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SHEETS NOT USED: 7-14

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF ENGINEERING

MADISON COUNTY

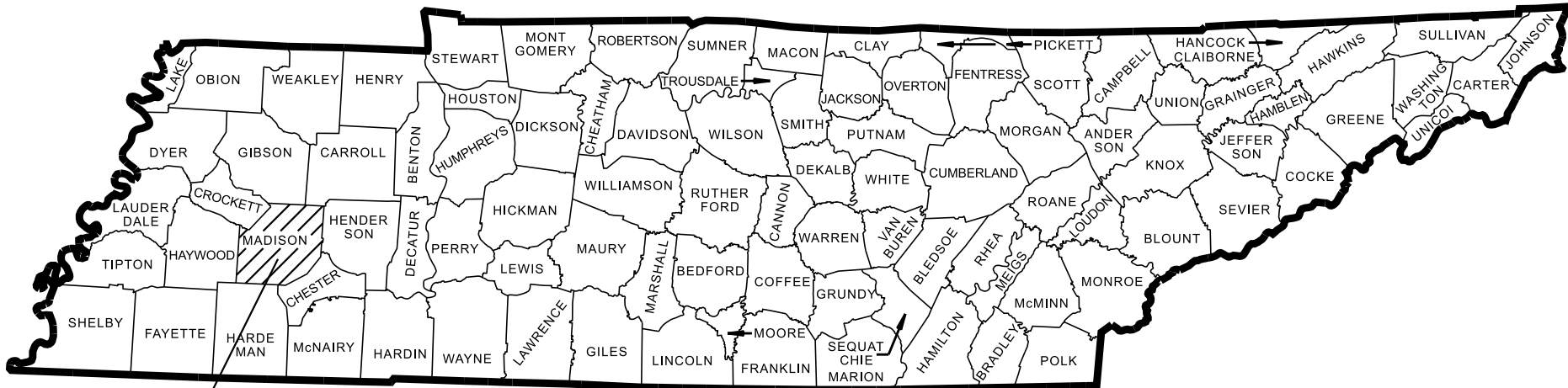
STATE ROUTE 138
BRIDGES OVER OVERFLOW AND BRANCH
L.M. 4.88 AND L.M. 4.95

LINE AND GRADE
BRIDGE REPLACEMENT

STATE HIGHWAY NO. 138

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

TENN.	YEAR 2026	SHEET NO. 1
FED. AID PROJ. NO.		
STATE PROJ. NO.		R4SVAR-S1-058



PROJECT LOCATION
BRIDGE ID. # 57SR1380013 57SR1380011

NO EXCLUSIONS

LINE
AND
GRADE

SEALED BY

APPROVED:
SHANE HESTER, CHIEF ENGINEER

DATE:

APPROVED:
WILL REID, COMMISSIONER

END PROJECT NO. R4SVAR-S1-058 R.O.W.
STA. 120+09.14 S.R. 138

END PROJECT NO. R4SVAR-S1-058 PRELIMINARY
STA. 118+50.00 S.R. 138

BEGIN PROJECT NO. R4SVAR-S1-058 R.O.W.
STA. 108+84.60 S.R. 138

BEGIN PROJECT NO. R4SVAR-S1-058 PRELIMINARY
STA. 108+00.00 S.R. 138

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.

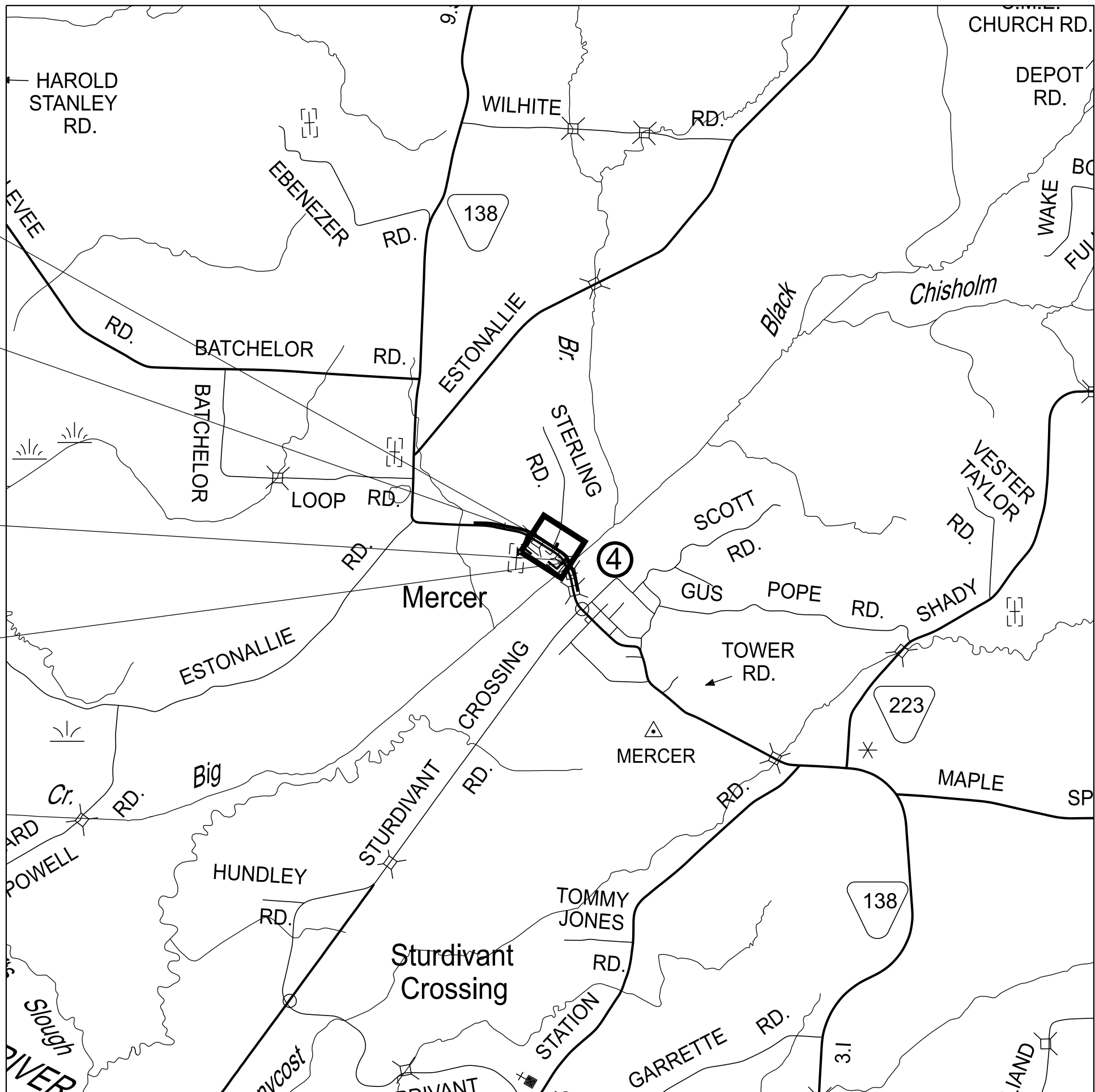
TDOT PROJECT MANAGER: DEREK LINK

DESIGN FIRM : GRESHAM SMITH

DESIGNER : AUSTIN BIGGS, P.E. CHECKED BY : BEN COLES, P.E.

P.E. NO. R4SVAR-S1-058

PIN NO. 137109.14 & 137109.15



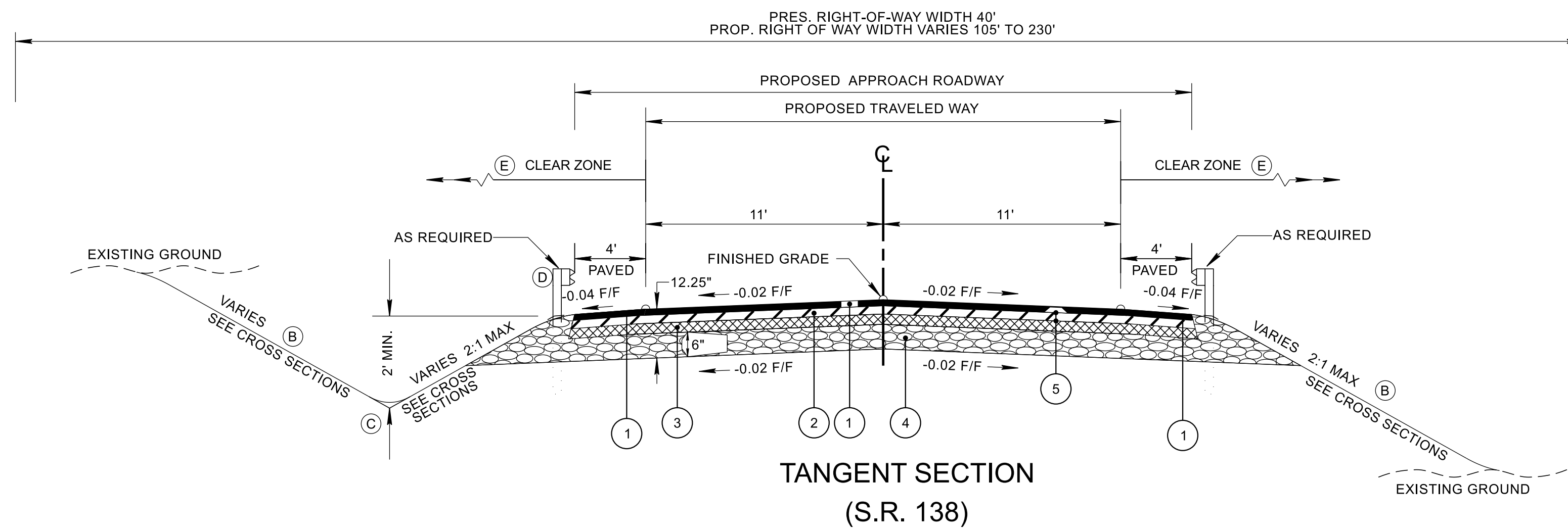
SCALE: 1"= 1/2 MILE

R.O.W. LENGTH 0.212 MILES
ROADWAY LENGTH 0.174 MILES
BRIDGE LENGTH 0.025 MILES
PROJECT LENGTH 0.199 MILES ▲

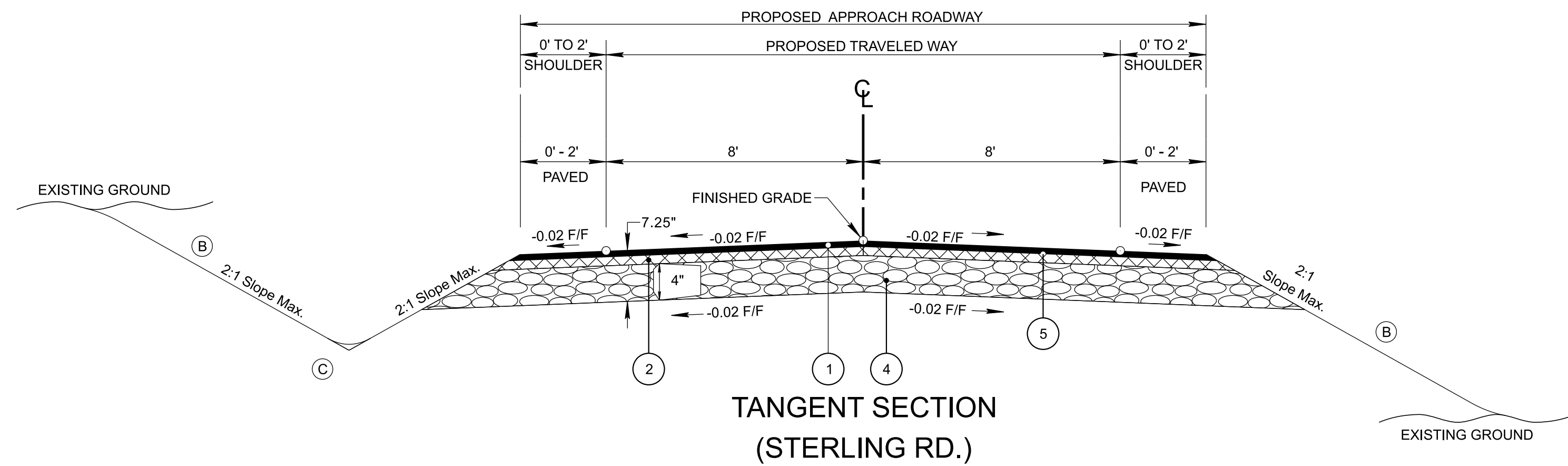
Not included in the project length (Non Riding Surface).

SURVEY 03-2026	TRAFFIC DATA
TN STATE LIDAR UTILIZED WITH SUPPLEMENTAL SURVEY FOR EXISTING STREAM AND BRIDGE ONLY	ADT (2029) 880
	ADT (2049) 970
	DHV (2049) 107
	D 65 - 35
	T (ADT) 8 %
	T (DHV) 5 %
	V 30 MPH

TYPE	YEAR	PROJECT NO.	SHEET NO.
L&G	2026	R4SVAR-S1-058	2B1



- (A) THE SLOPE OF THE SHOULDER AND THE ROADWAY PAVEMENT SHALL NOT EXCEED AN ALGEBRAIC DIFFERENCE OF 7%.
- (B) MAXIMUM 2(H):1(V) OR AS RECOMMENDED BY THE GEOTECHNICAL OFFICE. WHEN A 2(H):1(V) SLOPE IS USED, AND THE FILL HEIGHT EXCEEDS SIX FEET, GUARDRAIL SHOULD BE CONSIDERED. WHERE RIGHT-OF-WAY IS NOT AN ISSUE, STANDARD DRAWING RD11-S-11 (CASE II) SLOPES MAY BE USED.
- (C) SEE STANDARD DRAWING RD11-S-11A FOR ROUNDING OF ROADSIDE DITCH SLOPES.
- (D) SEE STANDARD DRAWING S-PL-6 FOR TYPICAL GUARDRAIL PLACEMENT.
- (E) SEE STANDARD DRAWING S-CZ-1 FOR CLEAR ZONE CRITERIA. SEE THE "ROADSIDE DESIGN GUIDE", AASHTO, 2011, FOR FURTHER INFORMATION REGARDING CLEAR ZONES.



TANGENT SECTION
(STERLING RD.)

(BASED ON STD. DWG. RD18-TS-1)

FROM STA. 300+00.00 TO STA. 301+45.00

PROPOSED PAVEMENT SCHEDULE	
① ASPHALTIC CONCRETE SURFACE (HOT MIX) PG64-22 GRADING "D" SURFACE @ 1.25" THICK (APPROX. 132.5 LB./S.Y.) 411-01.10 ACS MIX (PG64-22) GRADING "D"	④ MINERAL AGGREGATE 6.00" THICK 303-01 MINERAL AGGREGATE, TYPE "A" BASE, GRADING "D" (STERLING RD. TO BE APPLIED AT 4.00" THICK)
② BITUMINOUS PLANT MIX BASE (HOT MIX) PG64-22 GRADING "B-M2" @ 2.00" THICK (APPROX. 226 LB./S.Y.) 307-01.08 ASPHALT CONCRETE MIX (PG64-22) (BPMB-HM) GRADING "B-M2"	⑤ TACK COAT 403-01 BITUMINOUS MATERIAL FOR TACK COAT (TC) AT 0.07 GALLONS/S.Y. SEE 403.05 FOR DETERMINING APPLICATION RATE IN THE FIELD
③ BITUMINOUS PLANT MIX BASE (HOT MIX) PG64-22 GRADING "A" @ 3.00" THICK (APPROX. 345 LB./S.Y.) 307-01.01 ASPHALT CONCRETE MIX (PG64-22) (BPMB-HM) GRADING "A"	

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

TYPICAL SECTIONS

RIGHT-OF-WAY

- (3)

EXISTING PAVED DRIVEWAY PER TRACT REMAINDER WILL BE REPLACED IN KIND TO A TOUCHDOWN POINT.
- (4)

WHERE THE EXISTING DRIVEWAY IS UNPAVED AND THE PROPOSED DRIVEWAY EXCEEDS 7 PERCENT IN GRADE, EACH DRIVEWAY WILL BE PAVED TO A TOUCHDOWN POINT OR UNTIL THE GRADE IS LESS THAN 7 PERCENT.
- (5)

WHERE THE EXISTING DRIVEWAY IS UNPAVED AND THE PROPOSED DRIVEWAY IS LESS THAN 7 PERCENT IN GRADE, EACH DRIVEWAY WILL BE PAVED A SHOULDER WIDTH FROM THE EDGE OF PAVEMENT AND THE REMAINDER OF THAT DRIVEWAY REPLACED IN KIND TO A TOUCHDOWN POINT.
- (6)

ANY NECESSARY PAVING OF DRIVEWAYS WILL BE DONE DURING PAVING OPERATIONS ON THE MAIN ROADWAY.
- (7)

TRACT REMAINDERS NOT HAVING AN EXISTING DRIVEWAY WILL BE PROVIDED ONE 50-FOOT OPENING IN THE ACCESS CONTROL FENCE AND A DRIVEWAY WILL BE CONSTRUCTED UNLESS ACCESS IS PROVIDED FROM AN INTERSECTING ROAD OR BASED ON PHYSICAL CONDITIONS AND/OR CONFLICTS WITH OTHER DESIGN CONSIDERATIONS WHICH PREVENT AN ACCESS OPENING. PAVING OF THESE NEW DRIVEWAYS WILL BE IN ACCORDANCE TO THE 7 PERCENT CRITERIA PREVIOUSLY MENTIONED FOR EXISTING DRIVEWAYS.
- (9)

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

UTILITY

- (1)

THE LOCATIONS OF UTILITIES SHOWN WITHIN THESE PLANS ARE APPROXIMATE ONLY. THE SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES. ABOVE GRADE AND UNDERGROUND UTILITIES SHOWN WERE TAKEN FROM VISIBLE APPURTENANCES AT THE SITE, PUBLIC RECORDS, AND/OR MAPS PREPARED BY OTHERS. THEREFORE, RELIANCE UPON THE TYPE, SIZE, AND LOCATION OF UTILITIES SHOWN SHOULD BE DONE SO WITH THIS CIRCUMSTANCE CONSIDERED. DETAILED VERIFICATION OF EXISTENCE, LOCATION, AND DEPTH SHOULD ALSO BE MADE PRIOR TO ANY DECISION RELATIVE THERETO IS MADE. AVAILABILITY AND COST OF SERVICE SHOULD BE CONFIRMED WITH THE APPROPRIATE UTILITY COMPANY. IN TENNESSEE, IT IS A REQUIREMENT, PER "THE UNDERGROUND UTILITY DAMAGE PREVENTION ACT", THAT ANYONE WHO ENGAGES IN EXCAVATION MUST NOTIFY ALL KNOWN UNDERGROUND UTILITY OWNERS, NO LESS THAN THREE (3) OR NOT MORE THAN TEN (10) WORKING DAYS PRIOR TO THE DATE OF THEIR INTENT TO EXCAVATE AND ALSO TO AVOID ANY POSSIBLE HAZARD OR CONFLICT. NOTIFICATION BY CALLING THE TENNESSEE ONE CALL SYSTEM, INC., AT 1-800-351-1111 AS REQUIRED BY TCA 65-31-106 WILL BE REQUIRED.
- (2)

UNLESS OTHERWISE NOTED, ALL UTILITY ADJUSTMENTS WILL BE PERFORMED BY THE UTILITY OR ITS REPRESENTATIVE. THE CONTRACTOR AND UTILITY OWNERS WILL BE REQUIRED TO COOPERATE WITH EACH OTHER IN ORDER TO EXPEDITE THE WORK REQUIRED BY THIS CONTRACT. ON CONTRACTS WHERE CONSTRUCTION STAKES, LINES, AND GRADES ARE CONTRACT ITEMS, THE CONTRACTOR WILL BE REQUIRED TO PROVIDE RIGHT-OF-WAY OR SLOPE STAKES, DITCH OR STREAM BED GRADES, OR OTHER ESSENTIAL SURVEY STAKING TO PREVENT CONFLICTS WITH THE HIGHWAY CONSTRUCTION. FREQUENTLY, THIS WILL BE REQUIRED AS THE FIRST ITEM OF WORK AND AT ANY LOCATION ON THE PROJECT DIRECTED BY THE ENGINEER.
- (3)

THE CONTRACTOR WILL PROVIDE ALL NECESSARY PROTECTIVE MEASURES TO SAFEGUARD EXISTING UTILITIES FROM DAMAGE DURING CONSTRUCTION OF THIS PROJECT. IN THE EVENT THAT SPECIAL EQUIPMENT IS REQUIRED TO WORK OVER AND AROUND THE UTILITIES, THE CONTRACTOR WILL BE REQUIRED TO FURNISH SUCH EQUIPMENT. THE COST OF PROTECTING UTILITIES FROM DAMAGE AND FURNISHING SPECIAL EQUIPMENT WILL BE INCLUDED IN THE PRICE BID FOR OTHER ITEMS OF CONSTRUCTION.
- (4)

PRIOR TO SUBMITTING HIS BID, THE CONTRACTOR WILL BE SOLELY RESPONSIBLE FOR CONTACTING OWNERS OF ALL AFFECTED UTILITIES IN ORDER TO DETERMINE THE EXTENT TO WHICH UTILITY RELOCATIONS AND/OR ADJUSTMENTS WILL HAVE UPON THE SCHEDULE OF WORK FOR THE PROJECT. WHILE SOME WORK MAY BE REQUIRED 'AROUND' UTILITY FACILITIES THAT WILL REMAIN IN PLACE, OTHER UTILITY FACILITIES MAY NEED TO BE ADJUSTED CONCURRENTLY WITH THE CONTRACTOR'S OPERATIONS. ADVANCE CLEAR CUTTING MAY BE REQUIRED BY THE ENGINEER AT ANY LOCATION WHERE CLEARING IS CALLED FOR IN THE SPECIFICATIONS AND CLEAR CUTTING IS NECESSARY FOR A UTILITY RELOCATION. ANY ADDITIONAL COST WILL BE INCLUDED IN THE UNIT PRICE BID FOR THE CLEARING ITEM SPECIFIED IN THE PLANS.
- (5)

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

UTILITY OWNERS

CABLE:

AT&T

315 E. College Street

Jackson, TN 38301

CONTACT: Daniel R. Potts

OFFICE PHONE: 901 488 2359

CELL PHONE: N/A

Email: dp7607@att.com

ELECTRIC:

Southwest Tennessee Electric Membership Corporation

1009 E. Main Street

Brownsville, TN 38012

CONTACT: Joshua Kennedy

OFFICE PHONE: 731 585 0531

CELL PHONE: N/A

Email: jkennedy@stemc.com

ELECTRIC:

TVA

1101 Market St. Mr 4G

Chattanooga, TN 37402

CONTACT: Stephen Williams

OFFICE PHONE: 662 255 6272

CELL PHONE: N/A

Email: sewilliams@tva.gov

TYPE	YEAR	PROJECT NO.	SHEET NO.
L&G	2026	R4SVAR-S1-058	3

SEALED BY

STATE OF TENNESSEE DEPARTMENT OF TRANSPORTATION
RIGHT-OF-WAY NOTES, UTILITY NOTES AND UTILITY OWNERS

TYPE	YEAR	PROJECT NO.	SHEET NO.
L&G	2026	R4SVAR-S1-058	3A

R.O.W. ACQUISITION TABLE																		
TRACT NO.	PROPERTY OWNERS	COUNTY RECORDS				TOTAL AREA (ACRES)			AREA TO BE ACQUIRED (ACRES)			AREA REMAINING (ACRES)		EASEMENT (SQUARE FEET)				
		TAX MAP NO.	PARCEL NO.	DEED DOCUMENT REFERENCE		LEFT	RIGHT	TOTAL	LEFT	RIGHT	TOTAL	LEFT	RIGHT	PERM DRAINAGE	PERM SLOPE	CONST	AIR RIGHTS	PERM HIGHWAY
				BOOK	PAGE													
1	MERCER GIN COMPANY, INC.	138	019.00	643	152		51.570	51.570					51.570					
2	TONY KELLY	138	025.02	755	1516	70.540		70.540				70.540						
3	GAY MULHERIN, JASON MULHERIN JR., AND HOLLY MULHERIN	138	024.00	711	1323	243.500		243.500	1.024		1.024	242.476						
4	MARK FERGUSON AND KAREN PAIGE FERGUSON	138	022.04	583	35		7.940	7.940		0.369	0.369		7.571			4223 S.F.		
5	GAY MULHERIN, JASON MULHERIN JR., AND HOLLY MULHERIN	138	024.00	711	1323		3.660	3.660		0.690	0.690		2.970			0.341		
6	MERCER CEMETERY	138	023.00			1.630		1.630				1.630						
7	ANNE DANIEL DALE	138	002.00	741	35		101.630	101.630					101.630					
ACQUISITION TOTALS (ACRES)									2.083							0.437		

DISTURBED AREA		
IN BETWEEN SLOPE LINES		1.478 (AC)
15 FOOT WIDE STRIP (OUT SIDE SLOPE LINES)		0.810 (AC)
TOTAL DISTURBED AREA		2.288 (AC)
TOTAL PROJECT AREA		4.307 (AC)

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STATE OF TENNESSEE DEPARTMENT OF TRANSPORTATION
RIGHT-OF-WAY ACQUISITION TABLE

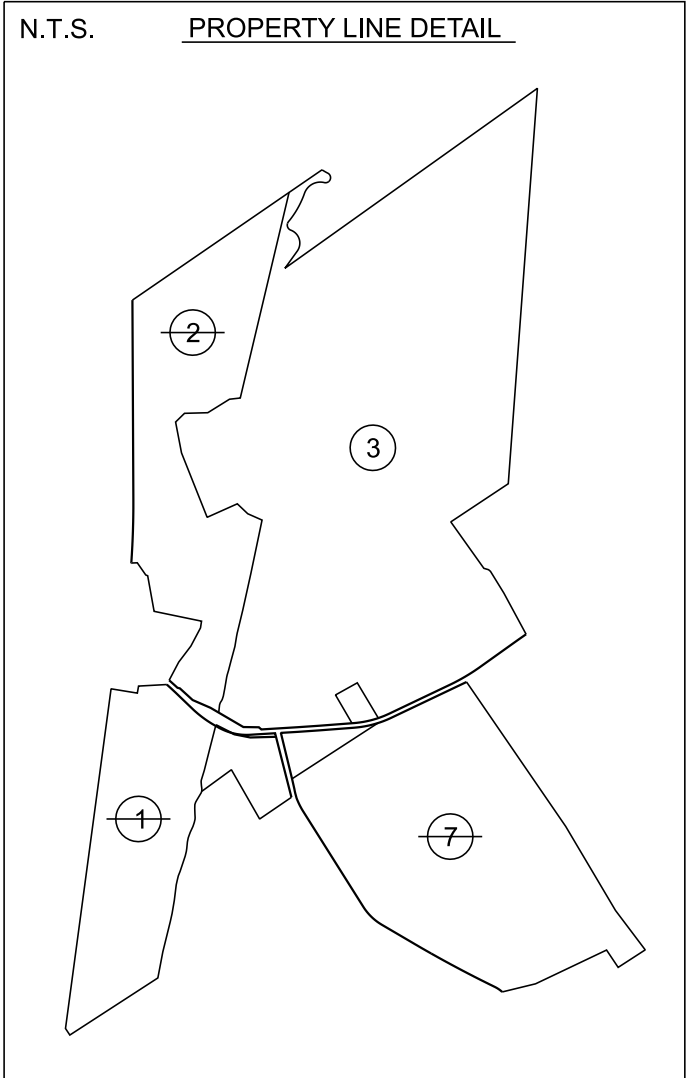
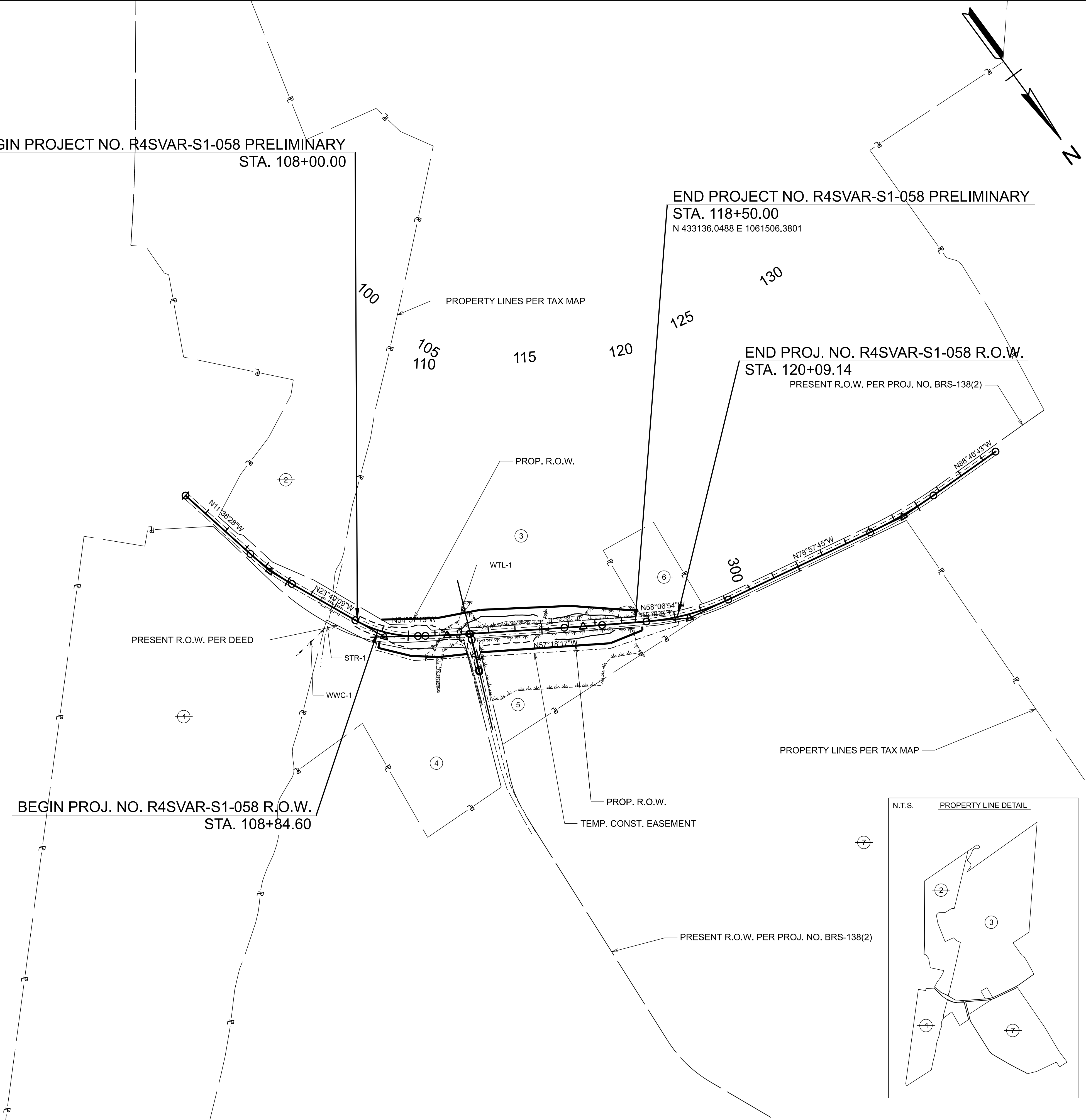
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L&G	2026	R4SVAR-S1-058	3B

BEGIN PROJECT NO. R4SVAR-S1-058 PRELIMINARY
STA. 108+00.00

END PROJECT NO. R4SVAR-S1-058 PRELIMINARY
STA. 118+50.00
N 433136.0488 E 1061506.3801

END PROJ. NO. R4SVAR-S1-058 R.O.W.
STA. 120+09.14
PRESENT R.O.W. PER PROJ. NO. BRS-138(2)

BEGIN PROJ. NO. R4SVAR-S1-058 R.O.W.
STA. 108+84.60



SEALED BY

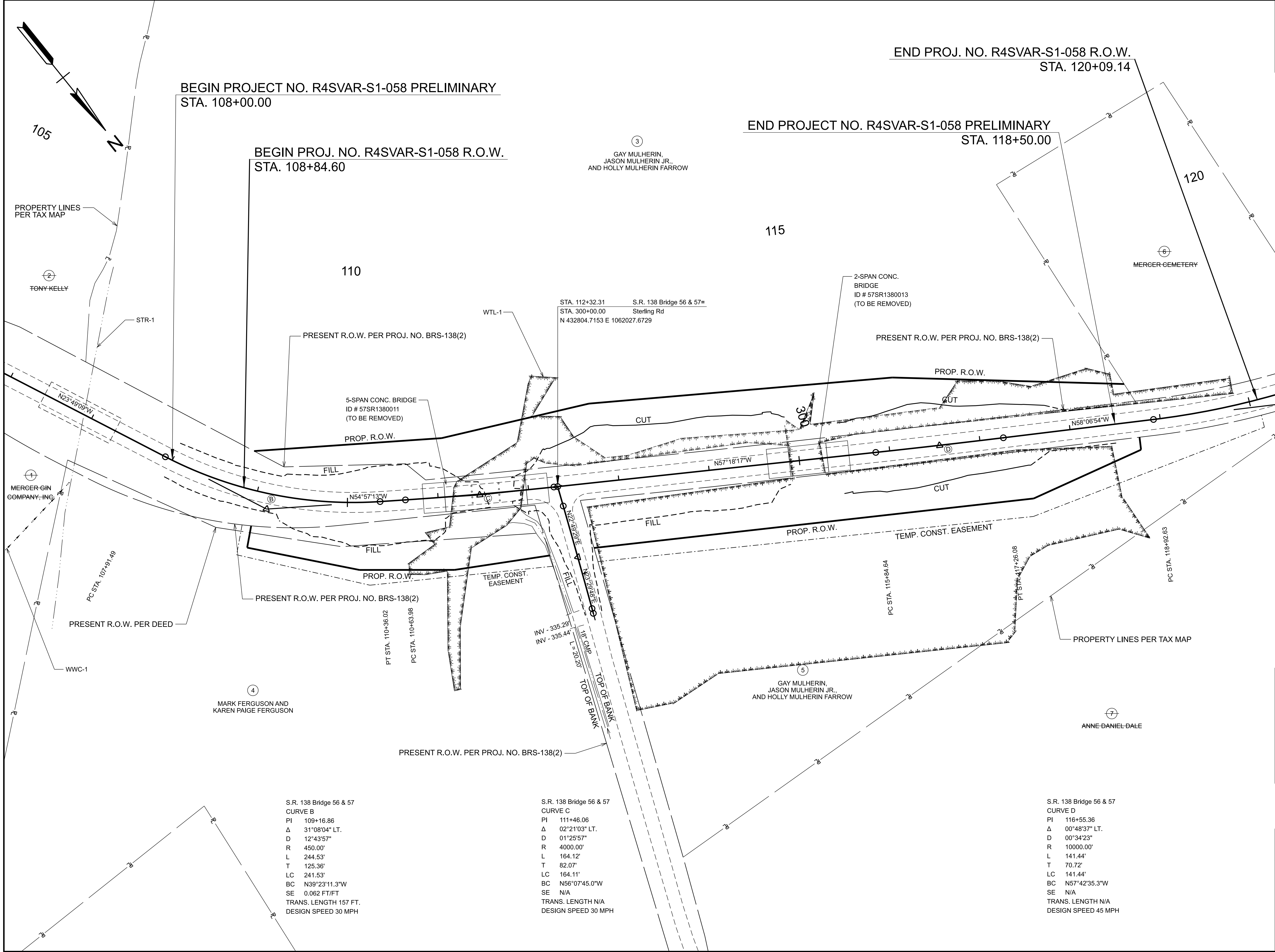
TN STATE LIDAR UTILIZED
WITH SUPPLEMENTAL
SURVEY FOR EXISTING
STREAM AND BRIDGE ONLY.

**STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION**

**PROPERTY
MAP**

STA. 92+00.00 TO STA. 140+00.00
SCALE: 1" = 200'

TYPE	YEAR	PROJECT NO.	SHEET NO.
L&G	2026	R4SVAR-S1-058	4



SEALED BY

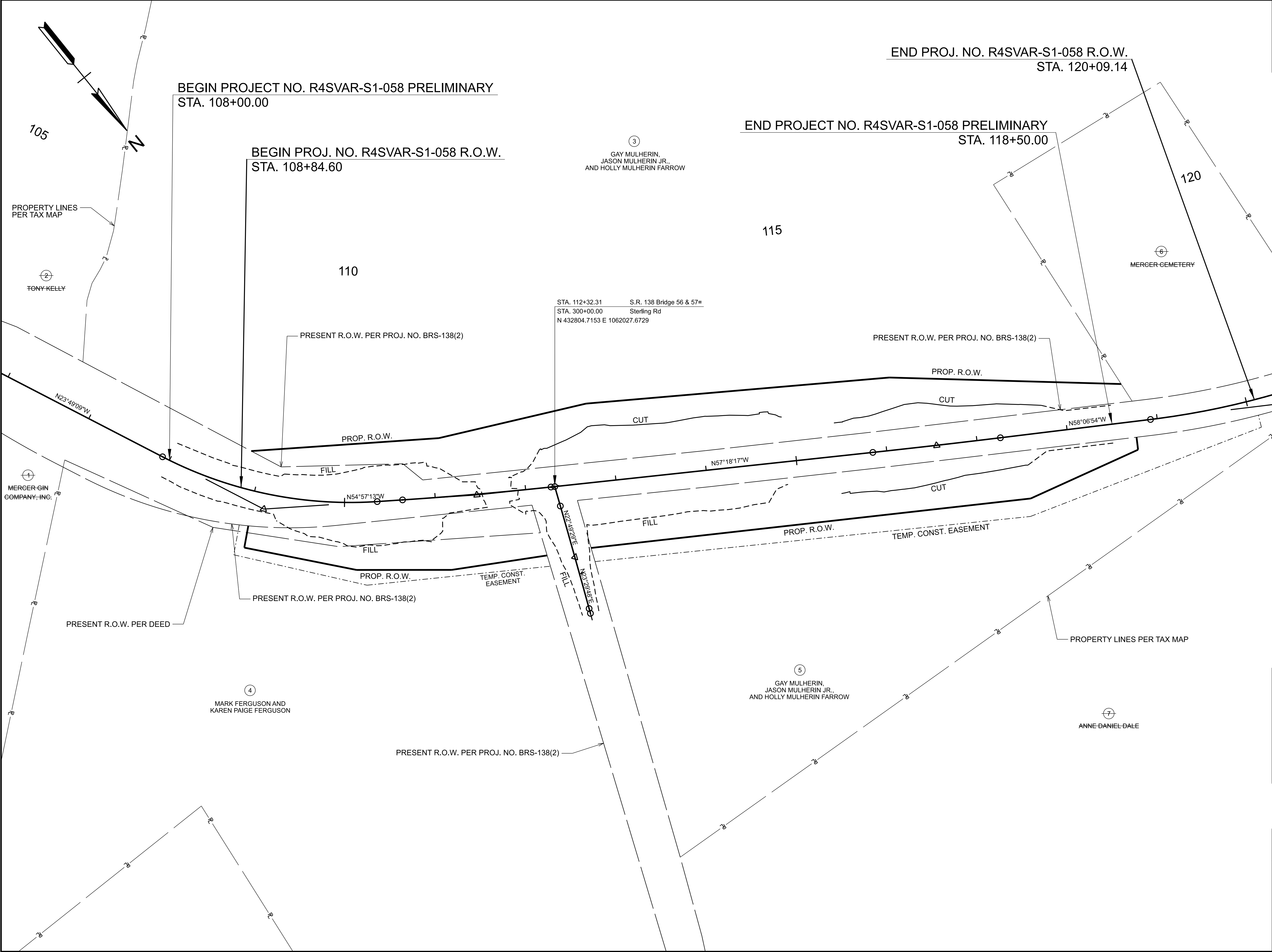
TN STATE LIDAR UTILIZED
WITH SUPPLEMENTAL
SURVEY FOR EXISTING
STREAM AND BRIDGE ONLY.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PRESENT
LAYOUT

STA. 107+00.00 TO STA. 119+00.00
SCALE: 1" = 50'

TYPE	YEAR	PROJECT NO.	SHEET NO.
L&G	2026	R4SVAR-S1-058	4A



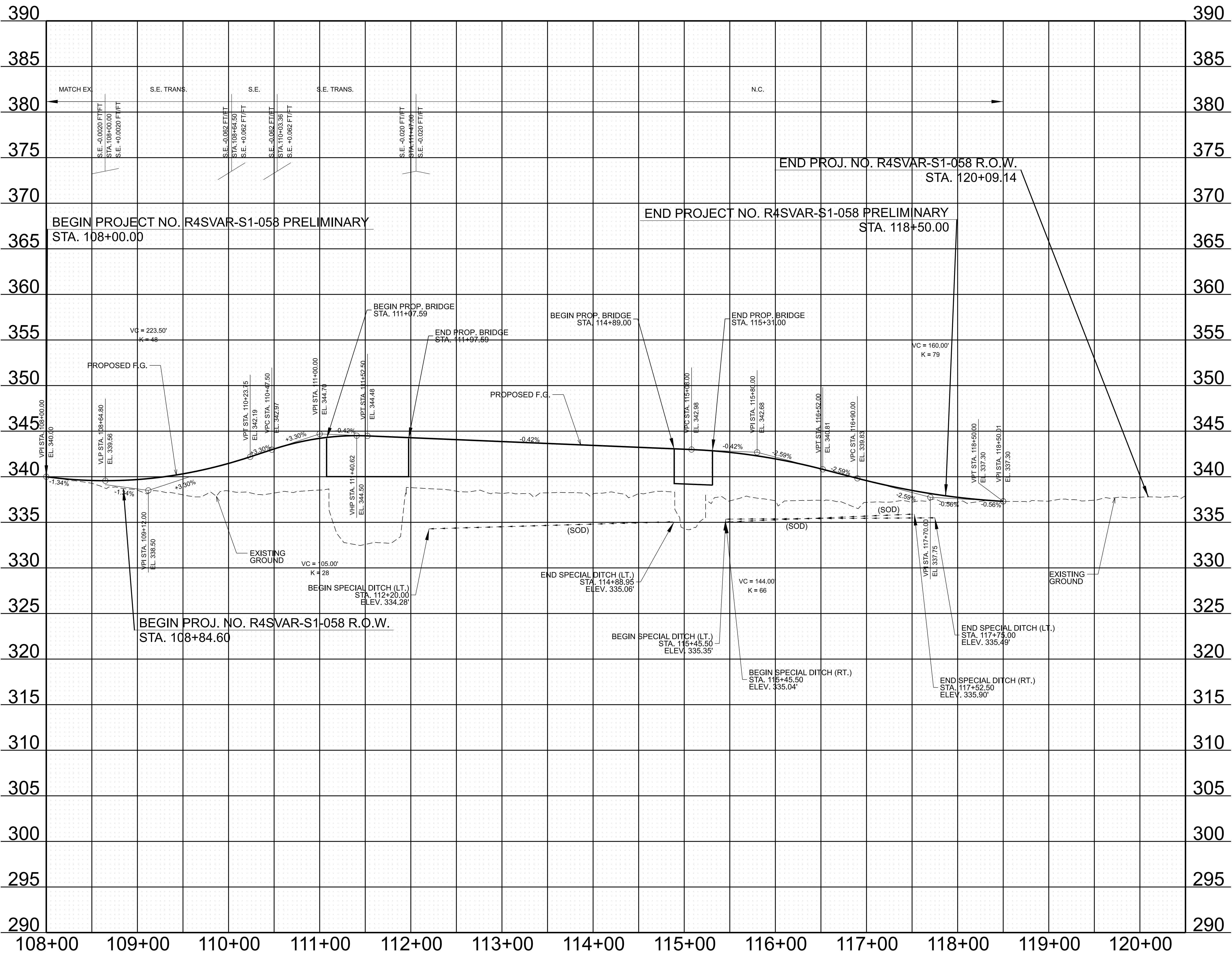
SEALED BY

TN STATE LIDAR UTILIZED
WITH SUPPLEMENTAL
SURVEY FOR EXISTING
STREAM AND BRIDGE ONLY.

**STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION**

**RIGHT-OF-WAY
DETAILS**

STA. 107+00.00 TO STA. 119+00.00
SCALE: 1" = 50'

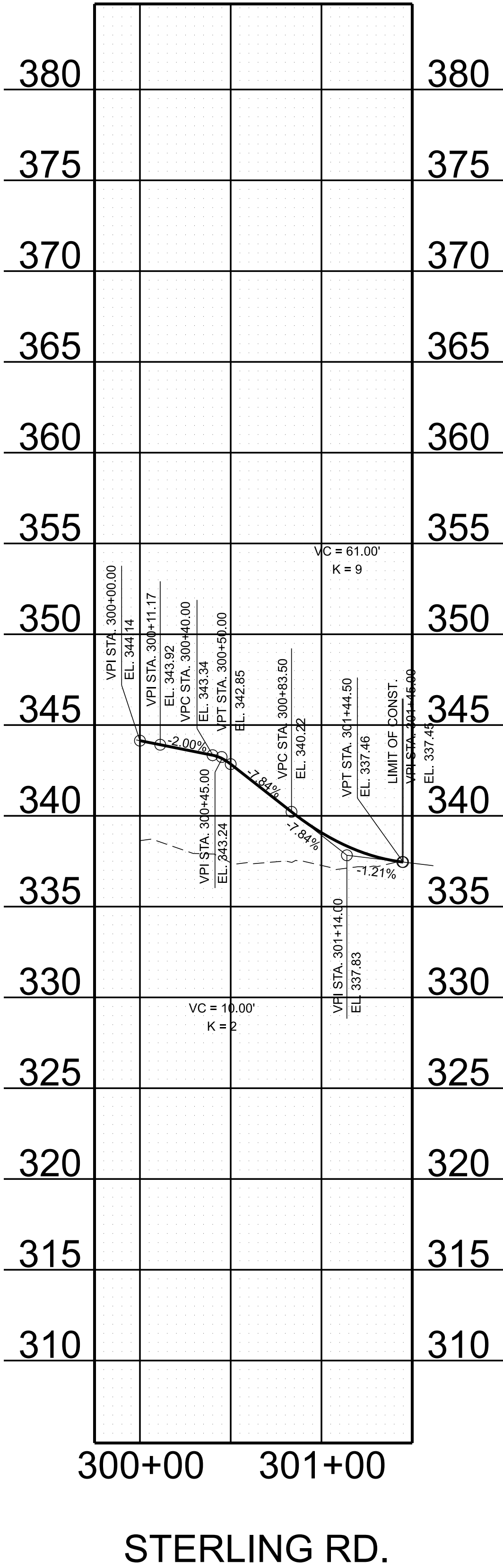


TYPE	YEAR	PROJECT NO.	SHEET NO.
L&G	2026	R4SVAR-S1-058	4C

SEALED BY

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PROPOSED
PROFILE
STA. 108+00.00 TO STA. 120+50.00
SCALE: 1" = 50' HORIZ.
1" = 5' VERT.



TYPE	YEAR	PROJECT NO.	SHEET NO.
L&G	2026	R4SVAR-S1-058	5

SEALED BY

STATE OF TENNESSEE DEPARTMENT OF TRANSPORTATION
SIDE ROAD PROFILE STERLING ROAD STA. 299+75.00 TO STA. 301+50.00 SCALE: 1" = 50' HORIZ. 1" = 5' VERT.

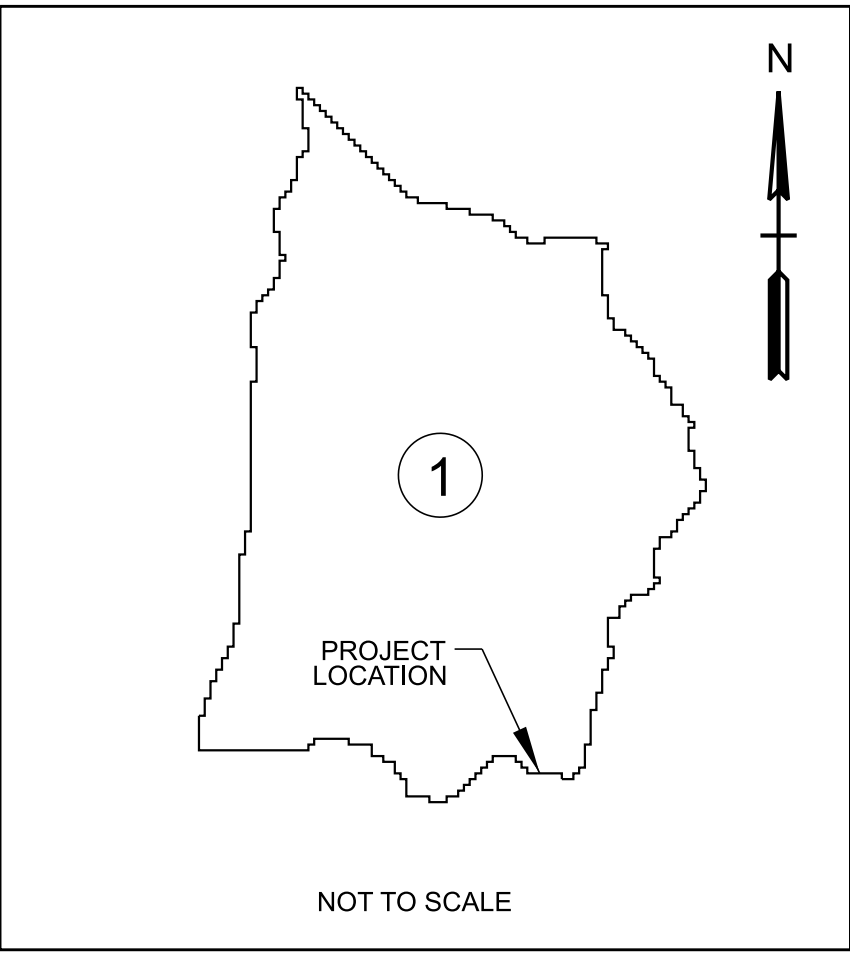
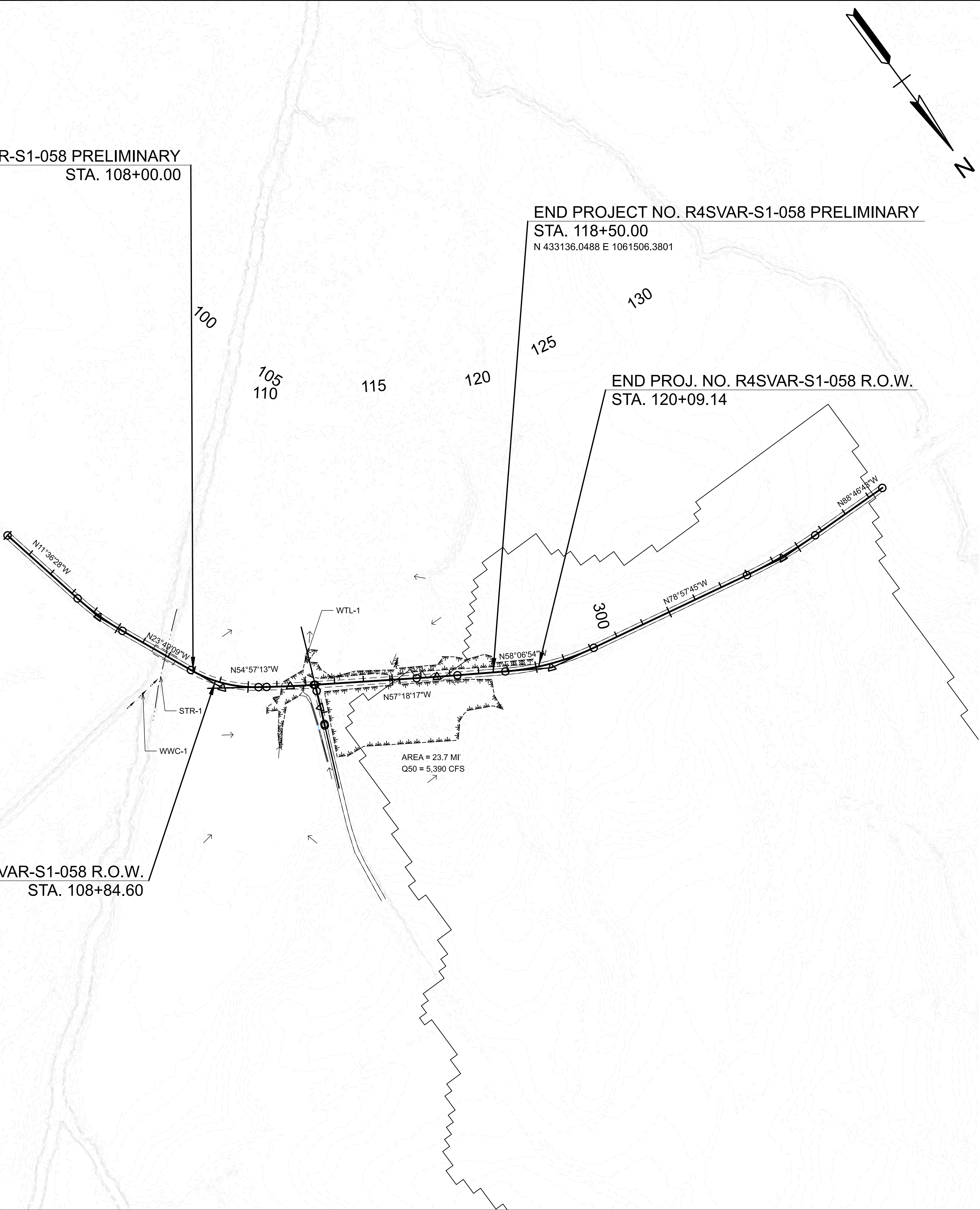
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L&G	2026	R4SVAR-S1-058	6

BEGIN PROJECT NO. R4SVAR-S1-058 PRELIMINARY
STA. 108+00.00

END PROJECT NO. R4SVAR-S1-058 PRELIMINARY
STA. 118+50.00
N 433136.0488 E 1061506.3801

END PROJ. NO. R4SVAR-S1-058 R.O.W.
STA. 120+09.14

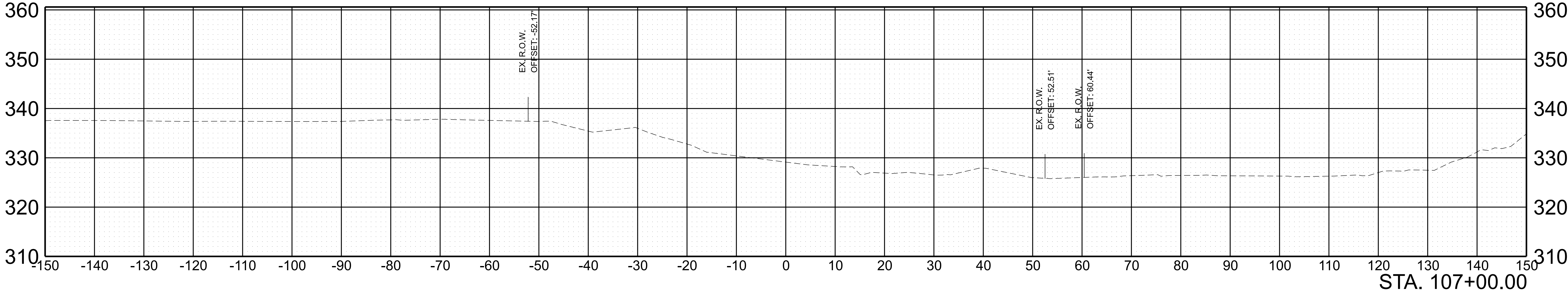
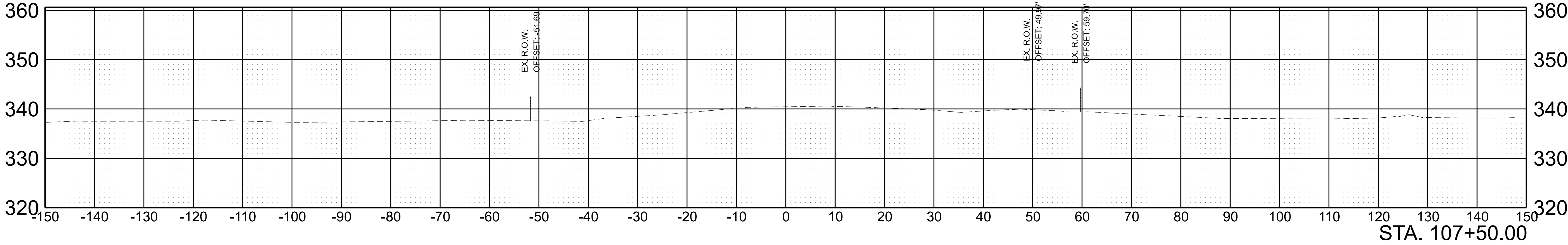
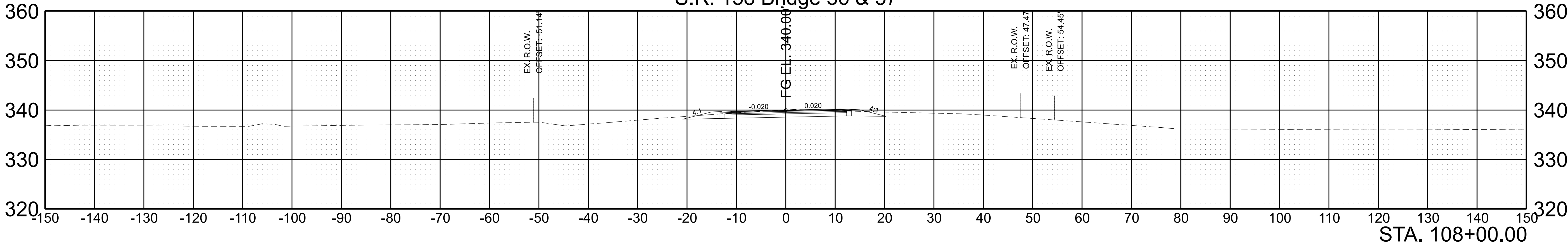
BEGIN PROJ. NO. R4SVAR-S1-058 R.O.W.
STA. 108+84.60



SEALED BY
TN STATE LIDAR UTILIZED WITH SUPPLEMENTAL SURVEY FOR EXISTING STREAM AND BRIDGE ONLY.
STATE OF TENNESSEE DEPARTMENT OF TRANSPORTATION
DRAINAGE MAP
STA. 92+00.00 TO STA. 140+00.00 SCALE: 1" = 200'

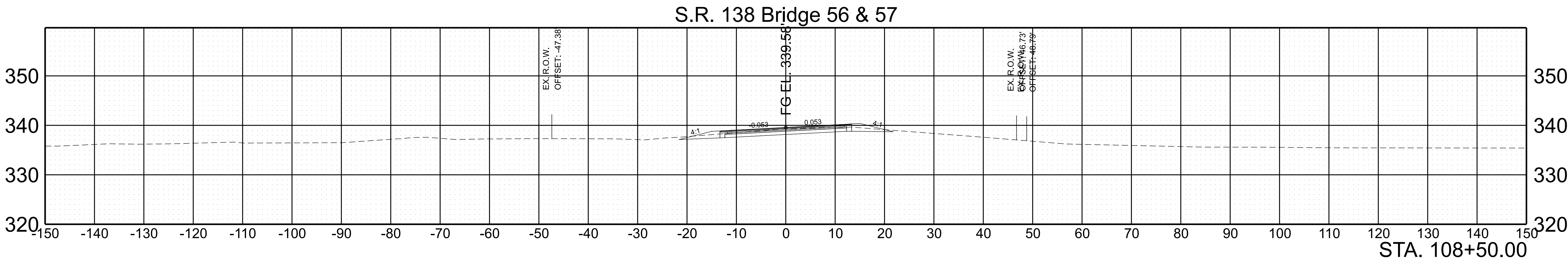
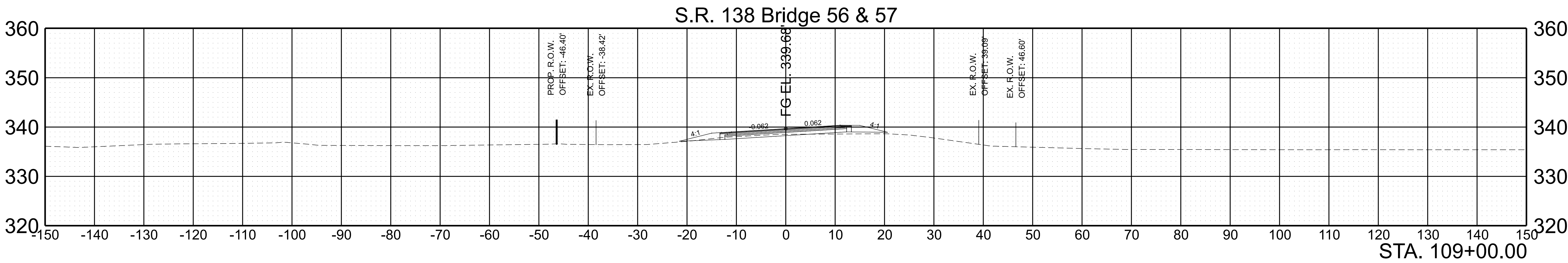
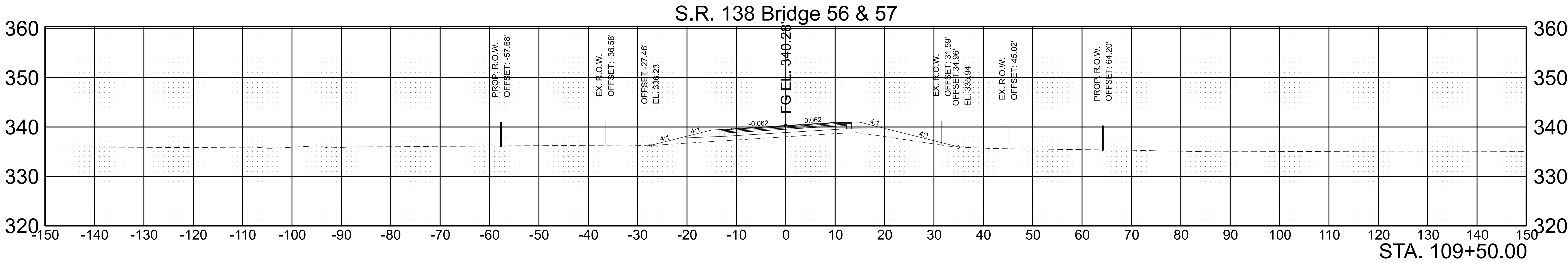
TYPE	YEAR	PROJECT NO.	SHEET NO.
L&G	2026	R4SVAR-S1-058	15

S.R. 138 Bridge 56 & 57



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

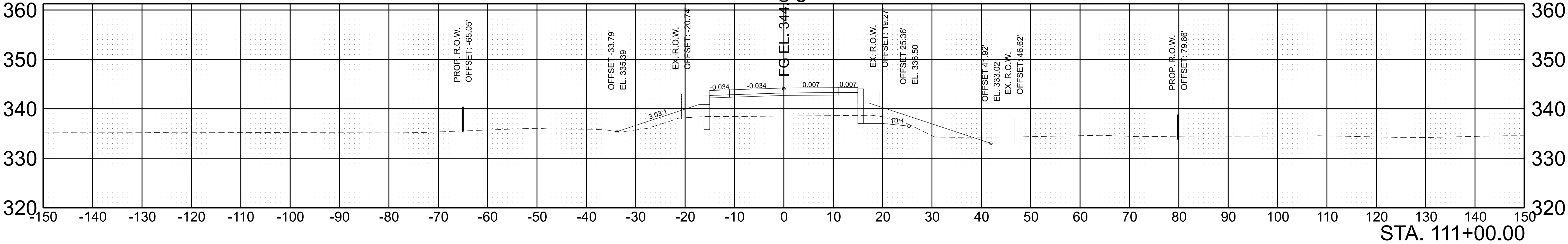
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L&G	2026	R4SVAR-S1-058	16



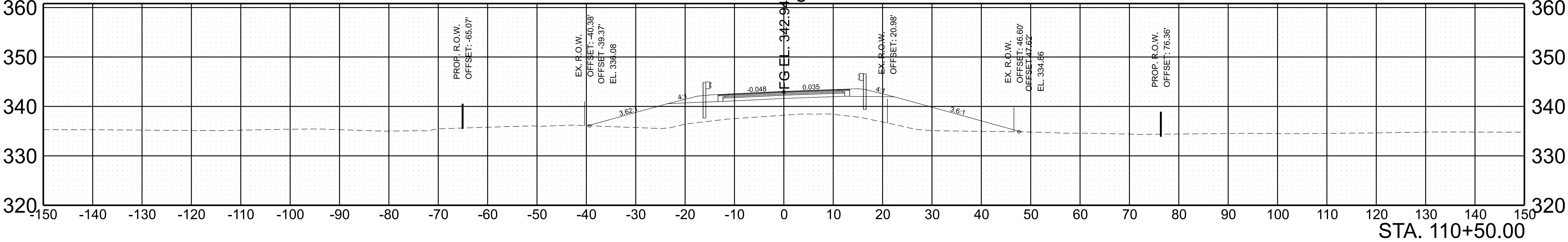
SCALE:	1"=10' HORIZ.	BEGIN STA. 108+50.00
	1"=10' VERT.	END STA. 109+50.00

TYPE	YEAR	PROJECT NO.	SHEET NO.
L&G	2026	R4SVAR-S1-058	17

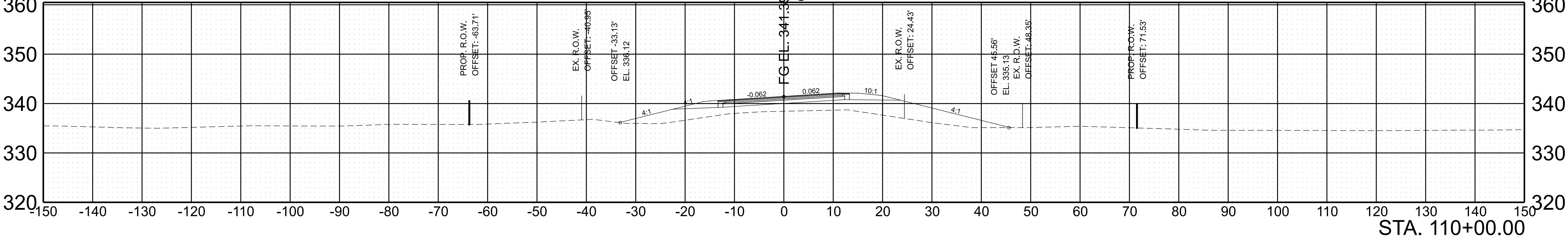
S.R. 138 Bridge 56 & 57



S.R. 138 Bridge 56 & 57

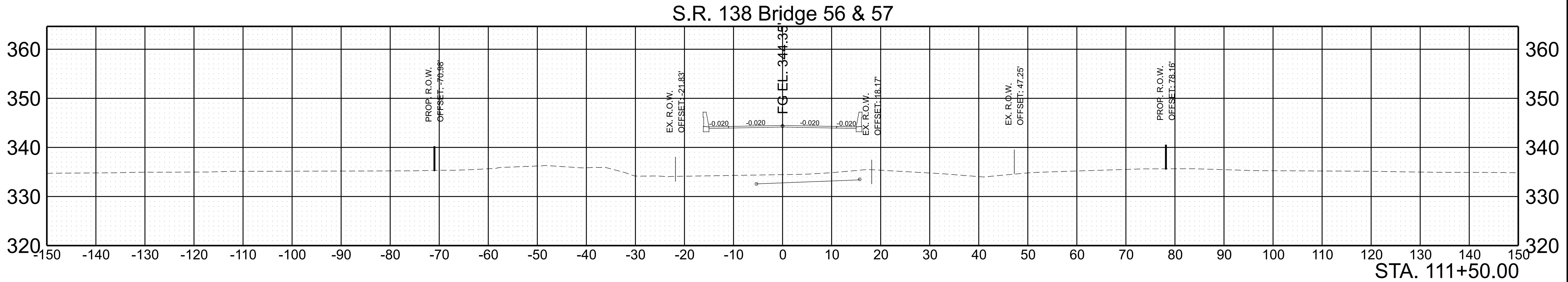
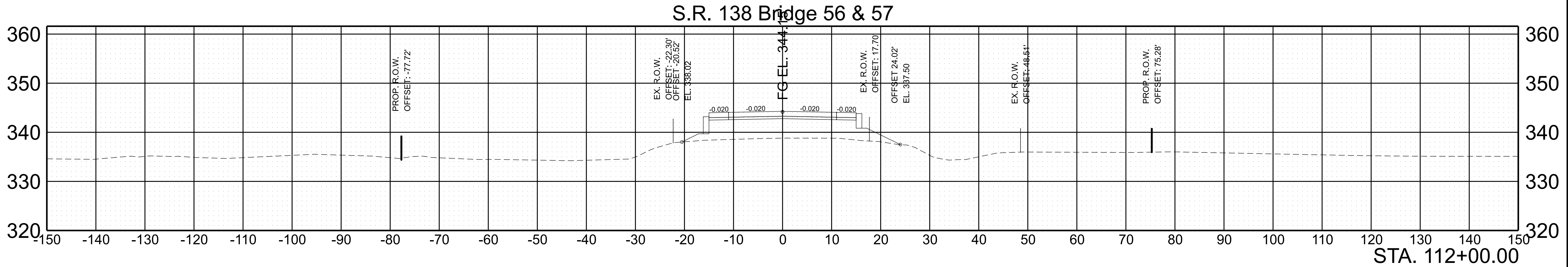
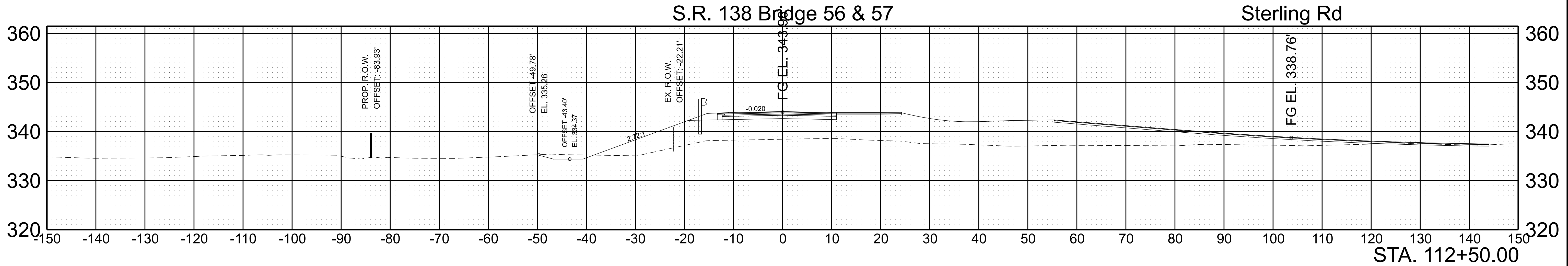


S.R. 138 Bridge 56 & 57



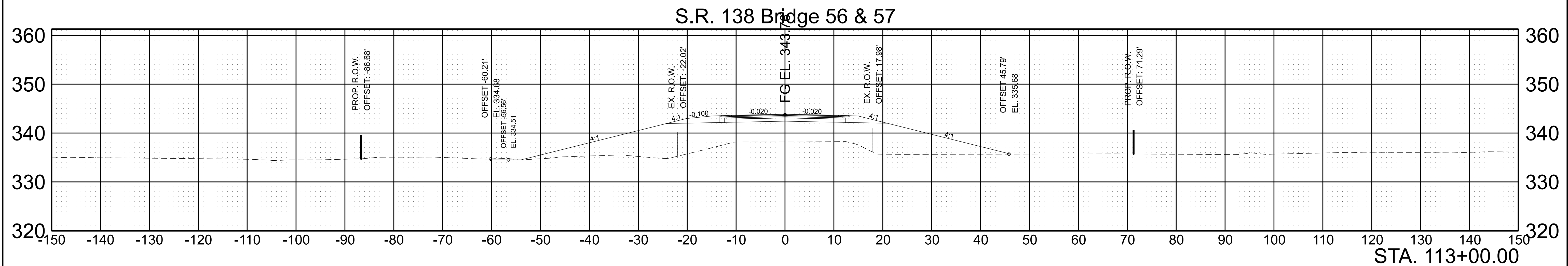
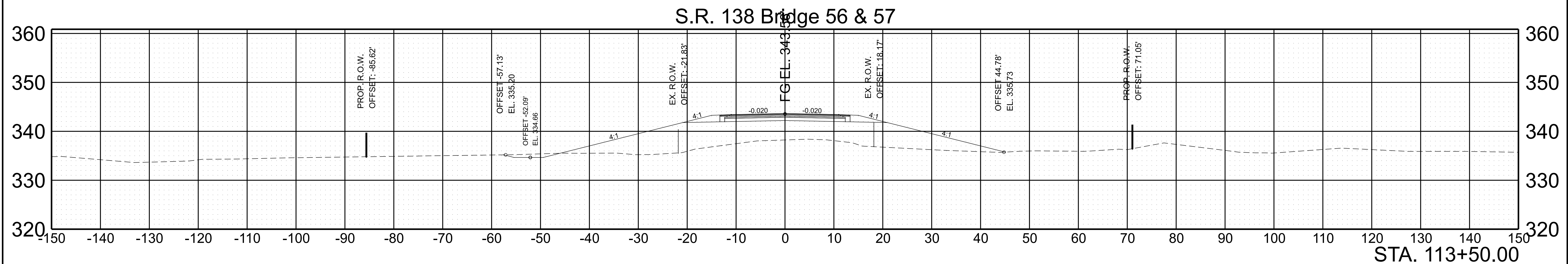
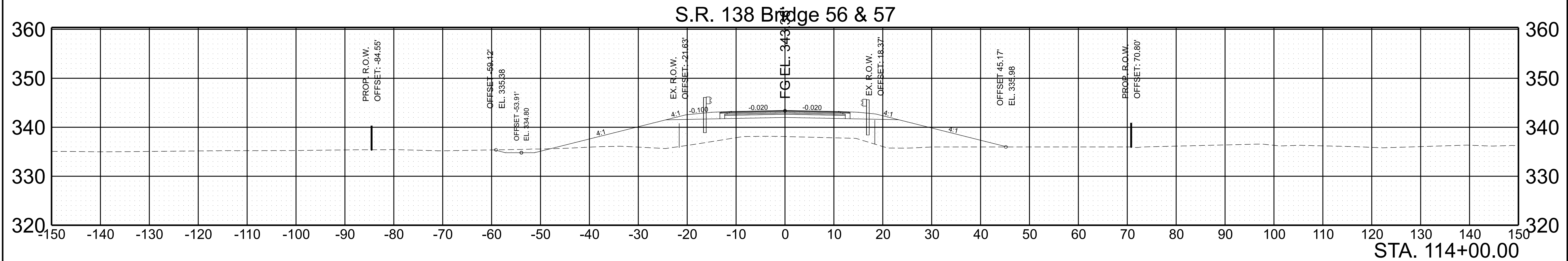
SCALE:	1"=10' HORIZ.	BEGIN STA. 110+00.00
	1"=10' VERT.	END STA. 111+00.00

TYPE	YEAR	PROJECT NO.	SHEET NO.
L&G	2026	R4SVAR-S1-058	18



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

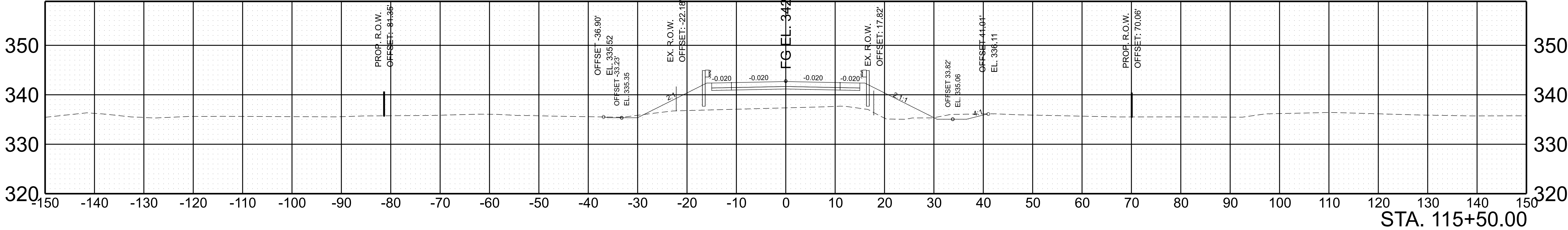
TYPE	YEAR	PROJECT NO.	SHEET NO.
L&G	2026	R4SVAR-S1-058	19



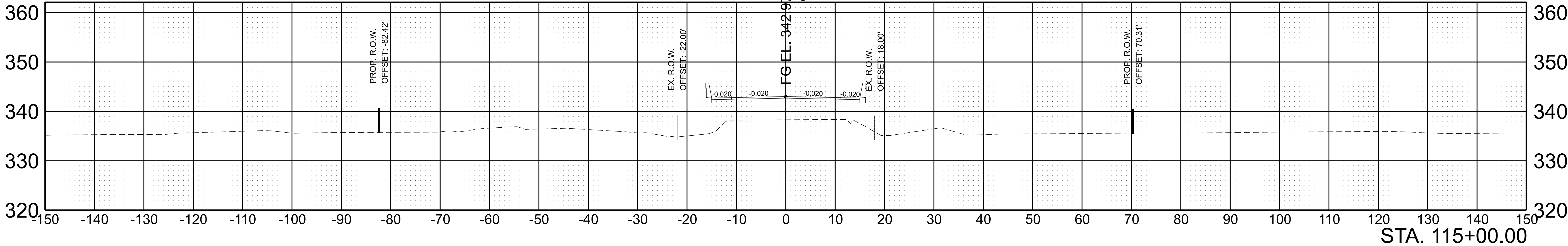
SCALE: 1"=10' HORIZ.	BEGIN STA. 113+00.00
1"=10' VERT.	END STA. 114+00.00

TYPE	YEAR	PROJECT NO.	SHEET NO.
L&G	2026	R4SVAR-S1-058	20

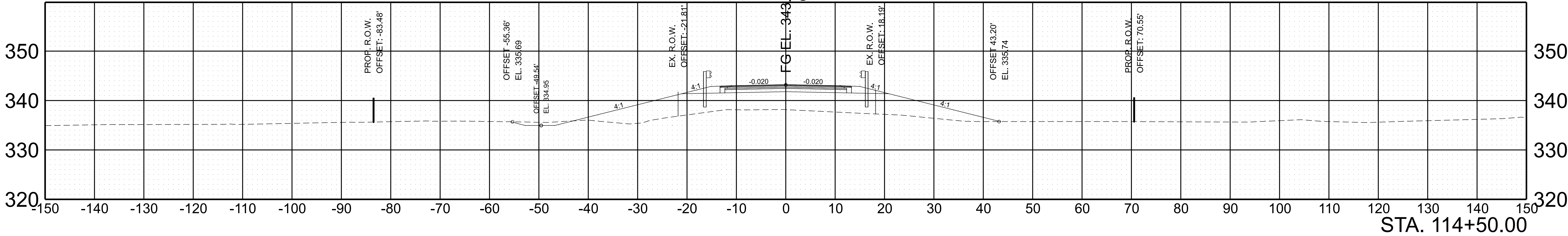
S.R. 138 Bridge 56 & 57



S.R. 138 Bridge 56 & 57

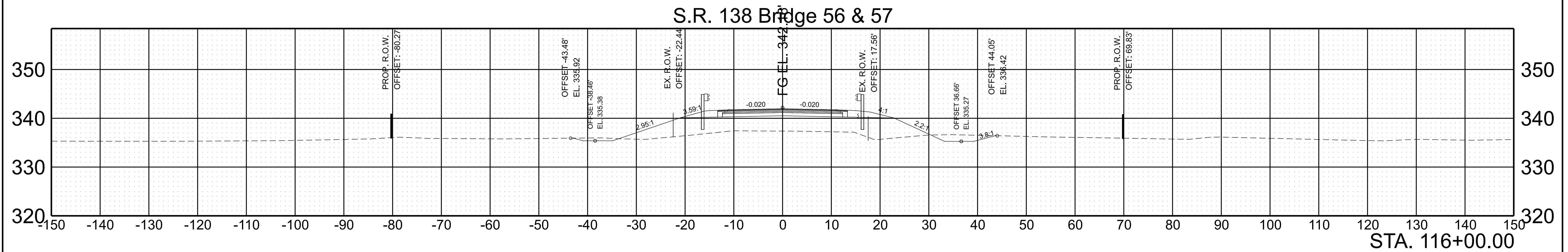
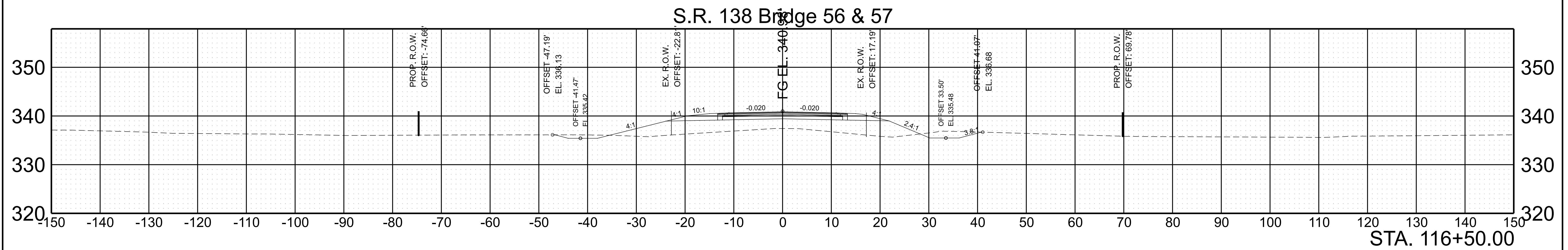
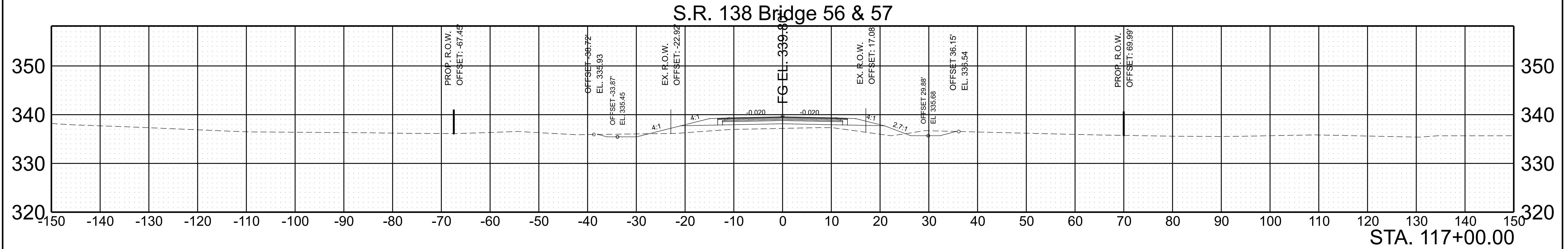


S.R. 138 Bridge 56 & 57



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

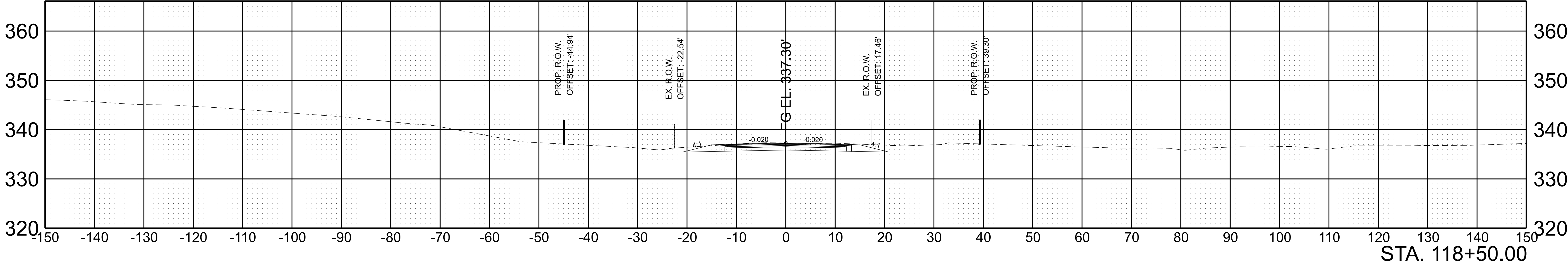
TYPE	YEAR	PROJECT NO.	SHEET NO.
L&G	2026	R4SVAR-S1-058	21



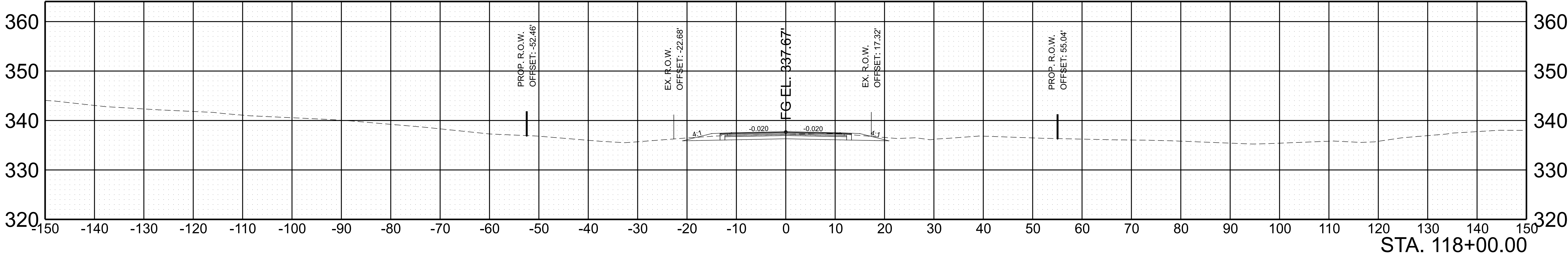
SCALE: 1"=10' HORIZ.	BEGIN STA. 116+00.00
1"=10' VERT.	END STA. 117+00.00

TYPE	YEAR	PROJECT NO.	SHEET NO.
L&G	2026	R4SVAR-S1-058	22

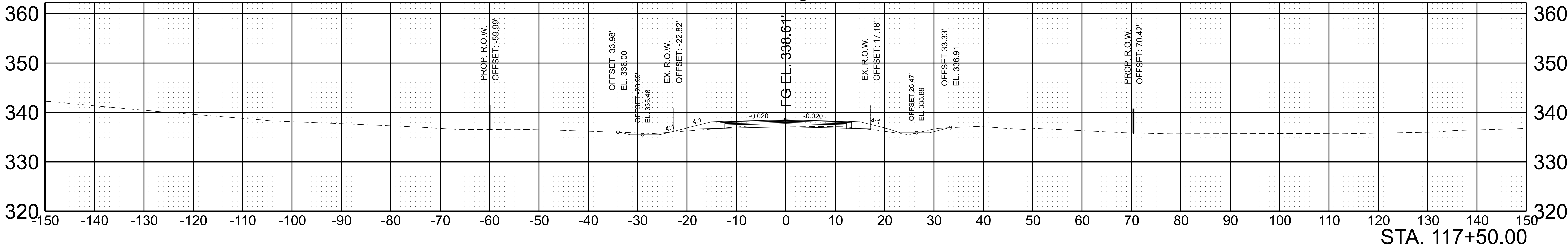
S.R. 138 Bridge 56 & 57



S.R. 138 Bridge 56 & 57

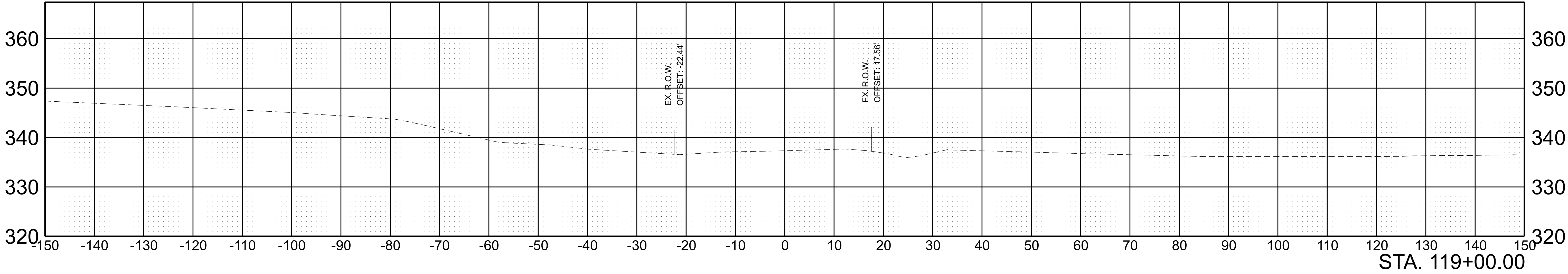


S.R. 138 Bridge 56 & 57



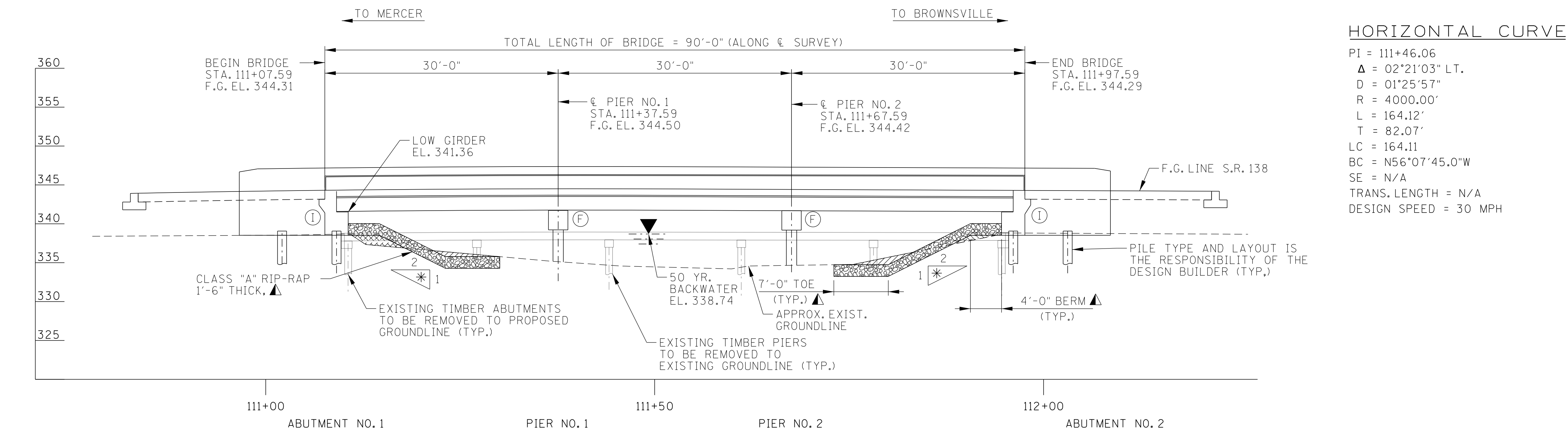
SCALE: 1"=10' HORIZ.	BEGIN STA. 117+50.00
1"=10' VERT.	END STA. 118+50.00

TYPE	YEAR	PROJECT NO.	SHEET NO.
L&G	2026	R4SVAR-S1-058	23



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

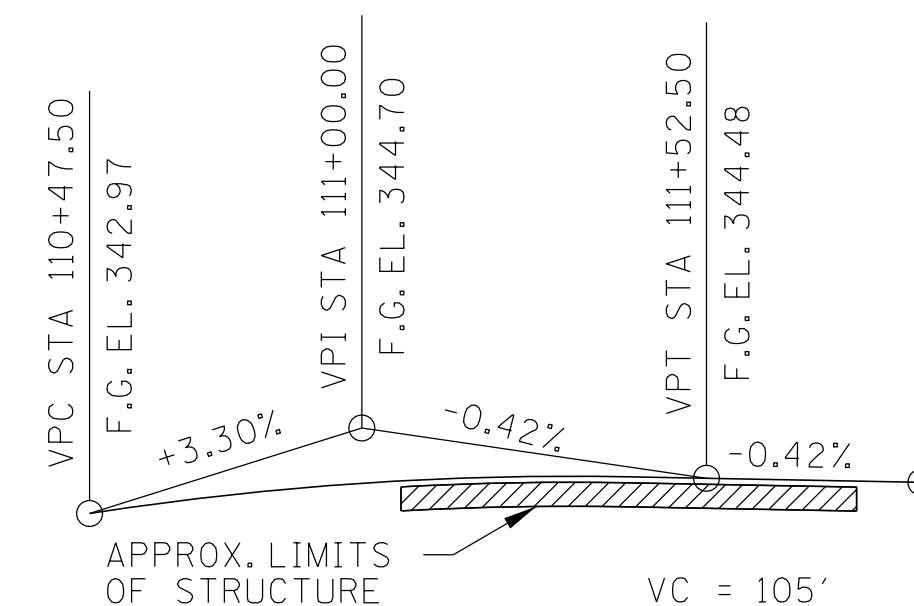
PIN NO.: 137109.14
DESIGN BY: A. VILLAGOMEZ DATE: 05/2026
DRAWN BY: A. VILLAGOMEZ DATE: 05/2026
SUPERVISED BY: H. NEAL DATE: 05/2026
CHECKED BY: B. WELLS DATE: 05/2026



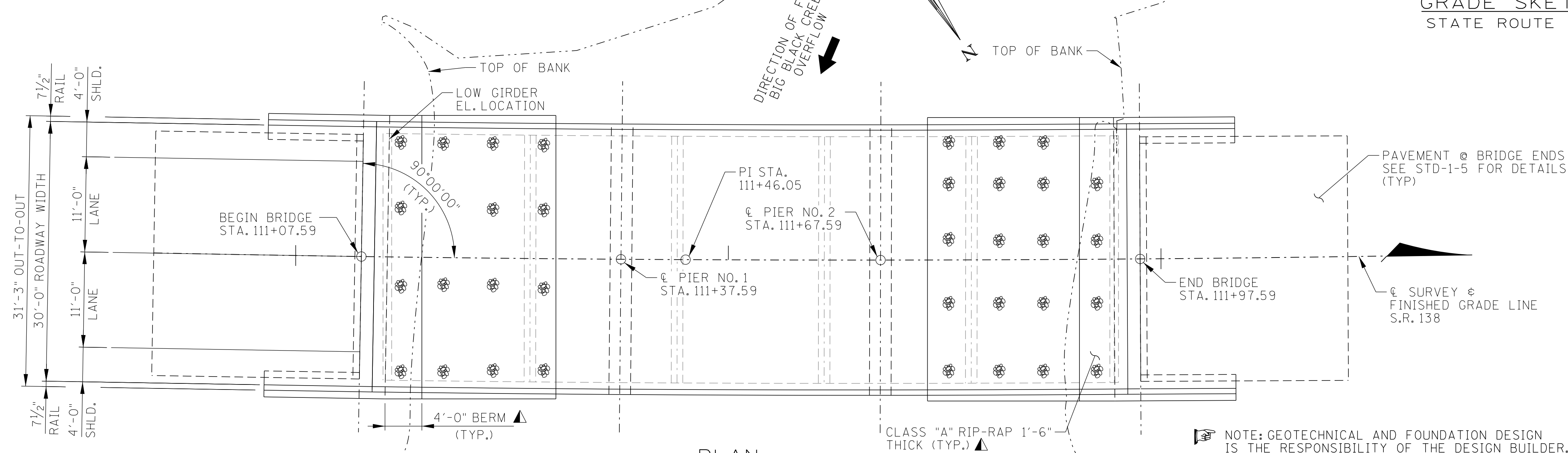
- ① DENOTES: INTEGRAL
Ⓕ DENOTES: FIXED
▨ DENOTES: AREA TO BE EXCAVATED AND PAID FOR AS A ROADWAY ITEM
▩ DENOTES: AREA TO BE FILLED AND PAID FOR AS A ROADWAY ITEM

ELEVATION

- * DENOTES: ORIENTED AT RIGHT ANGLE TO ABUTMENT (TYP.)
▲ DENOTES: RIP-RAP CLASS, THICKNESS, AND LIMITS TO BE VERIFIED BY THE DESIGN BUILDER USING TDOT GUIDELINES (TYP.)
NOTE: ELEVATION VIEW IS PROJECTED FROM PLAN VIEW BELOW



GRADE SKETCH STATE ROUTE 138



PLAN

HYDRAULIC DATA

DRAINAGE AREA = 23.7 MI²
DESIGN DISCHARGE (50 YR.) = 5,390 CFS
WATER AREA PROVIDED BELOW EL. 338.74 = 369.34 FT²
50 YR. VELOCITY = 2.25 FPS
50 YR. BRIDGE BACKWATER = 0.79 FT
ROADWAY OVERTOPPING EL. 340.35
100 YR. DISCHARGE = 6,110 CFS

- NOTE: GEOTECHNICAL AND FOUNDATION DESIGN IS THE RESPONSIBILITY OF THE DESIGN BUILDER.
NOTE: EXISTING UTILITY LOCATIONS ARE NOT SHOWN AS THESE WERE NOT CAPTURED IN THE LIDAR SURVEY. DESIGN BUILDER IS RESPONSIBLE FOR LOCATING ALL UTILITIES WITHIN CONSTRUCTION LIMITS.
NOTE: ALL HYDRAULIC INFORMATION SHOWN HEREIN IS FOR PRELIMINARY INFORMATION ONLY. DESIGN BUILDER IS RESPONSIBLE FOR HYDRAULIC ANALYSIS AND CONFIRMING THAT ALL HYDRAULIC CRITERIA CAN BE MET.
NOTE: EXISTING BRIDGE NO. 57SR1380011 AND APPROACHES TO BE REMOVED TO NATURAL GROUND BETWEEN STATIONS 111+10.59 AND 111+95.59

CONST. NO.: R4SVAR-S1-058

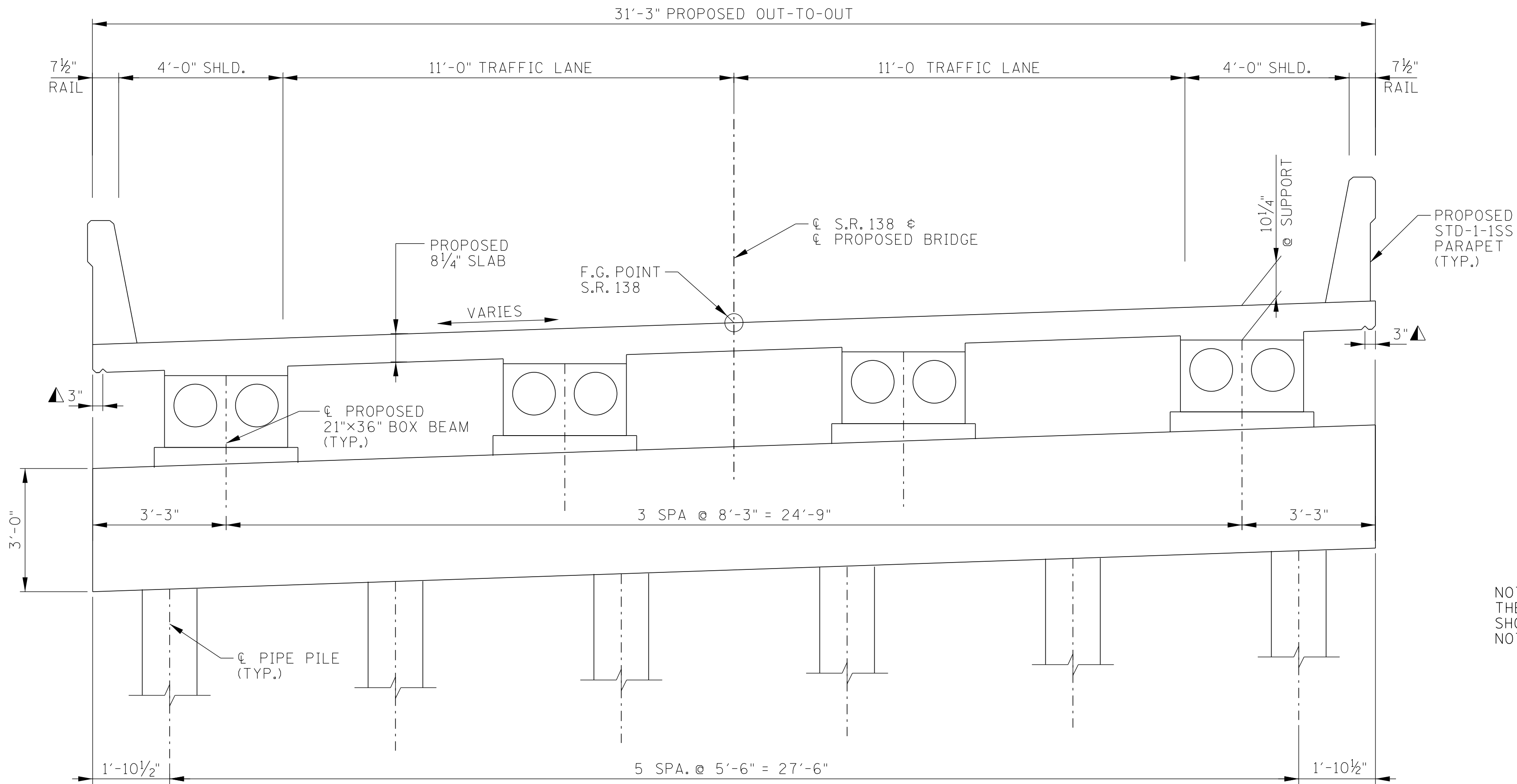
PROJECT NO.		YEAR	SHEET NO.
		2026	1 OF 2
REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION
	- -		
	- -		
	- -		
	- -		
	- -		

GENERAL NOTES

- CONSTRUCTION SPECIFICATIONS: TENNESSEE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (APRIL 1, 2026 EDITION.)
- DESIGN SPECIFICATIONS: 10TH EDITION (2024) AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS AND THE 2ND EDITION (2011) AASHTO GUIDE SPECIFICATIONS FOR LRFD SEISMIC BRIDGE DESIGN WITH INTERIMS.
- LOADING: HL-93 LIVE LOAD INCREASED BY 10% IN ADDITION TO ALL LOAD FACTORS SPECIFIED BY AASHTO FOR ALL APPLICABLE LOAD COMBINATIONS; SEISMIC CATEGORY "D" WITH AS = 0.338, SDS = 0.728, SD1 = 0.319 (1000 YEAR RETURN PERIOD); DEAD LOADS SHALL INCLUDE 35 LB/SQ. FT. FOR FUTURE WEARING SURFACE.
- SUPERSTRUCTURE: TO CONSIST OF 3 SPANS OF CONTINUOUS 21"x36" PRESTRESSED BOX BEAMS WITH COMPOSITE CONCRETE SLAB.
- CONCRETE: CLASS A F'C=3000, CLASS DS F'C=4000 PSI FOR BRIDGE DECK
- REINFORCING STEEL: TO BE ASTM A615 GRADE 60 UNLESS NOTED OTHERWISE. EPOXY COAT ALL SLAB STEEL.
- BRIDGE DECK SURFACE FINISH: TO BE IN ACCORDANCE WITH METHOD 3 IN ARTICLE 604.22 OF THE STANDARD SPECIFICATIONS.
- USE STD-1-1SS PARAPETS.
- TEXTURE COATING: TO BE GRAY (36440) EXCEPT TRAFFIC FACE AND TOP OF PARAPET TO BE WHITE (37886).
- EXCAVATION: TO BE BASED FINAL PROFILE AT ABUTMENTS AND EXISTING GROUND AT PIERS.
- ▲ RIP-RAP: MACHINED RIP-RAP SHALL BE CLASS "A" IN ACCORDANCE WITH SECTION 709 OF THE STANDARD SPECIFICATIONS AND SHALL BE MEASURED AND PAID FOR UNDER ROADWAY ITEM NO. 709-05.06.
- DESIGN BUILDER TO DETERMINE IF FLUMES AT BRIDGE ENDS ARE REQUIRED.
- BRIDGE DECK DRAIN DESIGN IS THE RESPONSIBILITY OF THE DESIGN BUILDER.
- EXISTING BRIDGE DESCRIPTION: 28'-6" OUT-TO-OUT, 5 SPANS AT 17'-0" (85'-0" TOTAL LENGTH), CONTINUOUS CONCRETE DECK GIRDER BRIDGE WITH TIMBER SUBSTRUCTURE.
- STREAM CHANNEL: ANY WORK WITHIN THE STREAM CHANNEL AREA (E.G. PIER/BENT FOOTING, RIP-RAP PLACEMENT, ETC.) SHALL BE SEPARATED FROM FLOWING WATER OR EXPECTED FLOW PATH AND PERFORMED DURING LOW FLOW CONDITIONS. ALL ITEMS USED WITHIN THE STREAM CHANNEL AREA FOR DIVERSION OF FLOW (OR EXPECTED FLOW), UNLESS SPECIFIED IN THE PLANS, SHALL NOT BE PAID FOR DIRECTLY BUT SHALL BE INCLUDED IN THE COST OF OTHER ITEMS. THIS NOTE EXCLUDES ANY ITEMS SPECIFIED IN THE PLANS FOR TEMPORARY DIVERSION CHANNELS (EC-STR-31).
- ALL BEAMS SHALL HAVE AN UPWARD DEFLECTION OF AT LEAST 1/8" UNDER TOTAL DEAD LOAD.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
**CONCEPTUAL LAYOUT OF BRIDGE
STATE ROUTE 138 OVER
BIG BLACK CREEK OVERFLOW
BRIDGE I.D NO. 57SR1380011
LOG MILE - 4.88
STA. 111+52.59
MADISON COUNTY**

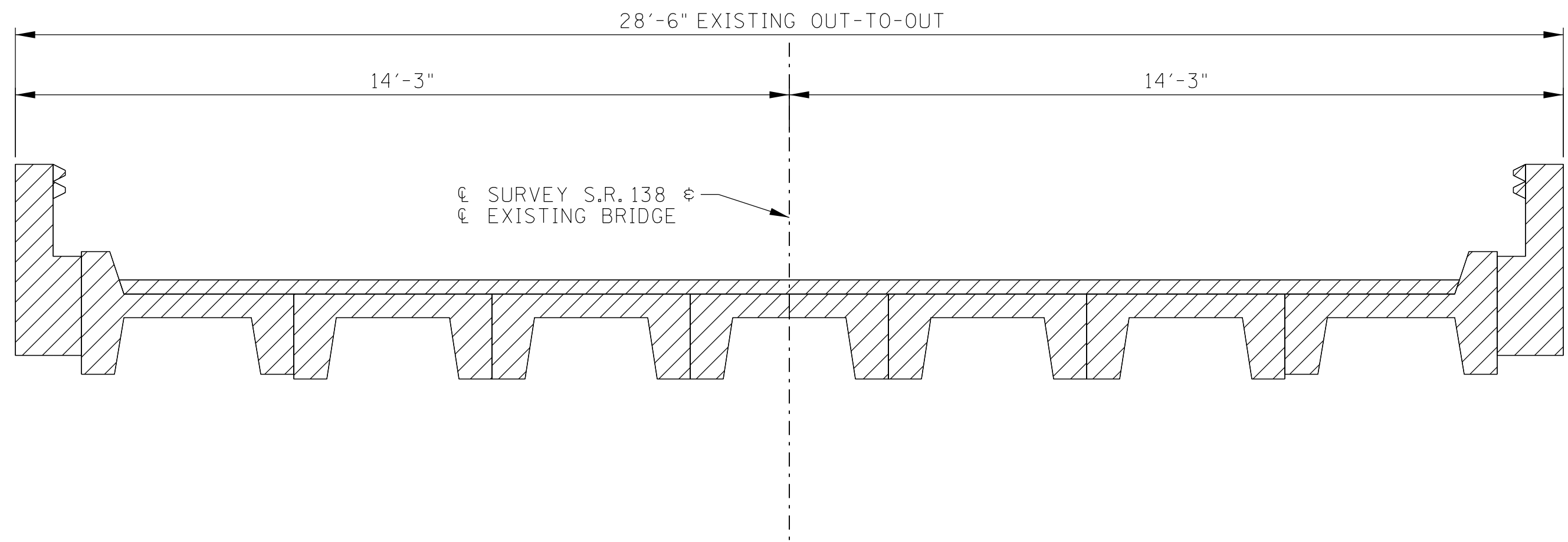
CONST. NO.: R4SVAR-S1-058			
PROJECT NO.		YEAR	SHEET NO.
		2026	2 OF 2
REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION
-	-		
-	-		
-	-		
-	-		
-	-		



NOTE: DESIGN BUILDER IS RESPONSIBLE FOR THE FOUNDATION DESIGN. PIPE PILES ARE SHOWN FOR GENERAL DETAILING. THIS DOES NOT IMPLY THAT PIPE PILES MUST BE USED.

PROPOSED TYPICAL CROSS-SECTION
(LOOKING FOWARD ON SURVEY)

▲ DENOTES: 1" TRIANGULAR DRIP NOTCH TO RUN FULL LENGTH OF SLAB



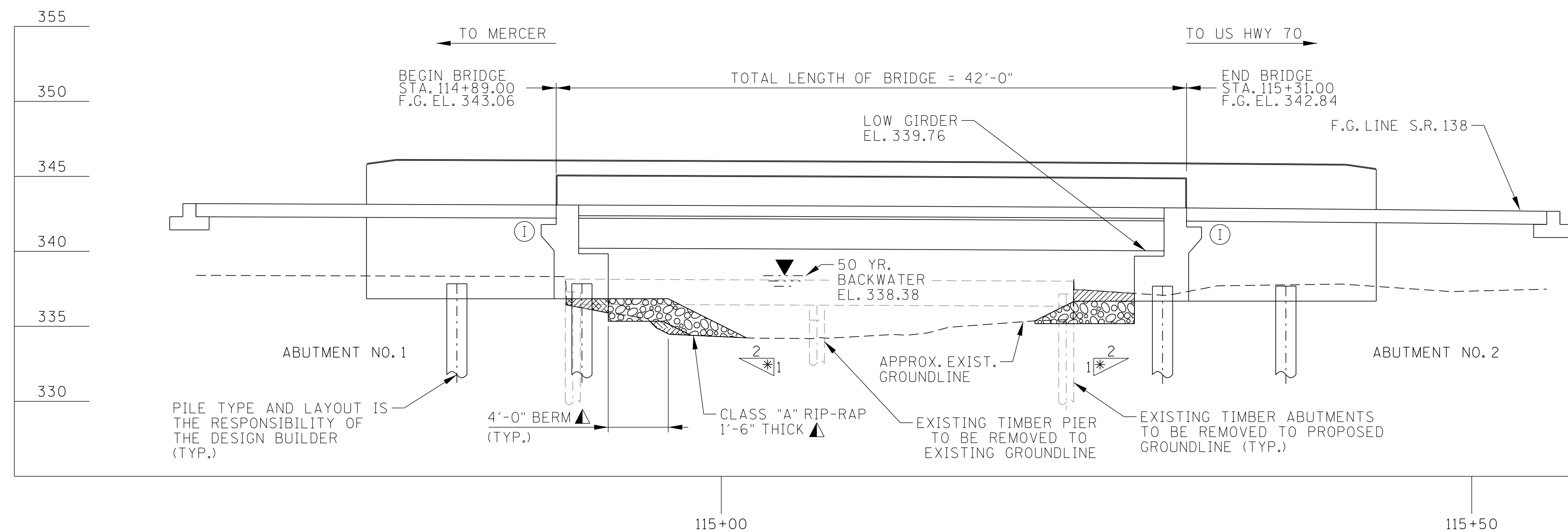
EXISTING TYPICAL CROSS-SECTION
(LOOKING FORWARD ON SURVEY)

/// DENOTES: EXISTING STRUCTURE TO BE REMOVED

PIN NO.: 137109.14
DESIGN BY: A. VILLAGOMEZ DATE: 05/2026
DRAWN BY: A. VILLAGOMEZ DATE: 05/2026
SUPERVISED BY: H. NEAL DATE: 05/2026
CHECKED BY: B. WELLS DATE: 05/2026



STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
CONCEPTUAL TYPICAL SECTION
STATE ROUTE 138 OVER
BIG BLACK CREEK OVERFLOW
BRIDGE I.D NO. 57SR1380011
LOG MILE - 4.88
STA. 111+52.59
MADISON COUNTY



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

* DENOTES: ORIENTED AT RIGHT ANGLE TO ABUTMENT (TYP.)

▲ DENOTES: RIP-RAP CLASS, THICKNESS, AND LIMITS TO BE VERIFIED BY THE DESIGN BUILDER USING TDOT GUIDELINES (TYP.)

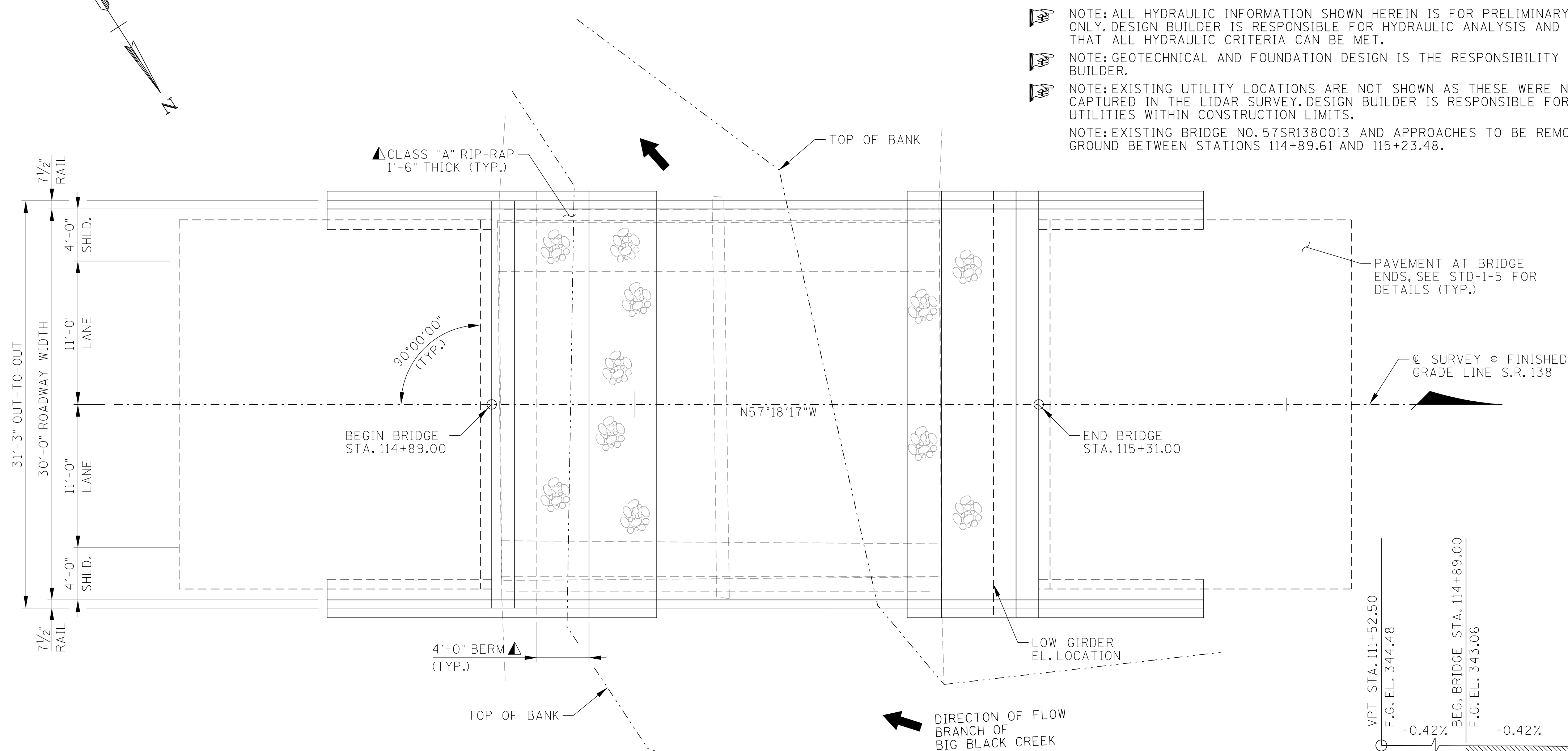
ELEVATION

 NOTE: ALL HYDRAULIC INFORMATION SHOWN HEREIN IS FOR PRELIMINARY INFORMATION ONLY. DESIGN BUILDER IS RESPONSIBLE FOR HYDRAULIC ANALYSIS AND CONFIRMING THAT ALL HYDRAULIC CRITERIA CAN BE MET.

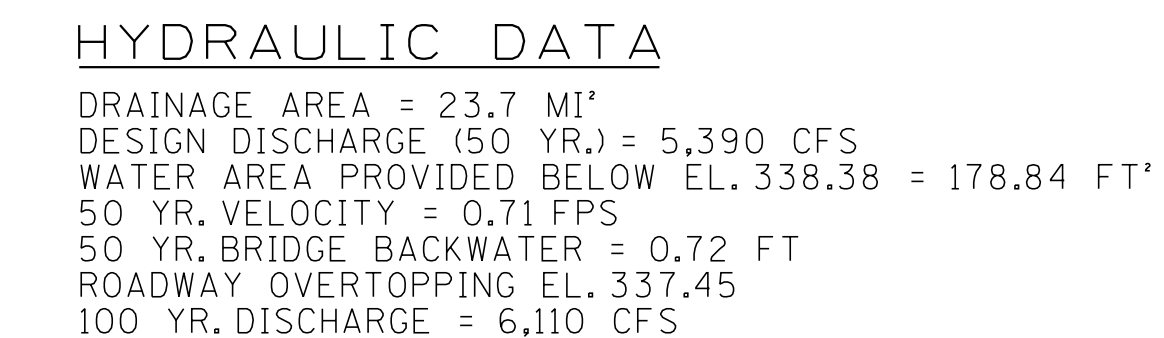
 NOTE: GEOTECHNICAL AND FOUNDATION DESIGN IS THE RESPONSIBILITY OF THE DESIGN BUILDER.

 NOTE: EXISTING UTILITY LOCATIONS ARE NOT SHOWN AS THESE WERE NOT CAPTURED IN THE LIDAR SURVEY. DESIGN BUILDER IS RESPONSIBLE FOR LOCATING ALL UTILITIES WITHIN CONSTRUCTION LIMITS.

NOTE: EXISTING BRIDGE NO. 57SR1380013 AND APPROACHES TO BE REMOVED TO NATURAL GROUND BETWEEN STATIONS 114+89.61 AND 115+23.48.



PLAN

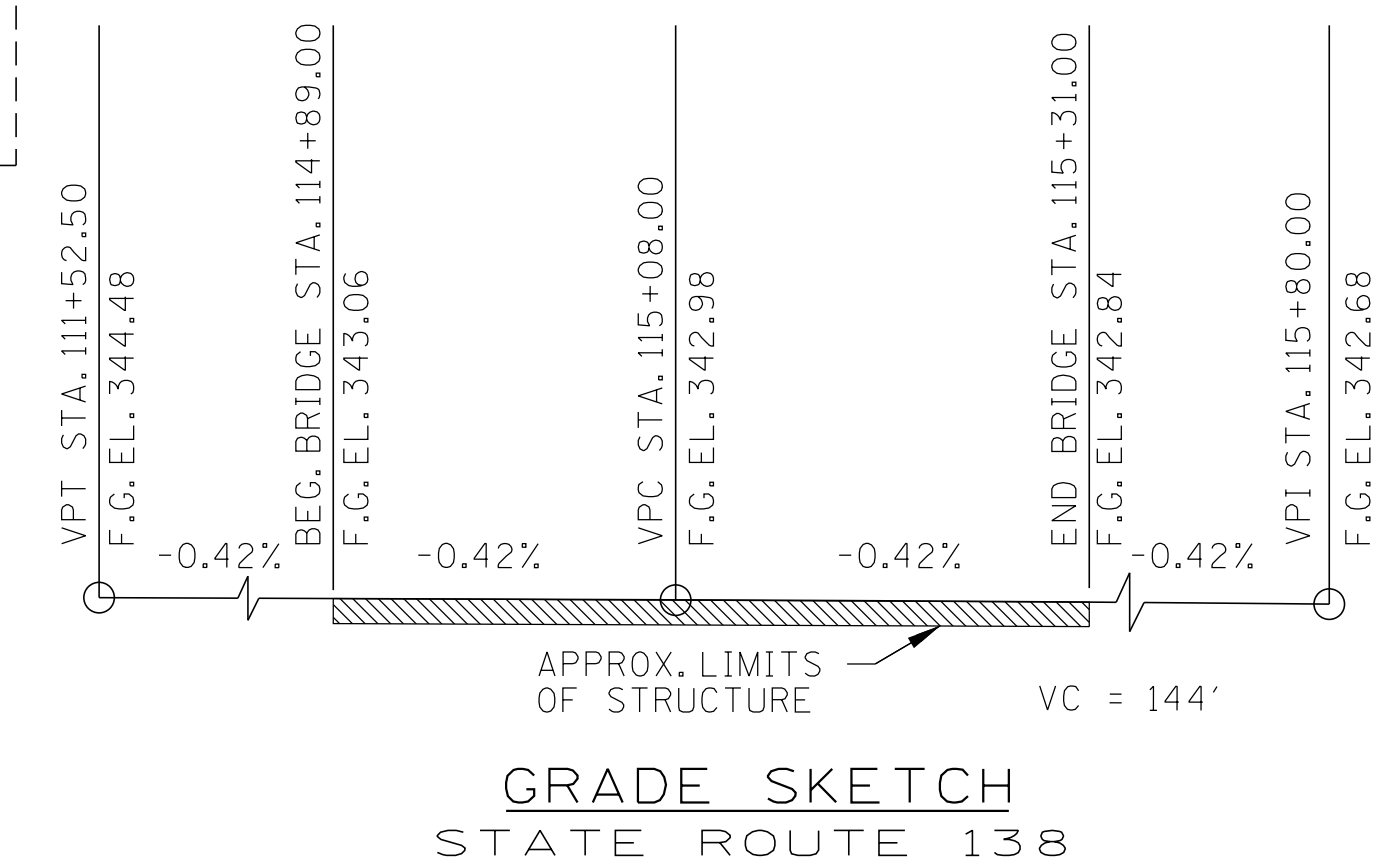


CONST. NO.: R4SVAR-S1-058			
PROJECT NO.		YEAR	SHEET NO.
		2026	1 OF 2
REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION
	- -		
	- -		
	- -		
	- -		
	- -		

GENERAL NOTES:

1. CONSTRUCTION SPECIFICATIONS: TENNESSEE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (APRIL 1, 2026 EDITION).
2. DESIGN SPECIFICATIONS: 10TH EDITION (2024) AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS AND THE 2ND EDITION (2011) AASHTO GUIDE SPECIFICATIONS FOR LRFD SEISMIC BRIDGE DESIGN WITH INTERIMS.
3. LOADING: HL-93 LIVE LOAD INCREASED BY 10% (MULTIPLIED BY 1.1) IN ADDITION TO ALL LOAD FACTORS SPECIFIED BY AASHTO FOR ALL APPLICABLE LOAD COMBINATIONS; SEISMIC CATEGORY "D" WITH $AS = 0.253$, $SDS = 0.568$, $SD1 = 0.266$ (1000 YEAR RETURN PERIOD); DEAD LOADS SHALL INCLUDE 35 LB/SQ. FT. FOR FUTURE WEARING SURFACE.
4. SUPERSTRUCTURE: TO CONSIST OF SIMPLY SUPPORTED 24"x36" PRESTRESSED BOX BEAMS WITH COMPOSITE CONCRETE DECK.
5. CONCRETE: CLASS A $F'C=3000$, CLASS DS $F'C=4000$ PSI FOR BRIDGE DECK
6. REINFORCING STEEL: TO BE ASTM A615 GRADE 60 UNLESS NOTED OTHERWISE. EPOXY COAT ALL SLAB STEEL.
7. BRIDGE DECK SURFACE FINISH: TO BE IN ACCORDANCE WITH METHOD 3 IN ARTICLE 604.22 OF THE STANDARD SPECIFICATIONS.
8. USE STD-1-1SS PARAPETS
9. TEXTURE COATING: TO BE GRAY (36440) EXCEPT TRAFFIC FACE AND TOP OF PARAPET TO BE WHITE (37886).
10. EXCAVATION: TO BE BASED ON FINAL PROFILE AT ABUTMENTS
- ▲ 11. RIP-RAP: MACHINED RIP-RAP SHALL BE CLASS "A" IN ACCORDANCE WITH SECTION 709 OF THE STANDARD SPECIFICATIONS AND SHALL BE MEASURED AND PAID FOR UNDER ROADWAY ITEM NO. 709-05-06.
12. DESIGN BUILDER TO DETERMINE IF FLUMES AT BRIDGE ENDS ARE REQUIRED.
13. BRIDGE DECK DRAIN DESIGN IS THE RESPONSIBILITY OF THE DESIGN BUILDER.
14. EXISTING BRIDGE DESCRIPTION: 28'-10" OUT-TO-OUT, 2 SPANS AT 17'-9" (35'-6" TOTAL LENGTH), CONTINUOUS CONCRETE DECK GIRDER BRIDGE WITH TIMBER SUBSTRUCTURE.
15. STREAM CHANNEL: ANY WORK WITHIN THE STREAM CHANNEL AREA (E.G. PIER/BENT FOOTING, RIP-RAP PLACEMENT, ETC.) SHALL BE SEPARATED FROM FLOWING WATER OR EXPECTED FLOW PATH AND PERFORMED DURING LOW FLOW CONDITIONS. ALL ITEMS USED WITHIN THE STREAM CHANNEL AREA FOR DIVERSION OF FLOW (OR EXPECTED FLOW), UNLESS SPECIFIED IN THE PLANS, SHALL NOT BE PAID FOR DIRECTLY BUT SHALL BE INCLUDED IN THE COST OF OTHER ITEMS. THIS NOTE EXCLUDES ANY ITEMS SPECIFIED IN THE PLANS FOR TEMPORARY DIVERSION CHANNELS (EC-STR-31)
16. ALL BEAMS SHALL HAVE UPWARD DEFLECTION OF AT LEAST $1/8"$ UNDER TOTAL DEAD LOAD.

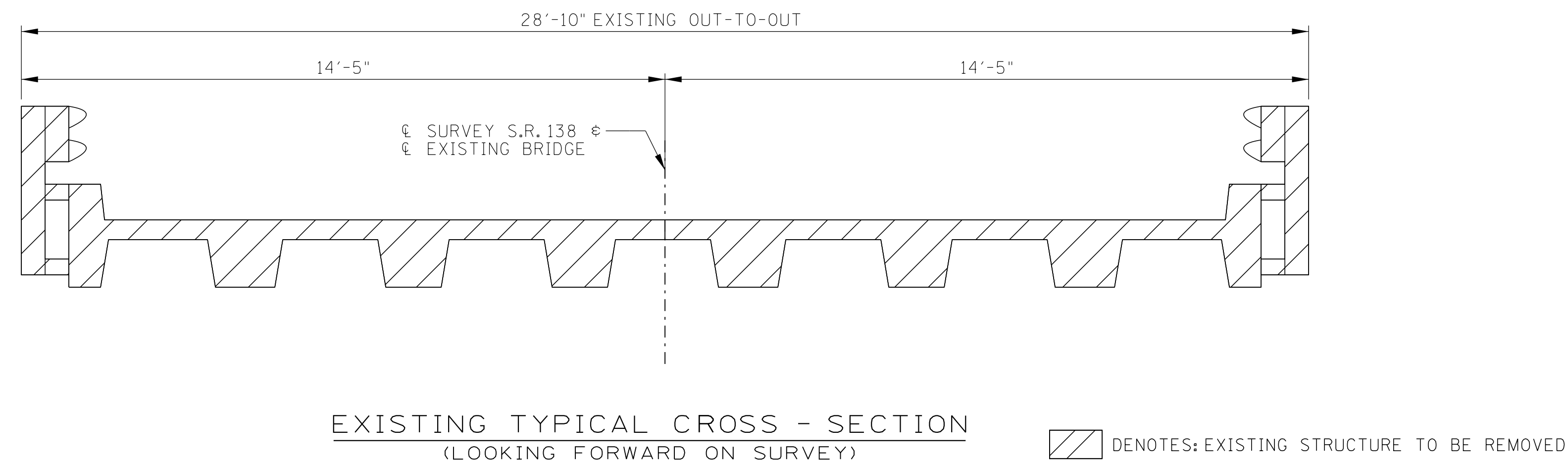
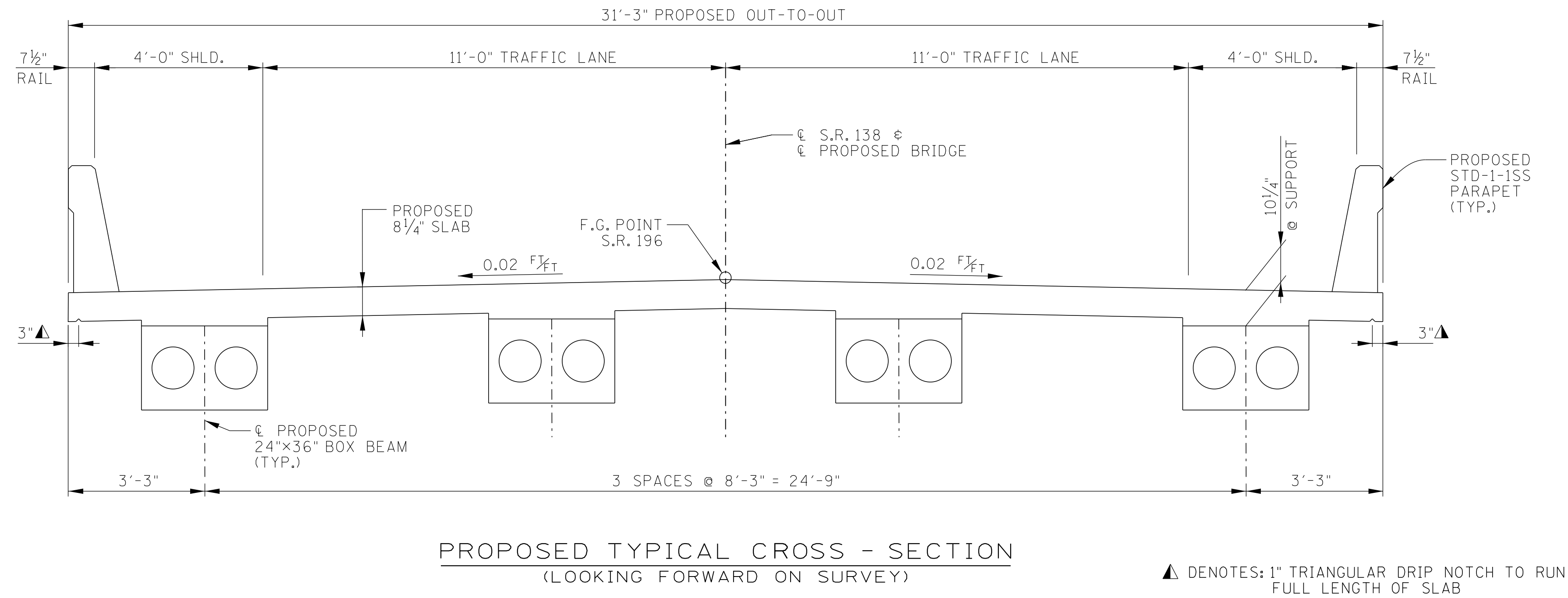
STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
CONCEPTUAL LAYOUT OF BRIDGE
STATE ROUTE 138 OVER
BIG BLACK CREEK BRANCH
BRIDGE I.D. NO. 57SR1380013
LOG MILE - 4.95
STA. 115+10.00
MADISON COUNTY



PIN NO.:	137109.15	
DESIGN BY:	I. BALLARD	DATE: 05/2026
DRAWN BY:	T. TURNER	DATE: 05/2026
SUPERVISED BY:	B. WELLS	DATE: 05/2026
CHECKED BY:	H. NEAL	DATE: 05/2026



CONST. NO.: R4SVAR-S1-058			
PROJECT NO.		YEAR	SHEET NO.
		2026	2 OF 2
REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION
-	-		
-	-		
-	-		
-	-		
-	-		



PIN NO.: 137109.15
DESIGN BY: J. BALLARD DATE: 05/2026
DRAWN BY: J. BALLARD DATE: 05/2026
SUPERVISED BY: H. NEAL DATE: 05/2026
CHECKED BY: B. WELLS DATE: 05/2026



STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
CONCEPTUAL TYPICAL SECTION
STATE ROUTE 138 OVER
BIG BLACK CREEK BRANCH
BRIDGE I.D. NO. 57SR1380013
LOG MILE - 4.95
STA. 115+10.00
MADISON COUNTY