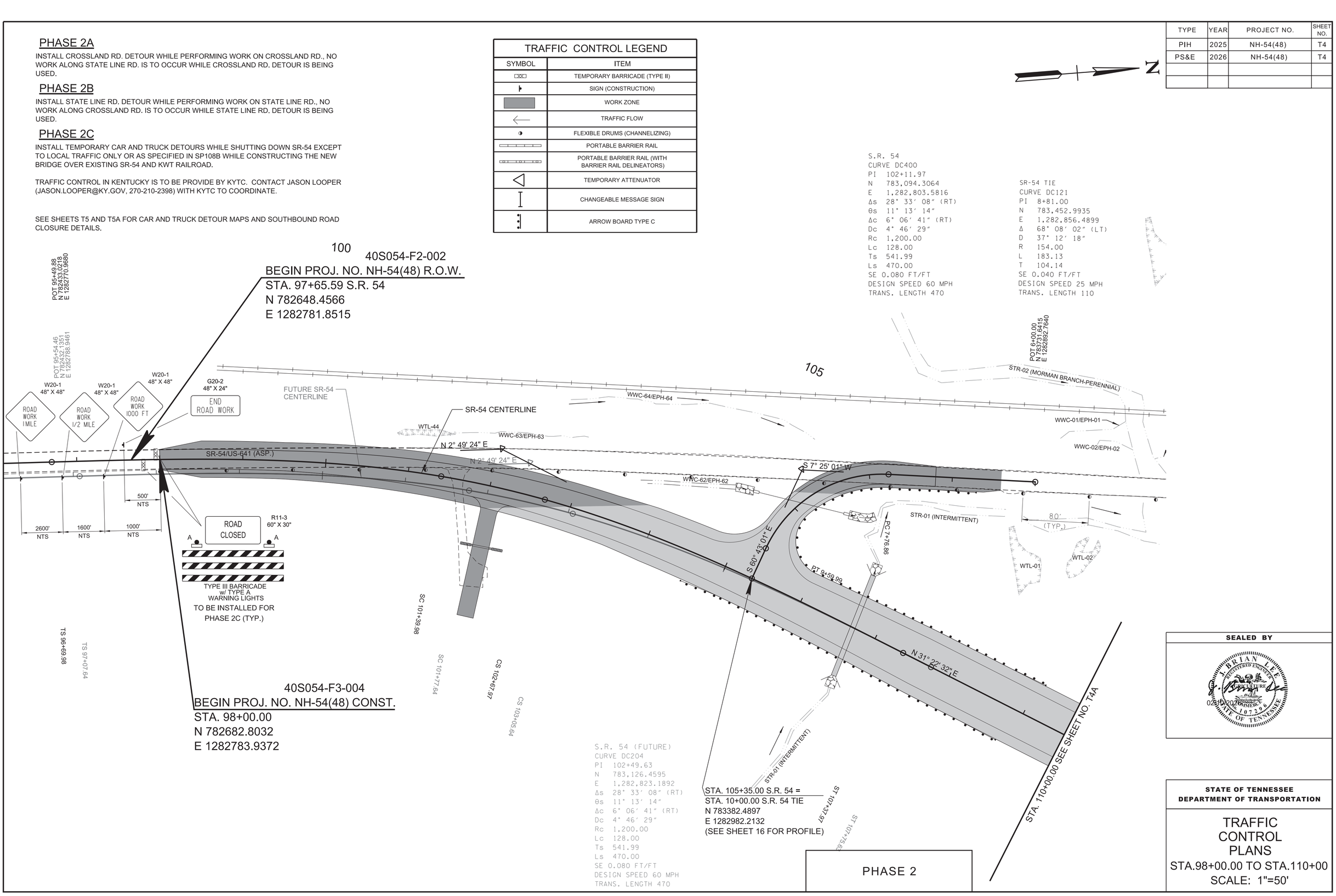
PHASE 2C

INSTALL TEMPORARY CAR AND TRUCK DETOURS WHILE SHUTTING DOWN SR-54 EXCEPT TO LOCAL TRAFFIC ONLY OR AS SPECIFIED IN SP108B WHILE CONSTRUCTING THE NEW BRIDGE OVER EXISTING SR-54 AND KWT RAILROAD.

TRAFFIC CONTROL IN KENTUCKY IS TO BE PROVIDE BY KYTC. CONTACT JASON LOOPER (JASON.LOOPER@KY.GOV, 270-210-2398) WITH KYTC TO COORDINATE.

SEE SHEETS T5 AND T5A FOR CAR AND TRUCK DETOUR MAPS AND SOUTHBOUND ROAD CLOSURE DETAILS.

TRAFFIC CONTROL LEGEND	
SYMBOL	ITEM
	TEMPORARY BARRICADE (TYPE II)
	SIGN (CONSTRUCTION)
	WORK ZONE
	TRAFFIC FLOW
	FLEXIBLE DRUMS (CHANNELIZING)
	PORTABLE BARRIER RAIL
	PORTABLE BARRIER RAIL (WITH BARRIER RAIL DELINEATORS)
	TEMPORARY ATTENUATOR
	CHANGEABLE MESSAGE SIGN
	ARROW BOARD TYPE C



S.R. 54
CURVE DC400
PI 102+11.97
N 783,094.3064
E 1,282,803.5816
Δs 28° 33′ 08″ (RT)
θs 11° 13′ 14″
Δc 6° 06′ 41″ (RT)
Dc 4° 46′ 29″
Rc 1,200.00
Lc 128.00
Ts 541.99
Ls 470.00
SE 0.080 FT/FT
DESIGN SPEED 60 MPH
TRANS. LENGTH 470

SR-54 TIE
CURVE DC121
PI 8+81.00
N 783,452.9935
E 1,282,856.4899
Δ 68° 08′ 02″ (LT)
D 37° 12′ 18″
R 154.00
L 183.13
T 104.14
SE 0.040 FT/FT
DESIGN SPEED 25 MPH
TRANS. LENGTH 110

S.R. 54 (FUTURE)
CURVE DC204
PI 102+49.63
N 783,126.4595
E 1,282,823.1892
Δs 28° 33′ 08″ (RT)
θs 11° 13′ 14″
Δc 6° 06′ 41″ (RT)
Dc 4° 46′ 29″
Rc 1,200.00
Lc 128.00
Ts 541.99
Ls 470.00
SE 0.080 FT/FT
DESIGN SPEED 60 MPH
TRANS. LENGTH 470

SEALED BY

J. BRIAN LEE
REGISTERED ENGINEER
AGRICULTURE
No. 107296
STATE OF TENNESSEE
02/10/2026

PHASE 2

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

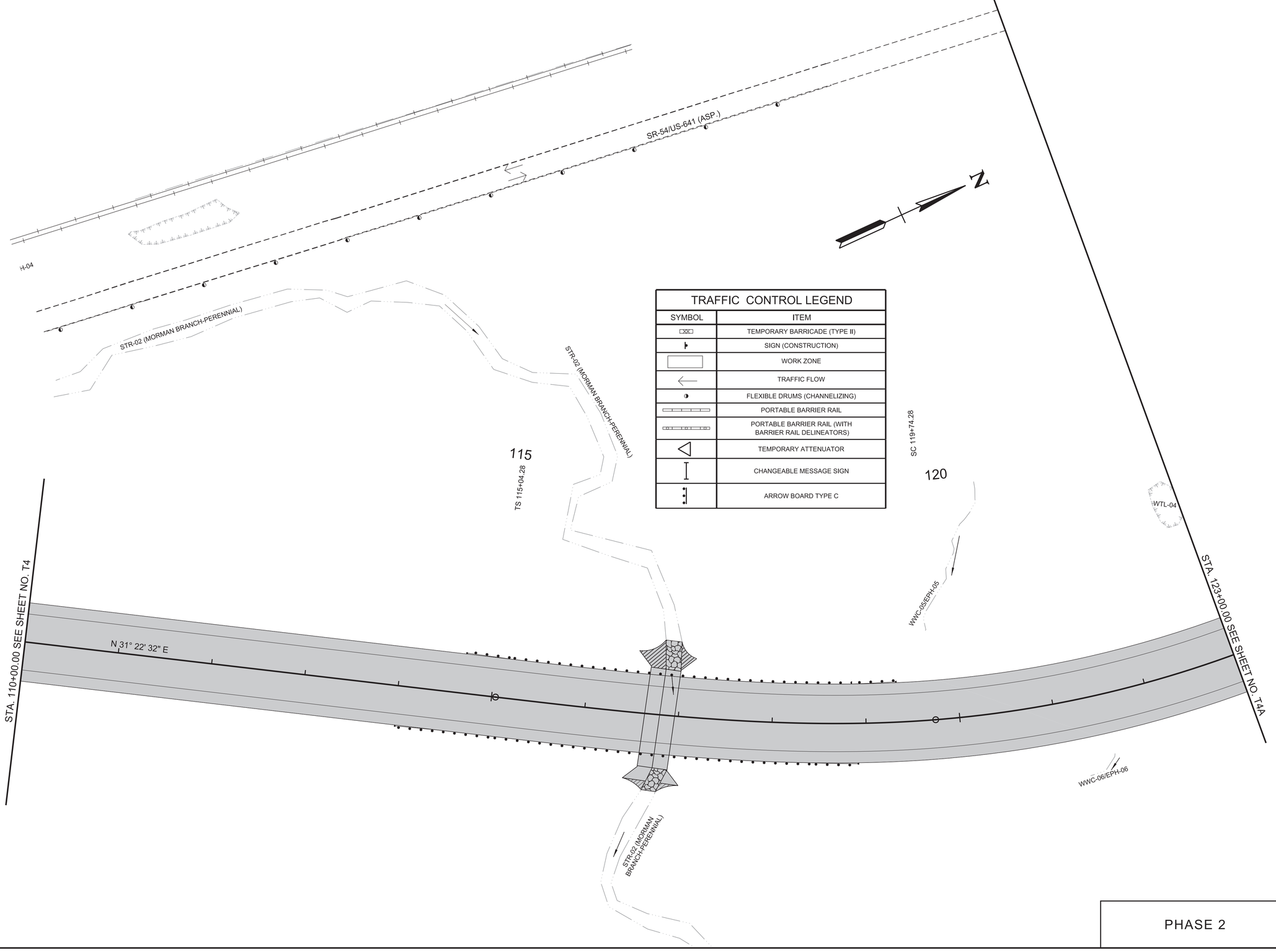
TRAFFIC CONTROL PLANS

STA.98+00.00 TO STA.110+00

SCALE: 1"=50'

2/9/2026 2:48:09 PM
T:\TDOT\Henry_SR54\T4.sht

TYPE	YEAR	PROJECT NO.	SHEET NO.
PIH	2025	NH-54(48)	T4A
PS&E	2026	NH-54(48)	T4A



TRAFFIC CONTROL LEGEND

SYMBOL	ITEM
	TEMPORARY BARRICADE (TYPE II)
	SIGN (CONSTRUCTION)
	WORK ZONE
	TRAFFIC FLOW
	FLEXIBLE DRUMS (CHANNELIZING)
	PORTABLE BARRIER RAIL
	PORTABLE BARRIER RAIL (WITH BARRIER RAIL DELINEATORS)
	TEMPORARY ATTENUATOR
	CHANGEABLE MESSAGE SIGN
	ARROW BOARD TYPE C

SEALED BY

BRIAN LEE
REGISTERED ENGINEER
AGRICULTURE
ENGINEER
STATE OF TENNESSEE
02/05/2026

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL PLANS

STA.110+00 TO STA.123+00

SCALE: 1"=50'

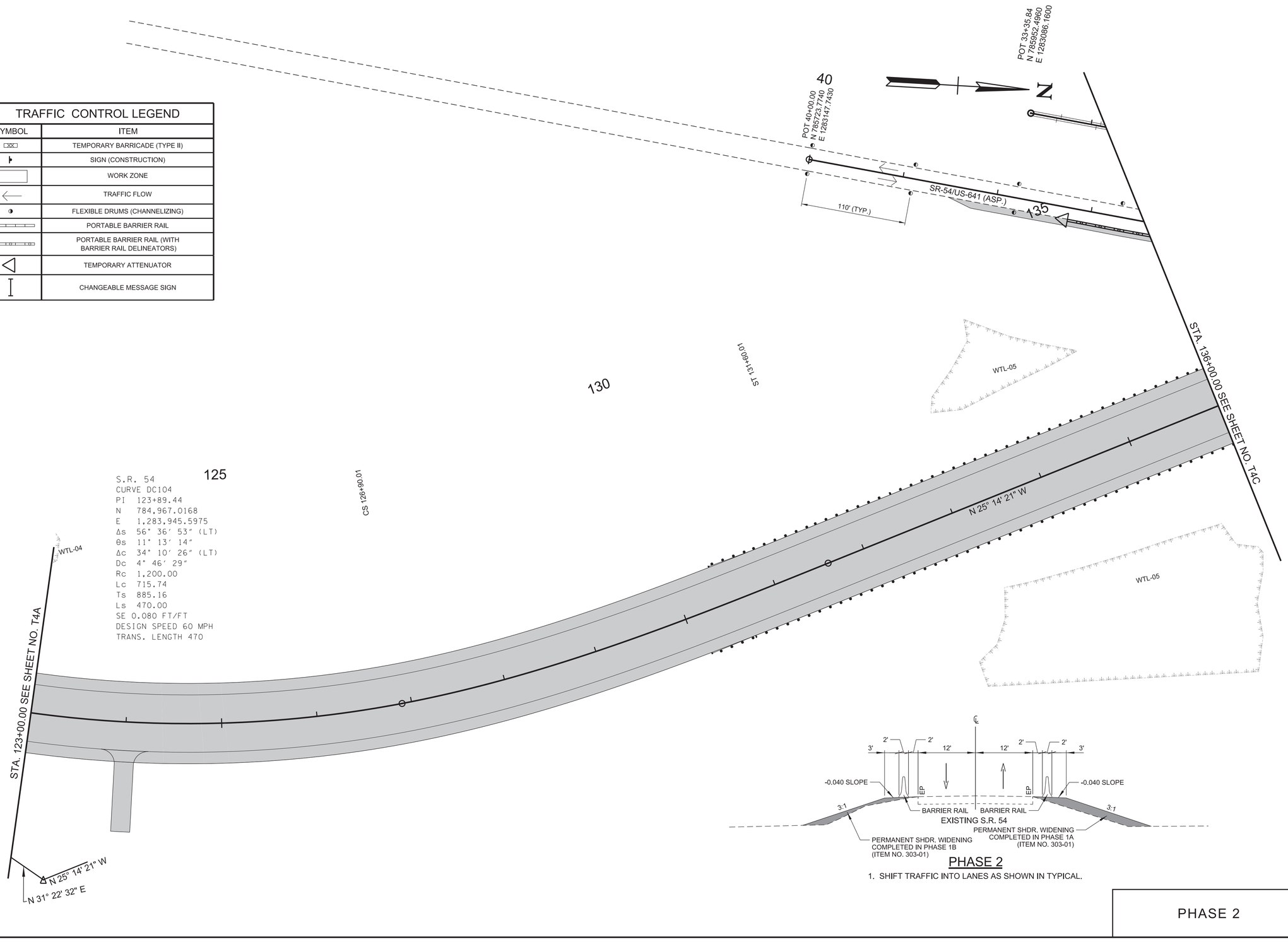
PHASE 2

2/9/2026 2:48:10 PM
T:\TDOT\Henry_SR54\T4A.sht

TYPE	YEAR	PROJECT NO.	SHEET NO.
PIH	2025	NH-54(48)	T4B
PS&E	2026	NH-54(48)	T4B

TRAFFIC CONTROL LEGEND

SYMBOL	ITEM
	TEMPORARY BARRICADE (TYPE II)
	SIGN (CONSTRUCTION)
	WORK ZONE
	TRAFFIC FLOW
	FLEXIBLE DRUMS (CHANNELIZING)
	PORTABLE BARRIER RAIL
	PORTABLE BARRIER RAIL (WITH BARRIER RAIL DELINEATORS)
	TEMPORARY ATTENUATOR
	CHANGEABLE MESSAGE SIGN



PHASE 2

1. SHIFT TRAFFIC INTO LANES AS SHOWN IN TYPICAL.

SEALED BY

J. BRIAN LEE
REGISTERED ENGINEER
AGRICULTURE
NUMBER
107209
STATE OF TENNESSEE
02/09/2026

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

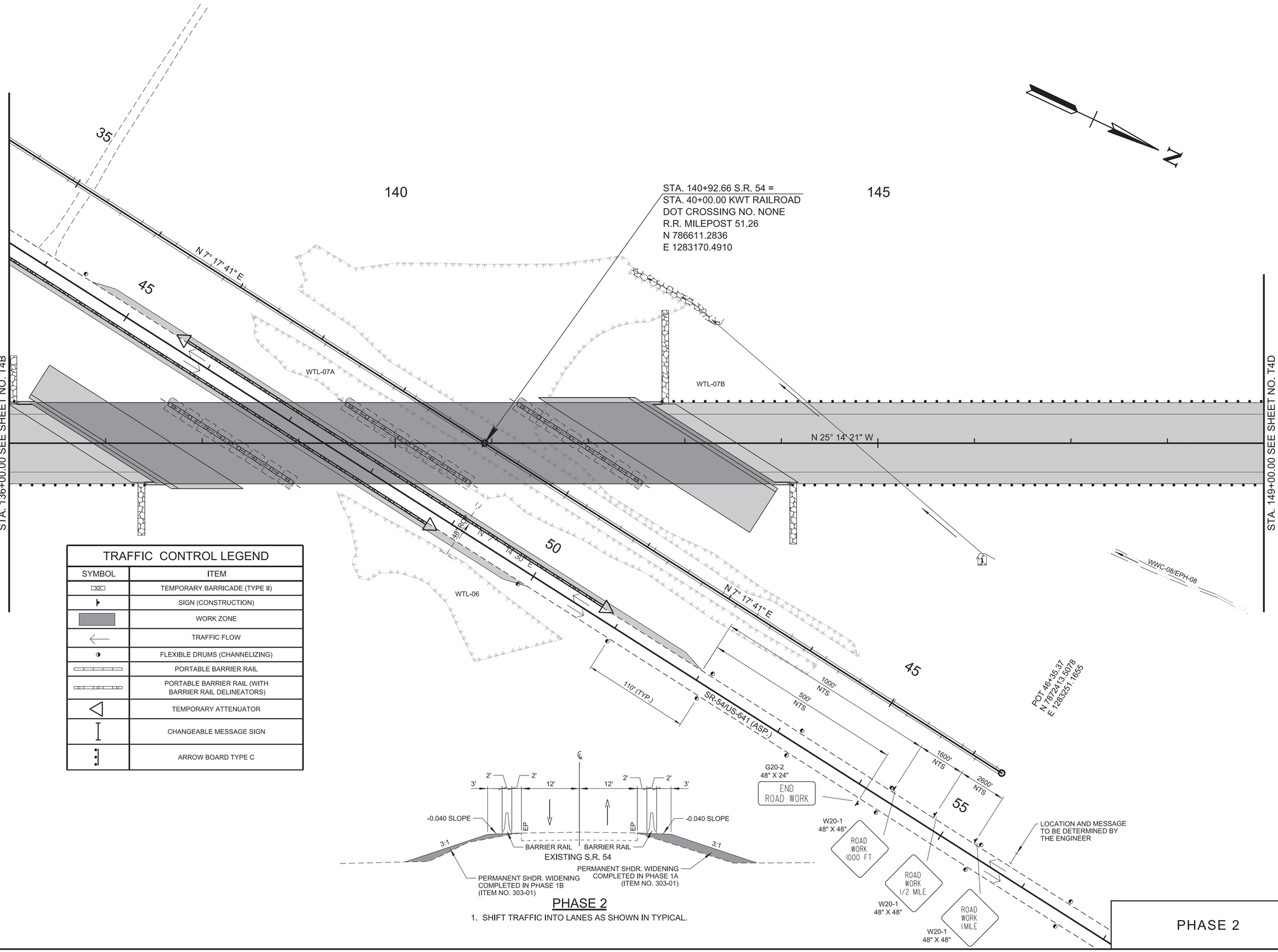
TRAFFIC CONTROL PLANS

STA.123+00 TO STA.136+00
SCALE: 1"=50'

PHASE 2

2/9/2026 2:48:10 PM
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TYPE	YEAR	PROJECT NO.	SHEET NO.
PIH	2025	NH-54(48)	T4C
PS&E	2026	NH-54(48)	T4C



TRAFFIC CONTROL LEGEND

SYMBOL	ITEM
	TEMPORARY BARRICADE (TYPE II)
	SIGN (CONSTRUCTION)
	WORK ZONE
	TRAFFIC FLOW
	FLEXIBLE DRUMS (CHANNELIZING)
	PORTABLE BARRIER RAIL
	PORTABLE BARRIER RAIL (WITH BARRIER RAIL DELINEATORS)
	TEMPORARY ATTENUATOR
	CHANGEABLE MESSAGE SIGN
	ARROW BOARD TYPE C

PHASE 2

1. SHIFT TRAFFIC INTO LANES AS SHOWN IN TYPICAL.

SEALED BY

J. BRIAN LOWE
REGISTERED ENGINEER
SIGNATURE
DATE
NO. 107299
STATE OF TENNESSEE
02/09/2026

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL PLANS

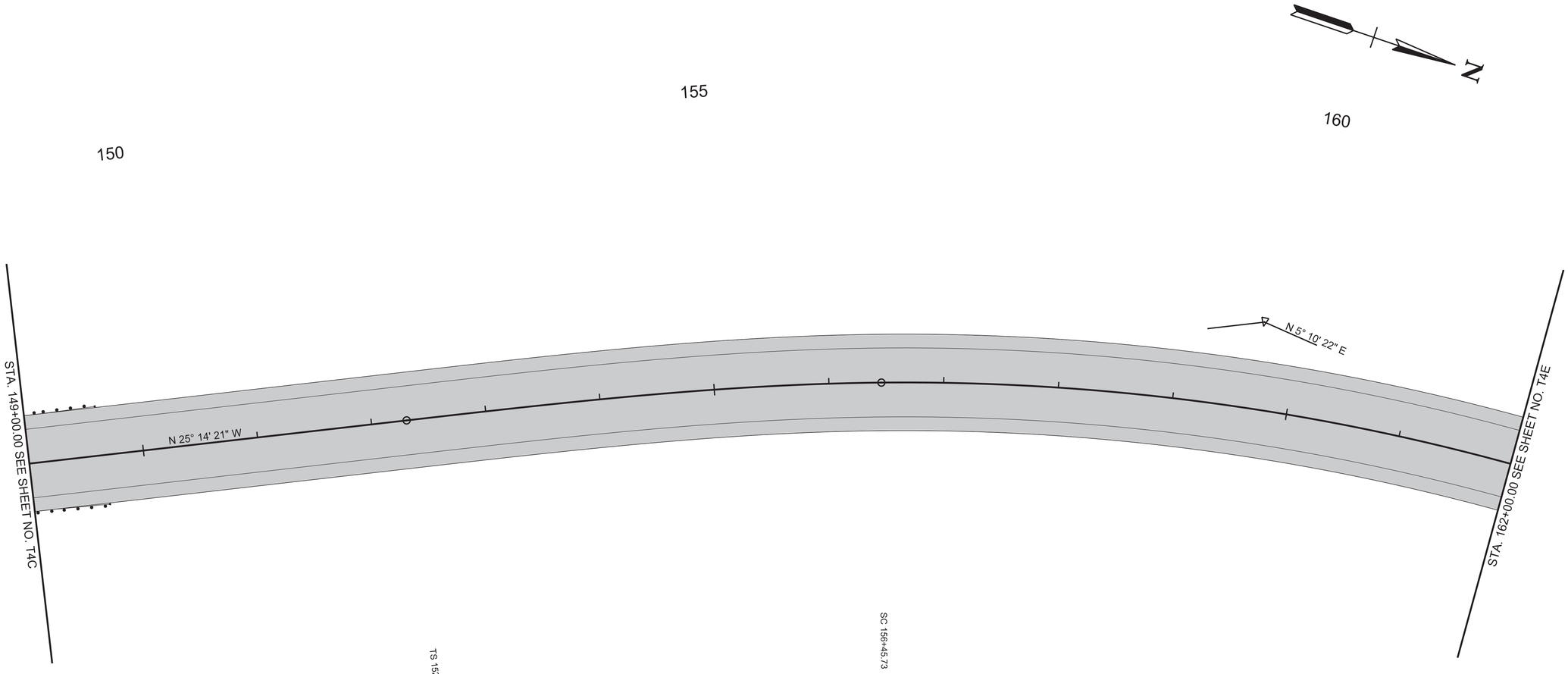
STA.136+00 TO STA.149+00

SCALE: 1"=50'

PHASE 2

2/9/2026 2:48:11 PM
T:\TDOT\Henry_SR54\T4C.sht

TYPE	YEAR	PROJECT NO.	SHEET NO.
PIH	2025	NH-54(48)	T4D
PS&E	2026	NH-54(48)	T4D



S.R. 54
CURVE DC105
PI 159+82.75
N 788,320.9360
E 1,282,364.5617
Δs 30° 24′ 43″ (RT)
θs 5° 56′ 40″
Δc 18° 31′ 23″ (RT)
Dc 2° 51′ 53″
Rc 2,000.00
Lc 646.57
Ts 752.01
Ls 415.00
SE 0.068 FT/FT
DESIGN SPEED 60 MPH
TRANS. LENGTH 415

TRAFFIC CONTROL LEGEND	
SYMBOL	ITEM
	TEMPORARY BARRICADE (TYPE II)
	SIGN (CONSTRUCTION)
	WORK ZONE
	TRAFFIC FLOW
	FLEXIBLE DRUMS (CHANNELIZING)
	PORTABLE BARRIER RAIL
	PORTABLE BARRIER RAIL (WITH BARRIER RAIL DELINEATORS)
	TEMPORARY ATTENUATOR
	CHANGEABLE MESSAGE SIGN
	ARROW BOARD TYPE C

SEALED BY



02/09/2026

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL PLANS

STA.149+00 TO STA.162+00
SCALE: 1"=50'

PHASE 2

2/9/2026 2:48:11 PM
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TYPE	YEAR	PROJECT NO.	SHEET NO.
PIH	2025	NH-54(48)	T4E
PS&E	2026	NH-54(48)	T4E

TRAFFIC CONTROL LEGEND

SYMBOL	ITEM
	TEMPORARY BARRICADE (TYPE II)
	SIGN (CONSTRUCTION)
	WORK ZONE
	TRAFFIC FLOW
	FLEXIBLE DRUMS (CHANNELIZING)
	PORTABLE BARRIER RAIL
	PORTABLE BARRIER RAIL (WITH BARRIER RAIL DELINEATORS)
	TEMPORARY ATTENUATOR
	CHANGEABLE MESSAGE SIGN
	ARROW BOARD TYPE C

165

170

175

POND

CROSSLAND RD (ASP.)

LOCATION AND MESSAGE TO BE DETERMINED BY THE ENGINEER

POT 16+00.00
N 789504.4464
E 1282070.3307

W20-1
48" X 48"
ROAD WORK 1/2 MILE

W20-1
48" X 48"
ROAD WORK 1000 FT

W20-1
48" X 48"
ROAD WORK 500 FT

1600' NTS

1000' NTS

500' NTS

S 86° 54' 35" E

WTL-09

END ROAD WORK

G20-2
48" X 24"

STA. 171+22.00 S.R. 54 =
STA. 20+00.00 CROSSLAND RD.
N 789482.8826
E 1282469.7490
(SEE SHEET 17 FOR PROFILE)

STA. 162+00.00 SEE SHEET NO. T4D

N 5° 10' 22" E

STA. 175+00.00 SEE SHEET NO. T4F

DETOUR M4-10L 48" X 18"
ROAD CLOSED TO THRU TRAFFIC R11-4 60" X 30"
A A
TYPE III BARRICADE w/ TYPE A WARNING LIGHTS

DETOUR M4-10L 48" X 18"
ROAD CLOSED R11-2 48" X 30"

END DETOUR M4-8a 30" X 24"
CROSSLAND ROAD M4-9 30" X 24"

CROSSLAND ROAD DETOUR M4-9R 30" X 24"

CROSSLAND ROAD DETOUR M4-9R 30" X 24"

OLD WHITLOCK RD.
1.4 MILES

DETOUR M4-10R 48" X 18"
ROAD CLOSED TO THRU TRAFFIC R11-4 60" X 30"
A A
TYPE III BARRICADE w/ TYPE A WARNING LIGHTS

CROSSLAND RD.
0.8 MILES

STATE LINE RD.
0.9 MILES

CROSSLAND ROAD DETOUR M4-9L 30" X 24"

CROSSLAND ROAD DETOUR M4-9R 30" X 24"

SR-54
1.5 MILES

LOCATION AND MESSAGE TO BE DETERMINED BY THE ENGINEER

M4-8a 30" X 24" END DETOUR
M4-9 30" X 24" CROSSLAND ROAD

DETOUR M4-10R 48" X 18"
ROAD CLOSED R11-2 48" X 30"

CROSSLAND ROAD DETOUR M4-9L 30" X 24"

LOCATION AND MESSAGE TO BE DETERMINED BY THE ENGINEER

PHASE 2A
CROSSLAND ROAD DETOUR

WTL-08

WTL-09

S 86° 55' 46" E

8.0' (TYP.)

CROSSLAND RD (ASP.)

POT 25+00.00
N 789456.0998
E 1282969.0312

MATCH LINE THIS SHEET

25

500' NTS

MATCH LINE THIS SHEET

POT 25+00.00
N 789456.0998
E 1282969.0312

25

G20-2
48" X 24"
END ROAD WORK

500' NTS

1000' NTS

ROAD WORK 500 FT
W20-1
48" X 48"

ROAD WORK 1000 FT
W20-1
48" X 48"

LOCATION AND MESSAGE TO BE DETERMINED BY THE ENGINEER

SEALED BY

J. BRIAN LEE
REGISTERED ENGINEER
No. 107290
STATE OF TENNESSEE
02/09/2026

PHASE 2

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL PLANS

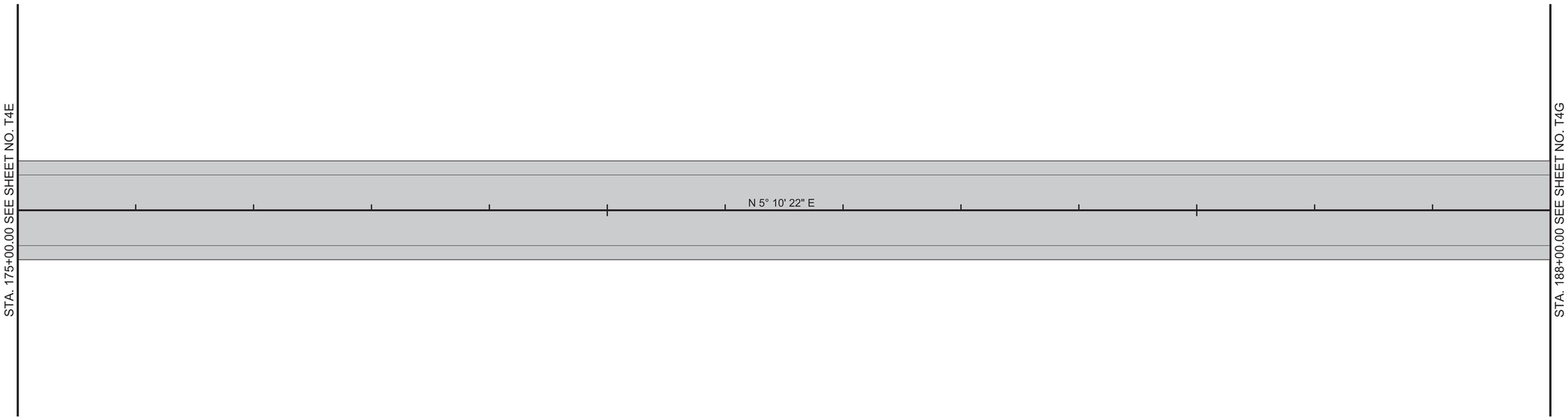
STA.162+00 TO STA.175+00
SCALE: 1"=50'

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TYPE	YEAR	PROJECT NO.	SHEET NO.
PIH	2025	NH-54(48)	T4F
PS&E	2026	NH-54(48)	T4F

N

175 180 185



TRAFFIC CONTROL LEGEND

SYMBOL	ITEM
	TEMPORARY BARRICADE (TYPE II)
	SIGN (CONSTRUCTION)
	WORK ZONE
	TRAFFIC FLOW
	FLEXIBLE DRUMS (CHANNELIZING)
	PORTABLE BARRIER RAIL
	PORTABLE BARRIER RAIL (WITH BARRIER RAIL DELINEATORS)
	TEMPORARY ATTENUATOR
	CHANGEABLE MESSAGE SIGN
	ARROW BOARD TYPE C

SEALED BY

J. BRIAN LEE
REGISTERED ENGINEER
AGRICULTURE
COMMERCE
No. 107299
STATE OF TENNESSEE

02/09/2026

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL PLANS

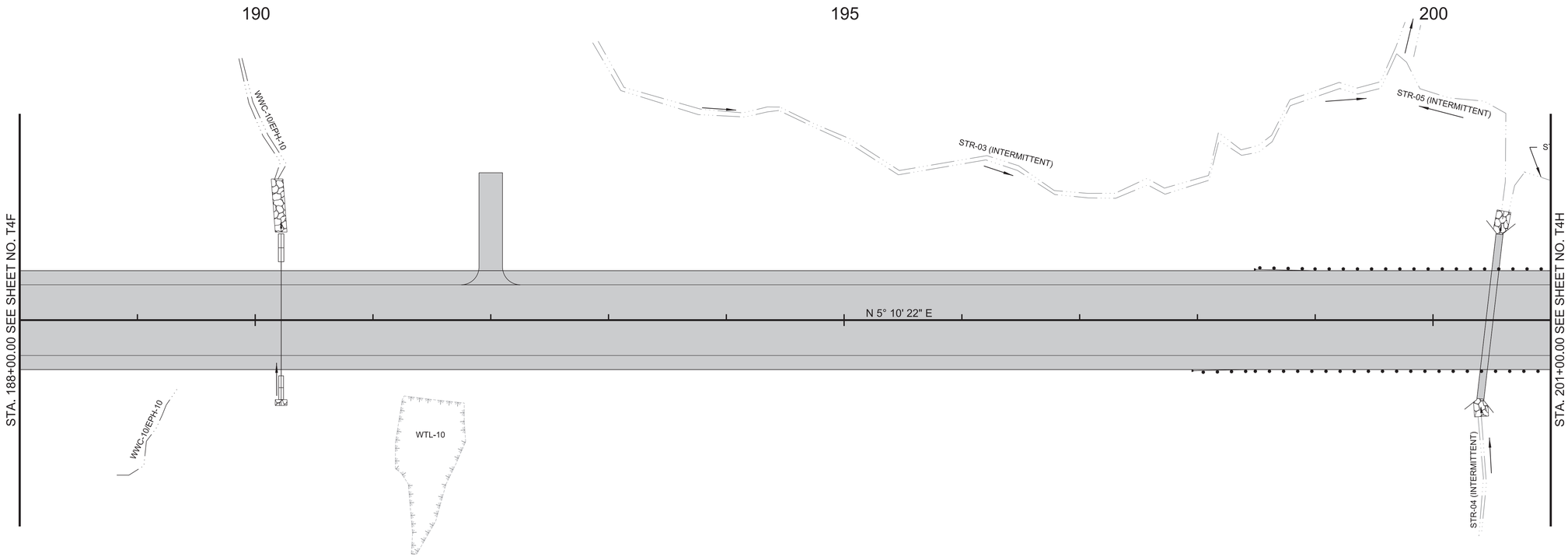
STA.175+00 TO STA.188+00

SCALE: 1"=50'

PHASE 2

2/9/2026 2:48:12 PM
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TYPE	YEAR	PROJECT NO.	SHEET NO.
PIH	2025	NH-54(48)	T4G
PS&E	2026	NH-54(48)	T4G



TRAFFIC CONTROL LEGEND	
SYMBOL	ITEM
	TEMPORARY BARRICADE (TYPE II)
	SIGN (CONSTRUCTION)
	WORK ZONE
	TRAFFIC FLOW
	FLEXIBLE DRUMS (CHANNELIZING)
	PORTABLE BARRIER RAIL
	PORTABLE BARRIER RAIL (WITH BARRIER RAIL DELINEATORS)
	TEMPORARY ATTENUATOR
	CHANGEABLE MESSAGE SIGN
	ARROW BOARD TYPE C

SEALED BY

BRIAN LEE
REGISTERED ENGINEER
AGRICULTURE
COMMERCE
No. 107299
STATE OF TENNESSEE
02/09/2026

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL PLANS

STA.188+00 TO STA.201+00

SCALE: 1"=50'

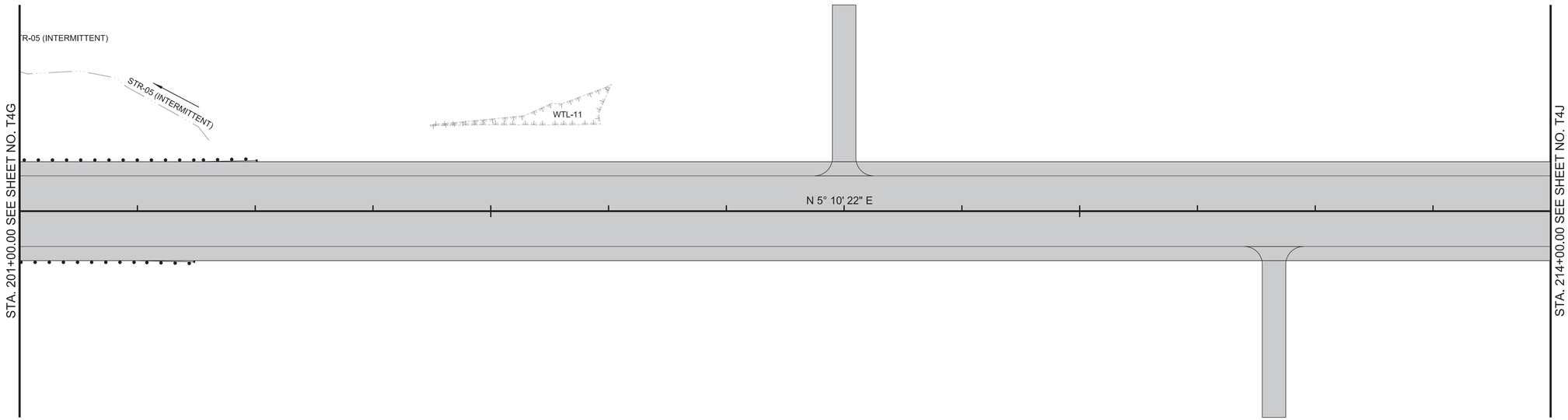
PHASE 2

2/9/2026 2:48:12 PM
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TYPE	YEAR	PROJECT NO.	SHEET NO.
PIH	2025	NH-54(48)	T4H
PS&E	2026	NH-54(48)	T4H

205

210



TRAFFIC CONTROL LEGEND	
SYMBOL	ITEM
	TEMPORARY BARRICADE (TYPE II)
	SIGN (CONSTRUCTION)
	WORK ZONE
	TRAFFIC FLOW
	FLEXIBLE DRUMS (CHANNELIZING)
	PORTABLE BARRIER RAIL
	PORTABLE BARRIER RAIL (WITH BARRIER RAIL DELINEATORS)
	TEMPORARY ATTENUATOR
	CHANGEABLE MESSAGE SIGN
	ARROW BOARD TYPE C

SEALED BY

J. BRIAN LEE
REGISTERED ENGINEER
ARCHITECTURE
ENGINEERING
COMMERCE
No. 107296
STATE OF TENNESSEE

02/09/2026

PHASE 2

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL PLANS

STA.201+00 TO STA.214+00

SCALE: 1"=50'

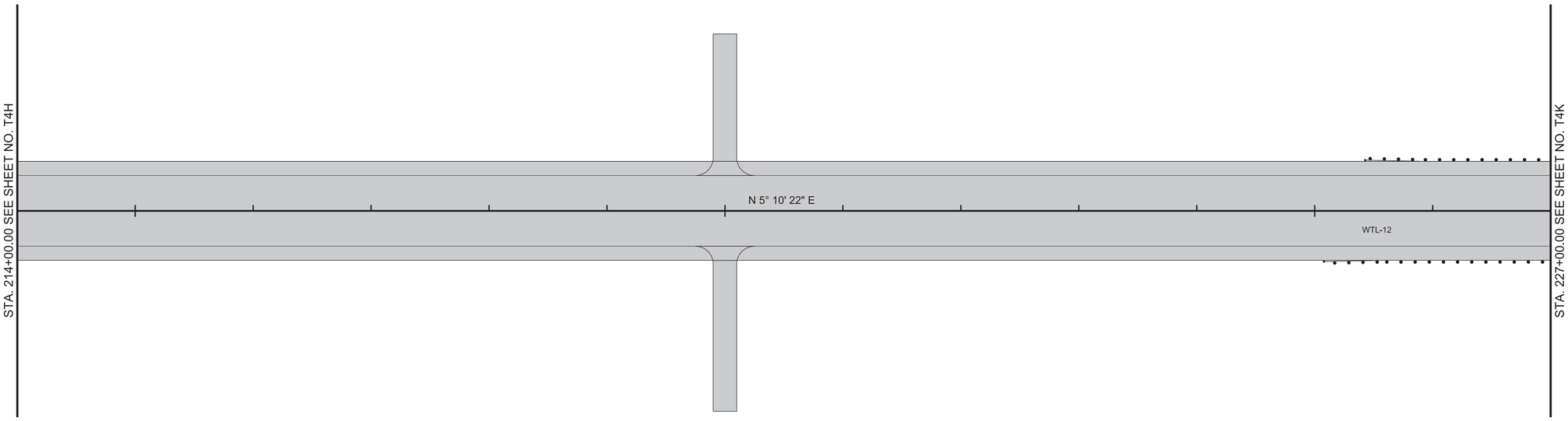
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T:\TDOT\Henry_SR54\T4H.sht

TYPE	YEAR	PROJECT NO.	SHEET NO.
PIH	2025	NH-54(48)	T4J
PS&E	2026	NH-54(48)	T4J

215

220

225



TRAFFIC CONTROL LEGEND	
SYMBOL	ITEM
	TEMPORARY BARRICADE (TYPE II)
	SIGN (CONSTRUCTION)
	WORK ZONE
	TRAFFIC FLOW
	FLEXIBLE DRUMS (CHANNELIZING)
	PORTABLE BARRIER RAIL
	PORTABLE BARRIER RAIL (WITH BARRIER RAIL DELINEATORS)
	TEMPORARY ATTENUATOR
	CHANGEABLE MESSAGE SIGN
	ARROW BOARD TYPE C

SEALED BY



02/10/2026

PHASE 2

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

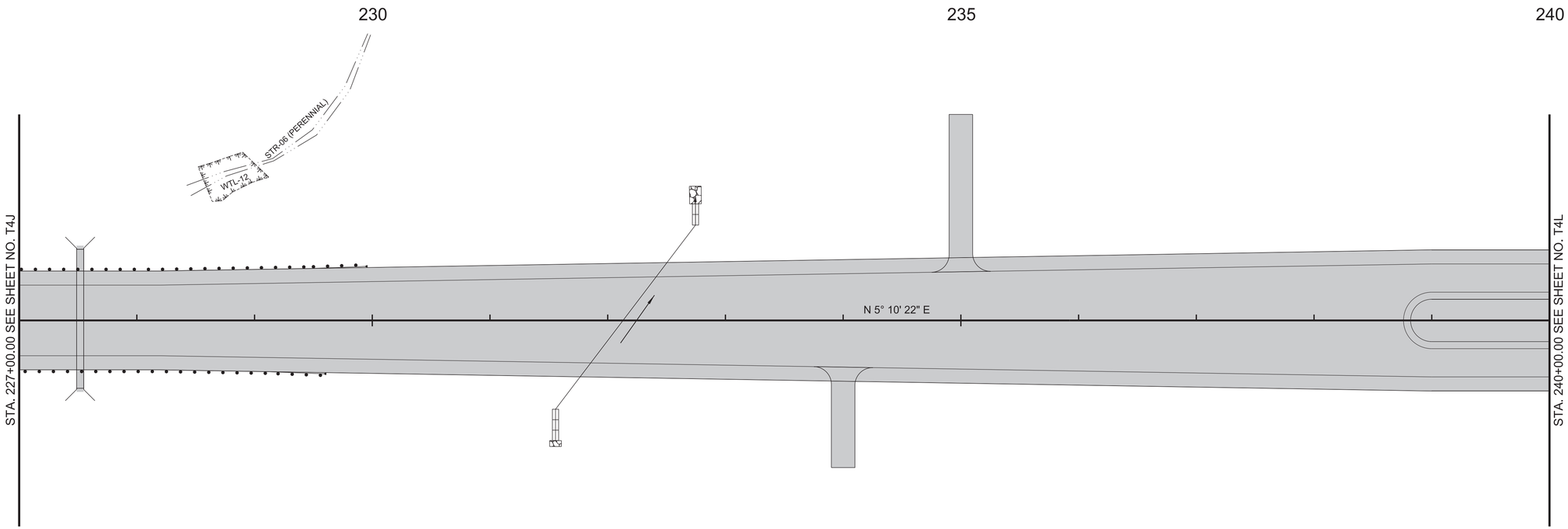
TRAFFIC CONTROL PLANS

STA.214+00 TO STA.227+00

SCALE: 1"=50'

2/9/2026 2:48:20 PM
T:\TDOT\Henry_SR54\T4J.sht

TYPE	YEAR	PROJECT NO.	SHEET NO.
PIH	2025	NH-54(48)	T4K
PS&E	2026	NH-54(48)	T4K



TRAFFIC CONTROL LEGEND	
SYMBOL	ITEM
	TEMPORARY BARRICADE (TYPE II)
	SIGN (CONSTRUCTION)
	WORK ZONE
	TRAFFIC FLOW
	FLEXIBLE DRUMS (CHANNELIZING)
	PORTABLE BARRIER RAIL
	PORTABLE BARRIER RAIL (WITH BARRIER RAIL DELINEATORS)
	TEMPORARY ATTENUATOR
	CHANGEABLE MESSAGE SIGN
	ARROW BOARD TYPE C

SEALED BY

J. BRIAN LEE
REGISTERED ENGINEER
AGRICULTURE
COMMERCE
No. 107290
STATE OF TENNESSEE

02/09/2026

PHASE 2

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL PLANS

STA.227+00 TO STA.240+00

SCALE: 1"=50'

2/9/2026 2:48:20 PM
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TYPE	YEAR	PROJECT NO.	SHEET NO.
PIH	2025	NH-54(48)	T4L
PS&E	2026	NH-54(48)	T4L

240

245

STA. 240+00.00 SEE SHEET NO. T4K

KENTUCKY
TENNESSEE

LOCATION AND MESSAGE TO BE DETERMINED BY THE ENGINEER

W20-1
48" X 48"
ROAD WORK 1/2 MILE

W20-1
48" X 48"
ROAD WORK 1000 FT

W20-1
48" X 48"
ROAD WORK 500 FT

1600' NTS
1000' NTS
500' NTS

POT 27+00.00
N 797096.1211
E 1282858.5566

END ROAD WORK
G20-2
48" X 24"

STATE LINE RD (ASP.) (KY 893)

S 88° 06' 12" E

N 5° 10' 22" E

40S054-F2-002
END PROJ. NO. NH-54(48) R.O.W.
STA. 247+50.14
N 797079.9613 250
E 1283157.4887

STA. 247+61.57 S.R. 54 =
STA. 30+00.00 STATE LINE RD. (KY 893)
N 797091.3391
E 1283158.5185
(SEE SHEET 18 FOR PROFILE)

POND

CALLOWAY CO, KY
US 641
PRJ.# NHPP 6411 (039)
FD52 018 0641 000-006

WTL-13 ADJACENT PROJECT BY OTHERS

40S054-F3-004
END PROJ. NO. NH-54(48) CONST.
STA. 250+00.00
N 797328.7992
E 1283180.0156

M4-8a
30" X 24"
END DETOUR

M4-9
30" X 24"
STATELINE ROAD

M4-10R
48" X 18"
DETOUR

R11-2
48" X 30"
ROAD CLOSED

M4-10R
48" X 18"
DETOUR

ROAD CLOSED TO THRU TRAFFIC
R11-4
60" X 30"

TYPE III BARRICADE w/ TYPE A WARNING LIGHTS

STATE LINE ROAD DETOUR
M4-9L
30" X 24"

STATE LINE ROAD DETOUR
M4-9L
30" X 24"

STATE LINE ROAD DETOUR
M4-9R
30" X 24"

OLD WHITLOCK RD.
1.4 MILES

CROSSLAND RD.
0.8 MILES

STATE LINE ROAD DETOUR
M4-9L
30" X 24"

STATE LINE ROAD DETOUR
M4-9R
30" X 24"

0.9 MILES

STATE LINE RD.

M4-10L
48" X 18"
DETOUR

ROAD CLOSED TO THRU TRAFFIC
R11-4
60" X 30"

TYPE III BARRICADE w/ TYPE A WARNING LIGHTS

SR-54
1.5 MILES

STATE LINE ROAD DETOUR
M4-9R
30" X 24"

M4-10L
48" X 18"
DETOUR

R11-2
48" X 30"
ROAD CLOSED

END DETOUR
M4-8a
30" X 24"

STATELINE ROAD
M4-9
30" X 24"

LOCATION AND MESSAGE TO BE DETERMINED BY THE ENGINEER

LOCATION AND MESSAGE TO BE DETERMINED BY THE ENGINEER

PHASE 2B
STATE LINE ROAD DETOUR

END ROAD WORK
G20-2
48" X 24"

ROAD WORK 500 FT
W20-1
48" X 48"

ROAD WORK 1000 FT
W20-1
48" X 48"

500' NTS
1000' NTS

POT 33+00.00
N 797085.2091
E 1283458.2091

S 88° 49' 45" E

STATE LINE RD (ASP.) (KY 893)

LOCATION AND MESSAGE TO BE DETERMINED BY THE ENGINEER

CALLOWAY COUNTY
HENRY COUNTY

TRAFFIC CONTROL LEGEND

SYMBOL	ITEM
	TEMPORARY BARRICADE (TYPE II)
	SIGN (CONSTRUCTION)
	WORK ZONE
	TRAFFIC FLOW
	FLEXIBLE DRUMS (CHANNELIZING)
	PORTABLE BARRIER RAIL
	PORTABLE BARRIER RAIL (WITH BARRIER RAIL DELINEATORS)
	TEMPORARY ATTENUATOR
	CHANGEABLE MESSAGE SIGN
	ARROW BOARD TYPE C

SEALED BY

J. BRIAN LEE
REGISTERED ENGINEER
AGRICULTURE
102290
STATE OF TENNESSEE
02/09/2026

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

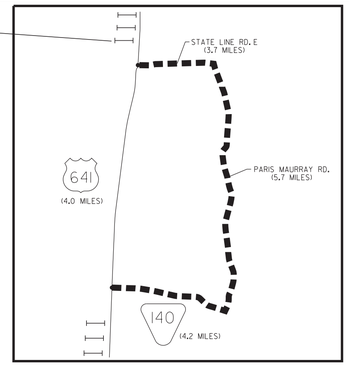
TRAFFIC CONTROL PLANS

STA.240+00 TO STA.250+00
SCALE: 1"=50'

PHASE 2

2/9/2026 2:48:21 PM
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TYPE	YEAR	PROJECT NO.	SHEET NO.
PIH	2025	NH-54(48)	T5
PS&E	2026	NH-54(48)	T5



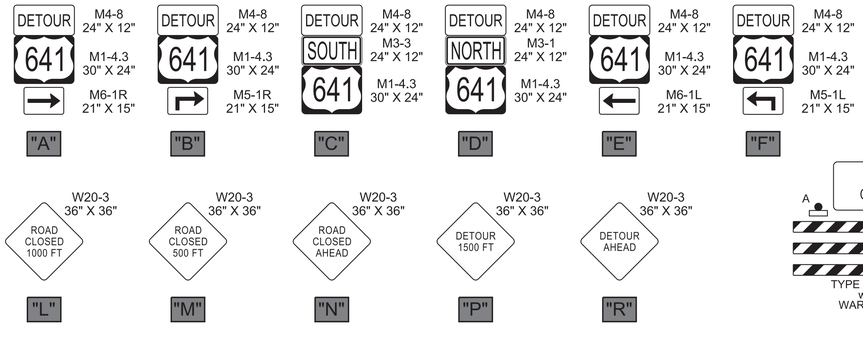
S.R. 54 DETOUR
TOTAL MILES = 13.6 MILES

LOCATION AND MESSAGE TO BE DETERMINED BY THE ENGINEER (TYP.)

WITH CHANGEABLE MESSAGE SIGN UNIT

WITH CHANGEABLE MESSAGE SIGN UNIT

PURYEAR
POP. 667



TRAFFIC CONTROL LEGEND

SYMBOL	ITEM
	SIGN
	DETOUR ROUTE
	CHANGEABLE MESSAGE SIGN UNIT

N

SEALED BY

J. BRIAN LEE
REGISTERED ENGINEER
LICENSE NO. 107299
STATE OF TENNESSEE
02/09/2026

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

S.R. 54 DETOUR PLAN

CAR DETOUR MAP

NOT TO SCALE

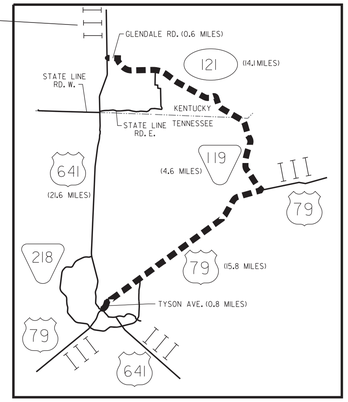
PHASE 2C

2/9/2026 2:48:22 PM
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TYPE	YEAR	PROJECT NO.	SHEET NO.
PIH	2025	NH-54(48)	T5A
PS&E	2026	NH-54(48)	T5A

LOCATION AND MESSAGE TO BE DETERMINED BY THE ENGINEER (TYP.)

WITH CHANGEABLE MESSAGE SIGN UNIT



S.R. 54 TRUCK DETOUR
TOTAL MILES = 36.0 MILES

GRAVES COUNTY
CALLOWAY
TO MAYFIELD, KY.
HAZEL, KY.
TO MURRAY, KY.
KENTUCKY
TENNESSEE
TO DOVER
TO DRESDEN
PURYEAR POP. 667
COTTAGE GROVE POP. 97
PARIS POP. 9,763
Midway
North Fork
Center
Jones Mill
Como
Crossland
Mt. Pleasant
Freeland
Cypress Creek
Pine Hill
Liberty
Conyersville
Buchanan
Oak Grove
Nobles
India
Elkhorn
Moore
Osage
Whitlock
River
Creek
TENNESSEE RIVER
TENNESSEE NATIONAL WILDLIFE REFUGE (BIG SANDY UNIT)
PARIS LANDING STATE PARK
Oak Hill
BIG SANDY RIVER
RIVER LAKE
SANDY
COUNTY

"A"
"B"
"C"
"D"
"E"
"F"
"G"
"H"
"J"
"K"
94
1550
893
1828
783
1270
641
1497
121
280
444
218
54
69
140
79
76
119
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THIS DOCUMENT HAS BEEN DIGITALLY SIGNED AND SEALED BY:

DANIEL JAMES SHIKE
2026.02.19 08:35:24 -06'00'

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

TENNESSEE DEPARTMENT OF TRANSPORTATION
JAMES K. POLK BUILDING, SUITE 1100
505 DEADERICK STREET
NASHVILLE, TN 37243
DANIEL J. SHIKE, P.E. NO. 106952

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

SHEET NAME	SHEET NO.
SIGNATURE SHEET	STRUCTURE-SIGN1
INDEX OF DRAWINGS	U-102-001
LAYOUT OF BRIDGE	U-102-002
GENERAL NOTES	U-102-003
GENERAL NOTES	U-102-004
ESTIMATED QUANTITIES	U-102-005
SUPERSTRUCTURE	U-102-009
SUPERSTRUCTURE DETAILS	U-102-010
SUPERSTRUCTURE DETAILS	U-102-011
SUPERSTRUCTURE DETAILS	U-102-012
SUPERSTRUCTURE DETAILS	U-102-013
GIRDER NOS. 1 THRU 8	U-102-014
GIRDER NOS. 1 THRU 8 CONTINUED	U-102-015
INTERMEDIATE CROSS-FRAME DETAILS	U-102-016
FIELD SPLICE DETAILS	U-102-017
CROSS-FRAME DETAILS	U-102-018
STIFFENER DETAILS	U-102-019
ABUTMENT BEARING DETAILS	U-102-020
BENT BEARING DETAILS	U-102-021
ABUTMENT NO. 1	U-102-022
ABUTMENT NO. 1 - CONTINUED	U-102-023
ABUTMENT NO. 1 DETAILS	U-102-024
ABUTMENT NO. 1 DETAILS	U-102-025
ABUTMENT NO. 2	U-102-026
ABUTMENT NO. 2 - CONTINUED	U-102-027
ABUTMENT NO. 2 DETAILS	U-102-028
ABUTMENT NO. 2 DETAILS	U-102-029
BENT NO. 1	U-102-030
BENT NO. 1 - CONTINUED	U-102-031
BENT NO. 2	U-102-032
BENT NO. 2 - CONTINUED	U-102-033
BENT NO. 2 - CRASHWALL	U-102-033A
BENT NO. 3	U-102-034
BENT NO. 3 - CONTINUED	U-102-035
BENT NOS. 1 THRU 3 DETAILS	U-102-036
BILL OF STEEL	U-102-039
BILL OF STEEL	U-102-040

YEAR	PROJECT NO.	SHEET NO.
2026	NH-54(48)	STRUCTURE-SIGN1

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

SIGNATURE SHEET

2/19/2026 8:11:03 AM P:\STRUCTURES\CADD_REGION_4\40-HENRY\40SR054003 1\BRIDGE_DRAWINGS\40SR054003 1SIG.DGN

CONST. NO.: 40S054-F3-004

PROJECT NO.	YEAR	SHEET NO.
NH-54(48)	2026	B - 1

REVISIONS

NO.	DATE	BY	BRIEF DESCRIPTION
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LIST OF DRAWINGS

LIST OF DRAWINGS	DWG. NO.	LAST REV. DATE
SIGNATURE SHEET	STRUCTURE-SIGN1	__ / __ / __
INDEX OF DRAWINGS	U-102-001	__ / __ / __
LAYOUT OF BRIDGE	U-102-002	__ / __ / __
GENERAL NOTES	U-102-003	__ / __ / __
GENERAL NOTES	U-102-004	__ / __ / __
ESTIMATED QUANTITIES	U-102-005	__ / __ / __
FOUNDATION DATA	U-102-006	__ / __ / __
FOUNDATION DATA	U-102-007	__ / __ / __
FOUNDATION DATA	U-102-008	__ / __ / __
SUPERSTRUCTURE	U-102-009	__ / __ / __
SUPERSTRUCTURE DETAILS	U-102-010	__ / __ / __
SUPERSTRUCTURE DETAILS	U-102-011	__ / __ / __
SUPERSTRUCTURE DETAILS	U-102-012	__ / __ / __
SUPERSTRUCTURE DETAILS	U-102-013	__ / __ / __
GIRDER NOS. 1 THRU 8	U-102-014	__ / __ / __
GIRDER NOS. 1 THRU 8 CONTINUED	U-102-015	__ / __ / __
INTERMEDIATE CROSS-FRAME DETAILS	U-102-016	__ / __ / __
FIELD SPLICE DETAILS	U-102-017	__ / __ / __
CROSS-FRAME DETAILS	U-102-018	__ / __ / __
STIFFENER DETAILS	U-102-019	__ / __ / __
ABUTMENT BEARING DETAILS	U-102-020	__ / __ / __
BENT BEARING DETAILS	U-102-021	__ / __ / __
ABUTMENT NO. 1	U-102-022	__ / __ / __
ABUTMENT NO. 1 - CONTINUED	U-102-023	__ / __ / __
ABUTMENT NO. 1 DETAILS	U-102-024	__ / __ / __
ABUTMENT NO. 1 DETAILS	U-102-025	__ / __ / __
ABUTMENT NO. 2	U-102-026	__ / __ / __
ABUTMENT NO. 2 - CONTINUED	U-102-027	__ / __ / __
ABUTMENT NO. 2 DETAILS	U-102-028	__ / __ / __
ABUTMENT NO. 2 DETAILS	U-102-029	__ / __ / __
BENT NO. 1	U-102-030	__ / __ / __
BENT NO.1 - CONTINUED	U-102-031	__ / __ / __
BENT NO. 2	U-102-032	__ / __ / __
BENT NO. 2 - CONTINUED	U-102-033	__ / __ / __
BENT NO. 2 - CRASHWALL	U-102-033A	__ / __ / __
BENT NO. 3	U-102-034	__ / __ / __
BENT NO. 3 - CONTINUED	U-102-035	__ / __ / __
BENT NOS. 1 THRU 3 DETAILS	U-102-036	__ / __ / __
FINAL FOUNDATION DATA	U-102-037	__ / __ / __
FINAL FOUNDATION DATA	U-102-038	__ / __ / __
BILL OF STEEL	U-102-039	__ / __ / __
BILL OF STEEL	U-102-040	__ / __ / __

LIST OF STANDARD DRAWINGS

LIST OF STANDARD DRAWINGS	DWG. NO.	LAST REV. DATE
BRIDGE RAILING SINGLE SLOPE CONCRETE PARAPET	STD-1-1SS	07/09/2025
STEEL SLIDER PLATE ASSEMBLIES FOR SINGLE SLOPE CONCRETE PARAPET AND BRIDGE DECK DRAIN DETAILS	STD-1-2SS	05/31/2024
REINFORCED CONCRETE PAVEMENT AT BRIDGE ENDS	STD-1-5	06/05/2023
STRIPSEAL EXPANSION JOINT NEW CONSTRUCTION	STD-3-1	11/01/2010
STRIPSEAL EXPANSION JOINT NEW CONSTRUCTION	STD-3-2	11/01/2010
STANDARD PILE DETAILS	STD-5-1	
STANDARD SEISMIC DETAILS	STD-6-1	12/08/2023
STANDARD PROTECTIVE FENCE DETAILS	STD-8-5	10/01/2025
TRI-STAR STATE EMBLEM FINISH DETAILS	STD-8-6	10/03/2018
STANDARD REINFORCING BAR SUPPORT DETAILS FOR CONCRETE SLABS	STD-9-1	10/07/2008
MISCELLANEOUS ABUTMENT AND DRAINAGE DETAILS	STD-10-1	06/05/2023
MISC. ABUTMENT AND PAVEMENT AT BRIDGE ENDS BACKFILL DETAILS	STD-10-2	06/05/2023
BRIDGE END DRAIN FLUME DETAILS	D-FLU-3	04/14/2025
SAFETY APPROACH TO UNDERPASSES GRADING DESIGN AND SLOPE PROTECTION	RD11-SA-1	01/09/2024

LIST OF SPECIAL PROVISIONS REGARDING

LIST OF SPECIAL PROVISIONS REGARDING	PROV. NO.	LAST REV. DATE
STEEL STRUCTURES	602	07/15/2005

SEALED BY

DANIEL J. SHIKE — REGISTERED ENGINEER — STRUCTURE — 109832 — STATE OF TENNESSEE

Daniel Shike

02-05-26

PIN NO.: 101886.05

DESIGN BY:	JOHN AYERS	DATE:	02-2025
DRAWN BY:	T.R. KIRK	DATE:	05-2025
SUPERVISED BY:	DJS/GWK(DE)	DATE:	02-2025
CHECKED BY:	ALI OMAR	DATE:	08-2025

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

INDEX OF DRAWINGS
STATE ROUTE 54 (US-641) OVER KWT RAILWAY & EXISTING STATE ROUTE 54
BRIDGE I. D. NO. 40SR0540031
STATION 140+12.90
HENRY COUNTY

U-102-001

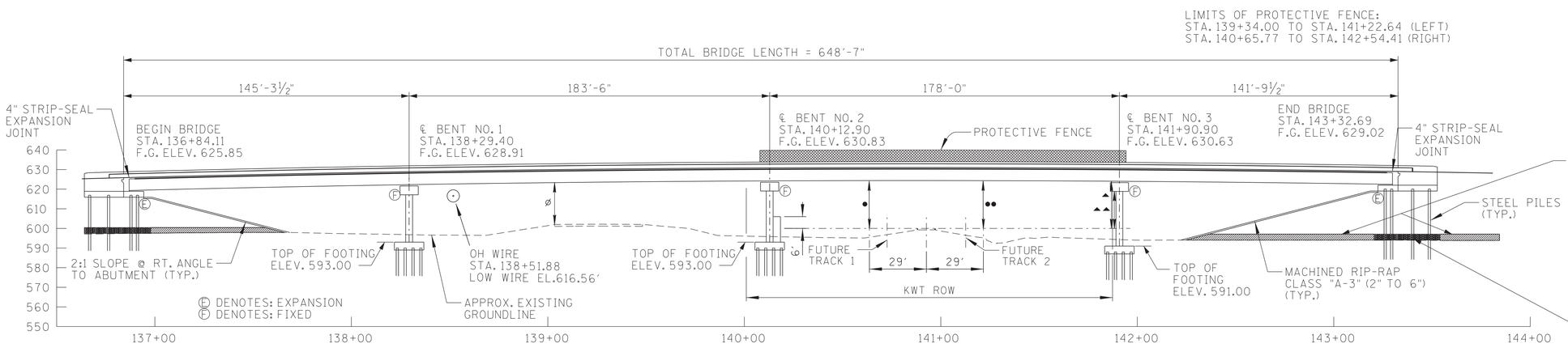
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CONST. NO.: 40S054-F3-004

PROJECT NO.	YEAR	SHEET NO.
NH-54(48)	2026	

REVISIONS

NO.	DATE	BY	BRIEF DESCRIPTION
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NOTE: GRADED SOLID ROCK, GEOTEXTILE FABRIC, AND #57 STONE TO BE PAID FOR AS ROADWAY ITEMS.

▲▲ DENOTES: POINT OF MIN. VERTICAL CLEARANCE OVER ENTIRE KWT ROW WIDTH TO UNDER-SIDE OF BENT CAP SR-54 STA. 142+53.07
ACTUAL VERTICAL CLEARANCE = 18'-0⅜"
MINIMUM REQUIRED CLEARANCE = 23'-0"

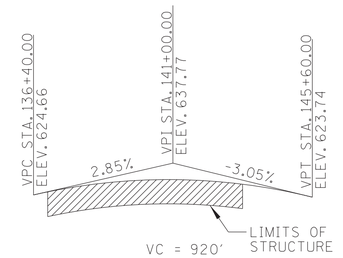
▲ DENOTES: POINT OF MIN. VERTICAL CLEARANCE OVER ENTIRE KWT ROW WIDTH TO UNDER-SIDE OF GIRDERS SR-54 STA. 142+47.06
ACTUAL VERTICAL CLEARANCE = 23'-0¾"
MINIMUM REQUIRED CLEARANCE = 23'-0"

●● DENOTES: POINT OF MIN. VERTICAL CLEARANCE (FUTURE TRACK 2)
SR-54 STA. 142+07.40
ACTUAL VERTICAL CLEARANCE = 23'-6½"
MINIMUM REQUIRED CLEARANCE = 23'-0"

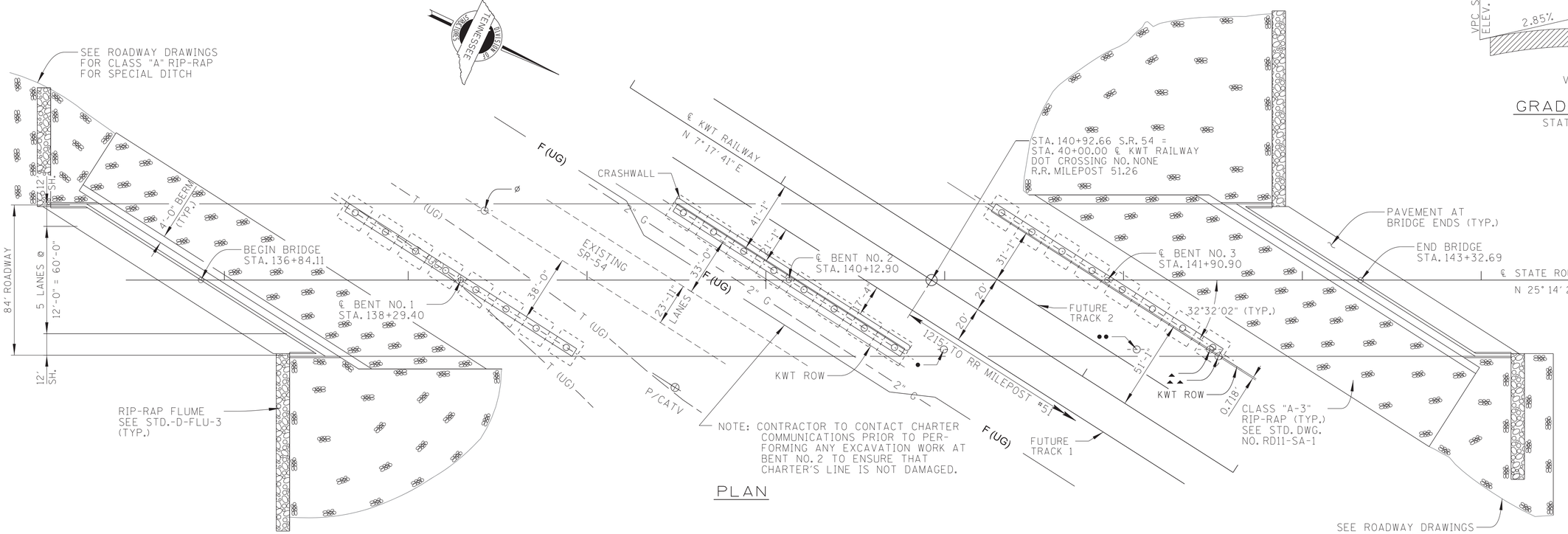
ø DENOTES: POINT OF MIN. VERTICAL CLEARANCE (ROAD)
SR-54 STA. 138+42.73
ACTUAL VERTICAL CLEARANCE = 19'-7"
MINIMUM REQUIRED CLEARANCE = 16'-6"

● DENOTES: POINT OF MIN. VERTICAL CLEARANCE (FUTURE TRACK 1)
SR-54 STA. 140+99.55
ACTUAL VERTICAL CLEARANCE = 24'-3"
MINIMUM REQUIRED CLEARANCE = 23'-0"

ELEVATION

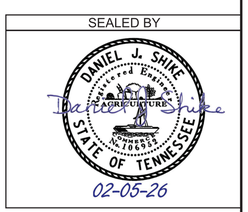


GRADE SKETCH
STATE ROUTE 54



PLAN

SEALED BY



PIN NO.:	101886.05	
DESIGN BY:	JOHN AYERS	DATE: 02-2025
DRAWN BY:	T.R. KIRK	DATE: 02-2025
SUPERVISED BY:	DJS/GWK(DE)	DATE: 02-2025
CHECKED BY:	ALI OMAR	DATE: 08-2025

CORRECT
ENGINEER OF STRUCTURES

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

LAYOUT OF BRIDGE
STATE ROUTE 54 (US-641) OVER KWT RAILWAY & EXISTING STATE ROUTE 54
BRIDGE I. D. NO. 40SR0540031
STATION 140+12.90
HENRY COUNTY

U-102-002

1/22/2026 8:12:56 AM

GENERAL NOTES

SPECIFICATIONS & LOADING

CONSTRUCTION SPECIFICATIONS: TENNESSEE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (APRIL 1, 2026 EDITION).

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.

LOADING:

A. HL-93 LIVE LOADING
B. SEISMIC DESIGN CATEGORY C WITH A_S= 0.354, S_{DS}= 0.756, S_{D1}= 0.323, (1000 YEAR RETURN PERIOD).
C. DEAD LOAD INCLUDES 35 LB/SQ. FT. FOR FUTURE WEARING SURFACE.

CONCRETE, REINFORCING & FORMING

CONCRETE: TO BE CLASS A F'C = 3000 PSI EXCEPT AS NOTED OTHERWISE.

BRIDGE DECKS: CLASS DS CONCRETE FOR BRIDGE DECKS AND END DIAPHRAGMS 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. SEE 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.

REINFORCING STEEL IN COLUMNS: ALL LONGITUDINAL REINFORCING STEEL IN COLUMNS SHALL BE ASTM A706 GRADE 60.

FOUNDATION ELEMENTS

ABUTMENTS ON FILL: THE FILLS AT THE ENDS OF THE BRIDGE SHALL BE IN PLACE AND THOROUGHLY COMPACTED AND THEN UNDERGO A 1-MONTH WAITING PERIOD BEFORE ANY ABUTMENT PILES ARE DRIVEN. SEE GEOTECHNICAL SHEETS FOR FURTHER DETAILS.

FRICTION PILES AT ABUTMENTS: TO BE 16" DIA. X ½", GRADE 3 MODIFIED WITH A MINIMUM YIELD STRESS OF 50 KSI IN ACCORDANCE WITH ASTM A252. A TEST PILE SHALL BE DRIVEN AT EACH SUBSTRUCTURE AT THE LOCATION DESIGNATED ON DRAWING NO. U-102-037. A LOAD TEST WILL THEN BE APPLIED TO THE TEST PILE IN ABUTMENT NO. 2. 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-102-004.
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. PILES SHALL BE DRIVEN CONTITNUOUSLY UNTIL CAPACITY IS REACHED TO PREVENT THE PILES FROM FREEZING.

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.

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. FOR PILE BENTS, ANY PROPOSAL OF THE CONTRACTOR TO USE AN ALTERNATE PILE TYPE OR SIZE SHALL BE CONSIDERED VALUE ENGINEERING.

PIPE PILES AT ABUTMENTS: SHALL BE PP 16" DIA. X ½", 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.

FRICTION PILES AT BENTS: TO BE PP 14" DIA. X ½", GRADE 3 MODIFIED WITH A MINIMUM YIELD STRESS OF 50 KSI IN ACCORDANCE WITH ASTM A252. AFTER EXCAVATION TO THE PROPOSED FOOTING ELEVATIONS, A TEST PILE SHALL BE DRIVEN AT EACH SUBSTRUCTURE AT THE LOCATION DESIGNATED ON DRAWING NO. U-102-037. A LOAD TEST WILL THEN BE APPLIED TO THE TEST PILE IN BENT 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. U-102-004.
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. PILES SHALL BE DRIVEN CONTITNUOUSLY UNTIL CAPACITY IS REACHED TO PREVENT THE PILES FROM FREEZING.

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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 NOS. 606-18.03 OR 606-19.03, AS APPLICABLE.

STEEL SUPERSTRUCTURES

WELDING: SEE SECTION 602 OF THE STANDARD SPECIFICATIONS AND NOTES ON DRAWING NO. U-102-009.

PAINT: PAINT SHALL BE SYSTEM "A" (QPL 3.001) – INORGANIC ZINC. COLOR OF THE FINISH COAT SHALL COMPLY WITH AMS-STD-595A, FEDERAL STANDARD COLOR NO. 30059, BROWN. SEE SECTIONS 603 AND 910 OF THE STANDARD SPECIFICATIONS. THE CONTRACTOR SHALL ALSO HAVE THE OPTION TO USE ORGANIC ZINC IN SYSTEM "A" INSTEAD OF AN INORGANIC ZINC. ORGANIC ZINC SYSTEMS SHALL BE FROM QPL 3.002.

RADIOGRAPHIC, ULTRASONIC, AND MAGNETIC INSPECTION: SEE SECTION 602 OF THE STANDARD SPECIFICATIONS AND NOTES ON DRAWING NO. U-102-009.

STEEL STRUCTURES: SEE TENNESSEE STANDARD SPECIFICATIONS SECTION 602 AND NOTES ON DRAWING NO. U-102-009.

PROTECTION OF SUBSTRUCTURES: SINCE THIS BRIDGE UTILIZES WEATHERING STEEL, THE CONTRACTOR MUST TAKE SPECIAL PRECAUTIONS TO PREVENT STAINING OF PIERS AND ABUTMENTS. PRIOR TO THE ERECTION OF ANY STEEL, THE TOPS AND SIDES OF THE COMPLETED SUBSTRUCTURES SHALL BE PROTECTED FROM STAINING BY WRAPPING WITH TRANSLUCENT, REINFORCED, HIGH DENSITY, TWO-PLY, CROSS-LAMINATED POLYETHYLENE.

IN LIEU OF THIS PROTECTION, THE CONTRACTOR MAY ELECT TO THOROUGHLY CLEAN THE CONCRETE OF RUST STAINING BY SANDBLASTING OR OTHER APPROVED METHODS, PRIOR TO APPLYING A TEXTURE-COATED FINISH. NO SEALANT TYPE MATERIALS SHALL BE APPLIED WHICH ARE INCOMPATIBLE WITH THE TEXTURE-COATED FINISH UNLESS THEY CAN BE THOROUGHLY REMOVED PRIOR TO APPLYING THE FINISH. TEXTURE-COATING OF THE SUBSTRUCTURE SHALL BE DELAYED UNTIL AFTER THE DECK IS COMPLETED.

AFTER A SUBSTRUCTURE HAS RECEIVED ITS FINAL FINISH, THE TOP AND SIDES SHALL BE PROTECTED FROM STAINING BY WRAPPING WITH REINFORCED POLYETHYLENE, WHICH, IF BEING REUSED, SHALL BE IN GOOD CONDITION AND FREE FROM HOLES AND TEARS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROTECT THE SUBSTRUCTURES FROM STAINING FOR THE DURATION OF THE CONTRACT. ANY CORRECTIVE TEXTURE-COATING SHALL BE AT HIS EXPENSE. COST TO BE INCLUDED IN THE UNIT PRICE BID FOR OTHER ITEMS.

BLAST CLEANING: ALL GIRDERS AND FAYING SURFACES OF FIELD SPLICES OF ALL GIRDERS SHALL BE BLAST CLEANED IN ACCORDANCE WITH THE STEEL STRUCTURES PAINTING COUNCIL SURFACE PREPARATION SPECIFICATIONS "NO. 6 COMMERCIAL BLAST CLEANING" SSPC-SP 6 (OR NACE EQUIVALENT). PRIOR TO BOLTING, ANY LOOSE RUST ON THE FAYING SURFACES SHALL BE REMOVED.

FINAL APPEARANCE: PRIOR TO FINAL ACCEPTANCE, ALL STRUCTURAL STEEL SHALL BE FREE OF GREASE, OIL, CHALK MARKS, PAINT, CONCRETE SPATTER AND SIMILAR SOILAGE. DEPENDING ON THE LOCATION, WITH RESPECT TO VIEW AND SEVERITY OF THE FOREGOING SOILAGE, THE STRUCTURAL STEEL SHALL BE CLEANED UNDER THE PROVISIONS OF ONE OF THE FOLLOWING STEEL STRUCTURES PAINTING COUNCIL SURFACE PREPARATION SPECIFICATIONS:

- NO. 1 SOLVENT CLEANING - SSPC-SP 1
- NO. 2 HAND CLEANING - SSPC-SP 2
- NO. 3 POWER TOOL CLEANING - SSPC-SP 3
- NO. 7 BRUSH-OFF BLAST CLEANING - SSPC-SP 7 (OR NACE EQUIVALENT)

WEATHERING BOLTS: ALL BOLTS SHALL BE ASTM F3125 GRADE A325 TYPE 3 UNLESS NOTED OTHERWISE. ALL BOLTS, NUTS, AND WASHERS SHALL HAVE THE SAME WEATHERING CHARACTERISTICS AS THE STRUCTURAL STEEL USED. IN LIEU OF USING DIRECT TENSION INDICATORS (DTI'S), ALL BOLTS SHALL BE INSTALLED BY EITHER TURN-OF-NUT TIGHTENING OR CALIBRATED WRENCH TIGHTENING IN ACCORDANCE WITH SECTION 602 OF THE STANDARD SPECIFICATIONS AND THE AASHTO LRFD BRIDGE CONSTRUCTION SPECIFICATIONS, CURRENT EDITION.

PAINTING GIRDERS BELOW EXPANSION JOINTS: WEATHERING STEEL GIRDERS BELOW EXPANSION JOINTS SHALL BE PAINTED FOR A MINIMUM DISTANCE OF 1 ½ TIMES THE DEPTH (1.5D) OF THE GIRDER ON EITHER SIDE OF THE JOINT. THE COLOR OF THE TOP COAT SHALL BE BROWN, AMS-STD-595A, COLOR NO. 30059.

PIN NO.: 101886.05
DESIGN BY: JOHN AYERS DATE: 02-2025
DRAWN BY: J. STEVENS DATE: 05-2025
SUPERVISED BY: DJS/GWK(DE) DATE: 02-2025
CHECKED BY: ALI OMAR DATE: 08-2025

2/10/2026 2:36:36 PM

CONST. NO.: 40S054-F3-004

PROJECT NO.	YEAR	SHEET NO.
NH-54(48)	2026	

REVISIONS

NO.	DATE	BY	BRIEF DESCRIPTION
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SEALED BY



STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

GENERAL NOTES
STATE ROUTE 54 (US-641) OVER KWT RAILWAY &
EXISTING STATE ROUTE 54
BRIDGE I. D. NO. 40SR0540031
STATION 140+12.90
HENRY COUNTY

U-102-003

CONST. NO.: 40S054-F3-004

PROJECT NO.	YEAR	SHEET NO.
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MISCELLANEOUS GENERAL NOTES

RAILROAD CROSSING: THE CONTRACTOR SHALL CONDUCT HIS WORK SO AS TO PROTECT THE RAILROAD TRACKS AND PROPERTIES FROM ANY DAMAGE. THE WORK SHALL BE DONE IN ACCORDANCE WITH REGULATIONS STIPULATED BY KWT RAILWAY, INC. SO AS TO MAINTAIN CLEARANCE AND NOT INTERRUPT TRAFFIC.

THE CONTRACTOR SHALL COMPLY WITH ALL REQUIREMENTS OF AREMA AND THE APPLICABLE RAILROAD PUBLIC CROSSING MANUAL. ALL REQURED DOCUMENTATION OF THE CONTRACTOR'S MEANS AND METHODS SHALL BE SUBMITTED BY THE CONTRACTOR DIRECTLY TO THE RAILROAD FOR APPROVAL. TDOT'S ENGINEERING DIVISION - STRUCTURES SECTION DOES NOT REVIEW OR APPROVE THE CITED CONTRACTOR SUBMITTALS WITH THE EXCEPTION THAT TDOT MAY REVIEW PHASED DEMOLITION DETAILS ON BRIDGES CROSSING OVER RAILROADS TO INSURE THE STABILITY OF THE REMAINING STRUCTURE.

THE following MINIMUM TEMPORARY CLEARANCE SHALL BE MAINTAINED DURING CONSTRUTION.

- VERTICAL - 21.5 FEET ABOVE TOP OF RAIL (ATR) (TEMPORARY).
- HORIZONTAL - 15 FEET IN TANGENT SECTIONS OF TRACK MEASURED PERPENDICULAR TO THE TRACK (TEMPORARY).
- HORIZONTAL - 20 FEET IN CURVED SECTIONS OF TRACK MEASURED PERPENDICULAR TO THE TRACK (TEMPORARY).

SHOP DRAWINGS: SEE SECTION 105.02 OF THE STANDARD SPECIFICATIONS.

PROTECTIVE FENCE: RAILROAD PROTECTIVE FENCE IS REQUIRED TO BE BUILT IN ACCORDANCE WITH STANDARD DRAWING STD-8-5. DIMENSION "H" AS SHOWN ON STANDARD DRAWING STD-8-5 SHALL BE 8'-0".

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.

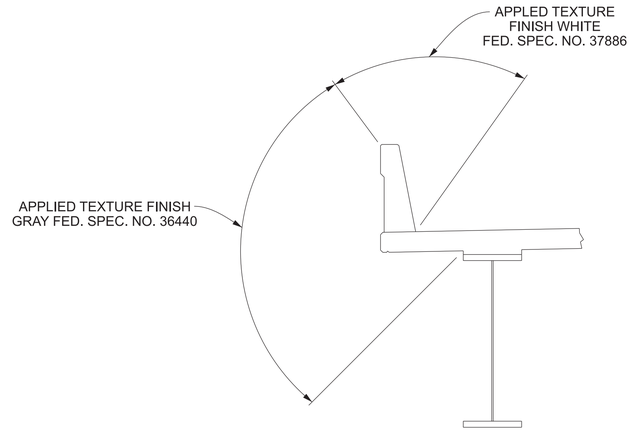
CONCRETE SEALER: CONCRETE SEALER SHALL BE APPLIED TO SUBSTRUCTURES COINCIDING WITH EXPANSION JOINT LOCATIONS BEFORE PLACEMENT OF BEARING DEVICES AND APPLYING TEXTURE-COATING. CONCRETE SEALER SHALL BE APPLIED TO THE FRONT VERTICAL FACE OF THE ABUTMENT ENDWALL, THE FRONT AND TOP OF THE ABUTMENT BEAM AND THE BACK VERTICAL FACE OF THE END DIAPHRAGM.

CONCRETE SHALL BE CLEAN AND DRY BEFORE APPLYING THE CONCRETE SEALER, AND THE THICKNESS OF THE SEALER SHALL BE AS RECOMMENDED BY THE SEALANT MANUFACTURER. ACCEPTABLE CONCRETE SEALERS ARE INCLUDED IN THE QUALIFIED PRODUCTS LIST FOR NON-PENETRATING CONCRETE SEALERS MAINTAINED BY THE DIVISION OF MATERIALS AND TESTS. THE SEALER SHALL BE CLEAR OR SIMILAR TO THE COLOR OF EXISTING CONCRETE SURFACES TO BE SEALED. THE COST OF THE SEALER, COMPLETE AND IN PLACE, SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE EXPANSION DEVICE AT EACH SUBSTRUCTURE.

MACHINED RIP-RAP: MACHINED RIP-RAP FOR SLOPE PROTECTION SHALL BE 2" TO 6" IN SIZE UNIFORMLY GRADED AND MEET THE REQUIREMENTS OF SECTION 709 OF THE STANDARD SPECIFICATIONS AND SHALL BE MEASURED AND PAID FOR UNDER ROADWAY ITEM NO. 709-05.05.

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, FOR GRADE SEPARATIONS, THE HORIZONTAL CLEARANCES MAY NOT BE REDUCED, NOR MAY THE VERTICAL CLEARANCES BE LESS THAN THE MINIMUM ACCEPTABLE FOR THE TYPE FACILITY CROSSED.

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.



APPLIED TEXTURE FINISH SKETCH

NOTE: IN ADDITION TO THE SURFACES SHOWN IN THE APPLIED TEXTURE FINSH SKETCH ALL EXPOSED SURFACES OF THE CRASHWALL, WINGWALLS, ABUTMENT BEAMS, BENTS, AND END DIAPHRAGMS ARE TO RECEIVE AN APPLIED TEXTURE FINISH (GRAY, FED. SPEC. NO. 36440).

LOCATION	DESIGN LOAD (TONS)	TEST PILE CUT-OFF ELEV. (FT.)	ESTIMATED PILE LENGTH (FT.)	TEST PILE LENGTH (FT.)	MINIMUM PILE TIP ELEVATION
ABUNTMENT NO. 1	40	613.85	60	70	587.00
BENT NO. 1	80	590.00	70	80	N/A
BENT NO. 2	80	590.00	65	75	N/A
BENT NO. 3	80	588.00	65	75	N/A
ABUNTMENT NO. 2	40	617.57	70	80	584.00

SEALED BY

DANIEL J. SHIKE · REGISTERED ENGINEER · AGRICULTURE · 106552 · STATE OF TENNESSEE

Daniel J. Shike

02-05-26

PIN NO.: 101886.05

DESIGN BY: JOHN AYERS DATE: 02-2025

DRAWN BY: J. STEVENS DATE: 05-2025

SUPERVISED BY: DJS/GWK(DE) DATE: 02-2025

CHECKED BY: ALI OMAR DATE: 08-2025

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

GENERAL NOTES
STATE ROUTE 54 (US-641) OVER KWT RAILWAY & EXISTING STATE ROUTE 54

BRIDGE I. D. NO. 40SR0540031
STATION 140+12.90
HENRY COUNTY

U-102-004

1/15/2026 9:48:49 AM

CONST. NO.: 40S054-F3-004

PROJECT NO.	YEAR	SHEET NO.
NH-54(48)	2026	

REVISIONS

NO.	DATE	BY	BRIEF DESCRIPTION
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ESTIMATED QUANTITIES

	ITEM NO.	DESCRIPTION	UNITS	TOTAL	SUPERSTRUCTURE	ABUT. NO. 1	BENT NO. 1	BENT NO. 2	BENT NO. 3	ABUT. NO. 2
(2)	204-02.01	DRY EXCAVATION (BRIDGES)	C.Y.	2,643		257	751	676	702	257
(9)	303-01.02	GRANULAR BACKFILL (BRIDGES)	TON	170		85				85
(4)	602-04.01	STEEL STRUCTURES (WELDED PLATE GIRDER, 66" WEB)	L.S.	1	1					
(5)	602-10.60	BEARING DEVICE (REINFORCED ELASTOMERIC PAD, ABUTMENTS)	EACH	16		8				8
(5)	602-10.61	BEARING DEVICE (PLAIN ELASTOMERIC PAD, BENTS)	EACH	24			8	8	8	
	604-02.03	EPOXY COATED REINFORCING STEEL	LB.	506,622	465,102	20,760				20,760
	604-03.01	CLASS 'A' CONCRETE (BRIDGES)	C.Y.	2,072		204	462	728	473	205
(10)	604-03.02	STEEL BAR REINFORCEMENT (BRIDGES)	LB.	398,721		9,765	110,043	156,989	112,138	9,786
(1)	604-03.04	PAVEMENT AT BRIDGE ENDS	S.Y.	440		220				220
	604-03.32	CLASS 'DS' CONCRETE (BRIDGE DECK)	C.Y.	1,468	1,468					
	604-04.01	APPLIED TEXTURE FINISH (NEW STRUCTURES)	S.Y.	3,521	1,647	178	358	765	395	178
	604-04.41	THREE STAR STATE EMBLEM	EACH	4		2				2
	604-05.31	BRIDGE DECK GROOVING (MECHANICAL)	S.Y.	6,256						
(3)(8)	604-11.01	EXPANSION DEVICE (ABUTMENTS)	L.F.	320		160				160
	606-18.01	TEST PILES (STEEL PIPE PILES, 14-INCH)	L.F.	230			80	75	75	
	606-18.02	LOADING TEST (STEEL PIPE PILES, 14-INCH)	EACH	1			1			
	606-18.03	STEEL PIPE PILES (14-INCH)	L.F.	25,855			8,890	8,710	8,255	
	606-19.01	TEST PILES (STEEL PIPE PILES, 16-INCH)	L.F.	150		70				80
	606-19.02	LOADING TEST (STEEL PIPE PILES, 16-INCH)	EACH	1						1
	606-19.03	STEEL PIPE PILES (16-INCH)	L.F.	6,890		3,180				3,710
	620-05.01	CONCRETE PARAPET SINGLE SLOPE (STD-1-1SS)	L.F.	1,366						
	707-07.01	CHAIN-LINK FENCE (BRIDGES)	S.F.	2,076	2,076					
(7)	710-09.01	6" PERFORATED PIPE WITH VERTICAL DRAIN SYSTEM	L.F.	362		181				181
	710-09.02	6" PIPE UNDERDRAIN	L.F.	44		22				22

ESTIMATED QUANTITIES NOTES

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

(2) **NOTE:** EXCAVATION BASED ON FINAL PROFILE AT ABUTMENTS AND EXISTING GROUND AT BENTS.

(3) **NOTE:** THE UNIT PRICE BID FOR ROADWAY EXPANSION DEVICES TO INCLUDE THE COST OF 760 S.Y. OF CONCRETE SEALER REQUIRED. SEE GENERAL NOTES FOR DESCRIPTION OF CONCRETE SEALER.

(4) **NOTE:** LUMP SUM: TOTAL ESTIMATED WEIGHT OF 2,504,955 LBS. OF STRUCTURAL STEEL INCLUDES GIRDERS, FIELD SPLICES, CROSS-FRAMES, STIFFENERS, SHEAR CONNECTORS, TAB CONNECTION PLATES, BOLTS, ETC. ALSO SEE STANDARD SPECIFICATIONS SECTIONS 602.49 AND 602.50.

(5) **NOTE:** BEARING DEVICE ASSEMBLY INCLUDES THE COST OF THE SOLE PLATE, ELASTOMERIC PAD, AND ANCHOR RODS.

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

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

(8) **NOTE:** THE EXPANSION JOINT AT BOTH ABUTMENTS SHALL BE IN ACCORDANCE WITH SECTION 623.03 OF THE STANDARD SPECIFICATIONS. THE TOTAL REQUIRED MOVEMENT IS 4 INCHES. SHOP DRAWINGS SHALL BE SUBMITTED TO THE ENGINEER OF STRUCTURES FOR APPROVAL.

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

(10) NOTE: MECHANICAL BAR SPLICERS MUST BE ON THE TDOT QUALIFIED PRODUCTS LIST 27. THE BAR SPLICERS SHALL MEET AASHTO LRFD SPECIFICATIONS FOR MECHANICAL CONNECTION. THE COST OF FURNISHING THE BAR SPLICERS, INCLUDING ALL LABOR AND MATERIALS NECESSARY FOR COMPLETE INSTALLATION, SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM NO. 604-03.02.

SEALED BY



PIN NO.: 101886.05
DESIGN BY: JOHN AYERS DATE: 02-2025
DRAWN BY: J. STEVENS DATE: 05-2025
SUPERVISED BY: DJS/GWK(DE) DATE: 02-2025
CHECKED BY: ALI OMAR DATE: 08-2025

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

ESTIMATED QUANTITIES
STATE ROUTE 54 (US-641) OVER KWT RAILWAY & EXISTING STATE ROUTE 54
BRIDGE I. D. NO. 40SR0540031
STATION 140+12.90
HENRY COUNTY

U-102-005

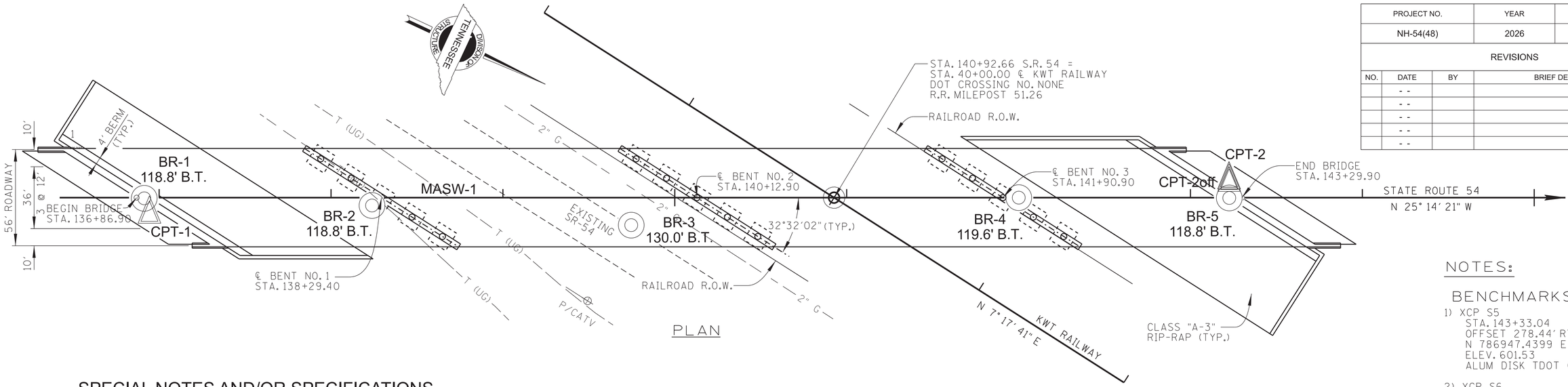
1/15/2026 9:57:50 AM

CONST. NO.: 40S054-F3-004

PROJECT NO.	YEAR	SHEET NO.
NH-54(48)	2026	

REVISIONS

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



PLAN

SPECIAL NOTES AND/OR SPECIFICATIONS

1. AFTER REACHING FINAL GRADE, THE FOLLOWING INTERVAL WILL REQUIRE A ONE MONTH WAITING PERIOD BEFORE INSTALLATION OF PILES AT ABUTMENT 1 AND ABUTMENT 2:

   MAINLINE SR54
   SR54 STATION 135+50 TO STATION 136+87
   SR54 STATION 143+30 TO STATION 146+50

2. EMBANKMENT MATERIAL DIRECTLY BENEATH THE PILE CAPS SHALL BE FREE OF BOULDERS OR PARTICLE SIZES LARGER THEN 4 INCHES IN ANY DIMENSION OR ANY OTHER OBSTRUCTIONS THAT MAY HINDER PILE DRIVING OPERATIONS.

3. THE BOTTOM 3 FEET OF EMBANKMENT WITHIN THE PILE CAP FOOTPRINT SHALL BE CONSTRUCTED USING #57 STONE IN LIEU OF THE GRADED SOLID ROCK (GSR) SHOWN IN ROADWAY PLANS TO FACILITATE PILE DRIVING.

4. PILES SHALL BE DRIVEN CONTINUOUSLY UNTIL CAPACITY IS REACHED TO PREVENT THE PILES FROM FREEZING.

5. AT LEAST ONE STATIC LOAD TEST SHALL BE PERFORMED AT THE PROJECT SITE FOR EACH PILE TYPE USED.

TABLE OF BORING LOCATIONS

POINT	STATION	OFFSET	N	E	GROUND ELEV.
BR-1	136+94	CL	786248.43165	1283341.96233	597.9
BR-2	138+24	5' Rt.	786370.078263	1283289.24270	596.8
BR-3	139+75	16' Rt.	786511.36191	1283235.27719	601.9
BR-4	142+00	CL	786708.46986	1283124.67298	594.1
BR-5	143+22	CL	786819.32807	1283072.60594	594.2
CPT-1	136+94	9' Rt.	786255.05510	1283348.74204	597.9
CPT-2	143+22	11' Lt.	786814.69029	1283062.93932	594.2
CPT-2OFF	143+22	9' Lt.	786815.35214	1283064.34332	594.2

NOTES:

BENCHMARKS

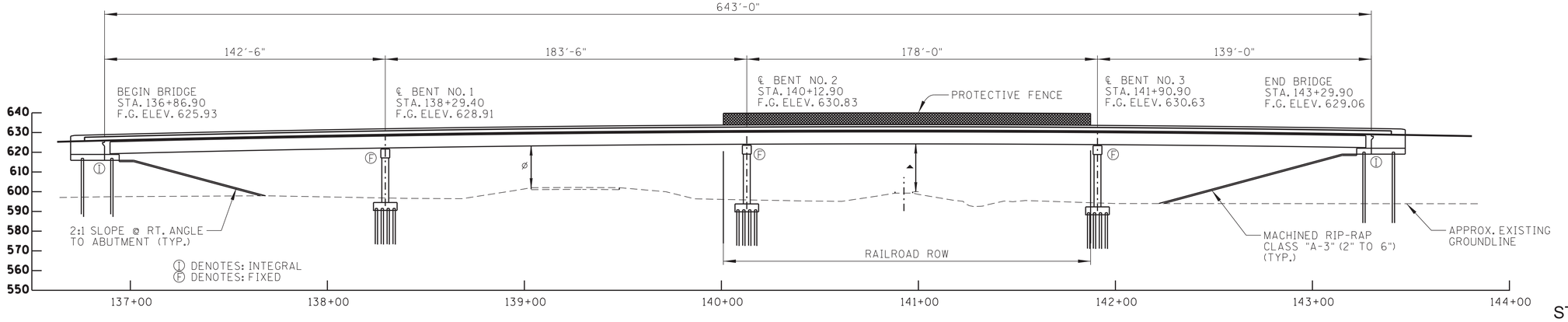
1) XCP S5
   STA. 143+33.04
   OFFSET 278.44' RT
   N 786947.4399 E 1283319.8490
   ELEV. 601.53
   ALUM DISK TDOT GPS#40-054-05

2) XCP S6
   STA. 148+34.33
   OFFSET 597.39' RT.
   N 787536.9515 E 1283394.5749
   ELEV. 602.12
   ALUM DISK TDOT GPS#40-054-06

LEGEND

- BORING LOCATION TERMINATION DEPTH (NO REFUSAL)
- CONE PENETRATION TEST LOCATION

B.T.= BORING TERMINATED
REF.= AUGER REFUSAL



ELEVATION

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

PIN NO.: 101886.05
DESIGN BY: HDR DATE: 03-2025
DRAWN BY: T.R. KIRK DATE: 06-2025
SUPERVISED BY: DJS/GWK(DE) DATE: 03-2025
CHECKED BY: DATE:

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

FOUNDATION DATA
STATE ROUTE 54 (US-641) OVER KWT RAILWAY & EXISTING STATE ROUTE 54
BRIDGE I. D. NO. 40SR0540031
STATION 140+12.90
HENRY COUNTY

U-102-006

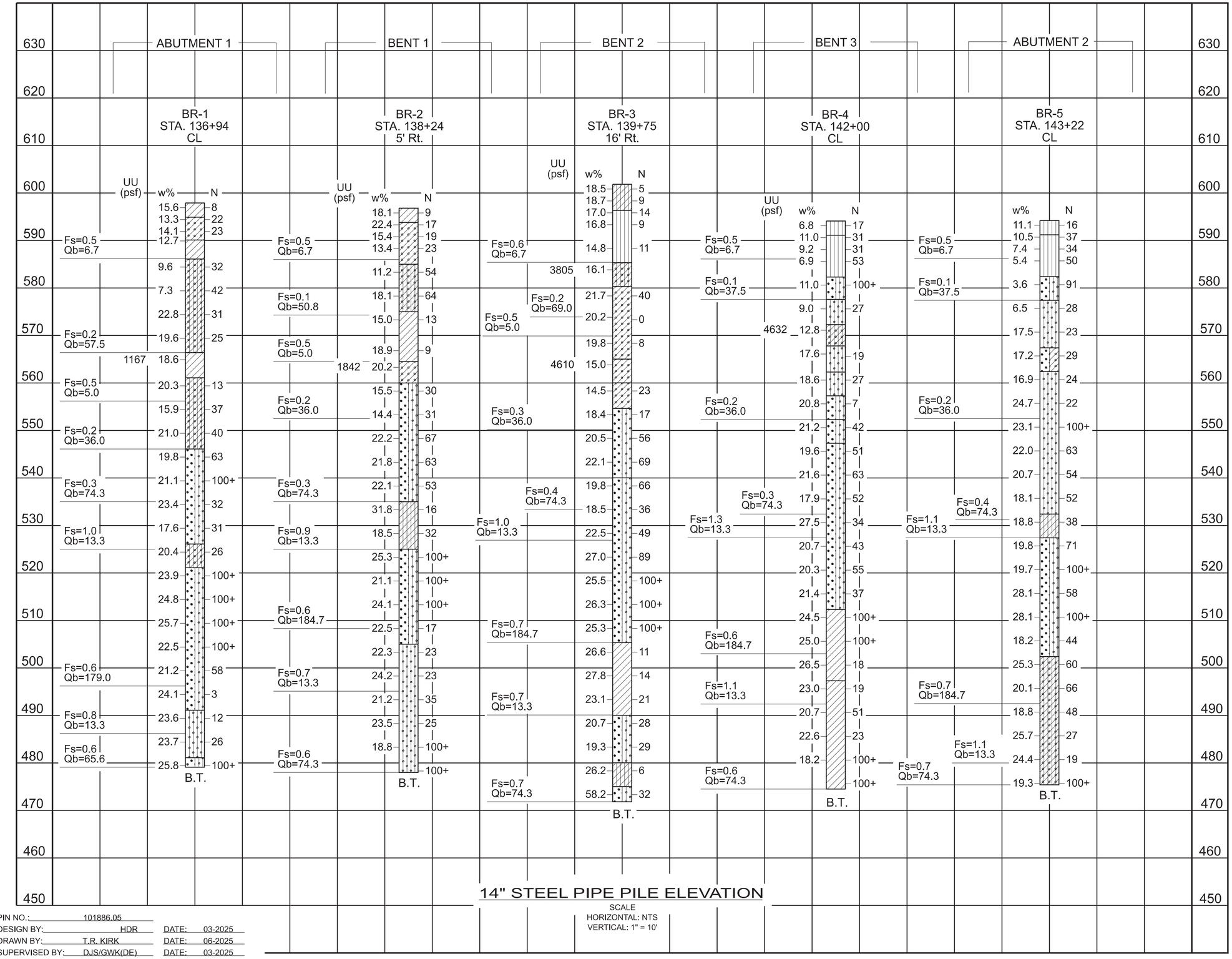
1/22/2026 8:33:09 AM

CONST. NO.: 40S054-F3-004

PROJECT NO.	YEAR	SHEET NO.
NH-54(48)	2026	

REVISIONS

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



14" STEEL PIPE PILE ELEVATION

SCALE
HORIZONTAL: NTS
VERTICAL: 1" = 10'

LEGEND

- LEAN CLAY (TYPE A MATERIAL)
- SILT (TYPE A MATERIAL)
- SILTY CLAY (TYPE A MATERIAL)
- SILTY SAND (TYPE A MATERIAL)
- CLAYEY SAND (TYPE A MATERIAL)
- POORLY GRADED SAND WITH SILT (TYPE A MATERIAL)
- SILTY, CLAYEY SAND (TYPE A MATERIAL)
- POORLY GRADED SAND WITH CLAY (TYPE A MATERIAL)

TYPE MATERIAL-SEE DEFINITION OF EARTHWORK TERMS ON GEOTECHNICAL NOTES AND EST. QTYS. SHEET.

B.T.= BORING TERMINATED
N = PENETRATION RESISTANCE
UU (psf) = UNDRAINED SHEAR STRENGTH
w% = MOISTURE CONTENT
▽ = IMMEDIATE WATER TABLE
▼ = 24 HOUR WATER TABLE
Fs = SIDE FRICTION VALUE FOR INTERVAL (TSF)
Qb = END BEARING FOR LAYER (TSF)

PIN NO.: 101886.05
DESIGN BY: HDR DATE: 03-2025
DRAWN BY: T.R. KIRK DATE: 06-2025
SUPERVISED BY: DJS/GWK(DE) DATE: 03-2025
CHECKED BY: DATE:

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

FOUNDATION DATA
STATE ROUTE 54 (US-641) OVER KWT RAILWAY &
EXISTING STATE ROUTE 54
BRIDGE I. D. NO. 40SR0540031
STATION 140+12.90
HENRY COUNTY

U-102-007

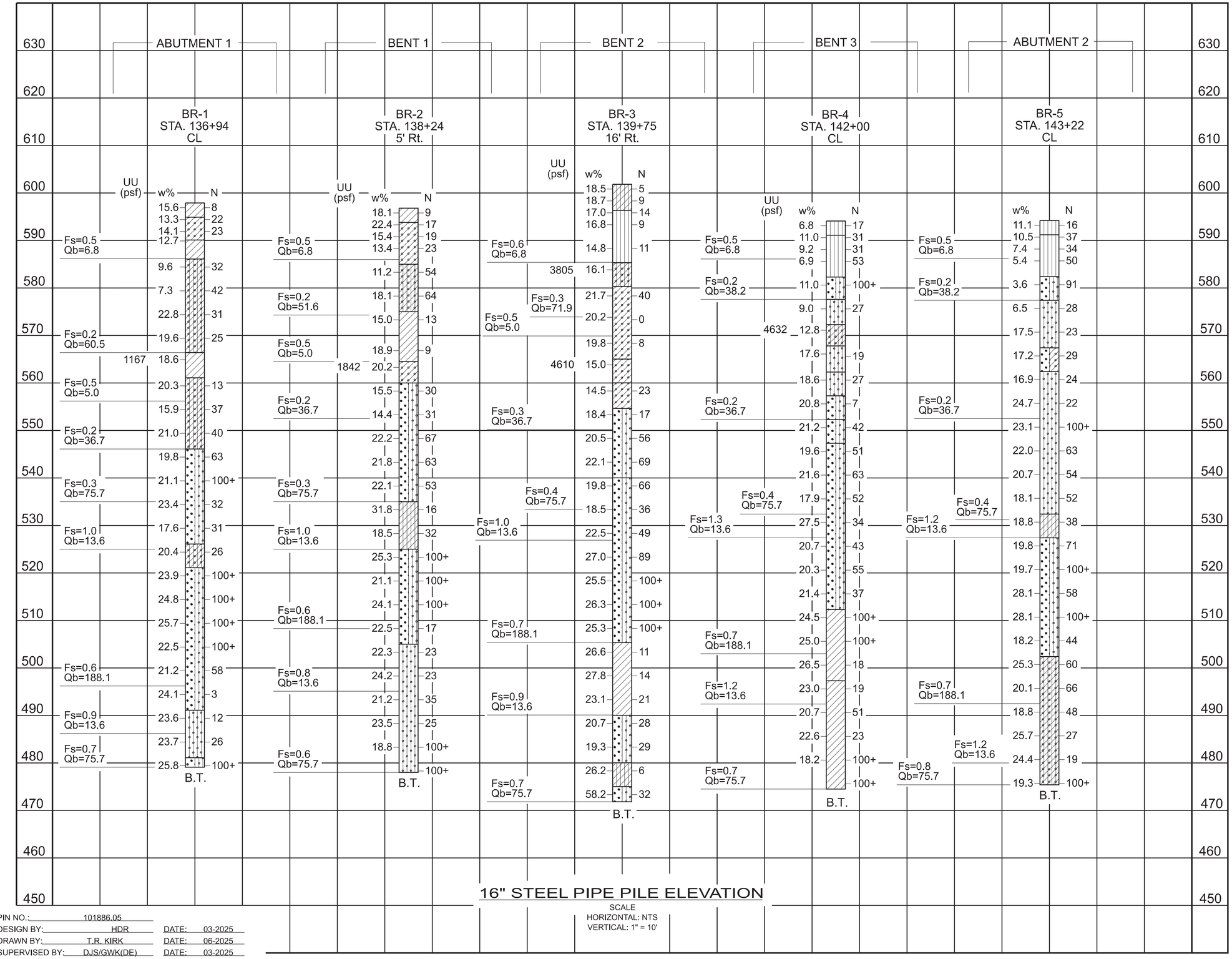
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1/22/2026

CONST. NO.: 40S054-F3-004

PROJECT NO.	YEAR	SHEET NO.
NH-54(48)	2026	

REVISIONS

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



16" STEEL PIPE PILE ELEVATION

SCALE
HORIZONTAL: NTS
VERTICAL: 1" = 10'

LEGEND

- LEAN CLAY (TYPE A MATERIAL)
- SILT (TYPE A MATERIAL)
- SILTY CLAY (TYPE A MATERIAL)
- SILTY SAND (TYPE A MATERIAL)
- CLAYEY SAND (TYPE A MATERIAL)
- POORLY GRADED SAND WITH SILT (TYPE A MATERIAL)
- SILTY, CLAYEY SAND (TYPE A MATERIAL)
- POORLY GRADED SAND WITH CLAY (TYPE A MATERIAL)

TYPE MATERIAL-SEE DEFINITION OF EARTHWORK TERMS ON GEOTECHNICAL NOTES AND EST. QTYS. SHEET.

B.T.= BORING TERMINATED
N = PENETRATION RESISTANCE
UU (psf) = UNDRAINED SHEAR STRENGTH
w% = MOISTURE CONTENT
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Fs = SIDE FRICTION VALUE FOR INTERVAL (TSF)
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PIN NO.: 101886.05

DESIGN BY:	HDR	DATE: 03-2025
DRAWN BY:	T.R. KIRK	DATE: 06-2025
SUPERVISED BY:	DJS/GWK(DE)	DATE: 03-2025
CHECKED BY:		DATE:

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

FOUNDATION DATA
STATE ROUTE 54 (US-641) OVER KWT RAILWAY &
EXISTING STATE ROUTE 54
BRIDGE I. D. NO. 40SR0540031
STATION 140+12.90
HENRY COUNTY

U-102-008

8:36:02 AM
1/22/2026

CONST. NO.: 40S054-F3-004

PROJECT NO.	YEAR	SHEET NO.
NH-54(48)	2026	

REVISIONS

NO.	DATE	BY	BRIEF DESCRIPTION
	- -		
	- -		
	- -		
	- -		
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SUPERSTRUCTURE NOTES:

ALL SLAB CONSTRUCTION JOINTS SHALL BE IN ACCORDANCE WITH THE SLAB CONSTRUCTION JOINT DETAILS SHOWN ON THIS SHEET.

ALL SLAB POURS SHALL BE MADE IN NUMERICAL SEQUENCE. SEE "SLAB POURING SEQUENCE" ON SHEET U-102-011.

THE CONTRACTOR SHALL MAKE ADEQUATE PROVISIONS DURING PLACEMENT OF THE SLAB TO PREVENT THE EXTERIOR GIRDERS FROM TWISTING.

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

NOTE: THE CONCRETE DECK SHALL NOT BE POURED UNTIL ALL STRUCTURAL STEEL IS ERECTED AND ALL WELDING AND/OR BOLTING IS COMPLETE.

DEAD LOAD CORRECTION CURVE: GIRDERS SHALL BE CAMBERED TO COMPENSATE FOR DEAD LOAD DEFLECTION AND VERTICAL CURVE.

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

APPROVAL OF MATERIALS: NO FABRICATION SHALL BE STARTED UNTIL THE MATERIALS INVOLVED HAVE BEEN APPROVED BY THE TENNESSEE DEPARTMENT OF TRANSPORTATION, DIVISION OF MATERIALS AND TESTS WITH A COPY OF THE TEST REPORTS ALSO GOING TO THE TENNESSEE DEPARTMENT OF TRANSPORTATION, DIVISION OF MATERIALS AND TESTS.

IDENTITY OF MAIN MATERIALS: SEE SECTION 602 OF THE STANDARD SPECIFICATIONS.

STRUCTURAL STEEL: SHALL CONFORM TO ASTM A709 GRADE 50W UNLESS OTHERWISE NOTED. ALL STRUCTURAL STEEL FOR GIRDER FLANGES IN TENSION AND ALL WEBS SHALL MEET THE SUPPLEMENTAL REQUIREMENTS FOR LONGITUDINAL CHARPY V-NOTCH TESTS SPECIFIED IN THE ASTM SPECIFICATIONS. ZONE 2 OF NON-FRACTURE CRITICAL CRITERIA SHALL APPLY.

WELDING: AASHTO/AWS D1.5-CURRENT EDITION BRIDGE WELDING CODE AND SECTION 602 OF THE STANDARD SPECIFICATIONS.

FIELD CONNECTIONS: SHALL BE 7/8" ø HIGH TENSILE STRENGTH BOLTS ASTM F3125 GRADE A325 TYPE 3 UNLESS OTHERWISE SHOWN. SEE AASHTO LRFD BRIDGE CONSTRUCTION SPECIFICATIONS ART. 11.3.2 AND SECTION 602 OF THE STANDARD SPECIFICATIONS.

ADDITIONAL SHOP SPLICE NOTE: SHOP SPLICES NECESSARY DUE TO LENGTHS OR SIZE OF MATERIAL INVOLVED MAY BE ADDED BY THE FABRICATOR SUBJECT TO APPROVAL BY THE ENGINEER AND SHALL BE AT NO ADDITIONAL COST TO THE PROJECT.

ADDITIONAL FIELD SPLICE NOTE: FIELD SPLICES NECESSARY DUE TO LENGTHS INVOLVED MAY BE ADDED BY THE FABRICATOR SUBJECT TO APPROVAL BY THE ENGINEER AND SHALL BE AT NO ADDITIONAL COST TO THE PROJECT.

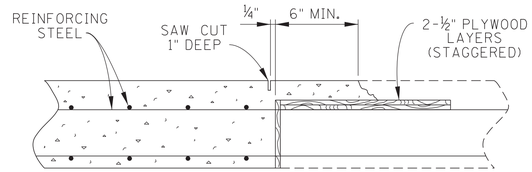
FIELD SPLICE NOTE: FIELD SPLICES SHOWN ON THE PLANS MAY BE DELETED BY THE CONTRACTOR. ADJUSTMENT TO THE LUMP SUM PRICE FOR STEEL STRUCTURES SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS.

STRAIGHT GIRDER ERECTION: GIRDERS MAY HAVE TO BE CRANE-LIFTED, JACKED, NEEDLE-BEAMED, ETC. TO ACHIEVE THE PROPER CROSS-SLOPE AND HOLE ALIGNMENT DURING TRANSVERSE BRACING INSTALLATION. ALL TRANSVERSE BRACING SHALL BE IN PLACE AND ALL BOLTS TENSIONED TO THE PLANS SPECIFIED VALUES PRIOR TO THE SLAB POUR. ALL COSTS OF TRANSVERSE BRACING INSTALLATION TO BE INCLUDED IN THE LUMP SUM COST OF STEEL STRUCTURES.

STRAIGHT GIRDER TRANSVERSE BRACING: STRAIGHT GIRDER TRANSVERSE BRACING, SHALL BE FABRICATED FOR TOTAL CAMBER MINUS GIRDER SELF WEIGHT CAMBER.

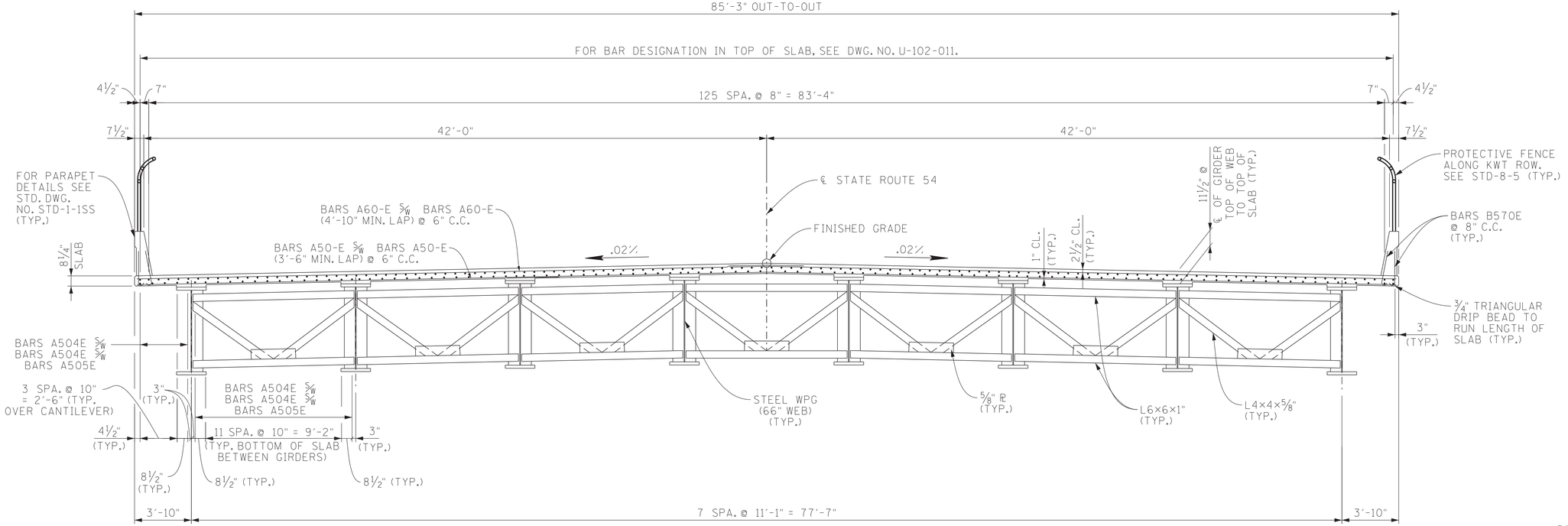
SHEAR CONNECTORS: SHEAR CONNECTOR MATERIAL SHALL BE COLD-DRAWN ASTM A108 GRADE 1015, 1018, OR 1020, EITHER SEMI OR FULLY KILLED, AND HAVE SPECIFIED MINIMUM YIELD AND TENSILE STRENGTHS OF 50 KSI AND 60 KSI, RESPECTIVELY.

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



SLAB CONSTRUCTION JOINT DETAIL

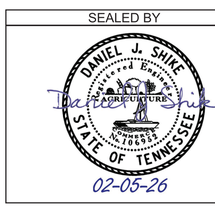
(N.T.S.)



TYPICAL CROSS-SECTION

(LOOKING FORWARD ON SURVEY)

SEALED BY



PIN NO.: 101886.05

DESIGN BY:	JOHN AYERS	DATE: 02-2025
DRAWN BY:	F. BARTON	DATE: 02-2025
SUPERVISED BY:	DJS/GWK(DE)	DATE: 02-2025
CHECKED BY:	SALIM ALSAFFAR	DATE: 05-2025

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

SUPERSTRUCTURE
STATE ROUTE 54 (US-641) OVER KWT RAILWAY & EXISTING STATE ROUTE 54
BRIDGE I. D. NO. 40SR0540031
STATION 140+12.90
HENRY COUNTY

U-102-009

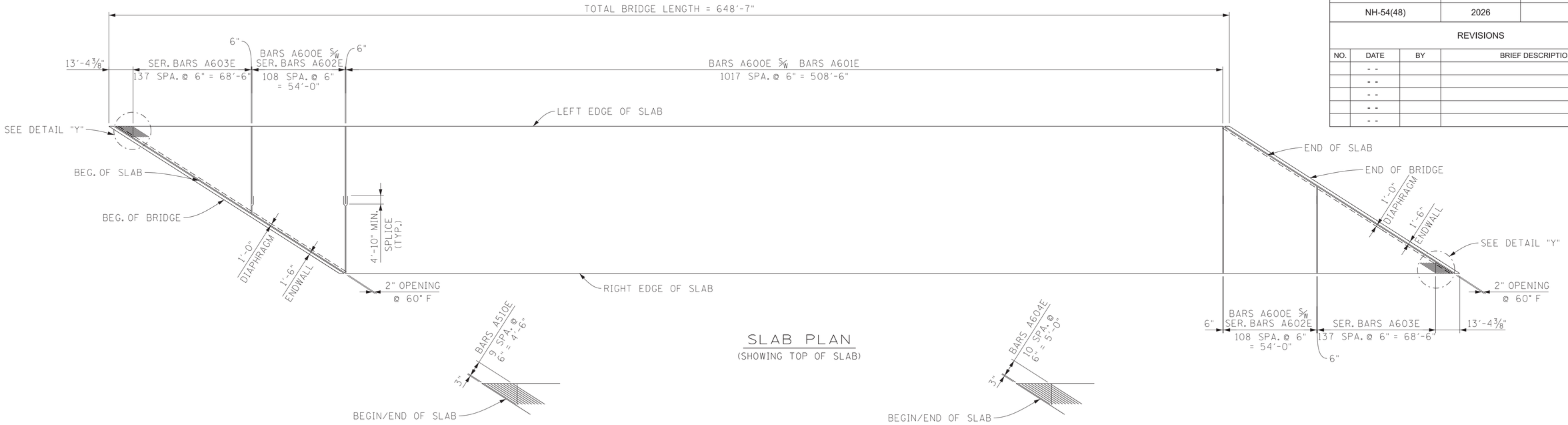
1/14/2026 9:09:58 AM

CONST. NO.: 40S054-F3-004

PROJECT NO.	YEAR	SHEET NO.
NH-54(48)	2026	

REVISIONS

NO.	DATE	BY	BRIEF DESCRIPTION
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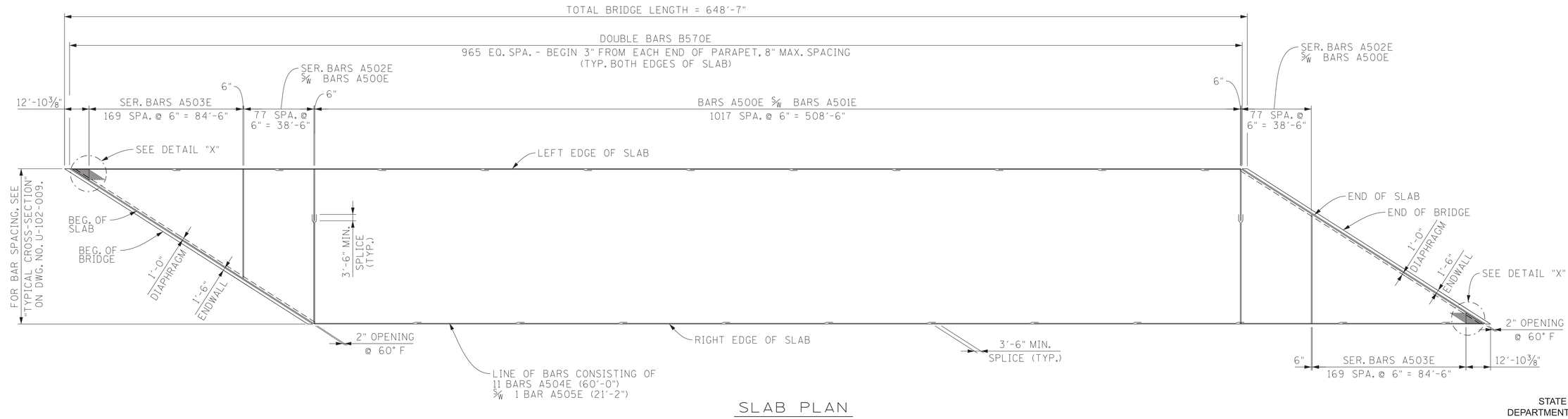
SLAB PLAN
(SHOWING TOP OF SLAB)

DETAIL "X"
(SHOWING BOTTOM OF SLAB)

NOTE: LONGITUDINAL BARS NOT SHOWN FOR CLARITY.

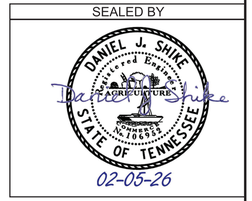
DETAIL "Y"
(SHOWING TOP OF SLAB)

NOTE: LONGITUDINAL BARS NOT SHOWN FOR CLARITY.



SLAB PLAN
(SHOWING BOTTOM OF SLAB)

SEALED BY



PIN NO.:	101886.05	
DESIGN BY:	JOHN AYERS	DATE: 02-2025
DRAWN BY:	F. BARTON	DATE: 02-2025
SUPERVISED BY:	DJS/GWK(DE)	DATE: 02-2025
CHECKED BY:	SALIM ALSAFFAR	DATE: 05-2025

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

SUPERSTRUCTURE DETAILS
STATE ROUTE 54 (US-641) OVER KWT RAILWAY & EXISTING STATE ROUTE 54
BRIDGE I. D. NO. 40SR0540031
STATION 140+12.90
HENRY COUNTY

U-102-010

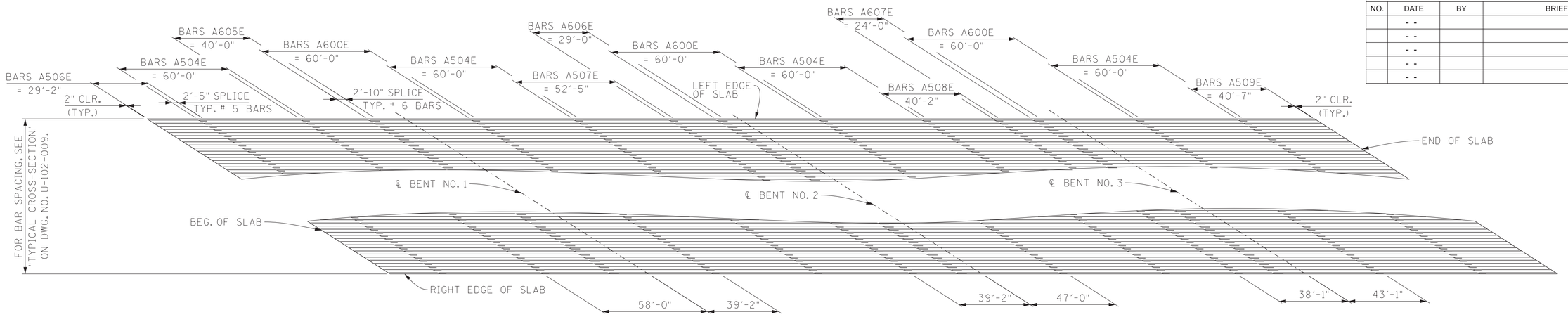
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CONST. NO.: 40S054-F3-004

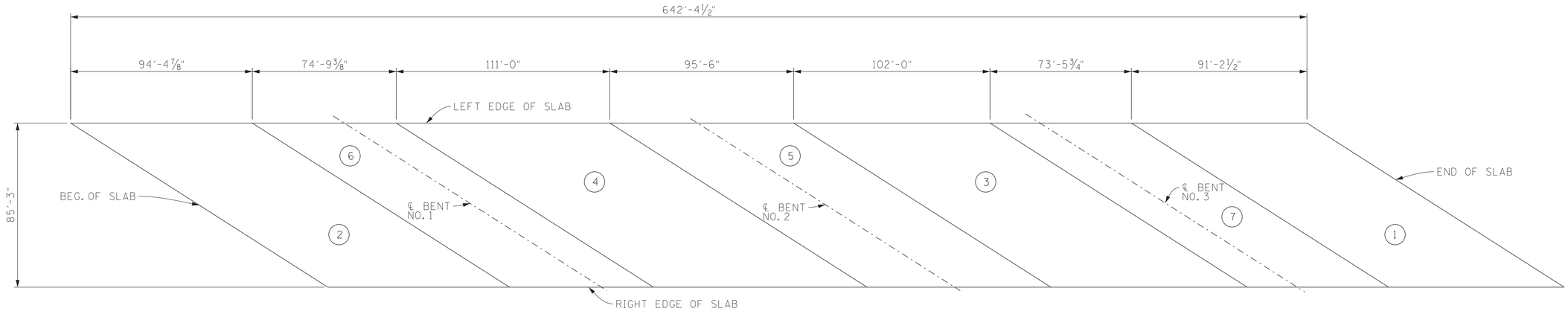
PROJECT NO.	YEAR	SHEET NO.
NH-54(48)	2026	

REVISIONS

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



PLAN OF MAIN REINFORCEMENT



SLAB POURING SEQUENCE

SEALED BY

DANIEL J. SHIKE
LICENSED PROFESSIONAL ENGINEER
AGRICULTURE
No. 104931
STATE OF TENNESSEE

02-05-26

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

SUPERSTRUCTURE DETAILS
STATE ROUTE 54 (US-641) OVER KWT RAILWAY & EXISTING STATE ROUTE 54
BRIDGE I. D. NO. 40SR0540031
STATION 140+12.90
HENRY COUNTY

U-102-011

PIN NO.: 101886.05
DESIGN BY: JOHN AYERS DATE: 02-2025
DRAWN BY: F. BARTON DATE: 02-2025
SUPERVISED BY: DJS/GWK(DE) DATE: 02-2025
CHECKED BY: SALIM ALSAFFAR DATE: 05-2025

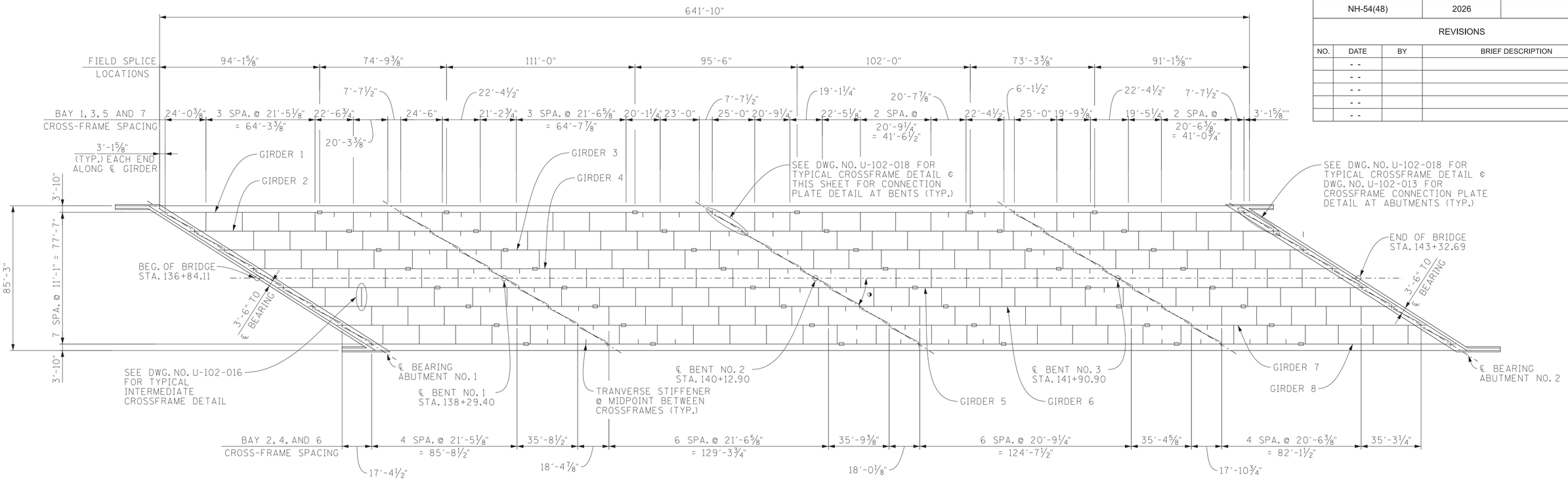
1/14/2026 9:12:13 AM

CONST. NO.: 40S054-F3-004

PROJECT NO.	YEAR	SHEET NO.
NH-54(48)	2026	

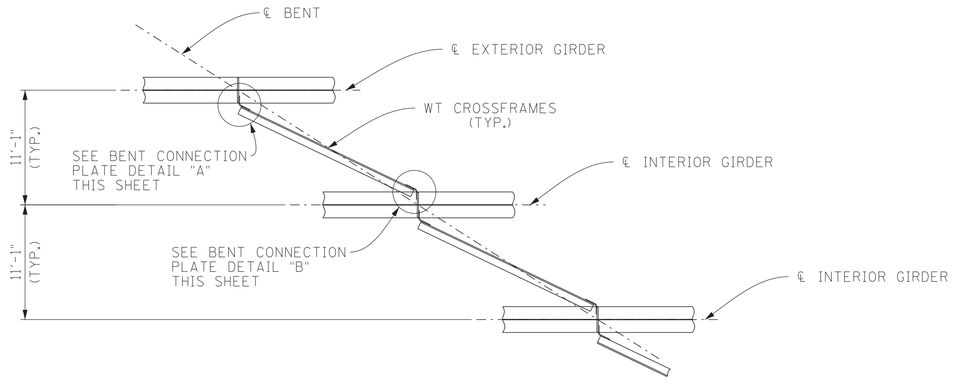
REVISIONS

NO.	DATE	BY	BRIEF DESCRIPTION
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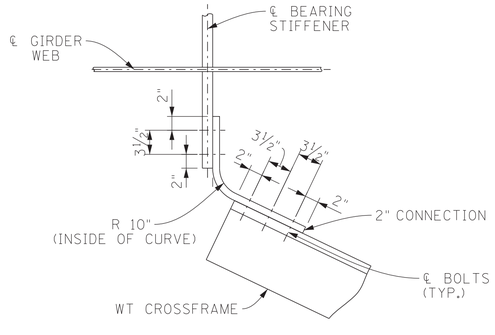


FRAMING PLAN

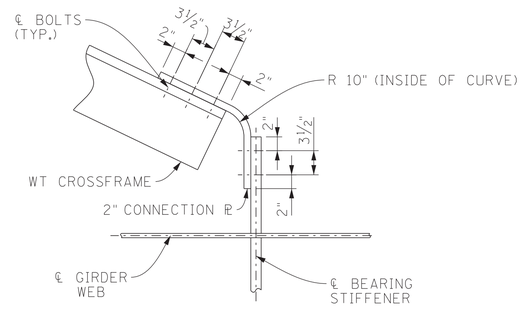
◑ DENOTES: 32°32'02" (TYP.)



CROSSFRAMES AT BENTS SUPPORTS (TYP.)



BENT CONNECTION ℙ
DETAIL "A"



BENT CONNECTION ℙ
DETAIL "B"

SEALED BY

DANIEL J. SHIKE — STATE OF TENNESSEE — REGISTERED ENGINEER — AGRICULTURE — No. 104551

02-05-26

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

SUPERSTRUCTURE DETAILS
STATE ROUTE 54 (US-641) OVER KWT RAILWAY & EXISTING STATE ROUTE 54
BRIDGE I. D. NO. 40SR0540031
STATION 140+12.90
HENRY COUNTY

U-102-012

PIN NO.: 101886.05
DESIGN BY: JOHN AYERS DATE: 02-2025
DRAWN BY: F. BARTON DATE: 02-2025
SUPERVISED BY: DJS/GWK(DE) DATE: 02-2025
CHECKED BY: DATE:

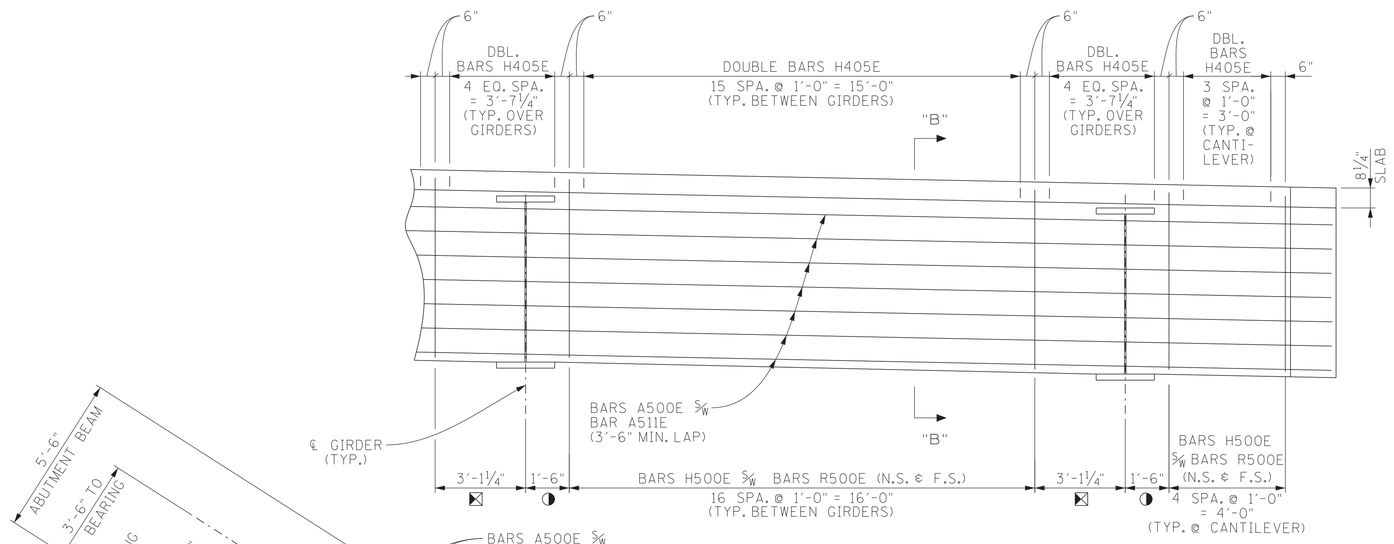
1/14/2026 9:13:16 AM

CONST. NO.: 40S054-F3-004

PROJECT NO.	YEAR	SHEET NO.
NH-54(48)	2026	

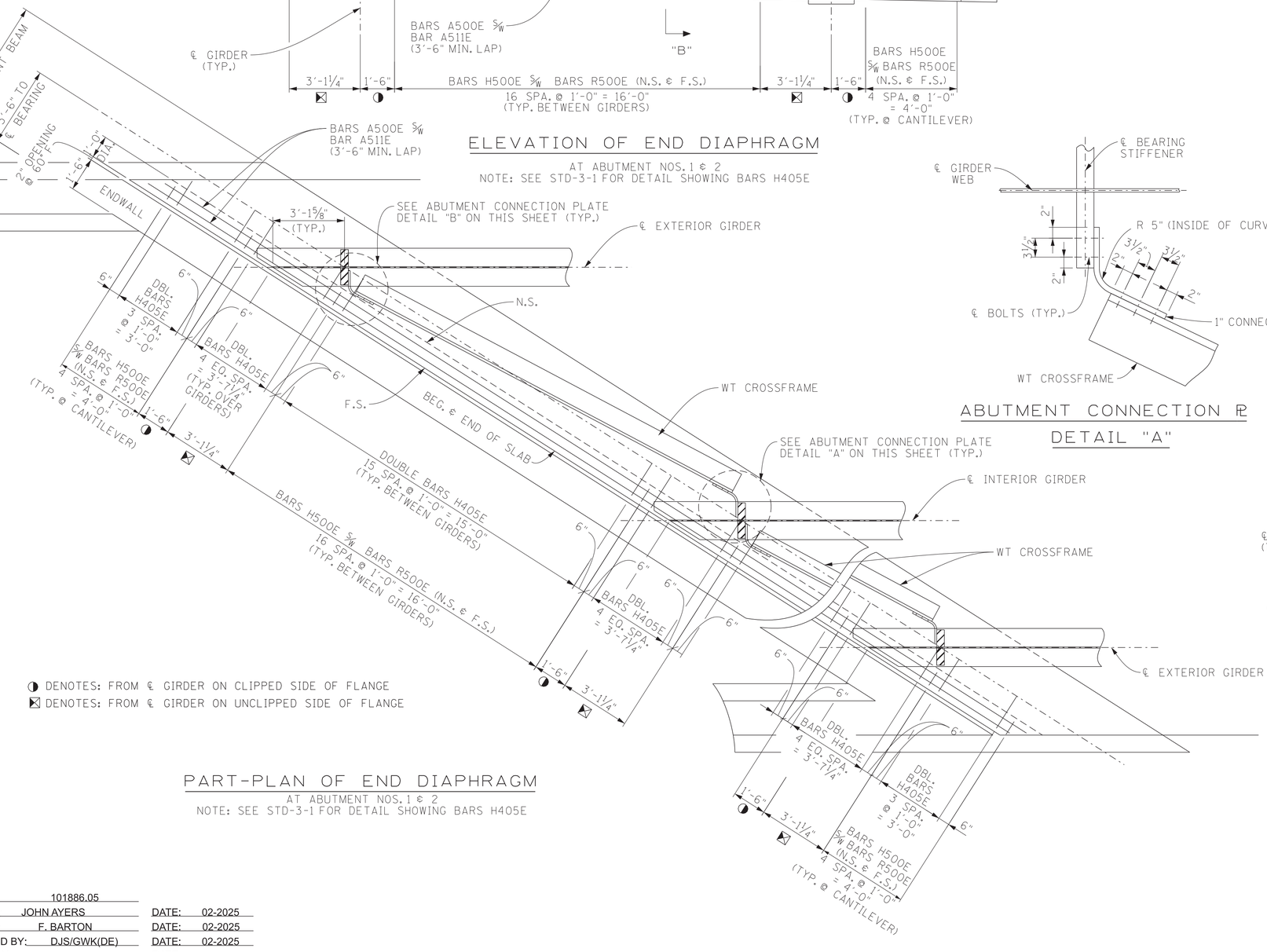
REVISIONS

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



ELEVATION OF END DIAPHRAGM

AT ABUTMENT NOS. 1 & 2
NOTE: SEE STD-3-1 FOR DETAIL SHOWING BARS H405E

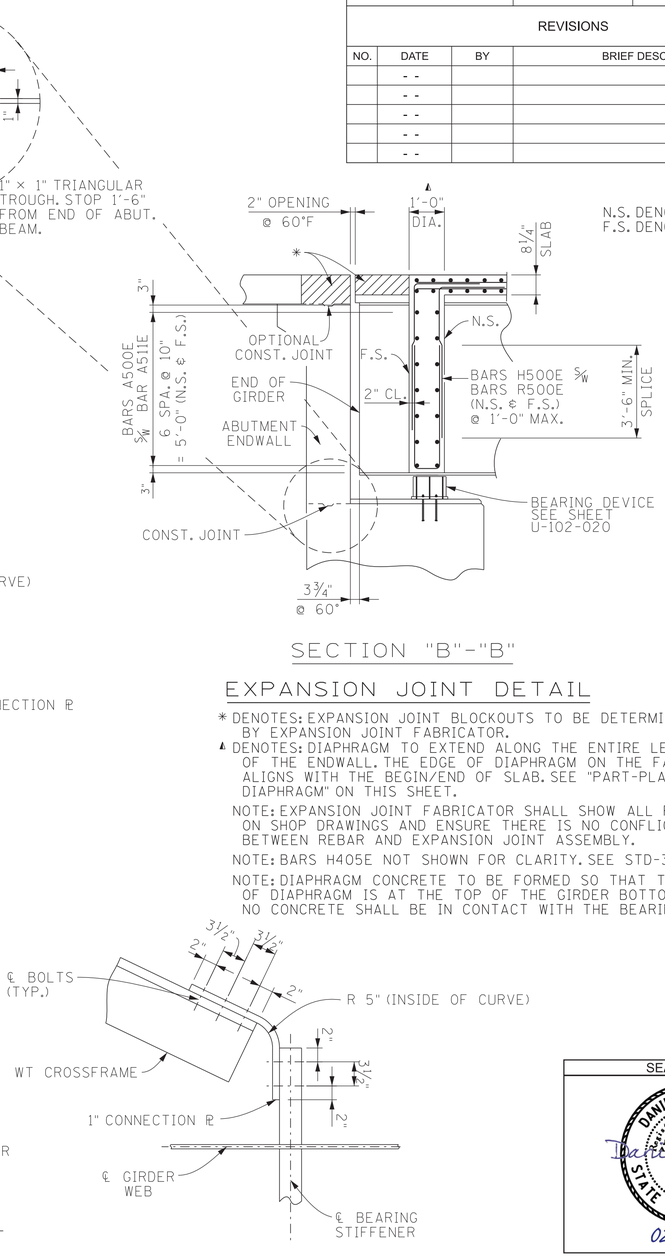


◑ DENOTES: FROM ℄ GIRDER ON CLIPPED SIDE OF FLANGE
⊠ DENOTES: FROM ℄ GIRDER ON UNCLIPPED SIDE OF FLANGE

PART-PLAN OF END DIAPHRAGM

AT ABUTMENT NOS. 1 & 2
NOTE: SEE STD-3-1 FOR DETAIL SHOWING BARS H405E

ABUTMENT CONNECTION ℞
DETAIL "A"



N.S. DENOTES: NEAR SIDE
F.S. DENOTES: FAR SIDE

SECTION "B"-"B"

EXPANSION JOINT DETAIL

* DENOTES: EXPANSION JOINT BLOCKOUTS TO BE DETERMINED BY EXPANSION JOINT FABRICATOR.
▲ DENOTES: DIAPHRAGM TO EXTEND ALONG THE ENTIRE LENGTH OF THE ENDWALL. THE EDGE OF DIAPHRAGM ON THE FAR SIDE ALIGNS WITH THE BEGIN/END OF SLAB. SEE "PART-PLAN OF END DIAPHRAGM" ON THIS SHEET.

NOTE: EXPANSION JOINT FABRICATOR SHALL SHOW ALL REBAR ON SHOP DRAWINGS AND ENSURE THERE IS NO CONFLICT BETWEEN REBAR AND EXPANSION JOINT ASSEMBLY.

NOTE: BARS H405E NOT SHOWN FOR CLARITY. SEE STD-3-1 FOR DETAILS.

NOTE: DIAPHRAGM CONCRETE TO BE FORMED SO THAT THE BOTTOM OF DIAPHRAGM IS AT THE TOP OF THE GIRDER BOTTOM FLANGE. NO CONCRETE SHALL BE IN CONTACT WITH THE BEARING DEVICE.

ABUTMENT CONNECTION ℞
DETAIL "B"

SEALED BY

DANIEL J. SHIKE — Licensed Engineer — STATE OF TENNESSEE
02-05-26

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

SUPERSTRUCTURE DETAILS
STATE ROUTE 54 (US-641) OVER KWT RAILWAY & EXISTING STATE ROUTE 54
BRIDGE I. D. NO. 40SR0540031
STATION 140+12.90
HENRY COUNTY

U-102-013

PIN NO.: 101886.05
DESIGN BY: JOHN AYERS DATE: 02-2025
DRAWN BY: F. BARTON DATE: 02-2025
SUPERVISED BY: DJS/GWK(DE) DATE: 02-2025
CHECKED BY: DATE:

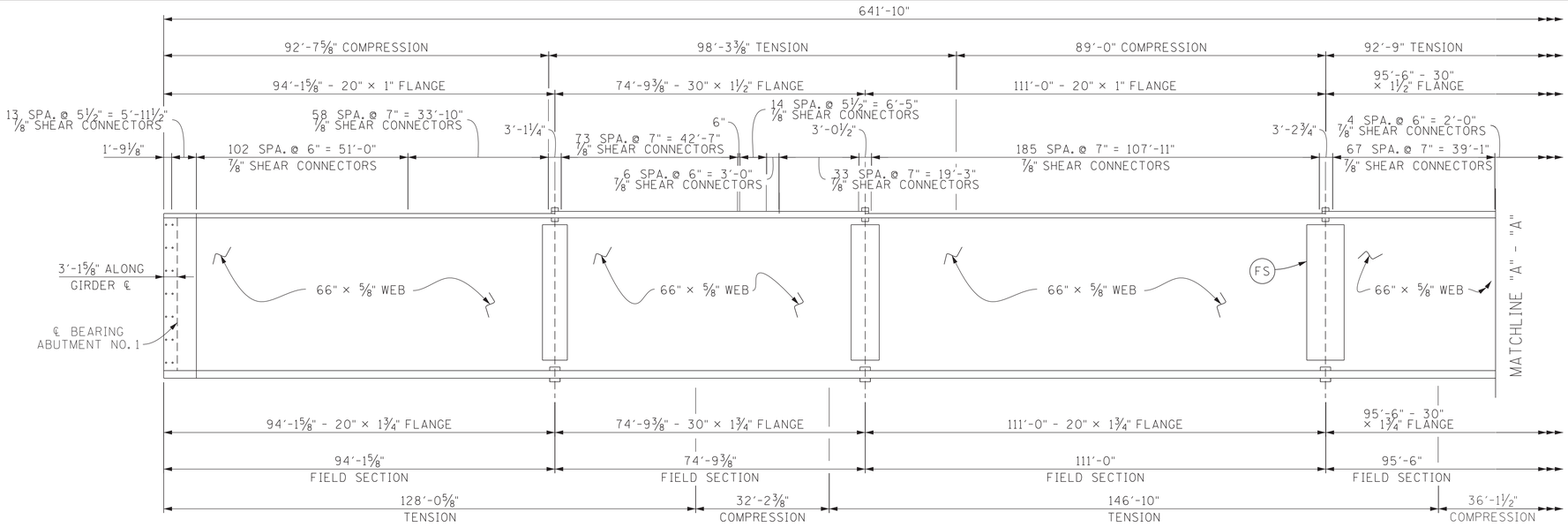
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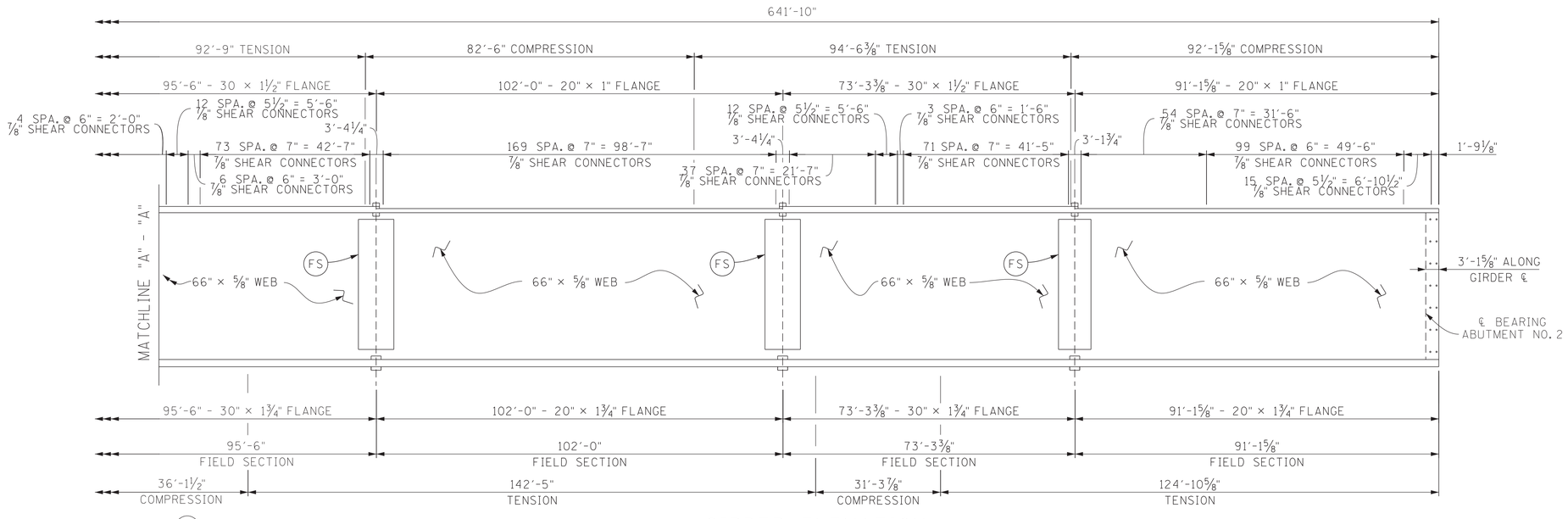
CONST. NO.: 40S054-F3-004

PROJECT NO.	YEAR	SHEET NO.
NH-54(48)	2026	

REVISIONS

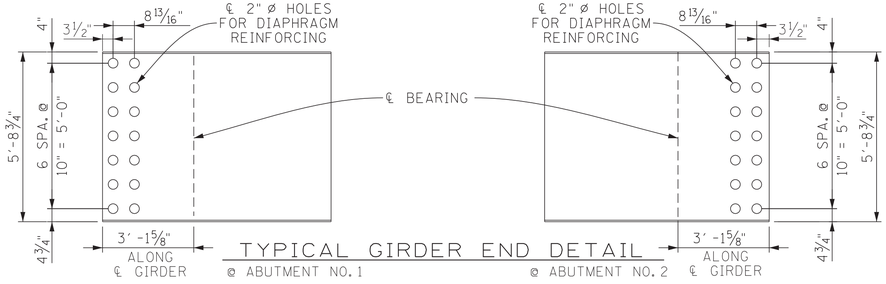
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	- -		
	- -		
	- -		
	- -		



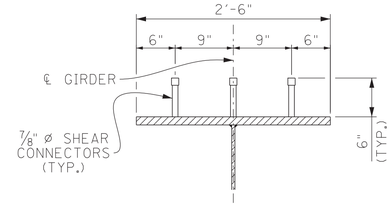


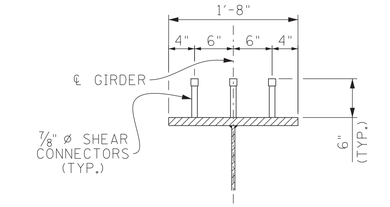
(FS) DENOTES: FOR FIELD SPLICE DETAILS SEE DWG. NO. U-102-017.

GIRDER ELEVATION

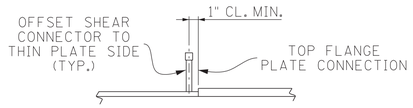


TYPICAL GIRDER END DETAIL

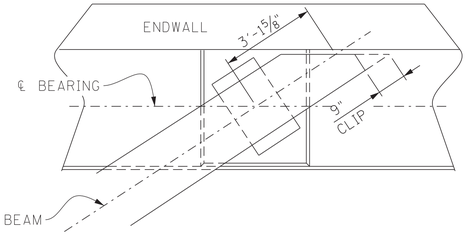




SHEAR CONNECTOR DETAIL



DETAIL "Z"
(TYP. AS REQUIRED)



GIRDER EXTENSION DETAIL
ABUTMENT NOS. 1 AND 2

SEALED BY



PIN NO.:	101886.05	
DESIGN BY:	JOHN AYERS	DATE: 02-2025
DRAWN BY:	RODNEY CHANDLER	DATE: 03-2025
SUPERVISED BY:	DJS/GWK(DE)	DATE: 02-2025
CHECKED BY:	SALIM ALSAFFAR	DATE: 05-2025

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

GIRDER NOS. 1 THRU 8
STATE ROUTE 54 (US-641) OVER KWT RAILWAY & EXISTING STATE ROUTE 54
BRIDGE I. D. NO. 40SR0540031
STATION 140+12.90
HENRY COUNTY

U-102-014

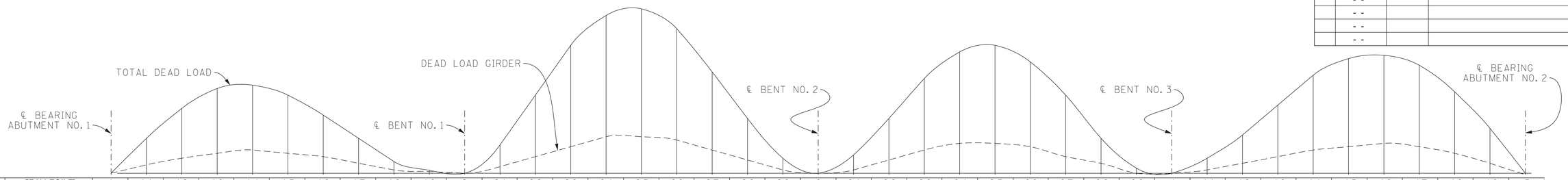
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CONST. NO.: 40S054-F3-004

PROJECT NO.	YEAR	SHEET NO.
NH-54(48)	2026	

REVISIONS

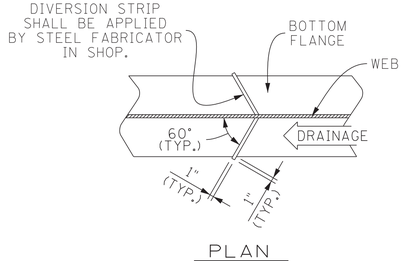
NO.	DATE	BY	BRIEF DESCRIPTION
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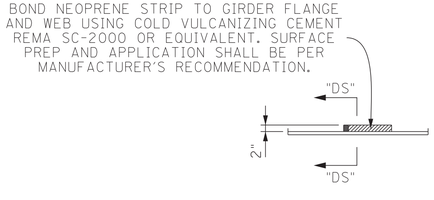
GIRDER																																							
NO. 1	SPAN POINT	1	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2	2.1	2.2	2.3	2.4	2.5	2.6	2.7	2.8	2.9	3	3.1	3.2	3.3	3.4	3.5	3.6	3.7	3.8	3.9	4	4.1	4.2	4.3	4.4	4.5	4.6	4.7	4.8	4.9	5
	DEAD LOAD GIRDER	0	1/4	3/8	9/16	9/16	9/16	1/2	3/8	3/16	1/16	0	1/16	3/16	3/8	9/16	11/16	11/16	1/2	5/16	1/8	0	1/16	3/16	5/16	1/2	9/16	9/16	7/16	1/4	1/8	0	0	1/16	3/16	5/16	3/8	3/8	3/8	5/16	3/16	0
	TOTAL DEAD LOAD	0	15/16	1 11/16	2 1/4	2 7/16	2 3/8	2	1 7/16	13/16	5/16	0	1/4	15/16	1 7/8	2 5/8	3 1/16	2 15/16	2 5/16	1 7/16	9/16	0	1/8	11/16	1 3/8	2 1/16	2 7/16	2 3/8	1 7/8	1 3/16	7/16	0	1/16	5/16	11/16	1 1/8	1 1/2	1 5/8	1 9/16	1 3/16	11/16	0
GIRDER	SPAN POINT	1	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2	2.1	2.2	2.3	2.4	2.5	2.6	2.7	2.8	2.9	3	3.1	3.2	3.3	3.4	3.5	3.6	3.7	3.8	3.9	4	4.1	4.2	4.3	4.4	4.5	4.6	4.7	4.8	4.9	5
NO. 2	DEAD LOAD GIRDER	0	3/16	3/8	1/2	1/2	1/2	7/16	5/16	3/16	1/16	0	1/16	1/4	7/16	9/16	5/8	5/8	1/2	1/4	1/8	0	1/16	3/16	3/8	1/2	9/16	1/2	3/8	1/4	1/16	0	1/16	1/8	3/16	5/16	3/8	3/8	3/8	5/16	1/8	0
	TOTAL DEAD LOAD	0	7/8	1 9/16	2 1/16	2 1/4	2 1/8	1 3/4	1 3/16	5/8	3/16	0	3/8	1 1/8	2	2 3/4	3	2 13/16	2 3/16	1 5/16	7/16	0	1/4	13/16	1 9/16	2 1/8	2 7/16	2 5/16	1 13/16	1 1/16	3/8	0	1/8	7/16	7/8	1 1/4	1 9/16	1 11/16	1 5/8	1 1/4	11/16	0
GIRDER	SPAN POINT	1	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2	2.1	2.2	2.3	2.4	2.5	2.6	2.7	2.8	2.9	3	3.1	3.2	3.3	3.4	3.5	3.6	3.7	3.8	3.9	4	4.1	4.2	4.3	4.4	4.5	4.6	4.7	4.8	4.9	5
NO. 3	DEAD LOAD GIRDER	0	3/16	5/16	7/16	1/2	7/16	3/8	1/4	1/8	1/16	0	1/16	1/4	7/16	9/16	5/8	5/8	7/16	1/4	1/8	0	1/16	3/16	3/8	1/2	9/16	1/2	3/8	3/16	1/16	0	1/16	1/8	1/4	5/16	3/8	7/16	3/8	5/16	3/16	0
	TOTAL DEAD LOAD	0	13/16	1 1/2	1 15/16	2 1/8	2	1 5/8	1 1/8	5/8	3/16	0	3/8	1 1/8	2 1/16	2 3/4	3 1/16	2 13/16	2 3/16	1 5/16	7/16	0	1/4	7/8	1 9/16	2 3/16	2 7/16	2 5/16	1 13/16	1 1/16	3/8	0	1/8	7/16	15/16	1 3/8	1 11/16	1 13/16	1 11/16	1 5/16	11/16	0
GIRDER	SPAN POINT	1	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2	2.1	2.2	2.3	2.4	2.5	2.6	2.7	2.8	2.9	3	3.1	3.2	3.3	3.4	3.5	3.6	3.7	3.8	3.9	4	4.1	4.2	4.3	4.4	4.5	4.6	4.7	4.8	4.9	5
NO. 4	DEAD LOAD GIRDER	0	3/16	5/16	7/16	7/16	7/16	3/8	1/4	1/8	1/16	0	1/16	1/4	7/16	9/16	5/8	9/16	7/16	1/4	1/16	0	1/16	3/16	3/8	1/2	9/16	1/2	3/8	3/16	1/16	0	1/16	1/8	1/4	5/16	3/8	7/16	3/8	5/16	3/16	0
	TOTAL DEAD LOAD	0	13/16	1 1/2	1 7/8	2 1/16	1 15/16	1 9/16	1 1/16	1/2	1/8	0	7/16	1 1/4	2 1/8	2 13/16	3 1/16	2 13/16	2 1/8	1 1/4	7/16	0	1/4	7/8	1 5/8	2 1/4	2 1/2	2 5/16	1 3/4	1	5/16	0	3/16	9/16	1	1 7/16	1 3/4	1 7/8	1 3/4	1 5/16	3/4	0
GIRDER	SPAN POINT	1	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2	2.1	2.2	2.3	2.4	2.5	2.6	2.7	2.8	2.9	3	3.1	3.2	3.3	3.4	3.5	3.6	3.7	3.8	3.9	4	4.1	4.2	4.3	4.4	4.5	4.6	4.7	4.8	4.9	5
NO. 5	DEAD LOAD GIRDER	0	3/16	5/16	7/16	7/16	7/16	3/8	1/4	1/8	1/16	0	1/16	1/4	7/16	9/16	5/8	9/16	7/16	1/4	1/16	0	1/16	3/16	3/8	1/2	9/16	1/2	3/8	3/16	1/16	0	1/16	1/8	1/4	5/16	7/16	7/16	3/8	5/16	3/16	0
	TOTAL DEAD LOAD	0	13/16	1 7/16	1 7/8	2	1 7/8	1 1/2	1	1/2	1/8	0	7/16	1 1/4	2 3/16	2 13/16	3 1/16	2 13/16	2 1/8	1 1/4	7/16	0	1/4	7/8	1 5/8	2 1/4	2 7/16	2 5/16	1 3/4	1	5/16	0	1/8	9/16	1	1 1/2	1 13/16	1 15/16	1 3/4	1 3/8	3/4	0
GIRDER	SPAN POINT	1	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2	2.1	2.2	2.3	2.4	2.5	2.6	2.7	2.8	2.9	3	3.1	3.2	3.3	3.4	3.5	3.6	3.7	3.8	3.9	4	4.1	4.2	4.3	4.4	4.5	4.6	4.7	4.8	4.9	5
NO. 6	DEAD LOAD GIRDER	0	3/16	5/16	3/8	7/16	7/16	5/16	1/4	1/8	0	0	1/16	1/4	7/16	5/8	5/8	5/8	7/16	1/4	1/16	0	1/16	3/16	3/8	1/2	9/16	1/2	3/8	3/16	1/16	0	1/16	1/8	1/4	3/8	7/16	7/16	7/16	5/16	3/16	0
	TOTAL DEAD LOAD	0	3/4	1 3/8	1 3/4	1 7/8	1 3/4	1 3/8	15/16	7/16	1/16	0	1/2	1 5/16	2 3/16	2 7/8	3 1/16	2 13/16	2 1/16	1 3/16	3/8	0	5/16	15/16	1 11/16	2 1/4	2 7/16	2 1/4	1 11/16	15/16	1/4	0	3/16	5/8	1 1/16	1 9/16	1 7/8	2	1 13/16	1 3/8	3/4	0
GIRDER	SPAN POINT	1	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2	2.1	2.2	2.3	2.4	2.5	2.6	2.7	2.8	2.9	3	3.1	3.2	3.3	3.4	3.5	3.6	3.7	3.8	3.9	4	4.1	4.2	4.3	4.4	4.5	4.6	4.7	4.8	4.9	5
NO. 7	DEAD LOAD GIRDER	0	3/4	1 5/16	1 11/16	1 13/16	1 5/8	1 5/16	7/8	3/8	1/16	0	1/2	1 3/8	2 1/4	2 7/8	3 1/16	2 3/4	2 1/16	1 3/16	3/8	0	5/16	15/16	1 11/16	2 1/4	2 7/16	2 3/16	1 5/8	7/8	1/4	0	3/16	5/8	1 1/8	1 5/8	1 15/16	2 1/16	1 7/8	1 7/16	13/16	0
	TOTAL DEAD LOAD	0	3/4	1 3/8	1 3/4	1 7/8	1 3/4	1 3/8	15/16	7/16	1/16	0	1/2	1 5/16	2 3/16	2 7/8	3 1/16	2 13/16	2 1/16	1 3/16	3/8	0	5/16	15/16	1 11/16	2 1/4	2 7/16	2 1/4	1 11/16	15/16	1/4	0	3/16	5/8	1 1/16	1 9/16	1 7/8	2	1 13/16	1 3/8	3/4	0
GIRDER	SPAN POINT	1	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2	2.1	2.2	2.3	2.4	2.5	2.6	2.7	2.8	2.9	3	3.1	3.2	3.3	3.4	3.5	3.6	3.7	3.8	3.9	4	4.1	4.2	4.3	4.4	4.5	4.6	4.7	4.8	4.9	5
NO. 8	DEAD LOAD GIRDER	0	3/16	5/16	3/8	7/16	3/8	5/16	3/16	1/16	0	0	1/8	5/16	1/2	11/16	11/16	5/8	7/16	1/4	1/16	0	1/16	1/4	7/16	9/16	9/16	1/2	5/16	3/16	0	0	1/16	3/16	5/16	7/16	1/2	9/16	1/2	3/8	3/16	0
	TOTAL DEAD LOAD	0	11/16	1 1/4	1 5/8	1 11/16	1 1/2	1 1/8	11/16	1/4	0	0	9/16	1 1/2	2 7/16	3	3 1/8	2 3/4	1 15/16	1 1/16	5/16	0	3/8	1 1/16	1 13/16	2 5/16	2 7/16	2 1/8	1 1/2	11/16	1/8	0	5/16	3/4	1 5/16	1 7/8	2 3/16	2 1/4	2 1/16	1 9/16	7/8	0

DEAD LOAD CORRECTION CURVE ORDINATES (INCHES)

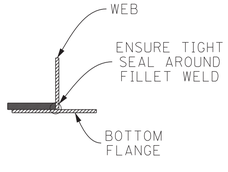
NOTE: DIAGRAMS OF CURVES ARE CONCEPTUAL IN NATURE AND DO NOT NECESSARILY REPRESENT THE DEAD LOAD CORRECTION CURVES OF ANY PARTICULAR GIRDER. ACTUAL ORDINATES IN TABLES SHOULD BE USED.



PLAN



ELEVATION



SECTION "DS"-"DS"

DIVERSION STRIP DETAILS

NOTE: NEOPRENE DIVERSION STRIPS SHALL BE LOCATED ON BOTH SIDES OF THE WEB OF ALL GIRDERS. THE STRIPS SHALL BE PLACED NEAR THE LOW END OF ALL SPANS. THE STRIPS SHALL BE LOCATED FIVE (5'-0") FEET FROM THE FACE OF CONCRETE OR 1'-0" FROM EDGE OF PAINT WHICHEVER IS FURTHER AND SHALL BE SLOPED TOWARD THE END OF THE GIRDER AS SHOWN IN PLAN VIEW.

SEALED BY



PIN NO.: 101886.05
DESIGN BY: JOHN AYERS DATE: 02-2025
DRAWN BY: RODNEY CHANDLER DATE: 03-2025
SUPERVISED BY: DJS/GWK(DE) DATE: 02-2025
CHECKED BY: SALIM ALSAFFAR DATE: 05-2025

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

GIRDER NO. 1 THRU 8 - CONTINUED
STATE ROUTE 54 (US-641) OVER KWT RAILWAY & EXISTING STATE ROUTE 54
BRIDGE I. D. NO. 40SR0540031
STATION 140+12.90
HENRY COUNTY

U-102-015

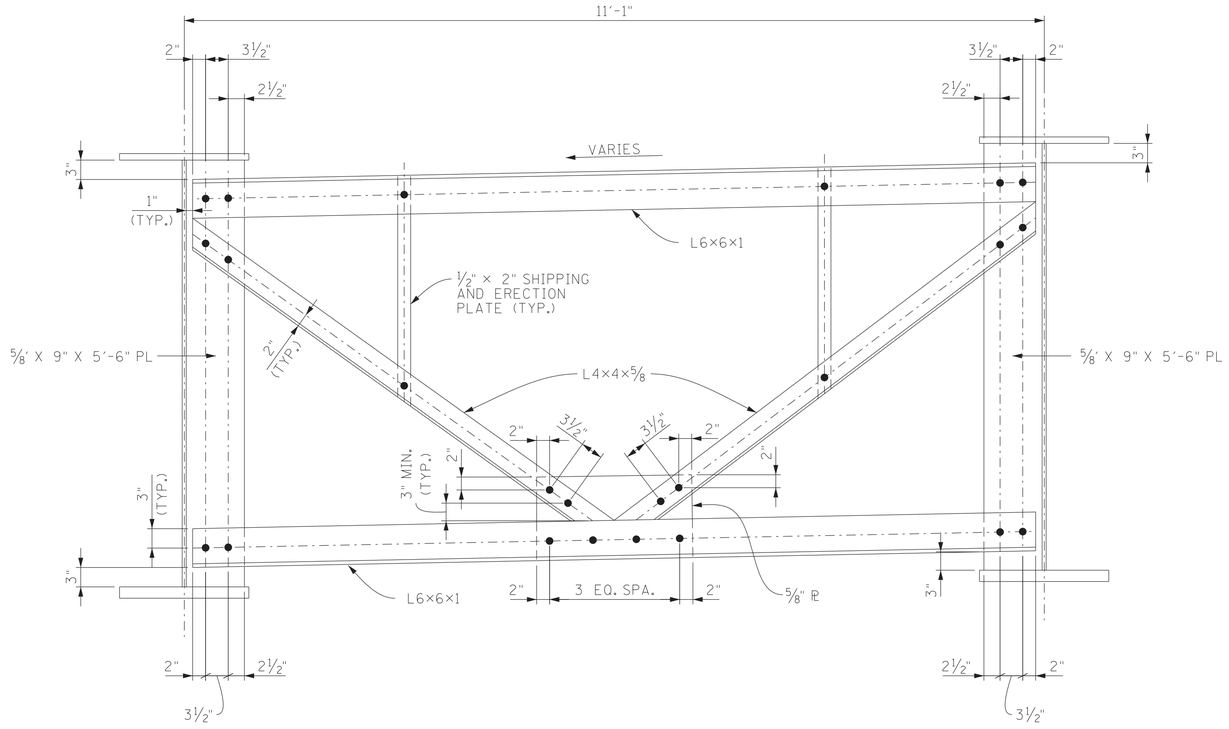
1/14/2026 10:13:00 AM

CONST. NO.: 40S054-F3-004

PROJECT NO.	YEAR	SHEET NO.
NH-54(48)	2026	

REVISIONS

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



TYPICAL INTERMEDIATE CROSS-FRAME DETAIL

1"ø F3125 GRADE A490 TYPE 3 BOLTS

SEALED BY

DANIEL J. SHIKE
REGISTERED ENGINEER
AGRICULTURE
No. 109938
STATE OF TENNESSEE

02-05-26

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

INTERMEDIATE CROSS-FRAME DETAIL
STATE ROUTE 54 (US-641) OVER KWT RAILWAY & EXISTING STATE ROUTE 54
BRIDGE I. D. NO. 40SR0540031
STATION 140+12.90
HENRY COUNTY

U-102-016

PIN NO.: 101886.05
DESIGN BY: JOHN AYERS DATE: 04-2025
DRAWN BY: J. STEVENS DATE: 05-2025
SUPERVISED BY: DJS/GWK(DE) DATE: 04-2025
CHECKED BY: SALIM ALSAFFAR DATE: 05-2025

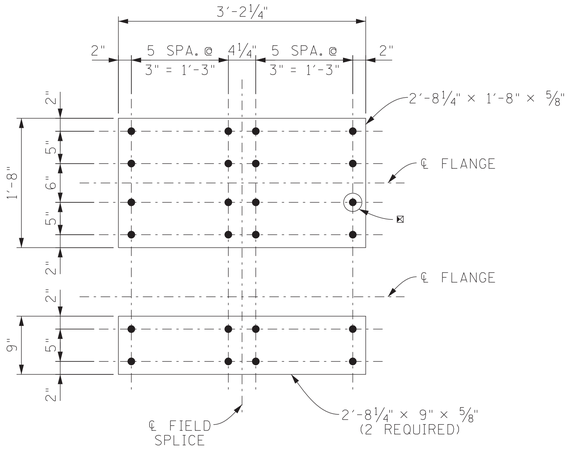
1/22/2026 8:07:42 AM

CONST. NO.: 40S054-F3-004

PROJECT NO.	YEAR	SHEET NO.
NH-54(48)	2026	

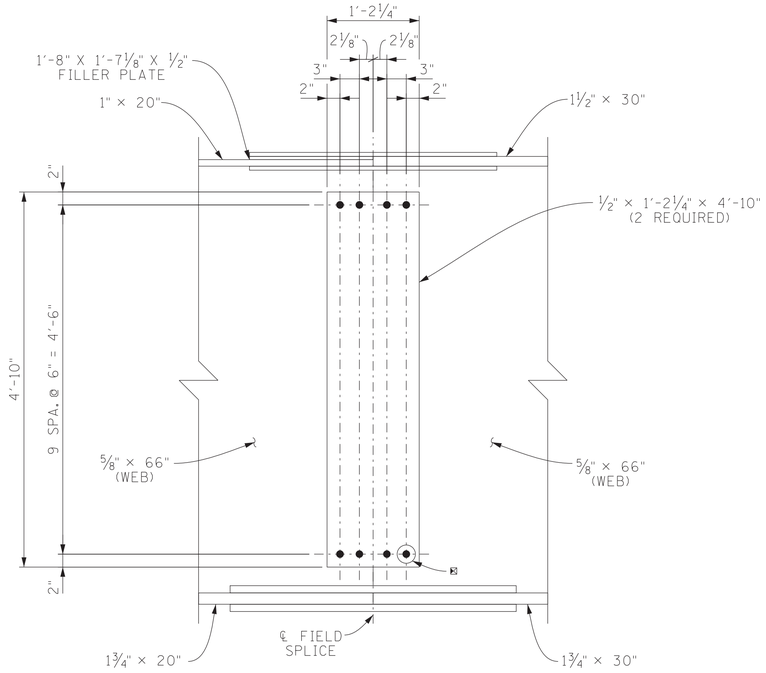
REVISIONS

NO.	DATE	BY	BRIEF DESCRIPTION
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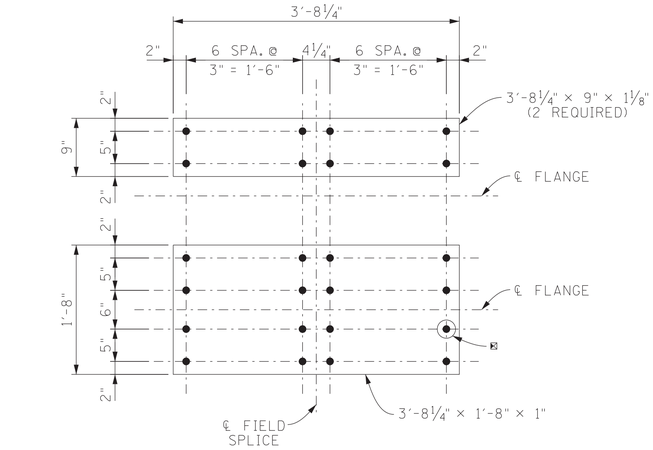


PLAN OF TOP FLANGE SPLICE PLATES

1′-8" X 1′-7⅛" X ½" FILLER PLATE (TYP.)



ELEVATION OF WEB SPLICE PLATE



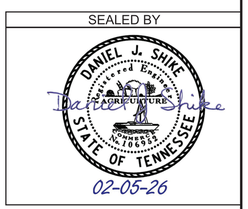
PLAN OF BOTTOM FLANGE SPLICE PLATES

SPLICE PLATE DETAILS

SPLICE WEIGHT = 1,167

☒ NOTE: ALL BOLTED FIELD SPLICES - SHALL USE ⅞"ø A325 BOLTS.

SEALED BY



PIN NO.: 101886.05

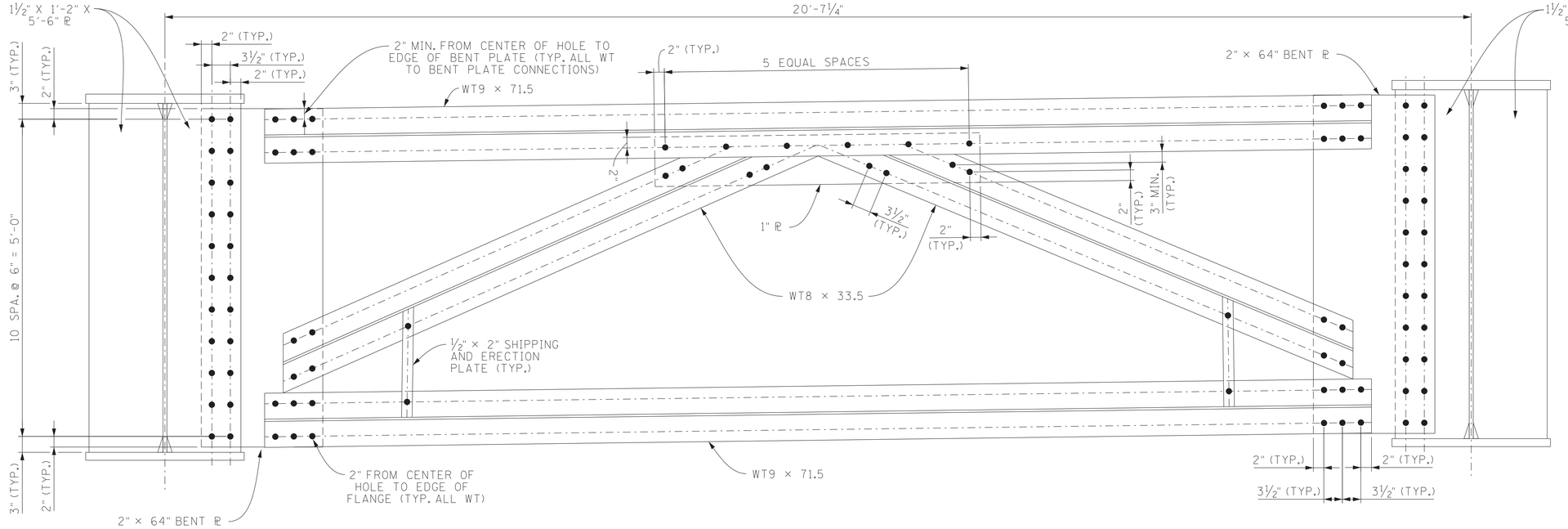
DESIGN BY:	JOHN AYERS	DATE:	04-2025
DRAWN BY:	J. STEVENS	DATE:	05-2025
SUPERVISED BY:	DJS/GWK(DE)	DATE:	04-2025
CHECKED BY:	SALIM ALSAFFAR	DATE:	05-2025

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

FIELD SPLICE DETAILS
STATE ROUTE 54 (US-641) OVER
KWT RAILWAY &
EXISTING STATE ROUTE 54
BRIDGE I. D. NO. 40SR0540031
STATION 140+12.90
HENRY COUNTY

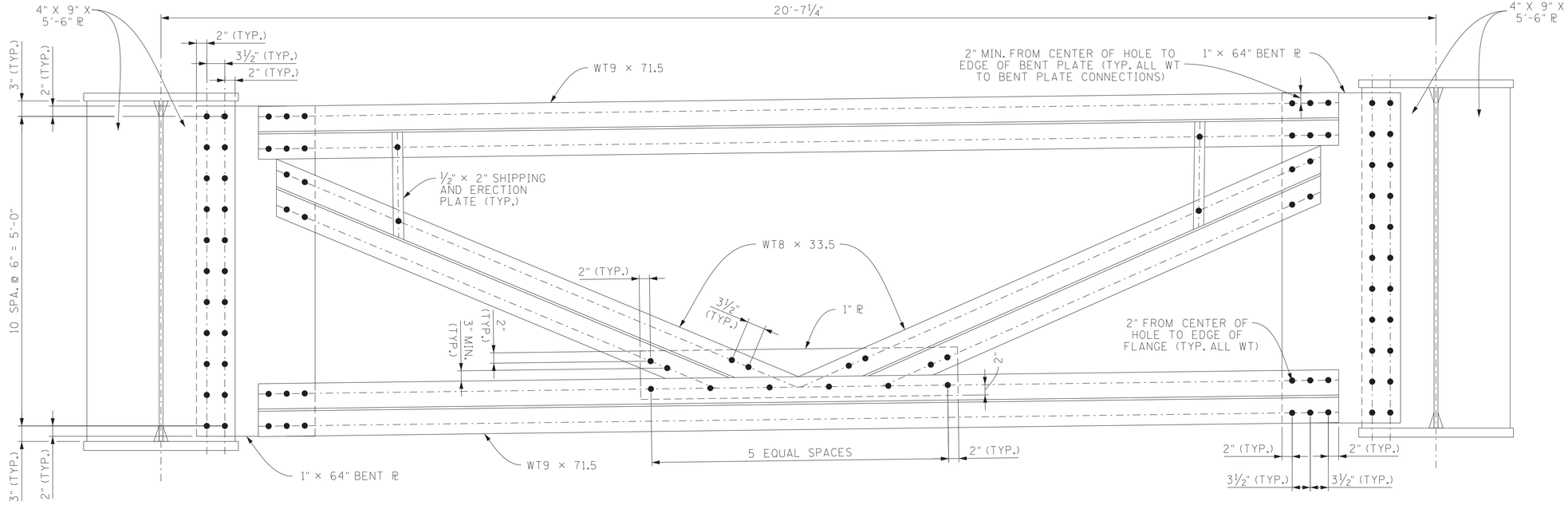
U-102-017

1/22/2026 8:13:39 AM



TYPICAL CROSS-FRAME DETAIL AT BENT

1"ø F3125 GRADE A490 TYPE 3 BOLTS
NOTE: LOOKING FORWARD ON SURVEY



TYPICAL CROSS-FRAME DETAIL AT ABUTMENT

1"ø F3125 GRADE A490 TYPE 3 BOLTS
NOTE: LOOKING AT NEAR SIDE OF ABUTMENT. WT SHALL BE TURNED SO THAT THE WEB OF THE WT IS TURNED AWAY FROM THE ENDWALL.

CONST. NO.: 40S054-F3-004

PROJECT NO.	YEAR	SHEET NO.
NH-54(48)	2026	

REVISIONS

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

SEALED BY

DANIEL J. SHIKE — REGISTERED — ENGINEER — AGRICULTURE — SCHNEER 104 — STATE OF TENNESSEE

Daniel Shike

02-05-26

PIN NO.: 101886.05

DESIGN BY:	JOHN AYERS	DATE:	04-2025
DRAWN BY:	J. STEVENS	DATE:	05-2025
SUPERVISED BY:	DJS/GWK(DE)	DATE:	04-2025
CHECKED BY:	ALI OMAR	DATE:	08-2025

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

CROSS-FRAME DETAILS
STATE ROUTE 54 (US-641) OVER KWT RAILWAY & EXISTING STATE ROUTE 54
BRIDGE I. D. NO. 40SR0540031
STATION 140+12.90
HENRY COUNTY

U-102-018

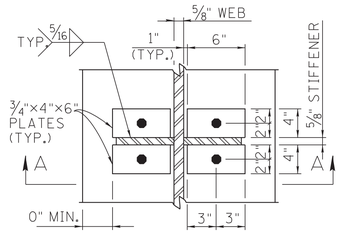
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CONST. NO.: 40S054-F3-004

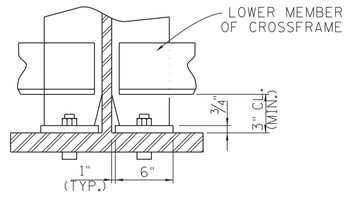
PROJECT NO.	YEAR	SHEET NO.
NH-54(48)	2026	

REVISIONS

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



SECTION A-A

TAB CONNECTION PLATE DETAILS

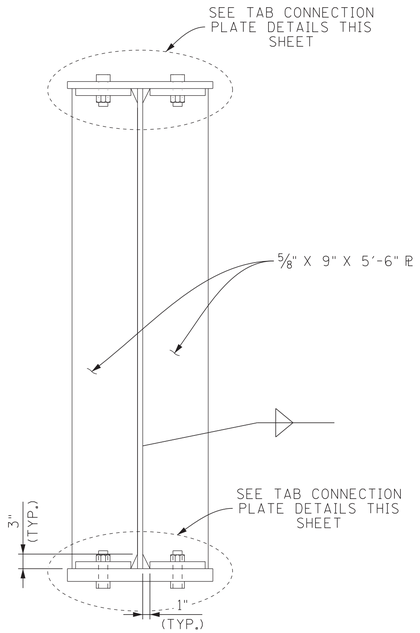
NOTE: TYPICAL TOP AND BOTTOM FLANGE. (BOTTOM FLANGE DETAILS SHOWN.)

NOTE: TAB CONNECTION PLATE YIELD STRENGTH SHALL MATCH STIFFENER YIELD STRENGTH, TAB CONNECTION PLATE SIZE AND LOCATION SHALL BE AS SHOWN REGARDLESS OF STIFFENER WIDTH.

NOTE: TAB CONNECTION PLATES ARE REQUIRED AT THE TOP AND BOTTOM FLANGES AT ALL CROSS-FRAME LOCATIONS EXCEPT AT BEARING STIFFENERS.

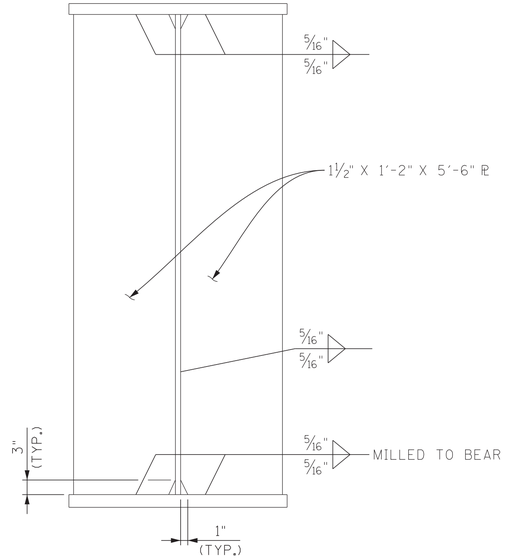
NOTE: 1"Ø - ASTM F3125 GRADE A325 BOLTS TO BE TENSIONED TO AASHTO SPECIFICATION FOR SLIP-CRITICAL CONNECTION PRIOR TO TAB-TO-STIFFENER WELD.

NOTE: WEB STIFFENER SHALL BE TIGHT FIT AGAINST FLANGE WITHIN AWS D1.5 FABRICATION TOLERANCE.

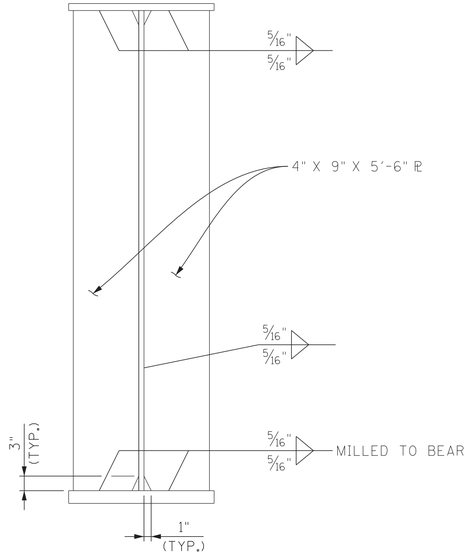


CROSSFRAME STIFFENER

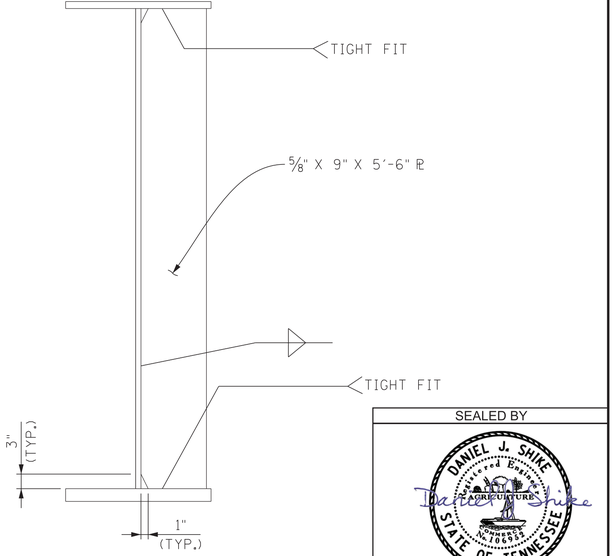
(OMIT STIFFENER ON OUTSIDE FACE OF EXTERIOR GIRDERS)



BENTS NO. 1, 2 AND 3



ABUTMENTS NO. 1 AND 2



TRANSVERSE STIFFENERS

(ONE SIDE ONLY)

SEALED BY

PIN NO.: 101886.05

DESIGN BY: JOHN AYERS DATE: 02-2025

DRAWN BY: RODNEY CHANDLER DATE: 03-2025

SUPERVISED BY: DJS/GWK(DE) DATE: 02-2025

CHECKED BY: SALIM ALSAFFAR DATE: 05-2025

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

STIFFENER DETAILS
STATE ROUTE 54 (US-641) OVER KWT RAILWAY & EXISTING STATE ROUTE 54
BRIDGE I. D. NO. 40SR0540031
STATION 140+12.90
HENRY COUNTY

U-102-019

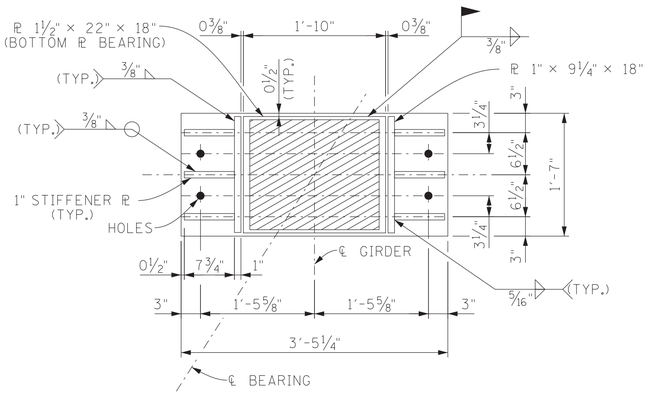
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CONST. NO.: 40S054-F3-004

PROJECT NO.	YEAR	SHEET NO.
NH-54(48)	2026	

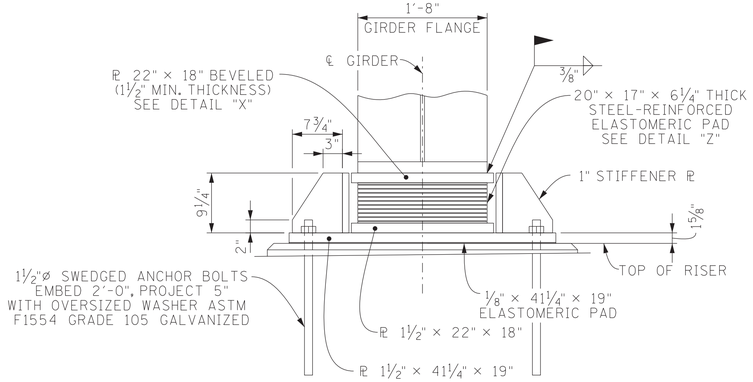
REVISIONS

NO.	DATE	BY	BRIEF DESCRIPTION
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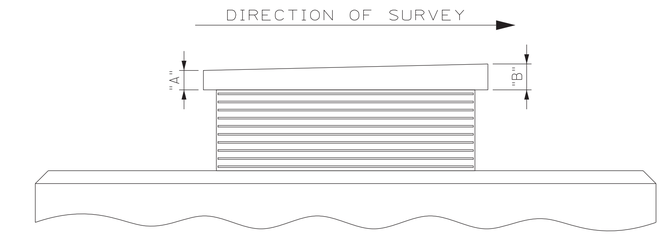
PLAN

NOTE: HOLES IN SOLE PLATE FOR ANCHORS RODS SHALL BE ¾" LARGER THAN THE ANCHORS RODS DIAMETER



ELEVATION

NOTE: ANCHOR BOLTS TO BE INCLUDED IN COST OF BEARING DEVICE.
NOTE: ALL STEEL PLATES FOR THE BEARING DEVICE SHALL BE ASTM A709 GRADE 50.
NOTE: ANCHOR BOLTS SHALL BE TENSIONED TO PRODUCE 60% OF ANCHOR BOLT YIELD STRESS.
NOTE: ANCHOR BOLTS SHALL BE GALVANIZED ACCORDING TO ASTM F2329 OR MECHANICALLY GALVANIZED TO ASTM B695.
NOTE: ALL EXPOSED SURFACES OF ASSEMBLED BEARING DEVICE SHALL BE PAINTED. THE COLOR OF THE TOP COAT SHALL BE BROWN, AMS-STD-595A, COLOR NO. 30059.



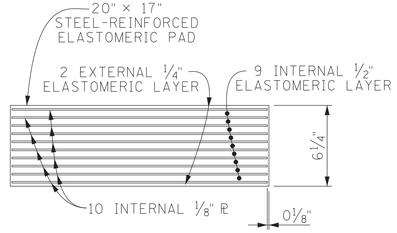
DETAIL "X"

BEVEL DIMENSIONS

SOLE PLATES TO BE BEVELED TO GRADE

BEAM NOS. @ ABUTMENT NO. 1	"A"	"B"
1 - 3	1 1/2"	2"
4 - 6	1 1/2"	1 15/16"
7 - 8	1 1/2"	1 7/8"

BEAM NOS. @ ABUTMENT NO. 2	"A"	"B"
1	1 11/16"	1 1/2"
2 - 4	1 3/4"	1 1/2"
5 - 7	1 13/16"	1 1/2"
8	1 7/8"	1 1/2"



NOTE: MIN. SHEAR MODULUS = 150 PSI
BEARING TO BE VULCANIZED TO STEEL PLATES.

DETAIL "Z"

BEARING DETAIL

(ABUTMENT NOS. 1 & 2)

SEALED BY

DANIEL J. SHIKE — Registered Engineer — DEPARTMENT OF AGRICULTURE — STATE OF TENNESSEE

Daniel J. Shike

02-05-26

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

ABUTMENT BEARING DETAIL
STATE ROUTE 54 (US-641) OVER
KWT RAILWAY &
EXISTING STATE ROUTE 54
BRIDGE I. D. NO. 40SR0540031
STATION 140+12.90
HENRY COUNTY

U-102-020

PIN NO.: 101886.05
DESIGN BY: JOHN AYERS DATE: 02-2025
DRAWN BY: J. STEVENS DATE: 04-2025
SUPERVISED BY: DJS/GWK(DE) DATE: 02-2025
CHECKED BY: ALI OMAR DATE: 08-2025

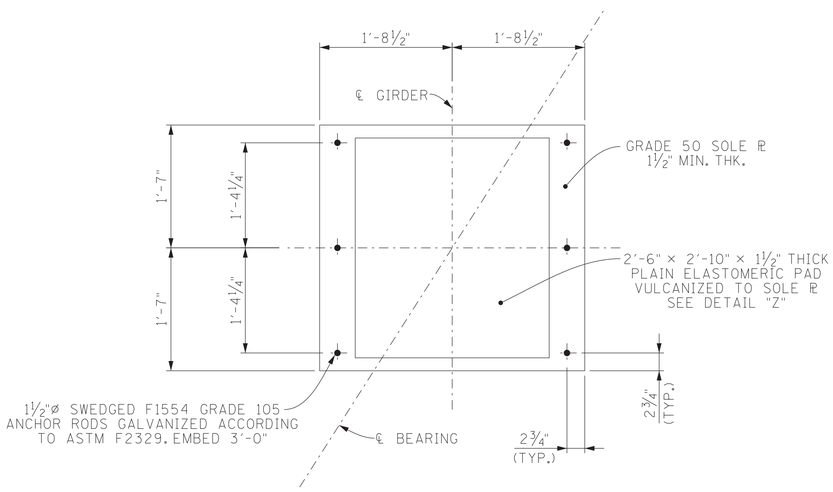
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CONST. NO.: 40S054-F3-004

PROJECT NO.	YEAR	SHEET NO.
NH-54(48)	2026	

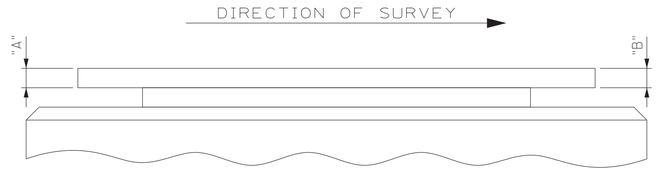
REVISIONS

NO.	DATE	BY	BRIEF DESCRIPTION
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	- -		



PLAN

NOTE: HOLES IN SOLE PLATE FOR ANCHORS RODS SHALL BE ¾" LARGER THAN THE ANCHORS RODS DIAMETER
NOTE: PROVIDE OVERSIZED WASHERS WITH BEVEL COMPATIBLE WITH BEVELED SOLE PLATE DIMENSIONS GIVEN IN TABLE ON THIS SHEET.



DETAIL "X"

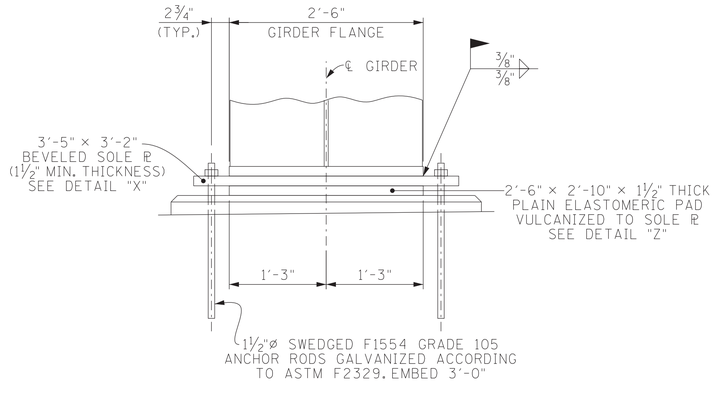
BEVEL DIMENSIONS

SOLE PLATES TO BE BEVELED TO GRADE

BEAM NOS. @ BENT NO. 1	"A"	"B"
1-2	1 1/2"	2 1/4"
3	1 1/2"	2 3/16"
4-5	1 1/2"	2 1/8"
6	1 1/2"	2 1/16"
7-8	1 1/2"	2"

BEAM NOS. @ BENT NO. 2	"A"	"B"
1	1 1/2"	1 13/16"
2-3	1 1/2"	1 3/4"
4	1 1/2"	1 11/16"
5-6	1 1/2"	1 5/8"
7	1 1/2"	1 9/16"
8	1 1/2"	1 1/2"

BEAM NOS. @ BENT NO. 3	"A"	"B"
1-2	1 5/8"	1 1/2"
3	1 11/16"	1 1/2"
4-5	1 3/4"	1 1/2"
6	1 13/16"	1 1/2"
7	1 7/8"	1 1/2"
8	1 15/16"	1 1/2"



ELEVATION

NOTE: THE SOLE PLATE FOR THE BEARING DEVICE SHALL BE ASTM A709 GRADE 50.
NOTE: ANCHOR BOLTS SHALL BE TENSIONED TO PRODUCE 60% OF ANCHOR BOLT YIELD STRESS.
NOTE: ANCHOR BOLTS SHALL BE GALVANIZED ACCORDING TO ASTM F2329 OR MECHANICALLY GALVANIZED TO ASTM B695.
NOTE: ALL EXPOSED SURFACES OF ASSEMBLED BEARING DEVICE SHALL BE PAINTED. THE COLOR OF THE TOP COAT SHALL BE BROWN, AMS-STD-595A, COLOR NO. 30059.
NOTE: COST OF RUBBER BONDING CEMENT TO BE INCLUDED IN UNIT PRICE BID FOR THE BEARING DEVICE.

BEARING DETAIL

(BENT NOS. 1, 2 & 3)



NOTE: MIN. SHEAR MODULUS = 200 PSI AT 73 DEGREES FAHRENHEIT BEARING TO BE VULCANIZED TO STEEL PLATES.

DETAIL "Z"

SEALED BY



PIN NO.: 101886.05
DESIGN BY: JOHN AYERS DATE: 02-2025
DRAWN BY: J. STEVENS DATE: 04-2025
SUPERVISED BY: DJS/GWK(DE) DATE: 02-2025
CHECKED BY: ALI OMAR DATE: 08-2025

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

BENT BEARING DETAIL
STATE ROUTE 54 (US-641) OVER KWT RAILWAY & EXISTING STATE ROUTE 54
BRIDGE I. D. NO. 40SR0540031
STATION 140+12.90
HENRY COUNTY

U-102-021

9:43:27 AM
2/4/2026

CONST. NO.: 40S054-F3-004

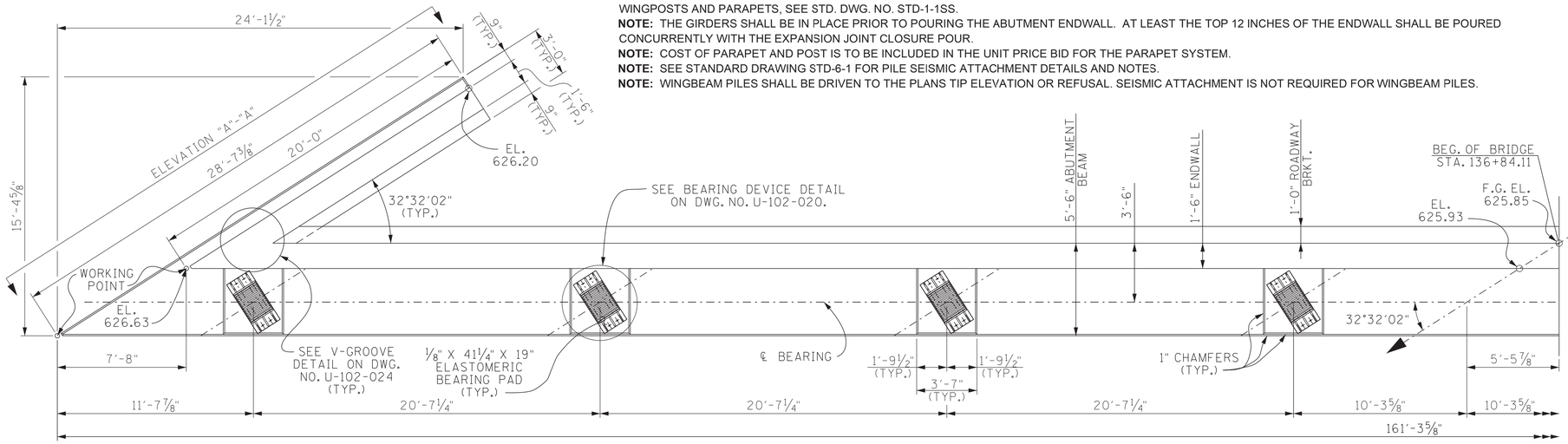
PROJECT NO.	YEAR	SHEET NO.
NH-54(48)	2026	

REVISIONS

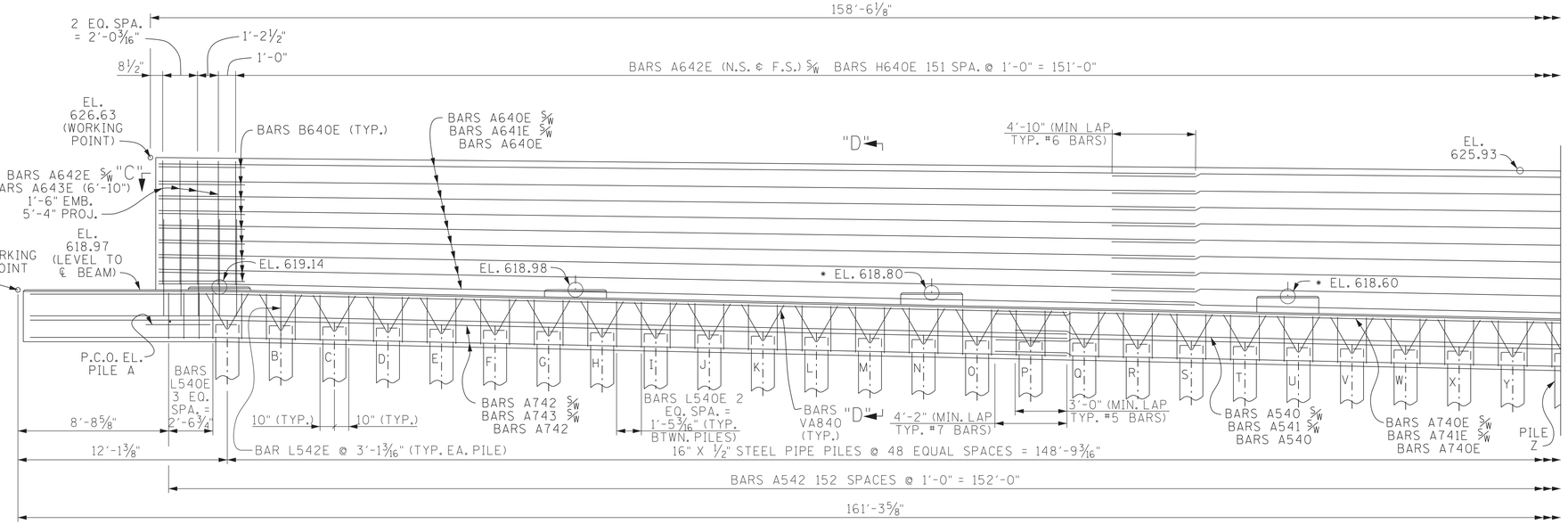
NO.	DATE	BY	BRIEF DESCRIPTION
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GENERAL NOTES

NOTE: WHEN POURING ABUTMENT BEAM, PROVISIONS SHALL BE MADE FOR SETTING ANCHOR BOLTS. BOLT PROJECTION 5".
NOTE: RISER BLOCKS SHALL BE POURED MONOLITHICALLY WITH THE ABUTMENT BEAM.
NOTE: 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.
NOTE: THE GIRDERS SHALL BE IN PLACE PRIOR TO POURING THE ABUTMENT ENDWALL. AT LEAST THE TOP 12 INCHES OF THE ENDWALL SHALL BE POURED CONCURRENTLY WITH THE EXPANSION JOINT CLOSURE POUR.
NOTE: COST OF PARAPET AND POST IS TO BE INCLUDED IN THE UNIT PRICE BID FOR THE PARAPET SYSTEM.
NOTE: SEE STANDARD DRAWING STD-6-1 FOR PILE SEISMIC ATTACHMENT DETAILS AND NOTES.
NOTE: WINGBEAM PILES SHALL BE DRIVEN TO THE PLANS TIP ELEVATION OR REFUSAL. SEISMIC ATTACHMENT IS NOT REQUIRED FOR WINGBEAM PILES.

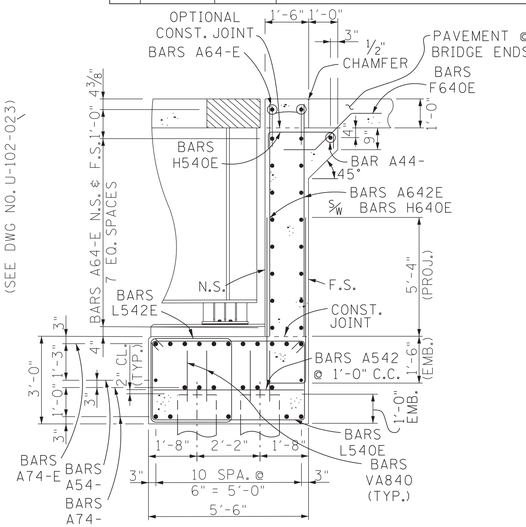


PLAN



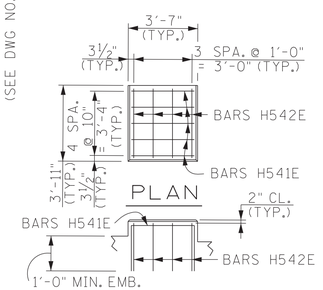
ELEVATION
(LOOKING BACK ON SURVEY)

PILE DESIGNATION	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z
PILE CUT-OFF ELEVATION	616.97	616.90	616.84	616.77	616.70	616.64	616.57	616.51	616.44	616.37	616.31	616.24	616.17	616.11	616.04	615.97	615.91	615.84	615.78	615.71	615.64	615.58	615.51	615.44	615.38	615.31



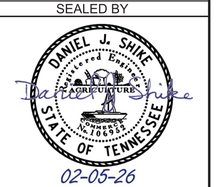
SECTION "D"-"D"
(NOTE: END DIAPHRAGM NOT SHOWN FOR CLARITY, SEE SHEET U-102-013 FOR DIAPHRAGM DETAILS.)

* DENOTES: REINFORCED RISERS SEE DETAIL ON THIS SHEET.
N.S. DENOTES NEAR SIDE
F.S. DENOTES FAR SIDE
P.C.O. DENOTES PILE CUT-OFF



ELEVATION
* PLAN OF RISER BLOCK REINFORCING

SEALED BY



STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

ABUTMENT NO. 1
STATE ROUTE 54 (US-641) OVER KWT RAILWAY & EXISTING STATE ROUTE 54
BRIDGE I. D. NO. 40SR0540031
STATION 140+12.90
HENRY COUNTY

U-102-022

PIN NO.: 101886.05
DESIGN BY: JOHN AYERS DATE: 02-2025
DRAWN BY: T.R. KIRK DATE: 04-2025
SUPERVISED BY: DJS/GWK(DE) DATE: 02-2025
CHECKED BY: ALI OMAR DATE: 08-2025

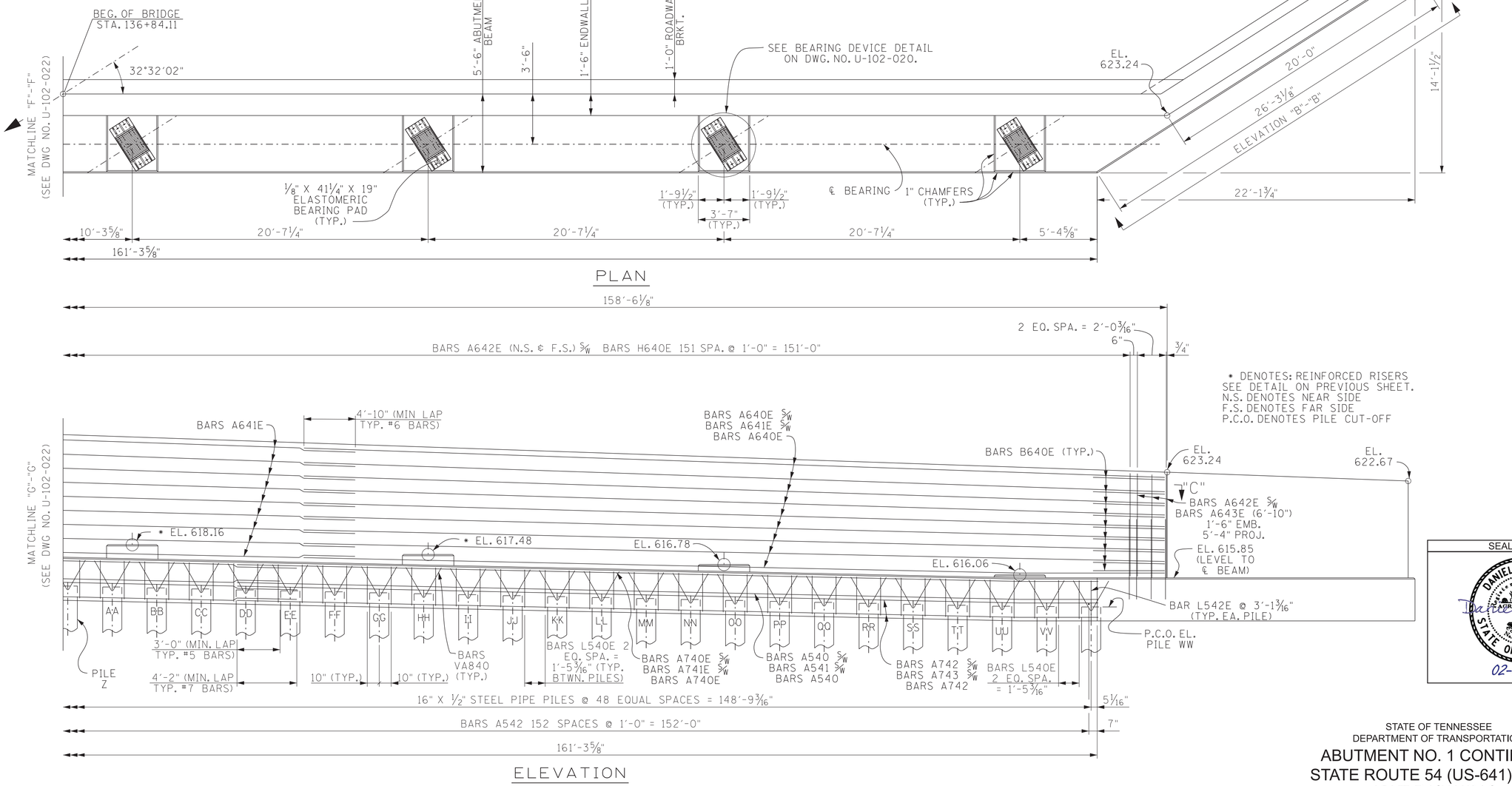
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CONST. NO.: 40S054-F3-004

PROJECT NO.	YEAR	SHEET NO.
NH-54(48)	2026	

REVISIONS

NO.	DATE	BY	BRIEF DESCRIPTION
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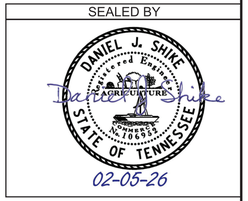
PLAN

ELEVATION

(LOOKING BACK ON SURVEY)

PILE DESIGNATION	Z	AA	BB	CC	DD	EE	FF	GG	HH	II	JJ	KK	LL	MM	NN	OO	PP	QQ	RR	SS	TT	UU	VV	WW
PILE CUT-OFF ELEVATION	615.31	615.24	615.18	615.11	615.04	614.98	614.91	614.85	614.78	614.71	614.65	614.58	614.51	614.45	614.38	614.31	614.25	614.18	614.12	614.05	613.98	613.92	613.85	613.85

SEALED BY



PIN NO.: 101886.05

DESIGN BY: JOHN AYERS DATE: 02-2025

DRAWN BY: T.R. KIRK DATE: 04-2025

SUPERVISED BY: DJS/GWK(DE) DATE: 02-2025

CHECKED BY: ALI OMAR DATE: 08-2025

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

ABUTMENT NO. 1 CONTINUED STATE ROUTE 54 (US-641) OVER KWT RAILWAY & EXISTING STATE ROUTE 54 BRIDGE I. D. NO. 40SR0540031 STATION 140+12.90 HENRY COUNTY

U-102-023

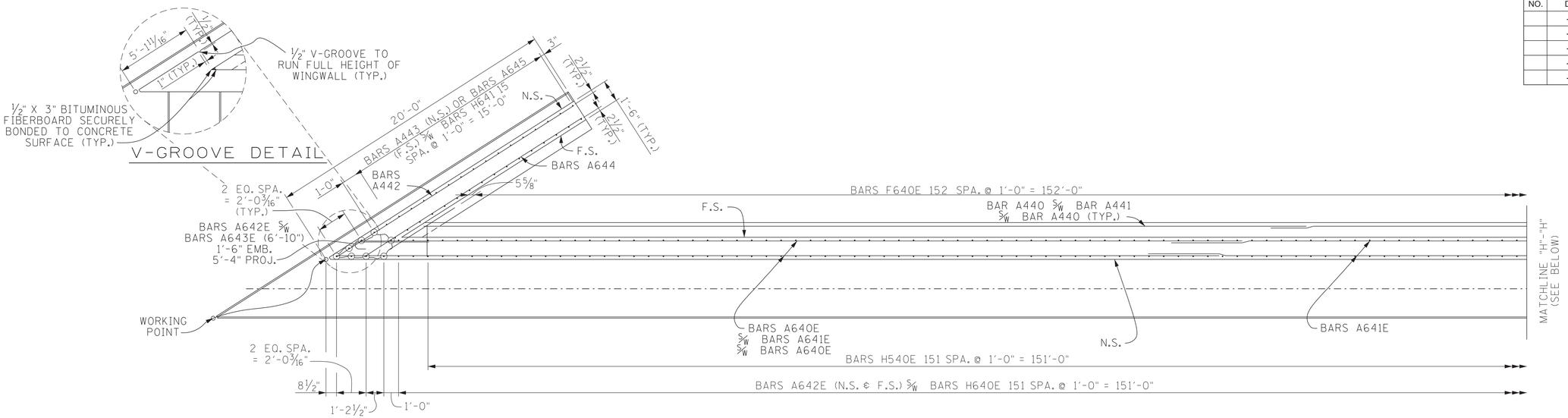
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CONST. NO.: 40S054-F3-004

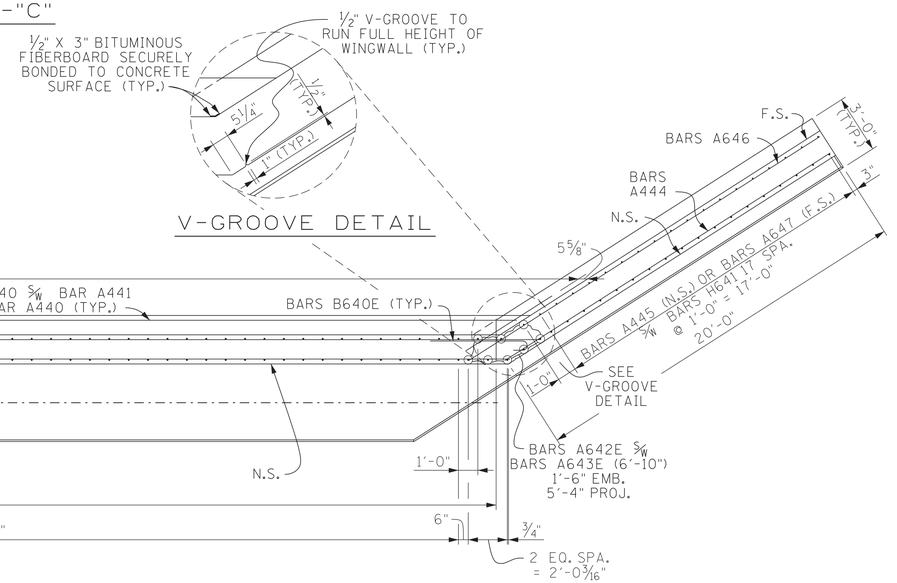
PROJECT NO.	YEAR	SHEET NO.
NH-54(48)	2026	

REVISIONS

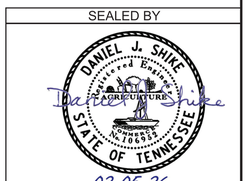
NO.	DATE	BY	BRIEF DESCRIPTION
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SECTION "C"-"C"



SEALED BY



STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

ABUTMENT NO. 1 DETAILS
STATE ROUTE 54 (US-641) OVER KWT RAILWAY & EXISTING STATE ROUTE 54
BRIDGE I. D. NO. 40SR0540031
STATION 140+12.90
HENRY COUNTY

U-102-024

PIN NO.: 101886.05
DESIGN BY: JOHN AYERS DATE: 02-2025
DRAWN BY: T.R. KIRK DATE: 04-2025
SUPERVISED BY: DJS/GWK(DE) DATE: 02-2025
CHECKED BY: ALI OMAR DATE: 08-2025

1/22/2026 8:20:50 AM

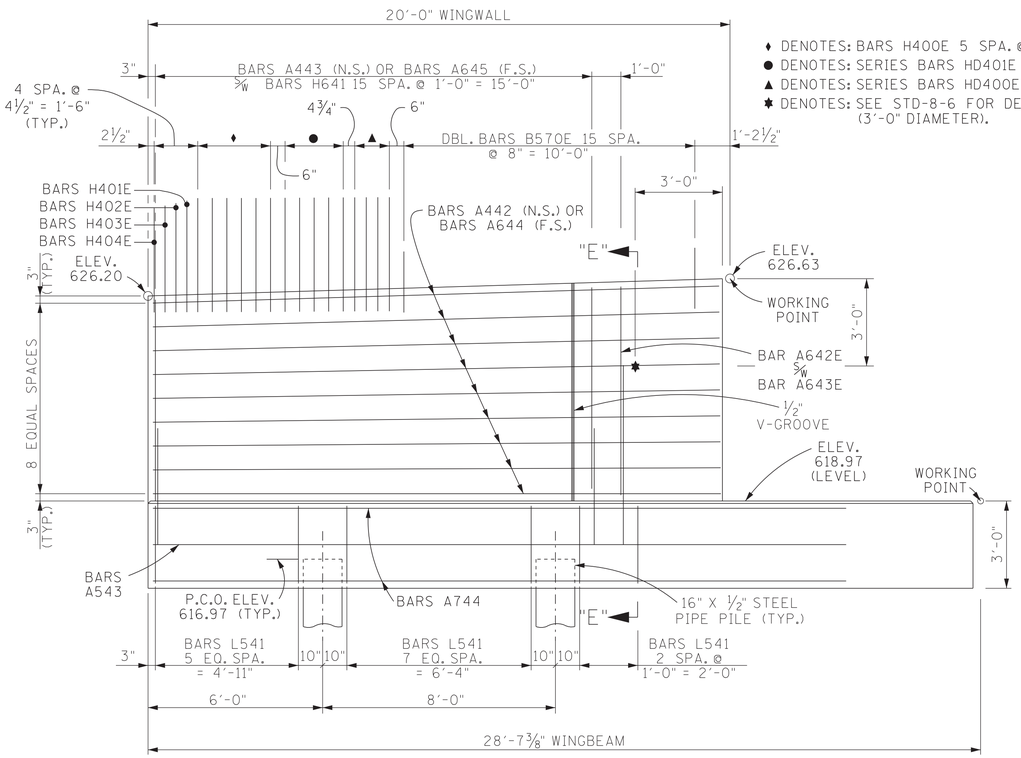
CONST. NO.: 40S054-F3-004

PROJECT NO.	YEAR	SHEET NO.
NH-54(48)	2026	

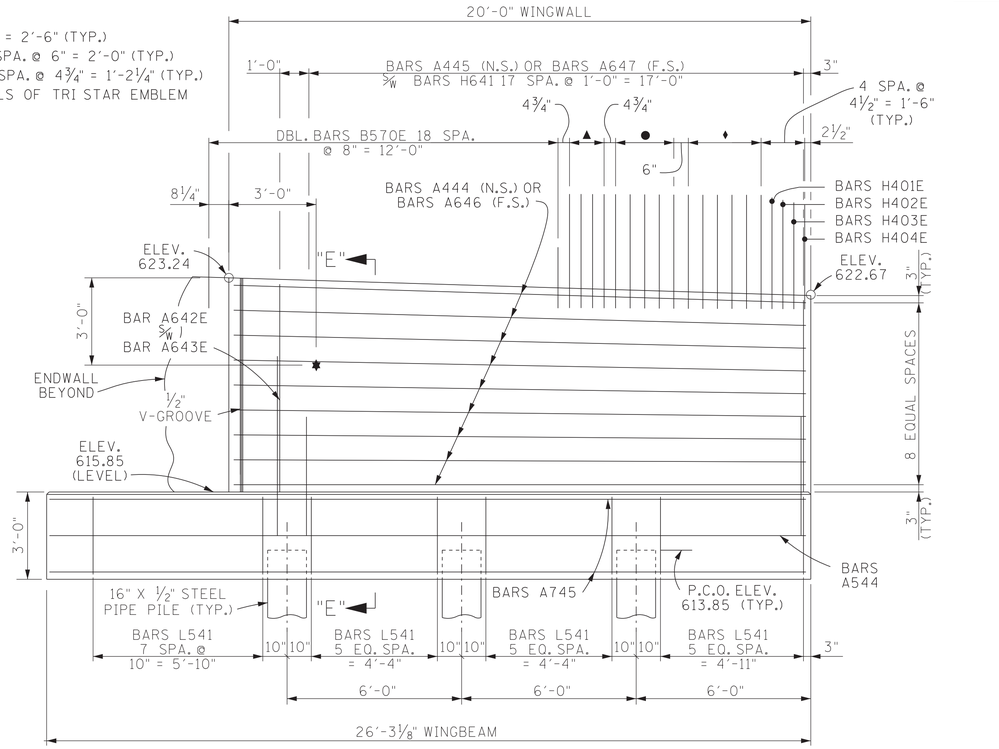
REVISIONS

NO.	DATE	BY	BRIEF DESCRIPTION
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	- -		

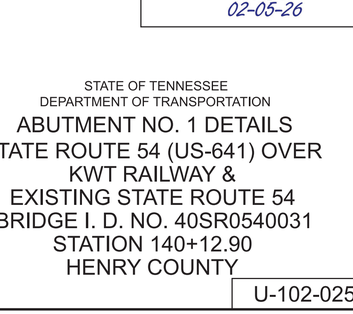
♦ DENOTES: BARS H400E 5 SPA. @ 6" = 2'-6" (TYP.)
● DENOTES: SERIES BARS HD401E 4 SPA. @ 6" = 2'-0" (TYP.)
▲ DENOTES: SERIES BARS HD400E 3 SPA. @ 4¾" = 1'-2¼" (TYP.)
✱ DENOTES: SEE STD-8-6 FOR DETAILS OF TRI STAR EMBLEM (3'-0" DIAMETER).



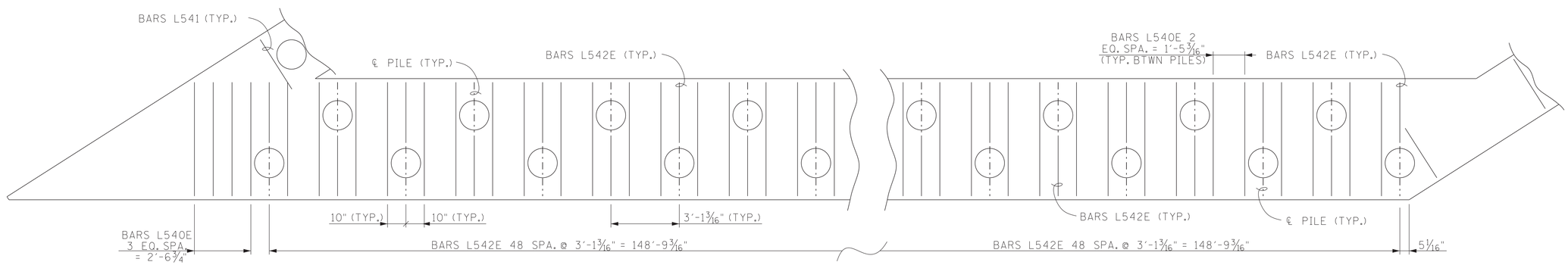
ELEVATION "A"-"A"



ELEVATION "B"-"B"



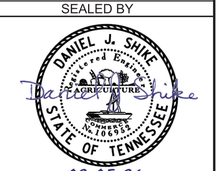
SECTION "E"-"E"



PLAN OF PILE LAYOUT

(SHOWING LOCATION OF BARS L54-E)

SEALED BY



STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

ABUTMENT NO. 1 DETAILS
STATE ROUTE 54 (US-641) OVER KWT RAILWAY & EXISTING STATE ROUTE 54
BRIDGE I. D. NO. 40SR0540031
STATION 140+12.90
HENRY COUNTY

U-102-025

PIN NO.: 101886.05
DESIGN BY: JOHN AYERS DATE: 02-2025
DRAWN BY: T.R. KIRK DATE: 04-2025
SUPERVISED BY: DJS/GWK(DE) DATE: 02-2025
CHECKED BY: ALI OMAR DATE: 08-2025

1/22/2026 8:22:35 AM

GENERAL NOTES

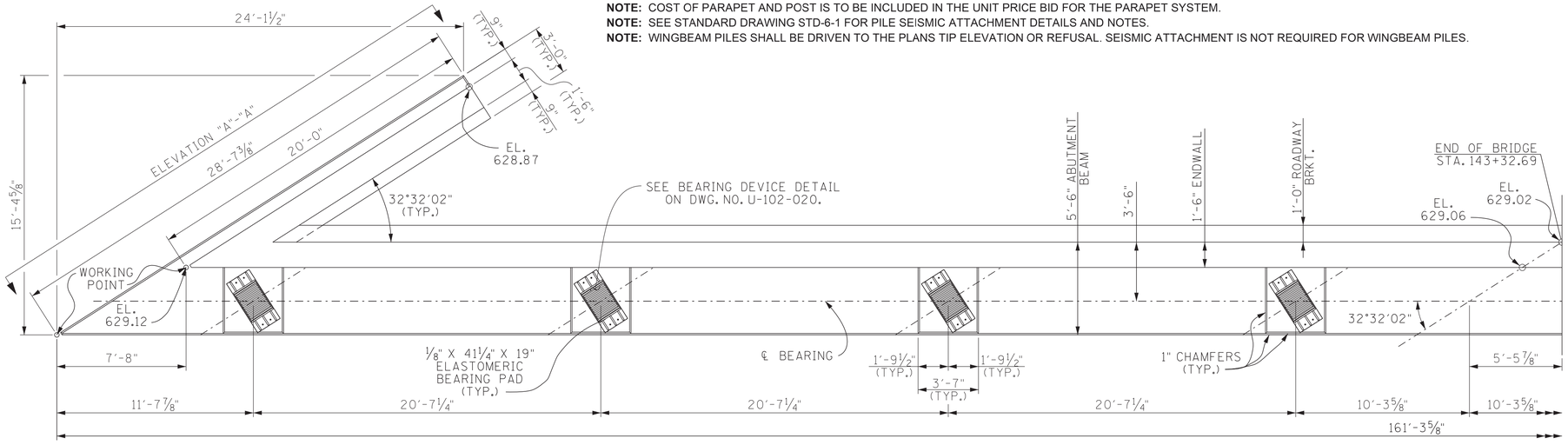
NOTE: WHEN POURING ABUTMENT BEAM, PROVISIONS SHALL BE MADE FOR SETTING ANCHOR BOLTS. BOLT PROJECTION 5".
NOTE: RISER BLOCKS SHALL BE POURED MONOLITHICALLY WITH THE ABUTMENT BEAM.
NOTE: WHEN POURING WINGWALLS, PROVISIONS SHALL BE MADE FOR SETTING REINFORCING STEEL FOR WINGPOSTS AND PARAPETS. FOR DETAILS OF WINGPOSTS AND PARAPETS, SEE STD. DWG. NO. STD-1-1SS.
NOTE: THE GIRDERS SHALL BE IN PLACE PRIOR TO POURING THE ABUTMENT ENDWALL. AT LEAST THE TOP 12 INCHES OF THE ENDWALL SHALL BE POURED CONCURRENTLY WITH THE EXPANSION JOINT CLOSURE POUR.
NOTE: COST OF PARAPET AND POST IS TO BE INCLUDED IN THE UNIT PRICE BID FOR THE PARAPET SYSTEM.
NOTE: SEE STANDARD DRAWING STD-6-1 FOR PILE SEISMIC ATTACHMENT DETAILS AND NOTES.
NOTE: WINGBEAM PILES SHALL BE DRIVEN TO THE PLANS TIP ELEVATION OR REFUSAL. SEISMIC ATTACHMENT IS NOT REQUIRED FOR WINGBEAM PILES.

CONST. NO.: 40S054-F3-004

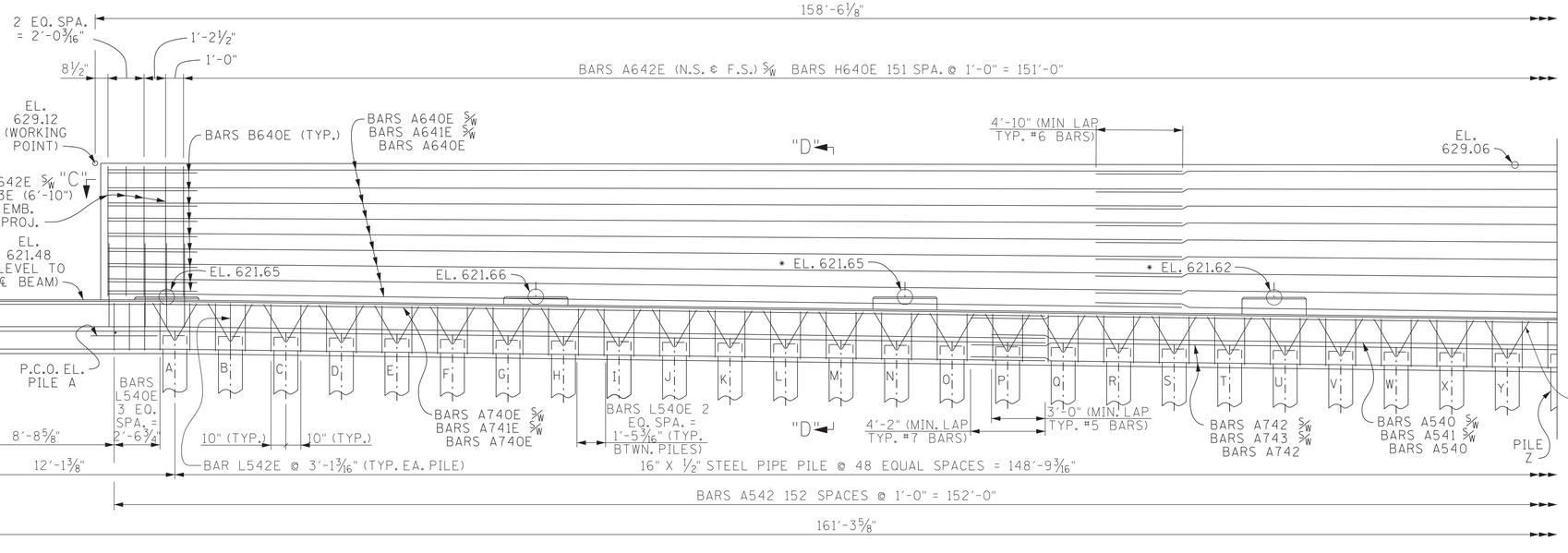
PROJECT NO.	YEAR	SHEET NO.
NH-54(48)	2026	

REVISIONS

NO.	DATE	BY	BRIEF DESCRIPTION
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	- -		
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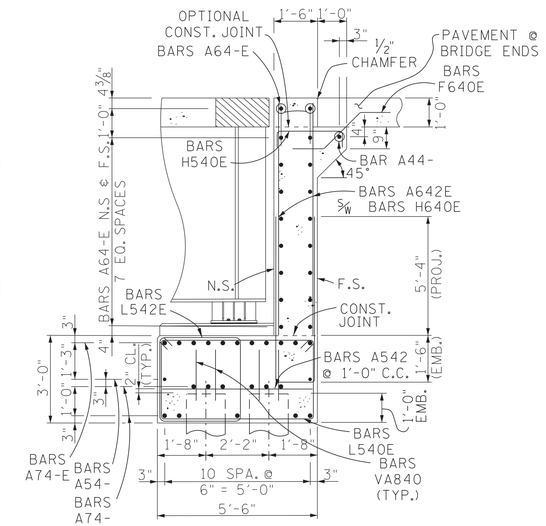
PLAN



ELEVATION

(LOOKING FORWARD ON SURVEY)

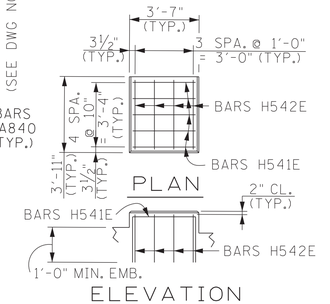
PILE DESIGNATION	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z
PILE CUT-OFF ELEVATION	619.48	619.44	619.40	619.36	619.32	619.28	619.24	619.20	619.16	619.11	619.07	619.03	618.99	618.95	618.91	618.87	618.83	618.79	618.75	618.71	618.67	618.63	618.59	618.55	618.50	618.46



SECTION "D"-"D"

(NOTE: END DIAPHRAGM NOT SHOWN FOR CLARITY, SEE SHEET U-102-013 FOR DIAPHRAGM DETAILS.)

* DENOTES: REINFORCED RISERS
SEE DETAIL ON THIS SHEET.
N.S. DENOTES NEAR SIDE
F.S. DENOTES FAR SIDE
P.C.O. DENOTES PILE CUT-OFF



PLAN

ELEVATION

* PLAN OF RISER BLOCK REINFORCING

SEALED BY

DANIEL J. SHIKE — 1045 — REGISTERED PROFESSIONAL ENGINEER — AGRICULTURE — STATE OF TENNESSEE

02-05-26

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

ABUTMENT NO. 2
STATE ROUTE 54 (US-641) OVER KWT RAILWAY & EXISTING STATE ROUTE 54
BRIDGE I. D. NO. 40SR0540031
STATION 140+12.90
HENRY COUNTY

U-102-026

PIN NO.: 101886.05
DESIGN BY: JOHN AYERS DATE: 02-2025
DRAWN BY: T.R. KIRK DATE: 04-2025
SUPERVISED BY: DJS/GWK(DE) DATE: 02-2025
CHECKED BY: ALI OMAR DATE: 08-2025

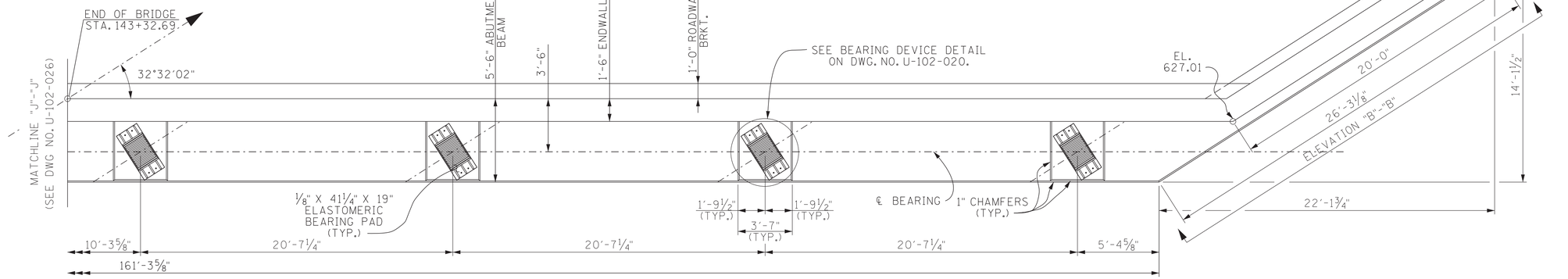
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CONST. NO.: 40S054-F3-004

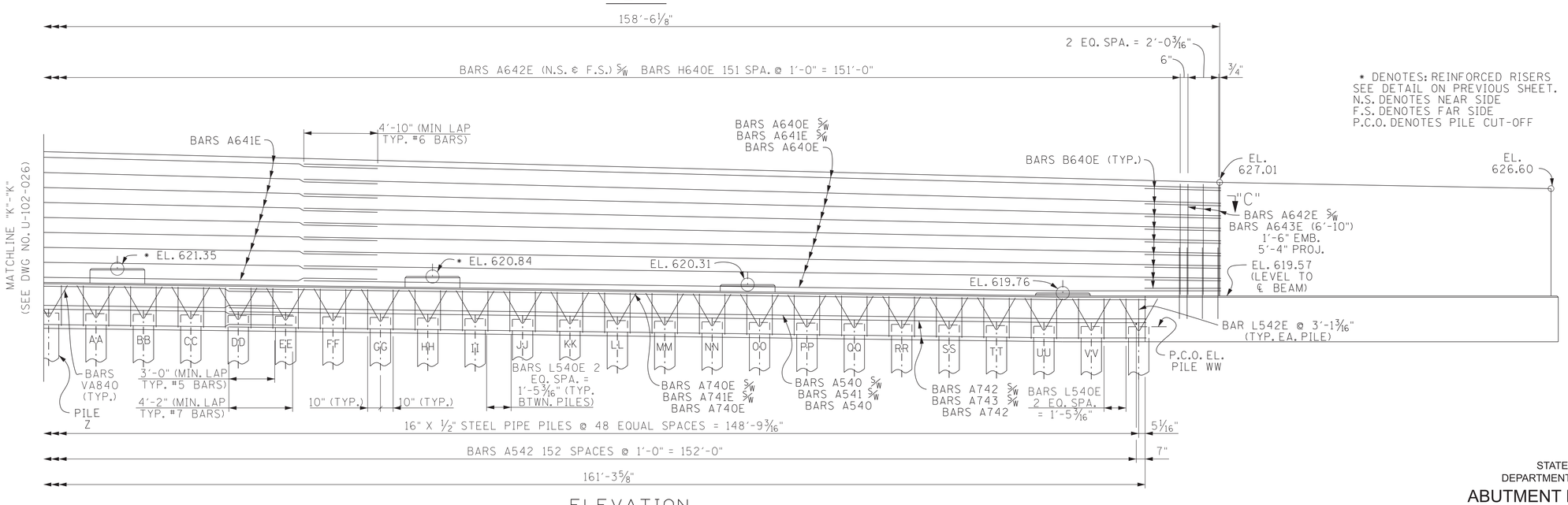
PROJECT NO.	YEAR	SHEET NO.
NH-54(48)	2026	

REVISIONS

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



PLAN



ELEVATION

(LOOKING FORWARD ON SURVEY)

PILE DESIGNATION	Z	AA	BB	CC	DD	EE	FF	GG	HH	II	JJ	KK	LL	MM	NN	OO	PP	QQ	RR	SS	TT	UU	VV	WW
PILE CUT-OFF ELEVATION	618.46	618.42	618.38	618.34	618.30	618.26	618.22	618.18	618.14	618.10	618.06	618.02	617.98	617.94	617.90	617.85	617.81	617.77	617.73	617.69	617.65	617.61	617.57	617.57

SEALED BY



PIN NO.: 101886.05
DESIGN BY: JOHN AYERS DATE: 02-2025
DRAWN BY: T.R. KIRK DATE: 04-2025
SUPERVISED BY: DJS/GWK(DE) DATE: 02-2025
CHECKED BY: ALI OMAR DATE: 08-2025

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

ABUTMENT NO. 2 CONTINUED
STATE ROUTE 54 (US-641) OVER KWT RAILWAY & EXISTING STATE ROUTE 54
BRIDGE I. D. NO. 40SR0540031
STATION 140+12.90
HENRY COUNTY

U-102-027

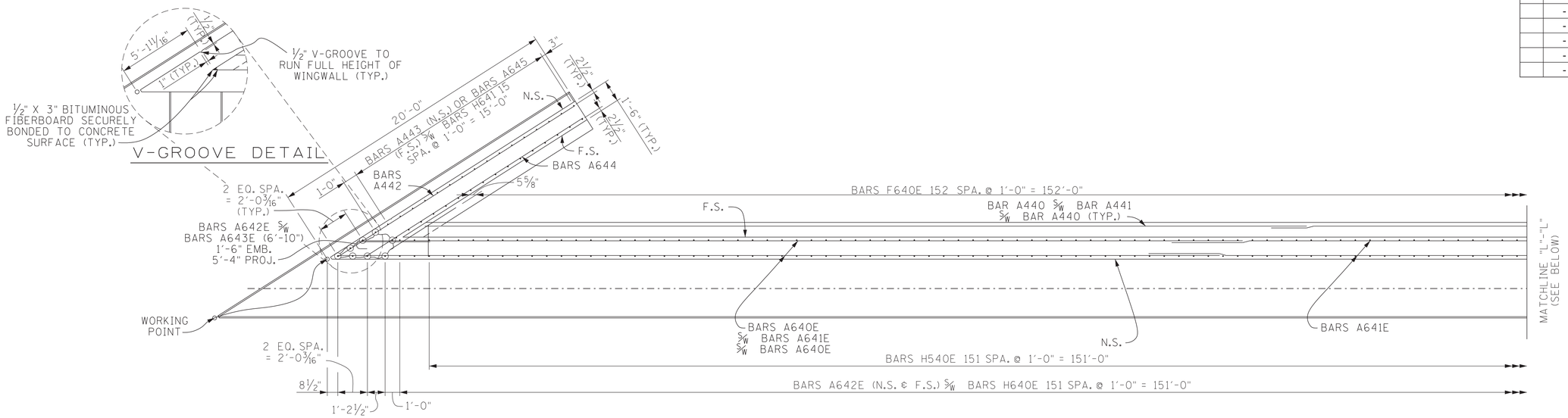
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CONST. NO.: 40S054-F3-004

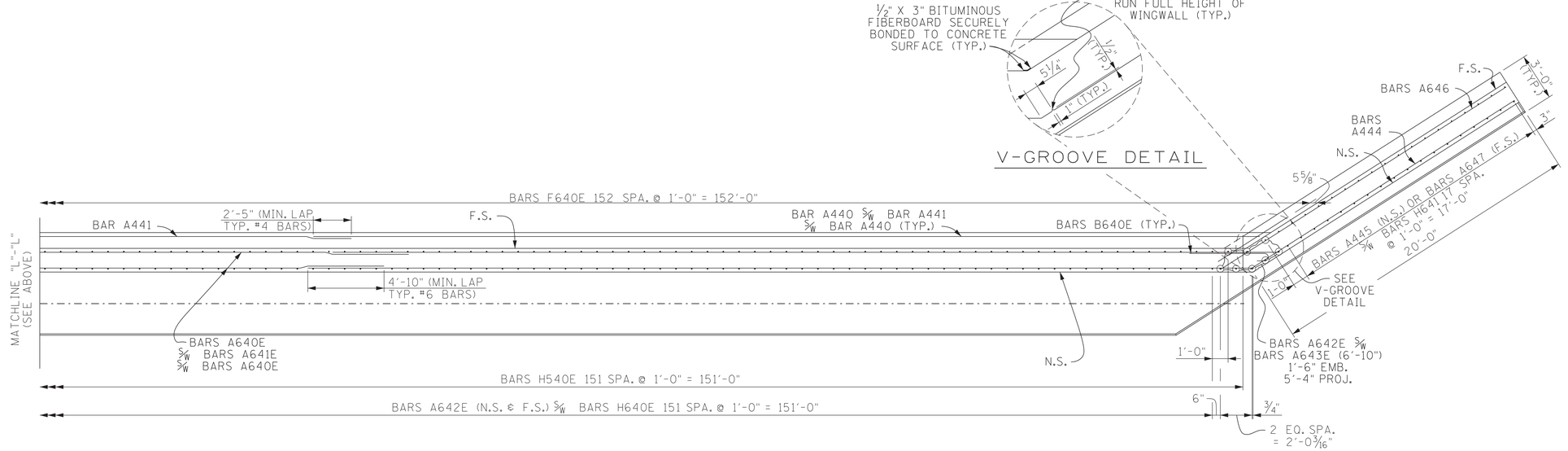
PROJECT NO.	YEAR	SHEET NO.
NH-54(48)	2026	

REVISIONS

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	- -		
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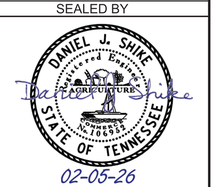


SECTION "C"-"C"



SECTION "C"-"C"

SEALED BY



STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

ABUTMENT NO. 2 DETAILS
STATE ROUTE 54 (US-641) OVER KWT RAILWAY & EXISTING STATE ROUTE 54
BRIDGE I. D. NO. 40SR0540031
STATION 140+12.90
HENRY COUNTY

U-102-028

PIN NO.: 101886.05
DESIGN BY: JOHN AYERS DATE: 02-2025
DRAWN BY: T.R. KIRK DATE: 04-2025
SUPERVISED BY: DJS/GWK(DE) DATE: 02-2025
CHECKED BY: ALI OMAR DATE: 08-2025

1/22/2026 8:28:05 AM

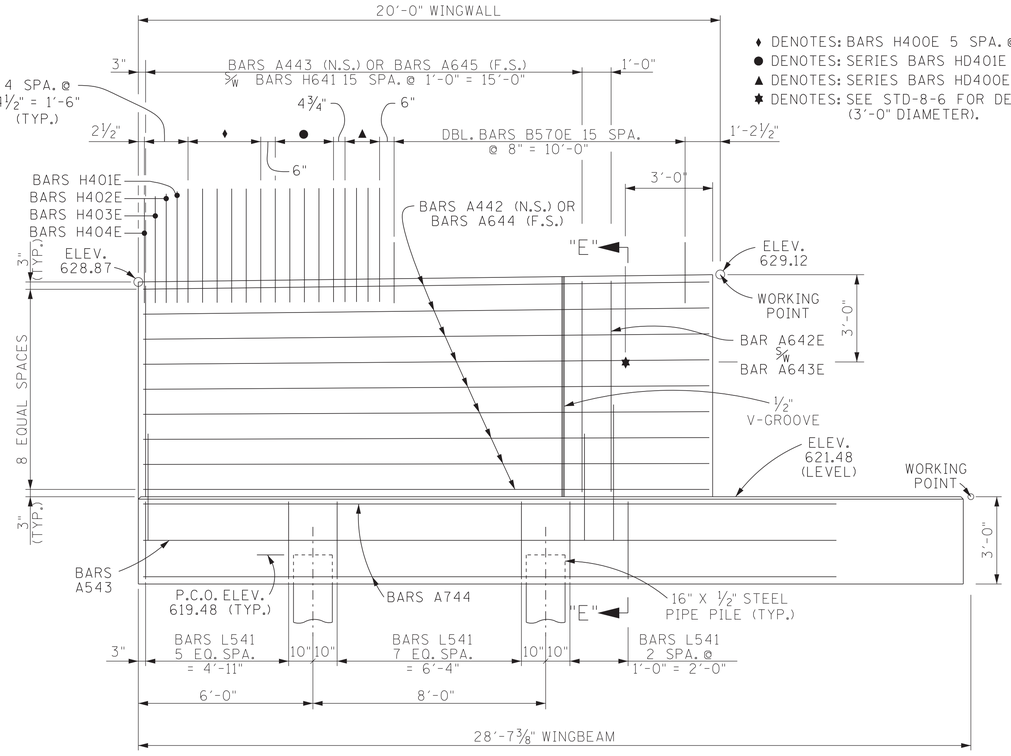
CONST. NO.: 40S054-F3-004

PROJECT NO.	YEAR	SHEET NO.
NH-54(48)	2026	

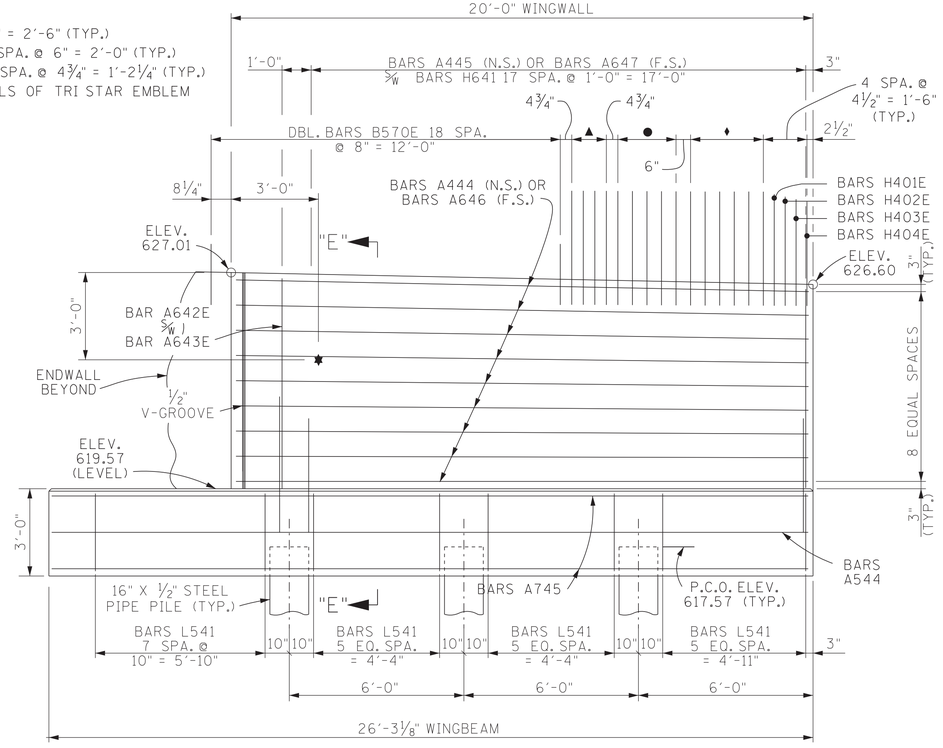
REVISIONS

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

♦ DENOTES: BARS H400E 5 SPA. @ 6" = 2'-6" (TYP.)
● DENOTES: SERIES BARS HD401E 4 SPA. @ 6" = 2'-0" (TYP.)
▲ DENOTES: SERIES BARS HD400E 3 SPA. @ 4¾" = 1'-2¼" (TYP.)
✱ DENOTES: SEE STD-8-6 FOR DETAILS OF TRI STAR EMBLEM (3'-0" DIAMETER).

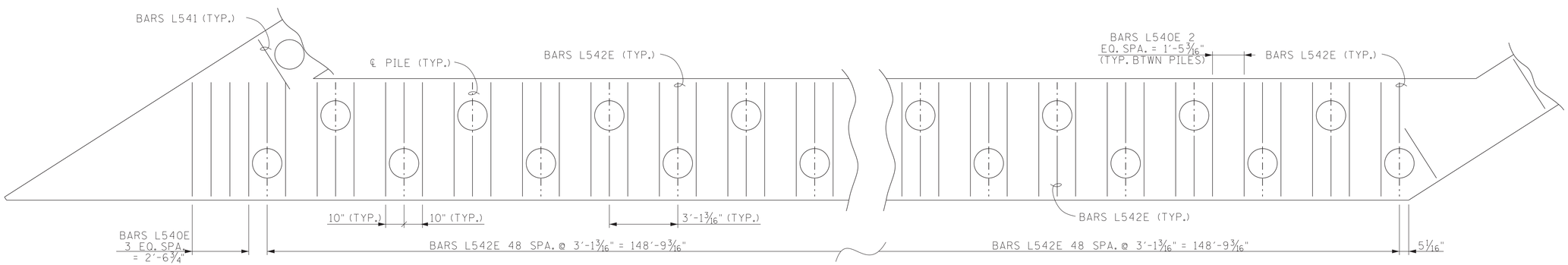


ELEVATION "A"-"A"



ELEVATION "B"-"B"

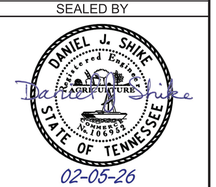
SECTION "E"-"E"



PLAN OF PILE LAYOUT

(SHOWING LOCATION OF BARS L54-E)

SEALED BY



02-05-26

PIN NO.: 101886.05
DESIGN BY: JOHN AYERS DATE: 02-2025
DRAWN BY: T.R. KIRK DATE: 04-2025
SUPERVISED BY: DJS/GWK(DE) DATE: 02-2025
CHECKED BY: ALI OMAR DATE: 08-2025

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

ABUTMENT NO. 2 DETAILS
STATE ROUTE 54 (US-641) OVER KWT RAILWAY & EXISTING STATE ROUTE 54
BRIDGE I. D. NO. 40SR0540031
STATION 140+12.90
HENRY COUNTY

U-102-029

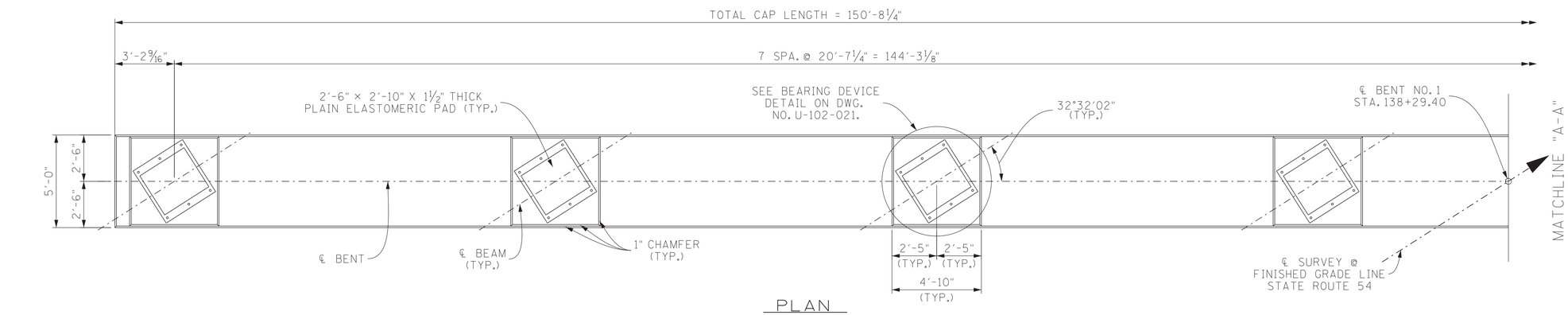
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CONST. NO.: 40S054-F3-004

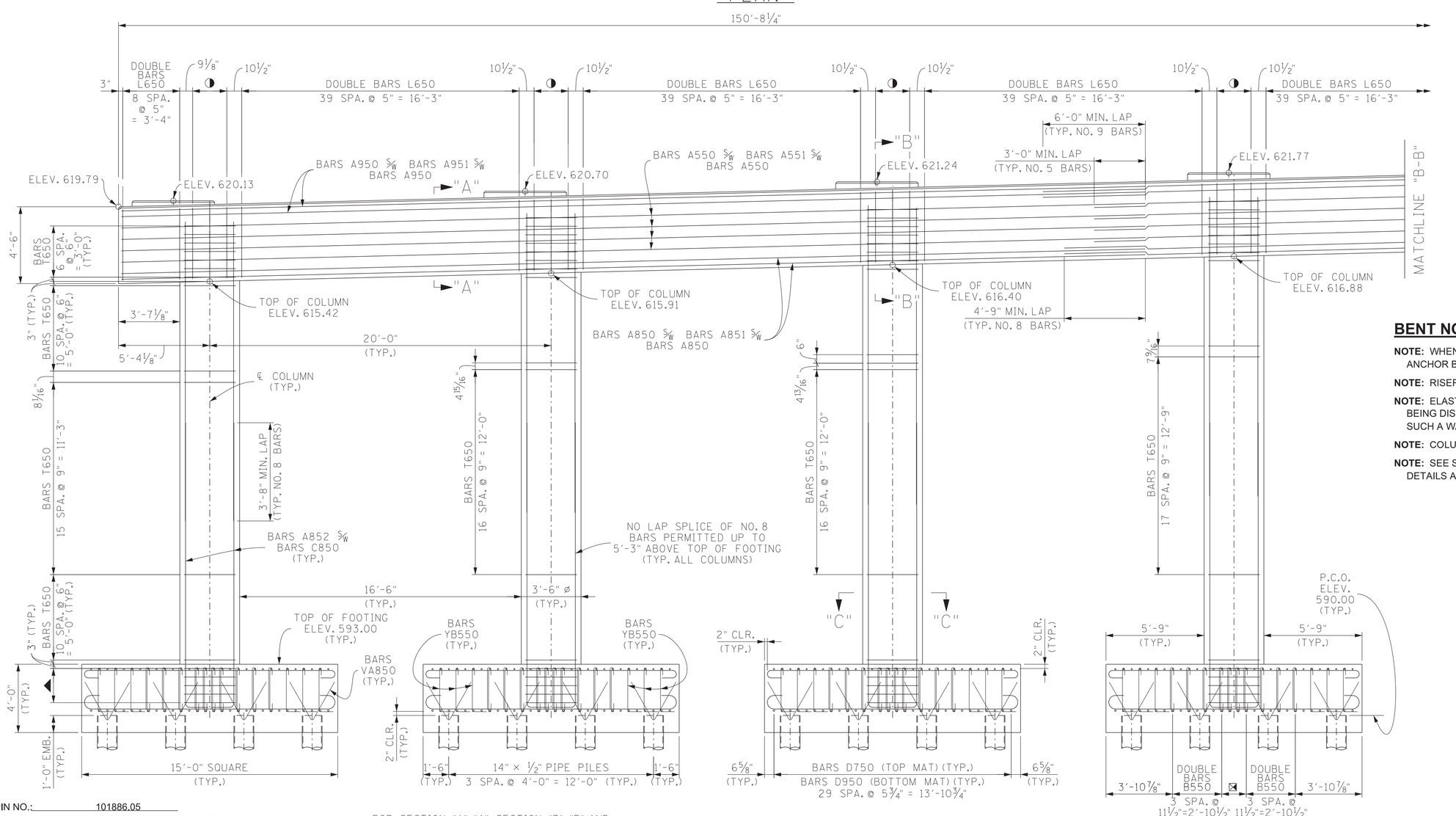
PROJECT NO.	YEAR	SHEET NO.
NH-54(48)	2026	

REVISIONS

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



PLAN



ELEVATION
(LOOKING FORWARD ON SURVEY)

◑ DENOTES: DOUBLE BARS H650 - 2 SPA @ 1'-0" = 2'-0"
⊠ DENOTES: DOUBLE BARS B550 - 3 SPA. @ 5¾" = 1'-5¼"
▲ DENOTES: BARS T650 - 4 SPA. @ 6" = 2'-0"

BENT NOTES

NOTE: WHEN POURING CAP BEAM, PROVISIONS SHALL BE MADE FOR SETTING ANCHOR BOLTS. BOLT PROJECTION 6 ½".

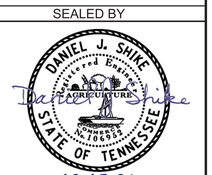
NOTE: RISER BLOCKS SHALL BE POURED MONOLITHICALLY WITH BENT CAP.

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: COLUMN STEEL SHALL EXTEND 3'-6" INTO BENT CAP.

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

SEALED BY



STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

BENT NO. 1
STATE ROUTE 54 (US-641) OVER KWT RAILWAY & EXISTING STATE ROUTE 54
BRIDGE I. D. NO. 40SR0540031
STATION 140+12.90
HENRY COUNTY

U-102-030

PIN NO.: 101886.05

DESIGN BY:	JOHN AYERS	DATE: 04-2025
DRAWN BY:	RODNEY CHANDLER	DATE: 06-2025
SUPERVISED BY:	DJS/GWK(DE)	DATE: 04-2025
CHECKED BY:	ALI OMAR	DATE: 08-2025

FOR SECTION "A"-"A", SECTION "B"-"B" AND SECTION "C"-"C" SEE DWG. NO. U-102-036.

FOR END ELEVATION SEE DWG. NO. U-102-036.

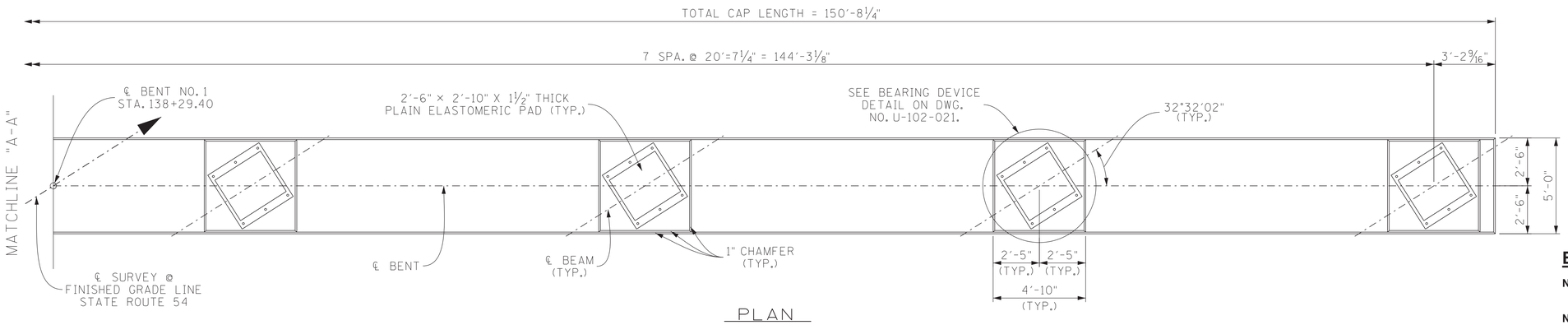
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CONST. NO.: 40S054-F3-004

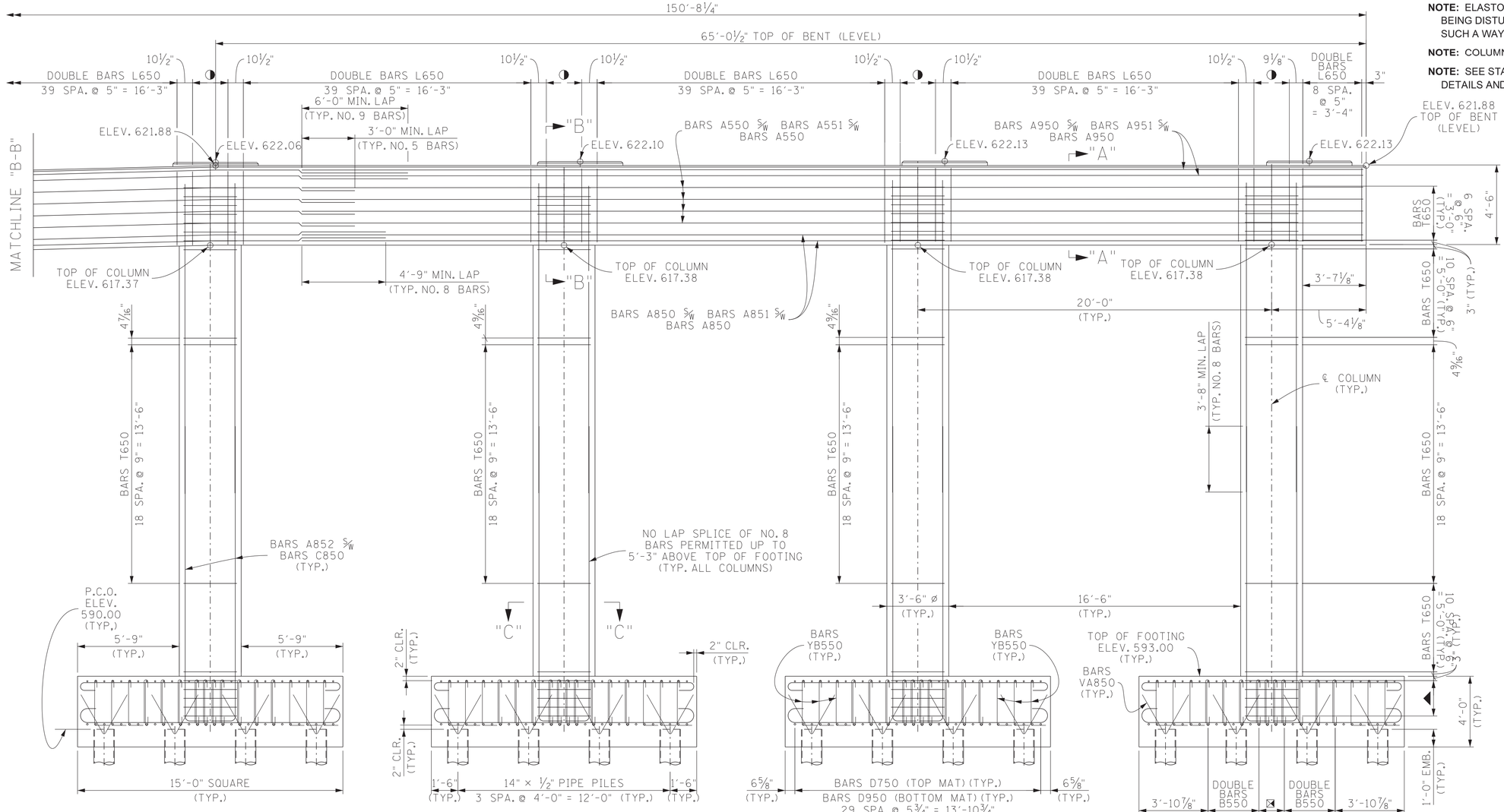
PROJECT NO.	YEAR	SHEET NO.
NH-54(48)	2026	

REVISIONS

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



PLAN



ELEVATION
(LOOKING FORWARD ON SURVEY)

◑ DENOTES: DOUBLE BARS H650 - 2 SPA @ 1'-0" = 2'-0"
⊠ DENOTES: DOUBLE BARS B550 - 3 SPA. @ 5¾" = 1'-5¼"
▲ DENOTES: BARS T650 - 4 SPA. @ 6" = 2'-0"

BENT NOTES

NOTE: WHEN POURING CAP BEAM, PROVISIONS SHALL BE MADE FOR SETTING ANCHOR BOLTS. BOLT PROJECTION 6 ½".

NOTE: RISER BLOCKS SHALL BE POURED MONOLITHICALLY WITH BENT CAP.

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: COLUMN STEEL SHALL EXTEND 3"-6" INTO BENT CAP.

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

SEALED BY

DANIEL J. SHIKE
Registered Engineer
DEPARTMENT OF AGRICULTURE
STATE OF TENNESSEE

02-05-26

PIN NO.:	101886.05	
DESIGN BY:	JOHN AYERS	DATE: 04-2025
DRAWN BY:	RODNEY CHANDLER	DATE: 06-2025
SUPERVISED BY:	DJS/GWK(DE)	DATE: 04-2025
CHECKED BY:		DATE:

FOR SECTION "A"-"A", SECTION "B"-"B" AND SECTION "C"-"C" SEE DWG. NO. U-102-036.

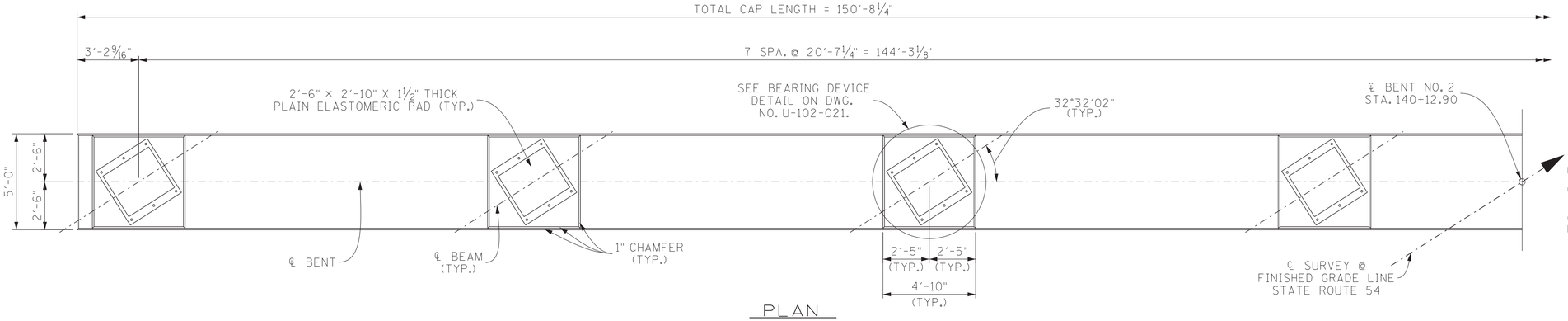
FOR END ELEVATION SEE DWG. NO. U-102-036.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

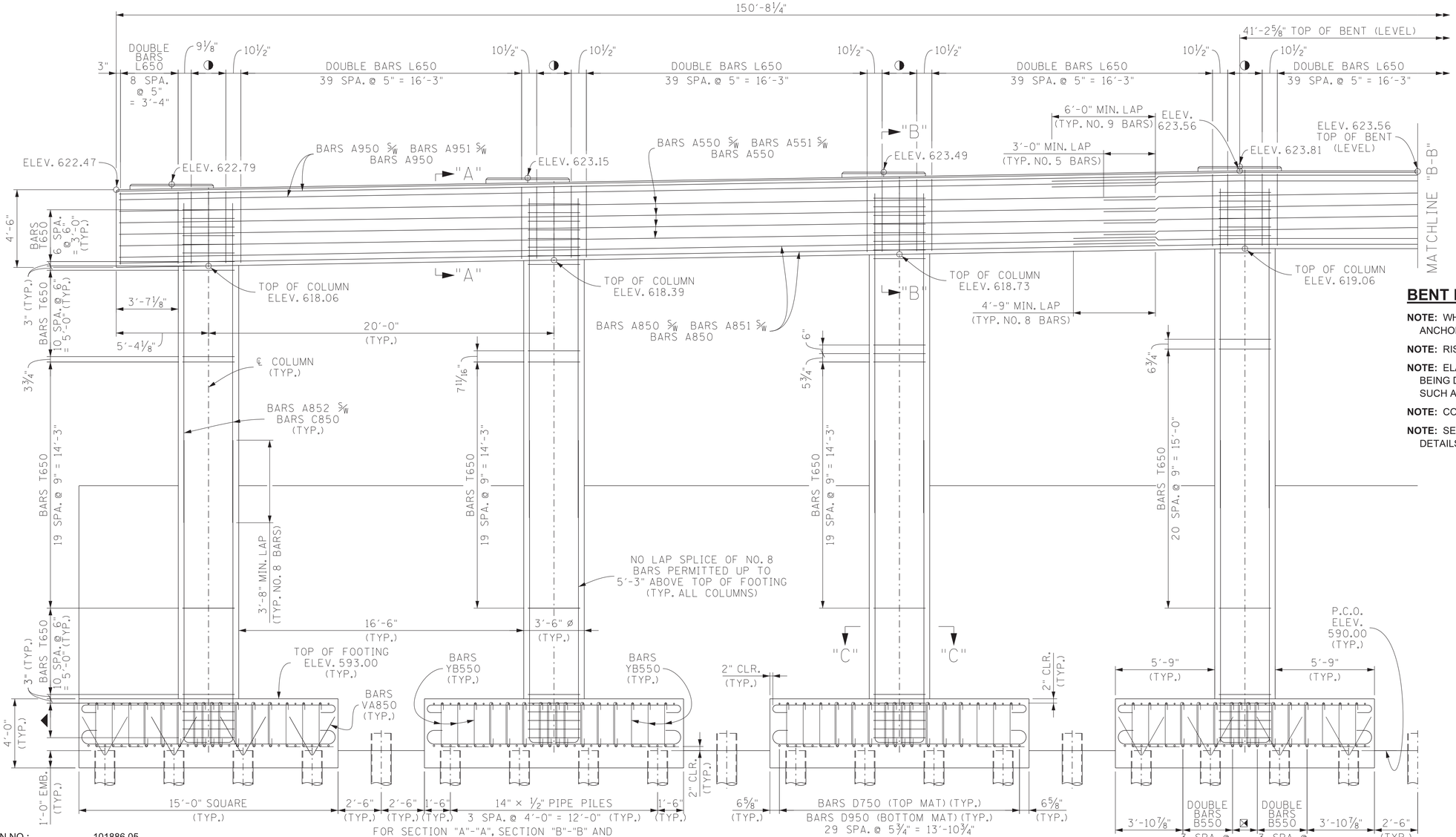
BENT NO. 1 - CONTINUED
STATE ROUTE 54 (US-641) OVER KWT RAILWAY & EXISTING STATE ROUTE 54
BRIDGE I. D. NO. 40SR0540031
STATION 140+12.90
HENRY COUNTY

U-102-031

1/14/2026 9:35:46 AM



PLAN



FOR SECTION "A"-"A", SECTION "B"-"B" AND SECTION "C"-"C" SEE DWG. NO. U-102-036.

FOR END ELEVATION SEE DWG. NO. U-102-036.

FOR CRASHWALL SPECIFICATIONS SEE DWG. NO. U-102-???A.

ELEVATION
(LOOKING FORWARD ON SURVEY)

◑ DENOTES: DOUBLE BARS H650 - 2 SPA @ 1'-0" = 2'-0"
⊠ DENOTES: DOUBLE BARS B550 - 3 SPA. @ 5¾" = 1'-5¼"
▲ DENOTES: BARS T650 - 4 SPA. @ 6" = 2'-0"

CONST. NO.: 40S054-F3-004

PROJECT NO.	YEAR	SHEET NO.
NH-54(48)	2026	

REVISIONS

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

BENT NOTES

NOTE: WHEN POURING CAP BEAM, PROVISIONS SHALL BE MADE FOR SETTING ANCHOR BOLTS. BOLT PROJECTION 6 ½".

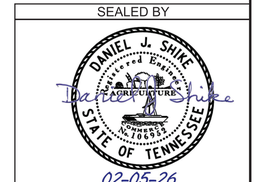
NOTE: RISER BLOCKS SHALL BE POURED MONOLITHICALLY WITH BENT CAP.

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: COLUMN STEEL SHALL EXTEND 3"-6" INTO BENT CAP.

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

SEALED BY



STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

BENT NO. 2
STATE ROUTE 54 (US-641) OVER KWT RAILWAY & EXISTING STATE ROUTE 54
BRIDGE I. D. NO. 40SR0540031
STATION 140+12.90
HENRY COUNTY

U-102-032

PIN NO.: 101886.05
DESIGN BY: JOHN AYERS DATE: 04-2025
DRAWN BY: RODNEY CHANDLER DATE: 06-2025
SUPERVISED BY: DJS/GWK(DE) DATE: 04-2025
CHECKED BY: DATE:

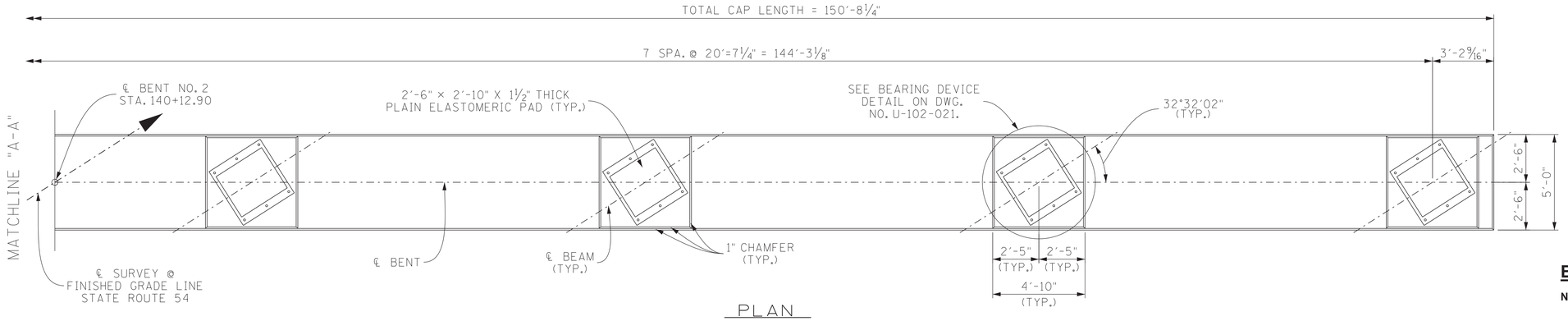
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CONST. NO.: 40S054-F3-004

PROJECT NO.	YEAR	SHEET NO.
NH-54(48)	2026	

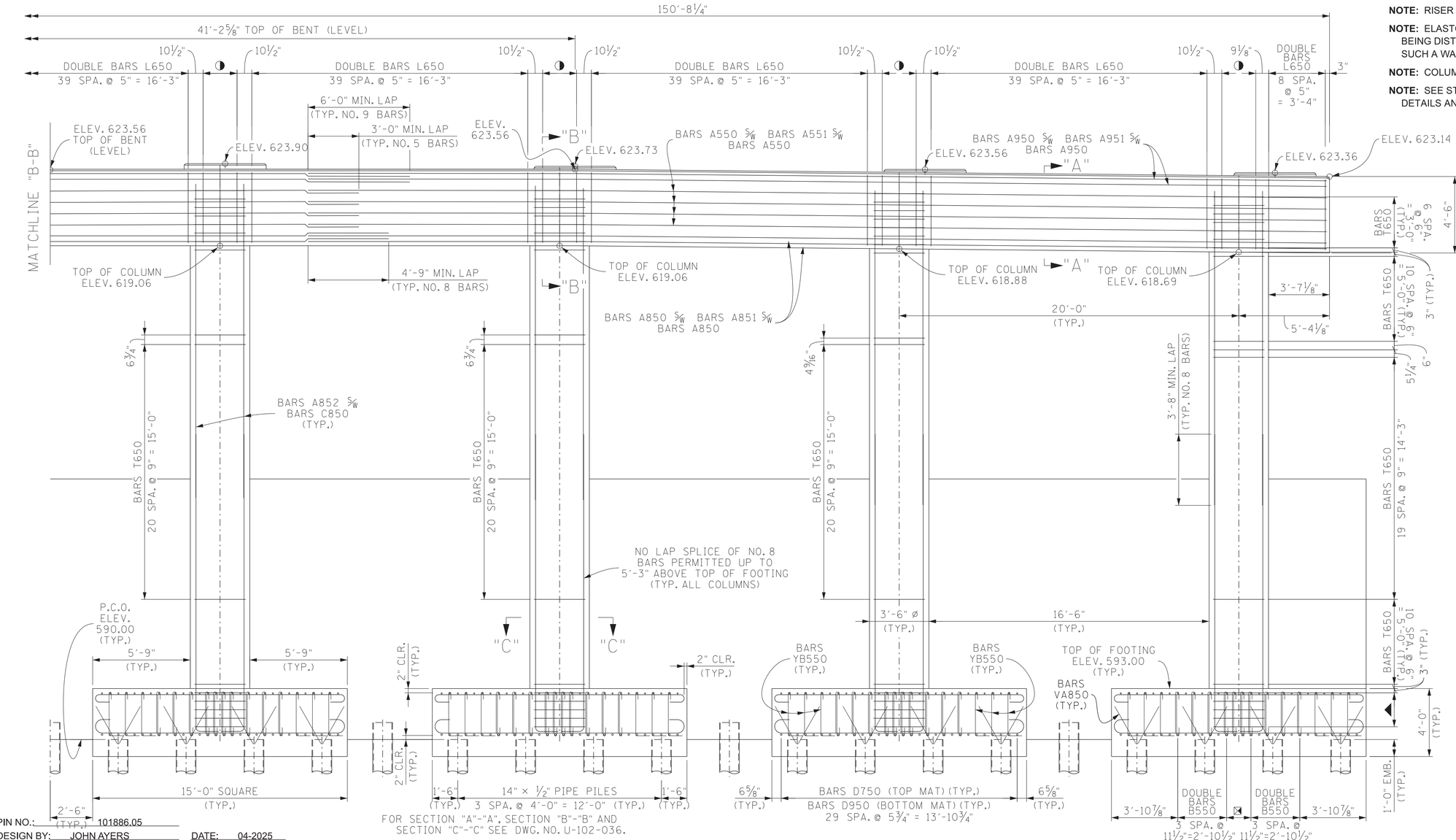
REVISIONS

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



PLAN

150'-8¼"



ELEVATION

(LOOKING FORWARD ON SURVEY)

◑ DENOTES: DOUBLE BARS H650 - 2 SPA @ 1'-0" = 2'-0"
⊠ DENOTES: DOUBLE BARS B550 - 3 SPA. @ 5¾" = 1'-5¼"
▲ DENOTES: BARS T650 - 4 SPA. @ 6" = 2'-0"

FOR SECTION "A"-"A", SECTION "B"-"B" AND SECTION "C"-"C" SEE DWG. NO. U-102-036.

FOR END ELEVATION SEE DWG. NO. U-102-036.

FOR CRASHWALL SPECIFICATIONS SEE DWG. NO. U-102-???A.

BENT NOTES

NOTE: WHEN POURING CAP BEAM, PROVISIONS SHALL BE MADE FOR SETTING ANCHOR BOLTS. BOLT PROJECTION 6 ½".

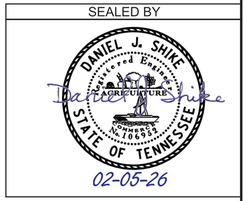
NOTE: RISER BLOCKS SHALL BE POURED MONOLITHICALLY WITH BENT CAP.

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: COLUMN STEEL SHALL EXTEND 3"-6" INTO BENT CAP.

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

SEALED BY



STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

BENT NO. 2 - CONTINUED
STATE ROUTE 54 (US-641) OVER KWT RAILWAY & EXISTING STATE ROUTE 54
BRIDGE I. D. NO. 40SR0540031
STATE 140+12.90
HENRY COUNTY

U-102-033

PIN NO.: 101886.05

DESIGN BY:	JOHN AYERS	DATE: 04-2025
DRAWN BY:	RODNEY CHANDLER	DATE: 06-2025
SUPERVISED BY:	DJS/GWK(DE)	DATE: 04-2025
CHECKED BY:		DATE:

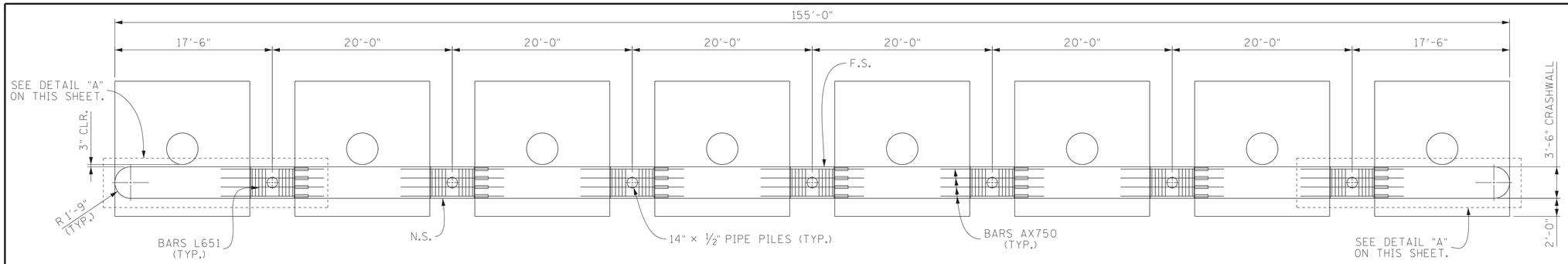
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CONST. NO.: 40S054-F3-004

PROJECT NO.	YEAR	SHEET NO.
NH-54(48)	2026	

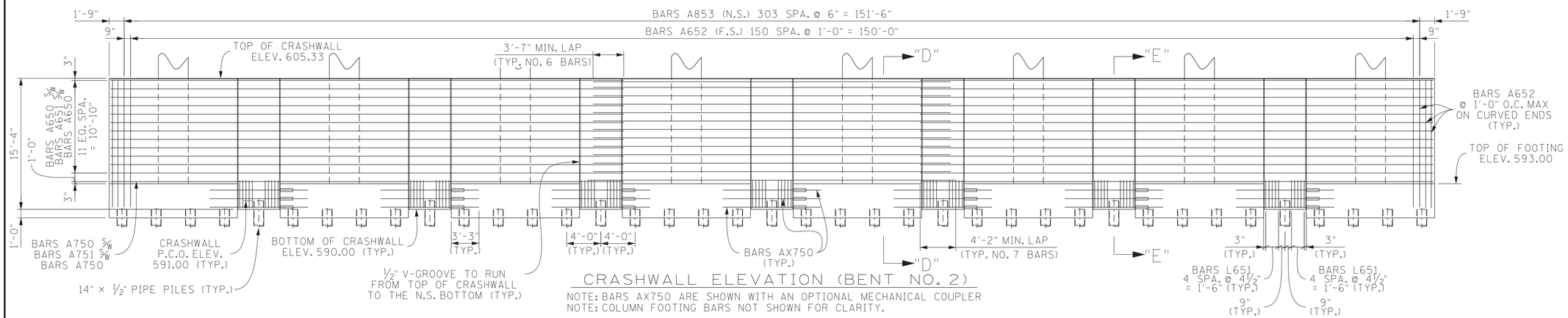
REVISIONS

NO.	DATE	BY	BRIEF DESCRIPTION
	- -		
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	- -		



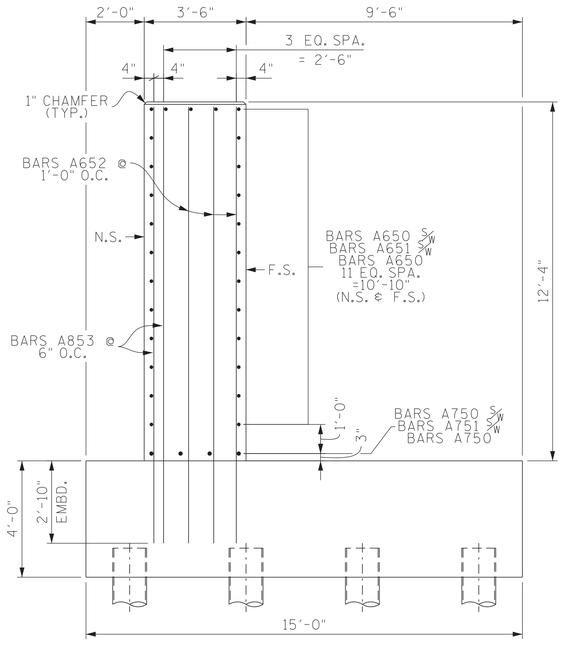
CRASHWALL PLAN (BENT NO. 2)

N.S. DENOTES: NEAR SIDE (TOWARD CENTERLINE OF RAILROAD TRACK)
F.S. DENOTES: FAR SIDE (AWAY FROM CENTERLINE OF RAILROAD TRACK)



CRASHWALL ELEVATION (BENT NO. 2)

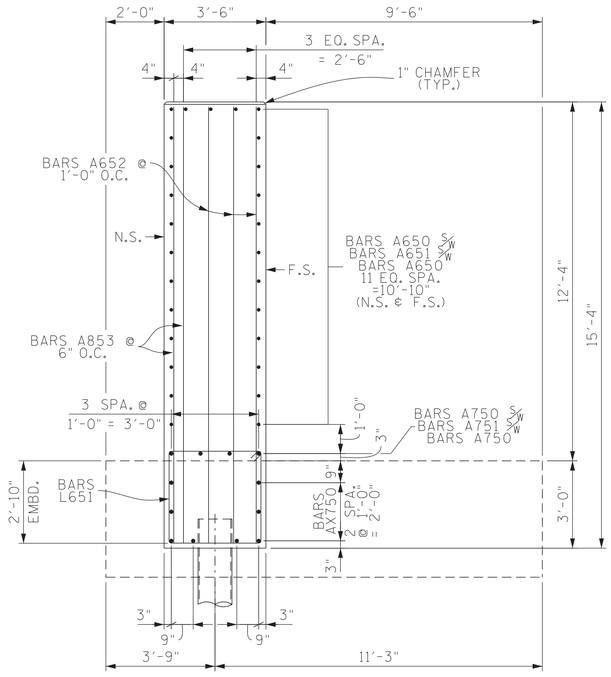
NOTE: BARS AX750 ARE SHOWN WITH AN OPTIONAL MECHANICAL COUPLER
NOTE: COLUMN FOOTING BARS NOT SHOWN FOR CLARITY.



SECTION "D"-"D"

TYPICAL BETWEEN COLUMNS

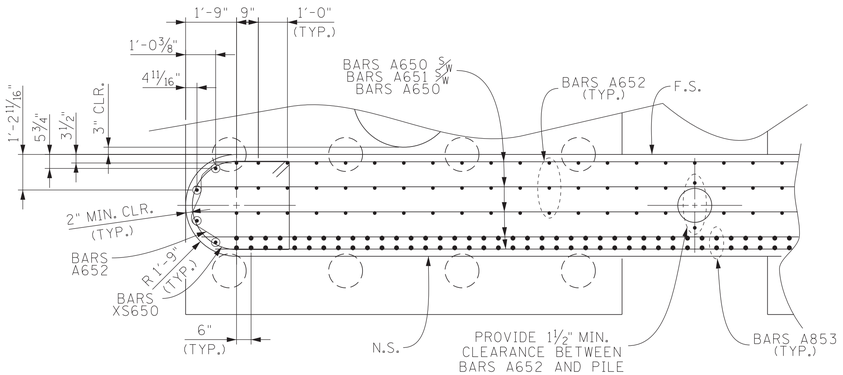
NOTE: COLUMN FOOTING BARS NOT SHOWN FOR CLARITY.



SECTION "E"-"E"

TYPICAL BETWEEN FOOTINGS

NOTE: PROVIDE 1½" MIN. CLEAR BETWEEN PILE AND BARS AX750.



DETAIL "A"

SEALED BY

DANIEL J. SHIKE — LICENSED PROFESSIONAL ENGINEER — AGRICULTURE — NUMBER 104511 — STATE OF TENNESSEE

02-05-26

PIN NO.:	101886.05
DESIGN BY:	JOHN AYERS DATE: 10-2025
DRAWN BY:	RODNEY CHANDLER DATE: 10-2025
SUPERVISED BY:	DJS/GWK(DE) DATE: 10-2025
CHECKED BY:	ALI OMAR DATE: 11-2025

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

BENT NO. 2 - CRASHWALL
STATE ROUTE 54 (US-641) OVER KWT RAILWAY & EXISTING STATE ROUTE 54
BRIDGE I. D. NO. 40SR0540031
STATION 140+12.90
HENRY COUNTY

U-102-033A

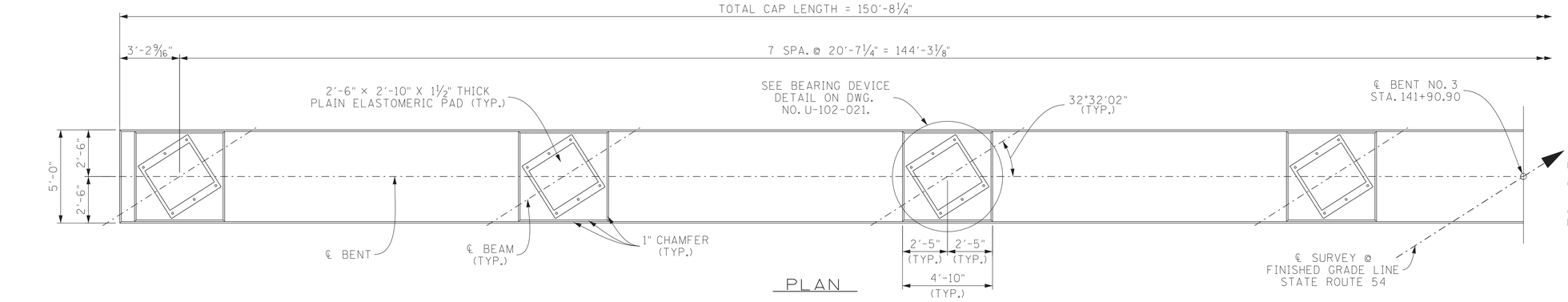
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CONST. NO.: 40S054-F3-004

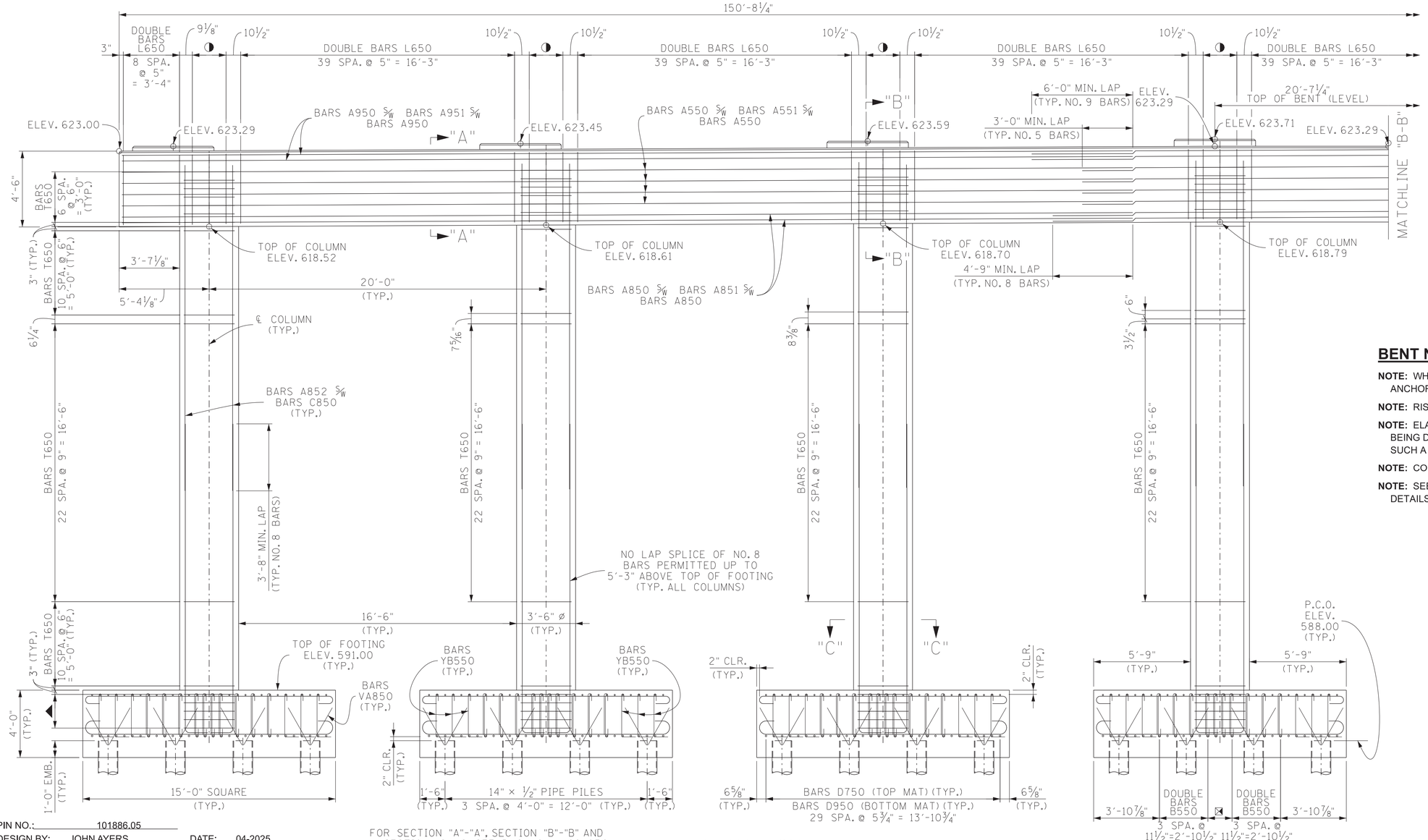
PROJECT NO.	YEAR	SHEET NO.
NH-54(48)	2026	

REVISIONS

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



PLAN



FOR SECTION "A"-"A", SECTION "B"-"B" AND SECTION "C"-"C" SEE DWG. NO. U-102-036.

FOR END ELEVATION SEE DWG. NO. U-102-036.

ELEVATION
(LOOKING FORWARD ON SURVEY)

◑ DENOTES: DOUBLE BARS H650 - 2 SPA @ 1'-0" = 2'-0"
⊠ DENOTES: DOUBLE BARS B550 - 3 SPA. @ 5¾" = 1'-5¼"
▲ DENOTES: BARS T650 - 4 SPA. @ 6" = 2'-0"

BENT NOTES

NOTE: WHEN POURING CAP BEAM, PROVISIONS SHALL BE MADE FOR SETTING ANCHOR BOLTS. BOLT PROJECTION 6 ½".

NOTE: RISER BLOCKS SHALL BE POURED MONOLITHICALLY WITH BENT CAP.

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: COLUMN STEEL SHALL EXTEND 3'-6" INTO BENT CAP.

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

SEALED BY



STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

BENT NO. 3
STATE ROUTE 54 (US-641) OVER KWT RAILWAY & EXISTING STATE ROUTE 54
BRIDGE I. D. NO. 40SR0540031
STATION 140+12.90
HENRY COUNTY

U-102-034

PIN NO.: 101886.05
DESIGN BY: JOHN AYERS DATE: 04-2025
DRAWN BY: RODNEY CHANDLER DATE: 06-2025
SUPERVISED BY: DJS/GWK(DE) DATE: 04-2025
CHECKED BY: DATE:

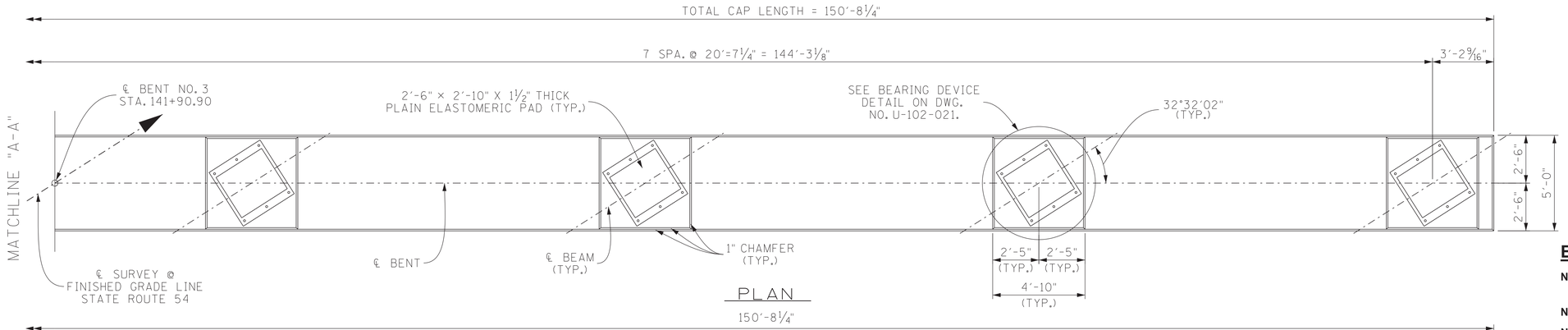
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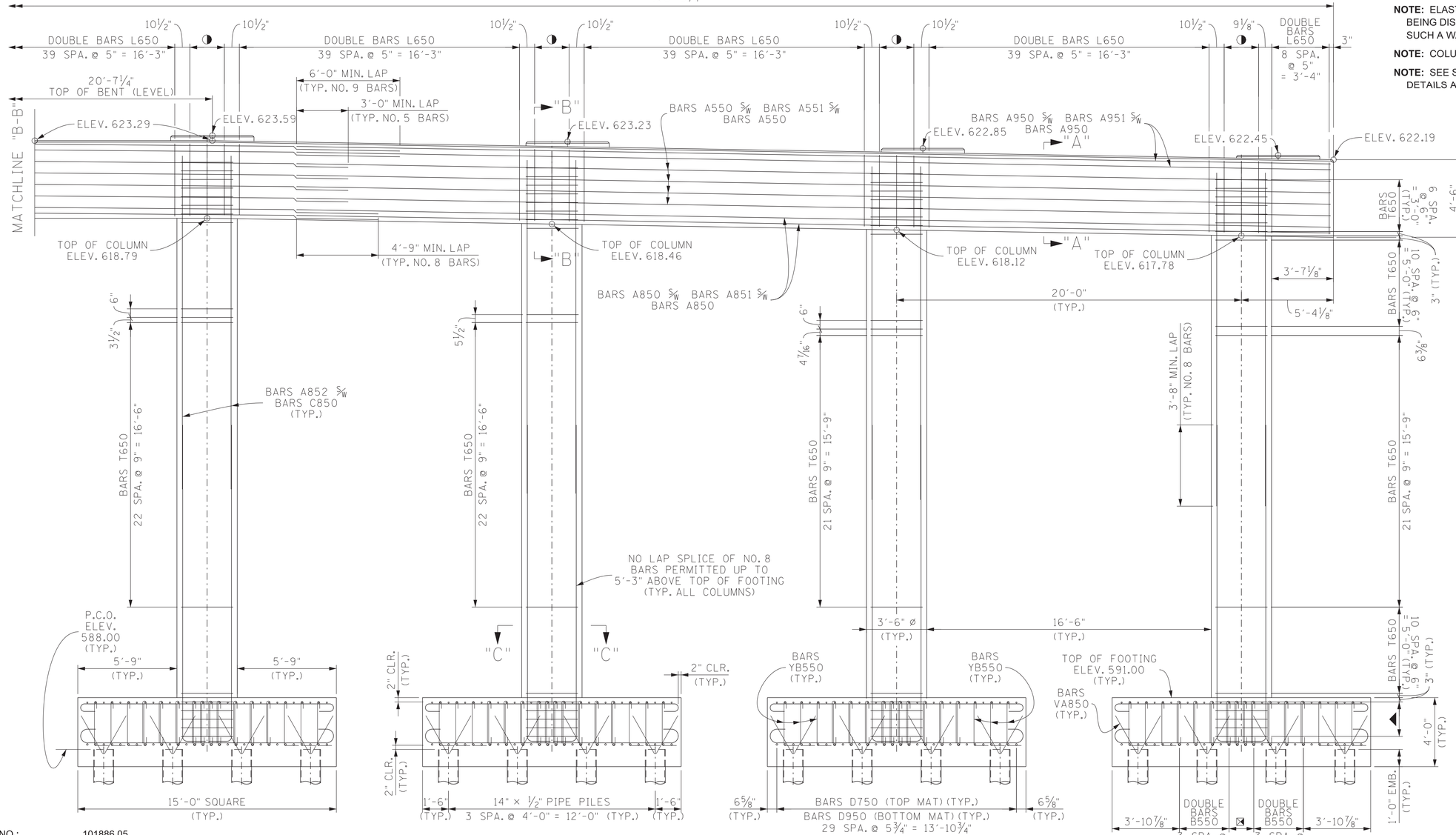
CONST. NO.: 40S054-F3-004

PROJECT NO.	YEAR	SHEET NO.
NH-54(48)	2026	

REVISIONS

NO.	DATE	BY	BRIEF DESCRIPTION
	- -		
	- -		
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	- -		
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BENT NOTES

NOTE: WHEN POURING CAP BEAM, PROVISIONS SHALL BE MADE FOR SETTING ANCHOR BOLTS. BOLT PROJECTION 6 ½".

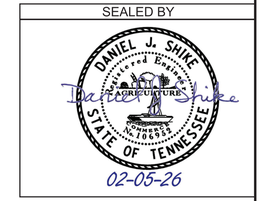
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NOTE: SEE STANDARD DRAWING STD-6-1 FOR PILE SEISMIC ATTACHMENT DETAILS AND NOTES.

SEALED BY



PIN NO.: 101886.05

DESIGN BY:	JOHN AYERS	DATE: 04-2025
DRAWN BY:	RODNEY CHANDLER	DATE: 06-2025
SUPERVISED BY:	DJS/GWK(DE)	DATE: 04-2025
CHECKED BY:		DATE:

FOR SECTION "A"-"A", SECTION "B"-"B" AND SECTION "C"-"C" SEE DWG. NO. U-102-036.

FOR END ELEVATION SEE DWG. NO. U-102-036.

ELEVATION
(LOOKING FORWARD ON SURVEY)

◑ DENOTES: DOUBLE BARS H650 - 2 SPA @ 1'-0" = 2'-0"
⊠ DENOTES: DOUBLE BARS B550 - 3 SPA. @ 5¾" = 1'-5¼"
▲ DENOTES: BARS T650 - 4 SPA. @ 6" = 2'-0"

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

BENT NO. 3 - CONTINUED
STATE ROUTE 54 (US-641) OVER KWT RAILWAY & EXISTING STATE ROUTE 54
BRIDGE I. D. NO. 40SR0540031
STATION 140+12.90
HENRY COUNTY

U-102-035

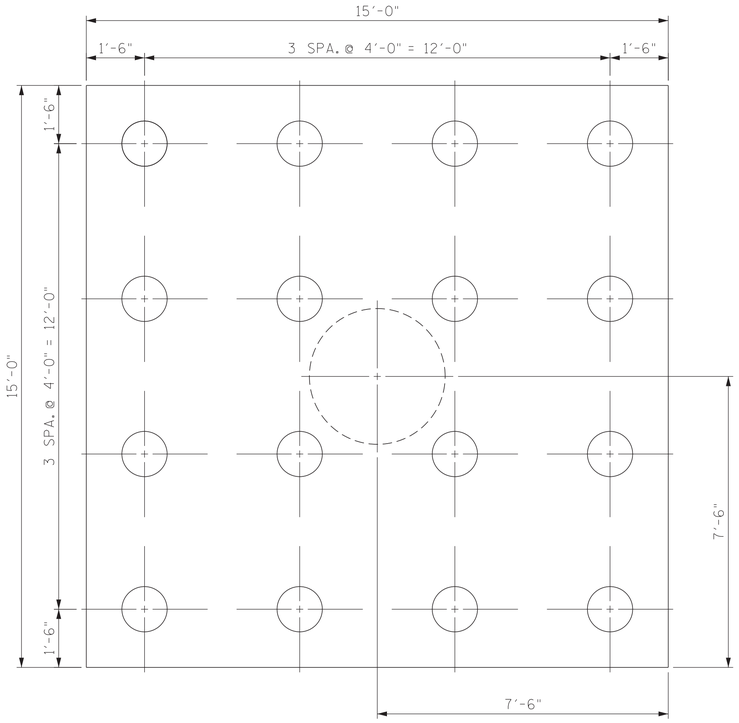
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CONST. NO.: 40S054-F3-004

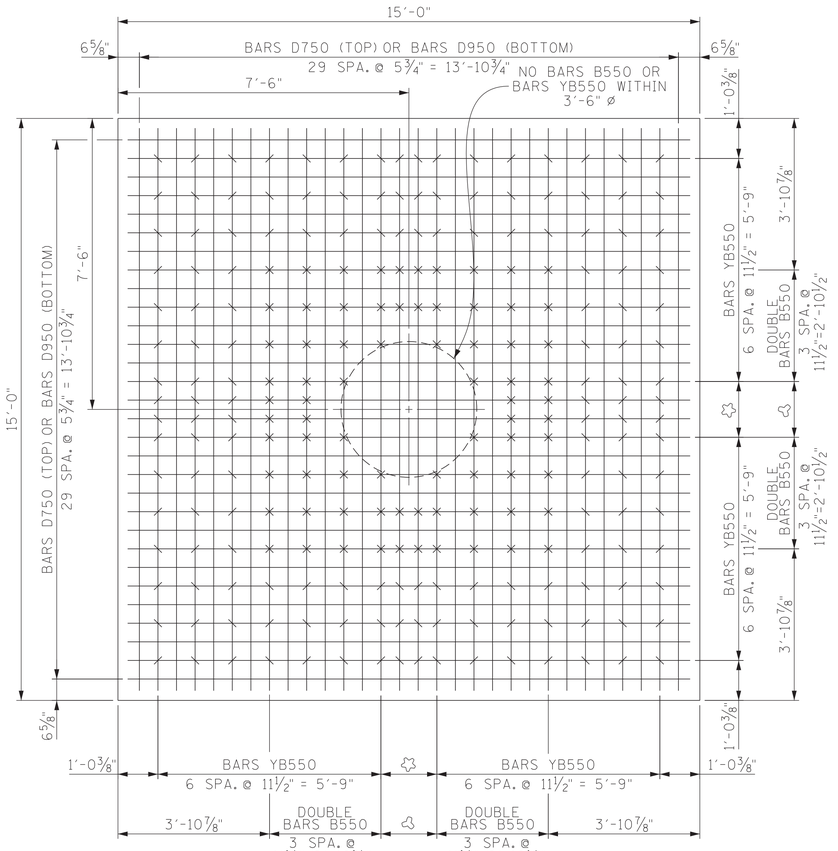
PROJECT NO.	YEAR	SHEET NO.
NH-54(48)	2026	

REVISIONS

NO.	DATE	BY	BRIEF DESCRIPTION
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	- -		
	- -		
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PLAN OF FOOTING
(SHOWING PILE LOCATIONS)

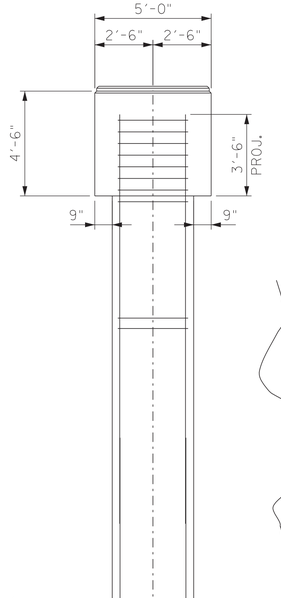


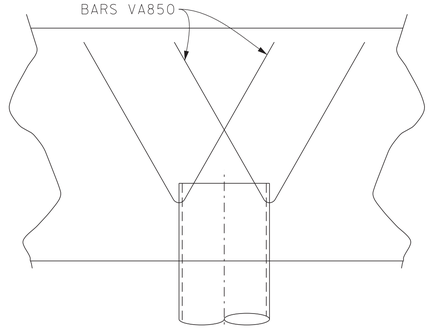
PLAN OF FOOTING
(SHOWING REINFORCEMENT)

NOTE: DOUBLE BARS B550 LAP WITH HOOKS AT OPPOSITE ENDS

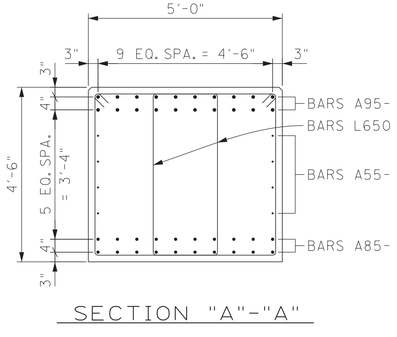
DENOTES: BARS YB550 3 SPA. @ 5¾" = 1'-5¼"

DENOTES: DOUBLE BARS B550 3 SPA. @ 5¾" = 1'-5¼"

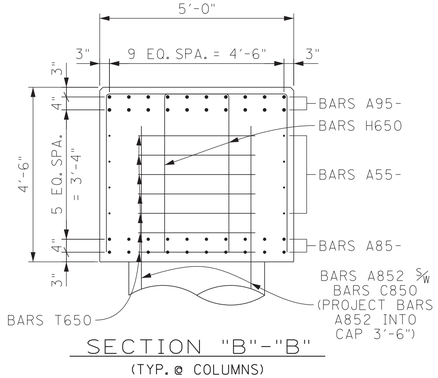




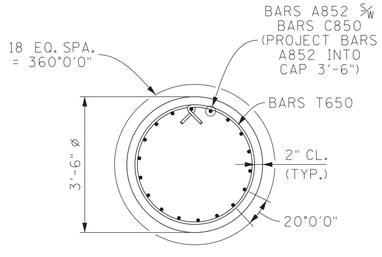
SEISMIC ATTACHMENT
(SEE STD-6-1 FOR DETAILS)



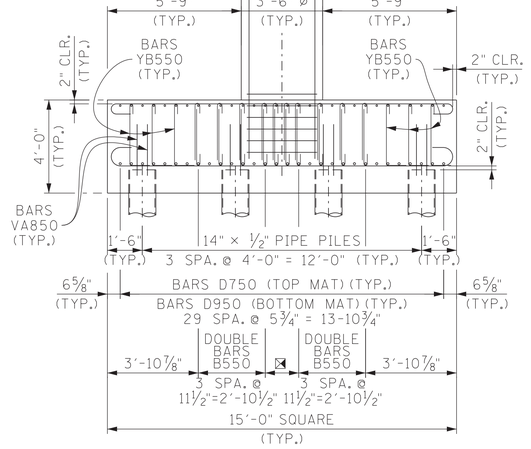
SECTION "A"-"A"



SECTION "B"-"B"
(TYP. @ COLUMNS)



SECTION "C"-"C"
(TYP. @ EACH COLUMN)



END ELEVATION

DENOTES: DOUBLE BARS B550 3 SPA. @ 5¾" = 1'-5¼"

SEALED BY



STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

BENT NOS 1 THRU 3 DETAILS
STATE ROUTE 54 (US-641) OVER KWT RAILWAY & EXISTING STATE ROUTE 54
BRIDGE I. D. NO. 40SR0540031
STATION 140+12.90
HENRY COUNTY

U-102-036

PIN NO.: 101886.05
DESIGN BY: JOHN AYERS DATE: 04-2025
DRAWN BY: RODNEY CHANDLER DATE: 06-2025
SUPERVISED BY: DJS/GWK(DE) DATE: 04-2025
CHECKED BY: ALI OMAR DATE: 08-2025

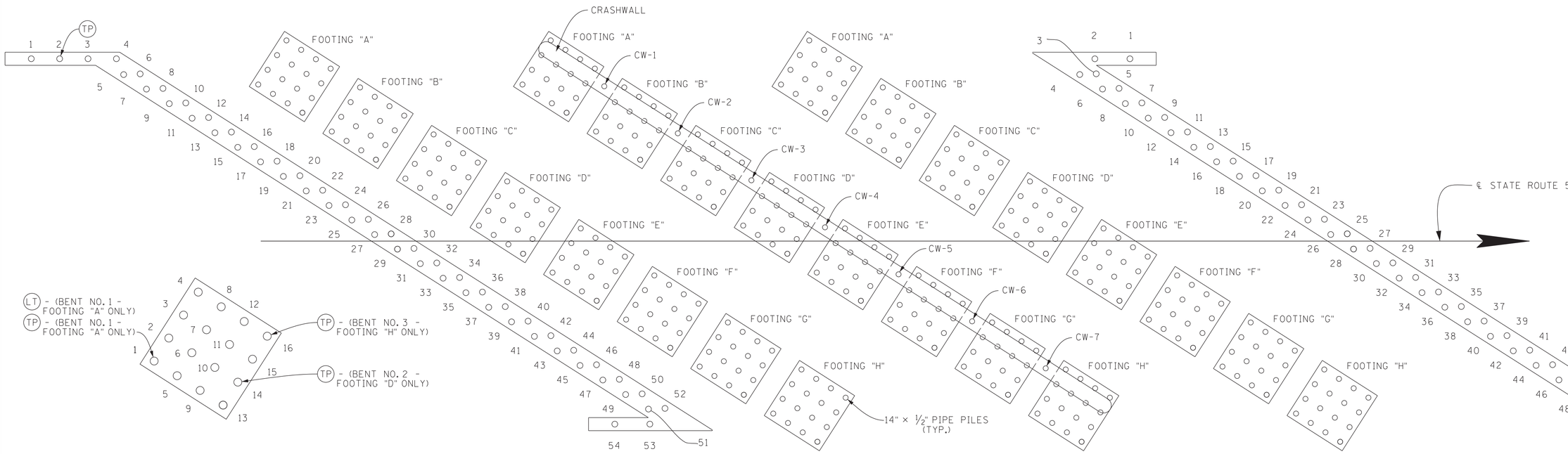
1/14/2026 9:52:46 AM

CONST. NO.: 40S054-F3-004

PROJECT NO.	YEAR	SHEET NO.
NH-54(48)	2026	

REVISIONS

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



FOOTING DETAIL
(TYP. @ EACH FOOTING)

TP DENOTES: TEST PILE

LT DENOTES: STATIC LOAD TEST

FOR PILE DATA SEE DWG. NO. U-102-038.

PIN NO.: 101886.05

DESIGN BY:	JOHN AYERS	DATE: 02-2025
DRAWN BY:	RODNEY CHANDLER	DATE: 06-2025
SUPERVISED BY:	DJS/GWK(DE)	DATE: 02-2025
CHECKED BY:		DATE:

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

FINAL FOUNDATION DATA
STATE ROUTE 54 (US-641) OVER KWT RAILWAY & EXISTING STATE ROUTE 54
BRIDGE I. D. NO. 40SR0540031
STATION 140+12.90
HENRY COUNTY

U-102-037

1/14/2026 9:56:10 AM

CONST. NO.: 40S054-F3-004

PROJECT NO.	YEAR	SHEET NO.
NH-54(48)	2026	

REVISIONS

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

TABLE OF PILE DATA

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	ABUTMENT NO. 1	PILE CUT-OFF ELEVATION																											
		PILE TIP ELEVATION																											
		IN PLACE PILE LENGTH																											
			28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54
		PILE CUT-OFF ELEVATION																											
		PILE TIP ELEVATION																											
		IN PLACE PILE LENGTH																											
BENT NO. 1	FOOTING "A"	PILE CUT-OFF ELEVATION																											
		PILE TIP ELEVATION																											
		IN PLACE PILE LENGTH																											
	FOOTING "B"	PILE CUT-OFF ELEVATION																											
		PILE TIP ELEVATION																											
		IN PLACE PILE LENGTH																											
	FOOTING "C"	PILE CUT-OFF ELEVATION																											
		PILE TIP ELEVATION																											
		IN PLACE PILE LENGTH																											
	FOOTING "D"	PILE CUT-OFF ELEVATION																											
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		IN PLACE PILE LENGTH																											
	FOOTING "E"	PILE CUT-OFF ELEVATION																											
		PILE TIP ELEVATION																											
		IN PLACE PILE LENGTH																											
	FOOTING "F"	PILE CUT-OFF ELEVATION																											
		PILE TIP ELEVATION																											
		IN PLACE PILE LENGTH																											
	FOOTING "G"	PILE CUT-OFF ELEVATION																											
		PILE TIP ELEVATION																											
		IN PLACE PILE LENGTH																											
	FOOTING "H"	PILE CUT-OFF ELEVATION																											
		PILE TIP ELEVATION																											
		IN PLACE PILE LENGTH																											
BENT NO. 2	FOOTING "A"	PILE CUT-OFF ELEVATION																											
		PILE TIP ELEVATION																											
		IN PLACE PILE LENGTH																											
	FOOTING "B"	PILE CUT-OFF ELEVATION																											
		PILE TIP ELEVATION																											
		IN PLACE PILE LENGTH																											
	FOOTING "C"	PILE CUT-OFF ELEVATION																											
		PILE TIP ELEVATION																											
		IN PLACE PILE LENGTH																											
	FOOTING "D"	PILE CUT-OFF ELEVATION																											
		PILE TIP ELEVATION																											
		IN PLACE PILE LENGTH																											
	FOOTING "E"	PILE CUT-OFF ELEVATION																											
		PILE TIP ELEVATION																											
		IN PLACE PILE LENGTH																											
	FOOTING "F"	PILE CUT-OFF ELEVATION																											
		PILE TIP ELEVATION																											
		IN PLACE PILE LENGTH																											
	FOOTING "G"	PILE CUT-OFF ELEVATION																											
		PILE TIP ELEVATION																											
		IN PLACE PILE LENGTH																											
	FOOTING "H"	PILE CUT-OFF ELEVATION																											
		PILE TIP ELEVATION																											
		IN PLACE PILE LENGTH																											
BENT NO. 3	FOOTING "A"	PILE CUT-OFF ELEVATION																											
		PILE TIP ELEVATION																											
		IN PLACE PILE LENGTH																											
	FOOTING "B"	PILE CUT-OFF ELEVATION																											
		PILE TIP ELEVATION																											
		IN PLACE PILE LENGTH																											
	FOOTING "C"	PILE CUT-OFF ELEVATION																											
		PILE TIP ELEVATION																											
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	FOOTING "E"	PILE CUT-OFF ELEVATION																											
		PILE TIP ELEVATION																											
		IN PLACE PILE LENGTH																											
	FOOTING "F"	PILE CUT-OFF ELEVATION																											
		PILE TIP ELEVATION																											
		IN PLACE PILE LENGTH																											
	FOOTING "G"	PILE CUT-OFF ELEVATION																											
		PILE TIP ELEVATION																											
		IN PLACE PILE LENGTH																											
	FOOTING "H"	PILE CUT-OFF ELEVATION																											
		PILE TIP ELEVATION																											
		IN PLACE PILE LENGTH																											
			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27
	ABUTMENT NO. 2	PILE CUT-OFF ELEVATION																											
		PILE TIP ELEVATION																											
		IN PLACE PILE LENGTH																											
			28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54
		PILE CUT-OFF ELEVATION																											
		PILE TIP ELEVATION																											
		IN PLACE PILE LENGTH																											

CRASHWALL @ BENT NO. 2			
	CW-1	PILE CUT-OFF ELEVATION	
		PILE TIP ELEVATION	
		IN PLACE PILE LENGTH	
	CW-2	PILE CUT-OFF ELEVATION	
		PILE TIP ELEVATION	
		IN PLACE PILE LENGTH	
	CW-3	PILE CUT-OFF ELEVATION	
		PILE TIP ELEVATION	
		IN PLACE PILE LENGTH	
	CW-4	PILE CUT-OFF ELEVATION	
		PILE TIP ELEVATION	
		IN PLACE PILE LENGTH	
	CW-5	PILE CUT-OFF ELEVATION	
		PILE TIP ELEVATION	
		IN PLACE PILE LENGTH	
	CW-6	PILE CUT-OFF ELEVATION	
		PILE TIP ELEVATION	
		IN PLACE PILE LENGTH	
	CW-7	PILE CUT-OFF ELEVATION	
		PILE TIP ELEVATION	
		IN PLACE PILE LENGTH	

PIN NO.: 101886.05
DESIGN BY: JOHN AYERS DATE: 02-2025
DRAWN BY: RODNEY CHANDLER DATE: 06-2025
SUPERVISED BY: DJS/GWK(DE) DATE: 02-2025
CHECKED BY: DATE:

NOTE TO 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.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

FINAL FOUNDATION DATA
STATE ROUTE 54 (US-641) OVER
KWT RAILWAY &
EXISTING STATE ROUTE 54
BRIDGE I. D. NO. 40SR0540031
STATION 140+12.90
HENRY COUNTY

U-102-038

10:00:44 AM
1/14/2026

BILL OF STEEL

SUPERSTRUCTURE (EPOXY)

BARS	LOCATION	SIZE	NO. REQ'D.	BENDING DIMENSIONS A	B	C	D	LENGTH (FEET)
A500E	BOTTOM SLAB/DIA.	5	1,230					60'-0"
A501E	BOTTOM SLAB	5	1,018					28'-5"
SERIES								
A502E	BOTTOM SLAB	5	2					1238'-3"
				LENGTH VARIES FROM 3'-7" TO 28'-2" IN INC. OF 3 13/16" (78 BARS)				
SERIES								
A503E	BOTTOM SLAB	5	2					5574'-7"
				LENGTH VARIES FROM 5'-10" TO 59'-9" IN INC. OF 3 13/16" (170 BARS)				
A504E	TOP & BOTTOM SLAB	5	1,700					60'-0"
A505E	BOTTOM SLAB	5	108					21'-2"
A506E	TOP SLAB	5	128					29'- 2"
A507E	TOP SLAB	5	128					52'- 5"
A508E	TOP SLAB	5	128					40'- 2"
A509E	TOP SLAB	5	128					40'- 7"
A510E	BOTTOM SLAB	5	20					11'- 2"
A511E	DIAPHRAGM	5	28					44'- 10"
A600E	TOP SLAB	6	1,236					44'- 11"
A601E	TOP SLAB	6	1,018					44'- 10"
SERIES								
A602E	TOP SLAB	6	2					2983'- 11"
				LENGTH VARIES FROM 10'-2" TO 44'-7" IN INC. OF 3 13/16" (109 BARS)				
SERIES								
A603E	TOP SLAB	6	2					3869'- 9"
				LENGTH VARIES FROM 6'-2" TO 49'-11" IN INC. OF 3 13/16" (138 BARS)				
A604E	TOP SLAB	6	22					11'- 2"
A605E	TOP SLAB	6	128					40'- 0"
A606E	TOP SLAB	6	128					29'- 0"
A607E	TOP SLAB	6	128					24'- 0"
B570E	SLAB/PARAPET	5	3,864	2'-8"				3'- 3"
H405E	DIAPHRAGM/SLAB	4	640	1'-8"	5"			2'- 6"
H500E	DIAPHRAGM	5	258	8"	5'-6"			11'- 8"
R500E	DIAPHRAGM	5	516	3'-0"	3'-10"			6'- 10"

ABUTMENT NO. 1 (EPOXY)

BARS	LOCATION	SIZE	NO. REQ'D.	BENDING DIMENSIONS A	B	C	D	LENGTH (FEET)
A640E	ENDWALL	6	36					60'-0"
A641E	ENDWALL	6	18					47'-7"
A642E	ENDWALL	6	320					7'-2"
A643E	ENDWALL	6	16					6'-10"
A740E	ABUT BEAM	7	22					60'-0"
A741E	ABUT BEAM	7	11					49'-0"
B570E	WINGWALLS	5	70	2'-8"				3'-3"
B640E	ENDWALL	6	18	5'-0"				5'-8"
F640E	ENDWALL	6	153	1'-1"	1'-3"	1'-1"	1'-3"	4'-0"
H400E	WINGWALL	4	12	10 1/2"	3'-11"			8'-9"
H401E	WINGWALL	4	2	9 7/8"	3'-10"			8'-6"
H402E	WINGWALL	4	2	8 3/4"	3'-9"			8'-3"
H403E	WINGWALL	4	2	7 5/8"	3'-8"			8'-0"
H404E	WINGWALL	4	2	6 1/2"	3'-7"			7'-9"
SERIES								
HD400E	WINGWALL	4	2	*	3'-11"	0'-9"		33'-0"
				* DIM. "A" VARIES FROM 5 7/8" TO 3 3/4" IN INC. OF 11/16" (4 BARS)				
SERIES								
HD401E	WINGWALL	4	2	*	3'-11"	0'-9"		42'-8"
				* DIM. "A" VARIES FROM 10" TO 6 1/2" IN INC. OF 7/8" (5 BARS)				
H540E	ENDWALL	5	152	2'-2"	0'-6"			3'-2"
H541E	RISER BLOCKS	5	20	3'-3"	1'-11"			7'-1"
H542E	RISER BLOCKS	5	16	3'-7"	1'-11"			7'-5"
H640E	ENDWALL	6	152	1'-2"	6'-10"			14'-10"
L540E	ABUT BEAM	5	148	5'-2"	2'-8"			16'-7"
L542E	ABUT BEAM	5	49	2'-8"	2'-8"			11'-7"

ABUTMENT NO. 1 (REGULAR)

BARS	LOCATION	SIZE	NO. REQ'D.	BENDING DIMENSIONS A	B	C	D	LENGTH (FEET)
A440	RDWY BRKT	4	2					60'-0"
A441	RDWY BRKT	4	1					37'-5"
A442	WINGWALL	4	9					19'-2"
A443	WINGWALL	4	16					6'-11"
A444	WINGWALL	4	9					19'-11"
A445	WINGWALL	4	18					6'-7"
A540	ABUT BEAM	5	4					60'-0"
A541	ABUT BEAM	5	2					46'-8"
A542	ABUT BEAM	5	153					5'-2"
A543	WING BEAM	5	2					23'-10"
A544	WING BEAM	5	2					26'-0"
A644	WINGWALL	6	9					17'-7"
A645	WINGWALL	6	16					6'-11"
A646	WINGWALL	6	9					21'-6"
A647	WINGWALL	6	18					6'-7"
A742	ABUT BEAM	7	22					60'-0"

ABUTMENT NO. 1 (REGULAR) - CONTINUED

BARS	LOCATION	SIZE	NO. REQ'D.	BENDING DIMENSIONS A	B	C	D	LENGTH (FEET)
A743	ABUT BEAM	7	11					49'-0"
A744	WING BEAM	7	10					23'-10"
A745	WING BEAM	7	10					26'-0"
H641	WINGWALL	6	34	1'-2"	4'-1"			9'-4"
L541	WING BEAM	5	43	2'-8"	2'-8"			11'-7"
VA840	ABUT BEAM	8	98	2'-6"	2'-6"			5'-0"

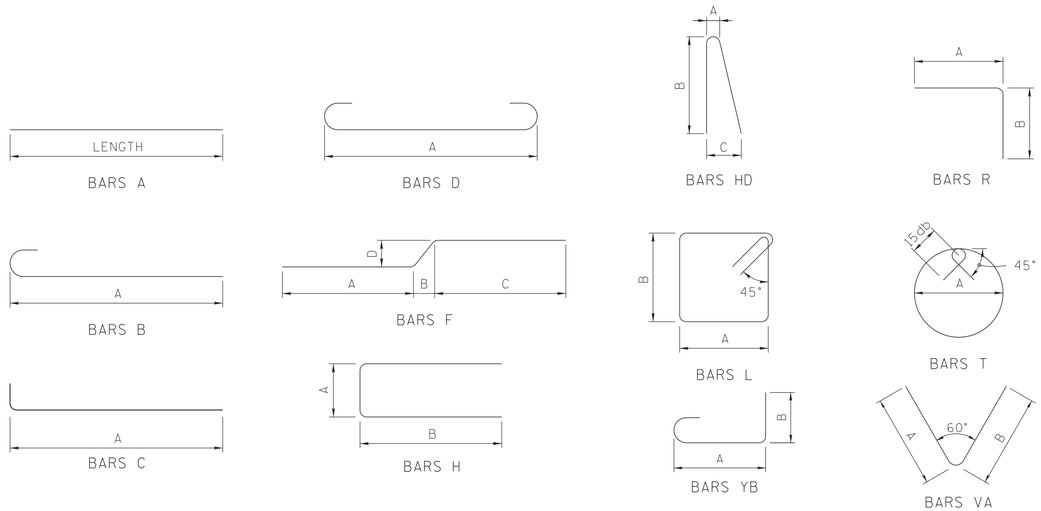
ABUTMENT NO. 2 (EPOXY)

BARS	LOCATION	SIZE	NO. REQ'D.	BENDING DIMENSIONS A	B	C	D	LENGTH (FEET)
A640E	ENDWALL	6	36					60'-0"
A641E	ENDWALL	6	18					47'-7"
A642E	ENDWALL	6	320					7'-2"
A643E	ENDWALL	6	16					6'-10"
A740E	ABUT BEAM	7	22					60'-0"
A741E	ABUT BEAM	7	11					49'-0"
B570E	WINGWALLS	5	70	2'-8"				3'-3"
B640E	ENDWALL	6	18	5'-0"				5'-8"
F640E	ENDWALL	6	153	1'-1"	1'-3"	1'-1"	1'-3"	4'-0"
H400E	WINGWALL	4	12	10 1/2"	3'-11"			8'-9"
H401E	WINGWALL	4	2	9 7/8"	3'-10"			8'-6"
H402E	WINGWALL	4	2	8 3/4"	3'-9"			8'-3"
H403E	WINGWALL	4	2	7 5/8"	3'-8"			8'-0"
H404E	WINGWALL	4	2	6 1/2"	3'-7"			7'-9"
SERIES								
HD400E	WINGWALL	4	2	*	3'-11"	0'-9"		33'-0"
				* DIM. "A" VARIES FROM 5 7/8" TO 3 3/4" IN INC. OF 11/16" (4 BARS)				
SERIES								
HD401E	WINGWALL	4	2	*	3'-11"	0'-9"		42'-8"
				* DIM. "A" VARIES FROM 10" TO 6 1/2" IN INC. OF 7/8" (5 BARS)				
H540E	ENDWALL	5	152	2'-2"	0'-6"			3'-2"
H541E	RISER BLOCKS	5	20	3'-3"	1'-11"			7'-1"
H542E	RISER BLOCKS	5	16	3'-7"	1'-11"			7'-5"
H640E	ENDWALL	6	152	1'-2"	6'-10"			14'-10"
L540E	ABUT BEAM	5	148	5'-2"	2'-8"			16'-7"
L542E	ABUT BEAM	5	49	2'-8"	2'-8"			11'-7"

ABUTMENT NO. 2 (REGULAR)

BARS	LOCATION	SIZE	NO. REQ'D.	BENDING DIMENSIONS A	B	C	D	LENGTH (FEET)
A440	RDWY BRKT	4	2					60'-0"
A441	RDWY BRKT	4	1					37'-5"
A442	WINGWALL	4	9					19'-2"
A443	WINGWALL	4	16					7'-3"
A444	WINGWALL	4	9					19'-11"
A445	WINGWALL	4	18					6'-10"
A540	ABUT BEAM	5	4					60'-0"
A541	ABUT BEAM	5	2					46'-8"
A542	ABUT BEAM	5	153					5'-2"
A543	WING BEAM	5	2					23'-10"
A544	WING BEAM	5	2					26'-0"
A644	WINGWALL	6	9					17'-7"
A645	WINGWALL	6	16					7'-3"
A646	WINGWALL	6	9					21'-6"
A647	WINGWALL	6	18					6'-10"
A742	ABUT BEAM	7	22					60'-0"
A743	ABUT BEAM	7	11					49'-0"
A744	WING BEAM	7	10					23'-10"
A745	WING BEAM	7	10					26'-0"
H641	WINGWALL	6	34	1'-2"	4'-1"			9'-4"
L541	WING BEAMS	5	43	2'-8"	2'-8"			11'-7"
VA840	ABUT BEAM	8	98	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.



PIN NO.: 101886.05
DESIGN BY: JOHN AYERS DATE: 02-2025
DRAWN BY: RODNEY CHANDLER DATE: 06-2025
SUPERVISED BY: DJS/GWK(DE) DATE: 02-2025
CHECKED BY: DATE:

CONST. NO.: 40S054-F3-004

PROJECT NO.	YEAR	SHEET NO.
NH-54(48)	2026	

REVISIONS

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

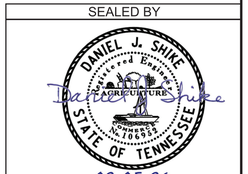
REINFORCING STEEL CODE

TYPE	SIZE	SERIES
A	5	6

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
STATE ROUTE 54 (US-641) OVER
KWT RAILWAY &
EXISTING STATE ROUTE 54
BRIDGE I. D. NO. 40SR0540031
STATION 140+12.90
HENRY COUNTY

U-102-039

1/14/2026 10:05:54 AM

CONST. NO.: 40S054-F3-004

PROJECT NO.	YEAR	SHEET NO.
NH-54(48)	2026	

REVISIONS

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

BILL OF STEEL

BENT NO. 1

BARS	LOCATION	SIZE	NO. REQ'D.	BENDING DIMENSIONS A	B	C	D	LENGTH (FEET)
A550	CAP	5	16					60'-0"
A551	CAP	5	8					36'-7"
A850	CAP	8	40					60'-0"
A851	CAP	8	20					40'-1"
A852	COLUMN/CAP	8	144					17'-7"
A950	CAP	9	40					60'-0"
A951	CAP	9	20					42'-7"
B550	FOOTING	5	1344	2'-8"				3'-3"
C850	COLUMN/FOOTING	8	144	16'-8"				18'-0"
D750	FOOTING	7	480	14'-8"				16'-4"
D950	FOOTING	9	480	14'-8"				17'-2"
H650	CAP	6	48	3'-2"	4'-2"			11'-6"
L650	CAP	6	596	3'-2"	4'-2"			16'-0"
T650	COLUMN	6	410	3'-2"				12'-5"
YB550	FOOTING	5	156	2'-8"	10"			4'-1"
VA850	FOOTING	8	256	2'-6"	2'-6"			5'-0"

BENT NO. 2

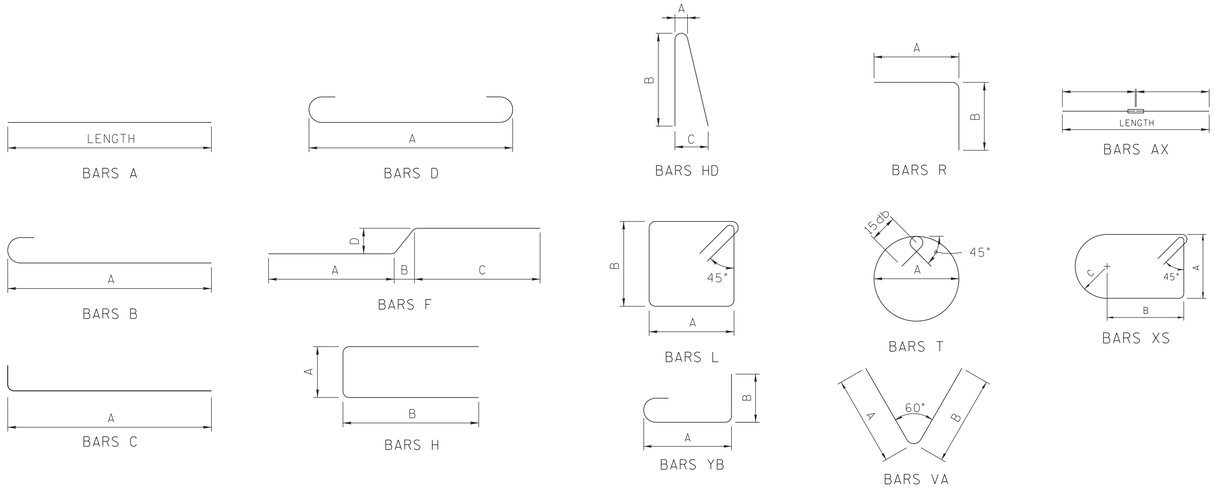
BARS	LOCATION	SIZE	NO. REQ'D.	BENDING DIMENSIONS A	B	C	D	LENGTH (FEET)
A550	CAP	5	16					60'-0"
A551	CAP	5	8					36'-7"
A850	CRASHWALL	6	54					60'-0"
A851	CRASHWALL	6	27					41'-10"
A852	CRASHWALL	6	467					14'-11"
A750	CRASHWALL	7	8					60'-0"
A751	CRASHWALL	7	4					43'-0"
AX750	CRASHWALL	7	56					11'-6"
A850	CAP	8	40					60'-0"
A851	CAP	8	20					40'-1"
A852	COLUMN/CAP	8	144					18'-6"
A853	CRASHWALL	8	608					14'-11"
A950	CAP	9	40					60'-0"
A951	CAP	9	20					42'-7"
B550	FOOTING	5	1344	2'-8"				3'-3"
C850	COLUMN/FOOTING	8	144	17'-6"				18'-10"
D750	FOOTING	7	480	14'-8"				16'-4"
D950	FOOTING	9	480	14'-8"				17'-2"
H550	CAP	6	48	3'-2"	4'-2"			11'-6"
L650	CAP	6	596	3'-2"	4'-2"			16'-0"
L651	CRASHWALL	6	70	3'-2"	3'-2"			14'-0"
T650	COLUMN	6	432	3'-2"				12'-5"
YB550	FOOTING	5	156	2'-8"	10"			4'-1"
VA850	FOOTING	8	256	2'-6"	2'-6"			5'-0"
XS650	CRASHWALL	6	26	3'-0"	1'-10"	1'-7"		13'-0"

BENT NO. 3

BARS	LOCATION	SIZE	NO. REQ'D.	BENDING DIMENSIONS A	B	C	D	LENGTH (FEET)
A550	CAP	5	16					60'-0"
A551	CAP	5	8					36'-7"
A850	CAP	8	40					60'-0"
A851	CAP	8	20					40'-1"
A852	COLUMN/CAP	8	144					19'-4"
A950	CAP	9	40					60'-0"
A951	CAP	9	20					42'-7"
B550	FOOTING	5	1344	2'-8"				3'-3"
C850	COLUMN/FOOTING	8	144	18'-4"				19'-8"
D750	FOOTING	7	480	14'-8"				16'-4"
D950	FOOTING	9	480	14'-8"				17'-2"
H650	CAP	6	48	3'-2"	4'-2"			11'-6"
L650	CAP	6	596	3'-2"	4'-2"			16'-0"
T650	COLUMN	6	452	3'-2"				12'-5"
YB550	FOOTING	5	156	2'-8"	10"			4'-1"
VA850	FOOTING	8	256	2'-6"	2'-6"			5'-0"

BARS	LOCATION	SIZE	NO. REQ'D.	BENDING DIMENSIONS A	B	C	D	LENGTH (FEET)

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	6

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

DANIEL J. SHIKE — LICENSED PROFESSIONAL ENGINEER — AGRICULTURE — SCHNEER 106852 — STATE OF TENNESSEE

02-05-26

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

BILL OF STEEL
STATE ROUTE 54 (US-641) OVER KWT RAILWAY & EXISTING STATE ROUTE 54
BRIDGE I. D. NO. 40SR0540031
STATION 140+12.90
HENRY COUNTY

U-102-040

PIN NO.: 101886.05
DESIGN BY: JOHN AYERS DATE: 02-2025
DRAWN BY: RODNEY CHANDLER DATE: 06-2025
SUPERVISED BY: DJS/GWK(DE) DATE: 02-2025
CHECKED BY: ALI OMAR DATE: 08-2025

1/14/2026 10:08:29 AM



THIS DOCUMENT HAS BEEN DIGITALLY SIGNED AND SEALED BY:

Devin Chittenden Date: 2026.02.06 14:03:41-06'00'

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

COMPANY NAME: HDR Inc.
ADDRESS: 4645 Village Square Drive, Suite F

CITY, STATE: Paducah, KY
PE NAME, P.E. NO.: Devin Chittenden, 112811

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

SHEET NAME	SHEET NO.
SIGNATURE SHEET	GEOTECH-SIGN1
GEOTECHNICAL INDEX	G1
GEOTECHNICAL NOTES	G1A
GEOTECHNICAL NOTES AND ESTIMATED QUANTITES	G1B
GEOTECHNICAL BORING LAYOUT AND PROFILE	G2-G13
GEOTECHNICAL SIDE ROAD BORING PROFILE	G14-G15
GEOTECHNICAL TYPICAL SECTIONS	G16-G24

YEAR	PROJECT NO.	SHEET NO.
2026	NH-54(48)	GEOTECH-SIGN1

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

SIGNATURE SHEET

C:\PWWORKING\EAST01\D3224772\GEOTECH-SIGN.SHT

TYPE	YEAR	PROJECT NO.	SHEET NO.
PS&E	2026	NH-54(48)	G1

GEOTECHNICAL INDEX

SHEET NAME	SHEET NO.
SIGNATURE SHEET	GEOTECH-SIGN1
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SEALED BY



12/06/2025

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

GEOTECHNICAL INDEX

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TYPE	YEAR	PROJECT NO.	SHEET NO.
PS&E	2026	NH-54(48)	G1A

DEFINTION OF EARTHWORK TERMS

THE TERMS AND DEFINITIONS BELOW SHALL CHARACTERIZE THE MATERIAL TYPE THAT WILL BE ENCOUNTERED DURING EXCAVATION AND GRADING. SEE TYPE MATERIAL REFERENCE IN TYPICAL SECTIONS LEGEND.

A. SOIL MATERIAL

SOIL MATERIAL IS MATERIAL THAT IS PREDOMINANTLY MADE UP OF NATURALLY OCCURRING MINERAL PARTICLES WHICH ARE FAIRLY READILY SEPARATED INTO RELATIVELY SMALL PIECES, AND IN WHICH THE MASS MAY CONTAIN AIR, WATER OR ORGANIC MATERIALS. THIS MATERIAL MAY CONTAIN ROCK PIECES IN THE FORM OF DISCONNECTED SLABS, LENSES, OR BOULDERS OF LESS THAN APPROXIMATELY 0.5 CUBIC YARDS. THE MAIN SOIL GROUPS CONSIST OF CLAY, SILT, SAND, GRAVEL, COBBLES, BOULDERS (LESS THAN 0.5 CUBIC YARD VOLUME) OR A COMBINATION OF ANY OF THE CONSTITUENTS. FOR CONSTRUCTION PURPOSES, THIS MATERIAL WOULD TYPICALLY BE CONSIDERED TO BE EXCAVATABLE BY CONVENTIONAL EXCAVATION MACHINERY SUCH AS PANS, TRACK HOES, OR FRONT END EXCAVATORS/LOADERS.

B. SOLID ROCK MATERIAL

SOLID ROCK MATERIAL IS THAT NATURALLY OCCURRING MATERIAL COMPOSED OF MINERAL PARTICLES SO FIRMLY BONDED TOGETHER THAT RELATIVELY GREAT EFFORT IS REQUIRED TO SEPARATE THE PARTICLES (I.E. BLASTING OR HEAVY CRUSHING FORCES). FOR CONSTRUCTION PURPOSES, THIS MATERIAL WOULD TYPICALLY HAVE TO BE BLASTED TO SEPARATE INTO PIECES SMALL ENOUGH TO LOAD AND TRANSPORT ON EARTH MOVING TRUCKS AND WHICH WHEN SUBJECTED TO PROPER PRE-SPLIT AND PRODUCTION BLASTING WOULD RESULT IN A UNIFORM STABLE ROCK CUT FACE. NOTE THAT THIS MATERIAL WOULD NOT BY DEFINITION NECESSARILY BE A PROVEN SOURCE OF ANY ROCK TYPE AGGREGATE SUCH AS SOLID ROCK, GRADED SOLID ROCK, RIP RAP, OR OTHER ROCK AGGREGATE CONSTRUCTION PRODUCTS.

C. SOFT ROCK OR DEGRADABLE ROCK

THIS MATERIAL IS THAT NATURALLY OCCURRING MATERIAL COMPOSED OF MINERAL PARTICLES THAT ARE SO FIRMLY BONDED SUCH THAT THEY ARE NOT FAIRLY READILY SEPARATED INTO SMALL PIECES YET HAS SUCH RELATIVELY LOW BONDING STRENGTH THAT WOULD ALLOW FOR SEPARATING INTO SMALL PIECES THROUGH MODERATE TO HEAVY CRUSHING FORCES. FOR CONSTRUCTION PURPOSES THIS MATERIAL WOULD HAVE TO BE SUBJECTED TO RIPPING TYPE EQUIPMENT, HOE RAMS, OR RUGGED USE OF A LARGE BULLDOZER IN ORDER TO SEPARATE THE MATERIAL SUCH THAT IT CAN BE READILY LOADED INTO EARTH MOVING TRUCKS. THESE MATERIALS WOULD TYPICALLY BE SHALES, CLAYSTONES, SILTSTONES, WEATHERED SANDSTONES, WEATHERED SCHIST AND WEATHERED GNEISS.

D. TRANSITIONAL MATERIALS

THIS MATERIAL IS THAT MATERIAL COMPRISED OF A COMBINATION OF SOIL AND ROCK (MATERIALS A, B, AND C) OCCURRING IN EITHER NON-UNIFORM INTERBEDDED LAYERS OF THE ABOVE MATERIALS (I.E. SHALE MATERIAL WITH RELATIVELY THIN LAYERS OF SOLID ROCK SUCH AS HARD LIMESTONE) OR ERRATIC LOCALIZED CHANGES OF MATERIAL TYPES BOTH LATERALLY AND WITH DEPTH (SUCH AS A GEOLOGIC FORMATION RESULTING IN PINNACLED ROCK COLUMNS, FLOATING BOULDERS OR LENSES INTERCALATED WITH CLAY SOIL, A COMMON OCCURRENCE IN CERTAIN REGIONS OF TENNESSEE). FOR CONSTRUCTION PURPOSES, THIS MATERIAL MAY HAVE TO BE EXCAVATED USING A COMBINATION OF EXCAVATION METHODS SUCH AS BLASTING OF ROCK PINNACLES, LAYERS OR BOULDERS ALONG WITH A RIPPING OF WEATHERED ROCK AND EXCAVATING OF SOIL WITH TRACK HOES OR LOADERS ALL WITHIN A LOCALIZED AREA. THIS MATERIAL WOULD NOT BE SUITABLE FOR THE USE OF EXCAVATING PAN TYPE EQUIPMENT.

GEOTECHNICAL NOTES

THE FOLLOWING CONSTRUCTION NOTES SHOULD BE INCLUDED WITHIN THE CONSTRUCTION PLANS:

1. THE NATURAL MOISTURE CONTENTS OF THE OVERBURDEN SOILS AT THE TIME OF DRILLING ARE TYPICALLY NEAR OR ABOVE THE UPPER LIMIT OF THE 95% COMPACTION MOISTURE RANGE. DRYING, HANDLING, AND MANIPULATION OF THE SOILS IS LIKELY TO BE REQUIRED IN ORDER TO GET THE PROPER MOISTURE CONTENT REQUIRED TO SATISFY THE COMPACTION REQUIREMENT.

2. A SOIL SHRINKAGE FACTOR OF 15% HAS BEEN ESTIMATED FOR THIS PROJECT.

3. SOME OF THE SOILS ENCOUNTERED ON THIS PROJECT HAVE RELATIVELY LOW DRY DENSITIES AND HIGH PLASTICITY, WHICH WILL IMPEDE CONSTRUCTION. ALL MATERIAL WITHIN THREE (3) FEET OF THE FINAL SUBGRADE ELEVATION IN BOTH CUT AND FILL EMBANKMENT SECTIONS SHALL HAVE A MINIMUM COMPACTED DRY DENSITY OF 95 PCF OR GREATER.

IN CUT SECTIONS, A MINIMUM OF THREE (3) FEET OF UNDERCUTTING AT THE FINAL SUBGRADE ELEVATION WILL BE REQUIRED. THIS UNDERCUT MATERIAL SHALL BE REPLACED WITH SELECT GRANULAR MATERIAL AND SHALL BE WRAPPED WITH TYPE IV GEOTEXTILE FABRIC IN THE FOLLOWING INTERVALS, AS DEPICTED ON THE SOILS SHEETS, AND AS DIRECTED AND MODIFIED BY THE ENGINEER:

MAINLINE SR-54
STATION 152+50+/- TO STATION 186+50+/-

IN FILL SECTIONS, A MINIMUM OF THREE (3) FEET OF SELECT GRANULAR MATERIAL WRAPPED IN TYPE IV GEOTEXTILE FABRIC SHALL BE PLACED IN THE LOWER PORTIONS OF THE EMBANKMENT IN THE FOLLOWING INTERVALS, AS DEPICTED ON THE SOILS SHEETS, AND AS DIRECTED AND MODIFIED BY THE ENGINEER. IN FILL SECTIONS WHERE 3 FEET OF SELECT GRANULAR MATERIAL CANNOT BE PLACED IN ALL OR PART OF THE SECTION, UNDERCUT AS NECESSARY AND BACKFILL WITH SELECT GRANULAR MATERIAL.

MAINLINE SR-54
STATION 106+00+/- TO STATION 107+50+/-
STATION 116+00+/- TO STATION 119+50+/-
STATION 146+50+/- TO STATION 152+50+/-

THE SELECT GRANULAR MATERIAL SHALL BE A SAND AND/OR GRAVEL MEETING AASHTO SOIL CLASSIFICATION OF EITHER A-1-A, A-1-B, OR A-3 WITH NO MORE THAN 10% BY WEIGHT PASSING THE #200 SIEVE PER TDOT SPECIFICATIONS.

4. SOME AREAS ENCOUNTERED ON THIS PROJECT ARE DESIGNATED WETLANDS OR HAVE STANDING WATER ABOVE OR NEAR THE EXISTING GROUND SURFACE, WHICH MAY IMPEDE CONSTRUCTION. GRADED SOLID ROCK SHALL BE USED IN THESE AREAS TO ALLOW CONSTRUCTION TO CONTINUE ACROSS WET AREAS, TO PROMOTE DRAINAGE OF SEEPAGE ZONES, AND TO PROVIDE A WORKING PLATFORM FOR CONSTRUCTION ACTIVITIES.

IN CUT SECTIONS, A MINIMUM OF THREE (3) FEET OF UNDERCUTTING AT THE FINAL SUBGRADE ELEVATION WILL BE REQUIRED. THIS UNDERCUT MATERIAL SHALL BE REPLACED WITH GRADED SOLID ROCK AND SHALL BE WRAPPED WITH TYPE IV GEOTEXTILE FABRIC IN THE FOLLOWING INTERVALS, AS DEPICTED ON THE SOILS SHEETS, AND AS DIRECTED AND MODIFIED BY THE ENGINEER:

MAINLINE SR-54
STATION 186+50+/- TO STATION 195+00+/-
STATION 204+00+/- TO STATION 206+50+/-

IN FILL SECTIONS, A MINIMUM OF THREE (3) FEET OF GRADED SOLID ROCK SHALL BE PLACED IN THE LOWER PORTIONS OF THE EMBANKMENT AND SHALL BE WRAPPED WITH TYPE IV GEOTEXTILE FABRIC IN THE FOLLOWING INTERVALS, IN ACCORDANCE WITH TDOT SPECIFICATIONS AND AS DIRECTED BY THE ENGINEER. IN FILL SECTIONS WHERE 3 FEET OF GRADED SOLID ROCK CANNOT BE PLACED IN ALL OR PART OF THE SECTION, UNDERCUT AS NECESSARY AND BACKFILL WITH GRADED SOLID ROCK.

MAINLINE SR-54
STATION 132+00+/- TO STATION 138+53.39+/-
STATION 141+44.18+/- TO STATION 146+50+/-
STATION 224+00+/- TO STATION 229+00+/-

5. AFTER REACHING FINAL GRADE, THE FOLLOWING INTERVALS WILL REQUIRE A ONE MONTH WAITING PERIOD BEFORE INSTALLATION OF PILES AND PAVING AT ABUTMENT 1 AND ABUTMENT 2:

MAINLINE SR-54
STATION 135+50 TO STATION 138+53.39
STATION 141+44.18 TO STATION 146+50

6. BASED ON THE COMPLETED BEARING CAPACITY ANALYSES, THE FOLLOWING BOX CULVERTS WILL REQUIRE UNDERCUT AND BACKFILL WITH TYPE A AGGREGATE, GRADING D, MEETING TDOT STANDARD SPECIFICATION 903.05. ALL BACKFILL SHALL BE WRAPPED IN TYPE IV GEOTEXTILE FABRIC.

MAINLINE SR-54
STATION 106+70 1.5-FT DEPTH
STATION 116+80 0.5-FT DEPTH
STATION 200+48 0.5-FT DEPTH
STATION 227+51.81 0.5-FT DEPTH

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

GEOTECHNICAL NOTES

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TYPE	YEAR	PROJECT NO.	SHEET NO.
PS&E	2026	NH-54(48)	G1B

7. IF THE EARTHWORK BALANCE FOR THE PROJECT IS A WASTE SITUATION, THE HIGHLY PLASTIC A-6, AND A-7 SOILS SHOULD BE THE MATERIAL THAT IS WASTED FIRST.

8. PROVIDE A MINIMUM OF 6 INCHES OF BEDDING MATERIAL UNDER ALL CULVERTS.

9. UNDERCUT A MINIMUM OF 1.5 FEET BELOW THE CULVERT FOUNDATION AT STATION 106+70 IN ACCORDANCE WITH 204.08 OF THE CURRENT STANDARD SPECIFICATIONS AND BACKFILL WITH GRANULAR FOUNDATION FILL MATERIAL.

10. EMBANKMENT MATERIAL DIRECTLY BENEATH THE PILE CAPS SHALL BE FREE OF BOULDERS OR PARTICLE SIZES LARGER THAN 4 INCHES IN ANY DIMENSION OR ANY OTHER OBSTRUCTIONS THAT MAY HINDER PILE DRIVING OPERATIONS.

11. THE BOTTOM 3 FEET OF EMBANKMENT WITHIN THE PILE CAP FOOTPRINT SHALL BE CONSTRUCTED USING #57 STONE IN LIEU OF THE GRADED SOLID ROCK (GSR) TO FACILITATE PILE DRIVING. THE #57 STONE SHALL BE PLACED WITHIN THE PLAN AREA FORMED BY CONNECTING THE FOLLOWING POINTS:

ABUTMENT 1:

1) STATION 136+01, OFFSET 44' LT.
2) STATION 136+25, OFFSET 44' LT.
3) STATION 137+39, OFFSET 44' RT.
4) STATION 137+63, OFFSET 44' RT.

ABUTMENT 2:

1) STATION 142+53, OFFSET 44' LT.
2) STATION 142+78, OFFSET 44' LT.
3) STATION 143+91, OFFSET 44' RT.
4) STATION 144+16, OFFSET 44' RT.

ESTIMATED GEOTECHNICAL QUANTITIES

	ITEM NO.	DESCRIPTION	UNIT	QUANTITY
(2)	203-02.01	BORROW EXCAVATION (GRADED SOLID ROCK)	TON	83,854
(1)(3)	203-03.01	BORROW EXCAVATION (SELECT MATERIAL)	C.Y.	68,447
(1)(2)	203-05	UNDERCUTTING	C.Y.	62,498

FOOTNOTES:

(1) THIS ITEM TO BE USED FOR STATION RANGES LISTED IN NOTE 3 OR OTHERWISE AS DIRECTED BY ENGINEER FOR THE STABILIZATION OF SUBGRADE.
(2) THIS ITEM TO BE USED FOR STATION RANGES LISTED IN NOTE 4 OR OTHERWISE AS DIRECTED BY ENGINEER FOR EMBANKMENT STABILIZATION.
(3) SELECT GRANULAR MATERIAL SHALL BE SAND AND/OR GRAVEL MEETING THE AASHTO SOIL CLASSIFICATION OF EITHER A-1-a, A-1-b, OR A-3 WITH NO MORE THAN 10% BY WEIGHT PASSING THE 200 SIEVE.

TABULATED GEOTECHNICAL QUANTITIES

	ITEM NO.	DESCRIPTION	UNIT	QUANTITY
(1)	204-08	FOUNDATION FILL MATERIAL	C.Y.	53
(2)	303-10.01	MINERAL AGGREGATE (SIZE 57)	TON	667
(3)(4)	740-10.04	GEOTEXTILE (TYPE IV) (STABILZATION)	S.Y.	285,763

FOOTNOTES:
FOR BIDDING PURPOSES, THESE QUANTITIES ARE INCLUDED IN THE SHEET 2 SERIES

(1) THIS ITEM TO BE USED FOR CULVERTS AS DIRECTED IN NOTES 8 AND 9
(2) THIS ITEM TO BE USED WITHIN THE BRIDGE PILE CAP FOOTPRINT AS DIRECTED IN NOTE 11.
(3) THIS ITEM TO BE USED FOR STATION RANGES LISTED IN NOTE 3 OR OTHERWISE AS DIRECTED BY ENGINEER FOR THE STABILIZATION OF SUBGRADE.
(4) THIS ITEM TO BE USED FOR STATION RANGES LISTED IN NOTE 4 OR OTHERWISE AS DIRECTED BY ENGINEER FOR EMBANKMENT STABILIZATION.

SEALED BY

DENNIS L. CHITTENDEN
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AGRICULTURE
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STATE OF TENNESSEE
02/06/2026

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

GEOTECHNICAL NOTES & EST. QTYS.

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TYPE	YEAR	PROJECT NO.	SHEET NO.
PS&E	2026	NH-54(48)	G2

LEGEND

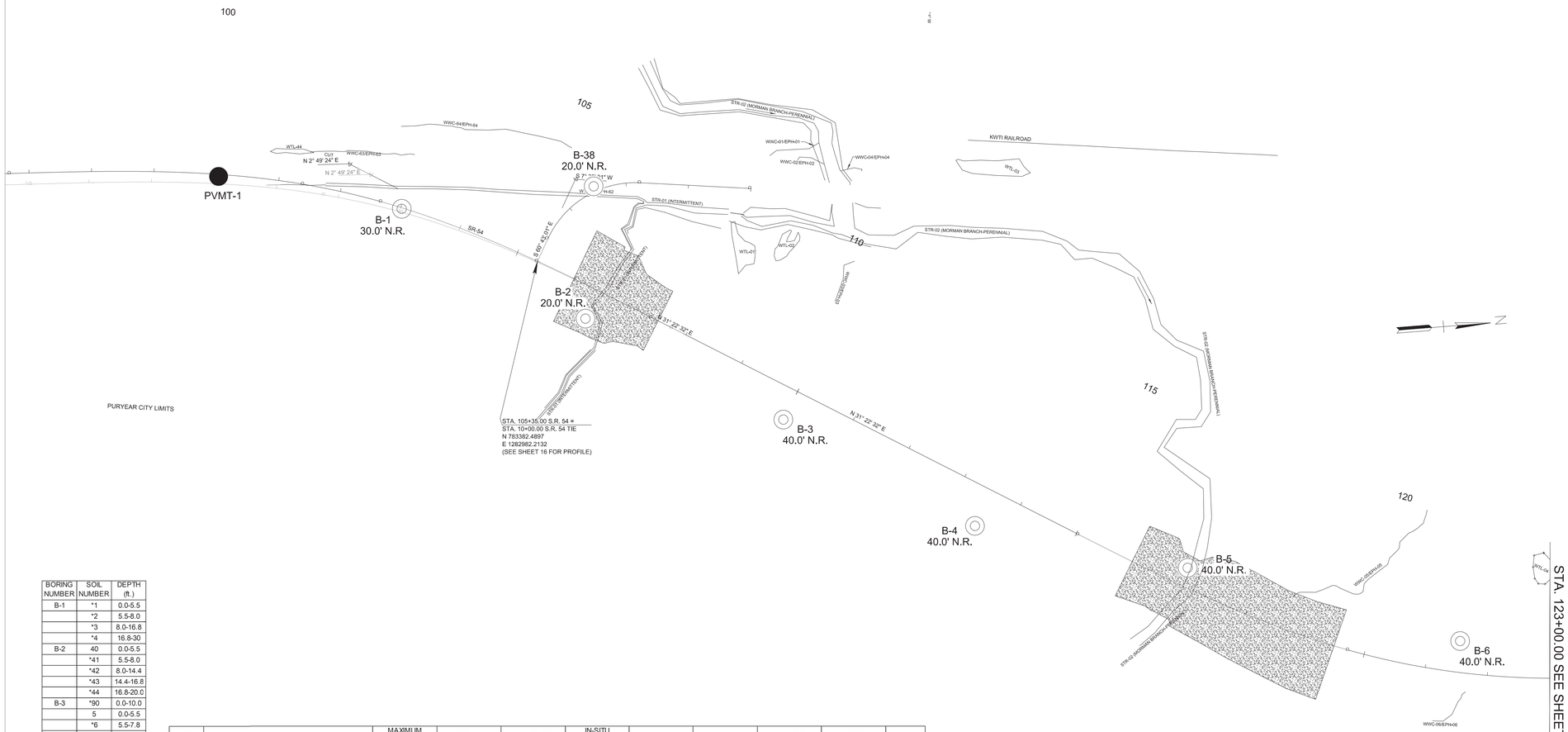
R-1 — UNDISTURBED SAMPLE LOCATION

PVMT-1 — PAVEMENT CORE LOCATION

SELECT GRANULAR MATERIAL

REF. - AUGER OR SPLITSPOON REFUSAL

N.R. - BORING TERMINATED WITH NO REFUSAL



BORING NUMBER	SOIL NUMBER	DEPTH (ft.)
B-1	*1	0.0-5.5
	*2	5.5-8.0
	*3	8.0-16.8
	*4	16.8-30
B-2	40	0.0-5.5
	*41	5.5-8.0
	*42	8.0-14.4
	*43	14.4-16.8
	*44	16.8-20.0
B-3	*90	0.0-10.0
	5	0.0-5.5
	*6	5.5-7.8
	*101	7.8-11.8
	6	11.8-16.8
	8	16.8-31.8
	*9	31.8-40.0
B-4	*5	0.0-8.0
	6	8.0-11.8
	*7	11.8-21.8
	*8	21.8-40.0
B-5	45	0.0-5.5
	*47	5.5-8.0
	*48	8.0-11.8
	*50	11.8-31.8
	*51	31.8-40.0
B-6	*45	0.0-8.0
	*46	8.0-21.8
	*49	21.8-31.8
	51	31.8-36.8
	*52	36.8-40.0
B-38	*39	2.0-3.5
	*40	3.5-5.5
	44	5.5-20.0

* INDICATES LOCATION WHERE SAMPLE WAS TAKEN AND LAB TEST PERFORMED. ALL OTHER SAMPLE NUMBER LABELS INDICATE AN APPARENT SIMILARITY BASED ON VISUAL IDENTIFICATION.

SOIL NUMBER	DESCRIPTION	MAXIMUM DENSITY (pcf)	OPTIMUM MOISTURE	MOISTURE RANGE	IN-SITU MOISTURE (%)	L.L.	P.I.	AASHTO CLASS	USCS CLASS	C.B.R.
1	Silt with Sand				11.2	21	3	A-4 (0)	ML	
2	Silty, Clayey Sand				10.6	22	5	A-4 (0)	SC-SM	
3	Silty, Clayey Sand				16.6	26	7	A-2-4 (0)	SC-SM	
4	Sandy Lean Clay				25.1	32	13	A-6 (6)	CL	
5	Lean Clay with Sand				19.5	28	11	A-6 (7)	CL	
6	Sandy Lean Clay				16.8	25	9	A-4 (2)	CL	
7	Silty Sand with Gravel				18.3	38	11	A-2-6 (0)	SM	
8	Poorly Graded Sand with Silt				7.7	23	0	A-1-b (0)	SP-SM	
9	Well-Graded Sand with Clay (and/or Silty Clay)				8.9	21	6	A-1-b (0)	SW-SC	
39	Silty, Clayey Sand				10.6	18	5	A-4 (0)	SC-SM	
40	Sandy Silty Clay				16.7	18	6	A-4 (0)	CL-ML	
41	Silty Sand				13.8	12	0	A-2-4 (0)	SM	
42	Silty Sand				17.2	15	0	A-2-4 (0)	SM	
43	Lean Clay with Sand				18.5	35	12	A-6 (8)	CL	
44	Poorly Graded Sand with Silt				18.6	12	0	A-3 (0)	SP-SM	
45	Clayey Sand				10.2	22	9	A-4 (1)	SC	
46	Silty Sand				7	20	3	A-2-4 (0)	SM	
47	Silty Sand				4.6	13	0	A-2-4 (0)	SM	
48	Well-Graded Sand with Silt and Gravel				10.9	24	0	A-1-b (0)	SW-SM	
49	Poorly Graded Sand with Silt				8	22	4	A-1-b (0)	SP-SM	
50	Poorly Graded Sand				23.4	17	0	A-1-b (0)	SP	
51	Poorly Graded Sand				27.2	14	0	A-3 (0)	SP	
52	Silty Sand				21.5	17	0	A-2-4 (0)	SM	
90	Lean Clay with Sand				22.8	30	15	A-6 (9)	CL	
101	Silty, Clayey Sand	113.3	13.5	9.0-20.4	16.8	20	7	A-2-4 (0)	SC-SM	3.9

SEALED BY

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02/06/2026

COORDINATES ARE NAD 83(2011), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00002 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988 WITH GEOID 12B MODEL.

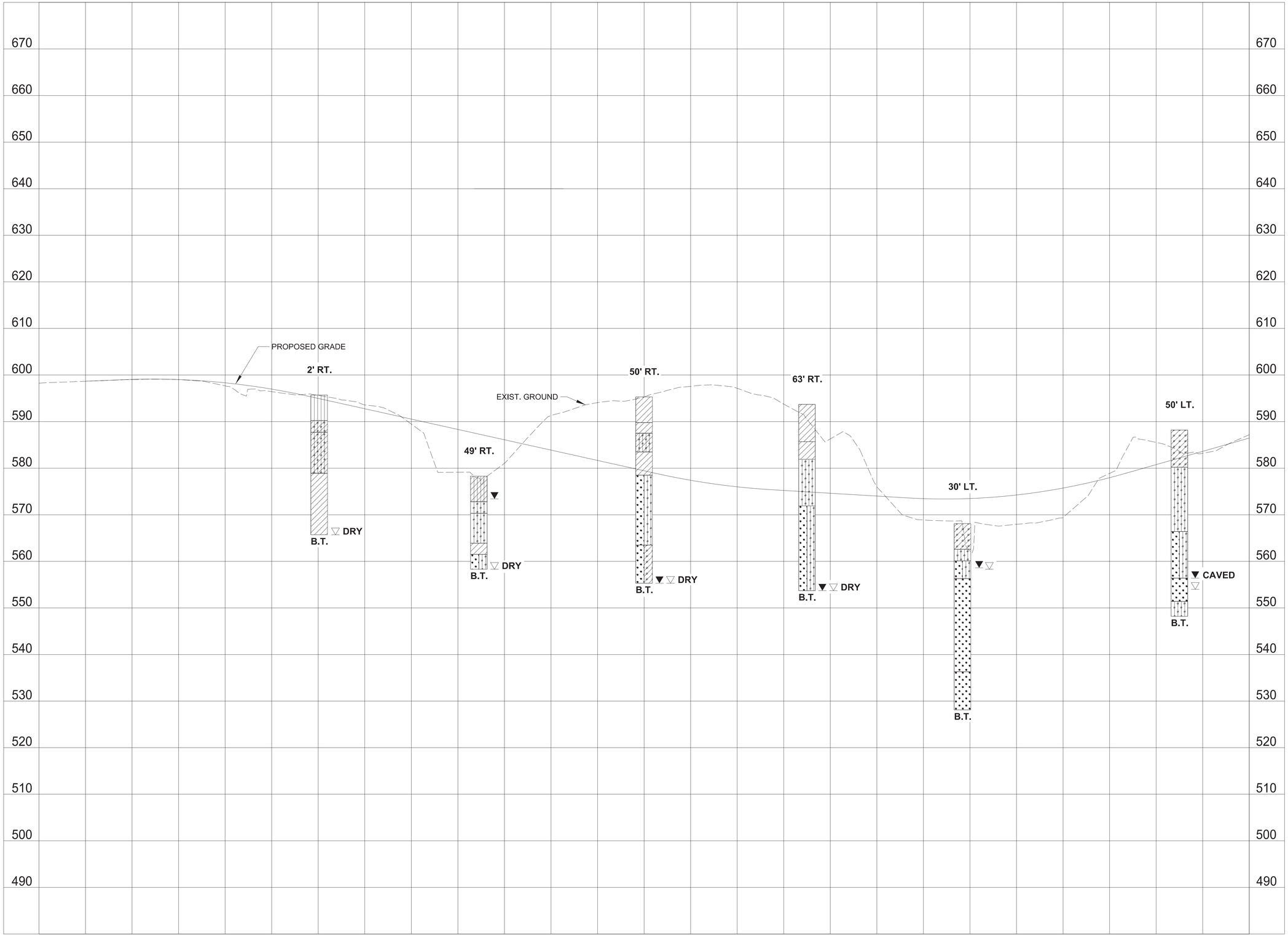
STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

GEOTECHNICAL BORING LAYOUT

STA. 98+00 TO STA. 123+00
SCALE: 1" = 100'

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TYPE	YEAR	PROJECT NO.	SHEET NO.
PS&E	2026	NH-54(48)	G3



LEGEND

- LEAN CLAY (TYPE A MATERIAL)
- SILT (TYPE A MATERIAL)
- SILTY CLAYEY SAND (TYPE A MATERIAL)
- SILTY CLAY (TYPE A MATERIAL)
- SILTY SAND (TYPE A MATERIAL)
- POORLY TO WELL-GRADED SAND WITH SILT (TYPE A MATERIAL)
- WELL-GRADED SAND WITH CLAY (TYPE A MATERIAL)
- CLAYEY SAND (TYPE A MATERIAL)
- POORLY TO WELL-GRADED SAND (TYPE A MATERIAL)

TYPE MATERIAL-SEE DEFINITION OF EARTHWORK TERMS ON GEOTECHNICAL NOTES AND EST. QTYS. SHEET.
B.T.= BORING TERMINATED
REF.= AUGER REFUSAL
▽ = IMMEDIATE WATER TABLE
▼ = 24 HOUR WATER TABLE

SEALED BY

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VU
AGRICULTURE
COMMISSIONER OF
KEVIN L. CHITTENDEN
02/06/2026

COORDINATES ARE NAD/83(2011). ARE DATUM ADJUSTED BY THE FACTOR OF 1.00002 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988 WITH GEOID 12B MODEL.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

GEOTECHNICAL BORING PROFILE

C:\PWWORKING\EAST01\D3224772\G3.SHT

BORING NUMBER	SOIL NUMBER	DEPTH (ft.)
B-7	*53	0.0-5.5
	54	5.5-11.8
	*55	11.8-16.8
	*56	16.8-30.0
B-8	53	0.0-5.5
	*107	5.5-8.3
	54	8.3-11.8
	57	11.8-20.0
B-9	53	0.0-5.5
	*54	5.5-11.8
	*57	11.8-40.0
B-10	*128	1.0-6.0
	*58	0.0-5.5
	*60	5.5-11.8
	*61	11.8-26.8
	*62	26.8-31.8
	*103	31.8-37.0
	*63	37.0-41.8
	64	41.8-60.0
B-11	*59	0.0-7.8
	*105	7.8-11.8
	61	11.8-16.8
	*64	16.8-41.8
	*109	41.8-66.8
	*65	66.8-76.8
	*66	76.8-78.9
B-12	*86	0.0-10.0
	*10	0.0-5.5
`	*11	5.5-11.8
	*12	11.8-16.8
	*13	16.8-26.8
	*14	26.8-46.8
	*15	46.8-60.0

* INDICATES LOCATION WHERE SAMPLE WAS TAKEN AND LAB TEST PERFORMED. ALL OTHER SAMPLE NUMBER LABELS INDICATE AN APPARENT SIMILARITY BASED ON VISUAL IDENTIFICATION.

SOIL NUMBER	DESCRIPTION	MAXIMUM DENSITY (pcf)	OPTIMUM MOISTURE	MOISTURE RANGE	IN-SITU MOISTURE (%)	L.L.	P.I.	AASHTO CLASS	USCS CLASS	C.B.R.
10	Sandy Silty Clay				17.3	20	5	A-4 (0)	CL-ML	
11	Silty Sand				11.8	15	0	A-2-4 (0)	SM	
12	Poorly Graded Sand with Silt				6.8	14	0	A-2-4 (0)	SP-SM	
13	Silty Sand				16.1	20	3	A-2-4 (0)	SM	
14	Poorly Graded Sand with Silt				24.9	17	0	A-3 (0)	SP-SM	
15	Poorly Graded Sand with Silt				25.9	16	0	A-2-4 (0)	SP-SM	
53	Sandy Lean Clay				16.7	28	14	A-6 (5)	CL	
54	Silty Sand				18.8	22	0	A-2-4 (0)	SM	
55	Silty Sand				14.3	18	3	A-4 (0)	SM	
56	Silty Sand				9.9	22	0	A-2-4 (0)	SM	
57	Poorly Graded Sand with Silt				17.0	10	0	A-3 (0)	SP-SM	
58	Lean Clay				23.4	30	8	A-4 (7)	CL	
59	Lean Clay with Sand				20.1	24	8	A-4 (5)	CL	
60	Lean Clay with Sand				18.9	29	10	A-4 (5)	CL	
61	Poorly Graded Sand with Silt				20.7	10	0	A-3 (0)	SP-SM	
62	Lean Clay with Sand				25.8	30	11	A-6 (6)	CL	
63	Silty Sand				21.1	40	14	A-6 (1)	SM	
64	Silty, Clayey Sand				16.8	21	6	A-2-4 (0)	SC-SM	
65	Lean Clay				38.5	47	22	A-7-6 (24)	CL	
66	Poorly Graded Sand with Silt				26.3	17	0	A-3 (0)	SP-SM	
86	Silty Clay with Sand	110.1	12.2	6.3-16.6	25.4	22	5	A-4 (2)	CL-ML	4.2
103	Clayey Sand				17.9	30	14	A-6 (4)	SC	
105	Silty, Clayey Sand				17.8	18	5	A-2-4 (0)	SC-SM	
107	Sandy Lean Clay				18.0	31	13	A-6 (6)	CL	
109	Silty Sand				27.3	18	3	A-2-4 (0)	SM	
128	Clayey Gravel with Sand				22.1	26	12	A-2-6 (0)	GC	

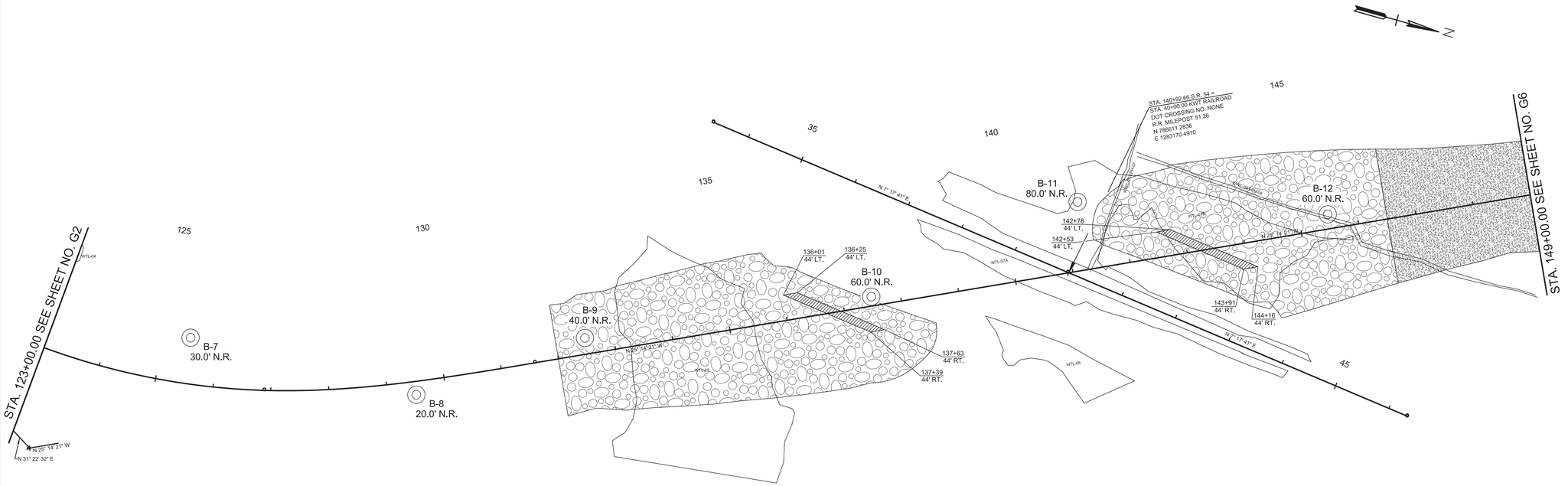
TYPE	YEAR	PROJECT NO.	SHEET NO.
PS&E	2026	NH-54(48)	G4

LEGEND

- R-1 — UNDISTURBED SAMPLE LOCATION
- PVMT-1 — PAVEMENT CORE LOCATION
- SELECT GRANULAR MATERIAL
- GRADED SOLID ROCK
- MINERAL AGGREGATE (SIZE 57)

REF. - AUGER OR SPLITSPOON REFUSAL

N.R. - BORING TERMINATED WITH NO REFUSAL



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02/06/2026

COORDINATES ARE NAD 83(2011), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00002 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988 WITH GEOID 12B MODEL.

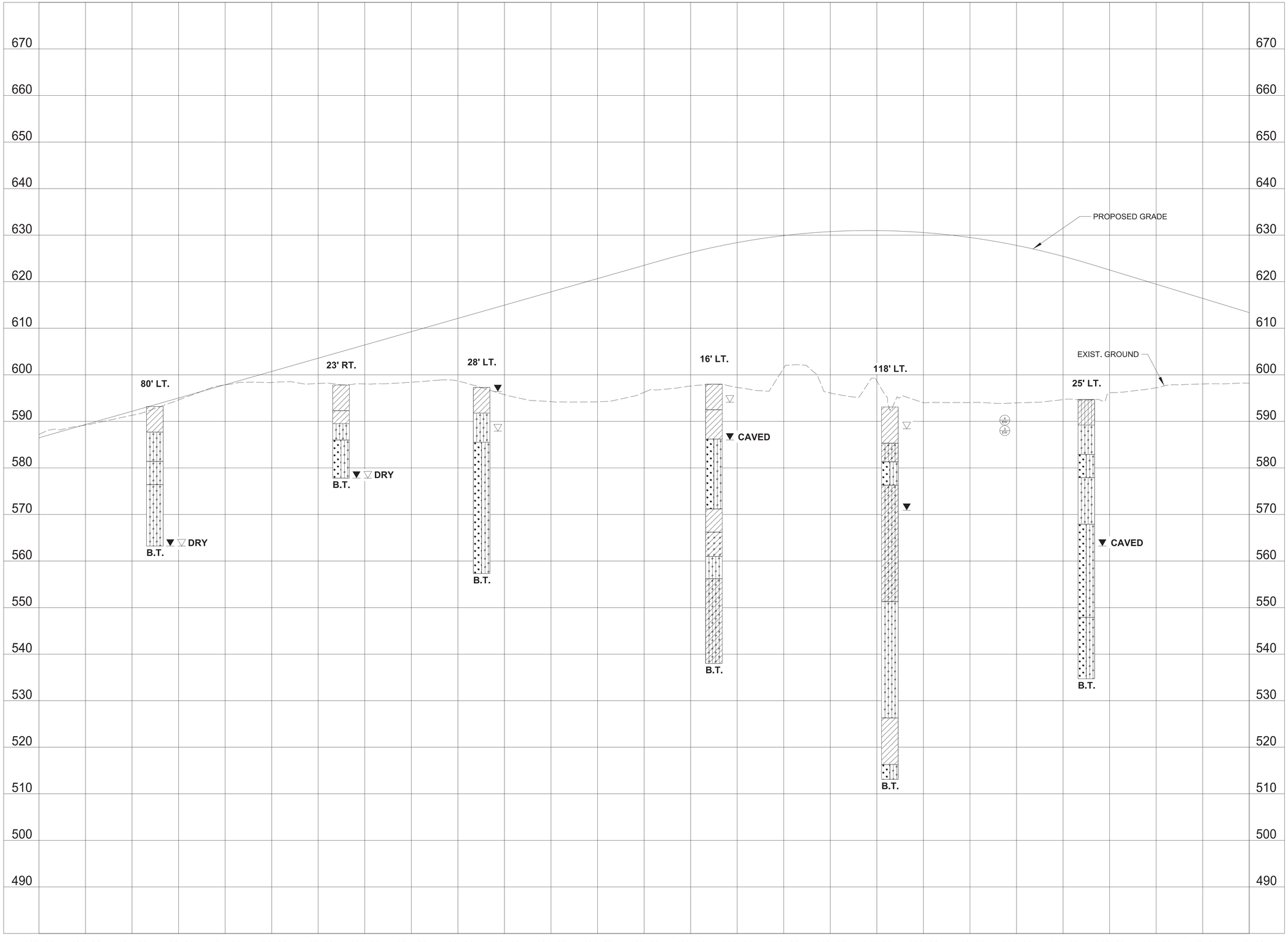
STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

GEOTECHNICAL BORING LAYOUT

STA. 123+00 TO STA. 149+00
SCALE: 1" = 100'

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TYPE	YEAR	PROJECT NO.	SHEET NO.
PS&E	2026	NH-54(48)	G5



LEGEND

- LEAN CLAY (TYPE A MATERIAL)
- SILTY SAND (TYPE A MATERIAL)
- SILTY CLAY (TYPE A MATERIAL)
- POORLY TO WELL-GRADED SAND WITH SILT (TYPE A MATERIAL)
- CLAYEY SAND (TYPE A MATERIAL)
- SILTY CLAYEY SAND (TYPE A MATERIAL)

TYPE MATERIAL-SEE DEFINITION OF EARTHWORK TERMS ON GEOTECHNICAL NOTES AND EST. QTYS. SHEET.
B.T.= BORING TERMINATED
REF.= AUGER REFUSAL
▽ = IMMEDIATE WATER TABLE
▼ = 24 HOUR WATER TABLE

SEALED BY



COORDINATES ARE NAD/83(2011). ARE DATUM ADJUSTED BY THE FACTOR OF 1.00002 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988 WITH GEOID 12B MODEL.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

GEOTECHNICAL BORING PROFILE

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TYPE	YEAR	PROJECT NO.	SHEET NO.
PS&E	2026	NH-54(48)	G6

LEGEND

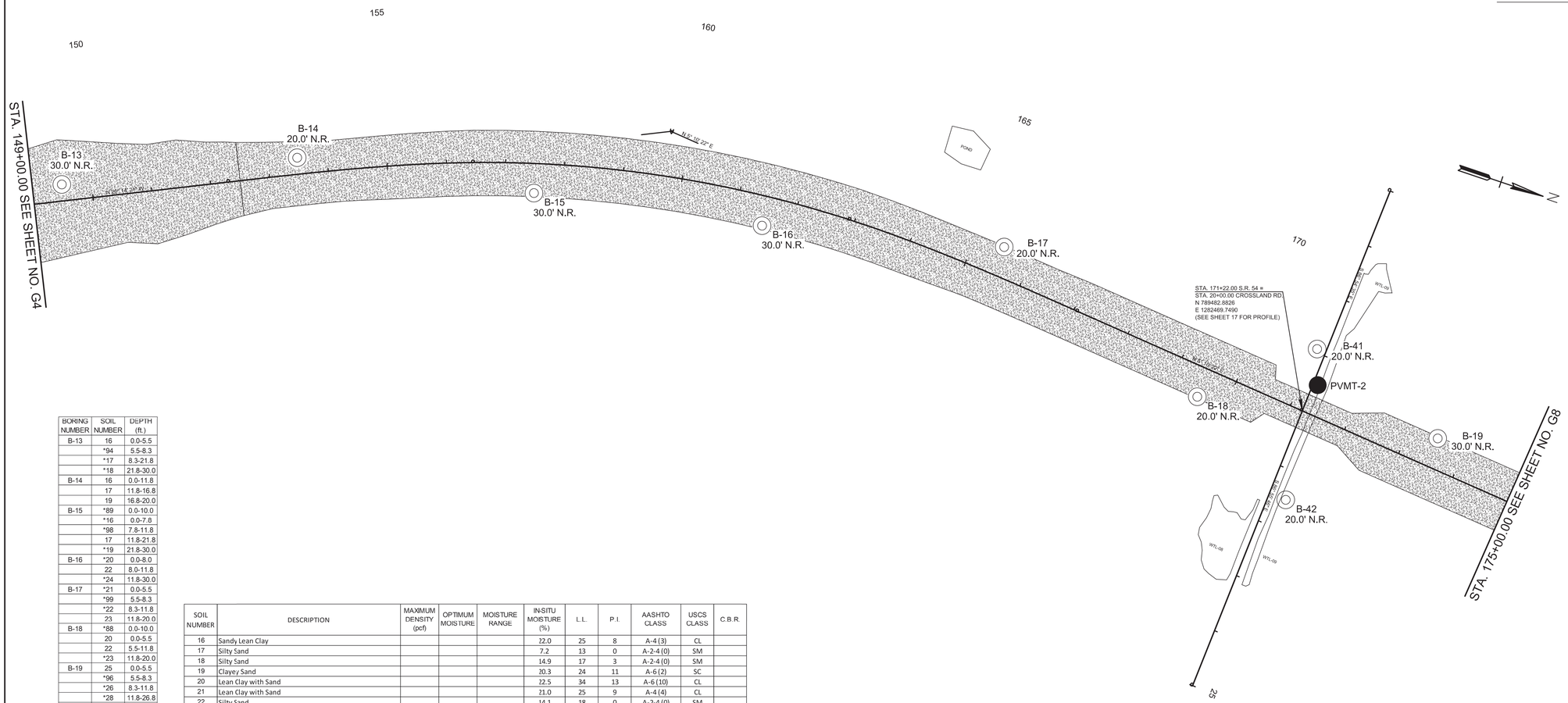
R-1 — UNDISTURBED SAMPLE LOCATION

PVMT-1 — PAVEMENT CORE LOCATION

SELECT GRANULAR MATERIAL

REF. - AUGER OR SPLITSPOON REFUSAL

N.R. - BORING TERMINATED WITH NO REFUSAL



BORING NUMBER	SOIL NUMBER	DEPTH (ft.)
B-13	16	0.0-5.5
	*94	5.5-8.3
	*17	8.3-21.8
	*18	21.8-30.0
B-14	16	0.0-11.8
	17	11.8-16.8
	19	16.8-20.0
B-15	*89	0.0-10.0
	*16	0.0-7.8
	*98	7.8-11.8
	17	11.8-21.8
	*19	21.8-30.0
B-16	*20	0.0-8.0
	22	8.0-11.8
	*24	11.8-30.0
B-17	*21	0.0-5.5
	*99	5.5-8.3
	*22	8.3-11.8
	23	11.8-20.0
B-18	*88	0.0-10.0
	20	0.0-5.5
	22	5.5-11.8
	*23	11.8-20.0
B-19	25	0.0-5.5
	*96	5.5-8.3
	*26	8.3-11.8
	*28	11.8-26.8
	29	26.8-30.0
B-41	*36	0.0-5.5
	37	5.5-8.0
	*106	8.0-11.8
	*38	11.8-20.0
B-42	36	0.0-5.5
	*37	5.5-11.8
	38	11.8-20.0

* INDICATES LOCATION WHERE SAMPLE WAS TAKEN AND LAB TEST PERFORMED. ALL OTHER SAMPLE NUMBER LABELS INDICATE AN APPARENT SIMILARITY BASED ON VISUAL IDENTIFICATION.

SOIL NUMBER	DESCRIPTION	MAXIMUM DENSITY (pcf)	OPTIMUM MOISTURE	MOISTURE RANGE	IN-SITU MOISTURE (%)	L.L.	P.I.	AASHTO CLASS	USCS CLASS	C.B.R.
16	Sandy Lean Clay				22.0	25	8	A-4 (3)	CL	
17	Silty Sand				7.2	13	0	A-2-4 (0)	SM	
18	Silty Sand				14.9	17	3	A-2-4 (0)	SM	
19	Clayey Sand				20.3	24	11	A-6 (2)	SC	
20	Lean Clay with Sand				22.5	34	13	A-6 (10)	CL	
21	Lean Clay with Sand				21.0	25	9	A-4 (4)	CL	
22	Silty Sand				14.1	18	0	A-2-4 (0)	SM	
23	Poorly Graded Sand with Silt				9.3	17	0	A-3 (0)	SP-SM	
24	Silty Sand				10.1	14	0	A-2-4 (0)	SM	
26	Silty Sand				16.8	19	2	A-2-4 (0)	SM	
28	Silty Sand				16.3	20	3	A-2-4 (0)	SM	
36	Sandy Silty Clay				19.9	27	7	A-4 (3)	CL-ML	
37	Sandy Lean Clay				22.0	31	13	A-6 (6)	CL	
38	Silty Sand				11.3	17	0	A-2-4 (0)	SM	
88	Lean Clay with Sand	112.3	14.4	9.2-18.4	22.8	26	8	A-4 (4)	CL	4.6
89	Lean Clay with Sand	111.0	12.6	8.7-17.1	21.1	26	8	A-4 (5)	CL	3.9
94	Sandy Lean Clay				21.5	26	8	A-4 (2)	CL	
96	Sandy Lean Clay				17.7	24	9	A-4 (3)	CL	
98	Clayey Sand				15.0	25	11	A-6 (2)	SC	
99	Sandy Silty Clay				16.7	24	7	A-4 (2)	CL-ML	
106	Clayey Sand				15.8	27	10	A-4 (1)	SC	

SEALED BY

KEVIN L. CHITTENDEN
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AGRICULTURE & ENVIRONMENT
COMMISSION OF THE STATE OF TENNESSEE

02/06/2026

COORDINATES ARE NAD 83(2011), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00002 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988 WITH GEOID 12B MODEL.

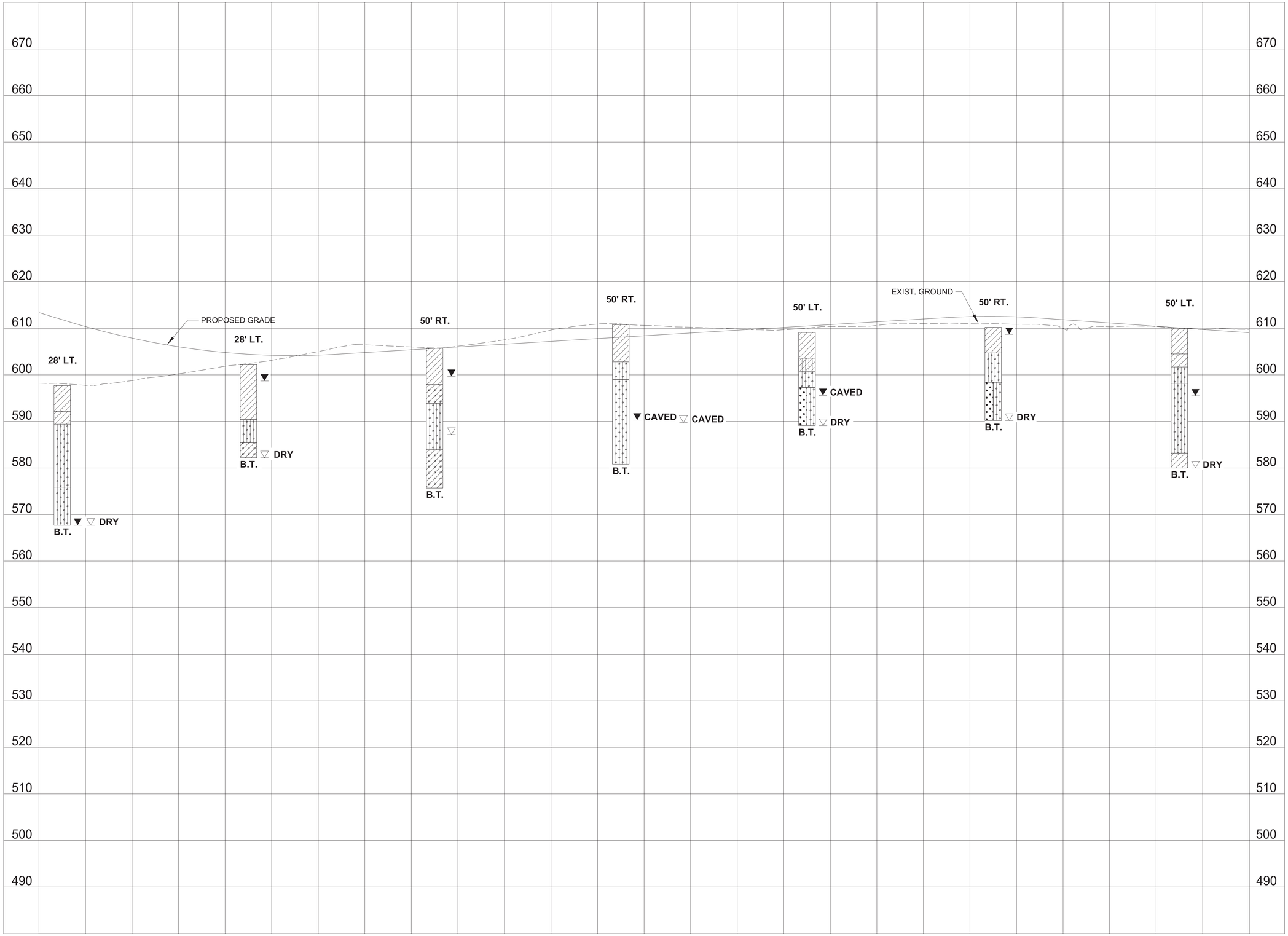
STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

GEOTECHNICAL BORING LAYOUT

STA. 149+00 TO STA. 175+00
SCALE: 1" = 100'

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TYPE	YEAR	PROJECT NO.	SHEET NO.
PS&E	2026	NH-54(48)	G7



LEGEND

- LEAN CLAY (TYPE A MATERIAL)
- SILTY SAND (TYPE A MATERIAL)
- CLAYEY SAND (TYPE A MATERIAL)
- SILTY CLAY (TYPE A MATERIAL)
- POORLY TO WELL-GRADED SAND WITH SILT (TYPE A MATERIAL)

TYPE MATERIAL-SEE DEFINITION OF EARTHWORK TERMS ON GEOTECHNICAL NOTES AND EST. QTYS. SHEET.
B.T.= BORING TERMINATED
REF.= AUGER REFUSAL
▽ = IMMEDIATE WATER TABLE
▼ = 24 HOUR WATER TABLE

SEALED BY

STEVEN L. CHITTENDEN
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STATE OF TENNESSEE
AGRICULTURE
COMMERCE
02/06/2026

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

GEOTECHNICAL BORING PROFILE

C:\PWWORKING\EAST\01D3224772\G7.SHT

BORING NUMBER	SOIL NUMBER	DEPTH (ft.)
B-20	25	0.0-3.0
	27	3.0-11.0
	28	11.8-26.8
	*29	26.8-30.0
B-21	*87	0.0-10.0
	*25	0.0-3.0
	27	3.0-5.5
	*95	5.5-8.3
	*27	8.3-11.8
	28	11.8-26.8
	29	26.8-30.0
B-22	*30	0.0-5.5
	*31	5.5-11.8
	*32	11.8-21.8
	*34	21.8-30.0
B-23	30	0.0-5.5
	*33	5.5-11.8
	*35	11.8-20.0
B-24	*91	1.0-10.0
	68	0.0-5.5
	*104	5.5-8.3
	*70	8.3-16.8
	*72	16.8-30.0
B-25	67	0.0-5.5
	*68	5.5-7.8
	*97	7.8-11.8
	*69	11.8-16.8
	70	16.8-26.8
	*100	26.8-30.0

* INDICATES LOCATION WHERE SAMPLE WAS TAKEN AND LAB TEST PERFORMED. ALL OTHER SAMPLE NUMBER LABELS INDICATE AN APPARENT SIMILARITY BASED ON VISUAL IDENTIFICATION.

SOIL NUMBER	DESCRIPTION	MAXIMUM DENSITY (pcf)	OPTIMUM MOISTURE	MOISTURE RANGE	IN-SITU MOISTURE (%)	L.L.	P.I.	AASHTO CLASS	USCS CLASS	C.B.R.
25	Lean Clay with Sand				27.5	31	10	A-4 (8)	CL	
27	Silty Sand				18.4	19	3	A-2-4 (0)	SM	
29	Sandy Lean Clay				25.0	32	12	A-6 (6)	CL	
30	Lean Clay with Sand				22.2	36	15	A-6 (11)	CL	
31	Silty Sand				15.2	18	0	A-2-4 (0)	SM	
32	Poorly Graded Sand with Silt				6.5	18	0	A-3 (0)	SP-SM	
33	Poorly Graded Sand with Silt				5.5	17	0	A-3 (0)	SP-SM	
34	Sandy Lean Clay				27.1	31	14	A-6 (7)	CL	
35	Silty Sand				28.0	43	14	A-2-7 (1)	SM	
68	Clayey Sand				23.7	35	13	A-6 (2)	SC	
69	Silty Sand				24.9	27	0	A-2-4 (0)	SM	
70	Silty Sand				8.6	17	0	A-2-4 (0)	SM	
72	Clayey Sand				20.2	40	16	A-6 (2)	SC	
87	Lean Clay with Sand	111.2	15.5	13.1-20.0	25.6	29	10	A-4 (6)	CL	10.6
91	Lean Clay with Sand				18.5	29	11	A-6 (7)	CL	
95	Sandy Lean Clay				19.0	33	15	A-6 (7)	CL	
97	Clayey Sand				24.1	35	16	A-2-6 (1)	SC	
100	Well-Graded Sand with Clay and Gravel (and/or Silty Clay and Gravel)				19.1	31	9	A-2-4 (0)	SW-SC	
104	Sandy Lean Clay				14.1	21	8	A-4 (1)	CL	

TYPE	YEAR	PROJECT NO.	SHEET NO.
PS&E	2026	NH-54(48)	G8

LEGEND

R-1 — UNDISTURBED SAMPLE LOCATION

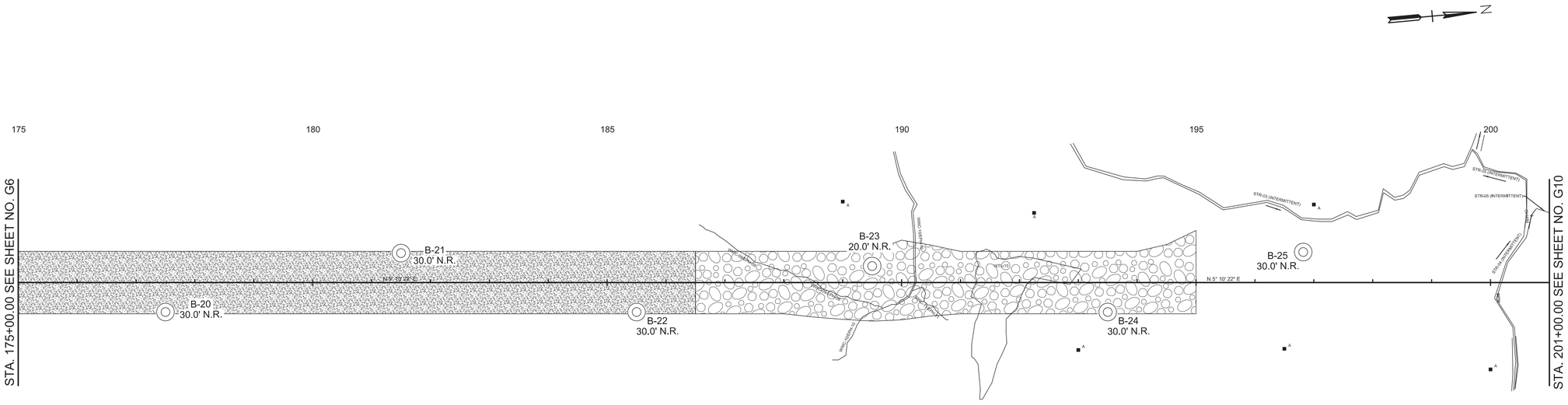
PVMT-1 — PAVEMENT CORE LOCATION

SELECT GRANULAR MATERIAL

GRADED SOLID ROCK

REF. - AUGER OR SPLITSPOON REFUSAL

N.R. - BORING TERMINATED WITH NO REFUSAL



SEALED BY



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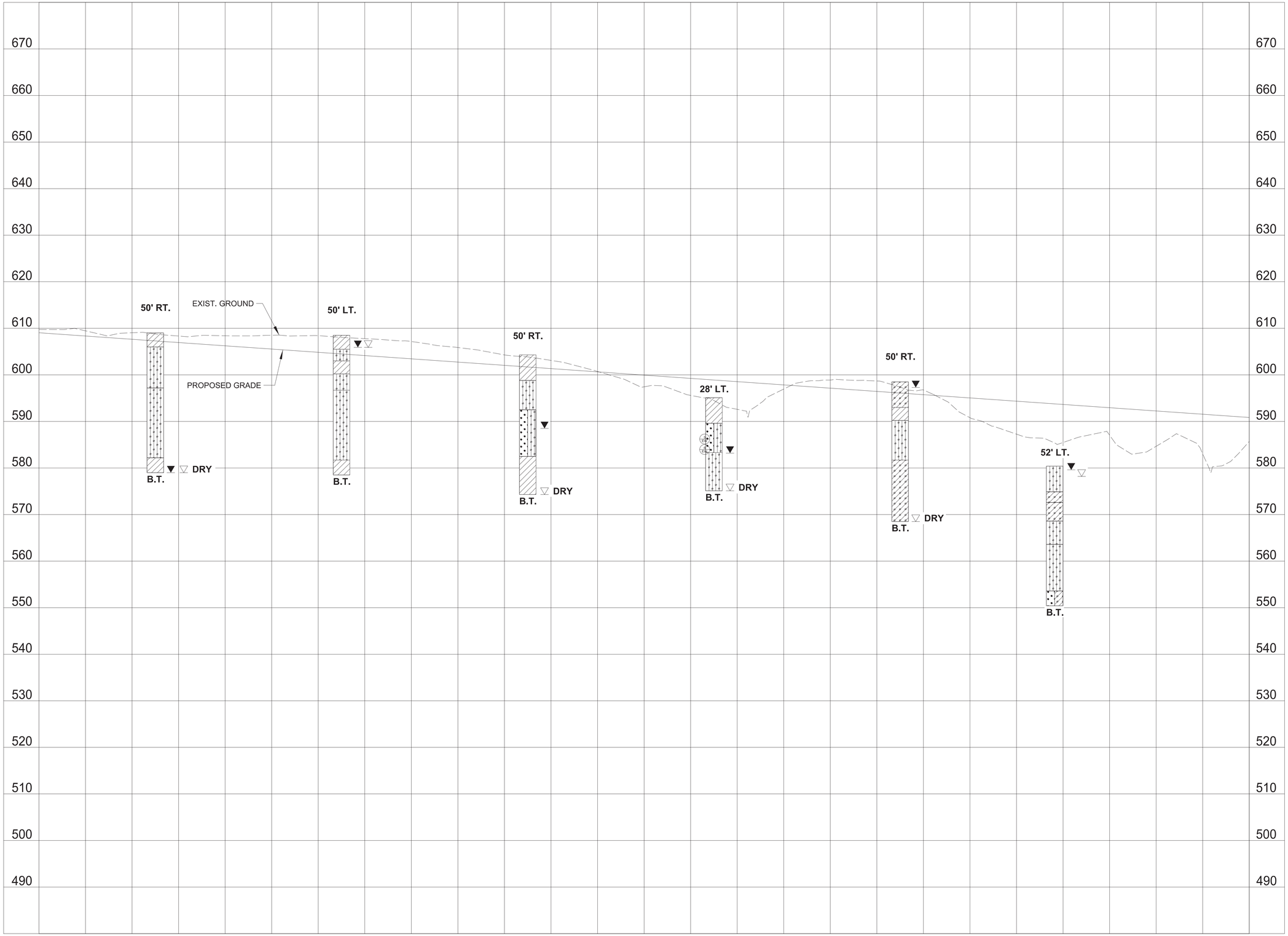
STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

GEOTECHNICAL BORING LAYOUT

STA. 175+00 TO STA. 201+00
SCALE: 1" = 100'

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TYPE	YEAR	PROJECT NO.	SHEET NO.
PS&E	2026	NH-54(48)	G9



LEGEND

- LEAN CLAY (TYPE A MATERIAL)
- SILTY SAND (TYPE A MATERIAL)
- CLAYEY SAND (TYPE A MATERIAL)
- POORLY GRADED SAND WITH SILT (TYPE A MATERIAL)
- WELL-GRADED SAND WITH CLAY AND GRAVEL (TYPE A MATERIAL)

TYPE MATERIAL-SEE DEFINITION OF EARTHWORK TERMS ON GEOTECHNICAL NOTES AND EST. QTYS. SHEET.
B.T.= BORING TERMINATED
REF.= AUGER REFUSAL
▽ = IMMEDIATE WATER TABLE
▼ = 24 HOUR WATER TABLE

SEALED BY

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COMMISSION
02/06/2026

COORDINATES ARE NAD/83(2011). ARE DATUM ADJUSTED BY THE FACTOR OF 1.00002 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988 WITH GEOID 12B MODEL.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

GEOTECHNICAL BORING PROFILE

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TYPE	YEAR	PROJECT NO.	SHEET NO.
PS&E	2026	NH-54(48)	G10

BORING NUMBER	SOIL NUMBER	DEPTH (ft.)
B-26	*67	0.0-11.8
	*71	11.8-21.8
	70	21.8-26.8
	72	26.8-30.0
B-27	*92	1.0-10.0
	*73	0.0-8.0
	*74	8.0-11.8
	77	11.8-16.5
	*102	16.5-21.8
	*77	21.8-26.8
	80	26.8-30.0
B-28	73	0.0-8.0
	*75	8.0-11.8
	*76	11.8-16.8
	*78	16.8-26.8
	*79	26.8-36.8
	*80	36.8-40.0
B-29	110	0.0-2.0
	111	2.0-4.5
	112	4.5-9.5
	*114	9.5-13.3
	113	13.3-21.5
B-30	*127	2.0-10.0
	110	0.0-2.0
	*111	2.0-4.5
	*112	4.5-9.5
	114	9.5-13.3
	113	13.3-21.5
B-31	*110	0.0-4.5
	*113	4.5-21.5
B-32	*115	0.0-9.5
	*116	9.5-18.3
	*117	18.3-23.3
	*118	23.3-31.5

* INDICATES LOCATION WHERE SAMPLE WAS TAKEN AND LAB TEST PERFORMED. ALL OTHER SAMPLE NUMBER LABELS INDICATE AN APPARENT SIMILARITY BASED ON VISUAL IDENTIFICATION.

SOIL NUMBER	DESCRIPTION	MAXIMUM DENSITY (pcf)	OPTIMUM MOISTURE	MOISTURE RANGE	IN-SITU MOISTURE (%)	L.L.	P.I.	AASHTO CLASS	USCS CLASS	C.B.R.
67	Silty Sand				11.3	23	3	A-4 (0)	SM	
71	Clayey Sand				18.9	32	13	A-6 (3)	SC	
73	Sandy Silty Clay				16.1	21	6	A-4 (1)	CL-ML	
74	Silty Sand				11.3	13	0	A-2-4 (0)	SM	
75	Silty Sand				13.5	15	0	A-2-4 (0)	SM	
76	Silty Sand				6.9	15	0	A-2-4 (0)	SM	
77	Poorly Graded Sand with Clay and Gravel (and/or Silty Clay and Gravel)				17.3	31	11	A-2-6 (0)	SP-SC	
78	Sandy Silty Clay				20.5	21	6	A-4 (1)	CL-ML	
79	Silty Sand				14.1	25	0	A-2-4 (0)	SM	
80	Silty Sand				14.3	17	3	A-2-4 (0)	SM	
92	Lean Clay	104.7	17.7	5.8-21.4	17.1	30	10	A-4 (8)	CL	5.4
102	Sandy Lean Clay				24.8	33	16	A-6 (9)	CL	
110	Sandy Lean Clay				11.8	23	8	A-4 (2)	CL	
111	Lean Clay with Sand				17.6	23	8	A-4 (4)	CL	
112	Silty, Clayey Sand				11.7	22	7	A-2-4 (0)	SC-SM	
113	Silty, Clayey Sand				12.6	20	5	A-2-4 (0)	SC-SM	
114	Silty Sand				10.8	16	1	A-2-4 (0)	SM	
115	Silty Sand				29.8	13	1	A-4 (0)	SM	
116	Sandy Silt				2.5	13	2	A-4 (0)	ML	
117	Clayey Sand with Gravel				17.8	36	15	A-2-6 (1)	SC	
118	Silty, Clayey Sand with Gravel				25.3	24	5	A-1-b (0)	SC-SM	
127	Sandy Lean Clay				17.6	25	9	A-4 (4)	CL	

LEGEND

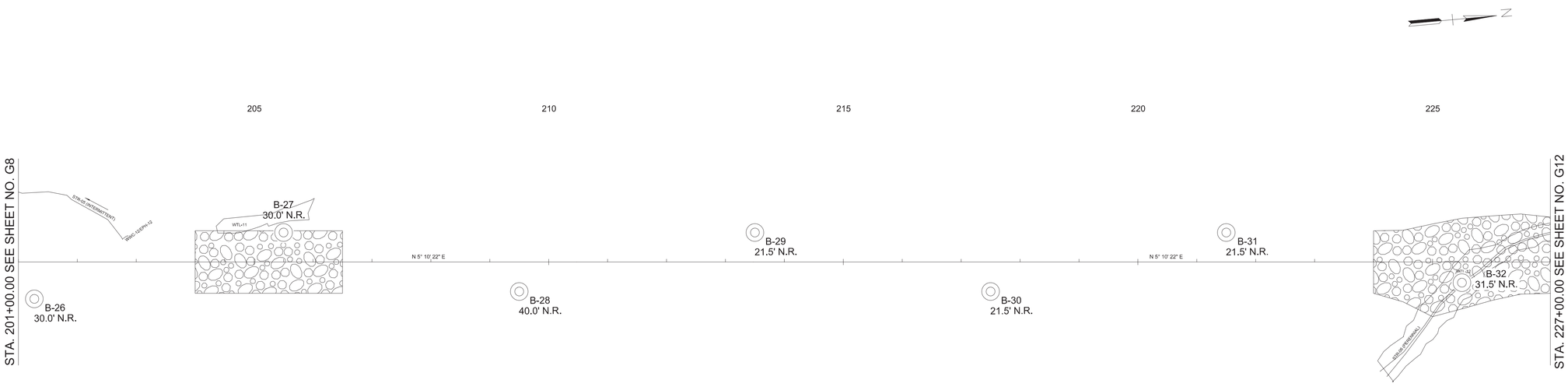
R-1 — UNDISTURBED SAMPLE LOCATION

PVMT-1 — PAVEMENT CORE LOCATION

GRADED SOLID ROCK

REF. - AUGER OR SPLITSPOON REFUSAL

N.R. - BORING TERMINATED WITH NO REFUSAL



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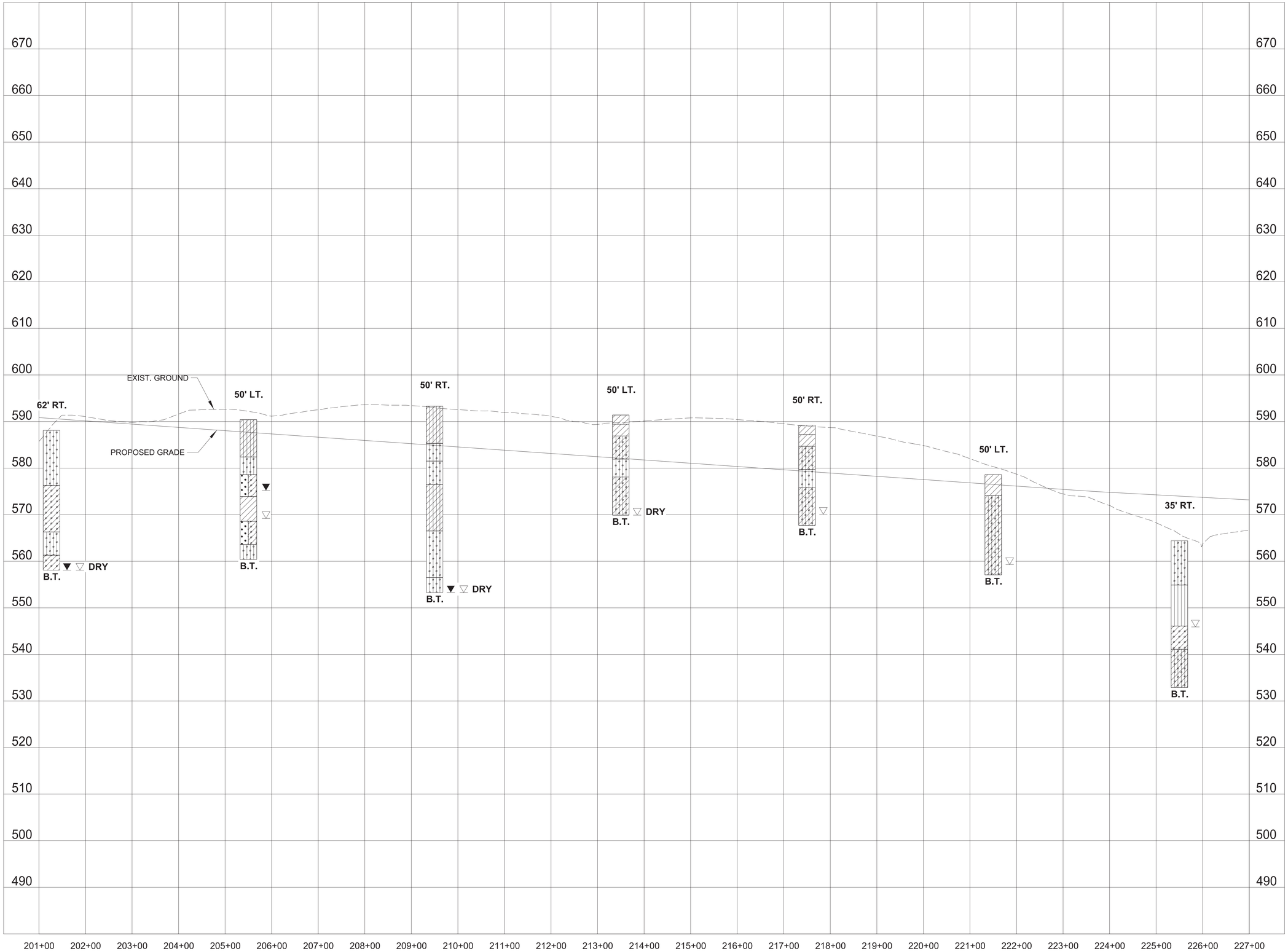
STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

GEOTECHNICAL BORING LAYOUT

STA. 201+00 TO STA. 227+00
SCALE: 1" = 100'

C:\PWWORKING\EAST\01\D3224772\G10.SHT

TYPE	YEAR	PROJECT NO.	SHEET NO.
PS&E	2026	NH-54(48)	G11



LEGEND

- LEAN CLAY (TYPE A MATERIAL)
- SILT (TYPE A MATERIAL)
- SILTY CLAY (TYPE A MATERIAL)
- SILTY SAND (TYPE A MATERIAL)
- POORLY GRADED SAND WITH CLAY AND GRAVEL (TYPE A MATERIAL)
- SILTY CLAYEY SAND (TYPE A MATERIAL)

TYPE MATERIAL-SEE DEFINITION OF EARTHWORK TERMS ON GEOTECHNICAL NOTES AND EST. QTYS. SHEET.
B.T.= BORING TERMINATED
REF.= AUGER REFUSAL
▽ = IMMEDIATE WATER TABLE
▼ = 24 HOUR WATER TABLE

SEALED BY

KEVIN L. CHITTENDEN
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COMMERCE
02/09/2026

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

GEOTECHNICAL BORING PROFILE

C:\PWWORKING\EAST01\D3224772\G11.SHT

BORING NUMBER	SOIL NUMBER	DEPTH (ft.)
B-33	*129	2.0-10.0
	*119	0.0-2.0
	120	2.0-7.0
	*124	7.0-31.5
B-34	119	0.0-2.0
	*121	2.0-7.0
	*126	7.0-9.8
	121	9.8-13.3
	122	13.3-18.3
	*123	18.3-23.3
	124	23.3-31.5
B-35	119	0.0-2.0
	*120	2.0-7.0
	*122	7.0-13.3
	*125	13.3-21.5
B-36	*93	1.0-10.0
	81	0.0-8.0
	*82	8.0-11.8
	*83	11.8-20.0
B-37	*81	0.0-5.5
	85	5.5-7.8
	*108	7.8-11.8
	*85	11.8-20.0
B-38	*39	2.0-3.5
	*40	3.5-5.5
	44	5.5-20.0
B-43	81	0.0-5.5
	*84	5.5-11.8
	85	11.8-20.0

* INDICATES LOCATION WHERE SAMPLE WAS TAKEN AND LAB TEST PERFORMED. ALL OTHER SAMPLE NUMBER LABELS INDICATE AN APPARENT SIMILARITY BASED ON VISUAL IDENTIFICATION.

SOIL NUMBER	DESCRIPTION	MAXIMUM DENSITY (pcf)	OPTIMUM MOISTURE	MOISTURE RANGE	IN-SITU MOISTURE (%)	L.L.	P.I.	AASHTO CLASS	USCS CLASS	C.B.R.
39	Silty, Clayey Sand				10.6	18	5	A-4 (0)	SC-SM	
40	Sandy Silty Clay				16.7	18	6	A-4 (0)	CL-ML	
81	Lean Clay				24.7	34	12	A-6 (12)	CL	
82	Lean Clay with Sand				22.3	31	14	A-6 (9)	CL	
83	Silty, Clayey Sand				19.0	24	6	A-2-4 (0)	SC-SM	
84	Lean Clay				19.1	27	11	A-6 (8)	CL	
85	Silty Sand				16.7	18	0	A-2-4 (0)	SM	
93	Silty Clay	104.9	18.4	12.9-21.8	22.6	29	7	A-4 (6)	CL-ML	5.2
108	Lean Clay with Sand				19.1	37	17	A-6 (11)	CL	
119	Lean Clay with Sand				11.9	30	11	A-6 (8)	CL	
120	Lean Clay with Sand				17.9	31	12	A-6 (7)	CL	
121	Lean Clay with Sand				12.4	30	13	A-6 (7)	CL	
122	Clayey Sand				16.8	36	18	A-2-6 (2)	SC	
123	Poorly Graded Sand with Silt				20.6	14	0	A-3 (0)	SP-SM	
124	Silty Sand				8.0	12	0	A-4 (0)	SM	
125	Sandy Lean Clay				19.8	26	11	A-6 (3)	CL	
126	Lean Clay with Sand				21.3	27	14	A-6 (7)	CL	
129	Sandy Lean Clay				13.9	34	18	A-6 (9)	CL	

TYPE	YEAR	PROJECT NO.	SHEET NO.
PS&E	2026	NH-54(48)	G12

LEGEND

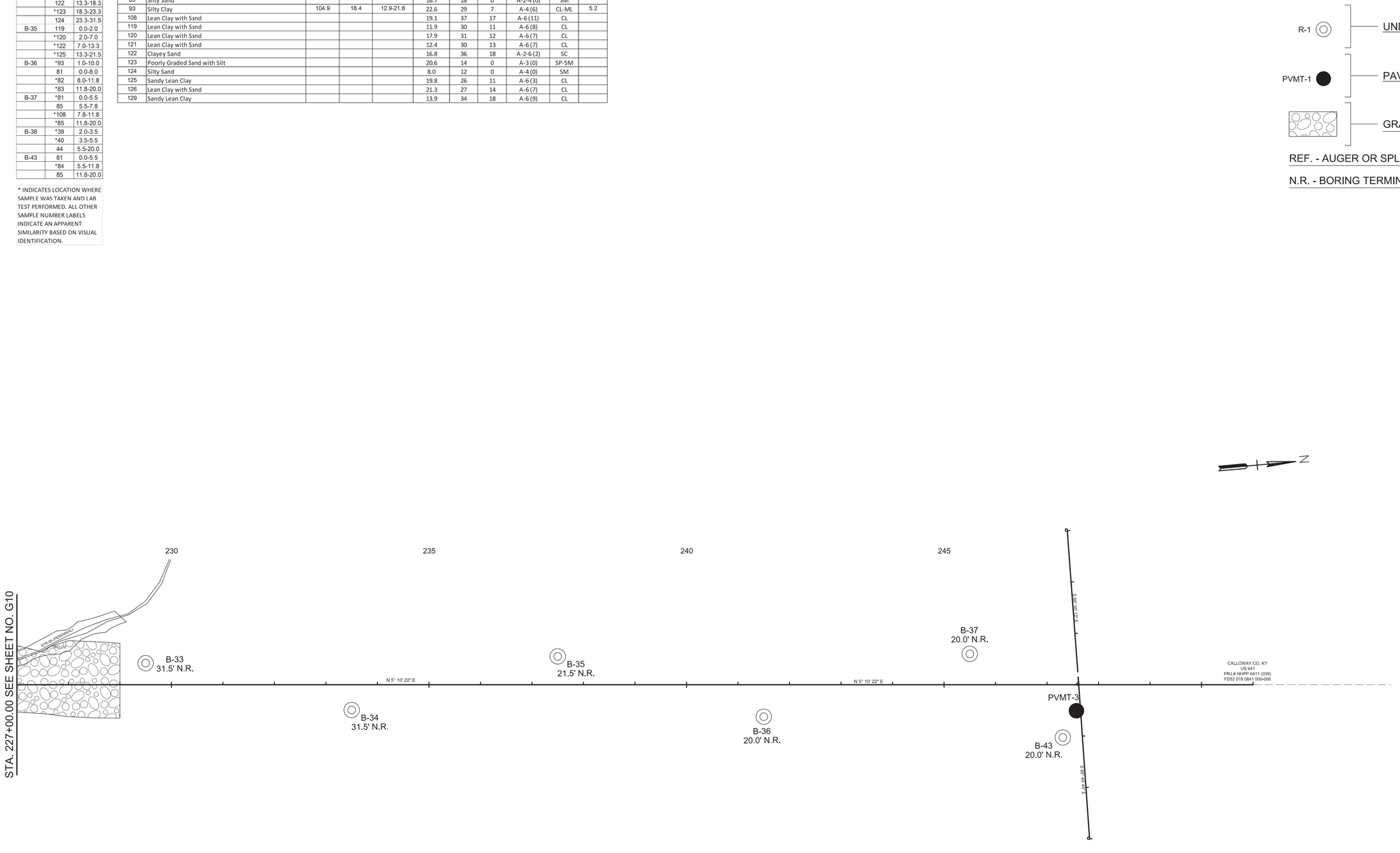
R-1 — UNDISTURBED SAMPLE LOCATION

PVMT-1 — PAVEMENT CORE LOCATION

GRADED SOLID ROCK

REF. - AUGER OR SPLITSPOON REFUSAL

N.R. - BORING TERMINATED WITH NO REFUSAL



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COORDINATES ARE NAD 83(2011), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00002 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988 WITH GEOID 12B MODEL.

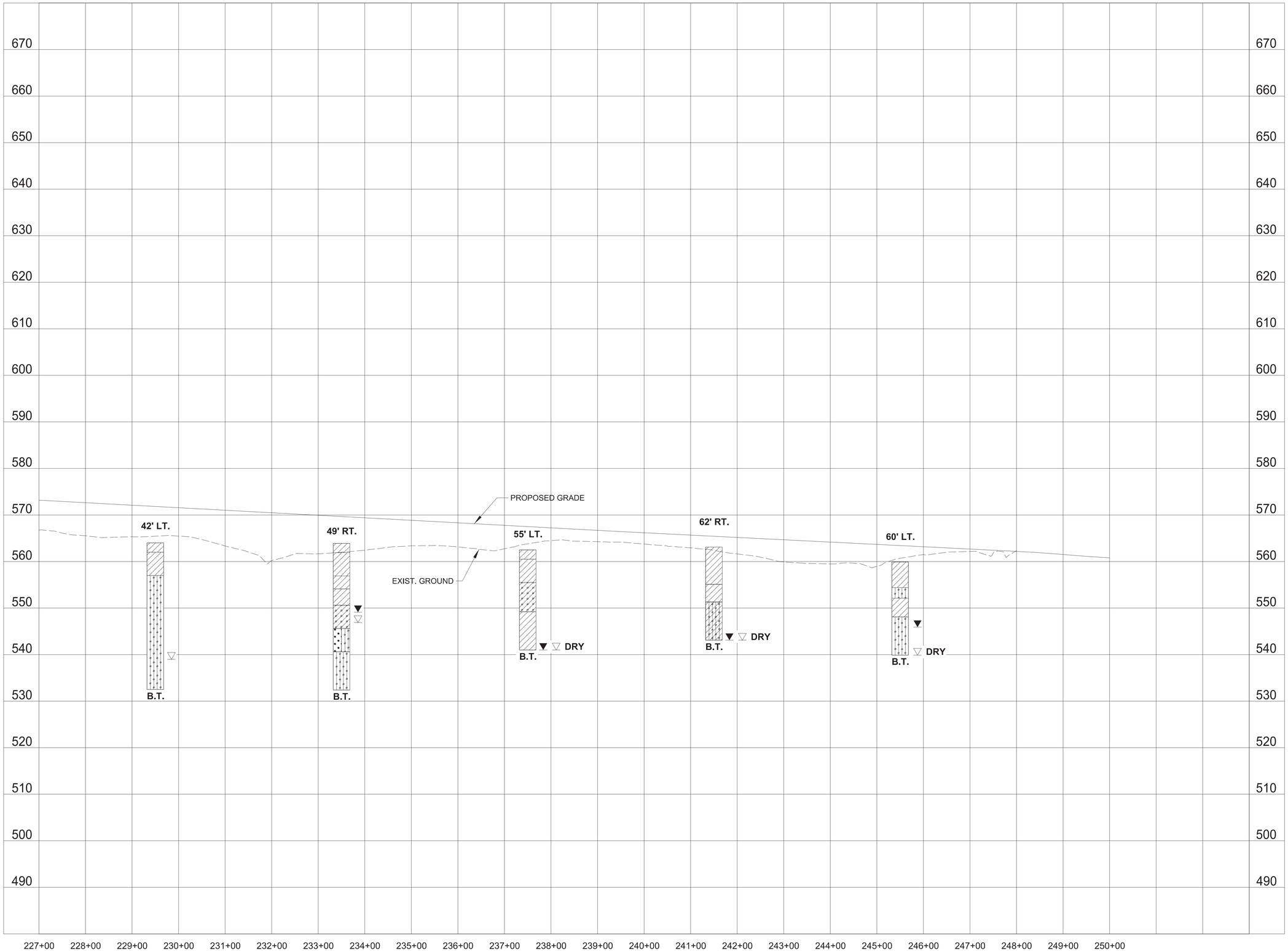
STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

GEOTECHNICAL BORING LAYOUT

STA. 227+00 TO STA. 248+00
SCALE: 1" = 100'

C:\PWWORKING\EAST\01D3224772\G12.SHT

TYPE	YEAR	PROJECT NO.	SHEET NO.
PS&E	2026	NH-54(48)	G13



LEGEND

- LEAN CLAY (TYPE A MATERIAL)
- SILTY SAND (TYPE A MATERIAL)
- CLAYEY SAND (TYPE A MATERIAL)
- POORLY GRADED SAND WITH SILT (TYPE A MATERIAL)
- SILTY CLAYEY SAND (TYPE A MATERIAL)

TYPE MATERIAL-SEE DEFINITION OF EARTHWORK TERMS ON GEOTECHNICAL NOTES AND EST. QTYS. SHEET.
B.T.= BORING TERMINATED
REF.= AUGER REFUSAL
▽ = IMMEDIATE WATER TABLE
▼ = 24 HOUR WATER TABLE

SEALED BY



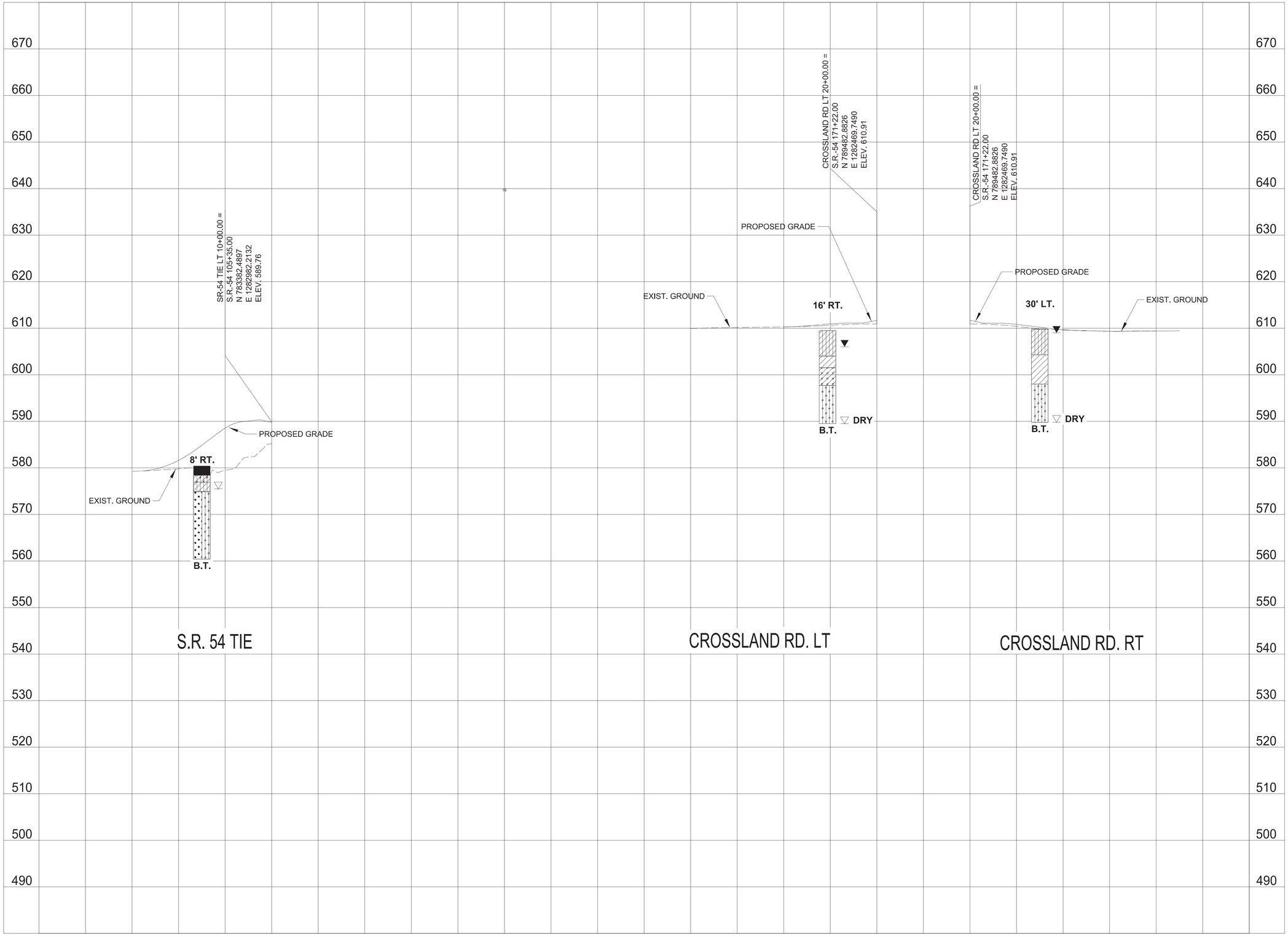
COORDINATES ARE NAD/83(2011). ARE DATUM ADJUSTED BY THE FACTOR OF 1.00002 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988 WITH GEOID 12B MODEL.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

GEOTECHNICAL BORING PROFILE

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TYPE	YEAR	PROJECT NO.	SHEET NO.
PS&E	2026	NH-54(48)	G14



LEGEND

- ASPHALT
- SILTY CLAYEY SAND (TYPE A MATERIAL)
- SILTY CLAY (TYPE A MATERIAL)
- POORLY GRADED SAND WITH SILT (TYPE A MATERIAL)
- LEAN CLAY (TYPE A MATERIAL)
- CLAYEY SAND (TYPE A MATERIAL)
- SILTY SAND (TYPE A MATERIAL)

TYPE MATERIAL-SEE DEFINITION OF EARTHWORK TERMS ON GEOTECHNICAL NOTES AND EST. QTYS. SHEET.
B.T.= BORING TERMINATED
REF.= AUGER REFUSAL
▽ = IMMEDIATE WATER TABLE
▼ = 24 HOUR WATER TABLE

SEALED BY

KEVIN L. GUTTRIDGE
PROFESSIONAL ENGINEER
XVI
AGRICULTURE
COMMISSION
02/06/2026

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

GEOTECHNICAL SIDE ROAD BORING PROFILE

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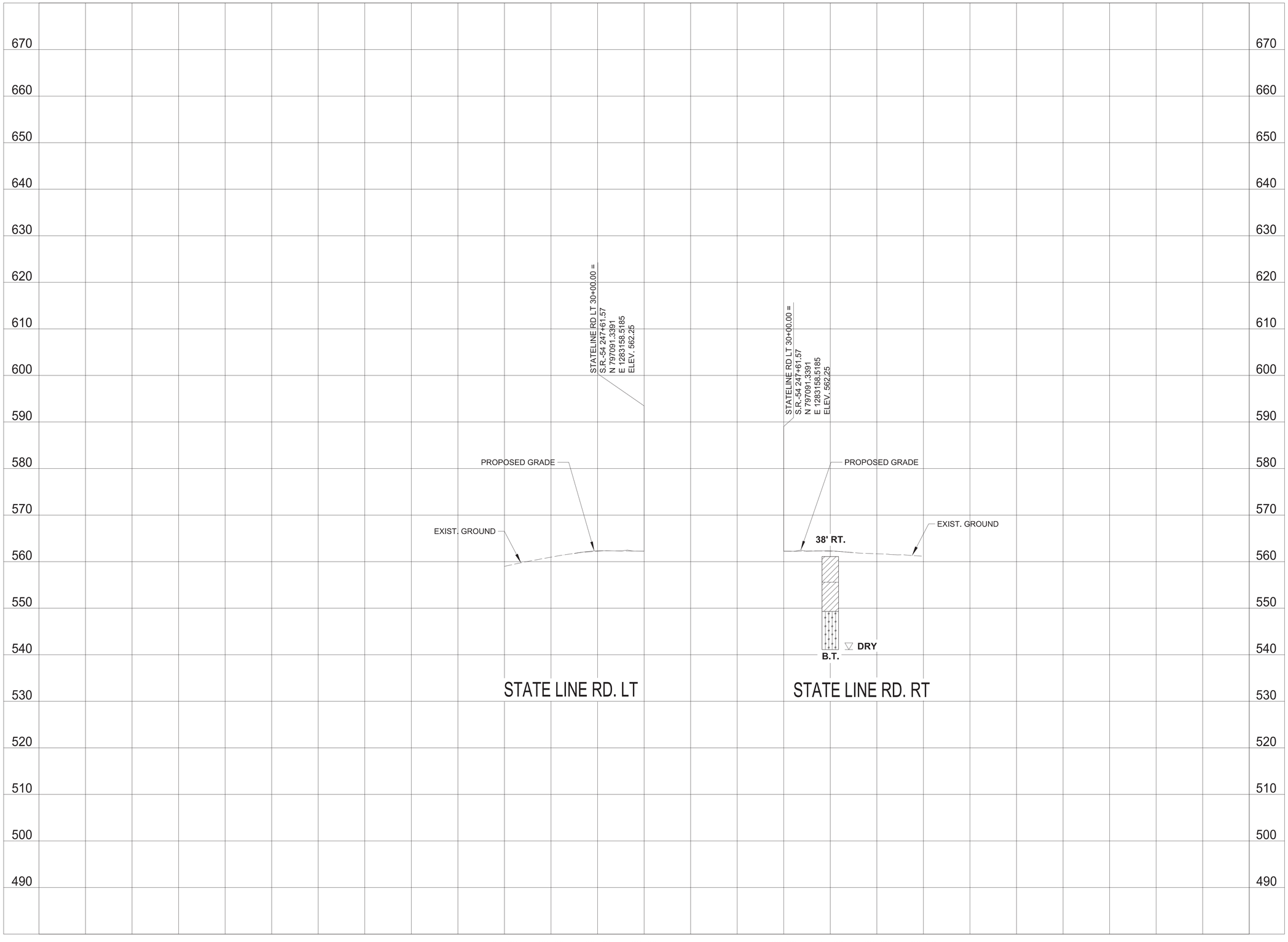
TYPE	YEAR	PROJECT NO.	SHEET NO.
PS&E	2026	NH-54(48)	G15

LEGEND

LEAN CLAY (TYPE A MATERIAL)

SILTY SAND (TYPE A MATERIAL)

TYPE MATERIAL-SEE DEFINITION OF EARTHWORK TERMS ON GEOTECHNICAL NOTES AND EST. QTYS. SHEET.
B.T.= BORING TERMINATED
REF.= AUGER REFUSAL
▽ = IMMEDIATE WATER TABLE
▼ = 24 HOUR WATER TABLE



SEALED BY

KEVIN L. CHITTENDEN
PROFESSIONAL ENGINEER
AGRICULTURE
COMMERCE
02/05/2026

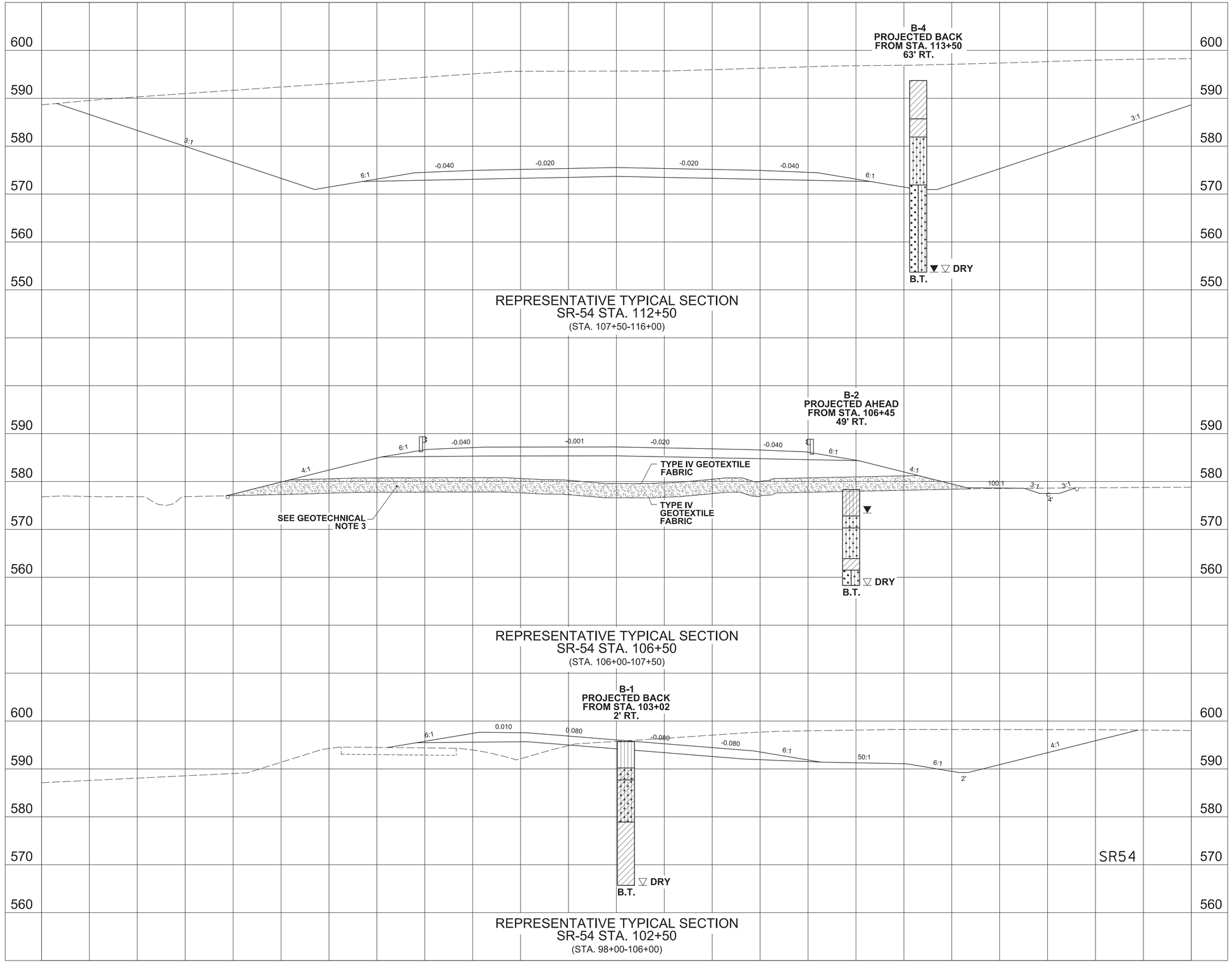
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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

GEOTECHNICAL SIDE ROAD BORING PROFILE

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TYPE	YEAR	PROJECT NO.	SHEET NO.
PS&E	2026	NH-54(48)	G16



C:\PW\WORKING\EAST01\D3224772\HYSR54 TYPICAL SECTIONS.SHT

LEGEND

- LEAN CLAY (TYPE A MATERIAL)
- SILT (TYPE A MATERIAL)
- SILTY CLAYEY SAND (TYPE A MATERIAL)
- SILTY SAND (TYPE A MATERIAL)
- POORLY GRADED SAND WITH SILT (TYPE A MATERIAL)

TYPE MATERIAL-SEE DEFINITION OF EARTHWORK TERMS ON GEOTECHNICAL NOTES AND EST. QTYS. SHEET.
B.T.= BORING TERMINATED
REF.= AUGER REFUSAL
▽ = IMMEDIATE WATER TABLE
▼ = 24 HOUR WATER TABLE

SEALED BY

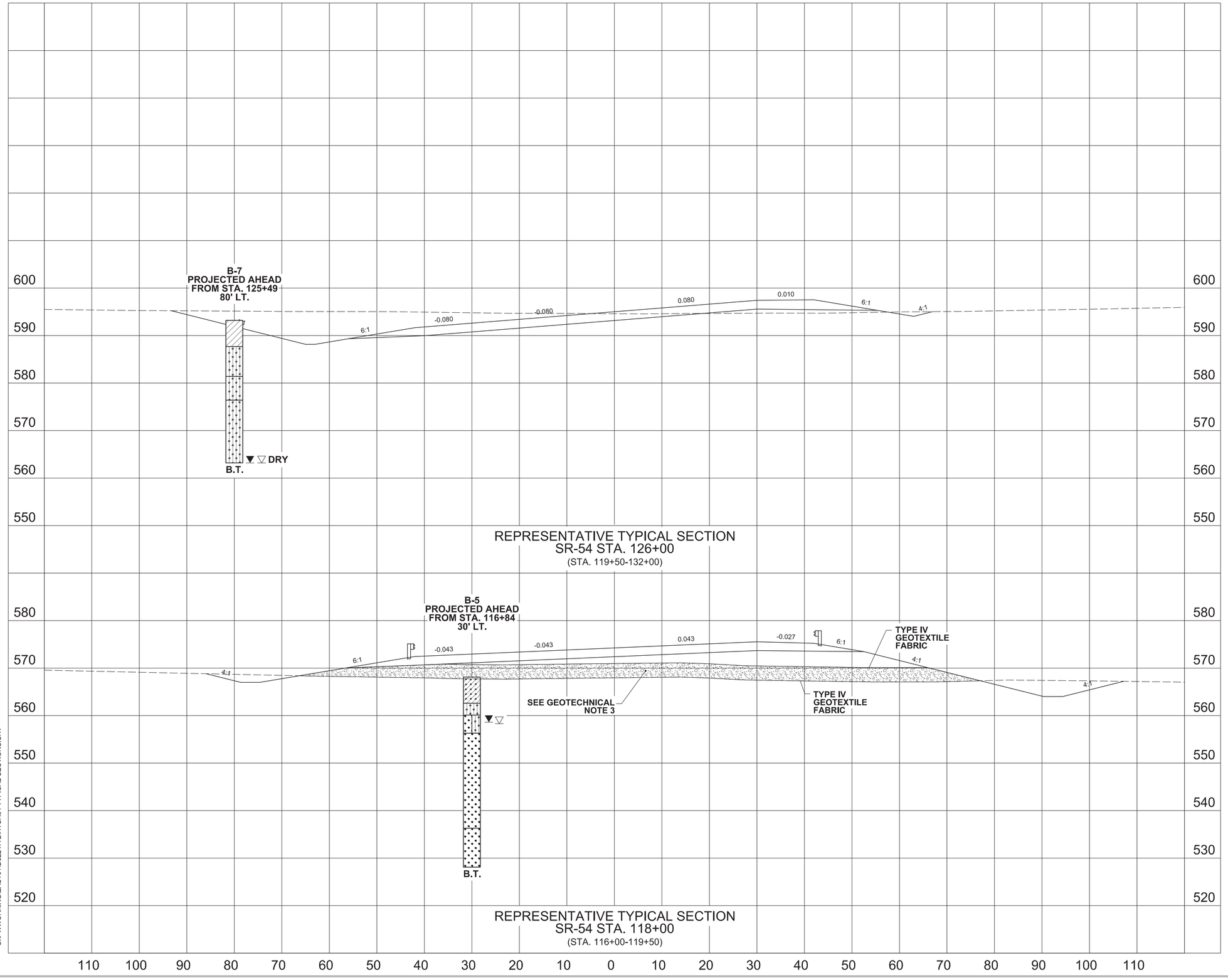
DAVID L. CHITTENDEN
PROFESSIONAL ENGINEER
XVI
AGRICULTURE
STATE OF TENNESSEE
02/06/2025

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

GEOTECHNICAL TYPICAL SECTIONS

TYPE	YEAR	PROJECT NO.	SHEET NO.
PS&E	2026	NH-54(48)	G17



C:\PWWORKING\EAST01\D3224772\HYSR54 TYPICAL SECTIONS.SHT

LEGEND

- LEAN CLAY (TYPE A MATERIAL)
- CLAYEY SAND (TYPE A MATERIAL)
- SILTY SAND (TYPE A MATERIAL)
- WELL-GRADED SAND WITH SILT (TYPE A MATERIAL)
- POORLY GRADED SAND (TYPE A MATERIAL)

TYPE MATERIAL-SEE DEFINITION OF EARTHWORK TERMS ON GEOTECHNICAL NOTES AND EST. QTYS. SHEET.
B.T.= BORING TERMINATED
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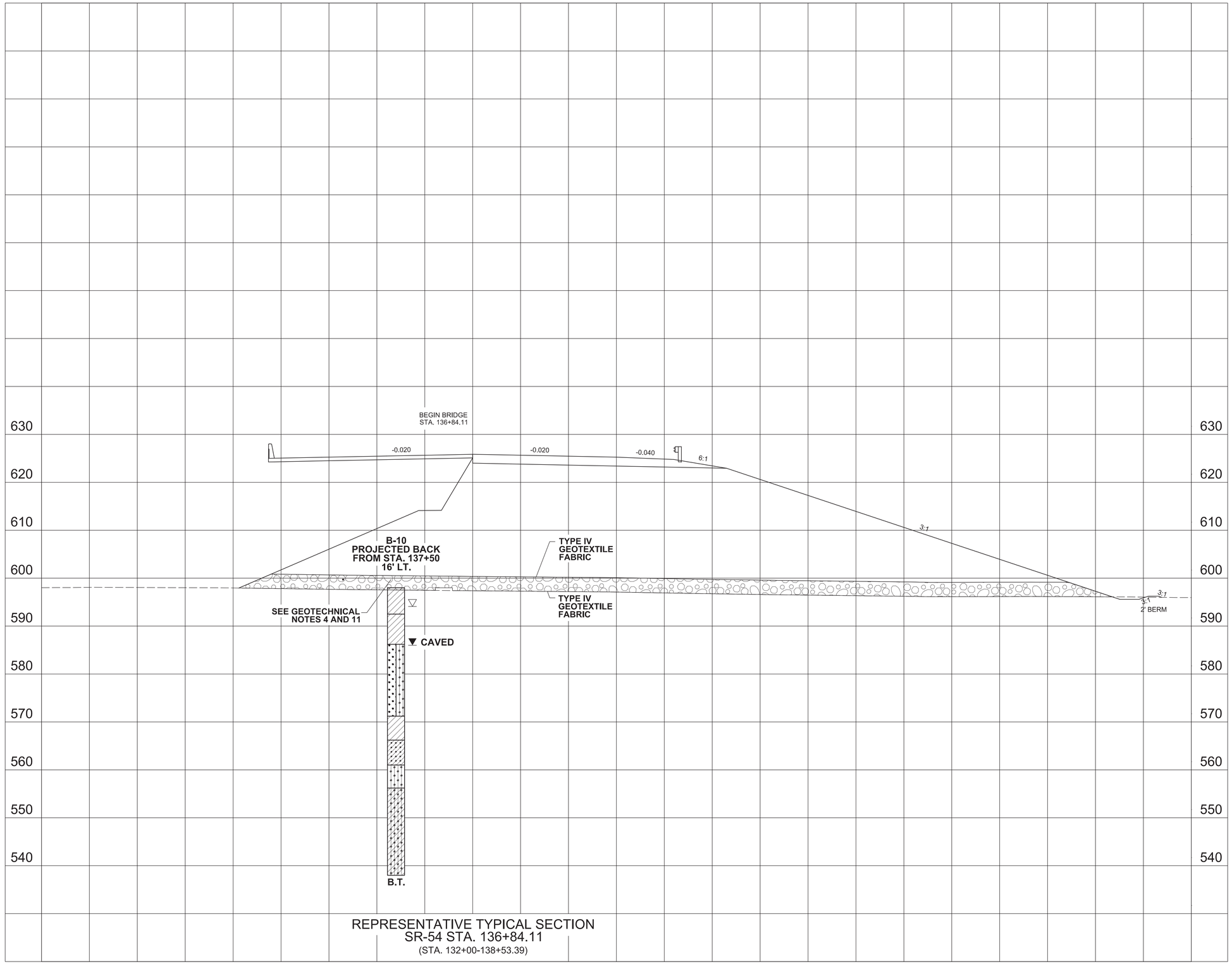
DANIEL CHITTENDEN
PROFESSIONAL ENGINEER
XVI
AGRICULTURE
STATE OF TENNESSEE
12/09/2025

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

GEOTECHNICAL TYPICAL SECTIONS

TYPE	YEAR	PROJECT NO.	SHEET NO.
PS&E	2026	NH-54(48)	G18



REPRESENTATIVE TYPICAL SECTION
SR-54 STA. 136+84.11
(STA. 132+00-138+53.39)

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LEGEND

- LEAN CLAY (TYPE A MATERIAL)
- CLAYEY SAND (TYPE A MATERIAL)
- SILTY SAND (TYPE A MATERIAL)
- POORLY GRADED SAND WITH SILT (TYPE A MATERIAL)
- SILTY CLAYEY SAND (TYPE A MATERIAL)

TYPE MATERIAL-SEE DEFINITION OF EARTHWORK TERMS ON GEOTECHNICAL NOTES AND EST. QTYS. SHEET.
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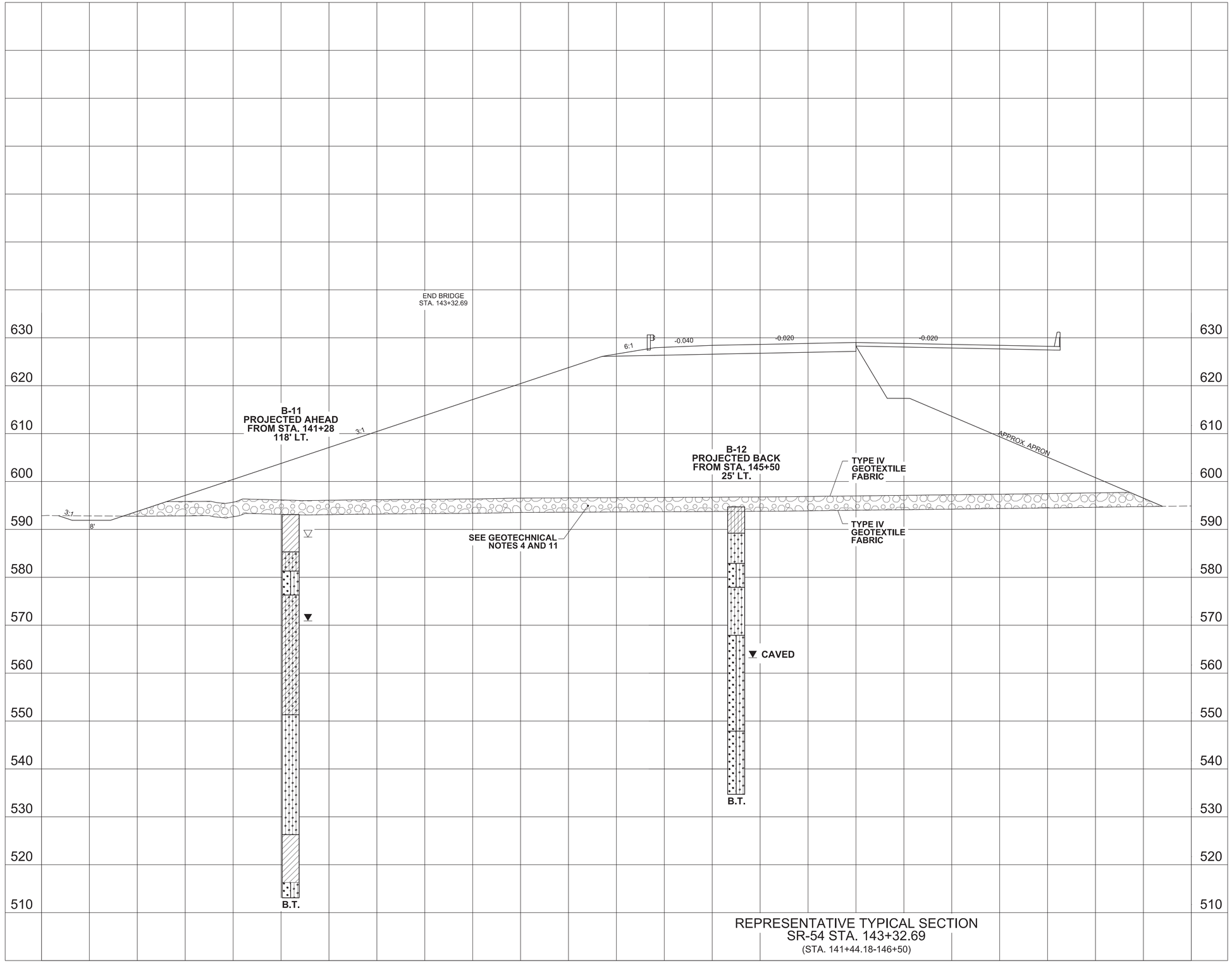
DEVIN L. CHITTENDEN
PROFESSIONAL ENGINEER
XVI
AGRICULTURE
STATE OF TENNESSEE
12/09/2025

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

GEOTECHNICAL TYPICAL SECTIONS

TYPE	YEAR	PROJECT NO.	SHEET NO.
PS&E	2026	NH-54(48)	G19



REPRESENTATIVE TYPICAL SECTION
SR-54 STA. 143+32.69
(STA. 141+44.18-146+50)

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LEGEND

- LEAN CLAY (TYPE A MATERIAL)
- SILTY CLAY (TYPE A MATERIAL)
- SILTY CLAYEY SAND (TYPE A MATERIAL)
- SILTY SAND (TYPE A MATERIAL)
- POORLY GRADED SAND WITH SILT (TYPE A MATERIAL)
- SILTY CLAY (TYPE A MATERIAL)

TYPE MATERIAL-SEE DEFINITION OF EARTHWORK TERMS ON GEOTECHNICAL NOTES AND EST. QTYS. SHEET.
B.T.= BORING TERMINATED
REF.= AUGER REFUSAL
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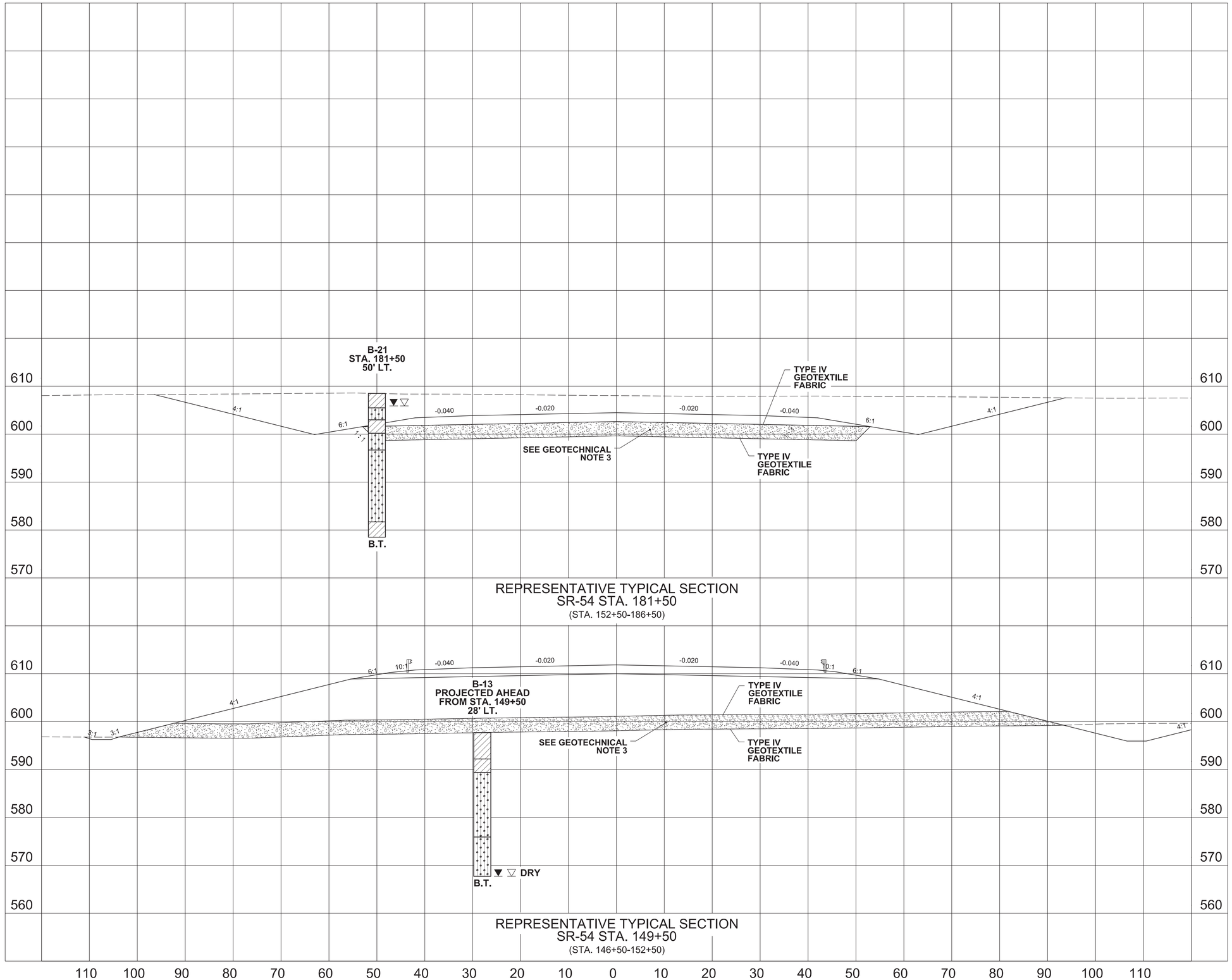
DEVIN L. CHITTENDEN
PROFESSIONAL ENGINEER
VVI
AGRICULTURE
STATE OF TENNESSEE
12/09/2025

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

GEOTECHNICAL TYPICAL SECTIONS

TYPE	YEAR	PROJECT NO.	SHEET NO.
PS&E	2026	NH-54(48)	G20



REPRESENTATIVE TYPICAL SECTION
SR-54 STA. 181+50
(STA. 152+50-186+50)

REPRESENTATIVE TYPICAL SECTION
SR-54 STA. 149+50
(STA. 146+50-152+50)

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LEGEND

LEAN CLAY (TYPE A MATERIAL)

SILTY SAND (TYPE A MATERIAL)

TYPE MATERIAL-SEE DEFINITION OF EARTHWORK TERMS ON GEOTECHNICAL NOTES AND EST. QTYS. SHEET.
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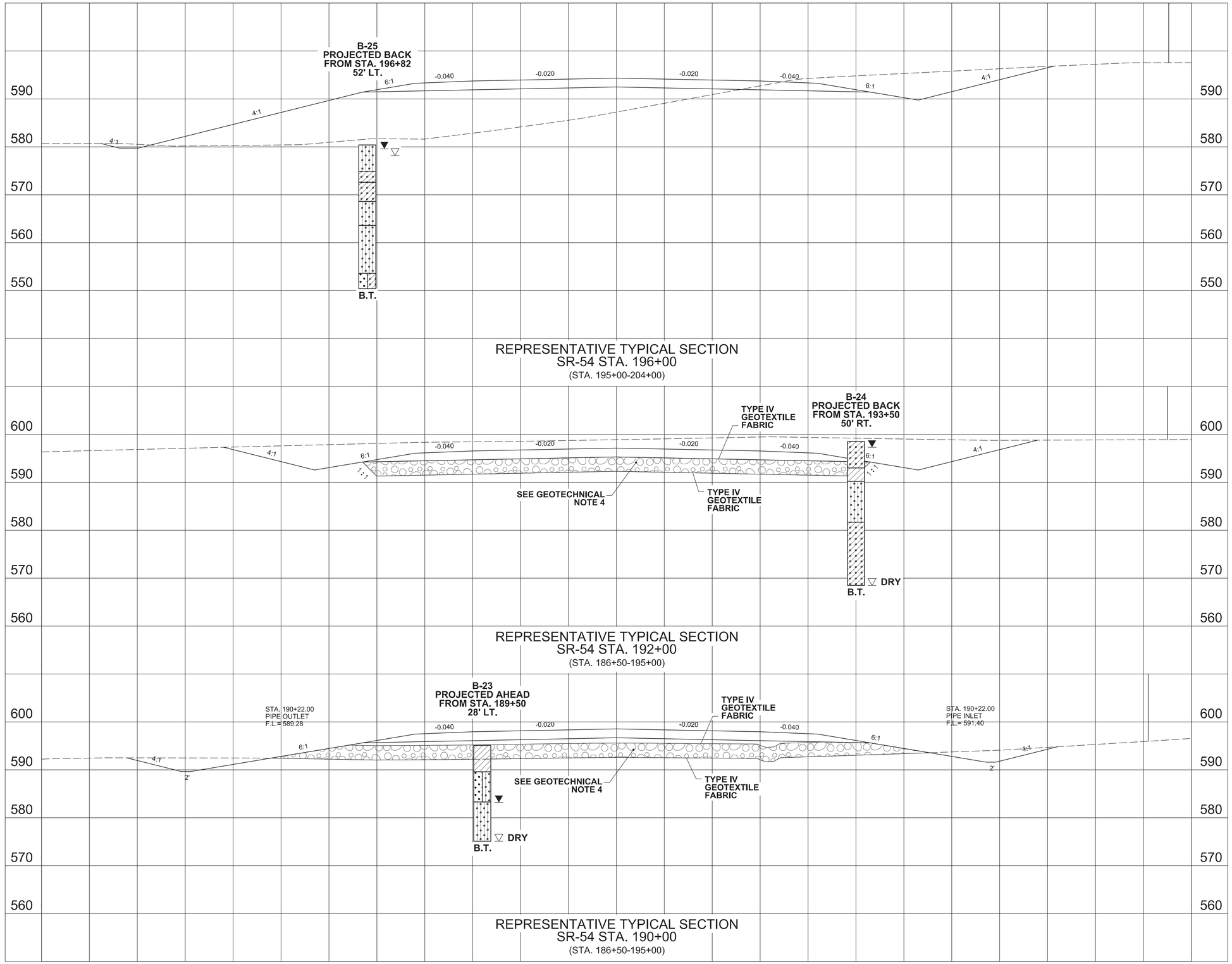
DEVIN L. CHITTENDEN
PROFESSIONAL ENGINEER
AGRICULTURE
STATE OF TENNESSEE
12/09/2025

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

GEOTECHNICAL TYPICAL SECTIONS

TYPE	YEAR	PROJECT NO.	SHEET NO.
PS&E	2026	NH-54(48)	G21



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LEGEND

- LEAN CLAY (TYPE A MATERIAL)
- SILTY SAND (TYPE A MATERIAL)
- POORLY GRADED SAND WITH SILT (TYPE A MATERIAL)
- WELL-GRADED SAND WITH CLAY AND GRAVEL (TYPE A MATERIAL)
- CLAYEY SAND (TYPE A MATERIAL)

TYPE MATERIAL-SEE DEFINITION OF EARTHWORK TERMS ON GEOTECHNICAL NOTES AND EST. QTYS. SHEET.
B.T.= BORING TERMINATED
REF.= AUGER REFUSAL
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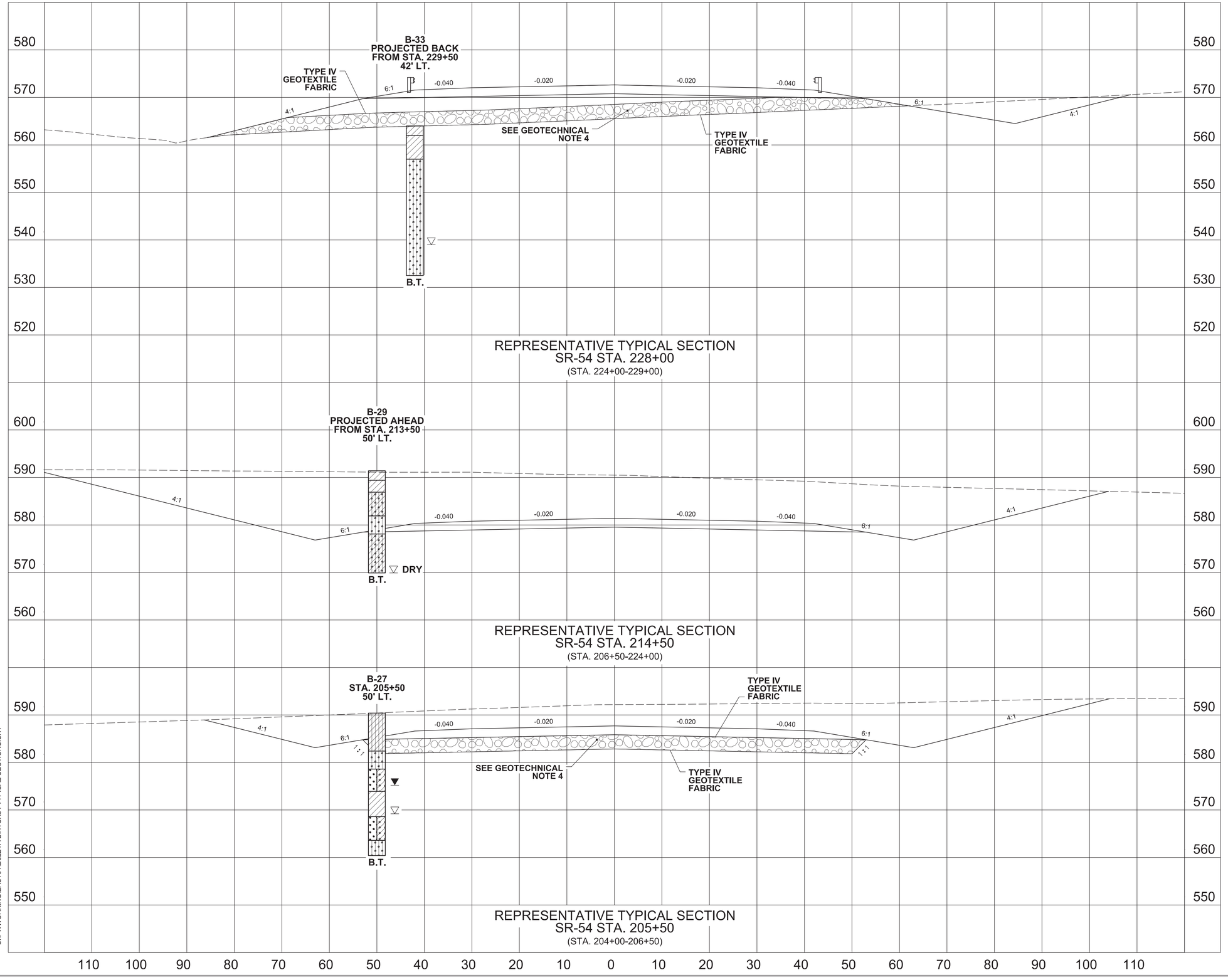
KEVIN L. CHITTENDEN
PROFESSIONAL ENGINEER
XVI
AGRICULTURE
STATE OF TENNESSEE
02/06/2026

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

GEOTECHNICAL TYPICAL SECTIONS

TYPE	YEAR	PROJECT NO.	SHEET NO.
PS&E	2026	NH-54(48)	G22



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LEGEND

- LEAN CLAY (TYPE A MATERIAL)
- SILTY CLAY (TYPE A MATERIAL)
- SILTY SAND (TYPE A MATERIAL)
- SILTY CLAYEY SAND (TYPE A MATERIAL)
- WELL-GRADED SAND WITH CLAY AND GRAVEL (TYPE A MATERIAL)

TYPE MATERIAL-SEE DEFINITION OF EARTHWORK TERMS ON GEOTECHNICAL NOTES AND EST. QTYS. SHEET.
B.T.= BORING TERMINATED
REF.= AUGER REFUSAL
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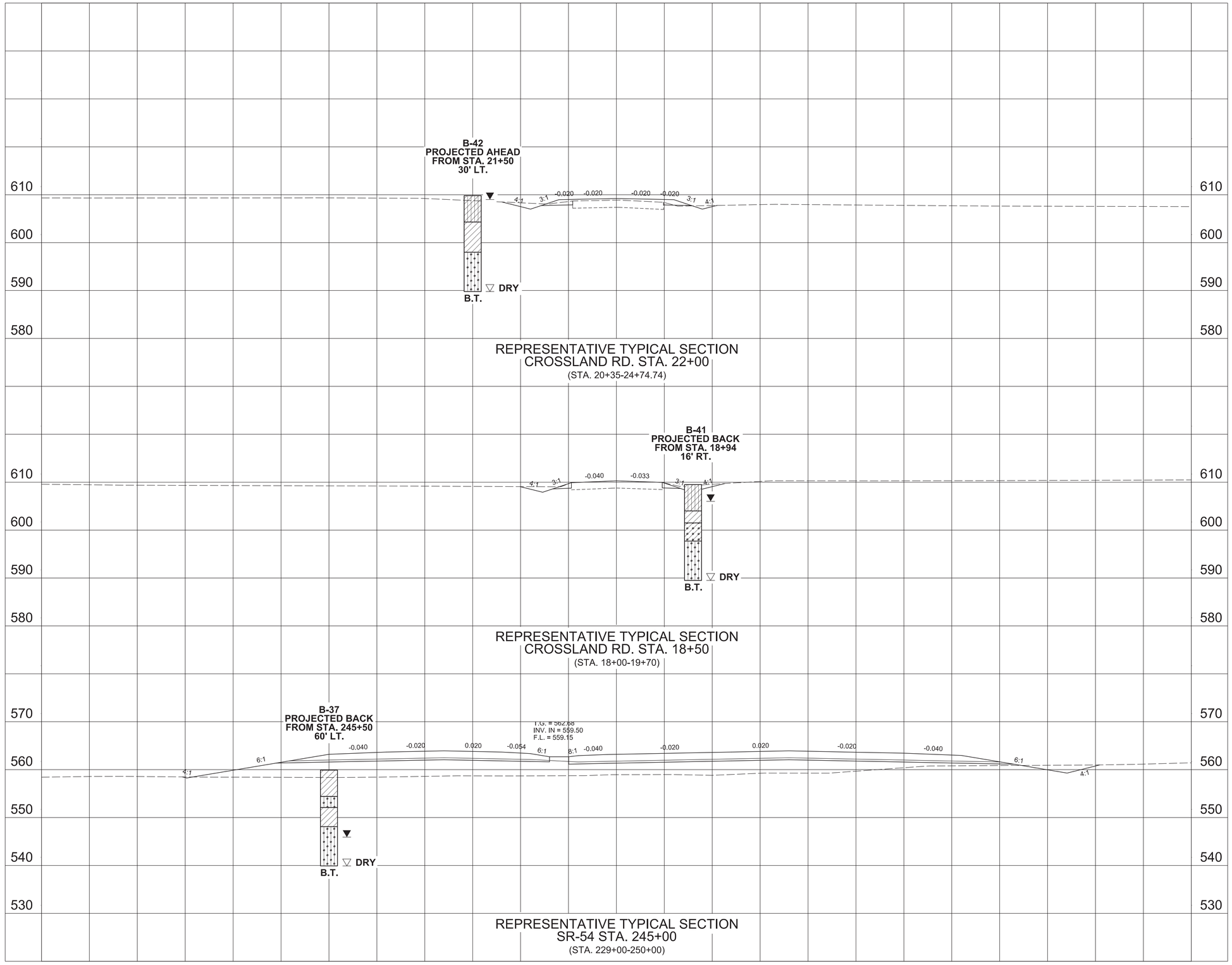
02/06/2026

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

GEOTECHNICAL TYPICAL SECTIONS

TYPE	YEAR	PROJECT NO.	SHEET NO.
PS&E	2026	NH-54(48)	G23



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LEGEND

- LEAN CLAY (TYPE A MATERIAL)
- SILTY SAND (TYPE A MATERIAL)
- SILTY CLAY (TYPE A MATERIAL)
- CLAYEY SAND (TYPE A MATERIAL)

TYPE MATERIAL-SEE DEFINITION OF EARTHWORK TERMS ON GEOTECHNICAL NOTES AND EST. QTYS. SHEET.
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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

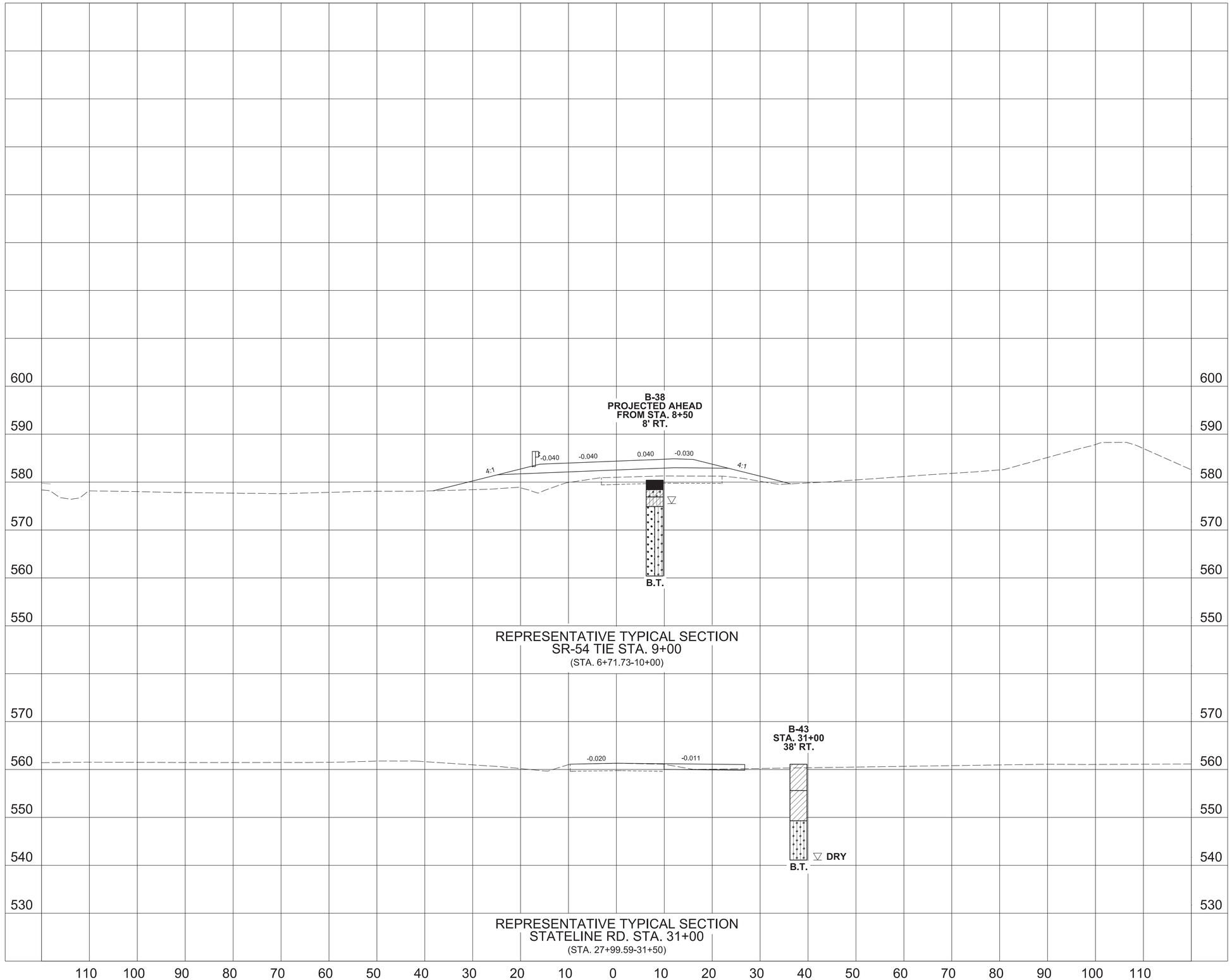
GEOTECHNICAL TYPICAL SECTIONS

TYPE	YEAR	PROJECT NO.	SHEET NO.
PS&E	2026	NH-54(48)	G24

LEGEND

- ASPHALT
- LEAN CLAY (TYPE A MATERIAL)
- SILTY SAND (TYPE A MATERIAL)
- SILTY CLAY (TYPE A MATERIAL)
- SILTY CLAYEY SAND (TYPE A MATERIAL)
- POORLY GRADED SAND WITH SILT (TYPE A MATERIAL)

TYPE MATERIAL-SEE DEFINITION OF EARTHWORK TERMS ON GEOTECHNICAL NOTES AND EST. QTYS. SHEET.
B.T.= BORING TERMINATED
REF.= AUGER REFUSAL
▽ = IMMEDIATE WATER TABLE
▼ = 24 HOUR WATER TABLE



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DEVIN L. CHITTENDEN
PROFESSIONAL ENGINEER
AGRICULTURE
STATE OF TENNESSEE
12/09/2025

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

GEOTECHNICAL TYPICAL SECTIONS



THIS DOCUMENT HAS BEGIN DIGITALLY SIGNED AND SEALED BY:

Shaver, Jeffrey

Digitally signed by Shaver, Jeffrey
DN: E=jshaver@cecinc.com, CN="Shaver, Jeffrey", OU=Users, OU=Nashville, DC=cecinc, DC=com
Date: 2026.02.10 11:19:33-06'00'

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CIVIL & ENVIRONMENTAL CONSULTANTS, INC.
117 SEABOARD LANE
SUITE E100
FRANKLIN, TN 37067
JEFFREY B. SHAVER, P.E. NO. 110803

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

NATURAL STREAM DESIGN INDEX

SHEET NAME **SHEET NO.**

NATURAL STREAM DESIGN SIGNATURE SHEET NS-SIGN1
NATURAL STREAM DESIGN INDEX OF SHEETS NS-1
TYPICAL SECTIONS NS-2
DETAIL SHEETS ..... NS-2A – NS-2E
PRESENT LAYOUT(S) NS-3
PROPOSED LAYOUT(S) NS-3A
PROPOSED PROFILE(S) ..... NS-3B – NS-3C
REVEGETATION PLAN NS-4
EROSION PREVENTION AND SEDIMENT CONTROL NOTES NS-5
ESTIMATED QUANTITIES NS-6
EROSION PREVENTION AND SEDIMENT CONTROL PLANS ..... NS-7 – NS-9
CROSS SECTIONS ..... NS-10 – NS-15

TYPE	YEAR	PROJECT NO.	SHEET NO.
PRELIM.	2023	NH-54(48)	
R.O.W.	2023	NH-54(48)	
PIH	2025	NH-54(48)	
PS&E	2026	NH-54(48)	NS-SIGN1

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

SIGNATURE SHEET

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TYPE	YEAR	PROJECT NO.	SHEET NO.
PRELIM.	2023	NH-54(48)	NS-1A
R.O.W.	2023	NH-54(48)	NS-1
PIH	2025	NH-54(48)	NS-1
PS&E	2026	NH-54(48)	NS-1

NATURAL STREAM DESIGN INDEX

SHEET NAME **SHEET NO.**

NATURAL STREAM DESIGN SIGNATURE SHEET NS-SIGN1
NATURAL STREAM DESIGN INDEX OF SHEETS NS-1
TYPICAL SECTIONS NS-2
DETAIL SHEETS ..... NS-2A – NS-2E
PRESENT LAYOUT(S) NS-3
PROPOSED LAYOUT(S) NS-3A
PROPOSED PROFILE(S) ..... NS-3B – NS-3C
REVEGETATION PLAN NS-4
EROSION PREVENTION AND SEDIMENT CONTROL NOTES NS-5
ESTIMATED QUANTITIES NS-6
EROSION PREVENTION AND SEDIMENT CONTROL PLANS ..... NS-7 – NS-9
CROSS SECTIONS ..... NS-10 – NS-15

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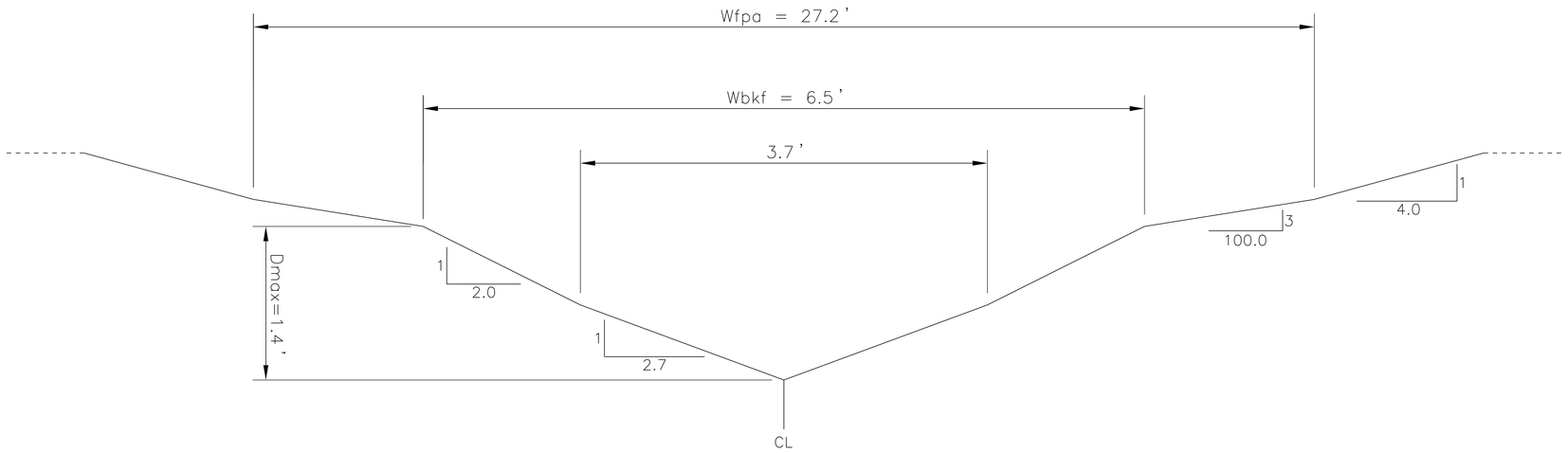


STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

NATURAL STREAM DESIGN INDEX OF SHEETS

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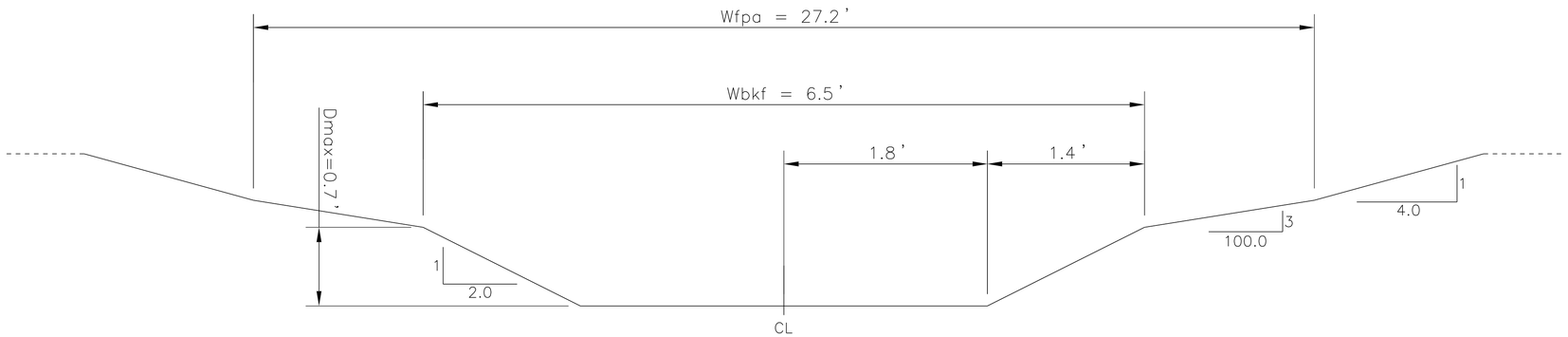
TYPE	YEAR	PROJECT NO.	SHEET NO.
PRELIM.	2023	NH-54(48)	
R.O.W.	2023	NH-54(48)	NS-2
PIH	2025	NH-54(48)	NS-2
PS&E	2026	NH-54(48)	NS-2



TYPICAL POOL SECTION

DESIGN PARAMETERS SIZE

BANK HEIGHT RATIO	1.0
ENTRENCHMENT RATIO	4.2
BANKFULL AREA	3.6 SQ. FT.
MEAN BANKFULL DEPTH	0.6 FT.
WIDTH/DEPTH RATIO	11.74
HYRDRAULIC RADIUS	0.5 FT.
SINUOSITY	1.2
POOL TO POOL SPACING RATIO	5.0



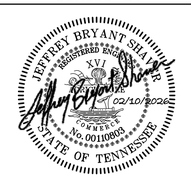
TYPICAL RIFFLE SECTION

Wbkf =BANKFULL WIDTH
Dmax=MAXIMUM BANKFULL DEPTH
Wfpa =FLOODPRONE WIDTH

TYPICAL STREAM SECTIONS
N.T.S.

SEGMENT	START STATION	END STATION
RIFFLE	10+21.1	10+38.3
POOL	10+38.3	10+52.5
RIFFLE	10+52.5	10+61.2
POOL	10+61.2	10+75.2
RIFFLE	10+75.2	10+83.1
POOL	10+83.1	11+02.6
RIFFLE	11+02.6	11+12.0
POOL	11+12.0	11+32.9
RIFFLE	11+32.9	11+41.8
POOL	11+41.8	11+64.4
RIFFLE	11+64.4	11+72.6
POOL	11+72.6	11+95.1
RIFFLE	11+95.1	12+04.1
POOL	12+04.1	12+24.6
RIFFLE	12+24.6	12+35.9
POOL	12+35.9	12+57.2
RIFFLE	12+57.2	12+67.7
POOL	12+67.7	12+90.5
RIFFLE	12+90.5	12+99.0
POOL	12+99.0	13+19.2
RIFFLE	13+19.2	13+29.3
POOL	13+29.3	13+51.3
RIFFLE	13+51.3	13+60.9
POOL	13+60.9	13+82.3
RIFFLE	13+82.3	13+90.4
POOL	13+90.4	14+12.4
RIFFLE	14+12.4	14+32.0
PIPE	14+32.0	15+56.2
RIFFLE	15+56.2	15+80.3
POOL	15+80.3	15+96.9
RIFFLE	15+96.9	16+11.5
POOL	16+11.5	16+36.3
RIFFLE	16+36.3	16+49.1
POOL	16+49.1	16+72.1
RIFFLE	16+72.1	16+89.3

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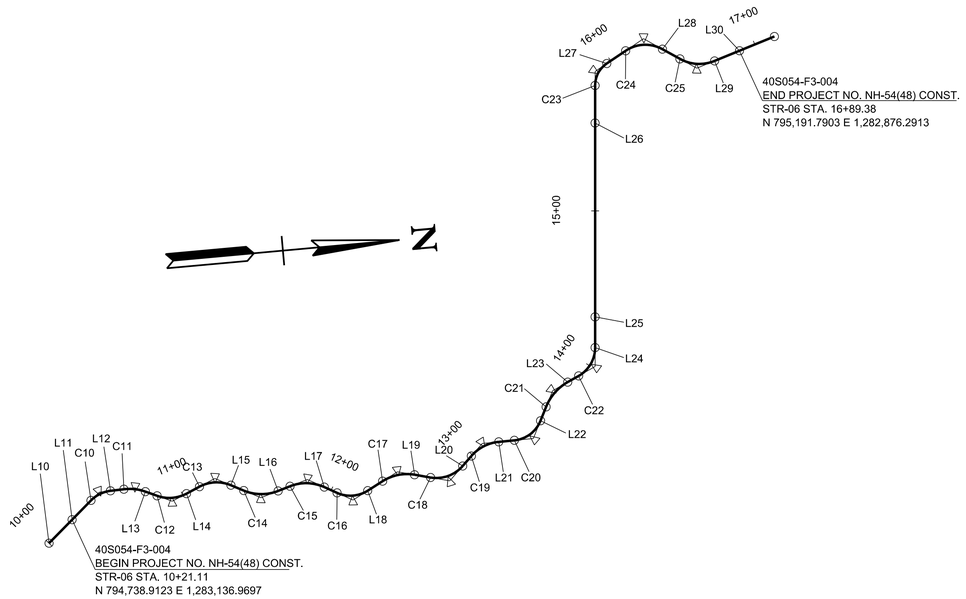


STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

TYPICAL SECTIONS

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TYPE	YEAR	PROJECT NO.	SHEET NO.
PRELIM.	2023	NH-54(48)	NS-2F
R.O.W.	2023	NH-54(48)	NS-2A
PIH	2025	NH-54(48)	NS-2A
PS&E	2026	NH-54(48)	NS-2A



PROPOSED STREAM ALIGNMENT

NUMBER	RADIUS	LENGTH	CHORD LENGTH	START STATION	END STATION	PI STATION	START POINT	END POINT	CENTER POINT	PI POINT
L10		21.1108		10+00.0	10+21.1		1283150.657 / 794722.8393	1283136.9677 / 794738.91		
L11		17.2736		10+21.1	10+38.3		1283136.9677 / 794738.91	1283125.7666 / 794752.0597		
C10	21	14.1856	13.9	10+38.3	10+52.5	10+45.7	1283125.7666 / 794752.0597	1283120.7678 / 794765.0477	1283141.7345 / 794765.6614	1283120.9836 / 794757.6748
L12		8.6621		10+52.5	10+61.2		1283120.7678 / 794765.0477	1283120.5144 / 794773.7061		
C11	30.2	13.9836	13.9	10+61.2	10+75.2	10+68.3	1283120.5144 / 794773.7061	1283123.3 / 794787.2822	1283150.6851 / 794774.5892	1283120.3061 / 794780.8227
L13		7.9628		10+75.2	10+83.1		1283123.3 / 794787.2822	1283126.6486 / 794794.5067		
C12	23.3	19.4229	18.9	10+83.1	11+02.6	10+93.5	1283126.6486 / 794794.5067	1283126.9624 / 794813.3679	1283105.5386 / 794804.2911	1283130.9874 / 794803.8677
L14		9.4634		11+02.6	11+12.0		1283126.9624 / 794813.3679	1283123.2706 / 794822.0815		
C13	23.5	20.8498	20.2	11+12.0	11+32.9	11+23.2	1283123.2706 / 794822.0815	1283124.1402 / 794842.2346	1283144.896 / 794831.2437	1283118.9138 / 794832.3648
L15		8.8983		11+32.9	11+41.8		1283124.1402 / 794842.2346	1283128.3044 / 794850.0985		
C14	29.3	22.6040	22	11+41.8	11+64.4	11+53.7	1283128.3044 / 794850.0985	1283130.5306 / 794872.0331	1283102.4186 / 794863.8059	1283133.8726 / 794860.6136
L16		8.1928		11+64.4	11+72.6		1283130.5306 / 794872.0331	1283128.2294 / 794879.8961		
C15	28.2	22.5134	21.9	11+72.6	11+95.1	11+84.5	1283128.2294 / 794879.8961	1283130.7288 / 794901.6739	1283155.3075 / 794887.8207	1283124.8885 / 794891.3119
L17		9.0358		11+95.1	12+04.1		1283130.7288 / 794901.6739	1283135.1655 / 794909.5456		
C16	20.7	20.4695	19.6	12+04.1	12+24.6	12+15.3	1283135.1655 / 794909.5456	1283135.5241 / 794929.1861	1283117.1529 / 794919.698	1283140.6459 / 794919.269
L18		11.3328		12+24.6	12+35.9		1283135.5241 / 794929.1861	1283130.3238 / 794939.2553		
C17	28.9	21.3244	20.8	12+35.9	12+57.2	12+47.1	1283130.3238 / 794939.2553	1283128.0707 / 794959.9784	1283156.0363 / 794952.5348	1283125.197 / 794949.182
L19		10.4176		12+57.2	12+67.7		1283128.0707 / 794959.9784	1283130.7503 / 794970.0455		
C18	22.3	22.8629	21.9	12+67.7	12+90.5	12+80.2	1283130.7503 / 794970.0455	1283125.2698 / 794991.2194	1283109.2339 / 794975.7725	1283133.9795 / 794982.1775
L20		8.4472		12+90.5	12+99.0		1283125.2698 / 794991.2194	1283119.4095 / 794997.3031		
C19	26.7	20.2716	19.8	12+99.0	13+19.2	13+09.6	1283119.4095 / 794997.3031	1283111.9464 / 795015.6291	1283138.6222 / 795015.81	1283112.0186 / 795004.9759
L21		10.0431		13+19.2	13+29.3		1283111.9464 / 795015.6291	1283111.8783 / 795025.672		
C20	20.2	22.0065	20.9	13+29.3	13+51.3	13+41.5	1283111.8783 / 795025.672	1283100.8932 / 795043.4877	1283091.7171 / 795025.5353	1283111.7953 / 795037.9153
L22		9.5614		13+51.3	13+60.9		1283100.8932 / 795043.4877	1283092.3795 / 795047.8394		
C21	32	21.4613	21.1	13+60.9	13+82.3	13+72.0	1283092.3795 / 795047.8394	1283077.8226 / 795063.0608	1283106.9493 / 795076.3444	1283082.4499 / 795052.9147
L23		8.0640		13+82.3	13+90.4		1283077.8226 / 795063.0608	1283074.4765 / 795070.3978		
C22	20.9	21.9792	21	13+90.4	14+12.4	14+02.5	1283074.4765 / 795070.3978	1283057.3611 / 795082.5287	1283055.479 / 795061.7338	1283069.4427 / 795081.4352
L24		19.6650		14+12.4	14+32.0		1283057.3611 / 795082.5287	1283037.7761 / 795084.3013		
L25		124.2200		14+32.0	15+56.2		1283037.7761 / 795084.3013	1282914.0618 / 795095.4987		
L26		24.0412		15+56.2	15+80.3		1282914.0618 / 795095.4987	1282890.1185 / 795097.6658		
C23	17	16.5946	15.9	15+80.3	15+96.9	15+89.3	1282890.1185 / 795097.6658	1282876.7723 / 795106.3859	1282891.6496 / 795114.5825	1282881.1283 / 795098.4795
L27		14.6036		15+96.9	16+11.5		1282876.7723 / 795106.3859	1282869.7253 / 795119.1767		
C24	22.6	24.8146	23.6	16+11.5	16+36.3	16+25.3	1282869.7253 / 795119.1767	1282870.8227 / 795142.7329	1282889.4793 / 795130.0601	1282863.0508 / 795131.2914
L28		12.8181		16+36.3	16+49.1		1282870.8227 / 795142.7329	1282878.0251 / 795153.3361		
C25	25.7	23.0039	22.2	16+49.1	16+72.1	16+61.4	1282878.0251 / 795153.3361	1282881.3395 / 795175.3329	1282856.746 / 795167.7904	1282884.9562 / 795163.5399
L29		17.2143		16+72.1	16+89.3		1282881.3395 / 795175.3329	1282876.2921 / 795191.7906		
L30		24.1685		16+89.3	17+13.5		1282876.2921 / 795191.7906	1282869.2057 / 795214.8968		

NATURAL STREAM DESIGN

SYMBOL	ITEM	STD. DWG.
	LOG RIFFLE	D-NSD-28A
	WOOD TOE WITH GEO-LIFTS	D-NSD-32

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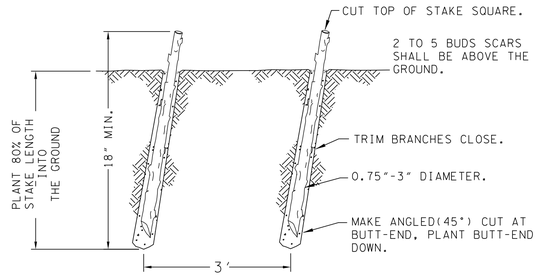
COORDINATES ARE NAD 83(2011), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00002 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988 WITH GEOID 12B MODEL.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

DETAIL SHEETS

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TYPE	YEAR	PROJECT NO.	SHEET NO.
PRELIM.	2023	NH-54(48)	
R.O.W.	2023	NH-54(48)	NS-2B
PIH	2025	NH-54(48)	NS-2B
PS&E	2026	NH-54(48)	NS-2B



LIVE STAKES DETAIL
N.T.S.



PROTECTED AREA SIGN
N.T.S.

LIVE STAKE NOTES

LIVE STAKE HARVESTING:

1. LIVE STAKES SHALL CONSIST OF A COMBINATION OF SPECIES SHOWN IN TABLE ON THIS SHEET.
2. STAKES SHOULD BE HARVESTED AND PLANTED WHEN THE SPECIES ARE DORMANT. THIS PERIOD IS GENERALLY FROM LATE FALL TO EARLY SPRING, OR BEFORE THE BUDS START TO BREAK.
3. WHEN HARVESTING CUTTINGS, SELECT HEALTHY, LIVE WOOD THAT IS REASONABLY STRAIGHT.
4. USE LIVE WOOD AT LEAST 1 YEAR OLD OR OLDER. THE BEST WOOD IS 2 TO 5 YEARS OLD WITH SMOOTH BARK THAT IS NOT DEEPLY FURROWED.
5. MAKE CLEAN CUTS WITH UNSPLIT ENDS. TRIM BRANCHES FROM CUTTING AS CLOSE AS POSSIBLE. CUT THE BUTT END OF THE CUTTING AT AN ANGLE (~45 DEGREES) AND THE TOP END PERPENDICULAR (90 DEGREES).
6. THE TOP (SQUARE CUT END) SHOULD BE PAINTED AND SEALED BY DIPPING THE TOP 1-INCH TO 2-INCHES INTO A 50-50 MIX OF LIGHT-COLORED LATEX PAINT AND WATER. THIS REDUCES THE POSSIBILITY OF DESICCATION AND DISEASE-CAUSING MORTALITY AND MAKES THEM MORE VISIBLE FOR SUBSEQUENT PLANTING EVALUATIONS. ASSURE THE STAKES ARE PLANTED WITH THE TOP UP.
7. CUTTINGS SHOULD GENERALLY BE BETWEEN 0.75-INCHES TO 3-INCHES IN DIAMETER BUT CAN BE LARGER DEPENDING ON THE SPECIES. HIGHEST SURVIVAL RATES ARE OBTAINED FROM USING CUTTINGS 2-INCHES TO 3-INCHES IN DIAMETER. LARGER DIAMETER CUTTINGS ARE NEEDED FOR PLANTING INTO ROCK RIPRAP.
8. LIVE STOUT STAKES SHOULD BE LONG ENOUGH TO REACH BELOW THE GROUNDWATER TABLE. GENERALLY, A LENGTH OF 2-FEET TO 3-FEET WITH A MINIMUM LENGTH OF 18-INCHES.
9. CUTTINGS OF SMALL DIAMETER (UP TO 1.5-INCHES) SHOULD BE A MINIMUM OF 18-INCHES LONG, THICKER CUTTINGS SHOULD BE LONGER.
10. STAKES SHOULD BE CUT SO A TERMINAL BUD SCAR IS WITHIN 1-INCH TO 4-INCHES OF THE TOP. AT LEAST TWO BUDS AND/OR BUD SCARS SHOULD BE ABOVE THE GROUND AFTER PLANTING.

LIVE STAKE PLANTING:

11. STAKES MUST BE PLANTED WITH BUTT-ENDS INTO THE GROUND. LEAF BUD SCARS OR EMERGING BUDS SHOULD ALWAYS POINT UP.
12. USE AN IRON STAKE OR BAR TO MAKE A PILOT HOLE IN FIRM SOIL OR BETWEEN RIPRAP. DRIVE LIVE STAKES INTO THE SOIL WITH A RUBBER MALLET OR DEAD-BLOW HAMMER.
13. STAKES MUST NOT BE ALLOWED TO DRY OUT. THE CUTTINGS NOT PLANTED THE DAY THEY ARE HARVESTED SHOULD BE SOAKED IN WATER FOR A MINIMUM OF 24 HOURS AS SOAKING SIGNIFICANTLY INCREASES THE SURVIVAL RATE OF THE CUTTINGS. SOAK FOR 5-7 DAYS FOR BEST RESULTS.
14. PLANT STAKES 3 FEET APART AND ALTERNATE SPECIES. LIVE WHIPS AND BRANCHES BURIED JUST UNDER THE SOIL SURFACE CAN BE USED IN PLACE OF LIVE STAKES.
15. SET THE STAKE AS DEEP AS POSSIBLE INTO THE SOIL, PREFERABLY WITH 80 PERCENT OF ITS LENGTH BURIED BUT NO LESS THAN ONE-HALF OF THE TOTAL LENGTH BURIED.
16. TAMP THE SOIL AROUND THE CUTTING.

PROTECTED AREA SIGN NOTES

1. THE PROTECTED AREA SIGN SHALL BE WHITE WITH BLACK LETTERING.
2. PROTECTED AREA SIGN SHALL BE PAID FOR UNDER ITEM NO. 209-03.99, PROTECTED AREA SIGN, PER EACH, AS SHOWN IN DETAIL ON THIS SHEET. PAYMENT SHOULD INCLUDE ALL MATERIALS, EQUIPMENT, AND LABOR NECESSARY TO CONSTRUCT AS SHOWN IN DETAIL.
3. PROTECTED AREA SIGN TO BE 72" WHITE DUAL SIDED MARKERS AND CUSTOM PROTECTED AREA DECALS TO BE PRE-APPLIED TO BOTH SIDES.

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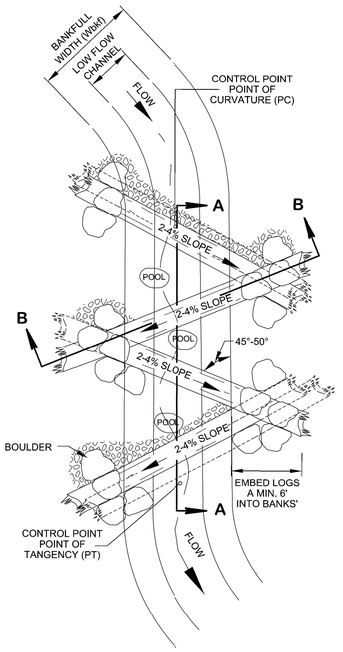


STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

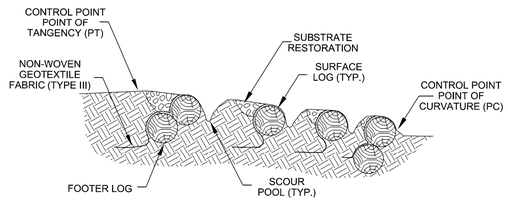
DETAIL SHEETS

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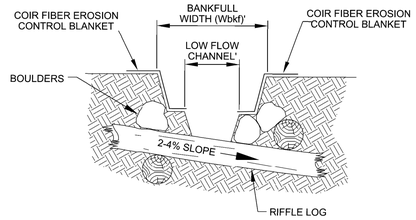
TYPE	YEAR	PROJECT NO.	SHEET NO.
PRELIM.	2023	NH-54(48)	
R.O.W.	2023	NH-54(48)	NS-2C
PIH	2025	NH-54(48)	NS-2C
PS&E	2026	NH-54(48)	NS-2C



PLAN VIEW



SECTION A-A



SECTION B-B

LOG RIFFLE

LOG RIFFLES NOTES

(A) LOG AND BOULDER RIFFLES ARE GRADE CONTROL AND HABITAT ENHANCEMENT MEASURES THAT ARE USED TO MAINTAIN GRADE OF UPSTREAM POOLS, OXYGENATE WATER, AND PROVIDE HABITAT FOR EPIFAUNA AND FISH. THESE STRUCTURES ARE TYPICALLY USED IN LOWER GRADIENT STREAMS WITH SLOPES LESS THAN 3%. THIS DETAIL CAN BE USED FOR CONSTRUCTING RIFFLES USING BOULDERS, LOGS, OR A COMBINATION OF BOULDERS AND LOGS.

(B) LOG AND BOULDER RIFFLES SHOULD BE PLACED AT THE STATIONS, OFFSETS, ELEVATIONS, AND GEOMORPHIC POSITIONS INDICATED ON THE STREAM MITIGATION DATA TABLE IN THE PROJECT PLANS, STREAM MITIGATION PLAN, OR AS DIRECTED BY THE ENGINEER. AT A MINIMUM, THE BANKFULL WIDTH, MINIMUM LOG AND/OR BOULDER DIMENSIONS, INVERT ELEVATIONS, AND SELECT MATERIAL CLASSIFICATION SHOULD BE SPECIFIED IN THE STREAM MITIGATION DATA TABLE.

(C) REFER TO STANDARD DRAWING D-NSD-37 "SPECIAL NOTES FOR NATURAL STREAM DESIGN".

(D) LOGS SHALL BE RELATIVELY STRAIGHT, RECENTLY HARVESTED AND DECAY RESISTANT SPECIES SUCH AS CEDAR, WHITE OAK, ETC.

(E) BOULDERS PRESENT IN THE EXISTING STREAM MEETING THE SPECIFIED TYPE AND SIZE SHOULD BE USED IN THE RESTORED CHANNEL SEGMENT.

(F) LOCATE LOG OR BOULDER RIFFLE STRUCTURES (RIFFLE LOGS AND BOULDER MINI-VANES) AT EQUALLY SPACED INTERVALS IN THE STRAIGHT SECTIONS OF THE CHANNEL BETWEEN MEANDER BENDS (I.E., BETWEEN UPSTREAM POINT OF TANGENCY AND DOWNSTREAM POINT OF CURVATURE), AS INDICATED ON THE STREAM MITIGATION PLANS.

(G) THE MAXIMUM AMOUNT OF DROP IN INVERT FROM ONE RIFFLE LOG OR BOULDER MINI-VANE TO THE NEXT SHALL BE NO GREATER THAN 0.10 FOOT. THE COMBINED AMOUNT OF DROP OVER ALL THE MINI-VANES SHALL NOT EXCEED THE TOTAL AMOUNT OF FALL IN THE RIFFLE SLOPE. THE INVERT IN RIFFLE LOGS AND MINI-VANES SHALL ALTERNATE LEFT AND RIGHT OF CENTERLINE TO PRODUCE A MEANDERING FLOW PATTERN IN THE RIFFLE.

(H) CONSTRUCT LOG RIFFLE STRUCTURES BY:

(1) SHAPE THE CHANNEL AND FLOODPLAIN TO THE SPECIFIED GRADES AND DIMENSIONS.

(2) LOG RIFFLE STRUCTURES ARE BUILT STARTING WITH THE DOWNSTREAM LOG AND PROCEEDING UPSTREAM. LOGS ARE SLOPED DOWN TWO PERCENT (2%) TO FOUR PERCENT (4%) AT THEIR UPSTREAM END.

(3) RIFFLE LOGS SHALL OVERLAP IN THE STREAM BANK, WITH THE DOWNSTREAM END OF THE UPSTREAM LOG PLACED ON TOP OF THE UPSTREAM END OF THE DOWNSTREAM LOG, THEREBY HELPING TO ANCHOR THE DOWNSTREAM LOG. ADDITIONALLY, THE RIFFLE LOGS ARE ANCHORED WITHIN THE BANKS BY PINCHING BOTH SIDES OF THE LOG WITH BOULDERS.

(4) EXCAVATE ENOUGH BED AND BANK MATERIAL TO PLACE THE RIFFLE LOGS, ANCHOR BOULDERS, NON-WOVEN GEOTEXTILE FABRIC (TYPE III), AND ALLUVIUM OR SELECT MATERIAL BACKFILL. SURFACE AND FOOTER LOGS SHOULD EXTEND A MINIMUM OF SIX FEET INTO EACH BANK.

(5) THE UPSTREAM RIFFLE LOG IS BUILT WITH A LOG FOOTER. THE DOWNSTREAM RIFFLE LOGS ARE INSTALLED WITHOUT FOOTERS.

(6) LOG RIFFLES SHALL ALL BE DESIGNED TO BE SUBMERGED OR COVERED AT LOW FLOWS TO REDUCE THE RATE OF WOOD DECOMPOSITION. INSTALL LOGS AT THE INVERTS SPECIFIED IN THE PLANS AND THEN CHECK THE ELEVATIONS OF THE INVERTS WITH SURVEY EQUIPMENT. PLACE THE FOOTER AND SURFACE LOGS AT THE UPSTREAM END OF THE RIFFLE TO MINIMIZE VOIDS AND TO PRODUCE A SMOOTH COMPACT SURFACE.

(7) ONCE THE INVERTS HAVE BEEN ESTABLISHED, FILL THE VOIDS BETWEEN THE UPSTREAM FOOTER AND SURFACE LOG ON THE UPSTREAM SIDE WITH COARSE ALLUVIUM OR SPECIFIED SELECT MATERIAL.

(8) PLACE NON-WOVEN GEOTEXTILE FABRIC (TYPE III) ALONG THE ENTIRE UPSTREAM FACE OF EACH RIFFLE LOG. THE GEOTEXTILE SHALL EXTEND FROM THE BOTTOM OF THE FOOTER (WHERE PRESENT) TO THE FINISHED GRADE ELEVATION OF THE SURFACE LOG. ONLY GEOTEXTILE FABRIC (TYPE III) LISTED ON THE QUALIFIED PRODUCTS LIST SHALL BE USED. NAIL GEOTEXTILE FABRIC (TYPE III) TO THE SURFACE LOG APPROXIMATELY ONE QUARTER OF THE CIRCUMFERENCE DOWN FROM THE TOP OF THE SURFACE LOG USING TWO-INCH GALVANIZED ROOFING NAILS ON ONE-FOOT SPACING ALONG THE ENTIRE LENGTH OF THE LOG.

(9) BACKFILL STRUCTURE AND NON-WOVEN GEOTEXTILE FABRIC (TYPE III) WITH EXCAVATED ON-SITE STREAM ALLUVIUM (IF AVAILABLE). OTHERWISE USE THE SPECIFIED SELECT MATERIAL. SOIL SHALL BE COMPACTED WELL AROUND BURIED PORTIONS OF THE STRUCTURE. TRIM ANY EXPOSED NON-WOVEN GEOTEXTILE FABRIC (TYPE III).

(I) THE SURFACE OF LOG AND BOULDER RIFFLES SHALL BE FINISHED TO A NEAT AND COMPACT SURFACE IN ACCORDANCE WITH THE LINES, GRADES AND CROSS-SECTIONS OR ELEVATIONS SHOWN ON THE PLANS. THE DEGREE OF FINISH FOR INVERT ELEVATIONS SHALL BE WITHIN 0.10 FOOT OF THE GRADES AND ELEVATIONS INDICATED, OR AS DIRECTED BY THE ENGINEER. ALL GAPS OR VOIDS BETWEEN FOOTER AND SURFACE BOULDERS AND LOGS SHALL BE PLUGGED WITH SELECT MATERIAL TO FORM A TIGHT-FITTING SEAL.

(J) RE-DRESSING OF CHANNEL AND BANKFULL BENCH/FLOODPLAIN WILL LIKELY BE REQUIRED FOLLOWING INSTALLATION OF IN-STREAM STRUCTURES AND SHALL BE CONSIDERED INCIDENTAL TO CONSTRUCTION.

(K) A MIXTURE OF SELECT MATERIALS, AS SPECIFIED ON THE STREAM MITIGATION PLAN SHEETS, SHOULD BE USED FOR SUBSTRATE RESTORATION IN RIFFLE AND RUN HABITATS AND TO FILL GAPS BETWEEN LOGS. COARSE ALLUVIUM EXCAVATED FROM THE EXISTING STREAM BED, WHICH MEETS THE SPECIFIED SIZE CLASSIFICATION, IS THE PREFERRED MATERIAL TO USE FOR SUBSTRATE RESTORATION. REFER TO D-NSD-30 AND D-NSD-37 FOR ADDITIONAL SUBSTRATE RESTORATION INFORMATION.

(L) COIR FIBER EROSION CONTROL BLANKET SHALL BE INSTALLED ABOVE THE INNER-BERM STAGE AND NOT IN THE LOW-FLOW CHANNEL OF THE RIFFLE. SEE TYPICAL CROSS-SECTION DATA IN STREAM MITIGATION PLANS FOR INNER BERM INFORMATION.

(M) ALL MATERIALS ARE TO BE APPROVED BY ENGINEER OR ENGINEER'S ON-SITE CONSTRUCTION OBSERVER.

(N) PAYMENT FOR THE LOG RIFFLE SYSTEM SHALL INCLUDE ALL MATERIALS, EQUIPMENT, AND LABOR FOR CONSTRUCTION, AND SHALL BE PAID FOR UNDER THE FOLLOWING ITEM NUMBER:

209-03.40, STREAM MITIGATION - LOG RIFFLE, L.F.

(O) FOR BOULDER RIFFLE DETAIL, SEE STANDARD DRAWING D-NSD-28.

STREAM MITIGATION PLAN LEGEND: LOG RIFFLE

REV. 9-15-17: MODIFIED THE STREAM MITIGATION PLAN LEGEND SYMBOL. MODIFIED LEGEND SYMBOL, MODIFIED NOTES. ADDED SLOPE DESIGNATION ON PLAN VIEW.

REV. 05-01-20: REDREW SHEET.

REV. 11-30-20: REVISED NON-WOVEN GEOTEXTILE FABRIC NOTE ON SECTION A-A.

MATERIAL SHOWN ARE ONLY A GRAPHICAL REPRESENTATION AND DO NOT DEPICT THE ACTUAL DEPTH OR QUANTITY OF MATERIALS TO APPROPRIATELY CONSTRUCT OR STABILIZE THE CHANNEL.

STATE OF TENNESSEE
STANDARD DRAWING
DEPARTMENT OF TRANSPORTATION

LOG RIFFLES

11-01-2016 D-NSD-28A

SEALED BY

JEFFREY BRYANT SHAVER
REGISTERED ENGINEER
No. 001108005
STATE OF TENNESSEE
02/10/2026

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

DETAIL SHEETS

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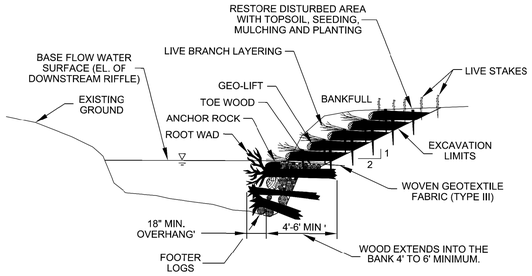
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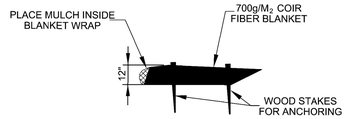
TYPE	YEAR	PROJECT NO.	SHEET NO.
PRELIM.	2023	NH-54(48)	
R.O.W.	2023	NH-54(48)	NS-2D
PIH	2025	NH-54(48)	NS-2D
PS&E	2026	NH-54(48)	NS-2D

REV. 9-15-17: MODIFIED PAY ITEM DESCRIPTION. MODIFIED THE STREAM MITIGATION PLAN LEGEND SYMBOL, ADDED NOTE (H). MODIFIED WOOD TOE PLAN VIEW. ADDED "GEO-LIFTS" AND AS DIRECTED BY THE ENGINEER: TO THE REINFORCED EARTH DETAIL. MODIFIED DRAWING NAME . MODIFIED PLAN VIEW AND LEGEND.

REV. 05-01-20: REDREW SHEET.



SECTION A-A



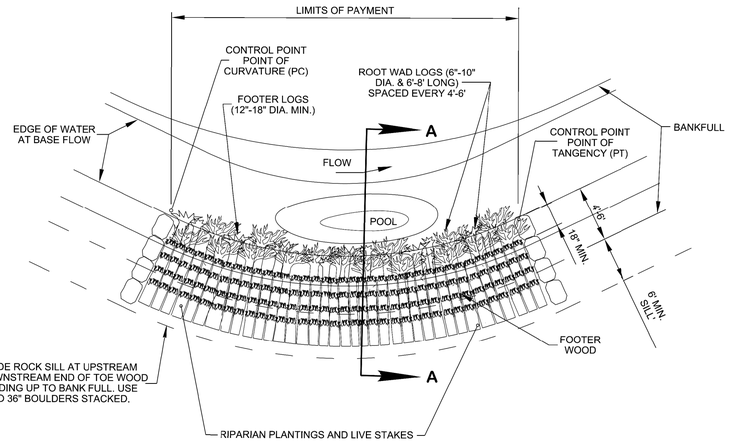
REINFORCED EARTH GEO-LIFTS

(AS DIRECTED BY THE ENGINEER)



WOOD STAKE

NOTE: STAKES MAY BE MADE BY SAWING A 2" x 4" DIAGONALLY IN HALF.



PLAN VIEW

WOOD TOE

WOOD TOE WITH GEO-LIFTS NOTES

(A) WOOD AND BOULDER TOE WITH GEO-LIFTS AND LIVE BRUSH LAYERING ARE BANK STABILIZATION MEASURES THAT PROTECT THE STREAM BANK ALONG OUTSIDE MEANDER BENDS FROM EROSION AND ENHANCE THE ESTABLISHMENT AND GROWTH OF NATIVE VEGETATION USING LIVE BRANCHES AND CUTTINGS. WOOD TOE ALSO PROVIDES HABITAT FOR INVERTEBRATES AND FISH AND HELPS TO MAINTAIN POOL DEPTH BY CREATING TURBULENT FLOW AND SCOUR ALONG THE STREAM BED.

(B) WOOD AND BOULDER TOE WITH LIVE BRUSH LAYERING SHOULD BE PLACED AT THE STATIONS, OFFSETS, ELEVATIONS, AND GEOMORPHIC POSITIONS INDICATED ON THE STREAM MITIGATION DATA TABLE IN THE PROJECT PLANS, STREAM MITIGATION PLAN, OR AS DIRECTED BY THE ENGINEER. AT A MINIMUM, THE BANKFULL WIDTH, WOOD AND BOULDER DIMENSIONS AND ELEVATIONS, NUMBER AND DIMENSIONS OF GEO-LIFTS, AND LENGTH AND NUMBER OF LIVE BRUSH AND CUTTINGS SHOULD BE SPECIFIED IN THE STREAM MITIGATION DATA TABLE.

(C) WOOD TOE SHALL CONSIST OF A MIX OF ROOT WADS, LOGS, BRANCHES, BRUSH, AND OTHER WOODY VEGETATION INSTALLED AT VARIOUS ANGLE, BUT NOT PARALLEL TO THE FLOW.

(D) A HYDRAULIC EXCAVATOR WITH A HYDRAULIC THUMB SHALL BE USED TO PLACE WOOD AND BOULDERS.

(E) CONSTRUCT WOOD OR BOULDER TOE, GEO-LIFTS, AND LIVE BRUSH LAYERING BY:

(1) SHAPE THE CHANNEL AND FLOODPLAIN TO THE SPECIFIED GRADES AND DIMENSIONS.

(2) EXCAVATE THE POOL AND GRADE EXISTING BANK SUBGRADE TO 2:1 (MIN).

(3) FOR WOOD TOE, LAYER THE WOOD WITH LARGER MATERIAL ON THE BOTTOM AND A MAT OF BRANCHES AS THE TOP LAYER. IF USED, ANGLE ROOT WADS SLIGHTLY UPSTREAM INTO THE FLOW. FILL GAPS BETWEEN LARGER MATERIAL WITH A MIX OF BRANCHES AND WOODY DEBRIS. THE TOP TYPE III LAYER OF TOE WOOD SHALL BE AT THE ESTABLISHED NORMAL BASE FLOW ELEVATION (I.E., ELEVATION OF THE DOWNSTREAM RIFFLE). PLACE WOVEN GEOTEXTILE FABRIC ON TOP OF WOOD TOE.

(4) FOR BOULDER TOE, EXCAVATE BANK TO KEY IN BOULDERS AND PLACE TYPE III WOVEN GEOTEXTILE FABRIC ALONG THE EXCAVATED BANK. PLACE BOULDERS IN OVERLAPPING LAYERS AND IMBRICATE EACH LAYER. BACKFILL AREA BEHIND BOULDER WITH SOIL OR ALLUVIUM AND COMPACT WITH EXCAVATOR BUCKET.

(5) CONSTRUCT GEO-LIFTS AND LIVE BRUSH LAYERING ABOVE WOOD OR BOULDER TOE, AS FOLLOWS:

(a) FOR EACH LIFT, PLACE BRUSH CUTTINGS PERPENDICULAR TO THE BANK AT A DENSITY OF 10-12 STEMS PER FOOT AND COVER WITH 2" OF SOIL.

(b) LAY 700G COIR BLANKETS OVER THE LIVE CUTTINGS PARALLEL TO THE BANK AND SHINGLED IN A DOWNSTREAM DIRECTION.

(c) PLACE SPECIFIED SOIL LIFT OVER THE BACK HALF OF THE COIR BLANKET AND COMPACT WITH THE EXCAVATOR BUCKET.

(d) PLACE CLEAN STRAW OR MULCH ALONG THE FACE OF THE SOIL LIFT, WRAP THE LIFT WITH THE FRONT HALF OF THE COIR BLANKET AND STAKE IN PLACE WITH A MINIMUM OF TWO ROWS OF 2" x 4" x 18" WOOD STAKES AT FIVE-FOOT SPACING.

(e) REPEAT STEPS (a) THROUGH (d) FOR EACH GEO-LIFT SPECIFIED.

(f) PLACE LIVE STAKES OR WOODY PLANTINGS, AS SPECIFIED, ON THE TOP LIFT.

(F) ALL MATERIALS ARE TO BE APPROVED BY ENGINEER OR ENGINEER'S ONSITE CONSTRUCTION OBSERVER.

(G) PAYMENT FOR THE WOOD TOE WITH REINFORCED EARTH AND LIVE BRUSH LAYERING SYSTEM SHALL INCLUDE ALL MATERIALS, EQUIPMENT, AND LABOR NECESSARY FOR CONSTRUCTION, AND SHALL BE PAID FOR UNDER THE FOLLOWING ITEM NUMBERS:

209-03.67, STREAM MITIGATION - WOOD TOE W/REINFORCED EARTH, L.F.,

209-03.42, STREAM MITIGATION - LIVE BRUSH LAYERING, L.F.

(H) FOR BOULDER TOE DETAILS SEE STANDARD DRAWING D-NSD-32A.

STREAM MITIGATION PLAN LEGEND: **WOOD TOE WITH GEO-LIFTS**

MATERIAL SHOWN ARE ONLY A GRAPHICAL REPRESENTATION AND DO NOT DEPICT THE ACTUAL DEPTH OR QUANTITY OF MATERIALS TO APPROPRIATELY CONSTRUCT OR STABILIZE THE CHANNEL.

SEALED BY

JEFFREY BRYANT SHAVER — REGISTERED ENGINEER — XVI — 02/10/2026 — CORNELL — No. 001108903 — STATE OF TENNESSEE

STATE OF TENNESSEE
STANDARD DRAWING
DEPARTMENT OF TRANSPORTATION

WOOD TOE WITH GEO-LIFTS

11-01-2016 D-NSD-32

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

DETAIL SHEETS

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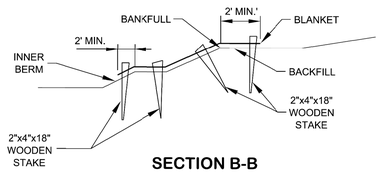
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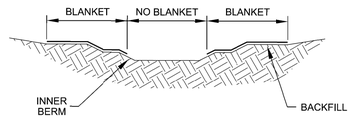
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PRELIM.	2023	NH-54(48)	
R.O.W.	2023	NH-54(48)	NS-2E
PIH	2025	NH-54(48)	NS-2E
PS&E	2026	NH-54(48)	NS-2E

REV. 9-15-17: MODIFIED PAY ITEM DESCRIPTION. MODIFIED THE STREAM MITIGATION PLAN LEGEND SYMBOL. MODIFIED NOTES. ADDED COIR FIBER EROSION CONTROL BLANKET LEGEND.

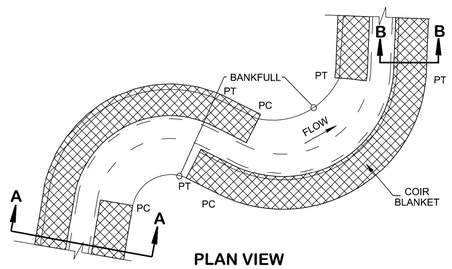
REV. 05-01-20: REDREW SHEET.



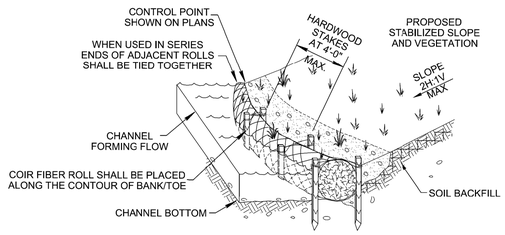
SECTION B-B



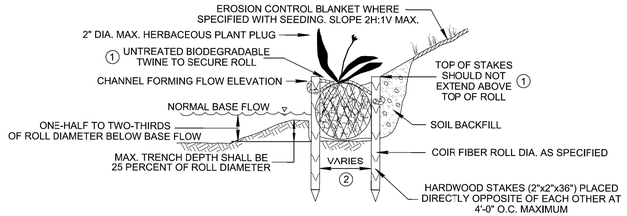
SECTION A-A



PLAN VIEW



ISOMETRIC VIEW



SECTION VIEW

COIR FIBER ROLL 3

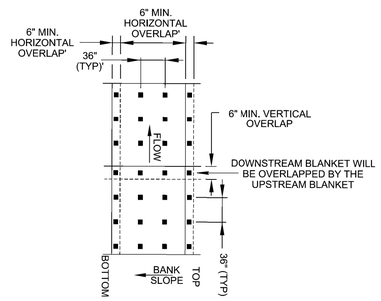
NOTES:

1 DRIVE STAKES AS NEEDED SO TWINE IS SECURED AGAINST TOP OF ROLL. 2 SPACING VARIES BASED ON ROLL DIAMETER 8, 12, 16, 18, 20-INCH (TYP.). 3 FULL OR PARTIAL SUN REQUIRED FOR USE.



WOOD STAKE

NOTE: STAKES MAY BE MADE BY SAWING A 2" x 4" DIAGONALLY IN HALF.



MATTING STAKING VIEW

COIR FIBER EROSION CONTROL BLANKET

COIR FIBER EROSION CONTROL BLANKET NOTES

A COIR FIBER EROSION CONTROL BLANKETS PROVIDE TEMPORARY BANK STABILIZATION FOLLOWING BANK GRADING, UNTIL PERMANENT VEGETATION CAN BE ESTABLISHED.

B COIR FIBER EROSION CONTROL BLANKETS SHALL BE 700 GRAMS PER SQUARE METER.

C BEFORE INSTALLING COIR BLANKETS, RAKE OR TILL THE UPPER THREE TO FOUR INCHES OF THE SOIL ON THE STREAM BANKS, SEED WITH TEMPORARY AND PERMANENT SEED MIXES, RAKE SOIL LEVEL, AND LIGHTLY MULCH WITH CLEAN STRAW.

D COIR BLANKETS SHALL BE INSTALLED ON THE OUTSIDE OF BANKS OF MEANDERS AND ON BOTH BANKS ALONG RIFFLES, FROM THE INNER BERM OF THE CHANNEL TO TWO FEET (MIN.) BEYOND BANKFULL. BLANKET MAY BE ELIMINATED FROM THE INNER BERM AT THE DISCRETION OF THE ENGINEER.

E PLACE COIR BLANKETS PARALLEL TO THE CHANNEL. WHERE MULTIPLE PANELS OF BLANKETS ARE USED, PANELS SHALL BE OVERLAPPED A MINIMUM OF SIX INCHES, IN A DOWNSTREAM AND DOWNSLOPE DIRECTION.

F PULL BLANKETS TIGHT, BUT MAINTAIN CONTACT WITH THE SOIL. USE 2-INCH x 4-INCH x 18-INCH WOODEN STAKES ON THREE-FOOT CENTERS TO SECURE COIR BLANKETS.

G ALL MATERIALS ARE TO BE APPROVED BY ENGINEER OR ENGINEER'S ON-SITE CONSTRUCTION OBSERVER.

H PAYMENT FOR THE COIR FIBER EROSION CONTROL BLANKETS SYSTEM SHALL INCLUDE ALL MATERIALS, EQUIPMENT, AND LABOR NECESSARY FOR CONSTRUCTION, AND SHALL BE PAID FOR UNDER THE FOLLOWING ITEM NUMBER:

805-12.08, 700 GRAM COIR FIBER EROSION BLANKETS, S.Y.

SEED AND MULCH SHALL BE PAID FOR ACCORDING TO THEIR RESPECTIVE ITEM NUMBERS.

COIR FIBER ROLL NOTES

A COIR FIBER ROLLS ARE A FLEXIBLE BANK STABILIZATION MEASURE CONSISTING OF INTERWOVEN COCONUT HUSK FIBERS THAT CAN BE FITTED TO THE CURVATURE OF A STREAM BANK PROVIDING IMMEDIATE TOE PROTECTION AND BANK STABILIZATION. COIR FIBER ROLLS ARE USED TO ENHANCE THE ESTABLISHMENT AND GROWTH OF NATIVE VEGETATION ALONG THE STREAM BANK BY TRAPPING SEDIMENT BEHIND THE ROLL PROVIDING A SUBSTRATE FOR PLANT GROWTH. EFFECTIVE LIFE 2 TO 3 YEARS.

B COIR FIBER ROLLS ARE AN ACCEPTABLE MITIGATION PRACTICE FOR USE IN STREAMS AND ALONG THE SHORELINE OF PONDS AND WETLANDS.

C COIR FIBER ROLLS MAY BE USED IN COMBINATION WITH LONGITUDINAL STONE TOES, ROOT WADS, LIVE SILTATION, OR OTHER BANK STABILIZATION MEASURES.

D COIR FIBER ROLLS SHOULD NOT BE USED WHEN CHANNEL FLOW VELOCITY EXCEEDS 10 FEET PER SECOND, WHERE CHANNEL SHEAR STRESSES ARE MODERATE TO HIGH ALONG THE BANK, IN BEDROCK CHANNELS, IN CHANNELS WHERE SCOUR IS PRESENT OR EXPECTED, OR IN STREAMS WHERE SIGNIFICANT DEBRIS LOAD IS EXPECTED.

E COIR FIBER ROLLS SHOULD BE CONSTRUCTED AT THE TOE OF A STREAM BANK TO A HEIGHT EQUAL TO THE CHANNEL FORMING FLOW ELEVATION.

F COIR FIBER ROLLS SHALL BE SEATED IN A SHALLOW HAND-CUT TRENCH SLIGHTLY BELOW THE CHANNEL BOTTOM ELEVATION. COIR FIBER ROLL SHALL BE IN CONTACT WITH THE WATER, SUBMERGED FROM ONE-HALF TO TWO-THIRDS OF THE ROLL DIAMETER.

G ENDS OF COIR FIBER ROLLS SHALL BE TURNED IN AND BURIED WITHIN THE BANK TO PREVENT WATER FROM INTRUDING BEHIND THE ROLL.

H VEGETATION (SPECIES) USED FOR HERBACEOUS PLUGS TO BE INSTALLED IN THE TOP OF COIR FIBER ROLLS SHALL BE APPROVED BY THE ENVIRONMENTAL DIVISION. LIVE DORMANT STAKES MAY BE USED FOR PLUGS.

I COIR FIBER ROLLS SHALL BE KEPT DRY PRIOR TO INSTALLATION.

J PAYMENT FOR THE COIR FIBER ROLLS SYSTEM SHALL INCLUDE ALL MATERIALS, EQUIPMENT, AND LABOR NECESSARY FOR CONSTRUCTION, AND SHALL BE PAID FOR UNDER THE FOLLOWING ITEM NUMBER:

209-03.31, STREAM MITIGATION - COCONUT FIBER ROLLS, L.F.

EROSION CONTROL BLANKETS AND HERBACEOUS PLANT PLUGS SHALL BE PAID FOR ACCORDING TO THEIR RESPECTIVE ITEM NUMBERS.

STREAM MITIGATION PLAN LEGEND: COIR FIBER EROSION CONTROL BLANKET, ** ROLL ** COIR FIBER ROLLS

MATERIAL SHOWN ARE ONLY A GRAPHICAL REPRESENTATION AND DO NOT DEPICT THE ACTUAL DEPTH OR QUANTITY OF MATERIALS TO APPROPRIATELY CONSTRUCT OR STABILIZE THE CHANNEL.

STATE OF TENNESSEE
STANDARD DRAWING
DEPARTMENT OF TRANSPORTATION

COIR FIBER EROSION CONTROL BLANKET AND COIR FIBER ROLLS

11-01-2016 D-NSD-33

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SEALED BY

JEFFREY BRYANT SHAFER
REGISTERED ENGINEER
No. 0011090
STATE OF TENNESSEE
02/10/2026

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

DETAIL SHEETS

TYPE	YEAR	PROJECT NO.	SHEET NO.
PRELIM.	2023	NH-54(48)	NS-3
R.O.W.	2023	NH-54(48)	NS-3
PIH	2025	NH-54(48)	NS-3
PS&E	2026	NH-54(48)	NS-3

N

PROP. R.O.W.

B

C

PROP. R.O.W.

WOODS

TOP OF BANK

TOP OF BANK

40S054-F3-004
END PROJECT NO. NH-54(48) CONST.
STR-06 STA. 16+89.38
N 795,191.7903 E 1,282,876.2913

LEGEND	WETLAND IMPACTS (WTL-12)
	AREA OF PERMANENT IMPACT = 0.486 AC.
	VOLUME OF PERMANENT IMPACT = 784 C.Y.
	AREA OF TEMPORARY IMPACT = 0.124 AC.
	VOLUME OF TEMPORARY IMPACT = 200 C.Y.

225

SR-54

124.3' OF 6' X 6' RCBC

E 1283000

N 795000

40S054-F3-004
BEGIN PROJECT NO. NH-54(48) CONST.
STR-06 STA. 10+21.11
N 794,738.9123 E 1,283,136.9697

C

STR-06

CULTIVATED

CULTIVATED

B

TOP OF BANK

TOP OF BANK

TEMP. CONST. ESMT.

PROP. R.O.W.

A

A

C

15

R.B. PATTERSON AND WIFE, HILDA A. PATTERSON

NOTE: SEE SHEET 14B IN ROADWAY PLANS

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JEFFREY BRYANT SHAFER
REGISTERED ENGINEER
No. 0011090
STATE OF TENNESSEE
02/10/2026

COORDINATES ARE NAD 83(2011), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00002 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988 WITH GEOID 12B MODEL.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PRESENT LAYOUT

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PRELIM.	2023	NH-54(48)	NS-3A
R.O.W.	2023	NH-54(48)	NS-3A
PIH	2025	NH-54(48)	NS-3A
PS&E	2026	NH-54(48)	NS-3A

RIPARIAN PLANTING ZONES FOR STREAM RELOCATION/MITIGATION - SEE REVEGETATION PLAN (NS-4)

PROTECTED AREA SIGN

N

END SPECIAL DITCH
STA. 227+50.00
OFF -87.56'

40S054-F3-004
END PROJECT NO. NH-54(48) CONST.
STR-06 STA. 16+89.38
N 795,191.7903 E 1,282,876.2913

16+00

17+00

TOP OF BANK

TOP OF BANK

WTL-12

TRM 4' T

CLASS "A" 4' T

SOD 2' T

SOD 2' T

TRM 4' T

4' T

225

OUT EL. 559.78
F.L. EL. 561.78

BEGIN SPECIAL DITCH
STA. 223+50.00
OFF -63.00'

SR-54

15+00

124.3' OF 6' X 6' RCBC

40S054-F3-004
BEGIN PROJECT NO. NH-54(48) CONST.
STR-06 STA. 10+21.11
N 794,738.9123 E 1,283,136.9697

4' T 4' T SOD 4' T TRM 4' T 4' T TRM 4' T 4' T TRM 4' T 4' T

14+00

IN. EL. 560.78
F.L. EL. 562.78

SOD V V V V SOD

13+00

12+00

11+00

10+00

TOP OF BANK

TOP OF BANK

STR-06 (PERENNIAL)

NOTE: SEE SHEET 14B IN ROADWAY PLANS

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JEFFREY BRYANT SHAND
REGISTERED ENGINEER
No. 0011088
STATE OF TENNESSEE
02/10/2026

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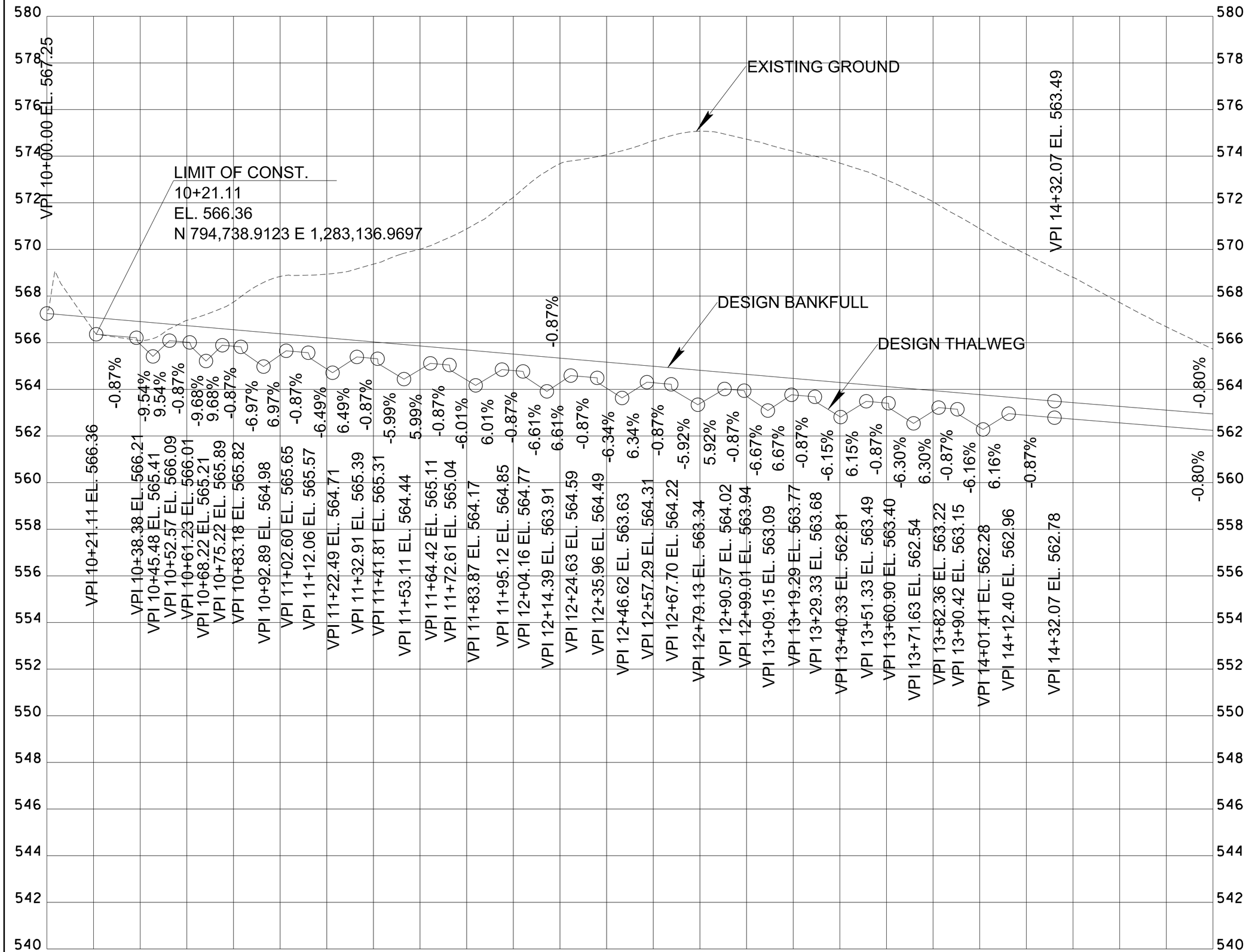
STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PROPOSED LAYOUT

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TYPE	YEAR	PROJECT NO.	SHEET NO.
PRELIM.	2023	NH-54(48)	NS-3B
R.O.W.	2023	NH-54(48)	NS-3B
PIH	2025	NH-54(48)	NS-3B
PS&E	2026	NH-54(48)	NS-3B



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JEFFREY BRYANT SHAVER
REGISTERED ENGINEER
No. 001108903
STATE OF TENNESSEE
02/10/2026

COORDINATES ARE NAD 83(2011), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00002 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988 WITH GEOID 12B MODEL.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

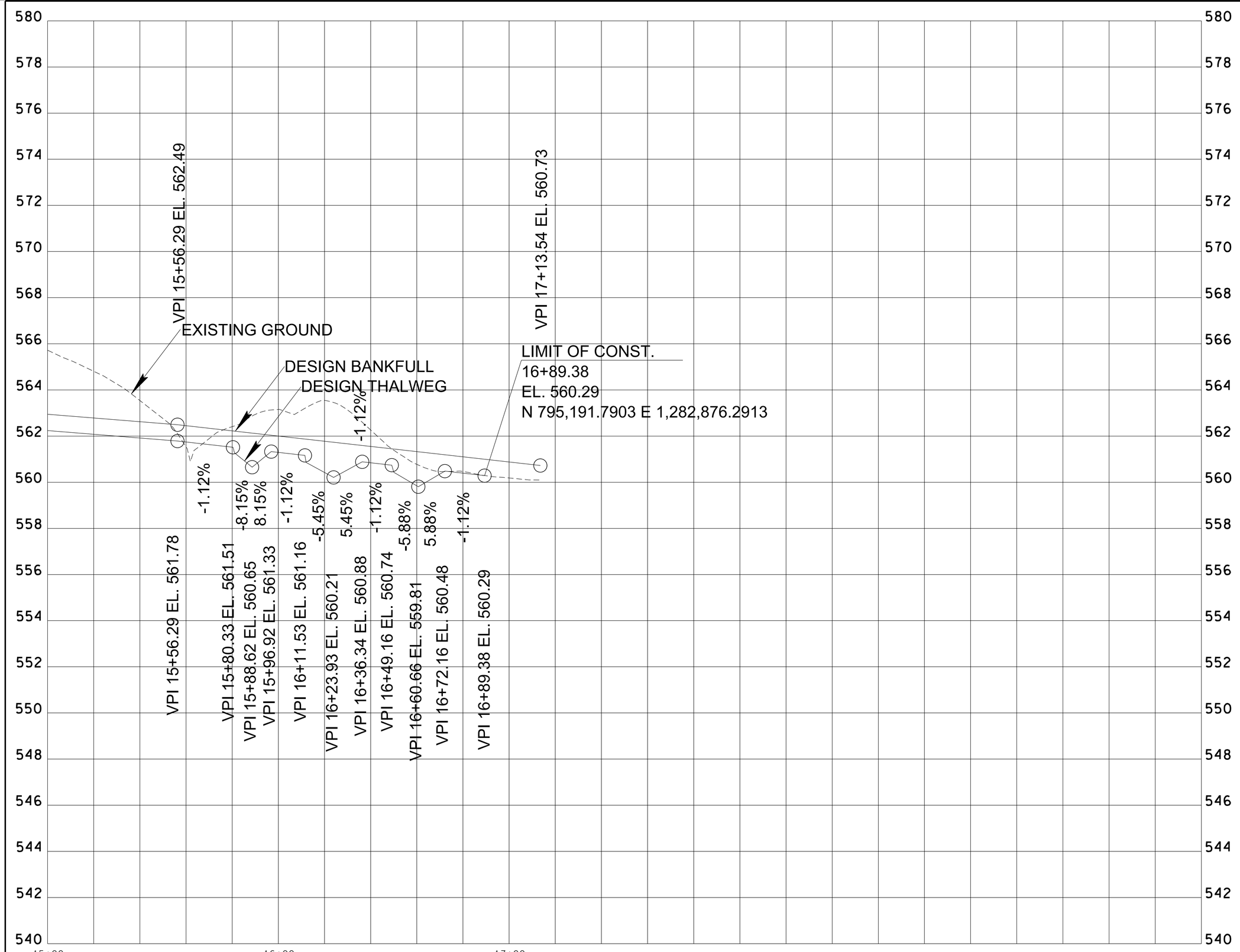
PROPOSED PROFILE

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1"=2' VERT.

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TYPE	YEAR	PROJECT NO.	SHEET NO.
PRELIM.	2023	NH-54(48)	
R.O.W.	2023	NH-54(48)	NS-3C
PIH	2025	NH-54(48)	NS-3C
PS&E	2026	NH-54(48)	NS-3C



SEALED BY



COORDINATES ARE NAD 83(2011), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00002 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988 WITH GEOID 12B MODEL.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

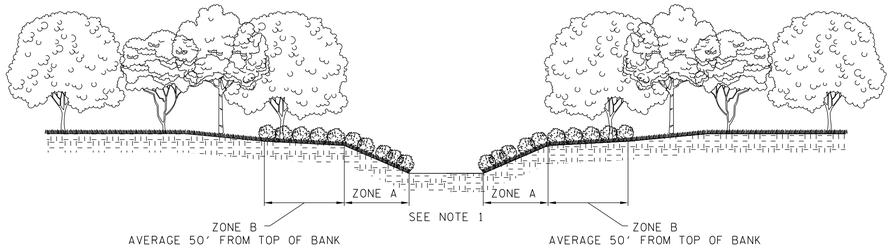
PROPOSED PROFILE

STA.15+00 TO STA.17+00

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1"=2' VERT.

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TYPE	YEAR	PROJECT NO.	SHEET NO.
PRELIM.	2023	NH-54(48)	
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PIH	2025	NH-54(48)	NS-4
PS&E	2026	NH-54(48)	NS-4

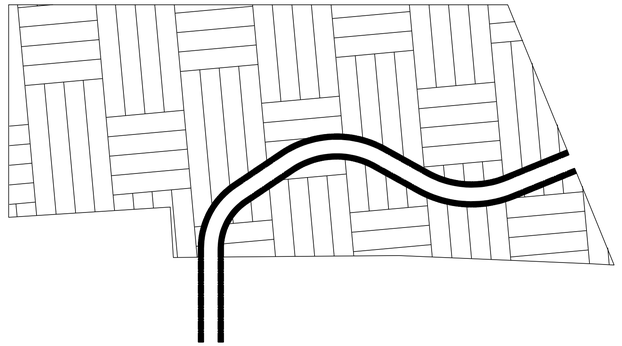


PLANTING DETAIL
N.T.S.

Stream Riparian Zone Planting Plan						
Common Name	Scientific Name	Indicator Status	Size	Planting Density (Siems/Acre)	Planting Zone	Percent Composition
Silky Dogwood	*Cornus amomum*	FACW	Live stake	36" Spacing	A	20*
American Sycamore	*Platanus occidentalis*	FACW	Live stake	36" Spacing	A	20*
Hazel Alder	*Alnus serrulata*	FACW	Live Stake	36" Spacing	A	20*
Buttonbush	*Cephalanthus occidentalis*	OBL	Live Stake	36" Spacing	A	20*
River Birch	*Betula nigra*	FACW	Live stake	36" Spacing	A	20*
Willow Oak	*Quercus phellos*	FAC	Half-Gallon	72/acre	B	18*
Pin Oak	*Quercus palustris*	FACW	Half-Gallon	72/acre	B	18*
Sycamore	*Platanus occidentalis*	FACW	Bare Root	48/acre	B	12*
Water Oak	*Quercus nigra*	FAC	Bare Root	48/acre	B	12*
Silky Dogwood	*Cornus amomum*	FACW	Bare Root	40/acre	B	10*
False Indigo Bush	*Amorpha fruticose*	FACW	Bare Root	60/acre	B	15*
Common Seviceberry	*Amelanchier arborea*	FAC	Bare Root	60/acre	B	15*
*Species and percent composition dependent on availability						

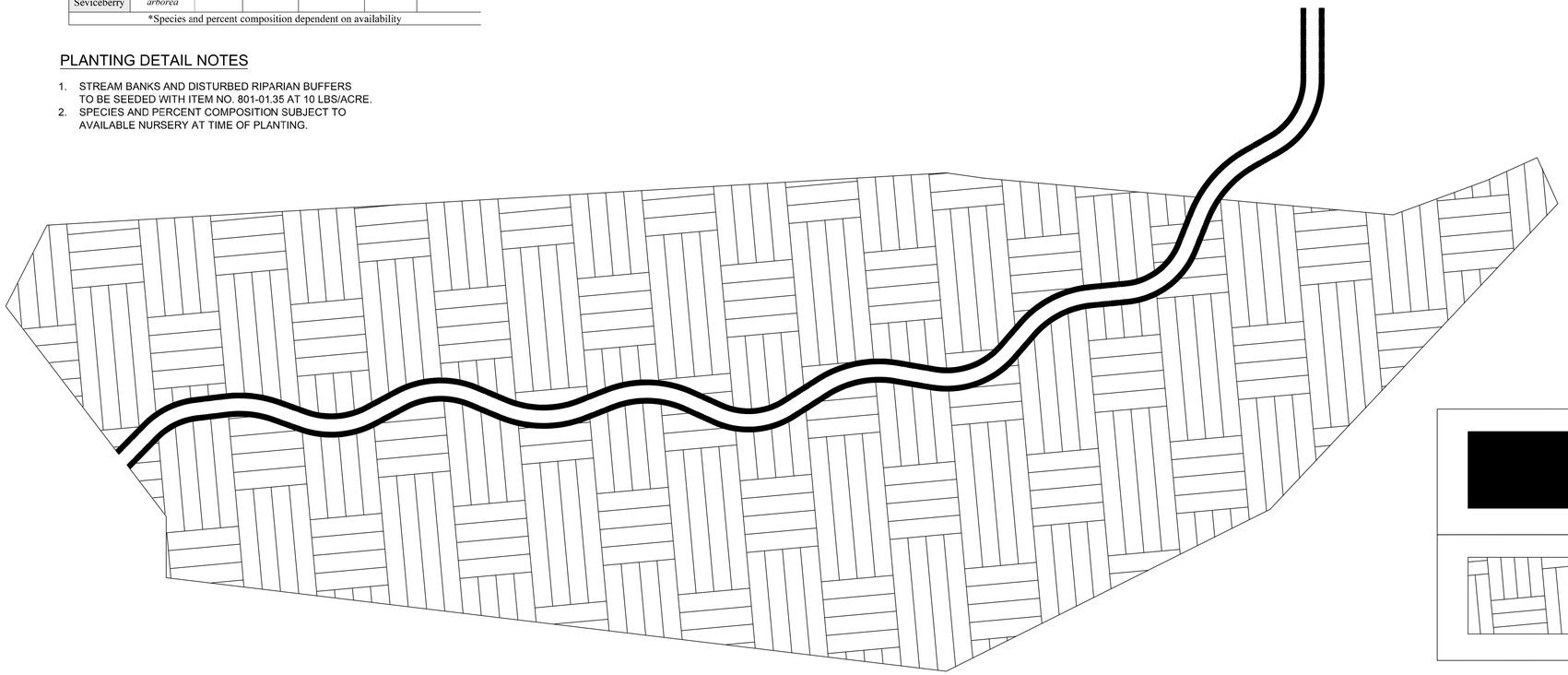
PLANTING DETAIL NOTES

1. STREAM BANKS AND DISTURBED RIPARIAN BUFFERS TO BE SEEDED WITH ITEM NO. 801-01.35 AT 10 LBS/ACRE.
2. SPECIES AND PERCENT COMPOSITION SUBJECT TO AVAILABLE NURSERY AT TIME OF PLANTING.



ESTIMATED TREE QUANTITIES

ITEM NO.	DESCRIPTION	UNIT	QUANTITY 40S054-F3-004
802-02.29	CUTTINGS: BETULA NIGRA (18IN-24IN)	EACH	80
802-02.32	CUTTINGS: CORNUS AMOMUM (18IN-24IN)	EACH	80
802-02.37	CUTTINGS: ALNUS SERRULATA (18IN-24IN)	EACH	80
802-02.38	CUTTINGS: PLATANUS OCCIDENTALIS (18IN-24IN)	EACH	80
802-02.45	CUTTINGS: CEPHALANTHUS OCCIDENTALIS (24-48IN)	EACH	80
802-11.37	QUERCUS PALUSTRIS (PIN OAK 2-5FT CNTNR GRWN)	EACH	80
802-11.38	QUERCUS PHELLOS (WILLOW OAK 2-5FT CNTNR GRWN)	EACH	80
802-12.26	PLATANUS OCCIDENTALIS (SYCAMORE SEEDLNG B.R.)	EACH	50
802-12.35	QUERCUS NIGRA (WATER OAK SEEDLNG B.R.)	EACH	50
802-12.67	AMELANCHIER ARBOREA (COMMON SERVICEBERRY SEEDLING B.R.)	EACH	65
802-13.54	CORNUS AMOMUM (SILKY DOGWOOD SDLNG BARE ROOT)	EACH	45
802-13.65	AMORPHA FRUTICOSA (INDIGOBUSH SDLING B.R.)	EACH	65



ZONE A

ZONE B

SEALED BY

JEFFREY BRYANT SHAVER
REGISTERED ENGINEER
XVI
02/10/2026
No. 001108
STATE OF TENNESSEE

COORDINATES ARE NAD 83(2011), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00002 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988 WITH GEOID 12B MODEL.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

REVEGETATION PLAN

SCALE: 1"=20'

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TYPE	YEAR	PROJECT NO.	SHEET NO.
PRELIM.	2023	NH-54(48)	
R.O.W.	2023	NH-54(48)	NS-5
PIH	2025	NH-54(48)	NS-5
PS&E	2026	NH-54(48)	NS-5

ENVIRONMENTAL NOTES

SUBSECTION 3 – EROSION PREVENTION AND SEDIMENT CONTROL GENERAL NOTES

EROSION PREVENTION AND SEDIMENT CONTROL GENERAL NOTES

STREAM CONSTRUCTION SEQUENCE NOTES

(1) THE CONTRACTOR IS RESPONSIBLE FOR FOLLOWING THE SEQUENCE OF CONSTRUCTION WITH THE PLANS AND THE FOLLOWING PROVISIONS, AS DIRECTED BY THE DESIGNER AND THE TDOT ENGINEER. CONSTRUCTION SHALL PROCEED IN THE SPECIFIED MANNER UNLESS OTHERWISE DIRECTED OR APPROVED BY THE DESIGNER AND THE TDOT ENGINEER. THE FOLLOWING PROVISIONS, ALONG WITH THE INSTRUCTIONS CONTAINED IN THE PLANS, CONSTITUTE THE SEQUENCE OF CONSTRUCTION.

GENERAL SITE NOTES

(2) THE CONTRACTOR SHALL ONLY CONDUCT STREAM WORK, INCLUDING ALL IN-STREAM STRUCTURES, GRADING STABILIZATION MEASURES, AND SEEDING, MULCHING, AND MATTING WORK, ON A SECTION OF STREAM THAT SHALL BE ENTIRELY COMPLETED WITHIN A SINGLE DAY. EACH SECTION OF COMPLETED STREAM MUST BE STABILIZED AND MATTED BEFORE FLOW CAN BE RETURNED INTO THE CHANNEL.

(3) WHEN WORKING IN STREAMS WITH NO ACTIVE FLOW THE CONTRACTOR IS REQUIRED TO HAVE APPROPRIATELY SIZED PUMPS AND MATERIALS TO INSTALL AND MAINTAIN A TEMPORARY STREAM DIVERSION IN ANTICIPATION OF PENDING STORM EVENTS. WORKING IN A DRY CHANNEL DOES NOT PRECLUDE THE CONTRACTOR FROM HAVING TO COMPLY WITH NOTE 2 ABOVE.

(4) UPON APPROVAL FROM THE DESIGNER AND THE TDOT ENGINEER, PHASES MAY BE CONSTRUCTED IN A DIFFERENT SEQUENCE THAN INDICATED BELOW OR CONCURRENTLY.

(5) ALL CONSTRUCTION WORK SHALL BE DONE DURING PERIODS OF DRY WEATHER.

(6) INITIAL SITE PREPARATION

A. IDENTIFY PROJECT BOUNDARY, LIMITS OF DISTURBANCE, SENSITIVE AREAS, STAGING AREAS, STABILIZED ENTRANCES, TEMPORARY CROSSINGS AND ACCESS POINTS WITH THE DESIGNER AND THE TDOT ENGINEER.

B. CONSTRUCT ENTRANCE AND STAGING AREAS AND THEIR ASSOCIATED EROSION AND SEDIMENT CONTROL DEVICES IN A MANNER TO SUPPORT EXECUTION OF THE RESTORATION IN PHASES AS INDICATED IN THE PLANS AND AS DIRECTED BY THE DESIGNER AND THE TDOT ENGINEER.

C. CONSTRUCT TEMPORARY DIVERSION CULVERTS (EC-STR-32) IN ACCORDANCE WITH THESE PLANS.

(7) STREAM CONSTRUCTION

A. GRADE ALL SECTIONS OF PROPOSED CHANNEL, EXCEPT TIE-IN LOCATIONS. STOCKPILE EXCAVATED MATERIAL UPSTREAM OF EROSION CONTROL MEASURES TO PREVENT SILTATION OF EXISTING CHANNEL.

B. INSTALL IN-STREAM STRUCTURES (E.G. LOG RIFFLES, STONE TOE).

C. STABILIZE CONSTRUCTED CHANNEL WITH COIR FIBER EROSION BLANKET (D-NSD-33).

D. CONSTRUCT TIE-IN GRADING AT UPSTREAM AND DOWNSTREAM LOCATIONS USING PUMP AROUND DIVERSION.

E. REMOVE TEMPORARY DIVERSION CULVERTS FROM EXISTING CHANNEL.

F. BACKFILL EXISTING CHANNEL USING STOCKPILED MATERIAL.

G. FINALIZE FLOODPLAIN GRADING.

H. STABILIZE ALL DISTURBED SOILS WITH SEED AND MULCH.

(8) RIPARIAN BUFFER PLANTING

A. PLANTINGS SHALL OCCUR IN THE FIRST PLANTING SEASON AFTER COMPLETION OF STREAM CONSTRUCTION.

B. PLANTS SHALL BE PLANTED ONLY DURING THE DORMANT SEASON (NOVEMBER 6 - MARCH 24).

NATURAL STREAM CHANNEL REQUIREMENTS AND QUALIFICATIONS

(1) CONSTRUCT NATURAL STREAM CHANNELS PURSUANT TO ALL PROVISIONS AND REQUIREMENTS OF APPLICABLE ARAP'S, 404 PERMITS, NPDES PERMITS, AND PLANS.

(2) THE NATURAL STREAM CHANNEL CONSTRUCTION/DESIGN EXPERT SHALL HAVE COMPLETED CONSTRUCTION OF AT LEAST THREE STREAM RESTORATION PROJECTS FOR MITIGATION BANKS, IN LIEU FEE PROGRAMS, OR STANDALONE MITIGATION SITES. THESE THREE PROJECT SHALL BE BASED ON NATURAL STREAM CHANNEL DESIGN PRINCIPLES INCLUDING, BUT NOT LIMITED TO: IN-STREAM STRUCTURES (STEP POOLS, LOG VANES, ROCK RIFFLES, AND WOOD TOE PROTECTIONS), STREAM MEANDER CONSTRUCTION, AND STREAMBANK RESTORATION (BANK SHAPING, STABILIZATION, AND BIOENGINEERING), AND VEGETATION INSTALLATION (I.E. NATIVE SEED MIX, BARE ROOT SEEDLINGS, LIVE STAKES, CONTAINER TREES, AND BALLED AND BURLAP TREES). PROVIDE DOCUMENTATION OF THE PROJECTS FOR REVIEW TO THE TDOT DISTRICT SUPERVISOR AT THE PRE-CONSTRUCTION MEETING.

(3) A REGISTERED TENNESSEE PROFESSIONAL ENGINEER WITH KNOWLEDGE OF THE MITIGATION SITE SHALL PREPARE AS-BUILT PLANS OF THE CONSTRUCTED NATURAL STREAM CHANNEL IMMEDIATELY FOLLOWING COMPLETION. A COPY OF THE ORIGINAL NATURAL STREAM CHANNEL PLANS, RED-LINED TO SHOW VARIANCES FROM THE ORIGINAL DESIGN, IS ACCEPTABLE TO MEET THIS REQUIREMENT. A SURVEY QUALITY AS-BUILT PLANS MAY BE REQUIRED IF PERMIT COMPLIANCE ISSUES ARE IDENTIFIED DUE TO DISCREPANCIES IN THE CONSTRUCTED NATURAL STREAM CHANNEL PLANS AND THE PERMITTED NATURAL STREAM CHANNEL PLANS. SUBMIT THE AS-BULT PLANS TO THE TDOT ENVIRONMENTAL DIVISION MITIGATION OFFICE AT TDOT.ENV.MITIGATION@TN.GOV AND TO THE TDOT DISTRICT SUPERVISOR.

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

EROSION PREVENTION AND SEDIMENT CONTROL NOTES

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TYPE	YEAR	PROJECT NO.	SHEET NO.
PRELIM.	2023	NH-54(48)	
R.O.W.	2023	NH-54(48)	NS-6
PIH	2025	NH-54(48)	NS-6
PS&E	2026	NH-54(48)	NS-6

ESTIMATED NSD QUANTITIES

	ITEM NO.	DESCRIPTION	UNIT	QUANTITY 40S054-F3-004
	105-01*	CONSTRUCTION STAKES, LINES AND GRADES	LS	1
	201-01*	CLEARING AND GRUBBING	LS	1
(1)	203-01.13	ROAD & DRAINAGE EXCAVATION (STREAM MITIGATION)	C.Y.	4598
(1)	209-03.40	STREAM MITIGATION - LOG RIFFLE	L.F.	222
(1)	209-03.42	STREAM MITIGATION - LIVE BRUSH LAYERING	L.F.	329
(1)	209-03.67	STREAM MITIGATION – WOOD TOE W/REINFORCED EARTH	L.F.	329
(1)	209-03.99*	PROTECTED AREA MARKER (WHITE WITH DECAL)	EACH	18
	209-08.02*	TEMPORARY SILT FENCE (WITH BACKING)	L.F.	1016
(1)	209-09.03*	SEDIMENT FILTER BAG (15' X 15')	EACH	2
	303-10.01*	MINERAL AGGREGATE (SIZE 57)	TON	15
	740-10.03*	GEOTEXTILE (TYPE III)(EROSION CONTROL)	S.Y.	12
(1)(2)	801-01.30	COVER CROP SEED MIX (RIPZN/FLPL) W/MULCH	UNIT	32
(1)(3)	801-01.35	GRASS SEED MIX (RIPZN/FLPL) W/MULCH	UNIT	32
	802-02.29	CUTTINGS: BETULA NIGRA (18IN-24IN)	EACH	80
	802-02.32	CUTTINGS: CORNUS AMOMUM (18IN-24IN)	EACH	80
	802-02.37	CUTTINGS: ALNUS SERRULATA (18IN-24IN)	EACH	80
	802-02.38	CUTTINGS: PLATANUS OCCIDENTALIS (18IN-24IN)	EACH	80
	802-02.45	CUTTINGS: CEPHALANTHUS OCCIDENTALIS (24-48IN)	EACH	80
	802-11.37	QUERCUS PALUSTRIS (PIN OAK 2-5FT CNTNR GRWN)	EACH	80
	802-11.38	QUERCUS PHELLOS (WILLOW OAK 2-5FT CNTNR GRWN)	EACH	80
	802-12.26*	PLATANUS OCCIDENTALIS (SYCAMORE SEEDLNG B.R.)	EACH	50
	802-12.35	QUERCUS NIGRA (WATER OAK SEEDLNG B.R.)	EACH	50
	802-12.67	AMELANCHIER ARBOREA (COMMON SERVICEBERRY SEEDLING B.R.)	EACH	65
	802-13.54	CORNUS AMOMUM (SILKY DOGWOOD SDLNG BARE ROOT)	EACH	45
	802-13.65	AMORPHA FRUTICOSA (INDIGOBUSH SDLING B.R.)	EACH	65
(1)(4)	805-12.08*	700 GRAM COIR FIBER EROSION BLANKET	S.Y.	398

FOOTNOTES

(1) SEE SUBSECTION 209.07 OF THE STANDARD SPECIFICATIONS FOR MAINTENANCE REPLACEMENT. ALL QUANTITIES ARE TO BE USED AS DIRECTED BY THE ENGINEER.

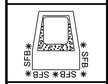
(2) TO BE USED FOR TEMPORARY SEEDING.

(3) TO BE USED FOR PERMANENT SEEDING.

(4) COIR FIBER EROSION BLANKETS SHALL BE 700 GRAMS PER SQUARE METER AND INSTALLED PER TDOT STD. DWG. D-NSD-33.

(*) QUANTITIES FOR STREAM MITIGATION ONLY. FOR BIDDING PURPOSED, THESE QUANTITIES ARE INCLUDED IN THE ROADWAY PLANS ESTIMATED QUANTITIES.

EROSION PREVENTION AND SEDIMENT CONTROL LEGEND

SYMBOL	ITEM	STD. DWG.
	COIR FIBER EROSION CONTROL BLANKET	D-NSD-33
	SEDIMENT FILTER BAG	EC-STR-2
	SILT FENCE WITH WIRE BACKING	EC-STR-3C
	SEEDING (WITH MULCH)	N/A

SEALED BY



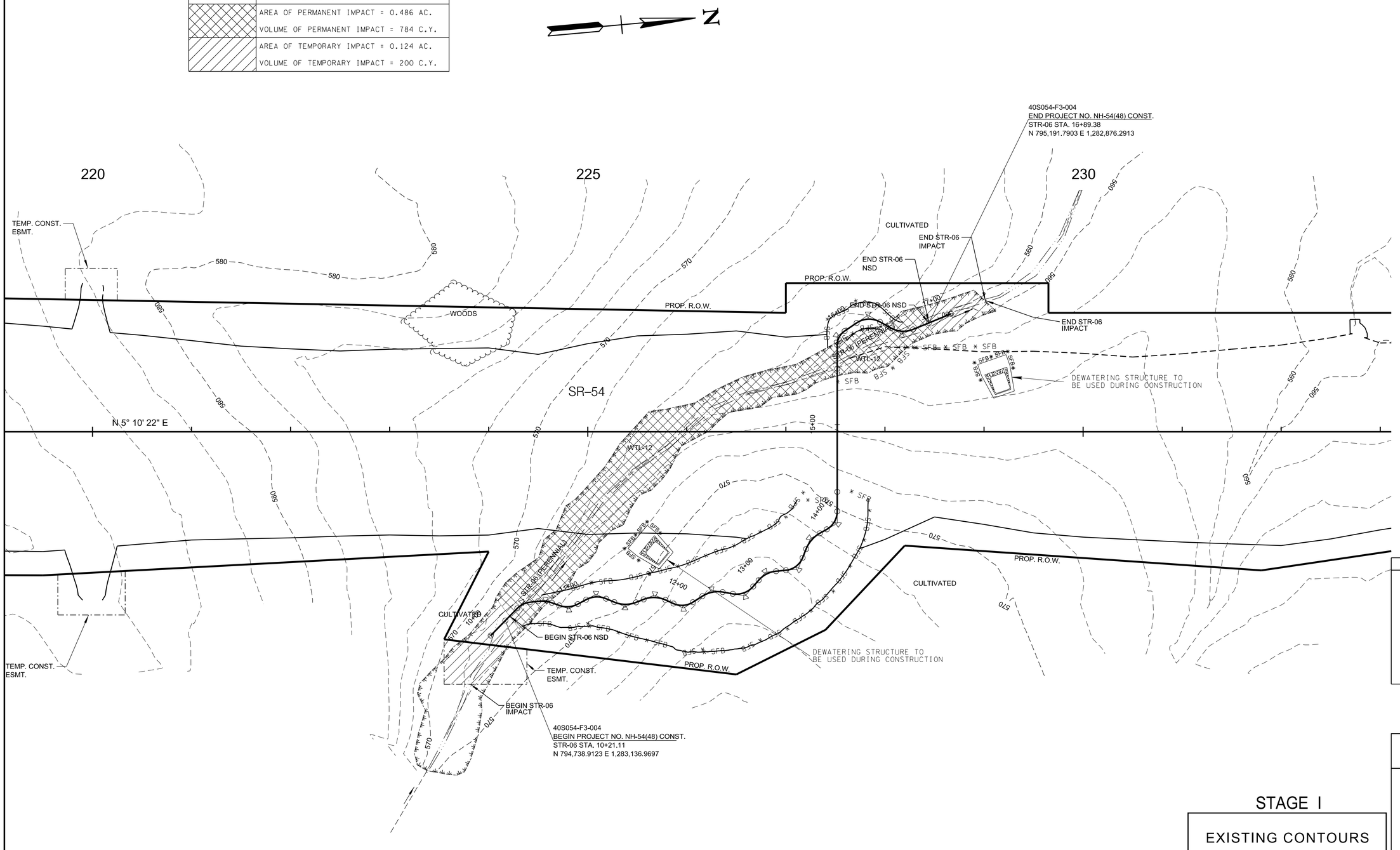
STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

ESTIMATED QUANTITIES

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TYPE	YEAR	PROJECT NO.	SHEET NO.
PRELIM.	2023	NH-54(48)	
R.O.W.	2023	NH-54(48)	NS-7
PIH	2025	NH-54(48)	NS-7
PS&E	2026	NH-54(48)	NS-7

LEGEND	WETLAND IMPACTS (WTL-12)
	AREA OF PERMANENT IMPACT = 0.486 AC.
	VOLUME OF PERMANENT IMPACT = 784 C.Y.
	AREA OF TEMPORARY IMPACT = 0.124 AC.
	VOLUME OF TEMPORARY IMPACT = 200 C.Y.



SEALED BY

JEFFREY BRYANT SHAVER
REGISTERED ENGINEER
XVI
02/10/2026
No. 001108901
ENGINEER
STATE OF TENNESSEE

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

EROSION PREVENTION & SEDIMENT CONTROL (EPSC) PLANS

STA.10+00 TO STA.17+00

SCALE: 1"=50'

STAGE I

EXISTING CONTOURS

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TYPE	YEAR	PROJECT NO.	SHEET NO.
PRELIM.	2023	NH-54(48)	
R.O.W.	2023	NH-54(48)	NS-8
PIH	2025	NH-54(48)	NS-8
PS&E	2026	NH-54(48)	NS-8

POTENTIAL STOCKPILE AREA - PERIMETER
EPSC MEASURES TO BE INSTALLED AROUND
POTENTIAL STOCKPILE AREAS WHEN UTILIZED

NOTE: THE EXISTING CHANNEL MUST BE MAINTAINED UNTIL THE PROPOSED CHANNEL IS COMPLETED. NO DISTURBANCE ASSOCIATED WITH THESE NATURAL STREAM DESIGN PLANS SHALL OCCUR TO THE NORTH AND WEST OF THE PROPOSED SILT FENCE WITH BACKING ALONG THE EXISTING CHANNELS UNTIL PROPOSED CHANNELS ARE COMPLETE AND STABILIZED.

LEGEND	WETLAND IMPACTS (WTL-12)
	AREA OF PERMANENT IMPACT = 0.486 AC.
	VOLUME OF PERMANENT IMPACT = 784 C.Y.
	AREA OF TEMPORARY IMPACT = 0.124 AC.
	VOLUME OF TEMPORARY IMPACT = 200 C.Y.

N

TIE-IN AREA TO BE CONSTRUCTED USING PUMP AROUND DIVERSION AFTER REMAINDER OF CHANNEL HAS BEEN COMPLETED AND STABILIZED

40S054-F3-004
END PROJECT NO. NH-54(48) CONST.
STR-06 STA. 16+89.38
N 795,191.7903 E 1,282,876.2913

220 225 230

TEMP. CONST. ESMT.

END STR-06 IMPACT

END STR-06 NSD

PROP. R.O.W.

TOP OF BANK

STR-06 (PERENNIAL)

WTL-12

SFB

DEWATERING STRUCTURE TO BE USED DURING CONSTRUCTION

SR-54

N 5° 10' 22" E

124.3' OF 6' X 6' RCBC

70.0' OF 36" RCP

86' OF 18" RCP

98.0' OF 36" RCP

BEGIN STR-06 NSD

BEGIN STR-06 IMPACT

TEMP. CONST. ESMT.

TIE-IN AREA TO BE CONSTRUCTED USING PUMP AROUND DIVERSION AFTER REMAINDER OF CHANNEL HAS BEEN COMPLETED AND STABILIZED

40S054-F3-004
BEGIN PROJECT NO. NH-54(48) CONST.
STR-06 STA. 10+21.11
N 794,738.9123 E 1,283,136.9697

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02/10/2026

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

EROSION PREVENTION & SEDIMENT CONTROL (EPSC) PLANS

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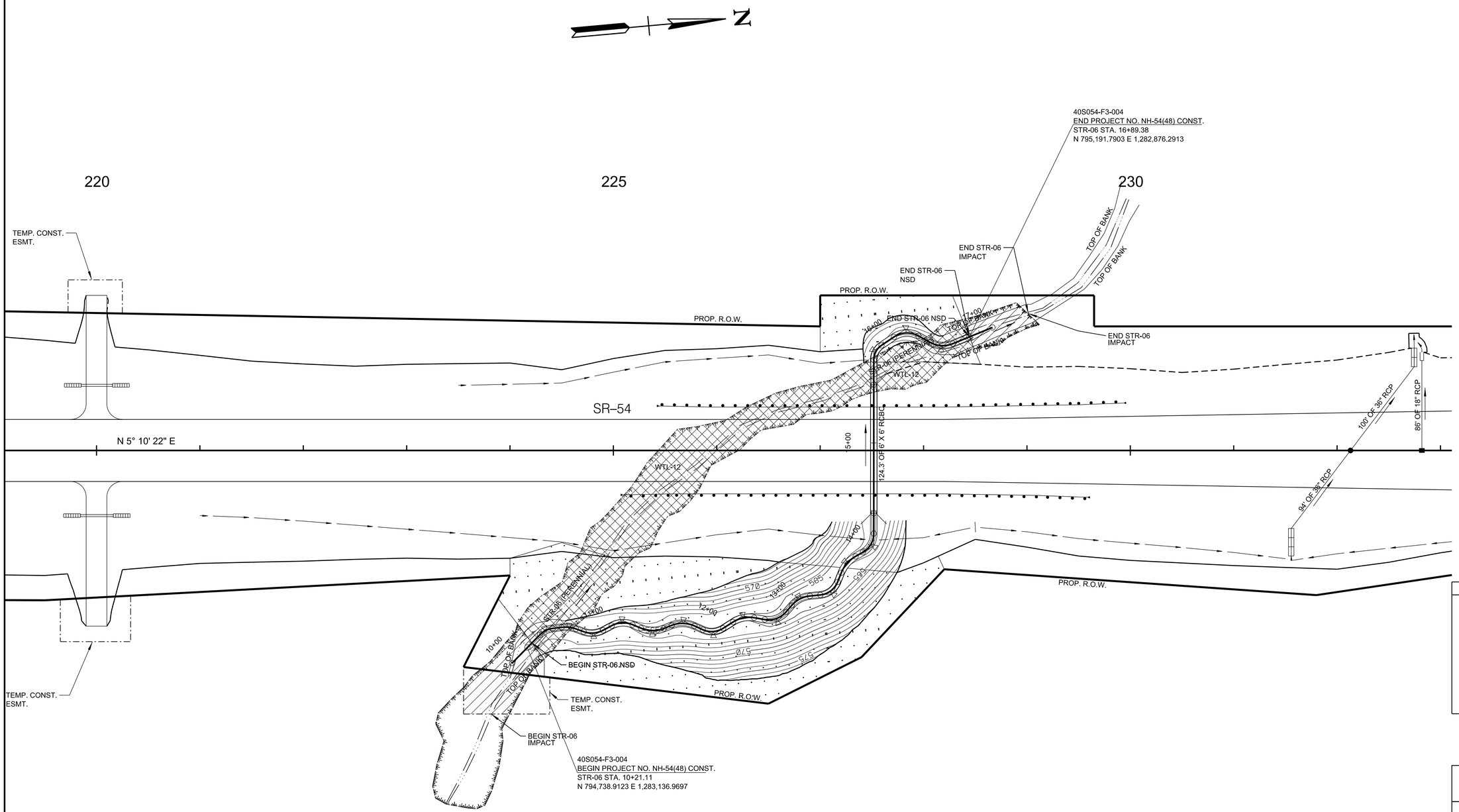
STAGE II

EXISTING AND PROPOSED CONTOURS

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TYPE	YEAR	PROJECT NO.	SHEET NO.
PRELIM.	2023	NH-54(48)	
R.O.W.	2023	NH-54(48)	NS-9
PIH	2025	NH-54(48)	NS-9
PS&E	2026	NH-54(48)	NS-9

PERMAMENT SEEDING WITH MULCH



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02/10/2026

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

EROSION PREVENTION & SEDIMENT CONTROL (EPSC) PLANS

STA.10+00 TO STA.17+00

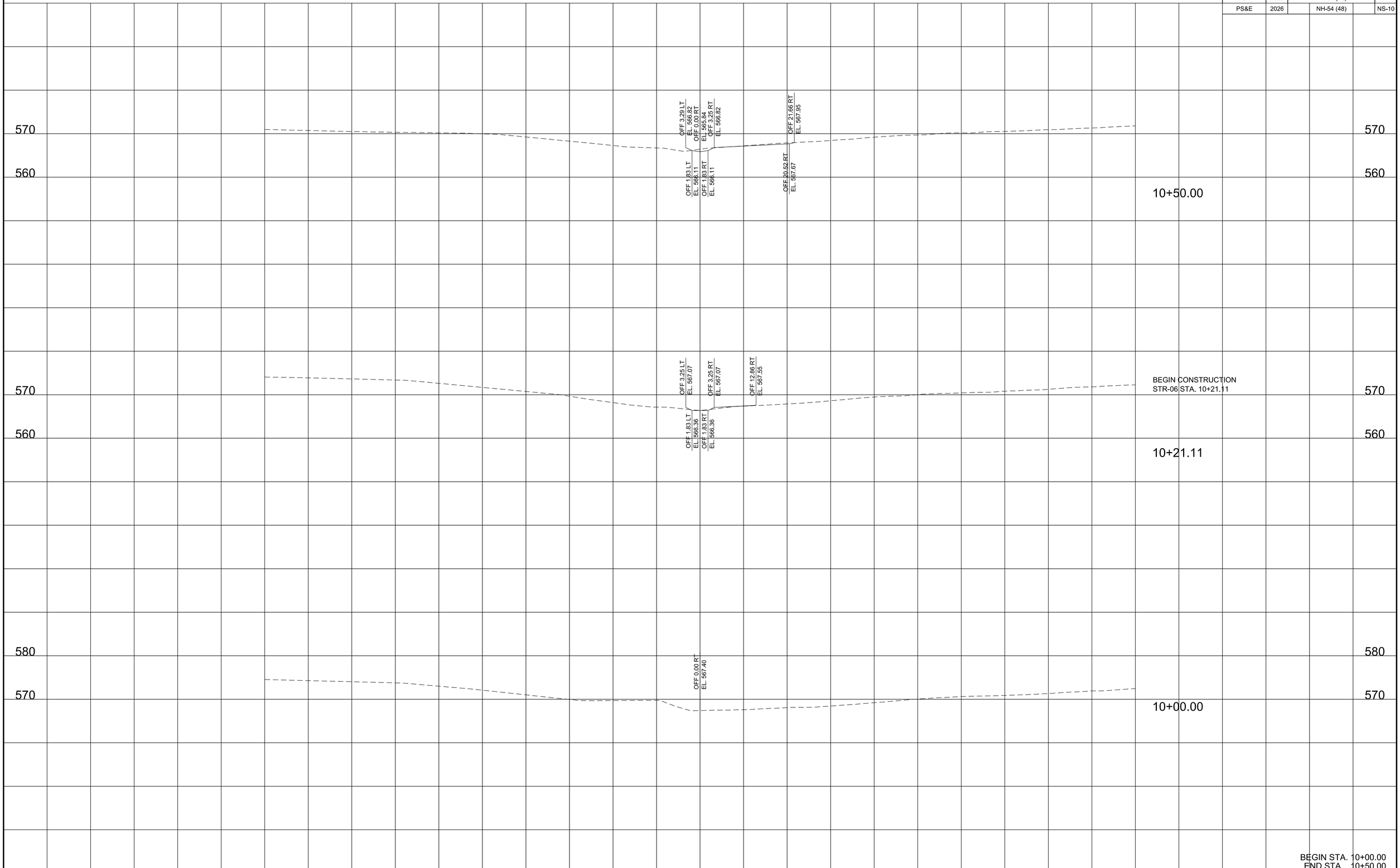
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STAGE III

PROPOSED CONTOURS

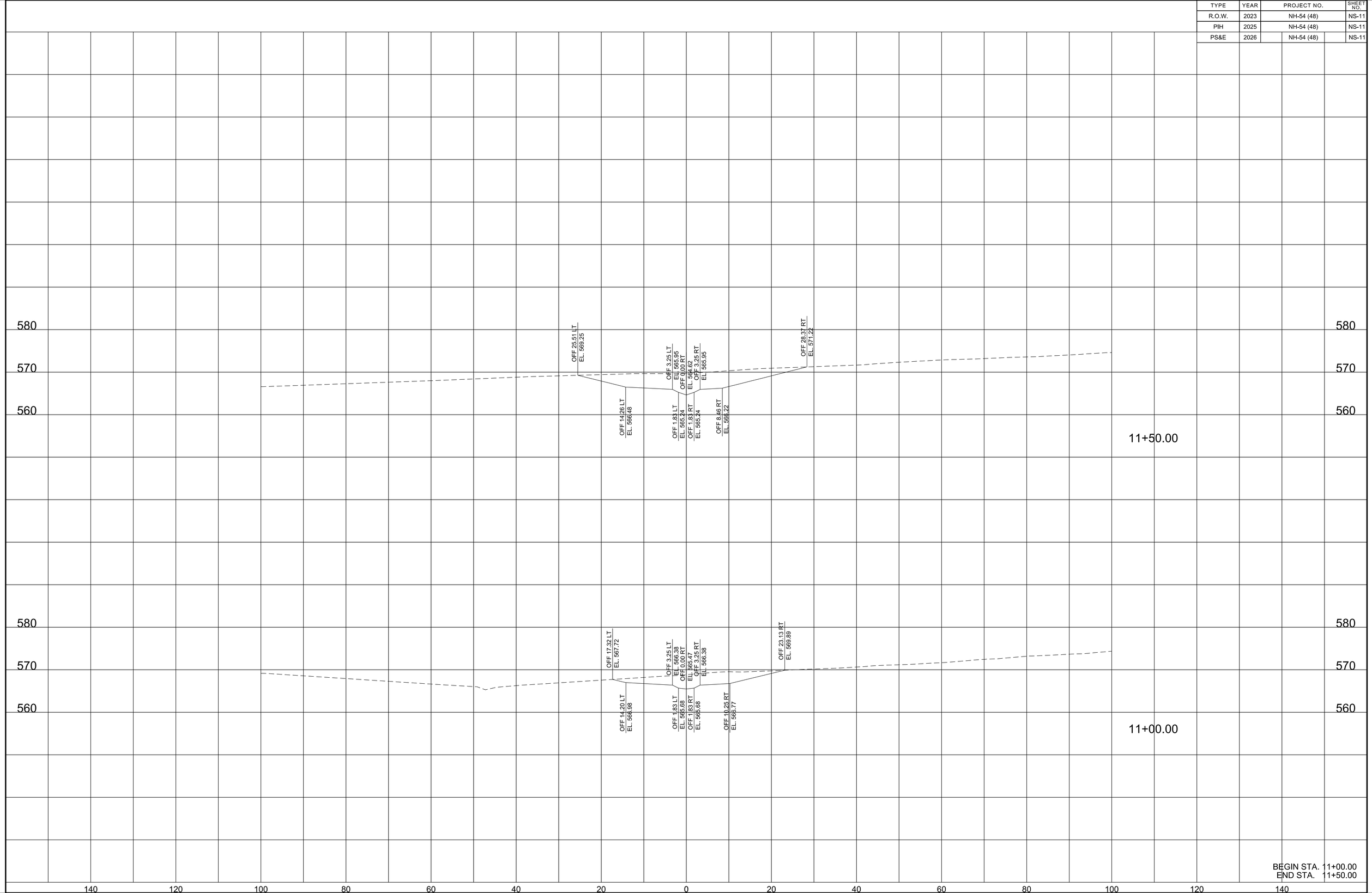
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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54 (48)	NS-10
PIH	2025	NH-54 (48)	NS-10
PS&E	2026	NH-54 (48)	NS-10



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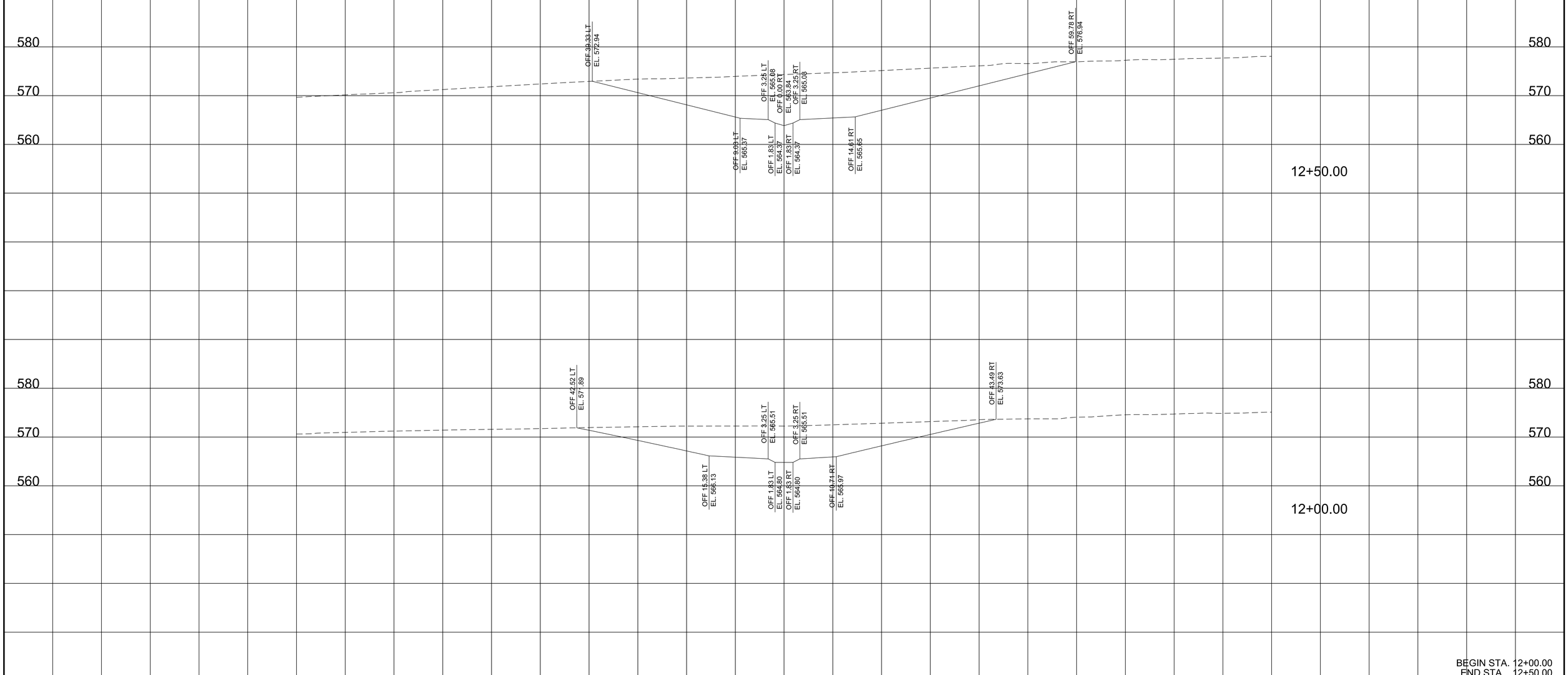
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R.O.W.	2023	NH-54 (48)	NS-11
PIH	2025	NH-54 (48)	NS-11
PS&E	2026	NH-54 (48)	NS-11



BEGIN STA. 11+00.00
END STA. 11+50.00

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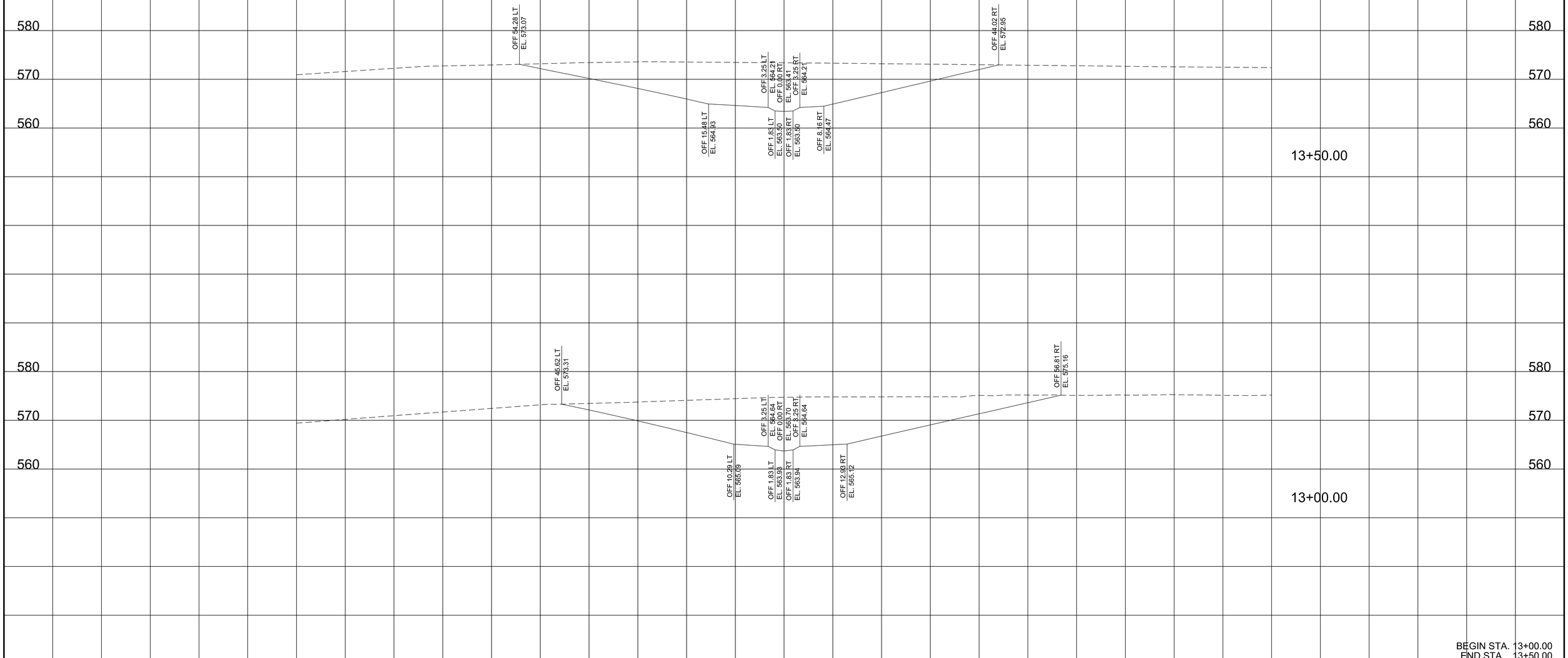
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R.O.W.	2023	NH-54 (48)	NS-12
PIH	2025	NH-54 (48)	NS-12
PS&E	2026	NH-54 (48)	NS-12



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END STA. 12+50.00

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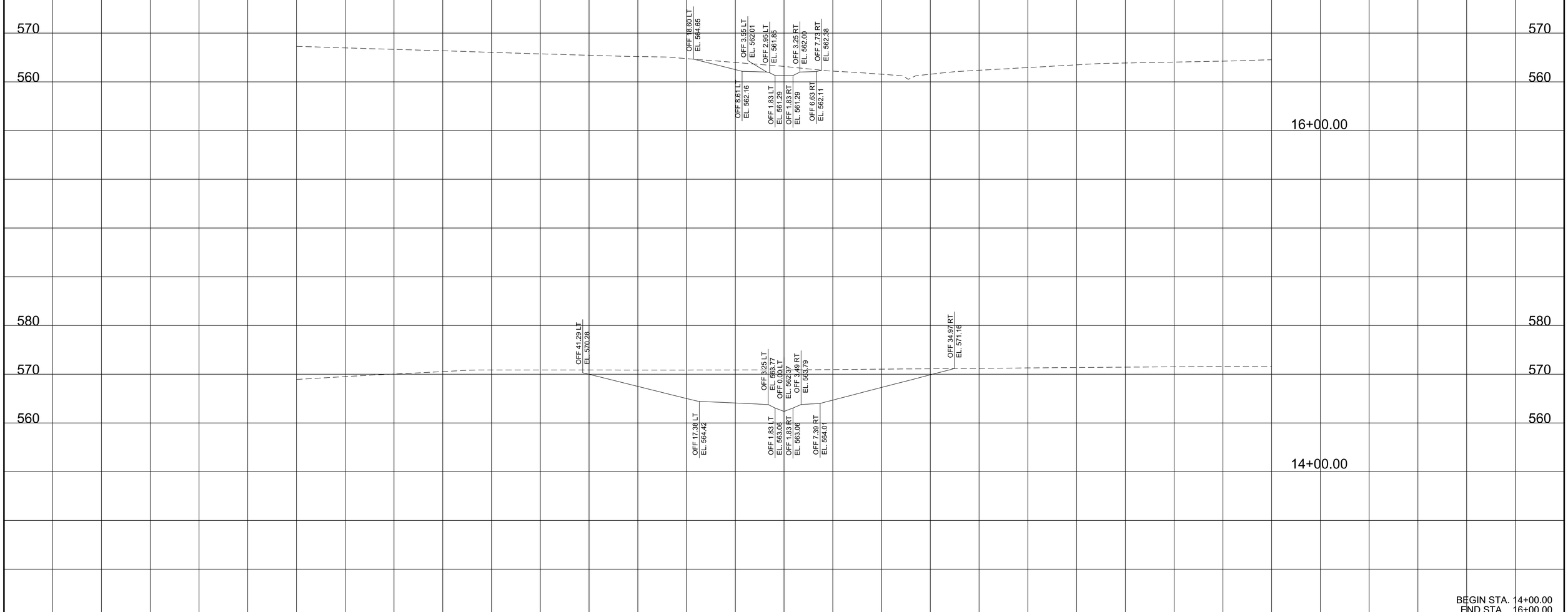
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54 (48)	NS-13
PIH	2025	NH-54 (48)	NS-13
PS&E	2026	NH-54 (48)	NS-13



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END STA. 13+50.00

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54 (48)	NS-14
PIH	2025	NH-54 (48)	NS-14
PS&E	2026	NH-54 (48)	NS-14



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END STA. 16+00.00

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2023	NH-54 (48)	NS-15
PIH	2025	NH-54 (48)	NS-15
PS&E	2026	NH-54 (48)	NS-15

570
560

OFF 0.00 LT
EL. 560.19

17+00.00

OFF 3.25 LT
EL. 561.00

OFF 3.25 RT
EL. 561.00

END CONSTRUCTION
STR-06 STA. 16+89.38

OFF 1.83 LT
EL. 560.29

OFF 1.83 RT
EL. 560.29

16+89.38

OFF 9.19 LT
EL. 561.96

OFF 1.83 LT
EL. 560.73

OFF 1.83 RT
EL. 560.73

OFF 6.12 RT
EL. 561.53

OFF 7.36 LT
EL. 561.56

OFF 3.25 LT
EL. 561.44

OFF 0.00 RT
EL. 560.43

OFF 3.25 RT
EL. 561.44

16+50.00

BEGIN STA. 16+50.00
END STA. 17+00.00

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

TYPE	YEAR	PROJECT NO.	SHEET NO.
PIH	2025	NH-54(48)	
PS&E	2026	NH-54(48)	S-1

SWPPP INDEX OF SHEETS

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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): 93.069 ACRES

2.3. TOTAL AREA TO BE DISTURBED (5.5.1.b): 78.692 ACRES

2.4. PROJECT DESCRIPTION (5.5.1.a):

TITLE: SR-54 FROM NEAR HOWARD RD TO KENTUCKY STATE LINE
COUNTY: HENRY
PIN: 101886.05

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) 35-35L, DRAINAGE MAP SHEET(S) 23-24, 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): NATURAL STREAM DESIGN

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)
GRENADA SILT LOAM, 2-5% SLOPES (GrB2)	C	22	0.49
GRENADA SILT LOAM, 0-2% SLOPES (GrA)	C/D	21	0.49
CALLOWAY-KURK COMPLEX (CkA)	C	17	0.43
PROVIDENCE SILTY CLAY LOAM (PrD3)	D	8	0.43
ROUTON SILT LOAM, 0-2% SLOPES (RtA)	C/D	8	0.49
PROVIDENCE SILTY CLAY LOAM (PrC3)	D	5	0.43
UDORTHENTS, LOAMY (Ua)	A	4	0.28
CHENNEBY, ENVILLE, ARKABUTLA (CVA)	B/D	3	0.49
FELICIANA SILT LOAM, 2-5% SLOPES (FeB2)	B	2	0.43
LEXINGTON SILTY CLAY LOAM, 5-8% SLOPES (LnC3)	B	2	0.37
SMITHDALE LOAM, 12-25% SLOPES (SeE2)	B	2	0.43
SMITHDALE-LEXINGTON COMPLEX, 8-12% SLOPES (SgD3)	B	2	0.43
ROUTON SILT LOAM, 0-2% SLOPES (RuA)	C/D	2	0.49
CALLOWAY SILT LOAM, 2-5% SLOPES (CaB2)	D	1	0.49
FELICIANA SILT LOAM, 0-2% SLOPES (FeA)	B	1	0.43

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	8	10	0.83	
PERVIOUS	71	90	0.30	
WEIGHTED CURVE NUMBER OR C-FACTOR =			0.35	

RUNOFF COEFFICIENTS FOR POST-CONSTRUCTION CONDITIONS

AREA TYPE	AREA(AC)	PERCENTAGE OF TOTAL AREA (%)	RUNOFF CN	C FACTOR
IMPERVIOUS	38	48	0.83	
PERVIOUS	41	52	0.30	
WEIGHTED CURVE NUMBER OR C-FACTOR =			0.55	

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. INSTALL STABILIZED CONSTRUCTION EXITS.

3.2. INSTALL PERIMETER PROTECTION WHERE RUNOFF SHEET FLOWS FROM THE SITE.

3.3. 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.

3.4. PERFORM CLEARING AND GRUBBING (NOT MORE THAN TWO WEEKS PRIOR TO GRADING OR EARTH-MOVING. REFER TO THE STABILIZATION PRACTICES BELOW.).

3.5. REMOVE AND STORE TOPSOIL.

3.6. 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).

3.7. INSTALL UTILITIES, STORM SEWERS, CULVERTS, BRIDGE STRUCTURES, AND NATURAL STREAM DESIGN.

3.8. INSTALL INLET AND CULVERT PROTECTION ONCE STRUCTURES ARE IN PLACE AND CAPABLE OF INTERCEPTING FLOW.

3.9. PERFORM FINAL GRADING AND INSTALL BASE STONE.

3.10. COMPLETE FINAL PAVING AND SEALING OF CONCRETE.

3.11. INSTALL TRAFFIC CONTROL AND PROTECTION DEVICES.

3.12. COMPLETE PERMANENT STABILIZATION (TOPSOIL, SEEDING, MULCH, EROSION CONTROL BLANKET, SOD, ETC.)

3.13. REMOVE TEMPORARY EROSION CONTROLS AND ACCUMULATED SEDIMENT FROM AREAS THAT HAVE ESTABLISHED AT LEAST 70 PERCENT UNIFORM PERMANENT VEGETATIVE COVER.

3.14. 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-01	UNNAMED	NO	NO	YES	YES
STR-02	MORMON BR	NO	NO	YES	YES
STR-03	UNNAMED	NO	NO	YES	YES
STR-04	UNNAMED	NO	NO	YES	YES

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

STORMWATER POLLUTION PREVENTION PLAN

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

TYPE	YEAR	PROJECT NO.	SHEET NO.
PIH	2025	NH-54(48)	
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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-05	UNNAMED	NO	NO	YES	YES
STR-06	UNNAMED	NO	NO	YES	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.

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)
WWC-01	YES	YES
WWC-02	YES	YES
WWC-03	YES	YES
WWC-04	YES	YES
WWC-05	YES	YES
WWC-06	YES	YES
WWC-07	YES	YES
WWC-08	YES	YES
WWC-09	YES	YES
WWC-10	YES	YES
WWC-11	YES	YES
WWC-12	YES	YES
WWC-62	YES	YES
WWC-63	YES	YES
WWC-64	YES	YES

4.1.5. ARE THERE ANY WATER QUALITY RIPARIAN BUFFER ZONES REQUIRED FOR WATERS OF THE STATE? (5.5.1.I, 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, S-9 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-01	108+00 LT	108+60 LT	0.000	0.000
WTL-02	108+80 LT	109+00 LT	0.000	0.000
WTL-03	110+80 LT	112+00 LT	0.000	0.000
WTL-04	122+70 LT	123+00 LT	0.000	0.000
WTL-05	133+20 CL	135+90 RT	0.133	1.151
WTL-06	139+40 RT	141+90 RT	0.000	0.000
WTL-07A	138+50 LT	144+20 RT	0.272	0.052
WTL-07B	139+00 LT	145+90 LT	0.111	1.291
WTL-08	170+30 RT	171+10 RT	0.026	0.019
WTL-09	171+30 CL	171+40 CL	0.088	0.112
WTL-10	191+30 RT	193+10 LT	0.019	0.278
WTL-11	204+30 LT	206+00 LT	0.000	0.084
WTL-12	223+80 RT	229+10 LT	0.124	0.486
WTL-44	100+80 LT	101+50 LT	0.009	0.000

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

STORMWATER POLLUTION PREVENTION PLAN

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) 1B.

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 2-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.

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 S-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 34 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 34 (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.

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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 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

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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): NA

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.

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

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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 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 OF 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;

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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 THAT:

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 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

February 11, 2026
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	NRS24.193	03/25/30
CORPS OF ENGINEERS (USACE)	YES	LRN-2023-00057	03/25/30
TVA 26A	NO	NA	NA
TDEC CGP			
OTHER:			

*THE TDOT ENVIRONMENTAL DIVISION MUST BE NOTIFIED SIX MONTHS PRIOR TO PERMIT EXPIRATION DATE.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

STORMWATER POLLUTION PREVENTION PLAN

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

TYPE	YEAR	PROJECT NO.	SHEET NO.
PIH	2025	NH-54(48)	
PS&E	2026	NH-54(48)	S-8

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
OUT-1		98+10 RT	5/--/--	0.4					STR-01	
OUT-2		109+90 LT	6/--/--	0.8					STR-02	
OUT-3		139+30 RT	1/1/1	0.6	0.6	0.6			WTL-06	
OUT-4		232+90 LT	2/2/2	16.3 (14.4 PASS THROUGH)	17.3 (15.1 PASS THROUGH)	17.3 (15.1 PASS THROUGH)			NA	
	OUT-4A	231+30 RT	--/2/2		2.2 (1.4 PASS THROUGH)	2.2 (1.4 PASS THROUGH)			NA	
	OUT-4B	231+70 RT	--/1/1		1.3 (0.8 PASS THROUGH)	1.3 (0.8 PASS THROUGH)			NA	
	OUT-4C	232+10 CL	--/2/2		0.1	0.1			NA	
OUT-5		247+40 LT	2/2/2	0.4	0.4	0.4			NA	
OUT-6		247+40 RT	2/2/2	0.5	0.5	0.5			NA	
OUT-7		106+30 RT	--/4/4		2.2	2.2			STR-01	
OUT-8		107+00 RT	--/3/3		0.1	0.1			STR-01	
OUT-9		106+30 LT	--/3/3		1.0	1.0			STR-01	
OUT-10		107+00 LT	--/6/6		0.3	0.3			STR-01	
OUT-11		133+00 LT	--/3/3		1.3	1.3			WTL-05	
OUT-12		135+00 LT	--/1/1		0.5	0.5			WTL-05	
OUT-13		145+00 LT	--/1/1		8.4	8.4			WTL-07B	
OUT-14		190+00 LT	--/2/2		6.4	6.4			WWC-10	
OUT-15		190+20 LT	--/4/4		0.1	0.1			WWC-10	
OUT-16		190+00 RT	--/3/3		5.5	5.5			WWC-10	
OUT-17		190+20 RT	--/2/2		0.1	0.1			WWC-10	
OUT-18		196+50 LT	--/4/4		1.0	1.0			STR-03	
OUT-19		200+10 RT	--/2/2		4.2	4.2			STR-04	
OUT-20		200+50 RT	--/5/5		0.3	0.3			STR-04	
OUT-21		227+30 RT	--/2/2		9.7	9.7			STR-06	
OUT-22										
OUT-23		227+10 LT	--/2/2		9.0	9.0			STR-06	
OUT-24		227+80 RT	--/2/2		0.3	0.3			STR-06	
OUT-25										
OUT-26		243+50 LT	--/1/1		6.6	6.6			NA	
	OUT-26A	243+50 CL	--/1/1		1.0	1.0			NA	
	OUT-26B	245+00 CL	--/1/1		0.6	0.6			NA	
	OUT-26C	243+20 RT	--/1/1		4.4	4.4			NA	
	OUT-26D	243+80 RT	--/1/1		0.5	0.5			NA	
OUT-27		145+70 RT	--/1/1		0.8	0.8			WTL-07A	
OUT-28		147+80 RT	--/1/1		18.4 (13.3 DIVERTED)	18.4 (13.3 DIVERTED)			WTL-07A	
OUT-29		116+60 LT	--/2/2		3.1	3.1			STR-02	
OUT-30		117+60 LT	--/3/3		9.6	9.6			STR-02	
OUT-31		116+60 RT	--/2/2		4.1	4.1			STR-02	
OUT-32		117+10 RT	--/4/4		1.6	1.6			STR-02	
OUT-33		171+00 LT	1/1/1	0.8	0.8	0.8			NA	

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

STORMWATER POLLUTION PREVENTION PLAN

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

TYPE	YEAR	PROJECT NO.	SHEET NO.
PIH	2025	NH-54(48)	
PS&E	2026	NH-54(48)	S-9

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
OUT-34		171+20 LT	1/1/1	0.6	0.6	0.6			WTL-09	
OUT-35		171+00 RT	1/1/1	1.1	1.1	1.1			WTL-08	
OUT-36		171+20 RT	1/1/1	0.5	0.5	0.5			WTL-09	
OUT-37		232+90 LT	--/2/2		0.4	0.4			NA	
	OUT-37A	232+90 CL	--/2/2		0.1	0.1			NA	
	OUT-37B	234+90 CL	--/2/2		0.1	0.1			NA	
	OUT-37C	236+90 CL	--/2/2		0.2	0.2			NA	
OUT-38		133+00 RT	-/4/4		3.6	3.6			WTL-05	
OUT-39		135+75 RT	-/11/11		1.5	1.5			WTL-05	

ALL UNUSED FIELDS WITHIN THE OUTFALL TABLE ARE TO BE SHADED, HATCHED, OR REMOVED TO INDICATE THEIR NON-USAGE.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

STORMWATER POLLUTION PREVENTION PLAN

TYPE	YEAR	PROJECT NO.	SHEET NO.
PS&E	2026	NH-54(48)	U1-1
		–	

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF ENGINEERING

HENRY COUNTY

SR- 54 (US 641)

FROM: L.M. 22.07 (NEAR HOWARD ROAD)
TO: L.M. 24.94 (KENTUCKY STATE LINE (IA))

STATE HIGHWAY NO. 54 F.A.H.S. NO. 641

Index Of Sheets

SHEET NAME	SHEET NO.
UTILITIES INDEX, UTILITIES OWNERS, AND UTILITIES SHEETS;	U1-1
ParisBPU - ELECTRIC	U2-1 - U2-5
PHCPUD - GAS	U3-1 - U3-4

PIN: 101886.05

CONTRACT TYPE	UTILITY	UTILITY OWNERS & CONTACTS:	CONTRACT TYPE	UTILITY	UTILITY OWNERS & CONTACTS:
MOVE IN STATE	ELECTRIC	PARIS BOARD OF PUBLIC UTILITIES JOSH MCCASLIN 117 E WASHINGTON STREET PARIS, TN 38242 731-642-1322 / Cell 731-499-2361 jmccaslin@parisbpu.org			
MOVE IN STATE	GAS	PARIS HENRY CO. PUBLIC UTILITY DISTRICT JEFF HILL 215 WEST WOOD STREET PARIS, TN. 38242 731-642-5635 / CELL 731-363-6314 jeff@parisnaturalgas.com			
NO COST	FIBER OPTIC	WEST KENTUCKY & TEN. TELCOM. COOP. DARREN DUKE 100 WK&T TECHNOLOGY DR. MAYFIELD, KY 42066 270-856-1877 / Cell 270-970-2307 dduke@mywkt.coop			
NO COST	FIBER OPTIC	CHARTER COMMUNICATIONS KEITH CHESSER 24 CIRCLE DRIVE MCKENZIE, TN. 38201 731-352-1146 / Cell 731-621-9552 keith.chesser@charter.com			
NO COST	WATER	SOUTH 641 WATER DISTRICT HANK STANFIELD 207 MAIN STREET HAZEL, KY 42049 270-492-8857 / Cell 270-293-0117 so641@mk.net			

SEALED BY

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

UTILITY INDEX
AND
UTILITY OWNERS

SPECIAL NOTES

SOME UTILITIES CAN BE LOCATED BY CALLING THE TENNESSEE ONE SYSTEM, INC. AT 1-800-351-1111.

18-NOV-2025 12:01
C:\Users\JJ05763\Desktop\Final Project\Henry\101886.05\101886.05-Henry-SR-54.dgn

TYPE	YEAR	PROJECT NO.	SHEET NO.
PS&E	2026	NH-54(48)	U2-1

STATE PROJECT NO.: 40S054-F2-002
ROUTE: FROM NEAR HOWARD ROAD TO THE KENTUCKY STATE LINE (IA)
HENRY COUNTY

ESTIMATED QUANTITIES (ELECTRIC):

ESTIMATED ELECTRICAL UTILITY QUANTITIES

ITEM NO.	DESCRIPTION	UNIT	Project No. 1: NH-54 (48) QUANTITY	FOOT NOTES	BUY AMERICAN
790-02.04	POLE 35FT CLASS 5 WOOD (35-5W)	EA	1	1	
790-03.03	POLE 40FT CLASS 4 WOOD (40-4W)	EA	5	1	
790-21.04	SINGLE PHASE SINGLE SUPPORT 15KV (A1.1)	EA	1	1	
790-21.05	1Ø DBL PRIMARY SUPPORT 15KV (A2.3)	EA	2	2	
790-21.07	1Ø PRIMARY LG ANGLE 15KV (A4.2)	EA	2	2	N/A
790-21.09	1Ø PRIMARY TAP 15KV (A5.3)	EA	1	2	N/A
790-31.02	SERVICE ASSEMBLY-POLE TYPE (K11C)	EA	2		
790-32.02	DOWN GUY - THROUGH BOLT TYPE HEAVY DUTY (E1.1L)	EA	4		BA
790-32.07	OH GUY - THROUGH BOLT TYPE (E1.4L (E2-3))	EA	1		
790-32.23	GUY MARKER (E3-10)	EA	3		N/A
790-33.04	SCREW TYPE ANCHOR 10,000LB - 12,000LB (F2.10, F2.12)	EA	3		BA
790-36.05	TRANSFER SECONDARY (2 TPX)	EA	2		
790-36.14	TRANSFER CONDUCTOR (#4ACSR, #4ACSRN)	EA	6		N/A
790-40.02	OH COND 2 7/1 ACSR SPARATE (#2 ACSR)	LF	2016		N/A
790-46.01	1Ø TRANSFORMER (G1.2, G1.3)	EA	2	15	
790-52.04	15KVA 1Ø OH XFORMER 7.2KV 120/240	EA	1		
790-68.01	POLE GROUND ROD TYPE (H1.1)	EA	5		N/A
790-69.27	EXTENSION LINK - EPOXY - 4FT (E1.5)	EA	5		BA
790-98.01	REMOVE WIRE	LF	4829	12	N/A
790-98.02	REMOVE POLES	EA	7	13	N/A
790-98.03	REMOVE FRAMING / ASSOCIATED APPARATUS (RFAA)	EA	27	14	N/A

PLANS ARE NOT COMPLETE
WITHOUT SPECIFICATIONS AND
FRAMING PLATES

FOOTNOTES:

(1) INCLUDES ALL MATERIALS, LABOR, EQUIPMENT FOR COMPLETE INSTALLATION INCLUDING BUT NOT LIMITED TO SETUP, POLE.

(2) ASSEMBLIES OF SIMILAR CONSTRUCTION BUT DIFFERING ONLY IN USE OF EPOXY VS. PORCELAIN INSULATORS OR FIBERGLASS VS. WOOD CROSSARMS OR LACK OF NEUTRAL ASSEMBLY SHOULD BE GROUPED WITHIN THE SAME ITEM.

(3) INCLUDES ALL MATERIALS, LABOR AND EQUIPMENT FOR COMPLETE INSTALLATION INCLUDING SETUP, TRAFFIC CONTROL, BEDDING, BACKFILL, AND SURFACE RESTORATION.

(4) INCLUDES ALL MATERIALS, LABOR AND EQUIPMENT INCLUDING BUT NOT LIMITED TO SETUP, TRAFFIC CONTROL, RODDING DUCT AND PULLING IN INNERDUCT.

(5) INCLUDES ALL MATERIALS AND EQUIPMENT INCLUDING BUT NOT LIMITED TO MOUNTING HARDWARE, BONDING/GROUNDING, STRAND SIZE AS INDICATED IN SPECS, AND LOOPS.

(6) INCLUDES ALL LABOR INCLUDING TRAFFIC CONTROL AND SETUP, REMOVAL OF LID AND COLLARS, BACKFILL WITH GRAVEL.

(7) INCLUDES ALL MATERIALS, LABOR AND EQUIPMENT INCLUDING BUT NOT LIMITED TO TRAFFIC CONTROL, BONDING/GROUNDING, AND TENSIONING.

(8) INCLUDES SHIELDED CABLE, FULL NEUTRAL CABLE, 1/3 NEUTRAL CABLE, 100% AND 133% INSULATION LEVELS.

(9) USE WITH ALL CLUSTER MOUNTED AND POLE MOUNTED THREE PHASE INSTALLATIONS, ALL CONNECTIONS, ALL SECONDARY VOLTAGES, FUSES AND ARRESTERS INCLUDED, 15KV AND 25KV. INCLUDES ALL MISCELLANEOUS MATERIALS EXCEPT TRANSFORMERS.

(10) VERTICAL OR HORIZONTAL MOUNT, INCLUDES OPERATOR MECHANISM

(11) INCLUDES MISCELLANEOUS MATERIALS EXCEPT SECTIONALIZER AND RECLOSER–SECTIONALIZER OR RECLOSER CALLED OUT SEPARATELY

(12) INCLUDES DROP WIRE, OH GUYS, MAIN LINE WIRE.

(13) INCLUDES MAINLINE POLES, SERVICE POLES, STUB POLES

(14) INCLUDES CROSSARMS, TRANSFORMERS, SWITCHES, ANCHORS, ETC.

(15) USE WITH COMPLETELY SELF PROTECTED, CONVENTIONAL TRANSFORMERS WITH TANK MOUNTED FUSE AND ARRESTER AND TRANSFORMERS WITH DOUBLE GAP ARRESTER AND INTERNAL FUSE, 15KV AND 25KV. INCLUDES MISCELLANEOUS MATERIALS EXCEPT TRANSFORMER.

BUY AMERICAN DESIGNATION:

N/A
NOT APPLICABLE TO BUY AMERICA. LESS THAN 90% STEEL OR IRON CONTENT WHEN DELIVERED TO THE JOB SITE FOR INSTALLATION.

MISC
MISCELLANEOUS COMPONENTS AND HARDWARE SUCH AS CABINETS, COVERS, SHELVES, CLAMPS, FITTINGS, SLEEVES, WASHERS, BOLTS, NUTS, SCREWS, TIE WIRE, SPACERS, CHAIRS, ETC.

BA
BUY AMERICA. CERTIFICATION IS REQUIRED FOR ALL STRUCTURAL STEEL OR IRON COMPONENETS FOR ITEM. MISCELLANEOUS COMPONENTS,
SUBCOMPONENTS AND HARDWARE NECESSARY TO ENCASE, ASSEMBLE AND CONSTRUCT DO NOT REQUIRE CERTIFICATION.

BAR
BUY AMERICA. CERTIFICATION REQUIRED FOR ALL STEEL OR IRON COMPONENENTS OF PRECASE CONCRETE PRODUCTS CONTAINS REINFORCING STEEL, WIRE MESH, AND PRE–STRESSING OR POST–TENSIONING STRANDS AND CABLES.
LE, BLASTING, BUTT WRAP, OR SINGLE GROUND ROD, MGNV, NUMBERING

OWNER	ENGINEER
PARIS BOARD OF PUBLIC UTILITIES	ALLEN & HOSHALL
CONTACT: JOSH McCASLIN	ENGINEER: PRIMARY CONTACT: BOBBY DAVIDSON SECONDARY CONTACT: BRET FISHER, P.E.
ADDRESS: PO BOX 460 PARIS, TN 38242	ADDRESS: 1661 INTERNATIONAL DRIVE SUITE 100 MEMPHIS, TN 38120
PHONE: 731–642–1322	PHONE: 901–820–0820

SEALED BY

BRET M. FISHER REGISTERED ENGINEER STATE OF TENNESSEE AGRICULTURE POWER NO. 0002198 03/15/25

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

ELECTRIC UTILITIES

ESTIMATED QUANTITIES

.

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TYPE	YEAR	PROJECT NO.	SHEET NO.
PS&E	2026	NH-54(48)	U2-2

STATE PROJECT NO.: 40S054-F2-002
ROUTE: FROM NEAR HOWARD ROAD TO THE KENTUCKY STATE LINE (IA)
HENRY COUNTY

GENERAL NOTES TO CONTRACTOR

STANDARD UTILITY NOTES:

(1) EXCEPT FOR EROSION AND SEDIMENT CONTROL ITEMS, NO ROADWAY OR BRIDGE ITEMS SHALL BE UTILIZED TO COMPENSATE FOR WORK METHODS OR MATERIALS ASSOCIATED WITH AND/OR SPECIFIED FOR THE UTILITY INSTALLATION, EVEN THOUGH THE SAME OR SIMILAR ROADWAY OR BRIDGE MATERIALS MAY HAVE BEEN CALLED FOR IN THE UTILITY SPECIFICATIONS OR DRAWINGS.

(2) ALL MATERIALS, METHODS, AND/OR INTEGRAL MATERIALS OUTLINED IN THE UTILITY SPECIFICATIONS OR DRAWINGS NECESSARY TO PROVIDE A COMPLETE AND FUNCTIONAL INSTALLATION MUST BE INCLUDED IN THE UNIT PRICE FOR THE ASSOCIATED UTILITY WORK ITEM.

(3) THE CONTRACTOR MUST MAINTAIN ALL SERVICES DURING THE CONSTRUCTION OF THE RELOCATED FACILITY. ANY COSTS ASSOCIATED WITH INSTALLATION OF REQUIRED TEMPORARY SERVICE LINES DUE TO THE ROADWAY CONSTRUCTION SEQUENCE OF WORK (I.E., CUTS, FILLS, PHASING, ETC.) SHALL BE INCLUDED IN THE COST OF THE PERMANENT UTILITY ITEMS. (NOTE TO UTILITY: A SPECIFIC TEMPORIZATION ITEM CAN BE INCLUDED IN THE PLANS IF IT IS A MAJOR ITEM OF WORK.)

(4) IT SHALL BE THE RESPONSIBILITY OF THE PRIME CONTRACTOR'S SURVEYOR TO LAY OUT ALL THE FACILITIES BEING RELOCATED WITHIN THE CONTRACT.

(5) FOR BURIED UTILITIES, THE PRIME CONTRACTOR OR HIS SUBCONTRACTOR SHALL BE REQUIRED TO PROVIDE TO THE UTILITY UPON COMPLETION OF THE UTILITY'S RELOCATION WORK A SET OF AS-BUILT DRAWINGS FOR THEIR RECORDS. THESE AS-BUILT DRAWINGS SHOULD BE PREPARED AS THE JOB PROGRESSES TO ENSURE THEIR ACCURACY.

(6) WHERE EROSION CONTROL MEASURES ARE NEEDED FOR THE UTILITY RELOCATION WORK OCCURRING INSIDE OR OUTSIDE THE STATE RIGHT-OF-WAY, THE CONTRACTOR SHALL SUBMIT TO THE TDOT PROJECT SUPERVISOR FOR APPROVAL A PROPOSED EROSION AND SEDIMENT CONTROL PLAN PRIOR TO BEGINNING THE WORK. TDOT APPROVAL MUST BE RECEIVED BEFORE THE EROSION CONTROL PAY ITEM FOR ROADWAY CONSTRUCTION CAN BE USED FOR ANY ADDITIONAL EROSION CONTROL MEASURES REQUIRED FOR THE UTILITY RELOCATION WORK.

(7) DRIVEWAY, SIDEWALK, AND ROADWAY TEMPORARY RESTORATION SHALL BE PART OF THE IN-PLACE COST OF PLACING THE UTILITY ITEM WITHIN THE ROW.

UTILITY NOTES (ELECTRICAL):

(1) CONTRACTOR IS RESPONSIBLE FOR CLEARING THE RIGHT-OF-WAY WITHIN THE BOUNDARY'S SHOWN ON THE PLANS. (UTILITY ROW & STATE ROW)

(2) ANY WORK OUTSIDE OF UTILITY ROW IS THE CONTRACTORS RESPONSIBILITY TO PROVIDE EASEMENT AND RELEASE FROM PROPERTY OWNER.

(3) THERE WILL BE A MINIMUM OF 5' SPACING BETWEEN ANCHORS.

(4) THE ROW AREA THAT IS SHOWN ON ALL SHEETS WILL NEED TO BE CUT.

(5) THE CUT ROW WILL BE 15' ON EACH SIDE OF THE DISTRIBUTION LINE.

(6) CUT ROW 5' CLEAR AROUND OVERHEAD STUB GUY, POLE AND ANCHORS.

INDEX OF SHEETS

SHEET NO	DESCRIPTION
U2-1	ELECTRIC UTILITIES – ESTIMATED QUANITITES
U2-2	ELECTRIC UTILITIES – GENERAL NOTES & INDEX OF SHEETS
U2-3	ELECTRIC UTILITIES – STA. 95+50.00 TO STA. 110+00
U2-4	ELECTRIC UTILITIES – STA. 162+00 TO STA. 175+00
U2-5	ELECTRIC UTILITIES – CROSSLAND RD. EXT.

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

ELECTRIC UTILITIES

GENERAL NOTES & INDEX OF SHEETS

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TYPE	YEAR	PROJECT NO.	SHEET NO.
PS&E	2026	NH-54(48)	U2-3

E05
1) N A5.3 (A5-3)
2) N E1.1L (E1-3)
2) N E1.5
1) N E3-10
1) N F2.12 (F1-4S)
1) N G1.3 (G106-)
1) E 40-4W
1) E E1.1 (E1-2)
1) E E1.5
1) E E3-10
1) E F2.10 (F1-3S)
1) E T15-CSP
1) E H1.1 (M2-11)
1) E J2.1 (J10)
1) R A1.1 (A1)
1) R G1.2 (G105-_ G136-)
GUY TENSION=
10,600#'S @ 25' G.L.
GRADE B

R06
1) R 40-4W
1) R A1.1 (A1)

178) R 4 ACSR

R07
1) R 40-4W
1) R A2.3 (A2)
1) R G1.2 (G105-_ G136-)
1) R T15-CSP
1) R H1.1 (M2-11)
1) R K1.2 (K11C)
1) R M26-5S

724) R 4 ACSR
69) R 2 TPX

R08
1) R 35-5W
1) R A1.1 (A1)

467) R 4 ACSR
664) R 4 ACSR

R07S
1) R 25-5W
1) R E1.1 (E1-2)
2) R E3-10
2) R F2.10 (F1-3S)

N

3
CHARLES M. ALLEN AND WIFE,
MARY E. ALLEN

100
40S054-F2-002
BEGIN PROJ. NO. NH-54(48) R.O.W.
STA. 97+65.59 S.R. 54
N 782648.4566
E 1282781.8515

MATCH LINE
STA. 97+00

CULTIVATED
WOODS
19
KWT RAILWAY, INC.
KWT RAILROAD
105
TOP OF BANK
STR-02 (MORMAN BRANCH-PERENNIAL)
1
OUTBACK ENTERPRISES, LLC
PROP. R.O.W.
FUTURE SR-54 CENTERLINE
SR-54 CENTERLINE
PRES. & PROP. R.O.W.
LIMIT OF CONST. 98+00.00
SCARIFY, ADD TOPSOIL & SEED
FILL
CUT
WELCOME TO PURYEAR
PURYEAR CITY LIMIT
SR-54/US-641 (ASP.)
R06
R07
R07S
R08
E05
PRES. R.O.W.
T (UG)
NO EASEMENT PER UTILITY
CULTIVATED
GRAVEL
SHED
1-S-F
WELL
SEPTIC TANK
LAWN
B55a
PROP. R.O.W.
TEMP. CONST. ESMT.
FIELD DRAIN
PURYEAR CITY LIMITS
S10137
E-9-69
EIP
2
KEVIN KENNEDY
FIELD DRAIN
40S054-F2-002
BEGIN PROJ. NO. NH-54(48) CONST.
STA. 98+00.00
N 782682.8032
E 1282783.9372
4
MICHAEL TYMON AND WIFE
KRISTY O. TYMON
TOP OF BANK
STR-01 (INTERMITTENT)
WOODS
FILL CUT
LIMIT OF CONST. 6+71.73
EXIST. & PROP. R.O.W.
end of wire 40CSR1A
WTL-01
WTL-02
WTL-03
2
KEVIN KENNEDY
RCBE
29.6' OFF
N 31° 22' 32" E
5
JERRY KEVIN KENNEDY
STA. 110+00.00
PROP. R.O.W.
STA. 105+35.00 S.R. 54 =
STA. 10+00.00 S.R. 54 TIE
N 783382.4897
E 1282982.2132
(SEE SHEET 16 FOR PROFILE)
6
JOHNNY BRANNON; TRUSTEE OF THE JOHNNY BRANNON REVOCABLE TRUST (1/2 INTEREST);
LARRY HAMPTON BRANNON (1/2 INTEREST)

SEALED BY
BRET M. FISHER
REGISTERED ENGINEER
AGRICULTURE
ENGINEER
NO. 0002198
STATE OF TENNESSEE
09/19/25

PARIS BOARD OF PUBLIC UTILITIES

ELECTRIC UTILITIES

STA.95+50.00 TO STA.110+00
SCALE: 1"=50'

11/5/2025 10:17:09 AM
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TYPE	YEAR	PROJECT NO.	SHEET NO.
PS&E	2026	NH-54(48)	U2-4

N011
STA: 16+21.21
OFF: 17.32'
1) N 40-4W
1) N A4.2
1) N E1.4L (E2-3)
1) N E1.5
1) N G1.2 (G105-_ G136-)
1) N T15-CSP
1) N H1.1 (M2-11)
1) N K1.2 (K11C)
2) XFR 4 ACSR
1) XFR 2 TPX

504) N 2 ACSR - SPARATE
36) R 4 ACSR

N011S
STA: 16+22.05
OFF: -23.62'
1) N 35-5W
1) N E1.1L (E1-3)
1) N E1.5
1) N E3-10
1) N F2.10 (F1-3S)
1) N K1.2 (K11C)
1) XFR 2 TPX
GUY TENSION=
2,800#'S @ 20° G.L.
GRADE B

R011
1) R 35-5W
1) R A2.3 (A2)
1) R E1.1 (E1-2)
1) R F2.8 (F1-2S)
1) R G1.2 (G105-_ G136-)
1) R T15-CSP
1) R H1.1 (M2-11)
1) R K1.2 (K11C)

907) R 4 ACSR

N011A
STA: 18+72.92
OFF: 26.92'
1) N 40-4W
1) N A2.3 (A2)
1) N H1.1 (M2-11)

504) N 2 ACSR - SPARATE

STA. 171+22.00 S.R. 54 =
STA. 20+00.00 CROSSLAND RD.
N 789482.8826
E 1282469.7490

N012
STA: 21+24.63
OFF: 36.56'
1) N 40-4W
1) N A2.3 (A2)
1) N H1.1 (M2-11)

504) R 2 ACSR - SPARATE

R012
1) R 35-5W
1) R A1.1 (A1)

998) R 4 ACSR

N012A
STA: 23+76.34
OFF: 46.24'
1) N 40-4W
1) N A1.1 (A1)
1) N H1.1 (M2-11)

504) N 2 ACSR - SPARATE

TRANSFER 2TPX THRU
N011S TO XFMR AT N011

TEMP. CONST. ESMT.

TEMP. CONST. ESMT.

LEGEND	
EASEMENT TO BE ACQUIRED	
EASEMENT TOTAL THIS SHEET	13,152.67 SF

SEALED BY

BRET M. FISHER
REGISTERED ENGINEER
AGRICULTURE
No. 0002198
STATE OF TENNESSEE
09/15/25

PARIS BOARD OF PUBLIC UTILITIES

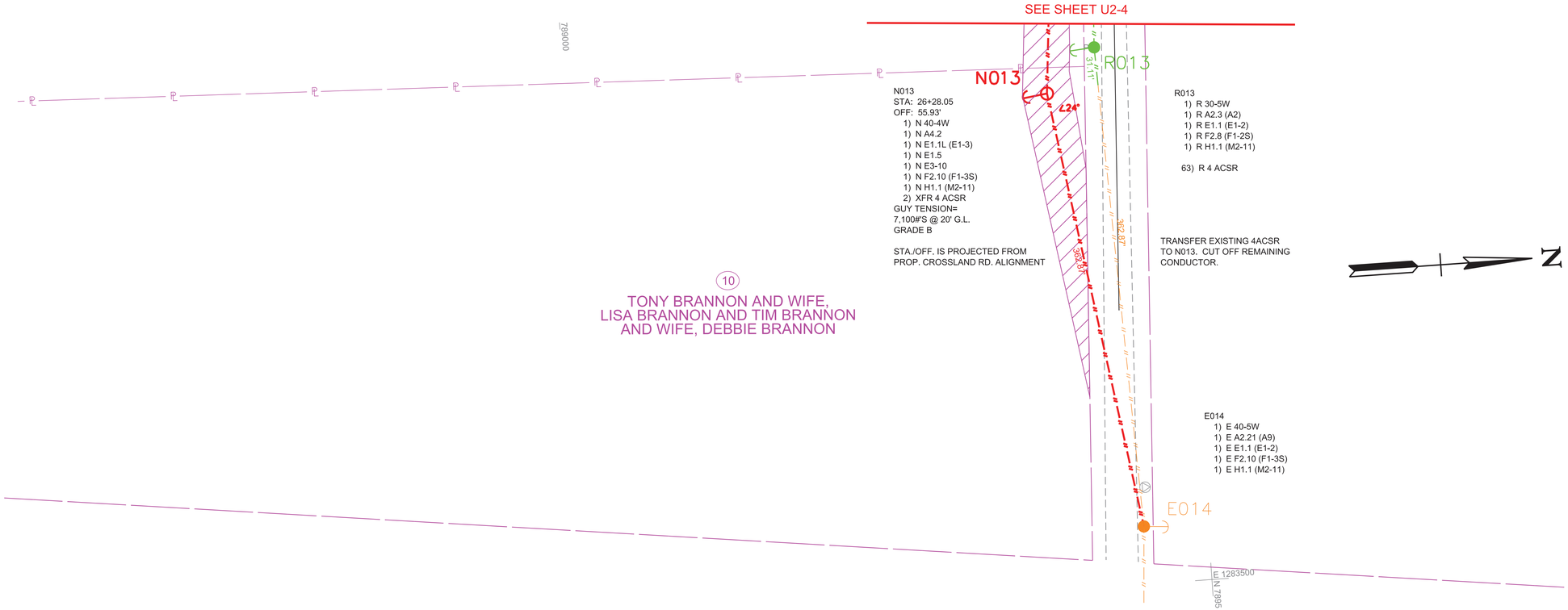
ELECTRIC UTILITIES

STA.162+00 TO STA.175+00
SCALE: 1"=50'

STA. 162+00.00 SEE SHEET NO. 8
STA. 175+00.00 SEE SHEET NO. 10
SEE SHEET NO. U2-5

11/5/2025 10:17:33 AM
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TYPE	YEAR	PROJECT NO.	SHEET NO.
PS&E	2026	NH-54(48)	U2-5



LEGEND

EASEMENT TO BE ACQUIRED

EASEMENT TOTAL THIS SHEET 8,249.83 SF

SEALED BY

BRET M. FISHER
REGISTERED ENGINEER
AGRICULTURE
COMMERCE
NO. 0092195
STATE OF TENNESSEE
09/19/2025

PARIS BOARD OF PUBLIC UTILITIES

ELECTRIC UTILITIES

CROSSLAND RD. EXT.
SCALE: 1"=50'

11/5/2025 10:18:00 AM
N:\Paris BPU\82071 - SR-54\Civil\Sheets\U2-5 CROSSLAND EXT.sht

TYPE	YEAR	PROJECT NO.	SHEET NO.
PS&E	2026	NH-54(48)	U3-1

PARIS-HENRY COUNTY PUBLIC UTILITY DISTRICT

GAS MAIN RELOCATION

TDOT SR 54
PIN 101886.05

ESTIMATED UTILITY QUANTITIES

ITEM NO.	DESCRIPTION	UNIT	QUANTITY	FOOTNOTE	% UTILITY	% PROJECT
791-01.02	2IN STEEL GAS MAIN	L.F.	800			
791-02.02	2IN MDPE GAS MAIN	L.F.	400			
791-04.02	HDD 2IN PE PIPE - UNCONSOLIDATED	L.F.	50			
791-04.20	HDD 2IN STEEL PIPE - UNCONSOLIDATED	L.F.	80			
791-06.02	CONNECT TO 2IN EX. PE MAIN	EACH	2			
791-06.31	CONNECT TO 2IN EX. STL MAIN W/ STOPPLE	EACH	2			

PARIS-HENRY COUNTY
PUBLIC UTILITY DISTRICT
NATURAL GAS

IN CONJUCTION WITH
TDOT PROJECT:

HENRY COUNTY
S.R. 54, FROM NEAR HOWARD ROAD
TO KENTUCKY STATE LINE (IA)

PIN 101886.05

UTILITIES INDEX

SHEET NAME	SHEET NUMBER
ESTIMATED QUANTITIES	U3-1
FROM STATION 136+00 TO STATION 149+00	U3-2
FROM STATION 240+00 TO END	U3-3
DETAILS	U3-4

NATURAL GAS UTILITIES

NEW PIPELINE

EXISTING TO REMAIN

RETIRED PIPELINE

FOOTNOTE 1:
INCLUDES ALL MATERIALS INCLUDING SAND/STONE BEDDING, FLOWABLE FILL, TEMPORARY PAVEMENT IN OR OUT OF ROW, LABOR, EQUIPMENT FOR COMPLETE INSTALLATION OF PIPE INCLUDING BUT NOT LIMITED TO TRAFFIC CONTROL, EXCAVATION INCLUDING DIRT/ROCK, BACKFILLING, CREEK CROSSINGS PER SWPPP,COUPLINGS, FITTINGS, PIPE FUSION, APPURTENANCES, MAINTAINING THE TRENCH, PURGE POINT INSTALLATION, TESTING BY UTILITY SPECIFICATIONS TO INCLUDE BUT NOT LIMITED TO AIR, NITROGEN, HYDROSTATIC OR X-RAY, DEW POINT OR DRYING , AND ANY OTHER LABOR OR MATERIAL REQUIRED TO COMPLETE THE WORK AS SPECIFIED ON THE PLANS.

FOOTNOTE 2:
INCLUDES ALL MATERIALS, LABOR, EQUIPMENT, AND TRAFFIC CONTROL, INCLUDING BUT NOT LIMITED TO FLUID CONTAINMENT FOR COMPLETE HORIZONTAL DIRECTIONAL DRILLING INSTALLATION OF CASING PIPE OR UNCASED CARRIER PIPE IN BOTH UNCONSOLIDATED SOIL OR ROCK. STEEL PIPE INCLUDES SPECIAL COATING AS SPECIFIED ON PLANS AND SPECS. IF CASING PIPE HAS CARRIER PIPE, THE CARRIER PIPE SHALL BE PAID AT THE OPEN CUT ITEM PRICE.

FOOTNOTE 3:
INCLUDES ALL MATERIALS, LABOR, AND EQUIPMENT, NECESSARY FOR BORE & JACK OF GAS LINE CASING PIPE INCLUDING BUT NOT LIMITED TO ENTRY AND EXIT PITS, B&J EQUIPMENT AND TRAFFIC CONTROL. CARRIER PIPE SHALL BE PAID AT THE OPEN CUT ITEM PRICE.

FOOTNOTE 4:
INCLUDES ALL MATERIALS, LABOR, AND EQUIPMENT, NECESSARY FOR CONNECTING TO EXISTING GAS LINE INCLUDING TRAFFIC CONTROL.

FOOTNOTE 5:
INCLUDES TRANSITION FITTINGS, VALVES, VALVE BOX, BOX ADJUSTMENT, VALVE BOX COLLAR, VALVE MARKER, EXCAVATION, BEDDING, BACKFILL, COUPLINGS, FUSION TEES, TAP OF EXISTING LINE, AND ALL OTHER NECESSARY MATERIALS AND LABOR FOR COMPLETE INSTALLATION OF ASSEMBLY INCLUDING TRAFFIC CONTROL.

FOOTNOTE 6:
INCLUDES ALL MATERIALS, PARTS, LABOR, EQUIPMENT, MACHINERY, TOOLS, OR APPARATUS NECESSARY FOR INSTALLATION OF GAS SERVICE ASSEMBLIES AS DESCRIBED IN THE PLANS AND SPECS. INSTALLATION FOR LONG SIDE AND SHORT SIDE APPLICATIONS. SERVICE PIPE SHALL BE PAID PER LINEAR FOOT INSTALLED.

FOOTNOTE 7:
INCLUDES ALL MATERIALS, LABOR, AND EQUIPMENT FOR COMPLETE INSTALLATION OF INDIVIDUAL ITEM AS SPECIFIED ON BID FORM AND UTILITY SPECIFICATIONS

FOOTNOTE 8:
INCLUDES ALL MATERIALS, LABOR, AND EQUIPMENT FOR REMOVAL OF ITEM.

FOOTNOTE 9:
INCLUDES ALL MATERIALS, LABOR, AND EQUIPMENT FOR RETIREMENT OF ITEM INCLUDING STABLIZING THE ITEM OF PLANT PER UTILITY SPECIFICATIONS.

SPECIAL NOTE:

THE CONTRACTOR WILL WORK DIRECTLY WITH THE STATE BOTANIST AND/OR TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION'S DIVISION OF NATURAL AREAS TO TRANSPLANT DESIGNATED PHLOX BIFIDA SSP. STELLARIA (GLADE –CLEFT PHLOX) IN ACCORDANCE WITH INSTRUCTIONS PROVIDED BY THE DIVISION OF NATURAL AREAS TO A SUITABLE LOCATION AS DESIGNED BY THE DIVISION OF NATURAL AREAS.

RICHARD S. CLARK
REGISTERED ENGINEER
AGRICULTURE
COMMERCE
NO. 104957
10-24
STATE OF TENNESSEE

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

NAT. GAS UTILITY QUANTITIES

TYPE	YEAR	PROJECT NO.	SHEET NO.
PS&E	2026	NH-54(48)	U3-2

PARIS-HENRY COUNTY PUBLIC UTILITY DISTRICT

GAS MAIN RELOCATION

TDOT SR 54
PIN 101886.05

8
JAMES E. UNDERWOOD AND, CHARLIE J. UNDERWOOD

9
TIMOTHY DEE BRANNON AND, TONY LEE BRANNON

CULTIVATED
GRAVEL
50'
35
RAILROAD CROSSING
KWT R.R. R.O.W.
EXISTING 2" STEEL GAS LINE TO REMAIN
CONTRACTOR TO INSTALL ANSI 150 MUELLER HOT TAP AND STOPPER FITTING
CONTRACTOR TO HDD 2" STEEL, OLD SR 54, APPROX 40'
INV-596.58 18" PIPE
N 82° 41' 37" W
PRES. R.O.W.
PC 5+03.23
POT 5+00.00
11.9'+/-
11.9'+/-
N 7° 13' 33" E 306.80'
APPROX. LOCATION TOE OF SLOPE
AIR RIGHTS EASEMENT (OUTSIDE EDGE OF DECK)
PAVEMENT AT BRIDGE END
BEGIN BRIDGE STA. 136+86.90
BENT NO. 1 STA. 138+29.40
PERM. ESMT.
AIR RIGHTS EASEMENT (OUTSIDE EDGE OF DECK)
P/CATV
N 7° 13' 33" E 335.33'
INV-595.00
EXIST. TO REMAIN 48" RCP
INV-594.49
S 7° 17' 41" W
TEMP. CONST. ESMT.
N 7° 13' 33" E 260.99'
PC 10+04.14
POT 10+00.00
N 7° 13' 33" E 16.13'
WTL-06
FILL
FILL
CULTIVATED
PROP. R.O.W.
NO EASEMENT PER UTILITY
N 7° 17' 41" E 409.39'
PT 5+69.18
PROP. R.O.W.
C
N 7° 17' 41" E
TEMP. CONST. ESMT.
N 7° 13' 33" E 596.91'
N 82° 54' 06" E
WTL-07A
2" STEEL GAS LINE TO BE RETIRED
N 7° 13' 17" E 334.69'
POT 7+69.09
BENT NO. 2 STA. 140+12.90
POT 12+82.99
INV-593.35
INV-593.77 8" PIPE
INV-593.10
INV-593.81 12" PIPE
PERM. ESMT.
AIR RIGHTS EASEMENT (OUTSIDE EDGE OF DECK)
P/CATV
EXIST. TO REMAIN 48" RCP
INV-594.49
S 7° 17' 41" W
TEMP. CONST. ESMT.
N 7° 13' 33" E 260.99'
PC 10+04.14
POT 10+00.00
N 7° 13' 33" E 16.13'
WTL-06
SR-54/US-641 (ASP)
N 82° 35' 12" W
WOODS
KWT RAILROAD
45
100' RAILROAD R.O.W.
50'
50'
N 7° 19' 4" E 2405.45'
KWT R.R. R.O.W.
EXISTING 2" STEEL GAS LINE TO REMAIN
CONTRACTOR TO HDD 2" STEEL, OLD SR 54, APPROX 40'
UP-S5
P/CATV
N 7° 19' 4" E 2667.56'
12.2'+/-
12.2'+/-
N 7° 19' 0" E 2639.35'
KWT R.R. R.O.W.
PRES. R.O.W.
PRES. R.O.W.
P/CATV
PRES. R.O.W.

SEE SHEETS 7D-7F FOR RR ESMT. DETAILS

STA. 140+92.66 S.R. 54 =
STA. 40+00.00 KWT RAILROAD
DOT CROSSING NO. NONE
R.R. MILEPOST 51.26
N 786611.2836
E 1283170.4910

140
145

A
CUT
FILL
CULTIVATED
PROP. R.O.W.
CUT
BENT NO. 3 STA. 141+90.90
WTL-07B
PAVEMENT AT BRIDGE END
WOODS
END BRIDGE STA. 143+29.90
PERM. ESMT.
N 25° 14' 21" W
0000 FENCE 1283000
406' OF 36" RCP
WWC-08/EPH-08
APPROX. LOCATION TOE OF SLOPE
N 7° 19' 4" E 230.05'
P.I. 10+67.05
ELP
CUT
CONTRACTOR TO INSTALL ANSI 150 MUELLER HOT TAP AND STOPPER FITTING
C
PROP. R.O.W.
N 7° 17' 41" E
WOODS
CUT
10
TONY BRANNON AND WIFE, LISA BRANNON AND TIM BRANNON AND WIFE, DEBBIE BRANNON
19
KWT RAILWAY, INC.

STA. 136+00.00 SEE SHEET NO. 6

STA. 149+00.00 SEE SHEET NO. 8

6
JOHNNY BRANNON; TRUSTEE OF THE JOHNNY BRANNON REVOCABLE TRUST (1/2 INTEREST); LARRY HAMPTON BRANNON (1/2 INTEREST)

10
TONY BRANNON AND WIFE, LISA BRANNON AND TIM BRANNON AND WIFE, DEBBIE BRANNON

NATURAL GAS UTILITIES

NEW PIPELINE

EXISTING TO REMAIN

RETIRED PIPELINE

SEALED BY

NICHARD S. CLARK
REGISTERED ENGINEER
AGRICULTURE
COMMERCE
No. 109524
STATE OF TENNESSEE

COORDINATES ARE NAD 83(2011), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00002 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988 WITH GEOID 12B MODEL.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PRESENT LAYOUT

STA.136+00 TO STA.149+00
SCALE: 1"=50'

TYPE	YEAR	PROJECT NO.	SHEET NO.
PS&E	2026	NH-54(48)	U3-3

PARIS-HENRY COUNTY PUBLIC UTILITY DISTRICT

GAS MAIN RELOCATION

TDOT SR 54
PIN 101886.05

16
STORY FARMS

240

18
STEVEN DUANE MAYNARD AND WIFE, KIMBERLY ANNE MAYNARD

245

CULTIVATED

STA. 240+00.00 SEE SHEET NO. 14

PROP. R.O.W.

FILL

CUT

76' OF 24" RCP

148' OF 18" RCP

94' OF 24" RCP

PROPOSED TRENCH DRAIN

CONTRACTOR TO INSTALL 2" MDPE AT STA. 247+00 4 FEET BELOW PROPOSED CUTLINE

CP-S9
GPS 40-054-09

CP-S10
GPS 40-054-10

EIP

KENTUCKY
TENNESSEE

STATE LINE RD (ASP.)

WELL HOUSE

SEPT

LIMIT OF CONST.
27+99.59
1-S-F

METAL GARAGE

PROP. CONST. ESMT.

LAWN

ASPHALT

P/T/CATV

BENT OVER

CUT W.V.

SPEED LIMIT 35

EXISTING 2" MDPE GAS LINE TO REMAIN

15" CMP

GRAVEL

WELL

P/T

9.5'+/-
9.2'+/-

CONTRACTOR TO TIE INTO EXISTING 2" MDPE USING APPROVED SQUEEZE-OFF TECHNIQUE. CAP RETIRED 2" MDPE.

NO EASEMENT PER UTILITY

TEL. PED.

40S054-F2-002
END PROJ. NO. NH-54(48) R.O.W.
STA. 247+47.60
N 797077.4313
E 1283157.2609

250

STA. 247+61.57 S.R. 54 =
STA. 30+00.00 STATE LINE RD.
N 797091.3391
E 1283158.5185
(SEE SHEET 18 FOR PROFILE)

LIMIT OF CONST.
250+00.00

CALLOWAY CO, KY
US 641
PRJ.# NHPP 6411 (039)
FD52 018 0641 000-006

2" MDPE GAS LINE TO BE RETIRED

40S054-F2-002
END PROJ. NO. NH-54(48) CONST.
STA. 250+00.00
N 797328.7992
E 1283180.0156

15
R.B. PATTERSON AND WIFE, HILDA A. PATTERSON

17
BRIAN PING

MOBILE HOME

STEPS

FLAG

SHED

PROP. CONST. ESMT.

SERVICE TO BE RETIRED

CONTRACTOR TO TIE INTO EXISTING 2" MDPE USING APPROVED SQUEEZE-OFF TECHNIQUE. CAP RETIRED 2" MDPE.

WOODEN FENCE

S 88° 49' 45" E

15" CMP

22" CMP

10.0'+/-
10.0'+/-

FIELD FENCE

GRAVEL

LIMIT OF CONST.
32+01.50

EXISTING 2" MDPE GAS LINE TO REMAIN

NO EASEMENT PER UTILITY

EXISTING 2" STEEL GAS LINE TO REMAIN

CALLOWAY COUNTY
HENRY COUNTY

NATURAL GAS UTILITIES

NEW PIPELINE

EXISTING TO REMAIN

RETIRED PIPELINE

SEALED BY

RICHARD S. CLARK
REGISTERED ENGINEER
AGRICULTURE
COMMERCE
No. 104932
STATE OF TENNESSEE

COORDINATES ARE NAD 83(2011), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00002 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988 WITH GEOID 12B MODEL.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PRESENT LAYOUT

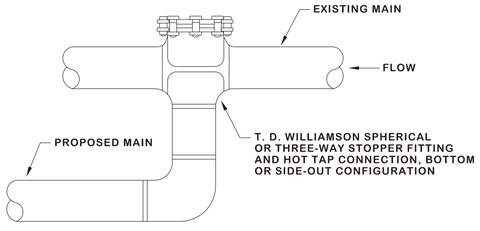
STA.240+00 TO STA.250+00
SCALE: 1"=50'

TYPE	YEAR	PROJECT NO.	SHEET NO.
PS&E	2026	NH-54(48)	U3-4

PARIS-HENRY COUNTY PUBLIC UTILITY DISTRICT

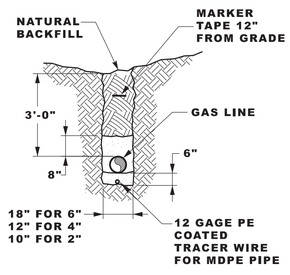
GAS MAIN RELOCATION

TDOT SR 54
PIN 101886.05



TYPICAL HOT TAP CONNECTION

NTS

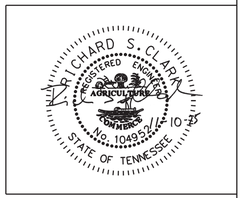


NOTES:

1. MINIMUM COVER SHALL BE 36".
2. IN CONSOLIDATED ROCK THE MINIMUM COVER SHALL BE 24".
3. 6" OF DEBRIS-FREE DIRT, LIMESTONE DUST OR SAND SHALL BE PLACED IN THE TRENCH AND COMPACTED PRIOR TO LOWERING IN THE PIPE.
4. AFTER THE PIPE HAS BEEN LOWERED IN THE TRENCH AND INSPECTED, CONTRACTOR SHALL PROVIDE COMPACTED DIRT, LIMESTONE DUST OR SAND AROUND THE PIPE AND 8" OVER THE PIPE BEFORE BACKFILLING THE TRENCH.
5. MINIMUM COVER SHALL BE 72" INSIDE CSX R.O.W. UNLESS NOTED ON PLAN SHEETS.

PIPE TRENCH DETAIL

SCALE: NTS



STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

NAT. GAS UTILITY DETAILS