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JAMES BARTON MORGAN
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TENNESSEE DEPARTMENT OF TRANSPORTATION
7345 REGION LANE
KNOXVILLE, TENNESSEE 37914
JAMES B. MORGAN, P.E. NO. 111658

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

SHEET NAME	SHEET NO.
SIGNATURE SHEETS	ROADWAY-SIGN1
TITLE SHEET	1
ROADWAY INDEX AND STANDARD ROADWAY DRAWINGS	1A
STANDARD ROADWAY DRAWINGS	1A1
STANDARD STRUCTURE AND TRAFFIC DESIGN DRAWINGS	1A2
ESTIMATED ROADWAY QUANTITIES	2, 2-1
TYPICAL SECTIONS	2B, 2B1, 2B2
TYPICAL SECTIONS AND PAVEMENT SCHEDULE	2B3
GENERAL NOTES	2C, 2C1
SPECIAL NOTES	2D
ENVIRONMENTAL NOTES	2E
TABULATED QUANTITIES	2F, 2F1
RIGHT-OF-WAY NOTES, UTILITY NOTES, AND UTILITY OWNERS	3
RIGHT-OF-WAY ACQUISITION TABLE	3A
PROPERTY MAP	3B
PRESENT LAYOUT	4
RIGHT-OF-WAY DETAILS	4A
PROPOSED LAYOUT	4B
PROPOSED PROFILE	4C
SIDE ROAD PROFILES	5 – 6
PRIVATE DRIVE, BUSINESS, AND FIELD ENTRANCE PROFILES	7 – 9
DRAINAGE MAP	10
CULVERT SECTIONS	11 – 12
EROSION PREVENTION AND SEDIMENT CONTROL PLANS	13 – 17
SIGNING AND PAVEMENT MARKING PLANS	18
ROADWAY CROSS SECTIONS	20 – 28
SIDE ROAD CROSS SECTIONS	29 – 49
TRAFFIC CONTROL PLANS	T1 –T10



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Bryan Bartnik
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TENNESSEE DEPARTMENT OF TRANSPORTATION
7345 REGION LANE
KNOXVILLE, TENNESSEE 37914
BRYAN BARTNIK, P.E. NO. 119211

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

SHEET NAME	SHEET NO.
SIGNATURE SHEETS	ROADWAY-SIGN1
SIGN SCHEDULE SHEET	19

YEAR	PROJECT NO.	SHEET NO.
2026	HSIP-131(33)	ROADWAY-SIGN1

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

SIGNATURE SHEETS

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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	NO X
WORK ZONE SIGNIFICANCE DETERMINATION		
SIGNIFICANT	YES	NO
RAILROAD INVOLVEMENT	YES	NO X

TENN.	YEAR	SHEET NO.
	2026	1
FED. AID PROJ. NO.	HSIP-131(33)	
STATE PROJ. NO.	47027-3222-94	

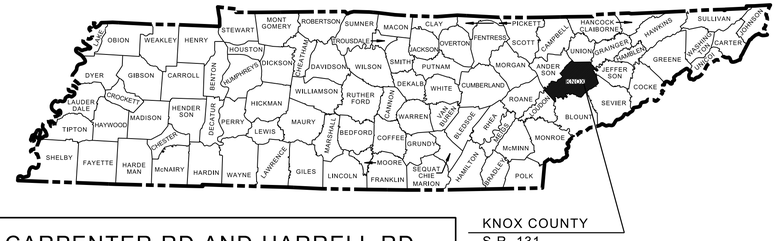
KNOX COUNTY

S.R. 131: INTERSECTION AT HARRELL ROAD/CARPENTER ROAD(RSAR)

PS&E

GRADE, DRAIN, BASE, PAVE, AND SIGNALS

STATE HIGHWAY NO. 131 F.A.H.S. NO. N/A



CARPENTER RD AND HARRELL RD
TO BE CLOSED DURING CONSTRUCTION

NO EXCLUSIONS

47027-3222-94
END PROJECT NO. HSIP-131(33) CONSTRUCTION
STA. 114+65.00
N 612262.8018 E 2534263.0744

47027-2222-94
END PROJECT NO. HSIP-131(33) R.O.W.
STA. 114+59.00
N 612259.5270 E 2534258.0469

PROJECT OF LIMITED SCOPE

47027-2222-94
BEGIN PROJECT NO. HSIP-131(33) R.O.W.
STA. 105+42.00
N 611698.1585 E 2533534.0511

47027-3222-94
BEGIN PROJECT NO. HSIP-131(33) CONSTRUCTION
STA. 105+25.00
N 611687.0847 E 2533521.1527



SCALE: 1"= 1000'

R.O.W. LENGTH	0.173 MILES
ROADWAY LENGTH	0.178 MILES
BRIDGE LENGTH	0.000 MILES
BOX BRIDGE LENGTH	0.000 MILES
BOX BRIDGE LENGTH	0.000 MILES ▲
PROJECT LENGTH	0.178 MILES

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

SR 131

SURVEY 10-01-14	TRAFFIC DATA	
SURVEY ADD 01-22-15	ADT (2026)	12670
SURVEY ADD 08-30-16	ADT (2046)	16460
SURVEY ADD 11-17-16	DHV (2046)	2034
SURVEY ADD 06-16-22	D	55 - 45
	T (ADT)	3 %
	T (DHV)	2 %
	V	45 MPH

COORDINATES ARE NAD 83(1995), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00009 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988 WITH GEOID 2012A.

SEALED BY
JAMES B. MORGAN
REGISTERED ENGINEER
COMMERCE N. 111698
STATE OF TENNESSEE
06/02/2026

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

TDOT PROJECT MANAGER: ERIC WILSON, P.E.

DESIGNER : AUBIN CANNING CHECKED BY : NATHAN BARTLETT, P.E.

P.E. NO. 47027-1222-94 (DESIGN)

PIN NO. 119390.00

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TYPE	YEAR	PROJECT NO.	SHEET NO.
PIH	2025	HSIP-131(33)	1A
PS&E	2026	HSIP-131(33)	1A

ROADWAY INDEX

SHEET NAME	SHEET NO.
SIGNATURE SHEETS	ROADWAY-SIGN1
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SIGNAL PLANS	SIG-1
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.

Footnotes:

NO PROJECT COMMITMENTS SHEET INCLUDED IN THIS PLAN SET

STANDARD ROADWAY DRAWINGS

STANDARD ROADWAY TITLE SHEET, ABBREVIATIONS, AND LEGENDS

DWG.	REV.	DESCRIPTION
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-3	03-01-23	STANDARD LEGEND FOR SIGNALIZATION AND LIGHTING
RD-L-4	10-01-24	STANDARD LEGEND FOR SIGNALIZATION AND LIGHTING
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

ROADWAY DESIGN STANDARDS

DWG.	REV.	DESCRIPTION
RD18-TS-2	01-30-26	URBAN LOCAL ROADS AND STREETS
RD18-TS-2A	01-30-26	RURAL LOCAL ROADS AND STREETS
RD18-TS-3	01-30-26	URBAN MINOR COLLECTOR (2-3 LANE)
RD18-TS-3A	01-30-26	RURAL MINOR COLLECTOR (2-LANE)
RD18-TS-5	01-30-26	URBAN MINOR ARTERIAL (2-3 LANE)
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-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-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

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

DWG.	REV.	DESCRIPTION
D-PB-1	03-01-23	STANDARD DETAILS FOR CONCRETE PIPE INSTALLATION
D-PB-4	01-09-24	PIPE COLLAR DETAILS
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)
D-PEW-4		PROTECTED STRAIGHT ENDWALLS (PIPE SIZES 18” TO 30” & EQU. OVAL PIPES)

CATCH BASINS AND MANHOLES

DWG.	REV.	DESCRIPTION
D-CB-12S	02-20-20	STANDARD RECTANGULAR CONCRETE NO. 12 CATCH BASIN
D-CB-14S	02-20-20	STANDARD RECTANGULAR CONCRETE NO. 14 CATCH BASIN
D-CB-25S	02-20-20	STANDARD RECTANGULAR CONCRETE NO. 25 CATCH BASIN (FOR USE WITH 6" SLOPING CURB)
D-CB-25SC	02-20-20	STANDARD 5’2” X 5’2” SQUARE CONCRETE NO. 25 CATCH BASIN (FOR USE WITH 6” SLOPING CURB)
D-CB-26S	02-20-20	STANDARD RECTANGULAR CONCRETE NO. 26 CATCH BASIN (FOR USE WITH 6" SLOPING CURB)
D-CB-42S	02-20-20	STANDARD 32" X 32" SQUARE CONCRETE NO. 42 CATCH BASIN
D-CB-42SB	02-20-20	STANDARD 4' X 4' SQUARE CONCRETE NO. 42 CATCH BASIN
D-CB-43SB	02-20-20	STANDARD 8' X 4' RECTANGULAR CONCRETE NO. 43SB CATCH BASIN
D-CB-99	02-20-20	MISCELLANEOUS DETAILS FOR RECTANGULAR STRUCTURES
D-CBB-12A	06-28-19	TYPE ‘B’ CAST IRON FRAME, GRATE & VERTICAL INLET DETAILS FOR NOS. 10, 12, 14, 16 & 17 TYPE CATCH BASINS
D-CBB-12B	06-28-19	TYPE ‘B’ CAST IRON FRAME, GRATE & 6" SLOPING INLET DETAILS FOR NOS. 25, 26 & 27 TYPE CATCH BASINS
D-CBB-12D	07-07-23	TYPE "B" CAST IRON FRAME, GRATE & CURB HOOD DETAILS FOR NOS. 12, 14, 16 & 17 TYPE CATCH BASINS
D-CBB-42	10-29-21	CAST IRON GRATE DETAILS FOR NOS. 42, 43 & 44 TYPE CATCH BASINS

ROADWAY, PAVEMENT APPURTENANCES, AND FENCES

DWG.	REV.	DESCRIPTION
RP-D-15	04-01-25	DETAILS OF STANDARD CONCRETE DRIVEWAYS
RP-D-16	04-01-25	DETAILS OF LOWERED STANDARD CONCRETE DRIVEWAYS
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-SC-1	05-04-22	SLOPING CONCRETE CURB AND CURB AND GUTTER
RP-VC-11	03-04-21	VERTICAL CONCRETE CURB AND CURB AND GUTTER (FOR 6” & 7” GUTTER DEPTH)
S-RP-2	06-28-19	STANDARD CONCRETE RIGHT-OF-WAY MARKERS

SEALED BY

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06/02/2026

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

ROADWAY INDEX AND STANDARD ROADWAY DRAWINGS

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STANDARD ROADWAY DRAWINGS, CONT'D

TYPE	YEAR	PROJECT NO.	SHEET NO.
PIH	2025	HSIP-131(33)	1A1
PS&E	2026	HSIP-131(33)	1A1

DWG. NO.	REV.	DESCRIPTION
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-6	07-30-24	SAFETY PLAN SAFETY HARDWARE PLACEMENT ON OUTSIDE EDGE
S-PL-7		SAFETY PLAN HARDWARE PLACEMENT AT INTERSECTIONS
S-CC-1	10-01-24	CRASH CUSHION
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-GRS-2	01-28-22	SPECIAL CASE GUARDRAIL ATTACHMENT TO CONCRETE DECKS
S-GRT-2	06-28-19	TYPE 38 GUARDRAIL END TERMINAL
S-GRT-2P	10-16-20	EARTH PAD FOR TYPE 38 AND TYPE 21 TERMINAL
S-GRT-3	06-28-19	TYPE 21 GUARDRAIL END TERMINAL
S-GRT-4	01-30-25	TYPE 21 GATING END TERMINAL
S-GRT-4A		TYPE 21 GATING END TERMINAL ANCHOR DETAILS
S-GRT-4B		GATING TERMINAL POST & RAIL DETAILS
S-GRA-4	03-01-23	IN-LINE GUARDRAIL ANCHOR TO PRIVATE DRIVE
EROSION PREVENTION AND SEDIMENT CONTROL		
EC-STR-3C	03-01-23	SILT FENCE WITH WIRE BACKING
EC-STR-3E	04-01-08	SILT FENCE FABRIC JOINING DETAILS
EC-STR-37	06-10-14	SEDIMENT TUBE
EC-STR-6	11-30-20	ROCK CHECK DAM
EC-STR-6A	05-06-16	ENHANCED ROCK CHECK DAM
EC-STR-11	03-16-17	CULVERT PROTECTION TYPE 1
EC-STR-19	04-01-08	CATCH BASIN PROTECTION
EC-STR-39	08-01-12	CURB INLET PROTECTION TYPE 1 & 2
EC-STR-41		CATCH BASIN FILTER ASSEMBLY (TYPE 1)
EC-STR-41A		CATCH BASIN FILTER ASSEMBLY (TYPE 1) SLIPCOVER DETAILS
EC-STR-11A	08-01-12	CULVERT PROTECTION TYPE 2
EC-STR-25	08-01-12	TEMPORARY CULVERT CROSSING, CONSTRUCTION EXIT, CONSTRUCTION FORD
EC-STR-31	05-04-22	TEMPORARY DIVERSION CHANNEL
EC-STR-31A	04-01-08	TEMPORARY DIVERSION CHANNEL DESIGN

DWG. NO.	REV.	DESCRIPTION

DWG. NO.	REV.	DESCRIPTION

SEALED BY



06/02/2026

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

STANDARD ROADWAY DRAWINGS

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TYPE	YEAR	PROJECT NO.	SHEET NO.
PIH	2025	HSIP-131(33)	1A2
PS&E	2026	HSIP-131(33)	1A2

STANDARD TRAFFIC DESIGN DRAWINGS

DWG.	REV.	DESCRIPTION
SIGN		
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-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-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
SIGNALS		
T-SG-2	12-18-25	LOOP LEAD-INS, CONDUIT AND PULL BOXES
T-SG-3	12-18-25	INDUCTIVE LOOP DETECTION DETAILS
T-SG-3A	12-18-25	INDUCTIVE LOOP DETECTION DETAILS AND NOTES
T-SG-3B		ALTERNATE DETECTION DETAILS
T-SG-5	12-18-25	CONTROLLER CABINET DETAILS
T-SG-7	12-18-25	SIGNAL HEAD ASSEMBLIES
T-SG-7C	12-18-25	TYPICAL SIGNAL HEAD PLACEMENT ONE-LANE AND TWO-LANE APPROACHES
T-SG-7H	12-18-25	TYPICAL SIGNAL HEAD PLACEMENT THREE-LANE AND FOUR-LANE APPROACHES
T-SG-9	12-18-25	CANTILEVER SIGNAL SUPPORT DETAIL
T-SG-9A	12-18-25	MISCELLANEOUS SIGNAL DETAILS
T-SG-10	12-18-25	MAST ARM POLE AND STRAIN POLES FOUNDATION DETAILS
T-SG-12	12-18-25	TYPICAL WIRING FOR SIGNAL HEADS AND DETECTION LOOPS
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-4	01-24-25	STANDARD INTERSECTION PAVEMENT MARKINGS
T-WZ-10	03-26-25	ADVANCE ROAD WORK SIGNING ON HIGHWAYS AND FREEWAYS
T-WZ-16	03-26-25	LANE SHIFT FOR DIVIDED HIGHWAYS AND FREEWAYS
T-WZ-31	03-26-25	TRAFFIC CONTROL 2-LANE, 2-WAY DIVERSION (GREATER THAN 40 MPH)
T-WZ-PBR2	03-26-25	DETAILS FOR WORK ZONE CHANNELIZATION DEVICES
T-WZ-PCB2	03-26-25	20 FOOT PORTABLE CONCRETE BARRIER RAIL
T-WZ-PCB3	03-26-25	PORTABLE CONCRETE BARRIER RAIL DETAILS

STANDARD STRUCTURE DRAWINGS

DWG.	REV.	DESCRIPTION
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 SECTION AND DETAILS
STD-17-6		TYPICAL ELEVATIONS
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-17-13		WINGWALL DIMENSIONS AND QUANTITIES
STD-17-16		WINGWALL DESIGN SECTION
STD-17-17	06-01-11	BACKFILL AND DRAINAGE DETAILS
STD-17-18		BACKFILL DETAILS
STD-17-24		WARPED SLOPE DETAIL
STD-17-25		STAGE CONSTRUCTION JOINT DETAIL (FILL ABOVE TOP OF SLAB NOT GREATER THAN 3'-6")
STD-17-28		END SECTION DETAILS
STD-17-29		PRECAST BOX CULVERT DETAILS
STD-17-51	05-01-14	BOX BRIDGE, 1 BARREL AT 6', CLEAR HTS. 3' - 6', 0 - 60' FILL

SEALED BY

JAMES B. MORGAN
REGISTERED ENGINEER
AGRICULTURE
COMMERCE
No. 111668
STATE OF TENNESSEE

06/02/2026

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

STANDARD STRUCTURE AND TRAFFIC DESIGN DRAWINGS

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ESTIMATED ROADWAY QUANTITIES

	ITEM NO.	DESCRIPTION	UNIT	QUANTITY 47027-3222-94
	105-01	CONSTRUCTION STAKES, LINES AND GRADES	LS	1
	201-01	CLEARING AND GRUBBING	LS	1
(1)	202-01.50	REMOVAL OF STRUCTURES AND OBSTRUCTIONS	EACH	5
	202-02.01	REMOVAL OF PIPE (24" ,STA.202+67.90)	L.F.	20
	202-02.02	REMOVAL OF PIPE (15", STA.202+94.70)	L.F.	27
	202-02.03	REMOVAL OF PIPE (18" ,STA.106+84.34)	L.F.	278
	202-02.04	REMOVAL OF PIPE (15" ,STA.110+86.87)	L.F.	21
	202-02.05	REMOVAL OF PIPE (15" ,STA.111+75.08)	L.F.	31
	202-02.06	REMOVAL OF PIPE (15" ,STA.112+47.21)	L.F.	27
	202-02.07	REMOVAL OF PIPE (18" ,STA.113+95.82)	L.F.	31
	202-02.08	REMOVAL OF PIPE (18" ,STA.114+05.43)	L.F.	41
	202-02.09	REMOVAL OF PIPE (18" ,STA.114+35.71)	L.F.	31
	202-02.10	REMOVAL OF PIPE (18" ,STA.300+63.87)	L.F.	42
	202-02.11	REMOVAL OF PIPE (18" ,STA.301+08.93)	L.F.	22
	202-02.12	REMOVAL OF PIPE (48" ,STA.400+32.52)	L.F.	31
	202-02.13	REMOVAL OF PIPE (18" ,STA.302+26.48)	L.F.	60
	202-02.14	REMOVAL OF PIPE (18" ,STA.400+92.87)	L.F.	24
	202-02.15	REMOVAL OF PIPE (18" ,STA.400+71.37)	L.F.	18
	202-02.16	REMOVAL OF PIPE (18" ,STA.500+40.91)	L.F.	38
	202-02.17	REMOVAL OF PIPE (18" ,STA.500+47.58)	L.F.	25
	202-02.18	REMOVAL OF PIPE (18" ,STA.500+40.92)	L.F.	23
	202-08.10	REMOVAL OF CURB (STA. 500+00 - STA. 501+25.00)	L.F.	229
(2)(3)(7)	203-01	ROAD & DRAINAGE EXCAVATION (UNCLASSIFIED)	C.Y.	6633
(4)(3)	203-03	BORROW EXCAVATION (UNCLASSIFIED)	C.Y.	5262
(3)	203-04	PLACING AND SPREADING TOPSOIL	C.Y.	934
	203-06	WATER	M.G.	69
(3)	203-07	FURNISHING & SPREADING TOPSOIL	C.Y.	354
(5)	204-06.02	FLOWABLE FILL (EXCAVATABLE)	C.Y.	103
(6)	208-01.05	BROOMING & DEGRASSING SHOULDERS	L.M.	0.06
	209-05	SEDIMENT REMOVAL	C.Y.	167
(8)(7)	209-08.02	TEMPORARY SILT FENCE (WITH BACKING)	L.F.	860
(7)	209-08.07	ROCK CHECK DAM	EACH	6
(7)	209-08.08	ENHANCED ROCK CHECK DAM	EACH	3
(7)	209-09.40	CURB INLET PROTECTION (TYPE 1)	EACH	28
(7)	209-40.34	CATCH BASIN PROTECTION (TYPE E)	EACH	1
(7)	209-40.41	CATCH BASIN FILTER ASSEMBLY(TYPE 1)	EACH	5
(7)	209-40.48	CATCH BASIN FILTER ASSEMBLY(TYPE 8)	EACH	1
(7)	209-65.03	TEMPORARY DIVERSION CHANNEL	L.F.	430
(9)	303-01	MINERAL AGGREGATE, TYPE A BASE, GRADING D	TON	5176
(10)	303-01.01	GRANULAR BACKFILL (ROADWAY)	TON	1643
(11)(7)	303-10.01	MINERAL AGGREGATE (SIZE 57)	TON	86
	307-01.01	ASPHALT CONCRETE MIX (PG64-22) (BPMB-HM) GRADING A	TON	982
(12)	307-01.08	ASPHALT CONCRETE MIX (PG64-22) (BPMB-HM) GRADING B-M2	TON	984
	402-01	BITUMINOUS MATERIAL FOR PRIME COAT (PC)	TON	8
(13)	403-01	BITUMINOUS MATERIAL FOR TACK COAT (TC)	TON	5
	411-01.10	ACS MIX(PG64-22) GRADING D	TON	741
	415-01.01	COLD PLANING BITUMINOUS PAVEMENT	TON	192
(14)	604-01.01	CLASS A CONCRETE (ROADWAY)	C.Y.	213
(14)	604-01.02	STEEL BAR REINFORCEMENT (ROADWAY)	LB.	50498
(15)	607-03.02	18" CONCRETE PIPE CULVERT (CLASS III)	L.F.	1282
(15)	607-05.02	24" CONCRETE PIPE CULVERT (CLASS III)	L.F.	141
(15)	607-07.02	36" CONCRETE PIPE CULVERT (CLASS III)	L.F.	145
	611-07.01	CLASS A CONCRETE (PIPE ENDWALLS)	C.Y.	21
	611-07.02	STEEL BAR REINFORCEMENT (PIPE ENDWALLS)	LB.	722
	611-12.01	CATCH BASINS, TYPE 12, > 0' - 4' DEPTH	EACH	1
	611-12.03	CATCH BASINS, TYPE 12, > 8' - 12' DEPTH	EACH	2
	611-14.01	CATCH BASINS, TYPE 14, > 0' - 4' DEPTH	EACH	1
	611-14.02	CATCH BASINS, TYPE 14, > 4' - 8' DEPTH	EACH	3
	611-25.01	CATCH BASINS, TYPE 25, 0' - 4' DEPTH	EACH	1
	611-25.02	CATCH BASINS, TYPE 25, > 4' - 8' DEPTH	EACH	3
(16)	611-25.04	CATCH BASINS, TYPE 25, > 12' - 16' DEPTH	EACH	2

ESTIMATED ROADWAY QUANTITIES

	ITEM NO.	DESCRIPTION	UNIT	QUANTITY 47027-3222-94
	611-26.02	CATCH BASINS, TYPE 26, > 4' - 8' DEPTH	EACH	1
	611-42.01	CATCH BASINS, TYPE 42, 0' - 4' DEPTH	EACH	2
	611-42.02	CATCH BASINS, TYPE 42, > 4' - 8' DEPTH	EACH	2
	611-42.03	CATCH BASINS, TYPE 42, > 8' - 12' DEPTH	EACH	1
	611-43.02	CATCH BASINS, TYPE 43, > 4' - 8' DEPTH	EACH	1
(17)(7)	621-03.02	18" TEMPORARY DRAINAGE PIPE	L.F.	153
(17)(7)	621-03.03	24" TEMPORARY DRAINAGE PIPE	L.F.	100
(17)(18)(7)	621-03.04	30" TEMPORARY DRAINAGE PIPE	L.F.	1898
(13)	621-03.08	54" TEMPORARY DRAINAGE PIPE	L.F.	60
(19)	621-05.10	TEMPORARY SHORING (TEMPORARY RUNAROUND)	LS	1
	701-02	CONCRETE DRIVEWAY	S.F.	3187
	702-01	CONCRETE CURB	C.Y.	27
	702-03	CONCRETE COMBINED CURB & GUTTER	C.Y.	164
	705-01.04	METAL BEAM GUARD FENCE	L.F.	33
	705-06.01	W BEAM GR (TYPE 2) MASH TL3	L.F.	384
	705-06.11	GR TERMINAL (IN-INLINE) MASH TL3	EACH	3
	705-06.20	TANGENT ENERGY ABSORBING TERM MASH TL-3	EACH	2
	705-06.30	GR TERMINAL (ENERGY ABSORBING) MASH TL2	EACH	1
	706-01	GUARDRAIL REMOVED	L.F.	281
	706-06.03	RADIUS RAIL	L.F.	64
	706-10.26	ROUNDED END ELEMENT	EACH	3
	708-02.01	MARKERS (CONCRETE R.O.W. POSTS)	EACH	28
(20)(7)	709-05.05	MACHINED RIP-RAP (CLASS A-3)	TON	100
(21)(7)	709-05.06	MACHINED RIP-RAP (CLASS A-1)	TON	1315
(22)	709-05.08	MACHINED RIP-RAP (CLASS B)	TON	1241
	712-01	TRAFFIC CONTROL	LS	1
	712-02.10	PORTABLE BARRIER RAIL (MASH TL-3)	L.F.	3460
(23)	712-02.60	TEMPORARY WORK ZONE CRASH CUSHION (MASH TL-3)	EACH	10
	712-04.01	FLEXIBLE DRUMS (CHANNELIZING)	EACH	50
	712-04.50	BARRIER RAIL DELINEATOR	EACH	170
	712-05.01	WARNING LIGHTS (TYPE A)	EACH	25
	712-06	SIGNS (CONSTRUCTION)	S.F.	693
	712-07.03	TEMPORARY BARRICADES (TYPE III)	L.F.	40
	712-09.04	REMOVABLE PAVEMENT MARKING (STOP LINE)	L.F.	107
	712-09.08	REMOVABLE PAVEMENT MARKING (6" line)	L.F.	8620
	712-09.30	REMOVABLE BLACK-OUT TAPE (6")	L.F.	9279
	713-01.01	CLASS A CONCRETE (FOUNDATION FOR SIGN SUPPORTS)	C.Y.	1
	713-01.02	STEEL BAR REINFORCEMENT(FOUNDATION FOR SIGN SUPPORTS)	LB.	125
	713-11.02	PERFORATED/KNOCKOUT SQUARE TUBE POST	LB.	272
	713-11.21	P POST SLIP BASE	EACH	5
	713-13.03	FLAT SHEET ALUMINUM SIGNS (0.100" THICK)	S.F.	54
	713-15	REMOVAL OF SIGNS, POSTS AND FOOTINGS	LS	1
	716-01.21	SNOWPLOWABLE RAISED PAVEMENT MARKERS (BI-DIR) (1 COLOR)	EACH	58
	716-01.22	SNOWPLOWABLE RAISED PAVMENT MARKERS (MONO-DIR)(1 COLOR)	EACH	30
	716-01.30	REMOVAL OF SNOWPLOWABLE REFLECTIVE MARKER	EACH	12
(24)	716-02.05	PLASTIC PAVEMENT MARKING (STOP LINE)	L.F.	230
(24)	716-02.06	PLASTIC PAVEMENT MARKING (TURN LANE ARROW)	EACH	6
(24)	716-02.08	PLASTIC PAVEMENT MARKING (8" DOTTED LINE)	L.F.	738
(24)	716-02.12	PLASTIC PAVEMENT MARKING (8IN LINE)	L.M.	0.2
(24)	716-04.01	PLASTIC PAVEMENT MARKING (STRAIGHT-TURN ARROW)	EACH	2
(24)	716-04.05	PLASTIC PAVEMENT MARKING (STRAIGHT ARROW)	EACH	2
(25)	716-05.20	PAINTED PAVEMENT MARKING (6" LINE)	L.M.	0.7
(26)	716-12.02	ENHANCED FLATLINE THERMO PVMT MRKNG (6IN LINE)	L.M.	2
	717-01	MOBILIZATION	LS	1
(10)	740-06.01	GEOMEMBRANE	S.Y.	995
(27)(7)	740-10.03	GEOTEXTILE (TYPE III)(EROSION CONTROL)	S.Y.	2514
(7)	740-11.03	TEMPORARY SEDIMENT TUBE 18IN	L.F.	3653
(28)	801-01	SEEDING (WITH MULCH)	UNIT	78
(29)	801-01.07	TEMPORARY SEEDING (WITH MULCH)	UNIT	69
(30)	801-03	WATER (SEEDING & SODDING)	M.G.	60
(31)	801-01.38	NATVE SEED MX FINAL STABLIZATN OF SLOPES	UNIT	17

TYPE	YEAR	PROJECT NO.	SHEET NO.
PIH	2025	HSIP-131(33)	2
PS&E	2026	HSIP-131(33)	2

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

ESTIMATED ROADWAY QUANTITIES

SHEET 1 OF 2

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TYPE	YEAR	PROJECT NO.	SHEET NO.
PIH	2025	HSIP-131(33)	2-1
PS&E	2026	HSIP-131(33)	2-1

ESTIMATED ROADWAY QUANTITIES

	ITEM NO.	DESCRIPTION	UNIT	QUANTITY 47027-3222-94
(32)	803-01	SODDING (NEW SOD)	S.Y.	6142
(33)	806-02.03	PROJECT MOWING	CYCL	4

FOOTNOTES

(1) INCLUDES THE REMOVAL OF CATCH BASINS AT STATION 500+44.61, 500+47.37, 400+64.48 400+93.76 AND 400+96.28

(2) INCLUDES 15 C.Y. FOR TEMPORARY CONSTRUCTION EXITS.

(3) SEE GRADING SPECIAL NOTES ON SHEET 2D.

(4) INCLUDES 1425 C.Y. EMBANKMENT FOR TEMPORARY RUNAROUND.

(5) TO BE USED FOR EXISTING 54" PIPE AT STA. 109+49.49, EXISTING 24" PIPE AT STA. 204+69.09, EXISTING 18" PIPE AT STA. 400+84.64, AND 49' OF EXISTING 48" PIPE AT STA. 400+32.52.

(6) INCLUDES THE COST OF REMOVING DEBRIS AND SWEEPING SHOULDERS PRIOR TO WORK. SEE SHEET NO. 2C, FINAL PAVEMENT MARKING NOTE (6) AND SHEET NO. 2D, PAVEMENT NOTE (2) FOR MORE INFORMATION.

(7) SEE SUBSECTION 209.07 OF THE STANDARD SPECIFICATIONS FOR MAINENANCE REPLACEMENT. ALL QUANTITIES ARE TO BE USED AS DIRECTED BY THE ENGINEER.

(8) TO BE USED FOR TEMPORARY DIVERSION CHANNEL.

(9) INCLUDES 322 TONS FOR DRIVEWAYS AND 593 TONS FOR TEMPORARY RUNAROUND.

(10) INCLUDES 167 TONS TO BE USED WITH SPECIAL DITCHES AND 1476 TONS FOR BOX CULVERTS.

(11) INCLUDES 71 TONS FOR CULVERT PROTECTION TYPE 1, AND 15 TONS FOR CULVERT PROTECTION TYPE 2.

(12) INCLUDES 148 TONS FOR TEMPORARY RUNAROUND.

(13) TO BE INCREASED OR DECREASED AS DIRECTED BY THE ENGINEER.

(14) 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.

(15) THE BEDDING MATERIAL SHALL BE INCLUDED IN THE COST OF THE PROPOSED PIPE CULVERT. SEE STANDARD DRAWING NO. D-PB-1 AND D-PB-2 FOR ADDITIONAL DETAILS.

(16) IN ORDER TO PROPERLY TRANSFER THE LOAD OF THE CATCH BASINS INTO THE BOX CULVERT, THE SIZE OF CATCH BASINS SHALL NOT BE CHANGED UNLESS APPROVED BY THE TDOT STRUCTURES OFFICE.

(17) QUANTITY INCLUDES COST OF MOVING TEMPORARY PIPE AS NEEDED DURING CONSTRUCTION PHASES TO MAINTAIN SEPARATION OF OFF SITE CLEAN WATER FLOW THROUGH PROJECT.

(18) TEMPORARY PIPE SIZING BASED ON HDPE OR PVC MATERIAL. IF CMP TEMPORARY PIPE IS USED, USE A 36" TEMPORARY PIPE SIZE.

(19) TO BE USED FOR TEMPORARY RUNAROUND. SHORING WILL BE PAID AT A LUMP SUM UNIT COST PER LOCATION AS INDICATED IN THE CONTRACT PLANS AND INCLUDE COSTS REQUIRED TO DESIGN, INSTALL, MAINTAIN, AND REMOVE FOR THE LIFE OF THE PROJECT. THIS ITEM WILL ALSO COVER ANY ADDITIONAL INSTALLATIONS REQUIRED FOR PHASED CONSTRUCTION OR MAINTENANCE OF TRAFFIC. ONLY THE LOCATIONS NOTED IN THE PLANS WILL BE ELIGIBLE FOR COMPENSATION UNDER ITEM 621-05.10. OTHER LOCATIONS THROUGHOUT THE PROJECT THAT MAY REQUIRE SHORING WILL NOT BE PAID FOR DIRECTLY BUT BE CONSIDERED PART OF THE CONTRACTOR'S MEANS AND METHODS FOR CONSTRUCTION AND INCLUDED IN THE COST OF OTHER ITEMS.

FOOTNOTES

(20) TO BE USED FOR TEMPORARY CONSTRUCTION EXITS.

(21) INCLUDES 386 TONS FOR CULVERT PROTECTION TYPE 1, AND 929 TONS FOR TEMPORARY DIVERSION CHANNEL.

(22) INCLUDES 281 TONS FOR RIPRAP APRON, AND 960 TONS SPECIAL DITCHES

(23) THIS ITEM 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 MANUFACTURER'S DRAWING.

(24) THE CONTRACTOR MAY ELECT TO SUBSTITUTE PREFORMED PLASTIC FOR THERMOPLASTIC. PREFORMED PLASTIC SHALL BE PAID FOR AT THE SAME UNIT PRICE AS BID FOR THERMOPLASTIC.

(25) INCLUDES 0.10 L.M. FOR TEMPORARY RUNAROUND.

(26) CONTRACTOR SHALL USE THE EXTRUDED OR RIBBON METHOD FOR APPLICATION.

(27) INCLUDES 172 S.Y. FOR TEMPORARY CONSTRUCTION EXITS, 915 S.Y. FOR CULVERT PROTECTION TYPE 1, 56 S.Y. FOR CULVERT PROTECTION TYPE 2, AND 1371 S.Y. FOR TEMPORARY DIVERSION CHANNEL.

(28) INCLUDES 1 UNIT FOR SCARIFIED AREA.

(29) 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.

(30) INCLUDES 60 THOUSAND GALLONS FOR EROSION PREVENTION AND SEDIMENT CONTROL.

(31) PERMANENT STABILIZATION WITH NATIVE OR NATURALIZED PERENNIAL VEGETATION IS 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.

(32) INCLUDES 67 SY FOR SPECIAL DITCHES.

(33) 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, PER CYCL.

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JAMES B. MORGAN REGISTERED ENGINEER AGRICULTURE COMMERCE & No. 111668 STATE OF TENNESSEE

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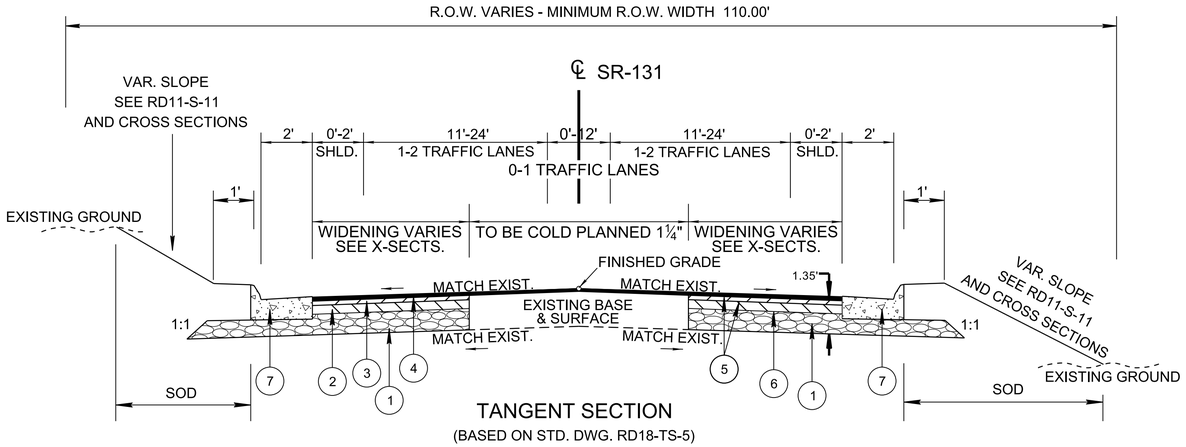
STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

ESTIMATED ROADWAY QUANTITIES

SHEET 2 OF 2

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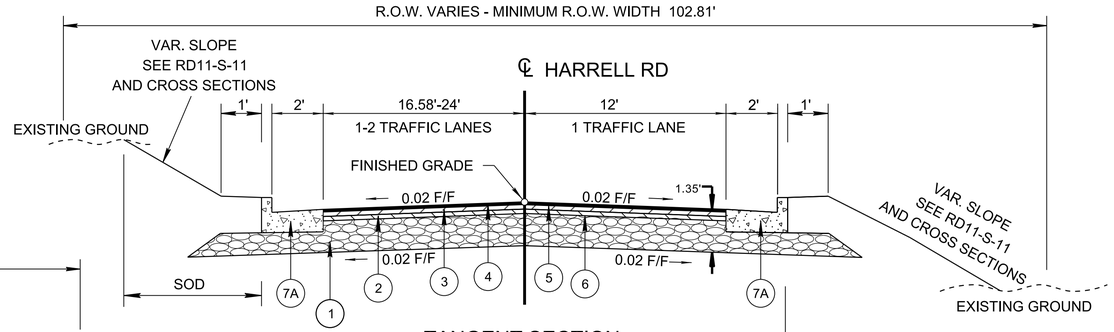
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2022	HSIP-131(33)	2B
PIH	2025	HSIP-131(33)	2B
PS&E	2026	HSIP-131(33)	2B



TANGENT SECTION
(BASED ON STD. DWG. RD18-TS-5)

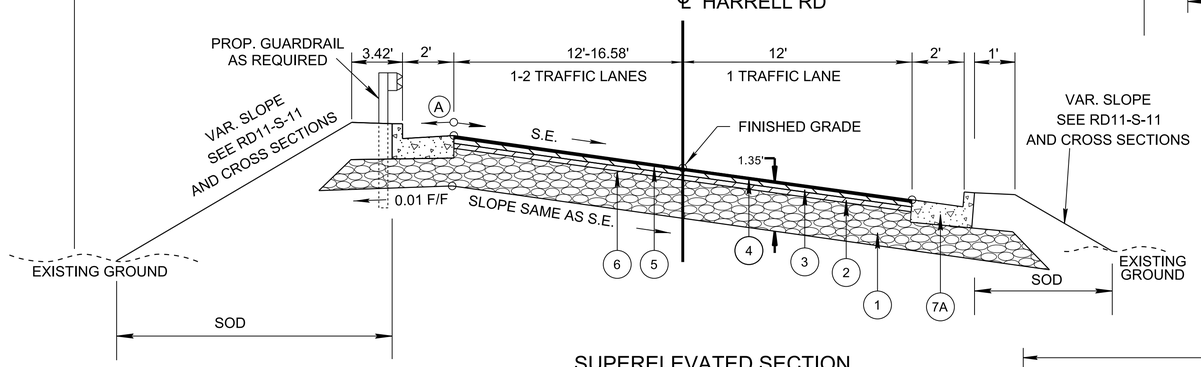
SEE SHEET 2B3 FOR PAVEMENT SCHEDULE.
(A) THE SLOPES OF THE SHOULDER AND ROADWAY PAVEMENT SHALL NOT EXCEED AN ALGEBRAIC DIFFERENCE OF 0.07.

STA. 105+25.00 TO STA. 106+15.00 (TRANSITION FROM 2-11' LANES TO 2-12' LANES WITH 2' SHLDS)
STA. 106+15.00 TO STA. 107+95.00 (TRANSITION FROM 2-12' LANES TO 4-12' LANES WITH 2' SHLDS)
STA. 107+95.00 TO STA. 111+95.00 (4-12' LANES WITH 2' SHLDS)
STA. 111+95.00 TO STA. 113+75.00 (TRANSITION FROM 4-12' LANES WITH 2' SHLDS TO 2-12' LANES WITH 2' SHLDS)
STA. 113+75.00 TO STA. 114+65.00 (TRANSITION FROM 2-12' LANES WITH 2' SHLDS TO 2-11' LANES)



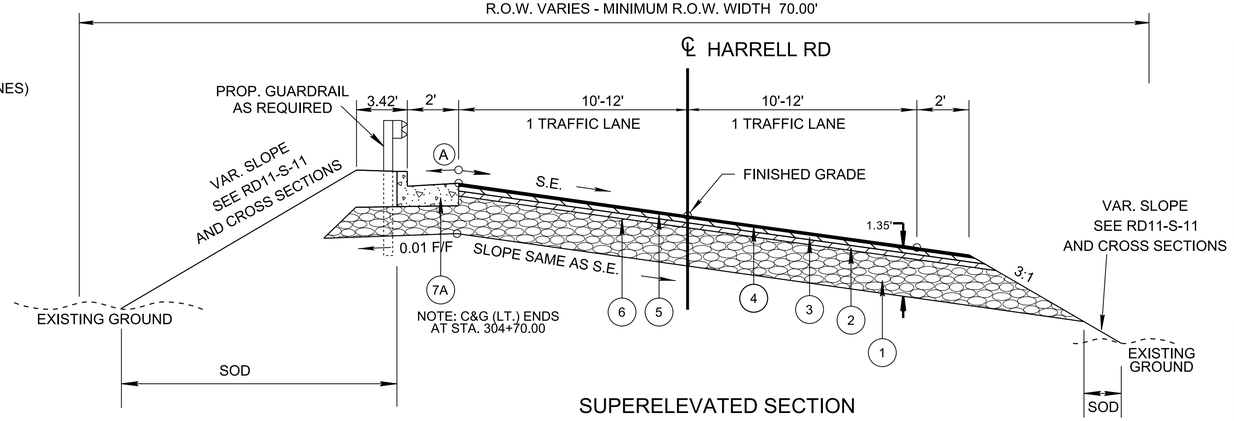
TANGENT SECTION
(BASED ON STD. DWG. RD18-TS-3)

STA. 300+42.91 TO STA. 301+44.00 (3-12' LANES)
STA. 301+44.00 TO STA. 302+48.18 (TRANSITION FROM 3-12' TO 2-12' & 1-1.58' LANES)



SUPERELEVATED SECTION
(BASED ON STD. DWG. RD18-TS-3)

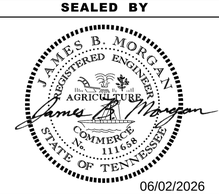
STA. 302+48.18 TO STA. 302+64.00 (TRANSITION FROM 2-12' & 1-1.58' TO 2-12' LANES)
STA. 302+64.00 TO STA. 303+91.00 (2-12' LANES)



SUPERELEVATED SECTION
(BASED ON STD. DWG. RD18-TS-3 AND RD18-TS-3A)

STA. 303+91.00 TO STA. 304+70.00 (2-12' LANES)
STA. 304+70.00 TO STA. 305+30.00 (TRANSITION FROM 2-12' TO 2-10' LANES)

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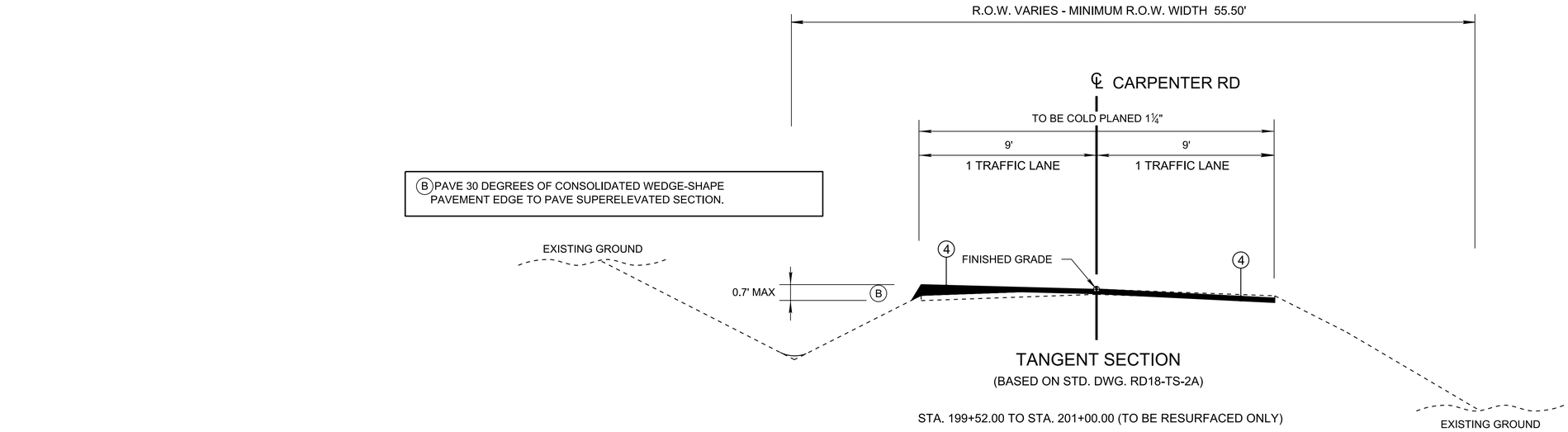
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TYPICAL SECTIONS

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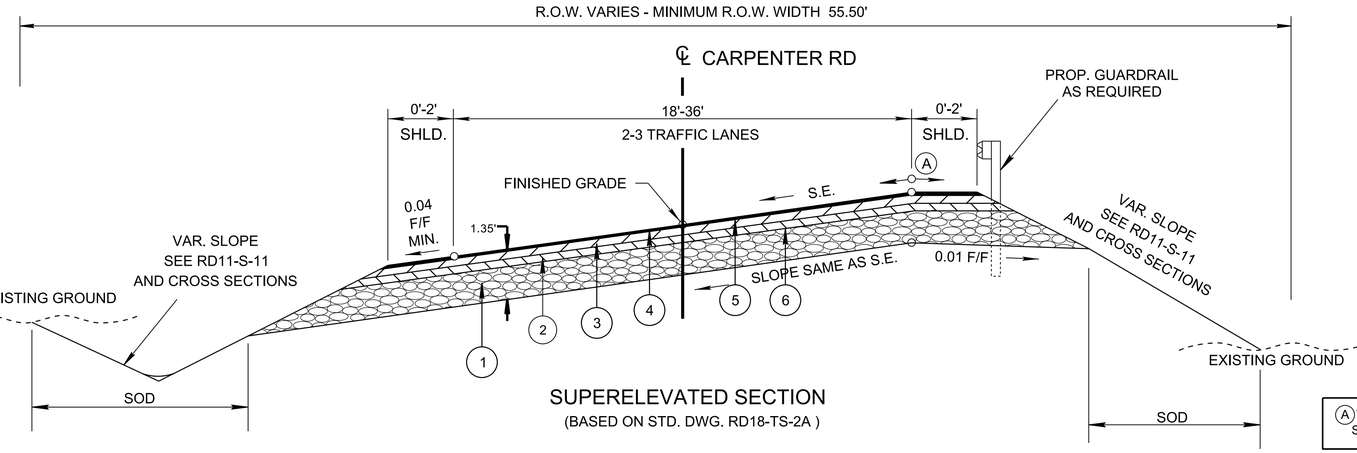
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2022	HSIP-131(33)	2B1
PIH	2025	HSIP-131(33)	2B1
PS&E	2026	HSIP-131(33)	2B1



TANGENT SECTION

(BASED ON STD. DWG. RD18-TS-2A)

STA. 199+52.00 TO STA. 201+00.00 (TO BE RESURFACED ONLY)

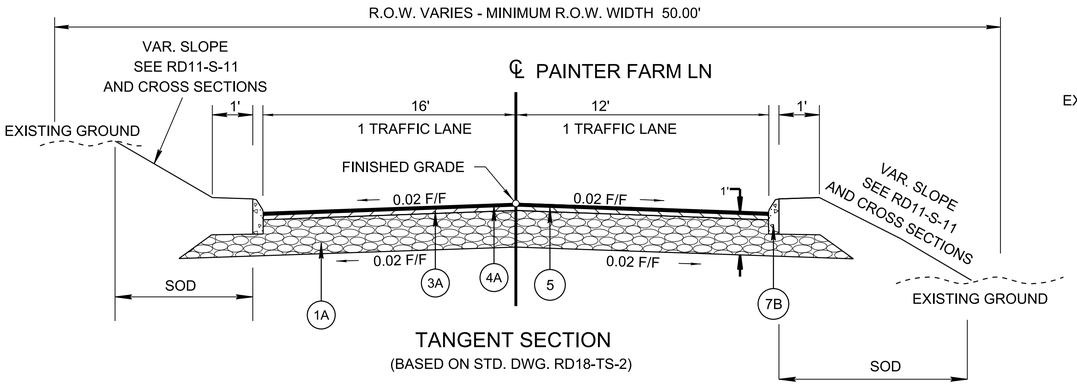


SUPERELEVATED SECTION

(BASED ON STD. DWG. RD18-TS-2A)

(A) THE SLOPES OF THE SHOULDER AND ROADWAY PAVEMENT SHALL NOT EXCEED AN ALGEBRAIC DIFFERENCE OF 0.07.

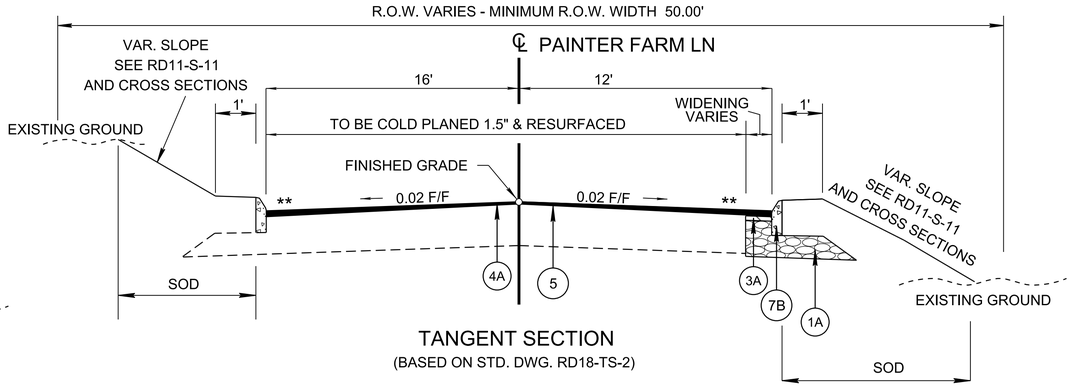
STA. 201+00.00 TO STA. 201+50.00 (TRANSITION FROM 2-9' LANES TO 2-12' LANES WITH 2' SHOULDERS)
STA. 201+50.00 TO STA. 202+60.00 (2-12' LANES WITH 2' SHOULDERS)
STA. 202+60.00 TO STA. 203+40.00 (TRANSITION FROM 2-12' LANES TO 3-12' LANES WITH 2' SHOULDERS)
STA. 203+40.00 TO STA. 204+60.43 (3-12' LANES WITH 2' SHOULDERS)



TANGENT SECTION

(BASED ON STD. DWG. RD18-TS-2)

STA. 400+12.00 TO STA. 401+00.00 (2-14' LANES)



TANGENT SECTION

(BASED ON STD. DWG. RD18-TS-2)

STA. 401+00.00 TO STA. 401+50.00 (2-14' LANES)

** ASPHALTWEDGING REQUIRED FOR A 2% CROSS SLOPE, NEEDED FOR PROPER DRAINAGE OF STORM WATER.

SEE SHEET 2B3 FOR PAVEMENT SCHEDULE.

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JAMES B. MORGAN
REGISTERED ENGINEER
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COMMERCE
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STATE OF TENNESSEE

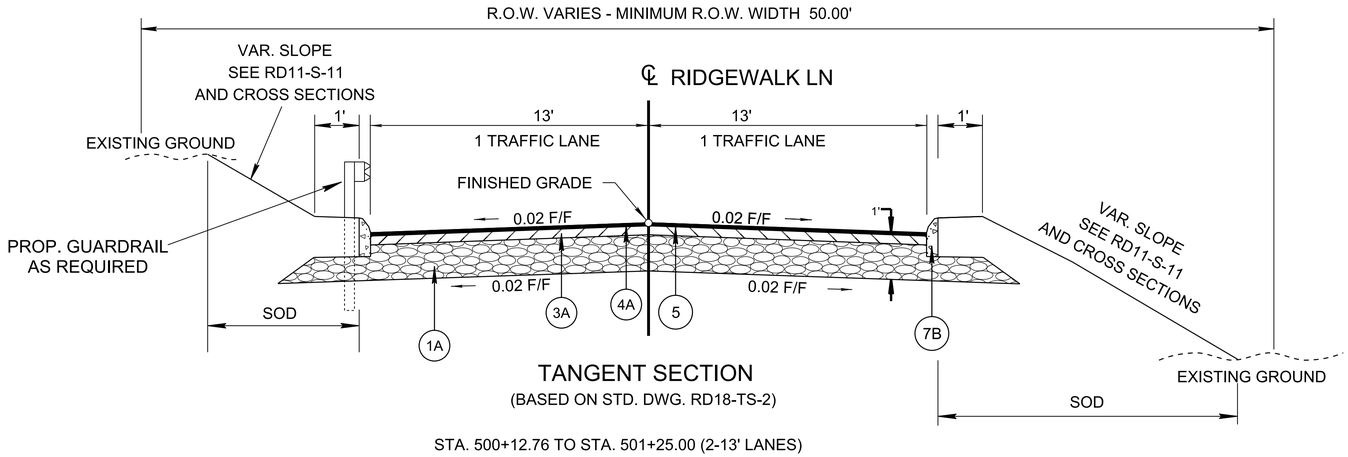
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TYPICAL SECTIONS

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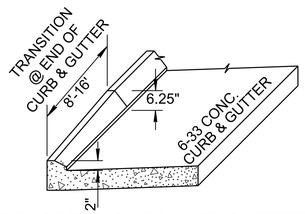
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2022	HSIP-131(33)	2B2
PIH	2025	HSIP-131(33)	2B2
PS&E	2026	HSIP-131(33)	2B2



TANGENT SECTION

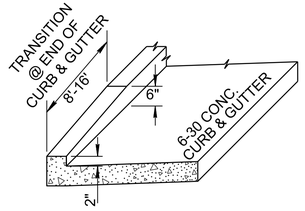
(BASED ON STD. DWG. RD18-TS-2)

STA. 500+12.76 TO STA. 501+25.00 (2-13' LANES)



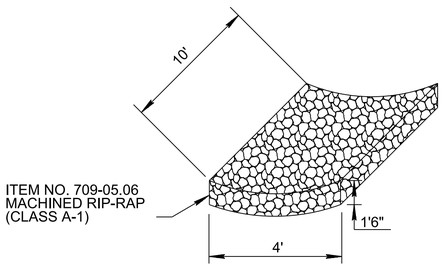
6" SLOPING CURB AND GUTTER TRANSITION DETAIL

SEE STD. DWG. RP-SC-1 FOR OTHER DETAILS



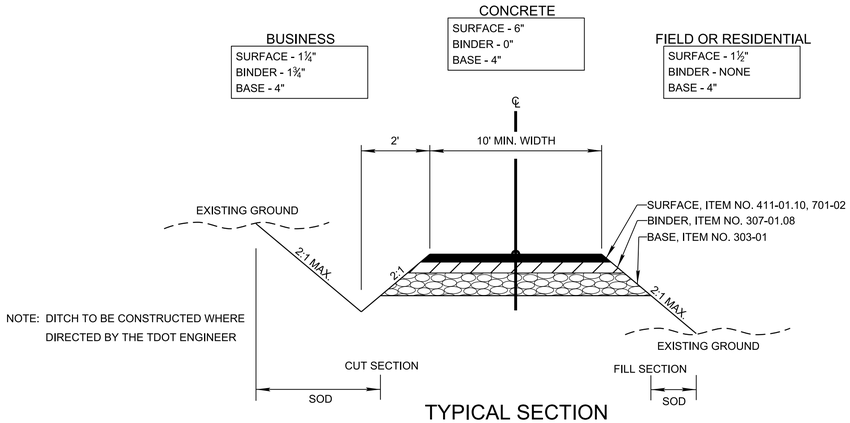
CURB AND GUTTER TRANSITION DETAIL

SEE STD. DWG. RP-VC-11 FOR OTHER DETAILS



DETAIL OF RIP-RAP PAD AT END OF CURB & GUTTER

STA. 105+25.00 (LT. & RT.)
STA. 113+92.00 (LT.)
STA. 114+65.00 (RT.)



TYPICAL SECTION

PRIVATE DRIVE TO BUSINESS,
FIELD, OR RESIDENTIAL PROPERTY

SEE SHEET 2B3 FOR PAVEMENT SCHEDULE.

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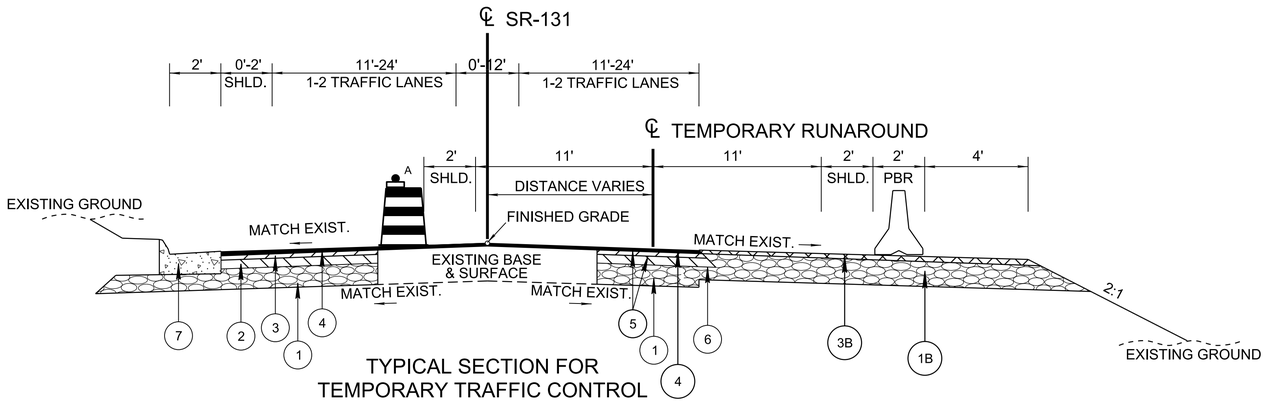
JAMES B. MORGAN
REGISTERED ENGINEER
AGRICULTURE
COMMERCE
No. 111658
STATE OF TENNESSEE

06/02/2026

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

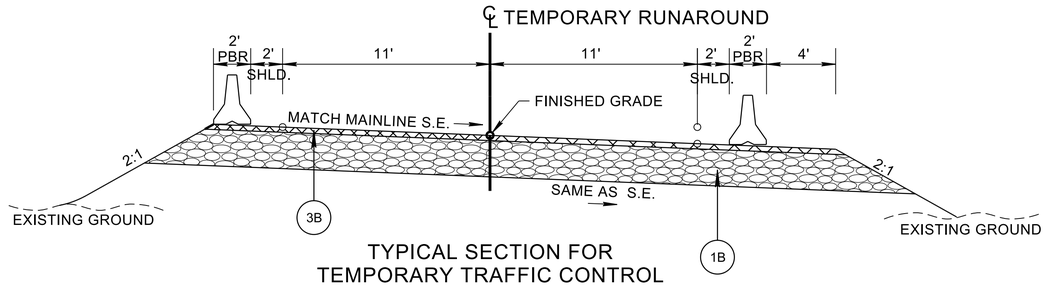
TYPICAL SECTIONS

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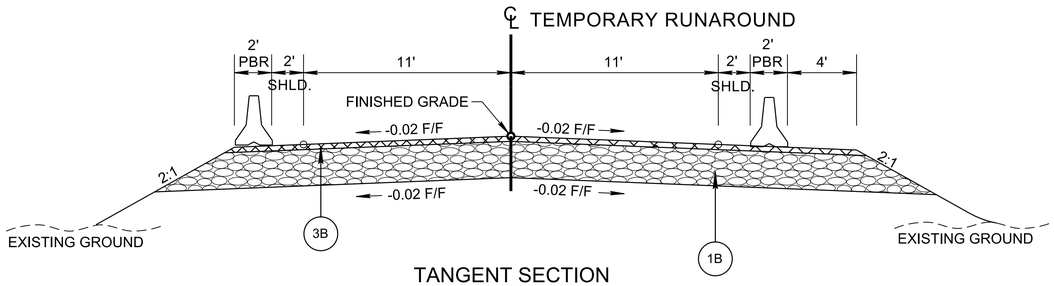
TYPICAL SECTION FOR TEMPORARY TRAFFIC CONTROL

FROM STA. 106+50.00 TO STA. 108+00.00



TYPICAL SECTION FOR TEMPORARY TRAFFIC CONTROL

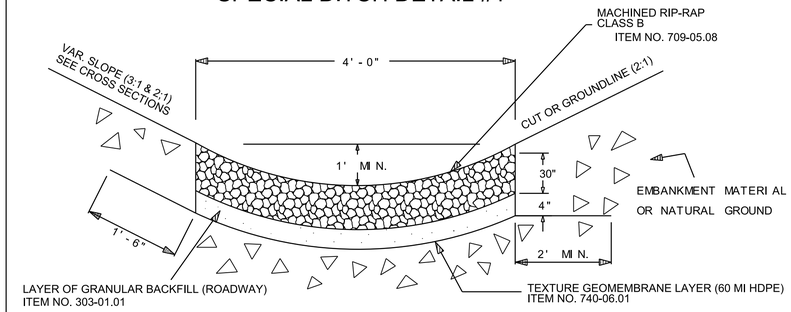
FROM STA. 108+00.00 TO STA. 109+38.00



TANGENT SECTION (TEMPORARY RUNAROUND)

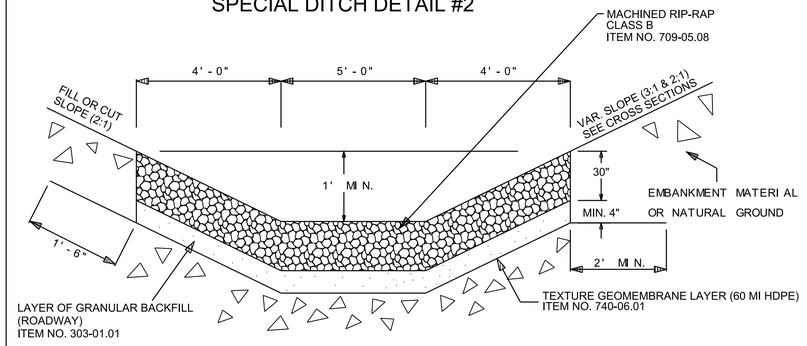
FROM STA. 109+38.00 TO STA. 109+50.00

SPECIAL DITCH DETAIL #1



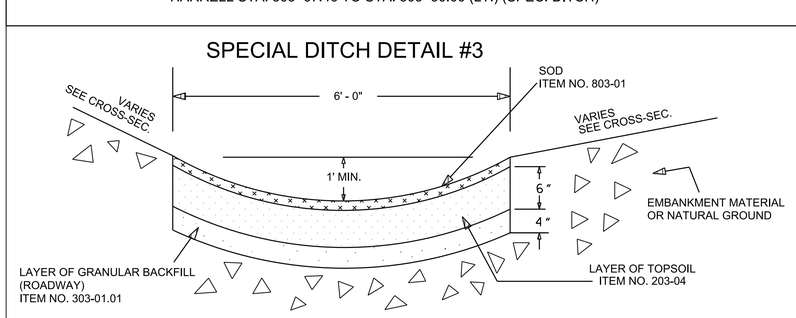
HARRELL STA. 303+20.91 TO STA. 304+51.61 (RT.) (SPEC. DITCH)

SPECIAL DITCH DETAIL #2



CARPENTER STA. 202+10.41 TO STA. 204+15.54 (RT.) (SPEC. DITCH)
HARRELL STA. 301+00.52 TO STA. 302+15.82 (RT.) (SPEC. DITCH)
HARRELL STA. 303+67.46 TO STA. 305+30.00 (LT.) (SPEC. DITCH)

SPECIAL DITCH DETAIL #3



CARPENTER STA. 202+50.00 TO STA. 203+50.00 (LT.) (SPEC. DITCH)

PROPOSED PAVEMENT SCHEDULE

(1) MINERAL AGGREGATE 10" THICK
303-01 MINERAL AGGREGATE, TYPE "A" BASE, GRADING "D"

(1A) MINERAL AGGREGATE 8" THICK
303-01 MINERAL AGGREGATE, TYPE "A" BASE, GRADING "D"

(1B) MINERAL AGGREGATE 12" THICK
303-01 MINERAL AGGREGATE, TYPE "A" BASE, GRADING "D"

(2) BITUMINOUS PLANT MIX BASE (HOT MIX) PG64-22 GRADING "A" @ 3.00" THICK (APPROX. 345 LB./S.Y.)
307-01.01 ASPHALT CONCRETE MIX (PG70-22) (BPMB-HM) GRADING "A"

(3) BITUMINOUS PLANT MIX BASE (HOT MIX) PG64-22 GRADING "B-M2" @ 2.00" THICK (APPROX. 226 LB./S.Y.)
307-01.08 ASPHALT CONCRETE MIX (PG64-22) (BPMB-HM) GRADING "B-M2"

(3A) BITUMINOUS PLANT MIX BASE (HOT MIX) PG64-22 GRADING "B-M2" @ 2.50" THICK (APPROX. 282.5 LB./S.Y.)
307-01.08 ASPHALT CONCRETE MIX (PG64-22) (BPMB-HM) GRADING "B-M2"

(3B) BITUMINOUS PLANT MIX BASE (HOT MIX) PG64-22 GRADING "B-M2" @ 3.00" THICK (APPROX. 339 LB./S.Y.)
307-01.08 ASPHALT CONCRETE MIX (PG64-22) (BPMB-HM) GRADING "B-M2"

(4) ASPHALTIC CONCRETE SURFACE (HOT MIX) PG64-22 GRADING "D" SURFACE @ 1.25" THICK (APPROX. 132.5 LB./S.Y.)
411-01.10 ACS MIX (PG64-22) GRADING "D"

(4A) ASPHALTIC CONCRETE SURFACE (HOT MIX) PG64-22 GRADING "D" SURFACE @ 1.50" THICK (APPROX. 159 LB./S.Y.)
411-01.10 ACS MIX (PG64-22) GRADING "D"

(5) TACK COAT
403-01 BITUMINOUS MATERIAL FOR TACK COAT (TC)
(SEE STANDARD SPECIFICATION SECTION 403.05 FOR DETERMINING APPLICATION RATE IN THE FIELD.)

(6) PRIME COAT
402-01 BITUMINOUS MATERIAL FOR PRIME COAT (PC)
(RATE 0.30-0.35 GAL./SQ.YD.)

(7) 6" SLOPING CONCRETE COMBINED CURB AND GUTTER
702-03. CONCRETE COMBINED CURB AND GUTTER TYPE 6-33 DEPTH 6"
STD. DWG. RP-SC-1

(7A) 6" CONCRETE COMBINED CURB AND GUTTER
702-03. CONCRETE COMBINED CURB AND GUTTER TYPE 6-30 DEPTH 6"
STD. DWG. RP-VC-11

(7B) 6" SLOPING DETACHED CONCRETE CURB
702-01. CONCRETE CURB
STD. DWG. RP-SC-1

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2022	HSIP-131(33)	2B3
PIH	2025	HSIP-131(33)	2B3
PS&E	2026	HSIP-131(33)	2B3

SEALED BY

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No. 111658
STATE OF TENNESSEE

06/02/2026

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

TYPICAL SECTIONS AND PAVEMENT SCHEDULE

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GENERAL NOTES

GRADING

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

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

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

SEEDING AND SODDING

(1) 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.

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, ALL OTHER CULVERTS AND MINOR STRUCTURES 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.

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.

PAVEMENT MARKINGS

TEMPORARY PAVEMENT MARKINGS ON INTERMEDIATE LAYERS

(2) TEMPORARY PAVEMENT LINE MARKINGS ON INTERMEDIATE LAYERS OF PAVEMENT SHALL BE REFLECTIVE TAPE OR REFLECTORIZED PAINT INSTALLED TO PERMANENT STANDARDS AT THE END OF EACH DAY'S WORK. SHORT, UNMARKED SECTIONS SHALL NOT BE ALLOWED. THESE MARKINGS WILL BE MEASURED AND PAID FOR UNDER ITEM NO. 716-05.20, PAINTED PAVEMENT MARKING (6" LINE), L.M.

FINAL PAVEMENT MARKING

(6) THE CONTRACTOR WILL BE REQUIRED TO PERFORM THE FOLLOWING WORK:

a. BROOMING & DE-GRASSING SHOULDERS SHALL INCLUDE CLIPPING OF MATERIAL INTERFERING WITH PROPER DRAINAGE OF ROADWAY (INCLUDING PAVED AND GRAVEL SHOULDERS), AS DIRECTED BY THE TDOT PROJECT ENGINEER.

b. ALL MATERIAL FROM CLIPPING, BROOMING AND DE-GRASSING SHOULDERS SHALL BE PICKED UP, REMOVED AND PROPERLY DISPOSED AS DIRECTED BY THE TDOT PROJECT ENGINEER.

c. ALL COSTS ASSOCIATED WITH PICKING UP, REMOVAL AND PROPER DISPOSAL SHALL BE PAID FOR UNDER ITEM NO. 208-01.05.

d. REMOVE ALL GARBAGE AND CONSTRUCTION DEBRIS FROM PROJECT. THE COST FOR THIS WILL BE INCLUDED IN THE PRICE BID FOR OTHER ITEMS OF CONSTRUCTION.

(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.

DETOURS, LANE SHIFTS AND MEDIAN CROSS-OVERS

(16) THE PAVEMENT MARKING ON THE TEMPORARY RUNAROUND FOR LANE LINES 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. 716-05.20, L.M.

(17) BEFORE OPENING THE LANE SHIFT TO TRAFFIC, THE TRANSITIONAL MARKINGS ON THE EXISTING ROADWAY MUST BE IN PLACE. THESE MARKINGS WILL BE MEASURED AND PAID FOR UNDER ITEM NO. 712-09.08 PER L.F. 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

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

SIGNING

(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.

(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 TDOT REGION 1, TRAFFIC DESIGN MANAGER.

(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.

(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 TDOT REGION 1, TRAFFIC DESIGN MANAGER PRIOR TO MOVING ANY PERMANENT SIGNS.

TYPE	YEAR	PROJECT NO.	SHEET NO.
PIH	2025	HSIP-131(33)	2C
PS&E	2026	HSIP-131(33)	2C

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06/02/2026

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

GENERAL NOTES

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TYPE	YEAR	PROJECT NO.	SHEET NO.
PIH	2025	HSIP-131(33)	2C1
PS&E	2026	HSIP-131(33)	2C1

GENERAL NOTES, CONT'D

SIGNING, CONT'D

(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 TDOT REGION 1, TRAFFIC DESIGN MANAGER PRIOR TO MOVING ANY PERMANENT SIGNS.

SIGNALIZATION

(1) EQUIPMENT AND INSTALLATION OF TRAFFIC SIGNALS SHALL COMPLY WITH TDOT STANDARD SPECIFICATIONS, SECTION 730.

(3) EQUIPMENT AND INSTALLATION SHALL COMPLY WITH THE TDOT "SPECIAL PROVISIONS REGARDING SECTION 730K-TRAFFIC SIGNALS."

(6) SALVAGEABLE EQUIPMENT SHALL BECOME THE PROPERTY OF THE KNOX COUNTY AND SHALL BE STOCKPILED AT A LOCATION DESIGNATED BY THE ENGINEER FOR PICKUP BY THE KNOX COUNTY.

(8) ANY SIGNAL HEADS, WHEN VISIBLE TO DRIVERS BUT NOT OPERATIONAL, SHALL BE COMPLETELY COVERED.

(9) AN ADVANCE FLASH OPERATION PERIOD IS REQUIRED TO MAKE MOTORISTS AWARE OF THE PRESENCE OF NEW SIGNAL HEADS. NEW SIGNAL HEADS SHALL BE PUT IN FLASH OPERATION FOR MINIMUM OF SEVEN (7) CALENDAR DAYS UP TO FOURTEEN (14) CALENDAR DAYS PRIOR TO ACTIVATION OF NORMAL TRAFFIC SIGNAL OPERATION. OTHER FLASH OPERTATION TIME PERIODS MAY BE CONSIDERED UPON WRITTEN APPROVAL FROM THE REGIONAL TRAFFIC ENGINEER.

(10) THE CONTRACTOR SHALL CONTACT KNOX COUNTY A MINIMUM OF THIRTY (30) DAYS PRIOR TO ACTIVATION OF THE SIGNAL TO OBTAIN THE INITIAL SIGNAL TIMINGS.

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.

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

GENERAL NOTES

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TYPE	YEAR	PROJECT NO.	SHEET NO.
PIH	2025	HSIP-131(33)	2D
PS&E	2026	HSIP-131(33)	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.

(6) THE CONTRACTOR SHALL CONSTRUCT AND COMPACT ALL EMBANKMENTS AND BRIDGE APPROACHES WITHIN THE PROJECT LIMITS AS PER 205.04.C IN THE STANDARD SPECIFICATIONS FOR DEGRADABLE ROCK. STOCKPILING OF NON-DEGRADABLE MATERIAL MAY BE REQUIRED FOR USE IN CAPPING EMBANKMENT. NO SEPARATE PAYMENT WILL BE MADE FOR STOCKPILING OR ADDITIONAL HANDLING OF NON-DEGRADABLE MATERIAL.

PAVEMENT

RESURFACING

(2) THE CONTRACTOR WILL BE REQUIRED TO PERFORM THE FOLLOWING WORK:

A. BROOMING & DEGRASSING SHALL INCLUDE NOTCHING THE GRAVEL SHOULDER PRIOR TO MILLING. THE NOTCH SHALL BE 1.5 IN DEEP AND 2 FT WIDE, OR AS DIRECTED BY THE TDOT PROJECT ENGINEER.

B. ALL MATERIAL FROM NOTCHING AND BROOMING SHOULDERS SHALL BE PICKED UP, REMOVED AND PROPERLY DISPOSED AS DIRECTED BY THE TDOT PROJECT ENGINEER.

C. ALL COSTS ASSOCIATED WITH NOTCHING, PICKING UP, REMOVAL AND PROPER DISPOSAL SHALL BE PAID FOR UNDER ITEM NO. 208-01.05.

SIGNALIZATION

(1) THE DESIGN OF TRAFFIC SIGNAL SUPPORT POLES, MAST ARMS, STRAIN POLES, ETC. SHALL BE IN CONFORMANCE WITH THE AASHTO STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS, CURRENT EDITION. OVERHEAD CANTILEVERED TRAFFIC SIGNAL STRUCTURES SHALL BE DESIGNED FOR FATIGUE CATEGORY 1.

DRAINAGE

(1) 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. 204-06.02, FLOWABLE FILL (EXCAVATABLE), C.Y.

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SPECIAL NOTES

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2022	HSIP-131(33)	2E
PIH	2025	HSIP-131(33)	2E
PS&E	2026	HSIP-131(33)	2E

ENVIRONMENTAL NOTES

ENVIRONMENTAL GENERAL NOTES

NATURAL RESOURCES

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

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

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

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

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

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

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

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

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

SPECIES

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

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

(12) IF THE REMOVAL OF ANY TREES WITH A DIAMETER AT BREAST HEIGHT (DBH) GREATER THAN 3 INCHES IS DEEMED NECESSARY THE TDOT SUPERVISOR SHALL CONTACT THE TDOT ENVIRONMENTAL DIVISION, ECOLOGY SECTION IMMEDIATELY.

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.

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) THIS PROJECT INCLUDES GRADING, DRAINAGE, BASE, AND PAVEMENT FROM LINES AND GRADES AS INDICATED ON THE PLANS. IT INCLUDES THE INSTALLATION OF CURB, CURB AND GUTTER, SIGNALS, SIGNS, GUARDRAIL, AND DRAINAGE STRUCTURES, AS WELL AS INCLUDES THE APPLICATION OF PAVEMENT MARKINGS, SOD, TRAFFIC CONTROL DEVICES, EPSC DEVICES, AND OTHER FEATURES AS INDICATED ON THE PLANS OR AS DIRECTED BY THE TDOT MANAGER.

ENVIRONMENTAL PERMITTING NOTES

(1) RIP-RAP SHALL BE PLACED SO AS TO MIMIC THE EXISTING CONTOURS OF THE STREAM CHANNEL. THE TOP OF THE PROPOSED RIP-RAP SHALL BE AT GRADE WITH THE BOTTOM OF THE EXISTING STREAM CHANNEL. VOIDS WITHIN THE RIP-RAP SHALL BE FILLED WITH CREEK GRAVEL, IF AVAILABLE, TO PREVENT LOSS OF STREAM WITHIN RIP-RAP AREAS. CREEK GRAVEL MAY BE REMOVED FROM CULVERT EXCAVATION AREA.

(2) THE CONTRACTOR SHALL USE ANY MEASURE NECESSARY TO ENSURE THAT CONSTRUCTION EQUIPMENT WILL NOT ENTER ANY PORTION OF WWC-1/EPH-1 AND THAT THE STREAM AND SURROUNDING VEGETATION WILL NOT BE DISTURBED AND ARE PROTECTED FROM SEDIMENT AND OTHER POLLUTANTS EXCEPT AT THE PERMITTED LOCATIONS.

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STATE OF TENNESSEE
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ENVIRONMENTAL NOTES

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2022	HSIP-131(33)	2F
PIH	2025	HSIP-131(33)	2F
PS&E	2026	HSIP-131(33)	2F

REV. 01/25/23 :
DELETED WING WALLS FROM THE STORM DRAIN ENDWALLS TABULATION TABLE. UPDATED STORM DRAINAGE PIPE SLOPES. UPDATED INVERT ELEVATION FOR CB#10. UPDATED CODE NUMBERS FOR STORM DRAIN ENDWALLS AND STORM DRAINAGE TIE POINTS.

REV. 04/14/25 : UPDATED STORM DRAINAGE PIPE SLOPE FROM CB#9 TO #8 AND CB#10 TO CB#9. UPDATED INVERT ELEVATIONS FOR CB#9 AND CB#19. UPDATED PIPE LENGTHS FROM CB#18 TO CB #19, CB#19 TO CB#27, CB#9 TO CB#8, AND CB#10 TO CB#9.

STORM DRAINAGE PIPES

SHEET NO.	INLET CODE NO.	INLET OUTLET ELEV.	OUTLET CODE NO.	OUTLET INLET ELEV.	% GRADE	REINFORCED CONCRETE PIPE - CLASS, ITEM NO., SIZE & LENGTH (FT.)	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"	
4B	1	988.79	20	985.52	1.00%		327'					
4B	20	985.38	2	985.35	0.50%		7'					
4B	2	982.08	21	982.04	0.50%		7'					
4B	21	981.85	4	981.73	0.64%		19'					
4B	6	982.56	22	982.06	1.00%		50'					
4B	10	994.04	9	992.73	3.34%		39'					
4B	9	992.53	8	989.29	1.32%		245'					
4B	8	988.60	7	986.17	2.00%		122'					
4B	7	986.00	5	983.01	2.00%		149'					
4B	11	973.77	12	973.43	0.50%		67'					
4B	13	971.66	12	971.47	0.50%		37'					
4B	15	985.06	16	984.67	1.85%		21'					
4B	18	967.25	19	967.14	0.50%		23'					
4B	17	982.75	23	980.78	1.00%					85'		
4B	16	984.34	24	981.00	3.63%		92'					
4B	22	976.48	25	975.50	1.14%			86'				
4B	12	969.24	26	968.00	4.00%		31'					
4B	19	966.80	27	965.56	2.70%		46'					
4B	28	962.14	32	961.89	2.50%			10'				
4B	28	962.14	33	961.77	3.36%			11'				
4B	34	960.26	29	959.60	4.12%			16'				
4B	35	959.95	29	959.60	1.94%			18'				
4B	30	979.05	31	978.72	1.10%					30'		
4B	30	979.05	31	978.72	1.10%					30'		
TOTALS							1282'	141'		145'		

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.
69573	399	535	934	1288	934	354	0

STORM DRAIN ENDWALLS

	LOCATION \ SHEET NO.	STATION	OFFSET (FT.)	SKEW	CODE	TYPE	STANDARD DRAWING NO.	PROTECTED ENDWALLS CLASS "A" CONCRETE 611-07.01 (C.Y.)	PROTECTED ENDWALLS STEEL BAR REINFORCING 611-07.02 (LB.)
	CARPENTER \ SHEET NO. 4B	202+10.41	32.7	90°	23	PROTECTED EW	D-PEW-1	2.82	109
	CARPENTER \ SHEET NO. 4B	202+23.80	42.8	90°	24	STRAIGHT	D-PEW-4	1.13	29
	CARPENTER \ SHEET NO. 4B	203+46.62	57.27	90°	25	STRAIGHT	D-PEW-4	2.14	68
	HARRELL \ SHEET NO. 4B	301+95.33	45.29	90°	26	STRAIGHT	D-PEW-4	1.13	29
	HARRELL \ SHEET NO. 4B	303+20.91	37.45	90°	27	STRAIGHT	D-PEW-4	1.13	29
*	HARRELL \ SHEET NO. 4B	304+51.61	24.35	45°	28	STRAIGHT	D-PEW-4	2.83	90
*	HARRELL \ SHEET NO. 4B	305+08.74	-27.94	45°	29	STRAIGHT	D-PEW-4	2.83	90
*	CARPENTER \ SHEET NO. 4B	202+51.75	40.6	90°	30	PROTECTED EW	D-PEW-1	3.60	139
*	CARPENTER \ SHEET NO. 4B	202+77.65	46.31	90°	31	PROTECTED EW	D-PEW-1	3.60	139
	TOTALS							21	722

* QUANTITIES INCLUDE EXTRA CONCRETE AND STEEL BAR REINFORCING TO ACCOUNT FOR DOUBLE PIPE CULVERTS.

ESTIMATED GRADING QUANTITIES

DESCRIPTION	UNADJUSTED VOLUMES (CY) EXC.	UNADJUSTED VOLUMES (CY) EMB.	ADJUSTED VOLUMES (CY) EXC.
MAINLINE	620	5732	589
SIDE ROADS	3524	2782	3348
PVT. DRIVES, BUSINESS AND FIELD ENTRANCES	115	487	110
INDEPENDENT DITCHES	0	0	
TEMPORARY CONSTRUCTION EXITS	15	0	15
OTHER (TEMPORARY RUNAROUND)	1425	1425	1354
TOPSOIL (EMB.)	535		
TOPSOIL (EXC.)	399		
TOPSOIL TOTALS (SEE TOPSOIL TABLE)			

BALANCE SUMMARY

SHRINK = 5 % SWELL = 5 %

EMB.		EXC.
10426	VS.	-5415
AVAILABLE	=	5011
BORROW MATERIAL	=	5262

ROCK (C.Y.) EXC.	ROCK (C.Y.) EMB.	TOTALS (C.Y.) EXC. (UNCL.)	EMB. (UNCL.)	EXC (COMMON)	EXC. (AVAIL.)	EXC. (ADJ.)
0	0	6633	10426	6633	5699	5415

SPECIAL DITCHES

ROADWAY	STATION FROM	STATION TO	SIDE	DETAIL NO.	CONFIGURATION FORE (H/V)	CONFIGURATION BOTTOM WIDTH (FT.)	CONFIGURATION BACK (H/V)	CLASS B RIP-RAP 709-05.08 (TON)	SODDING NEW SOD 803-01 (S.Y.)
CARPENTER ROAD	202+10.41	204+15.54	RT.	2	2/1	5	2/1	432	
CARPENTER ROAD	202+50.00	203+50.00	LT.	3	3/1	N/A	VARIES		67
HARRELL ROAD	301+00.52	302+15.82	RT.	2	2/1	5	2/1	243	
HARRELL ROAD	303+67.46	305+30.00	LT.	2	VARIES	5	2/1	200	
HARRELL ROAD	303+20.91	304+51.61	RT.	1	VARIES	N/A	2/1	85	
TOTALS								960	67

PROPOSED GUARDRAIL

SHEET NO.	LOCATION	SIDE LT	SIDE RT	STATIONS FROM	STATIONS TO	GUARDRAIL W BEAM GR (TYPE 2) MASH TL3 705-06.01 (L.F.)	GUARDRAIL METAIL BEAM GUARD FENCE 705-01.04 (L.F.)	GUARDRAIL RADIUS RAIL 706-06.03 (L.F.)	GUARDRAIL REMOVED 706-01 (L.F.)	TERMINAL ANCHORS ROUND END ELEMENT 706-10.26 (EACH)	TERMINAL ANCHORS IN-LINE MASH TL3 705-06.11 (EACH)	TERMINAL ANCHORS TYPE 38 MASH TL3 (46.875') 705-06.20 (EACH)	TERMINAL ANCHORS TYPE 21 MASH TL2 (21.875') 705-06.30 (EACH)	REMARKS
4B	SR 131 \ CARPENTER ROAD	X	X	108+22.53	202+76.20	223.26		32.20	162.56	1	1	1		
4B	CARPENTER ROAD \ RIDGEWALK LN		X	202+58.11	500+56.26	70.39		32.20		1	1		1	
4B	HARRELL ROAD	X		303+34.50	304+89.71	90.16	33.00		118.41	1	1	1		
TOTALS						384	33	64	281	3	3	2	1	

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JAMES B. MORGAN
REGISTERED ENGINEER
AGRICULTURE
COMMERCE
No. 111658
STATE OF TENNESSEE

06/02/2026

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

TABULATED QUANTITIES

SHEET 1 OF 2

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2022	HSIP-131(33)	2F1
PIH	2025	HSIP-131(33)	2F1
PS&E	2026	HSIP-131(33)	2F1

REV. 01/25/23 : UPDATED INVERT AND DEPTH INFORMATION FOR CB#10. UPDATED INSIDE DIMENSION AND STANDARD DRAWING NUMBER FOR CB#6, CB#9, AND CB#22.

REV. 04/14/25 : UPDATED GRATE, INVERT, DEPTH, AND OFFSET INFORMATION FOR CB#9 AND CB#19. UPDATED INSIDE DIMENSION AND STANDARD DRAWING NUMBER FOR CB#9.

CATCH BASINS

SHEET NO.	LOCATION	STATION	OFFSET (FT.)	DRAINAGE CODE	GRATE ELEV.	INVERT ELEV.	DEPTH (FT.)	INSIDE DIM.	STANDARD DRAWING NO.	PAY ITEMS											
										TYPE 12 611-12.01 0'-4'	TYPE 12 611-12.03 8'-12'	TYPE 14 611-14.01 0'-4'	TYPE 14 611-14.02 4'-8'	TYPE 25 611-25.01 0'-4'	TYPE 25 611-25.02 4'-8'	**TYPE 25 611-25.04 12'-16'	TYPE 26 611-26.02 4'-8'	TYPE 42 611-42.01 0'-4'	TYPE 42 611-42.02 4'-8'	TYPE 42 611-42.03 8'-12'	TYPE 43 611-43.02 4'-8'
4B	SR-131	105+42.00	18.00 (LT.)	1	991.79	988.79	3.00	32"X32"	D-CB-42S									1			
4B	SR-131	108+84.94	24.28 (LT.)	2	989.26	982.08	7.18	36"X96"	D-CB-26S								1				
4B	SR-131	109+19.80	27.39(LT.)	4	988.58	981.73	15.46	62"X62"	D-CB-25SC							1					
4B	SR-131	109+19.88	38.50 (RT.)	5	987.59	983.01	13.51	62"X62"	D-CB-25SC							1					
4B	CARPENTER ROAD	204+00.00	27.00 (LT.)	6	988.92	982.56	6.36	48"X48"	D-CB-42SB										1		
4B	SR-131	110+74.20	28.45 (RT.)	7	990.00	986.00	4.00	36"X48"	D-CB-25S						1						
4B	SR-131	112+00.02	21.89 (RT.)	8	993.02	988.60	4.42	36"X48"	D-CB-25S						1						
4B	SR-131	114+50.00	21.38 (RT.)	9	998.03	992.53	5.50	32"X32"	D-CB-42S										1		
4B	SR-131	114+40.00	20.58 (LT.)	10	996.98	994.04	2.94	32"X32"	D-CB-42S									1			
4B	HARRELL ROAD	301+28.77	17.23 (RT.)	11	983.36	973.77	9.59	36"X48"	D-CB-12S		1										
4B	HARRELL ROAD	301+99.25	14.00 (RT.)	12	977.50	969.24	8.26	36"X48"	D-CB-12S		1										
4B	HARRELL ROAD	302+24.93	17.92 (LT.)	13	975.56	971.66	3.90	36"X48"	D-CB-12S	1											
4B	RIDGEWALK LN	500+95.93	12.00 (RT.)	15	989.13	985.06	4.07	36"X96"	D-CB-14S				1								
4B	RIDGEWALK LN	500+95.86	14.01 (LT.)	16	989.08	984.34	4.74	96" DIAM.	D-CB-14RB				1								
4B	CARPENTER ROAD	201+37.10	23.78 (RT.)	17	989.28	982.75	6.53	96"X48"	D-CB-43SB												1
4B	PAINTER FARM LN	400+93.78	11.61 (RT.)	18	971.32	967.25	4.07	36"X96"	D-CB-14S			1									
4B	PAINTER FARM LN	400+95.62	16.00 (LT.)	19	971.24	966.83	4.41	36"X96"	D-CB-14RB				1								
4B	SR-131	108+72.32	23.53 (LT.)	20	989.29	985.38	3.91	36"X48"	D-CB-25S					1							
4B	SR-131	108+97.55	25.24 (LT.)	21	989.29	981.85	7.44	36"X48"	D-CB-25S						1						
4B	CARPENTER ROAD	203+51.57	30.62 (LT.)	22	984.88	976.48	8.40	48"X48"	D-CB-42SB											1	
TOTALS										1	2	1	3	1	3	2	1	2	2	1	1

**NOTE: IN ORDER TO PROPERLY TRANSFER THE LOAD OF THE CATCH BASINS INTO THE BOX CULVERT, THE SIZE OF CATCH BASINS SHALL NOT BE CHANGED UNLESS APPROVED BY THE TDOT STRUCTURES OFFICE.

PAVEMENT QUANTITIES

LOCATION (ROADWAY)	TYPE - GRADE - PAY ITEM (TON)						COLD PLANING BITUMINOUS PLANT MIX	CONCRETE DRIVEWAY
	MINERAL AGG.	BITUMINOUS PLANT MIX BASE (HOT MIX)		PRIME COAT	TACK COAT	ASPHALTIC CONCRETE SURFACE (HOT MIX)		
	D	A	B-M2			D	TON	S.F.
	303-01	307-01.01	307-01.08	401-01	403-01	411-01.10	415-01.01	701-02
SR 131	1803.0	432.0	283.0	3.5	2.6	334.0	166.0	
HARRELL ROAD	1176.0	302.0	198.0	2.4	1.0	116.0		
CARPENTER ROAD	810.0	248.0	162.0	2.0	1.0	140.0	26.0	
PAINTER FARM LANE	282.0		77.0		0.2	43.0		
RIDGEWALK LANE	190.0		54.0		0.1	31.0		
TEMPORARY RUNAROUND	593.0		148.0					
DRIVEWAYS	322.0		62.0		0.2	77.0		3187.0
TOTALS	5176	982	984	8	5	741	192	3187

RIGHT -OF- WAY MARKERS

SHEET NO.	Item #: 708-02.01 QUANTITIES			
	"A"	"B"	"C"	TOTALS
4A	20	2	6	28
TOTALS	20		6	28

BOX CULVERT TABULATION

STATION	LOCATION	TYPE		SKEW	NO. BARRELS	WIDTH	HEIGHT	LENGTH	DRAINAGE AREA ACRES	STANDARD DRAWING NO.	CULVERT ≤ 20 FT.		RIP-RAP CLASS B 709-05.08 TON
		BOX	SLAB								CLASS "A" CONCRETE 604-01.01 CU. YD.	STEEL BAR REINF. 604-01.02 LB.	
109+20.00	SR 131	X		90°	1	6	3	175	132	STD-17-51	106.28	26489	142
303-10.00	HARRELL RD.	X		60°	1	6	3	175	156	STD-17-51	106.50	24009	139
TOTALS											213	50498	281

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TABULATED QUANTITIES

SHEET 2 OF 2

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2022	HSIP-131(33)	3
PIH	2025	HSIP-131(33)	3
PS&E	2026	HSIP-131(33)	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 PROJECT MANAGER, AND PRECONSTRUCTION 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.

(10) ON PROJECTS WITH CURB AND GUTTER THAT ARE ON STATE ROUTES, IT WILL BE THE RESPONSIBILITY OF THE OWNER TO SECURE A PERMIT. AFTER THE PERMIT HAS BEEN GRANTED, THE DEPARTMENT WILL CONSTRUCT THE DRIVEWAY OR FIELD ENTRANCE THROUGH THE CURB AND SIDEWALK, PROVIDED THE CURB AND SIDEWALK HAVE NOT BEEN CONSTRUCTED. IT WILL BE THE RESPONSIBILITY OF THE PROPERTY OWNER TO CONSTRUCT THE DRIVEWAY OR FIELD ENTRANCE FROM BACK OF SIDEWALK TO TOUCHDOWN POINT FOR ANY ADDITIONAL DRIVEWAYS OR 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.

UTILITIES

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

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

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

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

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

UTILITY OWNER

CABLE:
XFINITY (COMCAST)
5720 ASHEVILLE HWY.
KNOXVILLE, TN 37924
CONTACT: JASON KELLY
OFFICE PHONE: 865 862 5061
CELL PHONE: 865 437 0295
Email: JASON_KELLY@COMCAST.COM

ELECTRIC:
KNOXVILLE UTILITIES BOARD
P.O. BOX 59017 (37950-9017)
4505 MIDDLEBROOK PIKE
KNOXVILLE, TN 37921-5599
CONTACT: DANIEL McELYEA
OFFICE PHONE: 865 558 2699
CELL PHONE: 865 216 0752
Email: DANIEL.MCELYEA@KUB.ORG

GAS:
KNOXVILLE UTILITIES BOARD
4505 MIDDLEBROOK PIKE
KNOXVILLE, TN 37921-5599
CONTACT: PETER TRAPKA
OFFICE PHONE: 423 881 5225

FIBER:
TDS TELECOM
10201 UPPER RIDGE WAY
KNOXVILLE, TN 37932
CONTACT: JASON WALKER
OFFICE PHONE: 865 740 4269

TELEPHONE:
FRONTIER COMMUNICATIONS
725 E MARKHAM AVE.
DURHAM, NC 27701
CONTACT: CHAD FOSTER
OFFICE PHONE: 919 471 3654
CELL PHONE: 919 886 8028
Email: CHAD.D.FOSTER@FTR.COM

COMM:
IRIS NETWORKS
211 COMMERCE STREET
NASHVILLE, TN 37201
CONTACT: DWAYNE LAXTON

OFFICE PHONE: 865 617 8711

WATER/SEWER:
WEST KNOX UTILITY DISTRICT
2328 LOVELL ROAD
KNOXVILLE, TN 37932
CONTACT: JIM REESE
OFFICE PHONE: 865 690 2521 EXT. 236
Email: JREESE@WKUD.COM

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DEPARTMENT OF TRANSPORTATION

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

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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 BK.	PAGE	LEFT	RIGHT	TOTAL	LEFT	RIGHT	TOTAL	LEFT	RIGHT	PERM. DRAINAGE	SLOPE	CONST. ①
~~1~~	~~WCO AL DP LLC~~	~~078~~	~~049.07~~	~~20150429~~	~~0058474~~	~~1.070~~		~~1.070~~				~~1.070~~				
~~2~~	~~CAMPBELL F. JR & SUSAN THOMASSON~~	~~078~~	~~044~~	~~20091118~~	~~0035077~~		~~0.654~~	~~0.654~~					~~0.654~~			
~~3~~	~~WCO AL DP LLC~~	~~078~~	~~049.06~~	~~20150429~~	~~0058474~~	~~1.055~~		~~1.055~~				~~1.055~~				
~~4~~	~~DOUGLAS FITZOVICH, EDWARD FITZOVICH, LOVELLA GEVILLANO~~	~~078~~	~~049.05~~	~~20100502~~	~~0064382~~	~~1.333~~		~~1.333~~				~~1.333~~				
~~5~~	~~JANET R. & ANNA B. WHITTED~~	~~078 G C~~	~~045~~	~~20080807~~	~~0009339~~		~~0.202~~	~~0.202~~					~~0.202~~			
~~6~~	~~BRYAN ADKISSON, DEBORAH ADKISSON~~	~~078~~	~~049.04~~	~~20150610~~	~~0067083~~	~~1.204~~		~~1.204~~				~~1.204~~				
~~7~~	~~WILLIAM A. & SANDY LYNN O. WELLS~~	~~078 G C~~	~~046~~	~~2080516~~	~~0086203~~		~~0.190~~	~~0.190~~					~~0.190~~			
~~8~~	~~STEVEN W. & AMBER C. MCGHEE~~	~~078 G C~~	~~048~~	~~20100622~~	~~0079634~~		~~0.411~~	~~0.411~~					~~0.411~~			
~~9~~	~~RODGER A AYERS, EMILY RHIANNON AYERS~~	~~078~~	~~049.03~~	~~20151203~~	~~0033847~~	~~1.056~~		~~1.056~~				~~1.056~~				
~~10~~	~~JOSHUA A. & HEATHER M. MORRIS~~	~~078-G-C~~	~~049~~	~~20130111~~	~~00445624~~		~~0.362~~	~~0.362~~					~~0.362~~			
~~11~~	~~MICHAEL W. & JANA C. WILSON~~	~~078 G C~~	~~050~~	~~20070918~~	~~0024220~~		~~0.281~~	~~0.281~~					~~0.281~~			
~~12~~	~~CLAUDE M BYRUM, EMILY P BYRUM~~	~~078 G C~~	~~053~~	~~20150921~~	~~0018645~~		~~0.274~~	~~0.274~~					~~0.274~~			
13	DUSTIN C PARROTT, REBECCA P PARROTT	078-G-C	001	20161202	0035319		0.754	0.754		3037 S.F.	3037 S.F.		0.684			
~~14~~	~~AMY D. BRASFIELD~~	~~078-G-C~~	~~001.01~~	~~20121231~~	~~0043200~~		~~0.347~~	~~0.347~~					~~0.347~~			
~~15~~	~~KNOX COUNTY TENNESSEE~~	~~078~~	~~049~~	~~20130905~~	~~0016446~~		~~17.491~~	~~17.491~~					~~17.491~~			
16	CHASITY QUEENER STEIN	078-B-C	004	20240710	0001708		1.737	1.737		3460 S.F.	3460 S.F.		1.658			
~~17~~	~~WILLIAM D. & TAMARA COFER~~	~~078 B C~~	~~004.01~~	~~20050222~~	~~0065880~~		~~0.983~~	~~0.983~~					~~0.983~~			
18	WANDA & ANGELA LEE	078	048	20081119	0033096		0.590	0.590		0.281	0.281		0.309			0.107 AC ②
19	EAGLE BEND REALTY LLC C/O SCOTT DAVIS	078-G-C	082	20050217	0065130		1.808	1.808		0.540	0.540		1.268			
~~20~~	~~HENRY LEE & BETTY L. LENOIR~~	~~078~~	~~049.02~~	~~20090828~~	~~0015783~~	~~1.072~~		~~1.072~~				~~1.072~~				
21	MICHAEL L. & APRIL D. VINEYARD	078	049.01	20070531	0098328	1.240		1.240	0.278		0.278	0.962				
22	MCKENZIE C. & LEDA M. ROBERTS	078-B-A	033	20131011	0024006	0.323		0.323	0.323		0.323					
23	MICHAEL B CLARK	078-B-A	041	20150828	0013539	0.593		0.593	1048 S.F.		1048 S.F.	0.569				0.117 AC
24	KIMBERLY HAYES MCCUISTON	078-B-A	043.07	20180501	0064500	0.189		0.189				0.189				
25	RONALD SCROGGINS, KIMBERLY SCROGGINS	078-B-A	043.08	20170626	0078759	0.185		0.185				0.185				
~~26~~	~~DAVID J KRAHL~~	~~078-B-A~~	~~043.09~~	~~20200427~~	~~0070845~~	~~0.254~~		~~0.254~~				~~0.254~~				
~~27~~	~~AARON S. & CRYSTAL D. STIDHAM~~	~~078-B-A~~	~~043.01~~	~~20080617~~	~~0094675~~	~~0.580~~		~~0.580~~				~~0.580~~				
~~29~~	~~KEEN DENISE HODGE~~	~~078-B-A~~	~~037~~	~~20170117~~	~~0044181~~	~~0.527~~		~~0.527~~				~~0.527~~				
~~29A~~	~~KAITLYN OKAL, BLAKE GRANTHAM~~	~~078-B-A~~	~~038~~	~~2222~~	~~700~~	~~0.355~~		~~0.355~~				~~0.355~~				
28	WILLIAM STEELE & ROBERTA BARNHILL & JERRY J. STEELE	078	031.01	20170613	0076179	3.494		3.494				3.494				
30	ANGIE STANSBERRY AND MARY ANN RUSSELL	078-B-A	035	20220713	0002773	2.457		2.457	0.118		0.118	2.339				
31	ALPESH PATEL	078-B-A	031	20120427	0060457	0.926		0.926	3158 S.F.		3158 S.F.	0.854				
~~32~~	~~DAVID & MARY ANN BROOKS~~	~~078 B A~~	~~001~~	~~20020812~~	~~0012188~~		~~0.509~~	~~0.509~~					~~0.509~~			
~~33~~	~~DAVID M. ROGERS~~	~~078 B A~~	~~002~~	~~20021002~~	~~0028939~~		~~0.462~~	~~0.462~~					~~0.462~~			
~~34~~	~~DENNIS & KIMBERLY WILLIAMS~~	~~078 B A~~	~~003~~	~~20110629~~	~~0074403~~		~~0.462~~	~~0.462~~					~~0.462~~			
~~35~~	~~JOY L. PATRICK~~	~~078~~	~~046.02~~	~~201000422~~	~~0033404~~		~~1.563~~	~~1.563~~					~~1.563~~			
36	TREVOR IAN DUNLAP & BRITNI KELLY MIRACLE	078-B-A	030	20240202	0037161	0.431		0.431	821 S.F.		821 S.F.	0.412				498
37	KIMBERLY J. NORRIS	078-B-A	029	20130122	0047807	0.381		0.381				0.381				429
~~38~~	~~DEAN & BRENDA WILSON~~	~~078~~	~~046.01~~	~~20110912~~	~~0013899~~	~~0.720~~		~~0.720~~				~~0.720~~	~~0.720~~			
~~39~~	~~JAMES L. THOMAS~~	~~078 B A~~	~~028~~	~~20100723~~	~~0004709~~	~~0.381~~		~~0.381~~				~~0.381~~				
~~40~~	~~MARISSA FRENCH, SCOTT FRENCH~~	~~078~~	~~046.03~~	~~20160504~~	~~0063683~~		~~0.456~~	~~0.456~~					~~0.456~~			
~~41~~	~~PEGGY J. JANSEN~~	~~078 B A~~	~~027~~	~~20041220~~	~~0050071~~	~~0.502~~		~~0.502~~				~~0.502~~				
~~42~~	~~CHRISTOPHER LAUDERDALE~~	~~078~~	~~046~~	~~20190605~~	~~0072161~~		~~1.810~~	~~1.810~~					~~1.810~~			
~~43~~	~~SCOTT T. CAUSBY~~	~~078 B D~~	~~001~~	~~20121204~~	~~0036003~~		~~0.460~~	~~0.460~~					~~0.460~~			
~~44~~	~~VAUD L. JR. & PRAYONK WIDNER~~	~~078 B B~~	~~002~~	~~1929~~	~~259~~	~~0.524~~		~~0.524~~				~~0.524~~				
~~45~~	~~BETHEL UNITED METHODIST CHURCH TRUSTEES~~	~~078~~	~~044~~	~~1788~~	~~469~~		~~1.001~~	~~1.001~~					~~1.001~~			
8018	WANDA & ANGELA LEE	078	048	20081119	0033096		0.309	0.309		0.309	0.309		0 S.F.			

① TO PROVIDE WORKING ROOM FOR CONSTRUCTION AND EPSC MEASURES.

② FOR REMOVAL OF STRUCTURE

DISTURBED AREA	
IN BETWEEN SLOPE LINES	3.60 AC
15 FOOTWIDE STRIP (OUTSIDE OF SLOPE LINES)	1.30 AC
TOTAL DISTURBED AREA	4.90 AC
TOTAL PROJECT AREA	5.45 AC

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2022	HSIP-131(33)	3A
PIH	2025	HSIP-131(33)	3A
PS&E	2026	HSIP-131(33)	3A

REV. 02/13/24 :ADDED TEMPORARY CONST. ESMT. TO TRACT 18. ADDED NOTE 2.

REV. 04/14/25 :UPDATED PROPERTY OWNERS AND DEED DOCUMENT REFERENCES FOR TRACTS 16, 30, & 36. ADDED TRACT 8018.

SEALED BY

JAMES B. MORGAN
REGISTERED ENGINEER
AGRICULTURE
COMMERCE
No. 111458
STATE OF TENNESSEE

06/02/2026

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

RIGHT-OF-WAY ACQUISITION TABLE

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2022	HSIP-131(33)	3B
PIH	2025	HSIP-131(33)	3B
PS&E	2026	HSIP-131(33)	3B

REV. 01/25/23 : ADDED EXISTING UTILITY EASEMENTS ON TRACTS 18 AND 13.

REV. 02/13/24 :ADDED TEMPORARY CONST. ESMT. TO TRACT 18.

REV. 04/14/25 :ADDED TRACT 8018. CADD UPDATES.

ALL SUBDIVISION LOTS HAVE AN EXISTING 10' UTILITY AND DRAINAGE EASEMENT INSIDE ROAD FRONTAGE AND SUBDIVISION PERIMETER LOT LINES, 5' EACH SIDE OF ALL INTERIOR LOT LINES.
(TRACTS 23, 24, 25, 26, & 27)

47027-3222-94
BEGIN PROJ. NO. HSIP-131(33)
STA. 105+25.00 (CONST.)
N 611687.0847
E 2533521.1527

ALL SUBDIVISION LOTS HAVE AN EXISTING 5' UTILITY AND DRAINAGE EASEMENT
(TRACTS 29, 29A, 36, 37, 39, 41, & 44).

47027-2222-94
END PROJ. NO. HSIP-131(33)
STA. 114+59.00 (R.O.W.)
N 612259.5270
E 2534258.0469

47027-3222-94
END PROJ. NO. HSIP-131(33)
STA. 114+65.00 (CONST.)
N 612262.8018
E 2534263.0744

47027-2222-94
BEGIN PROJ. NO. HSIP-131(33)
STA. 105+42.00 (R.O.W.)
N 611698.1585
E 2533534.0511

ALL SUBDIVISION LOTS HAVE AN EXISTING 10' UTILITY AND DRAINAGE EASEMENT INSIDE ROAD FRONTAGE AND SUBDIVISION PERIMETER LOT LINES, 5' EACH SIDE OF ALL INTERIOR LOT LINES.
(TRACTS 1-14, & 19-21)

ALL SUBDIVISION LOTS HAVE AN EXISTING 10' UTILITY AND DRAINAGE EASEMENT INSIDE ROAD FRONTAGE AND SUBDIVISION PERIMETER LOT LINES, 5' EACH SIDE OF ALL INTERIOR LOT LINES.
(TRACTS 16, 17, 18, 32, 33, 34, 35, 38, 40, 42, & 43)

LEGEND	
	PROPOSED CONSTRUCTION EASEMENT

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No. 111658
STATE OF TENNESSEE

06/02/2026

COORDINATES ARE NAD 83(1995), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00009 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988 WITH GEOID 2012A.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PROPERTY MAP

SCALE: 1"=100'

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47027-2222-94
BEGIN PROJ. NO. HSIP-131(33)
STA. 105+42.00 (R.O.W.)
N 611698.1585
E 2533534.0511

47027-2222-94
END PROJ. NO. HSIP-131(33)
STA. 114+59.00 (R.O.W.)
N 612259.5270
E 2534258.0469

47027-3222-94
END PROJ. NO. HSIP-131(33)
STA. 114+65.00 (CONST.)
N 612262.8018
E 2534263.0744

47027-3222-94
BEGIN PROJ. NO. HSIP-131(33)
STA. 105+25.00 (CONST.)
N 611687.0847
E 2533521.1527

CONTROL POINTS						
POINT	NORTHING	EASTING	ELEV.	STATION	OFFSET	REFERENCE TO
CP-S31	612061.0232	2533925.7687	991.33	110+74.04	-29.32	S.R. 131
CP-S33	612189.1103	2533617.7707	989.46	201+61.24	24.70	CARPENTER RD.
CP-S34	611729.8428	2534034.5677	971.91	302+98.94	39.48	HARRELL RD.

TRACT NO.	PROPERTY OWNERS
24	KIMBERLY HAYES MCCUISTON
25	RONALD SCROGGINS, KIMBERLY SCROGGINS
26	DAVID J KRAHL

LEGEND	
T.B.R.	TO BE REMOVED
T.B.A.	TO BE ABANDONED AND BACKFILLED
	PROPOSED CONSTRUCTION EASEMENT
	EXIST. PVMT. TO BE SCARIFIED, OBLITERATED, TOPSOILED, AND SEEDED.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2022	HSIP-131(33)	4
PIH	2025	HSIP-131(33)	4
PS&E	2026	HSIP-131(33)	4

REV. 01/25/23 : ADDED EXISTING UTILITY EASEMENTS ON TRACTS 18 AND 13.

REV. 02/13/24 :ADDED TEMPORARY CONST. ESMT. AND PROPOSED DRIVEWAY TO TRACT 18. UPDATED SLOPE LINES AROUND DRIVEWAYS FOR TRACT 18 AND TRACT 21.

REV. 04/14/25 :ADDED TRACT 8018. CADD UPDATES. UPDATED PROPERTY OWNERS ON TRACTS 16, 30, & 36. MODIFIED SLOPE LINES ALONG HARRELL RD., CARPENTER RD., PAINTER FARM LN., AND S.R. 131.

MICHAEL B CLARK (23)
HENRY LEE & BETTY L. LENOIR (20)
RODGER A AYERS, EMILY RHIANNON AYERS (9)
MICHAEL L. & APRIL D. VINEYARD (21)
MCKENZIE C. & LEDA M. ROBERTS (22)
ANGIE STANSBERRY AND MARY ANN RUSSELL (30)
ALPESH PATEL (31)
TREVOR IAN DUNLAP & BRITNI KELLY MIRACLE (36)
KIMBERLY J. NORRIS (37)
JAMES L. THOMAS (39)
PEGGY J. JANSEN (41)
WANDA & ANGELA LEE (18)
EAGLE BEND REALTY LLC C/O SCOTT DAVIS (19)
DAVID & MARY ANN BROOKS (8018)
UNECONOMIC REMNANT
DAVID M. ROGERS (33)
DENNIS & KIMBERLY WILLIAMS (34)
DEAN & BRENDA WILSON (38)
MARISSA FRENCH, SCOTT FRENCH (40)
STEVEN W. & AMBER G. MCGHEE (8)
JOSHUA A. & HEATHER M. MORRIS (10)
MICHAEL W. & JANA G. WILSON (11)
CLAUDE M BYRUM, EMILY P BYRUM (12)
DUSTIN C PARROTT, REBECCA P PARROTT (13)
CHASITY QUEENER STEIN (16)
WILLIAM D. & TAMARA COFER (17)

CARPENTER RD STA. 201+86.00 = RIDGEWALK LN STA. 500+00.00
N 612180.8674
E 2533653.2295

S.R. 131 STA. 109+95.00 = HARRELL RD STA. 300+00.00 = CARPENTER RD STA. 204+90.00
N 611989.3473
E 2533881.0046

HARRELL RD STA. 302+75.00 = PAINTER FARM LN STA. 400+00.00
N 611773.0523
E 2534050.8324

SR131	CARPENTER1	CARPENTER2	CARPENTER3
PI 111+23.04	PI 199+65.32	PI 201+96.85	PI 203+38.32
N 612,076.6474	N 612,391.6226	N 612,164.2036	N 612,110.5956
E 2,533,974.9007	E 2,533,593.2834	E 2,533,639.4618	E 2,533,785.8044
Δ 7° 46' 54" (RT)	Δ 10° 56' 11" (LT)	Δ 58° 24' 12" (LT)	Δ 31° 44' 37" (RT)
D 1° 05' 00"	D 6° 21' 58"	D 39° 14' 37"	D 33° 42' 12"
R 5,288.84	R 900.00	R 146.00	R 170.00
L 718.30	L 171.79	L 148.82	L 94.18
T 359.70	T 86.16	T 81.60	T 48.34
		SE 0.068 FT/FT	SE 0.064 FT/FT
		DESIGN SPEED 20 MPH	DESIGN SPEED 20 MPH
		TRANS. LENGTH 145	TRANS. LENGTH 140

HARRELL	PAINTERFARM	RIDGEWALK
PI 304+50.35	PI 400+90.74	PI 501+34.19
N 611,635.1313	N 611,717.0128	N 612,138.5484
E 2,534,159.1234	E 2,533,979.4597	E 2,533,525.8924
Δ 17° 09' 32" (RT)	Δ 57° 58' 33" (LT)	Δ 20° 10' 58" (RT)
D 14° 00' 00"	D 45° 00' 00"	D 14° 00' 31"
R 409.26	R 127.32	R 409.00
L 122.56	L 128.84	L 144.07
T 61.74	T 70.54	T 72.79
SE 0.067 FT/FT		
DESIGN SPEED 30 MPH		
TRANS. LENGTH 158.18		

SEALED BY
JAMES B. MORGAN
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STATE OF TENNESSEE
06/02/2026

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PRESENT LAYOUT

STA. 105+25 TO STA. 114+65
SCALE: 1"= 50'

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47027-2222-94
BEGIN PROJ. NO. HSIP-131(33)
STA. 105+42.00 (R.O.W.)
N 611698.1585
E 2533534.0511

47027-2222-94
END PROJ. NO. HSIP-131(33)
STA. 114+59.00 (R.O.W.)
N 612259.5270
E 2534258.0469

47027-3222-94
END PROJ. NO. HSIP-131(33)
STA. 114+65.00 (CONST.)
N 612262.8018
E 2534263.0744

47027-3222-94
BEGIN PROJ. NO. HSIP-131(33)
STA. 105+25.00 (CONST.)
N 611687.0847
E 2533521.1527

CONTROL POINTS

POINT	NORTHING	EASTING	ELEV.	STATION	OFFSET	REFERENCE TO
CP-S31	612061.0232	2533925.7687	991.33	110+74.04	-29.32	S.R. 131
CP-S33	612189.1103	2533617.7707	989.46	201+61.24	24.70	CARPENTER RD.
CP-S34	611729.8428	2534034.5677	971.91	302+98.94	39.48	HARRELL RD.

TRACT NO.	PROPERTY OWNERS
24	KIMBERLY HAYES MCCUISTON
25	RONALD SCROGGINS, KIMBERLY SCROGGINS
26	DAVID J KRAHL

ALL SUBDIVISION LOTS HAVE AN EXISTING 5' UTILITY AND DRAINAGE EASEMENT

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2022	HSIP-131(33)	4A
PIH	2025	HSIP-131(33)	4A
PS&E	2026	HSIP-131(33)	4A

REV. 01/25/23 : ADDED EXISTING UTILITY EASEMENTS ON TRACTS 18 AND 13.

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SEALED BY

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AGRICULTURE
COMMERCE
111658
STATE OF TENNESSEE

06/02/2026

COORDINATES ARE NAD 83(1995), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00009 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988 WITH GEOID 2012A.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

RIGHT-OF-WAY DETAILS

STA. 105+25 TO STA. 114+65
SCALE: 1"= 50'

MICHAEL B CLARK
HENRY LEE & BETTY L. LENOIR
RODGER A AYERS, EMILY RHIANNON AYERS
MICHAEL L. & APRIL D. VINEYARD
MCKENZIE C. & LEDA M. ROBERTS
ANGIE STANSBERRY AND MARY ANN RUSSELL
ALPESH PATEL
TREVOR IAN DUNLAP & BRITNI KELLY MIRACLE
KIMBERLY J. NORRIS
PEGGY J. JANSEN
JAMES L. THOMAS
WANDA & ANGELA LEE
EAGLE BEND REALTY LLC C/O SCOTT DAVIS
UNECONOMIC REMNANT
DAVID & MARY ANN BROOKS
DAVID M. ROGERS
DENNIS & KIMBERLY WILLIAMS
DEAN & BRENDA WILSON
MARISSA FRENCH, SCOTT FRENCH
CHRISTOPHER LAUDERDALE
STEVEN W. & AMBER G. MCGHEE
JOSHUA A. & HEATHER M. MORRIS
MICHAEL W. & JANA G. WILSON
DUSTIN C PARROTT, REBECCA P PARROTT
CLAUDE M BYRUM, EMILY P BYRUM
CHASITY QUEENER STEIN
WILLIAM D. & TAMARA COFER
JOY L. PATRICK
CARPENTER RD
HARRELL RD
RIDGEWALK LN
S.R. 131
CARPENTER RD STA. 201+86.00 = RIDGEWALK LN STA. 500+00.00
N 612180.8674
E 2533653.2295
S.R. 131 STA. 109+95.00 = HARRELL RD STA. 300+00.00 = CARPENTER RD STA. 204+90.00
N 611989.3473
E 2533881.0046
HARRELL RD STA. 302+75.00 = PAINTER FARM LN STA. 400+00.00
N 611773.0523
E 2534050.8324
STA. 105+00.00 N 611670.7996 E 2533502.1844
STA. 115+00.00 N 612281.8174 E 2534292.4582
LIMIT OF CONST. STA. 199+52.00 N 612405.0473 E 2533596.1025
LIMIT OF CONST. STA. 401+50.00 N 611685.9168 E 2533981.0187
LIMIT OF CONST. STA. 305+39.00 N 611569.9021 E 2534187.9694
20' UTILITY CONSTRUCTION ESMT.
15' SANITARY SEWER ESMT.
15' SAN. SEWER ESMT.
15' UTIL ESMT. SIGHT DISTANCE ESMT.
150' TVA EASEMENT
D & U ESMT.
DRAINAGE & UTILITY ESMT.
PROP. CONST. ESMT. FOR REMOVAL OF STRUCTURE
PROP. 10' CONST ESMT.
PRES. & PROP ROW
PRES. ROW
PROP. R.O.W.
CUT
FILL
EIP
N 611500
E 2533500
N 612000
E 2534000
E 2534500
N 612000
8018
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19
23
24
25
26
S 66° 40' 48" W 25.05'
N 66° 40' 48" E 142.75'
104+06.95 404.25'
503+05.93 172.69'
503+05.93 162.00'
502+02.36 101.03'
501+82.05 28.09'
S 66° 40' 48" W 142.97'
S 66° 40' 48" W 186.00'
N 75° 47' 45" W 45.20'
S 66° 40' 48" W 31.25'
N75°47'45"W 29.51'
202+19.69 39.77'
202+28.29 55.74'
N66°40'48"E 22.91'
S 42° 31' 6" E 23.92'
N66°20'32"W 149.02'
S 42° 31' 6" E 20.07'
S 42° 31' 6" E 175.62'
204+06.16 111.76'
203+57.42 1.24'
105+43.30 45.38'
104+07.07 45.33'
S 49° 19' 47" W 136.23'
107+03.68 45.45'
N 49° 19' 47" E 160.38'
107+48.76 44.55'
N 33° 34' 47" E 143.59'
N 50° 29' 52" E 45.09'
S 50° 29' 52" W 190.65'
109+37.96 43.64'
109+39.27 23.61'
S 52° 19' 56" E 55.98'
109+95.00 22.86'
N 49° 21' 09" E
S.R. 131
S 49° 32' 17" W 113.70'
S 49° 32' 17" W 57.08'
S 49° 32' 17" E 371.27'
105+42.00 52.50'
104+84.92 52.32'
N 52° 27' 30" E 204.04'
N 56° 42' 16" E 88.78'
108+00.00 100.00'
108+90.00 110.00'
105+95.56 69.07'
105+74.42 132.14'
106+48.95 203.53'
105+05.36 278.15'
401+71.27 152.60'
401+82.56 83.17'
401+91.37 28.97'
S 10° 50' 12" E 54.01'
402+45.20 24.52'
S 10° 50' 12" E 53.92'
402+40.99 25.30'
402+49.05 31.86'
402+49.05 15.27'
401+87.25 20.86'
303+90.00 50.00'
304+55.13 32.50'
S21°48'54"E 24.45'
S82°1'49"E 83.41'
304+61.67 34.70'
305+00.00 60.00'
N 28° 6' 26" E 33.04'
305+20.00 34.86'
304+62.97 37.06'
303+70.00 67.00'
N81°57'52"W 34.66'
303+31.85 41.81'
303+19.47 49.45'
S 51° 14' 22" W 77.28'
303+18.63 117.72'
303+93.76 93.43'
N 73° 30' 27" W 59.64'
111+21.78 49.14'
S 59° 8' 43" W 95.24'
S 51° 43' 34" W 75.42'
112+15.81 40.18'
112+90.54 44.04'
N51°43'34"E 7.47'
112+97.93 44.48'
S 66° 32' 15" W 92.34'
114+08.73 26.83'
S 56° 43' 40" E 97.11'
112+91.70 23.93'
113+88.00 27.01'
S 56° 43' 40" E 109.96'
115+18.32 27.10'
S 56° 43' 40" E 20.84'
N 57° 08' 02" E
S 38° 16' 21" E 49.63'
112+82.87 180.04'
S 56° 43' 40" W 193.10'
S 56° 43' 40" W 109.96'
114+09.66 177.61'
115+17.21 177.89'
116+27.16 178.67'
N 56° 43' 40" E 143.46'
117+70.31 179.68'
N 38° 16' 21" W 360.92'
N 38° 16' 21" W 136.23'
S 38° 16' 21" E 135.13'
N 38° 16' 21" W 5.00'
S 38° 16' 21" E 15.14'
N 54° 9' 38" E 151.69'
S 38°16'21"E 23.67'
N 56° 43' 40" W 20.84'
N 33° 17' 22" W 150.78'
S 33° 17' 22" E 150.78'
5' D & U ESMT.
N 38° 16' 21" W 360.92'
S 38° 16' 21" E 360.92'
S 38° 16' 21" E 119.54'
N 38° 16' 21" W 119.54'
S 39° 21' 24" E 97.90'
201+32.46 27.01'
CARPENTER RD STA. 201+86.00 = RIDGEWALK LN STA. 500+00.00
N 612180.8674
E 2533653.2295
S 17° 38' 41" E 53.01'
N 17° 24' 31" W 53.01'
200+76.24 26.97'
S 12° 24' 31" E 76.27'
199+98.53 24.25'
199+50.83 25.49'
S 5° 1' 56" E 46.40'
199+99.09 30.86'
200+58.47 115.77'
S 12° 24' 31" E 84.06'
S 77° 24' 34" E 84.70'
200+61.40 28.28'
201+41.02 29.63'
500+62.43 19.97'
S 77° 24' 34" E 85.27' FILL
201+54.69 42.60'
500+47.46 29.03'
S71°27'39"W
500+23.83 31.07'
501+55.83 20.06'
R=250.00' L=98.77' CUT
R=300.00' L=104.66' FILL
501+77.63 21.77'
R=250.00' L=20.75'
502+33.31 24.05'
502+90.43 24.44'
N 86° 32' 32" W 110.01'
502+44.02 25.60'
502+89.10 25.54'
N 86° 32' 32" E 54.20'
S 86° 32' 32" E 55.81'
502+30.12 138.97'
N 86° 32' 32" W 85.40'
N 86° 32' 32" W 64.06'
S 86° 32' 32" E 64.06'
N 12° 24' 31" E 64.06'
S 80° 26' 22" W 84.06'
N 12° 24' 31" E 84.06'
N 77° 35' 29" W 54.20'
N 12° 24' 31" E 84.70'
S 12° 24' 31" E 84.70'
N 12° 24' 31" E 84.70'
S 77° 35' 29" E 54.20'
N 77° 35' 29" W 54.20

47027-2222-94
BEGIN PROJ. NO. HSIP-131(33)
STA. 105+42.00 (R.O.W.)
N 611698.1585
E 2533534.0511

47027-3222-94
BEGIN PROJ. NO. HSIP-131(33)
STA. 105+25.00 (CONST.)
N 611687.0847
E 2533521.1527

47027-2222-94
END PROJ. NO. HSIP-131(33)
STA. 114+59.00 (R.O.W.)
N 612259.5270
E 2534258.0469

47027-3222-94
END PROJ. NO. HSIP-131(33)
STA. 114+65.00 (CONST.)
N 612262.8018
E 2534263.0744

NOTE: PLEASE REFERENCE SHEET 2B3 FOR RIPRAP T CHANNEL DETAIL.
SEE SHEET 2E FOR ENVIRONMENTAL PERMITTING NOTES.
SEE SHEET 5 FOR HARRELL RD. & PAINTER FARM LN. PROFILES.
SEE SHEET 6 FOR CARPENTER RD. AND RIDGEWALK LN. PROFILES.

NOTE: NODES #3 AND #14 ARE NOT USED.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2022	HSIP-131(33)	4B
PIH	2025	HSIP-131(33)	4B
PS&E	2026	HSIP-131(33)	4B

REV. 01/25/23 : UPDATED INVERT INFORMATION FOR CB#10.
UPDATED CODE NUMBERS FOR STORM DRAIN ENDWALLS AND STORM DRAINAGE TIE POINTS.

REV. 02/13/24 :ADJUSTED GUARDRAIL ALONG CARPENTER RD. AND ADDED PROPOSED DRIVEWAY TO TRACT 18.

REV. 04/14/25 :MODIFIED SPECIAL DITCH ALONG HARRELL ROAD. UPDATED BOX CULVERT ENDWALLS AND HARRELL RD. BOX CULVERT RIP-RAP PAD. CADD CORRECTIONS. MODIFIED CB#9 AND CB#19. MODIFIED STORM PIPES FROM CB#10 TO CB#9, CB#9 TO CB#8, CB#18 TO CB#19, AND CB#19 TO EW#27.

POINT NUMBER	STATION	OFFSET	NORTHING	EASTING	REMARKS
P-1	108+51.82	30.00'	611876.3249	2533788.7559	S.R. 131
P-2	109+14.39	33.93'	611912.7188	2533839.3435	S.R. 131
P-3	109+76.71	95.21'	611903.3491	2533925.6966	S.R. 131
P-4	301+86.25	12.00'	611835.4438	2533986.5877	HARRELL
P-5	109+10.60	98.82'	611859.9546	2533877.3033	S.R. 131
P-6	301+44.69	23.93'	611890.3209	2533989.1827	HARRELL
P-7	110+23.71	80.70'	611943.9454	2533953.1249	S.R. 131
P-8	110+81.00	24.20'	612022.6311	2533963.7096	S.R. 131
P-9	111+73.61	18.00'	612082.7326	2534033.9511	S.R. 131
P-10	110+84.56	84.10'	611977.0419	2534002.7176	S.R. 131
P-11	111+29.00	30.00'	612094.8139	2533969.5102	S.R. 131
P-12	110+66.06	34.27'	612060.0891	2533916.3954	S.R. 131
P-13	110+12.16	84.33'	612066.4145	2533842.6576	S.R. 131
P-14	203+64.44	12.00'	612066.4145	2533842.6576	CARPENTER
P-15	110+70.37	94.11'	612110.3091	2533883.5632	S.R. 131
P-16	109+67.19	77.77'	611955.2397	2533802.4924	S.R. 131
P-17	109+12.53	22.30'	612008.0735	2533820.3838	S.R. 131
P-18	108+48.28	18.00'	611910.9975	2533755.3754	S.R. 131
P-19	109+08.24	82.15'	611998.9795	2533761.4213	S.R. 131

NOTE: IT IS IMPERATIVE THAT RADII ARE CONSTRUCTED AS DETAILED. DETAILS REFLECT THE MINIMUM APPROPRIATE VEHICLE TURNING PATHS.

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STATE OF TENNESSEE
06/02/2026

COORDINATES ARE NAD 83(1995), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00009 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988 WITH GEOID 2012A.

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PROPOSED LAYOUT

STA. 105+25 TO STA. 114+65
SCALE: 1"= 50'

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2022	HSIP-131(33)	4C
PIH	2025	HSIP-131(33)	4C
PS&E	2026	HSIP-131(33)	4C

REV. 01/25/23 : UPDATED INVERT INFORMATION FOR CB#10, PIPE SLOPE FROM CB#10 TO CB#9, AND PIPE SLOPE FROM CB#21 TO CB#4.

REV. 04/14/25 : UPDATED CB#9 AND STORM PIPES FROM CB#10 TO CB#9 AND CB#9 TO CB#8.

47027-3222-94
BEGIN PROJ. NO. HSIP-131(33)
STA. 105+25.00 (CONST.)
N 611687.0847
E 2533521.1527

47027-2222-94
BEGIN PROJ. NO. HSIP-131(33)
STA. 105+42.00 (R.O.W.)
N 611698.1585
E 2533534.0511

47027-3222-94
END PROJ. NO. HSIP-131(33)
STA. 114+65.00 (CONST.)
N 612262.8018
E 2534263.0744

47027-2222-94
END PROJ. NO. HSIP-131(33)
STA. 114+59.00 (R.O.W.)
N 612259.5270
E 2534258.0469

S.R. 131 STA. 109+95.00 = HARRELL RD STA. 300+00.00 = CARPENTER RD STA. 204+90.00
N 611,989.3473
E 2,533,881.0046

CP-S31
GPS 47-131-31
STA. 110+74.04
-29.32'(LT)
N 612061.0232
E 2533925.7687
ELEV 972.67
ALUM. DISK

BOX CULVERT		
STATION: 109+20.00		
STRUCTURE: 175' OF 6' X 3'		
SKEW	90	DEG.
DRAINAGE AREA	132.02	AC.
DESIGN DISCHARGE (Q50)	132.74	CFS
DESIGN DISCHARGE (Q100)	157.80	CFS
OVERTOPPING	989.94	ELEV.
ALLOWABLE HEADWATER	986.97	ELEV.
Q50 HEADWATER	974.29	ELEV.
Q100 HEADWATER	974.99	ELEV.
VELOCITY (Q50)	9.66	FT/S
VELOCITY (Q100)	10.12	FT/S
INLET	970.22	ELEV.
OUTLET	969.35	ELEV.
STANDARD DRAWING NOS.:		
STD-17-51, STD-17-11		
QUANTITIES:		
CLASS "A" CONCRETE	106.28	C.Y.
STEEL BAR REINFORCING	26489	LB.

STA 109+37.31
EXISTING 54"RCP
SKEW 80° 00' 00" RT
FLOWS RIGHT
INLET 976.35
OUTLET 975.63

STA 109+49.50
EXISTING 54"CMP
SKEW 89° 29' 6" RT
FLOWS RIGHT
INLET 973.3100
OUTLET 972.5500

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STATE OF TENNESSEE

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DEPARTMENT OF TRANSPORTATION

PROPOSED PROFILE

STA. 105+25 TO STA. 114+65

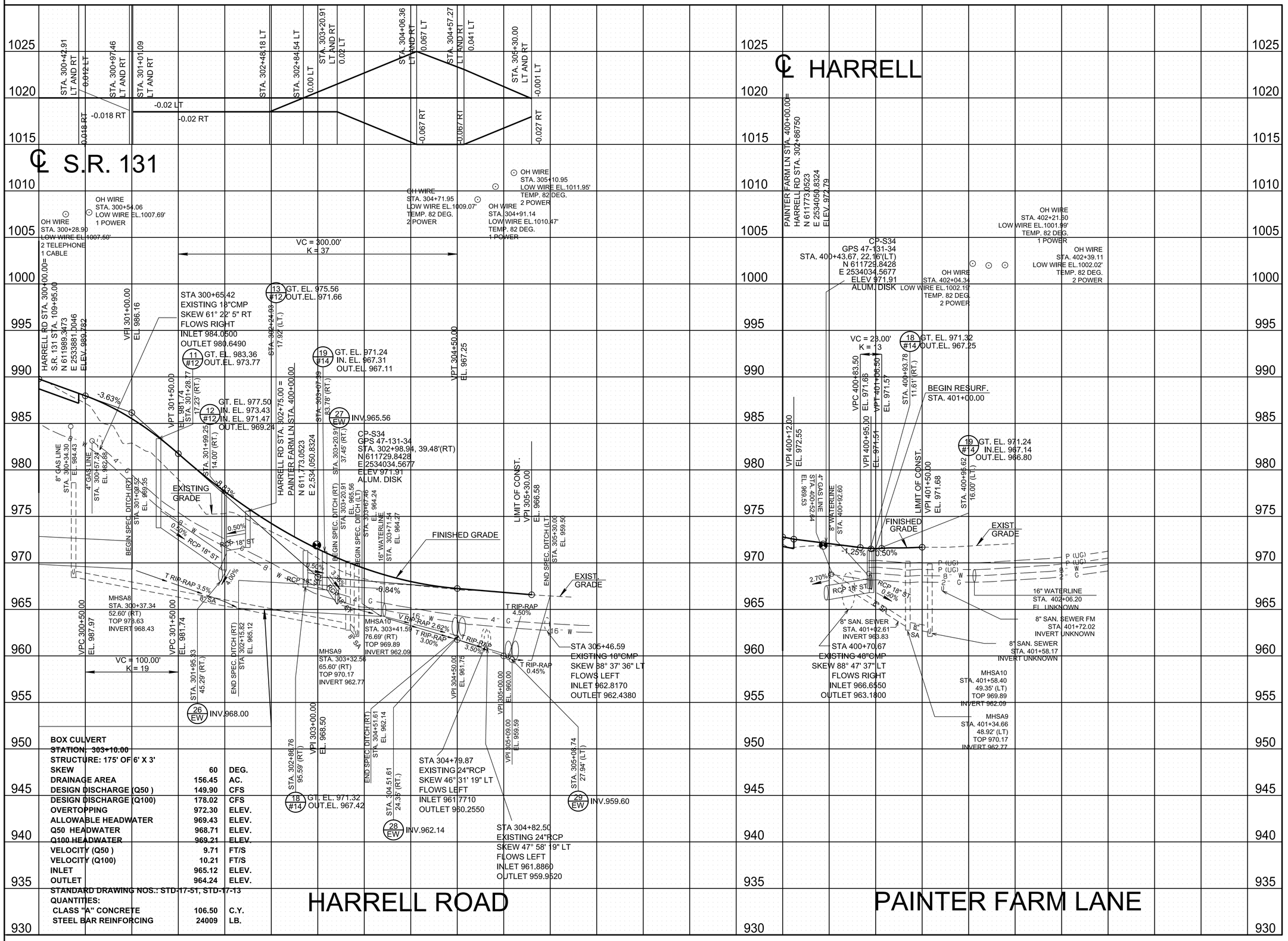
SCALE: 1"= 50' HORIZ.
1"= 5' VERT.

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2022	HSIP-131(33)	5
PIH	2025	HSIP-131(33)	5
PS&E	2026	HSIP-131(33)	5

REV. 01/25/23 : UPDATED PIPE SLOPE FROM CB#19 TO EW#27.
UPDATED CODE NUMBERS FOR STORM DRAIN ENDWALLS.

REV. 04/14/25 : MODIFIED SPECIAL DITCH AND DRAINAGE TEXT ALONG HARRELL RD. CADD UPDATES. MODIFIED PAINTER FARM LN. PROFILE. UPDATED CB#19 AND STORM PIPES FROM CB#18 TO CB#19 AND CB#19 TO EW#27. CADD CORRECTIONS.



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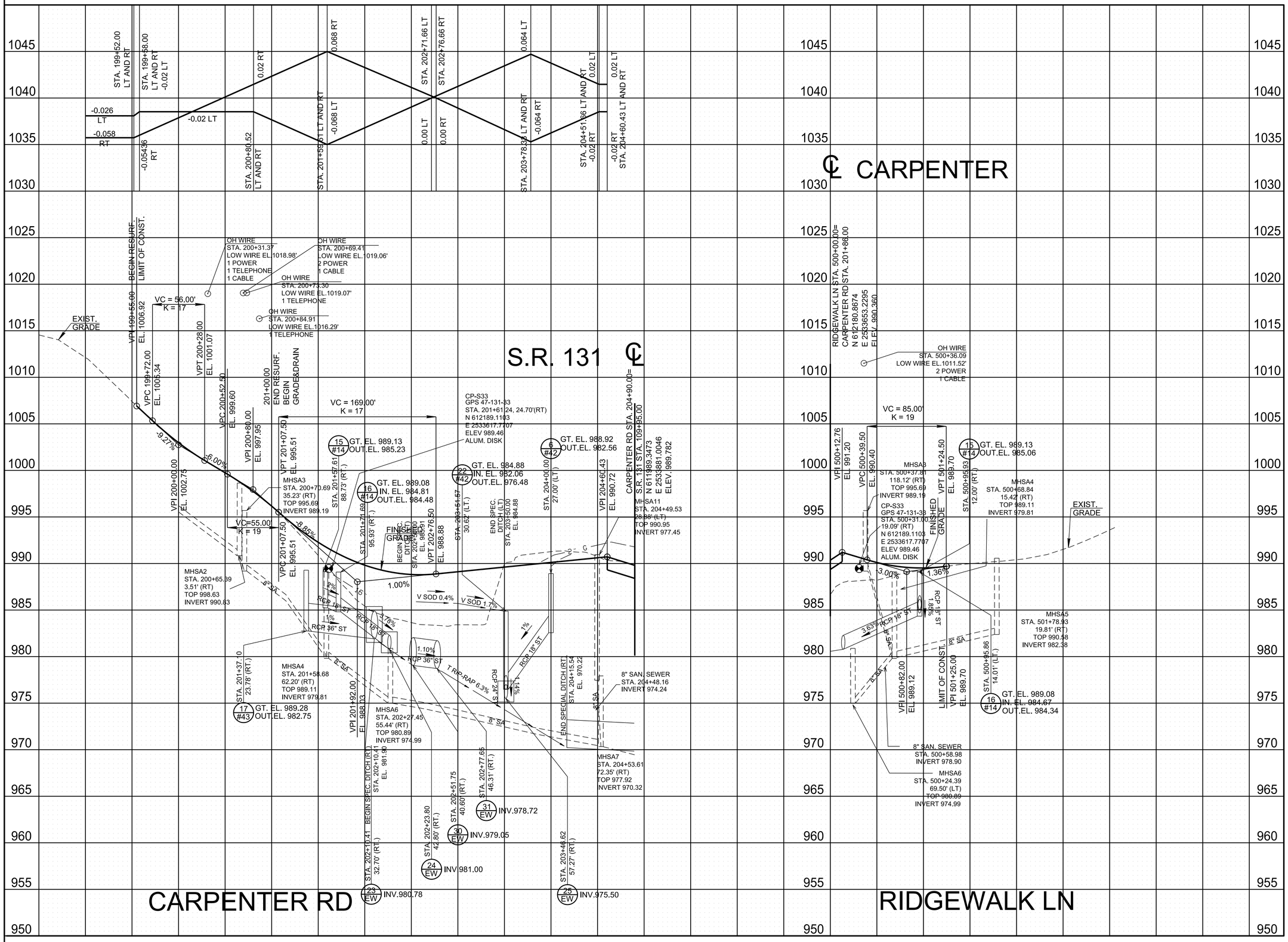
SIDE ROAD PROFILE

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

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2022	HSIP-131(33)	6
PIH	2025	HSIP-131(33)	6
PS&E	2026	HSIP-131(33)	6

REV. 01/25/23 : UPDATED PIPE SLOPE FROM CB#16 TO EW#24, PIPE SLOPE FROM EW#30 TO EW#31, AND PIPE SLOPE FROM CB#22 TO EW#25.
UPDATED CODE NUMBERS FOR STORM DRAIN ENDWALLS.



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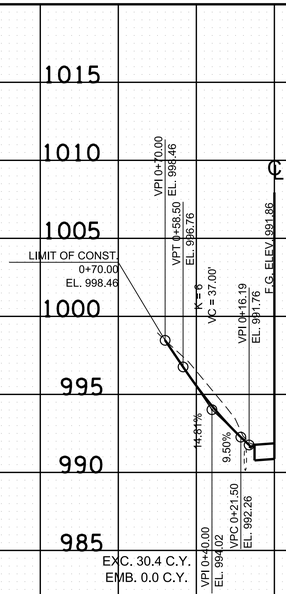
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DEPARTMENT OF TRANSPORTATION

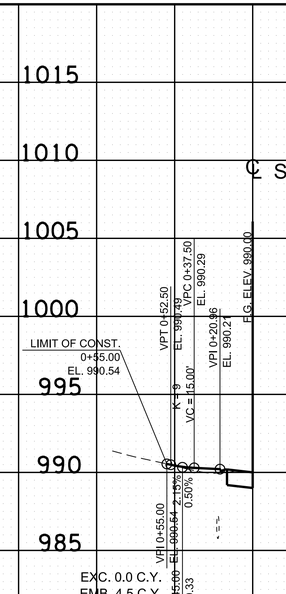
SIDE ROAD PROFILE

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

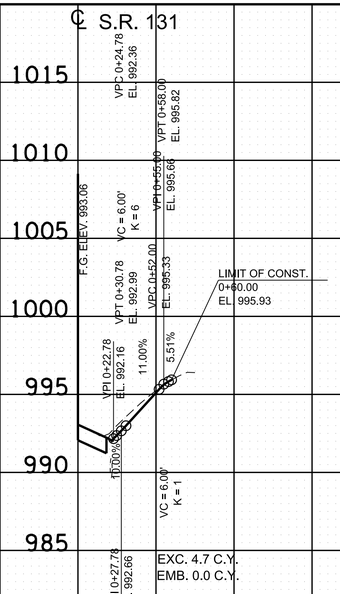
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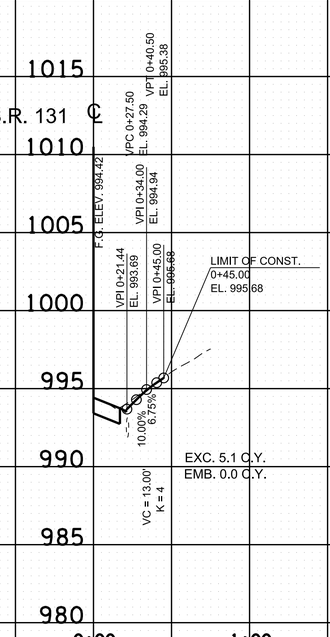
PRIVATE DRIVE
16' CONC.
STA. 105+69.00 (LT)
NO S.D. REQ'D
TRACT 20



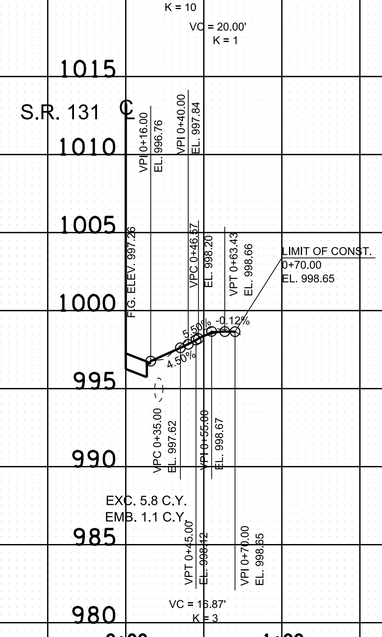
PRIVATE DRIVE
16' CONC.
STA. 107+29.00 (LT)
NO S.D. REQ'D
TRACT 21



PRIVATE DRIVE
10' CONC.
STA. 111+70.00 (RT)
NO S.D. REQ'D
TRACT 32



PRIVATE DRIVE
16' ASP.
STA. 112+44.00 (RT)
NO S.D. REQ'D
TRACT 33



PRIVATE DRIVE
12' CONC.
STA. 114+03.00 (RT)
NO S.D. REQ'D
TRACT 34

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2022	HSIP-131(33)	7
PIH	2025	HSIP-131(33)	7
PS&E	2026	HSIP-131(33)	7

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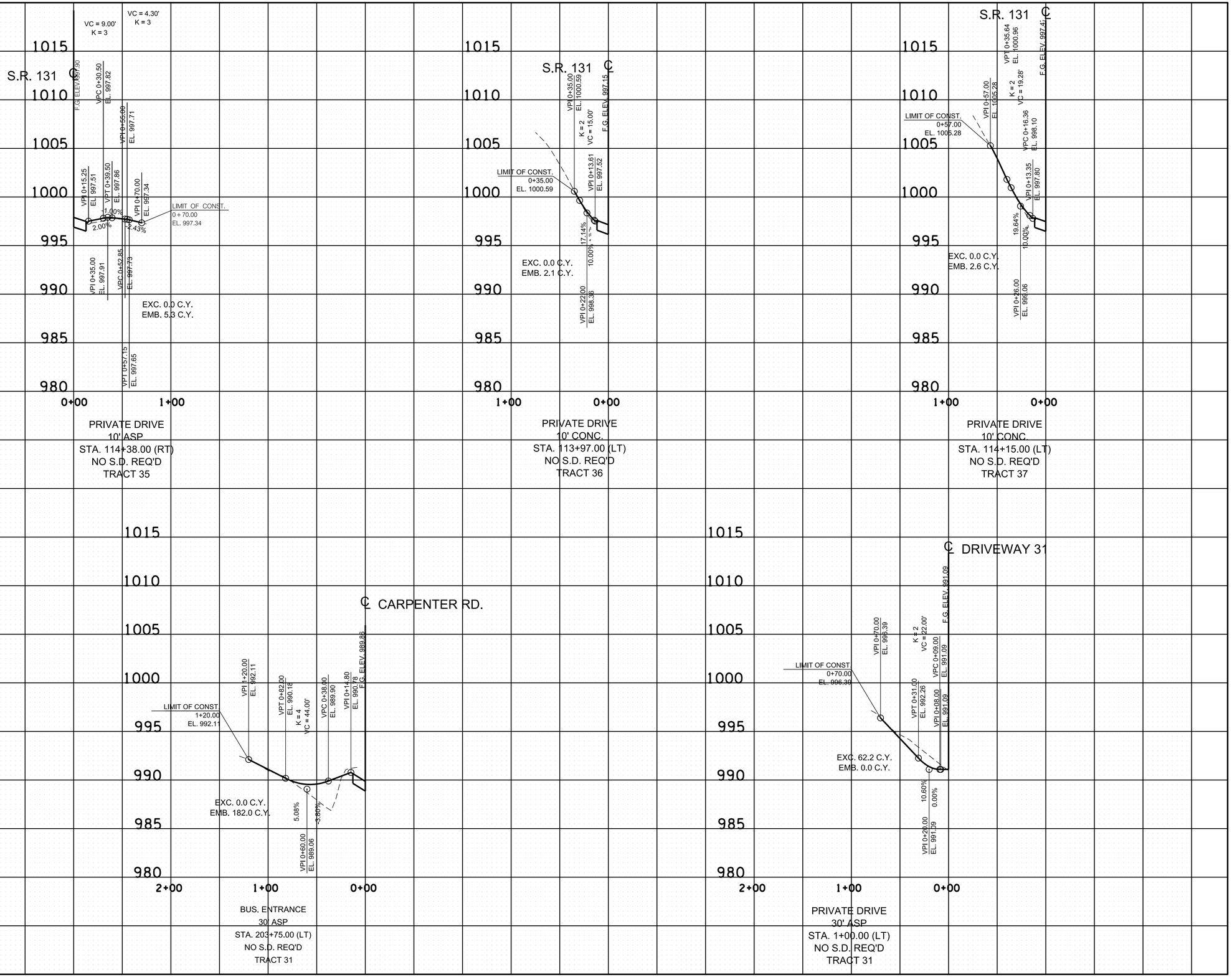
STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

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.	2022	HSIP-131(33)	8
PIH	2025	HSIP-131(33)	8
PS&E	2026	HSIP-131(33)	8



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STATE OF TENNESSEE

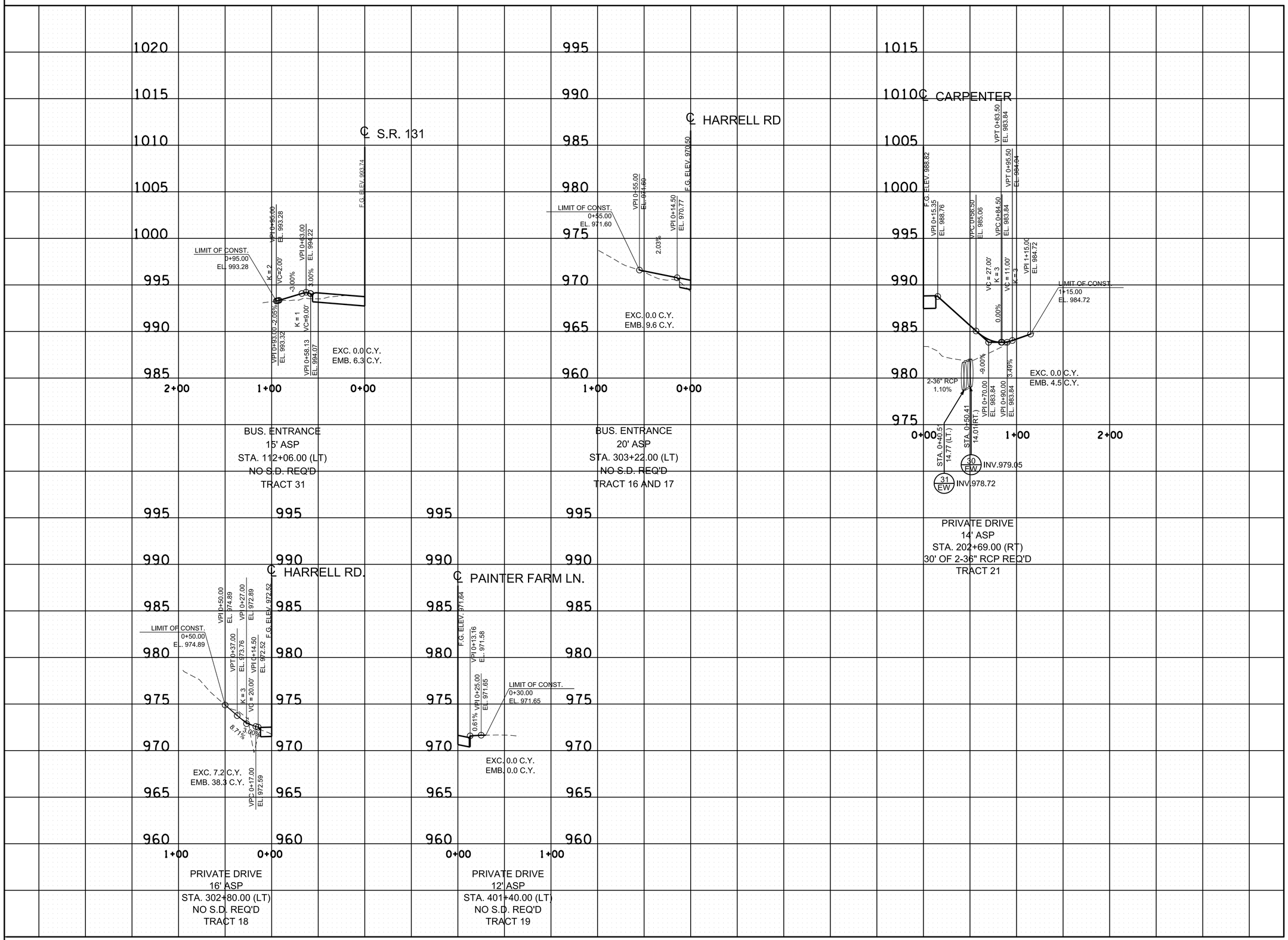
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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

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.	2022	HSIP-131(33)	9
PIH	2025	HSIP-131(33)	9
PS&E	2026	HSIP-131(33)	9

REV. 02/13/24 : UPDATED SIDE DRAINS UNDER DRIVEWAY FOR TRACT 21. ADDED PROPOSED DRIVEWAY PROFILE FOR TRACT 18.

REV. 04/14/25 : ADDED PROPOSED DRIVEWAY PROFILE FOR TRACT 19.

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STATE OF TENNESSEE

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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.	2022	HSIP-131(33)	10
PIH	2025	HSIP-131(33)	10
PS&E	2026	HSIP-131(33)	10

DRAINAGE DATA FOR
STATION: 202+94.69
EXISTING STRUCTURE: 15" CMP

INLET	981.20	ELEV.
OUTLET	979.58	ELEV.
SKEW	90	DEG.
FLOW	RIGHT	
DRAINAGE AREA	4.9	AC.
TERRAIN	ROLLING	
DISCHARGE (Q50)	20	CFS
DISCHARGE (Q100)	22.3	CFS

DRAINAGE DATA FOR
STATION: 109+49.49
EXISTING STRUCTURE: 54" CMP

INLET	973.31	ELEV.
OUTLET	972.55	ELEV.
SKEW	90	DEG.
FLOW	RIGHT	
DRAINAGE AREA	156.5	AC.
TERRAIN	ROLLING	
DISCHARGE (Q50)	149.9	CFS
DISCHARGE (Q100)	178.1	CFS

DRAINAGE DATA FOR
STATION: 198+07.17
EXISTING STRUCTURE: 24" CMP

DRAINAGE AREA	13.7	AC.

47027-2222-94
BEGIN PROJ. NO. HSIP-131(33)
STA. 105+42.00 (R.O.W.)
N 611698.1585
E 2533534.0511

47027-2222-94
END PROJ. NO. HSIP-131(33)
STA. 114+59.00 (R.O.W.)
N 612259.5270
E 2534258.0469

47027-3222-94
BEGIN PROJ. NO. HSIP-131(33)
STA. 105+25.00 (CONST.)
N 611687.0847
E 2533521.1527

47027-3222-94
END PROJ. NO. HSIP-131(33)
STA. 114+65.00 (CONST.)
N 612262.8018
E 2534263.0744

DRAINAGE DATA FOR
STATION: 198+07.17
EXISTING STRUCTURE: 24" CMP

DRAINAGE AREA	13.7	AC.

DRAINAGE DATA FOR
STATION: 204+73.22
EXISTING STRUCTURE: 24" CMP

INLET	992.76	ELEV.
OUTLET	985.88	ELEV.
SKEW	90	DEG.
FLOW	RIGHT	
DRAINAGE AREA	4.2	AC.
TERRAIN	ROLLING	
DISCHARGE (Q50)	19.2	CFS
DISCHARGE (Q100)	21.4	CFS

DRAINAGE DATA FOR
STATION: 300+63.87
EXISTING STRUCTURE: 18" CMP

INLET	984.05	ELEV.
OUTLET	980.65	ELEV.
SKEW	60	DEG.
FLOW	RIGHT	
DRAINAGE AREA	1.9	AC.
TERRAIN	ROLLING	
DISCHARGE (Q50)	5.7	CFS
DISCHARGE (Q100)	6.4	CFS

DRAINAGE DATA FOR
STATION: 400+32.34
EXISTING STRUCTURE: 48" CMP

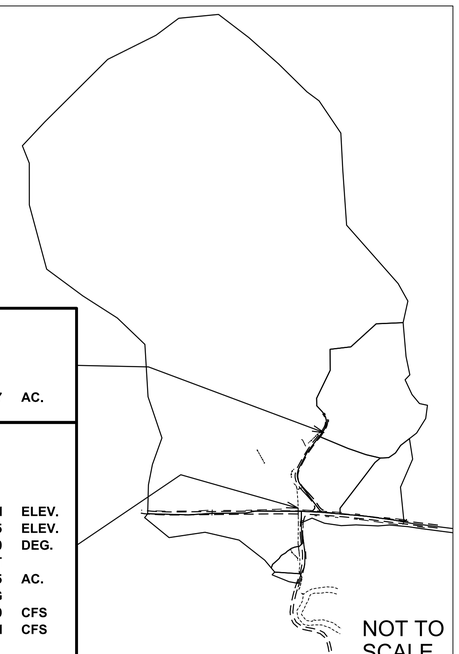
INLET	966.65	ELEV.
OUTLET	963.18	ELEV.
SKEW	90	DEG.
FLOW	LEFT	
DRAINAGE AREA	6.0	AC.
TERRAIN	ROLLING	
DISCHARGE (Q50)	16.2	CFS
DISCHARGE (Q100)	18.1	CFS

DRAINAGE DATA FOR
STATION: 305+43.35
EXISTING STRUCTURE: 18" CMP

DRAINAGE AREA	0.2	AC.

DRAINAGE DATA FOR
STATION: 304+78.96
EXISTING STRUCTURE: 2-24" RCP

INLET	961.77, 961.89	ELEV.
OUTLET	960.26, 959.95	ELEV.
SKEW	40	DEG.
FLOW	LEFT	
DRAINAGE AREA	0.9	AC.
TERRAIN	ROLLING	
DISCHARGE (Q50)	2.9	CFS
DISCHARGE (Q100)	3.2	CFS



NOT TO SCALE

S.R. 131 (W. EMORY RD.)
RIDGEWALKER LN
CARPENTER RD
PAINTER FARM LN
HARRELL RD
WWG-1/EPH-1
STR-1 (PRENNIAL)
S 71°50'19" W 1187.86' (M&S)
S 38° 08' 19" E
N 49° 21' 09" E
S 51° 14' 17" W
S 38° 08' 19" E
S 38° 08' 19" E

LEGEND

- - - - - -	EXISTING CONTOURS

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06/02/2026

COORDINATES ARE NAD 83(1995), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00009 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988 WITH GEOID 2012A.

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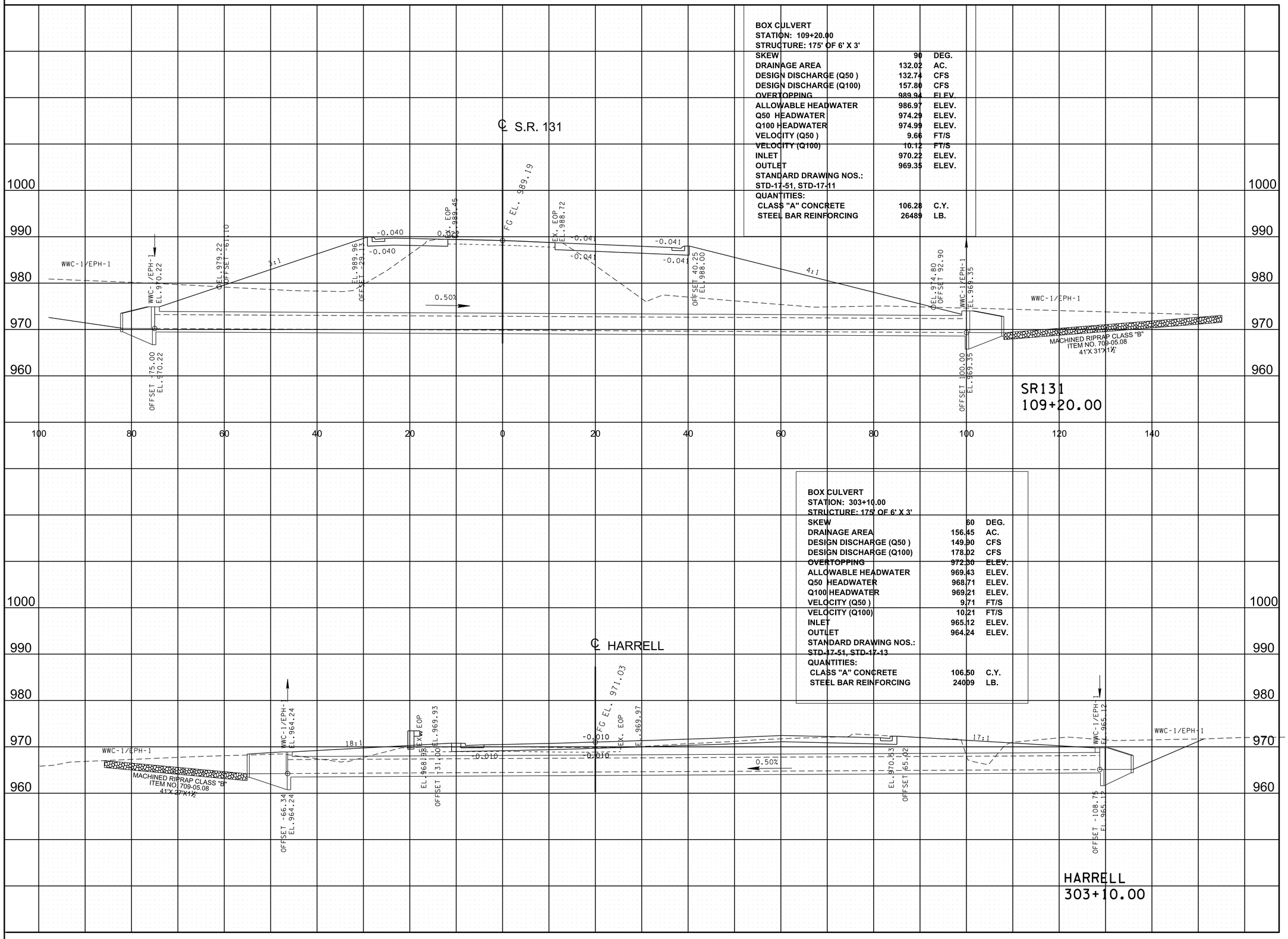
DRAINAGE MAP

STA. 105+25 TO STA. 114+65
SCALE: 1"=100'

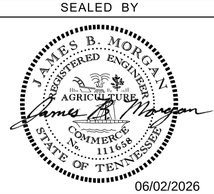
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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2022	HSIP-131(33)	11
PIH	2025	HSIP-131(33)	11
PS&E	2026	HSIP-131(33)	11

REV. 04/14/25 : UPDATED BOX CULVERT ENDWALLS. CADD CORRECTIONS.



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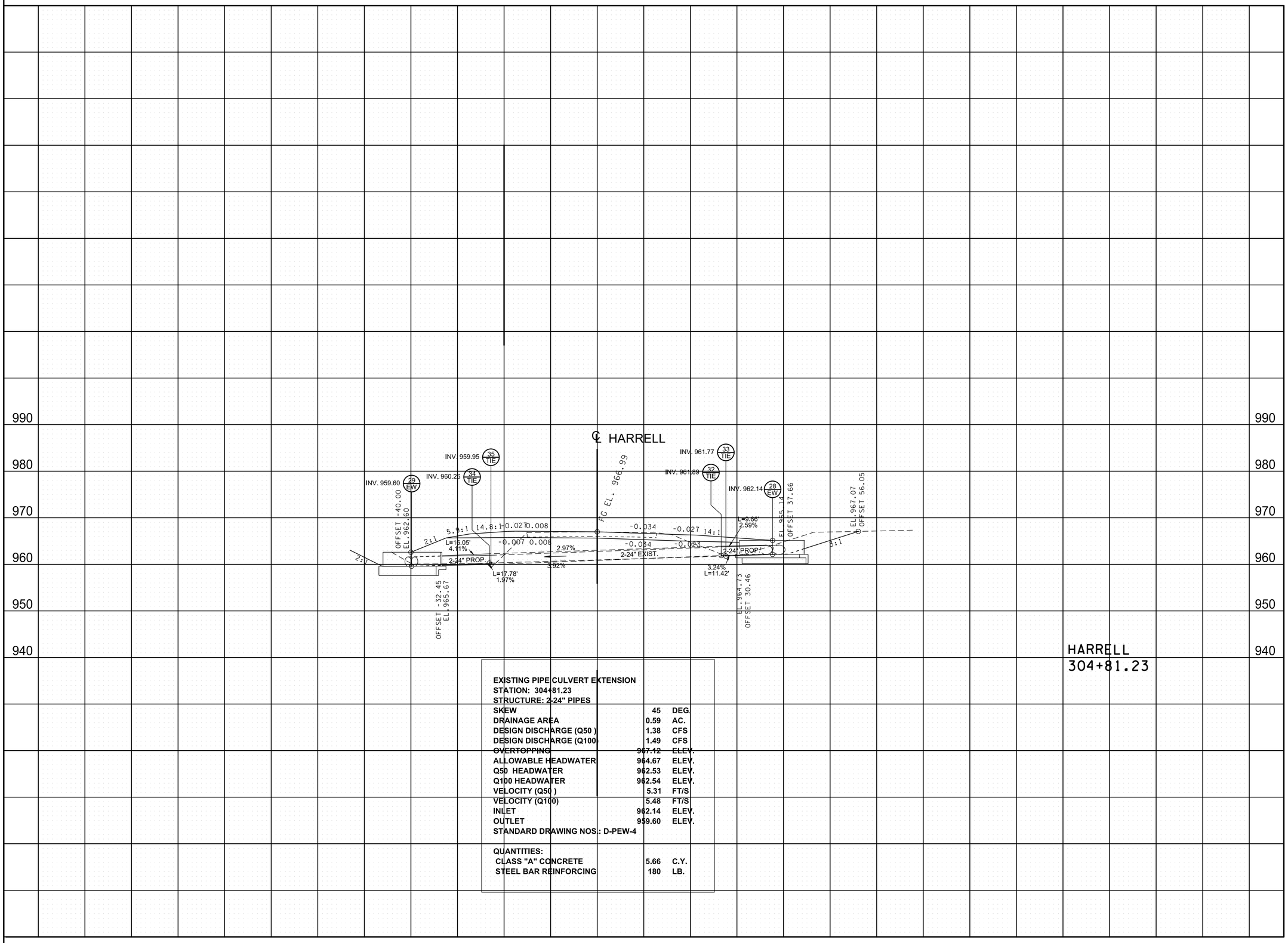
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CULVERT SECTION

SCALE: 1"= 10' HORIZ.
1"=10' VERT.

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TYPE	YEAR	PROJECT NO.	SHEET NO.
PIH	2025	HSIP-131(33)	12
PS&E	2026	HSIP-131(33)	12



EXISTING PIPE CULVERT EXTENSION
STATION: 304+81.23
STRUCTURE: 2-24" PIPES

SKEW	45	DEG.
DRAINAGE AREA	0.59	AC.
DESIGN DISCHARGE (Q50)	1.38	CFS
DESIGN DISCHARGE (Q100)	1.49	CFS
OVERTOPPING	967.12	ELEV.
ALLOWABLE HEADWATER	964.67	ELEV.
Q50 HEADWATER	962.53	ELEV.
Q100 HEADWATER	962.54	ELEV.
VELOCITY (Q50)	5.31	FT/S
VELOCITY (Q100)	5.48	FT/S
INLET	962.14	ELEV.
OUTLET	959.60	ELEV.
STANDARD DRAWING NOS.: D-PEW-4		

QUANTITIES:

CLASS "A" CONCRETE	5.66	C.Y.
STEEL BAR REINFORCING	180	LB.

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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.	2022	HSIP-131(33)	12
PIH	2025	HSIP-131(33)	13
PS&E	2026	HSIP-131(33)	13

ENVIRONMENTAL NOTES

ENVIRONMENTAL GENERAL NOTES

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.

EROSION PREVENTION AND SEDIMENT CONTROL GENERAL NOTES

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.

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06/02/2026

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.	2022	HSIP-131(33)	13
PIH	2025	HSIP-131(33)	14
PS&E	2026	HSIP-131(33)	14

TABULATED EPSC QUANTITIES

	ITEM NO.	DESCRIPTION	UNIT	QUANTITY 47027-3222-94
(1)(3)	203-01	ROAD & DRAINAGE EXCAVATION (UNCLASSIFIED)	C.Y.	15
	209-05	SEDIMENT REMOVAL	C.Y.	167
(2)(3)	209-08.02	TEMPORARY SILT FENCE (WITH BACKING)	L.F.	860
(3)	209-08.07	ROCK CHECK DAM PER	EACH	6
(3)	209-08.08	ENHANCED ROCK CHECK DAM	EACH	3
(3)	209-09.40	CURB INLET PROTECTION (TYPE 1)	EACH	28
(3)	209-40.34	CATCH BASIN PROTECTION (TYPE E)	EACH	1
(3)	209-40.41	CATCH BASIN FILTER ASSEMBLY(TYPE 1)	EACH	5
(3)	209-40.48	CATCH BASIN FILTER ASSEMBLY(TYPE 8)	EACH	1
(3)	209-65.03	TEMPORARY DIVERSION CHANNEL	L.F.	430
(4)(3)	303-10.01	MINERAL AGGREGATE (SIZE 57)	TON	86
(5)(3)	621-03.02	18" TEMPORARY DRAINAGE PIPE	L.F.	153
(5)(3)	621-03.03	24" TEMPORARY DRAINAGE PIPE	L.F.	100
(5)(6)(3)	621-03.04	30" TEMPORARY DRAINAGE PIPE	L.F.	1898
(1)(3)	709-05.05	MACHINED RIP-RAP (CLASS A-3)	TON	100
(7)(3)	709-05.06	MACHINED RIP-RAP (CLASS A-1)	TON	1315
(8)(3)	740-10.03	GEOTEXTILE (TYPE III)(EROSION CONTROL)	S.Y.	2514
(3)	740-11.03	TEMPORARY SEDIMENT TUBE 18IN	L.F.	3653
	801-01	SEEDING (WITH MULCH)	UNIT	78
	801-01.07	TEMPORARY SEEDING (WITH MULCH)	UNIT	69
	801-03	WATER (SEEDING & SODDING)	M.G.	60
	801-01.38	NATVE SEED MX FINAL STABLIZATN OF SLOPES	UNIT	17
	803-01	SODDING (NEW SOD)	S.Y.	6142

FOOTNOTES

(1) TO BE USED FOR TEMPORARY CONSTRUCTION EXIT.

(2) TO BE USED FOR TEMPORARY DIVERSION CHANNEL.

(3) ALL EROSION CONTROL PREVENTION AND SEDIMENT CONTROL QUANTITIES ARE TO BE USED AS DIRECTED BY THE ENGINEER.

(4) INCLUDES 71 TONS FOR CULVERT PROTECTION TYPE 1, AND 15 TONS FOR CULVERT PROTECTION TYPE 2.

(5) QUANTITY INCLUDES COST OF MOVING TEMPORARY PIPE AS NEEDED DURING CONSTRUCTION PHASES TO MAINTAIN SEPARATION OF OFF SITE CLEAN WATER FLOW THROUGH PROJECT.

(6) TEMPORARY PIPE SIZING BASED ON HDPE OR PVC MATERIAL. IF CMP TEMPORARY PIPE IS USED, USE A 36" TEMPORARY PIPE SIZE.

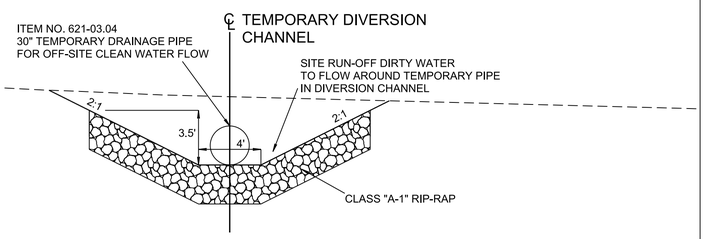
(7) INCLUDES 386 TONS FOR CULVERT PROTECTION TYPE 1, AND 929 TONS FOR TEMPORARY DIVERSION CHANNEL.

(8) INCLUDES 172 S.Y. FOR TEMPORARY CONSTRUCTION EXITS, 915 S.Y. FOR CULVERT PROTECTION TYPE 1, 56 S.Y. FOR CULVERT PROTECTION TYPE 2, AND 1371 S.Y. FOR TEMPORARY DIVERSION CHANNEL.

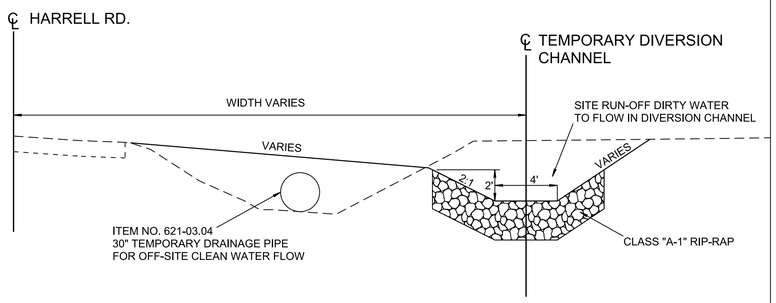
EROSION PREVENTION AND SEDIMENT CONTROL LEGEND

SYMBOL	ITEM	STD. DWG.
✱ SFB✱ SFB✱ SFB✱	SILT FENCE WITH WIRE BACKING	EC-STR-3C
	ROCK CHECK DAM (V-DITCH)	EC-STR-6
	ENHANCED ROCK CHECK DAM (V-DITCH)	EC-STR-6A
	ROCK CHECK DAM (TRAPEZOIDAL DITCH)	EC-STR-6
	CULVERT PROTECTION (TYPE 1)	EC-STR-11
	CULVERT PROTECTION (TYPE 2)	EC-STR-11A
E	CATCH BASIN PROTECTION (TYPE E)	EC-STR-19
1	CATCH BASIN FILTER ASSEMBLY (TYPE 1)	EC-STR-41
8	CATCH BASIN FILTER ASSEMBLY (TYPE 8)	EC-STR-48
1	CURB INLET PROTECTION (TYPE 1)	EC-STR-39
TCE	TEMPORARY CONSTRUCTION EXIT	EC-STR-25
	TEMPORARY DIVERSION CHANNEL (2:1 FORESLOPE, BACKSLOPE VARIES, 4' BOTTOM AND A-1 RIP RAP)	EC-STR-31
✱✱TUBE 18"✱✱TUBE 18"✱✱	18 INCH SEDIMENT TUBE	EC-STR-37
	TEMPORARY DRAINAGE PIPE	

TEMPORARY DIVERSION CHANNEL TYPICAL SECTION APPROX. STA. 300+91.00 TO STA. 302+40.00



TEMPORARY DIVERSION CHANNEL TYPICAL SECTION APPROX. STA. 303+18.35 TO STA. 305+41.22



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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

EROSION PREVENTION & SEDIMENT CONTROL (EPSC) LEGEND & TABULATION

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47027-2222-94
BEGIN PROJ. NO. HSIP-131(33)
STA. 105+42.00 (R.O.W.)
N 611698.1585
E 2533534.0511

OFF-SITE CLEAN WATER TO BE CONVEYED THROUGH THE PROJECT AREA VIA TEMPORARY PIPES

OFF-SITE CLEAN WATER TO BE CONVEYED THROUGH THE PROJECT AREA VIA TEMPORARY PIPES

CONNECT THE 18" TEMPORARY PIPE TO THE EXISTING PIPE UNDERGROUND

CARPENTER RD STA. 201+86.00 =
RIDGEWALK LN STA. 500+00.00
N 612180.8674
E 2533653.2295

COMBINE 18" AND 30" TEMPORARY PIPES INTO 1-30" TEMPORARY PIPE

CONSTRUCT A TEMPORARY 30" PIPE SIDE DRAIN UNDER DRIVEWAY TO CONTINUE THE FLOW OF OFF-SITE CLEAN WATER.

PIPE 30" TEMPORARY PIPE THROUGH EXISTING 54" PIPE CULVERT.

NOTE:
OFF-SITE CLEAN WATER SHALL BE KEEP SEPERATE FROM THE DIRTY ON-SITE RUN-OFF BY USING THE TEMPORARY PIPES OR BY USING THE EXISTING CULVERTS AS SHOWN.
TO KEEP THE OFF PROJECT WATER AS CLEAN AS POSSIBLE, ENSURE THERE ARE NO BREAKS IN THE TEMPORARY PIPES.

NOTE:
COST FOR MOVING TEMPORARY PIPES TO MAINTAIN CLEAN WATER FLOW THROUGH THE PROJECT IS INCLUDED IN TEMPORARY PIPE QUANTITIES.

47027-2222-94
END PROJ. NO. HSIP-131(33)
STA. 114+59.00 (R.O.W.)
N 612259.5270
E 2534258.0469

47027-3222-94
END PROJ. NO. HSIP-131(33)
STA. 114+65.00 (CONST.)
N 612262.8018
E 2534263.0744

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2022	HSIP-131(33)	14
PIH	2025	HSIP-131(33)	15
PS&E	2026	HSIP-131(33)	15

REV. 02/13/24 :ADDED TEMPORARY CONST. ESMT. TO TRACT 18.

REV. 04/14/25 :MODIFIED SLOPE LINES ALONG HARRELL RD., CARPENTER RD., PAINTER FARM LN., AND S.R. 131. CADD CORRECTIONS.

EXTEND EXISTING CULVERT AT A 0.5% SLOPE WITH A TEMPORARY 54" PIPE DURING THE CONSTRUCTION OF THE WIDENING ALONG S.R. 131

S.R. 131 STA. 109+95.00 =
HARRELL RD STA. 300+00.00 =
CARPENTER RD STA. 204+90.00
N 611989.3473
E 2533881.0046

DURING CONSTRUCTION OF PROPOSED BOX CULVERT UNDER HARRELL ROAD, DIVERT SITE RUN-OFF IN TEMPORARY DIVERSION CHANNEL AND TEMPORARY 30" PIPE CARRYING OFF-SITE CLEAN WATER AROUND WORKSITE AS SHOWN.

NOTE: KEEP TEMPORARY DITCH SLOPE AT 0.5% UNTIL APPROX. STA. 301+70.00.

MAINTAIN WATER FLOW INBETWEEN PROPOSED BOX CULVERT WORK AREA AND EXISTING UTILITY POLE BY KEEPING CLEAN WATER IN 30" TEMPORARY PIPE AND DIRECTING SITE RUN-OFF WATER FLOWING IN TEMPORARY DITCH INTO A 24" TEMPORARY PIPE.

BUILD TEMPORARY DITCH AT THE TEMPORARY 24" PIPE CULVERT OUTLET TO DIRECT SITE RUN-OFF WATER TO OUTFALL-1

47027-3222-94
BEGIN PROJ. NO. HSIP-131(33)
STA. 105+25.00 (CONST.)
N 611687.0847
E 2533521.1527

CONNECT 30" TEMPORARY PIPE TO THE EXISTING 48" PIPE OUTLET.

DURING CONSTRUCTION OF PROP. BOX CULVERT UNDER HARRELL ROAD, REMOVE APPROX. 31' OF EXIST. 48" PIPE CULVERT AND CONNECT THE TEMP. 30" PIPE TO THE NEW EXIST. INLET. EXIST. 48" PIPE TO BE USED FOR CLEAN WATER ONLY.

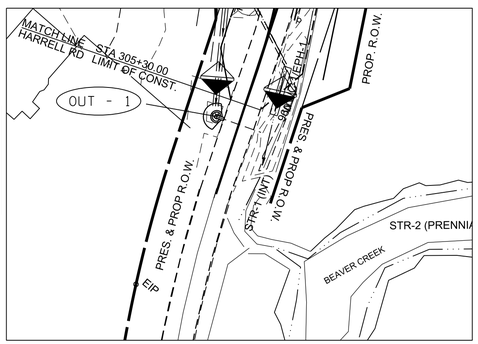
CONSTRUCT A TEMP. 24" PIPE CULVERT UNDER PAINTER FARM TO CARRY THE SITE RUN-OFF WATER.

NOTE: MAINTAIN A MIN. OF 0.5% SLOPE AND THE MIN. 12" OF PIPE COVER FOR THE TEMP. 24" PIPE CULVERT UNDER PAINTER FARM.
MAINTAIN ACCESS TO PAINTER FARM ALL TIMES.

HARRELL RD STA. 302+75.00 =
PAINTER FARM LN STA. 400+00.00
N 611773.0523
E 2534050.8324

CONNECT TEMPORARY 30" PIPE TO THE INLET OF THE EXISTING 2-24" PIPES. EXISTING PIPES TO BE USED FOR CLEAN WATER ONLY.

CONNECT TEMPORARY 30" PIPE TO THE OUTLET OF THE EXISTING 2-24" PIPES TO CARRY THE CLEAN WATER TO THE END OF THE PROJET LIMITS.



OUTFALLS		
Outfall No.	Drainage Area	Average Slope
1	16.393 AC	3.500 %
2	.044 AC	3.000 %
3	.547 AC	10.000 %
4	.080 AC	3.000 %
5	.035 AC	1.200 %
6	.961 AC	3.500 %
7	.494 AC	5.000 %
8	.115 AC	2.500 %
9	.068 AC	1.500 %
10	.043 AC	1.500 %
11	.208 AC	3.500 %

LEGEND
EXISTING CONTOURS

STAGE I

SEALED BY
JAMES B. MORGAN
REGISTERED ENGINEER
AGRICULTURE
COMMERCE
No. 111658
STATE OF TENNESSEE
06/02/2026

COORDINATES ARE NAD 83(1995), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00009 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988 WITH GEOID 2012A.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

EROSION PREVENTION & SEDIMENT CONTROL (EPSC) PLANS

STA. 105+25 TO STA. 114+65
SCALE: 1"= 50'

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47027-2222-94
BEGIN PROJ. NO. HSIP-131(33)
STA. 105+42.00 (R.O.W.)
N 611698.1585
E 2533534.0511

KEEP OFF-SITE CLEAN WATER RUNNING THROUGH EXISTING PIPES UNTIL RIDGEWALK & CARPENTER RD. CONSTRUCTION IS COMPLETE.

OUT - 3

OUT - 2

OFF-SITE CLEAN WATER TO BE CONVEYED THROUGH THE PROJECT AREA VIA TEMPORARY PIPES

TEMPORARY 18" PIPE

OFF-SITE CLEAN WATER TO BE CONVEYED THROUGH THE PROJECT AREA VIA TEMPORARY PIPES

TEMPORARY 30" PIPE

105

110

COMBINE 18" AND 30" TEMPORARY PIPES INTO 1-30" TEMPORARY PIPE

OUT - 4

OUT - 5

PIPE THE TEMPORARY 30" PIPE THROUGH PROPOSED CULVERTS OR UTILIZE THE PROPOSED STRUCTURES FOR CLEAN WATER ONCE THEIR CONSTRUCTION IS COMPLETED, WHILE MAINTAINING SEPARATE FLOW FOR SITE RUN-OFF.

CARPENTER RD STA. 201+85.00 = RIDGEWALK LN STA. 500+00.00
N 612,180.5274
E 2,533,652.9895

CARPENTER RD STA. 201+86.00 = RIDGEWALK LN STA. 500+00.00
N 612180.8674
E 2533653.2295

NOTE:
OFF-SITE CLEAN WATER SHALL BE KEEP SEPERATE FROM THE DIRTY ON-SITE RUN-OFF BY USING THE TEMPORARY PIPES OR BY USING THE EXISTING OR PROPOSED CULVERTS ONCE THEIR CONSTRUCTION IS COMPLETED.
TO KEEP THE OFF PROJECT WATER AS CLEAN AS POSSIBLE, ENSURE THERE ARE NO BREAKS IN THE TEMPORARY PIPES.

NOTE:
COST FOR MOVING TEMPORARY PIPES TO MAINTAIN CLEAN WATER FLOW THROUGH THE PROJECT IS INCLUDED IN TEMPORARY PIPE QUANTITIES.

47027-2222-94
END PROJ. NO. HSIP-131(33)
STA. 114+59.00 (R.O.W.)
N 612259.5270
E 2534258.0469

115

47027-3222-94
END PROJ. NO. HSIP-131(33)
STA. 114+65.00 (CONST.)
N 612262.8018
E 2534263.0744

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2022	HSIP-131(33)	15
PIH	2025	HSIP-131(33)	16
PS&E	2026	HSIP-131(33)	16

REV. 02/13/24 :ADJUSTED GUARDRAIL ALONG CARPENTER RD. ADDED TEMPORARY CONST. ESMT. AND PROPOSED DRIVEWAY TO TRACT 18.

REV. 04/14/25 :MODIFIED SLOPE LINES ALONG HARRELL RD., CARPENTER RD., PAINTER FARM LN., AND S.R. 131. MODIFIED CB #9 AND CB#19. MODIFIED STORM PIPES FROM CB#10 TO CB#9, CB#9 TO CB#8, CB#18 TO CB#19, AND CB#19 TO EW#27. CADD CORRECTIONS.

STA. 105+00.00
N 611670.7996
E 2533502.1844

PROP. 10' CONST. ESMT.

STA. 115+00.00
N 612281.8174
E 2534292.4582

S.R. 131 STA. 109+95.00 = HARRELL RD STA. 300+00.00 = CARPENTER RD STA. 204+90.00
N 611989.3473
E 2533881.0046

PROP. CONST. ESMT. FOR REMOVAL OF STRUCTURE

PIPE THE TEMPORARY 30" PIPE THROUGH PROPOSED CULVERT ONCE CULVERT CONSTRUCTION IS COMPLETE.

HARRELL RD STA. 302+75.00 = PAINTER FARM LN STA. 400+00.00
N 611773.0523
E 2534050.8324

PIPE CLEAN WATER THROUGH TEMPORARY 30" PIPE TO END OF PROJECT LIMITS

OUT - 6

47027-3222-94
BEGIN PROJ. NO. HSIP-131(33)
STA. 105+25.00 (CONST.)
N 611687.0847
E 2533521.1527

OUTFALLS		
Outfall No.	Drainage Area	Average Slope
2	.044 AC	3.000 %
3	.547 AC	10.000 %
4	.080 AC	3.000 %
5	.035 AC	1.200 %
6	16.393 AC	3.500 %

LEGEND

———	PROPOSED CONTOURS
- - - - - -	EXISTING CONTOURS

SEALED BY

JAMES B. MORGAN
REGISTERED ENGINEER
AGRICULTURE
COMMERCE
No. 111658
STATE OF TENNESSEE

06/02/2026

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

EROSION PREVENTION & SEDIMENT CONTROL (EPSC) PLANS

STA. 105+25 TO STA. 114+65

SCALE: 1"= 50'

STAGE II

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47027-2222-94
BEGIN PROJ. NO. HSIP-131(33)
STA. 105+42.00 (R.O.W.)
N 611698.1585
E 2533534.0511

105

110

115

47027-2222-94
END PROJ. NO. HSIP-131(33)
STA. 114+59.00 (R.O.W.)
N 612259.5270
E 2534258.0469

47027-3222-94
END PROJ. NO. HSIP-131(33)
STA. 114+65.00 (CONST.)
N 612262.8018
E 2534263.0744

47027-3222-94
BEGIN PROJ. NO. HSIP-131(33)
STA. 105+25.00 (CONST.)
N 611687.0847
E 2533521.1527

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2022	HSIP-131(33)	16
PIH	2025	HSIP-131(33)	17
PS&E	2026	HSIP-131(33)	17

REV. 02/13/24 :ADJUSTED GUARDRAIL ALONG CARPENTER RD.
ADDED TEMPORARY CONST. ESMT. AND PROPOSED DRIVEWAY TO TRACT 18.

REV. 04/14/25 :MODIFIED SLOPE LINES ALONG HARRELL RD., CARPENTER RD., PAINTER FARM LN., AND S.R. 131. MODIFIED CB #9 AND CB#19. MODIFIED STORM PIPES FROM CB#10 TO CB#9, CB#9 TO CB#8, CB#18 TO CB#19, AND CB#19 TO EW#27. CADD CORRECTIONS.

CARPENTER RD STA. 201+85.00 =
RIDGEWALK LN STA. 500+00.00
N 612,180.5274
E 2,533,652.9895

CARPENTER RD STA. 201+86.00 =
RIDGEWALK LN STA. 500+00.00
N 612180.8674
E 2533653.2295

S.R. 131 STA. 109+95.00 =
HARRELL RD STA. 300+00.00 =
CARPENTER RD STA. 204+90.00
N 611989.3473
E 2533881.0046

HARRELL RD STA. 302+75.00 =
PAINTER FARM LN STA. 400+00.00
N 611773.0523
E 2534050.8324

STA. 105+00.00
N 611670.7996
E 2533502.1844

STA. 115+00.00
N 612281.6174
E 2534292.4582

LEGEND

	PROPOSED CONTOURS
	SOD

NOTE: ALL EPSC MEASURES ARE TEMPORARY AND SHALL BE REMOVED ONCE CONSTRUCTION IS COMPLETE

STAGE III

SEALED BY

JAMES B. MORGAN
REGISTERED ENGINEER
AGRICULTURE
COMMERCE
No. 111668
STATE OF TENNESSEE

06/02/2026

COORDINATES ARE NAD 83(1995), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00009 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988 WITH GEOID 2012A.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

EROSION PREVENTION & SEDIMENT CONTROL (EPSC) PLANS

STA. 105+25 TO STA. 114+65
SCALE: 1"= 50'

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TYPE	YEAR	PROJECT NO.	SHEET NO.
PIH	2025	HSIP-131(33)	18
PS&E	2026	HSIP-131(33)	18

47027-2222-94
BEGIN PROJ. NO. HSIP-131(33)
STA. 105+42.00 (R.O.W.)
N 611698.1585
E 2533534.0511

105

STA. 105+00.00
N 611670.7996
E 2533502.1844

N 49° 21' 09" E

8" DWL

S.R. 131 (W. EMORY RD.)

8" DWL

6" SSWL

6" DSYL

8" SSWL

8" DWL

6" SSWL

W3-3
36" X 36"
(1)
STA. 105+50.00

200

6" DSYL

8" SSWL

S 17° 28' 41" E

RIDGEWALK LN

6" DSYL

S71°24'39"W

CARPENTER RD

CARPENTER RD STA. 201+86.00 =
RIDGEWALK LN STA. 500+00.00
N 612180.8674
E 2533653.2295

(5)
STOP
R1-1
36" X 36"

W3-3
36" X 36"
(4)
STA. 202+25.00

110

S89°42'53"E

8" DWL

6" SSWL

8" DWL

8" SSWL

S 38° 08' 16" E

6" DSYL

6" SSWL

8" SSWL

6" DWL

6" DSYL

8" SSWL

6" DWL

S.R. 131 (W. EMORY RD.)

6" SSWL

S.R. 131 STA. 109+95.00 =
HARRELL RD STA. 300+00.00 =
CARPENTER RD STA. 204+90.00
N 611989.3473
E 2533881.0046

S 38° 08' 16" E

6" SSWL

6" DSYL

6" SSWL

8" SSWL

6" DWL

S51°51'44"W

6" DSYL

PAINTER FARM LN

W3-3
36" X 36"
(2)
STA. 303+00.00

(6)
STOP
R1-1
36" X 36"

HARRELL RD

HARRELL RD STA. 302+75.00 =
PAINTER FARM LN STA. 400+00.00
N 611773.0523
E 2534050.8324

6" SSWL

6" DSYL

S 38° 08' 16" E

8" SSWL

47027-3222-94
BEGIN PROJ. NO. HSIP-131(33)
STA. 105+25.00 (CONST.)
N 611687.0847
E 2533521.1527

47027-2222-94
END PROJ. NO. HSIP-131(33)
STA. 114+59.00 (R.O.W.)
N 612259.5270
E 2534258.0469

115

47027-3222-94
END PROJ. NO. HSIP-131(33)
STA. 114+65.00 (CONST.)
N 612262.8018
E 2534263.0744

(3)
W3-3
36" X 36"
STA. 114+30.00

8" SSWL

6" SSWL

8" SSWL

6" DWL

6" DSYL

S.R. 131 (W. EMORY RD.)

6" SSWL

N 57° 08' 02" E

STA. 115+00.00
N 612281.8773
E 2534292.4582

N

SEALED BY

JAMES B. MORGAN
REGISTERED ENGINEER
AGRICULTURE
COMMERCE
No. 111668
STATE OF TENNESSEE

06/02/2026

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

SIGNING AND PAVEMENT MARKING PLANS

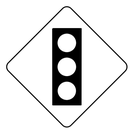
STA. 105+25.00 TO STA. 114+65.00

SCALE: 1"= 50'

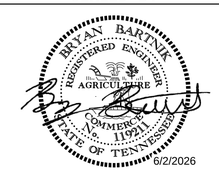
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ALL SIGNS SHOWN WITH DESIGNATIONS ARE TO BE FABRICATED AS DETAILED IN THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (CURRENT EDITION)

TYPE	YEAR	PROJECT NO.	SHEET NO.
PIH	2025	HSIP-131(33)	19
PS&E	2026	HSIP-131(33)	19

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	 W3-3	18	36"	36"									WHITE (REF.) BLACK	RED (REF.) YELLOW/ RE/GREEN (REF.)	0.100" SHEET ALUMINUM	P5	h =13'-0"	TYPE 4 1'-0"DIA.	0.12	24.9	5'	P5 & P6 SUPPORTS REQUIRED SLIP BASE ITEM NO. 713-11.21 (INCLUDES STUB)- SEE DETAIL D ON STD. DWG. T-S-23A
2																P5	h =14'-0"	TYPE 4 1'-0"DIA.	0.12	24.9	5'	
3																P5	h =13'-0"	TYPE 4 1'-0"DIA.	0.12	24.9	5'	
4																P6	h =16'-6"	TYPE 4 1'-0"DIA.	0.12	24.9	5'	
5	 R1-1	18	36"	36"									WHITE (REF.)	RED (REF.)	0.100" SHEET ALUMINUM	P4	h =14'-6"				5'	P5 SUPPORTS REQUIRED SLIP BASE ITEM NO. 713-11.21 (INCLUDES STUB)- SEE DETAIL D ON STD. DWG. T-S-23A
6																P5	h =12'-6"	TYPE 4 1'-0"DIA.	0.12	24.9	5'	
7	← Harrell Rd	SIG-2	96"	24"	2¼"	1"	12"	9"		D		SIGNCAD ARROW TYPE A	WHITE	GREEN/ (REF.)	0.100" SHEET ALUMINUM						17'	OVERHEAD - SEE SIGNAL SHEETS FOR PLACEMENT
8	Harrell Rd →	SIG-2	96"	24"	2¼"	1"	12"	9"		D		SIGNCAD ARROW TYPE A	WHITE	GREEN/ (REF.)	0.100" SHEET ALUMINUM						17'	OVERHEAD - SEE SIGNAL SHEETS FOR PLACEMENT
9	← Carpenter Rd	SIG-2	102"	24"	2¼"	1"	12"	9"		B		SIGNCAD ARROW TYPE A	WHITE	GREEN/ (REF.)	0.100" SHEET ALUMINUM						17'	OVERHEAD - SEE SIGNAL SHEETS FOR PLACEMENT
10	Carpenter Rd →	SIG-2	102"	24"	2¼"	1"	12"	9"		B		SIGNCAD ARROW TYPE A	WHITE	GREEN/ (REF.)	0.100" SHEET ALUMINUM						17'	OVERHEAD - SEE SIGNAL SHEETS FOR PLACEMENT
11	W. Emory Rd	SIG-2	96"	24"	2¼"	1"	12"	9"		D		SIGNCAD ARROW TYPE A	WHITE	GREEN/ (REF.)	0.100" SHEET ALUMINUM						17'	OVERHEAD - SEE SIGNAL SHEETS FOR PLACEMENT

SEALED BY



STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

SIGN SCHEDULE SHEET

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2022	HSIP-131(33)	17
PIH	2025	HSIP-131(33)	20
PS&E	2026	HSIP-131(33)	20

PRES. R.O.W.
OFFSET -45.38

PRES. R.O.W.
OFFSET 52.45

0.000 -0.013 -0.022 0.000

105+25.00

LIMIT OF CONST.
STA. 105+25.00

PRES. R.O.W.
OFFSET -45.37

PRES. R.O.W.
OFFSET 52.37

105+00.00

SR 131

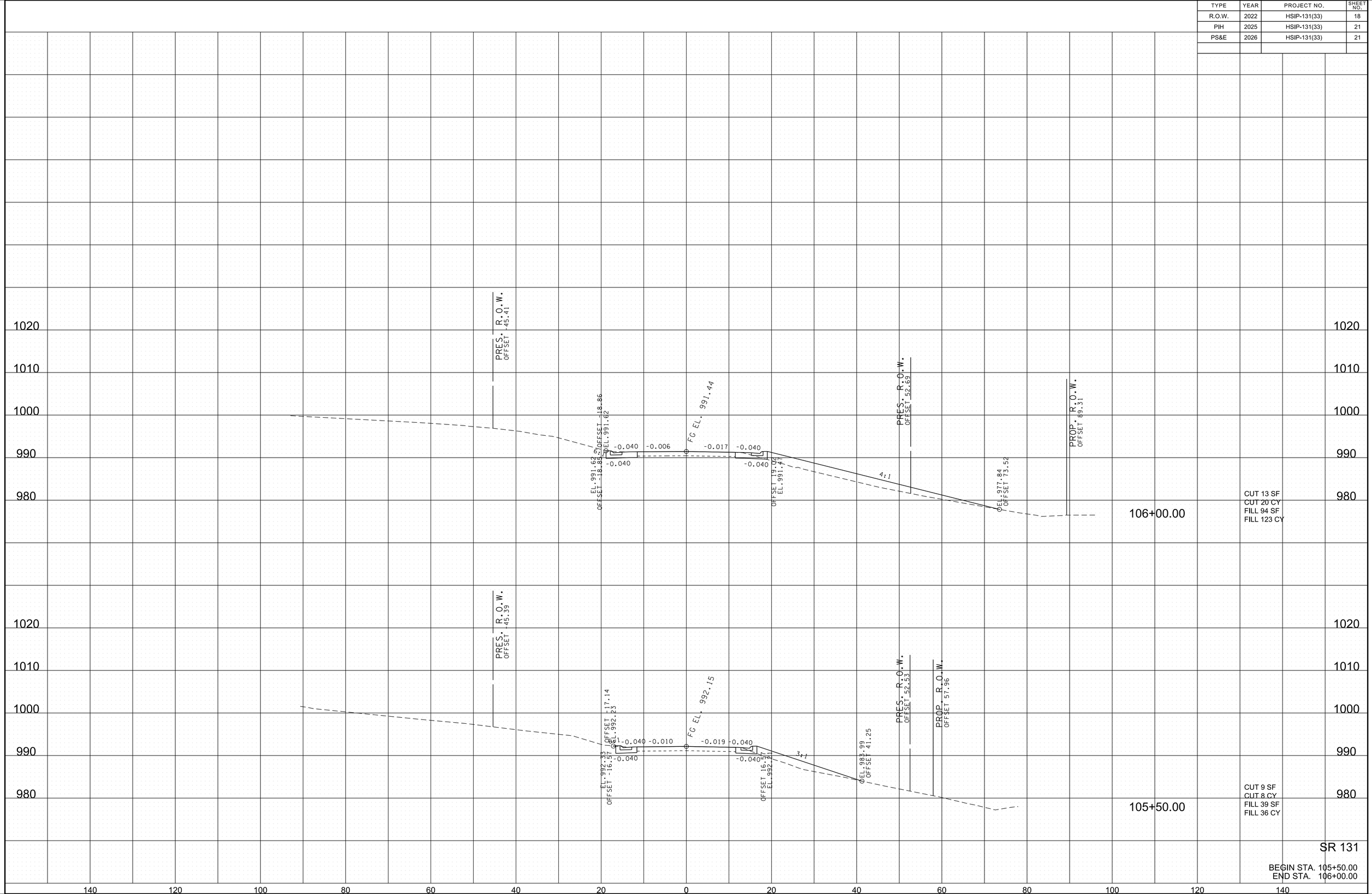
BEGIN STA. 105+00.00
END STA. 105+25.00

1020
1010
1000
990
980

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.	2022	HSIP-131(33)	18
PIH	2025	HSIP-131(33)	21
PS&E	2026	HSIP-131(33)	21

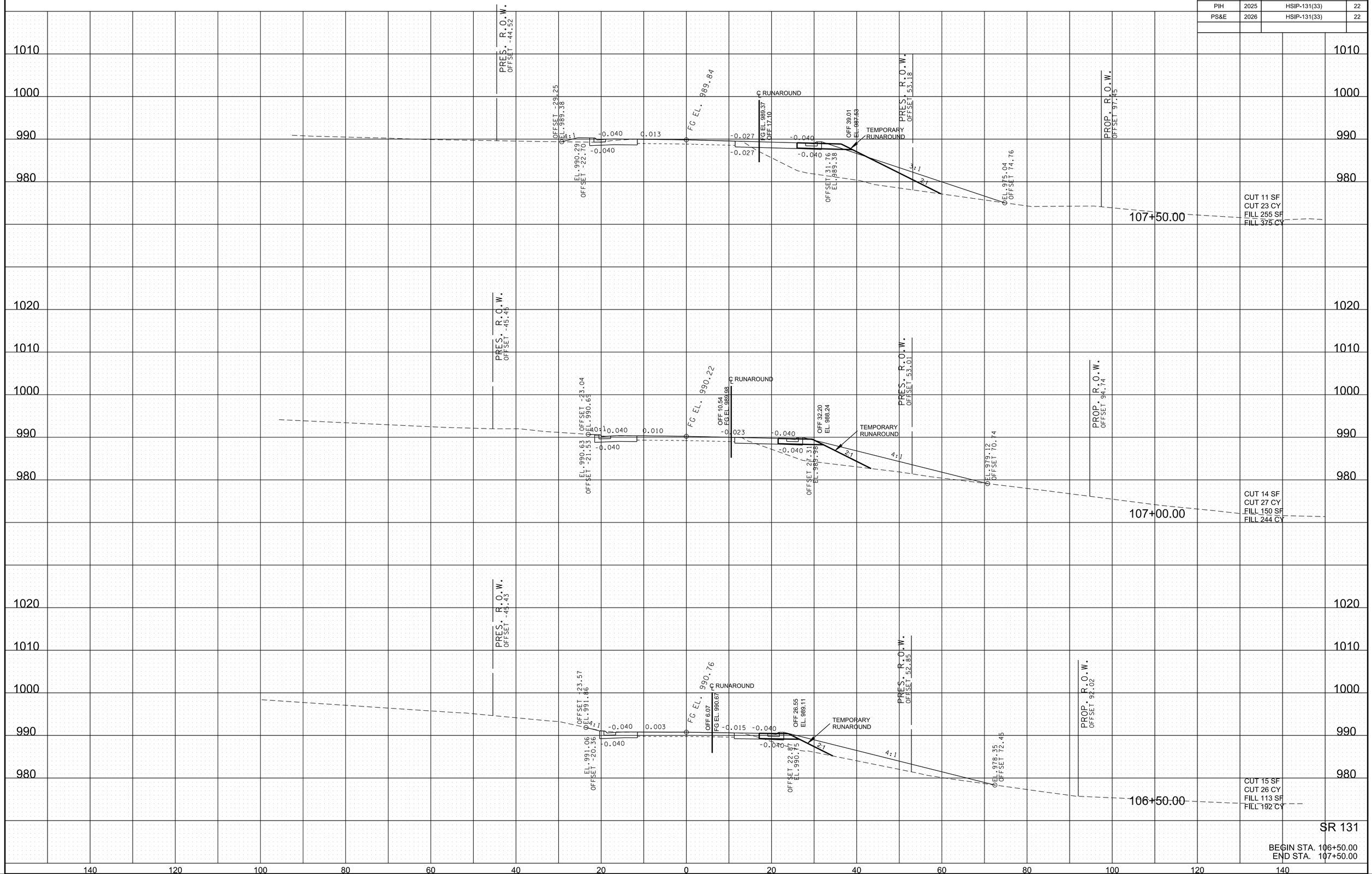


SR 131

BEGIN STA. 105+50.00
END STA. 106+00.00

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2022	HSIP-131(33)	19
PIH	2025	HSIP-131(33)	22
PS&E	2026	HSIP-131(33)	22

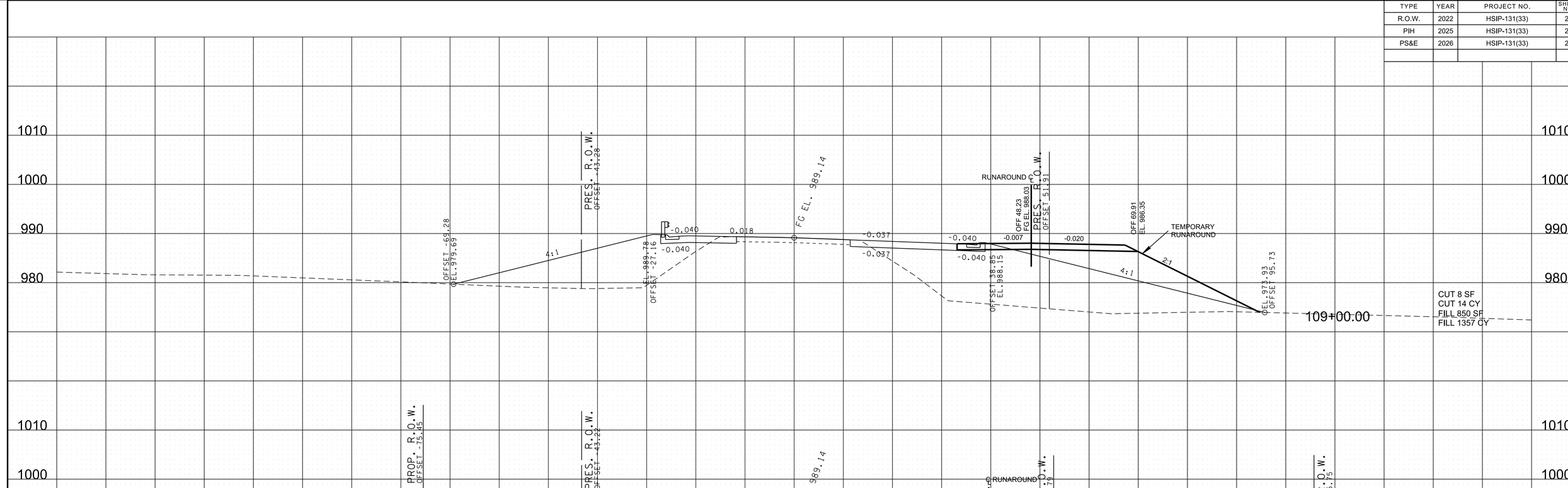


SR 131

BEGIN STA. 106+50.00
END STA. 107+50.00

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2022	HSIP-131(33)	20
PIH	2025	HSIP-131(33)	23
PS&E	2026	HSIP-131(33)	23



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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2022	HSIP-131(33)	21
PIH	2025	HSIP-131(33)	24
PS&E	2026	HSIP-131(33)	24

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1020
1010
1000
990
980

PRES. R.O.W. OFFSET -141.78
PRES. R.O.W. OFFSET -63.55
PRES. R.O.W. OFFSET -22.69
PRES. R.O.W. OFFSET 27.96
SIDEROAD *** OFFSET -33.12 EL. 990.47
FG EL. 990.66
0.035
-0.039
-0.039
-0.040
-0.040
OFFSET 40.55 EL. 989.54
OFFSET 41.31 EL. 989.42

110+50.00

CUT 33 SF
CUT 58 CY
FILL 1 SF
FILL 1 CY

PRES. R.O.W. OFFSET -125.33
PRES. R.O.W. OFFSET -22.82
PRES. R.O.W. OFFSET 28.98
PRES. R.O.W. OFFSET 45.08
SIDEROAD *** OFFSET -29.87 EL. 989.57
FG EL. 989.86
0.035
0.035
-0.035
-0.065
EL. 986.00 SIDEROAD *** OFFSET 42.76

110+00.00

CUT 30 SF
CUT 34 CY
FILL 0 SF
FILL 333 CY

PRES. R.O.W. OFFSET 23.42
SIDEROAD *** OFFSET -27.09 EL. 988.64
FG EL. 989.32
0.024
0.024
-0.044
-0.044
-0.020
-0.020
℄ RUNAROUND
OFF 49.81 FG EL. 987.76
OFFSET 44.12 EL. 985.97 SIDEROAD ***
OFF 72.71 EL. 986.05
TEMPORARY RUNAROUND
2:1

109+50.00

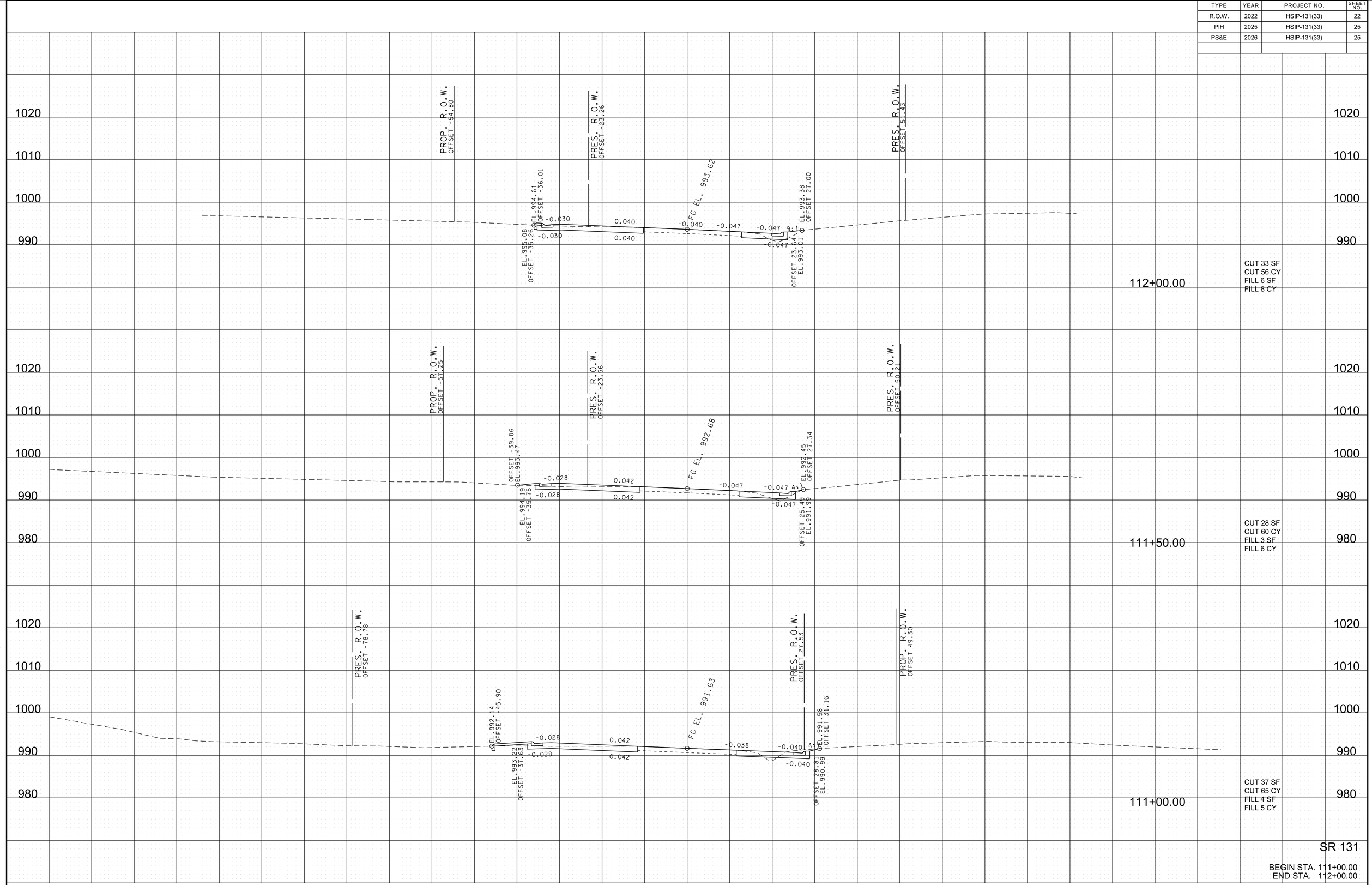
CUT 7 SF
CUT 14 CY
FILL 360 SF
FILL 1120 CY

SR 131

BEGIN STA. 109+50.00
END STA. 110+50.00

140 120 100 80 60 40 20 0 20 40 60 80 100 120 140

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2022	HSIP-131(33)	22
PIH	2025	HSIP-131(33)	25
PS&E	2026	HSIP-131(33)	25

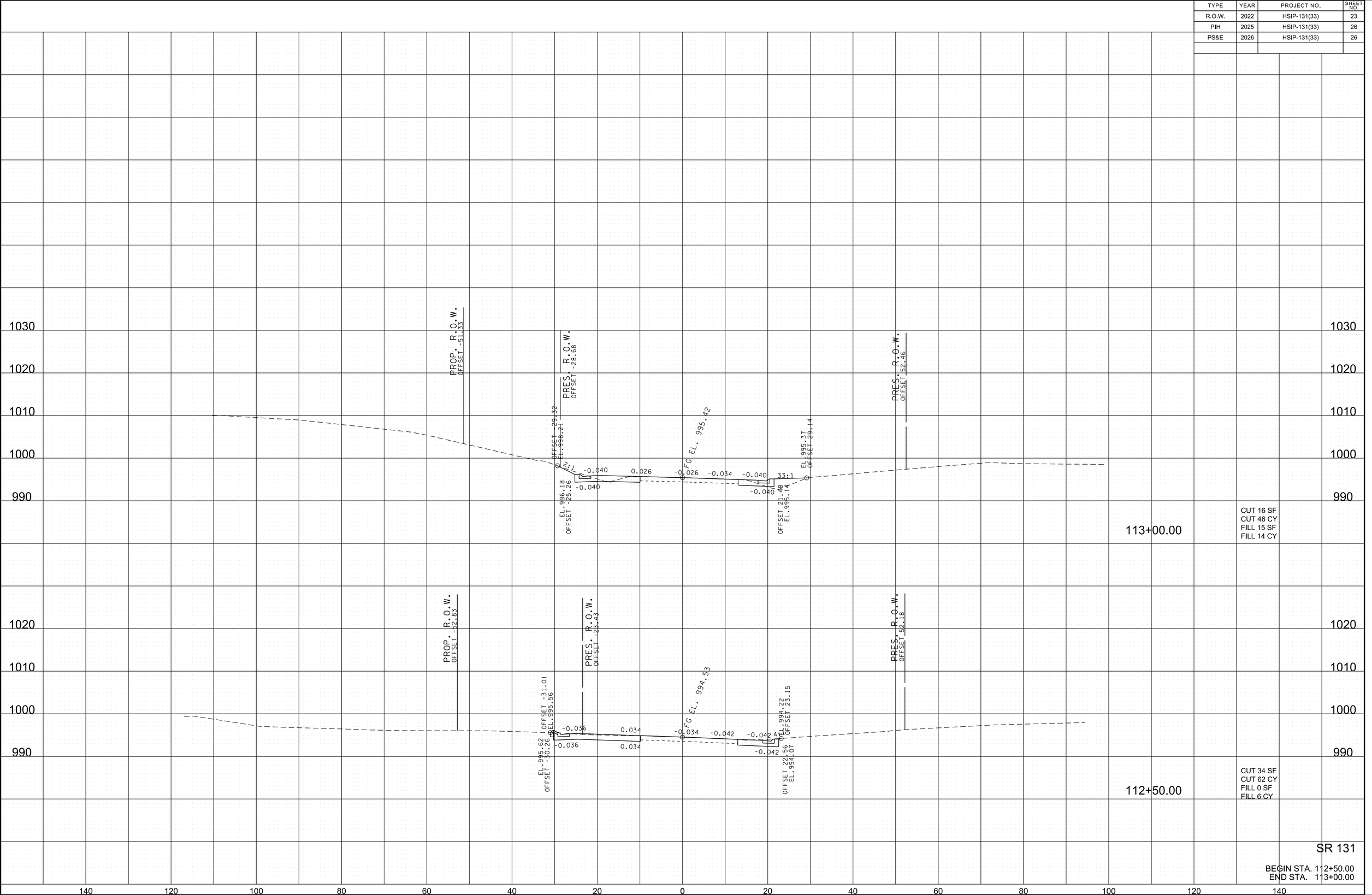


SR 131

BEGIN STA. 111+00.00
END STA. 112+00.00

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2022	HSIP-131(33)	23
PIH	2025	HSIP-131(33)	26
PS&E	2026	HSIP-131(33)	26



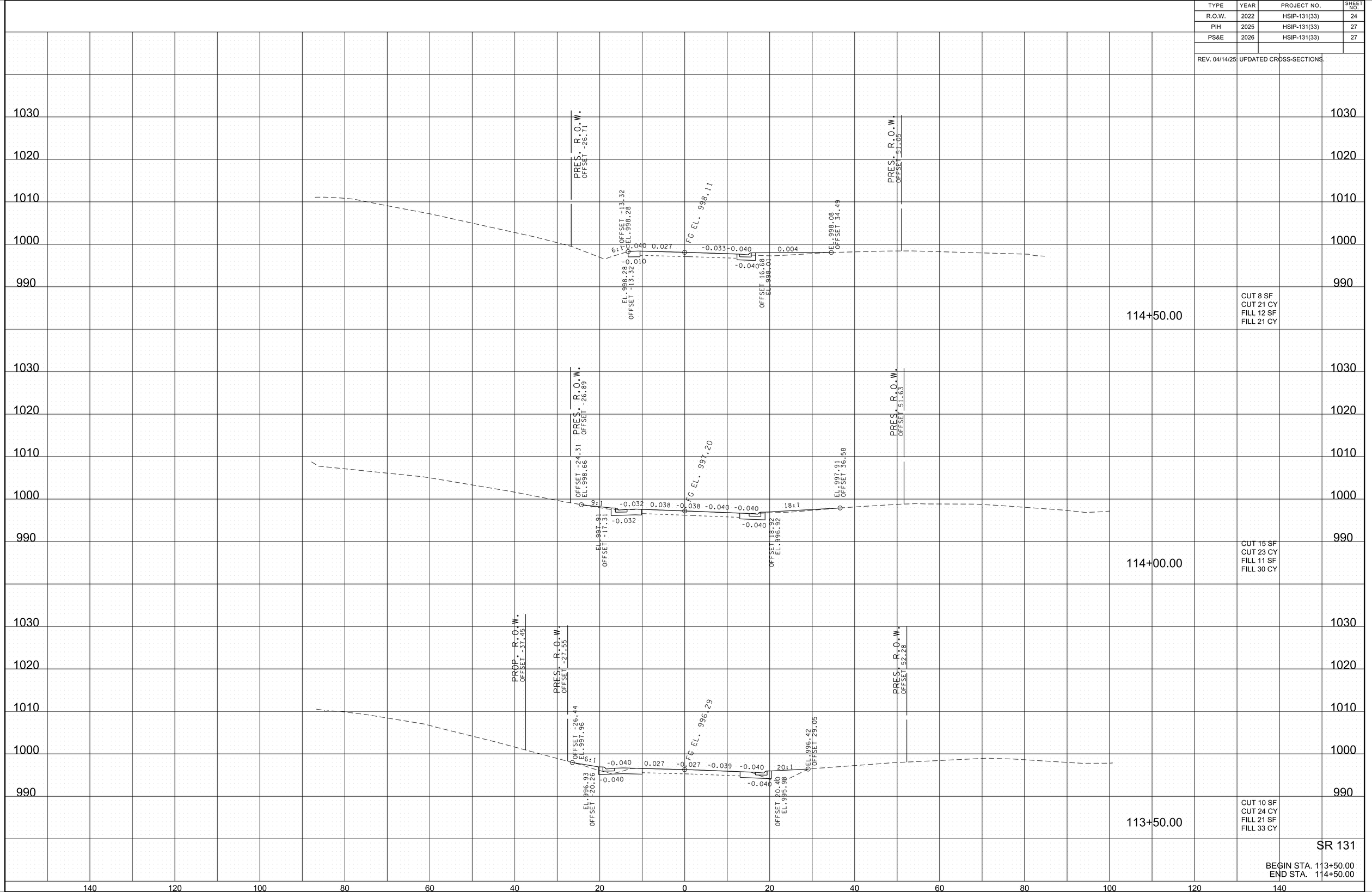
SR 131

BEGIN STA. 112+50.00
END STA. 113+00.00

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2022	HSIP-131(33)	24
PIH	2025	HSIP-131(33)	27
PS&E	2026	HSIP-131(33)	27

REV. 04/14/25 UPDATED CROSS-SECTIONS.



SR 131

BEGIN STA. 113+50.00
END STA. 114+50.00

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2022	HSIP-131(33)	25
PIH	2025	HSIP-131(33)	28
PS&E	2026	HSIP-131(33)	28

PRES. R.O.W.
OFFSET -26.97

PRES. R.O.W.
OFFSET 50.59

PRES. R.O.W.
OFFSET -26.75

PRES. R.O.W.
OFFSET 50.39

0.022 -0.033

LIMIT OF CONST.
STA. 114+65.00

115+00.00

114+65.00

SR 131

BEGIN STA. 114+65.00
END STA. 115+00.00

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2022	HSIP-131(33)	26
PIH	2025	HSIP-131(33)	29
PS&E	2026	HSIP-131(33)	29

1030
1020
1010
1000
1040
1030
1020
1010

PRES. R.O.W.
OFFSET -24.35

PRES. R.O.W.
OFFSET -30.19

-0.020 -0.029

200+00.00

PRES. R.O.W.
OFFSET -25.49

PRES. R.O.W.
OFFSET -29.51

-0.026 -0.058

LIMIT OF CONST.
STA. 199+52.00

199+52.00

BEGIN RESURF.
STA. 199+52.00

PRES. R.O.W.
OFFSET -25.53

PRES. R.O.W.
OFFSET -29.51

199+50.00

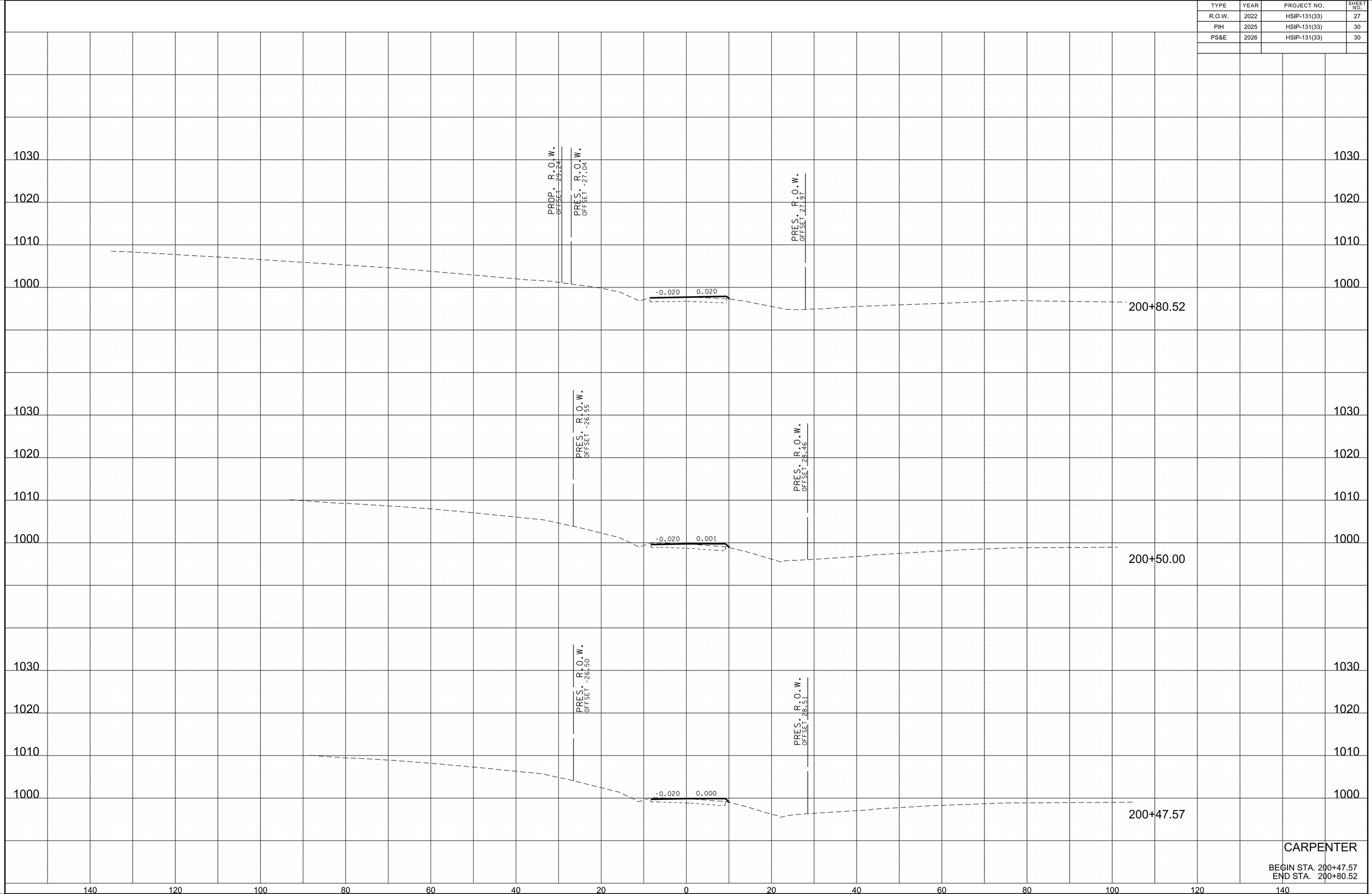
CARPENTER

BEGIN STA. 199+50.00
END STA. 200+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.	2022	HSIP-131(33)	27
PIH	2025	HSIP-131(33)	30
PS&E	2026	HSIP-131(33)	30

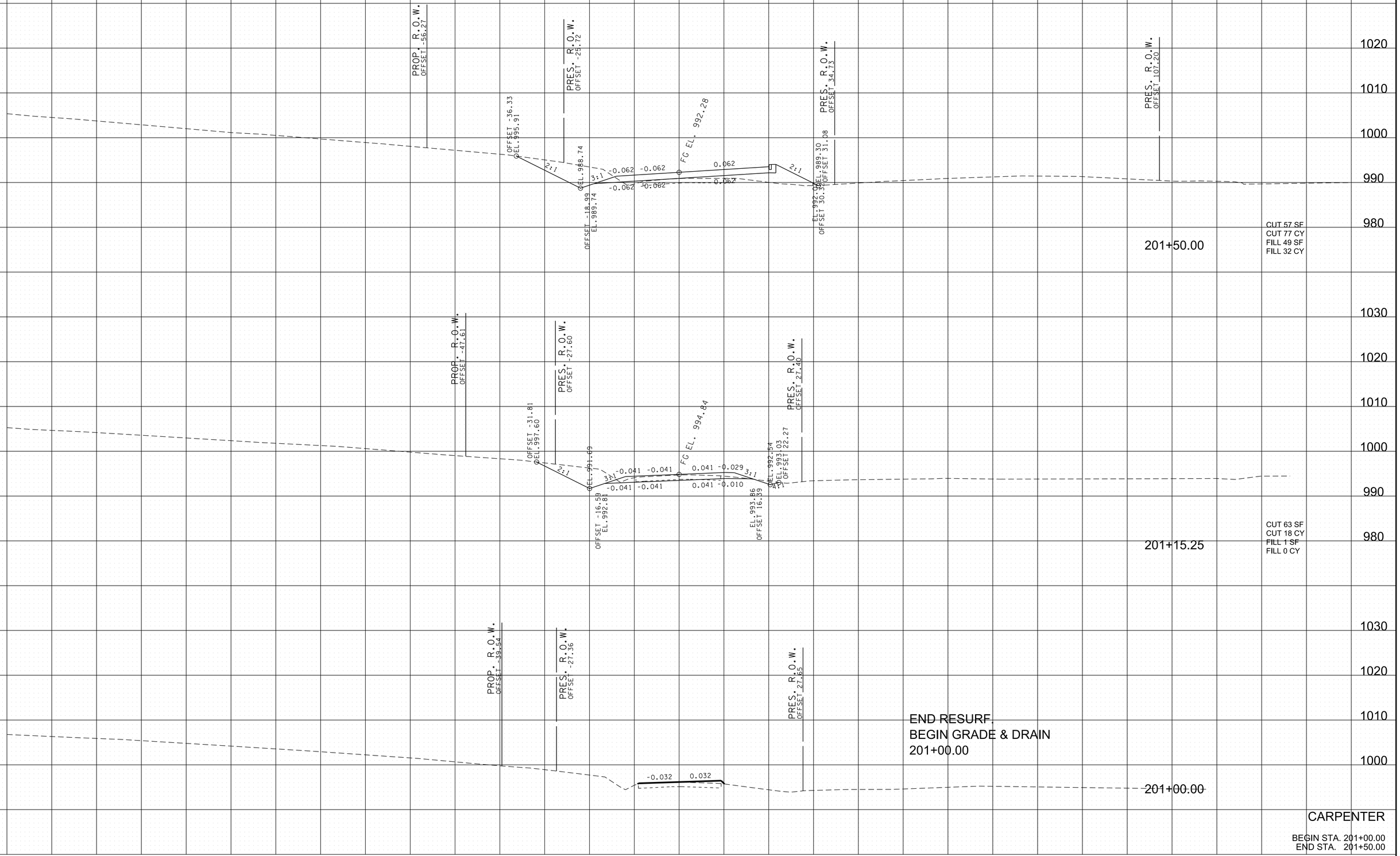


CARPENTER

BEGIN STA. 200+47.57
END STA. 200+80.52

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2022	HSIP-131(33)	28
PIH	2025	HSIP-131(33)	31
PS&E	2026	HSIP-131(33)	31

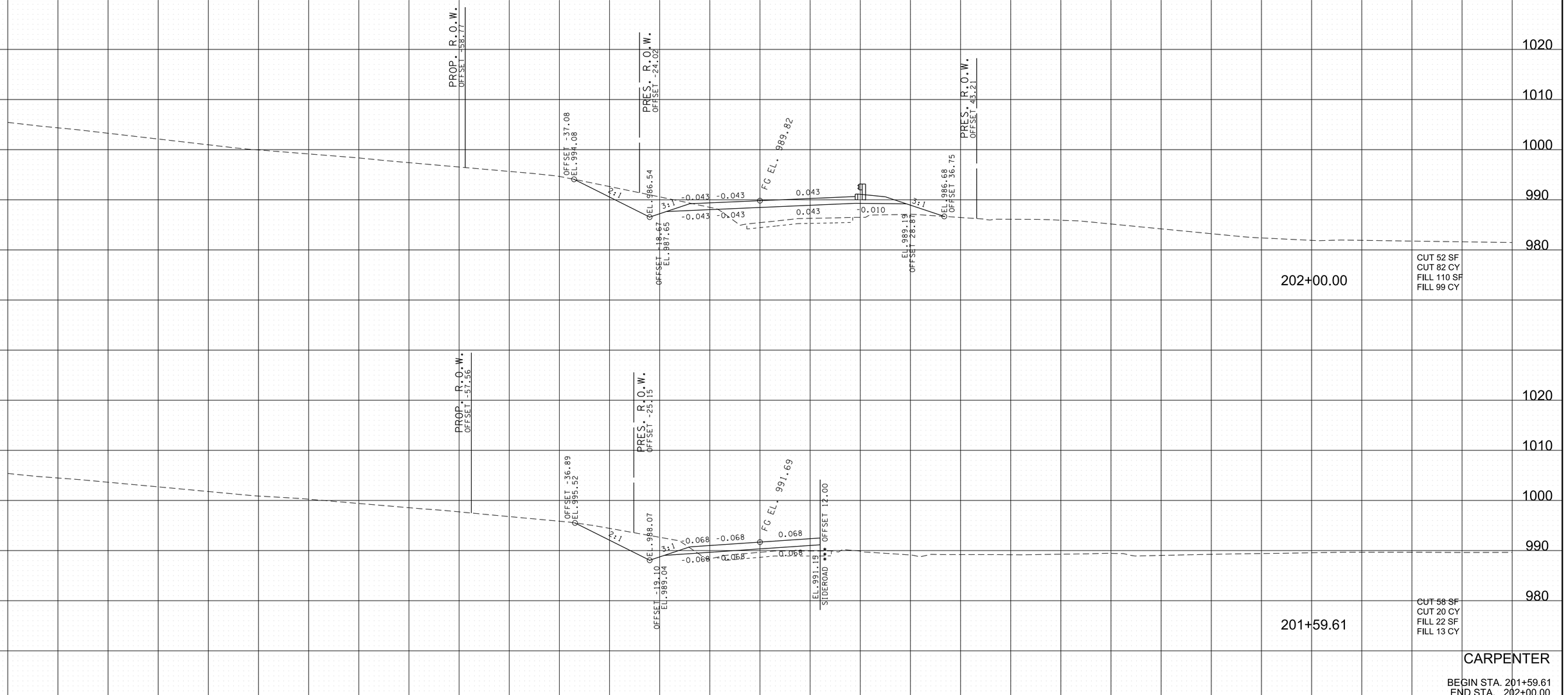


CARPENTER

BEGIN STA. 201+00.00
END STA. 201+50.00

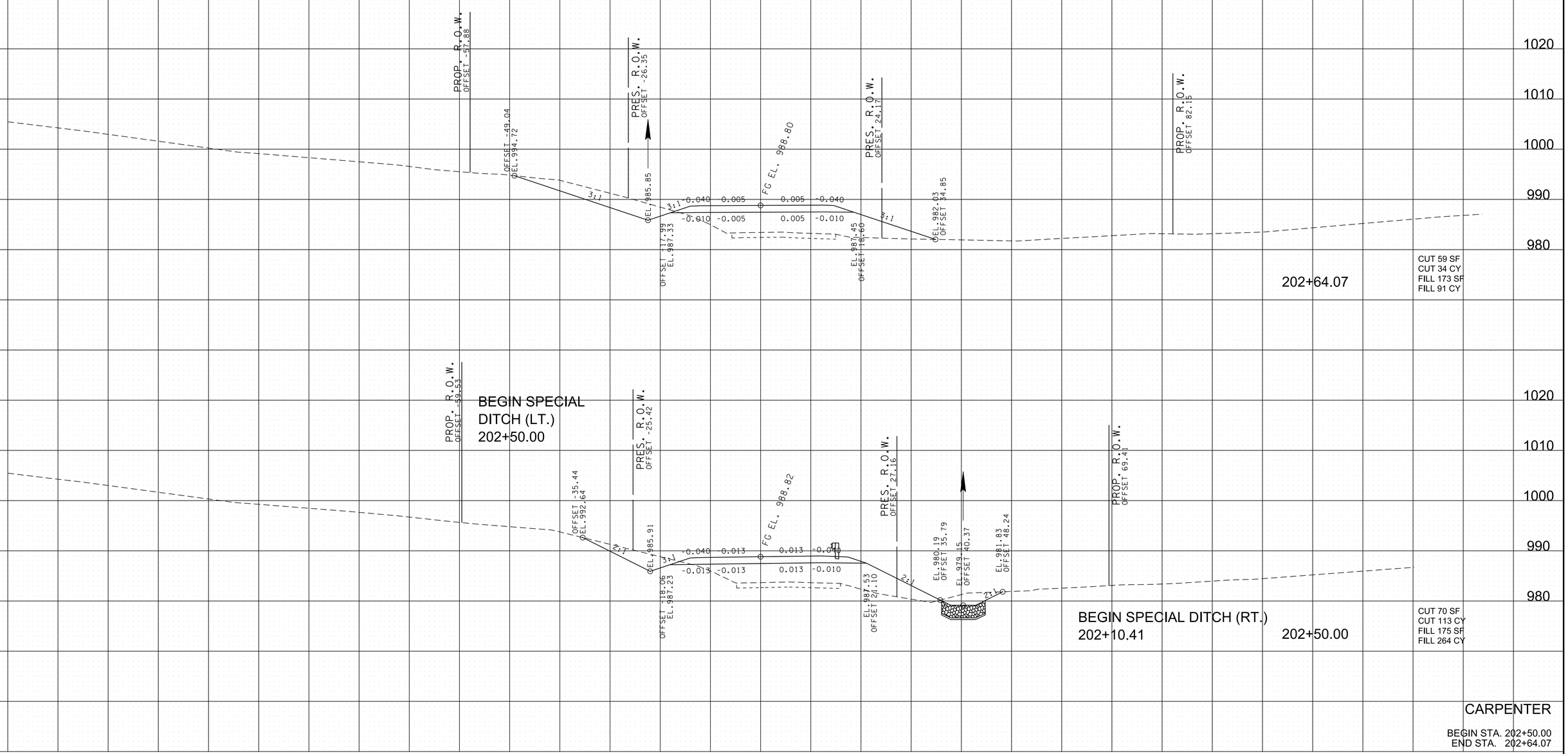
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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2022	HSIP-131(33)	29
PIH	2025	HSIP-131(33)	32
PS&E	2026	HSIP-131(33)	32



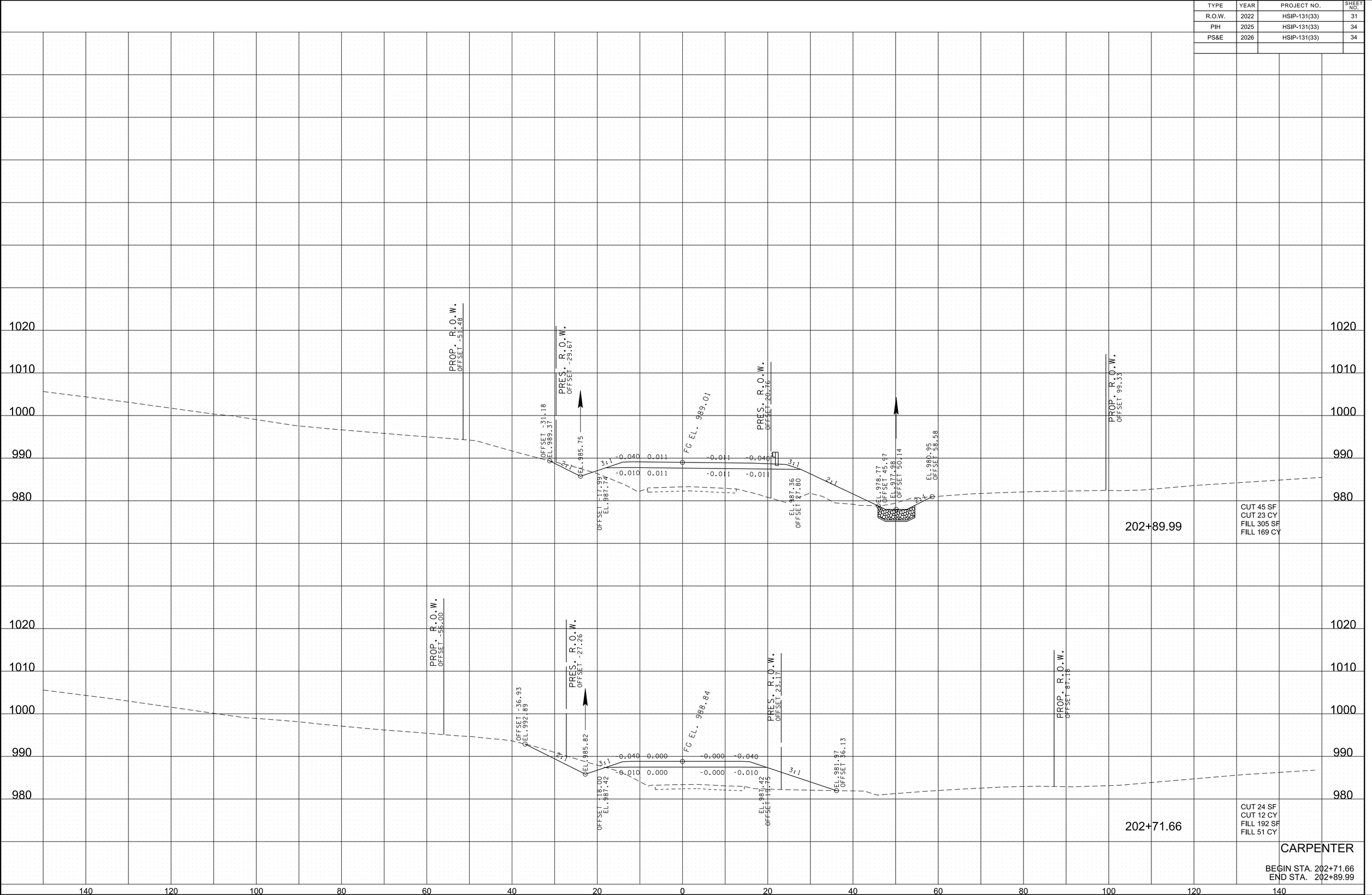
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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2022	HSIP-131(33)	30
PIH	2025	HSIP-131(33)	33
PS&E	2026	HSIP-131(33)	33



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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2022	HSIP-131(33)	31
PIH	2025	HSIP-131(33)	34
PS&E	2026	HSIP-131(33)	34

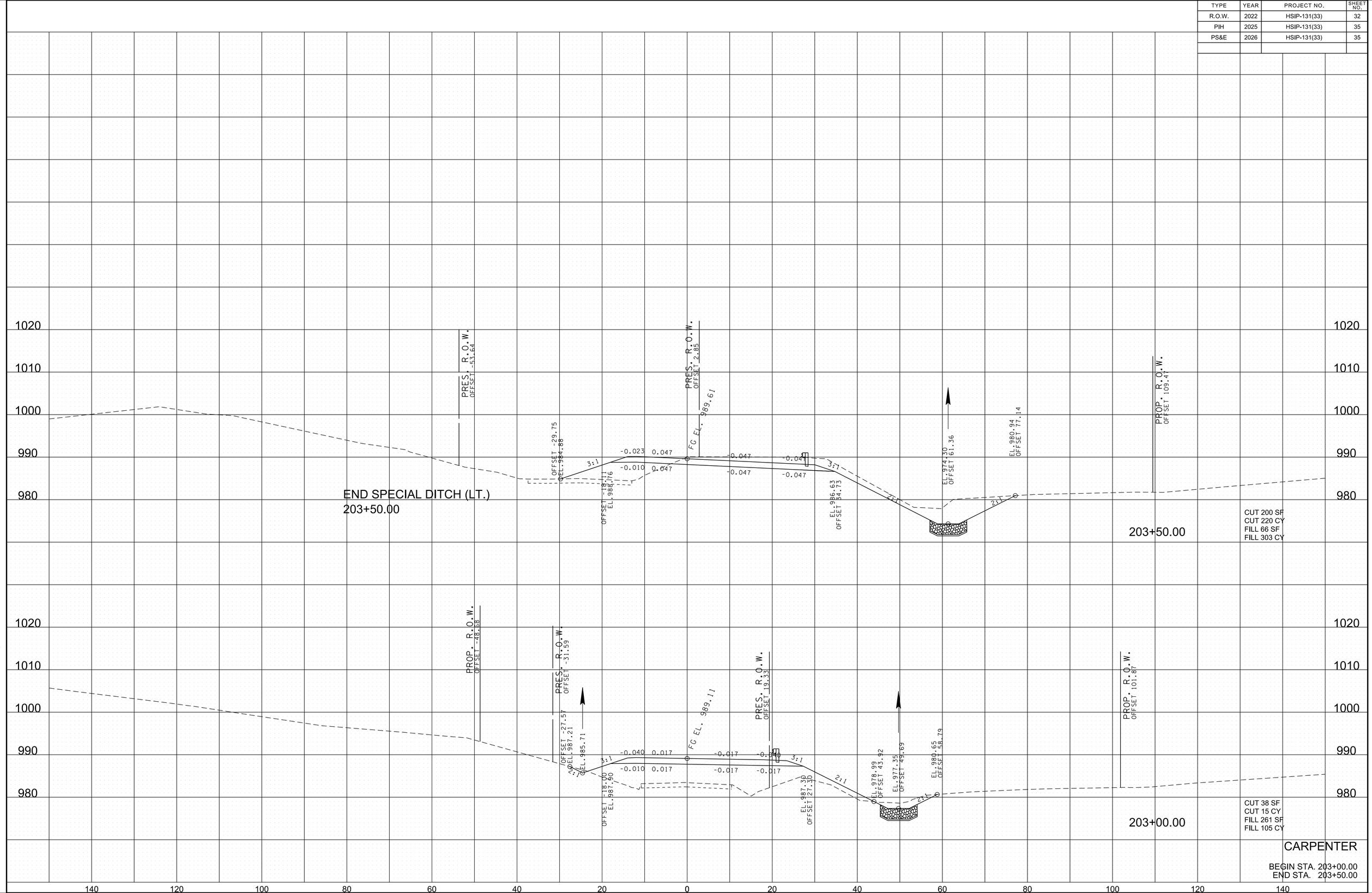


CARPENTER

BEGIN STA. 202+71.66
END STA. 202+89.99

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2022	HSIP-131(33)	32
PIH	2025	HSIP-131(33)	35
PS&E	2026	HSIP-131(33)	35

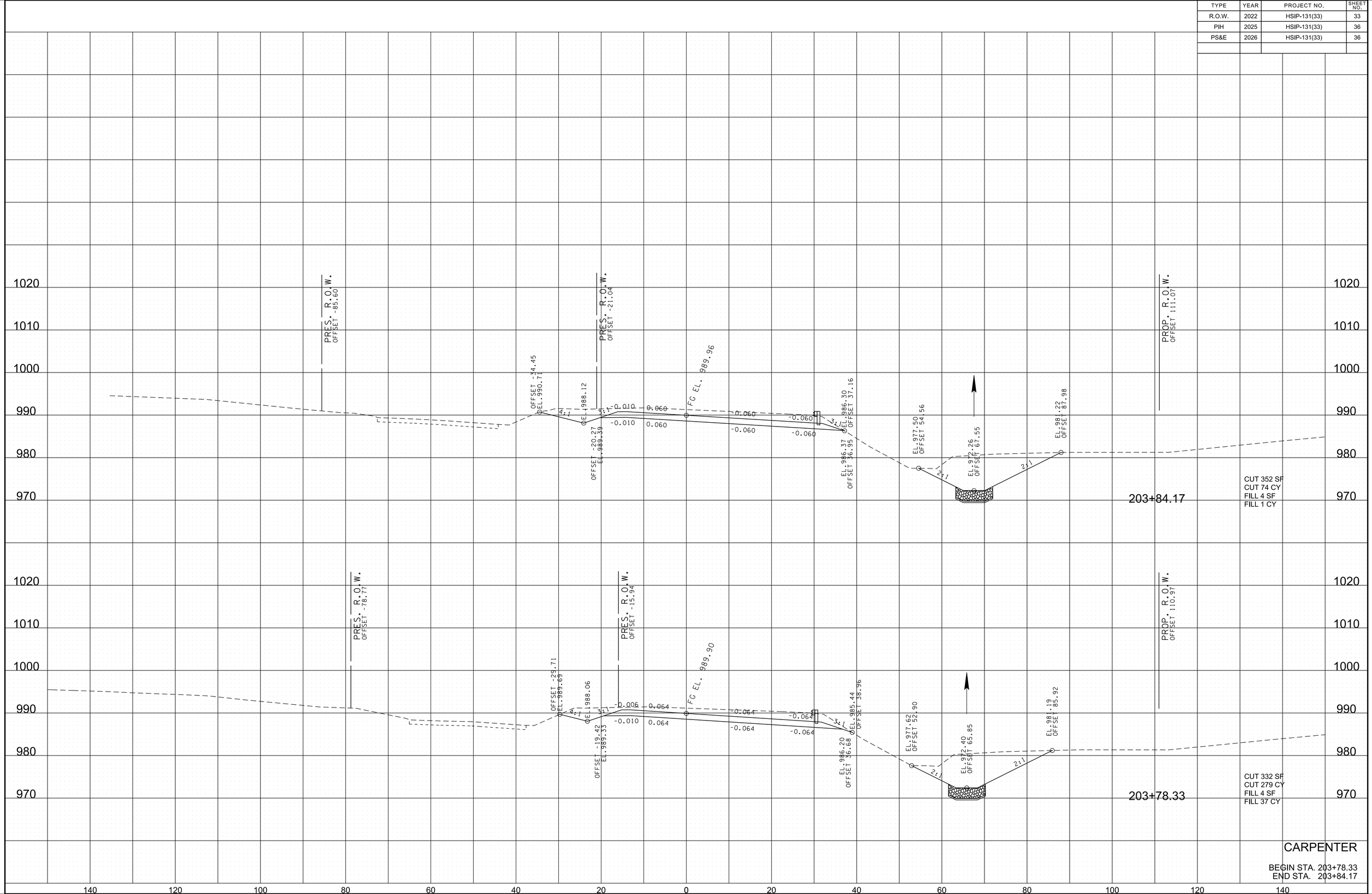


CARPENTER

BEGIN STA. 203+00.00
END STA. 203+50.00

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2022	HSIP-131(33)	33
PIH	2025	HSIP-131(33)	36
PS&E	2026	HSIP-131(33)	36

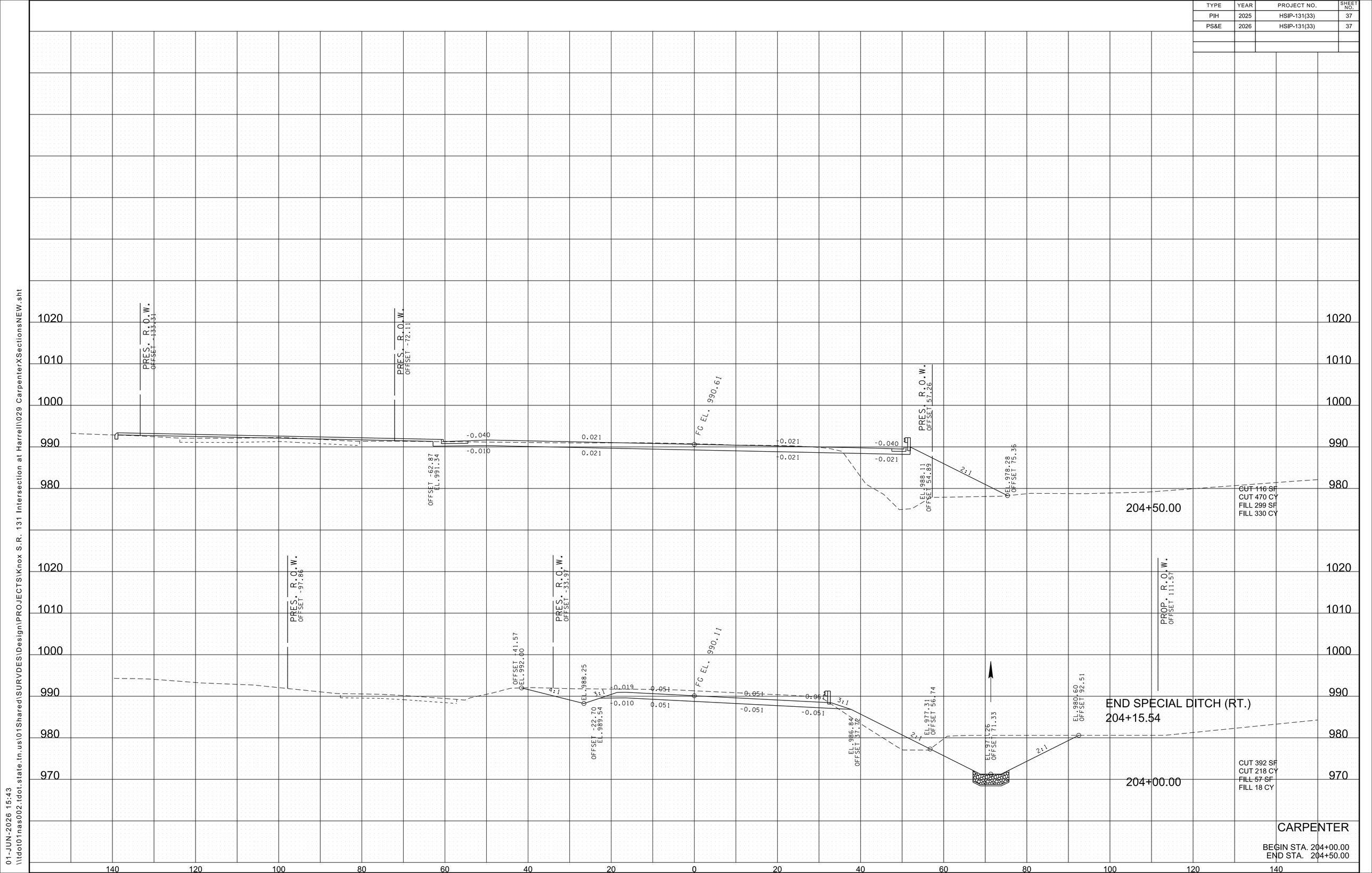


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TYPE	YEAR	PROJECT NO.	SHEET NO.
PIH	2025	HSIP-131(33)	37
PS&E	2026	HSIP-131(33)	37

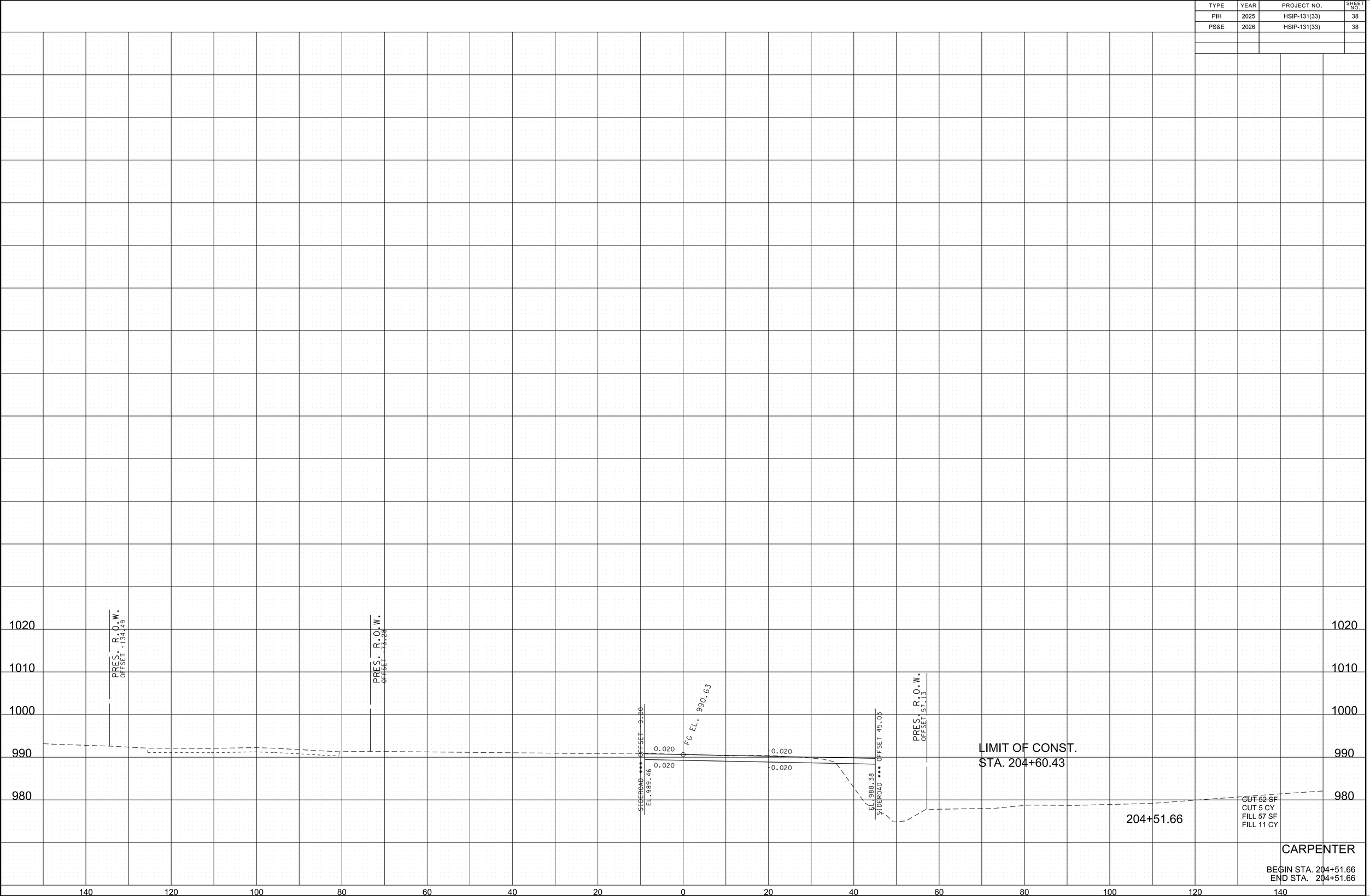


CARPENTER

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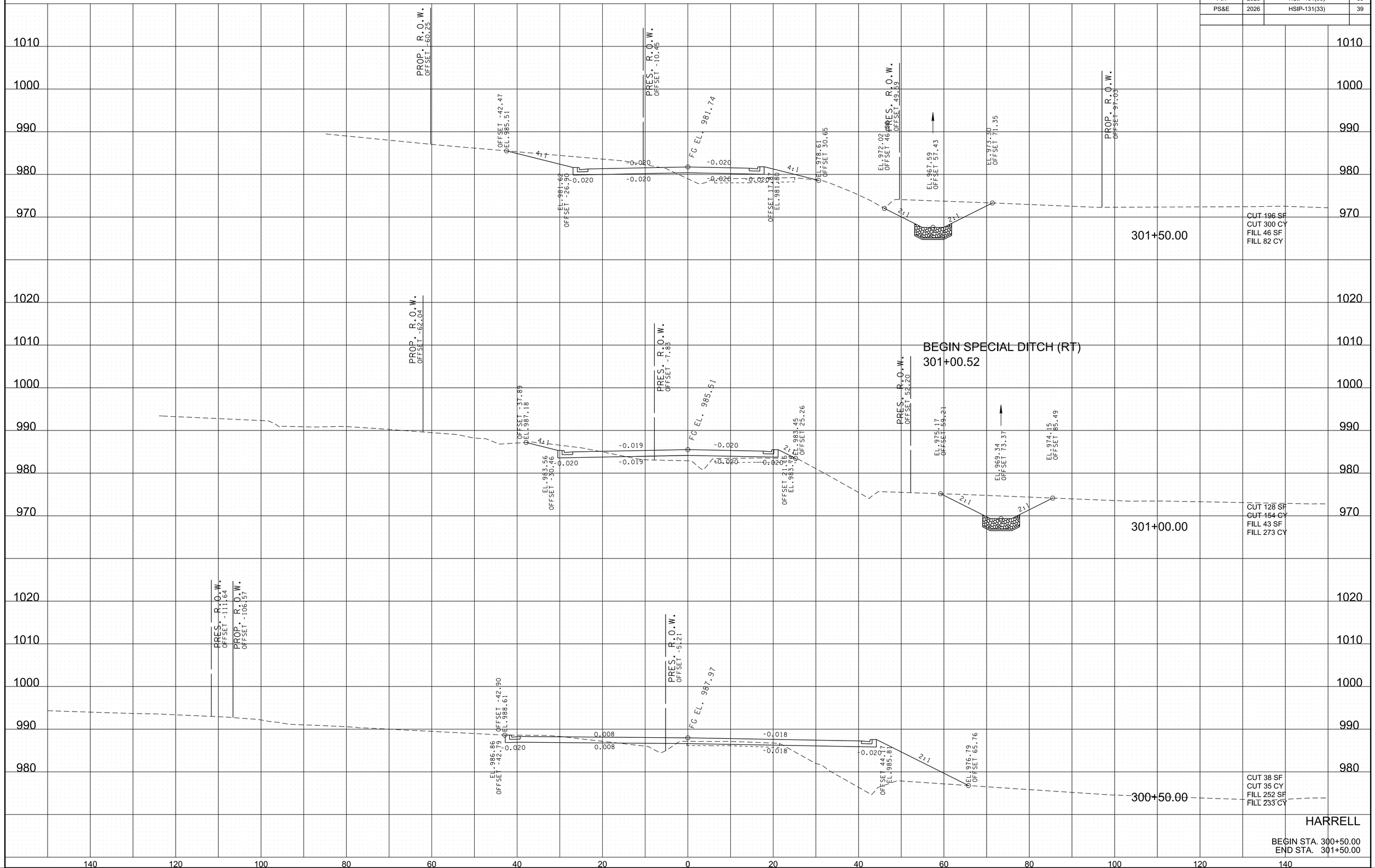
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TYPE	YEAR	PROJECT NO.	SHEET NO.
PIH	2025	HSIP-131(33)	38
PS&E	2026	HSIP-131(33)	38



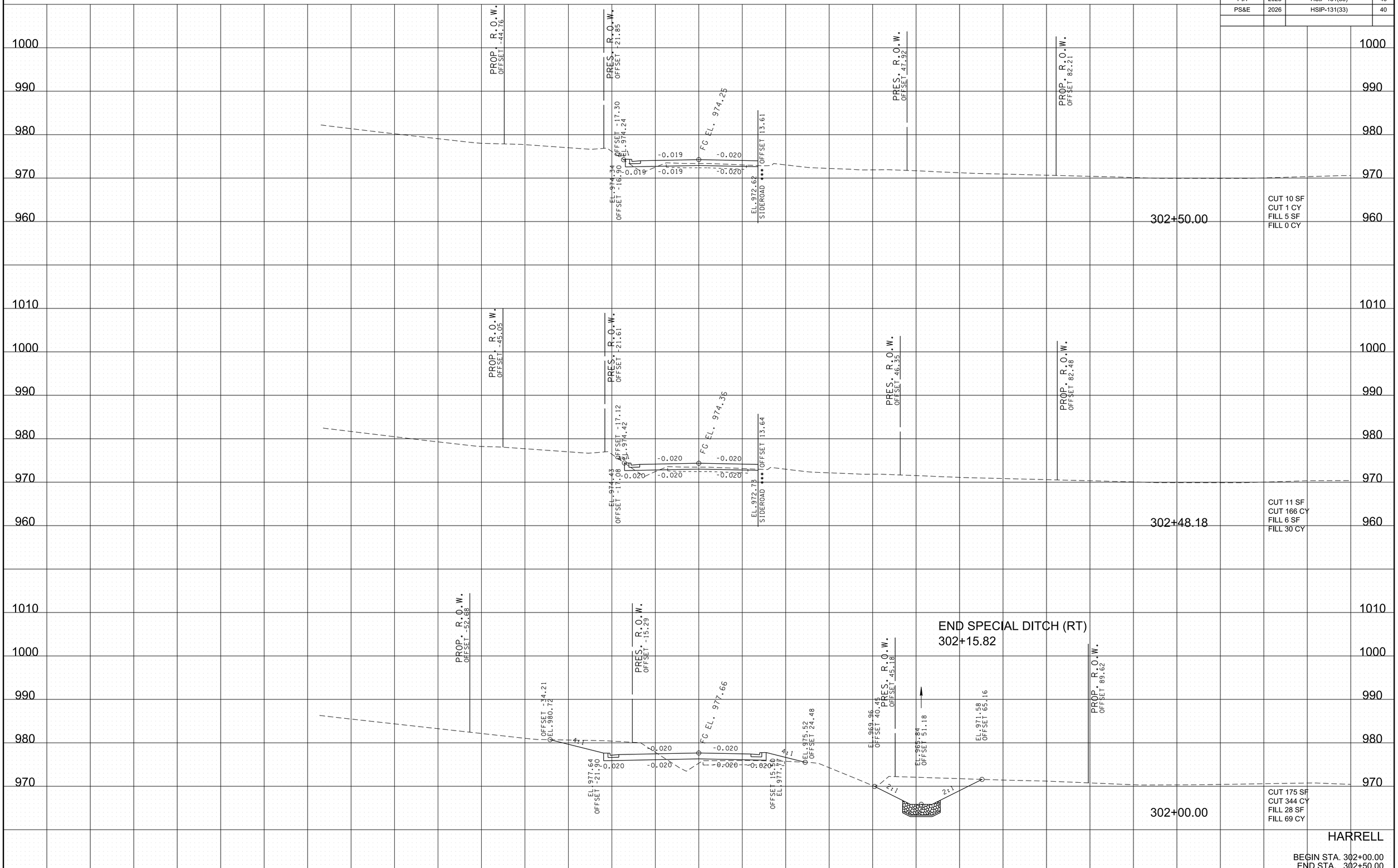
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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2022	HSIP-131(33)	34
PIH	2025	HSIP-131(33)	39
PS&E	2026	HSIP-131(33)	39



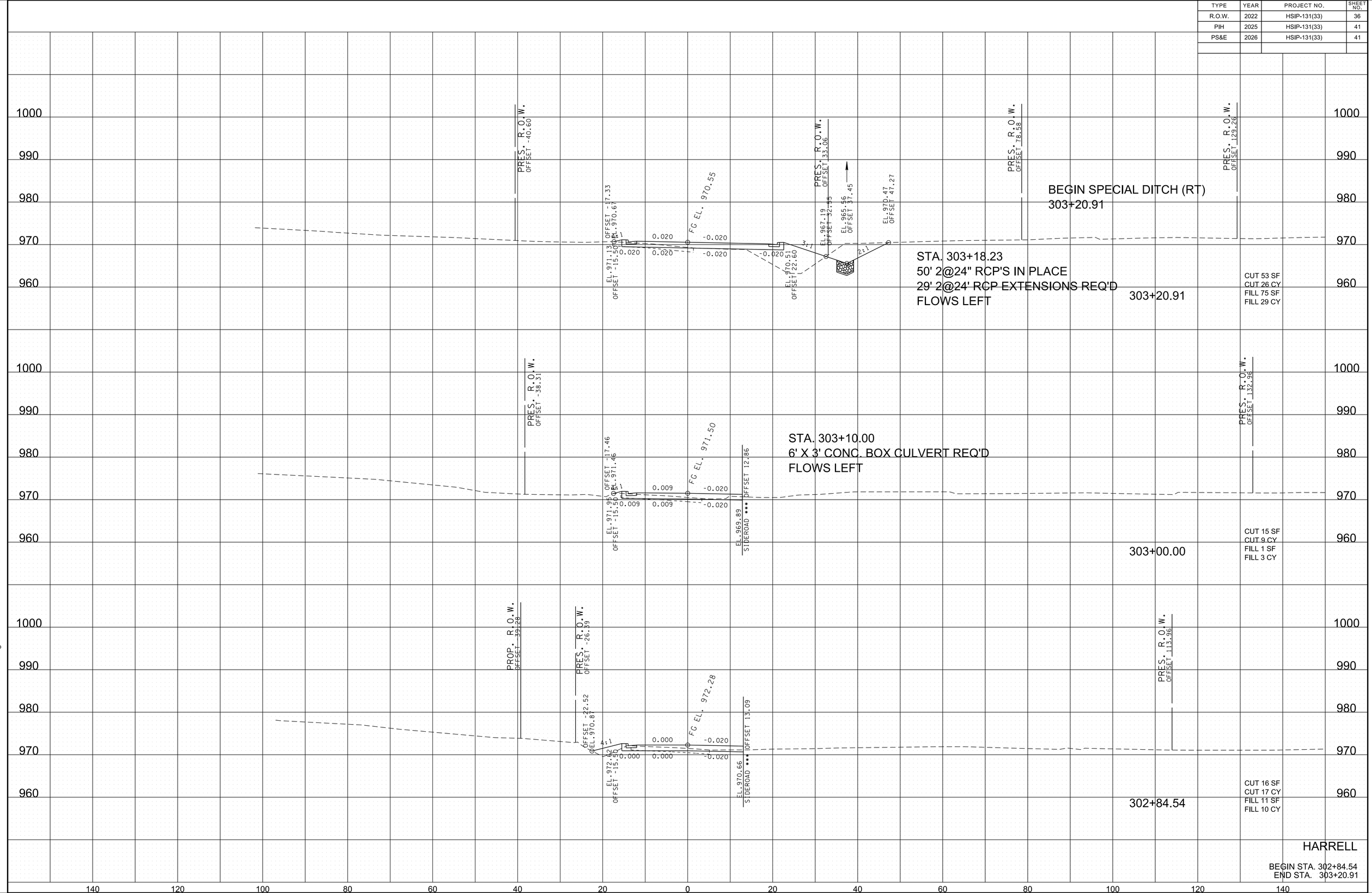
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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2022	HSIP-131(33)	35
PIH	2025	HSIP-131(33)	40
PS&E	2026	HSIP-131(33)	40



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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2022	HSIP-131(33)	36
PIH	2025	HSIP-131(33)	41
PS&E	2026	HSIP-131(33)	41



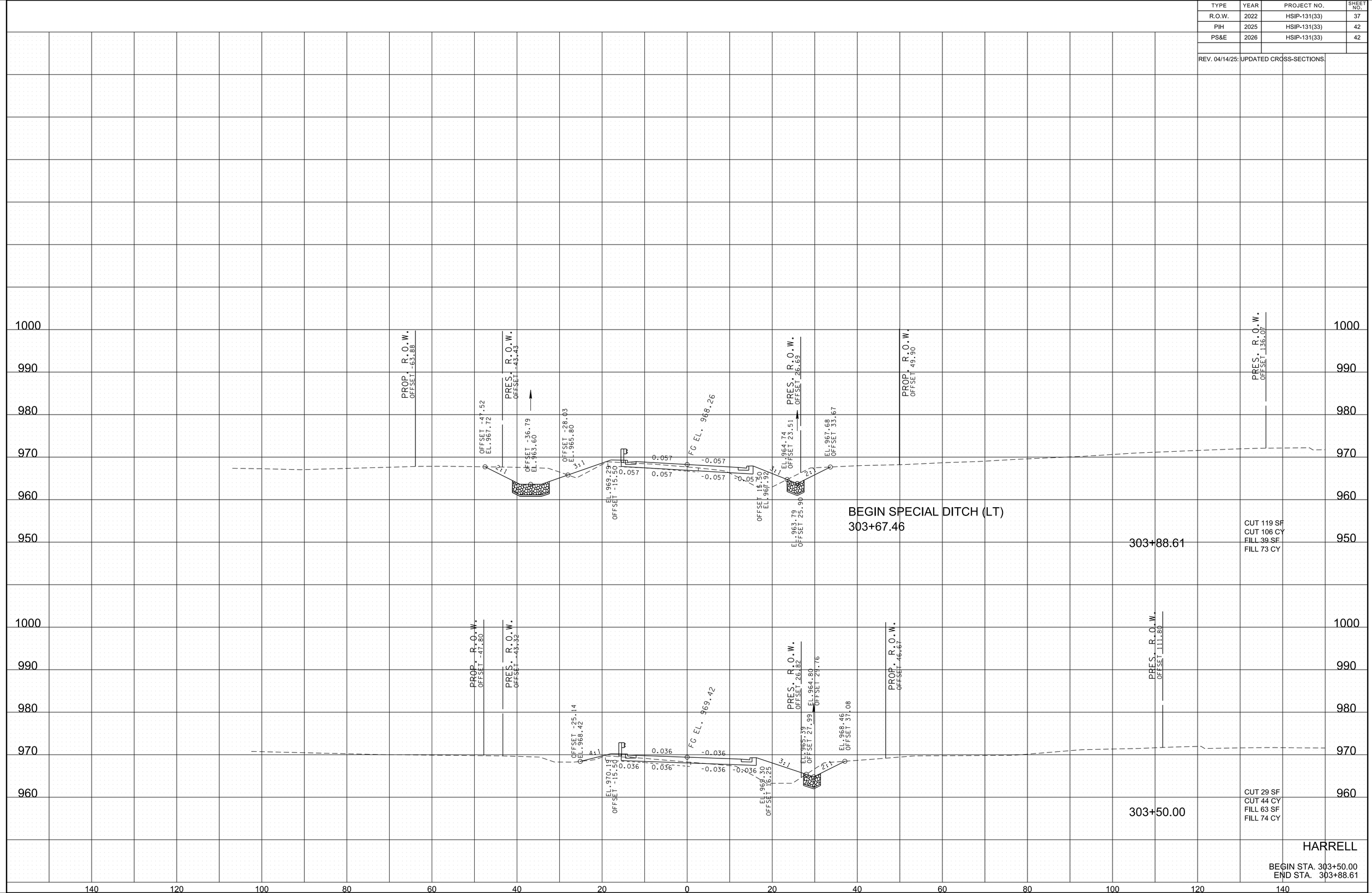
HARRELL

BEGIN STA. 302+84.54
END STA. 303+20.91

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2022	HSIP-131(33)	37
PIH	2025	HSIP-131(33)	42
PS&E	2026	HSIP-131(33)	42

REV. 04/14/25: UPDATED CROSS-SECTIONS.



HARRELL

BEGIN STA. 303+50.00
END STA. 303+88.61

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2022	HSIP-131(33)	38
PIH	2025	HSIP-131(33)	43
PS&E	2026	HSIP-131(33)	43

REV. 04/14/25: UPDATED CROSS-SECTIONS.

END SPECIAL DITCH (RT)
304+51.61

304+50.00

CUT 100 SF
CUT 166 CY
FILL 46 SF
FILL 72 CY

PROP. R.O.W. OFFSET -57.43
PRES. R.O.W. OFFSET -38.46
PRES. R.O.W. OFFSET 31.93
PROP. R.O.W. OFFSET 42.23

OFFSET -39.89 EL.963.67
OFFSET -33.54 EL.961.75
OFFSET -26.57 EL.963.99
EL.968.13 OFFSET -15.50
OFFSET 15.50 EL.966.79
EL.963.30 OFFSET 22.91
EL.962.18 OFFSET 26.29
EL.966.88 OFFSET 35.68

FG EL. 967.25

0.045 -0.067
0.045 -0.067
0.045 -0.067

2:1 2:1

304+06.36

CUT 106 SF
CUT 25 CY
FILL 43 SF
FILL 10 CY

PRES. R.O.W. OFFSET 103.11
PROP. R.O.W. OFFSET -60.90
PROP. R.O.W. OFFSET 48.68

OFFSET -47.90 EL.966.57
OFFSET -38.39 EL.963.06
OFFSET -29.09 EL.965.33
EL.969.01 OFFSET -15.50
OFFSET 18.12 EL.965.12
EL.963.92 OFFSET 22.93
EL.963.32 OFFSET 24.71
EL.967.43 OFFSET 32.94

FG EL. 967.87

0.067 -0.067
0.067 -0.067
0.067 -0.067

2:1 3:1 3:1 2:1

304+00.00

CUT 107 SF
CUT 48 CY
FILL 40 SF
FILL 17 CY

PROP. R.O.W. OFFSET -61.86
PRES. R.O.W. OFFSET -42.72
PROP. R.O.W. OFFSET 49.26
PRES. R.O.W. OFFSET 139.83

OFFSET -48.06 EL.966.98
OFFSET -38.09 EL.963.25
OFFSET -28.74 EL.965.54
EL.969.11 OFFSET -15.50
OFFSET 18.16 EL.965.46
EL.964.08 OFFSET 22.96
EL.963.49 OFFSET 24.74
EL.967.54 OFFSET 32.85

FG EL. 968.00

0.064 -0.064
0.064 -0.064
0.064 -0.064

2:1 3:1 3:1 2:1

HARRELL

BEGIN STA. 304+00.00
END STA. 304+50.00

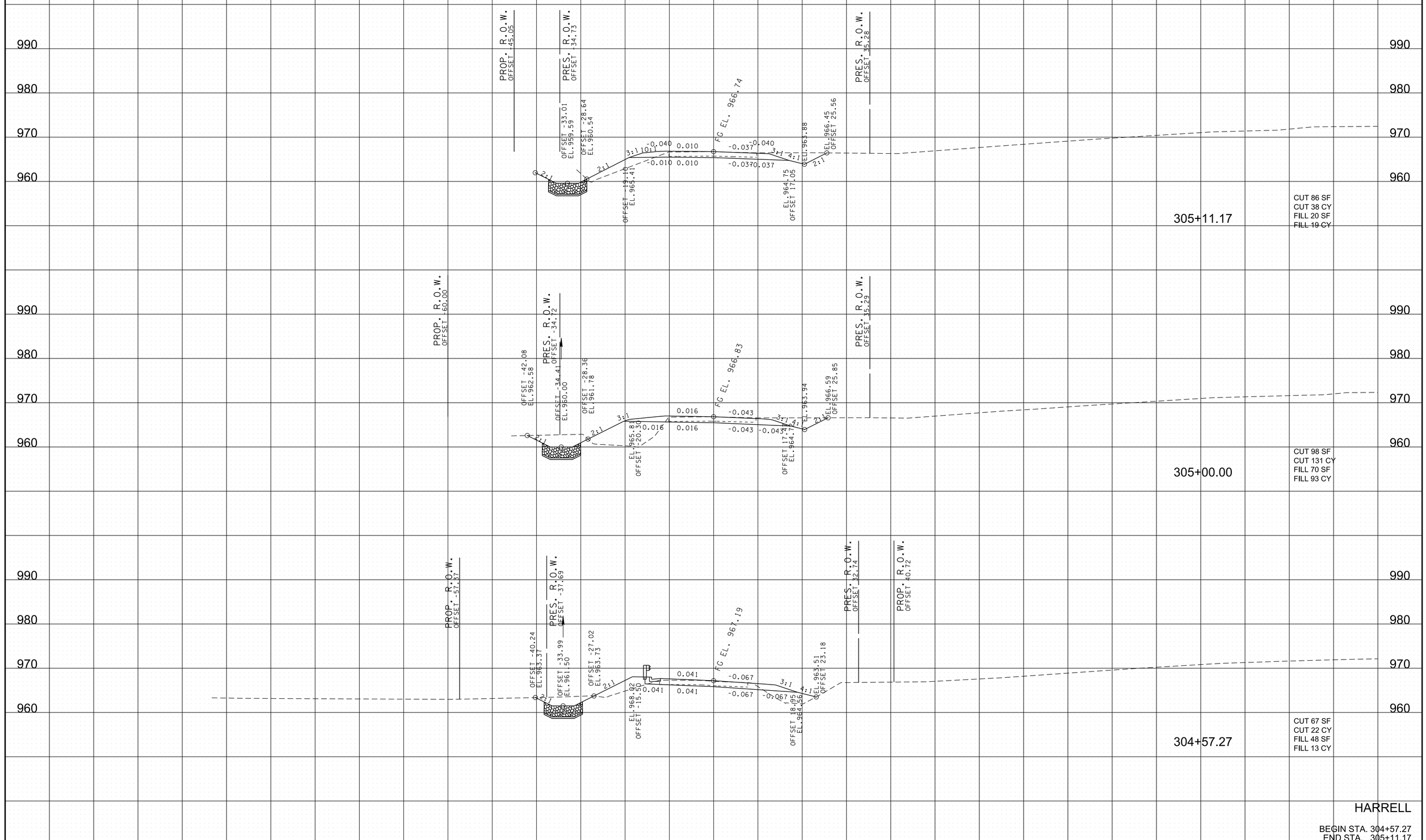
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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2022	HSIP-131(33)	39
PIH	2025	HSIP-131(33)	44
PS&E	2026	HSIP-131(33)	44

REV. 04/14/25: UPDATED CROSS-SECTIONS.

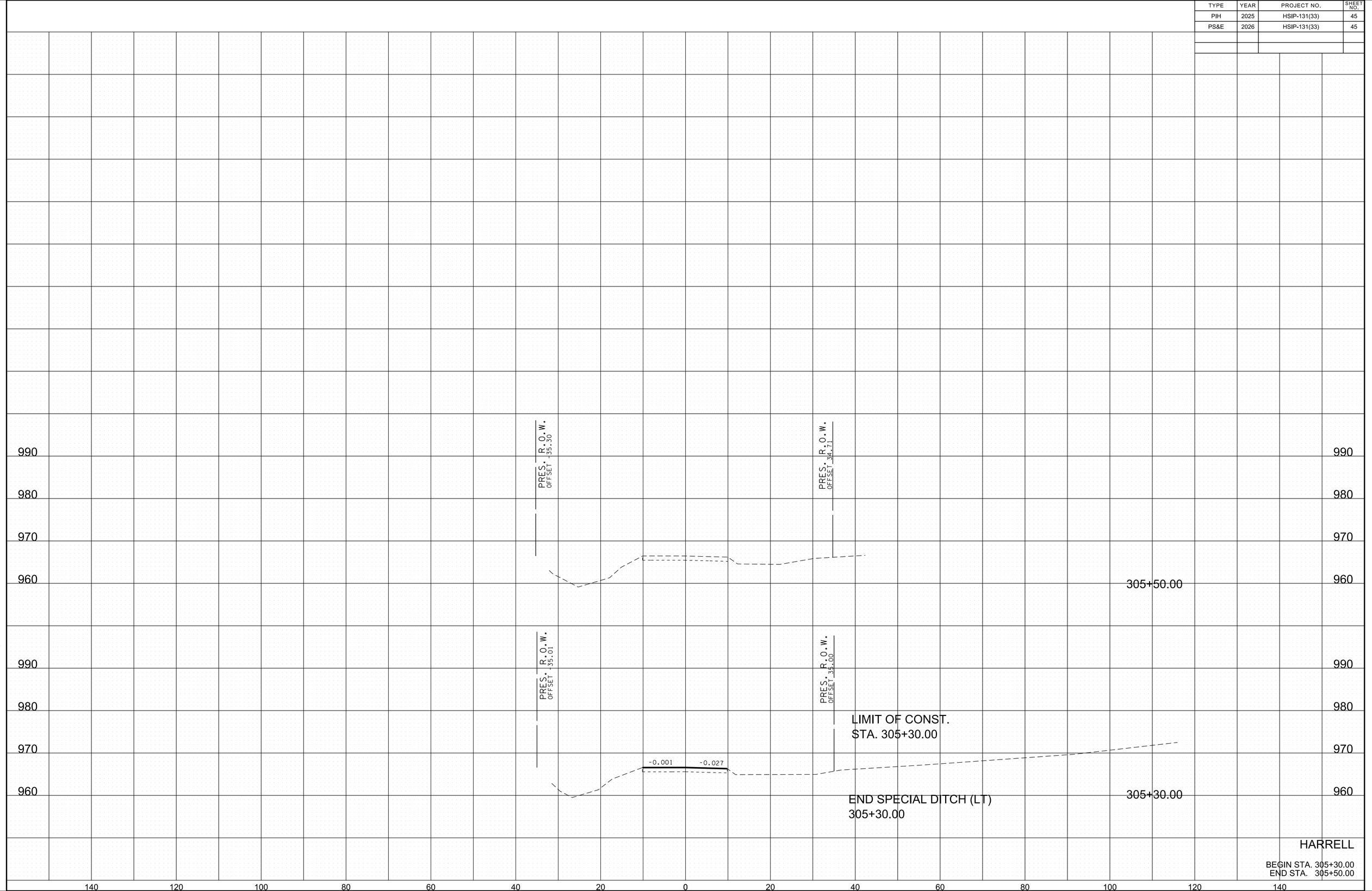


HARRELL

BEGIN STA. 304+57.27
END STA. 305+11.17

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TYPE	YEAR	PROJECT NO.	SHEET NO.
PIH	2025	HSIP-131(33)	45
PS&E	2026	HSIP-131(33)	45



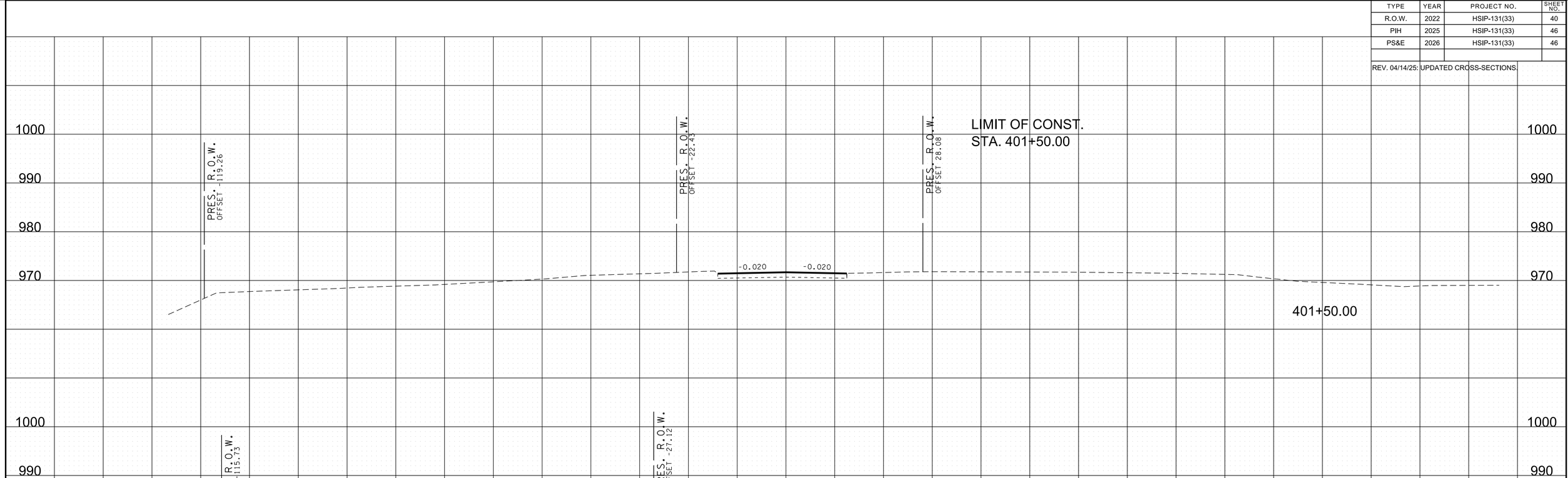
HARRELL

BEGIN STA. 305+30.00
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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2022	HSIP-131(33)	40
PIH	2025	HSIP-131(33)	46
PS&E	2026	HSIP-131(33)	46

REV. 04/14/25: UPDATED CROSS-SECTIONS.



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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2022	HSIP-131(33)	41
PIH	2025	HSIP-131(33)	47
PS&E	2026	HSIP-131(33)	47

980

970

402+00.00

PAINTERFARM

BEGIN STA. 402+00.00
END STA. 402+00.00

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2022	HSIP-131(33)	42
PIH	2025	HSIP-131(33)	48
PS&E	2026	HSIP-131(33)	48

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501+25.00

PRES. R.O.W.
OFFSET -31.24

PRES. R.O.W.
OFFSET 18.77

EL. 989.95
OFFSET -14.81

OFFSET 14.25
EL. 989.96

-0.020 -0.020 -0.020 -0.020 -0.020 -0.020 -0.020 -0.020

501+00.00

CUT 25 SF
CUT 23 CY
FILL 6 SF
FILL 47 CY

PRES. R.O.W.
OFFSET -31.37

PRES. R.O.W.
OFFSET 18.63

OFFSET -23.04
EL. 988.56

FG EL. 989.52

EL. 989.75
OFFSET -15.80

OFFSET 14.74
EL. 990.10

OFFSET 13.80
EL. 989.79

-0.020 -0.020 -0.020 -0.020 -0.020 -0.020 -0.020 -0.020

500+50.00

CUT 0 SF
CUT 0 CY
FILL 45 SF
FILL 42 CY

PRES. R.O.W.
OFFSET -29.27

PRES. R.O.W.
OFFSET 24.00

OFFSET -25.89
EL. 987.68

FG EL. 990.11

EL. 990.34
OFFSET -15.50

OFFSET 17.25
EL. 990.30

EL. 989.46
OFFSET 20.93

-0.020 -0.020 -0.020 -0.020 -0.020 -0.020 -0.020 -0.020

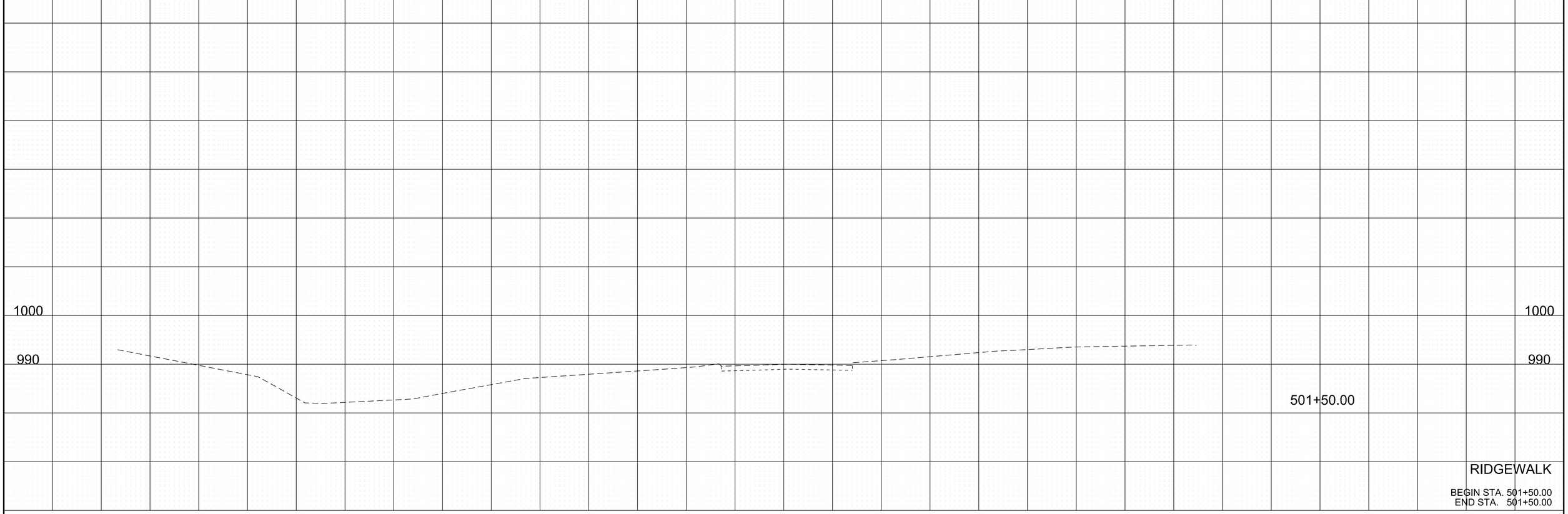
RIDGEWALK

BEGIN STA. 500+50.00
END STA. 501+25.00

1020 1010 1000 990 980

140 120 100 80 60 40 20 0 20 40 60 80 100 120 140

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2022	HSIP-131(33)	43
PIH	2025	HSIP-131(33)	49
PS&E	2026	HSIP-131(33)	49



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TYPE	YEAR	PROJECT NO.	SHEET NO.
PIH	2025	HSIP-131(33)	T1
PS&E	2026	HSIP-131(33)	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 REGIONAL TRAFFIC ENGINEER. SEE PARAGRAPH a REGARDING USE OF DRUMS, BARRICADES OR OTHER APPROVED PROTECTIVE DEVICES. WARNING SIGNS (UNEVEN LANES AND/OR SHOULDER DROP-OFF) WILL BE PLACED IN ADVANCE OF AND THROUGHOUT THE EXPOSED AREA. MAXIMUM SPACING BETWEEN SIGNS SHALL BE 2,000 FEET WITH A MINIMUM OF 2 SIGNS PER EXPOSED AREA. WHERE UNEVEN PAVEMENT IS ENCOUNTERED, SIGNS SHALL BE PLACED ON EACH SIDE OF THE ROADWAY.

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

3. DIFFERENCES IN ELEVATION BETWEEN ADJACENT ROADWAY ELEMENTS GREATER THAN 6 INCHES BUT NOT EXCEEDING 18 INCHES, THE CONTRACTOR, WITH THE ENGINEER'S APPROVAL, MAY UTILIZE ONE OF THE FOLLOWING:

   a. THE CONTRACTOR SHALL ACCOMPLISH SEPARATION BY DRUMS, BARRICADES OR OTHER APPROVED DEVICES IN ACCORDANCE WITH THE FOLLOWING:

      (1) WHERE POSTED SPEEDS ARE 50 MPH OR GREATER, SPACING OF THE PROTECTIVE DEVICES SHALL NOT EXCEED 100 FEET.

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

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

   b. THE CONTRACTOR SHALL PROVIDE DRUMS, BARRICADES OR OTHER APPROVED SEPARATION DEVICES AS SPECIFIED IN PARAGRAPH a, AND CONSTRUCT A STONE WEDGE WITH A 4:1 SLOPE, OR FLATTER, TO ELIMINATE THE VERTICAL OFFSET IF THE LOWER ELEVATION IS AT OR BELOW SUBGRADE AT THE END OF EACH DAY.

   c. THE CONTRACTOR SHALL PROVIDE DRUMS, BARRICADES OR OTHER APPROVED SEPARATION DEVICES AS SPECIFIED IN PARAGRAPH a AND IF THE LOWER ELEVATION IS BASE STONE OR ASPHALT PAVEMENT, PLACEMENT OF SUBSEQUENT LAYERS OF PAVEMENT MUST BEGIN THE NEXT WORK DAY AND PROGRESS CONTINUOUSLY UNTIL THE DIFFERENCE IN ELEVATION IS ELIMINATED OR REDUCED TO SIX INCHES OR LESS.

   d. THE CONTRACTOR SHALL PROVIDE SEPARATION BY PORTABLE BARRIER RAIL.

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

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

   SEPARATION WILL BE PROVIDED BY USE OF PORTABLE BARRIER RAIL.

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

B. IF THE DIFFERENCE IN ELEVATION IS WITHIN 30 FEET OF THE NEAREST TRAFFIC LANE BEING USED BY TRAFFIC CAUSED BY GRADING, EXCAVATION FOR UTILITIES, DRAINAGE STRUCTURES, UNDERCUTTING, ETC.:

1. IF THE DIFFERENCE IN ELEVATION IS WITHIN 8 FEET OF THE NEAREST TRAFFIC LANE WITH DIFFERENCE IN ELEVATION GREATER THAN 0.75 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

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REGISTERED ENGINEER
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COMMERCE
No. 111658
STATE OF TENNESSEE

06/02/2026

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PAVEMENT EDGE DROP-OFF NOTES FOR TRAFFIC CONTROL

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TABULATED TRAFFIC CONTROL QUANTITIES

	ITEM NO.	DESCRIPTION	UNIT	QUANTITY 47027-3222-94
(1)	203-03	BORROW EXCAVATION (UNCLASSIFIED)	C.Y.	1425
(1)	303-01	MINERAL AGGREGATE, TYPE A BASE, GRADING D	TON	593
(1)	307-01.08	ASPHALT CONCRETE MIX (PG64-22) (BPMB-HM) GRADING B-M2	TON	148
(1)	402-01	BITUMINOUS MATERIAL FOR PRIME COAT (PC)	TON	1
(2)	621-03.08	54" TEMPORARY DRAINAGE PIPE	L.F.	60
(1)	621-05.10	TEMPORARY SHORING (TEMPORARY RUNAROUND)	LS	1
	712-01	TRAFFIC CONTROL	LS	1
	712-02.10	PORTABLE BARRIER RAIL (MASH TL-3)	L.F.	3460
	712-02.60	TEMPORARY WORK ZONE CRASH CUSHION (MASH TL-3)	EACH	10
	712-04.01	FLEXIBLE DRUMS (CHANNELIZING)	EACH	50
	712-04.50	BARRIER RAIL DELINEATOR	EACH	170
	712-05.01	WARNING LIGHTS (TYPE A)	EACH	25
	712-06	SIGNS (CONSTRUCTION)	S.F.	693
	712-07.03	TEMPORARY BARRICADES (TYPE III)	L.F.	40
	712-09.04	REMOVABLE PAVEMENT MARKING (STOP LINE)	L.F.	107
	712-09.08	REMOVABLE PAVEMENT MARKING (6" line)	L.F.	8620
	712-09.30	REMOVABLE BLACK-OUT TAPE (6")	L.F.	9279
	716-01.21	SNOWPLOWABLE RAISED PAVEMENT MARKERS (BI-DIR) (1 COLOR)	EACH	58
	716-01.22	SNOWPLOWABLE RAISED PAVMENT MARKERS (MONO-DIR)(1 COLOR)	EACH	30
	716-01.30	REMOVAL OF SNOWPLOWABLE REFLECTIVE MARKER	EACH	12
	716-02.05	PLASTIC PAVEMENT MARKING (STOP LINE)	L.F.	230
	716-02.06	PLASTIC PAVEMENT MARKING (TURN LANE ARROW)	EACH	6
	716-02.08	PLASTIC PAVEMENT MARKING (8" DOTTED LINE)	L.F.	738
	716-02.12	PLASTIC PAVEMENT MARKING (8IN LINE)	L.M.	0.2
	716-04.01	PLASTIC PAVEMENT MARKING (STRAIGHT-TURN ARROW)	EACH	2
	716-04.05	PLASTIC PAVEMENT MARKING (STRAIGHT ARROW)	EACH	2
(3)	716-05.20	PAINTED PAVEMENT MARKING (6" LINE)	L.M.	0.7
	716-12.02	ENHANCED FLATLINE THERMO PVMT MRKNG (6IN LINE)	L.M.	2

FOOTNOTES

(1) TO BE USED FOR TEMPORARY RUNAROUND.
(2) TO BE USED FOR TEMPORARY PIPE EXTENSION ON EXISTING 54" CULVERT DURING PHASE 3A.
(3) INCLUDES 0.10 L.M. TO BE USED FOR TEMPORARY RUNAROUND.

TRAFFIC CONTROL PHASING NOTES

(PHASES BASED ON STD. DWG. NOS. T-WZ-10, 16 & 31)

PHASE 1

(1) SHIFT TRAFFIC ALONG SR 131 TO MAINTAIN 1-10' LANE AND 1-11' LANE.
(2) CONSTRUCT THE NEW ALIGNED PORTION OF CARPENTER ROAD FROM APPROXIMATELY STA. 203+00 TO STA. 204+77.63.
(3) BUILD PROPOSED DRAINAGE FEATURES FROM APPROX. STA. 202+75.00 TO 203+50.00. TIE BACK INTO EXISTING DRAINAGE FEATURES AT TRACT 21'S DRIVEWAY AND AT THE EXISTING PIPE CULVERT UNDER SR 131.

PHASE 2

(1) CLOSE CARPENTER RD AND DETOUR TRAFFIC AS SHOWN IN THE DETOUR MAP ON SHEET T9, WHILE MAINTAINING TRAFFIC ACCESS TO RIDGEWALK LANE AND TRACT 31 DRIVEWAY.
(2) CONSTRUCT THE NORTH PORTIONS OF CARPENTER ROAD AND SCARIFY THE EXISTING CARPENTER ROAD.
(3) CONSTRUCT THE PROPOSED RIDGEWALK LANE AND THE BUSINESS DRIVEWAY OFF CARPENTER ROAD TO TRACT 31.

PHASE 3

(1) CLOSE HARRELL RD AND DETOUR TRAFFIC AS SHOWN IN DETOUR MAP ON SHEET T10.
(2) MAINTAIN A ONE-LANE ENTRANCE TO PAINTER FARM LANE.
(3) MAINTAIN ACCESS TO TRACTS 16 AND 17 BY BUILDING TEMPORARY DRIVEWAY FOR TRAFFIC OFF OF HARRELL ROAD AS SHOWN ON SHEET T5.
(4) CONSTRUCT SOUTH PORTION OF PROPOSED CULVERT UNDER HARRELL ROAD.
(5) CONSTRUCT SOUTH AND SOUTHEAST PORTIONS OF PROPOSED HARRELL ROAD, LEAVING THE SOUTHWEST AS EXISTING TO MAINTAIN THE WWC FLOW THROUGH THE PROJECT.

PHASE 3A

(1) CLOSE HARRELL RD AND DETOUR TRAFFIC AS SHOWN IN DETOUR MAP ON SHEET T10.
(2) MAINTAIN A ONE-LANE ENTRANCE TO PAINTER FARM LANE AND MAINTAIN ACCESS TO TRACTS 16 AND 17.
(3) CONSTRUCT NORTH PORTION OF PROPOSED CULVERT UNDER HARRELL ROAD.
(4) CONSTRUCT NORTH PORTIONS OF THE PROPOSED HARRELL ROAD ALIGNMENT.
(5) CONSTRUCT SOUTH PORTION OF PROPOSED CULVERT UNDER S.R. 131, TEMPORARILY EXTENDING THE EXISTING 54" PIPE UNDER SR 131 TO MAINTAIN THE WWC FLOW.
(6) CONSTRUCT SOUTH WIDENED PORTION OF S.R. 131 UNTIL APPROX. STA. 108+00.00, WIDENING OUT THE PROPOSED GRADES TO BUILD A RUNAROUND FOR S.R. 131.
(7) BUILD A PROPOSED RUNAROUND WITH NEW GRADES FROM APPROX. STA. 108+00.00, TYING INTO THE INTERSECTION. THE RUNAROUND SHOULD CONSIST OF 2-11' LANES, 4' WB SHLDS. AND 8' EB SHLDS TO ALLOW SPACE FOR PORTABLE BARRIER RAIL AND BARRIER RAIL DEFLECTION.

NOTE: THE RUNAROUND'S S.E. WILL MATCH THE PROPOSED WIDENED GRADES UNTIL STA. 108+00. FROM STA. 108+00, IT SHOULD TRANSITION TO NORMAL CROWN.

(8) CONSTRUCT SOUTH WIDENED PORTION OF S.R. 131 FROM APPROX. STA. 110+00.00 TO STA. 114+65.00.

PHASE 4

(1) SHIFT SR 131 TRAFFIC ONTO RUNAROUND AND NEWLY BUILT WIDENED PORTION OF SR 131, MAINTAINING 2-11' LANES.
(2) MAINTAIN INTERSECTION TRAFFIC BY UTILIZING A 4-WAY STOP SIGN INTERSECTION.
(3) CONSTRUCT NORTH SIDE OF S.R. 131 AND CONSTRUCT REMAINING PROPOSED CULVERT UNDER S.R. 131.

PHASE 5

(1) RESURFACE AND APPLY FINAL PAVEMENT MARKINGS ALONG SR 131.
(2) SHIFT SR 131 TRAFFIC ONTO THE PROPOSED SR 131 ROADWAY.
(3) REMOVE RUNAROUND AND CONSTRUCT PROPOSED SIDE SLOPES AND CURB AND GUTTER ALONG SR 131.
(4) CONSTRUCT THE REMAINING PROPOSED PAINTER FARM LANE PROPOSED ROADWAY WHILE MAINTAINING 2-10' LANES.
(5) CONSTRUCT THE PROPOSED DRAINAGE AND PROPOSED SIDE SLOPES ALONG THE SOUTH WEST SIDE OF HARRELL ROAD. APPLY FINAL PAVEMENT MARKINGS ALONG THE SOUTH SIDE OF HARRELL ROAD.

TRAFFIC CONTROL LEGEND

SYMBOL	ITEM
	FLEXIBLE DRUMS (CHANNELIZING)
	SIGN (CONSTRUCTION)
→	TRAFFIC FLOW
	PORTABLE BARRIER RAIL
	TEMPORARY ATTENUATOR
	WORK ZONE

TYPE	YEAR	PROJECT NO.	SHEET NO.
PIH	2025	HSIP-131(33)	T2
PS&E	2026	HSIP-131(33)	T2

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	NO. REQUIRED PHASE III	NO. REQUIRED PHASE IIIA	NO. REQUIRED PHASE IV	NO. REQUIRED PHASE V	TOTAL NO. REQUIRED	ITEM NO. 712-06 S.F.	STANDARD DRAWING NO.
W20-1M	ROAD WORK 1 MILE	36"	X	36"	9	2	2	2	2		2	2	18.00	
W20-1M	ROAD WORK 1/2 MILE	36"	X	36"	9	4	4	4	4	4	4	4	36.00	
W1-4BR	LANE SHIFT (RIGHT)	36"	X	36"	9	2	2		2	2		2	18.00	
W1-4BL	LANE SHIFT (LEFT)	36"	X	36"	9	2	2		2	3	1	3	27.00	
G20-2	END ROAD WORK	36"	X	18"	5	6	6	6	6	6	6	6	27.00	
W20-1F	ROAD WORK 1000 FT	36"	X	36"	9	2	2	4	2	2	4	4	36.00	
W20-1F	ROAD WORK NEXT 500 FT	36"	X	36"	9	2	2	2	2	2	2	2	18.00	
W20-1	ROAD WORK AHEAD	36"	X	36"	9	2	2	2	2	2	2	2	18.00	
R11-2	ROAD CLOSED	48"	X	30"	10		2	6	6	1		6	60.00	
R1-1	STOP SIGN	30"	X	30"	6				3	4		4	25.00	
W3-1S	STOP SIGN AHEAD	30"	X	30"	6					2		2	12.50	
W20-1F	ROAD WORK 1500 FT	36"	X	36"	9					2		2	18.00	
R1-3P	ALL WAY PLAQUE	18"	X	6"	1					4		4	3.00	
W5-1	ROAD NARROWS	36"	X	36"	9						2	2	18.00	
W8-11	UNEVEN LANES	36"	X	36"	9						2	2	18.00	
W8-15	GROOVED PAVEMENT	36"	X	36"	9						2	2	18.00	
W8-15P	MOTORCYCLE (PLAQUE)	30"	X	24"	5						2	2	10.00	
W8-17	SHOULDER DROP-OFF (PLAQUE)	36"	X	36"	9						2	2	18.00	
W8-17P	SHOULDER DROP-OFF (SYMBOL)	24"	X	18"	3						2	2	6.00	
W20-7	FLAGGER	36"	X	36"	9						2	2	18.00	
M4-9 (MOD.)	ROAD DETOUR (CARPENTER RD.)	30"	X	24"	5		1					1	5.00	
R11-3a	ROAD CLOSED X MILES AHEAD LOCAL TRAFFIC ONLY	60"	X	30"	13		2	2	2			2	25.00	
M4-9R (MOD.)	ROAD DETOUR (CARPENTER RD.)	30"	X	24"	5		1					1	5.00	
M4-9L (MOD.)	ROAD DETOUR (CARPENTER RD.)	30"	X	24"	5		4					4	20.00	
SPECIAL	CARPENTER ROAD CLOSED NEAR W. EMORY ROAD FOLLOW DETOUR	60"	X	30"	13		1					1	12.50	
M4-10L	DETOUR (LEFT ARROW)	24"	X	12"	2		1	3	3			3	6.00	
M4-9L (MOD.)	ROAD DETOUR (HARRELL RD.)	30"	X	24"	5			10	10			10	50.00	
SPECIAL	HARRELL ROAD CLOSED AT W. EMORY ROAD FOLLOW DETOUR	60"	X	30"	13			2	2			2	25.00	
D3-1	STREET SIGN (HARRELL RD.)	24"	X	12"	2			8	8			8	16.00	
M4-10R	DETOUR (RIGHT ARROW)	24"	X	12"	2			3	3			3	6.00	
M4-9	DETOUR (STRAIGHT ARROW)	30"	X	24"	5			5	5			5	25.00	
R11-4	ROAD CLOSED TO THRU TRAFFIC	60"	X	30"	13			6	6			6	75.00	
												TOTAL	693	S.F.

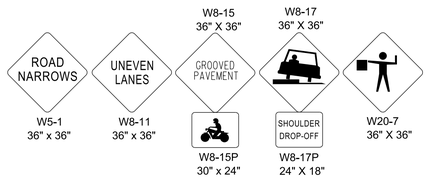
TRAFFIC CONTROL NOTES

THE CONSTRUCTION SIGNING PLANS ARE TO SERVE AS A GUIDE ONLY. OTHER SIGNS MAY BE REQUIRED DURING VARIOUS PHASES OF CONSTRUCTION.

THIS TRAFFIC CONTROL PLAN DOES NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY OF INSTALLING TRAFFIC CONTROL DEVICES IN ACCORDANCE WITH THE CURRENT EDITION OF THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES."

ALL CONSTRUCTION SIGNS ON THE PROJECT SHALL BE COVERED WHEN WORK WILL NOT BE AFFECTING TRAFFIC. COST OF COVERING/UNCOVERING SIGNS SHALL NOT BE MEASURED AND PAID FOR SEPARATELY, BUT ALL COST SHALL BE INCLUDED IN THE ORIGINAL UNIT PRICE BID FOR ITEM NO. 712-06, SIGNS (CONSTRUCTION) PER SQUARE FOOT.

ALL TRAFFIC CONTROL DEVICES SHALL BE APPROVED BY TDOT MANAGER.



SIGNS SHOWN ABOVE ARE TO BE USED WHEN CONSTRUCTION OPERATIONS WARRANT.
TO BE USED AS DIRECTED BY THE ENGINEER.

NOTE: CONTRACTOR SHALL REPLACE ALL TEMPORARY TRAFFIC CONTROL DEVICES WITHIN THE PROJECTS LIMITS.

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06/02/2026

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL PHASING NOTES, LEGEND AND TABULATION

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TYPE	YEAR	PROJECT NO.	SHEET NO.
PIH	2025	HSIP-131(33)	T3
PS&E	2026	HSIP-131(33)	T3

47027-2222-94
BEGIN PROJ. NO. HSIP-131(33)
STA. 105+42.00 (R.O.W.)
N 611698.1585
E 2533534.0511

47027-3222-94
BEGIN PROJ. NO. HSIP-131(33)
STA. 105+25.00 (CONST.)
N 611687.0847
E 2533521.1527

47027-2222-94
END PROJ. NO. HSIP-131(33)
STA. 114+59.00 (R.O.W.)
N 612259.5270
E 2534258.0469

47027-3222-94
END PROJ. NO. HSIP-131(33)
STA. 114+65.00 (CONST.)
N 612262.8018
E 2534263.0744

105 110 115 200

42" ST

STA 105+25.00 LIMIT OF CONST.
STA. 105+00.00 N 611670.7996 E 2533502.1844
STA. 106+90.00
165' LANE TAPER
G20-2 36" x 18" END ROAD WORK
500'
12'
N 49° 21' 09" E
10' 6" RSSWL
S.R. 131 (W. EMORY RD.)
6" RSSWL
2640' 1640' 1000'
ROAD WORK 1 MILE W20-1M 36" x 36"
ROAD WORK 1/2 MILE W20-1M 36" x 36"
W1-4BR 36" x 36"

STA. 501+25.00 LIMIT OF CONST.
G20-2 36" x 18" END ROAD WORK
500'
STA 159+52 BEGIN OF RESURF. MATCH LINE CARPENTER RD LIMIT OF CONST.
S 71° 28' 41" E
ROAD WORK AHEAD 200' W20-1 36" x 36"
RIDGEWALK LN S 71° 27' 39" W
CARPENTER RD
S 89° 32' 21" E
WWC-2/EPH-2
WWC-1/EPH-1
S 38° 08' 16" E
W1-4BR 36" x 36"

W20-1F 36" x 36" ROAD WORK 500 FT
W20-1F 36" x 36" ROAD WORK 1000 FT
W20-1M 36" x 36" ROAD WORK 1/2 MILE
500' 500' 1640'
MATCH LINE CARPENTER RD
500' END ROAD WORK G20-2 36" x 18"

CARPENTER RD STA. 201+86.00 =
RIDGEWALK LN STA. 500+00.00
N 612180.8674
E 2533653.2295

W1-4BL 36" x 36"
W20-1M 36" x 36" ROAD WORK 1 MILE
W20-1M 36" x 36" ROAD WORK 1/2 MILE
STA. 113+00.00
165' LANE TAPER
1000' 1640' 2640'
STA. 114+65.00
N 67° 08' 02" E
STA. 115+00.00 N 612281.6124 E 2534282.4682
500'
STA 114+65.00 LIMIT OF CONST.
END ROAD WORK G20-2 36" x 18"

S.R. 131 STA. 109+95.00 =
HARRELL RD STA. 300+00.00 =
CARPENTER RD STA. 204+90.00
N 611989.3473
E 2533881.0046

W1-4BL 36" x 36"
6" RSSWL S.R. 131 (W. EMORY RD.)
6" RSSWL
10'
12'
WWC-1/EPH-1
S 38° 08' 16" E

STA 401+50.00 LIMIT OF CONST.
G20-2 36" x 18" END ROAD WORK
500'
PAINTER FARM LN
S 51° 51' 44" W
18" ST
200'
ROAD WORK AHEAD W20-1 36" x 36"
HARRELL RD
WWC-1/EPH-1
S 38° 08' 16" E
MATCH LINE HARRELL RD STA 305+30.00 LIMIT OF CONST.

HARRELL RD STA. 302+75.00 =
PAINTER FARM LN STA. 400+00.00
N 611773.0523
E 2534050.8324

W20-1F 36" x 36" ROAD WORK 500 FT
W20-1F 36" x 36" ROAD WORK 1000 FT
W20-1M 36" x 36" ROAD WORK 1/2 MILE
500' 500' 1640'
MATCH LINE HARRELL RD
500' END ROAD WORK G20-2 36" x 18"

N

SEALED BY

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No. 111568
STATE OF TENNESSEE

06/02/2026

COORDINATES ARE NAD 83(1995), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00009 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988 WITH GEOID 2012A.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL PLANS

STA. 105+25 TO STA. 114+65
SCALE: 1"= 50'

PHASE I

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TYPE	YEAR	PROJECT NO.	SHEET NO.
PIH	2025	HSIP-131(33)	T4
PS&E	2026	HSIP-131(33)	T4

47027-2222-94
BEGIN PROJ. NO. HSIP-131(33)
STA. 105+42.00 (R.O.W.)
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N 612259.5270
E 2534258.0469

47027-3222-94
END PROJ. NO. HSIP-131(33)
STA. 114+65.00 (CONST.)
N 612262.8018
E 2534263.0744

105 110 115 200

42" ST

G20-2 36" x 18" END ROAD WORK — 500' — STA. 501+25.00 LIMIT OF CONST.

ROAD WORK AHEAD — 200' — W20-1 36" x 36"

RIDGEWALK LN S71° 27' 35"W

STA. 199+52 BEGIN OF RESURF. MATCH LINE CARPENTER RD LIMIT OF CONST.

S17° 28' 31"E

W20-1F 36" x 36" ROAD WORK 500 FT — 500'
W20-1F 36" x 36" ROAD WORK 1000 FT — 500'
W20-1M 36" x 36" ROAD WORK 1/2 MILE — 1640'
500' — END ROAD WORK — G20-2 36" x 18"
MATCH LINE CARPENTER RD

CARPENTER RD STA. 201+86.00 =
RIDGEWALK LN STA. 500+00.00
N 612180.8674
E 2533653.2295

CARPENTER RD

S69° 25' 51"E

18'
A — ROAD CLOSED R11-2 48" X 30" — A
TYPE III BARRICADE ROAD CLOSURE w/ TYPE A WARNING LIGHTS

W1-4BR 30" x 30"

24'

S 38° 08' 16" E

STA. 105+25.00 LIMIT OF CONST.
STA. 105+00.00 N 611670.7996 E 2533502.1844
165' LANE TAPER
STA. 106+90.00
G20-2 36" x 18" END ROAD WORK — 500'
12' 12'
10' 6" RSSWL 10' 6" RSSWL
S.R. 131 (W. EMORY RD.)
N 49° 21' 09" E
WWC-1/EPH-1

2640' 1640' 1000'
ROAD WORK 1 MILE — W20-1M 36" x 36"
ROAD WORK 1/2 MILE — W20-1M 36" x 36"
W1-4BR 30" x 30"

S.R. 131 STA. 109+95.00 =
HARRELL RD STA. 300+00.00 =
CARPENTER RD STA. 204+90.00
N 611989.3473
E 2533881.0046

W1-4BL 30" x 30"

S 38° 08' 16" E

S51°51'44"W
STA. 401+50.00 LIMIT OF CONST.
G20-2 36" x 18" END ROAD WORK — 500'
PAINTER FARM LN
18' ST
200'
ROAD WORK AHEAD — W20-1 36" x 36"
HARRELL RD

HARRELL RD STA. 302+75.00 =
PAINTER FARM LN STA. 400+00.00
N 611773.0523
E 2534050.8324

MATCH LINE HARRELL RD — STA. 305+30.00 LIMIT OF CONST.
S 38° 08' 16" E

W20-1F 36" x 36" ROAD WORK 500 FT — 500'
W20-1F 36" x 36" ROAD WORK 1000 FT — 500'
W20-1M 36" x 36" ROAD WORK 1/2 MILE — 1640'
500' — END ROAD WORK — G20-2 36" x 18"
MATCH LINE HARRELL RD

STA. 113+00.00
165' LANE TAPER
STA. 114+65.00
1000' 1640' 2640'
6" RSSWL S.R. 131 (W. EMORY RD.) 6" RSSWL
10' 12'
N 67° 08' 02" E
500'
STA. 115+00.00 N 612281.6124 E 2534282.4682
STA. 114+65.00 LIMIT OF CONST.
END ROAD WORK — G20-2 36" x 18"

W1-4BL 30" x 30"
W20-1M 36" x 36" ROAD WORK 1/2 MILE
W20-1M 36" x 36" ROAD WORK 1 MILE

N

NOTE: SEE SHEET T9 FOR CARPENTER RD DETOUR MAP

PHASE II

SEALED BY

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06/02/2026

COORDINATES ARE NAD 83(1995), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00009 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988 WITH GEOID 2012A.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL PLANS

STA. 105+25 TO STA. 114+65

SCALE: 1"= 50'

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TYPE	YEAR	PROJECT NO.	SHEET NO.
PIH	2025	HSIP-131(33)	T5
PS&E	2026	HSIP-131(33)	T5

47027-2222-94
BEGIN PROJ. NO. HSIP-131(33)
STA. 105+42.00 (R.O.W.)
N 611698.1585
E 2533534.0511

47027-3222-94
BEGIN PROJ. NO. HSIP-131(33)
STA. 105+25.00 (CONST.)
N 611687.0847
E 2533521.1527

47027-2222-94
END PROJ. NO. HSIP-131(33)
STA. 114+59.00 (R.O.W.)
N 612259.5270
E 2534258.0469

47027-3222-94
END PROJ. NO. HSIP-131(33)
STA. 114+65.00 (CONST.)
N 612262.8018
E 2534263.0744

105 110 115 200

42" ST

G20-2 36" x 18" END ROAD WORK — 500' — STA. 501+25.00 LIMIT OF CONST.

ROAD WORK AHEAD — W20-1 36" x 36" — 200' — 36" ST — RIDGEWALK LN S71° 21' 48" W

STA. 199+52 BEGIN OF RESURF. LIMIT OF CONST. — MATCH LINE CARPENTER RD

S 71° 28' 41" E

CARPENTER RD STA. 201+86.00 =
RIDGEWALK LN STA. 500+00.00
N 612180.8674
E 2533653.2295

W20-1F 36" x 36" ROAD WORK 500 FT — W20-1F 36" x 36" ROAD WORK 1000 FT — W20-1M 36" x 36" ROAD WORK 1/2 MILE

500' 500' 1640'

MATCH LINE CARPENTER RD — 500' — G20-2 36" x 18" END ROAD WORK

CARPENTER RD — S69° 52' 53" E — 24" S — 18" ST

S 38° 08' 16" E

WWC-1/EPH-1

STA. 105+00.00
N 611670.7996
E 2533502.1844

STA. 105+25.00 LIMIT OF CONST.

G20-2 36" x 18" END ROAD WORK — 500'

N 49° 21' 09" E — S.R. 131 (W. EMORY RD.)

2640' 1640' 1000'

ROAD WORK 1 MILE — W20-1M 36" x 36"
ROAD WORK 1/2 MILE — W20-1M 36" x 36"
ROAD WORK 1000 FT — W20-1F 36" x 36"

S.R. 131 STA. 109+95.00 =
HARRELL RD STA. 300+00.00 =
CARPENTER RD STA. 204+90.00
N 611989.3473
E 2533881.0046

WWC-1/EPH-1 — S 38° 08' 16" E

NOTE: CONTRACTOR MUST DETERMINE PHASED CONSTRUCTION LENGTHS FOR MOT DURING BOX CULVERT CONSTRUCTION.

S51°54'44"W — STA. 401+50.00 LIMIT OF CONST. — G20-2 36" x 18" END ROAD WORK

PAINTER FARM LN — 18" ST — 200'

ROAD WORK AHEAD — W20-1 36" x 36"

TEMPORARY DRIVEWAY

MAINTAIN THE ACCESS TO HARRELL RD FOR TRAFFIC FROM TRACT 16 AND TRACT 17.

HARRELL RD STA. 302+75.00 =
PAINTER FARM LN STA. 400+00.00
N 611773.0523
E 2534050.8324

HARRELL RD — WWC-1/EPH-1 — S 38° 08' 16" E

MATCH LINE HARRELL RD — STA. 305+30.00 LIMIT OF CONST.

18'
A — ROAD CLOSED — R11-2 48" X 30" — A

TYPE III BARRICADE ROAD CLOSURE w/ TYPE A WARNING LIGHTS

W20-1F 36" x 36" ROAD WORK 1000 FT — W20-1M 36" x 36" ROAD WORK 1/2 MILE — W20-1M 36" x 36" ROAD WORK 1 MILE

1000' 1640' 2640'

N 57° 08' 02" E

STA. 115+00.00
N 612281.6174
E 2534292.4682

500' — END ROAD WORK — G20-2 36" x 18"

STA. 114+65.00 LIMIT OF CONST.

W20-1F 36" x 36" ROAD WORK 500 FT — W20-1F 36" x 36" ROAD WORK 1000 FT — W20-1M 36" x 36" ROAD WORK 1/2 MILE

500' 500' 1640'

MATCH LINE HARRELL RD — 500' — END ROAD WORK — G20-2 36" x 18"

NOTE: SEE SHEET T10 FOR HARRELL RD DETOUR MAP

SEALED BY

JAMES B. MORGAN
REGISTERED ENGINEER
DEPARTMENT OF AGRICULTURE
COMMERCE
11168
STATE OF TENNESSEE

06/02/2026

COORDINATES ARE NAD 83(1995), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00009 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988 WITH GEOID 2012A.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL PLANS

STA. 105+25 TO STA. 114+65

SCALE: 1"= 50'

PHASE III

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TYPE	YEAR	PROJECT NO.	SHEET NO.
PIH	2025	HSIP-131(33)	T6
PS&E	2026	HSIP-131(33)	T6

47027-2222-94
BEGIN PROJ. NO. HSIP-131(33)
STA. 105+42.00 (R.O.W.)
N 611698.1585
E 2533534.0511

105

110

200

115

42" ST

18" ST

36" ST

24" ST

CARPENTER RD

RIDGEWALK LN

MATCH LINE CARPENTER RD

MATCH LINE HARRELL RD

HARRELL RD

PAINTER FARM LN

S.R. 131 (W. EMORY RD.)

6" RSSWL

10'

12'

N 49° 21' 09" E

S 69° 52' 25" E

S 38° 08' 16" E

S71°27'48"W

S71°28'41"E

STA. 105+00.00
N 611670.7996
E 2533502.1844

STA. 105+25.00
LIMIT OF CONST.

STA. 106+90.00

165' LANE TAPER

STA. 109+52
BEGIN OF RESURF.
LIMIT OF CONST.

STA. 501+25.00
LIMIT OF CONST.

STA. 401+50.00
LIMIT OF CONST.

STA. 113+00.00

STA. 113+65.00

STA. 114+65.00
LIMIT OF CONST.

STA. 115+00.00
N 612281.5124
E 2534239.4682

STA. 305+30.00
LIMIT OF CONST.

CARPENTER RD STA. 201+86.00 =
RIDGEWALK LN STA. 500+00.00
N 612180.8674
E 2533653.2295

S.R. 131 STA. 109+95.00 =
HARRELL RD STA. 300+00.00 =
CARPENTER RD STA. 204+90.00
N 611989.3473
E 2533881.0046

HARRELL RD STA. 302+75.00 =
PAINTER FARM LN STA. 400+00.00
N 611773.0523
E 2534050.8324

47027-2222-94
END PROJ. NO. HSIP-131(33)
STA. 114+59.00 (R.O.W.)
N 612259.5270
E 2534258.0469

47027-3222-94
END PROJ. NO. HSIP-131(33)
STA. 114+65.00 (CONST.)
N 612262.8018
E 2534263.0744

47027-3222-94
BEGIN PROJ. NO. HSIP-131(33)
STA. 105+25.00 (CONST.)
N 611687.0847
E 2533521.1527

NOTE: CONTRACTOR MUST DETERMINE PHASED CONSTRUCTION LENGTHS FOR MOT DURING BOX CULVERT CONSTRUCTION.

TYPE III BARRICADE ROAD CLOSURE
w/ TYPE A
WARNING LIGHTS

NOTE: SEE SHEET T10 FOR HARRELL RD DETOUR MAP

PHASE IIIA

SEALED BY

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COMMERCE
11468
STATE OF TENNESSEE

06/02/2026

COORDINATES ARE NAD 83(1995), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00009 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988 WITH GEOID 2012A.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL PLANS

STA. 105+25 TO STA. 114+65
SCALE: 1"= 50'

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TYPE	YEAR	PROJECT NO.	SHEET NO.
PIH	2025	HSIP-131(33)	T7
PS&E	2026	HSIP-131(33)	T7

47027-2222-94
BEGIN PROJ. NO. HSIP-131(33)
STA. 105+42.00 (R.O.W.)
N 611698.1585
E 2533534.0511

47027-2222-94
END PROJ. NO. HSIP-131(33)
STA. 114+59.00 (R.O.W.)
N 612259.5270
E 2534258.0469

47027-3222-94
END PROJ. NO. HSIP-131(33)
STA. 114+65.00 (CONST.)
N 612262.8018
E 2534263.0744

47027-3222-94
BEGIN PROJ. NO. HSIP-131(33)
STA. 105+25.00 (CONST.)
N 611687.0847
E 2533521.1527

105 600 110 115

STA 159+52 BEGIN OF RESURF. LIMIT OF CONST.
MATCH LINE CARPENTER RD
STA 501+25.00 LIMIT OF CONST.
STA 105+25.00 LIMIT OF CONST.
STA. 105+00.00 N 611670.7996 E 2533502.1844
STA 401+50.00 LIMIT OF CONST.
STA. 113+65.00
STA. 114+65.00
STA 114+65.00 LIMIT OF CONST.
STA. 115+00.00 N 612281.5124 E 2534282.4682

CARPENTER RD STA. 201+86.00 = RIDGEWALK LN STA. 500+00.00
N 612180.8674
E 2533653.2295

S.R. 131 STA. 105+81.74 = RUNAROUND RD STA. 600+00.00
N 611724.0440
E 2533564.2015

S.R. 131 STA. 109+95.00 = HARRELL RD STA. 300+00.00 = CARPENTER RD STA. 204+90.00
N 611989.3473
E 2533881.0046

HARRELL ROAD STA. 300+50.00 = RUNAROUND RD STA. 604+15.79
N 611950.0209
E 2533911.8824

HARRELL RD STA. 302+75.00 = PAINTER FARM LN STA. 400+00.00
N 611773.0523
E 2534050.8324

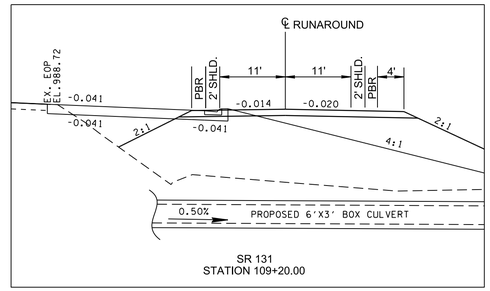
RIDGEWALK LN S71°27'48"W
CARPENTER RD
PAINTER FARM LN
HARRELL RD
MATCH LINE CARPENTER RD
MATCH LINE HARRELL RD
S.R. 131 (W. EMORY RD.)
WWC-1EPH-1
S71°27'48"E
S69°52'25"E
S 38° 08' 16" E
N 49° 21' 09" E
N 54° 25' 55" E
N 65° 23' 03" E
N 51° 51' 44" E
S51°51'44"W
N 87° 08' 02" E

18' TYPE III BARRICADE ROAD CLOSURE w/ TYPE A WARNING LIGHTS

RUNAROUND
PI 601+85.10
N 611,831.7107
E 2,533,714.7667
Δ 10° 57' 07" (RT)
D 7° 31' 09"
R 762.00
L 145.66
T 73.05
SE MATCH EXISTING
DESIGN SPEED 45 MPH
PC 601+12.05
PT 602+57.71
TRANS. LENGTH 120'

RUNAROUND
PI 603+07.30
N 611,882.7945
E 2,533,826.2619
Δ 13° 31' 19" (LT)
D 17° 12' 21"
R 333.00
L 78.59
T 39.48
SE NC
DESIGN SPEED 30 MPH
PC 602+67.82
PT 603+46.41

STA. 302+50.00
STA. 303+00.00
50' LANE TAPER
100' LANE TAPER



SR 131
STATION 109+20.00

NOTE: SEE CROSS-SECTIONS FOR GRADE OF TEMPORARY RUNAROUND.

SEALED BY

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No. 111458
STATE OF TENNESSEE

06/02/2026

COORDINATES ARE NAD 83(1995), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00009 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988 WITH GEOID 2012A.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL PLANS

STA. 105+25 TO STA. 114+65
SCALE: 1"= 50'

PHASE IV

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TYPE	YEAR	PROJECT NO.	SHEET NO.
PIH	2025	HSIP-131(33)	T8
PS&E	2026	HSIP-131(33)	T8

47027-2222-94
BEGIN PROJ. NO. HSIP-131(33)
STA. 105+42.00 (R.O.W.)
N 611698.1585
E 2533534.0511

105

110

115

200

G20-2
36" x 18"
END
ROAD WORK

500'

STA. 501+25.00
LIMIT OF CONST.

ROAD
WORK
AHEAD

W20-1
36" x 36"

200'

RIDGEWALK LN S71° 28' 48"W

36" ST

S 17° 28' 41" E

STA 109+52
BEGIN OF RESURF.
LIMIT OF CONST.

MATCH LINE
CARPENTER RD

W20-1F
36" x 36"
ROAD
WORK
500 FT

W20-1F
36" x 36"
ROAD
WORK
1000 FT

W20-1M
36" x 36"
ROAD
WORK
1/2 MILE

500'
500'
1640'

MATCH LINE CARPENTER RD

500'

END
ROAD WORK

G20-2
36" x 18"

CARPENTER RD STA. 201+86.00 =
RIDGEWALK LN STA. 500+00.00
N 612180.8674
E 2533653.2295

CARPENTER RD

S69° 52' 53" E

24" ST

18" ST

S 38° 08' 16" E

18" ST

18" ST

18" ST

TYPE	YEAR	PROJECT NO.	SHEET NO.
PIH	2025	HSIP-131(33)	T9
PS&E	2026	HSIP-131(33)	T9

CARPENTER RD.
DETOUR
M4-9 (MOD.)

ROAD CLOSED
1.2 MILES AHEAD
LOCAL TRAFFIC ONLY
R11-3a

CARPENTER ROAD
CLOSED
NEAR W. EMORY ROAD
FOLLOW DETOUR
SPECIAL

CARPENTER RD.
DETOUR
M4-9L (MOD.)

CARPENTER RD.
DETOUR
M4-9R (MOD.)

ANDERSON

KNOX

N

YOUT RD.

CARPENTER RD.

24'
ROAD CLOSED
R11-2
48" X 30"
A
A
TYPE III BARRICADE ROAD CLOSURE
w/ TYPE A
WARNING LIGHTS

24'
ROAD CLOSED
R11-2
48" X 30"
DETOUR
M4-10L
A
A
TYPE III BARRICADE ROAD CLOSURE
w/ TYPE A
WARNING LIGHTS

ROAD CLOSED
0.2 MILES AHEAD
LOCAL TRAFFIC ONLY
R11-3a

CARPENTER RD.
DETOUR
M4-9L (MOD.)

CARPENTER RD.
DETOUR
M4-9L (MOD.)

S.R. 131

S.R. 131

S.R. 131

PATRIOT WAY

NORTHAMPTON BLVD.

RIDGEWALK LN.

HARRELL RD.

HARRELL RD.

BONNEVILLE DR.

HEATHERBROOK DR.

WRIGHT RD.

SEALED BY

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No. 111658
STATE OF TENNESSEE

06/02/2026

COORDINATES ARE NAD 83(1995), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00009 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988 WITH GEOID 2012A.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL PLANS

STA. 105+25 TO STA. 114+65

SCALE: 1"=400'

DETOUR MAP
CARPENTER CLOSURE

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TYPE	YEAR	PROJECT NO.	SHEET NO.
PIH	2025	HSIP-131(33)	T10
PS&E	2026	HSIP-131(33)	T10

24'

R11-2
48" X 30"

ROAD CLOSED

A A

TYPE III BARRICADE ROAD CLOSURE
w/ TYPE A
WARNING LIGHTS

N

ANDERSON COUNTY

KNOX COUNTY

HARRELL ROAD
CLOSED
AT W. EMORY ROAD
FOLLOW DETOUR
SPECIAL

HARRELL RD.
DETOUR
M4-9L (MOD.)

HARRELL RD. D3-1
ROAD CLOSED R11-2
DETOUR M4-10R

CARPENTER RD.

S.R. 131

BEAVER RIDGE RD.

PAINTER FARM LN.

HARRELL RD.

ROAD CLOSED
0.3 MILES AHEAD
LOCAL TRAFFIC ONLY
R11-3a

ROAD CLOSED
TO
THRU TRAFFIC
R11-4
DETOUR M4-10L

DETOUR M4-9

CLINTON HWY.

W. BEAVER CREEK DR.

OAK RIDGE HWY.

ROAD CLOSED
0.6 MILES AHEAD
LOCAL TRAFFIC ONLY
R11-3a
DETOUR M4-10R

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JAMES B. MORGAN
REGISTERED ENGINEER
AGRICULTURE
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No. 111658
STATE OF TENNESSEE

06/02/2026

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

TRAFFIC
CONTROL
PLANS
STA. 105+25 TO STA. 114+65
SCALE: 1"=1000'

DETOUR MAP
HARRELL RD CLOSURE

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THIS DOCUMENT HAS BEEN DIGITALLY SIGNED AND SEALED BY:

Bryan Bartnik
2026.05.13 16:44:42 -04'00'

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

TENNESSEE DEPARTMENT OF TRANSPORTATION
7345 REGION LANE
KNOXVILLE, TN 37914
BRYAN BARTNIK, P.E. NO. 119211

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

SHEET NAME	SHEET NO.
SIGNATURE SHEETS	SIGNAL-SIGN 1
SIGNAL INDEX AND SPECIAL NOTES	SIG-1
ESTIMATED SIGNAL QUANTITIES	SIG-1A
SIGNAL LAYOUT	SIG-2
SIGNAL DETAILS	SIG-2A
SIGNAL PHASING AND TIMING	SIG-2B

YEAR	PROJECT NO.	SHEET NO.
2026	HSIP-131(33)	SIGNAL-SIGN 1

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

SIGNATURE SHEETS

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TYPE	YEAR	PROJECT NO.	SHEET NO.
PS&E	2026	HSIP-131(33)	SIG-1

SIGNAL INDEX

SHEET NAME	SHEET NO.
SIGNATURE SHEETS	SIGNAL-SIGN 1
SIGNAL INDEX AND SPECIAL NOTES	SIG-1
ESTIMATED SIGNAL QUANTITIES	SIG-1A
SIGNAL LAYOUT	SIG-2
SIGNAL DETAILS	SIG-2A
SIGNAL PHASING AND TIMING	SIG-2B

SPECIAL NOTES

SIGNAL HEADS

(1) ALL CIRCULAR AND ARROW INDICATIONS WITHIN ALL VEHICULAR SIGNAL HEADS PROPOSED FOR THIS PROJECT SHALL CONSIST OF AN LED (LIGHT EMITTING DIODE) SIGNAL MODULE UNLESS OTHERWISE NOTED IN THE PLANS.

(2) CIRCULAR INDICATIONS SHALL MEET “ITE VTCSH-LED CIRCULAR SIGNAL SUPPLEMENT” FOR EXPANDED/EXTENDED VIEW. ARROW INDICATIONS SHALL MEET “ITE VTCSH-3 LED ARROW SPECIFICATION” FOR EXPANDED/EXTENDED VIEW.

(3) INCANDESCENT OR SCREW-IN MODULES ARE NOT ACCEPTABLE.

(4) COMPATABILITY WITH CONFLICT MONITORS AND LOAD SWITCHES SHALL BE TESTED AND CONFIRMED.

(5) MANUFACTURER SHALL PROVIDE A MINIMUM FIVE-YEAR WARRANTY FOR OPERATION OF THE UNIT.

(6) SIGNAL HEADS SHALL INCLUDE LOUVERED BACKPLATES WITH A 1” MINIMUM, 3” MAXIMUM YELLOW RETRO REFLECTIVE BORDER AROUND THE PERIMETER OF THE FACE OF THE BACKPLATE. THE RETRO REFLECTIVE BORDER IS TO BE MADE OF A TYPE III PRISMATIC OR BETTER MATERIAL.

(7) ALL SIGNAL HEADS WITH LED LENSES SHALL INCLUDE SWIVEL BALANCE ADJUSTERS TO MAINTAIN THE PROPER VISIBILITY. COSTS OF ADJUSTERS TO BE INCLUDED IN COSTS OF SIGNAL HEADS.

SEALED BY

BRYAN BARTNIK
REGISTERED ENGINEER
AGRICULTURE
COMMERCE
No. 119281
STATE OF TENNESSEE
5/13/2026

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

SIGNAL INDEX
AND
SPECIAL NOTES

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TYPE	YEAR	PROJECT NO.	SHEET NO.
PS&E	2026	HSIP-131(33)	SIG-1A

ESTIMATED ROADWAY QUANTITIES

	ITEM NO.	DESCRIPTION	UNIT	QUANTITY 47027-3222-94
1	713-14.21	STREET NAME SIGN (RIGID 0.100IN THICK)	S.F.	82
2	713-15.07	SUSPENDED FLAT SHEET ALUMINUM SIGN (0.080" THICK)	EACH	2
	730-02.09	SIGNAL HEAD ASSEMBLY (130 WITH BACKPLATE)	EACH	6
	730-02.17	SIGNAL HEAD ASSEMBLY (150 A2H WITH BACKPLATE)	EACH	2
	730-02.59	SIGNAL HEAD ASSEMBLY (140 A4F WITH BACKPLATE)	EACH	2
	730-03.21	INSTALL PULL BOX (TYPE B)	EACH	4
3	730-05.01	ELECTRICAL SERVICE CONNECTION	EACH	1
	730-08.03	SIGNAL CABLE - 7 CONDUCTOR	L.F.	1137
	730-12.23	CONDUIT 2" DIAMETER (DIRECTIONAL BORE)	L.F.	224
	730-12.26	CONDUIT 2" DIAMETER (PVC SCHEDULE 80)	L.F.	174
	730-12.27	CONDUIT 3" DIAMETER (PVC SCHEDULE 80)	L.F.	17
4	730-13.02	VEHICLE DETECTOR (VIDEO - ADVANCE)	EACH	2
4	730-13.14	VEHICLE DETECTOR (360-DEGREE CAMERA-STOP LINE)	EACH	1
5	730-15.07	CABINET (ATC)	EACH	1
6	730-16.04	CONTROLLER (ATC)	EACH	1
7	730-25.07	CANTILEVER SIGNAL SUPPORT (1 ARM @ 55')	EACH	2
7	730-25.11	CANTILEVER SIGNAL SUPPORT (1 ARM @ 60')	EACH	1
7	730-25.13	CANTILEVER SIGNAL SUPPORT (1 ARM @ 65')	EACH	1

FOOTNOTES

1. COST OF INSTALLATION AND HARDWARE IS TO BE INCLUDED IN PRICE BID FOR THIS ITEM. SEE SIGN SCHEDULE SHEET FOR DETAILS.

2. INCLUDES:
   2 EACH R10-12a

3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING THE LOCAL UTILITY TO OBTAIN THE ESTIMATE FOR ANY CHARGES BY THE UTILITY FOR PROVIDING ELECTRICAL SERVICE TO THE SIGNAL CONTROLLER. THESE CHARGES AND ANY OTHER EQUIPMENT NECESSARY FOR A COMPLETE SERVICE CONNECTION SHALL BE INCLUDED IN THE PRICE BID FOR THIS ITEM FOR PAYMENT BY THE CONTRACTOR.

4. DETECTION SHALL BE MIOVISION SMARTVIEW 360 DETECTION WITH MIOVISION SMART LINK HARDWARE FOR STOP LINE DETECTION. AND MIOVISION SMARTVIEW APPROACH FOR ADVANCE DETECTION. INCLUDES ALL SENSOR UNITS, HARDWARE, SOFTWARE, MOUNTING ASSEMBLIES, 1012 LF OF SMART SENSOR INSTALLATION CABLE, AND RELATED EQUIPMENT TO PROVIDE ALL DETECTION ZONES AS SHOWN ON PLANS. CONTRACTOR TO ENSURE COMPATIBILITY WITH SIGNAL CONTROLLER.

5. SEE TDOT STANDARD SPECIFICATION 730.

6. TO BE McCAIN ATC eX2 NEMA CONTROLLER.

7. SEE SPECIAL PROVISION 700SIG FOR POLE DESIGN REQUIREMENTS. BID ITEM SHALL INCLUDE THE COST OF ALL MATERIALS AND LABOR NECESSARY FOR COMPLETE INSTALLATION OF THE POLE FOUNDATION. SELECT THE APPROPRIATE FOUNDATION DESIGN FOR TDOT STANDARD TRAFFIC OPERATIONS DRAWING, T-SG-10.

SEALED BY

BRYAN BARTNIK REGISTERED ENGINEER AGRICULTURE COMMERCE No. 119281 STATE OF TENNESSEE
5/13/2026

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

ESTIMATED
SIGNAL
QUANTITIES

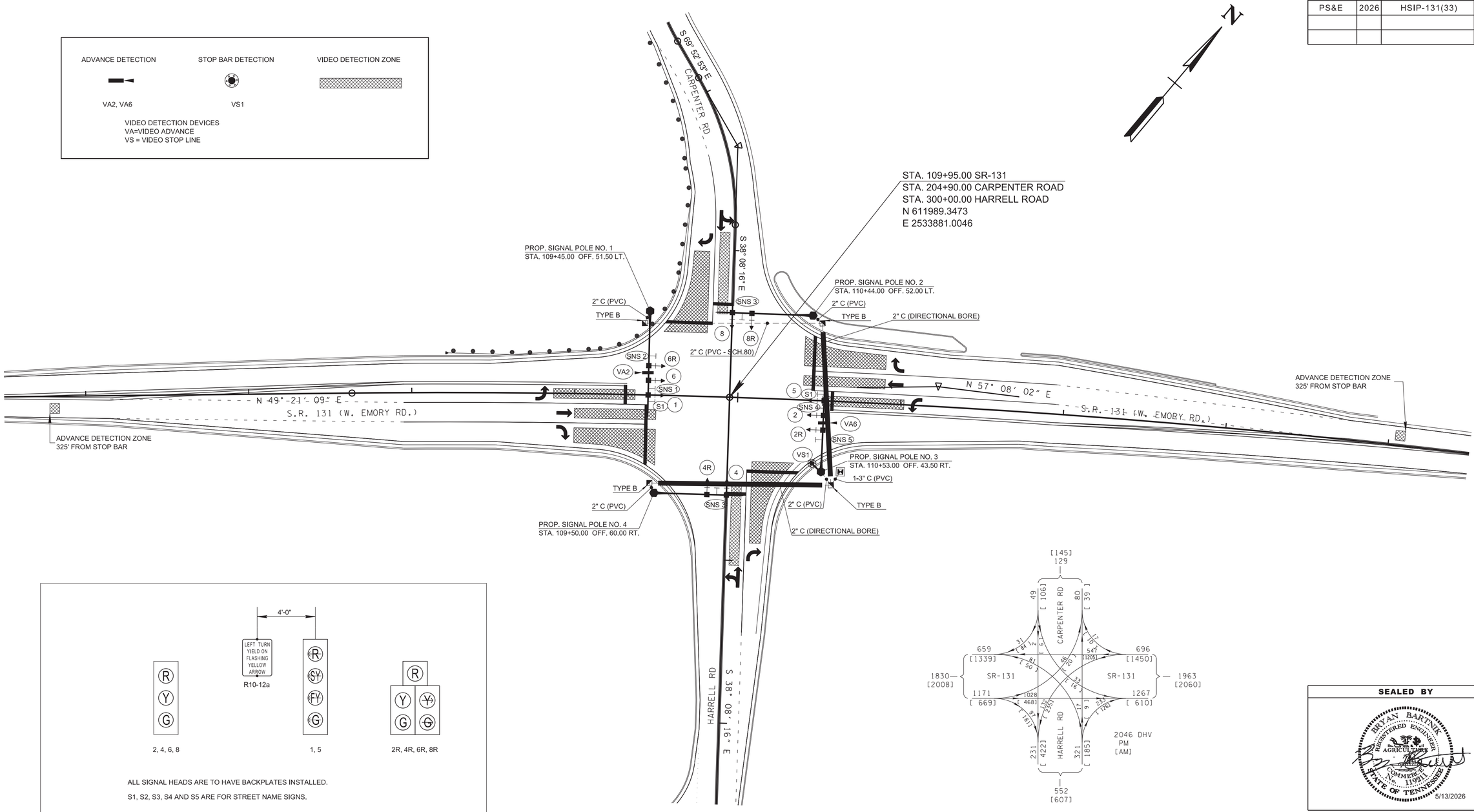
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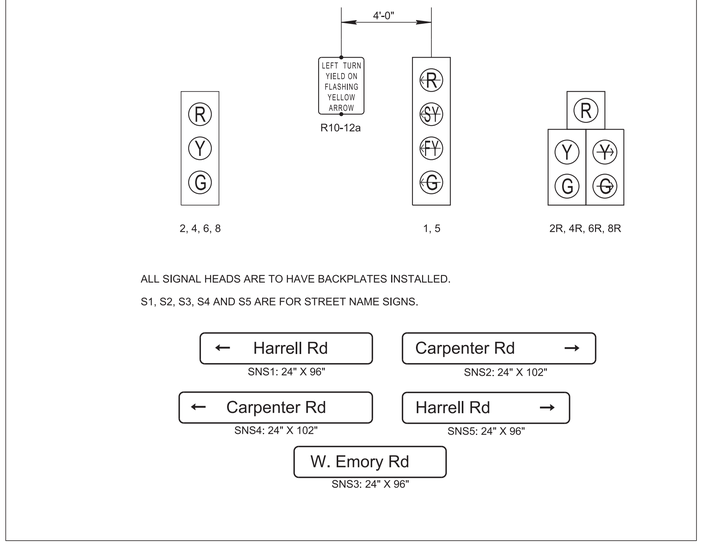
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2022	HSIP-131(33)	SIG-1
PS&E	2026	HSIP-131(33)	SIG-2

ADVANCE DETECTION | STOP BAR DETECTION | VIDEO DETECTION ZONE

VA2, VA6 | VS1

VIDEO DETECTION DEVICES
VA=VIDEO ADVANCE
VS = VIDEO STOP LINE





ALL SIGNAL HEADS ARE TO HAVE BACKPLATES INSTALLED.

S1, S2, S3, S4 AND S5 ARE FOR STREET NAME SIGNS.

← Harrell Rd — SNS1: 24" X 96"

Carpenter Rd → — SNS2: 24" X 102"

← Carpenter Rd — SNS4: 24" X 102"

Harrell Rd → — SNS5: 24" X 96"

W. Emory Rd — SNS3: 24" X 96"

SEALED BY

BRYAN BARTNIK
REGISTERED ENGINEER
No. 119390
AGRICULTURE
COMMERCE
STATE OF TENNESSEE
5/13/2026

COORDINATES ARE NAD 83(1995), ARE DATUM ADJUSTED BY THE FACTOR OF 1.000009 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988 WITH GEOID 12B.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

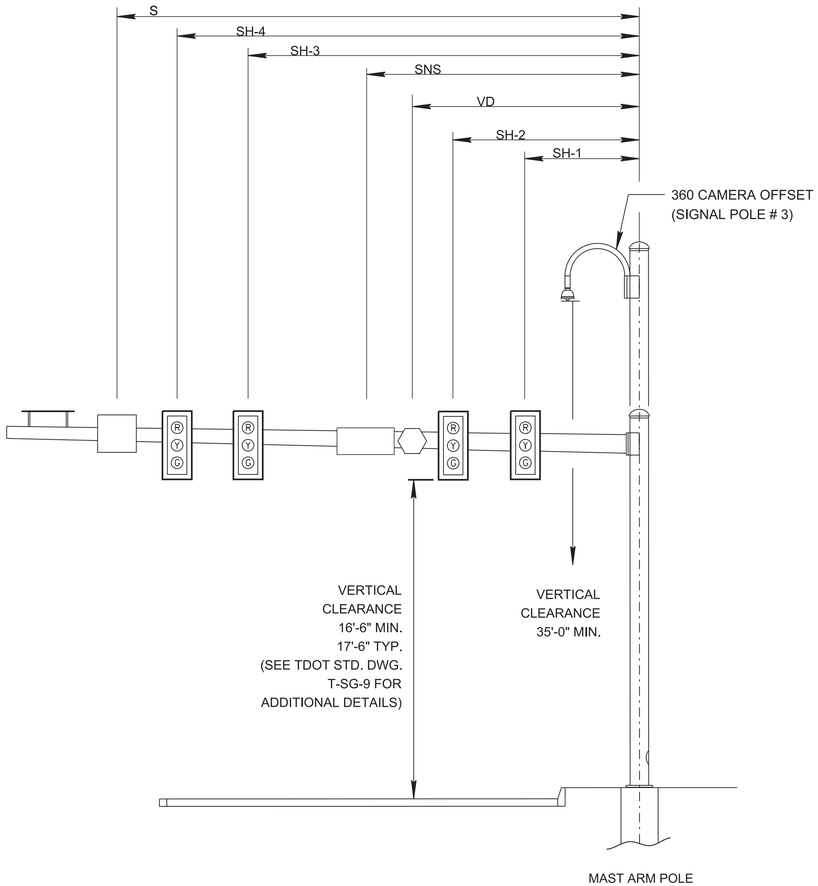
SIGNAL LAYOUT

SR-131 INTERSECTION @
HARRELL RD & CARPENTER RD

SCALE: 1"= 30'

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2022	HSIP-131(33)	SIG-1A
PS&E	2026	HSIP-131(33)	SIG-2A



S: SIGN
SNS: STREET NAME SIGN
SH-X: SIGNAL HEAD
VD: VEHICLE DETECTOR

LEGEND

- SIGNAL HEAD
- STREET NAME SIGN
- SIGN
- VEHICLE DETECTOR (VIDEO)

SIGNAL SUPPORT POLE DATA AND MAST ARM DETAILS

POLE NO.	STATION	OFFSET	NORTHING	EASTING	ARM	ARM LENGTH	SH-1	SH-2	VD-1	SNS	SH-3	SNS	VD-2	S		GROUND EL. @ POLE
SP-1	109+45.00	51.50' LT	611998.4878	2533809.6392		65'	33.5'	42.5'	38.0'	27.5'	51.5'	47.5'		55.5'		975.48'
SP-2	110+44.00	52.00' LT	612060.6237	2533887.9515		60'	37.5'	49.5'		43.5'						991.20'
SP-3	110+53.00	43.50' RT	611990.4082	2533953.3055		55'	25.5'	34.5'	0.0'	19.5'	43.5'	39.0'	30.0'	47.5'		989.51'
SP-4	109+50.00	60.00' RT	611914.5324	2533883.1830		55'	32.5'	44.5'		38.5'						976.77'

SR-131 @ HARRELL RD & CARPENTER RD

SEALED BY

BRYAN BARTNIK
REGISTERED ENGINEER
No. 119311
STATE OF TENNESSEE
5/13/2026

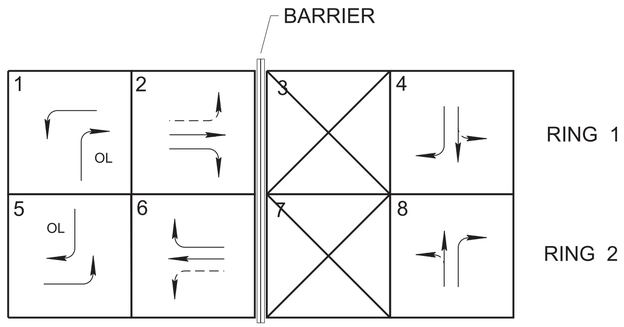
STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

SIGNAL DETAILS

NOT TO SCALE

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TYPE	YEAR	PROJECT NO.	SHEET NO.
PS&E	2026	HSIP-131(33)	SIG-2B



NOTE:

SIGNAL TIMING IS TO BE DONE BY KNOX COUNTY TRAFFIC ENGINEERING. THE CONTRACTOR SHALL CONTACT MR. TRISTAN MARCHWICZ AT (865) 215-5800 A MINIMUM OF 30 DAYS PRIOR TO ACTIVATION OF THE SIGNAL TO OBTAIN THE INITIAL TIMING.

NEMA EIGHT PHASE DESIGNATIONS

ACTIVE PHASE

PROTECTED PHASE

PERMISSIVE PHASE

INACTIVE PHASE (NOT USED)

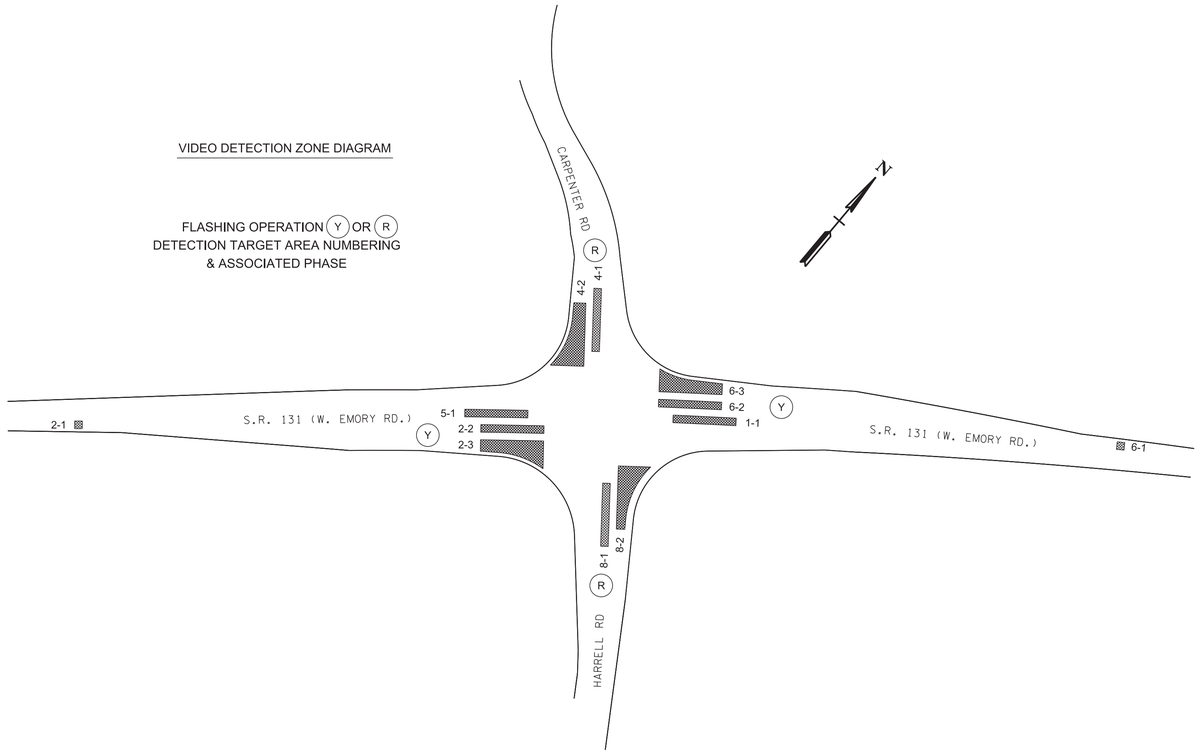
- OPERATION IS DUAL ENTRY MODE, FULL SKIP CAPABILITY
- SINGLE DIRECTION, LAGGING LEFT TURN PHASES ARE NOT ALLOWED
- ALL SIGNAL DISPLAYS AND CLEARANCES SHALL BE IN ACCORDANCE WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES

RADAR DETECTION TARGET ASSIGNMENTS				
TARGET AREA #	VEHICLE DETECTION #	TARGET AREA (FT)	ASSOC. Ø	COMMENTS
1-1	VS1	1 @ 50'	1	PRESENCE
2-1	VA2	1 @ 6'	2	PULSE
2-2	VS1	1 @ 50'	2	PRESENCE
2-3	VS1	1 @ 50'	2	PRESENCE
4-1	VS1	1 @ 50'	4	PRESENCE
4-2	VS1	1 @ 50'	4	PRESENCE
5-1	VS1	1 @ 50'	5	PRESENCE
6-1	VA6	1 @ 6'	6	PULSE
6-2	VS1	1 @ 50'	6	PRESENCE
6-3	VS1	1 @ 50'	6	PRESENCE
8-1	VS1	1 @ 50'	8	PRESENCE
8-2	VS1	1 @ 50'	8	PRESENCE

INTERSECTION @ SR-131 & HARRELL RD / CARPENTER RD

VIDEO DETECTION ZONE DIAGRAM

FLASHING OPERATION (Y) OR (R)
DETECTION TARGET AREA NUMBERING
& ASSOCIATED PHASE



SEALED BY

BRYAN BARTNIK
REGISTERED ENGINEER
No. 119211
STATE OF TENNESSEE
5/13/2026

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

SIGNAL PHASING AND TIMING

SR-131 INTERSECTION @
HARRELL RD & CARPENTER RD

NOT TO SCALE

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

TYPE	YEAR	PROJECT NO.	SHEET NO.
PS&E	2026	HSIP-131(33)	S-1

SWPPP INDEX OF SHEETS

DESCRIPTION	SHT.
1. SWPPP REQUIREMENTS (5.0.)	1
2. SITE DESCRIPTION (5.5.1.)	1
3. ORDER OF CONSTRUCTION ACTIVITIES (5.5.1.a)	1
4. STREAM, OUTFALL, WETLAND, TMDL AND ECOLOGY INFORMATION	1-2
5. EROSION PREVENTION AND SEDIMENT CONTROL (EPSC) MEASURES (5.5.3.)	2-3
6. FLOCCULANTS (3.5.3.1.b)	3
7. UTILITY RELOCATION	3-4
8. MAINTENANCE AND INSPECTION	4
9. SITE ASSESSMENTS (5.5.3.8.)	4
10. STORMWATER MANAGEMENT (5.5.3.11.h)	4-5
11. NON-STORMWATER DISCHARGES (5.5.3.12.)	5
12. SPILL PREVENTION, MANAGEMENT AND NOTIFICATION (5.5.3.7.c, 6.1)	5-6
13. RECORD-KEEPING	6-7
14. SITE WIDE/PRIMARY PERMITTEE CERTIFICATION (8.7.5.)	7
15. SECONDARY PERMITTEE (OPERATOR) CERTIFICATION (8.7.6.)	7
16. ENVIRONMENTAL PERMITS (1.5.2.)	7
17. OUTFALL TABLE (5.5.1.c, 6.4.1.e, 6.4.1.f)	8

NOTE: CITATIONS IN PARENTHESIS INDICATE SECTIONS OF THE CURRENT CGP.

1. SWPPP REQUIREMENTS (5.0.)

1.1. HAS THE SWPPP TEMPLATE BEEN PREPARED BY AN INDIVIDUAL THAT HAS THE FOLLOWING LICENSING AND/OR CERTIFICATIONS (5.2)?

☒ YES (CHECK ALL THAT APPLY BELOW) OR ☐ NO

- ☐ CERTIFIED PROFESSIONAL IN EROSION AND SEDIMENT CONTROL (CPESC)
- ☒ A TN LICENSED PROFESSIONAL ENGINEER OR LANDSCAPE ARCHITECT
- ☒ HAS SUCCESSFULLY COMPLETED TDEC LEVEL II COURSE

1.2. DO THE EPSC PLANS INVOLVE STRUCTURAL DESIGN, HYDRAULIC, HYDROLOGIC OR OTHER ENGINEERING CALCULATIONS FOR EPSC STRUCTURAL MEASURES (E.G. SEDIMENT BASINS) (5.2.)? YES ☐ NO ☒

IF YES, HAVE THE EPSC PLANS BEEN PREPARED, STAMPED AND CERTIFIED BY A TN LICENSED PROFESSIONAL ENGINEER OR LANDSCAPE ARCHITECT? ☐ YES ☐ NO

1.3. DO THE PROJECT STORMWATER OUTFALLS DISCHARGE INTO THE FOLLOWING (6.4.1.)? ☒ YES (CHECK ALL THAT APPLY BELOW) ☐ NO

- ☒ WATERS WITH UNAVAILABLE PARAMETERS (303d FOR SILTATION)
- ☐ EXCEPTIONAL TENNESSEE WATERS (ETW)

2. SITE DESCRIPTION (5.5.1.)

2.1. PROJECT LIMITS (5.5.1.f): REFER TO TITLE SHEET

2.2. TOTAL PROJECT AREA (5.5.1.b): 5.45 ACRES

2.3. TOTAL AREA TO BE DISTURBED (5.5.1.b): 4.90 ACRES

2.4. PROJECT DESCRIPTION (5.5.1.a):

TITLE: S.R. 131: Intersection at Harrell Road and Carpenter Road (RSAR)
COUNTY: Knox
PIN: 119390.00

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) 14 & 15, DRAINAGE MAP SHEET(S) 10, USGS QUAD MAP, AND THE OUTFALL TABLE IN SECTION 4.2.

2.7. MAJOR SOIL DISTURBING ACTIVITIES (5.5.1.a) (CHECK ALL THAT APPLY):

- ☒ CLEARING AND GRUBBING
- ☒ EXCAVATION
- ☒ CUTTING AND FILLING
- ☒ FINAL GRADING AND SHAPING
- ☒ UTILITIES
- ☐ OTHER (DESCRIBE): _____

2.8. NO MORE THAN 50 ACRES OF ACTIVE SOIL DISTURBANCE IS ALLOWED AT ANY TIME DURING THE CONSTRUCTION OF THE PROJECT.

2.9. ARE THERE ANY SEASONAL LIMITATIONS ON WORK? ☐ YES ☒ NO

IF YES, LIST THE CORRESPONDING PLAN SHEET: _____

2.10. WAS ROW FINALIZED PRIOR TO FEBRUARY 1, 2010 (4.1.2.2)?

☐ YES _____ (DATE) ☒ NO

IF ROW WAS FINALIZED PRIOR TO FEBRUARY 1, 2010, THIS PROJECT IS CONSIDERED A PRE-APPROVED SITE (4.1.2.2)

2.11. SOIL PROPERTIES (5.5.1.d, 5.5.3.3.d, 5.5.3.6.b).

SOIL PROPERTIES FOR THE PRIMARY SOILS ARE LISTED IN THE TABLE BELOW.

SOIL PROPERTIES

PRIMARY SOIL NAME	HSG	% OF SITE	ERODIBILITY (k value)
Dewey silt loam, 6 to 15 percent slopes, eroded	B	17.9	0.37
Dewey silt loam, 15 to 25 percent slopes, eroded	B	12.0	0.37
Etowah-Minvale complex, 2 to 5 percent slopes	B	70.1	0.32

2.12. IS ACID PRODUCING ROCK (APR) (i.e. PYRITE) LOCATED WITHIN THE PROJECT LIMITS? ☐ YES ☒ NO

2.12.1. IF YES TO SECTION 2.13, HAVE APR LOCATIONS BEEN IDENTIFIED WITHIN THE CONSTRUCTION PLANS AND/OR THE GEOTECHNICAL REPORT? ☐ YES ☐ NO; AND

2.12.2. IF YES TO SECTION 2.12.1, HAS A SPECIAL HANDLING PLAN AND/OR ADAPTIVE MANAGEMENT PLAN (AMP) BEEN PREPARED FOR THE PROJECT? ☐YES ☐ NO ☐ N/A (TDOT SP107L WILL BE APPLIED.)

2.13. PROJECT RUNOFF COEFFICIENTS AND AREA PERCENTAGES (5.5.3.6.a).

RUNOFF COEFFICIENTS FOR EXISTING CONDITIONS

AREA TYPE	AREA(AC)	PERCENTAGE OF TOTAL AREA (%)	RUNOFF CN	C FACTOR
IMPERVIOUS	1.75	32.1	98	
PERVIOUS	3.7	67.9	80	
WEIGHTED CURVE NUMBER OR C-FACTOR =			86.5	

RUNOFF COEFFICIENTS FOR POST-CONSTRUCTION CONDITIONS

AREA TYPE	AREA(AC)	PERCENTAGE OF TOTAL AREA (%)	RUNOFF CN	C FACTOR
IMPERVIOUS	2.25	41.3	98	
PERVIOUS	3.2	58.7	80	
WEIGHTED CURVE NUMBER OR C-FACTOR =			87.4	

3. ORDER OF CONSTRUCTION ACTIVITIES (5.5.1.a)

CONSTRUCTION SHALL BE SEQUENCED AND STAGED TO: MINIMIZE THE EXPOSURE TIME OF GRADED OR DENUDED SOIL AREAS, PRESERVE TOPSOIL, AND MINIMIZE SOIL COMPACTION. NO WORK SHALL BE STARTED UNTIL THE CONTRACTOR'S PLAN FOR THE STAGING OF THEIR OPERATIONS, INCLUDING THE PLAN FOR STAGING OF TEMPORARY AND PERMANENT EPSC MEASURES, HAS BEEN ACCEPTED BY THE ENGINEER. THE CONTRACTOR'S EPSC PLAN SHALL INCORPORATE AND SUPPLEMENT, AS ACCEPTABLE, THE ORDER OF CONSTRUCTION ACTIVITIES AND THE BASIC EPSC DEVICES DEPICTED ON THE EPSC PLAN CONTAINED WITHIN THE APPROVED SWPPP.

3.1. SPECIAL SEQUENCING REQUIREMENTS (SEE SHEETS NA)

3.2. INSTALL STABILIZED CONSTRUCTION EXITS.

3.3. INSTALL PERIMETER PROTECTION WHERE RUNOFF SHEET FLOWS FROM THE SITE.

3.4. INSTALL INITIAL EPSC MEASURES BEFORE CLEARING, GRUBBING, EXCAVATION, GRADING, CULVERT OR BRIDGE CONSTRUCTION, CUTTING, FILLING, OR ANY OTHER EARTHWORK OCCURS, EXCEPT AS SUCH WORK MAY BE NECESSARY TO INSTALL EPSC MEASURES.

3.5. PERFORM CLEARING AND GRUBBING (NOT MORE THAN TWO WEEKS PRIOR TO GRADING OR EARTH-MOVING. REFER TO THE STABILIZATION PRACTICES BELOW.).

3.6. REMOVE AND STORE TOPSOIL.

3.7. STABILIZE DISTURBED AREAS WITHIN 2 WEEKS OF COMPLETING ANY STAGE AND/OR PHASE OF ACTIVITY (STEEP SLOPES SHALL BE STABILIZED WITHIN 1 WEEK AFTER CONSTRUCTION ACTIVITY HAS TEMPORARY OR PERMANENTLY CEASED).

3.8. INSTALL UTILITIES, STORM SEWERS AND CULVERTS.

3.9. INSTALL INLET AND CULVERT PROTECTION ONCE STRUCTURES ARE IN PLACE AND CAPABLE OF INTERCEPTING FLOW.

3.10. PERFORM FINAL GRADING AND INSTALL BASE STONE.

3.11. COMPLETE FINAL PAVING AND SEALING OF CONCRETE.

3.12. INSTALL TRAFFIC CONTROL AND PROTECTION DEVICES.

3.13. COMPLETE PERMANENT STABILIZATION (TOPSOIL, SEEDING, MULCH, EROSION CONTROL BLANKET, SOD, ETC.)

3.14. REMOVE TEMPORARY EROSION CONTROLS AND ACCUMULATED SEDIMENT FROM AREAS THAT HAVE ESTABLISHED AT LEAST 70 PERCENT UNIFORM PERMANENT VEGETATIVE COVER.

3.15. RE-STABILIZE AREAS DISTURBED BY REMOVAL ACTIVITIES.

4. STREAM, OUTFALL, WETLAND, TMDL AND ECOLOGY INFORMATION

4.1. STREAM INFORMATION (5.5.1.h, 5.5.1.i)

4.1.1. WILL CONSTRUCTION AND/OR EROSION PREVENTION AND SEDIMENT CONTROLS IMPACT ANY STREAMS WITHIN THE PROJECT LIMITS? ☐ YES ☒ NO

IF YES, THE IMPACT(S) HAVE BEEN INCLUDED IN THE TOTAL PROJECT IMPACTS AND HAVE BEEN INCLUDED IN THE WATER QUALITY PERMITS.

4.1.2. HAVE ANY OF THE RECEIVING STATE WATERS LESS THAN OR EQUAL TO 1 FLOW MILE DOWN GRADIENT OF THE PROJECT LIMITS BEEN CLASSIFIED BY TDEC AS FOLLOWS (CHECK ALL THAT APPLY):

- ☒ 303d WITH UNAVAILABLE PARAMETERS FOR SILTATION
- ☐ EXCEPTIONAL TENNESSEE WATERS (ETW)

4.1.3. RECEIVING WATERS OF THE STATE (5.5.1.h, 5.5.1.j, 5.5.1.k).

RECEIVING WATERS OF THE STATE INFORMATION

TDOT STATE WATER LABEL FROM EBR	NAME OF RECEIVING STATE WATER	303d WITH UNAVAILABLE PARAMETERS FOR SILTATION (YES OR NO)	ETW (YES OR NO)	LOCATED WITHIN PROJECT LIMITS (YES OR NO)	LOCATED WITHIN ≤ 1 FLOW MILE DOWN GRADIENT OF PROJECT LIMITS (YES OR NO)
STR_ 1 (Beaver Creek)	Melton Hill Reservoir	YES	NO	NO	YES

4.1.4. RECEIVING WATERS OF THE US (NON STATE WATERS) (4.1.2). LIST ANY FEATURE THAT IS IDENTIFIED AS A WET WEATHER CONVEYANCE (TDEC) AND IDENTIFIED AS WATERS OF THE US BY THE ARMY CORPS OF ENGINEERS.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

STORMWATER POLLUTION PREVENTION PLAN

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

TYPE	YEAR	PROJECT NO.	SHEET NO.
PS&E	2026	HSIP-131(33)	S-2

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)
WWX-1/EPH-1	YES	YES

4.1.5. ARE THERE ANY WATER QUALITY RIPARIAN BUFFER ZONES REQUIRED FOR WATERS OF THE STATE? (5.5.1.l, 6.4.2.)

☒ YES ☐ NO

BUFFER ZONE REQUIREMENTS ARE NOT REQUIRED FOR PRE-APPROVED SITES (4.1.2.2.)

IF YES, THEY HAVE BEEN INCLUDED ON PLAN SHEET(S) Not enough room.

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:NA

4.1.8. EVERY ATTEMPT SHOULD BE MADE FOR CONSTRUCTION ACTIVITIES TO NOT TAKE PLACE WITHIN THE WATER QUALITY RIPARIAN BUFFER ZONE AND FOR EXISTING FORESTED AREAS TO BE PRESERVED. (4.1.2., 6.4.2.)

4.1.9. BECAUSE OF HEAVY SEDIMENT LOAD ASSOCIATED WITH CONSTRUCTION SITE RUNOFF, WATER QUALITY RIPARIAN BUFFER ZONES ARE NOT SEDIMENT CONTROL MEASURES AND SHOULD NOT BE RELIED UPON AS PRIMARY SEDIMENT CONTROL MEASURES. THE WATER QUALITY RIPARIAN BUFFER ZONE SHALL BE ESTABLISHED BETWEEN THE TOP OF THE STREAM BANK AND THE DISTURBED CONSTRUCTION AREA.

4.1.10. WHERE IT IS NOT PRACTICABLE TO MAINTAIN A FULL WATER QUALITY RIPARIAN BUFFER, BEST MANAGEMENT PRACTICES (BMPS) PROVIDING EQUIVALENT PROTECTION AS THE NATURAL RIPARIAN ZONE MUST BE USED. A JUSTIFICATION FOR USE AND DESIGN EQUIVALENCY SHALL BE DOCUMENTED WITHIN THE SWPPP. THE ENVIRONMENTAL AND ROADWAY DESIGN DIVISIONS SHALL REVIEW AND APPROVE THIS REVISION OF THE SWPPP BEFORE DISTURBANCE OF THE SITE PROCEEDS, UNLESS PREVIOUSLY EXEMPT IN THE NPDES CGP. WHERE ISSUED, ARAP/401 REQUIREMENTS WILL PREVAIL IF IN CONFLICT WITH THESE BUFFER ZONE REQUIREMENTS.

4.2. OUTFALL INFORMATION

4.2.1. OUTFALL TABLE (5.5.1.c). SEE SWPPP SHEET S-8 FOR OUTFALL INFORMATION.

4.2.2. HAVE ALL OUTFALLS BEEN LABELED ON THE EPSC PLAN SHEETS (5.5.1.f)? ☒ YES ☐ NO

4.2.3. HAVE ALL OUTFALLS BEEN LABELED ON A USGS TOPOGRAPHIC MAP INCLUDED IN THE "DOCUMENTATION AND PERMITS" BINDER (3.2.2.)? ☒YES ☐ NO

4.2.4. WHERE POSSIBLE, HAS NON-PROJECT RUN-ON BEEN DIVERTED AROUND OR THROUGH THE PROJECT TO ELIMINATE CONTACT WITH DISTURBED AREAS OF THE PROJECT AND SEPARATE IT FROM PROJECT RUN-OFF THEREBY REDUCING THE DRAINAGE AREA OF TO THE OUTFALLS IN THIS AREA?

☐ YES ☐ NO ☒ N/A

4.2.5. ARE EQUIVALENT MEASURES BEING SUBSTITUTED FOR A SEDIMENT BASIN(S? (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)

4.4. TOTAL MAXIMUM DAILY LOADS (TMDL) INFORMATION (1.3.j)

4.4.1. IS THIS PROJECT LOCATED IN A HUC-8 WATERSHED THAT MAINTAINS AN EPA APPROVED TMDL FOR SILTATION AND HABITAT ALTERATION?

☐YES ☒ NO

4.4.2. IF YES, IS THIS PROJECT LOCATED WITHIN A HUC-12 SUBWATERSHED WITH A WASTE LOAD ALLOCATION (WLA)?

☐ YES ☒ NO

4.4.3. IF YES, DOES THE PROJECT HAVE A DIRECT DISCHARGE TO A 303(d) LISTED STREAM FOR SILTATION?

☐ YES ☐ NO

IF YES, SWPPP INCORPORATES MEASURES OR CONTROLS CONSISTENT WITH THE ASSUMPTIONS AND REQUIREMENTS OF THE TMDL.

4.5. ECOLOGY INFORMATION (3.5.5.e)

DOES THE TDOT ENVIRONMENTAL BOUNDARIES REPORT SPECIFY SPECIAL NOTES TO BE ADDED TO THE PLAN SHEETS?

☐ YES ☒ NO

IF YES, THEY HAVE BEEN INCLUDED ON PLAN SHEET(S) _____.

4.6. ENVIRONMENTAL COMMITMENTS

ARE THERE ANY NOTES ON THE ENVIRONMENTAL COMMITMENT SHEET?

☐ YES ☒ NO

IF YES, THEY HAVE BEEN INCLUDED ON PLAN SHEET(S) _____.

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.

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

TYPE	YEAR	PROJECT NO.	SHEET NO.
PS&E	2026	HSIP-131(33)	S-3

5.9. HAS A THREE STAGED EPSC PLAN BEEN PREPARED FOR THE PROJECT (5.5.2.)?

YES ☒ NO ☐

PLEASE NOTE THAT A THREE STAGED EPSC PLAN IS REQUIRED FOR ALL TDOT PROJECTS FOR WHICH AN NPDES PERMIT IS REQUIRED.

5.10. STEEP SLOPES ARE DEFINED AS A NATURAL OR CREATED SLOPE OF 35% GRADE OR GREATER REGARDLESS OF HEIGHT. HAVE STEEP SLOPES BEEN MINIMALLY DISTURBED AND/OR PROTECTED BY CONVEYING RUNOFF NON-EROSIVELY AROUND OR OVER THE SLOPE (5.5.3.4.) (10. "STEEP SLOPE")? ☐ YES ☐ NO ☒ N/A

5.11. THE STRUCTURAL EPSC MEASURES HAVE BEEN INCLUDED IN THE TOTAL PROJECT IMPACTS AND HAVE BEEN INCLUDED IN THE AQUATIC RESOURCE ALTERATION (ARAP) PERMIT OR SECTION 401 CERTIFICATION (5.5.1.h). REFER TO THE LIST OF APPLICABLE ENVIRONMENTAL PERMITS LOCATED ON SWPPP SHEET 7. ALL PERMITS WILL BE MAINTAINED ON SITE WITHIN THE "DOCUMENTATION AND PERMITS" BINDER.

5.12. THE EPSC CONTROL MEASURES LISTED IN THE QUANTITIES TABLE ON SHEET 14 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 14 (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. <u>FLOCCULANTS (3.5.3.1.b)</u>

IS ADDITIONAL PHYSICAL OR CHEMICAL TREATMENT OF STORMWATER RUNOFF NECESSARY (5.5.3.5.)? ☐ YES ☒ NO

IF YES, THE FOLLOWING NOTES APPLY:

6.1. ENSURE THE FLOCCULANT EMULSIONS AND POWDERS ARE OF THE ANIONIC TYPE (5.5.3.5.). AND MEET THE FOLLOWING REQUIREMENTS:

6.1.1. MEETS THE EPA AND FDA ACRYLAMIDE MONOMER LIMITS OF EQUAL TO OR GREATER THAN 0.005% ACRYLAMIDE MONOMER.

6.1.2. HAS A DENSITY OF 10% TO 55% BY WEIGHT AND A MOLECULAR WEIGHT OF 16 TO 24 MG/MOLE (MILLIGRAM PER MOLE).

6.1.3. MIXTURE IS NON-COMBUSTIBLE.

6.1.4. CONTAINS ONLY MANUFACTURER'S RECOMMENDED ADDITIVES.

6.2. FLOCCULANT SHALL BE MIXED AND APPLIED IN ACCORDANCE WITH ALL OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) MATERIAL SAFETY DATA SHEET REQUIREMENTS AND THE MANUFACTURER'S RECOMMENDATIONS FOR THE SPECIFIED USES CONFORMING TO ALL FEDERAL, STATE, AND LOCAL LAWS, RULES, AND REGULATIONS.

6.3. ALL VENDORS AND SUPPLIERS OF FLOCCULANT BLENDS SHALL PRESENT OR SUPPLY A WRITTEN TOXICITY REPORT WHICH VERIFIES ACCEPTABLE TOXICITY PARAMETERS WHICH MEET OR EXCEED THE EPS REQUIREMENTS FOR THE STATE AND FEDERAL WATER QUALITY STANDARDS. WHOLE EFFLUENT TESTING DOES NOT MEET THIS REQUIREMENT AS PRIMARY REACTIONS HAVE OCCURRED AND TOXIC POTENTIALS HAVE BEEN REDUCED. CATIONIC FORMS OF FLOCCULANTS ARE NOT ALLOWED UNDER THIS SECTION DUE TO HIGH LEVELS OF TOXICITY TO AQUATIC ORGANISMS. FLOCCULANT EMULSIONS SHALL NEVER BE APPLIED DIRECTLY TO STORMWATER RUNOFF OR RIPARIAN WATERS DUE TO SURFACTANT TOXICITY. THE CONTRACTOR MUST SEEK THE APPROVAL OF THE EPSC DESIGN ENGINEER AND TDOT IF CHITOSAN IS PROPOSED FOR THIS PROJECT.

6.4. ALL VENDORS AND SUPPLIERS OF FLOCCULANT BLENDS SHALL SUPPLY WRITTEN "SITE SPECIFIC" TESTING RESULTS DEMONSTRATING A PERFORMANCE OF 95% OR GREATER REDUCTION OF NTU OR TSS FROM STORMWATER DISCHARGES.

6.5. EMULSION BATCHES SHALL BE MIXED FOLLOWING RECOMMENDATIONS OF THE TESTING LABORATORY THAT DETERMINES THE PROPER PRODUCT AND RATE TO MEET SITE REQUIREMENTS. APPLICATION METHODS SHALL ENSURE UNIFORM COVERAGE TO THE TARGET AREA. EMULSIONS SHALL NEVER BE APPLIED DIRECTLY TO STORMWATER RUNOFF OR RIPARIAN BUFFERS.

6.6. FLOCCULANT POWDER MAY BE APPLIED BY A HAND OR MECHANICAL SPREADER. MIXING OF THE FLOCCULANT POWDER WITH DRY SILICA SAND WILL AID IN SPREADING.

6.7. PREMIXING OF FLOCCULANT POWDER INTO FERTILIZER, SEED, OR OTHER SOIL AMENDMENTS IS ALLOWED WHEN SPECIFIED IN THE DESIGN PLAN. APPLICATION METHOD SHALL ENSURE UNIFORM COVERAGE TO THE TARGET AREA.

6.8. FLOCCULANT LOGS OR BLOCKS SHALL BE APPLIED FOLLOWING SITE TESTING RESULTS TO ENSURE PROPER PLACEMENT AND PERFORMANCE AND SHALL MEET OR EXCEED STATE AND FEDERAL WATER QUALITY REQUIREMENTS.

6.9. DO NOT APPLY FLOCCULANTS DIRECTLY TO, OR WITHIN 60 FEET, OF ANY STREAMS, WETLANDS, OR OTHER NATURAL WATER RESOURCE LOCATED ON OR ADJACENT TO THE CONSTRUCTION SITE. DO NOT APPLY FLOCCULANTS DIRECTLY INTO WATERS CONTAINED WITHIN SEDIMENT PONDS OR TO SLOPES THAT PRODUCE RUNOFF DIRECTLY INTO A STREAM, WETLAND, OR OTHER NATURAL WATER RESOURCE. DO NOT APPLY FLOCCULANTS IMMEDIATELY AT A STORMWATER OUTFALL WHERE RUNOFF LEAVES THE PROJECT LIMITS.

7. <u>UTILITY RELOCATION</u>

ARE UTILITIES INCLUDED IN THE CONTRACT? ☒ YES ☐ NO

IF YES, THE FOLLOWING APPLY:

7.1. STORMWATER WHICH COLLECTS IN THE UTILITY TRENCH SHALL BE PUMPED INTO A DEWATERING STRUCTURE OR SEDIMENT FILTER BAG AND TREATED PRIOR TO DISCHARGE.

7.2. SILT FENCE SHALL BE INSTALLED ON THE DOWNGRADIENT SIDE OF STOCKPILED SOIL. ANY TRENCHING ACROSS WET WEATHER CONVEYANCES SHALL BE DONE DURING DRY CONDITIONS, REMOVED AND STABILIZED BY THE END OF THE WORK DAY.

7.3. UTILITY CROSSINGS IN ENVIRONMENTAL FEATURES SHALL BE CONSTRUCTED IN ACCORDANCE WITH TDOT STANDARDS AND NO WORK SHALL BE CONDUCTED IN FLOWING WATERS. ENVIRONMENTAL PERMITS APPLY TO UTILITIES IN THIS PROJECT. THE STATE CONTRACTOR SHALL COMPLY WITH ALL REQUIREMENTS OF THE PERMITS.

7.4. IT IS THE RESPONSIBILITY OF THE STATE UTILITY CONTRACTOR TO PROTECT EXPOSED EARTH FROM EROSION AND TO PROVIDE FOR CONTAINMENT OF SEDIMENT THAT MAY RESULT FROM THEIR WORK. PRIOR TO BEGINNING WORK, ADEQUATE EPSC MEASURES MUST BE IN PLACE TO TRAP ANY SEDIMENT THAT MAY TRAVEL OFF-SITE IN THE EVENT OF RAIN. DURING THE PROGRESSION OF THEIR WORK, EXPOSED EARTH AREAS SHALL BE STABILIZED AS SOON AS POSSIBLE TO PREVENT EROSION. AT NO TIME, SHALL EXPOSED EARTH RESULTING FROM THEIR OPERATIONS HAVE UNPROTECTED ACCESS TO FLOWING OFF-SITE AND ENTERING WATERS OF THE STATE/U.S.

7.5. FOR THE INSTALLATION OF BURIED UTILITIES (PIPES AND CABLES), TRENCHES SHALL BE BACKFILLED DAILY AS CONSTRUCTION PROCEEDS. BACKFILLED TRENCHES SHALL BE SEEDED AND MULCHED OR SODDED DAILY IF POSSIBLE, BUT NO LATER THAN FOURTEEN DAYS AFTER BEING BACKFILLED. ANY TEMPORARY SPOILS OF EXCAVATED EARTH SHALL BE LOCATED WITHIN TDOT EPSC MEASURES OR RECEIVE SEPARATE EPSC MEASURES. IF TRENCHES ARE NOT BACKFILLED OVERNIGHT, APPROPRIATE EPSC MEASURES WILL BE INSTALLED BY THE STATE UTILITY CONTRACTOR UNTIL THE TRENCH IS BACKFILLED.

7.6. IN REGARDS TO EPSC, TDEC REGULATIONS APPLY TO THE STATE UTILITY CONTRACTORS ON THIS PROJECT. THE STATE CONTRACTOR IS RESPONSIBLE FOR EPSC MEASURES RELATED TO UTILITY CONSTRUCTION INCLUDED IN THE STATE CONTRACT.

7.7. TRENCHES FORMED FOR THE INSTALLATION OF BURIED UTILITIES MAY CAUSE STORMWATER RUNOFF TO CONCENTRATE AT THE TRENCH LINE. ADDITIONAL EPSC MEASURES MAY BE REQUIRED TO BE INSTALLED AS APPROVED BY THE TDOT PROJECT ENGINEER.

7.8. FOR THE INSTALLATION OF UNDERGROUND UTILITIES OUTSIDE OF THE TDOT RIGHT-OF-WAY, EPSC MEASURES SHALL BE INSTALLED PRIOR TO CLEARING (TRENCHING AND ASSOCIATED BLASTING) IN THOSE AREAS

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NECESSARY TO PREVENT SEDIMENT FROM LEAVING THE CONSTRUCTION AREA. THESE EPSC MEASURES SHALL REMAIN UNTIL THE BACKFILLED TRENCH IS STABILIZED WITH PERMANENT VEGETATIVE COVER.

7.9. THE UTILITY CONTRACTOR SHALL RESTORE ALL AFFECTED WET WEATHER CONVEYANCES TO THE EXISTING TOPOGRAPHIC CONDITIONS AS APPROVED BY THE TDOT RESPONSIBLE PARTY.

7.10. THE UTILITY CONTRACTOR WILL PROVIDE APPROPRIATE EPSC MEASURES TO REPLACE ONSITE EPSC MEASURES REMOVED TO FACILITATE THE INSTALLATION OF UTILITIES. REPLACEMENT OF EPSC MEASURES WILL BE COORDINATED WITH THE TDOT ENGINEER BEFORE COMMENCING WORK.

7.11. FOR UTILITY CROSSINGS THAT UTILIZE HORIZONTAL DIRECTIONAL DRILLING THE FOLLOWING SHALL APPLY:

7.11.1. THE ENTRY AND EXIT POINTS SHALL BE AT LEAST 50 FEET FROM THE STREAM BANK OR WETLAND BOUNDARY.

7.11.2. THE DEPTH OF BORE BELOW THE STREAMBED IS SUFFICIENT TO PREVENT RELEASE OF DRILLING FLUID, BASED ON THE PARENT MATERIAL.

7.11.3. A SITE-SPECIFIC CONTINGENCY AND CONTAINMENT PLAN FOR INADVERTENT RELEASE OF DRILLING FLUID SHALL BE ESTABLISHED PRIOR TO COMMENCEMENT OF WORK. THIS PLAN SHALL BE SUBMITTED TO THE TDOT PROJECT ENGINEER AND THE TDOT ENVIRONMENTAL DIVISION PERMITS AND/OR COMPLIANCE AND FIELD SERVICES OFFICE FOR REVIEW AND APPROVAL.

8. MAINTENANCE AND INSPECTION

8.1. INSPECTION PRACTICES (5.5.3.9.)

8.1.1. PROJECT EPSC INSPECTORS AND ENGINEERS (INCLUDING TDOT STAFF, CONSULTANTS AND CONTRACTOR STAFF) RESPONSIBLE FOR THE INSPECTION, IMPLEMENTATION, MAINTENANCE. AND/OR REPAIR OF EPSC MEASURES SHALL MEET ONE OF THE FOLLOWING REQUIREMENTS (5.5.3.10.):

8.1.1.1. SUCCESSFULLY COMPLETED THE TDOT EPSC INSPECTIONS TRAINING AND ANY RECERTIFICATION COURSE AS REQUIRED.

8.1.1.2. SUCCESSFULLY COMPLETED THE TDEC “LEVEL I - FUNDAMENTALS OF EROSION PREVENTION AND SEDIMENT CONTROL” COURSE AND ANY RECERTIFICATION COURSES AS REQUIRED.

8.1.1.3. BE A CURRENT TN LICENSED PROFESSIONAL ENGINEER OR LANDSCAPE ARCHITECT.

8.1.1.4. BE A CURRENT CERTIFIED PROFESSIONAL IN EROSION AND SEDIMENT CONTROL (CPESC).

8.1.1.5. SUCCESSFULLY COMPLETED TDEC “LEVEL II – DESIGN PRINCIPLES FOR EROSION PREVENTION AND SEDIMENT CONTROL FOR CONSTRUCTION SITES” COURSE AND ANY RECERTIFICATION COURSE AS REQUIRED.

8.1.2. THE TDOT CONSTRUCTION ENGINEER (OR THEIR DULY AUTHORIZED REPRESENTATIVE) AND THE CONTRACTOR’S SITE SUPERINTENDENT ARE RESPONSIBLE FOR INSPECTIONS. MAINTENANCE AND REPAIR ACTIVITIES ARE THE RESPONSIBILITY OF THE CONTRACTOR. THE TDOT CONSTRUCTION ENGINEER OR THEIR DULY AUTHORIZED REPRESENTATIVE SHALL COMPLETE THE EPSC INSPECTION REPORTS AND DISTRIBUTE COPIES PER THE CONTRACT.

8.1.3. THE INSPECTOR SHALL CONDUCT PRE-CONSTRUCTION INSPECTIONS TO VERIFY AREAS THAT ARE NOT TO BE DISTURBED HAVE BEEN MARKED IN THE SWPPP AND IN THE FIELD BEFORE LAND DISTURBANCE ACTIVITIES BEGIN AND INITIAL MEASURES HAVE BEEN INSTALLED (10 “INSPECTOR”) (5.5.1.f).

8.1.4. EPSC CONTROLS SHALL BE INSPECTED TO VERIFY MEASURES HAVE BEEN INSTALLED AND MAINTAINED IN ACCORDANCE WITH TDOT STANDARD DRAWINGS, SPECIFICATIONS, AND GOOD ENGINEERING PRACTICES. EPSC INSPECTIONS SHALL BE DOCUMENTED ON THE TDOT EPSC INSPECTION REPORT FORM AND THE TDEC CONSTRUCTION STORMWATER INSPECTION CERTIFICATION (TWICE-WEEKLY INSPECTIONS) FORM.

8.1.5. OUTFALL POINTS SHALL BE INSPECTED TO ASCERTAIN WHETHER EPSC MEASURES ARE EFFECTIVE IN PREVENTING EROSION AND CONTROLLING SEDIMENT INCLUDING SIGNIFICANT IMPACTS TO SURROUNDING STATE WATERS, WOTUS (EPHEMERAL), WETLANDS, OTHER NATURAL RESOURCES AND ADJACENT PROPERTY OWNERS. WHERE DISCHARGE LOCATIONS ARE INACCESSIBLE, NEARBY DOWN GRADIENT LOCATIONS SHALL BE INSPECTED. LOCATIONS WHERE VEHICLES ENTER AND EXIT THE SITE SHALL BE INSPECTED FOR EVIDENCE OF OFF-SITE ROADWAY SEDIMENT TRACKING.

8.1.6. INSPECTIONS WILL BE CONDUCTED AT LEAST TWICE EVERY CALENDAR WEEK AND AT LEAST 72 HOURS APART (5.5.3.11.a). A CALENDAR WEEK IS DEFINED AS SUNDAY THROUGH SATURDAY. QUALITY ASSURANCE INSPECTIONS OF TDOT EPSC, NPDES AND WATER QUALITY PERMIT REQUIREMENTS SHALL BE PERFORMED PER THE TDOT ENVIRONMENTAL DIVISION COMPLIANCE AND FIELD SERVICES OFFICE.

8.1.7. THE FREQUENCY OF EPSC INSPECTIONS MAY BE REDUCED TO ONCE A MONTH WHERE SITES OR PORTIONS OF SITES HAVE BEEN TEMPORARILY STABILIZED UNTIL CONSTRUCTION ACTIVITIES RESUME WITH WRITTEN NOTIFICATION BY THE TDOT REGIONAL ENGINEER TO TDEC NASHVILLE CENTRAL OFFICE AND SUBSEQUENT TDEC APPROVAL. WRITTEN NOTIFICATION MUST INCLUDE THE INTENT TO CHANGE FREQUENCY AND JUSTIFICATION (5.5.3.11.a).

8.1.8. ALL DISTURBED AREAS OF THE SITE THAT HAVE NOT BEEN PERMANENTLY STABILIZED, AREAS USED FOR MATERIAL STORAGE THAT ARE EXPOSED TO PRECIPITATION, STRUCTURAL CONTROL MEASURES, AND LOCATIONS WHERE VEHICLES ENTER OR EXIT THE SITE, AND EACH OUTFALL WILL BE INSPECTED (5.5.3.11.b).

8.1.9. THE INSPECTOR WILL OVERSEE THE REQUIREMENTS OF OTHER CONSTRUCTION-RELATED WATER QUALITY PERMITS (I.E. TDEC ARAP, USACE SECTION 404, AND TVA SECTION 26a PERMITS) FOR CONSTRUCTION ACTIVITIES AROUND WATERS OF THE STATE (10 “INSPECTOR”).

8.1.10. THE SWPPP WILL BE REVISED AS NECESSARY BASED ON THE RESULTS OF THE INSPECTION. REVISION(S) WILL BE RECORDED WITHIN 1 WEEK OF THE INSPECTION. REVISION(S) WILL BE IMPLEMENTED WITHIN 2 WEEKS OF THE INSPECTION (5.5.3.11.e AND 5.5.3.11.f).

8.1.11. DOCUMENTATION OF INSPECTIONS WILL BE MAINTAINED ON SITE IN THE “DOCUMENTATION AND PERMITS” BINDER. REPORTS WILL BE SUBMITTED TO THE TDOT PROJECT ENGINEER PER THE CONTRACT.

8.1.12. THESE INSPECTION REQUIREMENTS DO NOT APPLY TO DEFINABLE AREAS OF THE SITE THAT HAVE MET PERMANENT STABILIZATION REQUIREMENTS AND HAVE BEEN NOTED IN THE SWPPP.

8.1.13. TRAINED CERTIFIED INSPECTORS SHALL COMPLETE INSPECTION TO THE BEST OF THEIR ABILITY. FALSIFYING INSPECTION RECORDS OR OTHER DOCUMENTATION OR FAILURE TO COMPLETE INSPECTION DOCUMENTATION SHALL RESULT IN A VIOLATION OF THIS PERMIT AND ANY OTHER APPLICABLE ACTS OR RULES (5.5.3.11.h).

8.2. DULY AUTHORIZED REPRESENTATIVE (8.7.3.)

THE PROJECT ENGINEER MAY DELEGATE AN INDIVIDUAL AND/OR CONSULTANT TO SIGN EPSC INSPECTIONS REPORTS. FOR SATISFYING SIGNATORY REQUIREMENTS FOR EPSC INSPECTION REPORTS, THE PROJECT ENGINEER AND NEWLY AUTHORIZED INDIVIDUAL ACCEPTING RESPONSIBILITY MUST COMPLETE AND SIGN THE TDOT CONSTRUCTION DIVISION EPSC DELEGATION OF AUTHORITY.

8.3. MAINTENANCE PRACTICES (5.1 AND 8.13.)

8.3.1. ALL CONTROLS WILL BE MAINTAINED IN GOOD AND EFFECTIVE OPERATING ORDER AND IN ACCORDANCE WITH TDOT STANDARD DRAWINGS AND GOOD ENGINEERING PRACTICES. (5.1. AND 5.5.3.1.b)

8.3.2. MAINTENANCE AND REPAIR ACTIVITIES ARE THE RESPONSIBILITY OF THE CONTRACTOR.

8.3.3. UPON CONCLUSION OF THE INSPECTIONS, EPSC MEASURES FOUND TO BE INEFFECTIVE SHALL BE REPAIRED, REPLACED, OR MODIFIED BEFORE THE NEXT RAIN EVENT, IF POSSIBLE, BUT IN NO CASE, MORE THAN 24 HOURS AFTER THE INSPECTION OR WHEN THE CONDITION IS IDENTIFIED. IF THE REPAIR, REPLACEMENT OR MODIFICATION IS NOT PRACTICAL WITHIN THE 24-HOUR TIMEFRAME, WRITTEN DOCUMENTATION PROVIDED BY THE CONTRACTOR SHALL BE PLACED IN THE FIELD DIARY AND EPSC INSPECTION REPORT. AN ESTIMATED REPAIR, REPLACEMENT OR MODIFICATION SCHEDULE SHALL BE DOCUMENTED WITHIN 24 HOURS AFTER IDENTIFICATION. (5.5.3.11.e).

8.3.4. SEDIMENT SHALL BE REMOVED FROM SEDIMENT CONTROL STRUCTURES (SEDIMENT TRAPS, SILT FENCE, SEDIMENT BASINS, OTHER CONTROLS, ETC.) WHEN THE DESIGN CAPACITY HAS BEEN REDUCED BY FIFTY PERCENT (50%). (5.5.3.1.d).

8.3.5. DURING SEDIMENT REMOVAL, THE CONTRACTOR SHALL TAKE STEPS TO ENSURE THAT STRUCTURAL COMPONENTS OF EPSC MEASURES ARE NOT DAMAGED AND THUS MADE INEFFECTIVE. IF DAMAGE DOES OCCUR, THE CONTRACTOR SHALL REPAIR THE EPSC MEASURES AT THE CONTRACTOR'S OWN EXPENSE.

8.3.6. CHECK DAMS WILL BE INSPECTED FOR STABILITY. SEDIMENT WILL BE REMOVED WHEN DEPTH REACHES ONE-HALF (½) THE HEIGHT OF THE DAM.

8.3.7. SEDIMENT REMOVED FROM SEDIMENT CONTROL STRUCTURES SHALL BE PLACED AND TREATED IN A MANNER SO THAT THE SEDIMENT IS CONTAINED WITHIN THE PROJECT LIMITS, DOES NOT MIGRATE INTO FEATURES REMOVED FROM, AND DOES NOT MIGRATE ONTO ADJACENT PROPERTIES AND/OR INTO WATERS OF THE STATE/U.S.

8.3.8. LITTER, CONSTRUCTION DEBRIS, AND CONSTRUCTION CHEMICALS EXPOSED TO STORMWATER WILL BE PICKED UP AND REMOVED FROM STORMWATER EXPOSURE PRIOR TO ANTICIPATED STORM EVENTS OR BEFORE BEING CARRIED OFF THE SITE BY WIND, OR OTHERWISE PREVENTED FROM BECOMING A POLLUTANT SOURCE FOR STORMWATER DISCHARGES. AFTER USE, MATERIALS USED FOR EROSION CONTROL WILL BE REMOVED (5.5.3.7.a).

8.3.9. ALL SEEDED AREAS WILL BE CHECKED FOR BARE SPOTS, EROSION WASHOUTS, AND VIGOROUS GROWTH FREE OF SIGNIFICANT WEED INFESTATIONS.

9. SITE ASSESSMENTS (5.5.3.8.)

QUALITY ASSURANCE SITE ASSESSMENTS OF EROSION PREVENTION AND SEDIMENT CONTROLS SHALL BE PERFORMED PER THE TDOT ENVIRONMENTAL DIVISION COMPLIANCE AND FIELD SERVICES OFFICE GUIDELINES.

10. STORMWATER MANAGEMENT (5.5.3.11.h)

10.1. STORMWATER MANAGEMENT WILL BE HANDLED BY TEMPORARY CONTROLS OUTLINED IN THIS SWPPP AND ANY PERMANENT CONTROLS NEEDED TO MEET PERMANENT STORMWATER MANAGEMENT NEEDS IN THE POST CONSTRUCTION PERIOD. PERMANENT CONTROLS WILL BE DEPICTED ON THE PLANS AND NOTED AS PERMANENT.

10.2. DESCRIBE ANY SPECIFIC POST-CONSTRUCTION MEASURES THAT WILL CONTROL VELOCITY, POLLUTANTS, AND/OR EROSION (5.5.3.6.c): _____

10.3. OTHER ITEMS NEEDING CONTROL (5.5.3.7.)

CONSTRUCTION MATERIALS: THE FOLLOWING MATERIALS OR SUBSTANCES ARE EXPECTED TO BE PRESENT ON THE SITE DURING THE CONSTRUCTION PERIOD. (CHECK ALL THAT APPLY).

☒ LUMBER, GUARDRAIL, TRAFFIC CONTROL DEVICES
☒ CONCRETE WASHOUT
☒ PIPE CULVERTS (I.E. CONCRETE, CORRUGATED METAL, HDPE, ETC.)
☒ MINERAL AGGREGATES, ASPHALT
☒ EARTH
☒ LIQUID TRAFFIC STRIPING MATERIALS, PAINT
☒ ROCK
☒ CURING COMPOUND
☐ EXPLOSIVES
☐ OTHER _____

THESE MATERIALS WILL BE HANDLED AS NOTED IN THIS SWPPP.

10.4. WASTE MATERIALS (5.5.3.7.c)

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

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10.5. HAZARDOUS WASTE (5.5.3.7.c) (8.8)

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

10.6. SANITARY WASTE (5.5.3.7.b)

PORTABLE SANITARY FACILITIES WILL BE PROVIDED ON ALL CONSTRUCTION SITES. SANITARY WASTE WILL BE COLLECTED FROM THE PORTABLE UNITS IN A TIMELY MANNER BY A LICENSED WASTE MANAGEMENT CONTRACTOR OR AS REQUIRED BY ANY LOCAL REGULATIONS. THE CONTRACTOR WILL OBTAIN ALL NECESSARY PERMITS TO DISPOSE OF SANITARY WASTE.

10.7. OTHER MATERIALS

THE FOLLOWING MATERIALS OR SUBSTANCES ARE EXPECTED TO BE PRESENT ON THE SITE DURING THE CONSTRUCTION PERIOD. (CHECK ALL THAT APPLY).

☒ FERTILIZERS AND LIME

☒ PESTICIDES AND/OR HERBICIDES

☒ DIESEL AND GASOLINE

☒ MACHINERY LUBRICANTS (OIL AND GREASE)

THESE MATERIALS WILL BE HANDLED AS NOTED IN THIS SWPPP.

11. NON-STORMWATER DISCHARGES (5.5.3.12.)

11.1. THE FOLLOWING NON-STORMWATER DISCHARGES ARE ANTICIPATED DURING THE CONSTRUCTION OF THIS PROJECT (CHECK ALL THAT APPLY):

☒ DEWATERING OF WORK AREAS OF COLLECTED STORMWATER AND GROUND WATER.

☒ WATERS USED TO WASH VEHICLES (OF DUST AND SOIL) WHERE DETERGENTS ARE NOT USED AND DETENTION AND/OR FILTERING IS PROVIDED BEFORE THE WATER LEAVES THE SITE.

☒ WATER USED TO CONTROL DUST. (3.5.3.1.n)

☒ POTABLE WATER SOURCES INCLUDING WATERLINE FLUSHING FROM WHICH CHLORINE HAS BEEN REMOVED TO THE MAXIMUM EXTENT PRACTICABLE.

☐ UNCONTAMINATED GROUNDWATER OR SPRING WATER.

☐ FOUNDATION OR FOOTING DRAINS WHERE FLOWS ARE NOT CONTAMINATED WITH POLLUTANTS.

☐ OTHER: _____

11.2. ALL ALLOWABLE NON-STORMWATER DISCHARGES WILL BE DIRECTED TO STABLE DISCHARGE STRUCTURES PRIOR TO LEAVING THE SITE. FILTERING OR CHEMICAL TREATMENT MAY BE NECESSARY PRIOR TO DISCHARGE. ALL CHEMICAL TREATMENTS MUST BE APPLIED PER SECTION 6 FLOCCULANTS.

11.3. THE DESIGN OF ALL IMPACTED EPSC MEASURES RECEIVING FLOW FROM ALLOWABLE NON-STORMWATER DISCHARGES MUST BE DESIGNED TO HANDLE THE VOLUME OF THE NON-STORMWATER COMPONENT.

11.4. WASH DOWN OR WASTE DISCHARGE OF CONCRETE TRUCKS WILL NOT BE PERMITTED ON-SITE UNLESS PROPER SETTLEMENT AREAS HAVE BEEN PROVIDED IN ACCORDANCE WITH BOTH STATE AND FEDERAL REGULATIONS.

11.5. ARE ANY DISCHARGES ASSOCIATED WITH INDUSTRIAL (NON-CONSTRUCTION STORMWATER) ACTIVITY EXPECTED (5.5.1.g)?

☐ YES ☒ NO

IF YES, SPECIFY THE LOCATION OF THE ACTIVITY AND ITS PERMIT NUMBER: _____

12. SPILL PREVENTION, MANAGEMENT AND NOTIFICATION (5.5.3.7.c, 6.1)

12.1. SPILL PREVENTION (5.5.3.7.c)

12.1.1. CONTRACTOR'S BULK FUEL AND PETROLEUM PRODUCTS STORED ON-SITE OR ADJACENT TO THE R.O.W. IN ABOVE GROUND STORAGE TANKS WITH AGGREGATE STORAGE CAPACITY IN EXCESS OF 1,320 GALLONS SHALL HAVE SECONDARY CONTAINMENT.

12.1.2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PREPARING A SPILL PREVENTION CONTROL AND COUNTERMEASURE (SPCC) PLAN AS REQUIRED BY TDOT SPECIAL PROVISION 107FP (REGARDING WATER QUALITY AND STORM WATER PERMITS) AND THE LAW PRIOR TO STORING 1320 GALLONS ON SITE.

12.1.3. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR OBTAINING ANY NECESSARY LOCAL, STATE, AND FEDERAL PERMITS. THE SPCC PLAN AND/OR PERMITS SHALL BE KEPT ON-SITE AND A COPY PROVIDED TO THE TDOT CONSTRUCTION ENGINEER.

12.2. MATERIAL MANAGEMENT

12.2.1. HOUSEKEEPING

ONLY CONSTRUCTION PRODUCTS NEEDED SHALL BE STORED ON-SITE BY THE CONTRACTOR. EXCEPT FOR BULK MATERIALS THE CONTRACTOR WILL STORE ALL MATERIALS UNDER COVER AND IN APPROPRIATE CONTAINERS. PRODUCTS MUST BE STORED IN ORIGINAL CONTAINERS AND LABELED. MATERIAL MIXING WILL BE CONDUCTED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. WHEN POSSIBLE, ALL PRODUCTS WILL BE USED COMPLETELY BEFORE PROPERLY DISPOSING OF THE CONTAINER OFF SITE. THE MANUFACTURER'S DIRECTIONS FOR DISPOSAL OF MATERIALS AND CONTAINERS WILL BE FOLLOWED. THE CONTRACTOR'S SITE SUPERINTENDENT WILL INSPECT MATERIALS STORAGE AREAS REGULARLY TO ENSURE PROPER USE AND DISPOSAL. DUST GENERATED WILL BE CONTROLLED IN AN ENVIRONMENTALLY SAFE MANNER. VEGETATION AREAS NOT ESSENTIAL TO THE CONSTRUCTION PROJECT WILL BE PRESERVED AND MAINTAINED AS NOTED ON THE PLANS.

12.2.2. HAZARDOUS MATERIALS

PRODUCTS MUST BE STORED IN ORIGINAL CONTAINERS UNLESS THE CONTAINER IS NOT RE-SEALABLE. ORIGINAL LABELS AND MATERIAL SAFETY DATA SHEETS WILL BE RETAINED IN A SAFE PLACE TO RELAY IMPORTANT PRODUCT INFORMATION. IF SURPLUS PRODUCT MUST BE DISPOSED OF, MANUFACTURER'S LABEL DIRECTIONS FOR DISPOSAL WILL BE FOLLOWED. MAINTENANCE AND REPAIR OF ALL EQUIPMENT AND VEHICLES INVOLVING OIL CHANGES, HYDRAULIC SYSTEM DRAIN DOWN, DE-GREASING OPERATIONS, FUEL TANK DRAIN DOWN AND REMOVAL, AND OTHER ACTIVITIES WHICH MAY RESULT IN THE ACCIDENTAL RELEASE OF CONTAMINANTS WILL BE CONDUCTED ON AN IMPERVIOUS SURFACE AND UNDER COVER DURING WET WEATHER TO PREVENT THE RELEASE OF CONTAMINANTS ONTO THE GROUND. WHEEL WASH WATER WILL BE COLLECTED AND ALLOWED TO SETTLE OUT SUSPENDED SOLIDS PRIOR TO DISCHARGE. WHEEL WASH WATER WILL NOT BE DISCHARGED DIRECTLY INTO ANY STORMWATER SYSTEM OR STORMWATER TREATMENT SYSTEM. POTENTIAL pH-MODIFYING MATERIALS SUCH AS: BULK CEMENT, CEMENT KILN DUST, FLY ASH, NEW CONCRETE WASHINGS AND CURING WATERS, CONCRETE PUMPING, AND MIXER WASHOUT WATERS WILL BE COLLECTED ON SITE AND MANAGED TO PREVENT CONTAMINATION OF STORMWATER RUNOFF.

12.3. PRODUCT SPECIFIC PRACTICES

12.3.1. PETROLEUM PRODUCTS: ALL ON-SITE VEHICLES WILL BE MONITORED FOR LEAKS AND RECEIVE REGULAR PREVENTIVE MAINTENANCE TO REDUCE THE CHANCE OF LEAKAGE. PETROLEUM PRODUCTS WILL BE STORED IN TIGHTLY SEALED CONTAINERS WHICH ARE CLEARLY LABELED.

12.3.2. FERTILIZERS: FERTILIZERS WILL BE APPLIED ONLY IN THE AMOUNTS SPECIFIED BY TDOT. ONCE APPLIED, FERTILIZERS WILL BE WORKED INTO THE SOIL TO LIMIT THE EXPOSURE TO STORMWATER. FERTILIZERS WILL BE STORED IN AN ENCLOSED AREA UNDER COVER. THE CONTENTS OF PARTIALLY USED FERTILIZER BAGS WILL BE TRANSFERRED TO SEALABLE CONTAINERS TO AVOID SPILLS.

12.3.3. PAINTS: ALL CONTAINERS WILL BE TIGHTLY SEALED AND STORED WHEN NOT REQUIRED FOR USE. THE EXCESS WILL BE DISPOSED OF PER THE MANUFACTURER'S INSTRUCTIONS AND APPLICABLE STATE AND LOCAL REGULATIONS.

12.3.4. CONCRETE TRUCKS: CONTRACTORS WILL PROVIDE DESIGNATED TRUCK WASHOUT AREAS ON THE SITE. THESE AREAS MUST BE SELF CONTAINED AND NOT CONNECTED TO ANY STORMWATER OUTLET OF THE SITE, AND PROPERLY SIGNED. UPON COMPLETION OF CONSTRUCTION WASHOUT AREAS WILL BE PROPERLY STABILIZED.

12.4. SPILL MANAGEMENT

IN ADDITION TO THE PREVIOUS HOUSEKEEPING AND MANAGEMENT PRACTICES, THE FOLLOWING PRACTICES WILL BE FOLLOWED FOR SPILL PREVENTION AND CLEANUP IF NECESSARY:

12.4.1. ALL ONSITE VEHICLES SHALL BE MONITORED FOR LEAKS AND RECEIVE REGULAR PREVENTATIVE MAINTENANCE TO REDUCE THE CHANGE OF LEAKAGE AND SPILLS.

12.4.2. FOR ALL HAZARDOUS MATERIALS STORED ON SITE, THE MANUFACTURER'S RECOMMENDED METHODS FOR SPILL CLEAN UP WILL BE CLEARLY POSTED. SITE PERSONNEL WILL BE MADE AWARE OF THE PROCEDURES AND THE LOCATIONS OF THE INFORMATION AND CLEANUP SUPPLIES.

12.4.3. APPROPRIATE CLEANUP MATERIALS AND EQUIPMENT WILL BE MAINTAINED BY THE CONTRACTOR IN THE MATERIALS STORAGE AREA ON-SITE AND UNDER COVER. SPILL RESPONSE EQUIPMENT SHALL BE INSPECTED AND MAINTAINED BY THE CONTRACTOR AS NECESSARY TO REPLACE ANY MATERIALS USED IN SPILL RESPONSE ACTIVITIES.

12.4.4. ALL SPILLS SHALL BE CLEANED IMMEDIATELY AFTER DISCOVERY AND THE MATERIALS DISPOSED OF PROPERLY. THE SPILL AREA WILL BE KEPT WELL VENTILATED AND PERSONNEL WILL WEAR APPROPRIATE PROTECTIVE CLOTHING TO PREVENT INJURY FROM CONTACT WITH A HAZARDOUS SUBSTANCE.

12.4.5. THE CONTRACTOR'S RESPONSIBLE PARTY WILL BE THE SPILL PREVENTION AND CLEANUP COORDINATOR. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT THE SITE SUPERINTENDENT HAS HAD APPROPRIATE TRAINING FOR HAZARDOUS MATERIALS HANDLING, SPILL MANAGEMENT, AND CLEANUP.

12.4.6. IF SPILLS REPRESENT AN IMMINENT THREAT OF ESCAPING THE SITE AND ENTERING RECEIVING WATERS, PERSONNEL WILL RESPOND IMMEDIATELY TO CONTAIN THE RELEASE AND NOTIFY THE SUPERINTENDENT AFTER THE SITUATION HAS BEEN STABILIZED.

12.4.7. IF AN OIL SHEEN IS OBSERVED ON SURFACE WATER (E.G. SETTLING PONDS, DETENTION PONDS, SWALES), ACTION WILL BE TAKEN IMMEDIATELY TO REMOVE THE MATERIAL CAUSING THE SHEEN. THE CONTRACTOR WILL USE APPROPRIATE MATERIALS TO CONTAIN AND ABSORB THE SPILL. THE SOURCE OF THE OIL SHEEN WILL ALSO BE IDENTIFIED AND REMOVED OR REPAIRED AS NECESSARY TO PREVENT FURTHER RELEASES.

12.4.8. IF A SPILL OCCURS THE CONTRACTOR'S RESPONSIBLE PARTY SHALL BE RESPONSIBLE FOR COMPLETING THE SPILL REPORTING FORM AND FOR REPORTING THE SPILL TO THE TDOT PROJECT RESPONSIBLE PARTY. ALL SPILLS MUST BE REPORTED TO THE APPROPRIATE AGENCY, AND MEASURES SHALL BE TAKEN IMMEDIATELY TO PREVENT THE POLLUTION OF WATERS OF THE STATE/U.S., INCLUDING GROUNDWATER, SHOULD A SPILL OCCUR.

12.5. SPILL NOTIFICATION (6.1)

WHERE A RELEASE CONTAINING A HAZARDOUS SUBSTANCE IN AN AMOUNT EQUAL TO, OR MORE THAN A REPORTABLE QUANTITY ESTABLISHED UNDER EITHER 40 CFR 117 OR 40 CFR 302 OCCURS DURING A 24 HOUR PERIOD:

12.5.1. THE TDOT PROJECT ENGINEER IS RESPONSIBLE FOR NOTIFYING THE REGIONAL PROJECT DEVELOPMENT OFFICE (E.G. TRANSPORTATION ENVIRONMENTAL STUDIES SPECIALIST) AS SOON AS HE OR SHE HAS KNOWLEDGE OF THE DISCHARGE.

12.5.2. THE TDOT REGIONAL PROJECT DEVELOPMENT OFFICE WILL NOTIFY THE LOCAL TDEC ENVIRONMENTAL FIELD OFFICE AND ANY OTHER APPLICABLE REGULATORY AGENCIES WITHIN 24 HOURS OF THE SPILL.

12.5.3. IN ADDITION TO ANY FOLLOW UP NOTIFICATIONS REQUIRED BY FEDERAL LAW, A WRITTEN DESCRIPTION OF THE RELEASE, DATE OF RELEASE AND CIRCUMSTANCES LEADING TO THE RELEASE, WHAT ACTIONS WERE TAKEN TO MITIGATE EFFECTS OF THE RELEASE, AND STEPS TAKEN TO MINIMIZE THE CHANCE OF FUTURE OCCURRENCES WILL BE SUBMITTED TO THE APPROPRIATE TDEC ENVIRONMENTAL FIELD OFFICE WITHIN 2 WEEKS OF KNOWLEDGE OF THE RELEASE.

12.5.4. THE SWPPP MUST BE MODIFIED WITHIN 2 WEEKS OF KNOWLEDGE OF THE RELEASE PROVIDING A DESCRIPTION OF THE RELEASE, CIRCUMSTANCES LEADING TO THE RELEASE, AND THE DATE OF RELEASE. THE SWPPP WILL BE REVIEWED AND MODIFIED AS

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NECESSARY TO IDENTIFY MEASURES TO PREVENT THE REOCCURRENCE OF SUCH RELEASES AND TO RESPOND TO SUCH RELEASES.

13. RECORD-KEEPING

13.1. REQUIRED RECORDS

TDOT OR THEIR DULY AUTHORIZED REPRESENTATIVE WILL MAINTAIN AT THE SITE THE FOLLOWING RECORDS OF CONSTRUCTION ACTIVITIES (7.2.1.) (7.2.1.):

13.1.1. THE DATES WHEN MAJOR GRADING ACTIVITIES OCCUR.

13.1.2. THE DATES WHEN CONSTRUCTION ACTIVITIES TEMPORARILY OR PERMANENTLY CEASE ON A PORTION OF THE SITE.

13.1.3. THE DATES WHEN STABILIZATION MEASURES ARE INITIATED.

13.1.4. RECORDS EPSC INSPECTION REPORTS AND CORRECTIVE MEASURES.

13.1.5. RECORDS OF QUALITY ASSURANCE SITE ASSESSMENTS.

13.1.6. COPY OF SITE EPSC INSPECTOR'S CERTIFICATION AND/OR LICENSING

13.1.7. A COPY OF ANY REGULATORY CORRESPONDENCE REGARDING THE EFFECTIVENESS OF THE SWPPP OR EPSC CONTROLS.

13.2. RAINFALL MONITORING PLAN (7.2.1.):

13.2.1. EQUIPMENT

AT A MINIMUM, THE CONTRACTOR WILL INSTALL A FENCE POST TYPE RAIN GAUGE TO MEASURE RAINFALL. THE STANDARD FENCE POST RAIN GAUGE WILL BE A WEDGE-SHAPED GAUGE THAT MEASURES UP TO 6 INCHES OF RAINFALL. AN ENGLISH SCALE WILL BE PROVIDED ON ONE FACE, WITH A METRIC SCALE ON THE OTHER FACE. GRADUATION WILL BE PERMANENTLY MOLDED IN DURABLE WEATHER-RESISTANT PLASTIC. THE MINIMUM GRADUATION WILL BE 0.01 INCH (OR 0.1MM). AN ALUMINUM BRACKET WITH SCREWS MAY BE USED TO MOUNT THE GAUGE ON A WOODEN SUPPORT.

13.2.2. LOCATION

THE RAIN GAUGE WILL BE LOCATED AT OR ALONG THE PROJECT SITE, AS DEFINED IN THE NOI OF THE NPDES PERMIT, IN AN OPEN AREA SUCH THAT THE MEASUREMENT WILL NOT BE INFLUENCED BY OUTSIDE FACTORS (I.E. OVERHANGS, GUTTER, TREES, ETC.). AT LEAST ONE RAIN GAUGE PER LINEAR MILE IS REQUIRED ALONG (AS MEASURED ALONG THE CENTERLINE OF THE PRIMARY ALIGNMENT) THE PROJECT WHERE CLEARING, GRUBBING, EXCAVATION, GRADING, CUTTING OR FILLING IS ACTIVELY PERFORMED, OR EXPOSED SOIL HAS NOT YET BEEN PERMANENTLY STABILIZED.

13.2.3. METHODS

RAINFALL MONITORING WILL BE INITIATED PRIOR TO CLEARING, GRUBBING, EXCAVATION, GRADING, CUTTING, OR FILLING, EXCEPT AS SUCH MINIMAL CLEARING MAY BE NECESSARY TO INSTALL A RAIN GAUGE IN AN OPEN AREA. THE RAIN GAUGE WILL BE CHECKED FOR OPERATIONAL SOUNDNESS DAILY (DURING NORMAL BUSINESS HOURS) IN WET TIMES AND WEEKLY IN DRY TIMES. GAUGES WILL BE REPAIRED OR REPLACED ON THE SAME DAY IF FOUND TO BE NON-OPERATIONAL OR MISSING.

13.2.4. EACH RAIN GAUGE WILL BE READ (FOR DETAILED RECORDS OF RAINFALL) AND EMPTIED AFTER EVERY RAINFALL EVENT OCCURRING ON THE PROJECT SITE AT APPROXIMATELY THE SAME TIME OF THE DAY (DURING NORMAL BUSINESS HOURS). DURING PERIODS OF DRY CONDITIONS, IT WILL NOT BE NECESSARY TO READ THE RAIN GAUGE EVERY DAY. IN LIEU OF THIS REQUIREMENT ON WEEKENDS AND ON STATE HOLIDAYS, THE RAIN GAUGES CAN BE EMPTIED THE NEXT BUSINESS DAY AND A REFERENCE SITE USED FOR A RECORD OF DAILY AMOUNT OF PRECIPITATION FOR THOSE DAYS. A REFERENCE SITE IS THE DOCUMENTATION FROM THE CLOSEST GAUGE WITHIN PROXIMITY OF THE PROJECT FROM A RECOGNIZED SOURCE SUCH AS THE NOAA NATIONAL WEATHER SERVICE.

13.2.5. DETAILED RECORDS WILL BE RECORDED OF RAINFALL EVENTS INCLUDE DATES, AMOUNTS OF RAINFALL, AND THE APPROXIMATE DURATION (OR THE STARTING AND ENDING TIMES). THE RAINFALL RECORDS SHALL BE RECORDED ON THE TDOT RAINFALL RECORD SHEET AND SHALL BE MAINTAINED IN THE "DOCUMENTATION AND PERMITS" BINDER.

13.2.6. IF THE RAINFALL EVENT IS STILL IN PROGRESS AT THE DAILY RECORDING TIME, THE GAUGE WILL BE EMPTIED AND THE RECORD WILL INDICATE THAT THE STORM EVENT WAS STILL IN PROGRESS.

13.2.7. RAIN GAUGE INFORMATION (DETAILED RECORDS), INCLUDING THE LOCATION OF THE NEAREST OUTFALL, WILL BE RECORDED ON THE EPSC INSPECTION REPORT FORMS AT THE TIME OF MEASUREMENT.

13.3. KEEPING PLANS CURRENT (5.4.)

13.3.1. THE EPSC PLAN IS TO SERVE AS AN INITIAL GUIDE FOR SITE PERSONNEL AS THE CONSTRUCTION PROCESS DEVELOPS. IT MUST BE AMENDED, MODIFIED, AND UPDATED WHENEVER EPSC INSPECTIONS INDICATE, OR WHERE STATE OR FEDERAL REGULATORY OFFICIALS DETERMINE EPSC MEASURES ARE PROVING INEFFECTIVE IN ELIMINATING OR SIGNIFICANTLY MINIMIZING POLLUTANT SOURCES OR ARE OTHERWISE NOT ACHIEVING THE GENERAL OBJECTIVES OF CONTROLLING POLLUTANTS IN STORMWATER DISCHARGES ASSOCIATED WITH THE CONSTRUCTION ACTIVITY.

13.3.2. THE STAGES DEPICTED WITHIN THE EPSC PLANS MAY NOT COINCIDE WITH THE ACTUAL STAGES OF CONSTRUCTION ESTABLISHED BY THE CONTRACTOR DURING CONSTRUCTION, THUS MODIFICATIONS WILL BE REQUIRED TO ENSURE THE EPSC PLAN IS MAINTAINED TO DEPICT CURRENT SITE CONDITIONS. IT SHOULD BE MAINTAINED SUCH THAT IT WILL ALWAYS REFLECT THE MEASURES THAT ARE INSTALLED DURING THE VARIOUS STAGES OF CONSTRUCTION. IT IS IMPRACTICAL TO DETERMINE ALL THE INTERMEDIATE STAGES OF CONSTRUCTION THAT WILL OCCUR, THUS THESE DOCUMENTS MUST BE UPDATED THROUGHOUT THE LIFE OF THE CONSTRUCTION PROJECT.

13.3.3. THE TDOT EPSC INSPECTOR OR THEIR DULY AUTHORIZED REPRESENTATIVE WILL MODIFY AND UPDATE THE SWPPP WHEN ANY OF THE FOLLOWING CONDITIONS APPLY:

13.3.3.1. WHENEVER THERE IS A CHANGE IN THE SCOPE OF THE PROJECT THAT WOULD BE EXPECTED TO HAVE A SIGNIFICANT EFFECT ON THE DISCHARGE OF POLLUTANTS TO THE WATERS OF THE STATE AND WHICH HAS NOT OTHERWISE BEEN ADDRESSED IN THE SWPPP;

13.3.3.2. WHENEVER INSPECTIONS OR INVESTIGATIONS BY SITE OPERATORS, LOCAL, STATE, OR FEDERAL OFFICIALS INDICATE THE SWPPP IS PROVING INEFFECTIVE IN ELIMINATING OR SIGNIFICANTLY MINIMIZING POLLUTANTS FROM CONSTRUCTION ACTIVITY SOURCES, OR IS OTHERWISE NOT ACHIEVING THE GENERAL OBJECTIVES OF CONTROLLING POLLUTANTS IN STORMWATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITY; WHERE LOCAL, STATE, OR FEDERAL OFFICIALS DETERMINE THAT THE SWPPP IS INEFFECTIVE IN ELIMINATING OR SIGNIFICANTLY MINIMIZING POLLUTANT SOURCES, A COPY OF ANY CORRESPONDENCE TO THAT EFFECT MUST BE RETAINED IN THE SWPPP;

13.3.3.3. WHEN ANY NEW OPERATOR AND/OR SUB-OPERATOR IS ASSIGNED OR RELIEVED OF THEIR RESPONSIBILITY TO IMPLEMENT A PORTION OF THE SWPPP;

13.3.3.4. TO PREVENT A NEGATIVE IMPACT TO LEGALLY PROTECTED STATE OR FEDERALLY LISTED OR PROPOSED THREATENED OR ENDANGERED AQUATIC FAUNA;

13.3.3.5. WHEN THERE IS A CHANGE IN CHEMICAL TREATMENT METHODS INCLUDING: USE OF DIFFERENT TREATMENT CHEMICALS, DIFFERENT DOSAGE OR APPLICATION RATES OR A DIFFERENT AREA OF APPLICATION NOT SPECIFIED ON THE EPSC PLANS.

13.3.3.6. ALL SWPPP REVISION(S) SHALL BE RECORDED WITHIN 1 WEEK BY THE PROJECT EPSC INSPECTOR.

13.3.3.7. WHEN A TMDL IS DEVELOPED FOR THE RECEIVING WATERS FOR A POLLUTANT OF CONCERN (SILTATION AND/OR HABITAT ALTERATION), CONSTRUCTION SHALL NOTIFY THE PERMITS SECTION FOR PROPER COORDINATION.

13.4. MAKING PLANS ACCESSIBLE

13.4.1. TDOT WILL RETAIN A COPY OF THIS SWPPP (INCLUDING A COPY OF THE "DOCUMENTATION AND PERMITS" BINDER AT THE CONSTRUCTION SITE (OR OTHER LOCATION ACCESSIBLE TO TDEC AND THE PUBLIC) FROM THE DATE CONSTRUCTION COMMENCES TO THE DATE OF PERMANENT STABILIZATION. TDOT WILL HAVE A COPY OF THE SWPPP AVAILABLE AT THE LOCATION WHERE WORK IS OCCURRING ON-SITE FOR THE USE OF OPERATORS AND THOSE IDENTIFIED AS HAVING RESPONSIBILITIES UNDER THE SWPPP WHENEVER THEY ARE ON THE CONSTRUCTION SITE (7.2.).

13.4.2. PRIOR TO THE INITIATION OF LAND DISTURBING ACTIVITIES AND UNTIL THE SITE HAS MET THE PERMANENT STABILIZATION CRITERIA, TDOT OR THEIR DULY AUTHORIZED REPRESENTATIVE WILL POST A NOTICE NEAR THE MAIN ENTRANCE OF THE CONSTRUCTION SITE WITH THE FOLLOWING INFORMATION (5.3.4.) (7.2.1.):

13.4.2.1. A COPY OF THE NOTICE OF COVERAGE (NOC) WITH THE NPDES PERMIT NUMBER FOR THE PROJECT;

13.4.2.2. THE INDIVIDUAL NAME, COMPANY NAME, E-MAIL ADDRESS (IF APPLICABLE) AND TELEPHONE NUMBER OF THE LOCAL PROJECT SITE OWNER AND OPERATOR CONTACT;

13.4.2.3. A BRIEF DESCRIPTION OF THE PROJECT; AND

13.4.2.4. THE LOCATION OF THE SWPPP.

13.4.3. ALL INFORMATION DESCRIBED IN SECTION 13.4.2 MUST BE MAINTAINED IN LEGIBLE CONDITION. IF POSTING THIS INFORMATION NEAR A MAIN ENTRANCE IS INFEASIBLE DUE TO SAFETY CONCERNS, THE NOTICE SHALL BE POSTED IN A LOCAL BUILDING. THE NOTICE MUST BE PLACED IN A PUBLICLY ACCESSIBLE LOCATION WHERE CONSTRUCTION IS ACTIVELY UNDERWAY AND MOVED AS NECESSARY.

13.5. NOTICE OF TERMINATION (9.0.)

13.5.1. WHEN ALL STORMWATER DISCHARGES FROM CONSTRUCTION ACTIVITIES THAT ARE AUTHORIZED BY THE PERMIT ARE ELIMINATED BY PERMANENT STABILIZATION, THE TDOT REGIONAL ENGINEER WILL SUBMIT A NOTICE OF TERMINATION (NOT) THAT IS SIGNED IN ACCORDANCE WITH THE PERMIT TO THE TDEC CENTRAL OFFICE IN NASHVILLE, TN.

13.5.2. FOR THE PURPOSES OF THE CERTIFICATION REQUIRED BY THE NOT, THE ELIMINATION OF STORMWATER DISCHARGES ASSOCIATED WITH THE CONSTRUCTION ACTIVITY MEANS THE

13.5.2.1. ALL EARTH-DISTURBING ACTIVITIES ON THE SITE ARE COMPLETED AND ALL DISTURBED SOILS AT THE PORTION OF THE CONSTRUCTION SITE WHERE THE OPERATOR HAD CONTROL HAVE BEEN PERMANENTLY STABILIZED; AND

13.5.2.2. ALL CONSTRUCTION MATERIALS, WASTE AND WASTE HANDLING DEVICES, AND ALL EQUIPMENT, AND VEHICLES THAT WERE USED DURING CONSTRUCTION HAVE BEEN REMOVED AND PROPERLY DISPOSED; AND

13.5.2.3. ALL STORMWATER CONTROLS THAT WERE INSTALLED AND MAINTAINED DURING CONSTRUCTION, EXCEPT THOSE THAT ARE INTENDED FOR LONG-TERM USE FOLLOWING TERMINATION OF PERMIT COVERAGE, HAVE BEEN REMOVED; AND

13.5.2.4. ALL POTENTIAL POLLUTANTS AND POLLUTANT GENERATING ACTIVITIES ASSOCIATED WITH CONSTRUCTION HAVE BEEN REMOVED; AND

13.5.2.5. THE PERMITTEE HAS IDENTIFIED WHO IS RESPONSIBLE FOR ONGOING MAINTENANCE OF ANY STORMWATER CONTROLS LEFT ON THE SITE FOR LONG-TERM USE FOLLOWING TERMINATION OF PERMIT COVERAGE; AND

13.5.2.6. TEMPORARY EPSC MEASURES HAVE BEEN OR WILL BE REMOVED AT AN APPROPRIATE TIME TO ENSURE PERMANENT STABILIZATION IS MAINTAINED; AND

13.5.2.7. ALL STORMWATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITIES FROM THE IDENTIFIED SITE THAT ARE AUTHORIZED BY A NPDES GENERAL PERMIT HAVE OTHERWISE BEEN ELIMINATED FROM THE PORTION OF THE CONSTRUCTION SITE WHERE THE OPERATOR HAD CONTROL.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

STORMWATER POLLUTION PREVENTION PLAN

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

TYPE	YEAR	PROJECT NO.	SHEET NO.
PSE	2026	HSIP-131(33)	S-7

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.

Keven Brown

AUTHORIZED TDOT PERSONNEL SIGNATURE (5.3.3.)

KEVEN BROWN

PRINTED NAME

TEAM LEAD

TITLE

5-7-26

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			
CORPS OF ENGINEERS (USACE)			
TVA 26A			
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.
PS&E	2026	HSIP-131(33)	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		305+30 RT	3.50	16.393			YES	NO	STR-1 (Beaver Creek)	
OUT-2		201+75 RT	3.00	0.044	0.44		NO	NO	STR-1 (Beaver Creek)	
OUT-3		201+75 RT	10.00	0.547	0.547		NO	NO	STR-1 (Beaver Creek)	
OUT-4		201+86 RT	3.00	0.080	0.080		NO	NO	STR-1 (Beaver Creek)	
OUT-5		201+86 RT	1.20	0.035	0.035		NO	NO	STR-1 (Beaver Creek)	
OUT-6		305+30 LT	3.50	0.961	16.393		NO	YES	STR-1 (Beaver Creek)	
OUT-7		302+75.RT	5.00	0.494			NO	NO	STR-1 (Beaver Creek)	
OUT-8		302+75.RT	2.50	0.115			NO	NO	STR-1 (Beaver Creek)	
OUT-9		303+00 RT	1.50	0.068			NO	NO	STR-1 (Beaver Creek)	
OUT-10		303+00 RT	1.50	0.043			NO	NO	STR-1 (Beaver Creek)	
OUT-11		303+50 RT	3.50	0.208			NO	NO	STR-1 (Beaver Creek)	

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

TENN.	YEAR	SHEET NO.
	2026	U1-1
FED. AID PROJ. NO.	HSIP-131(33)	
STATE PROJ. NO.	47027-3222-94	

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF ENGINEERING

KNOX COUNTY

SR-131; INTERSECTION AT HARRELL ROAD/CARPENTER ROAD (RSAR)

UTILITIES

STATE HIGHWAY NO. 131 U.S. ROUTE NO. N/A

UTILITIES INDEX

SHEET NAME	SHEET NUMBER
UTILITIES INDEX, UTILITY OWNERS	U1 SERIES
KNOXVILLE UTILITIES BOARD (GAS)	U2 SERIES
WEST KNOX UTILITY DISTRICT (WATER)	U3 SERIES
WEST KNOX UTILITY DISTRICT (SEWER)	U4 SERIES

UTILITIES IN ROADWAY CONTRACT

GAS: KNOXVILLE UTILITIES BOARD 4505 MIDDLESBROOK PIKE KNOXVILLE, TN 37921 PETER TRAPKA 423-881-5225 (MOVE-IN-STATE)	SEWER: WEST KNOX UTILITY DISTRICT 2328 LOVELL ROAD KNOXVILLE, TN 37928-0199 JIM REESE 865-690-2521 EXT. 236 (MOVE-IN-STATE)
WATER: WEST KNOX UTILITY DISTRICT 2328 LOVELL ROAD KNOXVILLE, TN 37928-0199 JIM REESE 865-690-2521 EXT. 236 (MOVE-IN-STATE)	

UTILITIES NOT IN ROADWAY CONTRACT

COMM: WINDSTREAM COMMUNICATIONS TOMMY RAYFIELD 931-994-1249 (NOT-IN-PROJECT-LIMITS)	ELEC: KNOXVILLE UTILITIES BOARD 4505 MIDDLESBROOK PIKE KNOXVILLE, TN 37921 DANIEL McELYEA 865-216-0752 (NO-COST)
COMM: IRIS NETWORKS 211 COMMERCE STREET NASHVILLE, TN 37201 DWAYNE LAXTON 865-617-8711 (NO-COST)	FIBER: TDS TELECOM 10201 UPPER RIDGE WAY KNOXVILLE, TN 37932 JASON WALKER 865-740-4269 (NO-COST)
COMM: COMCAST 5720 ASHEVILLE HWY KNOXVILLE, TN 37924 JASON KELLY 865-437-0295 (NO-RESPONSE)	COMM: FRONTIER 725 E MARKHAM AVE DURHAM, NC 27701 CHAD FOSTER 919-471-3654 (NO-COST)

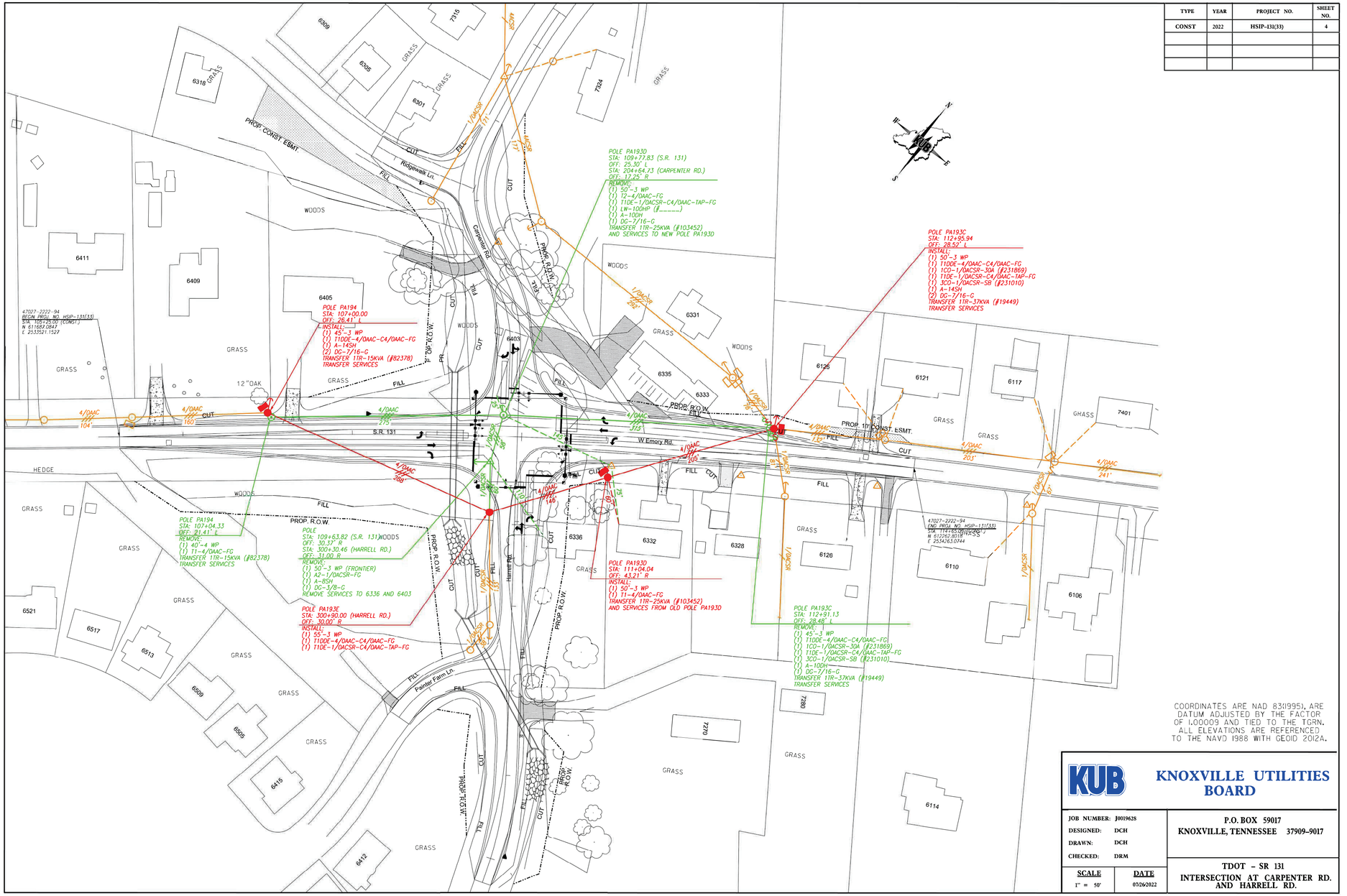
STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

UTILITY INDEX,
UTILITY OWNERS

$$$$SYTIME$$$$$$$
$$$DGNSPEC$$$$$$$

TENN.	YEAR	SHEET NO.
	2026	U1-2
FED. AID PROJ. NO.	HSIP-131(33)	
STATE PROJ. NO.	47027-3222-94	

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST	2022	HSIP-131(33)	4



COORDINATES ARE NAD 83(1995), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00009 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988 WITH GEOID 2012A.

KUB **KNOXVILLE UTILITIES BOARD**

JOB NUMBER: J0019628 DESIGNED: DCH DRAWN: DCH CHECKED: DRM	P.O. BOX 59017 KNOXVILLE, TENNESSEE 37909-9017
SCALE: 1" = 50' / DATE: 07/26/2022	TDOT – SR 131 INTERSECTION AT CARPENTER RD. AND HARRELL RD.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

UTILITIES REFERENCE

UTILITY REFERENCE - KNOXVILLE UTILITY BOARD- ELECTRIC (NO COST - MOVE -PRIOR; NOT TO SCALE)

$$$$SYTIME$$$$$$
$$$$DGNSPEC$$$$$$

TENN.	YEAR	SHEET NO.
	2026	U1-3
FED. AID PROJ. NO.	HSIP-131(33)	
STATE PROJ. NO.	47027-3222-94	

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2022	HSIP-131(33)	4B

47027-3222-94
BEGIN PROJ. NO. HSIP-131(33)
STA. 105+25.00 (CONST.)
N 611687.0847
E 2533521.1527

47027-2222-94
END PROJ. NO. HSIP-131(33)
STA. 114+59.00 (R.O.W.)
N 612259.5270
E 2534258.0469

47027-3222-94
END PROJ. NO. HSIP-131(33)
STA. 114+65.00 (CONST.)
N 612262.8018
E 2534263.0744

CARPENTER RD STA. 201+86.00 =
RIDGEWALK LN STA. 500+00.00
N 612180.8674
E 2533653.2295

S.R. 131 STA. 109+95.00 =
HARRELL RD STA. 300+00.00 =
CARPENTER RD STA.204+90.00
N 611989.3473
E 2533881.0046

HARRELL RD STA. 302+75.00 =
PAINTER FARM LN STA. 400+00.00
N 611773.0523
E 2534050.8324

FXWE HH189
N:BH-4(30"x48"x36") = 1
N:BFO(144)MO= 200
N:HBFO(144) = 1
N:HO-1(145-288) = 144
N:WBFO = 166
N:WBFOV = 50

FXWE 189
N:BFOI(144) = 56
N:BFOV(1)(1.25")PP = 26
N:BM55F = 1
N:BM82 = 1
N:PE1-3G = 1
N:PF1-5 = 1
N:PM2A = 1
N:PM11 = 1
N:PM52 = 1

FXWE 190
N:CO(144)10M = 166
N:PE1-3G = 1
N:PF1-5 = 1
N:PM2A = 1
N:PM11 = 1
N:PM52 = 1
N:WC = 200
R:XXBM53 = 1
R:XXBM82 = 1
R:XXPE = 1
R:XXPF = 1

FXWE 191
N:CO(144)10M = 288
N:PE1-3G = 1
N:PF1-5 = 1
N:PM2A = 1
N:PM11 = 1
N:PM52 = 1
N:WC = 200
R: XXCO = 275

FXWE 191.5
N:CO(144)10M = 146
N:PM2A = 1
N:PM52 = 1

FXWE 192
N:CO(144)10M = 205
N:CO(144)MO = 100
N:PE1-3G = 1
N:PF1-5 = 1
N:PM2A = 1
N:PM11 = 1
N:PM18 = 1
N:PM52 = 1
N:WC2 = 2
R: XXCO = 315

FXWE 193
N:CO(144)E = 136
N:PM82 = 1
R: XXCO = 137 (RETIRE IN PLACE)

FXWE 194
N:CO(144)E = 203
N:PM52 = 1
R: XXCO = 203 (RETIRE IN PLACE)

FXWE 195
N:CO(144)E = 241
N:CO(144)MO = 200
N:HAFO(144) = 1
N:HO-1(145-288) = 144
N:PM52 = 1
N:WC = 200
R: XXCO = 241 (RETIRE IN PLACE)

SEALED BY

COORDINATES ARE NAD 83(1995), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00009 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988 WITH GEOID 2012A.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PROPOSED
LAYOUT

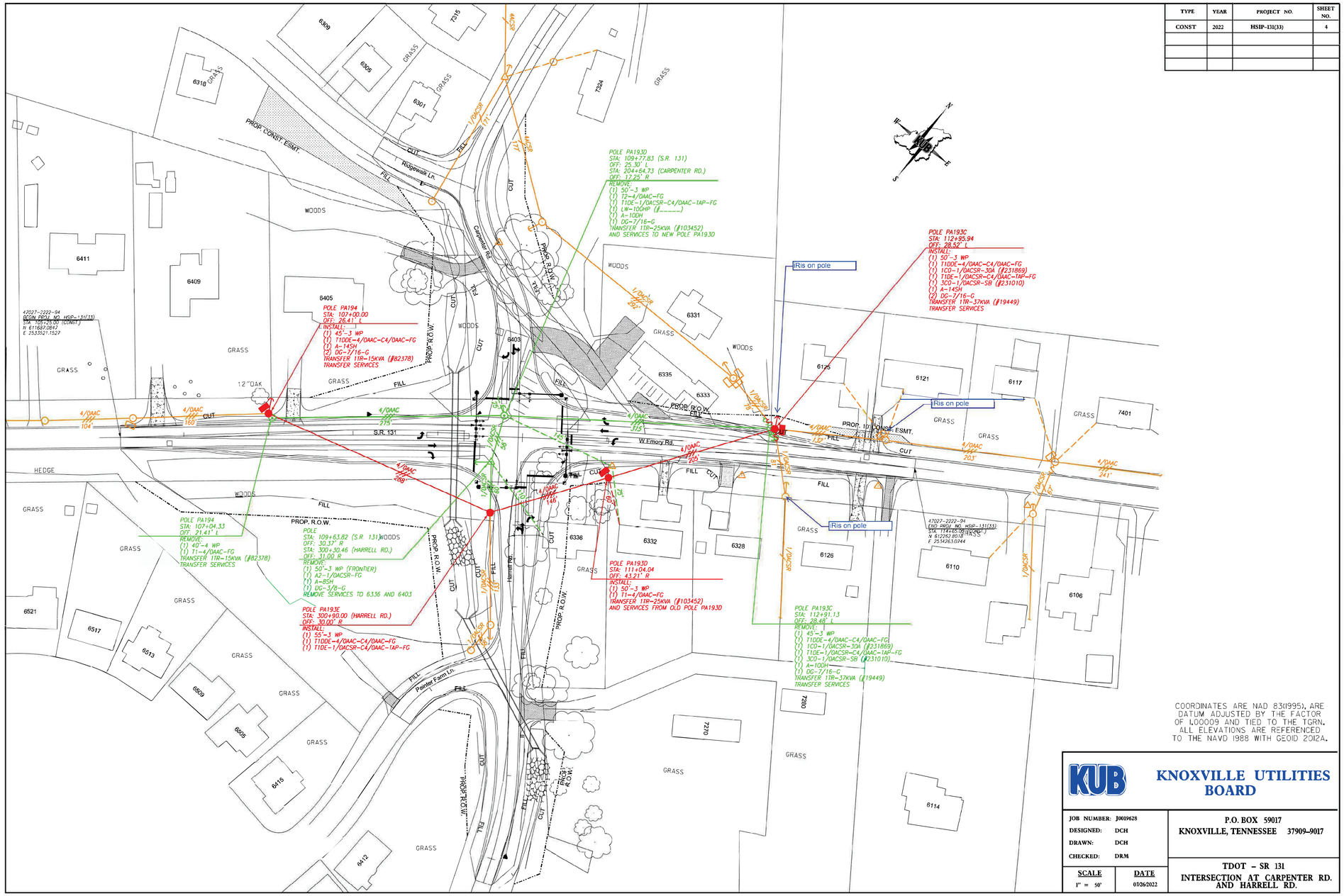
STA. 105+25 TO STA. 114+65
SCALE: 1"= 50'

4/14/2025
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$$$$SYTIME$$$$$$$
$$$$DGNSPECS$$$$$$$

TENN.	YEAR	SHEET NO.
	2026	U1-4
FED. AID PROJ. NO.	HSIP-131(33)	
STATE PROJ. NO.	47027-3222-94	

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST	2022	HSIP-131(33)	4



COORDINATES ARE NAD 83(1995), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00009 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988 WITH GEOID 2012A.

KNOXVILLE UTILITIES BOARD

P.O. BOX 59017
KNOXVILLE, TENNESSEE 37909-9017

JOB NUMBER:	J0019628
DESIGNED:	DCH
DRAWN:	DCH
CHECKED:	DRM
SCALE	1" = 50'
DATE	07/26/2022

TDOT – SR 131
INTERSECTION AT CARPENTER RD. AND HARRELL RD.

UTILITY REFERENCE - IRIS - COMMUNICATION
(NO COST - MOVE -PRIOR; NOT TO SCALE, ATTACH TO KUB POLES))

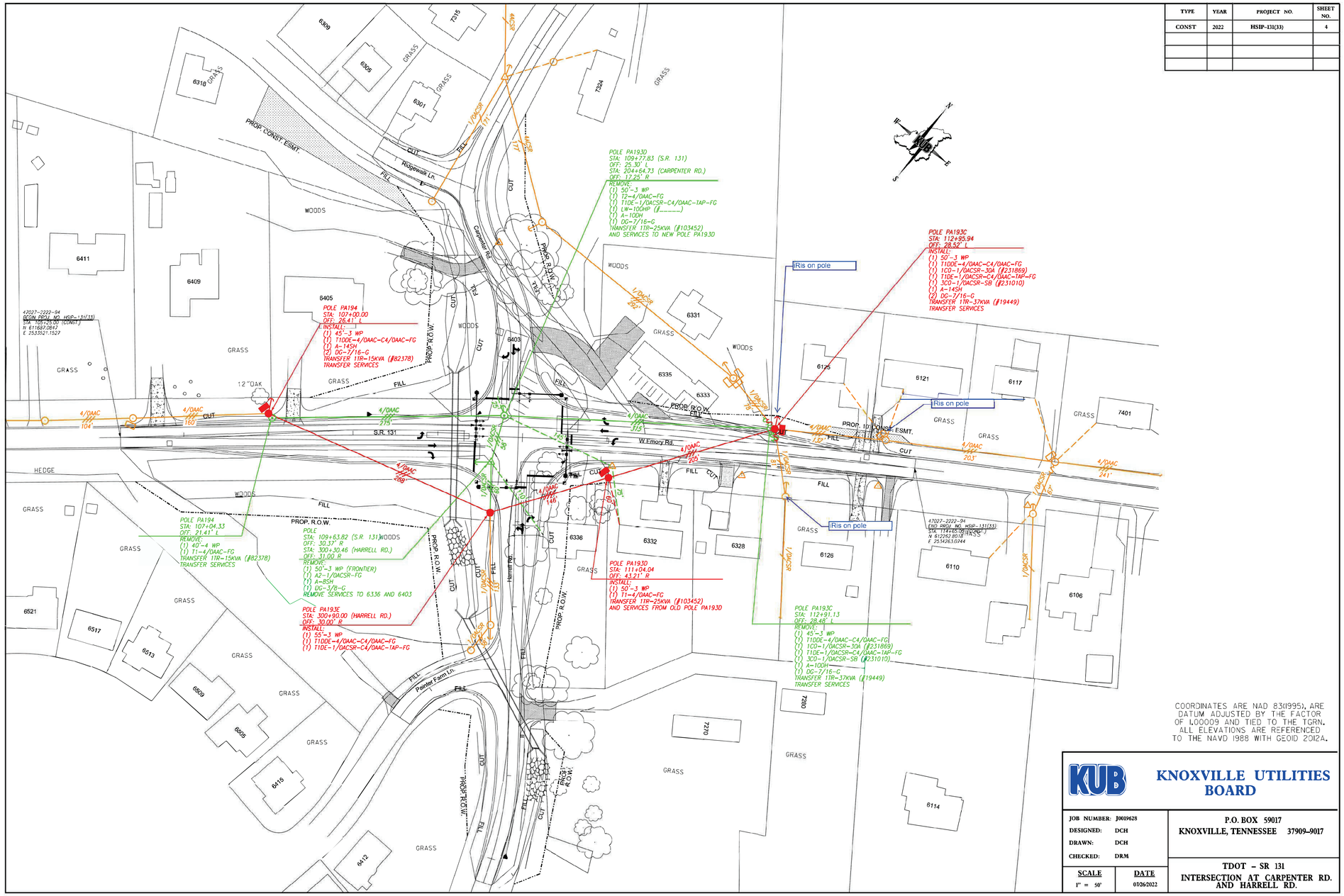
STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

UTILITIES REFERENCE

$$$$SYTIME$$$$$$
$$ DGNSPEC $$

TENN.	YEAR	SHEET NO.
	2026	U1-5
FED. AID PROJ. NO.	HSIP-131(33)	
STATE PROJ. NO.	47027-3222-94	

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST	2022	HSIP-131(33)	4



COORDINATES ARE NAD 83(1995), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00009 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988 WITH GEOID 2012A.

KNOXVILLE UTILITIES BOARD

P.O. BOX 59017
KNOXVILLE, TENNESSEE 37909-9017

JOB NUMBER:	J0019628
DESIGNED:	DCH
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SCALE	1" = 50'
DATE	07/26/2022

TDOT – SR 131
INTERSECTION AT CARPENTER RD. AND HARRELL RD.

UTILITY REFERENCE - COMCAST- COMMUNICATION
(NO COST - MOVE -PRIOR; NOT TO SCALE , ATTACH TO KUB POLES)

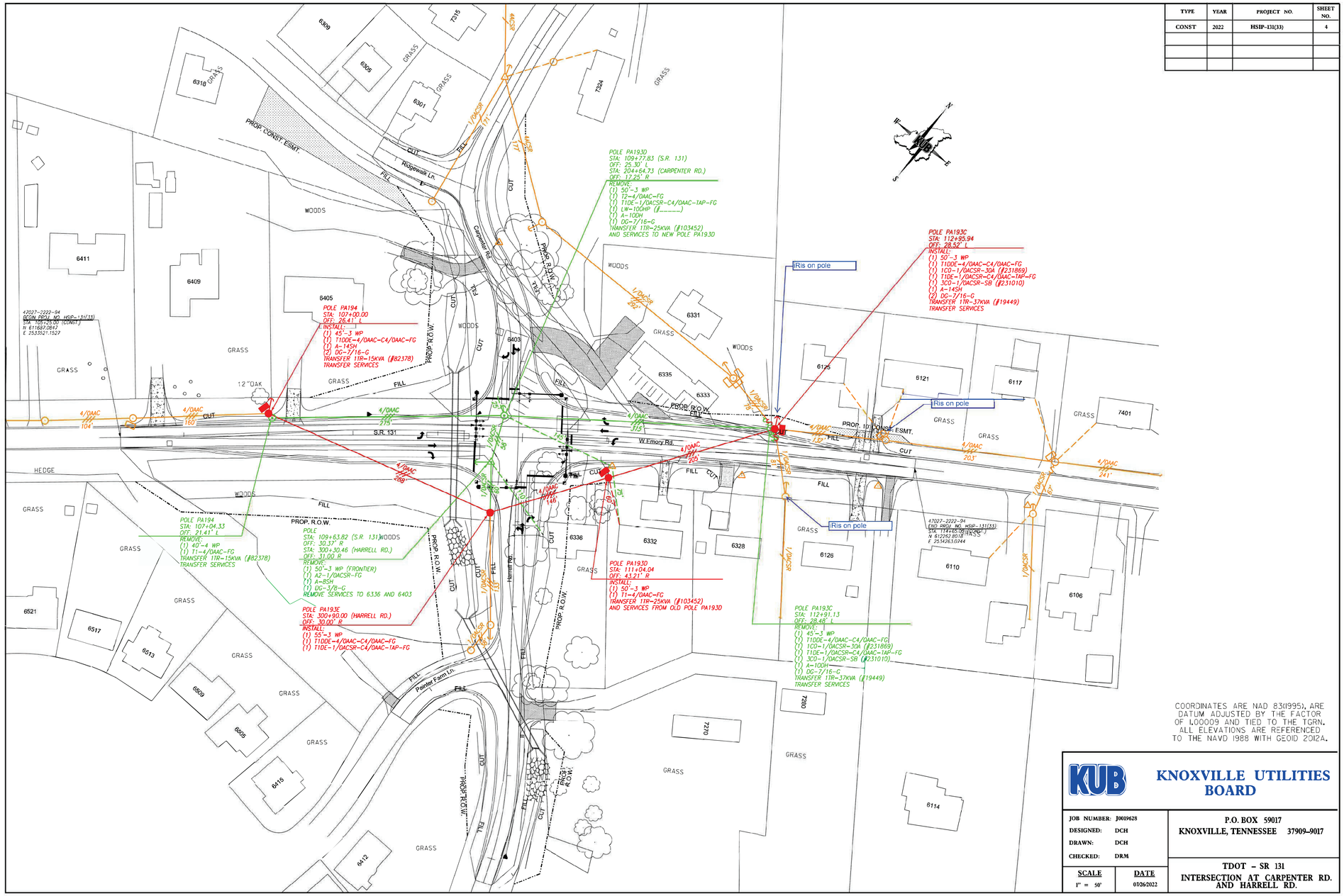
STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

UTILITIES REFERENCE

$$$$SYTIME$$$$$$
$$ DGNSPEC $$

TENN.	YEAR	SHEET NO.
	2026	U1-6
FED. AID PROJ. NO.	HSIP-131(33)	
STATE PROJ. NO.	47027-3222-94	

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST	2022	HSIP-131(33)	4



COORDINATES ARE NAD 83(1995), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00009 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988 WITH GEOID 2012A.

KNOXVILLE UTILITIES BOARD

P.O. BOX 59017
KNOXVILLE, TENNESSEE 37909-9017

JOB NUMBER:	J0019628
DESIGNED:	DCH
DRAWN:	DCH
CHECKED:	DRM
SCALE	1" = 50'
DATE	07/26/2022

TDOT – SR 131
INTERSECTION AT CARPENTER RD. AND HARRELL RD.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

UTILITIES REFERENCE

UTILITY REFERENCE - FRONTIER - COMMUNICATION
(NO COST - MOVE -PRIOR; NOT TO SCALE, ATTACH TO KUB POLES))

$$$$SYTIME$$$$$$
$$ DGNSPEC $$

GENERAL NOTES:

1. PLANIMETRIC AND PROFILE INFORMATION PER FIELD SURVEY PROVIDED BY T.D.O.T., CONDUCTED IN OCTOBER OF 2014. COORDINATES ARE NAD 83 (1995) AND ARE DATUM ADJUSTED BY THE FACTOR OF 1.00009 AND TIED TO THE TGRN, ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988 WITH GEOID 2012A. SEE TDOT ROADWAY DESIGN PROJECT 47027–2222–94.
2. RIGHT–OF–WAY AND PROPERTY SHOWN IS PER T.D.O.T. PROPERTY MAPPING WITH LIMITED SUPPLEMENTAL INFORMATION FROM INSTRUMENT SURVEY AS PERFORMED BY CANNON & CANNON, INC. SAID INFORMATION SHOULD BE CONSIDERED APPROXIMATE, IN THAT PROPERTY LINE SURVEY(S) WERE NOT UNDERTAKEN.
3. THE LOCATIONS OF THE EXISTING UTILITIES SHOWN ON THESE DRAWINGS ARE APPROXIMATE AND THOSE SHOWN MAY NOT BE ALL OF THE EXISTING UTILITIES WITHIN THE WORK AREA. THE EXACT LOCATIONS AND EXISTENCE OF ALL UTILITIES ARE THE CONTRACTOR'S RESPONSIBILITIES AND SHALL BE DETERMINED IN THE FIELD BY CONTACTING THE UTILITY COMPANIES INVOLVED. LOCATION OF EXISTING UTILITIES CAN BE COORDINATED BY CALLING THE TENNESSEE ONE CALL SYSTEM, AT 811.
4. UNDERGROUND UTILITIES INCLUDE, BUT ARE NOT LIMITED TO, WATER, SEWER, GAS, PETROLEUM, STEAM PIPING/DUCT WORK, ELECTRIC, COMMUNICATION SERVICES, STREET LIGHTING AND TRAFFIC DETECTOR LOOPS. THE CONTRACTOR SHALL LOCATE AND PROTECT ALL SUCH FACILITIES. THE CONTRACTOR IS RESPONSIBLE FOR REPAIRING ALL SUCH FACILITIES THAT ARE DAMAGED DURING CONSTRUCTION. PAYMENT FOR LOCATING, PROTECTING, COORDINATING AND RE–PAIRING EXISTING FACILITIES WILL BE INCLUDED IN OTHER ITEMS OF WORK AND NO ADDITIONAL COMPENSATION WILL BE MADE. ALL REPAIRS SHALL BE DONE IN ACCORDANCE WITH STANDARDS AND REQUIREMENTS OF THE UTILITY'S OWNER. UTILITY SUPPORT METHODS WILL BE SUBMITTED PRIOR TO CONSTRUCTION FOR APPROVAL.
5. THE EXISTING UTILITIES SHOWN AND INDICATED ON THE DRAWINGS ARE FOR GENERAL INFORMATION ONLY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATION OF EXISTING UNDERGROUND UTILITIES, ALL COSTS ASSOCIATED WITH POTHOLING WILL BE INCLUDED IN OTHER ITEMS OF WORK AND NO ADDITIONAL COMPENSATION WILL BE MADE THEREFORE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE OR DISRUPTION OF UTILITY SERVICE DURING CONSTRUCTION. THE CONTRACTOR SHALL VERIFY LOCATIONS AND DEPTHS OF ALL EXISTING UTILITIES IN THE PROJECT AREA PRIOR TO BEGINNING CONSTRUCTION
6. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR POT HOLING EXISTING UTILITIES AND DETERMINING ELEVATION AND LOCATION. POT HOLING SHALL BE CONDUCTED WITH THE LEAST INTRUSIVE MEANS SUCH AS A VACTRON, HAND DIGGING, OR OTHER SIMILAR EQUIPMENT. PAVEMENT RESTORATION AT POTHOLE LOCATIONS SHALL BE INCLUDED IN THE BASE BID
7. ALL MATERIALS AND WORKMANSHIP SHALL BE IN STRICT CONFORMANCE WITH CURRENT KNOXVILLE UTILITIES BOARD CONSTRUCTION SPECIFICATIONS AND DETAILS.
8. PROVIDE ALL NECESSARY PROTECTIVE MEASURES TO SAFEGUARD THE EXISTING UTILITIES FROM DAMAGE DURING THE CONSTRUCTION OF THIS PROJECT. FURNISH ANY SPECIAL EQUIPMENT REQUIRED TO WORK OVER AND AROUND THE UTILITIES.
9. TRENCH DESIGN AND SAFETY FOR PIPELINE CONSTRUCTION IS SOLELY THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL CONFORM WITH ALL APPLICABLE LOCAL, STATE, AND OSHA REGULATIONS.
10. WHERE FIGURE NUMBERS ARE REFERENCED ON THE DRAWINGS, REFER TO THE APPLICABLE SECTION IN THE PROJECT MANUAL FOR DETAILS & ADDITIONAL INFORMATION.
11. ALL WORK SHALL BE PERFORMED BY A TENNESSEE LICENSED UTILITY CONTRACTOR.
12. KNOXVILLE UTILITIES BOARD EMERGENCY 24–HOUR CONTACT: (865) 524–2911.
13. THE CONTRACTOR SHALL PROVIDE AND MAINTAIN SUITABLE SIGNAGE, BARRICADES, AND LIGHTS FOR PROTECTION OF TRAFFIC PER THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD). ANY EXISTING ROAD SIGN REMOVED FOR CONSTRUCTION SHALL BE REPLACED BY THE END OF THE WORKING DAY. TEMPORARY STOP SIGNS SHALL BE ERECTED PRIOR TO REMOVAL OF PERMANENT STOP SIGNS. COORDINATE WITH T.D.O.T. INSPECTOR.
14. THE CONTRACTOR SHALL NOT CLOSE OR BLOCK ANY HIGHWAY, STREET, OR ROADWAY WITHOUT FIRST OBTAINING ALL REQUIRED PERMITS FROM THE CITY OF KNOXVILLE OR OTHER GOVERNING ENTITY (TDOT, ETC...).
15. THE CONTRACTOR SHALL PROVIDE ACCESS TO UTILITY COMPANIES FOR MAINTENANCE AND WORK ON THEIR UTILITIES DURING THE COURSE OF WORK.
16. SURVEY MONUMENTS DISTURBED BY THE CONTRACTOR SHALL BE RESET BY A TENNESSEE REGISTERED LAND SURVEYOR, AT NO EXPENSE TO THE OWNER, AS DIRECTED BY THE PROJECT MANAGER. PRIOR TO DISTURBANCE, CONTACT THE T.D.O.T. PROJECT MANAGER FOR MONUMENT INFORMATION.
17. THE CONTRACTOR SHALL NEATLY SAW CUT ALL ROADWAYS AND DRIVEWAYS PRIOR TO INSTALLING A PERMANENT PAVEMENT REPAIR.
18. THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL PROPERTIES DURING CONSTRUCTION.
19. INDICATED SCALES ARE BASED ON FULL SIZE DRAWINGS; IF DRAWINGS ARE REDUCED, SCALES MUST BE ADJUSTED ACCORDINGLY. FULL SIZE DRAWINGS ARE 22" x 34".
20. CONTRACTOR SHALL NOTIFY THE K.U.B. PROJECT MANAGER 48 HOURS PRIOR TO BEGINNING CONSTRUCTION (865) 558–2838.
21. LOCATION OF EXISTING RIGHT–OF–WAY (R.O.W.) LINES AND PROPERTY LINES ARE APPROXIMATE.
22. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO THE PROJECT SITE RESULTING FROM THE CONTRACTOR'S CONSTRUCTION ACTIVITIES.
23. TREES THAT HAVE BEEN DAMAGED OR REMOVED, ASPHALT AND OTHER CONSTRUCTION DEBRIS SHALL BE REMOVED OFFSITE BY CONTRACTOR.
24. THE CONTRACTOR SHALL ENSURE POSITIVE DRAINAGE TO AND THROUGH EXISTING DRAINAGE FACILITIES. ANY CONSTRUCTION AROUND, THROUGH OR IN DRAINAGE PATHS SHALL NOT ALTER THE FLOW PATHS FROM EXISTING AFTER CONSTRUCTION IS COMPLETE.
25. ALL INCIDENTAL WORK, INCLUDING LABOR AND MATERIALS, NECESSARY TO COMPLETE THE PROJECT AS SHOWN IN THE CONTRACT DOCUMENTS, FOR WHICH A SEPARATE PAY ITEM IS NOT SHOWN SHALL BE PERFORMED BY THE CONTRACTOR AND NO ADDITIONAL PAYMENT SHALL BE MADE. THE COST OF THIS WORK SHALL BE MERGED INTO THE UNIT PRICES BID FOR THE BID ITEMS SHOWN.
26. THE CONTRACTOR SHALL PHOTOGRAPH OR VIDEO EACH SITE WITHIN 24 HOURS OF BEGINNING WORK ON THE ASSOCIATED PROPERTY. THE CONTRACTOR SHALL PROVIDE ONE COPY OF SUCH PHOTOS OR VIDEO TO THE OWNER WITH–IN 48 HOURS OF BEGINNING WORK ON SAID PROPERTY. IN THE EVENT THE RESIDENT PROJECT REPRESENTATIVE (RPR) IS NOT PRESENT FOR THE WORK, THE CONTRACTOR IS RESPONSIBLE FOR TAKING A PHOTOGRAPH OF THE EXCAVATED SERVICE BEFORE THE CONDEMNATION AND AFTER THE CONDEMNATION. FAILURE TO DOCUMENT THE WORK BY MEANS OF PHOTOGRAPHY WILL RESULT IN THE CONTRACTOR VERIFYING THE WORK BY MEANS OF RE–EXCAVATING THE SITE, AT THE EXPENSE OF THE CONTRACTOR.
27. CONTRACTOR TO COORDINATE DISRUPTION/REMOVAL OF ANY LANDSCAPING, SPRINKLER SYSTEMS, FENCES, SHEDS, GARDENS, RETAINING WALLS, ORNAMENTALS, ETC. WITH THE PROPERTY OWNER AND REPLACE TO MATCH OR IMPROVE EXISTING CONDITIONS.
28. EXISTING AND PROPOSED EASEMENTS ON THESE DRAWINGS ARE SHOWN FOR GENERAL INFORMATION ONLY AND ARE APPROXIMATE. CONTRACTOR TO REFER TO ACTUAL EXECUTED EASEMENT DOCUMENTS FOR PROPERTY ACCESS AND USE FOR CONSTRUCTION PURPOSES.
29. WHEN EXCAVATION MUST OCCUR NEAR A UTILITY POLE, THE CONTRACTOR SHALL EMPLOY A LICENSED ELECTRICAL CONTRACTOR TO GUY, ANCHOR, BRACE, MECHANICALLY HOLD, ETC., THE POLE THROUGHOUT THE EXCAVATION PROCESS AND UNTIL THE EXCAVATED AREA CAN BE PROPERLY BACKFILLED AND COMPACTED TO PREVENT MOVEMENT OF THE POLE. IF THE EXCAVATION AFFECTS AN ANCHOR, THE POLE WILL NEED TO BE STABILIZED IN A SIMILAR MANNER UNTIL THE ANCHOR CAN BE REINSTALLED IN THE EXACT LOCATION. CONTRACTOR SHALL NOTIFY KUB NOT LESS THAN SEVEN (7) CALENDAR DAYS PRIOR TO EXCAVATION WITHIN TWENTY (20) FEET OF ANY POLE AND SHALL PROVIDE INFORMATION TO KUB PERTAINING TO THE METHOD THAT IS TO BE USED TO STABILIZE THE POLE, AS WELL AS THE NAME OF THE ELECTRICAL CONTRACTOR RESPONSIBLE FOR THE PORTION OF THE WORK.
30. IT IS THE CONTRACTOR'S RESPONSIBILITY TO MAINTAIN ALL EXISTING UTILITY SERVICES DURING CONSTRUCTION. WHERE SERVICE INTERRUPTIONS ARE UNAVOIDABLE, COORDINATE WITH THE UTILITY OWNER BEFOREHAND REGARDING THE DURATION OF THE INTERRUPTION AND THE PROPER REINSTALLATION OF SERVICE. MAINTAIN A LIST OF EMERGENCY CONTACTS WITH EACH AFFECTED UTILITY FOR CASES OF ACCIDENTAL UTILITY DAMAGE.
31. THE CONTRACTOR SHALL PROVIDE EROSION CONTROL DEVICES PER TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION (TDEC). ALL WORK NEAR AND AROUND WATERWAYS SHALL CONFORM TO THE RULES OF TDEC – DIVISION OF WATER POLLUTION CONTROL. VIOLATIONS AND FINES LEVIED BY TDEC DUE TO CONTRACTOR NEGLIGENCE SHALL BE RECOVERED AT THE CONTRACTOR'S EXPENSE.
32. CONTRACTOR SHALL PROVIDE SUPPORT OF EXISTING UTILITIES EXPOSED DURING EXCAVATION TO MAINTAIN SERVICE & INTEGRITY OF UTILITY.

GAS LINE NOTES:

1. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE EXACT LOCATION OF EXISTING UTILITIES, PIPING, AND UNDERGROUND STRUCTURES THAT MAY INTERFERE WITH THE PROPOSED WORK BY POTHOLING AND CONTACTING THE UTILITY COMPANIES INVOLVED.
2. PRIOR TO COMMENCING WORK, THE CONTRACTOR SHALL CONTACT THE UTILITY OWNERS TO NOTIFY THEM OF WORK IN THE AREA AND REQUEST THEM TO PROPERLY LOCATE THEIR RESPECTIVE UTILITY. NOTIFICATION SHALL BE GIVEN AT LEAST THREE BUSINESS DAYS PRIOR TO COMMENCEMENT OF OPERATIONS AROUND THE UTILITY. UTILITIES CAN BE LOCATED BY CALLING THE TENNESSEE ONE CALL SYSTEM, AT 811.
3. LOCATE VALVES OUTSIDE OF PAVED AREAS UNLESS OTHERWISE APPROVED BY KUB. SERVICES SHOWN ON THESE DRAWINGS ARE FOR GENERAL LOCATION ONLY. CONTRACTOR TO COORDINATE WITH KUB TO DETERMINE FIELD LOCATION OF ALL GAS SERVICE LINES.
4. DISTANCES SHOWN TO PROPOSED GAS LINES ARE FROM EDGE OF PAVEMENT (E.O.P.) UNLESS OTHERWISE NOTED.
5. COMMERCIAL SERVICES SHALL RECEIVE A VALVE OF APPROPRIATE SIZE, 1" MINIMUM.
6. DEPTH OF HORIZONTAL DIRECTIONAL BORE(S) SHALL NOT EXCEED 5 FEET AT LOWEST POINT BELOW GRADE UNLESS OTHERWISE NOTED ON THE PROJECT DRAWINGS.
7. ELECTROFUSION COUPLINGS SHALL NOT BE USED WITHOUT PRIOR CONSENT OF KUB RESIDENT PROJECT REPRESENTATIVE (RPR).
8. EXISTING GAS VALVE BOXES SHALL BE MAINTAINED BY THE CONTRACTOR FOR THE DURATION OF THE PROJECT. REMOVE ALL EXISTING GAS VALVE BOXES ON LINES THAT ARE RETIRED IN–PLACE.

STANDARD T.D.O.T. UTILITY NOTES:

1. EXCEPT FOR EROSION SEDIMENT CONTROL ITEMS, NO ROADWAY OR BRIDGE ITEMS SHALL BE UTILIZED TO COMPENSATE FOR WORK METHODS OR MATERIALS ASSOCIATED WITH AND/OR SPECIFI ED FOR THE UTILITY INSTAL–LATION, EVEN THOUGH THE SAME OR SIMILAR ROADWAY OR BRIDGE MATERIALS MAY HAVE BEEN CALLED FOR IN THE UTILITY SPECIFI CATIONS OR DRAWINGS.
2. ALL MATERIALS, METHODS, AND/OR INTEGRAL MATERIALS OUTLINED IN THE UTILITY SPECIFI CATIONS 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, FI LLS, PHASING, ETC.) SHALL BE INCLUDED IN THE COST OF THE PERMANENT UTILITY ITEMS. (NOTE TO UTILITY: THE UTILITY RELOCATION PLANS SHALL PROVIDE TO THE CONTRACTOR THE UTILITY'S REQUIREMENTS FOR TEMPORARY TIE–INS (INCLUDING NECESSARY TESTING AND STERILIZATION TO ACCOMPLISH THE TIE–IN) AND ALSO ANY RESTRICTIONS FOR TAKING LINES OUT OF SERVICE. IF A TEMPORARY LINE WILL BE A MAJOR ITEM OF WORK, A SPECIFI C TEMPORIZATION PLAN AND ITEM MUST BE INCLUDED IN THE UTILITY'S PLANS.)
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 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 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 ITEMS 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.
8. ANY EXCAVATION OF THE STREAM CHANNEL AREA SHALL BE SEPARATED FROM FL OWING WATER AND ACCOM–PLISHED DURING LOW FL OW CONDITIONS. THIS SHALL BE ACCOMPLISHED BY THE USE OF FL UMES, LINED DIVERSION CHANNEL WITH SANDBAG BERM, DIVERSION PIPE WITH SANDBAG DAM AT PIPE INLET, OR IN SOME CASES COFF ERDAMS. ALTERNATIVELY, BASED ON FI ELD CONDITIONS AND CONTRACTOR SELECTION, THE UTILITY RELOCATION MAY BE ACCOMPLISHED USING BORE TECHNOLOGY WITH NO STREAM CHANNEL IMPACTS.

ABBREVIATIONS

D.I.	DUCTILE IRON
C.I.	CAST IRON
A.C.	ASBESTOS CEMENT
HDPE	HIGH DENSITY POLYETHYLENE
MDPE	MEDIUM DENSITY POLYETHYLENE
PL	PLASTIC
ST	STEEL
EOP	EDGE OF PAVEMENT
PE	POLYETHYLENE
LT	LEFT
RT	RIGHT

DRAWING INDEX

SHEET No.	DWG No.	DRAWING TITLE
1	U2–1	GAS LINE NOTES
2	U2–2	GAS RELOCATION – PLAN
3	U2–3	GAS RELOCATION – PROFILES
4	U2–4	GAS SERVICES – BORE PROFILES
4	U2–5	GAS LINE DETAILS

LEGEND

	EXISTING SANITARY SEWER MANHOLE
—SA—	EXISTING SANITARY SEWER LINE
OHU	EXISTING OVERHEAD UTILITY LINE
UGT	EXISTING UNDERGROUND TELEPHONE
G	EXISTING GAS LINE
W	EXISTING WATER LINE
6" CI	EXISTING 6" CAST IRON WATER LINE
8" CI	EXISTING 8" CAST IRON WATER LINE
8" DI	EXISTING 8" DUCTILE IRON WATER LINE
16" CI	EXISTING 16" CAST IRON WATER LINE
G	EXISTING GAS LINE (TO BE RETIRED)
	PROPOSED GAS LINE (MAIN LINE)
G	PROPOSED GAS LINE (SERVICE)
	PROPOSED GAS METER
G	CAP EXISTING GAS LINE
T	EXISTING TELEPHONE MANHOLE
X X	EXISTING CHAIN LINK FENCE
G.V.	EXISTING GAS VALVE
G.M.	EXISTING GAS METER
W.V.	EXISTING WATER VALVE
W.M.	EXISTING WATER METER
	EXISTING UTILITY POLE
	EXISTING LIGHT POLE
	EXISTING GUY WIRE
C.B.	EXISTING CATCH BASIN
C.O.	EXISTING SANITARY CLEAN OUT
	EXISTING FIRE HYDRANT
	EXISTING CREEK
	EXISTING TREE LINE
	EXISTING PROPERTY LINE (APPROXIMATE)
18" CMP	EXISTING STORM DRAIN LINE
1 / W1.01	DETAIL REFERENCE (DETAIL NO./ SHEET NO.)
G	PROPOSED GAS MARKER POST
	PROPOSED TEMPORARY CONSTRUCTION EASEMENT
	PROPOSED PERMANENT UTILITY EASEMENT

ESTIMATED UTILITY QUANTITIES

FOOTNOTE	ITEM NO.	DESCRIPTION	UNIT	QUANTITY	% PROJECT PUBLIC	% PROJECT PRIVATE
1	791-02.02	2IN MDPE GAS MAIN	L.F.	530	90%	10%
1	791-02.04	4IN MDPE GAS MAIN	L.F.	160	90%	10%
1	791-02.06	8IN MDPE GAS MAIN	L.F.	767	90%	10%
2	791-04.02	HDD 2IN PE PIPE - UNCONSOLIDATED	L.F.	100	90%	10%
3	791-06.02	CONNECT TO 2IN EX. PE MAIN	EACH	7	90%	10%
3	791-06.05	CONNECT TO 8IN EX. PE MAIN	EACH	2	90%	10%
4	791-07.01	2IN PE GAS VALVE ASSEMBLY	EACH	6	90%	10%
4	791-07.02	4IN PE GAS VALVE ASSEMBLY	EACH	2	90%	10%
4	791-07.04	8IN PE GAS VALVE ASSEMBLY	EACH	4	90%	10%
	791-07.40	PE GAS FITTINGS	LB	500	90%	10%
5	791-08.01	1/2IN SERVICE ASSEMBLY	EACH	2	90%	10%
5	791-08.06	1/2IN PE SERVICE PIPE	L.F.	250	90%	10%
6	791-10.10	RETIRE GAS MAIN	LS	1	90%	10%

FOOTNOTES:

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, 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.
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.
3. INCLUDES ALL MATERIALS, LABOR, AND EQUIPMENT, NECESSARY FOR CONNECTING TO EXISTING GAS LINE INCLUDING TRAFFIC CONTROL. TEMPORARY BYPASS TO MAINTAIN SERVICE AT ALL TIMES IN ACCORDANCE WITH KUB STANDARD DETAILS IS INCLUDED IN THESE ITEMS.
4. 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.
5. 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.
6. INCLUDES ALL MATERIALS, LABOR, EQUIPMENT, AND TRAFFIC CONTROL, INCLUDING BUT NOT LIMITED TO, THE CUTTING, CAPPING, DISCONNECTING, PURGING AND SEALING OF EXISTING FACILITIES (BOTH MAINS AND SERVICES) AS INDICATED ON THE DRAWINGS, REMOVAL OF VALVE BOXES NO LONGER IN SERVICE AND ANY ABOVE GROUND APPURTENANCES, BACKFILL, ASPHALT/CONCRETE RESTORATION, & CLEANUP/RESTORATION.

TYPE	YEAR	PROJECT NO.	SHEET NO.
PS&E	2026	HSIP-131(33)	U2-1

KNOX COUNTY
PIN 119390.00
CCI NO. 00309-0436

B-DATE SUBMITTAL
DATE: 05/22/2026
BASED ON ADD'L SURVEY
PROVIDED 1/15/2026

GAS LINE RELOCATION BY

CANNON & CANNON INC
10025 Investment Drive, Suite 120
Knoxville, TN 37932
865.670.8555
www.cci-corp.com

KUB

GAS PLANS

SEALED BY

WILLIAM W. LITTLEJOHN
REGISTERED ENGINEER
AGRICULTURE
No. 120419
STATE OF TENNESSEE
4/23/2026

COORDINATES ARE NAD 83(1995), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00009_ AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988 WITH GEOID 2012A.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

GAS LINE NOTES

TYPE	YEAR	PROJECT NO.	SHEET NO.
PS&E	2026	HSIP-131(33)	U2-2

KNOX COUNTY
PIN 119390.00
CCI NO. 00309-0436

B-DATE SUBMITTAL
DATE: 05/22/2026
BASED ON ADD'L SURVEY
PROVIDED 1/15/2026

SPECIAL WORK PROVISIONS:

1. EXISTING GAS MAIN FEEDS TO BE MAINTAINED THROUGHOUT THE PROJECT.
2. TEMPORARY BYPASSES REQUIRED WHILE WORKING ON EXISTING 8" MDPE GAS MAIN.
3. ACCESS TO PAINTER FARM SUBDIVISION TO BE MAINTAINED VIA 1 LANE AT ALL TIMES.

PAINTER FARM TIE-IN NOTES

1. CONTRACTOR TO MAINTAIN ACCESS TO PAINTER FARM SUBDIVISION VIA ONE LANE AT ALL TIMES.
2. TIE-INS FOR PAINTER FARM LN TO BE PERFORMED SEPARATELY. SERVICE SHALL BE MAINTAINED THROUGH ONE FEED AT ALL TIMES.

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KUB

GAS PLANS

SEALED BY

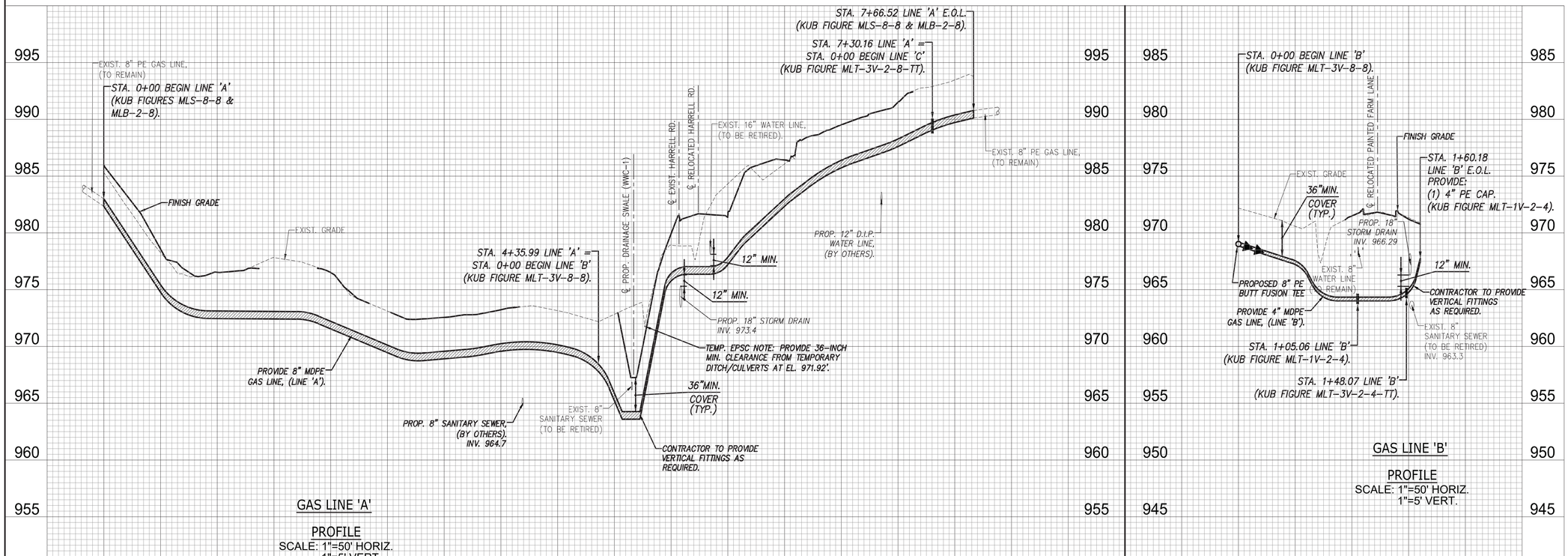
WILLIAM W. LITTLEJOHN
REGISTERED ENGINEER
AGRICULTURE
No. 120418
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4/23/2026

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

GAS RELOCATION PLAN

STA. 105+25 TO STA. 114+65
SCALE: 1" = 50'



TYPE	YEAR	PROJECT NO.	SHEET NO.
PS&E	2026	HSIP-131(33)	U2-3

KNOX COUNTY
PIN 119390.00
CCI NO. 00309-0436

B-DATE SUBMITTAL
DATE: 05/22/2026
BASED ON ADD'L SURVEY
PROVIDED 1/15/2026

PROFILE NOTES:

1. CROSSING UNDERGROUND WATER, GAS, ELECTRIC, TELEPHONE, AND FIBER PIPES ARE SHOWN IN PROFILE VIEW AT AN ASSUMED DEPTH OF 3-FEET. CONTRACTOR IS RESPONSIBLE FOR VERIFYING THE VERTICAL LOCATION OF ALL UTILITY CROSSINGS PRIOR TO CONSTRUCTION.
2. EXISTING STORM AND SANITARY CROSSING INVERTS SHOWN ON THE PROFILE VIEW ARE BASED ON TDOT SURVEY INFORMATION AND ARE FOR INFORMATION ONLY.
3. PROPOSED STORM CROSSING INVERTS SHOWN ON THE PROFILE VIEW ARE BASED ON TDOT CONSTRUCTION PLANS AND ARE FOR INFORMATION ONLY.
4. PROPOSED SANITARY SEWER CROSSING INVERTS SHOWN ON THE PROFILE VIEW ARE BASED ON WKUD SANITARY SEWER RELOCATION PLANS AND ARE FOR INFORMATION ONLY.
5. CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL EXISTING AND PROPOSED PIPE INVERTS AND SEPARATION REQUIREMENTS WITH TDOT PLANS AND OTHER UTILITY RELOCATION PLANS.

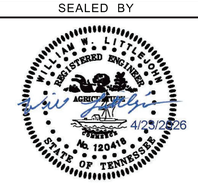
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KUB

GAS PLANS

SEALED BY



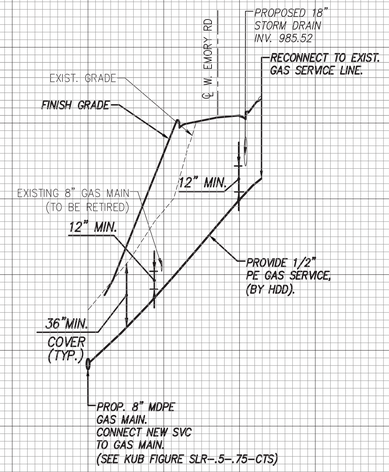
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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

GAS RELOCATION PROFILES

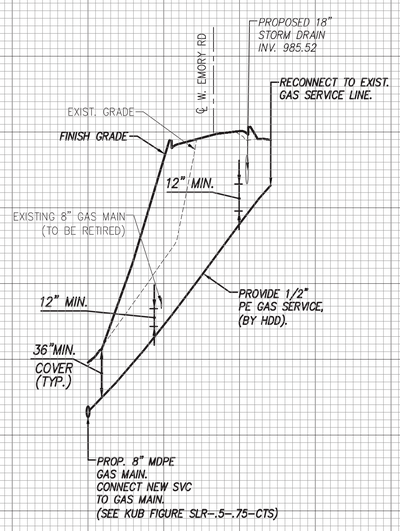
STA. 105+25 TO STA. 114+65

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



SERVICE BORE @ #6409 WEST EMORY ROAD (TRACT 20)

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



SERVICE BORE @ #6405 WEST EMORY ROAD (TRACT 21)

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

TYPE	YEAR	PROJECT NO.	SHEET NO.
PS&E	2026	HSIP-131(33)	U2-4

KNOX COUNTY
PIN 119390.00
CCI NO. 00309-0436

B-DATE SUBMITTAL
DATE: 05/22/2026
BASED ON ADD'L SURVEY
PROVIDED 1/15/2026

PROFILE NOTES:

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4. PROPOSED SANITARY SEWER CROSSING INVERTS SHOWN ON THE PROFILE VIEW ARE BASED ON WKUD SANITARY SEWER RELOCATION PLANS AND ARE FOR INFORMATION ONLY.
5. CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL EXISTING AND PROPOSED PIPE INVERTS AND SEPARATION REQUIREMENTS WITH TDOT PLANS AND OTHER UTILITY RELOCATION PLANS.

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KUB

GAS PLANS

SEALED BY



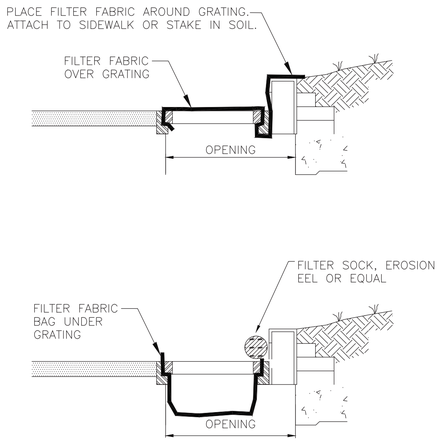
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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

GAS SERVICES BORE PROFILES

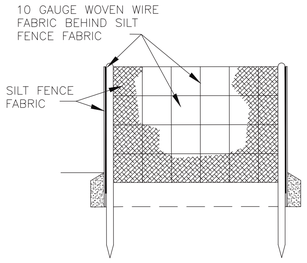
STA. 105+25 TO STA. 114+65

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



CURB INLET PROTECTION

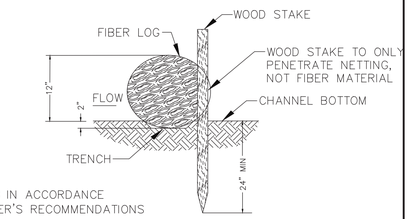
N.T.S.



WIRE FENCE REINFORCEMENT IS REQUIRED BELOW SLOPES THAT ARE OVER 8' HIGH, OR WHERE SILT FENCE IS INSTALLED IMMEDIATELY ADJACENT TO GRADING LIMITS. INSTALL REINFORCEMENT AT LOCATIONS WHERE WASHOUT OR HEAVY FLOW MAY OCCUR.

SILT FENCE REINFORCEMENT

N.T.S.

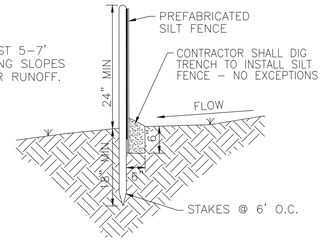


INSTALL FIBER LOG IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS

FIBER LOG BARRIER

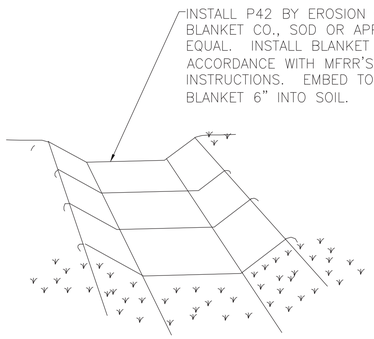
N.T.S.

767 LF OF 8" MDPE GAS LINE, 160 LF OF 4" MDPE GAS LINE, AND 530 LF OF 2" MDPE GAS LINE.



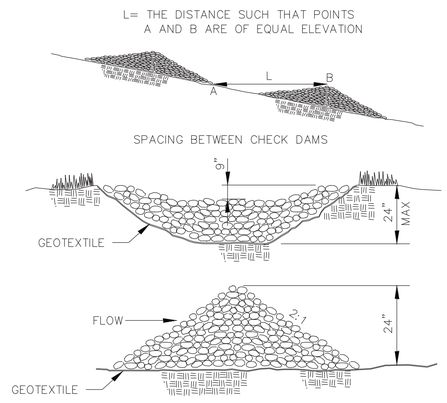
SILT FENCE

N.T.S.



CHANNEL EROSION PROTECTION

N.T.S.



STONE CHECK DAM

N.T.S.

SEDIMENT & EROSION CONTROL NOTES

1. OWNER: KUB – PO BOX 59017, KNOXVILLE, TN 37950–9017
2. THIS PROJECT INCLUDES THE INSTALLATION OF APPROXIMATELY 767 LF OF 8" MDPE GAS LINE, 160 LF OF 4" MDPE GAS LINE, AND 530 LF OF 2" MDPE GAS LINE.
3. TOTAL DISTURBED AREA IS APPROXIMATELY 0.33 ACRES.
4. ALL CONSTRUCTION LIES ABOVE THE 100 YEAR FLOOD HAZARD.
5. EROSION AND SEDIMENT CONTROL SHALL BE THE CONTRACTOR'S RESPONSIBILITY FOR COMPLIANCE, INSTALLATION, MAINTENANCE AND REMOVAL. CONTROLS SHALL BE CONSISTENT WITH THE TDEC EROSION AND SEDIMENT CONTROL HANDBOOK.
6. THE EROSION CONTROLS MUST BE INSTALLED ALONG THE UTILITY LINE ALIGNMENT WHERE THEY ARE NEEDED AND REMOVED WHEN THE AREA HAS BEEN STABILIZED. CHANGES MAY BE MADE TO IMPROVE EROSION AND SEDIMENT CONTROLS.
7. EROSION CONTROL MEASURES WILL BE MAINTAINED AT ALL TIMES. IF FULL IMPLEMENTATION OF APPROVED PLAN DOES NOT PROVIDE FOR EFFECTIVE EROSION CONTROL, ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE IMPLEMENTED TO CONTROL OR TREAT THE SEDIMENT SOURCE.
8. SILT FENCE SHALL BE INSTALLED AS REQUIRED TO PREVENT SEDIMENT FROM THIS PROJECT BEING DEPOSITED ON ADJACENT PROPERTY.
9. DISTURBED AREAS SHALL BE RESTORED TO NEAR ORIGINAL CONDITION (CONCRETE, ASPHALT, GRASS, ETC.).
10. CONTRACTOR SHALL NOT INSTALL SEDIMENT TRAPS SHOULD POTENTIAL EXIST FOR PAVEMENT FLOODING AND/OR WATER DAMAGE TO ADJACENT PROPERTY.
11. EROSION AND SEDIMENT CONTROL DEVICES SHALL BE INSPECTED BY THE CONTRACTOR AT THE END OF EACH DAY'S WORK AND AT THE END OF EACH AND EVERY RAIN. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REPAIR AND OR REMOVAL OF ACCUMULATED SILTS AND SEDIMENTS FROM THE EROSION AND SEDIMENT CONTROL DEVICES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL MAINTENANCE OF SAID STRUCTURES. ALL SILTS AND/OR SEDIMENTS REMOVED FROM THE EROSION/SEDIMENT CONTROL DEVICES SHALL BE DEPOSITED ON SITE IN SUCH A MANNER AS TO PREVENT SAID SILTS AND/OR SEDIMENTS FROM REENTERING THE CONTROL DEVICES AND OR EXITING THE SITE THROUGH THE STORM DRAINAGE SYSTEMS AND/OR SURFACE DRAINAGE.
12. FAILURE TO INSTALL, OPERATE AND/OR MAINTAIN ALL EROSION CONTROL MEASURES SHALL BE JUSTIFICATION TO STOP CONSTRUCTION ON THE JOB SITE UNTIL SUCH MEASURES ARE CORRECTED IN ACCORDANCE WITH APPROVED PLANS OR AS DIRECTED BY THE OWNER.
13. THE CONTRACTOR SHALL PREVENT TRACKING OR FLOW OF MUD ONTO PUBLIC RIGHTS–OF–WAY. ALL MATERIALS SPILLED, DROPPED, WASHED, OR TRACKED FROM VEHICLES ON SITE ONTO PUBLIC ROADWAYS OR INTO STORM DRAINS SHALL BE REMOVED IMMEDIATELY.
14. UPON PIPE INSTALLATION, DISTURBED SOIL SHALL BE STABILIZED WITH TEMPORARY COVER OR PERMANENT VEGETATION AS REQUIRED EVERY TWO WEEKS AND PRIOR TO ANY RAIN EVENT.
15. MATERIAL STAGING AREA SHALL BE ENCOMPASSED WITH SILT FENCE IF THE AREA IS DISTURBED.
16. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ADDITIONAL EROSION CONTROLS CREATED BY DRAINAGE PATTERNS AT VARIOUS STAGES DURING CONSTRUCTION. DIFFICULTY IN CONTROLLING EROSION DURING ANY PHASE OF CONSTRUCTION SHALL BE REPORTED TO THE RPR IMMEDIATELY.
17. THE CONTRACTOR SHALL REMOVE ACCUMULATED SILT BEFORE THE SILT IS WITHIN 12–INCHES OF THE TOP OF THE SILT FENCE UTILIZED FOR EROSION CONTROL.
18. STRAW MULCHING SHALL BE USED WITH PERMANENT VEGETATION APPLICATIONS AND SHALL BE FREE OF WEED SEEDS AND SPREAD AT A RATE OF 90 POUNDS PER 1000 SQUARE FEET.
19. EROSION CONTROL MEASURES SHALL BE MAINTAINED UNTIL ALL DISTURBED SOIL WITHIN THE CONSTRUCTION AREA HAS BEEN COMPLETELY STABILIZED WITH PERMANENT VEGETATION AND ALL ROADS/DRIVEWAYS HAVE BEEN PAVED.
20. THE ESCAPE OF SEDIMENT FROM THE SITE SHALL BE PREVENTED BY THE INSTALLATION OF EROSION AND SEDIMENT CONTROL MEASURES AND PRACTICES PRIOR TO OR CONCURRENT WITH LAND DISTURBING ACTIVITIES.
21. IN STREETS AND OTHER PAVED AREAS, REMOVE EXCAVATED MATERIALS FROM THE SITE AS CONSTRUCTION PROGRESSES TO PREVENT ANY EROSION OF THE EXCAVATED MATERIAL. IN OTHER AREAS, PLACE THE EXCAVATED MATERIAL SO AS NOT TO BLOCK ANY DRAINAGE AREAS. REPLACE EXCAVATED MATERIAL IN THE TRENCH IMMEDIATELY AFTER WORK HAS BEEN COMPLETED AND APPROVED BY THE OWNER.
22. RETAIN NATURAL VEGETATION WHENEVER FEASIBLE.
23. RESTORE AND COVER EXPOSED AREAS SUBJECT TO EROSION AS QUICKLY AS POSSIBLE BY MEANS OF SEEDING AND MULCHING. FIBER MATTING MAY BE NECESSARY AS REQUIRED BY OWNER.

TYPE	YEAR	PROJECT NO.	SHEET NO.
PS&E	2026	HSIP-131(33)	U2-5

KNOX COUNTY
PIN 119390.00
CCI NO. 00309-0436

B-DATE SUBMITTAL
DATE: 05/22/2026
BASED ON ADD'L SURVEY
PROVIDED 1/15/2026

GAS LINE RELOCATION BY

CANNON & CANNON INC
10025 Investment Drive, Suite 120
Knoxville, TN 37932
865.670.8555
www.cci-corp.com

KUB

GAS PLANS

SEALED BY



COORDINATES ARE NAD 83(1995), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00009_ AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988 WITH GEOID 2012A.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

GAS LINE DETAILS

GENERAL NOTES:

1. PLANIMETRIC AND PROFILE INFORMATION PER FIELD SURVEY PROVIDED BY T.D.O.T., CONDUCTED IN OCTOBER OF 2014. COORDINATES ARE NAD 83 (1995) AND ARE DATUM ADJUSTED BY THE FACTOR OF 1.00009 AND TIED TO THE TGRN, ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988 WITH GEOID 2012A. SEE TDOT ROADWAY DESIGN PROJECT 47027–2222–94.
2. RIGHT–OF–WAY AND PROPERTY SHOWN IS PER INFORMATION PROVIDED BY T.D.O.T.
3. ALL MATERIALS AND WORKMANSHIP SHALL BE IN STRICT CONFORMANCE WITH CURRENT OWNER CONSTRUCTION SPECIFICATIONS AND DETAILS.
4. WHERE FIGURE NUMBERS ARE REFERENCED ON THE DRAWINGS, REFER TO THE APPLICABLE SECTION IN THE PROJECT MANUAL FOR DETAILS & ADDITIONAL INFORMATION.
5. CANNON & CANNON, INC. WILL PROVIDE MICROSTATION DESIGN FILES (.DGN) TO THE CONTRACTOR FOR USE IN CONSTRUCTION STAKING THE PROPOSED ALIGNMENTS UPON REQUEST POST BID.
6. ALL WORK SHALL BE PERFORMED BY A TENNESSEE LICENSED UTILITY CONTRACTOR.
7. CONTRACTOR SHALL HAVE AN APPROVED SET OF PLANS AND SPECIFICATIONS AND A COPY OF THE GENERAL STORMWATER POLLUTION PREVENTION PLAN (SWPPP) ON THE JOB SITE AT ALL TIMES.
8. UNDERGROUND UTILITIES INCLUDE, BUT ARE NOT LIMITED TO, WATER, SEWER, GAS, PETROLEUM, STEAM PIPING/DUCT WORK, ELECTRIC, COMMUNICATION SERVICES, STREET LIGHTING AND TRAFFIC DETECTOR LOOPS. THE CONTRACTOR SHALL LOCATE AND PROTECT ALL SUCH FACILITIES. THE CONTRACTOR IS RESPONSIBLE FOR REPAIRING ALL SUCH FACILITIES THAT ARE DAMAGED DURING CONSTRUCTION. PAYMENT FOR LOCATING, PROTECTING, COORDINATING AND RE–PAIRING EXISTING FACILITIES WILL BE INCLUDED IN OTHER ITEMS OF WORK AND NO ADDITIONAL COMPENSATION WILL BE MADE. ALL REPAIRS SHALL BE DONE IN ACCORDANCE WITH STANDARDS AND REQUIREMENTS OF THE UTILITY'S OWNER. UTILITY SUPPORT METHODS WILL BE SUBMITTED PRIOR TO CONSTRUCTION FOR APPROVAL.
9. THE CONTRACTOR SHALL PROVIDE AND MAINTAIN SUITABLE SIGNAGE, BARRICADES, AND LIGHTS FOR PROTECTION OF TRAFFIC PER THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD). ANY EXISTING ROAD SIGN REMOVED FOR CONSTRUCTION SHALL BE REPLACED BY THE END OF THE WORKING DAY. TEMPORARY STOP SIGNS SHALL BE ERECTED PRIOR TO REMOVAL OF PERMANENT STOP SIGNS.
10. THE CONTRACTOR SHALL NOT CLOSE OR BLOCK ANY HIGHWAY, STREET, OR ROADWAY WITHOUT FIRST OBTAINING ALL REQUIRED PERMITS FROM THE GOVERNING ENTITY (TDOT, ETC...).
11. THE CONTRACTOR SHALL PROVIDE ACCESS TO UTILITY COMPANIES FOR MAINTENANCE AND WORK ON THEIR UTILITIES DURING THE COURSE OF WORK.
12. SURVEY MONUMENTS DISTURBED BY THE CONTRACTOR SHALL BE RESET BY A TENNESSEE REGISTERED LAND SURVEYOR, AS DIRECTED BY THE PROJECT MANAGER. PRIOR TO DISTURBANCE, CONTACT THE PROJECT MANAGER FOR MONUMENT INFORMATION.
13. CONTRACTOR SHALL VERIFY WORK IN FIELD AND SHALL SATISFY HIMSELF AS TO THE ACCURACY BETWEEN WORK SET FORTH ON THESE PLANS AND THE WORK REQUIRED IN THE FIELD. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE PROJECT MANAGER PRIOR TO THE START OF CONSTRUCTION.
14. THE CONTRACTOR SHALL NEATLY SAW CUT ALL ROADWAYS AND DRIVEWAYS PRIOR TO INSTALLING A PERMANENT PAVEMENT REPAIR.
15. THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL PROPERTIES DURING CONSTRUCTION.
16. INDICATED SCALES ARE BASED ON FULL SIZE DRAWINGS OF 22" x 34"; IF DRAWINGS ARE REDUCED, SCALES MUST BE ADJUSTED ACCORDINGLY.
17. CONTRACTOR SHALL NOTIFY THE OWNER'S PROJECT MANAGER 48 HOURS PRIOR TO BEGINNING CONSTRUCTION.
18. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO THE PROJECT SITE RESULTING FROM THE CONTRACTOR'S CONSTRUCTION ACTIVITIES.
19. TREES THAT HAVE BEEN DAMAGED OR REMOVED, ASPHALT AND OTHER CONSTRUCTION DEBRIS SHALL BE REMOVED OFFSITE BY CONTRACTOR.
20. THE CONTRACTOR SHALL ENSURE POSITIVE DRAINAGE TO AND THROUGH EXISTING DRAINAGE FACILITIES. ANY CONSTRUCTION AROUND, THROUGH OR IN DRAINAGE PATHS SHALL NOT ALTER THE FLOW PATHS FROM EXISTING AFTER CONSTRUCTION IS COMPLETE.
21. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR POT HOLING EXISTING UTILITIES AND DETERMINING ELEVATION AND LOCATION. POT HOLING SHALL BE CONDUCTED WITH THE LEAST INTRUSIVE MEANS SUCH AS A VACTRON, HAND DIGGING, OR OTHER SIMILAR EQUIPMENT. PAVEMENT RESTORATION AT POTHOLE LOCATIONS SHALL BE INCLUDED IN THE BASE BID.

WATER LINE NOTES:

1. ALL WORK TO BE PERFORMED IN ACCORDANCE WITH WKUD'S STANDARD SPECIFICATIONS. IF CONFLICTS ARISE DURING CONSTRUCTION, CONSULT WITH WKUD'S INSPECTOR AS TO NECESSARY FIELD CHANGES. WKUD RESERVES THE RIGHT TO MODIFY THE MATERIAL OR CONSTRUCTION REQUIREMENTS IF SUCH CONFLICTS ARISE.
2. THE LOCATIONS OF THE EXISTING UTILITIES SHOWN ON THESE DRAWINGS ARE APPROXIMATE. CONTRACTOR TO REFERENCE PLANS AND COORDINATE WITH THE UTILITY OWNER TO DETERMINE THE ACTUAL FIELD LOCATION. UTILITIES CAN BE LOCATED BY CALLING THE TENNESSE ONE CALL SYSTEM, AT 1–800 – 351–1111.
3. PRIOR TO COMMENCING WORK, THE CONTRACTOR SHALL CONTACT THE UTILITY OWNERS TO NOTIFY THEM OF WORK IN THE AREA AND REQUEST THEM TO PROPERLY LOCATE THEIR RESPECTIVE UTILITY. NOTIFICATION SHALL BE GIVEN AT LEAST THREE BUSINESS DAYS PRIOR TO COMMENCEMENT OF OPERATIONS AROUND THE UTILITY.
4. PROVIDE ALL NECESSARY PROTECTIVE MEASURES TO SAFEGUARD THE EXISTING UTILITIES FROM DAMAGE DURING THE CONSTRUCTION OF THIS PROJECT. FURNISH ANY SPECIAL EQUIPMENT REQUIRED TO WORK OVER AND AROUND THE UTILITIES.
5. WKUD REQUIRES 24" OF HORIZONTAL SEPARATION AND 12" OF VERTICAL SEPARATION FROM OTHER UTILITIES IF THEY ARE INSTALLED ALONGSIDE THE WATER MAINS, AND THEY SHOULD NOT BE CONSTRUCTED IN THE SAME TRENCH.
6. HORIZONTAL SEPARATION BETWEEN WATER AND SANITARY SEWER LINES SHALL BE 10 LF. IF 10 LF OF SEPARATION IS NOT AVAILABLE, THE SEWER SHALL BE INSTALLED UNDERNEATH THE WATER LINE WITH A MINIMUM OF 18" OF SEPARATION BETWEEN THE OUTSIDES OF THE PIPES.
7. NO BUILDINGS, BUILDING FOOTERS, OR OTHER PERMANENT STRUCTURES ARE TO BE CONSTRUCTED WITHIN THE 15 FEET UTILITY EASEMENTS (7.5 FEET EACH SIDE OF INSTALLED LINE).
8. TRENCH DESIGN AND SAFETY FOR PIPELINE CONSTRUCTION IS SOLELY THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL CONFORM WITH ALL APPLICABLE LOCAL, STATE, AND OSHA REGULATIONS.
9. THE STONE BEDDING AND BACKFILL SHALL BE DONE IN STRICT COMPLIANCE WITH THE PIPE MANUFACTURER'S RECOMMENDATIONS BUT MUST COMPLY WITH WKUD'S SPECIFICATIONS.
10. UTILITIES SHALL BE INSTALLED AFTER GRADING IS COMPLETED AND APPROVED AND BEFORE ANY PAVEMENT IS INSTALLED.
11. ALL WATER LINES AND APPURTENANCES SHALL BE INSTALLED AND TESTED IN ACCORDANCE WITH WKUD'S STANDARD WATER SYSTEM SPECIFICATIONS.
12. ALL WORK MUST BE INSPECTED BY WKUD PRIOR TO BACKFILLING.
13. WATER LINE MATERIALS, INSTALLATION, AND TESTING SHALL BE PER WKUD'S STANDARDS. MATERIAL SUBMITTALS SHALL BE MADE TO WKUD ENGINEERING DEPARTMENT PRIOR TO CONSTRUCTION AT 2328 LOVELL RD, KNOXVILLE, TN 37932. OFFICE: (865) 690 –2521.
14. DISINFECTION AND STERILIZATION SHALL BE COMPLETED BY CONTRACTOR WHEN INSTALLATION AND TESTING ARE COMPLETE. TAPS FOR STERILIZATION SHALL BE PROVIDED BY THE CONTRACTOR. WATER QUALITY TESTING WILL BE PERFORMED BY WKUD.
15. ALL WATER LINES SHALL HAVE A MINIMUM OF 36" COVER. BACKFILL WITH STONE TO GRADE REQUIRED UNDER ALL PROPOSED ROADWAYS.
16. ALL WATER LINES 4" OR LARGER SHALL BE CLASS 350 DIP. ALL FITTINGS SHALL BE APPROPRIATE FOR THE CLASS AND TYPE OF PIPE BEING JOINED.
17. ALL 2" WATER LINES SHALL BE PVC (SDR 13.5–315 PSI) OR TYPE K COPPER. COORDINATE WITH WKUD ON DESIRED MATERIAL BASED ON THE APPLICATION. ALL FITTINGS SHALL BE APPROPRIATE FOR THE CLASS AND TYPE OF PIPE BEING JOINED.
18. AIR RELEASE VALVES (ARI D–40 OR EQUAL) SHALL BE INSTALLED ON HIGH POINTS ON THE MAINS IN ACCORDANCE WITH THE PLANS OR AS REQUIRED BY WKUD'S INSPECTORS.
19. TO THE GREATEST EXTENT POSSIBLE, DO NOT LOCATE WATER METERS OR SERVICES AT THE SAME PROPERTY CORNERS AS ELECTRICAL TRANSFORMERS OR CATV/TELEPHONE PEDESTALS.
20. ALL WATER MAINS, INCLUDING D.I.P., SHALL BE INSTALLED WITH BLUE NO. 10 SOLID COPPER INSULATED WIRE THROUGHOUT THE ENTIRE SYSTEM, INCLUDING SERVICE LATERALS TO THE METER BOX. WIRE SHALL BE INSTALLED DIRECTLY ON TOP OF THE WATER MAIN. KEEP WIRE AS CONTINUOUS AS POSSIBLE. WHERE CONNECTIONS ARE NEEDED, STRIP WIRE BACK APPROX. 1" AND CONNECT WITH SPLIT–BOLT CONNECTORS. WRAP CONNECTIONS WELL ON EACH SIDE OF CONNECTION WITH ELECTRICAL TAPE. WHEN INSTALLATION IS COMPLETE, THE ENTIRE SYSTEM MUST BE TESTED FOR CONTINUITY IN THE PRESENCE OF A WKUD INSPECTOR. WKUD MAY REQUIRE RE–EXCAVATION AND IMPROVEMENT TO AREAS THAT DO NOT "TRACE" WELL AND SHOW LOW OR POOR CONTINUITY.
22. WATER MAINS REQUIRE CONCRETE THRUST BLOCKING AND MEGALUG MECHANICAL JOINT RESTRAINT AT ALL CHANGES IN DIRECTION REQUIRING BENDS, TEES, PLUGS, AND FIRE HYDRANTS. FIELD–LOK GASKETS MUST BE INSTALLED FOR AT LEAST TWO PIPE JOINTS ON EACH SIDE OF FITTINGS. ALL VALVES SHALL BE INSTALLED WITH MEGALUG MECHANICAL JOINT RESTRAINTS. WRAP ALL FITTINGS, BOLTS, FLANGES, ETC. IN 6 MIL PLASTIC PRIOR TO PLACING CONCRETE. HYDRANT TEES AND SWIVEL–X COUPLINGS SHALL BE USED FOR HYDRANTS.
23. WHERE MEGALUGS ARE SPECIFIED, THEY SHALL BE MANUFACTURED BY EBAA IRON INC. OR APPROVED EQUAL BY WKUD.
24. CONTRACTOR SHALL INSTALL ALL METER YOKES AND BOXES AND PROVIDE MATERIAL PER WKUD STANDARD SPECIFICATIONS. METER BOXES SHALL BE SET AT THE PROPERTY LINE (NO MORE THAN 2' +/– INSIDE PROPERTY). ALL VALVE BOXES TO BE INSTALLED OUTSIDE OF PAVED AREAS WITH BOX LOK'S.
25. SINGLE WATER SERVICES SHALL BE 3/4" TYPE K COPPER AND DOUBLE WATER SERVICES SHALL BE 1" TYPE K COPPER. ALL METERS SHALL HAVE A 3/4" CURB STOP INSIDE METER BOX BEFORE METER YOKE.
26. LONG SIDE SERVICES SHALL BE INSTALLED TRENCHLESSLY IN 2" HDPE CASING PIPE..
27. ALL METER BOX LIDS SHALL BE CAST IRON APPROVED BY WKUD INSPECTOR.
28. ALL METER YOKES SHALL BE FORD 3/4" COPPERSETTER 70 SERIES OR MUELLER B2404–R–2 OR APPROVED EQUAL.
29. ALL FIRE HYDRANTS BARREL SHALL BE 5.25".
30. ALL FIRE HYDRANTS SHALL BE FACTORY PAINTED YELLOW.
31. HYDRANT SHALL BE ROTATED TO FACE CLOSEST POINT OF PAVED ACCESS AND MUST HAVE AN ISOLATION GATE VALVE WITH BOX LOK–2 INSTALLED ON HYDRANT LATERAL.
32. INSTALL FITTINGS AS REQUIRED TO AVOID CONFLICTS WITH EXISTING AND PROPOSED UNDERGROUND CONFLICTS AND OBSTRUCTIONS.
33. INSTALL WATER LINES AT A POSITIVE GRADE BETWEEN DESIGNATED HIGH AND LOW POINTS TO PREVENT TRAPPING OF AIR.
34. ALL INTERSECTIONS WITH VALVES SHALL BE FLEX T–2 (2 VALVE APPLICATION) OR T–3 (3 VALVE APPLICATION) AS MANUFACTURED BY "IN FACT CORPORATION".
35. CONTRACTOR SHALL TAKE SPECIAL CARE TO BED, BACKFILL, AND COMPACT PIPE CROSSINGS WHERE A WATER MAIN CROSSES WITH STORM SEWERS. CROSSINGS SHALL BE CONSTRUCTED WITH A WELL COMPACTED FULL STONE 6–INCH ENVELOPE SUCH THAT STORM SEWER DOES NOT BEAR DIRECTLY ON WATER MAINS.

STANDARD T.D.O.T. UTILITY NOTES:

1. EXCEPT FOR EROSION SEDIMENT CONTROL ITEMS, NO ROADWAY OR BRIDGE ITEMS SHALL BE UTILIZED TO COMPENSATE FOR WORK METHODS OR MATERIALS ASSOCIATED WITH AND/OR SPECIFI ED FOR THE UTILITY INSTAL–LATION, EVEN THOUGH THE SAME OR SIMILAR ROADWAY OR BRIDGE MATERIALS MAY HAVE BEEN CALLED FOR IN THE UTILITY SPECIFI CATIONS OR DRAWINGS.
2. ALL MATERIALS, METHODS, AND/OR INTEGRAL MATERIALS OUTLINED IN THE UTILITY SPECIFI CATIONS 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, FI LLS, PHASING, ETC.) SHALL BE INCLUDED IN THE COST OF THE PERMANENT UTILITY ITEMS. (NOTE TO UTILITY: THE UTILITY RELOCATION PLANS SHALL PROVIDE TO THE CONTRACTOR THE UTILITY'S REQUIREMENTS FOR TEMPORARY TIE–INS (INCLUDING NECESSARY TESTING AND STERILIZATION TO ACCOMPLISH THE TIE–IN) AND ALSO ANY RESTRICTIONS FOR TAKING LINES OUT OF SERVICE. IF A TEMPORARY LINE WILL BE A MAJOR ITEM OF WORK, A SPECIFI C TEMPORIZATION PLAN AND ITEM MUST BE INCLUDED IN THE UTILITY'S PLANS.)
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 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 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 ITEMS 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.
8. ANY EXCAVATION OF THE STREAM CHANNEL AREA SHALL BE SEPARATED FROM FL OWING WATER AND ACCOM–PLISHED DURING LOW FL OW CONDITIONS. THIS SHALL BE ACCOMPLISHED BY THE USE OF FL UMES, LINED DIVERSION CHANNEL WITH SANDBAG BERM, DIVERSION PIPE WITH SANDBAG DAM AT PIPE INLET, OR IN SOME CASES COFF ERDAMS. ALTERNATIVELY, BASED ON FI ELD CONDITIONS AND CONTRACTOR SELECTION, THE UTILITY RELOCATION MAY BE ACCOMPLISHED USING BORE TECHNOLOGY WITH NO STREAM CHANNEL IMPACTS.

DRAWING INDEX

SHEET No.	DWG No.	DRAWING TITLE
1	U3–1	WATER LINE NOTES
2	U3–2	PROPOSED WATER RELOCATION
3	U3–3	PROPOSED WATER PROFILES
4	U3–4	WATER LINE DETAILS
5	U3–5	WATER LINE DETAILS

LEGEND

- EXISTING SANITARY SEWER MANHOLE
- SA — EXISTING SANITARY SEWER LINE
- FM — EXIST. FORCE MAIN
- OH — EXISTING OVERHEAD UTILITY LINE
- UGT — EXISTING UNDERGROUND TELEPHONE
- G — EXISTING GAS LINE
- W — EXISTING WATER LINE
- PROPOSED WATER LINE
- S — PROPOSED SILT FENCE
- PROPOSED AIR RELEASE VALVE
- PROPOSED VALVE
- PROPOSED FIRE HYDRANT
- PROPOSED BLOW–OFF VALVE
- PROPOSED WATER METER
- W — CAP EXISTING WATER LINE
- EXISTING TELEPHONE MANHOLE
- X — X — EXISTING CHAIN LINK FENCE
- EXISTING GAS VALVE
- G.M. EXISTING GAS METER
- EXISTING WATER VALVE
- W.M. EXISTING WATER METER
- EXISTING UTILITY POLE
- EXISTING LIGHT POLE
- EXISTING GUY WIRE
- C.B. EXISTING CATCH BASIN
- C.O. EXISTING SANITARY CLEAN OUT
- EXISTING FIRE HYDRANT
- W EXISTING WATER MANHOLE
- EXISTING CREEK
- EXISTING TREE LINE
- EXISTING PROPERTY LINE (APPROXIMATE)
- 18" CMP EXISTING STORM DRAIN LINE
- EXISTING CONCRETE SIDEWALK
- UTILITY LINE ABANDONMENT

1 / D1.01 — DETAIL # / DETAIL LOCATION

ESTIMATED WATER QUANTITIES

FOOTNOTE	ITEM NO.	DESCRIPTION	UNIT	QUANTITY	% PROJECT PUBLIC	% PROJECT PRIVATE
1	795-01.03	6IN DIP RESTRAINED JOINT WATER LINE	LF	60	79.00%	21.00%
1	795-01.04	6IN DIP SLIP JOINT WATER LINE	LF	49	79.00%	21.00%
1	795-01.05	8IN DIP RESTRAINED JOINT WATER LINE	LF	160	79.00%	21.00%
1	795-01.06	8IN DIP SLIP JOINT WATER LINE	LF	261	79.00%	21.00%
1	795-01.09	12IN DIP RESTRAINED JOINT WATER LINE	LF	200	79.00%	21.00%
1	795-01.10	12IN DIP SLIP JOINT WATER LINE	LF	316	79.00%	21.00%
1	795-01.13	16IN DIP RESTRAINED JOINT WATER LINE	LF	200	79.00%	21.00%
1	795-01.14	16IN DIP SLIP JOINT WATER LINE	LF	309	79.00%	21.00%
2	795-06.04	CONNECT TO 6IN WATER LINE	EA	1	79.00%	21.00%
2	795-06.05	CONNECT TO 8IN WATER LINE	EA	3	79.00%	21.00%
2	795-06.09	CONNECT TO 16IN WATER LINE	EA	1	79.00%	21.00%
	795-06.33	CUT AND CAP 6IN WATER LINE	EA	1	79.00%	21.00%
	795-06.34	CUT AND CAP 8IN WATER LINE	EA	4	79.00%	21.00%
	795-06.39	CUT AND CAP 16IN WATER LINE	EA	1	79.00%	21.00%
3	795-07.18	16IN X 8IN TAPPING SLEEVE AND VALVE	EA	1	79.00%	21.00%
3	795-08.04	6IN GATE VALVE ASSEMBLY	EA	2	79.00%	21.00%
3	795-08.09	12IN GATE VALVE ASSEMBLY	EA	2	79.00%	21.00%
4	795-08.13	16IN MJ BUTTERFLY VALVE	EA	2	79.00%	21.00%
5	795-09.24	TI OF 2IN HDPE CASING FOR SERVICE PIPE-UNCON	LF	140	79.00%	21.00%
5	795-09.28	3/4IN COPPER SERVICE LINE	LF	365	79.00%	21.00%
5	797-09.29	1 IN COPPER SERVICE LINE	LF	40	79.00%	21.00%
6	795-10.03	1IN AIR RELEASE VALVE	EA	2	79.00%	21.00%
6	795-11.02	FIRE HYDRANT ASSEMBLY	EA	1	79.00%	21.00%
	795-11.12	RETIRE IN PLACE EXISTING WATER MAIN	LF	1163	79.00%	21.00%
7	795-13.01	DI FITTINGS	LB	4500	79.00%	21.00%
8	795-15.02	12IN STEEL CASING PIPE OPEN CUT METHOD	LF	140	79.00%	21.00%
8	795-15.10	30IN STEEL CASING PIPE OPEN CUT METHOD	LF	65	79.00%	21.00%
	795-16.16	RELOCATE/RECONNECT 3/4IN WTR METER ASSMB	EA	11	79.00%	21.00%

WATER FOOTNOTES:

FOOTNOTE 1: INCLUDES ALL MATERIALS, LABOR, EQUIPMENT FOR COMPLETE INSTALLATION OF PIPE INCLUDING BUT NOT LIMITED TO TRAFFIC CONTROL, MATERIALS, EQUIPMENT, EXCAVATION IN BOTH UNCONSOLIDATED AND ROCK, REMOVAL AND REPLACEMENT OF UNSUITABLE SOIL, ENVELOPE/BEDDING MATERIAL, BACKFILLING, FLOWABLE FILL, THRUST BLOCKING, CONCRETE DEADMAN, PIPE FUSION, TRACER WIRE, WARNING TAPE, APPURTENANCES, TEMPORARY/PERMANENT SHORING, MAINTAINING THE TRENCH, TESTING, FLUSHING, DISINFECTION, BACTERIOLOGICAL SAMPLING, TEMPORARY/PERMANENT SURFACE RESTORATION, AND ANY OTHER LABOR OR MATERIAL REQUIRED TO COMPLETE THE WORK AS SPECIFIED ON THE PLANS.
FOOTNOTE 2: INCLUDES ALL MATERIALS, LABOR, AND EQUIPMENT NECESSARY FOR CONNECTING TO AN EXISTING WATER LINE INCLUDING TRAFFIC CONTROL.
FOOTNOTE 3: INCLUDES ALL MATERIALS, LABOR AND EQUIPMENT INCLUDING BUT NOT LIMITED TO TAPPING SLEEVE, VALVE, VALVE BOX, BOX ADJUSTMENT, VALVE BOX COLLAR, VALVE MARKER, EXCAVATION, BEDDING, BACKFILL, BLOCKING AND RESTRAINT, TAP OF EXISTING LINE, AND TRAFFIC CONTROL.
FOOTNOTE 4: INCLUDES ALL MATERIALS, LABOR AND EQUIPMENT INCLUDING BUT NOT LIMITED TO FITTINGS, VALVE, VALVE STEM EXTENSIONS, VALVE BOX AND COVER, BOX ADJUSTMENT, VALVE BOX COLLAR, VALVE MARKER, EXCAVATION, BEDDING, BACKFILL, BLOCKING, AND TRAFFIC CONTROL.
FOOTNOTE 5: INCLUDES ALL MATERIALS, LABOR AND EQUIPMENT FOR COMPLETE INSTALLATION OF SERVICE LINE OR CASING FOR SERVICE LINE ON LONG SIDE AND SHORT SIDE OF MAIN.
FOOTNOTE 6: INCLUDES ALL MATERIALS, LABOR AND EQUIPMENT INCLUDING BUT NOT LIMITED TO MACHINERY, TOOLS OR APPARATUS NECESSARY FOR INSTALLATION OF ASSEMBLIES AS DESCRIBED IN THE PLANS AND SPECS EXCEPT FOR SERVICE LINE WHICH IS PAID SEPERATELY FOR EACH FOOT INSTALLED.
FOOTNOTE 7: INCLUDES FITTINGS, FUSION, GLANDS AND RESTRAINT DEVICES DESCRIBED IN POUNDS.
FOOTNOTE 8: INCLUDES ALL MATERIALS, LABOR AND EQUIPMENT, SETUP AND TRAFFIC CONTROL

TYPE	YEAR	PROJECT NO.	SHEET NO.
PS&E	2026	HSIP-131(33)	U3-1

KNOX COUNTY
PIN 119390.00
CCI NO. 01021-0005

B-DATE SUBMITTAL
DATE: 05/22/2026
BASED ON ADD'L SURVEY
PROVIDED 1/15/2026

WATER LINE RELOCATION BY

CANNON & CANNON INC
10025 Investment Drive, Suite 120
Knoxville, TN 37932
865.670.8555
www.cci-corp.com

WEST KNOX UTILITY DISTRICT — WATER WASTEWATER SERVICE

WATER PLANS

SEALED BY

WILLIAM W. LITTLEJOHN — REGISTERED ENGINEER — AGRICULTURE — No. 120418 — STATE OF TENNESSEE
01/20/2026

COORDINATES ARE NAD 83(1995), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00009_ AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988 WITH GEOID 2012A.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

WATER LINE NOTES

NOTES:
1. ALL ROAD CROSSINGS SHALL BE COORDINATED AND INSTALLED WITH TRAFFIC CONTROL AND UTILITY OUTAGES.
2. CONTRACTOR IS RESPONSIBLE FOR LOCATING AND CONNECTING EXISTING SERVICE LINES TO RELOCATE THE EXISTING WATER METER.
3. ALL WATER SERVICE LINE REPLACEMENT UNDER EXISTING OR PROPOSED ROADWAYS SHALL BE PEXA IN 2" HDPE CASING PIPE AND INSTALLED BY HORIZONTAL DIRECTIONAL DRILLING.
4. BORE PITS ARE SHOWN FOR CONTRACTOR REFERENCE ONLY. WHEN INSTALLING BORE PIT IN CARPENTER ROAD, CONTRACTOR SHALL MAINTAIN ONE-LANE OF TRAFFIC ACCESS AT ALL TIMES.

STA. 0+00 BEGIN LINE '2'
STA. 0+59.58 LINE '1'
CONNECT NEW 6" WATER LINE TO NEW 12" WATER LINE W/ (1) 12" x 6" M.J. TEE, (1) 12" M.J. GATE VALVE, (1) 6" M.J. GATE VALVE & (1) 6" M.J. 22.5° BEND.
N 612177.31
E 2533644.85

EXIST. 8" WATER LINE (TO REMAIN)

STA. 0+00 BEGIN LINE '1'
CONNECT NEW 12" WATER LINE TO EXIST. 8" WATER LINE W/ (1) 12" GATE VALVE, (1) 12" x 8" M.J. REDUCER & (1) 8" SOLID SLEEVE.
N 612227.92
E 2533615.45

CUT & CAP EXIST. 8" WATER LINE

STA. 0+21.20 LINE '1'
PROVIDE (1) 12" M.J. 22.5° BEND.
N 612207.51
E 2533621.16

STA. 0+91 LINE '2'
PROVIDE (1) 12" M.J. 45° BEND.

PROPOSED 6" R.J. D.I.P. WATER LINE, (TYP.)

STA. 1+08.37 LINE '2' E.O.L.
CONNECT NEW 6" WATER LINE TO EXIST. 6" WATER LINE W/ (1) 6" M.J. 45° BEND, (1) 6" M.J. GATE VALVE & (1) 6" SOLID SLEEVE..
N 612129.15
E 2533553.06

CUT & CAP EXIST. 6" WATER LINE

EXIST. 6" WATER LINE, (TO BE RETIRED).

EXIST. 8" WATER LINE (TO BE RETIRED)

STA. 2+01.87 LINE '1'
PROVIDE (1) 12" M.J. 22.5° BEND.
N 612090.19
E 2533753.98

PROVIDE APPROX. 65 L.F. 12" R.J. D.I.P. CARRIER PIPE IN 24" STEEL CASING PIPE. OPEN CUT CROSSING OF PROP. CARPENTER RD. (SEE NOTE #1)

STA. 3+57.82 LINE '1'
PROVIDE (1) 12" M.J. 22.5° BEND.
N 612066.28
E 2533862.17

STA. 1+18.07 LINE '1'
PROVIDE (1) 12" M.J. 22.5° BEND.
N 612131.30
E 2533680.96

STA. 4+01.00 LINE '1'
PROVIDE (1) 1" AIR-RELEASE VALVE

STA. 4+02.93 LINE '1'
PROVIDE (1) 12" M.J. 22.5° BEND.
N 612077.76
E 2533905.80

20'X20' BORE PIT (SEE NOTE 4, THIS SHEET)

PROPOSED 12" D.I.P. WATER LINE, (TYP.)

STA. 2+87.47 LINE '1'
PROVIDE (1) 12" M.J. 90° BEND.
N 612022.85
E 2533806.82

STA. 4+19.93 LINE '1'
PROVIDE (1) 12" M.J. 45° BEND.
N 612075.47
E 2533922.64

STA. 6+70.36 LINE '3'
PROVIDE (1) 8" M.J. 45° BEND.
N 612106.06
E 2534116.34

EXIST. 2" WATER LINE, (TO REMAIN).

PROVIDE APPROX. 75 L.F. 12" R.J. D.I.P. CARRIER PIPE IN 24" STEEL CASING PIPE. JACK AND BORE CROSSING OF EMORY ROAD (SEE NOTE #1)

STA. 5+12.39 LINE '2'
PROVIDE (1) 8" M.J. 45° BEND.
N 612015.96
E 2533986.59

STA. 6+92.01 LINE '3'
PROVIDE (1) 8" M.J. 45° BEND.
N 612127.37
E 2534120.19

STA. 5+03.36 LINE '1'
PROVIDE (1) 12" M.J. 45° BEND.
N 612009.05
E 2533973.13

STA. 4+49.57 LINE '3'
PROVIDE (1) 16" M.J. 45° BEND.
N 611954.13
E 2533975.44

PROPOSED 8" D.I.P. WATER LINE, (TYP.)

APPROX. 20' X 40' BORE PIT, (SHOWN FOR REFERENCE).

STA. 5+15.38 LINE '1' E.O.L. = STA. 5+03.20 LINE '3'
PROVIDE (1) 16" x 12" M.J. TEE, (1) 16" M.J. BUTTERFLY VALVE, (1) 12" M.J. GATE VALVE & (1) 16" x 8" M.J. REDUCER & (1) 8" M.J. GATE VALVE.
N 612006.92
E 2533984.96

W.K.U.D. EASEMENT. (INSTR. NO. 202403180044689)

EXIST. 16" WATER LINE, (TO REMAIN).

PROPOSED 16" D.I.P. WATER LINE, (TYP.)

STA. 4+77.20 LINE '3'
PROVIDE (1) 16"x6" M.J. TEE & (1) FIRE HYDRANT ASSEMBLY
N 611981.33
E 2533980.35

EXIST. 16" WATER LINE (TO BE RETIRED)

EXIST. 8" WATER LINE (TO BE RETIRED)

STA. 2+85.00 LINE '3'
PROVIDE (1) 16" M.J. 11.25° BEND.
N 611814.65
E 2534062.23

SEE INSET #1, THIS SHEET

CONTRACTOR TO UTILIZE EXIST. W.K.U.D. WATER EASEMENT.

STA. 1+81.62 LINE '3'
PROVIDE (1) 16" M.J. 45° BEND.
N 611739.86
E 2534133.57

CUT & CAP EXIST. 8" WATER LINE. CLOSE EXIST. 8" VALVE.

STA. 1+55.93 LINE '3'
PROVIDE (1) 16" M.J. 45° BEND.
N 611731.58
E 2534157.90

CUT & CAP EXIST. 16" WATER LINE. CLOSE EXIST. 16" VALVE.

STA. 0+96.38 LINE '3'
PROVIDE (1) 16" M.J. 45° BEND.
N 611680.64
E 2534188.75

STA. 0+00 BEGIN LINE '3'
CONNECT NEW 16" WATER LINE TO EXIST. 16" WATER LINE W/ (1) 16" M.J. TEE (CUT-IN) & (2) 16" M.J. BUTTERFLY VALVES.
N 611623.23
E 2534116.50

STA. 0+79.87 LINE '3'
PROVIDE (1) 16" M.J. 45° BEND.
N 611664.61
E 2534184.82

EXIST. 16" WATER LINE (TO REMAIN)

PROVIDE APPROX. 65 L.F. 16" D.I.P. CARRIER PIPE IN 30" STEEL CASING PIPE. OPEN CUT CROSSING OF HARRELL RD & WWC-1. (SEE NOTE #1)

TYPICAL LONG-SIDE SERVICE REPLACEMENT: PROVIDE 3/4" PEXA IN 2" HDPE CASING BY HDD UNDER ROADWAYS. RELOCATE METER TO R.O.W. & RECONNECT.

EXIST. 8" WATER LINE (TO BE RETIRED)

CUT & CAP EXIST. 8" WATER LINE

STA. 8+96.54 LINE '3' E.O.L.
CONNECT NEW 8" WATER LINE TO EXIST. 8" WATER LINE W/ (1) 8" M.J. 45° BEND & (1) 8" SOLID SLEEVE.
N 612250.23
E 2534278.56

EXIST. 8" WATER LINE (TO REMAIN)

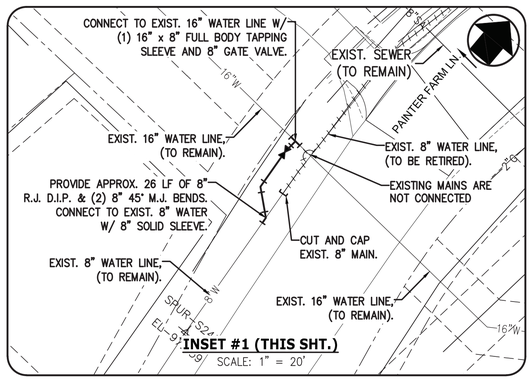
STA. 8+81.53 LINE '3'
PROVIDE (1) 8" M.J. 45° BEND.
N 612235.47
E 2534275.85

STA. 8+72.38 LINE '3'
PROVIDE (1) 1" AIR-RELEASE VALVE

TYPICAL SAME-SIDE SERVICE.
PROVIDE 3/4" COPPER SERVICE PIPE BY OPEN CUT.
RELOCATE METER TO R.O.W. & RECONNECT.

PROVIDE (2) 1" COPPER SERVICE LINES FROM WATER MAIN. INSTALL (2) 1"X3/4" TEES AND 3/4" SERVICE LINES TO EACH METER. RECONNECT (4) METERS, (SEE DETAIL 7, SHT. W2.01).

SAMH12 TOP-993.00 INV-985.40 INV-985.30
SAMH13 TOP-999.22 INV-990.62 INV-990.62 INV-990.52
SAMH14 TOP-996.80 INV-991.40 INV-991.30
SAMH15 TOP-1001.60 INV-993.10 INV-993.00
MHSA6 TOP-980.89 INV-975.09 INV-974.99
MHSA7 TOP-977.92 INV-970.52 INV-970.42 INV-970.32
MHSA8 TOP-978.63 INV-968.53 INV-968.43
MHSA11 TOP-990.95 INV-983.95



INSET #1 (THIS SHT.)
SCALE: 1" = 20'

TYPE	YEAR	PROJECT NO.	SHEET NO.
PS&E	2026	HSIP-131(33)	U3-2

KNOX COUNTY
PIN 119390.00
CCI NO. 01021-0005

B-DATE SUBMITTAL
DATE: 05/22/2026
BASED ON ADD'L SURVEY
PROVIDED 1/15/2026

WATER LINE RELOCATION BY

CANNON & CANNON INC
10025 Investment Drive, Suite 120
Knoxville, TN 37932
865.670.8555
www.cci-corp.com

WEST KNOX UTILITY DISTRICT
WATER WASTEWATER SERVICE

WATER PLANS

SEALED BY

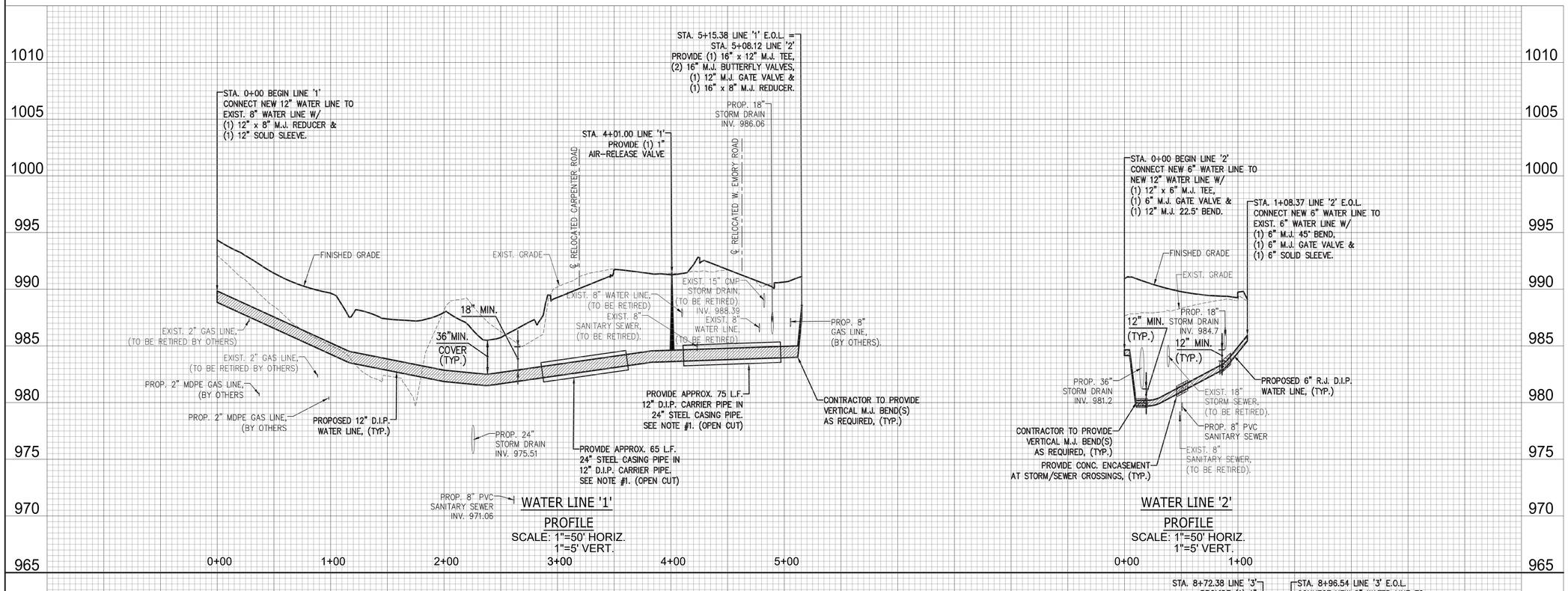


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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PROPOSED WATER RELOCATION

SCALE: 1" = 50'



WATER LINE '1'

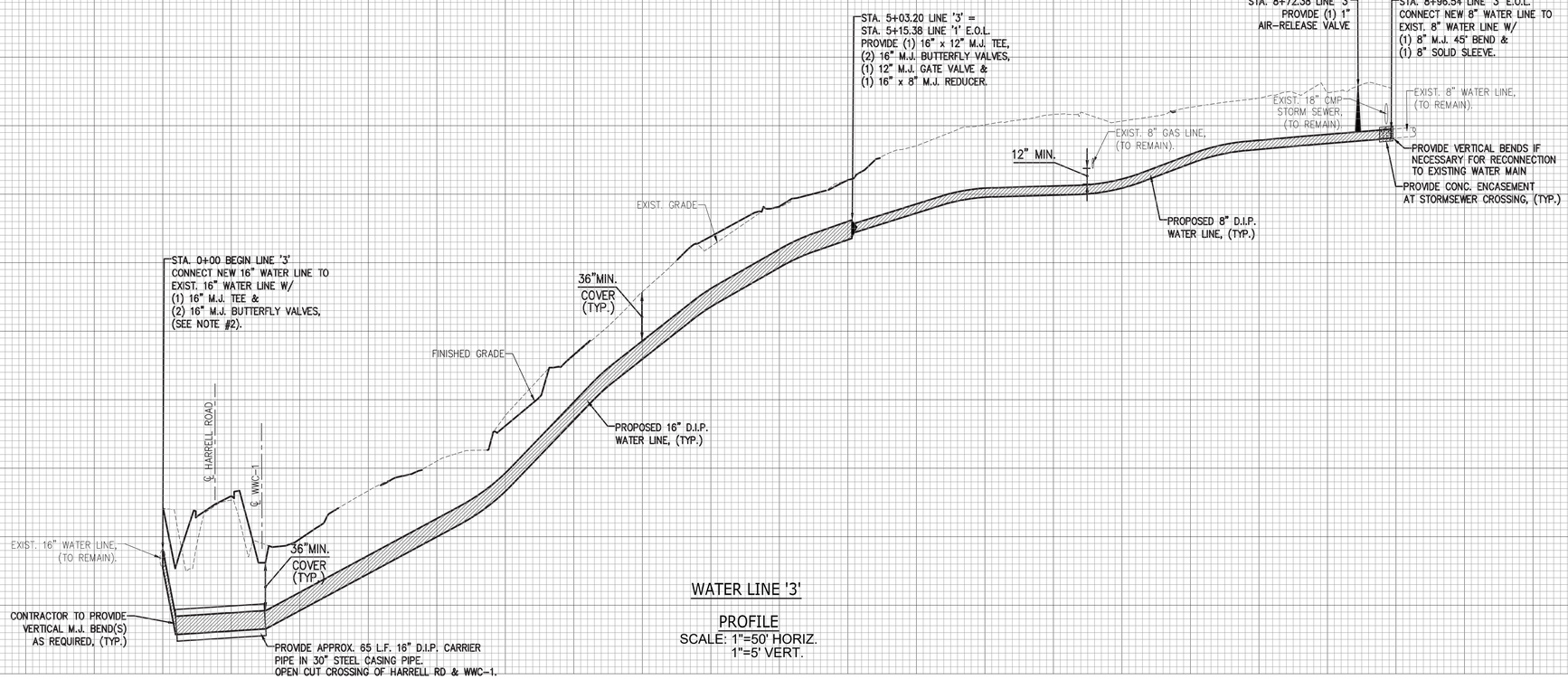
PROFILE

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

WATER LINE '2'

PROFILE

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



WATER LINE '3'

PROFILE

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

TYPE	YEAR	PROJECT NO.	SHEET NO.
PS&E	2026	HSIP-131(33)	U3-3

KNOX COUNTY
PIN 119390.00
CCI NO. 01021-0005

B-DATE SUBMITTAL
DATE: 05/22/2026
BASED ON ADD'L SURVEY
PROVIDED 1/15/2026

PROFILE NOTES:

1. CROSSING UNDERGROUND WATER, GAS, ELECTRIC, TELEPHONE, AND FIBER PIPES ARE SHOWN IN PROFILE VIEW AT AN ASSUMED DEPTH OF 3-FEET. CONTRACTOR IS RESPONSIBLE FOR VERIFYING THE VERTICAL LOCATION OF ALL UTILITY CROSSINGS PRIOR TO CONSTRUCTION.
2. PROPOSED STORM AND SANITARY SEWER CROSSING INVERTS SHOWN ON THE PROFILE VIEW ARE BASED ON TDOT CONSTRUCTION PLANS. CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL PIPE INVERTS AND SEPARATION REQUIREMENTS WITH TDOT PLANS. ADJUSTMENTS MAY BE REQUIRED DUE TO CHANGES IN CONDITIONS DURING CONSTRUCTION.

WATER LINE RELOCATION BY

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WEST KNOX UTILITY DISTRICT
WATER WASTEWATER SERVICE

WATER PLANS

SEALED BY

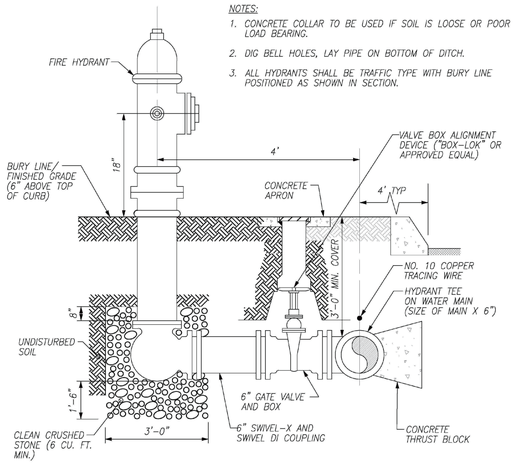


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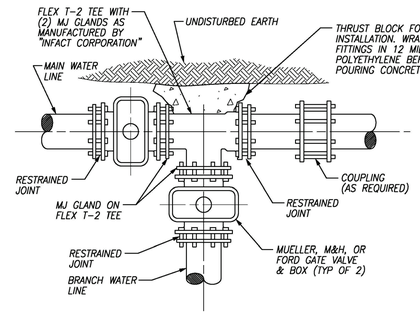
STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PROPOSED WATER PROFILES

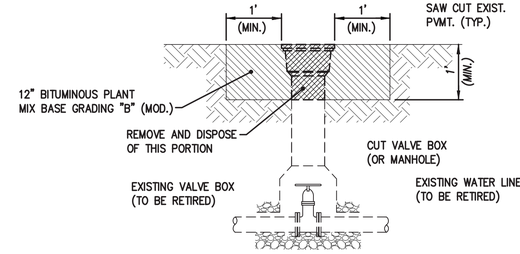
SCALE: 1"=50' HORIZ.
1"=5' VERT.



1 — FIRE HYDRANT
N.T.S.



2 — TYPICAL VALVE INSTALLATION
N.T.S.



NOTES:

1. AFTER EXISTING WATER LINE(S) HAVE BEEN RETIRED, SAW CUT EXISTING PAVEMENT A MINIMUM OF 1 FOOT BEYOND THE OUTSIDE EDGE OF VALVE (OR STRUCTURE) TO A MINIMUM DEPTH OF 1 FOOT.
2. CUT VALVE BOX (OR MANHOLE) AT 1 FOOT BELOW GRADE, REMOVE TOP PORTION, AND DISPOSE OF REMOVED MATERIAL PROPERLY. CONTRACTOR MAY REMOVE ENTIRE TOP SECTION OF VALVE BOX (OR MANHOLE) WITHOUT CUTTING IF APPROPRIATE, AT NO ADDITIONAL COST TO OWNER.
3. PROVIDE #57 CRUSHED STONE FOR LEVELING COURSE TO 1 FOOT BELOW GRADE.
4. WHEN A TEMPORARY ASPHALT PATCH IS USED, IT SHALL BE PLACED IMMEDIATELY AFTER CRUSHED STONE BACKFILL. ALL TEMPORARY REPAIRS MUST BE REPLACED PERMANENTLY WITHIN 90 DAYS.

3 — TYPICAL VALVE BOX RETIREMENT DETAIL
N.T.S.

TYPE	YEAR	PROJECT NO.	SHEET NO.
PS&E	2026	HSIP-131(33)	U3-4

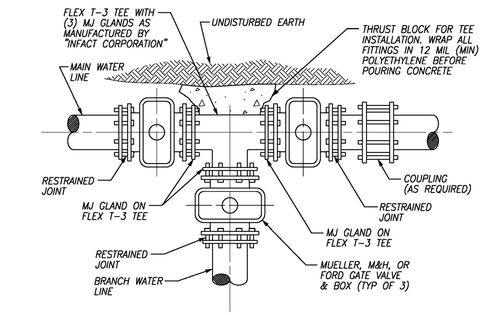
KNOX COUNTY
PIN 119390.00
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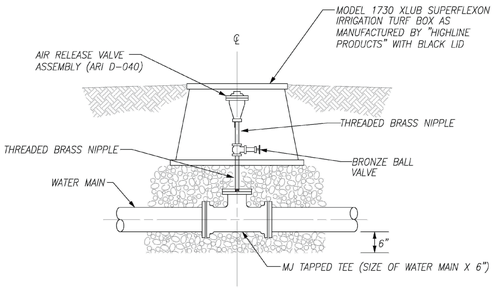
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WEST KNOX UTILITY DISTRICT — WATER WASTEWATER SERVICE



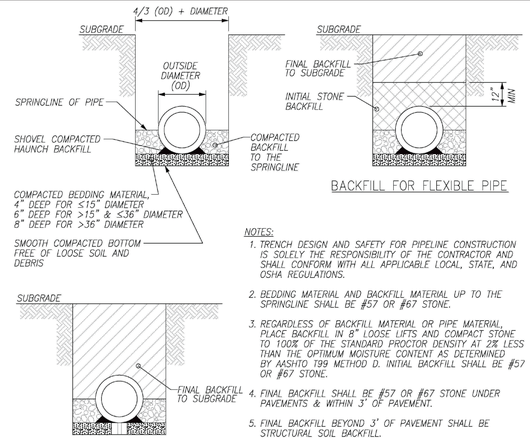
4 — TYPICAL VALVE INSTALLATION
N.T.S.



NOTES:

1. AIR RELEASE VALVES SHALL BE INSTALLED AT ALL HIGH POINTS ON WATER MAINS.
2. USE FOR ¾", 1", AND 2" AIR RELEASE VALVE INSTALLATIONS.

5 — AIR RELEASE VALVE DETAIL
N.T.S.



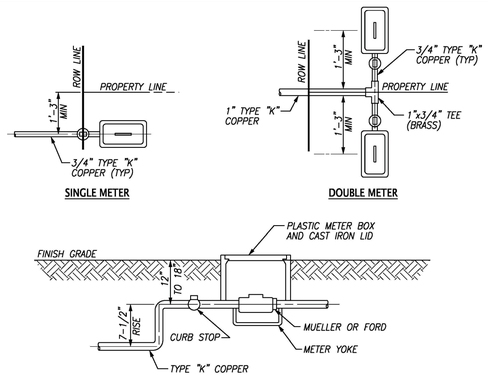
BACKFILL FOR FLEXIBLE PIPE

BACKFILL FOR RIGID PIPE

NOTES:

1. TRENCH DESIGN AND SAFETY FOR PIPELINE CONSTRUCTION IS SOLELY THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL CONFORM WITH ALL APPLICABLE LOCAL, STATE, AND OSHA REGULATIONS.
2. BEDDING MATERIAL AND BACKFILL MATERIAL UP TO THE SPRINGLINE SHALL BE #57 OR #67 STONE.
3. REGARDLESS OF BACKFILL MATERIAL OR PIPE MATERIAL, PLACE BACKFILL IN 8" LOOSE LIFTS AND COMPACT STONE TO 100% OF THE STANDARD PROCTOR DENSITY AT 2% LESS THAN THE OPTIMUM MOISTURE CONTENT AS DETERMINED BY AASHTO T99 METHOD D. INITIAL BACKFILL SHALL BE #57 OR #67 STONE.
4. FINAL BACKFILL SHALL BE #57 OR #67 STONE UNDER PAVEMENTS & WITHIN 3' OF PAVEMENT.
5. FINAL BACKFILL BEYOND 3' OF PAVEMENT SHALL BE STRUCTURAL SOIL BACKFILL.

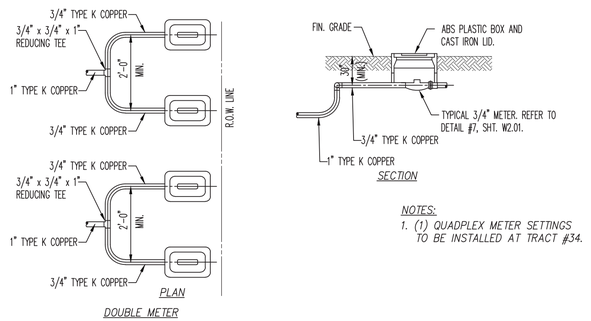
6 — PIPE BEDDING AND BACKFILL
N.T.S.



NOTES:

1. CONTRACTOR TO COORDINATE FIELD LOCATION OF PROPOSED WATER METERS WITH WKUD.
2. CONTRACTOR RESPONSIBLE FOR RE-CONNECTING TO EXISTING WATER SERVICE LINE.
3. USE ROLLED COPPER FOR SERVICE LINE DIRECTION CHANGES (NO FITTINGS FOR BENDS).

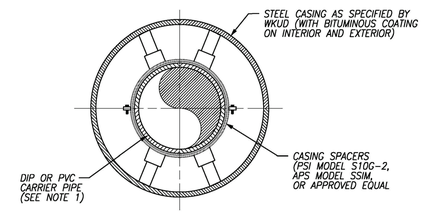
7 — TYPICAL 3/4" METER SETTING
N.T.S.



NOTES:

1. (1) QUADPLEX METER SETTINGS TO BE INSTALLED AT TRACT #34.

8 — DUPLEX/QUADPLEX METER DETAIL
N.T.S.



NOTES:

1. CARRIER PIPE SHALL BE CLASS 350 DUCTILE IRON PIPE (WATER) OR RJIB CERTA-LOK DR18 PRESSURE PIPE (235 PSI) (SEWER).
2. INSTALL CASING SPACERS IN STRICT COMPLIANCE WITH THE WRITTEN MANUFACTURER'S INSTRUCTIONS.
3. PROVIDE CASING END SEALS IN ACCORDANCE WITH WKUD REQUIREMENTS.
4. CONTRACTOR TO CONFIRM THAT ALL CASING SPACERS WILL FIT INSIDE OF SPECIFIED STEEL CASING AS SHOWN ON THE PLANS PRIOR TO ORDERING MATERIALS.
5. TRACER WIRE SHALL BE INSTALLED WITH CASING PIPE.
6. SPACERS SHALL BE SPACED EVENLY AT NO GREATER THAN 6 FEET APART
7. ENDS OF CASING PIPES MUST BE FULLY ROUND TO ALLOW CONTINUOUS WELDS FOR SMOOTH INSTALLATION OF CASING SPACERS.

9 — CASING AND SPACER DETAIL
N.T.S.

SEALED BY



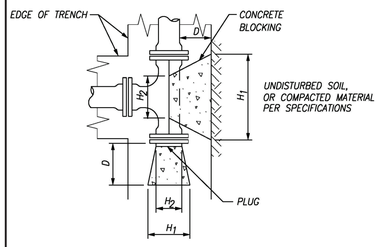
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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

WATER PLANS

WATER LINE DETAILS

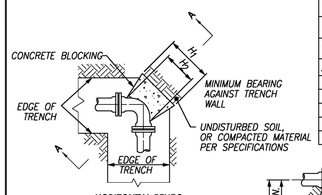
SIZE PIPE (INCHES)	TEES, PLUGS, AND CROSSES				
	H_1	H_2	V	D	CU FT.
2&2-1/4	18	10	12	18	1.9
3 & 4	24	12	12	18	2.3
6	24	16	18	18	3.5
8	36	18	18	18	5.1
10	48	24	18	24	7.2
12	54	30	24	24	13.4



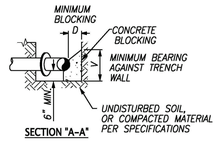
NOTES:

1. THRUST BLOCKING BASED UPON AN INTERNAL HYDROSTATIC PRESSURE OF 200 PSI AND AN ALLOWABLE SOIL BEARING CAPACITY OF 4000 POUNDS/SQUARE FOOT. SHOULD HYDROSTATIC PRESSURE BE GREATER AND/OR SOIL BEARING CAPACITY SHOULD BE LESS THAN THAT NOTED ABOVE, CONTRACTOR SHALL INCREASE SIZE AS REQUIRED AND PROVIDE CALCULATIONS TO SUPPORT SAID MODIFICATION.
2. WKUD SHALL APPROVE ALL THRUST BLOCKS.
3. WRAP ALL FITTINGS AND PIPE IN PLASTIC PRIOR TO PLACING CONCRETE.

10 — N.T.S. — TYPICAL THRUST BLOCKS FOR TEES, PLUGS & CROSSES



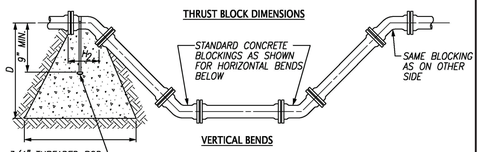
HORIZONTAL BENDS



SECTION "A-A"

SIZE PIPE (INCHES)	90° BENDS					45° BENDS					22 1/2° BENDS					11 1/4° BENDS					SIZE PIPE
	H_1	H_2	V	D	CU FT.	H_1	H_2	V	D	CU FT.	H_1	H_2	V	D	CU FT.	H_1	H_2	V	D	CU FT.	
2&2-1/4	18	10	12	18	1.9	18	6	12	18	1.5	18	6	12	18	1.5	18	6	12	18	1.5	2&2-1/4
3 & 4	24	12	12	18	2.3	18	8	12	18	1.6	18	8	12	18	1.6	18	8	12	18	1.6	3 & 4
6	30	16	18	18	4.1	24	10	16	18	3.2	24	10	16	18	3.2	24	10	16	18	3.2	6
8	39	18	24	18	7.3	30	11	18	18	4.0	24	11	18	18	3.5	24	11	16	18	3.4	8
10	54	32	24	18	10.3	24	18	21	18	4.6	24	18	21	18	4.6	24	18	21	18	4.6	10
12	54	32	36	24	18.2	42	18	24	24	9.6	24	18	24	24	6.6	24	18	21	24	6.1	12

THRUST BLOCK DIMENSIONS

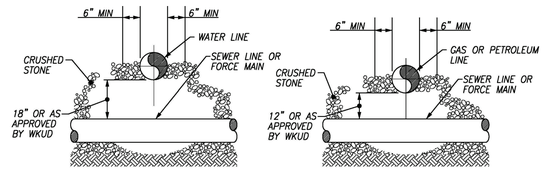


VERTICAL BENDS

NOTES:

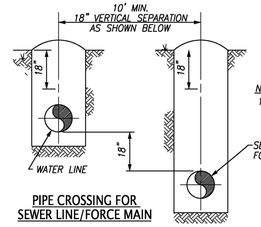
1. THRUST BLOCKING BASED UPON AN INTERNAL HYDROSTATIC PRESSURE OF 200 PSI AND AN ALLOWABLE SOIL BEARING CAPACITY OF 4000 POUNDS/SQUARE FOOT. SHOULD HYDROSTATIC PRESSURE BE GREATER AND/OR SOIL BEARING CAPACITY SHOULD BE LESS THAN THAT NOTED ABOVE, CONTRACTOR SHALL INCREASE SIZE AS REQUIRED AND PROVIDE CALCULATIONS TO SUPPORT SAID MODIFICATION.
2. WKUD SHALL APPROVE ALL THRUST BLOCKS.
3. WRAP ALL FITTINGS AND PIPE IN PLASTIC PRIOR TO PLACING CONCRETE.

11 — N.T.S. — TYPICAL THRUST AND ANCHOR BLOCK FOR BENDS



SEWER LINE/FORCE MAIN UNDER WATER LINE

SEWER LINE/FORCE MAIN UNDER GAS TRANSMISSION LINE

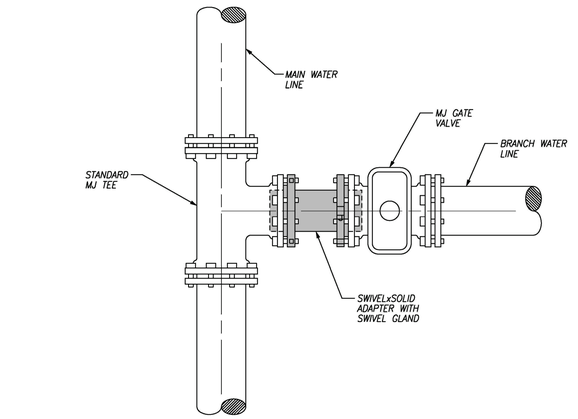


PIPE CROSSING FOR SEWER LINE/FORCE MAIN

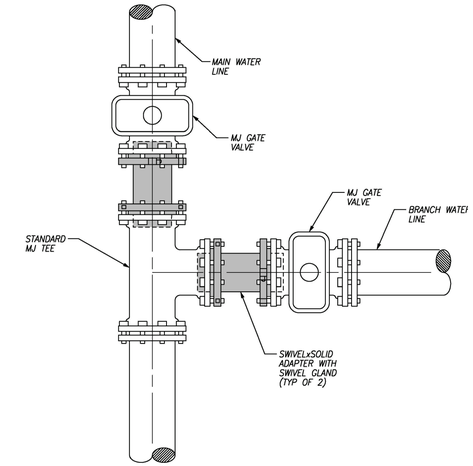
NOTES:

1. SEWER LINES AT WATER MAIN CROSSING SHALL BE ARRANGED SO THAT THE SEWER JOINTS WILL BE AS FAR AS POSSIBLE FROM WATER MAIN JOINTS

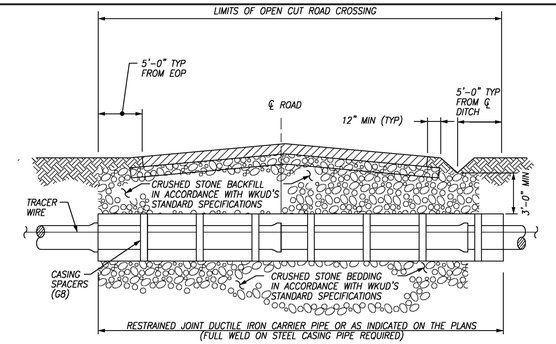
12 — N.T.S. — PIPE SEPARATION



13 — N.T.S. — SWIVEL X SOLID ADAPTER ON M.J. TEE (1-WAY)



14 — N.T.S. — SWIVEL X SOLID ADAPTER ON M.J. TEE (2-WAY)

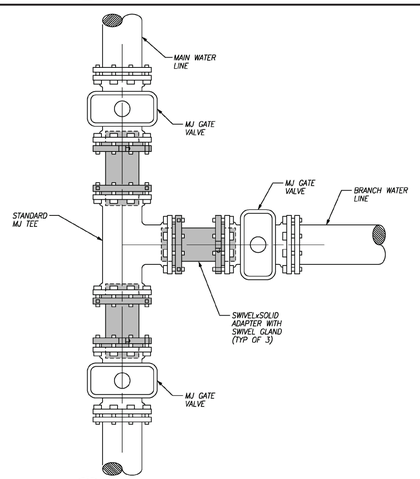


SECTION

NOTES:

1. ALL PIPING WITHIN THE LIMITS OF THE OPEN CUT ROAD CROSSING SHALL BE DIP TO MATCH THE SIZE OF PIPING SHOWN ON THE PLANS.

15 — N.T.S. — TYPICAL OPEN CUT ROAD CROSSING



16 — N.T.S. — SWIVEL X SOLID ADAPTER ON M.J. TEE (3-WAY)

TYPE	YEAR	PROJECT NO.	SHEET NO.
PS&E	2026	HSIP-131(33)	U3-5

KNOX COUNTY
PIN 119390.00
CCI NO. 01021-0005

B-DATE SUBMITTAL
DATE: 05/22/2026
BASED ON ADD'L SURVEY
PROVIDED 1/15/2026

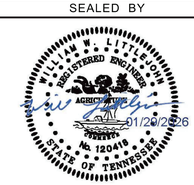
WATER LINE RELOCATION BY

CANNON & CANNON INC
10025 Investment Drive, Suite 120
Knoxville, TN 37932
865.670.8555
www.cci-corp.com

WEST KNOX UTILITY DISTRICT — WATER WASTEWATER SERVICE

WATER PLANS

SEALED BY



COORDINATES ARE NAD 83(1995), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00009_ AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988 WITH GEOID 2012A.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

WATER LINE DETAILS

GENERAL NOTES:

1. PLANIMETRIC AND PROFILE INFORMATION PER FIELD SURVEY PROVIDED BY T.D.O.T., CONDUCTED IN OCTOBER OF 2014. COORDINATES ARE NAD 83 (1995) AND ARE DATUM ADJUSTED BY THE FACTOR OF 1.00009 AND TIED TO THE TGRN, ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988 WITH GEOID 2012A. SEE TDOT ROADWAY DESIGN PROJECT 47027–2222–94.
2. RIGHT–OF–WAY AND PROPERTY SHOWN IS PER INFORMATION PROVIDED BY T.D.O.T.
3. ALL MATERIALS AND WORKMANSHIP SHALL BE IN STRICT CONFORMANCE WITH CURRENT OWNER CONSTRUCTION SPECIFICATIONS AND DETAILS.
4. WHERE FIGURE NUMBERS ARE REFERENCED ON THE DRAWINGS, REFER TO THE APPLICABLE SECTION IN THE PROJECT MANUAL FOR DETAILS & ADDITIONAL INFORMATION.
5. CANNON & CANNON, INC. WILL PROVIDE MICROSTATION DESIGN FILES (.DGN) TO THE CONTRACTOR FOR USE IN CONSTRUCTION STAKING THE PROPOSED ALIGNMENTS UPON REQUEST POST BID.
6. ALL WORK SHALL BE PERFORMED BY A TENNESSEE LICENSED UTILITY CONTRACTOR.
7. CONTRACTOR SHALL HAVE AN APPROVED SET OF PLANS AND SPECIFICATIONS AND A COPY OF THE GENERAL STORMWATER POLLUTION PREVENTION PLAN (SWPPP) ON THE JOB SITE AT ALL TIMES.
8. UNDERGROUND UTILITIES INCLUDE, BUT ARE NOT LIMITED TO, WATER, SEWER, GAS, PETROLEUM, STEAM PIPING/DUCT WORK, ELECTRIC, COMMUNICATION SERVICES, STREET LIGHTING AND TRAFFIC DETECTOR LOOPS. THE CONTRACTOR SHALL LOCATE AND PROTECT ALL SUCH FACILITIES. THE CONTRACTOR IS RESPONSIBLE FOR REPAIRING ALL SUCH FACILITIES THAT ARE DAMAGED DURING CONSTRUCTION. PAYMENT FOR LOCATING, PROTECTING, COORDINATING AND RE–PAIRING EXISTING FACILITIES WILL BE INCLUDED IN OTHER ITEMS OF WORK AND NO ADDITIONAL COMPENSATION WILL BE MADE. ALL REPAIRS SHALL BE DONE IN ACCORDANCE WITH STANDARDS AND REQUIREMENTS OF THE UTILITY'S OWNER. UTILITY SUPPORT METHODS WILL BE SUBMITTED PRIOR TO CONSTRUCTION FOR APPROVAL.
9. THE CONTRACTOR SHALL PROVIDE AND MAINTAIN SUITABLE SIGNAGE, BARRICADES, AND LIGHTS FOR PROTECTION OF TRAFFIC PER THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD). ANY EXISTING ROAD SIGN REMOVED FOR CONSTRUCTION SHALL BE REPLACED BY THE END OF THE WORKING DAY. TEMPORARY STOP SIGNS SHALL BE ERECTED PRIOR TO REMOVAL OF PERMANENT STOP SIGNS.
10. THE CONTRACTOR SHALL NOT CLOSE OR BLOCK ANY HIGHWAY, STREET, OR ROADWAY WITHOUT FIRST OBTAINING ALL REQUIRED PERMITS FROM THE GOVERNING ENTITY (TDOT, ETC...).
11. THE CONTRACTOR SHALL PROVIDE ACCESS TO UTILITY COMPANIES FOR MAINTENANCE AND WORK ON THEIR UTILITIES DURING THE COURSE OF WORK.
12. SURVEY MONUMENTS DISTURBED BY THE CONTRACTOR SHALL BE RESET BY A TENNESSEE REGISTERED LAND SURVEYOR, AS DIRECTED BY THE PROJECT MANAGER. PRIOR TO DISTURBANCE, CONTACT THE PROJECT MANAGER FOR MONUMENT INFORMATION.
13. CONTRACTOR SHALL VERIFY WORK IN FIELD AND SHALL SATISFY HIMSELF AS TO THE ACCURACY BETWEEN WORK SET FORTH ON THESE PLANS AND THE WORK REQUIRED IN THE FIELD. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE PROJECT MANAGER PRIOR TO THE START OF CONSTRUCTION.
14. THE CONTRACTOR SHALL NEATLY SAW CUT ALL ROADWAYS AND DRIVEWAYS PRIOR TO INSTALLING A PERMANENT PAVEMENT REPAIR.
15. THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL PROPERTIES DURING CONSTRUCTION.
16. INDICATED SCALES ARE BASED ON FULL SIZE DRAWINGS OF 22" x 34"; IF DRAWINGS ARE REDUCED, SCALES MUST BE ADJUSTED ACCORDINGLY.
17. CONTRACTOR SHALL NOTIFY THE OWNER'S PROJECT MANAGER 48 HOURS PRIOR TO BEGINNING CONSTRUCTION.
18. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO THE PROJECT SITE RESULTING FROM THE CONTRACTOR'S CONSTRUCTION ACTIVITIES.
19. TREES THAT HAVE BEEN DAMAGED OR REMOVED, ASPHALT AND OTHER CONSTRUCTION DEBRIS SHALL BE REMOVED OFFSITE BY CONTRACTOR.
20. THE CONTRACTOR SHALL ENSURE POSITIVE DRAINAGE TO AND THROUGH EXISTING DRAINAGE FACILITIES. ANY CONSTRUCTION AROUND, THROUGH OR IN DRAINAGE PATHS SHALL NOT ALTER THE FLOW PATHS FROM EXISTING AFTER CONSTRUCTION IS COMPLETE.
21. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR POT HOLING EXISTING UTILITIES AND DETERMINING ELEVATION AND LOCATION. POT HOLING SHALL BE CONDUCTED WITH THE LEAST INTRUSIVE MEANS SUCH AS A VACTRON, HAND DIGGING, OR OTHER SIMILAR EQUIPMENT. THE COST OF POTHOLING AND RESTORATION AT POTHOLE LOCATIONS SHALL BE INCLUDED IN THE BASE BID.

STANDARD WKUD SEWER NOTES:

1. ALL WORK TO BE PERFORMED IN ACCORDANCE WITH WKUD'S STANDARD SPECIFICATIONS. IF CONFLICTS ARISE DURING CONSTRUCTION, CONSULT WITH WKUD'S INSPECTOR AS TO NECESSARY FIELD CHANGES. WKUD RESERVES THE RIGHT TO MODIFY THE MATERIAL OR CONSTRUCTION REQUIREMENTS IF SUCH CONFLICTS ARISE.
2. THE LOCATIONS OF THE EXISTING UTILITIES SHOWN ON THESE DRAWINGS ARE APPROXIMATE. CONTRACTOR TO REFERENCE PLANS AND COORDINATE WITH THE UTILITY OWNER TO DETERMINE THE ACTUAL FIELD LOCATION. UTILITIES CAN BE LOCATED BY CALLING THE TENNESSEE ONE CALL SYSTEM, AT 1–800 – 351–1111.
3. PRIOR TO COMMENCING WORK, THE CONTRACTOR SHALL CONTACT THE UTILITY OWNERS TO NOTIFY THEM OF WORK IN THE AREA AND REQUEST THEM TO PROPERLY LOCATE THEIR RESPECTIVE UTILITY. NOTIFICATION SHALL BE GIVEN AT LEAST THREE BUSINESS DAYS PRIOR TO COMMENCEMENT OF OPERATIONS AROUND THE UTILITY.
4. PROVIDE ALL NECESSARY PROTECTIVE MEASURES TO SAFEGUARD THE EXISTING UTILITIES FROM DAMAGE DURING THE CONSTRUCTION OF THIS PROJECT. FURNISH ANY SPECIAL EQUIPMENT REQUIRED TO WORK OVER AND AROUND THE UTILITIES.
5. WKUD REQUIRES 24" OF HORIZONTAL SEPARATION AND 12" OF VERTICAL SEPARATION FROM OTHER UTILITIES IF THEY ARE INSTALLED ALONGSIDE THE SEWER MAINS, AND THEY SHOULD NOT BE CONSTRUCTED IN THE SAME TRENCH.
6. HORIZONTAL SEPARATION BETWEEN WATER AND SANITARY SEWER LINES SHALL BE 10 LF. IF 10 LF OF SEPARATION IS NOT AVAILABLE, THE SEWER SHALL BE INSTALLED UNDERNEATH THE WATER LINE WITH A MINIMUM OF 18" OF SEPARATION BETWEEN THE OUTSIDES OF THE PIPES.
7. NO BUILDINGS, BUILDING FOOTERS, OR OTHER PERMANENT STRUCTURES ARE TO BE CONSTRUCTED WITHIN THE 15 FEET UTILITY EASEMENTS (7.5 FEET EACH SIDE OF INSTALLED LINE).
8. TRENCH DESIGN AND SAFETY FOR PIPELINE CONSTRUCTION IS SOLELY THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL CONFORM WITH ALL APPLICABLE LOCAL, STATE, AND OSHA REGULATIONS.
9. THE STONE BEDDING AND BACKFILL SHALL BE DONE IN STRICT COMPLIANCE WITH THE PIPE MANUFACTURER'S RECOMMENDATIONS, BUT MUST COMPLY WITH WKUD'S SPECIFICATIONS.
10. UTILITIES SHALL BE INSTALLED AFTER GRADING IS COMPLETED AND APPROVED AND BEFORE ANY PAVEMENT IS INSTALLED.
11. CONTRACTOR SHALL TAKE SPECIAL CARE TO BED, BACKFILL, AND COMPACT PIPE CROSSINGS WHERE A SANITARY SEWER MAIN CROSSES WITH STORM SEWERS. CROSSING SHALL BE CONSTRUCTED WITH A WELL COMPACTED FULL STONE (#57) 6" ENVELOPE SUCH THAT STORM SEWER DOES NOT BEAR DIRECTLY ON SANITARY SEWER MAINS.
12. ALL SANITARY SEWER LINES AND APPURTENANCES SHALL BE INSTALLED AND TESTED IN ACCORDANCE WITH WKUD'S STANDARD SEWER SYSTEM SPECIFICATIONS.
13. ALL WORK MUST BE INSPECTED BY WKUD PRIOR TO BACKFILLING.
14. ALL SANITARY SEWER LINES SHALL BE SDR 26 PVC OR PROTECTO 401 LINED CLASS 350 DIP, (MIN.) UNLESS NOTED OTHERWISE.
15. ALL LOW–PRESSURE FORCE MAINS SEWER LINES SHALL BE HDPE SDR 11.
16. DUCTILE IRON PIPE PROTECTO 401 LINED PRESSURE CLASS 350 SHALL BE USED ON DEPTHS GREATER THAN 16 FEET, FOR CREEK CROSSING WITH STEEL CASINGS, AND FOR ROAD BORES WHERE STEEL CASING IS USED.
17. ANY SANITARY SEWER MAIN OR SERVICE LATERAL THAT DISCHARGES AT A HEIGHT GREATER THAN 1.99 FEET ABOVE THE MANHOLE INVERT REQUIRES A DROP CONNECTION. DROP CONNECTION SHALL BE "INSIDE DROP SYSTEM" BY RELINER OR EQUAL. INSTALLED PER WKUD'S SPECIFICATIONS.
18. ALL SEWER SERVICE LATERALS SHALL BE INSTALLED WITH A MINIMUM 1% SLOPE. CLEANOUTS IN PAVEMENT SHALL HAVE SOLID BRASS, THREADED, TRAFFIC–RATED CAPS. EFFORTS SHOULD BE MADE TO PLACE CLENOUTS IN UNPAVED AREAS WHERE POSSIBLE.
19. ALL 6" CLEANOUT SHALL BE CONNECTED TO THE SERVICE WITH A DOUBLE SWEEP TEE (SDR 26 PVC GPK OR APPROVED EQUAL).
20. ALL SANITARY SEWER LINES SHALL HAVE A MINIMUM OF 36" COVER. UNDER ROADWAYS AND CROSSINGS, SEWER SHALL HAVE A MINIMUM OF 48" COVER AND IF 48" IS NOT AVAILABLE, THEN DUCTILE IRON PIPE MUST BE USED, PROTECTO 401 LINED CLASS 350 (MIN).
21. GRAVITY SEWER PIPE DEFLECTION AND ALIGNMENT SHALL BE CHECKED AFTER BACKFILLING AND COMPACTION ARE COMPLETE AND PRIOR TO PLACING THE MANHOLE BASE. TEST DEFLECTION WITH A MANDREL OR OTHER APPROVED METHOD.
22. PIPE WITH DEFLECTION OF 5% OR GREATER OR WITH UNDUE MISALIGNMENT SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.
23. PIPE IS MEASURED IN TERMS OF HORIZONTAL LENGTH COMPLETE IN PLACE, REGARDLESS OF TYPE, DEPTH, CLASS, SHAPE, AND SIZE AS MEASURED ALONG THE CENTERLINE FROM CENTER OF STRUCTURE TO CENTER OF STRUCTURE (NO DEDUCTIONS FOR STRUCTURES). ACTUAL QUANTITY OF PIPE MAY VARY. THE CONTRACTOR SHALL SUPPLY AND INSTALL THE NECESSARY QUANTITY OF PIPE TO CONSTRUCT THE COMPLETE SYSTEM AS SHOWN. INSTALLATION INCLUDES EXCAVATION, SHORING, FURNISHING, AND INSTALLATION OF PIPES, JOINT MATERIALS, COUPLINGS, AND BACKFILL.
24. A RUBBER BOOT CONNECTOR ("A–LOK" OR APPROVED EQUAL. "Z–LOK" OR APPROVED EQUAL REQUIRED IF PIPE SLOPE IS GREATER THAN 10%) SHALL BE FITTED WITHIN EACH PRECAST CONCRETE MANHOLE FOR EACH SANITARY SEWER MAIN OR LATERAL CONNECTING TO A MANHOLE. EACH TAP TO AN EXISTING MANHOLE TO BE MECHANICALLY CORED AND A "KOR–N–SEAL" (OR APPROVED EQUAL) PIPE ENTRANCE SHALL BE PROVIDED.
25. ADJUST TOP OF CASTING (TC) ELEVATIONS (ALL SIDES) FLUSH WITH FINAL GRADES TO MATCH CROSS SLOPES AND LONGITUDINAL SLOPES.
26. INSTALL FITTINGS (FOR SERVICE LATERALS) AS REQUIRED TO AVOID CONFLICTS WITH EXISTING AND PROPOSED UNDERGROUND CONFLICTS AND OBSTRUCTIONS.
27. GROUT INSIDE MANHOLE JOINTS WITH NON–SHRINK GROUT. ALL EXTERIOR JOINTS TO BE WRAPPED WITH BUTYL AND CON–SEAL WRAP, APPLIED WITH PRIMER TO WKUD STANDARDS.
28. BOLT ALL MANHOLE FRAMES TO CONES WITH 4, 3/4" STAINLESS STEEL WEDGE ANCHORS.
29. FOR SEWER PIPES WITH SLOPES GREATER THAN 15% USE CONCRETE PIPE ANCHORS AS SPECIFIED BY THE MANUFACTURER.
30. ALL TESTING SHALL BE COMPLETED IN ACCORDANCE WITH THE PROJECT SPECIFIC SPECIFICATIONS OR WKUD'S STANDARD SPECIFICATIONS. REFER TO THE FOLLOWING WKUD STANDARD SPECIFICATION SECTIONS:
    - 30.1. SECTION 02530: GRAVITY SEWER PIPING, PARAGRAPH 3.16 – TESTING
    - 30.2. SECTION 02531: SEWAGE FORCE MAINS, PARAGRAPH 3.13 – TESTING
    - 30.3. SECTION 02532; SANITARY SEWER MANHOLES, FRAMES, AND COVERS, PARAGRAPH 3.10 – TESTING

STANDARD T.D.O.T. UTILITY NOTES:

1. EXCEPT FOR EROSION SEDIMENT CONTROL ITEMS, NO ROADWAY OR BRIDGE ITEMS SHALL BE UTILIZED TO COMPENSATE FOR WORK METHODS OR MATERIALS ASSOCIATED WITH AND/OR SPECIFI ED FOR THE UTILITY INSTAL–LATION, EVEN THOUGH THE SAME OR SIMILAR ROADWAY OR BRIDGE MATERIALS MAY HAVE BEEN CALLED FOR IN THE UTILITY SPECIFI CATIONS OR DRAWINGS.
2. ALL MATERIALS, METHODS, AND/OR INTEGRAL MATERIALS OUTLINED IN THE UTILITY SPECIFI CATIONS 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, FI LLS, PHASING, ETC.) SHALL BE INCLUDED IN THE COST OF THE PERMANENT UTILITY ITEMS. (NOTE TO UTILITY: THE UTILITY RELOCATION PLANS SHALL PROVIDE TO THE CONTRACTOR THE UTILITY'S REQUIREMENTS FOR TEMPORARY TIE–INS (INCLUDING NECESSARY TESTING AND STERILIZATION TO ACCOMPLISH THE TIE–IN) AND ALSO ANY RESTRICTIONS FOR TAKING LINES OUT OF SERVICE. IF A TEMPORARY LINE WILL BE A MAJOR ITEM OF WORK, A SPECIFI C TEMPORIZATION PLAN AND ITEM MUST BE INCLUDED IN THE UTILITY'S PLANS.)
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 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 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 ITEMS 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.
8. ANY EXCAVATION OF THE STREAM CHANNEL AREA SHALL BE SEPARATED FROM FL OWING WATER AND ACCOM–PLISHED DURING LOW FL OW CONDITIONS. THIS SHALL BE ACCOMPLISHED BY THE USE OF FL UMES, LINED DIVERSION CHANNEL WITH SANDBAG BERM, DIVERSION PIPE WITH SANDBAG DAM AT PIPE INLET, OR IN SOME CASES COFF ERDAMS. ALTERNATIVELY, BASED ON FI ELD CONDITIONS AND CONTRACTOR SELECTION, THE UTILITY RELOCATION MAY BE ACCOMPLISHED USING BORE TECHNOLOGY WITH NO STREAM CHANNEL IMPACTS.

DRAWING INDEX

SHEET No.	DWG No.	DRAWING TITLE
1	U4–1	SEWER LINE NOTES
2	U4–2	PROPOSED SEWER RELOCATION
3	U4–3	PROPOSED SEWER PROFILES
4	U4–4	SEWER LINE DETAILS
5	U4–5	SEWER LINE DETAILS

LEGEND

- EXISTING SANITARY SEWER MANHOLE
- SA — EXISTING SANITARY SEWER LINE
- FM — EXIST. FORCE MAIN
- OH — EXISTING OVERHEAD UTILITY LINE
- UGT — EXISTING UNDERGROUND TELEPHONE
- G — EXISTING GAS LINE
- W — EXISTING WATER LINE
- PROPOSED GRAVITY SEWER
- S — PROPOSED SILT FENCE
- MANHOLE – NEW
- MANHOLE – REPLACE
- MANHOLE – RETIRE
- SA — CAP EXISTING SEWER LINE
- T — EXISTING TELEPHONE MANHOLE
- EXISTING CHAIN LINK FENCE
- GAS — EXISTING GAS VALVE
- G.M. — EXISTING GAS METER
- W.V. — EXISTING WATER VALVE
- W.M. — EXISTING WATER METER
- EXISTING UTILITY POLE
- EXISTING LIGHT POLE
- EXISTING GUY WIRE
- C.B. — EXISTING CATCH BASIN
- S.C.O. — EXISTING SANITARY CLEAN OUT
- EXISTING FIRE HYDRANT
- W — EXISTING WATER MANHOLE
- EXISTING CREEK
- EXISTING TREE LINE
- EXISTING PROPERTY LINE (APPROXIMATE)
- 18" CMP — EXISTING STORM DRAIN LINE
- EXISTING CONCRETE SIDEWALK
- UTILITY LINE ABANDONMENT

1 / D1.01 — DETAIL # / DETAIL LOCATION

ESTIMATED SEWER QUANTITIES

FOOTNOTE	ITEM NO.	DESCRIPTION	UNIT	QUANTITY	% PROJECT PUBLIC	% PROJECT PRIVATE
1	797-05.51	8IN PVC GRAVITY SEWER 0-6 FT DEPTH	LF	95	36.00%	64.00%
1	797-05.52	8IN PVC GRAVITY SEWER 6-12 FT DEPTH	LF	535	36.00%	64.00%
1	797-05.53	8IN PVC GRAVITY SEWER 12-18 FT DEPTH	LF	245	36.00%	64.00%
1	797-05.54	8IN PVC GRAVITY SEWER >18 FT DEPTH	LF	100	36.00%	64.00%
2	797-06.64	BORE/JACK 16IN STEEL CASING PIPE-UNCON	LF	430	36.00%	64.00%
3	797-07.02	48IN MH 4-6 FT DEPTH	EA	1	36.00%	64.00%
3	797-07.03	48IN MH 6-8 FT DEPTH	EA	2	36.00%	64.00%
3	797-07.04	48IN MH 8-10 FT DEPTH	EA	2	36.00%	64.00%
3	797-07.05	48IN MH 10-12 FT DEPTH	EA	1	36.00%	64.00%
3	797-07.07	48IN MH 14-16 FT DEPTH	EA	2	36.00%	64.00%
4	797-07.56	MANHOLE DROP CONNECTION ASSEMBLY	EA	1	36.00%	64.00%
1	797-08.05	6" PVC PIPE FOR SERVICE LATERAL	LF	25	36.00%	64.00%
4	797-08.08	6" CLEAN OUT ASSEMBLY	EA	1	36.00%	64.00%
5	797-10.06	CONNECT 6" LATERAL TO SEWER LINE	EA	1	36.00%	64.00%
6	797-11.25	RETIRE IN PLACE 48" MH	EA	5	36.00%	64.00%
7	797-11.31	RETIRE IN PLACE EXISTING SEWER 8-14 IN	LF	900	36.00%	64.00%
7	797-11.35	REMOVE EXISTING SEWER 8IN-14IN	LF	100	36.00%	64.00%
8	797-11.38	BY-PASS PUMPING	LS	1	36.00%	64.00%
	797-40.01	CONCRETE ENCASEMENT	LF	30	36.00%	64.00%
	797-99.01	HYDROEXCAVATE AND BACKFILL GRAVEL	LS	1	36.00%	64.00%

SEWER FOOTNOTES:

FOOTNOTE 1: INCLUDES ALL MATERIALS, LABOR AND EQUIPMENT FOR COMPLETE EXCAVATION INCLUDING BUT NOT LIMITED TO BEDDING, BACKFILLING, THRUST BLOCKING, PIPE FUSION, APPURTENANCES, FLOWABLE FILL, MAINTAINING THE TRENCH, TESTING, CHECK DAMS, AND ANY OTHER LABOR OR MATERIAL REQUIRED TO COMPLETE FOR GRAVITY SEWER LINES OR FORCE MAINS AS SPECIFIED ON THE PLANS. DUCTILE IRON PIPE GRAVITY SEWER LINES SHALL BE EPOXY LINED.

FOOTNOTE 2: INCLUDES ALL MATERIALS, LABOR AND EQUIPMENT INCLUDING BUT NOT LIMITED TO CASING PIPE, PIPE SPACERS, CASING END SEALS, ANY OTHER APPURTENANCE TO COMPLETE THE WORK AS SPECIFIED ON THE PLANS, AND TRAFFIC CONTROL. IF CASING PIPE HAS CARRIER PIPE, THE CARRIER PIPE SHALL BE PAID AT THE OPEN CUT ITEM.

FOOTNOTE 3: INCLUDES ALL MATERIALS, LABOR AND EQUIPMENT NECESSARY FOR INSTALLATION OF PRECAST MANHOLE BOTH PREFORMED BASE OR OPEN BOTTOM (DOGHOUSE), INCLUDING BUT NOT LIMITED TO VENT ASSEMBLY (WHERE REQUIRED), CRUSHED STONE, PIPE TO MANHOLE CONNECTORS, EXCAVATION, BACKFILL, BUTYL RESIN GASKET, MANHOLE STEPS, ASPHALTIC WATERPROOFING, FRAME AND COVER, AND TRAFFIC CONTROL.

FOOTNOTE 4: INCLUDES ALL MATERIALS, LABOR AND EQUIPMENT, INCLUDING BUT NOT LIMITED TO MACHINERY, TOOLS, OR APPARATUS NECESSARY FOR INSTALLATION OF ASSEMBLIES AS DESCRIBED AND DETAILED IN THE PLANS AND SPECS.

FOOTNOTE 5: INCLUDES ALL MATERIALS, LABOR, AND EQUIPMENT NECESSARY FOR CONNECTING TO AN EXISTING FORCE MAIN, SEWER LINE, PUMP STATION, OR MANHOLE AS SPECIFIED ON PLANS, INCLUDING TRAFFIC CONTROL.

FOOTNOTE 6: INCLUDES ALL MATERIALS, LABOR, AND EQUIPMENT FOR INCREASEING OR DECREASING HEIGHT OF MANHOLE TO FINISHED ROAD GRADE, INCLUDING BUT NOT LIMITED TO ADDITION OR REMOVAL OF BARREL SECTIONS OR FRAME RINGS AND ADJUSTMENTS TO FRAME AND COVER.

FOOTNOTE 7: INCLUDES ALL MATERIALS, LABOR, AND EQUIPMENT FOR RETIRE IN PLACE OR REMOVE ITEMS AS SPECIFIED ON THE BID FORM INCLUDING TRAFFIC CONTROL.

FOOTNOTE 8: INCLUDES ALL MATERIALS, LABOR, AND EQUIPMENT FOR INTERNAL OR EXTERNAL POINT REPAIRS AS SPECIFIED ON THE BID FORM.

TYPE	YEAR	PROJECT NO.	SHEET NO.
PS&E	2026	HSIP-131(33)	U4-1

KNOX COUNTY
PIN 119390.00
CCI NO. 01021-0005

B-DATE SUBMITTAL
DATE: 05/22/2026
BASED ON ADD'L SURVEY
PROVIDED 1/15/2026

SEWER LINE RELOCATION BY

CANNON & CANNON INC
10025 Investment Drive, Suite 120
Knoxville, TN 37932
865.670.8555
www.cci-corp.com

WEST KNOX UTILITY DISTRICT — WATER WASTEWATER SERVICE

SEWER PLANS

SEALED BY

WILLIAM W. LITTLEJOHN — REGISTERED ENGINEER — AGRICULTURE — TENNESSEE — No. 120416 — STATE OF TENNESSEE — 01/20/2026

COORDINATES ARE NAD 83(1995). ARE DATUM ADJUSTED BY THE FACTOR OF 1.00009_ AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988 WITH GEOID 2012A.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

SEWER LINE NOTES

NOTES:
1. ALL SEWER MANHOLES ARE 48-INCH DIAMETER UNLESS OTHERWISE NOTED.
2. PRIOR TO, OR IN CONJUNCTION WITH, STORM IMPROVEMENTS, SEWER CONTRACTOR TO HYDROEXCAVATE A 10'X10' AREA, CENTERED AROUND PROP. CB10. EXCAVATE TO BOTTOM OF EXIST. 8" SA SEWER PIPE. BACKFILL W/ #57 STONE IN COMPACTED 6-INCH LIFTS.
3. RESTRAINT SYSTEMS FOR PVC SEWER PIPE SHALL BE UNIFLANGE MECHANICAL JOINT RESTRAINT OR APPROVED EQUAL.
4. EXISTING GRAVITY SEWER PIPE "TO BE RETIRED" AND LOCATED IN PROPOSED PAVED AREAS SHALL BE COMPLETELY FILLED WITH FLOWABLE FILL.
5. FOR EXISTING GRAVITY SEWER PIPE "TO BE REMOVED," ALL VOIDS DUE TO THE REMOVAL OF MATERIALS SHALL BE FILLED WITH #57 STONE TO WITHIN 2 FEET BELOW PROPOSED GRADE AND FINISHED WITH APPROVED BACKFILL AND TOPPED WITH A MINIMUM OF 6" OF TOPSOIL PRIOR TO SEEDING AND MULCHING.
6. EXISTING SEWER MANHOLES "TO BE RETIRED" SHALL HAVE ALL COMPONENTS REMOVED TO 2 FEET BELOW PROPOSED GRADE. REMAINING MH STRUCTURE SHALL BE BACKFILLED WITH #57 STONE OR SAND.
7. CONTRACTOR IS RESPONSIBLE FOR THE REMOVAL AND PROPER DISPOSAL OF ALL SPOILS INCLUDING BUT NOT LIMITED TO SEWER MANHOLES AND PIPES TO BE REMOVED OR RETIRED.

EXIST. SANITARY SEWER, (TO REMAIN).

EXIST M.H. SA4 (10.1') (REPLACE)
STA: 6+56 LINE '1' E.O.L.
TC: 989.91
Δ=55°07'55" LT. (EXIST.)
Δ=40°07'28" RT. (EXIST.)

EXIST. 8" SEWER LINE, (TO REMAIN)

EXIST. M.H. SA6 (5.9'), (RETIRE IN PLACE).

EXIST. 8" SEWER LINE, (TO BE RETIRED)

OPEN CUT 86.94' of 8" PVC @ 2.00%

M.H. 5 (5.9') (NEW)
STA: 5+69
TC: 983.90
Δ=05°22'22" LT. (LINE '1')

PROPOSED 15' WIDE PERMANENT UTILITY EASEMENT, (TYP.)

214.71' of 8" R.J. PVC @ 4.20%

PROVIDE 180 LF OF 16" ST CASING PIPE W/ 8" R.J. PVC CARRIER PIPE (BY JACK AND BORE)

W.K.U.D. EASMENT (INSTR. #202403180044686).

M.H. 6 (15.2') (NEW)
STA: 2+15 LINE '2'
TC: 991.92
Δ=55°17'00" RT. (LINE 2)

OPEN CUT 148.30' of 8" PVC @ 2.00%

CONTRACTOR TO LOCATE AND RECONNECT EXIST. SEWER LATERAL

W.K.U.D. EASMENT (INSTR. #202403180044688).

APPROX. 20' x 20' BORE PIT (SHOWN FOR REFERENCE)

W.K.U.D. EASMENT (INSTR. #202403180044687).

OPEN CUT 85.93' of 8" PVC @ 9.78%

EXIST. M.H. SA12 (7.8') (REPLACE)
STA: 3+01 LINE '2' E.O.L.
TC: 993.00
Δ=49°04'55" LT. (EXIST.)

M.H. 4 (15.6') (NEW)
PROVIDE INTERNAL DROP
STA: 4+21 LINE '1' =
STA. 0+00 LINE '2'
TC: 983.16
Δ=06°40'08" RT. (LINE '1')
Δ=92°04'34" RT. (LINE '2')

EXIST. M.H. SA7 (7.6'), (RETIRE IN PLACE).

HYDROEXCAVATION AND GRAVEL BACKFILL AREA. SEE NOTE #2, THIS SHEET.

APPROX. 20' x 40' BORE PIT, (SHOWN FOR REFERENCE).

EXIST. M.H. SA11 (13.6'), (RETIRE IN PLACE).

PROVIDE 156 L.F. OF 16" STEEL CASING PIPE (BY JACK AND BORE) W/ 8" R.J. PVC CARRIER PIPE.

205.39' of 8" R.J. PVC @ 0.90%

APPROX. 20' x 40' BORE PIT, (SHOWN FOR REFERENCE).

EXIST. M.H. SA8 (10.2'), (RETIRE IN PLACE).

M.H. 3 (8.6') (NEW)
STA: 2+15
TC: 974.27
Δ=03°26'52" RT. (LINE '1')

EXIST. 8" SEWER LINE, (TO BE RETIRED)

PROP. CONST. ESMT. FOR REMOVAL OF STRUCTURE

OPEN CUT 148.82' of 8" PVC @ 0.95%

SEE INSET #2, THIS SHEET

EXISTING WKUD PAINTER FARM SEWER P.S., (TO REMAIN).

OPEN CUT 66.59' of 8" PVC @ 2.28%

M.H. 1 (9.6') (NEW)
STA: 0+00
TC: 971.86
Δ=75°46'26" LT. (LINE '1')
Δ=180°00'00" (EXIST.)

M.H. 2 (7.4') (NEW)
STA: 0+67
TC: 971.57
Δ=65°48'21" LT. (LINE '1')

EXIST. 8" SEWER LINE, (TO REMAIN)

EXIST. M.H. SA9 (7.4'), (RETIRE IN PLACE).

EXIST. M.H. SA10 (7.6'), (LEAVE). CUT, CAP, AND PLUG EXIST. 8" (N)

SAMH12
TOP-993.00
INV-985.40
INV-985.30

SAMH13
TOP-999.22
INV-990.62
INV-990.62
INV-990.52

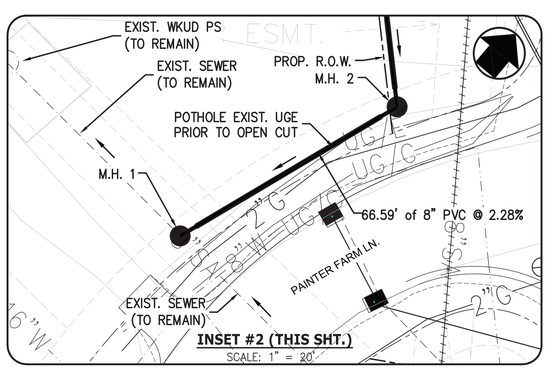
SAMH14
TOP-996.80
INV-991.40
INV-991.30

SAMH15
TOP-1001.60
INV-993.10
INV-993.00

MHSA7
TOP-977.92
INV-970.52
INV-970.42
INV-970.32

MHSA8
TOP-978.63

MHSA9
TOP-980.89
INV-975.09
INV-974.99



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PS&E	2026	HSIP-131(33)	U4-2

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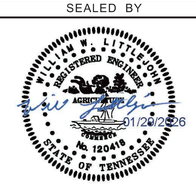
SEWER LINE RELOCATION BY

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WEST KNOX UTILITY DISTRICT
WATER WASTEWATER SERVICE

SEWER PLANS

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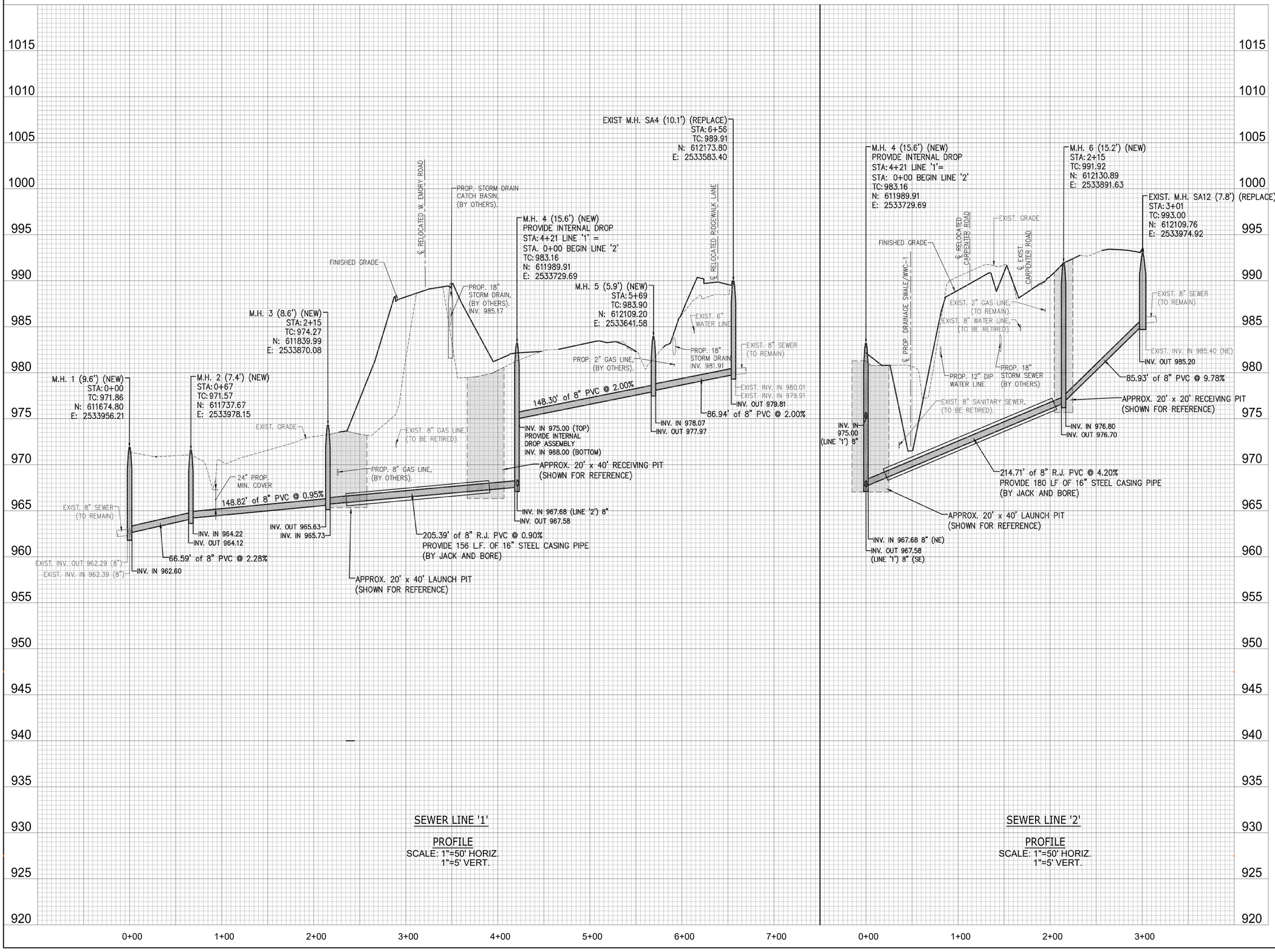


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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PROPOSED SEWER RELOCATION

SCALE: 1" = 50'



TYPE	YEAR	PROJECT NO.	SHEET NO.
PS&E	2026	HSIP-131(33)	U4-3

KNOX COUNTY
PIN 119390.00
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PROFILE NOTES:

1. CROSSING UNDERGROUND WATER, GAS, ELECTRIC, TELEPHONE, AND FIBER PIPES ARE SHOWN IN PROFILE VIEW AT AN ASSUMED DEPTH OF 3-FEET. CONTRACTOR IS RESPONSIBLE FOR VERIFYING THE VERTICAL LOCATION OF ALL UTILITY CROSSINGS PRIOR TO CONSTRUCTION.
2. PROPOSED STORM CROSSING INVERTS SHOWN ON THE PROFILE VIEW ARE BASED ON TDOT CONSTRUCTION PLANS. CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL PIPE INVERTS AND SEPARATION REQUIREMENTS WITH TDOT PLANS.

SEWER LINE RELOCATION BY

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WEST KNOX UTILITY DISTRICT
WATER WASTEWATER SERVICE

SEWER PLANS

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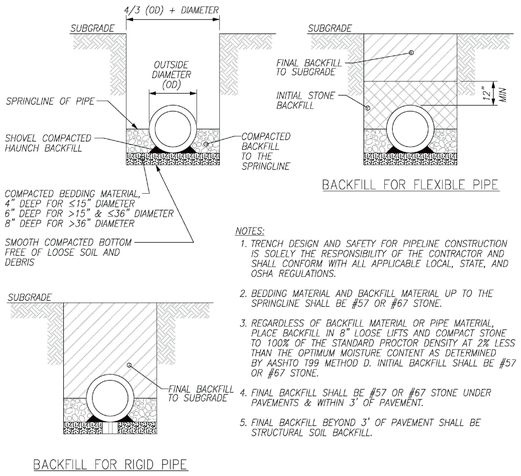


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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PROPOSED SEWER PROFILES

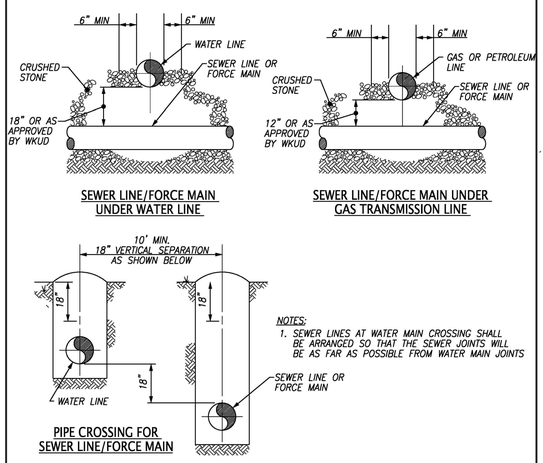
SCALE: 1"=50' HORIZ.
1"=5' VERT.



NOTES:

1. TRENCH DESIGN AND SAFETY FOR PIPELINE CONSTRUCTION IS SOLELY THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL CONFORM WITH ALL APPLICABLE LOCAL, STATE, AND OSHA REGULATIONS.
2. BEDDING MATERIAL AND BACKFILL MATERIAL UP TO THE SPRINGLINE SHALL BE #57 OR #67 STONE.
3. REGARDLESS OF BACKFILL MATERIAL OR PIPE MATERIAL, PLACE BACKFILL IN 8" LOOSE LIFTS AND COMPACT STONE TO 100% OF THE STANDARD PROCTOR DENSITY AT 2% LESS THAN THE OPTIMUM MOISTURE CONTENT AS DETERMINED BY AASHTO T99 METHOD D. INITIAL BACKFILL SHALL BE #57 OR #67 STONE.
4. FINAL BACKFILL SHALL BE #57 OR #67 STONE UNDER PAVEMENTS & WITHIN 3' OF PAVEMENT.
5. FINAL BACKFILL BEYOND 3' OF PAVEMENT SHALL BE STRUCTURAL SOIL BACKFILL.

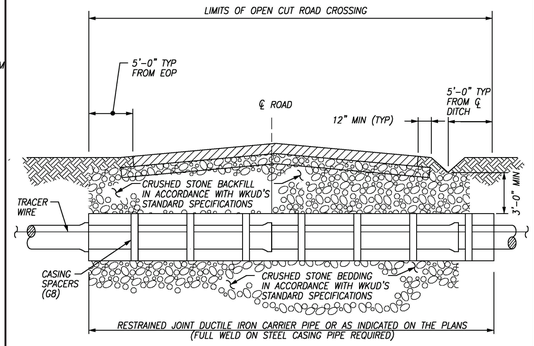
1 — PIPE BEDDING AND BACKFILL
N.T.S.



NOTES:

1. SEWER LINES AT WATER MAIN CROSSING SHALL BE ARRANGED SO THAT THE SEWER JOINTS WILL BE AS FAR AS POSSIBLE FROM WATER MAIN JOINTS

2 — PIPE SEPARATION
N.T.S.

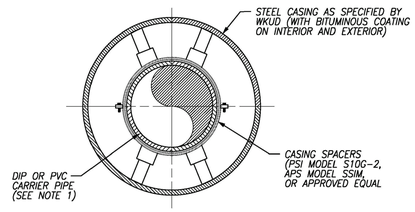


SECTION

NOTES:

1. ALL PIPING WITHIN THE LIMITS OF THE OPEN CUT ROAD CROSSING SHALL BE DIP TO MATCH THE SIZE OF PIPING SHOWN ON THE PLANS.

3 — TYPICAL OPEN CUT ROAD CROSSING
N.T.S.



NOTES:

1. CARRIER PIPE SHALL BE CLASS 350 DUCTILE IRON PIPE (WATER) OR RJIB CERTA-LOK DR18 PRESSURE PIPE (235 PSI) (SEWER).
2. INSTALL CASING SPACERS IN STRICT COMPLIANCE WITH THE WRITTEN MANUFACTURER'S INSTRUCTIONS.
3. PROVIDE CASING END SEALS IN ACCORDANCE WITH WKUD REQUIREMENTS.
4. CONTRACTOR TO CONFIRM THAT ALL CASING SPACERS WILL FIT INSIDE OF SPECIFIED STEEL CASING AS SHOWN ON THE PLANS PRIOR TO ORDERING MATERIALS.
5. TRACER WIRE SHALL BE INSTALLED WITH CASING PIPE.
6. SPACERS SHALL BE SPACED EVENLY AT NO GREATER THAN 6 FEET APART
7. ENDS OF CASING PIPES MUST BE FULLY ROUND TO ALLOW CONTINUOUS WELDS FOR SMOOTH INSTALLATION OF CASING SPACERS.

4 — CASING AND SPACER DETAIL
N.T.S.

TYPE	YEAR	PROJECT NO.	SHEET NO.
PS&E	2026	HSIP-131(33)	U4-4

KNOX COUNTY
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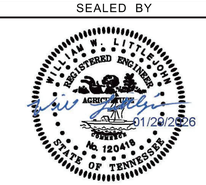
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SEWER PLANS

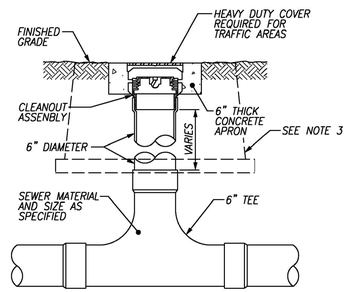
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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

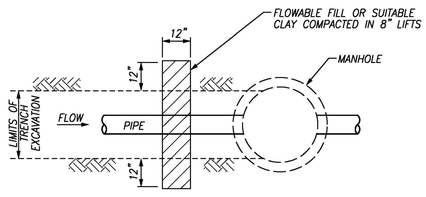
SEWER LINE DETAILS

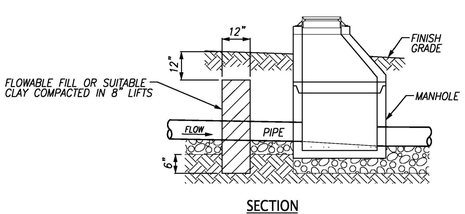


NOTES:

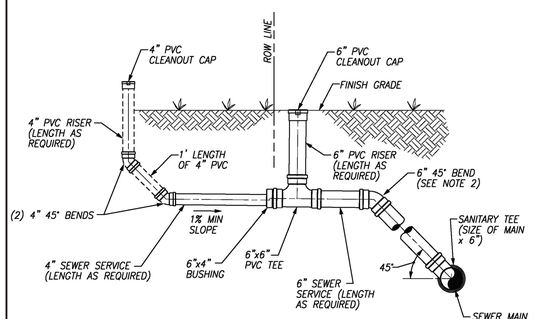
1. TRAFFIC RATED CLEANOUTS ARE REQUIRED FOR CLEANOUTS LOCATED WITHIN PAVEMENT, ROADWAYS, DRIVEWAYS OR ANY OTHER AREAS DEEMED NECESSARY BY THE OWNER OR OWNER'S REPRESENTATIVE.
2. PROVIDE CONCRETE APRON AROUND CLEANOUT AS SHOWN IN GRAVEL AREAS ONLY.
3. PROVIDE PLASTIC UTILITY BOX WITH LID MARKED "SEWER" FOR CLEANOUTS IN GRASS AREAS. UTILITY BOX SHALL BE MODEL DFW1300.12.4E AS MANUFACTURED BY "DWF PLASTICS, INC." OR APPROVED EQUAL.

5 — 2 WAY CLEANOUT DETAIL
N.T.S.





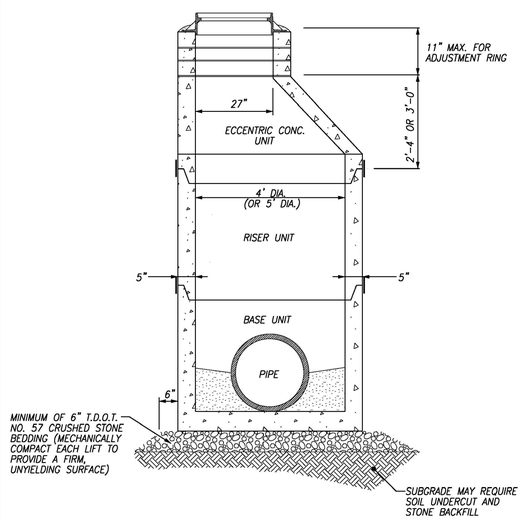
6 — SANITARY SEWER WATERSTOP
N.T.S.



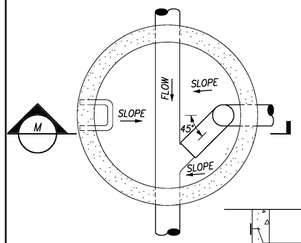
NOTES:

1. THE PURPOSE OF THE ADDITIONAL 4-INCH CLEANOUT IS FOR THE HOME BUILDER'S ABILITY TO EASILY FIND AND GAIN ACCESS TO THE SERVICE LATERAL. IT IS INTENDED THAT THE HOME BUILDER SHALL REMOVE THE DASHED PORTION OF THE 4-INCH SERVICE PIPE AND CONNECT THE BUILDING SEWER AT THE LOCATION OF THE LOWER 45° BEND.
2. 45° BEND ALLOWED FOR SEWER MAINS THAT ARE 6-FEET DEEP OR GREATER. SANITARY SERVICE LINES CONNECTING TO SEWER MAINS THAT ARE LESS THAN 6-FEET DEEP SHALL BE INSTALLED WITHOUT VERTICAL BENDS AT A 1.00% (MINIMUM) SLOPE.

7 — SANITARY SEWER SERVICE CONNECTION
N.T.S.

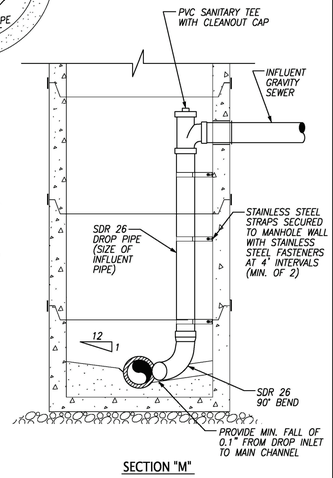


8 — PRECAST SANITARY SEWER MANHOLE
N.T.S.



REQUIRED DROP PIPE SIZES	
INFLUENT PIPE	DROP PIPE
8"	6"
10"	8"
12"	10"

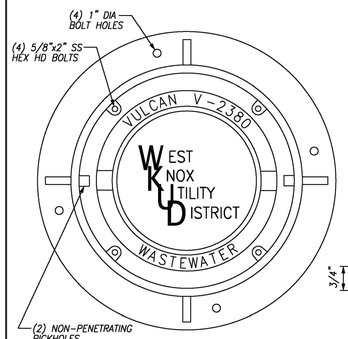
PLAN



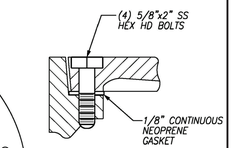
SECTION "M"

NOTES:
1. INSIDE DROP BOWL ASSEMBLY SHALL BE INSTALLED WITH 304 STAINLESS STEEL BRACKETS AND 18-8 STAINLESS STEEL FASTENERS IN ACCORDANCE WITH THE WRITTEN MANUFACTURER'S RECOMMENDATIONS.

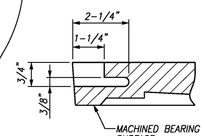
9 / – TYPICAL INSIDE DROP ASSEMBLY
N.T.S.



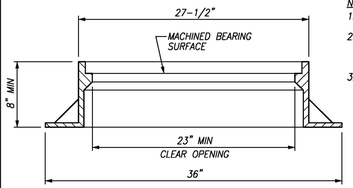
FRAME & COVER PLAN



WATERTIGHT DETAIL



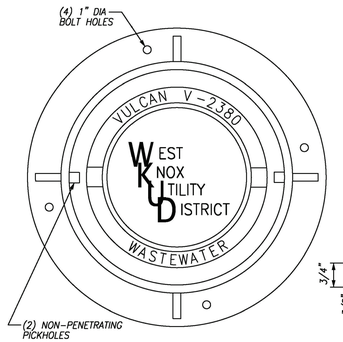
PICKHOLE DETAIL



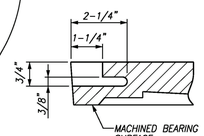
FRAME SECTION

NOTES:
1. LOAD RATING: HEAVY DUTY.
2. APPROX WEIGHT OF FRAME AND COVER SHALL NOT BE LESS THAN 364 LBS AS SPECIFIED.
3. COVER AND RING SHALL BE VULCAN CATALOG NUMBER V-2380.

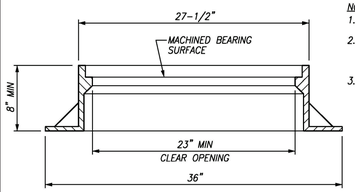
10 / – HEAVY DUTY WATERTIGHT MANHOLE FRAME & COVER
N.T.S.



FRAME & COVER PLAN



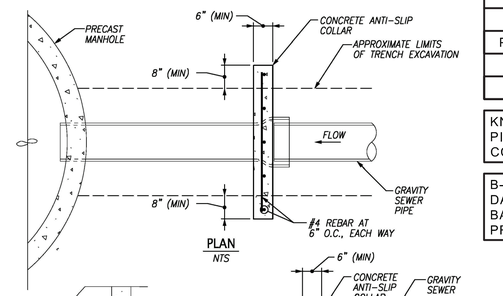
PICKHOLE DETAIL



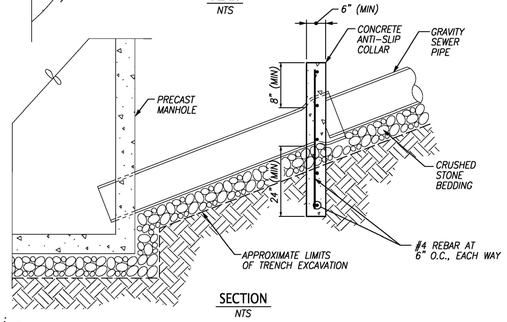
FRAME SECTION

NOTES:
1. LOAD RATING: HEAVY DUTY.
2. APPROX WEIGHT OF FRAME AND COVER SHALL NOT BE LESS THAN 364 LBS AS SPECIFIED.
3. COVER AND RING SHALL BE VULCAN CATALOG NUMBER V-2380.

11 / – HEAVY DUTY STANDARD MANHOLE FRAME & COVER
N.T.S.



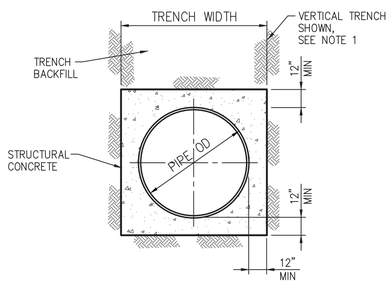
PLAN
NTS



SECTION
NTS

NOTES :
1. INSTALL CONCRETE ANTI-SLIP COLLARS AS SHOWN FOR SLOPES
   18% OR GREATER. MAXIMUM COLLAR SPACING SHALL BE AS FOLLOWS:
   A. 36 FEET CENTER TO CENTER FOR SLOPES 18%-25%
   B. 24 FEET CENTER TO CENTER FOR SLOPES 25%-35%
   C. 16 FEET CENTER TO CENTER FOR SLOPES 35% AND GREATER
2. FIELD LOK GASKETS AT EACH JOINT MAY BE USED IN LIEU OF COLLARS FOR DUCTILE IRON PIPE.
3. WHERE PRACTICAL, INSTALL ANTI-SLIP COLLARS AT THE PIPE JOINT LOCATED DOWNSTREAM OF THE BELL.

12 / – GRAVITY SEWER ANTI-SLIP COLLAR
N.T.S.



NOTES:
1. VERTICAL TRENCH WALLS SHOWN. CONTRACTOR SHALL SLOPE TRENCH WALLS OR SHORE EXCAVATIONS FOR CONSTRUCTION AND SAFETY IN ACCORDANCE WITH CURRENT OSHA REQUIREMENTS.
2. PEA GRAVEL BAGS, SANDBAGS, OR PRECAST SHAPED CONCRETE BLOCKS (12" MIN WIDTH) DESIGNED TO HANDLE THE INTENDED LOADS, MAY BE USED TO SUPPORT PIPE WHEN PLACING CONCRETE.

13 / – CONCRETE ENCASEMENT
N.T.S.

TYPE	YEAR	PROJECT NO.	SHEET NO.
PS&E	2026	HSIP-131(33)	U4-5

KNOX COUNTY
PIN 119390.00
CCI NO. 01021-0005

B-DATE SUBMITTAL
DATE: 05/22/2026
BASED ON ADD'L SURVEY
PROVIDED 1/15/2026

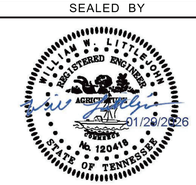
SEWER LINE RELOCATION BY

CANNON & CANNON INC
10025 Investment Drive, Suite 120
Knoxville, TN 37932
865.670.8555
www.cci-corp.com

WEST KNOX UTILITY DISTRICT
WATER WASTEWATER SERVICE

SEWER PLANS

SEALED BY



COORDINATES ARE NAD 83(1995), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00009_ AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988 WITH GEOID 2012A.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

SEWER LINE DETAILS