

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION



SPECIFICATIONS

Design: Load and Resistance Factor Design per AASHTO LRFD Bridge Design Specifications, Ninth Edition 2020.

DESIGN LOADING

Live Load HL - 93 Modified for Strength I

MATERIALS

Concrete:
Deck Concrete Class "A1"
All Other Concrete Class "A"
Reinforcing:
Footing and Approach Slabs ASTM A615, Grade 60
All Other ASTM A1035, Grade 100 Type CS
Structural Steel:
All Material (except as noted) ASTM A709, Grade 50 (Metalized)
High Strength Bolts ASTM F3125, Grade A325, Type 1 (Galvanized)
H-Piles ASTM A572, Grade 50

BASIC DESIGN STRESSES

Concrete:
Class "A1" f 'c = 4,000 psi
Class "A" f 'c = 4,000 psi
Reinforcing:
Low-Carbon Chromium Steel f y = 100,000 psi
Plain Reinforcing Steel f y = 60,000 psi
Structural Steel:
ASTM A709, Grade 50 F y = 50,000 psi
ASTM F3125, Grade A325, Type 1 F μ = 120,000 psi
ASTM A572 F y = 50,000 psi

CUMBERLAND
CUMBERLAND COUNTY
TUTTLE ROAD BRIDGE
OVER
INTERSTATE 295,
RTE US 1 & MCRR
TUTTLE ROAD
FEDERAL PROJECT NO. 2516100
PROJECT LENGTH 0.28 mi.
BRIDGE NO. 5801

LIST OF DRAWINGS

Title Sheet	1
Estimated Quantities	2
General Construction Notes	3
General Plan	4-6
Permanent Signs & Drainage Tables	7
Abutment Grading Plan	8
Profiles	9-12
Existing Profile	13
Boring Location Plan	14-15
Interpretive Subsurface Profile	16
Boring Logs	17-19
Typical Sections	20-21
Cross Sections	22-47
Abutment No. 1	48-52
Abutment No. 2	53-56
Abutment Details	57
Piers	58-62
Bearing Details	63
Structural Steel	64-69
Superstructure	70-75
Finger Joint	76-78
Expansion Joint Trough	79
Snow Fence Details	80
Steel Approach Railing, 4-Bar	81
Bridge Transition - Type 3	82
Reinforcing Steel Schedule	83-85
Right of Way Map	86-88
Utility Details	C1-C3

UTILITIES

Revolution Networks (aka NECAP) dba Firstlight
MaineDOT Railroad
Portland Water District
Town of Cumberland
Consolidated Communications of Northern New England
Central Maine Power

TRAFFIC DATA

Current (2021) AADT	4640
Future (2041) AADT	5570
DHV - % of AADT	13%
Design Hour Volume	724
Heavy Trucks (% of AADT)	4%
Heavy Trucks (% of DHV)	2%
Directional Distribution (% of DHV)	64%
18 kip Equivalent P 2.0	72
18 kip Equivalent P 2.5	69
Design Speed (mph)	35

MAINTENANCE OF TRAFFIC

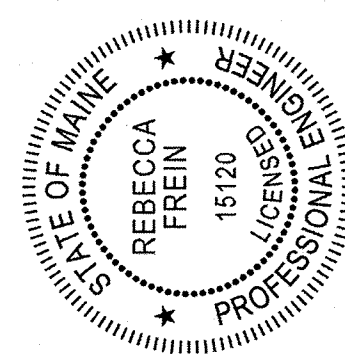
Build the bridge off-alignment to the north and maintain traffic on the existing bridge during construction

PROJECT LOCATION	ON TUTTLE ROAD OVER INTERSTATE 295, ROUTE 1 & MC RR Lat./Long. 43°46'09.0" N 70°12'11.0" W
OUTLINE OF WORK	BRIDGE REPLACEMENT

2516100 WIN 25161.00

CUMBERLAND
TUTTLE ROAD BRIDGE
TITLE SHEET

SHEET NUMBER
1
OF 88



Signature: *Rebecca Frein*
SIGNATURE
15120
P.E. NUMBER
5/28/2025
DATE

PROJECT INFORMATION	BRIDGE PROGRAM	PROJECT MANAGER	DESIGNER	CONSULTANT	PROJECT RESIDENT	CONTRACTOR	PROJECT COMPLETION DATE
	GERALD DOSTIE	REBECCA FREIN, PE	HARDESTY & HAROVER				

STATE OF MAINE DEPARTMENT OF TRANSPORTATION	APPROVED	DATE
	<i>Rebecca Frein</i>	6-2-25
COMMISSIONER:	CHIEF ENGINEER:	6-2-2025

GENERAL CONSTRUCTION NOTES

1. For easements, construction limits, and right of way lines, refer to the Right of Way Map.

2. The clearing limits as shown on the plans are approximate. The actual clearing limits for payment will be established in the field by the Resident.

3. All utility facilities shall be adjusted by the respective utilities unless otherwise noted.

4. Do not excavate for Aggregate Subbase Course where existing material is suitable as determined by the Resident.

5. In areas where the Resident directs the Contractor not to excavate to the subgrade line shown on the plans, payment for removing existing pavement, grubbing, shaping, ditching, and compacting the existing subbase and layers of new subbase 6 inches or less thick will be made under appropriate equipment rental items.

6. Construct the riprap shelf at Abutment 1 at EL. 100.00 and at Abutment 2 at EL. 99.00.

7. Place loam 2 inches deep on all new or reconstructed sideslopes or as directed by the Resident.

8. Erosion Control Mix may be substituted in those areas normally receiving loam and seed as directed by the Resident. Placement shall be in accordance with Standard Specifications Section 619, Mulch. Payment will be made under Pay Item 619J4, Erosion Control Mix.

9. A MASH compliant guardrail end treatment shall be installed concurrently with the placement of each section of beam guardrail.

10. Where it is apparent that runoff will cause continual erosion, Erosion Control Blanket, seeded gutters, riprap downspouts, and other gutters lined with Stone Ditch Protection shall be constructed after paving and shoulder work is completed. Payment will be made under the appropriate Contract items.

11. Protective Coating for Concrete Surfaces shall be applied to the following areas:

All exposed surfaces of concrete curbs and sidewalks, Fascias down to the drip notch, Top of abutment backwalls and wingwalls To one foot below the top of backwalls and wingwalls on the backside, and All exposed horizontal and vertical faces of abutment and piers, to one foot below the ground.

12. Project information referred to below may be accessed at the following MaineDOT web address: <http://www.maine.gov/mdot/contractors/>

13. The existing bridge plans may be accessed at the MaineDOT web address. The plans are reproductions of the original drawings as prepared for the construction of the bridge. It is very unlikely that the plans will show any construction field changes or any alterations which may have been made to the bridge during its life span.

14. The project geotechnical report titled: Geotechnical Design Report_Replacement of Tuttle Road, March 2025 may be accessed at the MaineDOT web address.

15. Geotechnical information furnished or referred to in this plan set is for the use of the Bidders and the Contractor. No assurance is given that the information or interpretations will be representative of actual subsurface conditions at the construction site. MaineDOT will not be responsible for the Bidders' or Contractor's interpretations of, or conclusions drawn from, the geotechnical information. The boring logs contained in the plan set present factual and interpretive subsurface information collected at discrete locations. Data provided may not be representative of the subsurface conditions between the boring locations.

16. Quantities included for pay items measured and paid for by Lump Sum are estimated quantities and are provided by MaineDOT for informational purposes only. Lump Sum pay items will be paid for at the Contract Bid amount, with no addition or reduction in payment to the Contractor if the actual final quantities are different from the MaineDOT provided estimated quantities, except as follows:

a. If a Lump Sum pay item is eliminated, the requirements of Standard Specifications Section 109.2, Elimination of Items, will take precedence.

b. If other Contract Documents specifically allow a change in payment for a Lump Sum pay item, those requirements will be followed.

c. If a design change results in changes to estimated quantities for Lump Sum pay items, price adjustments will be made in accordance with Standard Specifications Section 109.7, Equitable Adjustments to Compensation and Time.

17. The Contractor shall submit a Bridge Demolition Plan to the Resident at least 10 business days prior to the start of demolition work. The plan shall outline the methods and equipment to be used to remove and dispose of all materials included in the existing bridge. No work related to the removal of the bridge shall be undertaken by the Contractor until MaineDOT has reviewed the Bridge Demolition Plan for appropriateness and completeness. Payment for all work necessary for developing, submitting, and finalizing the Demolition Plan will be considered incidental to the bridge removal pay item.

18. The existing bridge shall be removed by and become the property of the Contractor. The steel portions of the existing bridge may be coated with a lead-based paint system. The Contractor is responsible for the containment, proper management and disposal of all lead-contaminated hazardous waste generated by the process of demolishing the bridge. The Contractor is responsible for implementing appropriate OSHA mandated personal protection standards related to this process. Once the existing bridge is removed, the Contractor is solely responsible for the care, custody, and control of the components of the existing bridge and any hazardous waste generated as a result of the storage, recycling, or disposal of the bridge components, including lead-coated steel. The Contractor shall recycle or reuse the steel in accordance with the Maine Department of Environmental Protection's "Maine Hazardous Waste Management Regulations," Chapter 850. A copy of this regulation is available at MaineDOT's offices on Child Street in Augusta. Payment for all labor, materials, equipment, and other costs required to remove and dispose of the existing bridge will be considered incidental to the bridge removal pay item.

19. Pavement cuts for installation of drainage or other items in areas where traffic is being maintained shall be covered with temporary pavement. Payment for temporary pavement will be incidental to related contract items.

20. The location of existing underground utilities and drainage shown on plans and cross-sections is approximate and should be confirmed by the Contractor.

SIGNAGE AND PAVEMENT MARKING NOTES

1. The Contractor shall install and activate the new traffic configuration at the Tuttle Road and Middle Road intersection as soon after starting work on site as is feasible given material lead times and site conditions. Temporary sign locations, pavement marking symbols, and striping may be used as directed by the Resident where the permanent location is not possible to install until the roadway has been realigned.

2. Red reflective vertical strips will be placed on each stop sign post facing traffic and yellow reflective vertical strips will be placed on each stop ahead sign post facing traffic. This work is considered incidental to the pay items for the new all-way stop signs.

3. All new signs on Tuttle Road for the proposed all-way stop configuration shall be kept covered until new Tuttle Road flashing stop signs are activated. Stop signs and advanced warning signs on Middle Road approaches do not need to be covered.

4. Proposed sign locations shown on the plans are approximate. Actual locations should be determined in the field per MUTCD and as directed by the Resident.

5. New traffic pattern ahead signs are temporary and shall remain in place for approximately 6 months.

6. Portable changeable message signs (PCMS) shall be installed on both Tuttle Rd approaches at least 14 days before new all-way stop signs are uncovered and shall remain in place for at least 14 days after the traffic pattern change.

7. PCMS messages shall be:

First screen:

Before change

After change

"NEW TRAFFIC PATTERN"

"NEW TRAFFIC PATTERN"

Second screen:

"STARTING [DATE]"

"STOP AHEAD"

8. Apply new center and edge line pavement markings from new stop bars, extending approximately 100 ft along each leg of the all-way stop intersection (outside of project limits) or as directed by the Resident.

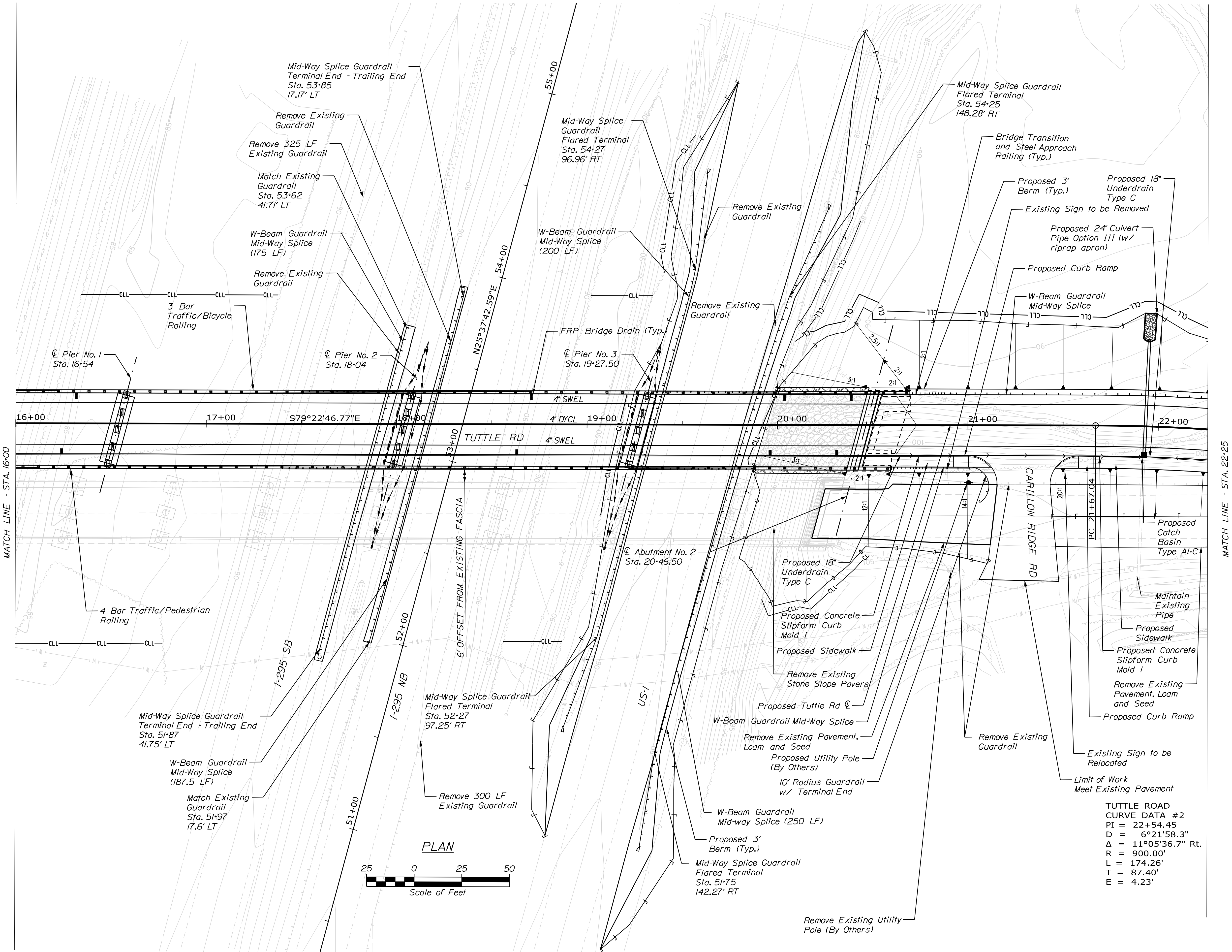
9. The General Plans (Sheets 4-6) show the final location of pavement markings and symbols. Install "stop" and "stop ahead" symbol in advance of stop bars on each leg of the all-way stop intersection, per MUTCD and MaineDOT Traffic Engineering, Striping & Stenciling Handbook.

10. All proposed solar-powered signs are to be LED flashing white.

SHEET NUMBER										TUTTLE ROAD BRIDGE INTERSTATE 295, RTE US 1 & MCRR CUMBERLAND CUMBERLAND COUNTY										PROJ. MANAGER				Gerald Dostle		BY		DATE		STATE OF MAINE DEPARTMENT OF TRANSPORTATION																																							
3 OF 88										GENERAL CONSTRUCTION NOTES										DESIGN-DETAILED				CT		CT		05/2025		2516100																																							
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FIELD CHANGES																																																																					



SHEET NUMBER	TUTTLE ROAD BRIDGE		PROJ. MANAGER	Gerold Dostie	BY	DATE	STATE OF MAINE DEPARTMENT OF TRANSPORTATION 2516100 WIN 25161.00 BRIDGE NO. 5801 BRIDGE PLANS	
	INTERSTATE 295, RTE US 1 & MCCR		DESIGN-DETAILED	GRS	GRS	05/2025		
	CUMBERLAND CUMBERLAND COUNTY		CHECKED-REVIEWED	SLM	SLM	05/2025		
	GENERAL PLAN (1 OF 3)		DESIGN2-DETAILED2			SIGNATURE		
			DESIGN3-DETAILED3			P.E. NUMBER		
			REVISIONS 1					
			REVISIONS 2					
			REVISIONS 3			DATE		
			REVISIONS 4					
			FIELD CHANGES					



STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
2516100

TUTTLE ROAD BRIDGE
INTERSTATE 295, RTE US 1 & MCRR
CUMBERLAND CUMBERLAND COUNTY
GENERAL PLAN (2 OF 3)

SHEET NUMBER
5
OF 88

PROJ. MANAGER	Gerald Dostie	BY	GRS	DATE	05/2025
DESIGN-DETAILED	GRS	CHECKED-REVIEWED	SLM	SIGNATURE	
DESIGN-DETAILED		DESIGN-DETAILED		P.E. NUMBER	
REVISIONS 1		REVISIONS 2		DATE	
REVISIONS 3		REVISIONS 4			
FIELD CHANGES					

BRIDGE NO. 6601
WIN
25161.00
BRIDGE PLANS



WP	Sta.	Northing	Easting
1	15+23.75	341249.47	1029394.80
2	16+54.00	341225.46	1029522.82
3	18+04.00	341197.82	1029670.25
4	19+27.50	341175.06	1029791.64
5	20+46.50	341153.13	1029908.60

PERMANENT SIGN RELOCATIONS / REMOVALS					
EXISTING STA.	EXISTING OFFSET	PROPOSED STA.	PROPOSED OFFSET	SIGN DESCRIPTION	REMARKS
EXISTING TUTTLE RD SIGNS WITHIN CONSTRUCTION LIMITS					
11+08	67' LT	N/A - TO BE REMOVED	N/A - TO BE REMOVED	"STOP", "CROSS TRAFFIC DOES NOT STOP"	
11+16	31' RT	11+22	31' RT	"BICYCLE 1"	
12+06	21' RT	12+06	26' RT	"SPEED LIMIT 35"	
12+18	14' LT	12+50	20' LT	"VAL HALLA"	
12+18	16' LT	12+50	22' LT	"NORTH" BICYCLE "1"	
12+76	7' LT	13+00	20' LT	"MAIN LINE FENCE"	
13+44	11' RT	N/A - TO BE REMOVED	N/A - TO BE REMOVED	"25 MPH" SPEED ADVISORY	
13+69	14' RT	N/A - TO BE REMOVED	N/A - TO BE REMOVED	INTERSECTION "MIDDLE RD"	
14+97	62' RT	N/A - TO BE REMOVED	N/A - TO BE REMOVED	"WEIGHT LIMIT 25 TONS"	
14+99	29' RT	N/A - TO BE REMOVED	N/A - TO BE REMOVED	"CAUTION HIGH CRASH LOCATION AHEAD"	
20+89	25' RT	N/A - TO BE REMOVED	N/A - TO BE REMOVED	"WEIGHT LIMIT 25 TONS"	
21+50	25' RT	21+50	25' LT	"SPEED LIMIT 35"	
22+67	4' RT	30+40	22' LT	"STOP"	
22+80	65' RT	22+70	25' RT	"PORTLAND 9, BRUNSWICK 16" "TO" RT 1	
22+87	64' RT	22+75	25' RT	"CHURCH, CUMBERLAND 3.5 MILES"	
22+90	61' RT	22+80	25' RT	"TUTTLE RD" "VAL HALLA"	
22+94	59' RT	22+85	25' RT	"CUMBERLAND FORESIDE", "COUSINS ISLAND 4", "CUMBERLAND CTR 3", "TO" 81	
23+03	60' RT	22+90	25' RT	"TUTTLE RD", "COMMUNITY CHURCH"	
23+08	56' RT	23+08	25' RT	"TO" RT 1	
23+38	52' RT	23+38	25' RT	BICYCLE "1"	
23+81	3' LT	40+38	9' LT	BICYCLE "1"	
23+89	40' RT	23+82	25' RT	NO LEFT TURN	
24+27	22' LT	40+55	9' LT	"STOP" "DO NOT ENTER"	
24+89	19' LT	40+92	21' RT	"DO NOT ENTER"	
24+93	21' LT	40+94	21' RT	"KINGS HWY" "TUTTLE RD"	
24+95	14' LT	25+45	21' LT	NO RIGHT TURN	
26+78	24' LT	N/A - TO BE REMOVED	N/A - TO BE REMOVED	"BRIDGE POSTED AHEAD" "25 TONS"	
EXISTING TUTTLE RD / MIDDLE RD INTERSECTION SIGNS					
-	-	N/A - TO BE REMOVED	N/A - TO BE REMOVED	"CAUTION HIGH CRASH LOCATION AHEAD"	MIDDLE RD. (SOUTH) APPROX. 490' SOUTH OF EXIST. STOP BAR
-	-	N/A - TO BE REMOVED	N/A - TO BE REMOVED	"BRIDGE POSTED TUTTLE RD LIMIT TO 25 TONS"	MIDDLE RD. (SOUTH) APPROX. 430' SOUTH OF EXIST. STOP BAR
-	-	N/A - TO BE REMOVED	N/A - TO BE REMOVED	"STOP AHEAD"	MIDDLE RD. (SOUTH) APPROX. 190' SOUTH OF EXIST. STOP BAR
-	-	N/A - TO BE REMOVED	N/A - TO BE REMOVED	"STOP"	MIDDLE RD. (SOUTH) APPROX. 20' SOUTH OF EXIST. STOP BAR (2 SIGNS)
-	-	N/A - TO BE REMOVED	N/A - TO BE REMOVED	"BRIDGE POSTED TUTTLE RD LIMIT TO 25 TONS"	MIDDLE RD. (NORTH) APPROX. 500' NORTH OF EXIST. STOP BAR
-	-	N/A - TO BE REMOVED	N/A - TO BE REMOVED	"CAUTION HIGH CRASH LOCATION AHEAD"	MIDDLE RD. (NORTH) APPROX. 440' NORTH OF EXIST. STOP BAR
-	-	N/A - TO BE REMOVED	N/A - TO BE REMOVED	"STOP AHEAD"	MIDDLE RD. (NORTH) APPROX. 270' NORTH OF EXIST. STOP BAR
-	-	N/A - TO BE REMOVED	N/A - TO BE REMOVED	"STOP"	MIDDLE RD. (NORTH) APPROX. 15' NORTH OF EXIST. STOP BAR (2 SIGNS)
-	-	N/A - TO BE REMOVED	N/A - TO BE REMOVED	"BRIDGE POSTED AHEAD 25 TONS"	TUTTLE RD. APPROX. 680' WEST OF NEW STOP BAR
-	-	N/A - TO BE REMOVED	N/A - TO BE REMOVED	"CAUTION HIGH CRASH LOCATION AHEAD"	TUTTLE RD. APPROX. 430' WEST OF NEW STOP BAR
-	-	RELOCATE TO 100' WEST OF NEW "STOP AHEAD" SIGN	RELOCATE	"MAIN LINE FENCE"	TUTTLE RD. APPROX. 340' WEST OF NEW STOP BAR
-	-	N/A - TO BE REMOVED	N/A - TO BE REMOVED	"25 MPH" SPEED ADVISORY	TUTTLE RD. APPROX. 320' WEST OF NEW STOP BAR
PROPOSED TUTTLE RD / MIDDLE RD ADVANCED WARNING SIGNS (REMOVE AFTER 6 MONTHS)					
-	-	SEE GENERAL PLAN (SHEET 4)	SEE GENERAL PLAN (SHEET 4)	"NEW TRAFFIC PATTERN AHEAD"	SEE SIGNAGE AND PAVEMENT MARKING NOTE 5
-	-	SEE GENERAL PLAN (SHEET 4)	SEE GENERAL PLAN (SHEET 4)	"NEW TRAFFIC PATTERN AHEAD"	SEE SIGNAGE AND PAVEMENT MARKING NOTE 5
-	-	SEE GENERAL PLAN (SHEET 4)	SEE GENERAL PLAN (SHEET 4)	"NEW TRAFFIC PATTERN AHEAD"	SEE SIGNAGE AND PAVEMENT MARKING NOTE 5
-	-	14+90	27' RT	"NEW TRAFFIC PATTERN AHEAD"	SEE SIGNAGE AND PAVEMENT MARKING NOTE 5
PROPOSED TUTTLE RD WESTBOUND ADVANCED WARNING SIGNS (RELOCATE TO FINAL LOCATION)					
-	-	13+83	23' RT	"STOP AHEAD" (SOLAR POWERED)	SEE SIGNAGE AND PAVEMENT MARKING NOTE 1
-	-	13+83	18' LT	"STOP AHEAD" (SOLAR POWERED)	SEE SIGNAGE AND PAVEMENT MARKING NOTE 1

DRAINAGE SUMMARY								
STATION		CULVERT PIPE OPTION III		CATCH BASIN		UNDERDRAIN TYPE C		REMARKS
STATION START	STATION END	SIZE	LENGTH	A1-C	ADJUST TO GRADE	SIZE	LENGTH	
STA. 11+47, 52' LT	STA. 11+53, 15' RT (CB #1)	18"	66'	1				
STA. 11+53, 15' RT (CB #1)	STA. 13+75, 15' RT (CB #2)			1		18"	218'	
STA. 13+75, 15' RT (CB #2)	STA. 14+98, 15' RT					18"	121'	
STA. 20+60, 15' RT	STA. 21+93, 15' RT (CB #3)			1		18"	131'	
STA. 21+93, 15' RT (CB #3)	STA. 22+45, 15' RT (CB #4)			1		18"	46'	
STA. 21+95, 46' LT	STA. 21+93, 15' RT (CB #3)	24"	59'					CONNECT EXISTING 18" CPP TO PROPOSED CB
STA. 22+45, 15' RT (CB #4)	STA. 22+85, 15' RT (CB #5)			1		18"	38'	
STA. 22+85, 15' RT (CB #5)	STA. 24+05, 15' RT (CB #6)			1		18"	118'	
STA. 25+22, 22' RT (CB #7)					1			

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2516100

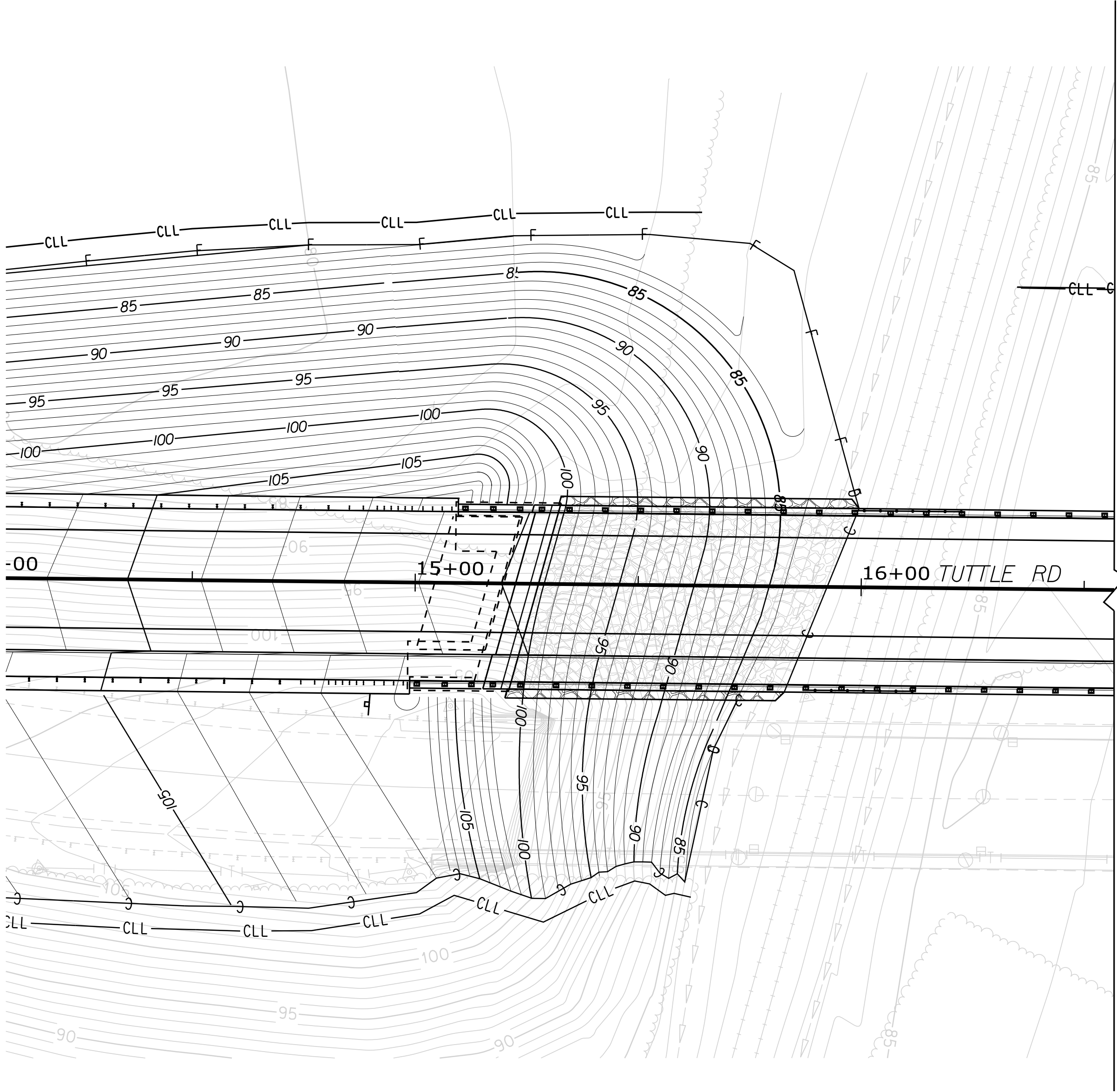
PIN 25161.00
BRIDGE NO. 6601
BRIDGE PLANS

TUTTLE ROAD BRIDGE
INTERSTATE 295, RTE US 1 & MCRR
CUMBERLAND CUMBERLAND COUNTY
PERMANENT SIGNS &
DRAINAGE TABLES

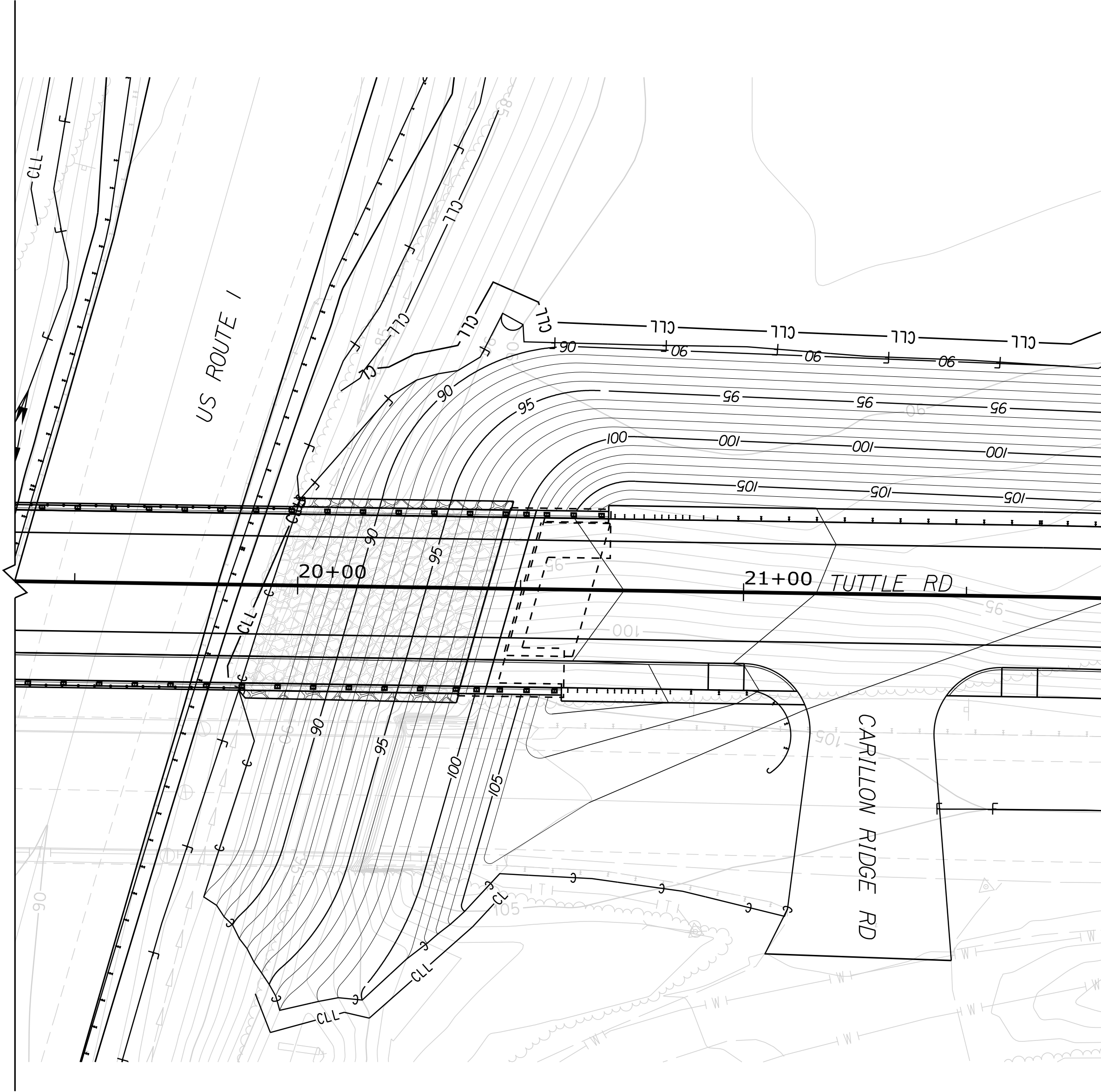
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7

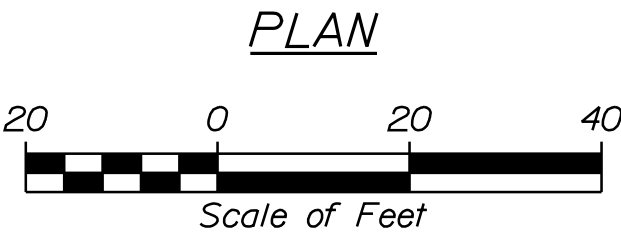
OF 88



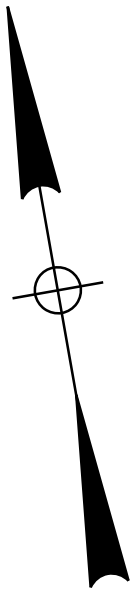
WEST ABUTMENT



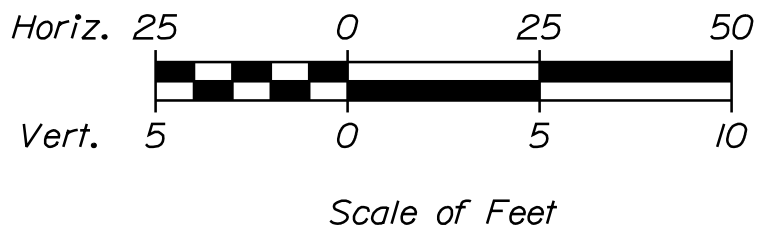
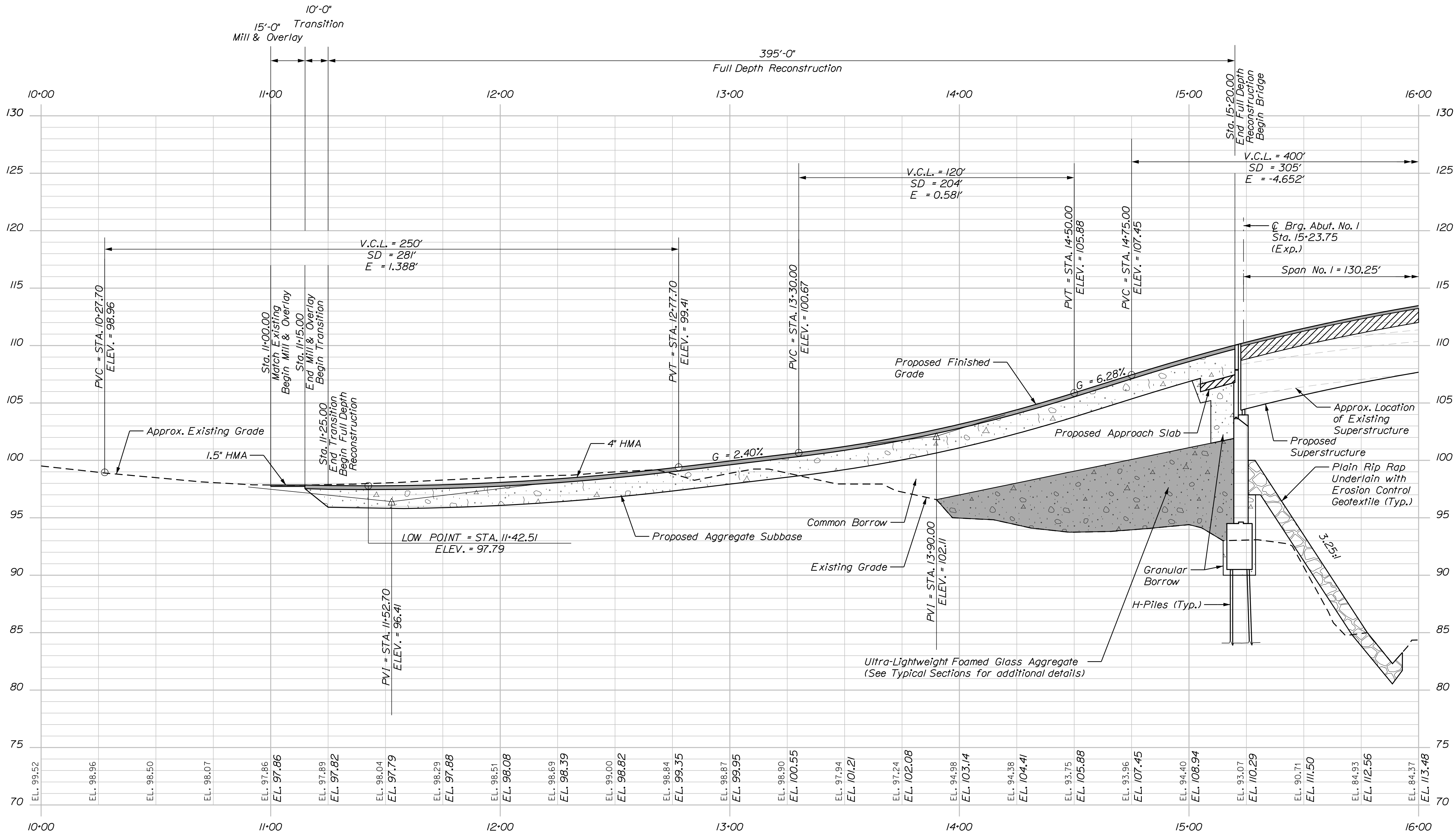
EAST ABUTMENT



PLAN

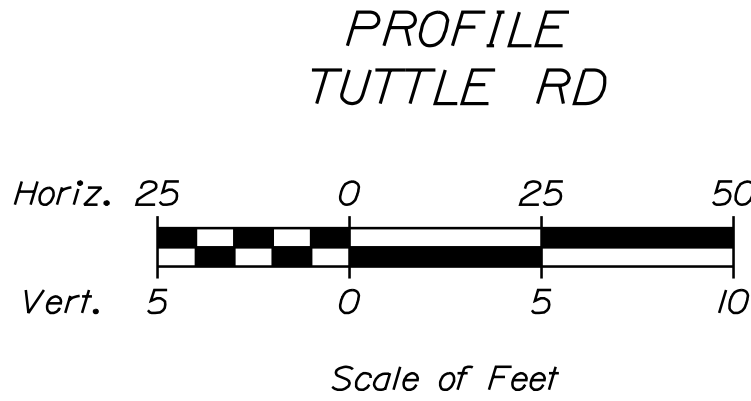
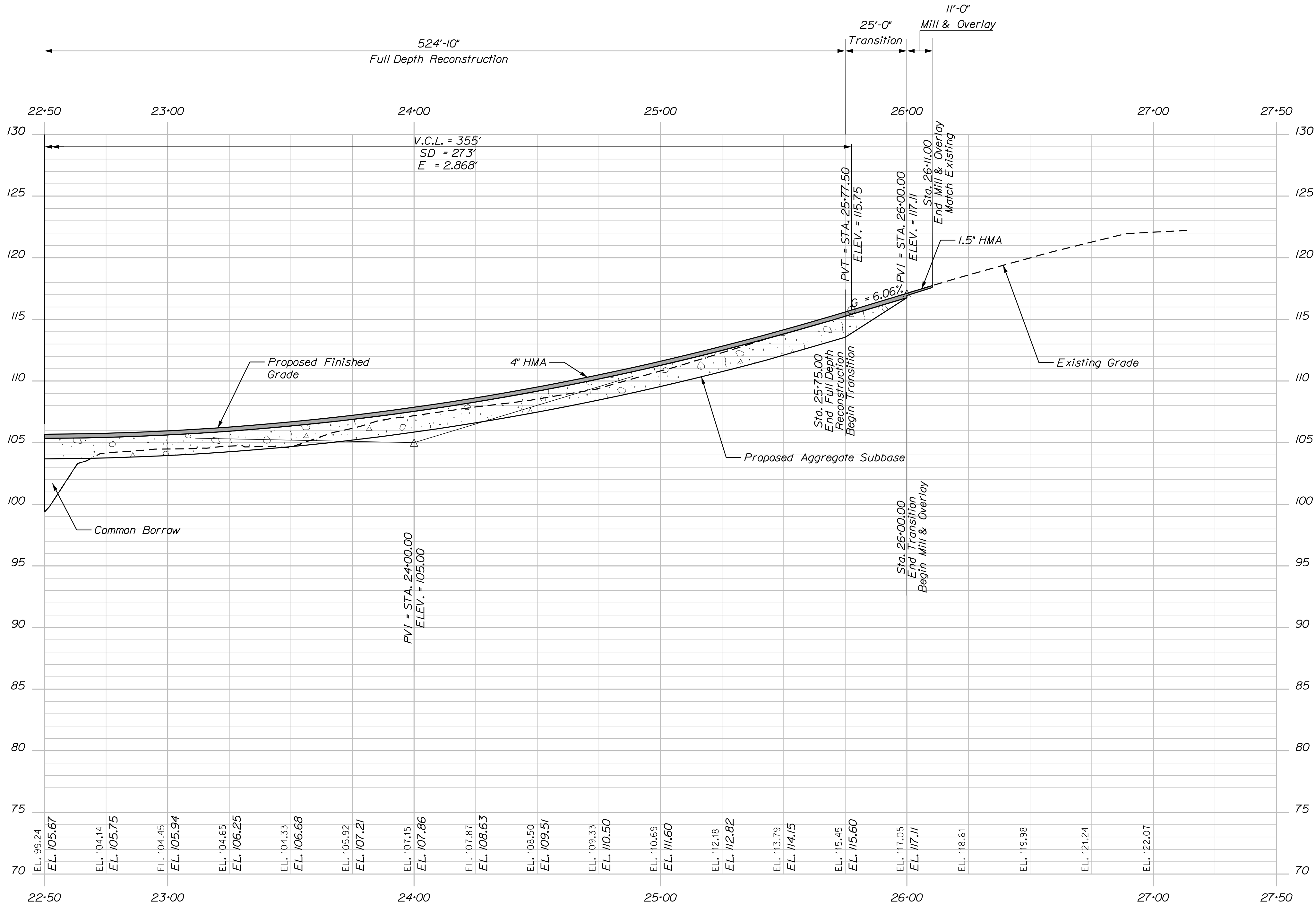


TUTTLE ROAD BRIDGE INTERSTATE 295, RTE US 1 & MCRR CUMBERLAND CUMBERLAND COUNTY	STATE OF MAINE DEPARTMENT OF TRANSPORTATION			
	2516100			
	BRIDGE NO. 5601 PIN 25161.00 BRIDGE PLANS			
SHEET NUMBER 8 OF 88	PROJ. MANAGER DESIGN-DETAILED CHECKED-REVIEWED DESIGN-DETAILED DESIGN-DETAILED REVISIONS 1 REVISIONS 2 REVISIONS 3 REVISIONS 4 FIELD CHANGES			
	Gerald Dostie GRS GRS SLM SLM SLM SLM SLM SLM SLM			
	DATE 03/2025 03/2025 03/2025 03/2025 03/2025 03/2025 03/2025 03/2025 03/2025			
	SIGNATURE P.E. NUMBER DATE			
	DATE 03/2025 03/2025 03/2025 03/2025 03/2025 03/2025 03/2025 03/2025 03/2025			



STATE OF MAINE DEPARTMENT OF TRANSPORTATION 2516100	SIGNATURE			
	P.E. NUMBER			
	DATE			
BRIDGE NO. 5601 WIN 25161.00 BRIDGE PLANS	DATE			
	BY			
	DATE			
TUTTLE ROAD BRIDGE INTERSTATE 295, RTE US 1 & MCRR CUMBERLAND CUMBERLAND COUNTY	DESIGN-DETAILED			
	CHECKED-REVIEWED			
	DESIGN-DETAILED			
TUTTLE RD PROFILE (1 OF 3)	REVISIONS 1			
	REVISIONS 2			
	REVISIONS 3			
SHEET NUMBER 9 OF 88	REVISIONS 4			
	FIELD CHANGES			
	DATE			

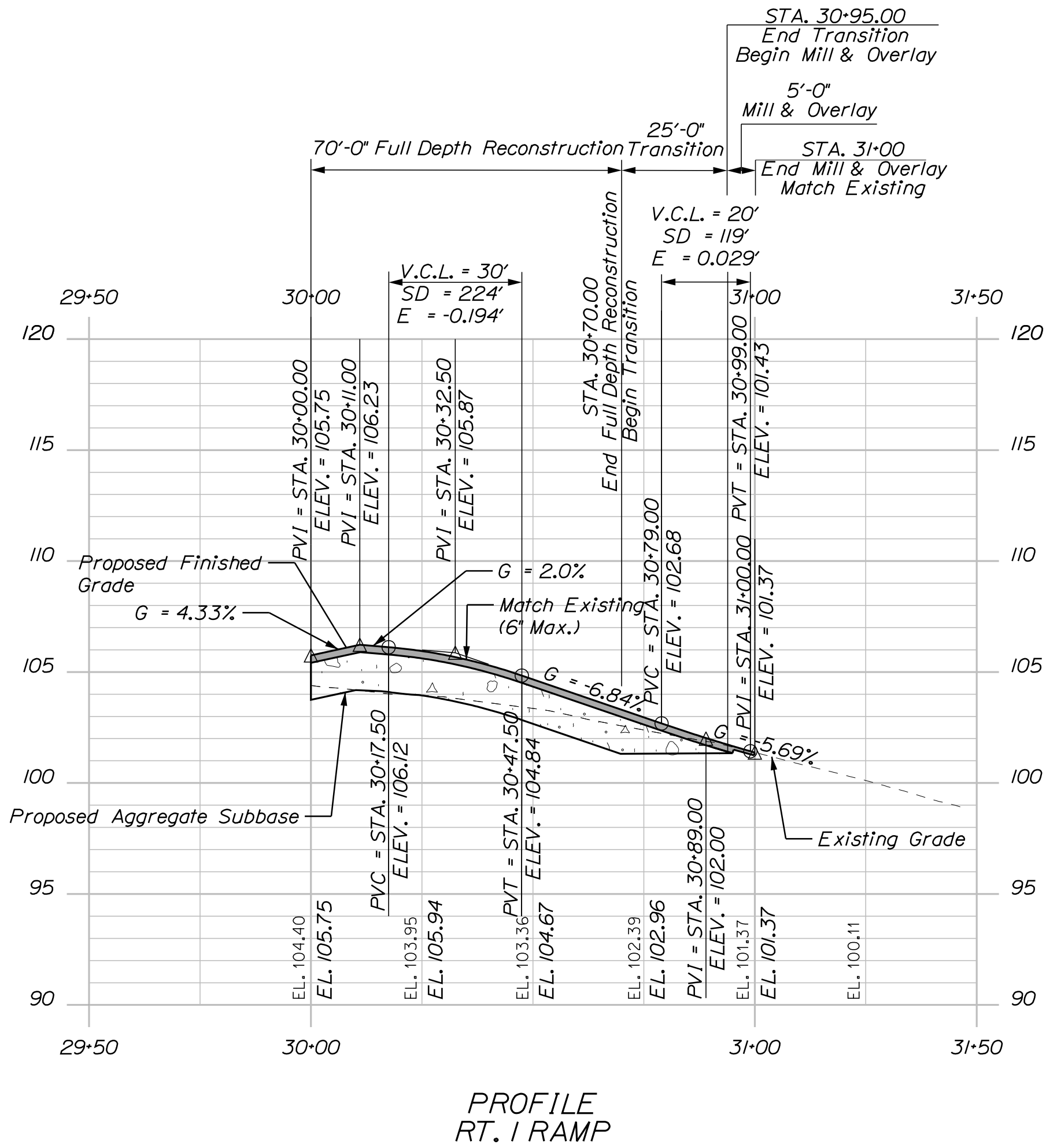




STATE OF MAINE DEPARTMENT OF TRANSPORTATION				
	2516100			
	WIN 25161.00			
	BRIDGE NO. 5801			
	BRIDGE PLANS			

TUTTLE ROAD BRIDGE INTERSTATE 295, RTE US 1 & MCRR CUMBERLAND COUNTY TUTTLE RD PROFILE (3 OF 3)	PROJ. MANAGER	Gerald Dastie	BY	DATE
	DESIGN-DETAILED	GRS	GRS	03/2025
	CHECKED-REVIEWED	SLM	SLM	03/2025
	DESIGN-DETAILED			SIGNATURE
	DESIGN-DETAILED			
	REVISIONS 1			P.E. NUMBER
	REVISIONS 2			
	REVISIONS 3			
	REVISIONS 4			DATE
	FIELD CHANGES			

SHEET NUMBER
11
OF 88

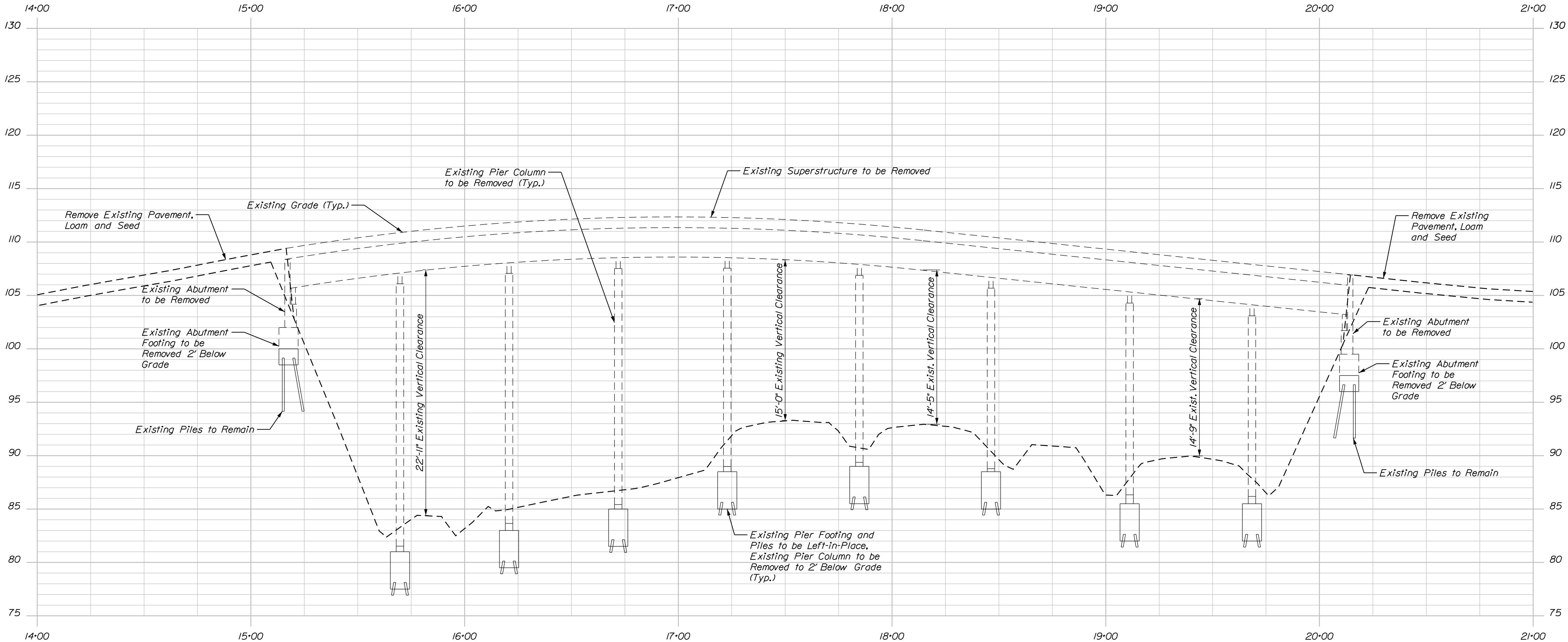


Date:5/25/2025

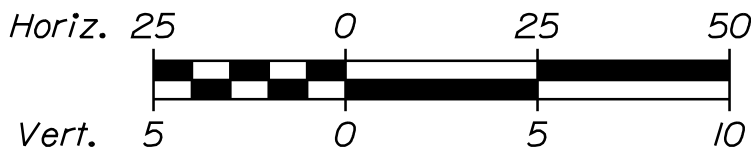
Username: common

Division: BRIDGE

Filename: ... \HIGHWAY\013_Profile.dgn



EXISTING PROFILE
(APPROX. 46' SOUTH OF PROPOSED CL TO EXISTING CL)



Scale of Feet

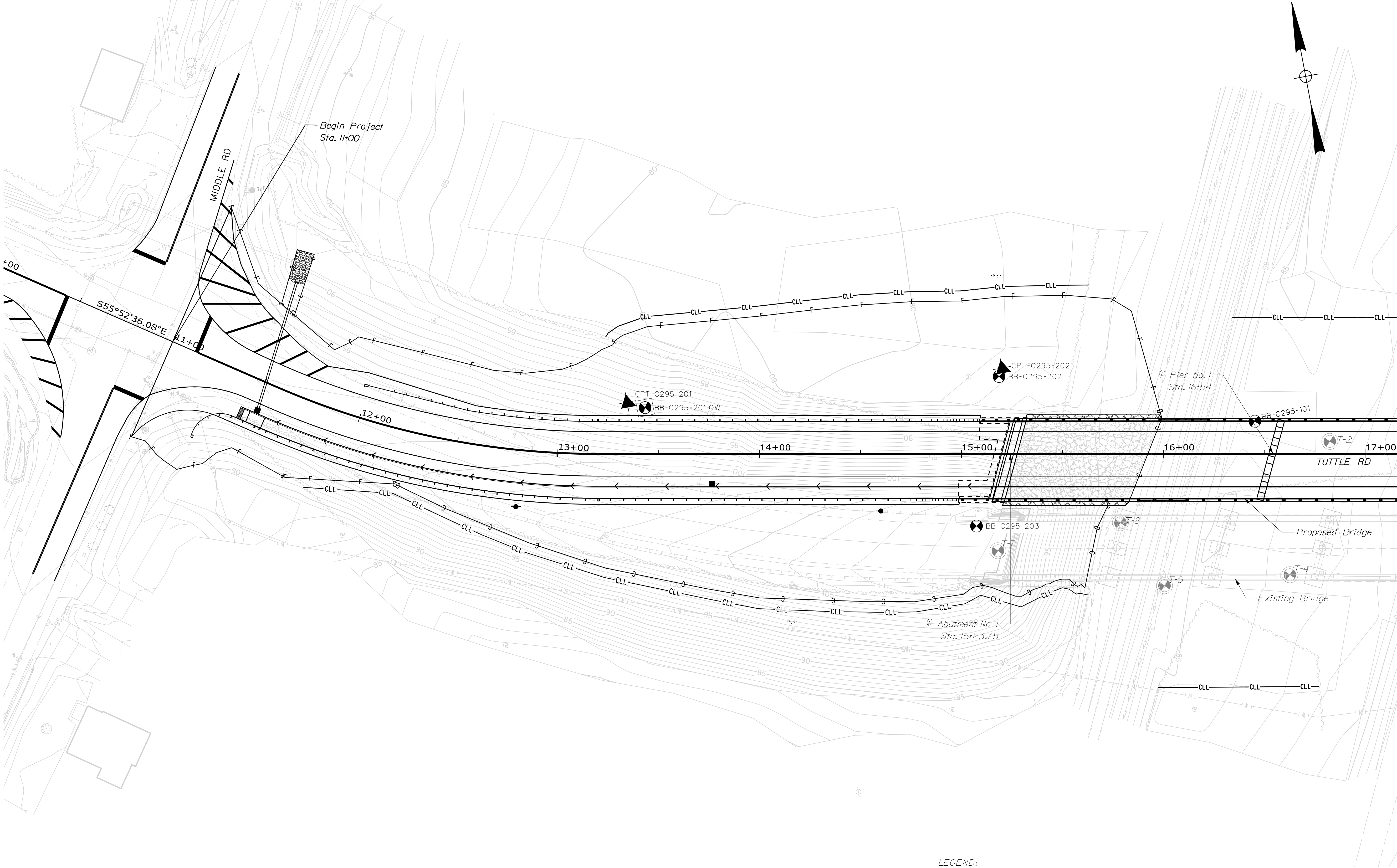
NOTE:
An existing sewer line runs underneath the roadside ditch on the northbound side of US Route 1.

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
2516100
WIN
25161.00
BRIDGE NO. 6601
BRIDGE PLANS

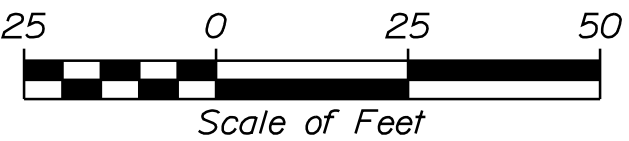
TUTTLE ROAD BRIDGE
INTERSTATE 295, RTE US 1 & MCRR
CUMBERLAND CUMBERLAND COUNTY
EXISTING PROFILE

SHEET NUMBER
13
OF 88

PROJ. MANAGER	Gerald Dostie	BY	DATE
DESIGN-DETAILED	GRS	GRS	03/2025
CHECKED-REVIEWED	SLM	SLM	03/2025
DESIGN-DETAILED			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			
SIGNATURE		P.E. NUMBER	
DATE		DATE	



PLAN



LEGEND:

Subsurface Exploration Boring*

Subsurface Exploration Boring with Observation Well

Historical Subsurface Exploration Boring from 1957

Cone Penetration Test (CPT) Location from Phase II

*100-Series Borings from Preliminary Design Report in 2022
 200-Series Borings from Phase II in 2024

TUTTLE ROAD BRIDGE
 INTERSTATE 295, RTE US 1 & MCRR
 CUMBERLAND CUMBERLAND COUNTY

BORING LOCATION PLAN

SHEET NUMBER

14

OF 88

STATE OF MAINE

DEPARTMENT OF TRANSPORTATION

2516100

WIN

BRIDGE NO. 6601

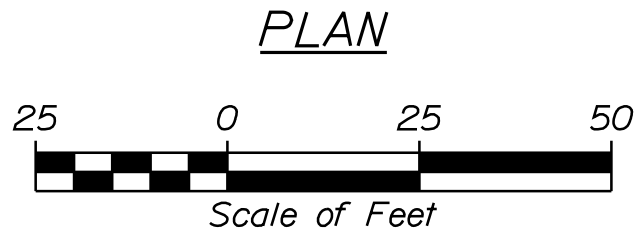
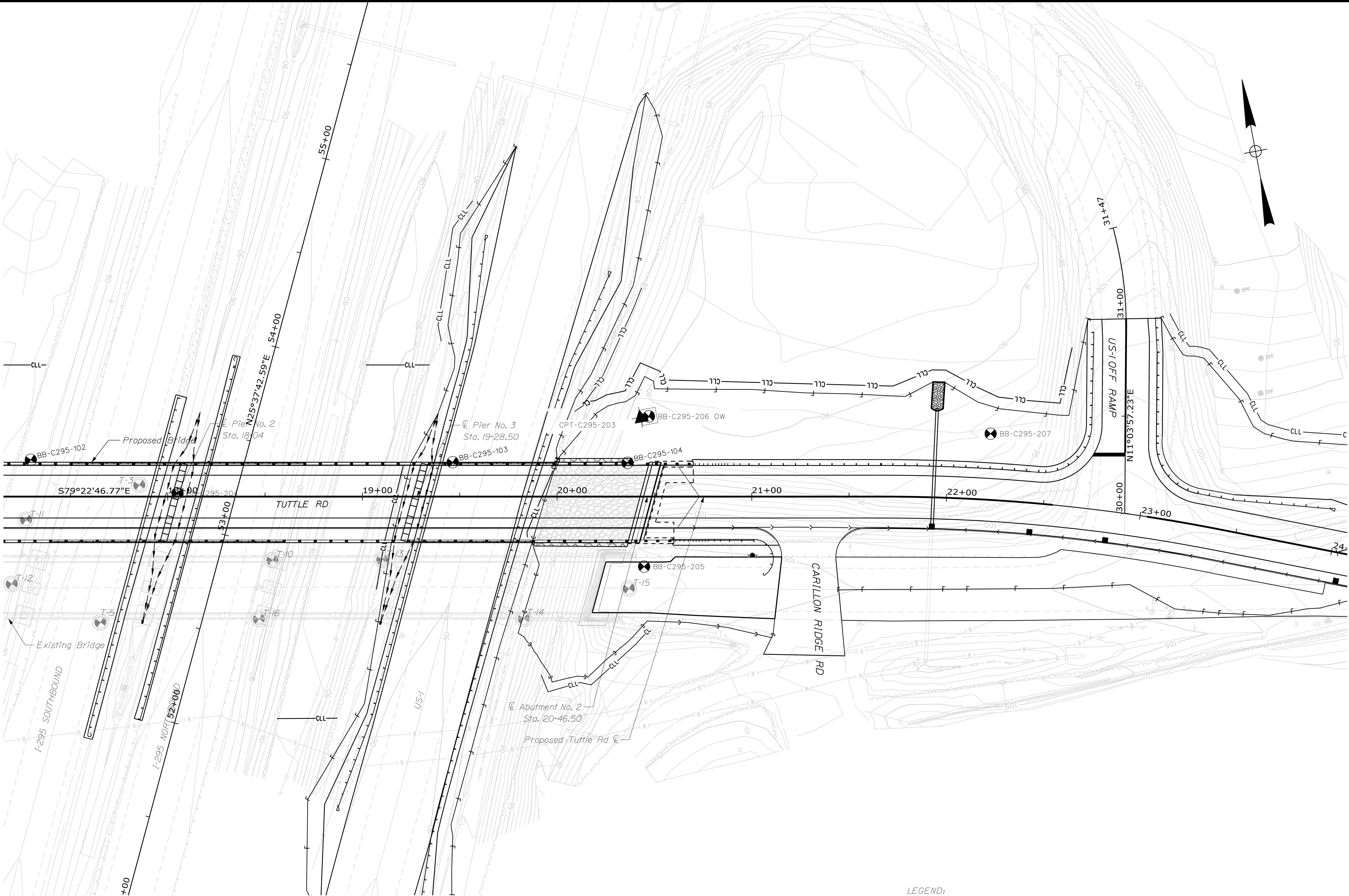
BRIDGE PLANS

PROJ. MANAGER	Gerard Dostie	BY	DATE
DESIGN-DETAILED	AS	LNH	03/2025
CHECKED-REVIEWED	AG	RF	03/2025
DESIGN-DETAILED			
DESIGN-DETAILED			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE



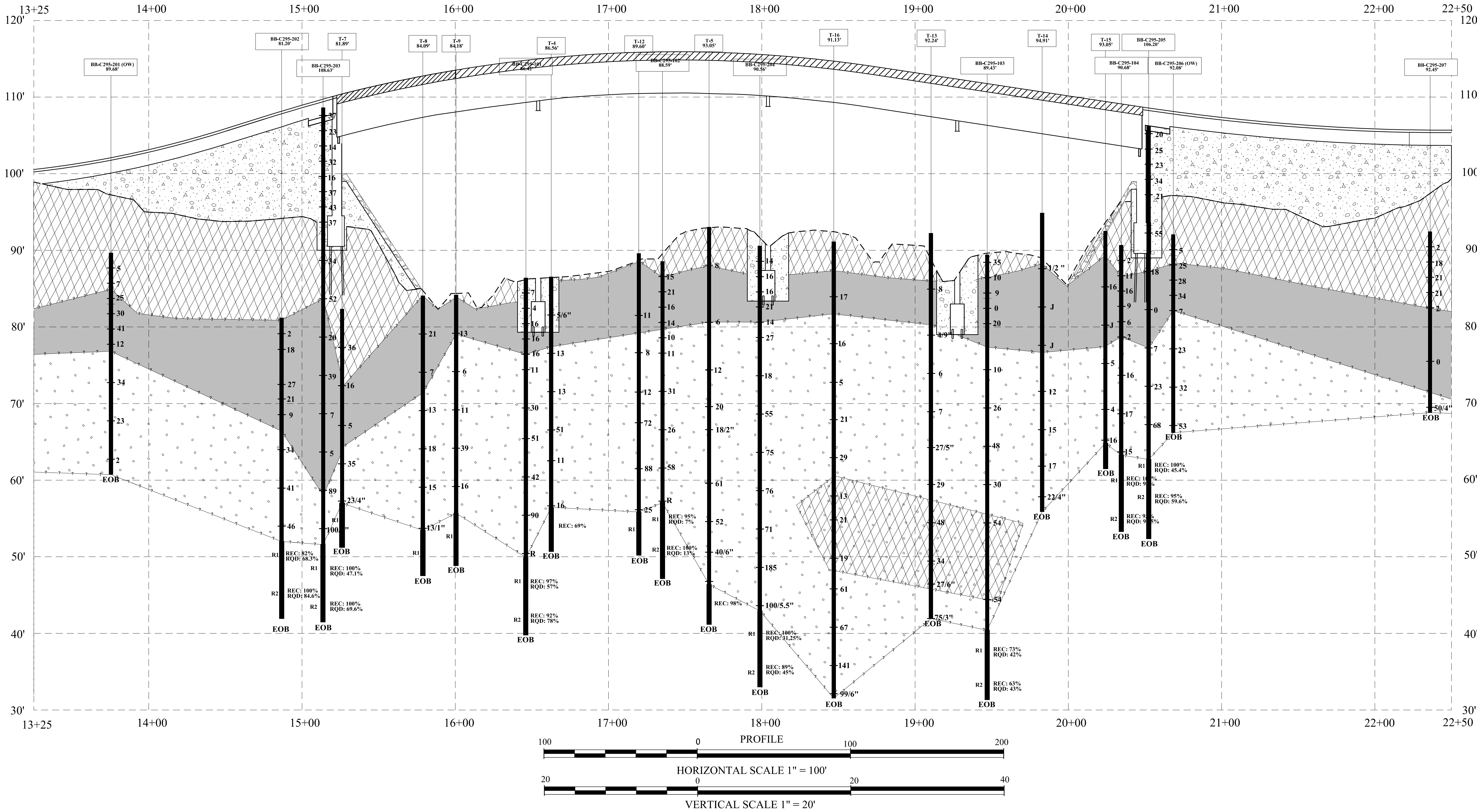
- LEGEND:
- Subsurface Exploration Boring*
 - Subsurface Exploration Boring with Observation Well
 - Historical Subsurface Exploration Boring from 1957
 - Cone Penetration Test (CPT) Location from Phase II
- *100-Series Borings from Preliminary Design Report in 2022
200-Series Borings from Phase II in 2024

STATE OF MAINE		DEPARTMENT OF TRANSPORTATION	
INTERSTATE 295, RTE US 1 & MCRR		2516100	
CUMBERLAND		WIN	
BORING LOCATION PLAN		BRIDGE NO. 6601	
SHEET NUMBER		BRIDGE PLANS	
15		25161.00	
OF 88			

Date: 5/25/2025

Username: common

Filename: ...\\016_GeoProfile_Interpretive Subsurface.dgn



FILL: Fine to coarse SAND, trace gravel, some to trace silt.

PRESUMPTSCOT FORMATION: Clayey SILT and Silty clay, some to trace gravel.

GLACIAL TILL: Fine to coarse SAND, some to trace gravel, some to trace silt.

INTERBEDDED COHESIVE DEPOSITS: layer of silty sand, fine sand, and clayey silt.

BEDROCK: Coarse grained GNEISS with medium to coarse quartzite intrusions.

GRANULAR BORROW

RIP RAP

BORING NO.
ELEV. (ft)

T-X BORINGS SERIES: FIELD SPT VALUES (BLOWS/FOOT)

BB-C295-XXX SERIES: ENERGY CORRECTED SPTN60 VALUE (BLOWS/FOOT)

XXX": INDICATES BLOWS/INCHES

INDICATES SAMPLE DEPTH

R: SPLIT SPOON REFUSAL C-50 BLOWS FOR 1" PENETRATION

J: SAMPLER DRIVEN BY STATIC LOAD NOT EXCEEDING 1/2 TON

WOH: INDICATES WEIGHT OF HAMMER

ENCOUNTERED GROUND WATER LEVEL

RX: RUN NUMBER

REC: RECOVERY OF BEDROCK CORE SAMPLE

RQD: ROCK QUALITY DESIGNATION OF BEDROCK CORE SAMPLE

EOB: INDICATES END OF BORING

NOTES:

- THE AS-DRILLED BORING LOCATIONS WERE SURVEYED BY A MAINEDOT SURVEY CREW AND PROVIDED TO H&H IN AN ELECTRONIC FILE (BORINGS 110722.DGN).
- BB-C295-100 SERIES BRIDGE BORINGS WERE PERFORMED BY NEW ENGLAND BORING CONTRACTORS AND OBSERVED BY HARDESTY AND HANOVER PERSONNEL IN SEPTEMBER, 2022.
- BB-C295-200 SERIES BRIDGE BORINGS WERE PERFORMED BY SEABOARD DRILLING, LLC AND OBSERVED BY HARDESTY AND HANOVER PERSONNEL IN APRIL, 2024.
- T-X SERIES BRIDGE BORINGS ARE HISTORICAL AND WERE MADE BY THE MAINE STATE HIGHWAY COMMISSION APRIL AND MAY 1957. BORINGS PRE-DATE ASTM STANDARDS AND WERE PERFORMED USING A HAMMER WEIGHT OF 310 LBS AT A DROP HEIGHT OF 16 INCHES.
- THIS GENERALIZED INTERPRETIVE SOIL PROFILE IS INTENDED TO CONVEY TRENDS IN SUBSURFACE CONDITIONS. THE BOUNDARIES BETWEEN STRATA ARE APPROXIMATE AND IDEALIZED, AND HAVE BEEN DEVELOPED BY INTERPRETATIONS OF WIDELY SPACED EXPLORATIONS AND SAMPLES. ACTUAL SOIL AND BEDROCK TRANSITIONS MAY VARY AND ARE PROBABLY MORE ERRATIC. FOR MORE SPECIFIC INFORMATION REFER TO THE EXPLORATION LOGS.

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
2516100

BRIDGE NO. 5601
WIN
25161.00
BRIDGE PLANS

TUTTLE ROAD BRIDGE
INTERSTATE 295, RTE US 1 & MCRR
CUMBERLAND COUNTY
INTERPRETIVE SUBSURFACE
PROFILE

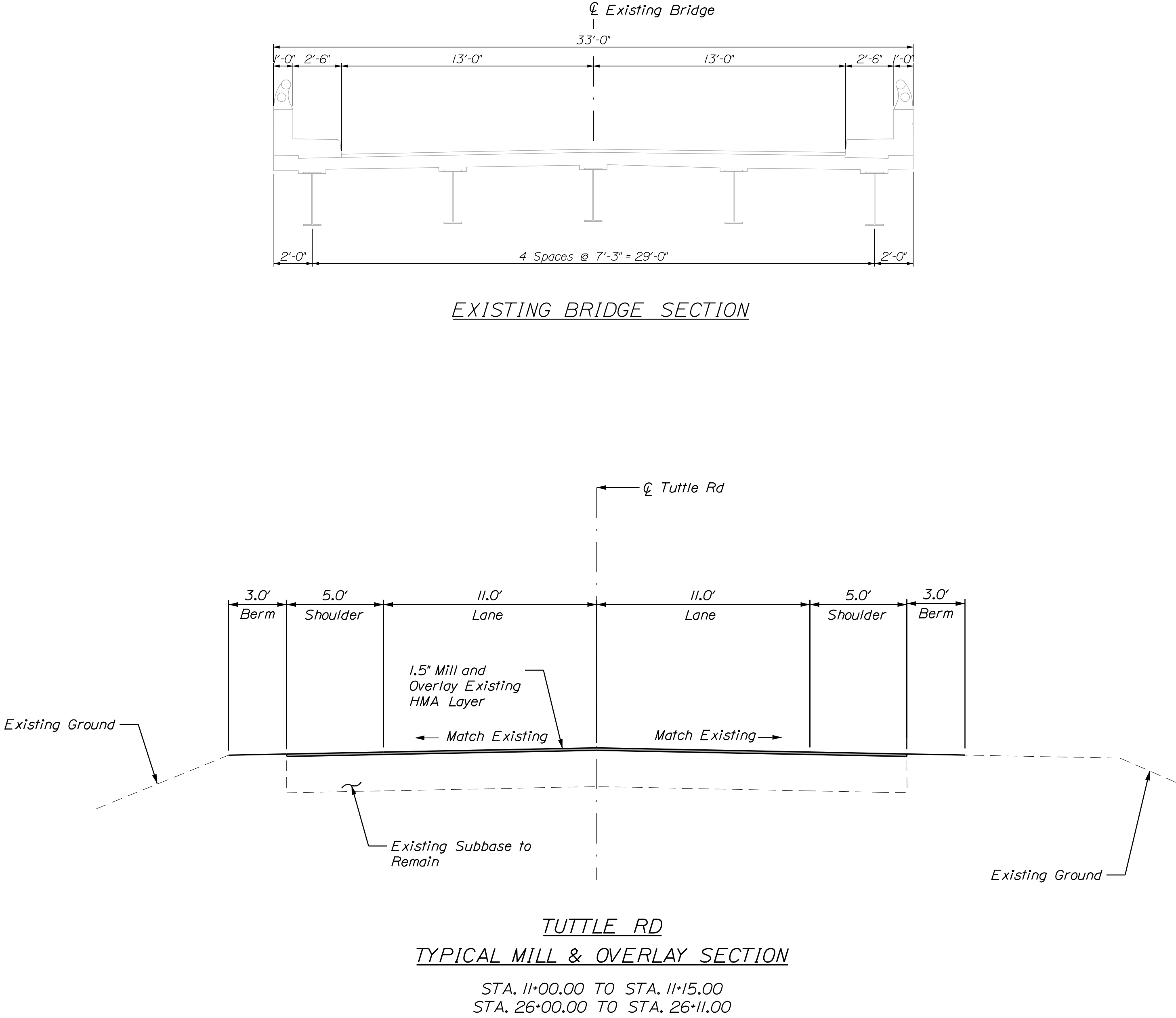
SHEET NUMBER
16
OF 88

PROJ. MANAGER	BY	DATE	SIGNATURE	P.E. NUMBER	DATE
Gerald Dostle	CNJ	03/2025			
DESIGN-DETAILED	AS	03/2025			
CHECKED-REVIEWED	AG				
DESIGNS-DETAILED					
DESIGNS-DETAILED					
REVISIONS 1					
REVISIONS 2					
REVISIONS 3					
REVISIONS 4					
FIELD CHANGES					

Maine Department of Transportation Soil/Brock Exploration Log US CUSTOMARY UNITS				Project: Tuttle Road Bridge/1295 #S801 over I-295, RTE US-1 & MCR8		Boring No. : BB-C295-101		
Location: Cumberland, Maine				WIN: 25161.00				
Driller: New England Boring Contractors		Elevation: 86.42'		Auger ID/OD: 2.5 inches SSA				
Operator: T. Shaffer		Datum: NAVD 88		Sampler: Standard Split Spoon				
Logged by: J. Slattery		Rig Type: Mobile B-53 Track Rig		Hammer Wt./Fall: 140lbs/30in				
Date Start/Finish: 10/18/2022		Drilling method: Rotary Wash		Core Bore#: N2				
Boring Location: 1029517.3229E, 341242.9480N		Casing ID/OD: 3.5/4.0 inches		Water Level*: 1.6' bgs				
Hammer Efficiency Factor: 0.742**		Hammer Type: ☒ Automatic ☐ Hydraulic ☐ Rope & Cathead						
Notes:		P - Rock Core Sample SSA - Solid Stem Auger HMS - Hollow Stem Auger HC - Hollow Core WOM - Weight of 140lb. Hammer WOMSC - Weight of Rock or Casing WOTF - Weight of Test Person		S _u - Presumptive Soil Size Undisturbed Shear Strength (psf) S _u - 1/2 Vane Undisturbed Shear Strength (psf) N _u - Unconfined Compression Strength (lb/inch ²) N _u - Unconfined - Bone Field SPT N-value H _u - Hammer Efficiency Factor - Rig Specific Annual Calibration Value N _u - SPT Recommended Correction for Hammer Efficiency N _u - (Hammer Efficiency Factor)/200%N _u Uncorrected		T _u - Pocket Pressure Shear Strength (psf) WC - Water Content, Percent LL - Liquid Limit PI - Plastic Limit P _u - Plasticity Index G _u - Grain Size Analysis C - Consolidation Test		
Sample Information				Visual Description and Remarks				Laboratory Testing Results AASHTO and Unified Class.
Depth (ft.)	Sample No.	Pen. Rate (in./s)	Sample Depth (ft.)	Blow Count (100lb SPT)	N _u value	Pen. Blow Count	Elevation	Sample Log
0	1D	24/14	0-2	WOR-3-3-4	6	7	SSA	Brown Gray, moist, loose, fine to coarse SAND, little silt clay, (tree roots present).
	2D	24/12	2-4	1-2-1-2	3	4		1.5 Gray, moist, soft, clayey SILT, little sand, trace gravel, (Presumptive Formation) (PP-0.5 to 1.0 ft).
-5	3D	24/18	4-6	3-5-8-9	13	16		Gray, moist, very stiff, clayey SILT, little sand, (Presumptive Formation) (PP=1.0 to 1.5 ft).
	4D	24/17	6-8	3-5-8-6	13	16		Gray, moist, very stiff, CLAY, trace sand, trace gravel, (Presumptive Formation).
	5D	24/20	8-10	3-8-5-10	13	16		8.0 Gray, moist, medium dense, fine to coarse SAND, little clayey silt, trace gravel.
-10	6D	24/16	10-12	4-4-5-8	9	11	7	Gray, moist, medium dense, fine to coarse SAND, some silt, some gravel.
								11 18 26 70
-15	7D	24/18	15-17	10-12-12-10	24	30	22	Gray, moist, medium dense, fine to coarse SAND, some silt, some gravel.
								40 62 150
-20	8D	24/12	20-22	8-21-20-9	41	51	42	Gray, moist, very dense, fine to coarse SAND, little gravel, little silt.
								23 24 50
-25	9D	24/24	25-27	15-21-13-40	34	42	15	Gray, moist, very dense, fine to coarse SAND, little clayey silt, little gravel.
								13 30 40 22
-30	10D	24/24	30-32	9-18-55-72	73	90	12	Gray, moist, very dense, fine to coarse SAND, some clayey silt, trace gravel.
								18 55 121
-35	11D	15/4	35-36.25	35-70-99/3	REF	REF		Gray, moist, very dense, fine to coarse GRAVEL, some sand (decomposed/weathred rock fragments).
	R1	60/58	36.5-41.5	RQD=57%				36.5 #1: Gray, fine to coarse grained, moderately fractured, GNEISS, hard rock, fresh - slightly weathered 75% Recovery
-40	R2	60/55	41.5-46.5	RQD=78%				82: Gray, fine to coarse grained, slightly fractured, GNEISS, hard rock, fresh - non weathered. 12% Recovery
-45								46.5 Bottom of Exploration at 46.5 feet below ground surface.
Remarks:								
Stratification lines represent approximate boundaries between soil types; transitions may be gradual								
* Water level readings have been made at times and under conditions stated. Groundwater fluctuations may occur due to conditions other than those present at the time measurements were made.								
**Calibration from 4/2023								
Boring No. :						BB-C295-101		

[illegible][illegible][illegible]

Maine Department of Transportation Soil/Brock Exploration Log US CUSTOMARY UNITS				Project: Tuttle Road Bridge/295 #5801 over I-295, Rte US1 & MCRR		Boring No. : BB-C295-205	
Location: Cumberland, Maine				WIN: 25161.00			
Driller: SEABOARD DRILLING				Elevation: 106.20'		Auger ID/OD: 2.5 inches SSA	
Operator: Kevin Harnscomb				Datum: NAVD 83		Sampler: Standard Split Spoon	
Logged by: A. Sajewska				Rig Type: DIEDRICH D-50 SN-367		Hammer Wt./Fall: 140lbs/30in	
Date Start/Finish: 4/1/2024				Drilling method: Cased Wash Boring		Core Barrel: NQ	
Boring Location: 1029900.22E, 341118.99N				Casing ID/OD: 3.5/4.0 inches		Water Level*: 13' bgs after boring completed	
Hammer Efficiency Factor: 1.07				Hammer Type: (1) Automatic (2) Hydraulic (3) Rope & Cablehead			
Definitions: D = Split Spoon Sample M = Unconsolidated Split Spoon Sample Attempt I = Thin Wall Tube Sample V = Undrained Shear MV = Unconsolidated Field Vane Shear Test Attempt NA = Solid Stem Auger NAU = Hollow Stem Auger RC = Rubber Core WOF = Weight of 140lb Hammer WOFV = Weight of Rods or Casing WOFV = Weight of One Person				B- Pocket Torque Shear Strength (psf) S _u = Lab Vane Undrained Shear Strength (psf) q _u = Unconsolidated Compressive Strength (psf) R _u = Undrained - Force Field TPT is value H _{ave} = Efficiency Factor - Rig Specific Annual Calibration Value NA = NOT RECORDED/CONTROLLED FOR HAMMER EFFICIENCY NA = Efficiency Factor/90% is Unrecorded		T ₁ = Pocket Torque Shear Strength (psf) WC = Water Content, percent LI = Liquid Limit PI = Plastic Limit PI = Plasticity Index G _o = Grain Size Analysis C = Consolidation Test	
Sample Information				Visual Description and Remarks		Laboratory Testing Results/ AASHTO and Unified Class.	
Depth (ft.)	Sample No.	Pen. Rate (in./min.)	Sample Depth (ft.)	Blow Count (blows/ft.)	Shear Strength (psf)	W _o (%)	W _L (%)
0	1D	24/14	1-3	7-4-7-7	11	20	2
5	2D	24/12	3-5	5-6-8-8	14	25	12
	3D	24/20	5-7	4-5-8-9	13	23	6
	4D	24/24	7-9	7-9-10-12	19	34	8
	5D	24/16	9-11	4-6-6-6	12	21	35
	6D	24/18	15-17	1-16-15-8	31	55	28
10	7D	24/24	20-22	2-4-6-6	10	18	46
	V1	22-33-22.5	5in/307/94in/ft				
	IU	24/21	23.3-24.3	PUSH			
	8D	24/24	24.5-26.5	WORK WOH=1	0	0	55
	9D	24/21	26.5-28.5	PUSH			
15	MV	29.5-29.5	No Rotation				
	90/A	24/24	30-32	WOH=13-4	4	7	34
	100	24/24	35-37	5-5-8-5	13	23	56
	110	24/18	40-42	13-18-20-15	38	68	89
	120	24/16	45-48	10-10-10-10	10	10	101
20	R1	60/60	43.5-48.5	RQD = 45.4%			
	R2	60/57	48.5-53.5	RQD = 59.6%			
	130	24/24	50-52	5-5-5-5	13	23	56
	140	24/24	55-57	5-5-5-5	13	23	56
	150	24/24	60-62	5-5-5-5	13	23	56
25	160	24/24	65-67	5-5-5-5	13	23	56
	170	24/24	70-72	5-5-5-5	13	23	56
	180	24/24	75-77	5-5-5-5	13	23	56
	190	24/24	80-82	5-5-5-5	13	23	56
	200	24/24	85-87	5-5-5-5	13	23	56
30	210	24/24	90-92	5-5-5-5	13	23	56
	220	24/24	95-97	5-5-5-5	13	23	56
	230	24/24	100-102	5-5-5-5	13	23	56
	240	24/24	105-107	5-5-5-5	13	23	56
	250	24/24	110-112	5-5-5-5	13	23	56
35	260	24/24	115-117	5-5-5-5	13	23	56
	270	24/24	120-122	5-5-5-5	13	23	56
	280	24/24	125-127	5-5-5-5	13	23	56
	290	24/24	130-132	5-5-5-5	13	23	56
	300	24/24	135-137	5-5-5-5	13	23	56
40	310	24/24	140-142	5-5-5-5	13	23	56
	320	24/24	145-147	5-5-5-5	13	23	56
	330	24/24	150-152	5-5-5-5	13	23	56
	340	24/24	155-157	5-5-5-5	13	23	56
	350	24/24	160-162	5-5-5-5	13	23	56
45	360	24/24	165-167	5-5-5-5	13	23	56
	370	24/24	170-172	5-5-5-5	13	23	56
	380	24/24	175-177	5-5-5-5	13	23	56
	390	24/24	180-182	5-5-5-5	13	23	56
	400	24/24	185-187	5-5-5-5	13	23	56
50	410	24/24	190-192	5-5-5-5	13	23	56
	420	24/24	195-197	5-5-5-5	13	23	56
	430	24/24	200-202	5-5-5-5	13	23	56
	440	24/24	205-207	5-5-5-5	13	23	56
	450	24/24	210-212	5-5-5-5	13	23	56
55	460	24/24	215-217	5-5-5-5	13	23	56
	470	24/24	220-222	5-5-5-5	13	23	56
	480	24/24	225-227	5-5-5-5	13	23	56
	490	24/24	230-232	5-5-5-5	13	23	56
	500	24/24	235-237	5-5-5-5	13	23	56
60	510	24/24	240-242	5-5-5-5	13	23	56
	520	24/24	245-247	5-5-5-5	13	23	56
	530	24/24	250-252	5-5-5-5	13	23	56
	540	24/24	255-257	5-5-5-5	13	23	56
	550	24/24	260-262	5-5-5-5	13	23	56
65	560	24/24	265-267	5-5-5-5	13	23	56
	570	24/24	270-272	5-5-5-5	13	23	56
	580	24/24	275-277	5-5-5-5	13	23	56
	590	24/24	280-282	5-5-5-5	13	23	56
	600	24/24	285-287	5-5-5-5	13	23	56
70	610	24/24	290-292	5-5-5-5	13	23	56
	620	24/24	295-297	5-5-5-5	13	23	56
	630	24/24	300-302	5-5-5-5	13	23	56
	640	24/24	305-307	5-5-5-5	13	23	56
	650	24/24	310-312	5-5-5-5	13	23	56
75	660	24/24	315-317	5-5-5-5	13	23	56
	670	24/24	320-322	5-5-5-5	13	23	56
	680	24/24	325-327	5-5-5-5	13	23	56
	690	24/24	330-332	5-5-5-5	13	23	56
	700	24/24	335-337	5-5-5-5	13	23	56
80	710	24/24	340-342	5-5-5-5	13	23	56
	720	24/24	345-347	5-5-5-5	13	23	56
	730	24/24	350-352	5-5-5-5	13	23	56
	740	24/24	355-357	5-5-5-5	13	23	56
	750	24/24	360-362	5-5-5-5	13	23	56
85	760	24/24	365-367	5-5-5-5	13	23	56
	770	24/24	370-372	5-5-5-5	13	23	56
	780	24/24	375-377	5-5-5-5	13	23	56
	790	24/24	380-382	5-5-5-5	13	23	56
	800	24/24	385-387	5-5-5-5	13	23	56
90	810	24/24	390-392	5-5-5-5	13	23	56
	820	24/24	395-397	5-5-5-5	13	23	56
	830	24/24	400-402	5-5-5-5	13	23	56
	840	24/24	405-407	5-5-5-5	13	23	56
	850	24/24	410-412	5-5-5-5	13	23	56
95	860	24/24	415-417	5-5-5-5	13	23	56
	870	24/24	420-422	5-5-5-5	13	23	56
	880	24/24	425-427	5-5-5-5	13	23	56
	890	24/24	430-432	5-5-5-5	13	23	56
	900	24/24	435-437	5-5-5-5	13	23	56
100	910	24/24	440-442	5-5-5-5	13	23	56
	920	24/24	445-447	5-5-5-5	13	23	56
	930	24/24	450-452	5-5-5-5	13	23	56
	940	24/24	455-457	5-5-5-5	13	23	56
	950	24/24	460-462	5-5-5-5	13	23	56
105	960	24/24	465-467	5-5-5-5	13	23	56
	970	24/24	470-472	5-5-5-5	13	23	56
	980	24/24	475-477	5-5-5-5	13	23	56
	990	24/24	480-482	5-5-5-5	13	23	56
	1000	24/24	485-487	5-5-5-5	13	23	56
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	1080	24/24	525-527	5-5-5-5	13	23	56
	1090	24/24	530-532	5-5-5-5	13	23	56
	1100	24/24	535-537	5-5-5-5	13	23	56
120	1110	24/24	540-542	5-5-5-5	13	23	56
	1120	24/24	545-547	5-5-5-5	13	23	56
	1130	24/24	550-552	5-5-5-5	13	23	56
	1140	24/24	555-557	5-5-5-5	13	23	56
	1150	24/24	560-562	5-5-5-5	13	23	56
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	1170	24/24	570-572	5-5-5-5	13	23	56
	1180	24/24	575-577	5-5-5-5	13	23	56
	1190	24/24	580-582	5-5-5-5	13	23	56
	1200	24/24	585-587	5-5-5-5	13	23	56
130	1210	24/24	590-592	5-5-5-5	13	23	56
	1220	24/24	595-597	5-5-5-5	13	23	56
	1230	24/24	600-602	5-5-5-5	13	23	56
	1240	24/24	605-607	5-5-5-5	13	23	56
	1250	24/24	610-612	5-5-5-5	13	23	56
135	1260	24/24	615-617	5-5-5-5	13	23	56
	1270	24/24	620-622	5-5-5-5	13	23	56
	1280	24/24	625-627	5-5-5-5	13	23	56
	1290	24/24	630-632	5-5-5-5	13	23	56
	1300	24/24	635-637	5-5-5-5	13	23	56
140	1310	24/24	640-642	5-5-5-5	13	23	56
	1320	24/24	645-647	5-5-5-5	13	23	56
	1330	24/24	650-652	5-5-5-5	13	23	56
	1340	24/24	655-657	5-5-5-5	13	23	56
	1350	24/24	660-662	5-5-5-5	13	23	56
145	1360	24/24	665-667	5-5-5-5	13	23	56
	1370	24/24	670-672	5-5-5-5	13	23	56
	1380	24/24	675-677	5-5-5-5	13	23	56
	1390	24/24	680-682	5-5-5-5	13	23	56
	1400	24/24	685-687	5-5-5-5	13	23	56
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	1420	24/24	695-697	5-5-5-5	13	23	56
	1430	24/24	700-702	5-5-5-5	13	23	56
	1440	24/24	705-707	5-5-5-5	13	23	56
	1450	24/24	710-712	5-5-5-5	13	23	56
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	1470	24/24	720-722	5-5-5-5	13	23	56
	1480	24/24	725-727	5-5-5-5	13	23	56
	1490	24/24	730-732	5-5-5-5	13	23	56
	1500	24/24	735-737	5-5-5-5	13	23	56
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	1570	24/24	770-772	5-5-5-5	13	23	56
	1580	24/24	775-777	5-5-5-5	13	23	56
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	1600	24/24	785-787	5-5-5-5	13	23	



NOT TO SCALE

TUTTLE ROAD BRIDGE
INTERSTATE 295, RTE US 1 & MCRR
CUMBERLAND CUMBERLAND COUNTY

SHEET NUMBER
20
OF 88

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
2516100

BRIDGE NO. 5801

WIN
25161.00

BRIDGE PLANS

DESIGN-DETAILED
CHECKED-REVIEWED
DESIGN-DETAILED
REVISIONS 1
REVISIONS 2
REVISIONS 3
REVISIONS 4
FIELD CHANGES

BY
GRS
SLM

DATE
03/2025
03/2025

SIGNATURE

P.E. NUMBER

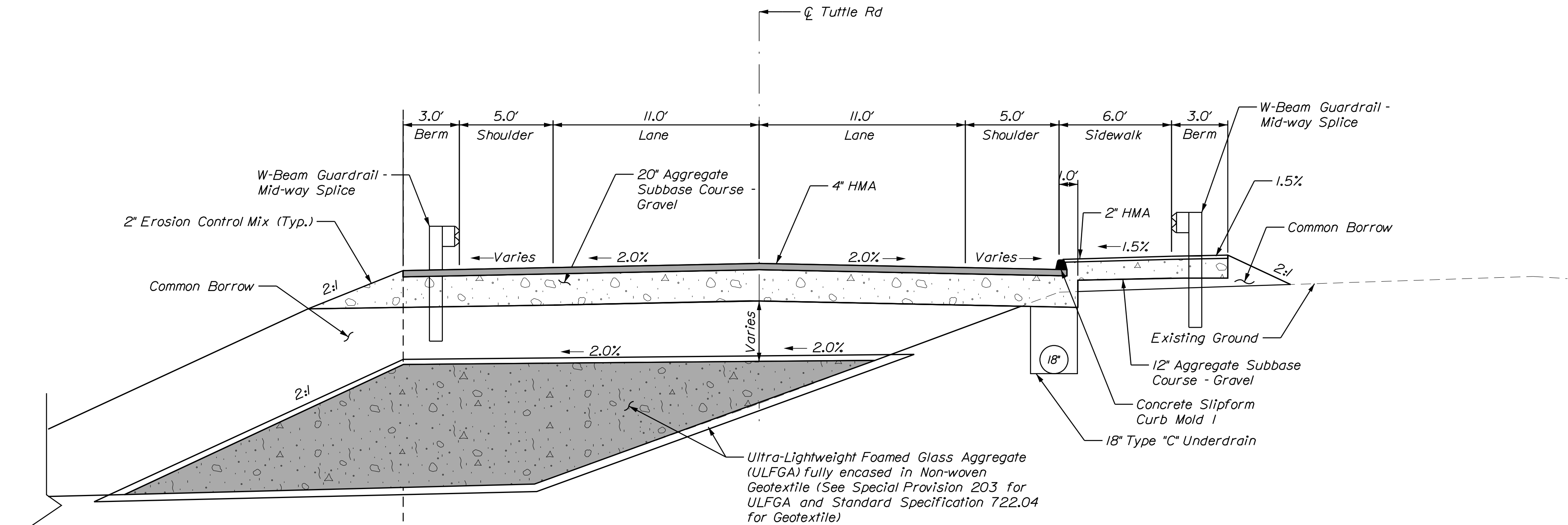
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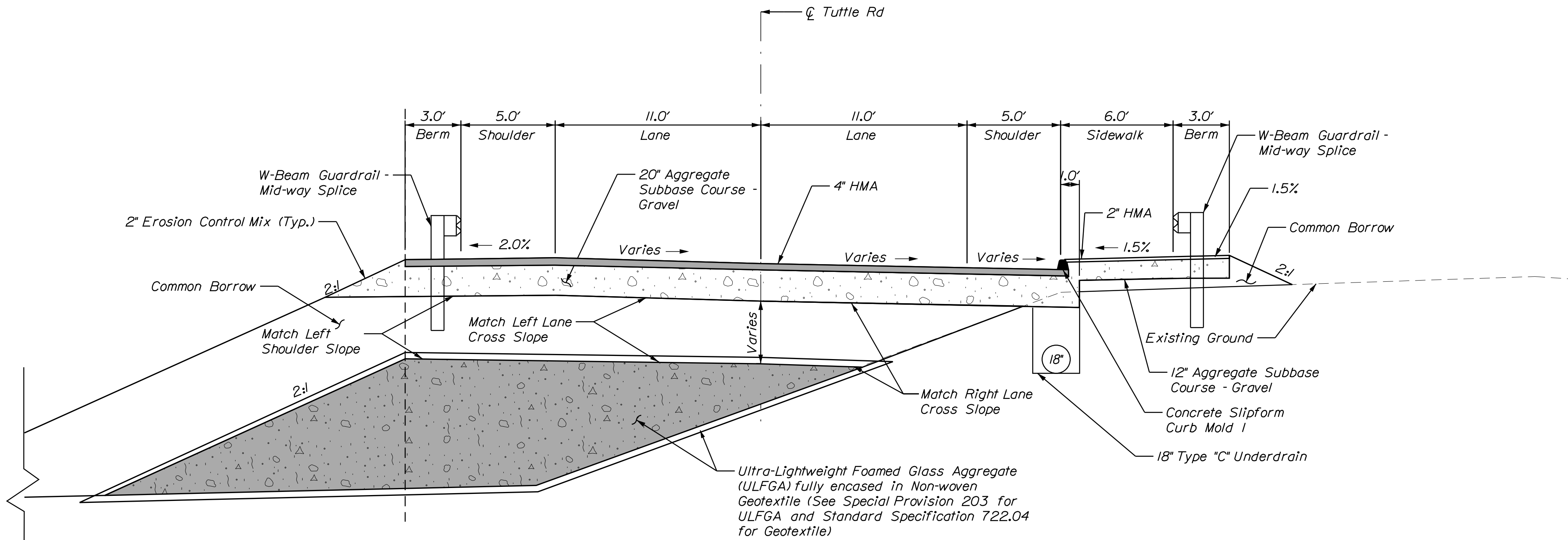
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Division: BRIDGE

Filename: ... \HIGHWAY\021_Typical.dgn



TUTTLE RD
TYPICAL APPROACH SECTION
STA. 14+04.00 TO STA. 15+20.00
STA. 20+50.16 TO STA. 20+69.00
STA. 24+16.00 TO STA. 25+75.00



TUTTLE RD
TYPICAL SUPERELEVATED APPROACH SECTION
STA. 11+25.00 TO STA. 14+04.00
STA. 20+69.00 TO STA. 24+16.00

NOTE

1. Raise the approach roadways to top of aggregate subbase no later than two months after construction of the abutments is complete. Place approach roadway asphalt no earlier than one month prior to opening the bridge to traffic. Prior to placing the asphalt, the contractor shall resurvey the top of embankment and adjust the aggregate subbase as necessary to account for potential settlement.

Curve 1					
Superelevation Table					
	STA.	LT. Shoulder	LT. TW	RT. TW	RT. Shoulder
	11+00	Match Ex.	Match Ex.	Match Ex.	Match Ex.
Begin Transition	11+01	-3.50%	-2.30%	-3.50%	-2.00%
	11+25	-2.91%	-2.30%	-1.91%	-2.00%
	11+50	-2.30%	-2.30%	-0.26%	-2.00%
	11+75	-2.30%	-2.30%	1.39%	-2.00%
	12+00	-3.04%	-3.04%	3.04%	-2.00%
Begin Full Super	12+21	-4.41%	-4.41%	4.41%	-2.00%
End Full Super	13+07	-4.41%	-4.41%	4.41%	-2.00%
	13+25	-3.20%	-3.20%	3.20%	-2.00%
	13+50	-2.00%	-2.00%	1.55%	-2.00%
	13+75	-2.00%	-2.00%	-0.10%	-2.00%
	14+00	-2.00%	-2.00%	-1.75%	-2.00%
Begin Normal Crown	14+04	-2.00%	-2.00%	-2.00%	-2.00%

Curve 2					
Superelevation Table					
	STA.	LT. Shoulder	LT. TW	RT. TW	RT. Shoulder
	20+50	-2.00%	-2.00%	-2.00%	-2.00%
Begin Transition	20+69	-2.00%	-2.00%	-2.00%	-2.00%
	20+75	-2.00%	-1.68%	-2.00%	-2.00%
	21+00	-2.00%	-0.29%	-2.00%	-2.00%
	21+25	-2.00%	1.11%	-2.00%	-2.00%
	21+50	-2.00%	2.51%	-2.51%	-2.51%
	21+75	-2.00%	3.91%	-3.91%	-2.00%
Begin Full Super	21+83	-1.67%	4.33%	-4.33%	-4.33%
End Full Super	23+03	-1.67%	4.33%	-4.33%	-4.33%
	23+25	-2.00%	3.08%	-3.08%	-3.08%
	23+50	-2.00%	1.68%	-2.00%	-2.00%
	23+75	-2.00%	0.28%	-2.00%	-2.00%
	24+00	-2.00%	-1.12%	-2.00%	-2.00%
Begin Normal Crown	24+16	-2.00%	-2.00%	-2.00%	-2.00%

NOT TO SCALE

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2516100

WIN
25161.00

BRIDGE NO. 5601
BRIDGE PLANS

DATE
03/2025

BY
GMS

PROJ. MANAGER
Gerald Dastie

SIGNATURE

P.E. NUMBER

DATE

CHECKED-REVIEWED
SLM

DESIGNED-DETAILED
SLM

DESIGNED-DETAILED
SLM

REVISIONS 1

REVISIONS 2

REVISIONS 3

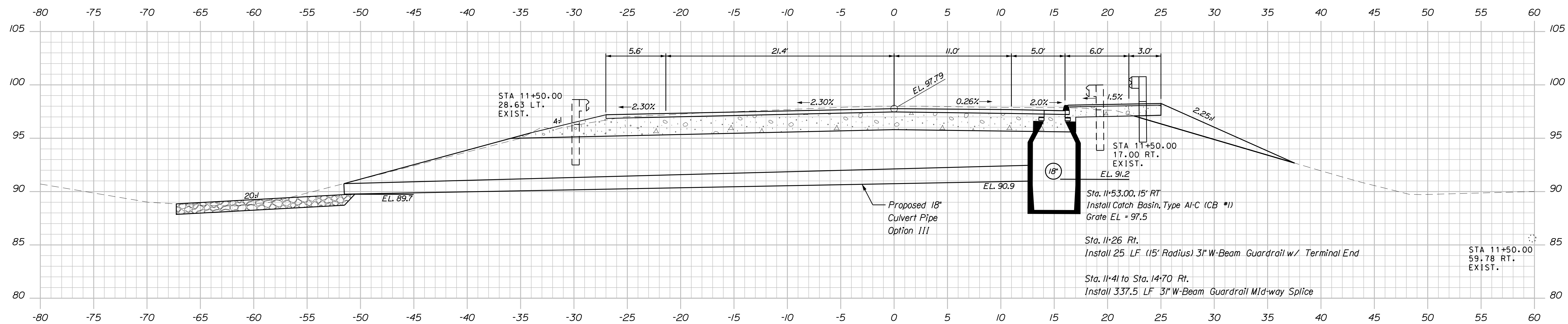
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FIELD CHANGES

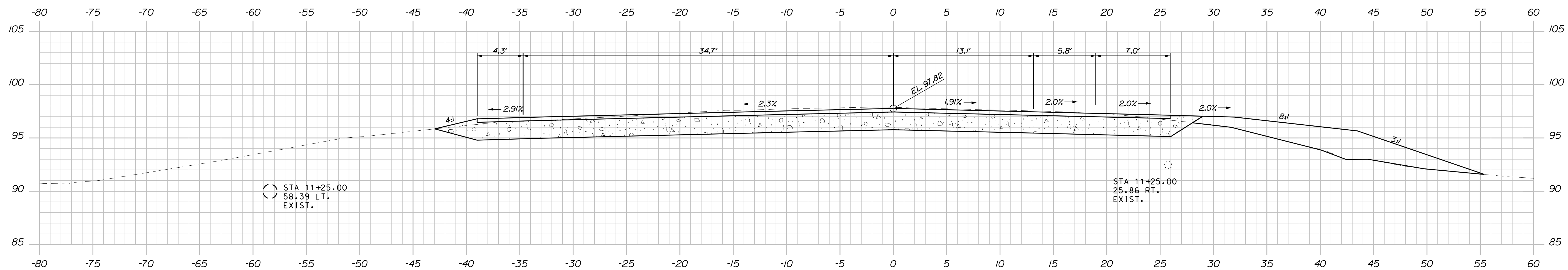
TUTTLE ROAD BRIDGE
INTERSTATE 295, RTE US 1 & MCRR
CUMBERLAND CUMBERLAND COUNTY

TYPICAL SECTIONS (2 OF 2)

SHEET NUMBER
21
OF 88



11+50.00

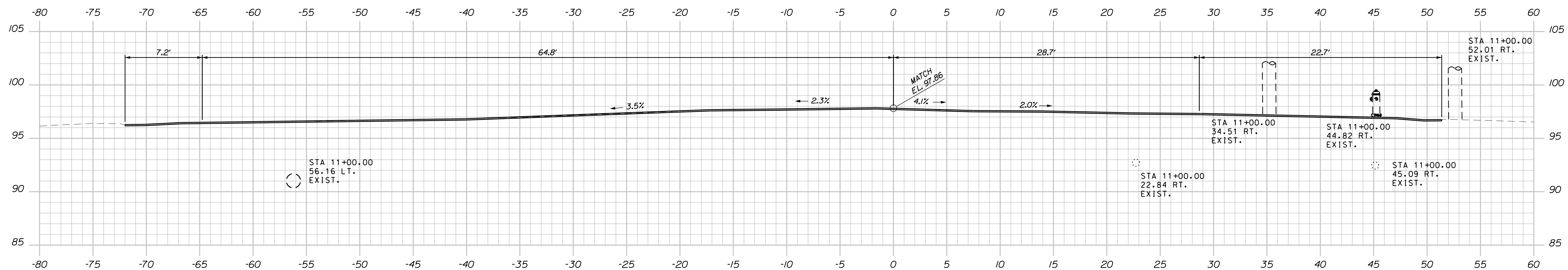


```

//+25.00
END TRANSITION
BEGIN FULL DEPTH RECONSTRUCTION

```

STA 11+15.00
END 1 1/2" MILL & OVERLAY
BEGIN TRANSITION

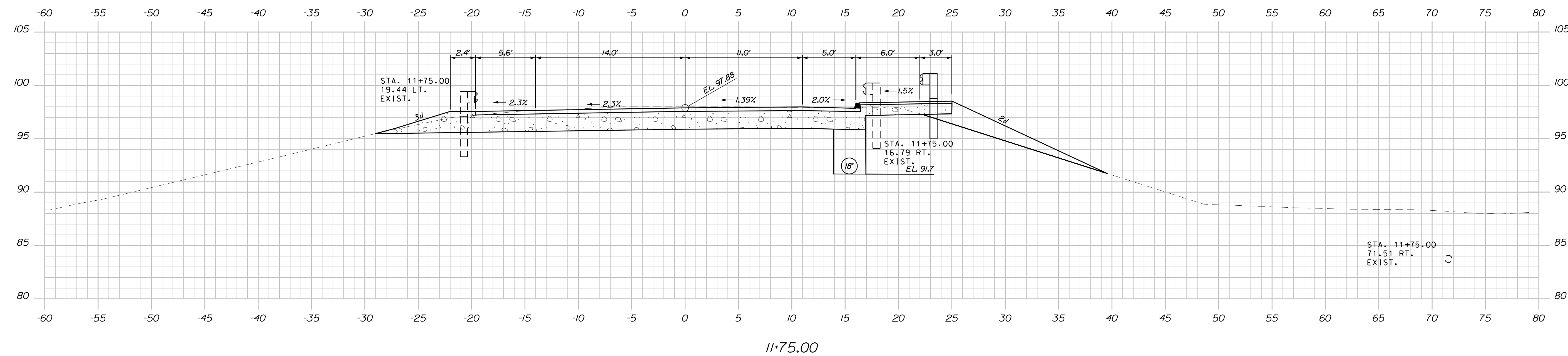
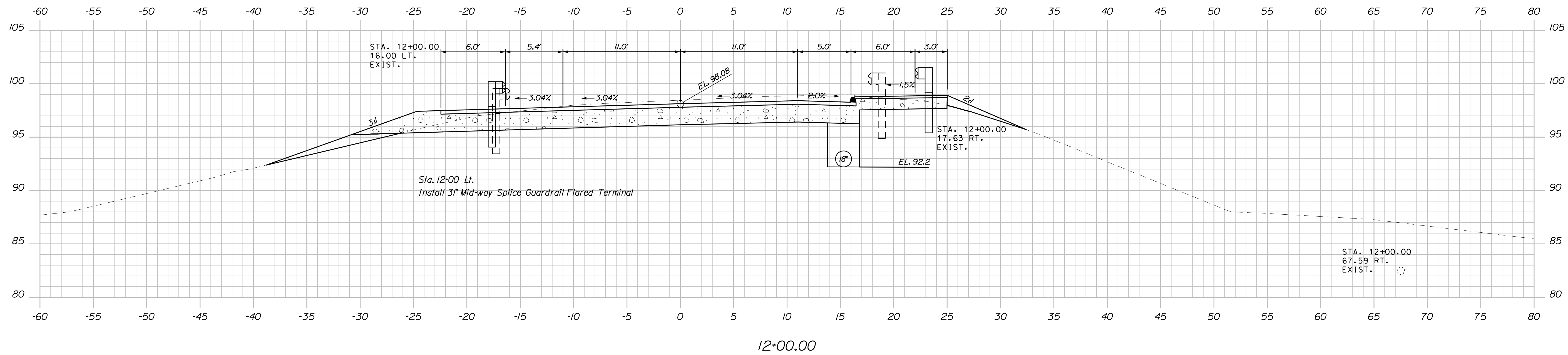


11+00.00
BEGIN 1 1/2" MILL & OVERLAY
MATCH EXISTING

PROJ. MANAGER	Gerard Dostle	BY	DATE
DESIGN-DETAILED	GRS	GRS	03/2025
CHECKED-REVIEWED	SJM	SJM	03/2025
DESIGN-DETAILED	GRS		SIGNATURE
DESIGN-DETAILED			
DESIGN-DETAILED			
REVISIONS 1			P.E. NUMBER
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			DATE
FIELD CHANGES			

TUTTLE ROAD BRIDGE
 INTERSTATE 295, RTE US 1 & MCRR
 CUMBERLAND CUMBERLAND COUNTY
 TUTTLE RD CROSS SECTIONS
 (1 OF 21)

SHEET NUMBER
22
OF 88

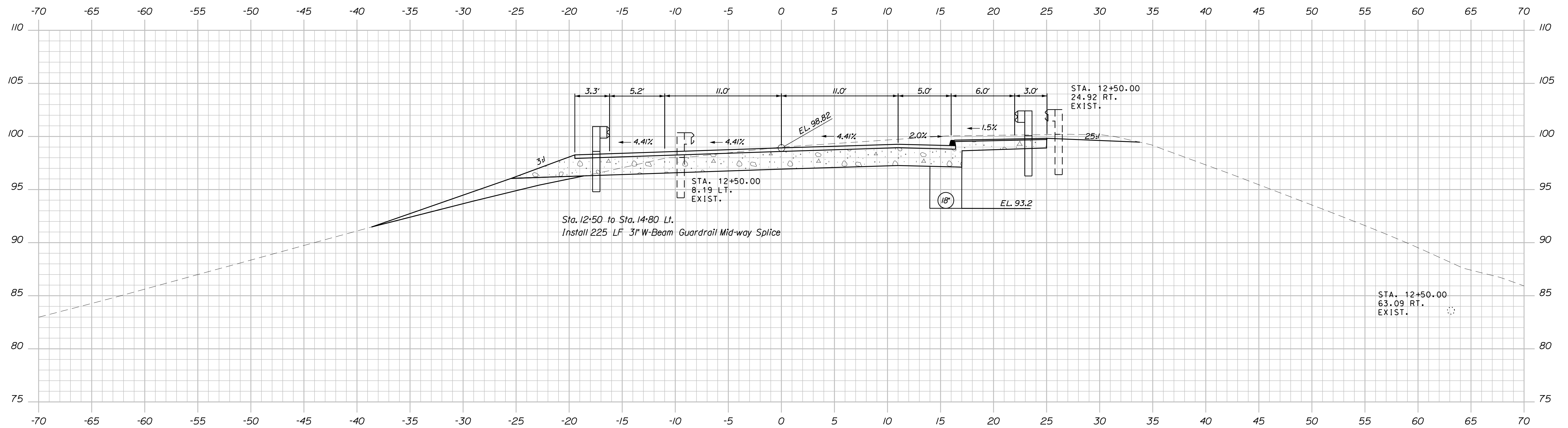


STATE OF MAINE	
DEPARTMENT OF TRANSPORTATION	
2516100	
BRIDGE NO. 5801	WIN 25161.00
BRIDGE PLANS	

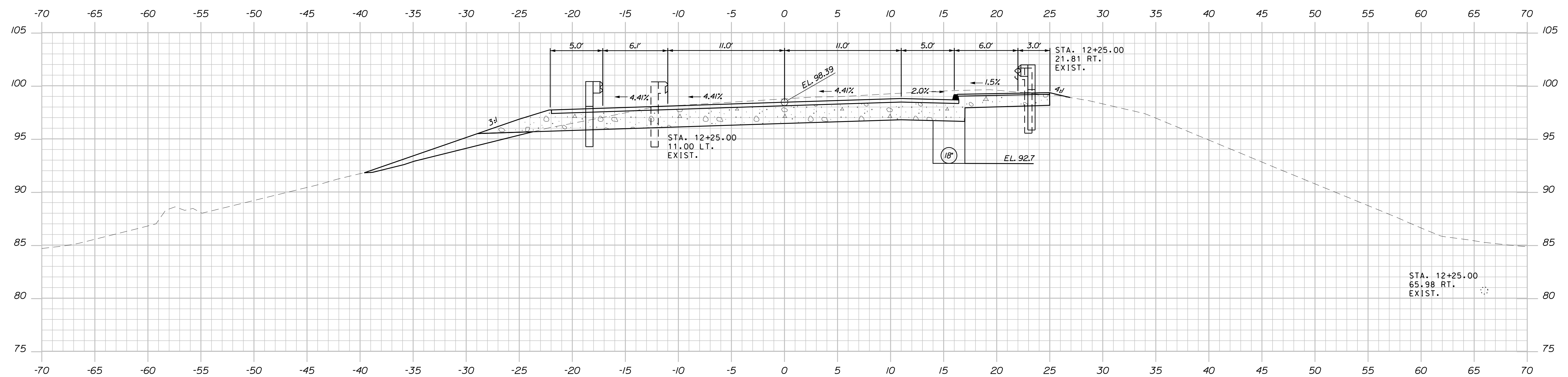
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CHECKED-REVIEWED	SLM	SLM	03/2025
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DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

TUTTLE ROAD BRIDGE
INTERSTATE 295, RTE US 1 & MCRR
CUMBERLAND CUMBERLAND COUNTY
TUTTLE RD CROSS SECTIONS
(2 OF 21)

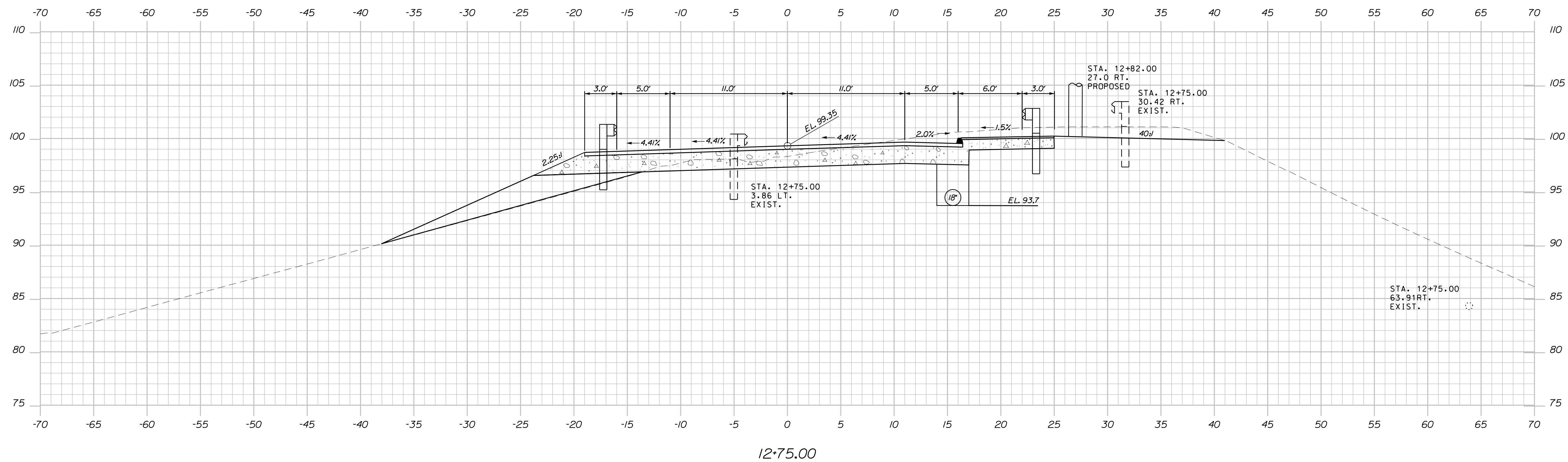
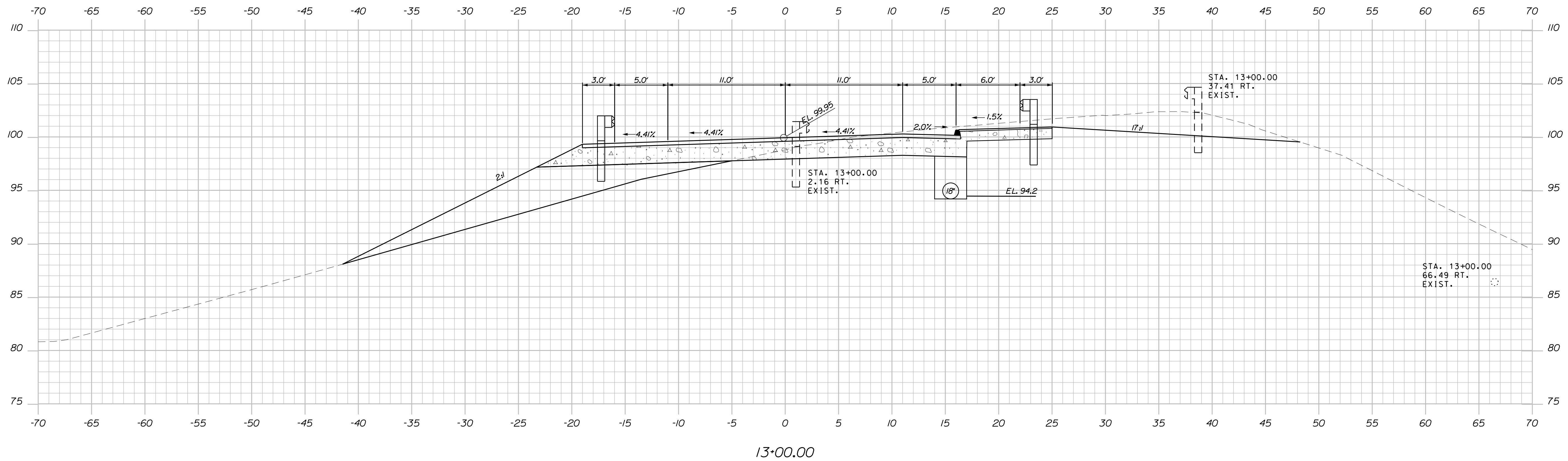
SHEET NUMBER
23
OF 88



12+50.00



12+25.00



Sta. 12+75.00 to Sta. 13+00.00

Date: 5/25/2025

Username: common

Division: BRIDGE

Filename: ... \HIGHWAY\025_Xsect (3).dgn

STATE OF MAINE	
DEPARTMENT OF TRANSPORTATION	
	2516100
	WIN
BRIDGE NO. 5501	25161.00
	BRIDGE PLANS

PROJ. MANAGER	Gerald Dostle	BY	DATE
DESIGN-DETAILED	GRS	GRS	03/2025
CHECKED-REVIEWED	SJM	SJM	03/2025
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DESIGN3-DETAILED3			
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FIELD CHANGES			

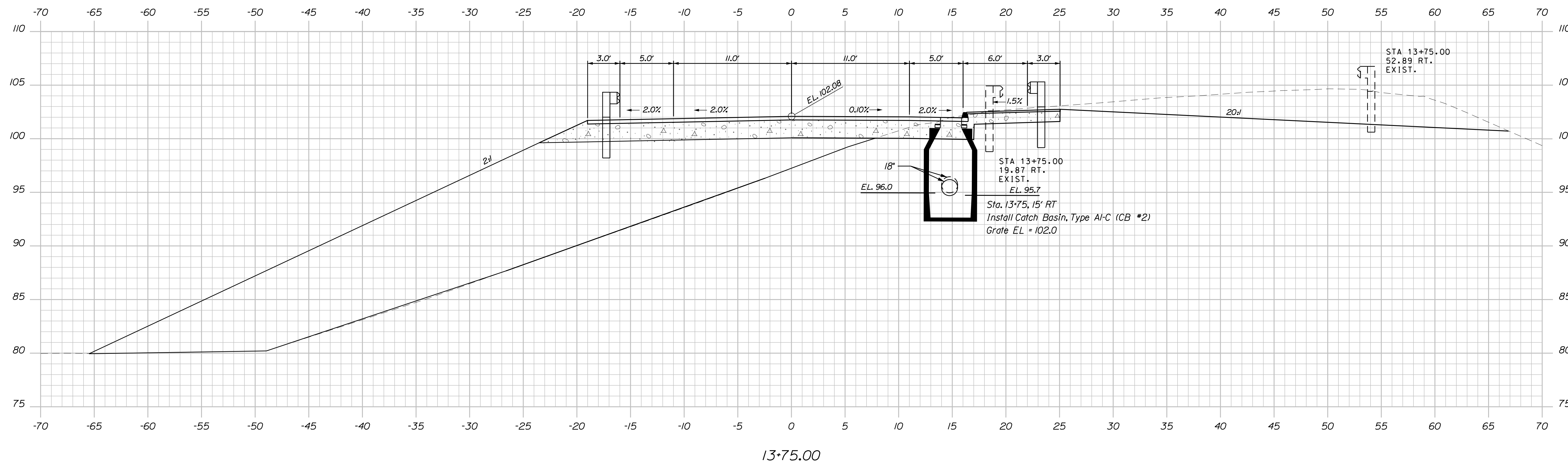
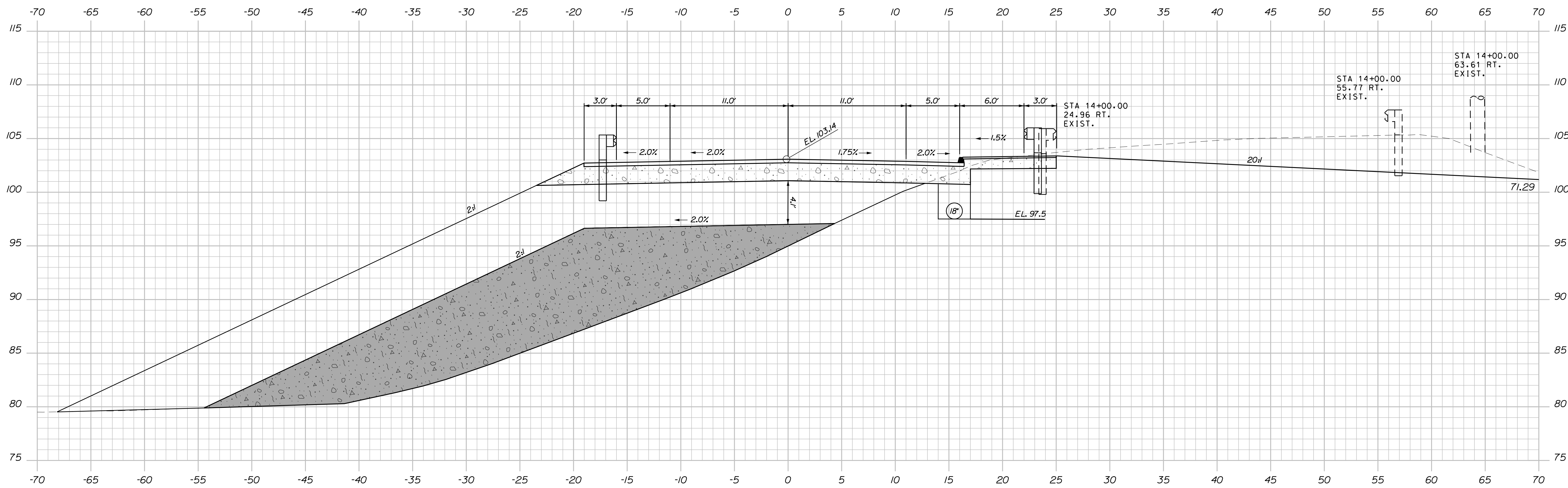
TUTTLE ROAD BRIDGE
INTERSTATE 295, RTE US 1 & MCRR
CUMBERLAND CUMBERLAND COUNTY

TUTTLE RD CROSS SECTIONS
(4 OF 21)

SHEET NUMBER

25

OF 88



Sta. 13+75.00 to Sta. 14+00.00

Date: 5/25/2025

Username: common

Division: BRIDGE

Filename: ... \HIGHWAY\027_Xsect (3).dgn

STATE OF MAINE

DEPARTMENT OF TRANSPORTATION

2516100

WIN 25164.00

WIN

BRIDGE PLANS

TUTTLE ROAD BRIDGE

TO THE ROAD BRIDGE
INTERSTATE 295, RTE US 1 & MCRR

CUMBERLAND CUMBERLAND COUNTY

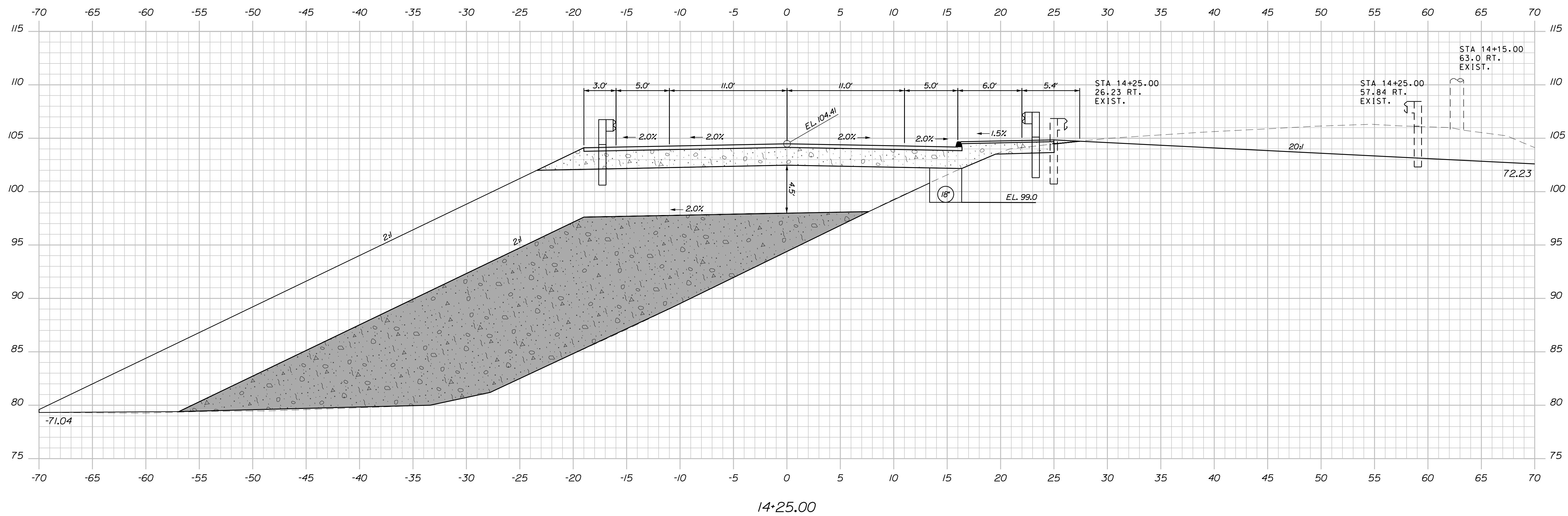
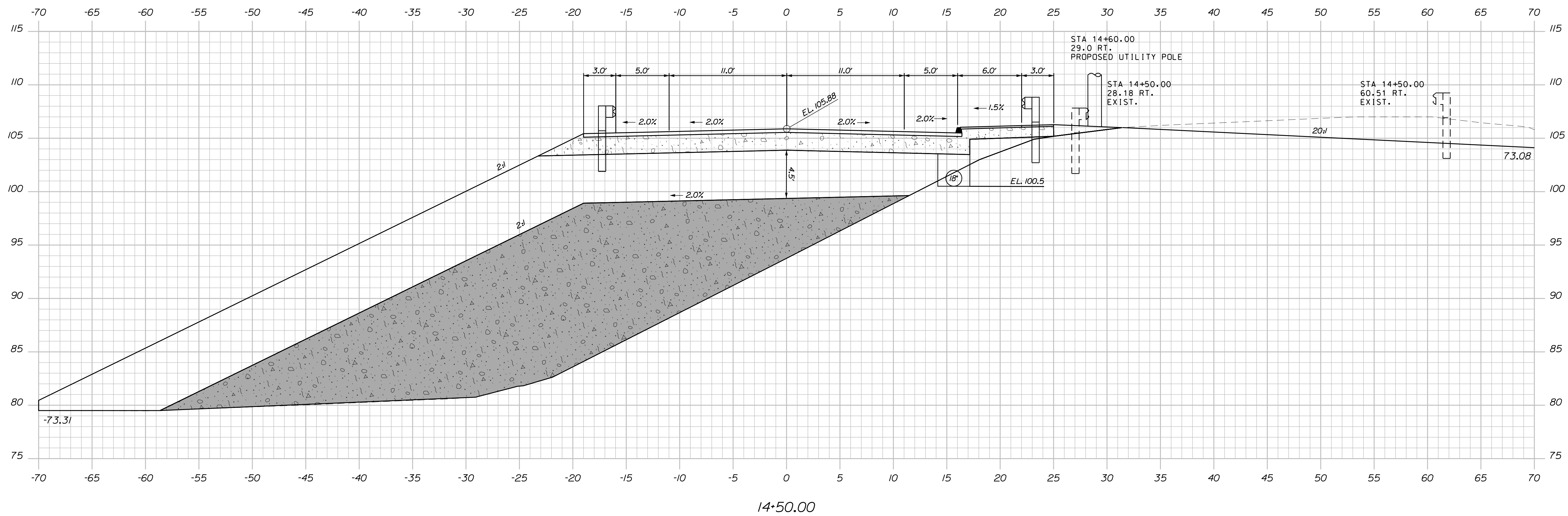
TUILE RD CROSS SECTIONS (E OF 21)

(6 OF 21)

SHEET NUMBER

27

OF 88

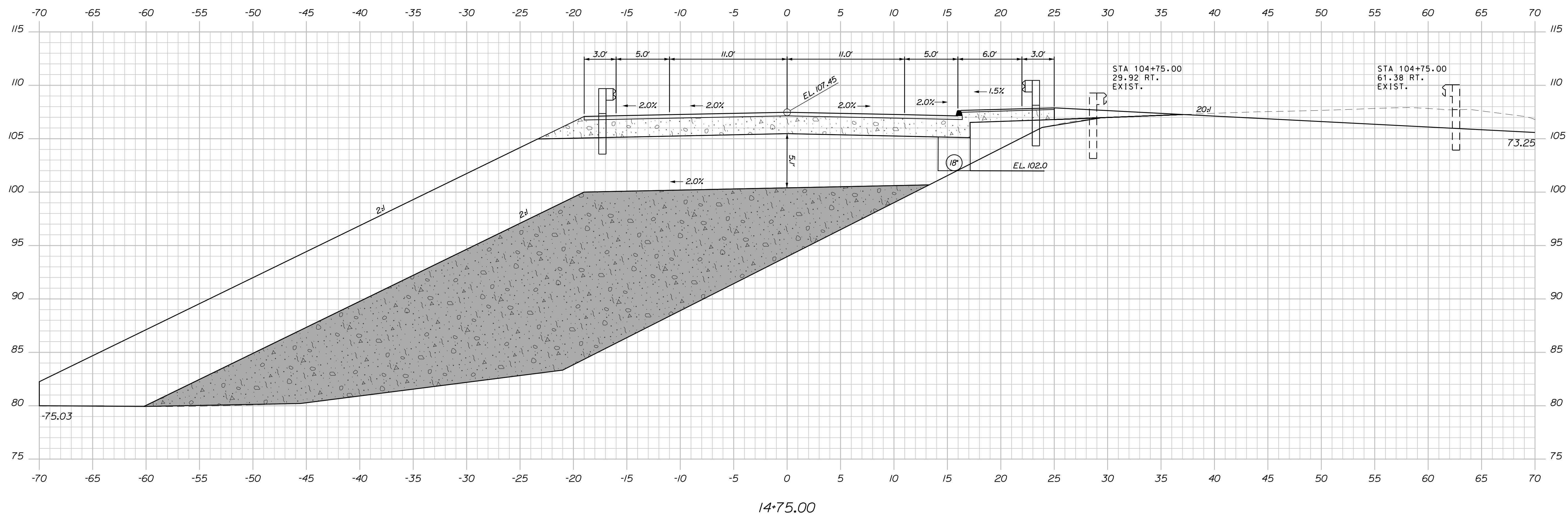
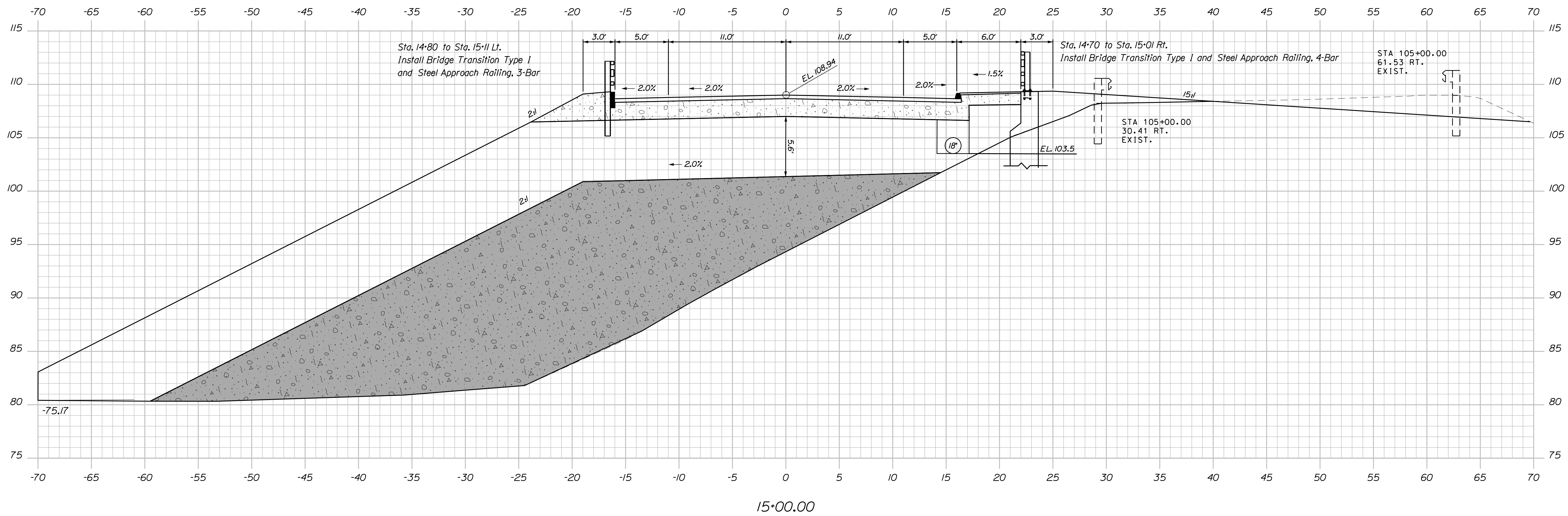


STATE OF MAINE	
DEPARTMENT OF TRANSPORTATION	
2516100	
BRIDGE NO. 5801	WIN 25161.00
BRIDGE PLANS	

PROJ. MANAGER	Gen'dl. Dist'dl.	BY	DATE
DESIGN-DETAILED	GRS		03/2025
CHECKED-REVIEWED	SLM		03/2025
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			
			SIGNATURE
			P.E. NUMBER
			DATE

TUTTLE ROAD BRIDGE
INTERSTATE 295, RTE US 1 & MCRR
CUMBERLAND CUMBERLAND COUNTY
TUTTLE RD CROSS SECTIONS
(7 OF 21)

SHEET NUMBER
28
OF 88



STATE OF MAINE	
DEPARTMENT OF TRANSPORTATION	
	2516100
BRIDGE NO. 5801	WIN 25161.00
BRIDGE PLANS	

PROJ. MANAGER	Gen'dl. Dist'dl.	BY	DATE
DESIGN-DETAILED	GRS		03/20/2025
CHECKED-REVIEWED	SLM		03/20/2025
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

TUTTLE ROAD BRIDGE
INTERSTATE 295, RTE US 1 & MCRR
CUMBERLAND CUMBERLAND COUNTY
TUTTLE RD CROSS SECTIONS
(8 OF 21)

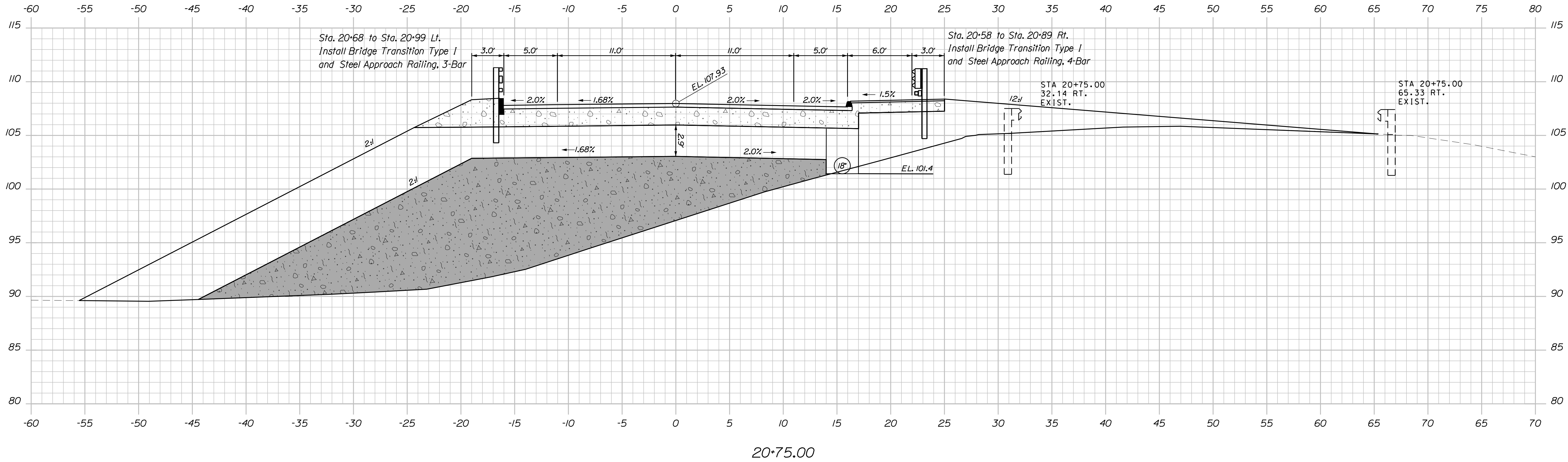
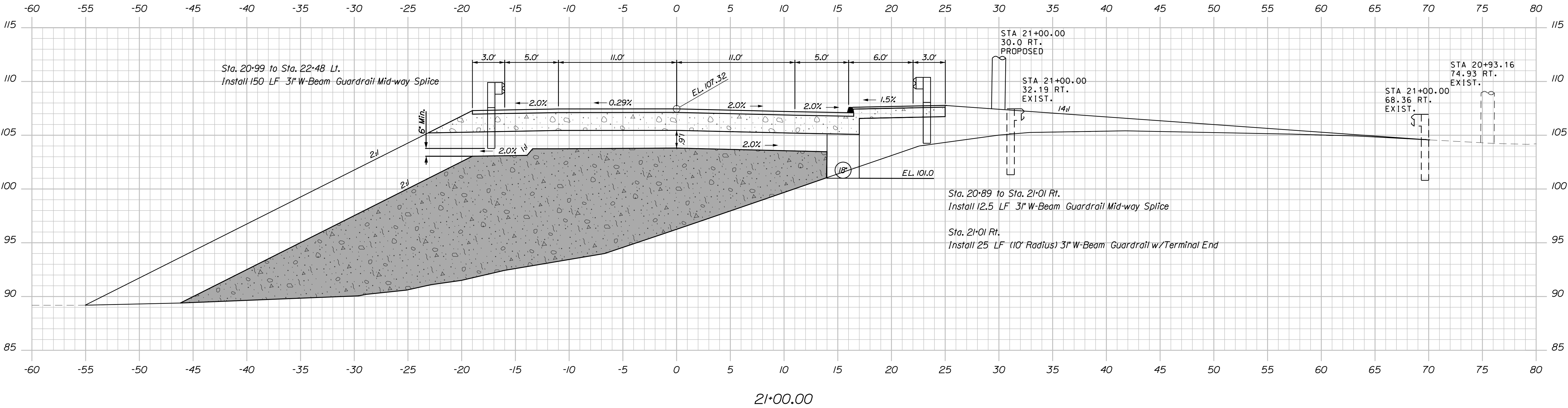
SHEET NUMBER
29
OF 88

Date:5/25/2025

Username: common

Division: BRIDGE

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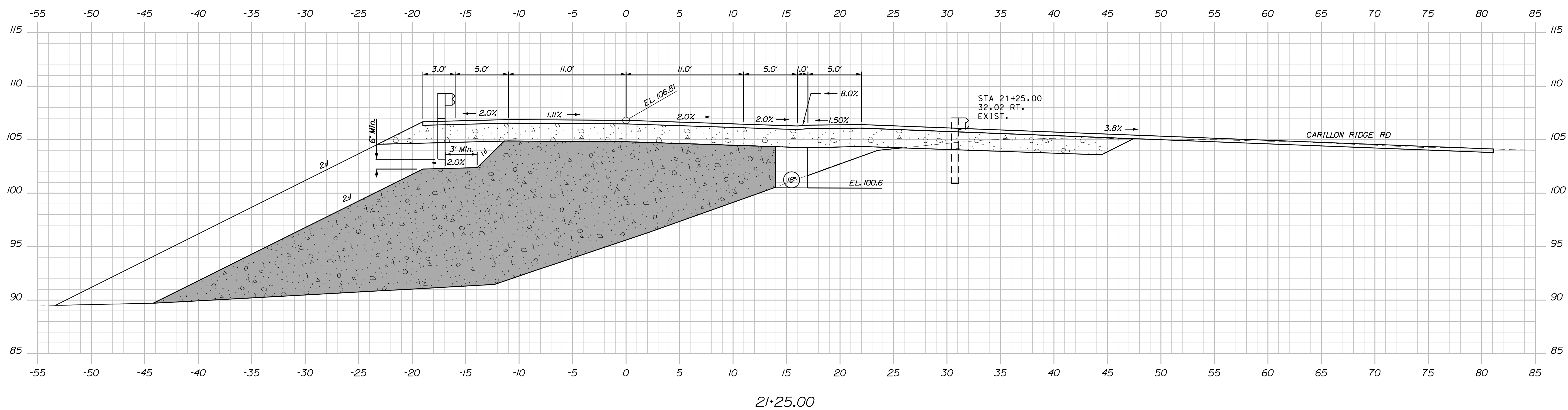
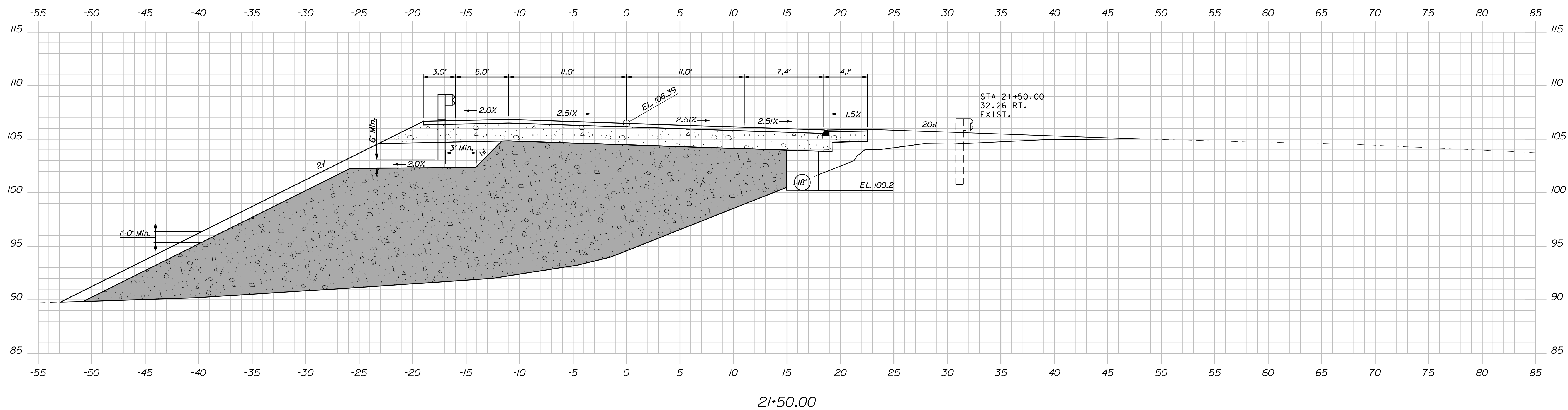
STA 15+20.00
END FULL DEPTH RECONSTRUCTION
BEGIN BRIDGE

STA 15+20.00
TO STA 20+50.16
BRIDGE STATION RANGE

STA 20+50.16
END BRIDGE
BEGIN FULL DEPTH RECONSTRUCTION

Sta. 20+75.00 to Sta. 21+00.00

SHEET NUMBER										STATE OF MAINE									
30										DEPARTMENT OF TRANSPORTATION									
										2516100									
OF 88										WIN									
										25161.00									
BRIDGE NO. 5801										BRIDGE PLANS									
TUTTLE ROAD BRIDGE										TUTTLE RD CROSS SECTIONS									
INTERSTATE 295, RTE US 1 & MCRR										(9 OF 21)									
CUMBERLAND COUNTY										CUMBERLAND COUNTY									
PROJ. MANAGER										P.E. NUMBER									
DESIGN-DETAILED										DATE									
CHECKED-REVIEWED										SIGNATURE									
DESIGN2-DETAILED2										P.E. NUMBER									
DESIGN3-DETAILED3										DATE									
REVISED 1										DATE									
REVISED 2										DATE									
REVISED 3										DATE									
REVISED 4										DATE									
FIELD CHANGES										DATE									



Date: 5/25/2025

Username: common

Division: BRIDGE

Filename: ... \HIGHWAY\031_Xsect (3).dgn

STATE OF MAINE

DEPARTMENT OF TRANSPORTATION

2516100

WIN

25161.00

BRIDGE NO. 5801

TUTTLE ROAD BRIDGE

INTERSTATE 295, RTE US 1 & MCRR

CUMBERLAND CUMBERLAND COUNTY

(10 OF 21)

SHEET NUMBER

31

OF 88

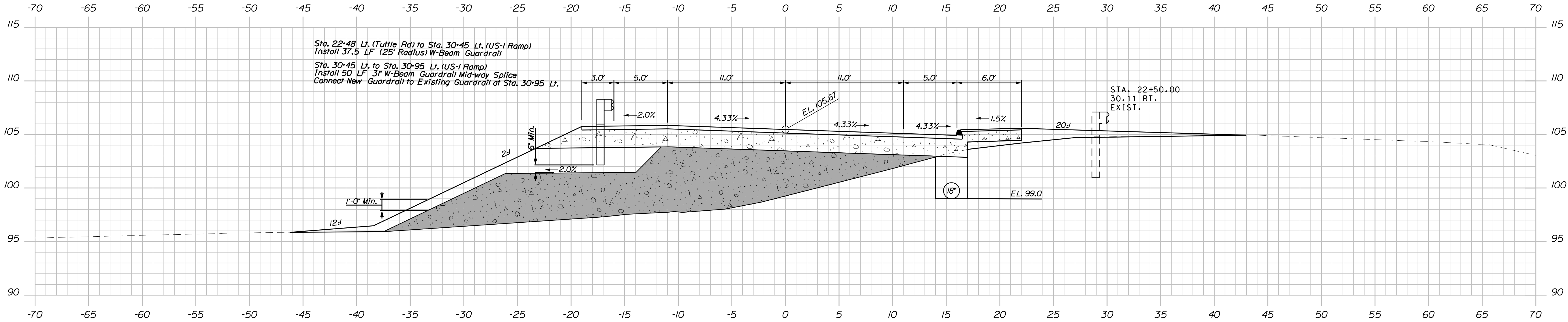
Sta. 21+25.00 to Sta. 21+50.00

Date:5/25/2025

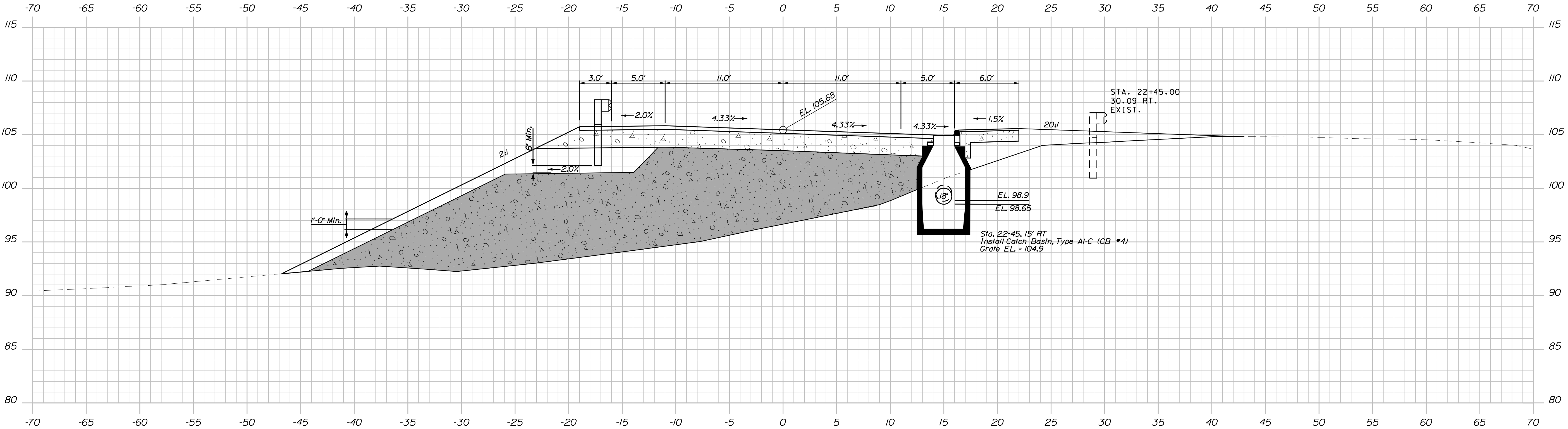
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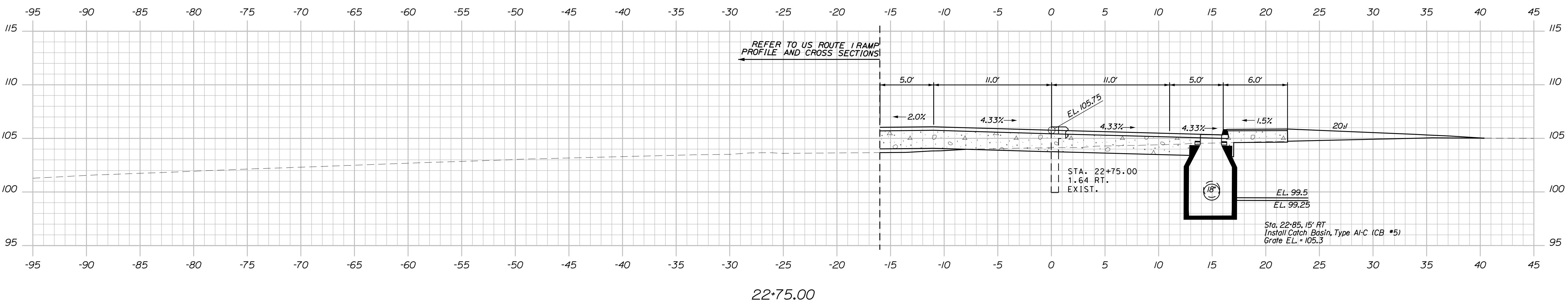
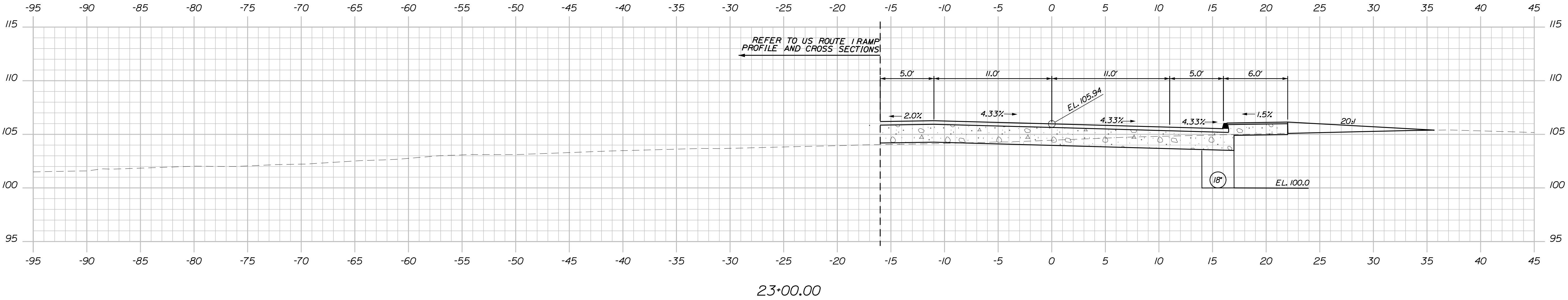


22+50.00



22+45.00

TUTTLE ROAD BRIDGE										PROJ. MANAGER		Gerald Dostie		BY		DATE		STATE OF MAINE			
INTERSTATE 295, RTE US 1 & MCRR CUMBERLAND COUNTY										DESIGN-DETAILED		GRS		GRS		03/2025		DEPARTMENT OF TRANSPORTATION			
										CHECKED-REVIEWED		SLM		SLM		03/2025					
										DESIGN2-DETAILED2											
										DESIGN3-DETAILED3											
TUTTLE RD CROSS SECTIONS (13 OF 21)										REVISIONS 1						P.E. NUMBER		2516100			
										REVISIONS 2											
										REVISIONS 3											
										REVISIONS 4											
										FIELD CHANGES											
SHEET NUMBER																BRIDGE NO. 5801		WIN			
																		25161.00		BRIDGE PLANS	
34										OF 88											



PROJ. MANAGER	DATE	BY	DATE
DESIGN-DETAILED	03/2025	GRS	03/2025
CHECKED-REVIEWED		SLM	
DESIGN-DETAILED			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

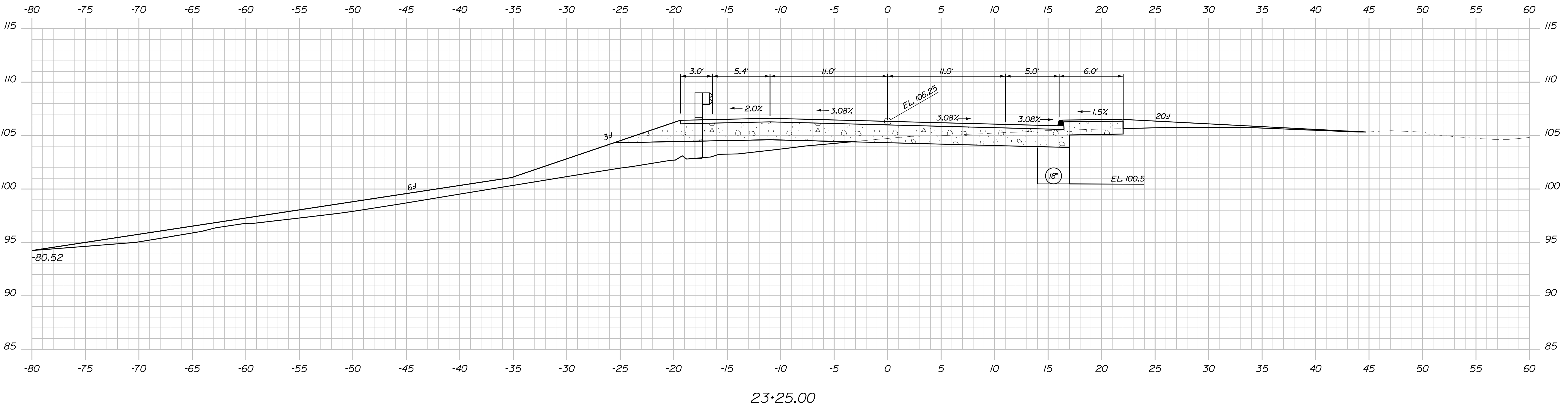
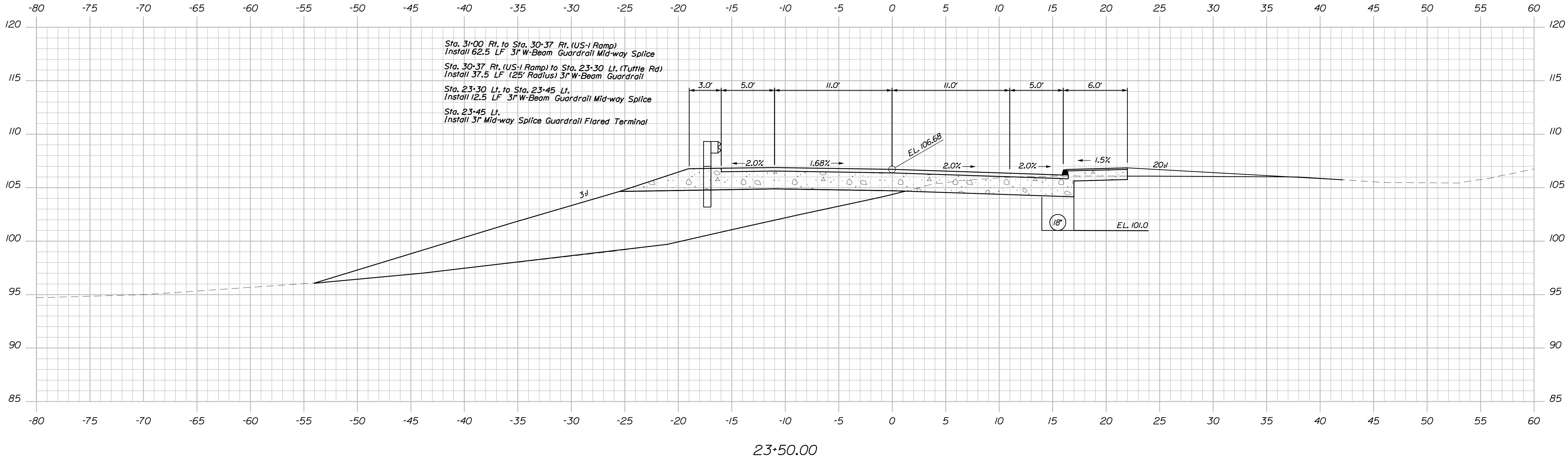
TUTTLE ROAD BRIDGE
INTERSTATE 295, RTE US 1 & MCRR
CUMBERLAND CUMBERLAND COUNTY
TUTTLE RD CROSS SECTIONS
(14 OF 21)

Date:5/25/2025

Username: common

Division: BRIDGE

Filename: ... \HIGHWAY\036_Xsect (2).dgn



STATE OF MAINE DEPARTMENT OF TRANSPORTATION	2516100		BRIDGE PLANS	
	WIN		25161.00	
	BRIDGE NO. 6601			

PROJ. MANAGER	DESIGN-DETAILED	CHECKED-REVIEWED	DATE	SIGNATURE
Gerald Dostle	GRS	GRS	03/2025	
	SLM	SLM	03/2025	
	DESIGN-DETAILED			P.E. NUMBER
	REVISIONS 1			DATE
	REVISIONS 2			
	REVISIONS 3			
	REVISIONS 4			
	FIELD CHANGES			

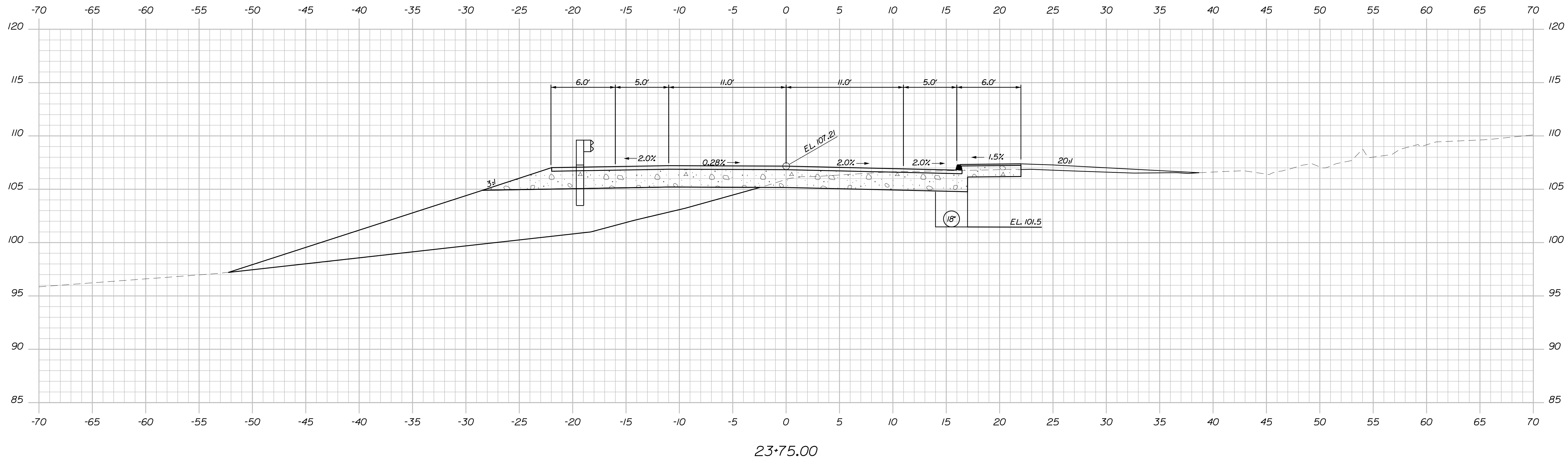
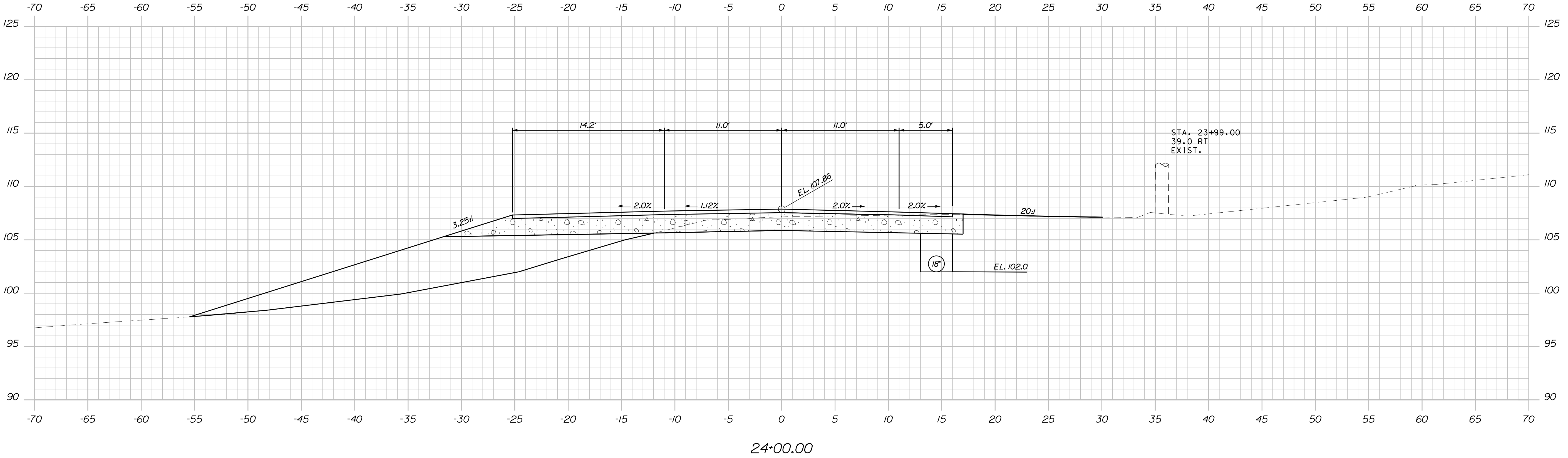
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Date:5/25/2025

Username: common

Division: BRIDGE

Filename: ... \HIGHWAY\037_Xsect (2).dgn



PROJ. MANAGER	DATE	BY	DATE
DESIGN-DETAILED	03/2025	GRS	03/2025
CHECKED-REVIEWED		SLM	
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REVISIONS 1			
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FIELD CHANGES			

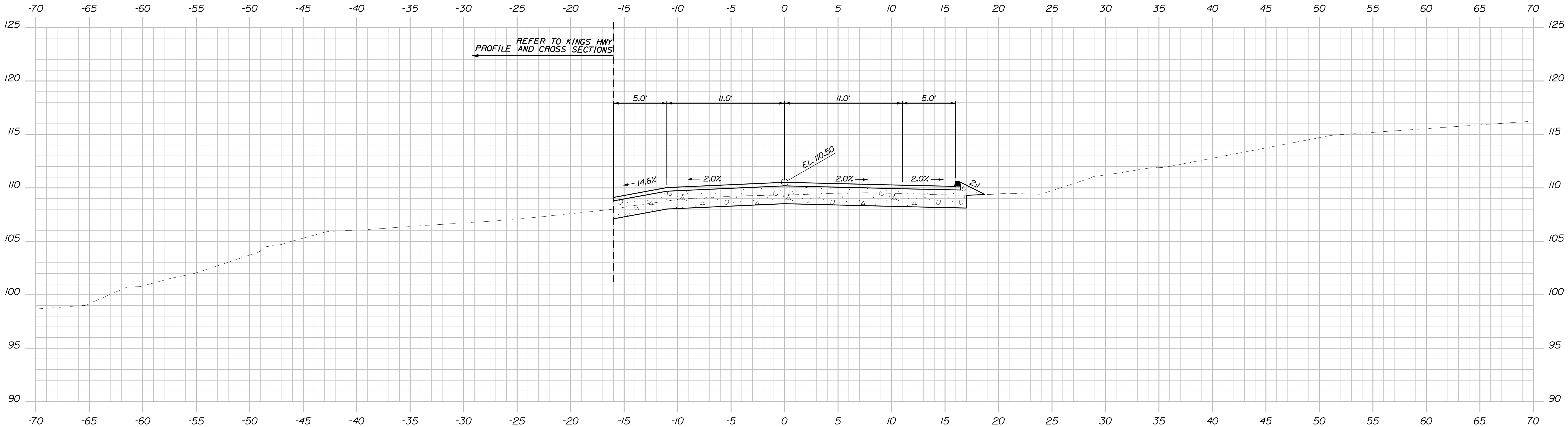
TUTTLE ROAD BRIDGE
INTERSTATE 295, RTE US 1 & MCRR
CUMBERLAND CUMBERLAND COUNTY
TUTTLE RD CROSS SECTIONS
(16 OF 21)

Date:5/25/2025

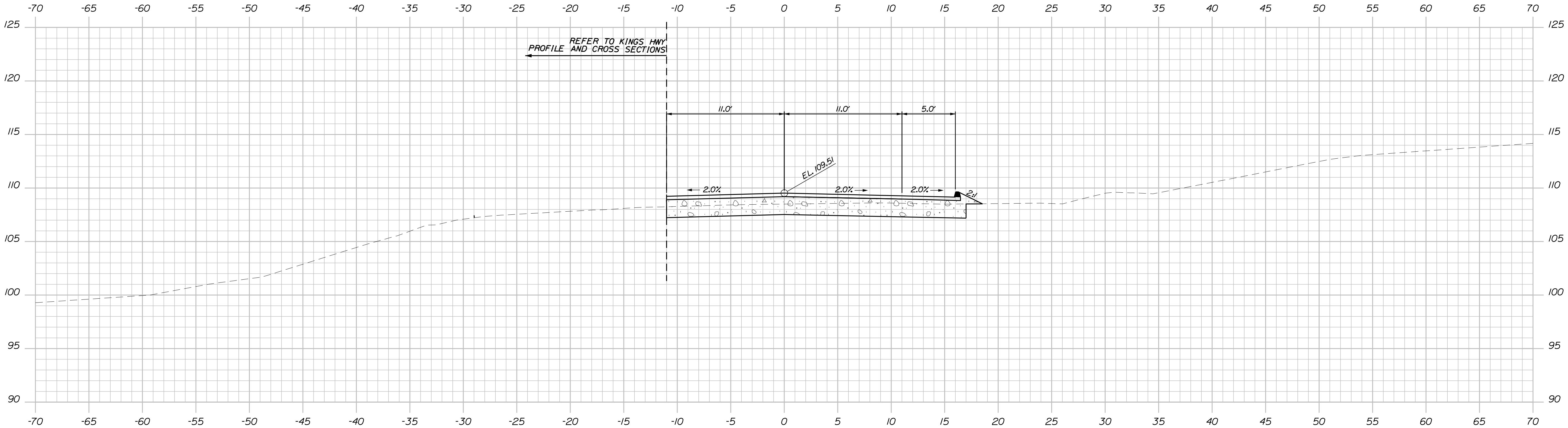
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Division: BRIDGE

Filename: ... \HIGHWAY\039_Xsect (2).dgn



24+75.00



24+50.00

STATE OF MAINE DEPARTMENT OF TRANSPORTATION	2516100	
	WIN	25161.00
	BRIDGE NO. 6601	BRIDGE PLANS

PROJ. MANAGER Gerald Dostle	BY GRS SLM	DATE 03/2025
		SIGNATURE
DESIGN-DETAILED CHECKED-REVIEWED DESIGNS-DETAILED	GRS SLM	P.E. NUMBER
		DATE
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

TUTTLE ROAD BRIDGE INTERSTATE 295, RTE US 1 & MCRR CUMBERLAND CUMBERLAND COUNTY	TUTTLE RD CROSS SECTIONS (18 OF 21)
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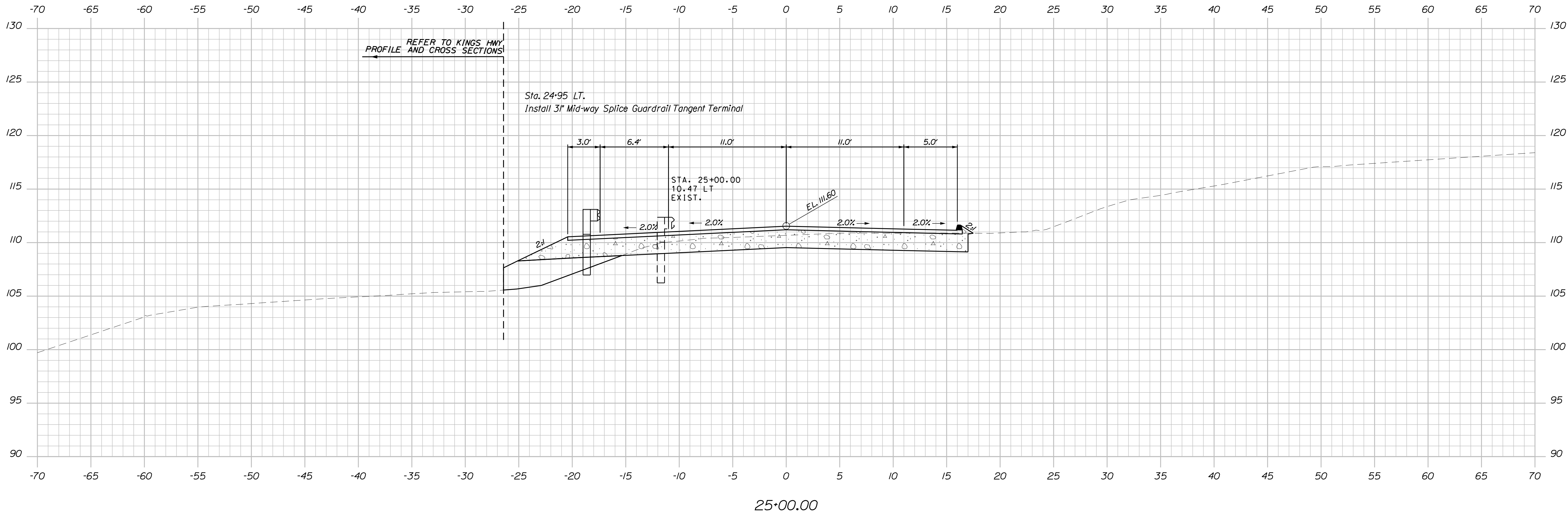
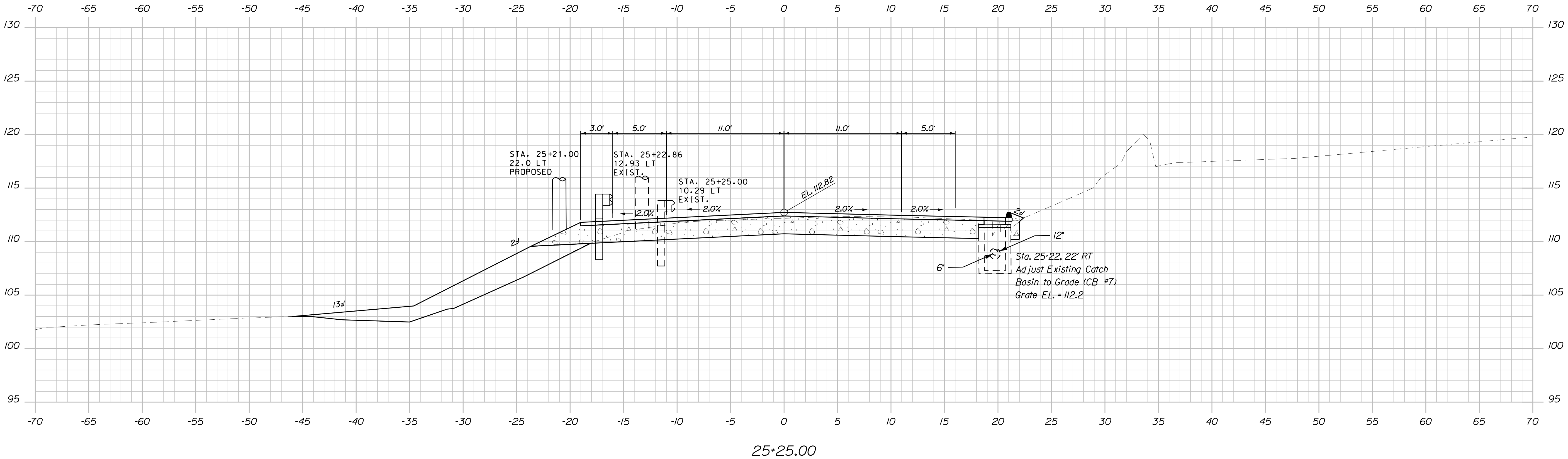
SHEET NUMBER
39
OF 88

Date:5/25/2025

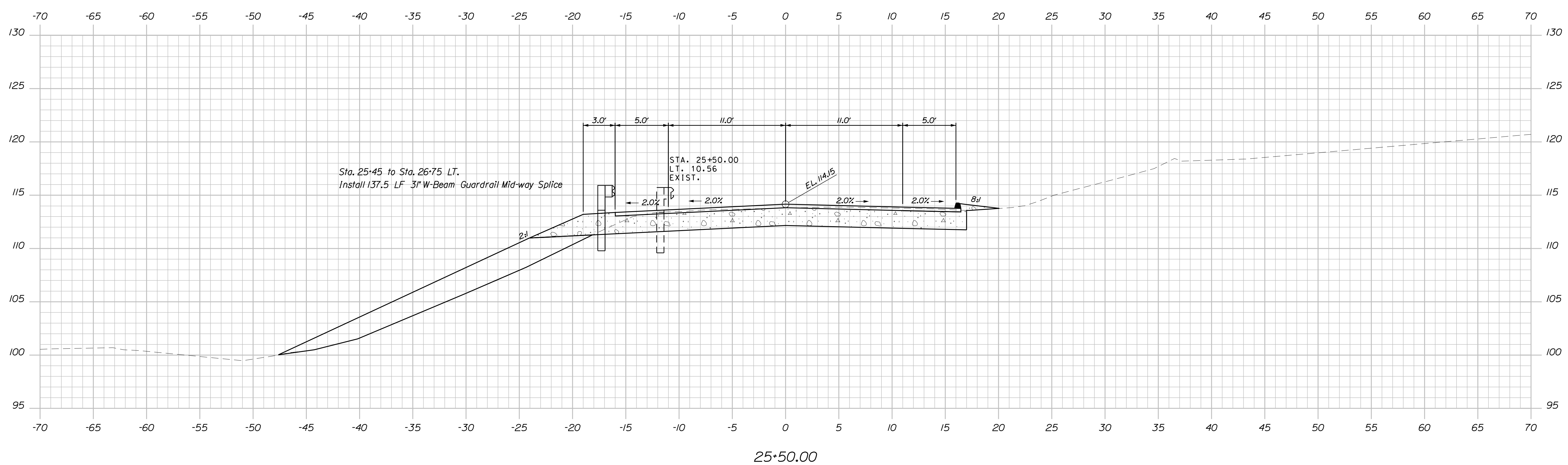
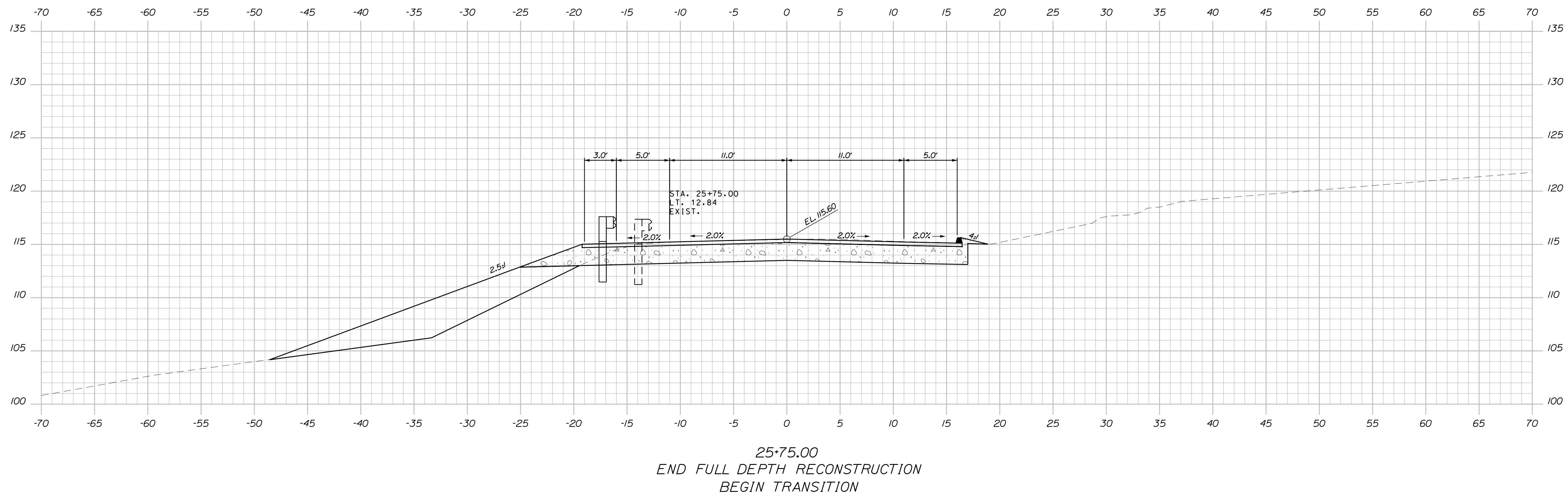
Username: common

Division: BRIDGE

Filename: ... \HIGHWAY\040_Xsect (2).dgn



PROJ. MANAGER	DATE	BY	DATE
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CHECKED-REVIEWED		SLM	
DESIGN-DETAILED			
DESIGN-DETAILED			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			



STATE OF MAINE

DEPARTMENT OF TRANSPORTATION

2516100

WIN

RIDGE NO. 5801
25161.00

BRIDGE PLANS

TUTTLE ROAD BRIDGE
INTERSTATE 295, RTE US 1 & MCRR
CUMBERLAND CUMBERLAND COUNTY

TUTTLE RD CROSS SECTIONS
(20 OF 21)

SHEET NUMBER

41

OF 88

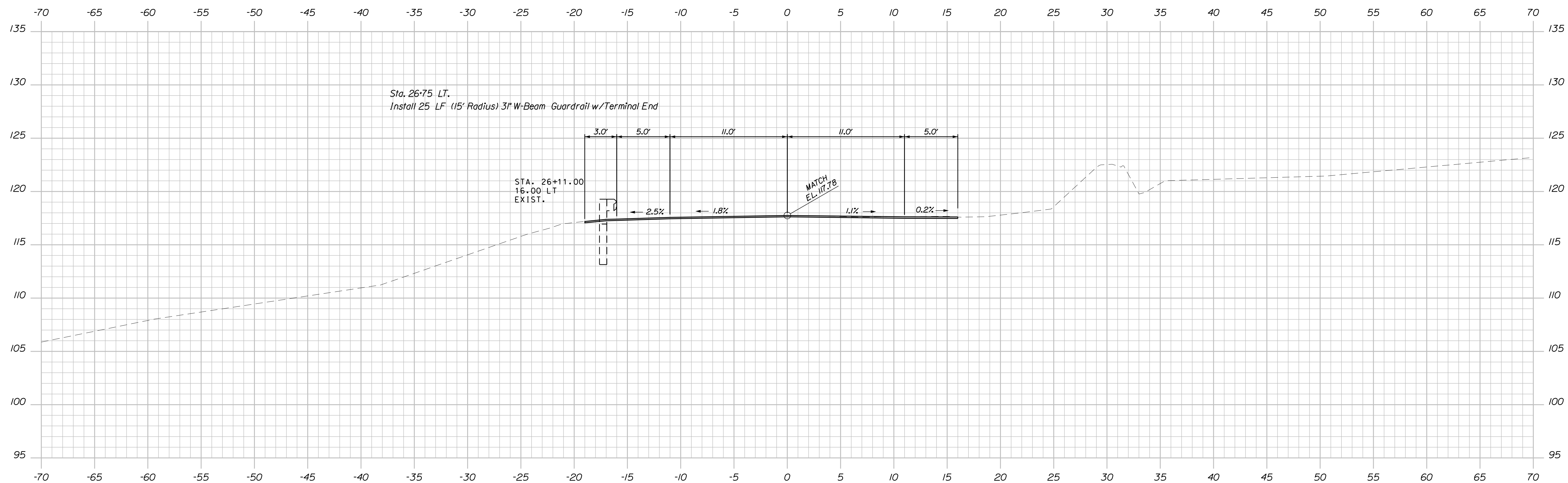
Sta. 25+50.00 to Sta. 25+75.00

Date: 5/25/2025

Username: common

Division: BRIDGE

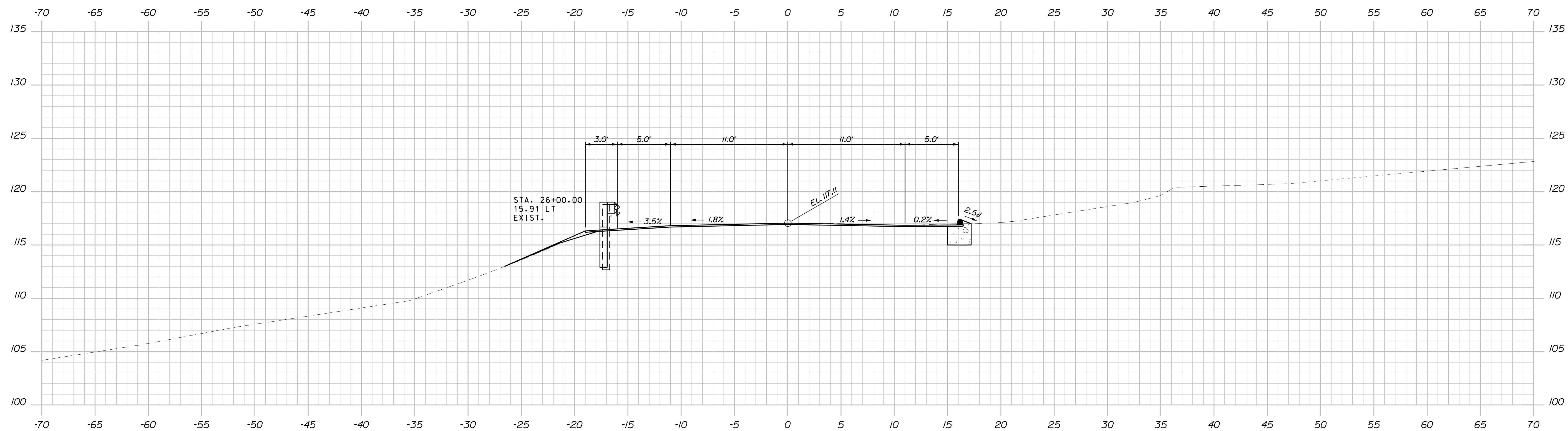
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Sta. 26+75 LT.
Install 25' LF (15' Radius) 31" W-Beam Guardrail w/Terminal End

STA. 26+11.00
16.00 LT
EXIST.

26+11.00
END 1 1/2" MILL & OVERLAY
MATCH EXISTING



STA. 26+
15.91 LT
EXIST.

26*00.00
END TRANSITION
BEGIN 1 1/2" MILL & OVERLAY

STATE OF MAINE

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2516100

WIN
1€1.00

BRIDGE PLANS

TUTTLE ROAD BRIDGE

FOOTILE ROAD BRIDGE
INTERSTATE 295, RTE US 1 & MCRR

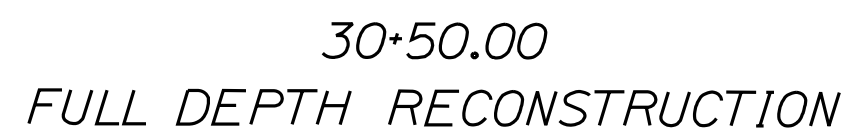
CUMBERLAND CUMBERLAND COUNTY
TUTTLE RD CROSS SECTIONS
(21 OF 21)

SHEET NUMBER

42

OF 88

Sta. 26+00.00 to Sta. 26+11.00

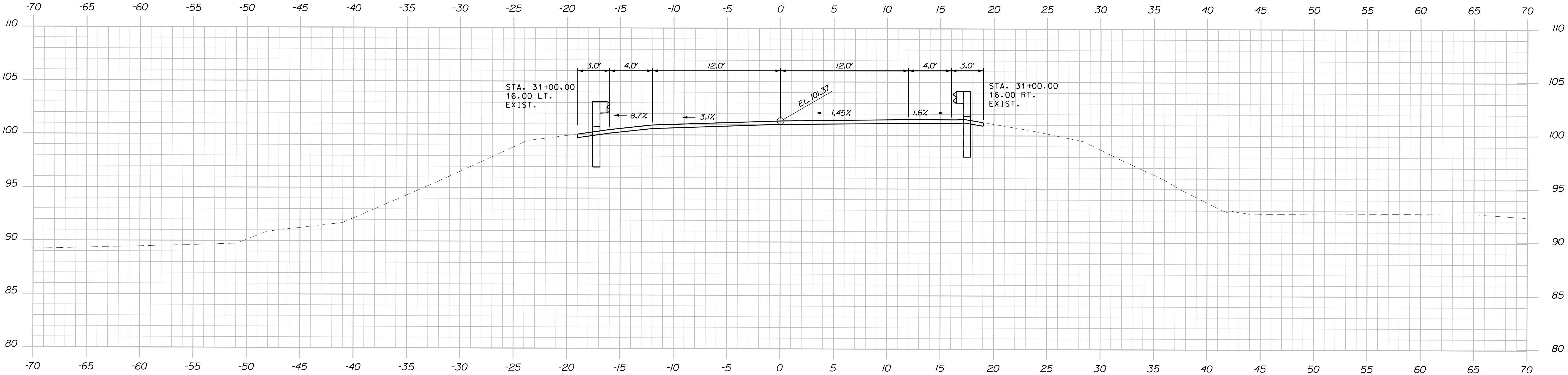
Sta. 30+50.00

Date:5/25/2025

Username: common

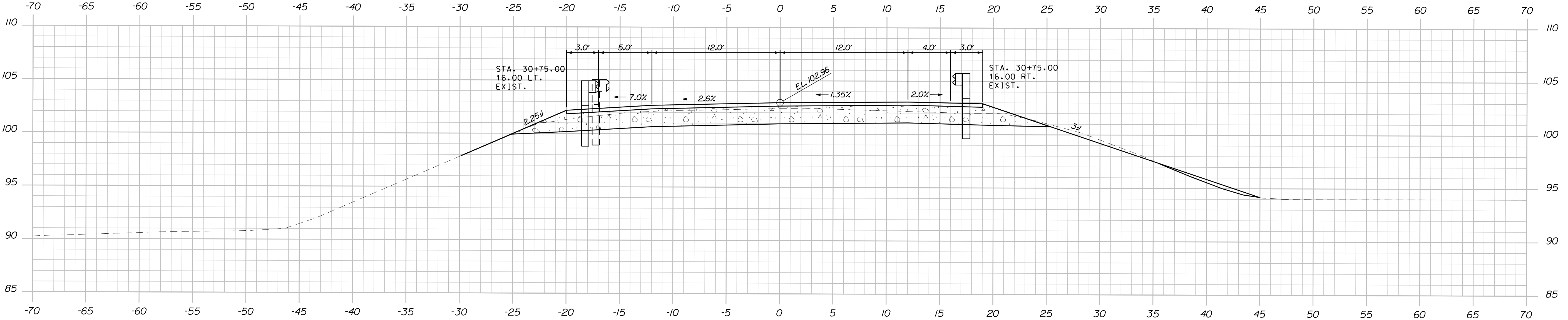
Division: BRIDGE

Filename: ... \HIGHWAY\044_Xsect.dgn



31+00.00
END 1 1/2" MILL & OVERLAY
MATCH EXISTING

STA 30+95
END TRANSITION
BEGIN 1 1/2" MILL & OVERLAY



30+75.00

STA 30+70
END FULL DEPTH RECONSTRUCTION
BEGIN TRANSITION

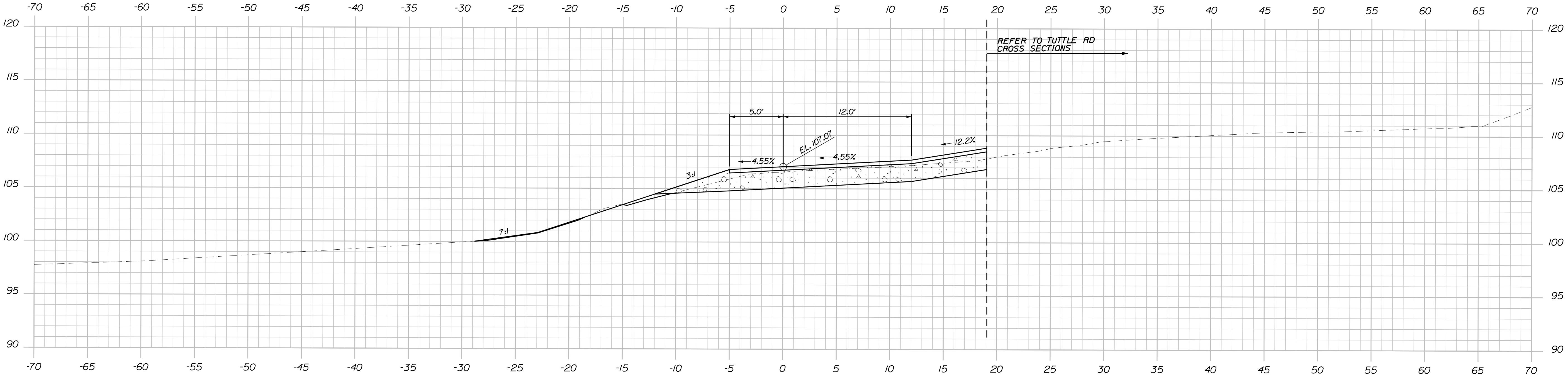
SHEET NUMBER										STATE OF MAINE									
44										DEPARTMENT OF TRANSPORTATION									
										2516100									
OF 88										BRIDGE NO. 5801									
										WIN									
25161.00										BRIDGE PLANS									
TUTTLE ROAD BRIDGE										PROJ. MANAGER									
INTERSTATE 295, RTE US 1 & MCRR										Gerald Dostie									
CUMBERLAND COUNTY										BY									
US ROUTE 1 RAMP										DATE									
CROSS SECTIONS (2 OF 2)										SIGNATURE									
										P.E. NUMBER									
										DATE									

Date:5/25/2025

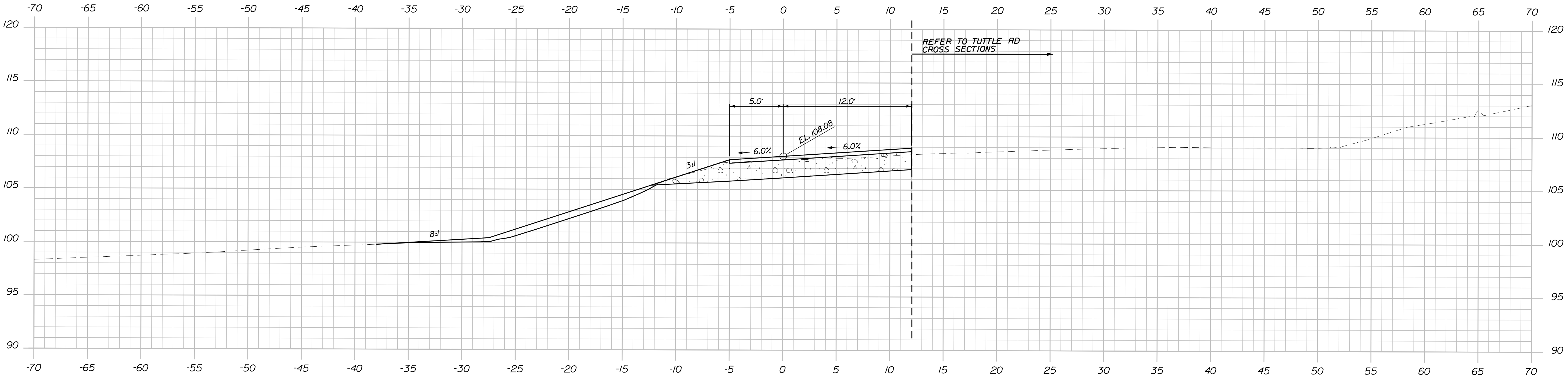
Username: common

Division: BRIDGE

Filename: ... \HIGHWAY\045_Xsect.dgn



40+75.00



40+50.00
FULL DEPTH RECONSTRUCTION

STATE OF MAINE DEPARTMENT OF TRANSPORTATION	2516100	
	WIN	25161.00
	BRIDGE NO. 6601	BRIDGE PLANS

PROJ. MANAGER	Gerald Dostle	BY	DATE	SIGNATURE
DESIGN-DETAILED	GRS	SLM	03/2025	P.E. NUMBER
CHECKED-REVIEWED	GRS	SLM	03/2025	DATE
DESIGN-DETAILED	GRS	SLM	03/2025	DATE
REVISIONS 1	GRS	SLM	03/2025	DATE
REVISIONS 2	GRS	SLM	03/2025	DATE
REVISIONS 3	GRS	SLM	03/2025	DATE
REVISIONS 4	GRS	SLM	03/2025	DATE
FIELD CHANGES	GRS	SLM	03/2025	DATE

TUTTLE ROAD BRIDGE INTERSTATE 295, RTE US 1 & MCRR CUMBERLAND CUMBERLAND COUNTY	KINGS HIGHWAY CROSS SECTIONS (1 OF 3)

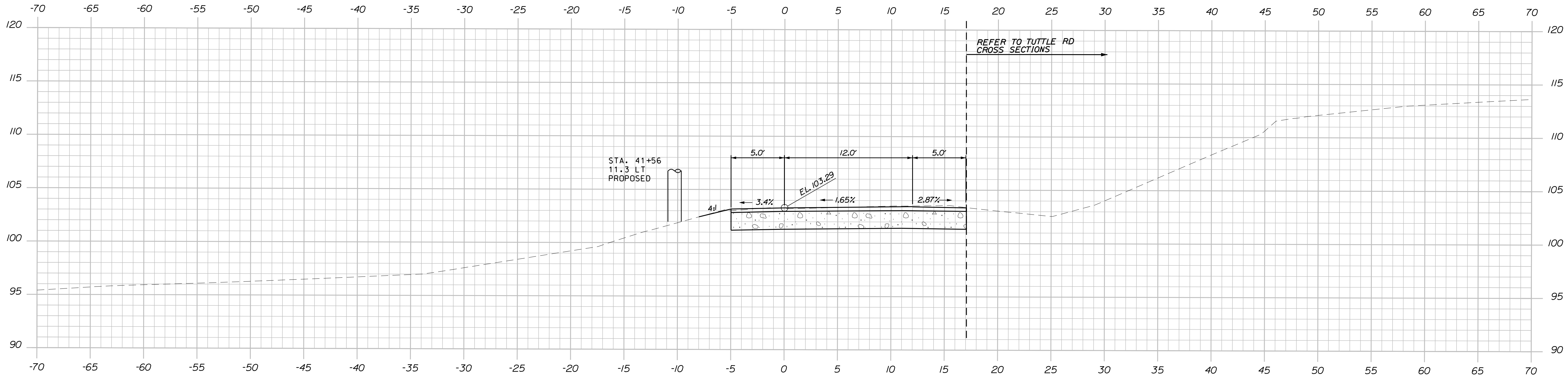
SHEET NUMBER
45
OF 88

Date:5/25/2025

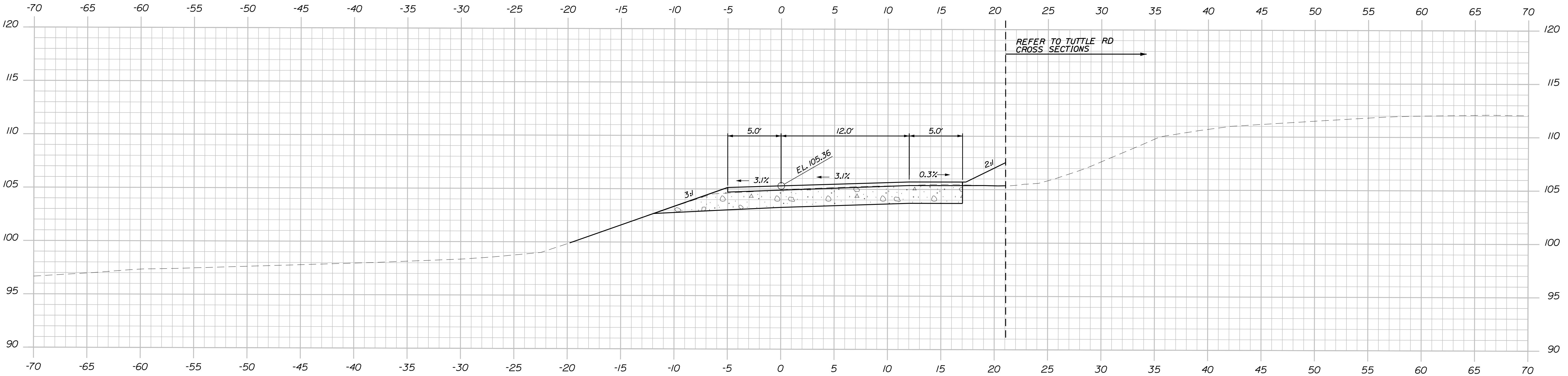
Username: common

Division: BRIDGE

Filename: ... \HIGHWAY\046_Xsect.dgn

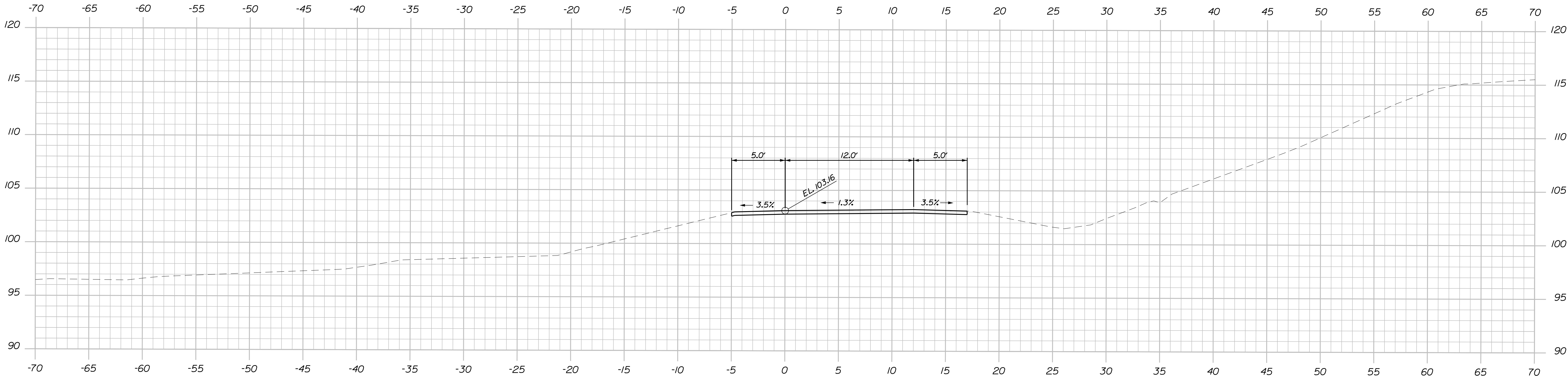


41+25.00
STA 41+22
END TRANSITION
BEGIN 1 1/2" MILL & OVERLAY



41+00.00
STA 40+97
END FULL DEPTH RECONSTRUCTION
BEGIN TRANSITION

STATE OF MAINE DEPARTMENT OF TRANSPORTATION	2516100		WIN		BRIDGE NO. 6601		BRIDGE PLANS		
	SIGNATURE		P.E. NUMBER		DATE				
	03/2025		03/2025						
TUTTLE ROAD BRIDGE INTERSTATE 295, RTE US 1 & MCRR CUMBERLAND CUMBERLAND COUNTY		PROJ. MANAGER Gerald Dostle		BY GRS SLM		DATE 03/2025		SHEET NUMBER 46 OF 88	
KINGS HIGHWAY CROSS SECTIONS (2 OF 3)		DESIGN-DETAILED CHECKED-REVIEWED DESIGN-DETAILED REVISIONS 1 REVISIONS 2 REVISIONS 3 REVISIONS 4 FIELD CHANGES		DESIGN-DETAILED CHECKED-REVIEWED DESIGN-DETAILED REVISIONS 1 REVISIONS 2 REVISIONS 3 REVISIONS 4 FIELD CHANGES		DESIGN-DETAILED CHECKED-REVIEWED DESIGN-DETAILED REVISIONS 1 REVISIONS 2 REVISIONS 3 REVISIONS 4 FIELD CHANGES		DESIGN-DETAILED CHECKED-REVIEWED DESIGN-DETAILED REVISIONS 1 REVISIONS 2 REVISIONS 3 REVISIONS 4 FIELD CHANGES	



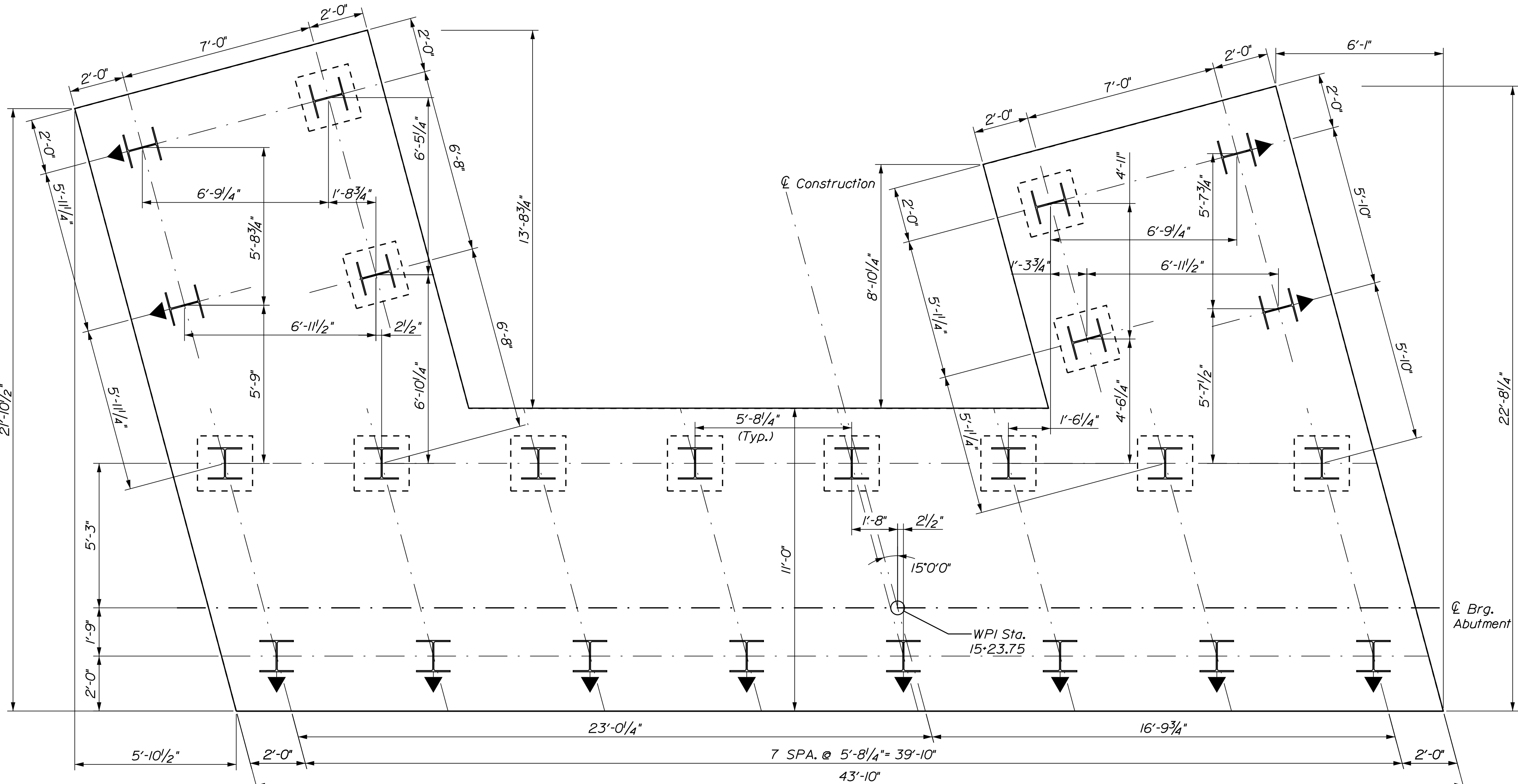
41+27.00
END 1/2" MILL & OVERLAY
MATCH EXISTING

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
2516100
WIN
BRIDGE NO. 5801
25161.00
BRIDGE PLANS

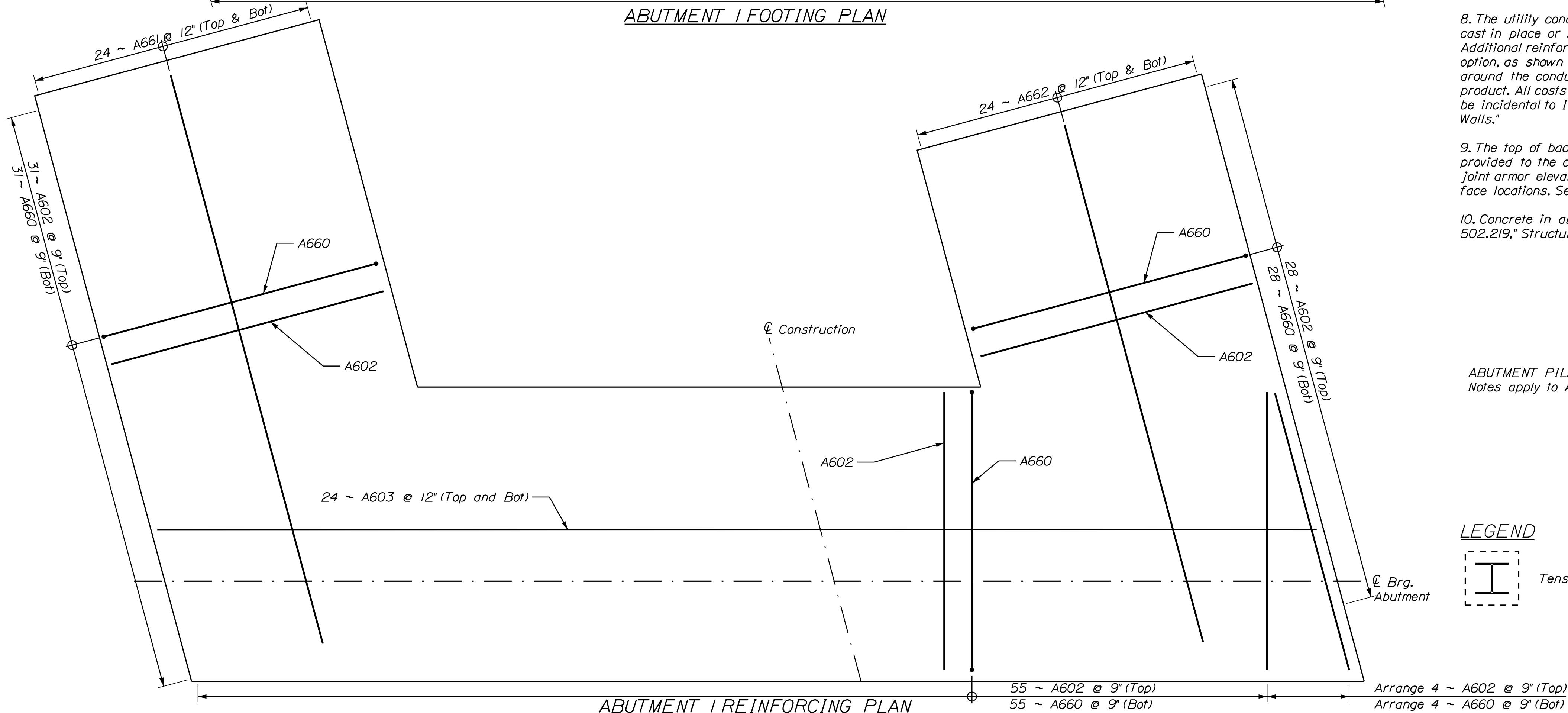
PROJ. MANAGER	Gerald Dostle	BY	DATE
DESIGN-DETAILED	GRS	GRS	03/2025
CHECKED-REVIEWED	SLM	SLM	03/2025
DESIGN-DETAILED			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

TUTTLE ROAD BRIDGE
INTERSTATE 295, RTE US 1 & MCRR
CUMBERLAND CUMBERLAND COUNTY
KINGS HIGHWAY
CROSS SECTIONS (3 OF 3)

SHEET NUMBER
47
OF 88



ABUTMENT 1 FOOTING PLAN



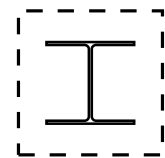
ABUTMENT 1 REINFORCING PLAN

ABUTMENT NOTES

1. Structural Earth Excavation required more than 12 inches below the bottom of the structure will be paid for in accordance with Standard Specifications Section 206, Structural Excavation.
2. Abutments, wingwalls, and their footings shall be backfilled with Granular Borrow or lightweight fill, as shown in the plans. Pay limits will be the structural excavation limits in cut areas and a vertical plane located 10 feet behind the walls in fill areas.
3. Reinforcing steel shall have a minimum concrete cover of 2 inches in the walls and 3 inches in the footings unless otherwise noted.
4. Place drains with a 4-inch diameter in the breastwall and wingwalls at 10 feet maximum spacing. The exact location will be determined by the Resident.
5. Construct French Drains behind the abutments and wingwalls in accordance with Standard Specifications Section 512, French Drains.
6. Cover joints where waterstops are not required in accordance with Standard Details Section 502.
7. The concrete pedestal elevations shown are approximate. The actual elevations shall be adjusted to accommodate the bearings supplied by the Contractor. The elevations provided on the Plans assume overall bearing heights as described on the "Bearing Details" sheet.
8. The utility conduits passing through the abutment backwalls shall be either cast in place or run through a utility blackout, at the option of the Contractor. Additional reinforcing steel shall be provided around the utility conduit for either option, as shown in the reinforcing details. If blockouts are used, all voids around the conduits shall be fully grouted with a MaineDOT pre-approved product. All costs associated with construction of utility conduit blockouts shall be incidental to Item 502.219, "Structural Concrete, Abutments and Retaining Walls."
9. The top of backwall elevations provided in abutment elevation views are provided to the concrete finish grade at all far face locations and to the final joint armor elevation or concrete finish grade elevation as appropriate at near face locations. See Finger Joint Detail sheets for additional details.
10. Concrete in abutment, wingwalls, and footings will be paid under Item 502.219, "Structural Concrete, Abutments and Retaining Walls".

ABUTMENT PILE NOTES on Abutment No. 2 Pile and Footing Plan and Notes apply to Abutment No. 1 and Abutment No. 2.

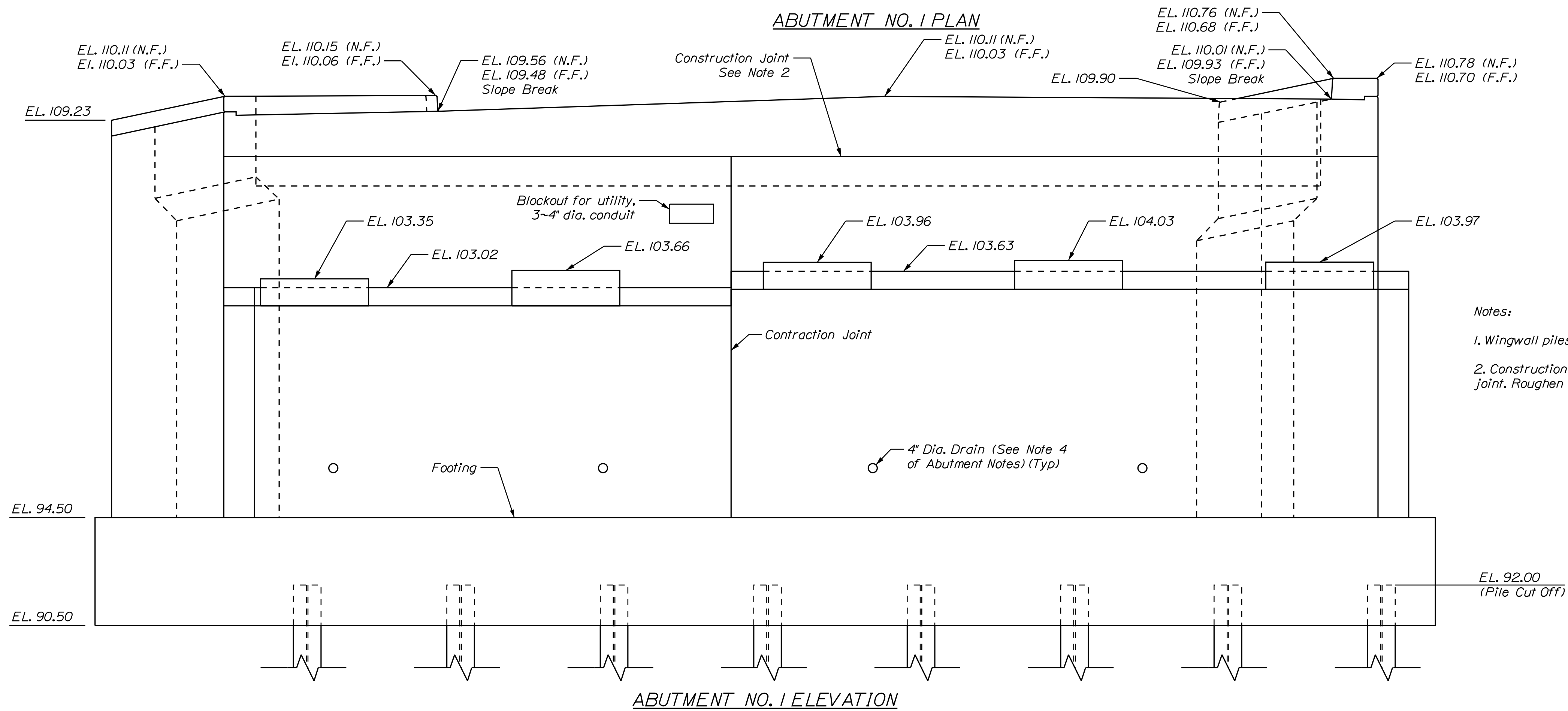
LEGEND

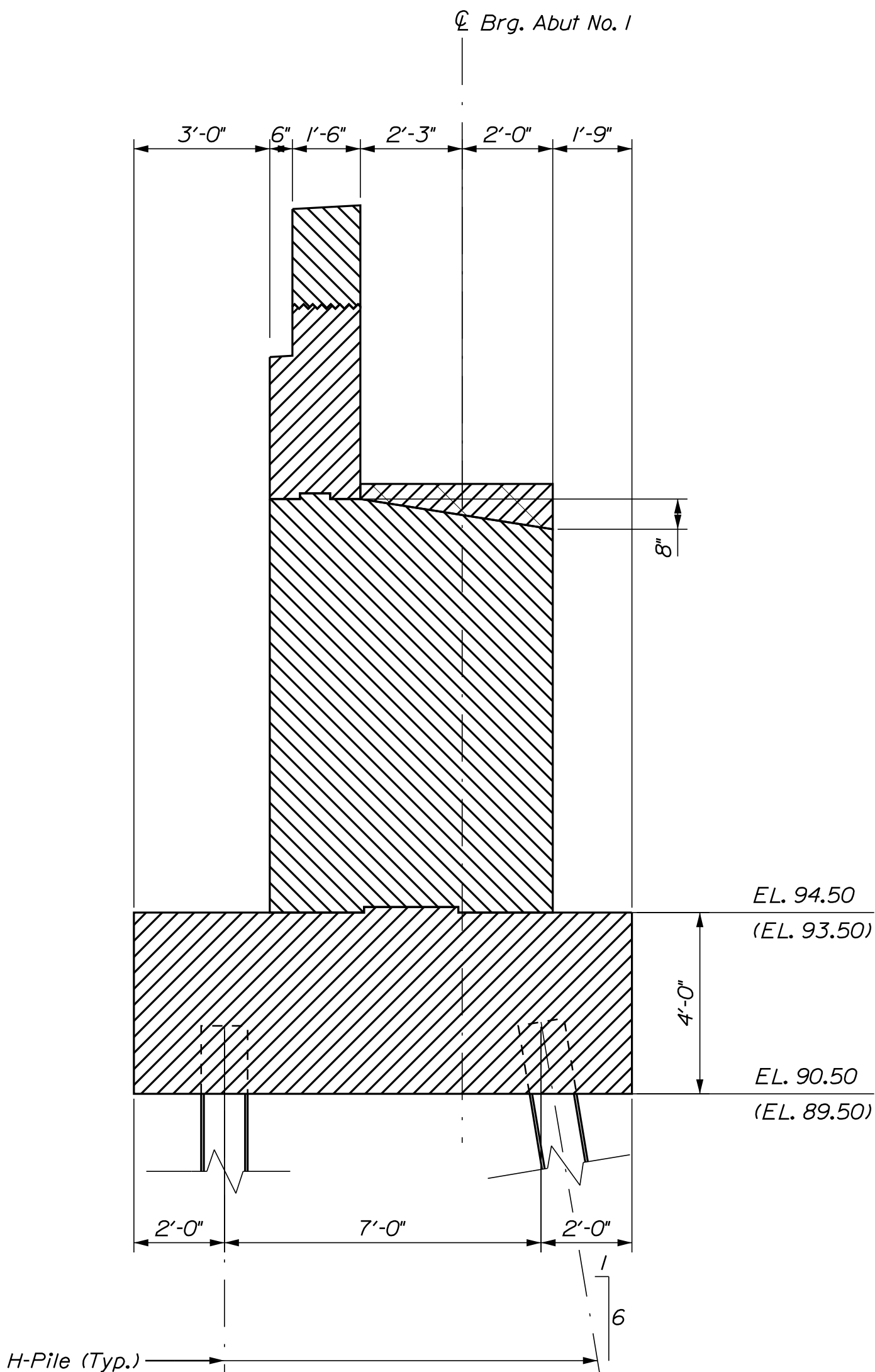
 Tension Pile - For Details, See Sheet Abutment No. 1 Reinforcing

STATE OF MAINE		DEPARTMENT OF TRANSPORTATION		2516100		WIN		BRIDGE NO. 6601		BRIDGE PLANS	
TUTTLE ROAD BRIDGE		INTERSTATE 295, RTE US 1 & MCRR		CUMBERLAND COUNTY		ABUTMENT NO. 1 PILE AND FOOTING PLAN AND NOTES		SHEET NUMBER		48	
DATE		BY		SIGNATURE		P.E. NUMBER		DATE		OF 88	
03/2025		CT		RF		REVISIONS 1		REVISIONS 2		REVISIONS 3	
03/2025		FF		FF		REVISIONS 4		FIELD CHANGES			

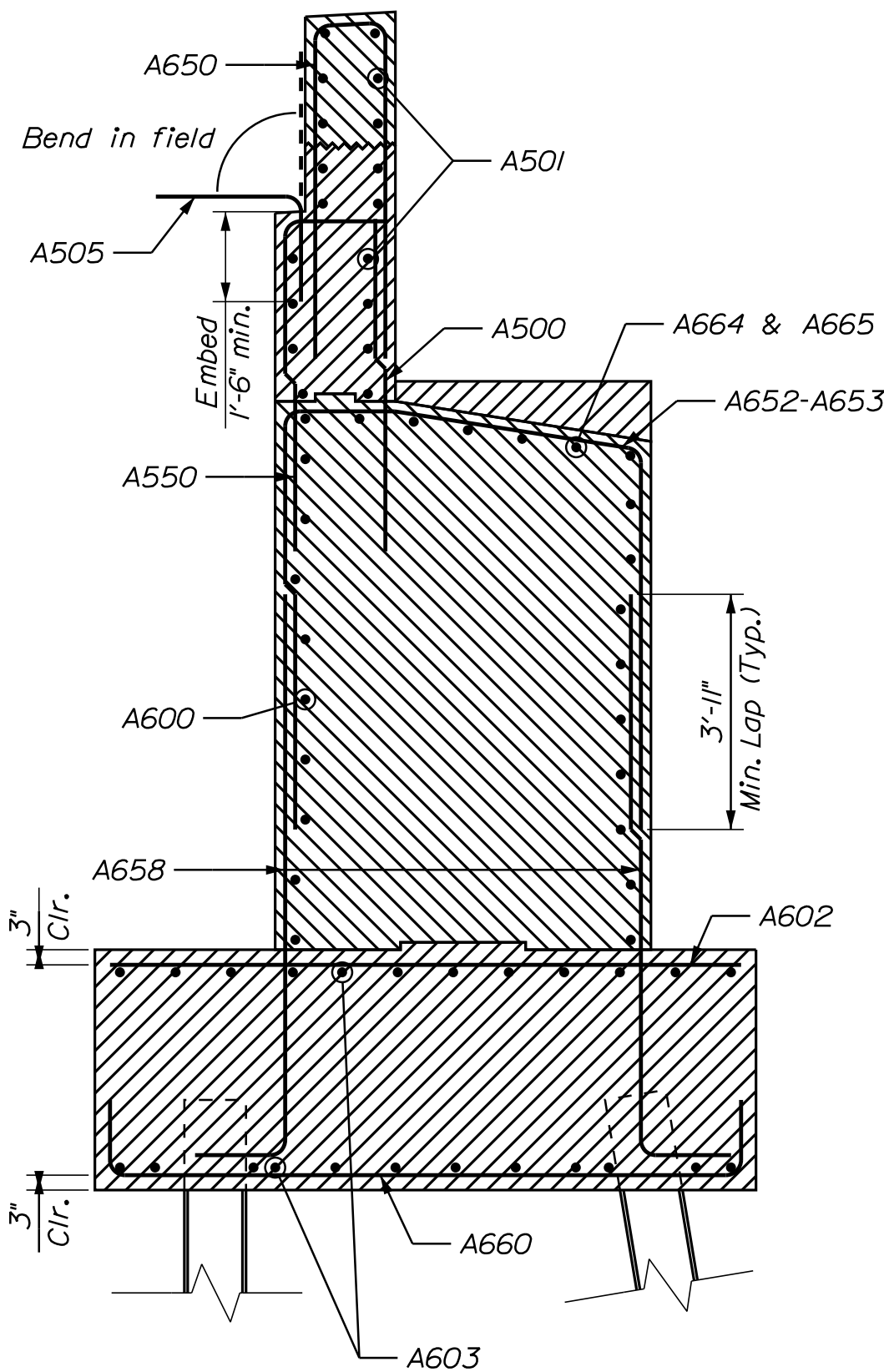


N.F. - Near Face
F.F. - Far Face

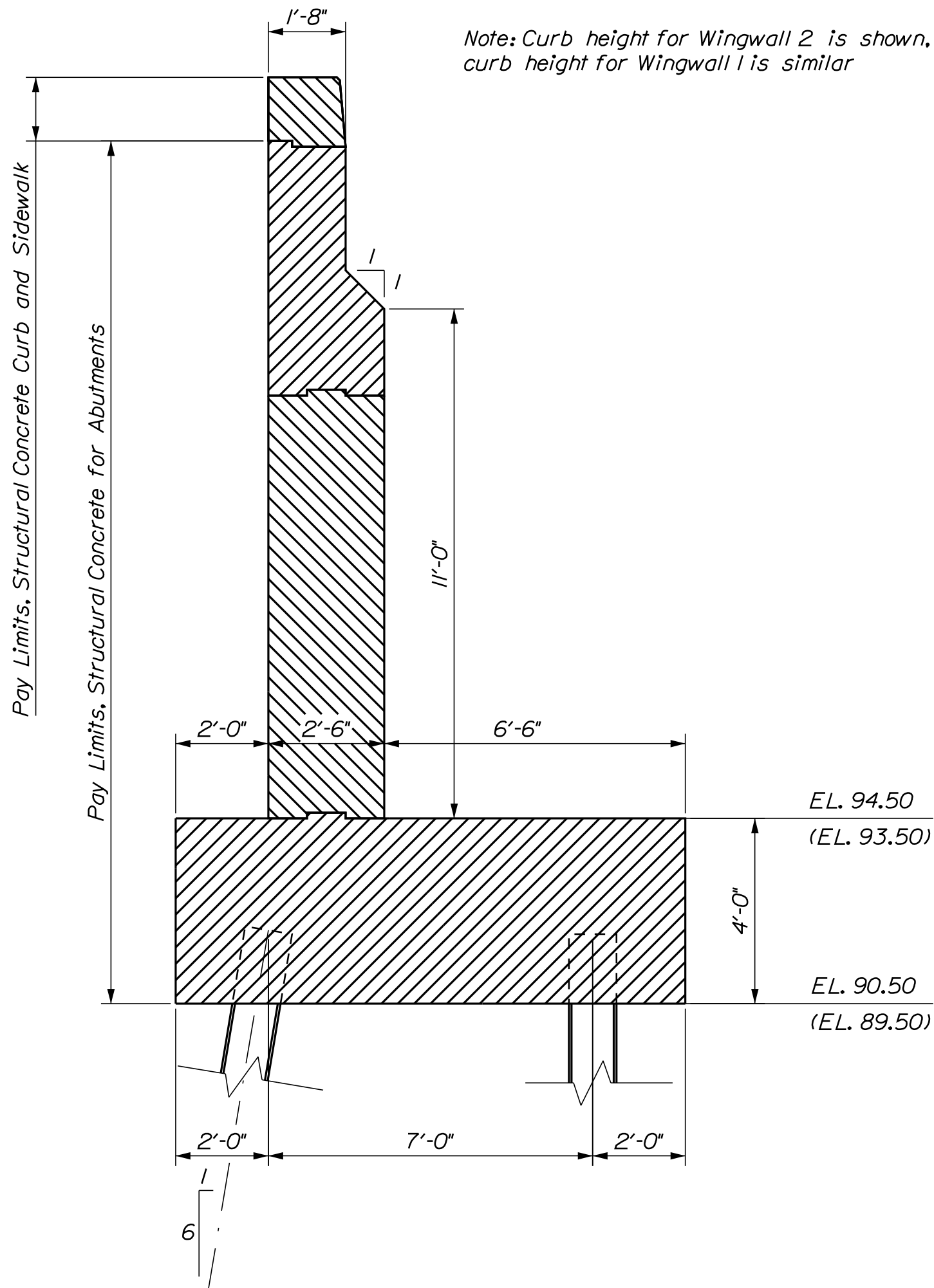




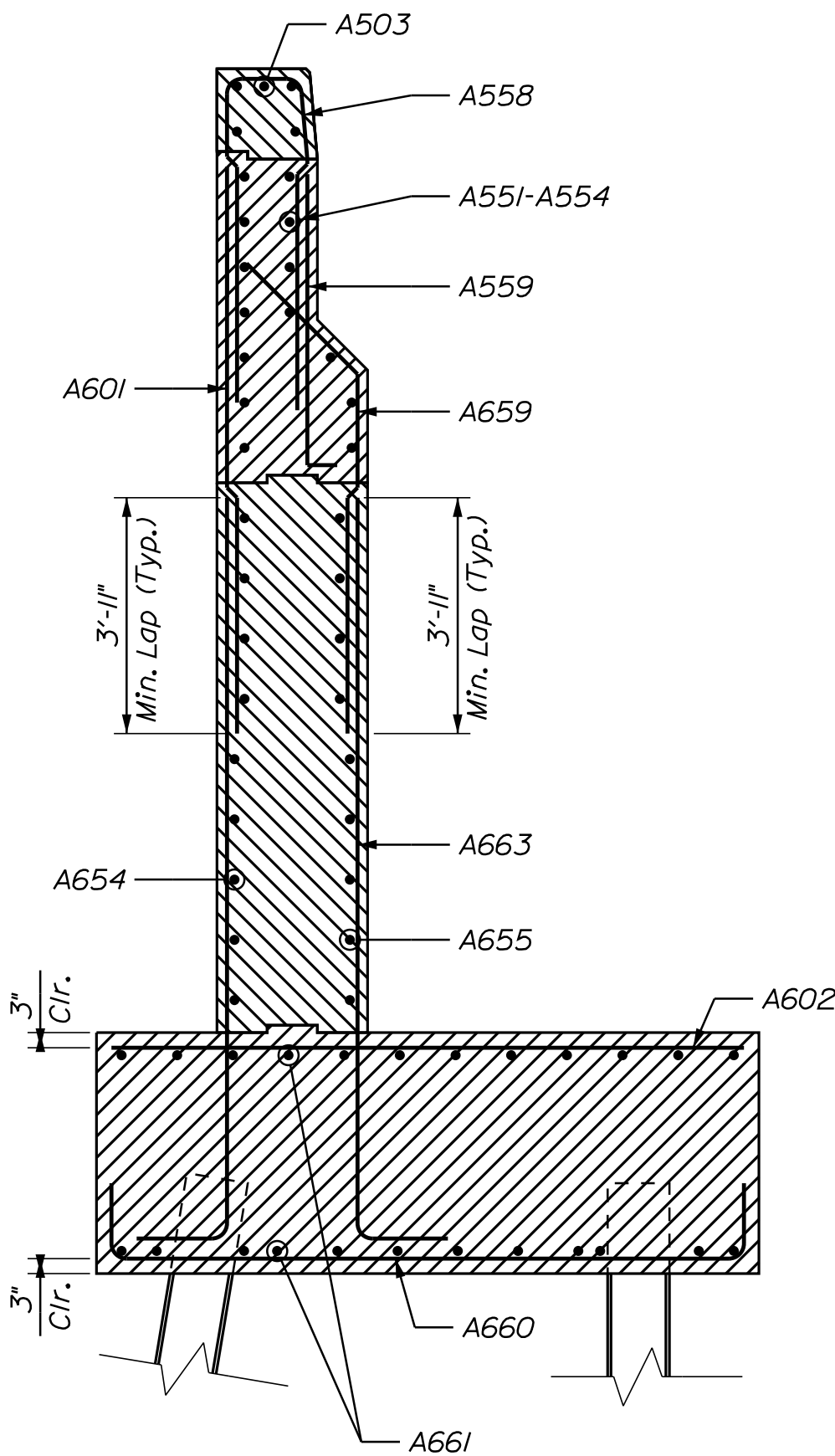
ABUTMENT NO. 1
SECTION
Abutment No. 2 Similar (in Parenthesis)



ABUTMENT NO. 1
REINFORCING SECTION
Abutment No. 2 Similar

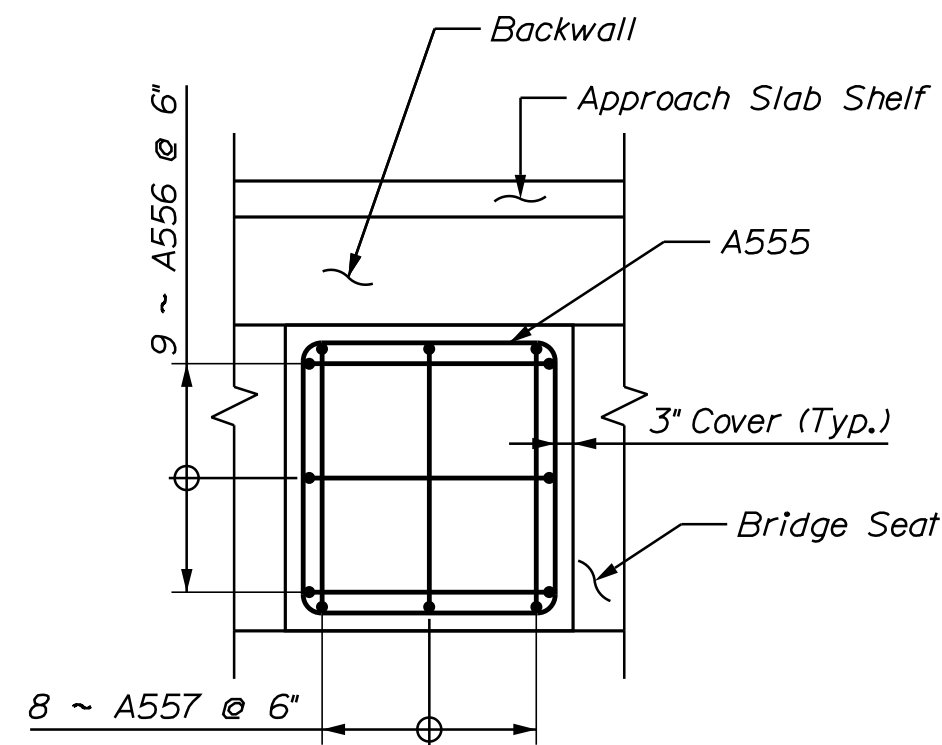


ABUTMENT NO. 1
WINGWALL SECTION
Abutment No. 2 Similar (in Parenthesis)

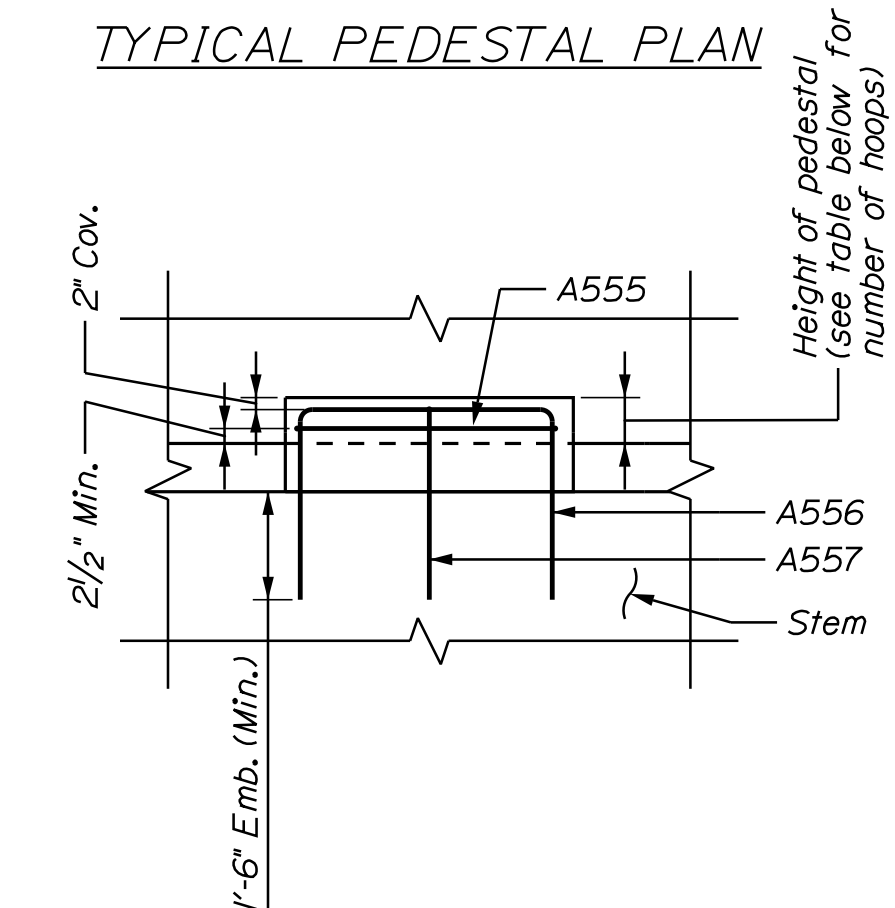


ABUTMENT NO. 1
WINGWALL REINFORCING SECTION
Abutment No. 2 Similar
Wingwall 1 shown, wingwall 2 similar

SHEET NUMBER				TUTTLE ROAD BRIDGE				PROJ. MANAGER				Cerdid Dostie		BY		DATE		STATE OF MAINE			
50				INTERSTATE 295, RTE US 1 & MCRR CUMBERLAND COUNTY				DESIGN-DETAILED		FF		CT		03/2025		DEPARTMENT OF TRANSPORTATION					
								CHECKED-REVIEWED		RF		RF		03/2025							
								DESIGN2-DETAILED2								SIGNATURE					
								DESIGN3-DETAILED3													
OF 88				ABUTMENT SECTIONS				REVISIONS 1						P.E. NUMBER		2516100					
								REVISIONS 2													
								REVISIONS 3												DATE	
								REVISIONS 4												BRIDGE NO. 5801	
								FIELD CHANGES								WIN		BRIDGE PLANS			
																25161.00					



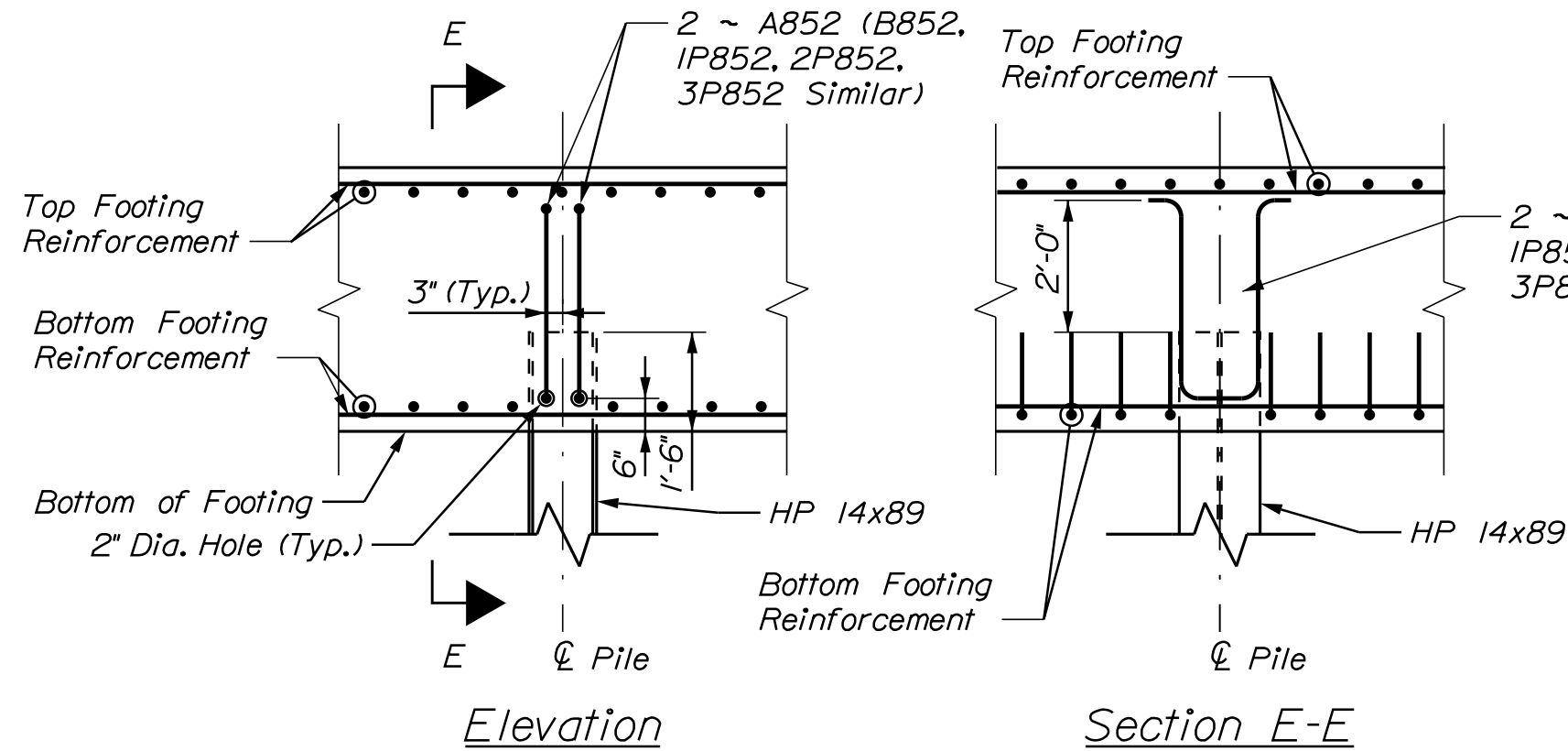
TYPICAL PEDESTAL PLAN



TYPICAL PEDESTAL ELEVATION

PEDESTAL HEIGHT	NUMBER OF HOOPS
4" TO 6"	1
6" TO 8"	2
8" TO 11"	3
11" TO 14"	4
14" TO 17"	5
17" TO 20"	6

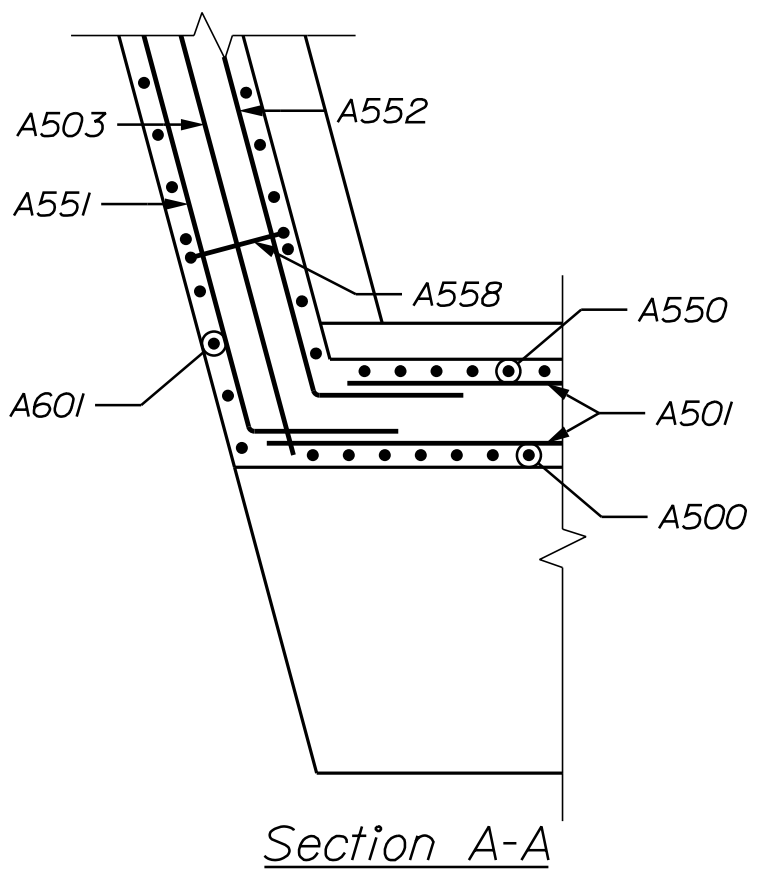
Height to be calculated at the back face of the pedestal



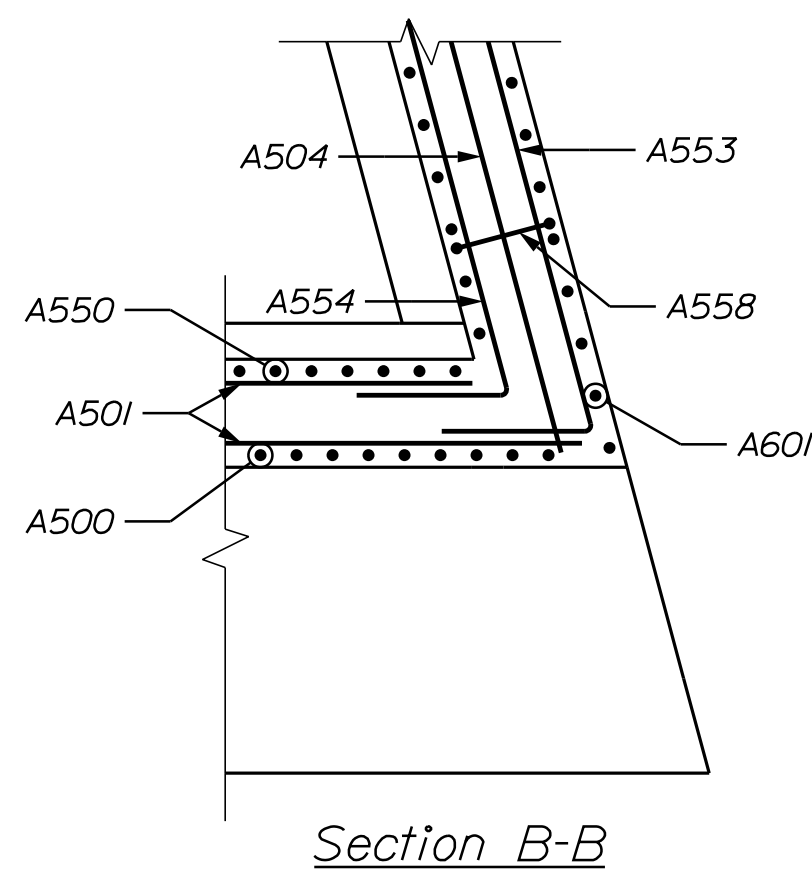
Elevation

Tension Pile Detail
N.T.S.

Section E-E



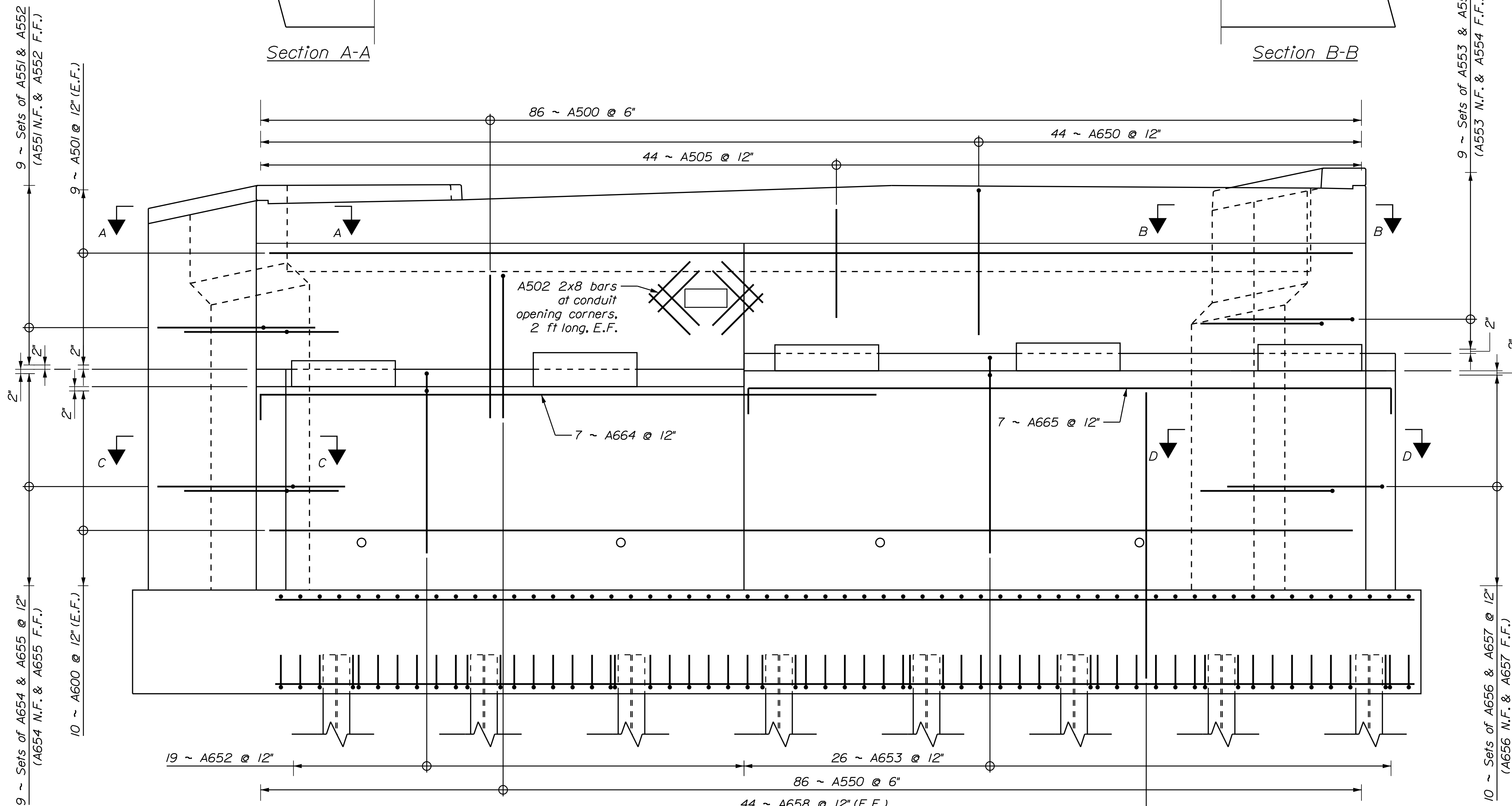
Section A-A



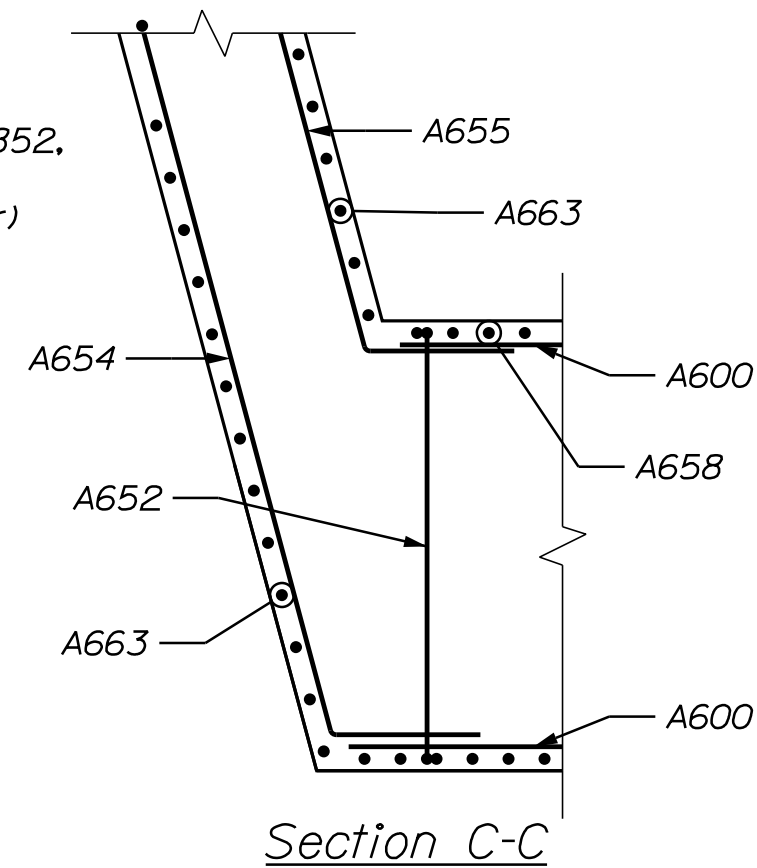
Section B-B

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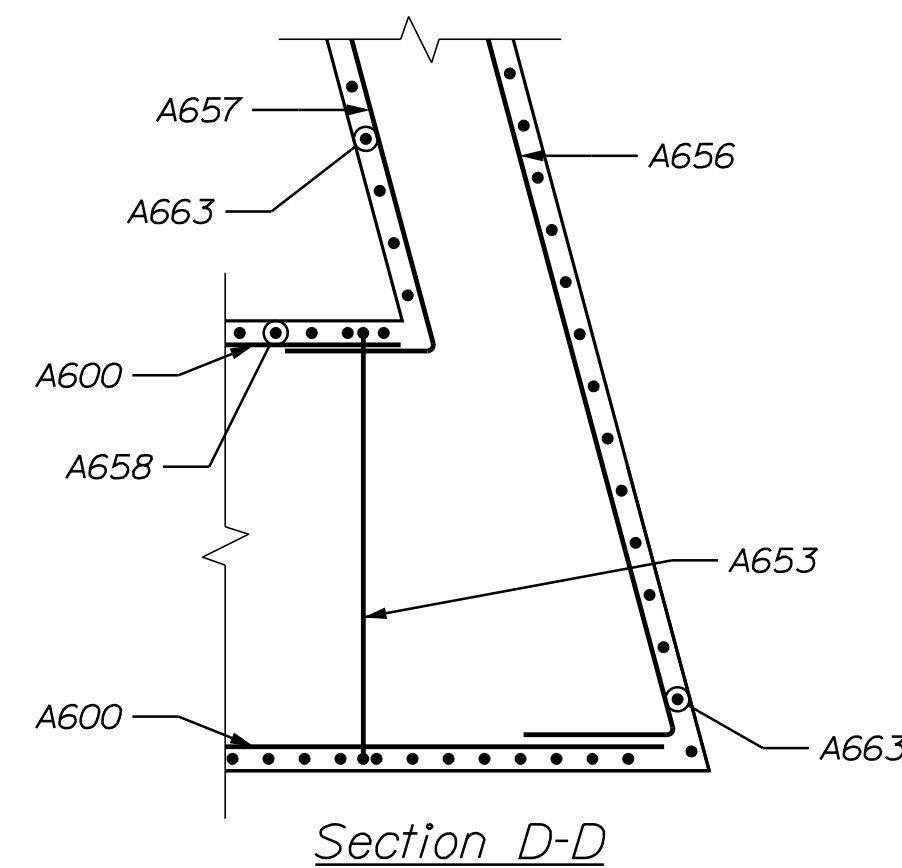
N.F. - Near Face
F.F. - Far Face
E.F. - Each Face



ABUTMENT NO. 1 REINFORCING
(Wingwall reinforcement not shown for clarity)

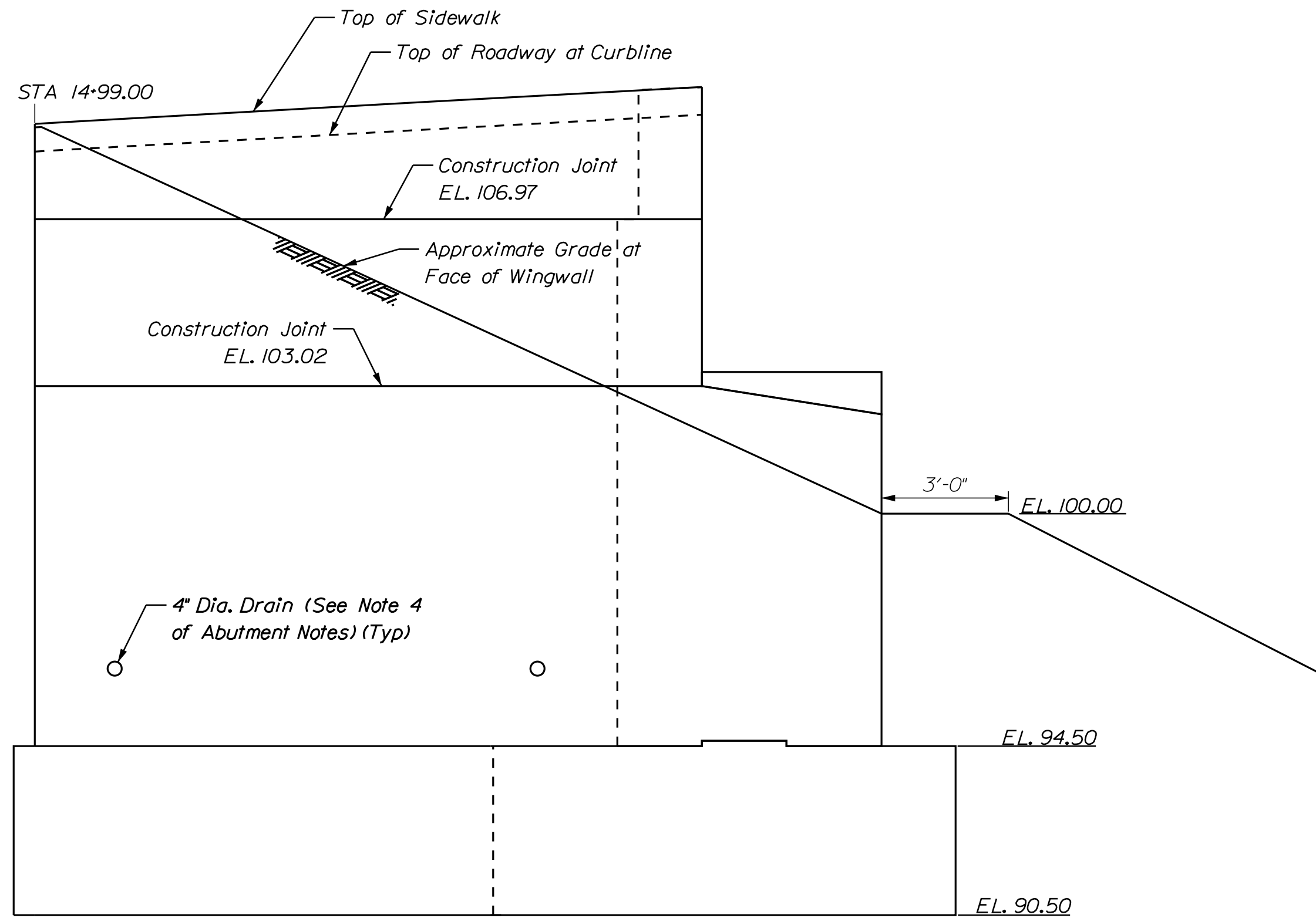


Section C-C

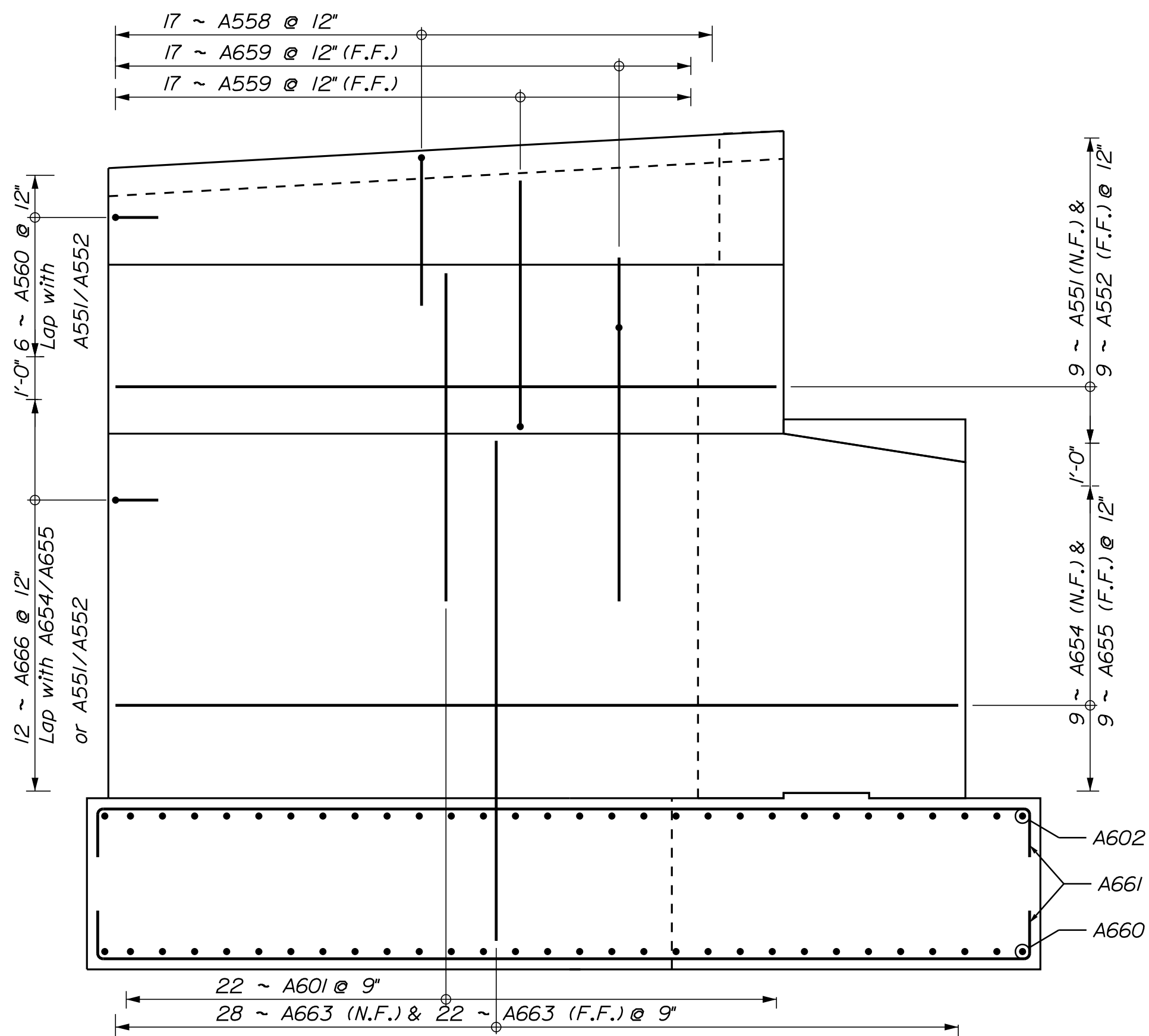


Section D-D

STATE OF MAINE DEPARTMENT OF TRANSPORTATION		2516100		BRIDGE NO. 5801		WIN 25161.00		BRIDGE PLANS	
TUTTLE ROAD BRIDGE INTERSTATE 295, RTE US 1 & MCRR CUMBERLAND CUMBERLAND COUNTY		ABUTMENT NO. 1 REINFORCING		SHEET NUMBER 51		OF 88			
PROJ. MANAGER	DATE	BY	DATE	SIGNATURE	P.E. NUMBER	DATE			
CHECKED-REVIEWED	03/2025	CT	03/2025						
DESIGNED-DETAILED		RF							
DESIGNED-DETAILED									
REVISIONS 1									
REVISIONS 2									
REVISIONS 3									
REVISIONS 4									
FIELD CHANGES									



WINGWALL /



WINGWALL /

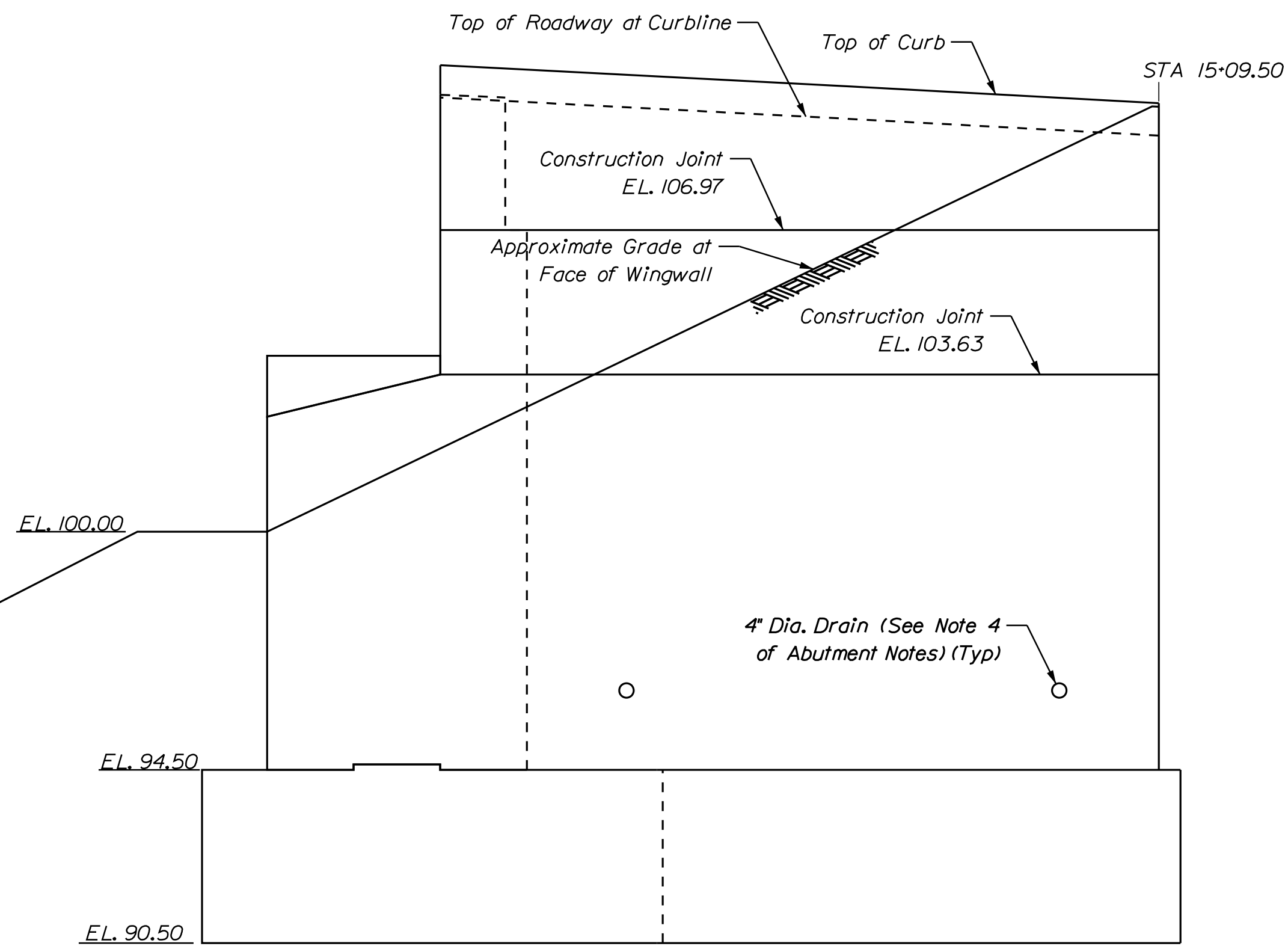
(Abutment Backwall and Sidewalk reinforcement not shown for clarity)

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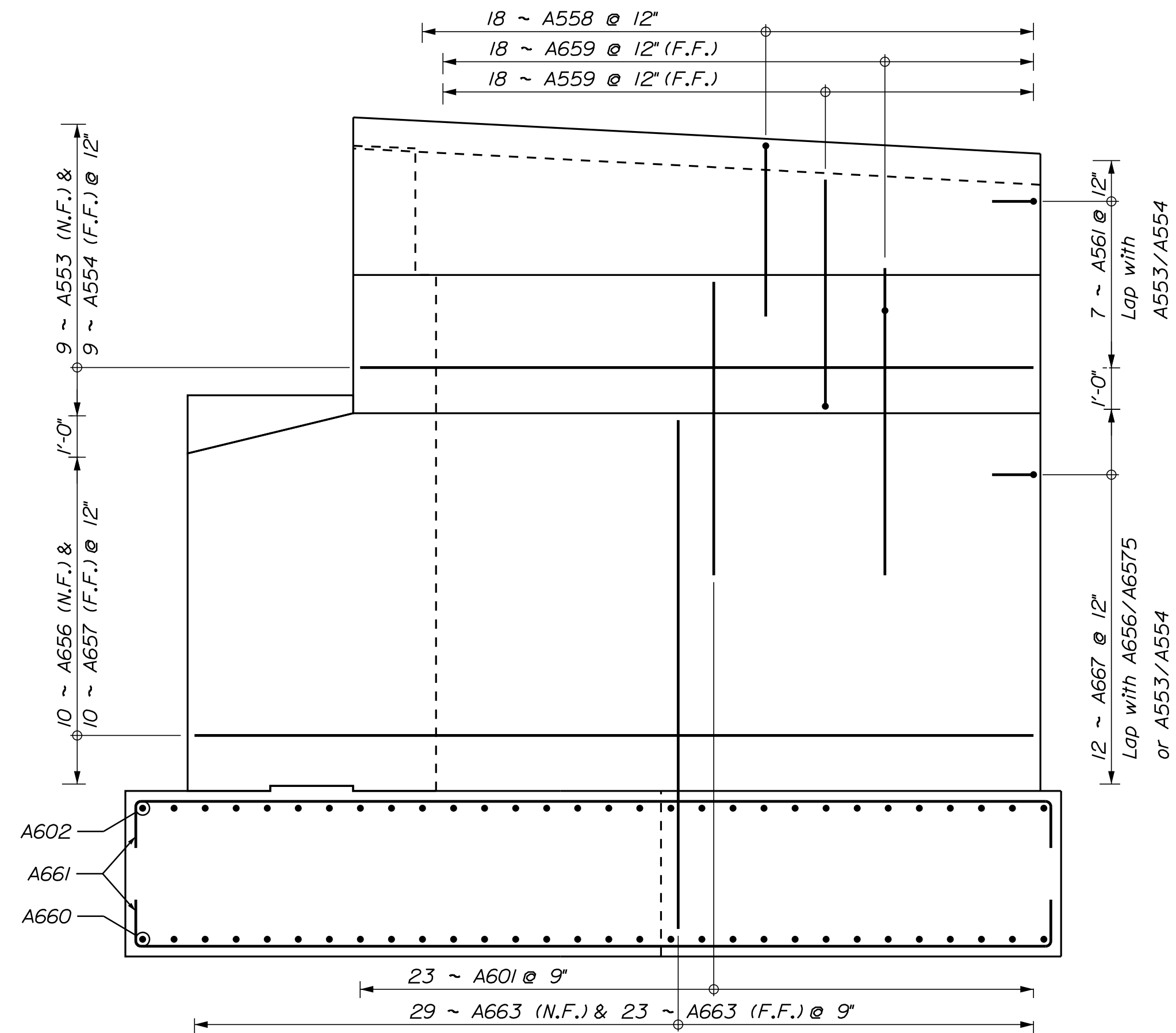
N.F. - Near Face
F.F. - Far Face

Note: Abutment and Wingwall piles not shown.

ABUTMENT NO. 1
WINGWALL ELEVATIONS

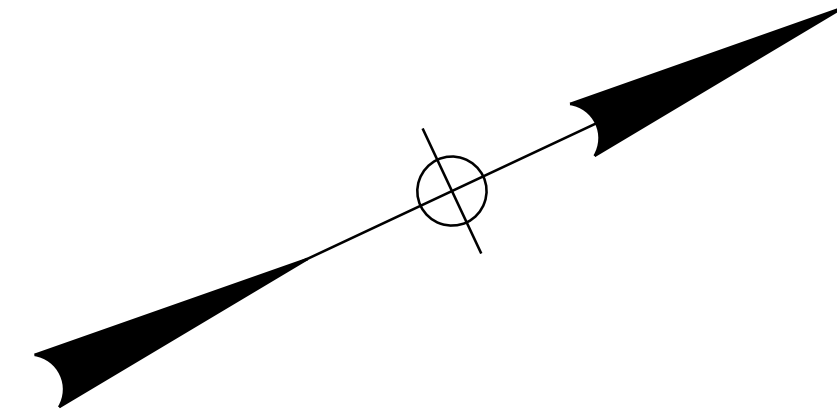


WINGWALL 2

WINGWALL 2

(Abutment Backwall and Curb reinforcement not shown for clarity)

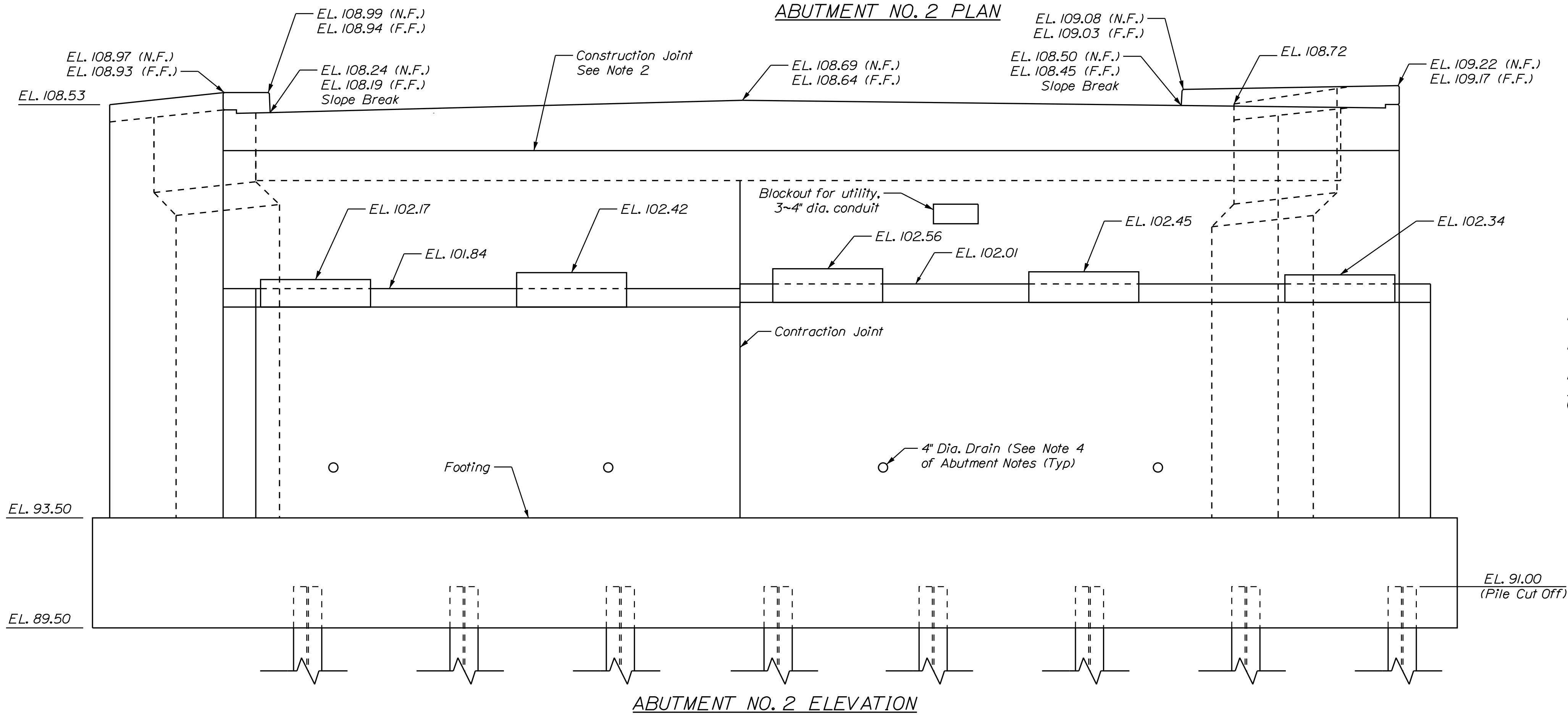
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				K/S	RF		03/2025		
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		DESIGN3-DETAILED3							
		REVISIONS 1							
		REVISIONS 2							
		REVISIONS 3							
		REVISIONS 4							
		FIELD CHANGES							



Tension Pile - For Details, See Sheet Abutment No. 1 Reinforcing

ABUTMENT 2 REINFORCING PLAN

SHEET NUMBER		TUTTLE ROAD BRIDGE		INTERSTATE 295, RTE US 1 & MCRR		CUMBERLAND CUMBERLAND COUNTY		PROJECT MANAGER		Gerold Dostle		BY		DATE		STATE OF MAINE	
53		OF 88		DESIGN-DETAILED		AS		CI		03/2025		2516100		WIN			
		CHECKED-REVIEWED		AC		RI		03/2025		SIGNATURE							
		DESIGN2-DETAILED2								P.E. NUMBER							
		DESIGN3-DETAILED3								DATE							
		REVISIONS 1															
		REVISIONS 2															
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														BRIDGE NO. 5801		BRIDGE PLANS	

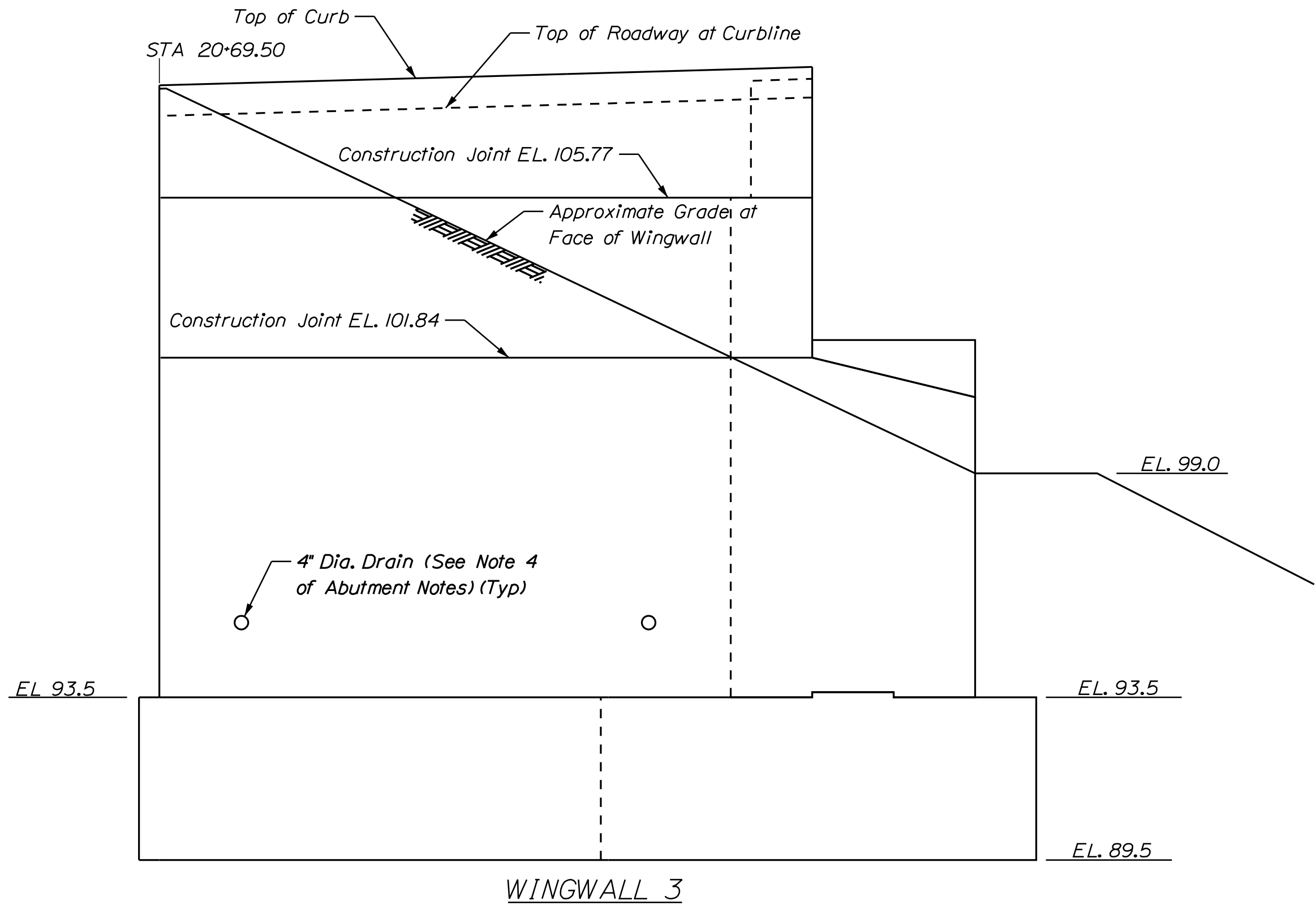


Notes:

1. Wingwall piles not shown.
2. Construction joint for setting bridge joint. Roughen surface to $1/4"$ profile (min.).

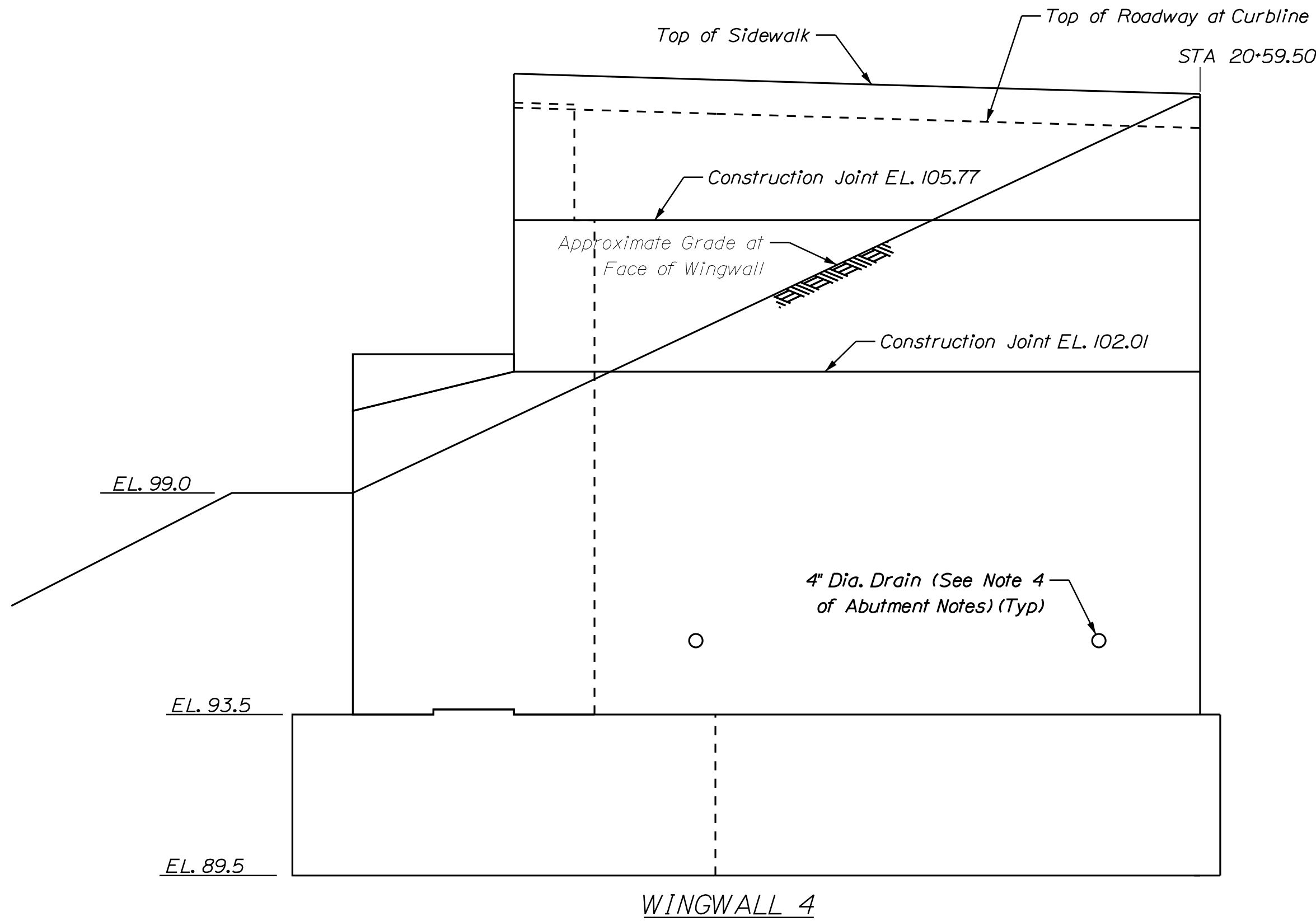
54 OF 88		SHEET NUMBER	TUTTLE ROAD BRIDGE INTERSTATE 295, RTE US 1 & MCRR CUMBERLAND CUMBERLAND COUNTY		PROJ. MANAGER		Gerold Dostie	BY	DATE	STATE OF MAINE DEPARTMENT OF TRANSPORTATION			
					DESIGN-DETAILED	FF					CI	03/20/05	
ABUTMENT NO. 2 PLAN AND ELEVATION		CUMBERLAND COUNTY	CHECKED-REVIEWED	RF	RF	03/20/05	SIGNATURE						
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			DESIGN3-DETAILED03					P.E. NUMBER					
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			FIELD CHANGES										
										BRIDGE NO. 5801	WIN	25161.00	BRIDGE PLANS

OF 88



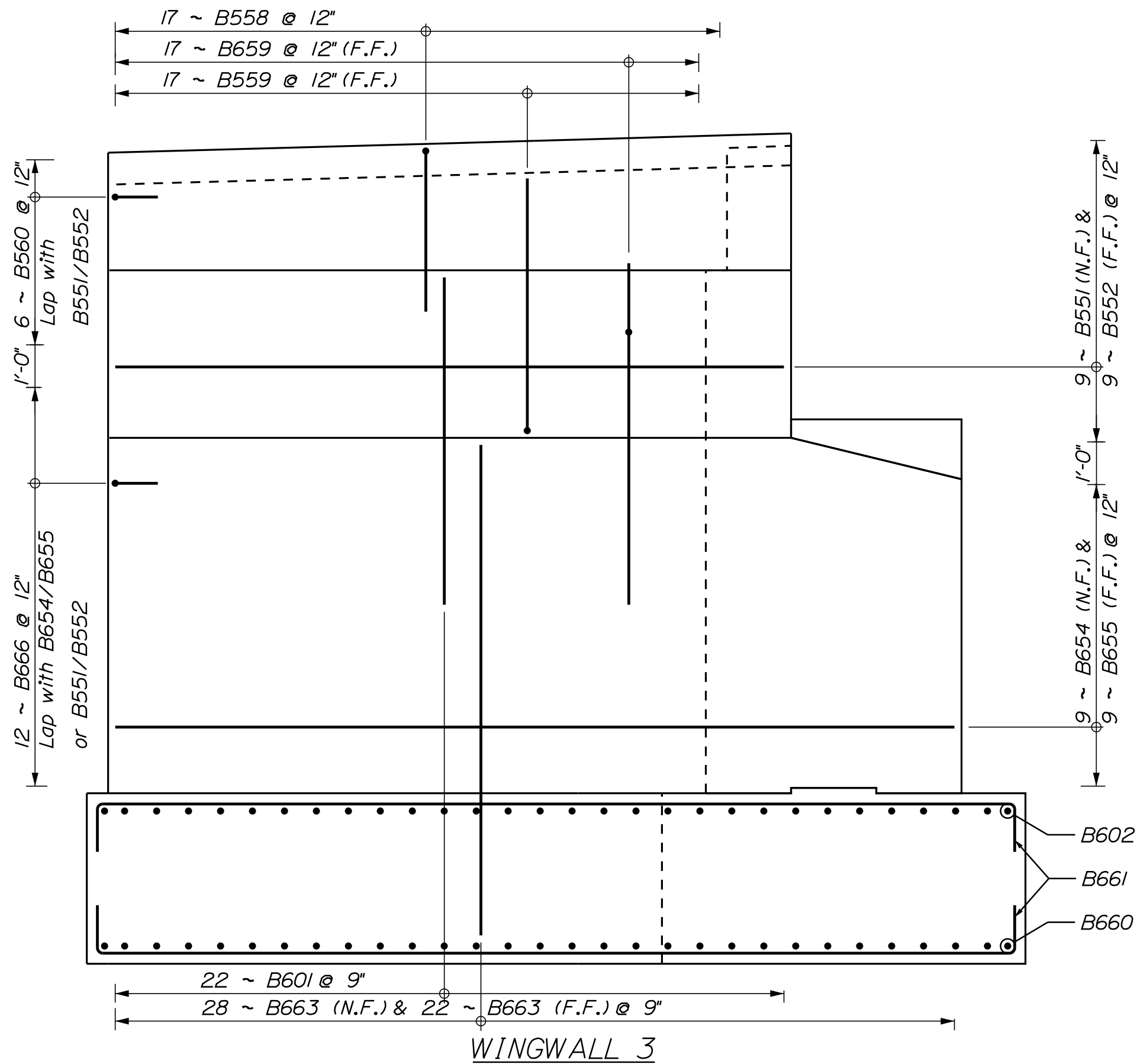
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N.F. - Near Face
F.F. - Far Face



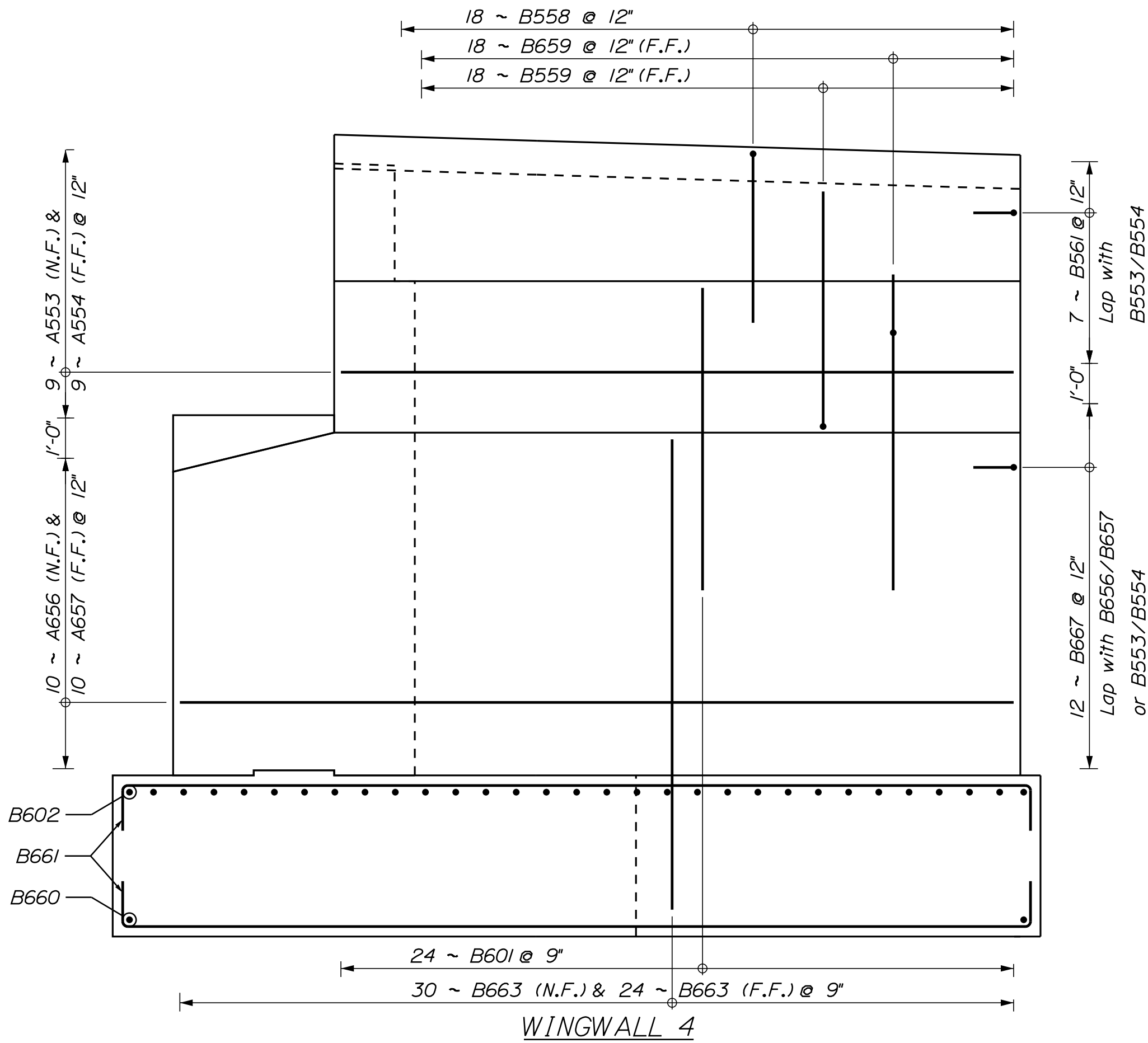
Note: Abutment and Wingwall piles not shown.

ABUTMENT NO. 2
WINGWALL ELEVATIONS



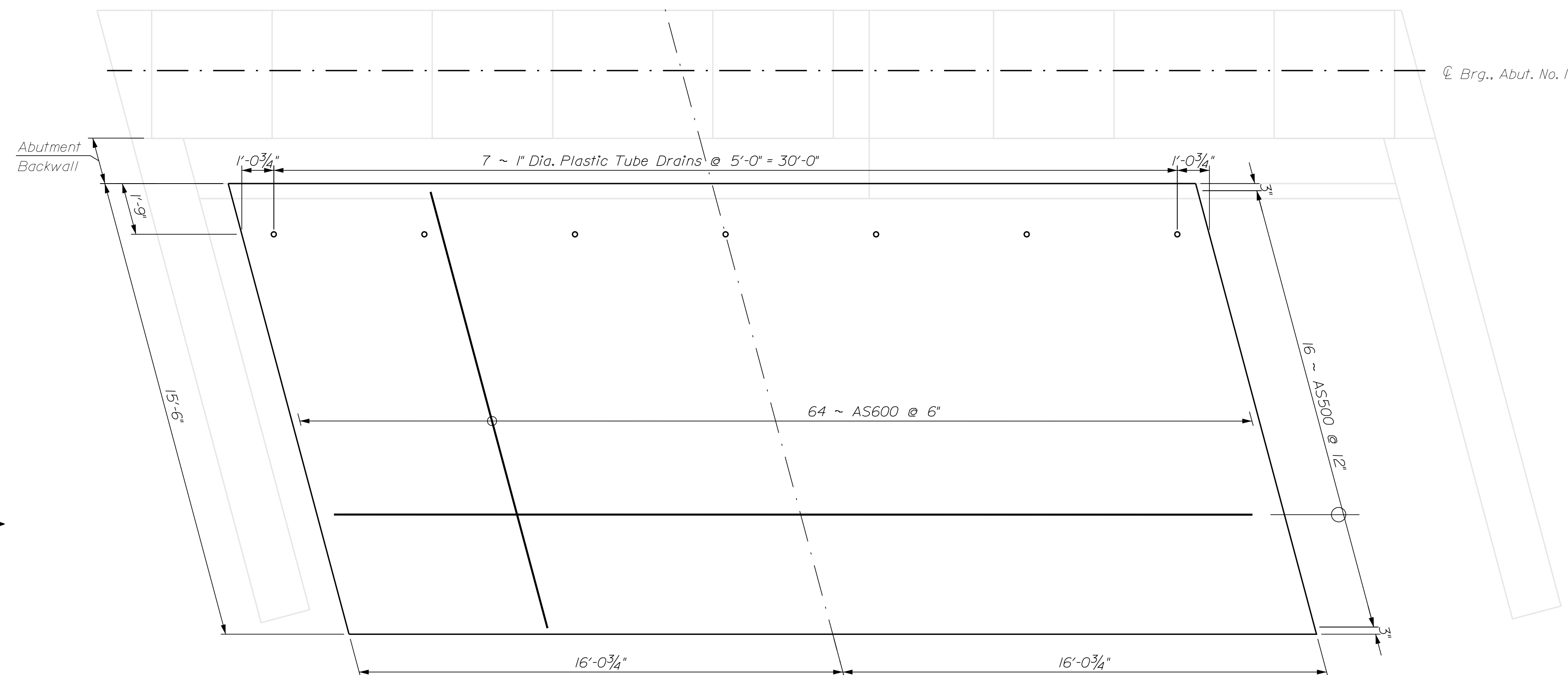
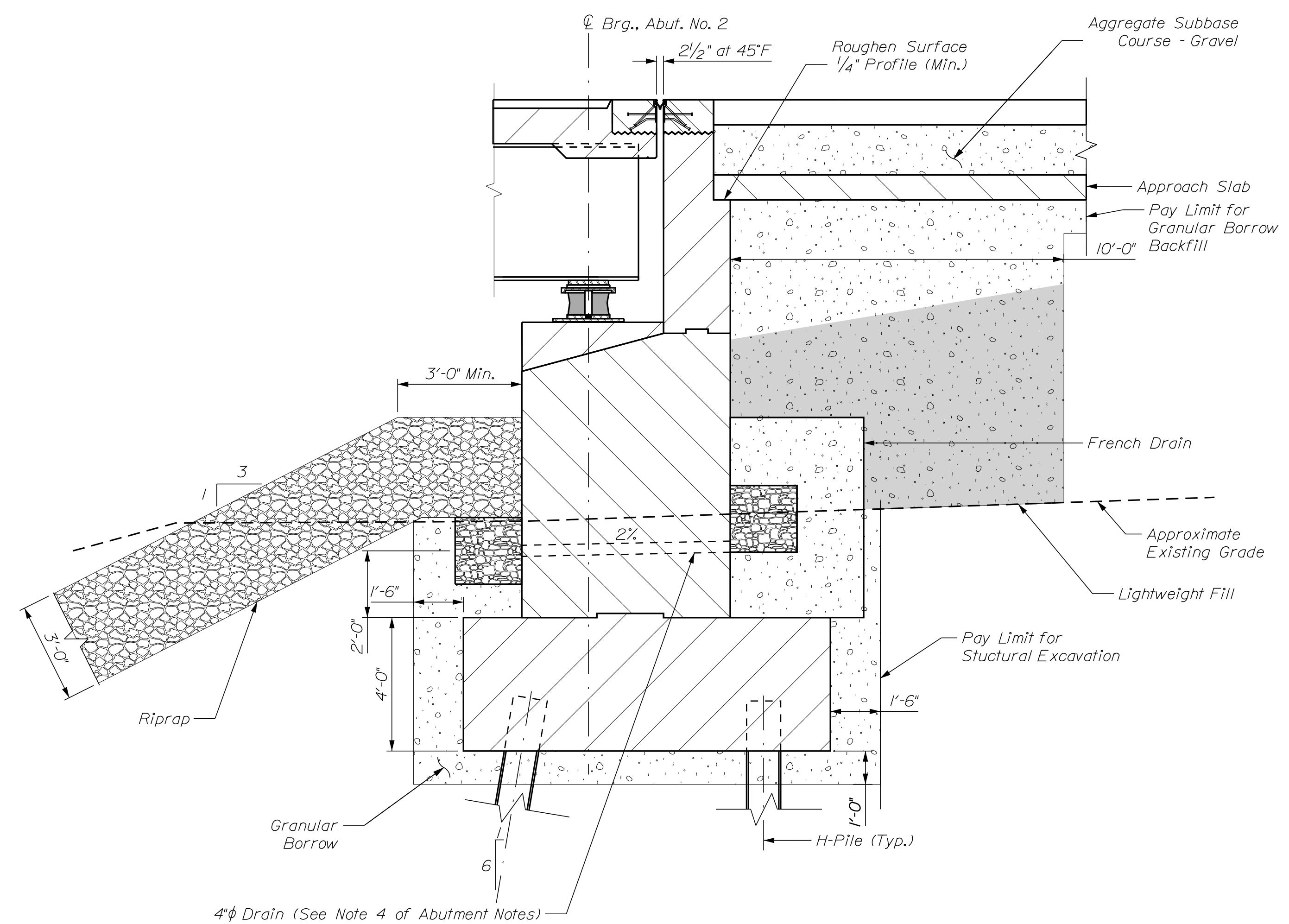
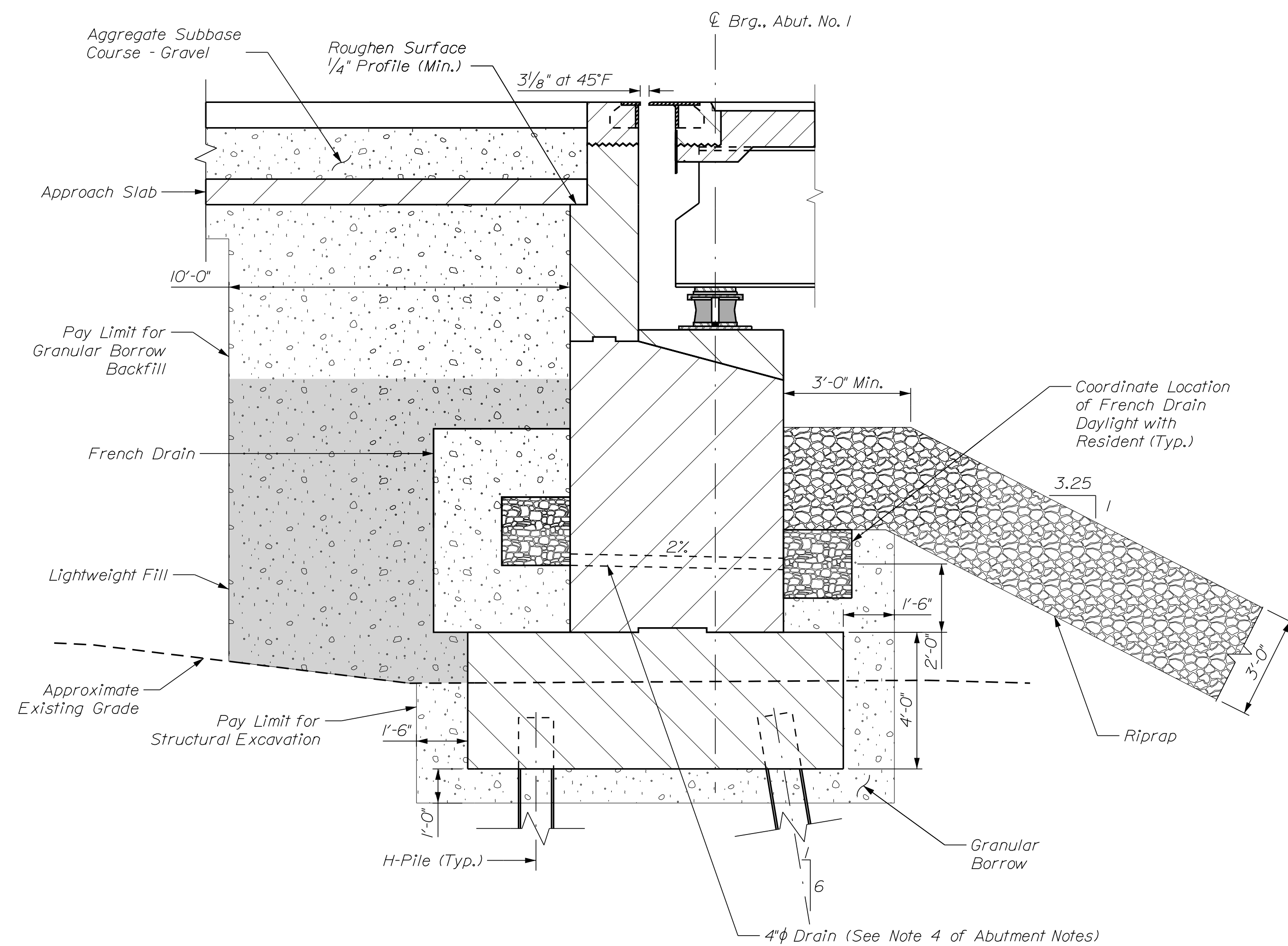
(Abutment Backwall and Curb reinforcement not shown for clarity)

ABUTMENT NO. 2
WINGWALL REINFORCING



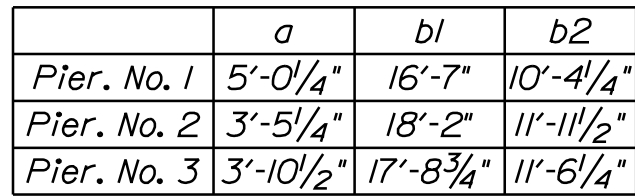
(Abutment Backwall and Sidewalk reinforcement not shown for clarity)

STATE OF MAINE		DEPARTMENT OF TRANSPORTATION		2516100		WIN		25161.00		BRIDGE NO. 6601		BRIDGE PLANS	
TUTTLE ROAD BRIDGE		INTERSTATE 295, RTE US 1 & MCRR		CUMBERLAND COUNTY		ABUTMENT NO. 2 WINGWALL		ELEVATION & REINFORCING		SHEET NUMBER		56	
PROJ. MANAGER		Gerald Dostle		BY		DATE		SIGNATURE		P.E. NUMBER		DATE	
DESIGN-DETAILED		RF		CNU		03/2025							
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REVISIONS 1													
REVISIONS 2													
REVISIONS 3													
REVISIONS 4													
FIELD CHANGES													

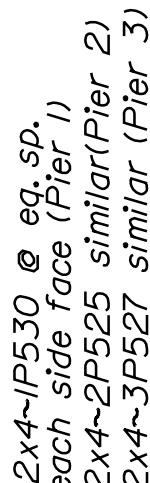


Proposed Construction
APPROACH SLAB PLAN
 Abutment No. 1 Shown. Abutment No. 2 Opposite Hand

57 OF 88	SHEET NUMBER		TUTTLE ROAD BRIDGE INTERSTATE 295, RTE US 1 & MCRR CUMBERLAND CUMBERLAND COUNTY				PROJ. MANAGER	Gerald Dostie	BY	DATE	STATE OF MAINE DEPARTMENT OF TRANSPORTATION
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			CHECKED-REVIEWED		RF	RF	03/2025				
			DESIGNS-DET. FILE D2								
			DESIGNS-DETAILED D3				P.E. NUMBER	2516100			
			REVISIONS 1								
			REVISIONS 2								
			REVISIONS 3								
			REVISIONS 4								
			FIELD CHANGES				DATE	BRIDGE NO. 5801 WIN 25161.00 BRIDGE PLANS			
		ABUTMENT DETAILS									



10-1P654 @ 12" (Top Mat)
10-1P654 (Bot Mat Spaced to avoid piles) Pier 1
10-2P654 @ 12" (Top)
10-2P654 (Bot Mat Spaced to avoid piles) Pier 2
10-3P654 @ 12" (Top)
10-3P654 (Bot Mat Spaced to avoid piles) Pier 3



PIER NOTES

1. Reinforcing steel shall have a minimum concrete cover of 2 inches in the stem and 3 inches in the footing unless otherwise noted.
2. Rotate horizontal leg of bar IP850, 2P850, 3P850 up to 45 degrees to avoid piles.
3. The concrete pedestal elevations shown are approximate. The actual elevations shall be adjusted to accommodate the bearings supplied by the Contractor. The elevations provided on the Plans assume overall bearing heights as described on the "Bearing Details" sheet.

1. Critical AASHTO Load Combination - Strength I Limit State.
2. Wind: 120 mph or 0.059 ksf.



*Tension Pile, Pier 3 Only - For Details, See Drawing
Abutment No. 1 Reinforcing*

Tension Pile, Pier 1, 2, and 3 - For Details, See Drawing Abutment No. 1 Reinforcing

1. The maximum factored pile loads at the Strength Limit State are:

Pier No. 1:	295 kips
Pier No. 2:	306 kips
Pier No. 3:	311 kips

2. Piles shall be driven to the required resistance on or within bedrock in accordance with Standard Specification Section 501.

3. Estimate of piles required:

Pier No. 1: 20 - HP 14 x 89 @ 37 feet
Pier No. 2: 20 - HP 14 x 89 @ 49 feet
Pier No. 3: 20 - HP 14 x 89 @ 47 feet

The order lengths of the piles shall include an additional 5 feet of length for each test pile to accommodate dynamic pile testing equipment.

4. Top of rock varies across the project site; anticipate adjustments to the pile tip elevation. The pile lengths given include approximately 5 feet of additional length to account for variable bedrock.

5. H-pile material shall be ASTM A572, Grade 50.

6. H-pile splices shall be in accordance with Standard Detail 50(03). Pile splices are not permitted within upper 15 feet of piles.

7. Moderate to severe driving conditions are anticipated. All piles shall be equipped with a pile tip in accordance with Standard Specifications Subsections 501.048, Prefabricated Pile Tips and 711.10 H-Beam Piles, Spliced and Tips. To mitigate damage to the piles, the refusal criteria of 10 blows per 0.5 inches shall be implemented.

8. Piles marked with an arrow shall be battered 2 inches/foot in the direction of the arrow.

9. The top of any pile driven its full length into the ground shall not vary from the plan location by more than 4 inches. The orientation of piles shall be within 10 degrees of the orientation shown on the plans. A driving frame/template is recommended to keep piles within allowable tolerances.

10. The Contractor shall perform and submit a wave equation analysis for review and acceptance by the Resident. The maximum allowable driving stress is 0.90 times F_y . The submittal analyses shall include the proposed stopping criteria based on the wave equation analysis and the proposed driving system.

11. The Contractor shall perform two (2) dynamic load test(s) per pier, with 24-hour (minimum) restrike tests to confirm the nominal resistance of the piles. The required nominal resistance for the pile is the factored axial pile load divided by a resistance factor of 0.65 per LRFD Specifications. The dynamic test shall be performed on the first two (2) production piles driven at each pier preferably located at either ends of the pier in the transverse direction.

12. Proposed H-piles at each substructure should be driven in a sequence beginning from south to north and initially driven with low energy (short stroke) as necessary to mitigate risk to the existing Tuttle Road Bridge.

TUTTLE ROAD BRIDGE
INTERSTATE 295, RTE US 1 &
CUMBERLAND CUMBERLAND

PIER FOOTING & NOTES

SHEET NUMBER

58

OF 88

STATE OF MAINE

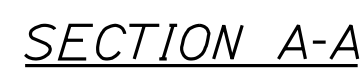
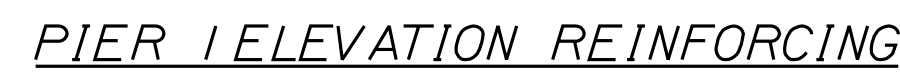
DEPARTMENT OF TRANSPORTATION

2516100

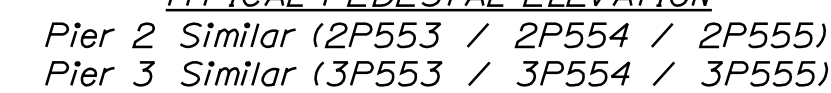
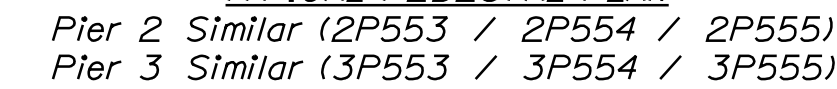
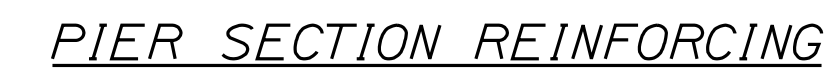
WIN

25161.00

BRIDGE NO. 5801

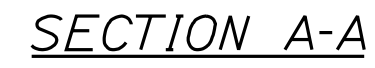


Set A3
2 x IP526 thru IP529
2 x IP653
27x IP652

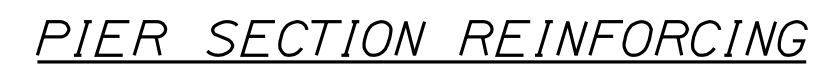


PEDESTAL HEIGHT	NUMBER OF HOOPS
4" TO 6"	1
6" TO 8"	2
8" TO 11"	3
11" TO 14"	4
14" TO 17"	5
17" TO 20"	6

Height to be calculated at the
back face of the pedestal

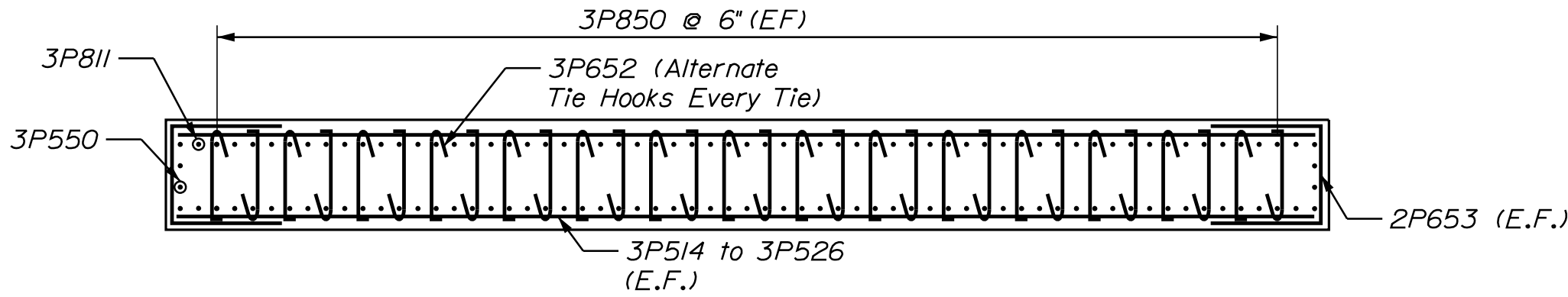
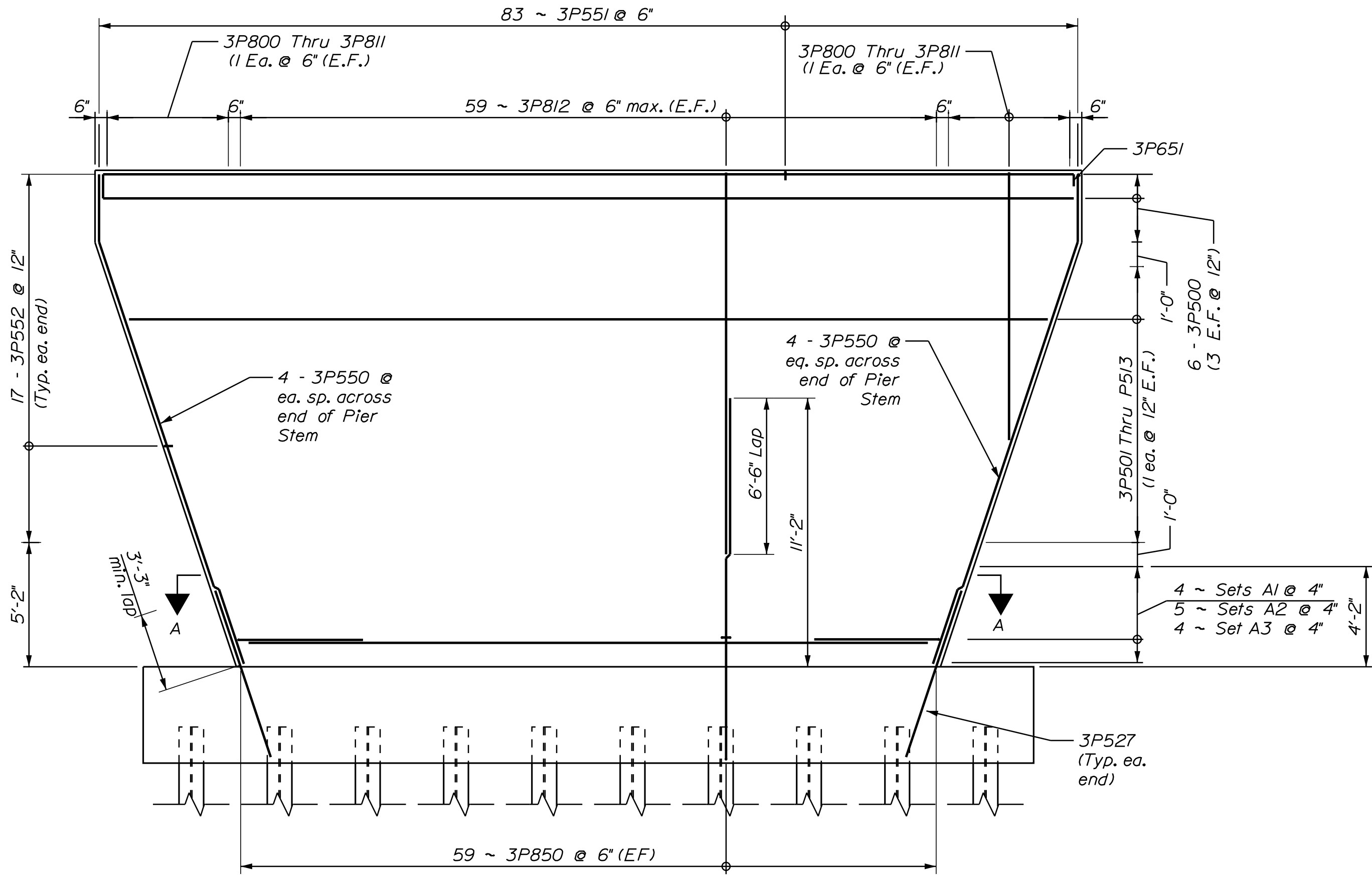


Set A3
2 x 2P520 thru 2P24
2 x 2P653
31x 2P652



LEGEND
E.F. - Each Face

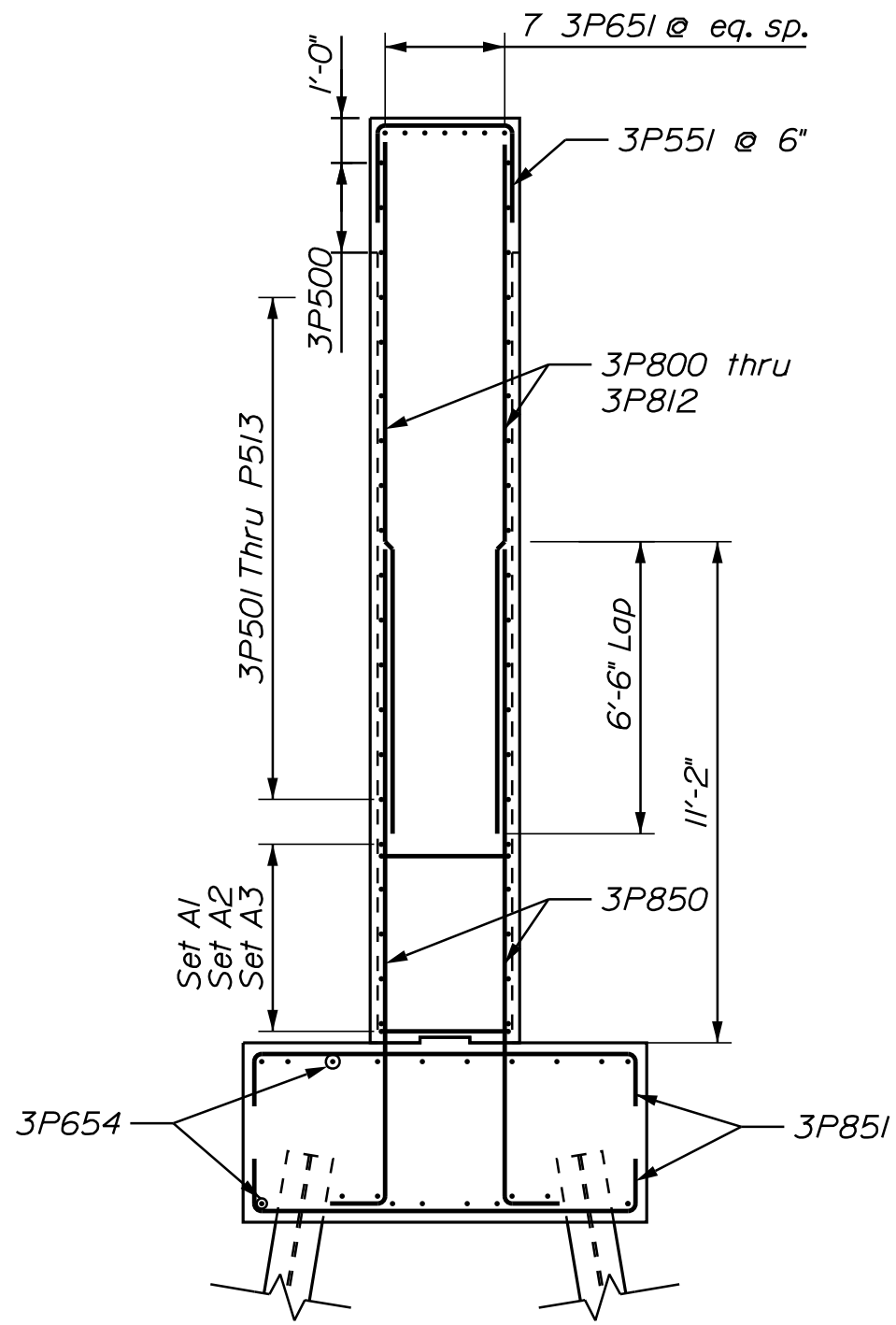
SHEET NUMBER 61 OF 88	TUTTLE ROAD BRIDGE INTERSTATE 295, RTE US 1 & MCRR CUMBERLAND CUMBERLAND COUNTY				PROJ. MANAGER Gerd Dostle	BY CNU	DATE 03/2025	STATE OF MAINE DEPARTMENT OF TRANSPORTATION 2516100 WIN 25161.00 BRIDGE NO. 5801 BRIDGE PLANS
	PIER 2 REINFORCING				DESIGN-DETAILED CHECKED-REVIEWED RF	RF	SIGNATURE	
					DESIGN2-DETAILED2 DESIGN3-DETAILED3		P.E. NUMBER	
					REVISIONS 1 REVISIONS 2 REVISIONS 3 REVISIONS 4		DATE	
					FIELD CHANGES			



Set A1
2 x 3P514 thru 3P517
2 x 3P653
32 x 3P652

Set A2
2 x 3P518 thru 3P522
2 x 3P653
31 x 3P652

Set A3
2 x 3P523 thru 3P26
2 x 3P653
30x 3P652



LEGEND
E.F. - Each Face

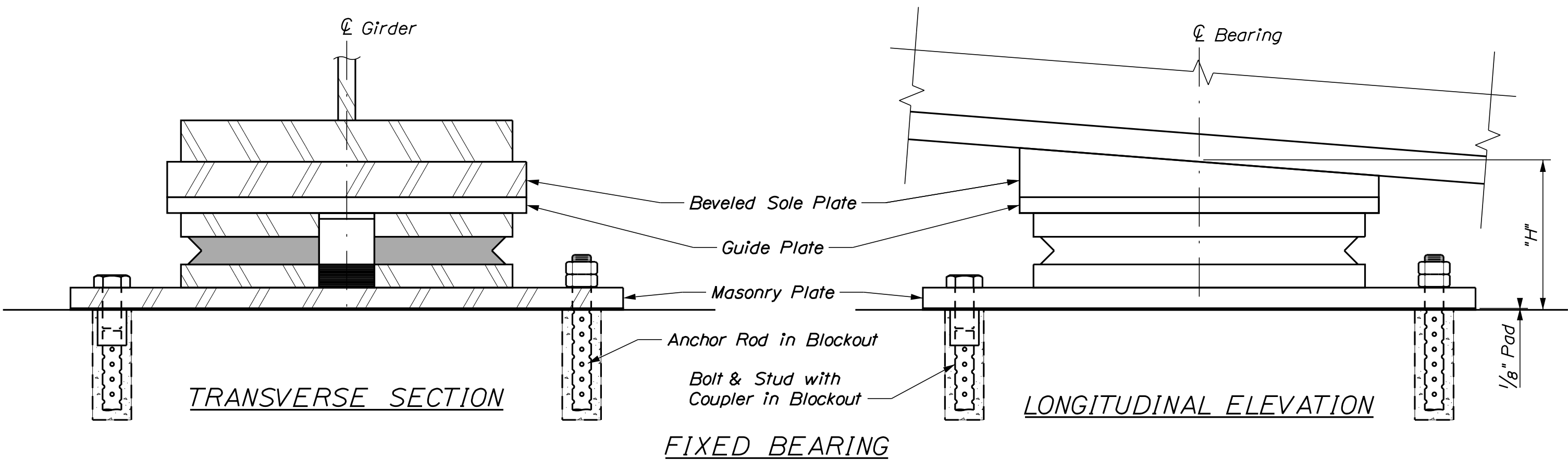
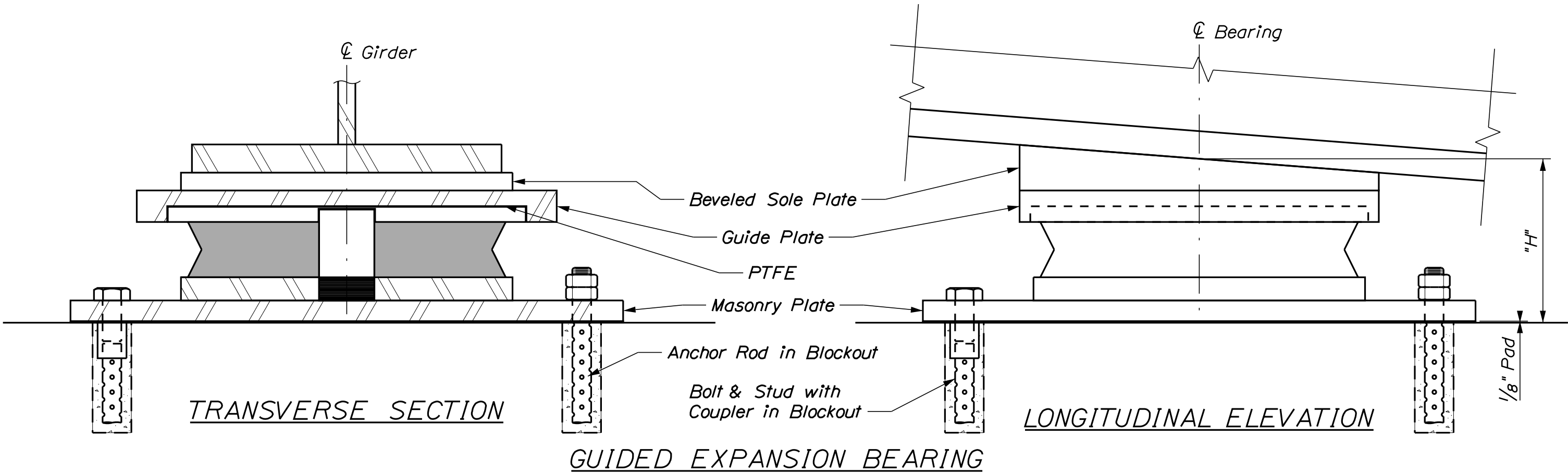
TUTTLE ROAD BRIDGE INTERSTATE 295, RTE US 1 & MCRR CUMBERLAND CUMBERLAND COUNTY PIER 3 REINFORCING	SHEET NUMBER			
	62			
	OF 88			
	PROJ. MANAGER	Gerold Dostile	BY	DATE
	DESIGN-DETAILED	FF	ONJ	03/2025
	CHECKED-REVIEWED	RF	RF	03/2025
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	DESIGN3-DETAILED3			
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	REVISIONS 2			
REVISIONS 3				
REVISIONS 4			DATE	
FIELD CHANGES				
STATE OF MAINE				
DEPARTMENT OF TRANSPORTATION				
		2516100		
		WIN		
		25161.00		
BRIDGE NO. 5801		BRIDGE PLANS		

Date:5/25/2025

Username: common

Division: BRIDGE

Filename: ... \BRIDGE\063_Bearings.dgn



DISC BEARING DESIGN TABLE																
Location	Bearing Type	Design Loads Per Bearing (kips)					Design Loads Per Bearing Line (kips)						Dim. "H" (in.) (See Note 1)	Design Rotation		Total Long. Movement (in.)
		Vertical					Horizontal							Strength	Service	
		Strength	Extreme Event	Service			Strength		Extreme		Service					
		Total Load	Total Load	Dead Load *	Max. Live Load **	Min. Live Load **	Long.	Trans.	Long.	Trans.	Long.	Trans.		Rotation (radians)	Rotation (radians)	
Abutment 1, G1-G5	Guided Expansion	352	116	90	135	-18	0	36	0	145	0	18	9	0.0154	0.0131	5.7
Pier 1, G1-G5	Guided Expansion	879	311	318	269	-17	0	89	0	390	0	42	9	0.0137	0.0121	3.8
Pier 2, G1-G5	Guided Expansion	782	292	258	258	-36	0	85	0	365	0	41	9	0.0136	0.0120	1.7
Pier 3, G1-G5	Fixed	782	264	265	253	-32	106	74	300	330	84	35	9	0.0131	0.0117	0
Abutment 2, G1-G5	Guided Expansion	351	116	89	135	-15	0	33	0	144	0	16	9	0.0144	0.0125	1.7

* Tabulated Dead Loads include DC1, DC2, and DW loads.
** Tabulated Live Loads include IM loading and multiple presence factors.

DISC BEARING NOTES

- The actual dimension "H" shall be the responsibility of the Contractor. Dimensions and sizes of plates not shown are dependent on design loads, capacity, and the manufacturer of the bearings. The shop drawings, prepared by the manufacturer, shall provide all pertinent bearing information. The final bearing pedestal elevations shall be determined by the Contractor and submitted with the shop drawings for approval prior to construction of the substructure units.
- Masonry plates shall be placed on 1/8" thick preformed pads in accordance with the specifications.
- All steel, unless otherwise specified, shall meet the requirements of ASTM A709, Grade 50.
- Bearing anchorage shall be either Anchor Rod with double nuts and washers in blockout, or Bolt & Stud with Coupler in blockout, at the Contractor's option, both options shown in details.
- Anchorage spacing shall be coordinated with the bearing manufacturer.
- Anchor bolts shall meet the requirements of ASTM F3125 Grade A325, Type 1.
- Anchor rods shall meet the requirements of ASTM F1554, Grade 55 or 105 and shall be swaged on the embedded portion of the rod.
- Heavy hex nuts for anchor rods shall meet the requirements of ASTM A563, Grade D or DH.
- Anchor bolts, rods, washers, and nuts shall be galvanized to ASTM A153 or ASTM B695, Class 50, Type 1. Payment for galvanizing will be considered incidental to the disc bearing pay items.
- Payment for Coatings for Disc Bearings will be considered incidental to Item 523.5552 Pot or Disc Bearings, Expansion and Item 523.5551 Pot or Disc Bearings, Fixed.
- The abbreviation "PTFE" indicates polytetrafluoroethylene.
- All PTFE, including guide and restraint surfaces, shall be unfilled.
- PTFE minimum bearing pressure shall be 1 ksi under total service loading and 3 ksi under total strength loading.
- Average compressive stresses on the disc shall be computed using the minimum plan area of the unstressed disc, excluding the area of any holes.
- The design temperature range shall be 150°F (-30°F to 120°F).
- Design of the sole plates, including weld to the girder, and masonry plates is the responsibility of the Bearing Manufacturer. Payment for these shall be made under Item 523.5551, Pot or Disc Bearings, Fixed or Item 523.5552, Pot or Disc Bearings, Expansion as applicable.
- Sole plate shall be beveled according to the grade defined at each substructure location in the Sole Plate Bevel Table.
- Strength Limit State rotations shown in the Disc Bearing Design Table include an allowance for uncertainties of 0.01 radians, as defined in AASHTO LRFD Bridge Design Specifications, 9th Edition 2020.
- Anchor rods shall be installed to a minimum of 18 inches into the substructure units, below the bottom of the pedestals.
- Bearings shall be designed with a thermal load factor of 1.2, which is included in the total longitudinal movement provided in the table.
- Longitudinal horizontal forces do not include friction forces at expansion bearings.
- All bearings shall be marked prior to shipping. The marks shall include the bearing location on the bridge, and a direction arrow that points upstation. All marks shall be permanent and shall be visible after the bearing is installed. Bearings shall be restrained during transit.
- Bearing installation shall be in strict conformance with the Standard Specifications and the manufacturer's recommendations.
- In the Disc Bearing Setting Corrections Table, a negative value for Dimension "X" indicates a direction away from the fixed bearing. A positive value for Dimension "X" indicates a direction toward the fixed bearing.
- Bearings stiffeners at Pier No. 3 shall be in line with the centerline of bearing at 45°F ± 10°F at the time of welding.
- Temperatures shown in the Disc Bearing Setting Corrections Table are those of the steel girders and not necessarily the ambient air temperature.

DISC BEARING SETTING CORRECTIONS TABLE						
	Dimension "X" (inches)					
	15 °F	30 °F	45 °F	60 °F	75 °F	90 °F
Abut. No. 1	¹⁵ / ₁₆	¹ / ₂	0	⁻¹ / ₂	⁻¹⁵ / ₁₆	⁻¹⁷ / ₁₆
Pier No. 1	⁵ / ₈	⁵ / ₁₆	0	⁻⁵ / ₁₆	⁻⁵ / ₈	⁻¹⁵ / ₁₆
Pier No. 2	⁹ / ₁₆	¹ / ₈	0	⁻¹ / ₈	⁻⁹ / ₁₆	⁻⁷ / ₁₆
Pier No. 3	0	0	0	0	0	0
Abut. No. 2	¹ / ₄	¹ / ₈	0	⁻¹ / ₈	⁻¹ / ₄	⁻⁷ / ₁₆

SOLE PLATE BEVEL (%)					
	Abut. No. 1	Pier No. 1	Pier No. 2	Pier No. 3	Abut. No. 2
G1	5.05	2.02	-1.47	-3.03	-2.98
G2	5.11	2.08	-1.42	-3.03	-3.02
G3	5.16	2.13	-1.36	-3.03	-3.03
G4	5.22	2.19	-1.30	-3.03	-3.03
G5	5.28	2.25	-1.25	-3.03	-3.03

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
2516100

WIN
25161.00
BRIDGE NO. 6601
BRIDGE PLANS

PROJ. MANAGER
Gerald Dostle
LNH
RT

BY
CT
RF

DATE
03/2025
03/2025

CHECKED-REVIEWED
DESIGNS-DETAILED
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REVISIONS 1
REVISIONS 2
REVISIONS 3
REVISIONS 4
FIELD CHANGES

SIGNATURE
P.E. NUMBER
DATE

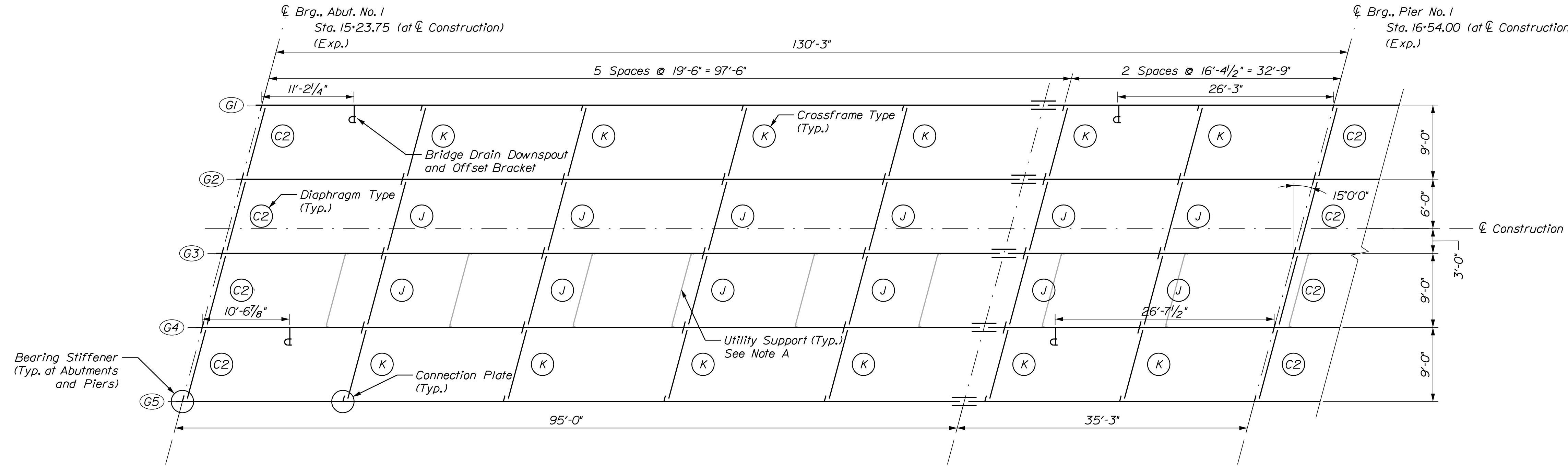
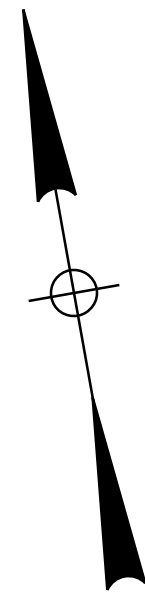
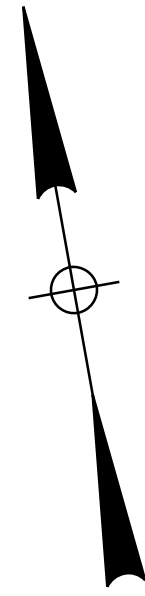
TUTTLE ROAD BRIDGE
INTERSTATE 295, RTE US 1 & MCRR
CUMBERLAND COUNTY

BEARING DETAILS

SHEET NUMBER

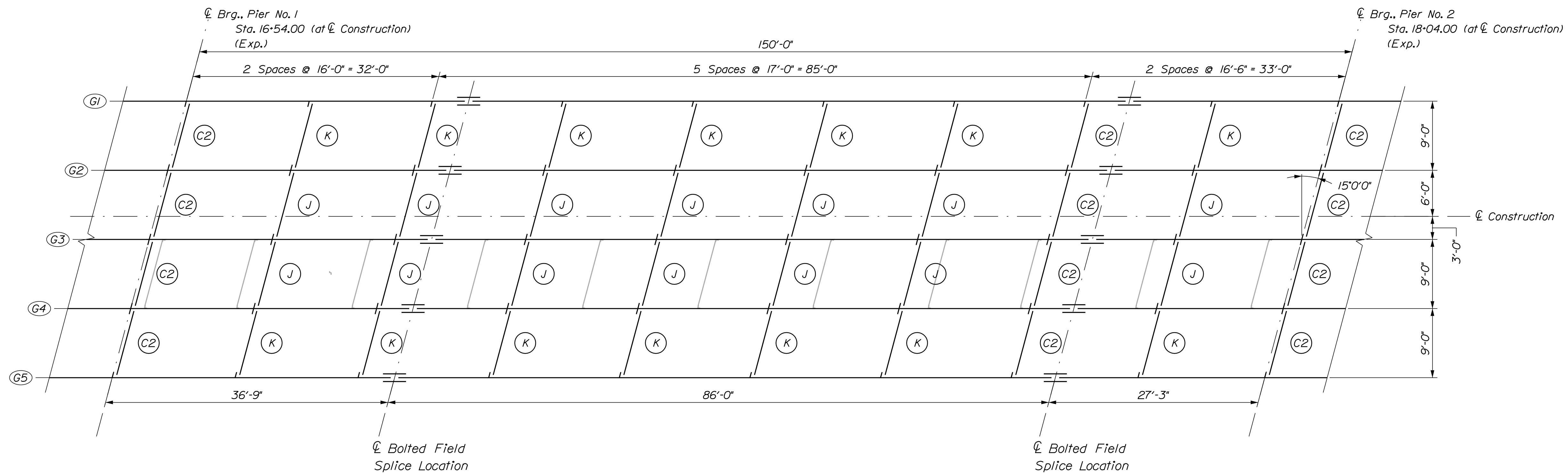
63

OF 88



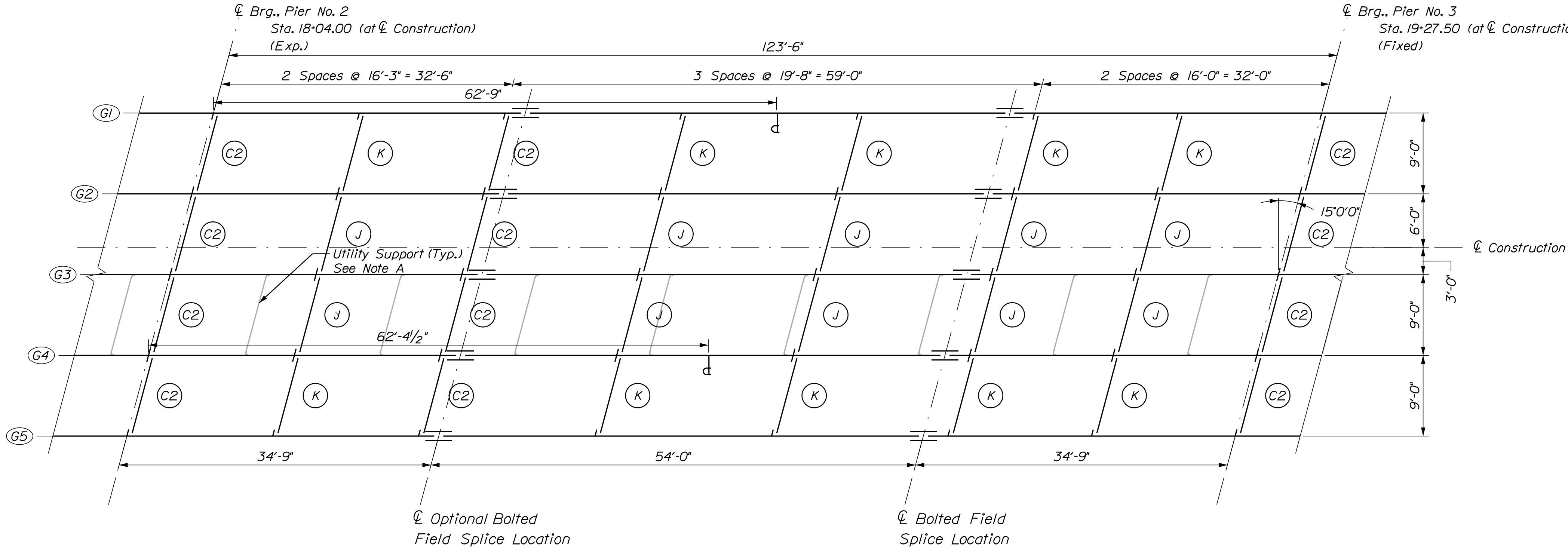
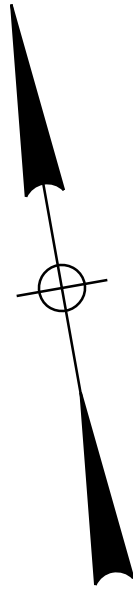
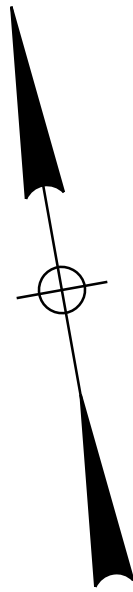
*Note A:
See Utility Support Plan and Detail
Sheets for layout and dimensions*

FRAMING PLAN
Span No. 1



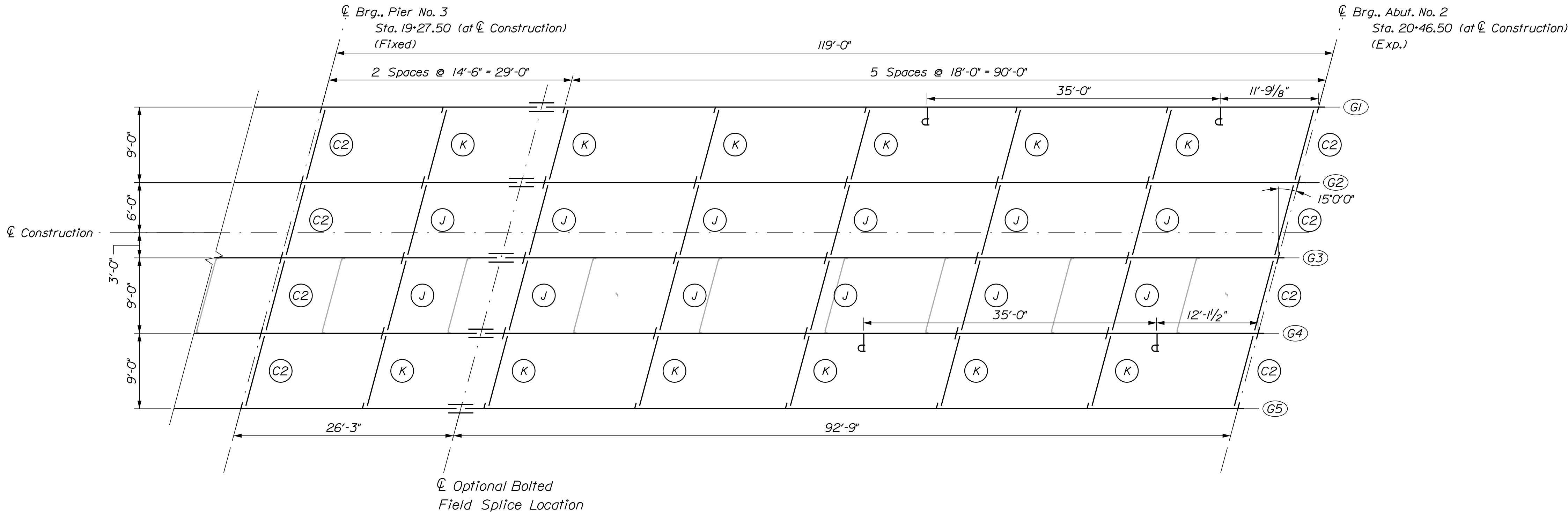
FRAMING PLAN
Span No. 2

64 OF 88	SHEET NUMBER	TUTTLE ROAD BRIDGE				STATE OF MAINE				
		INTERSTATE 295, RTE US 1 & MCCR					DEPARTMENT OF TRANSPORTATION			
		CUMBERLAND CUMBERLAND COUNTY								
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		SPAN NO. 1 & 2								
		PROJ. MANAGER						Gerard Dostie	BY	DATE
		DESIGN-DETAILED								
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		DESIGNER-DETAILED3								
REVISIONS 1				P.E. NUMBER						
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REVISIONS 4				DATE						
FIELD CHANGES										
				BRIDGE NO. 5801				WIN	25161.00	BRIDGE PLANS



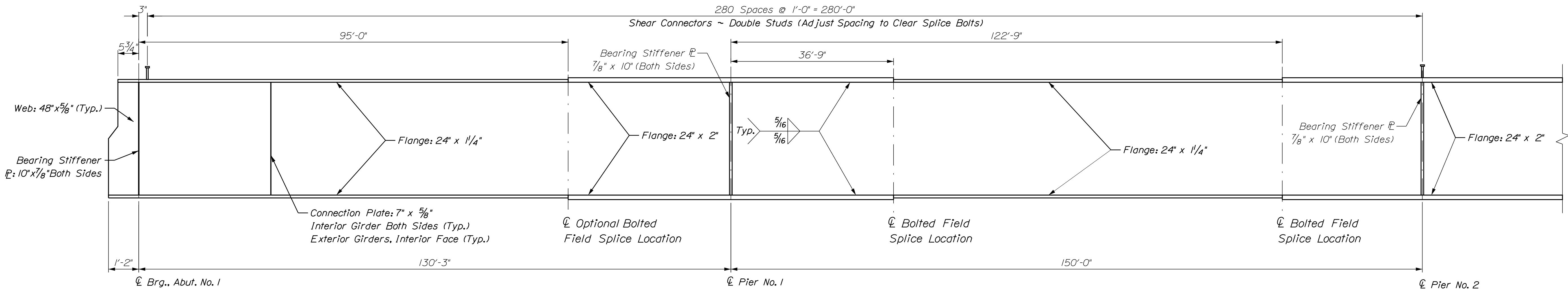
Note A:
See Utility Support Plan and Detail
Sheets for layout and dimensions

FRAMING PLAN
Span No. 3

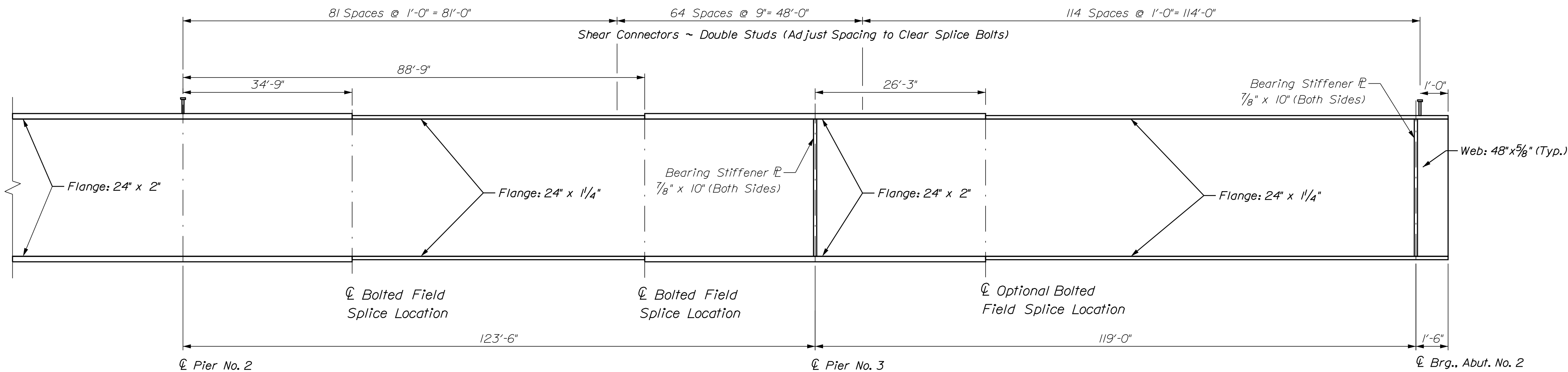


FRAMING PLAN
Span No. 4

STATE OF MAINE		DEPARTMENT OF TRANSPORTATION		2516100		BRIDGE NO. 6601		BRIDGE PLANS	
TUTTLE ROAD BRIDGE		INTERSTATE 295, RTE US 1 & MCRR		CUMBERLAND COUNTY		FRAMING PLAN		SHEET NUMBER	
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DATE		DATE		DATE		DATE		OF 88	
BY		BY		BY		BY			
Gerald Dostle		Gerald Dostle		Gerald Dostle		Gerald Dostle			
LNH		LNH		LNH		LNH			
FF		FF		FF		FF			
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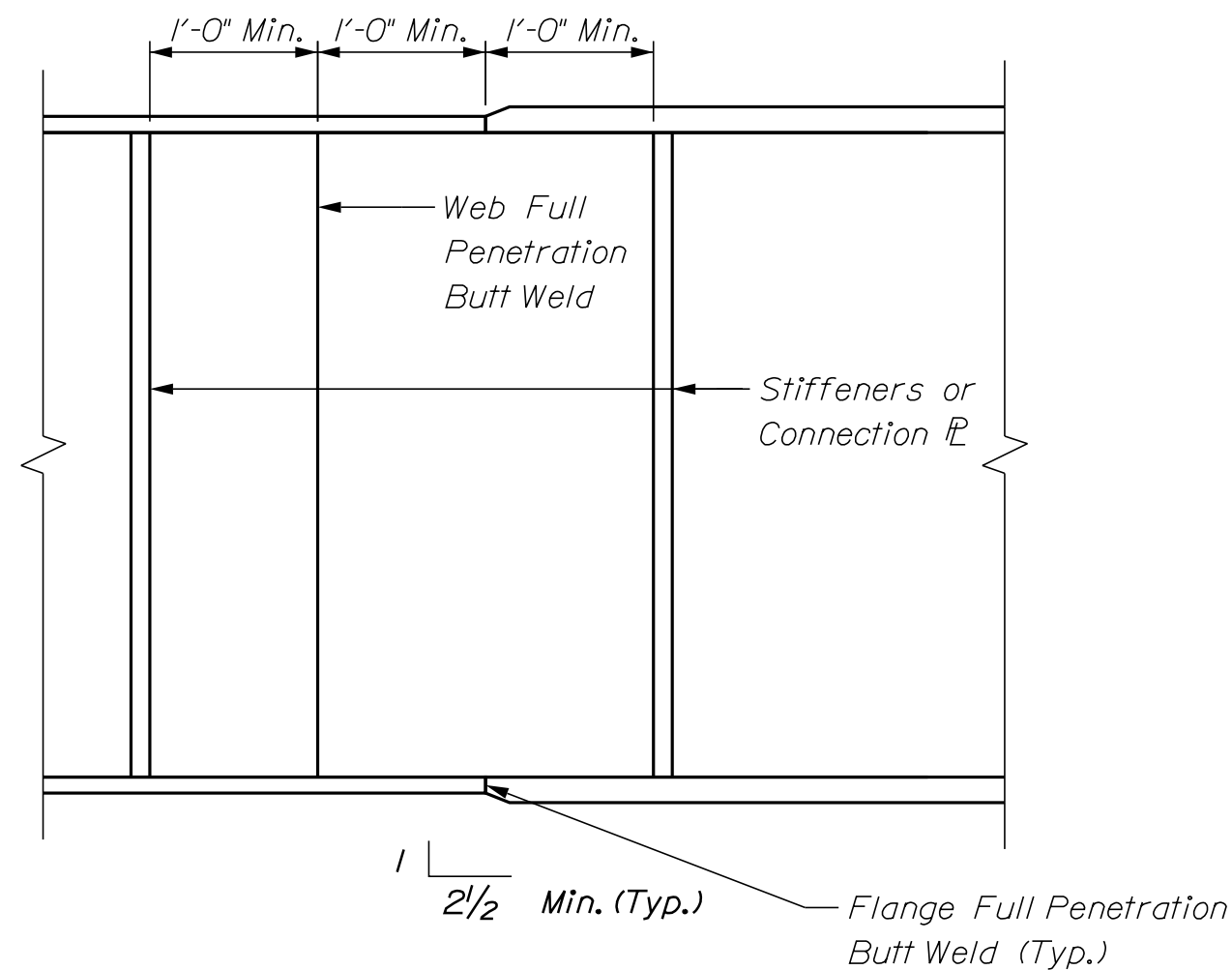


GIRDER ELEVATION

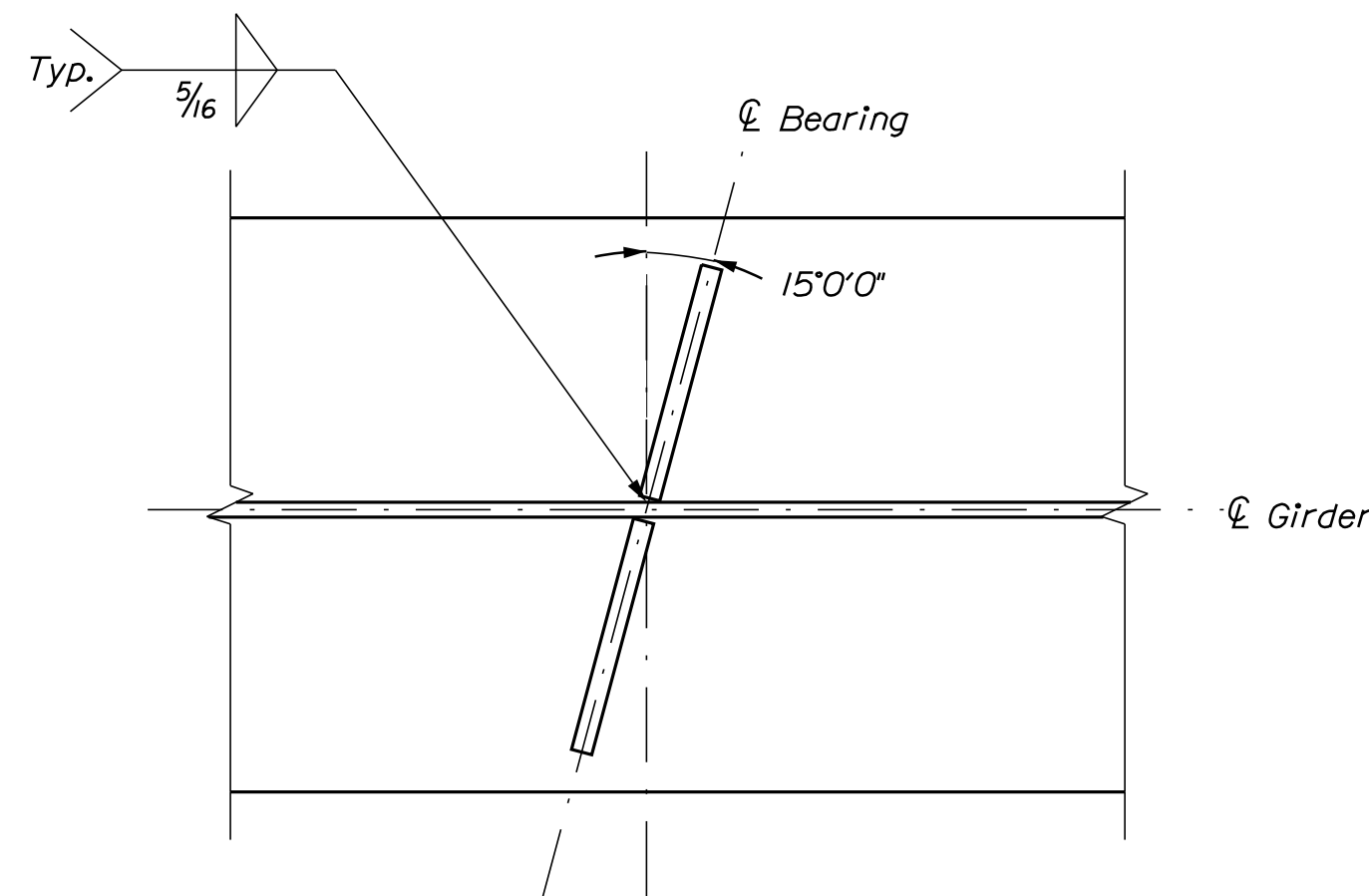
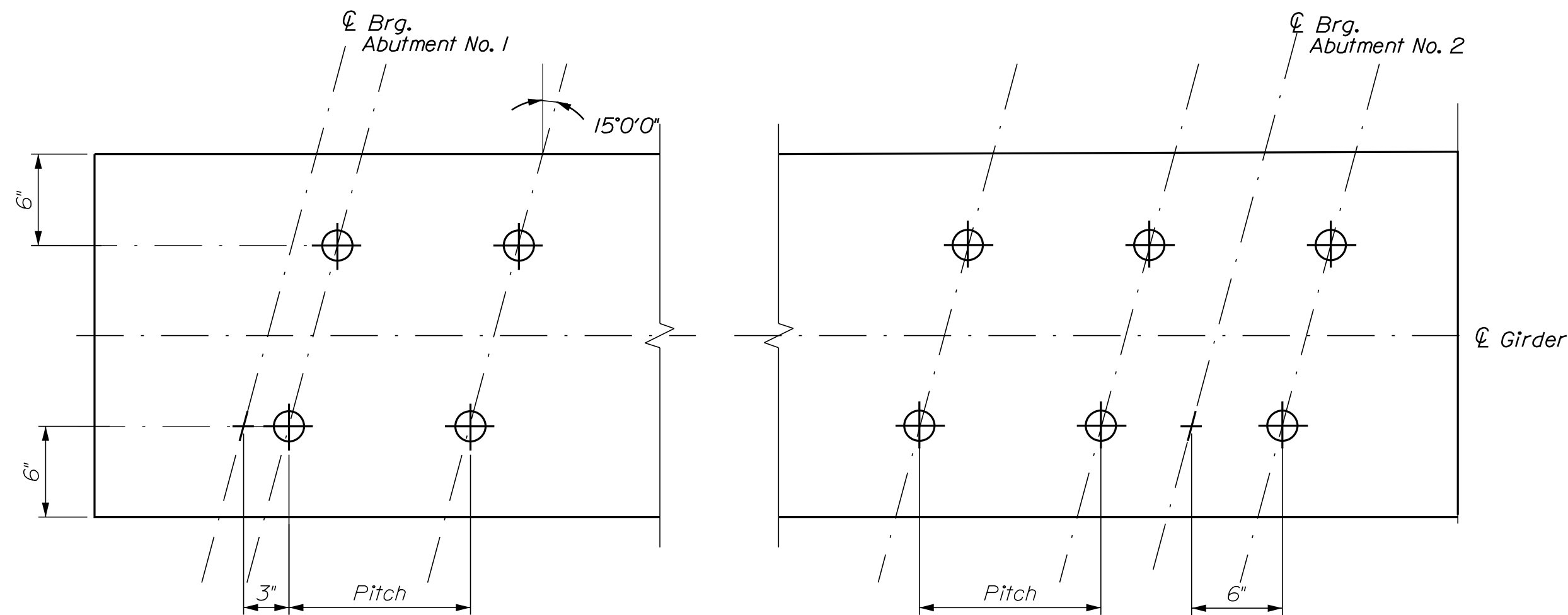


GIRDER ELEVATION

N.T.S
1,080 Studs per Girder (5,400 Studs Total)



WELDED SPlice TRANSITION
N.T.S



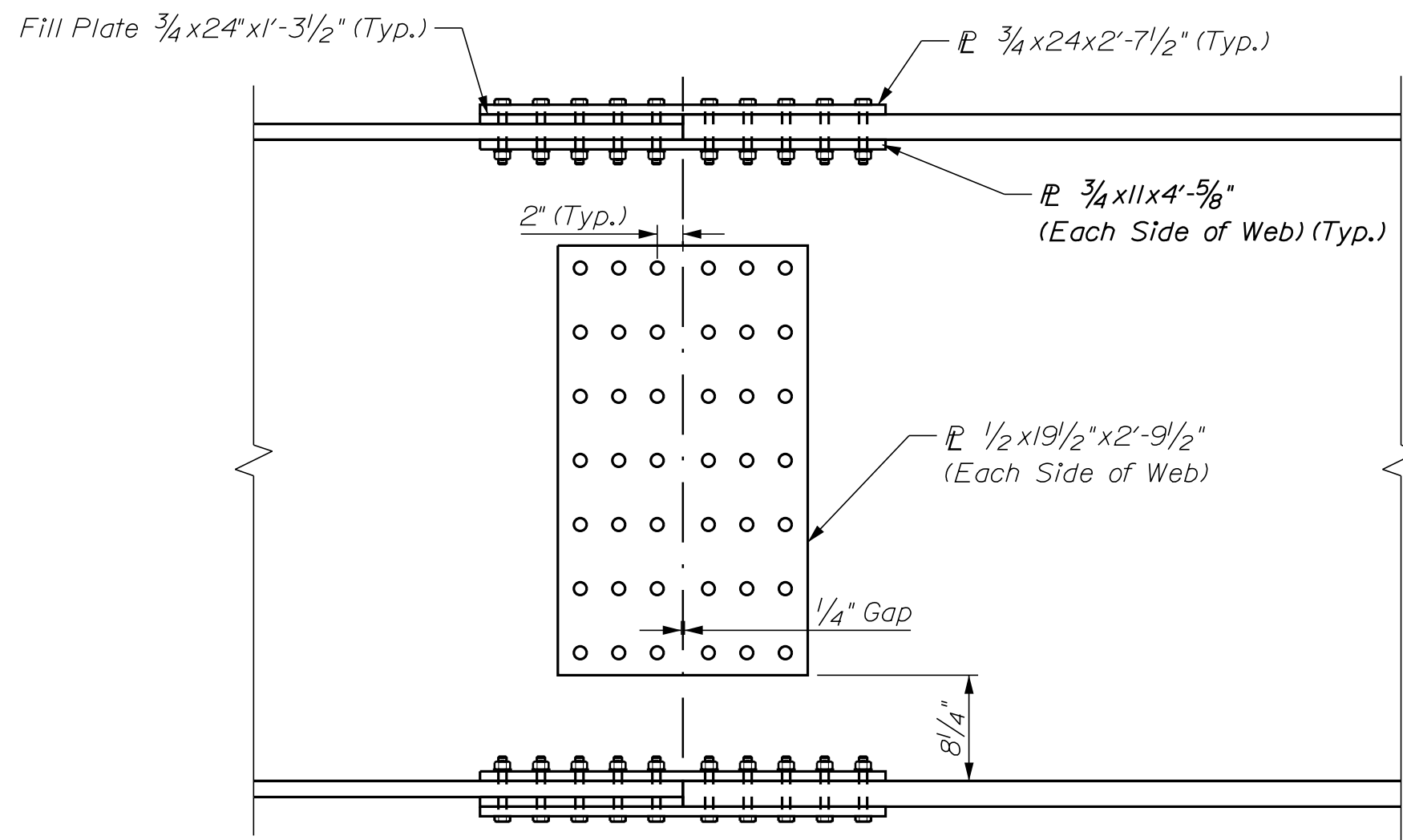
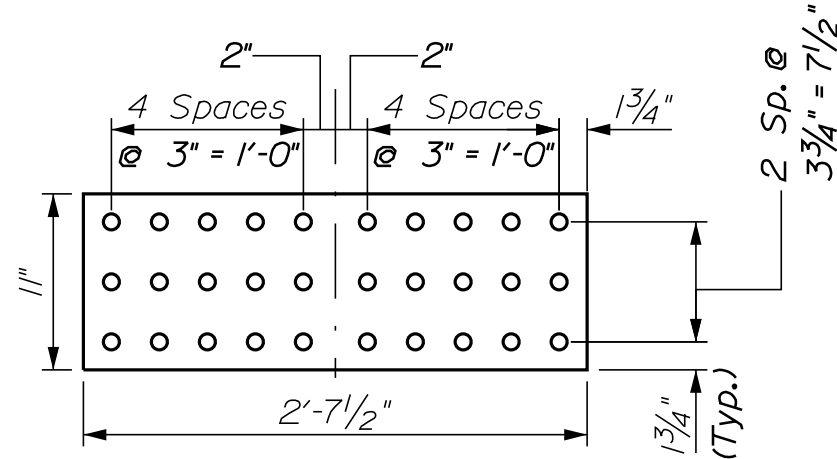
BEARING STIFFENERS

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
2516100
WIN 25161.00
BRIDGE NO. 6601
BRIDGE PLANS

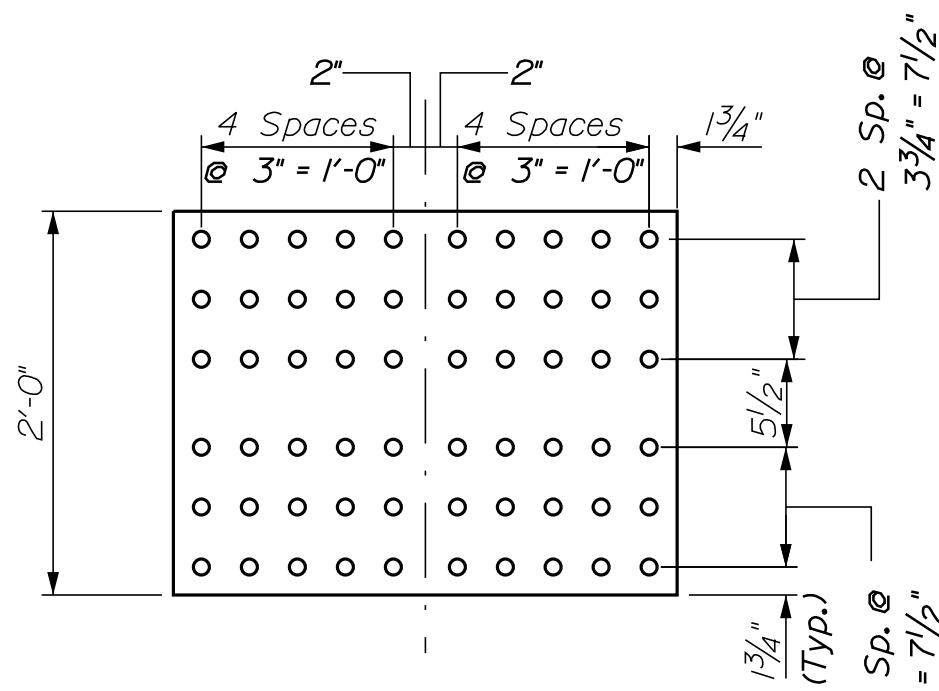
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BY	LNH	LNH							
DATE	03/2025	03/2025							
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TUTTLE ROAD BRIDGE
INTERSTATE 295, RTE US 1 & MCRR
CUMBERLAND COUNTY
GIRDER ELEVATION

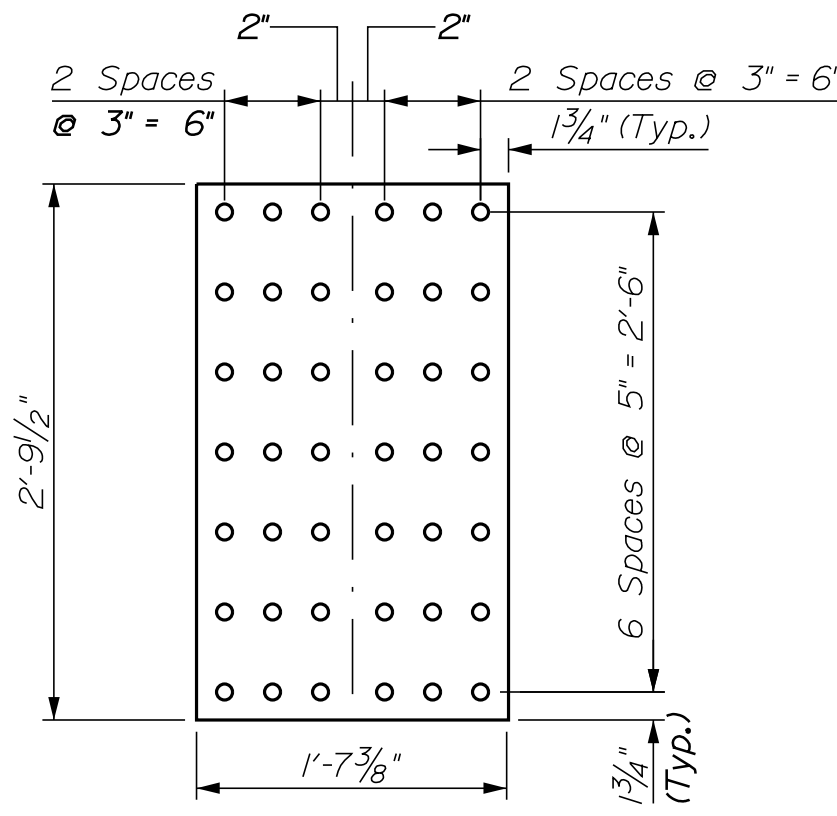
SHEET NUMBER
66
OF 88

ELEVATION

INNER FLANGE PLATE



OUTER FLANGE PLATE



WEB PLATE

STRUCTURAL STEEL NOTES

1. Camber ordinates, as shown, are computed to compensate for all dead load deflections and for the curvature of the finished grade profile.

2. No transverse butt weld splices will be allowed in the flange plates or web plates within 10 feet or 10 percent of the span length (whichever is greater) from the points of maximum negative moment or maximum positive moment. Butt weld splices in flanges shall be not less than 1 foot from transverse butt welds in the web plates and no transverse web or flange butt welds shall be located within 1 foot of other transverse welds (e.g. connection plates to web welds) on either flange or web. No transverse butt weld splices will be allowed in areas of stress reversal.

3. Sections of flange plates or web plates between transverse shop splices or between a transverse shop splice and a field splice shall be at least 20 feet in length unless otherwise shown on the Plans.

4. Bearing stiffeners shall be plumb after erection and dead loading of the structure. Intermediate web stiffeners may be either plumb or normal to the top flange.

5. Intermediate crossframe or diaphragm connection plates may be either plumb or normal to the top flange.

6. Filler plates may be steel conforming to the requirements of ASTM A709, Grade 36.

7. Provide a drip bar on the high side of each pier and abutment on all girders in accordance with Standard Detail 504(10).

8. Structural steel was designed with a vertical construction load of 50 lb/sf and a lateral wind velocity during construction of 70 mph.

9. All bolts, nuts, and washers shall be hot dip galvanized in accordance with ASTM A153.

10. Bolted field splice connections shall be made using $\frac{7}{8}$ inch ASTM F3125, Grade A325 Type A high strength bolts. Bolt hole size shall be $\frac{15}{16}$ inch diameter. Field splice bolt threads shall be excluded from the shear plane.

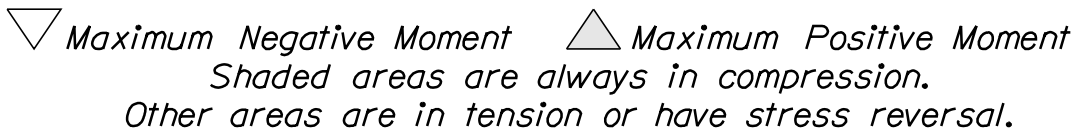
II. The splice was designed with a Class B slip coefficient.

12. Repairs to the Thermal Spray Coating that modify the surface roughness in the area of the faying surfaces shall not be performed without the approval of the Fabrication Engineer.

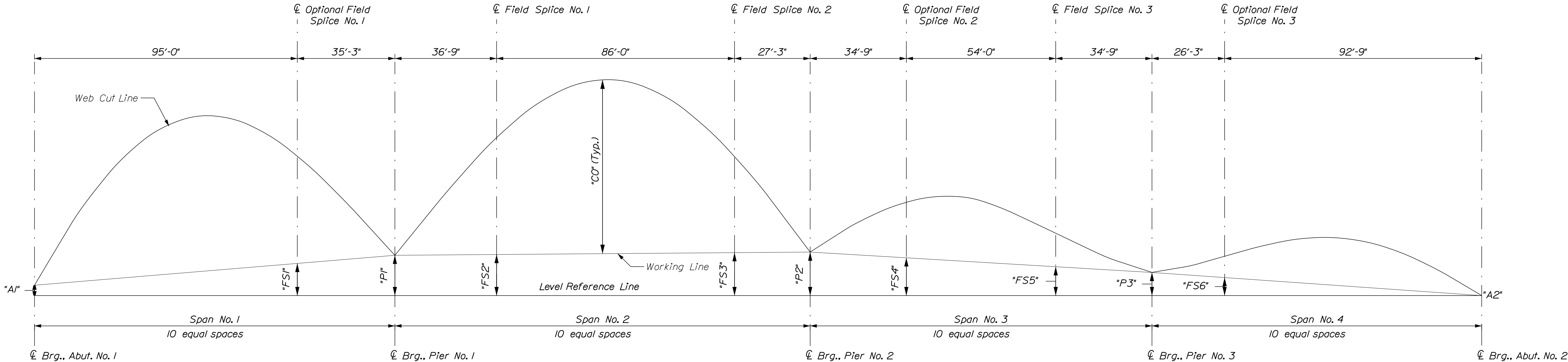
13. Ends of girder webs shall be vertical under full dead load.

14. At the Contractor's option, the Diaphragms and Cross Frames may be Hot-Dipped Galvanized in accordance with Standard Specifications Section 506, Shop Applied Protective Coating, as approved by the Resident. Payment will be considered incidental to Item 506.9104, Thermal Spray Coating (Shop Applied), no separate payment will be made.

67 OF 88		SHEET NUMBER		TUTTLE ROAD BRIDGE INTERSTATE 295, RTE US 1 & MCRR CUMBERLAND CUMBERLAND COUNTY		PROJ. MANAGER		Credit Dostie	BY	DATE	STATE OF MAINE DEPARTMENT OF TRANSPORTATION	
						DESIGN-DETAILED	CNJ	CNJ	03/2025			
GIRDER ELEVATION		CHECKED-REVIEWED		LNH	LNH	03/2025	SIGNATURE				2516100	
		DESIGN2-DETAILED2										
		DESIGN3-DETAILED3					P.E. NUMBER					
		REVISIONS 1										
		REVISIONS 2										
		REVISIONS 3					DATE				WIN	BRIDGE NO. 5801 BRIDGE PLANS
		REVISIONS 4									25161.00	
		FIELD CHANGES										



SHEET NUMBER	TUTTLE ROAD BRIDGE				PROJ. MANAGER	Ceridd Dostie	BY	DATE
	INTERSTATE 295, RTE US 1 & MCRR				CHECKED-REVIEWED	FF	CI	03/2025
68	CUMBERLAND CUMBERLAND COUNTY				DESIGN2-DETAILED2	RF	RF	03/2025
					DESIGN3-DETAILED3			
					REVISIONS 1			
					REVISIONS 2			
					REVISIONS 3			
OF 88	STRUCTURAL STEEL DETAILS				REVISIONS 4			
					FIELD CHANGES			



CAMBER DIAGRAM (BY SPAN)

TABLE OF CAMBER ORDINATES - SPAN NO. 1 "CO" (Inches)											
Girder	℄ Brg., Abut. No. 1	0.1 Span	0.2 Span	0.3 Span	0.4 Span	0.5 Span	0.6 Span	0.7 Span	0.8 Span	0.9 Span	℄ Brg., Pier No. 1
G1	0.00	3.28	5.91	7.75	8.73	8.84	8.15	6.74	4.79	2.48	0.00
G2	0.00	3.42	6.17	8.09	9.10	9.21	8.45	6.96	4.92	2.53	0.00
G3	0.00	3.42	6.16	8.08	9.10	9.20	8.45	6.96	4.92	2.53	0.00
G4	0.00	3.42	6.17	8.09	9.10	9.21	8.45	6.96	4.92	2.53	0.00
G5	0.00	3.28	5.91	7.75	8.73	8.84	8.15	6.74	4.79	2.48	0.00

TABLE OF CAMBER ORDINATES - SPAN NO. 2 "CO" (Inches)											
Girder	℄ Brg., Pier No. 1	0.1 Span	0.2 Span	0.3 Span	0.4 Span	0.5 Span	0.6 Span	0.7 Span	0.8 Span	0.9 Span	℄ Brg., Pier No. 2
G1	0.00	3.02	5.79	8.04	9.56	10.15	9.73	8.35	6.12	3.27	0.00
G2	0.00	3.03	5.84	8.17	9.73	10.35	9.92	8.49	6.20	3.30	0.00
G3	0.00	3.02	5.84	8.16	9.73	10.34	9.92	8.49	6.20	3.30	0.00
G4	0.00	3.03	5.84	8.17	9.73	10.35	9.92	8.49	6.20	3.30	0.00
G5	0.00	3.02	5.79	8.04	9.56	10.15	9.73	8.35	6.12	3.27	0.00

TABLE OF CAMBER ORDINATES - SPAN NO. 3 "CO" (Inches)											
Girder	℄ Brg., Pier No. 2	0.1 Span	0.2 Span	0.3 Span	0.4 Span	0.5 Span	0.6 Span	0.7 Span	0.8 Span	0.9 Span	℄ Brg., Pier No. 3
G1	0.00	1.40	2.53	3.31	3.64	3.44	2.78	2.01	1.22	0.51	0.00
G2	0.00	1.43	2.63	3.46	3.84	3.69	3.02	2.17	1.31	0.54	0.00
G3	0.00	1.47	2.70	3.57	3.99	3.87	3.21	2.31	1.41	0.59	0.00
G4	0.00	1.50	2.77	3.67	4.12	4.04	3.40	2.46	1.50	0.64	0.00
G5	0.00	1.54	2.81	3.73	4.19	4.14	3.55	2.59	1.60	0.70	0.00

TABLE OF CAMBER ORDINATES - SPAN NO. 4 "CO" (Inches)											
Girder	℄ Brg., Pier No. 3	0.1 Span	0.2 Span	0.3 Span	0.4 Span	0.5 Span	0.6 Span	0.7 Span	0.8 Span	0.9 Span	℄ Brg., Abut. No. 2
G1	0.00	0.41	0.99	1.61	2.17	2.45	2.49	2.24	1.69	0.91	0.00
G2	0.00	0.46	1.10	1.79	2.41	2.73	2.78	2.49	1.88	1.02	0.00
G3	0.00	0.46	1.10	1.79	2.41	2.73	2.77	2.49	1.88	1.02	0.00
G4	0.00	0.46	1.10	1.79	2.41	2.73	2.78	2.49	1.89	1.02	0.00
G5	0.00	0.41	0.99	1.61	2.17	2.45	2.49	2.24	1.69	0.91	0.00

CAMBER DIAGRAM DIMENSIONS (Feet)											
Girder	"A1"	"FS1"	"P1"	"FS2"	"FS3"	"P2"	"FS4"	"FS5"	"P3"	"FS6"	"A2"
G1	1.80	5.16	6.40	6.50	6.74	6.82	5.91	4.51	3.60	2.81	0.00
G2	1.60	5.01	6.28	6.40	6.69	6.78	5.88	4.50	3.60	2.81	0.00
G3	1.41	4.87	6.16	6.30	6.63	6.74	5.86	4.48	3.60	2.81	0.00
G4	1.21	4.73	6.03	6.19	6.58	6.70	5.83	4.47	3.60	2.81	0.00
G5	1.01	4.58	5.90	6.09	6.52	6.66	5.80	4.46	3.60	2.81	0.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
2516100

BRIDGE NO. 5601
WIN
25161.00
BRIDGE PLANS

TUTTLE ROAD BRIDGE
INTERSTATE 295, RTE US 1 & MCRR
CUMBERLAND CUMBERLAND COUNTY

STRUCTURAL STEEL CAMBER

PROJ. MANAGER
Gerald Dostle

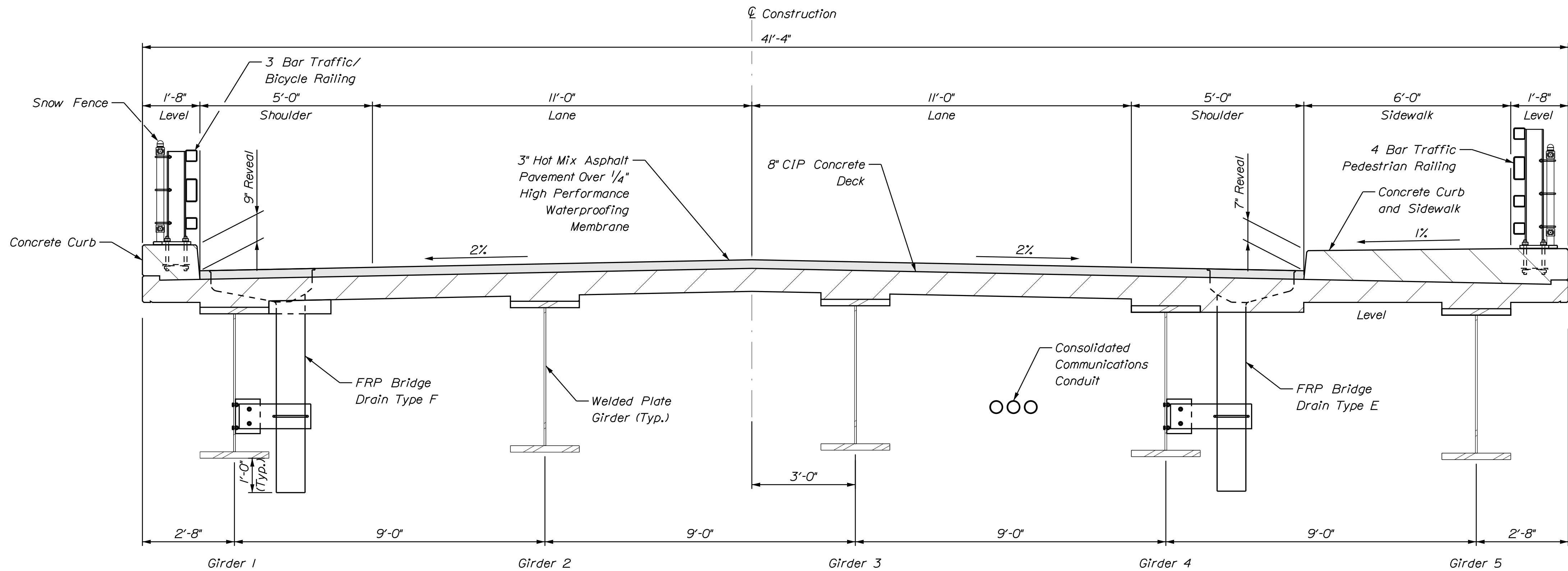
BY
CT
RF

DATE
03/2025
03/2025

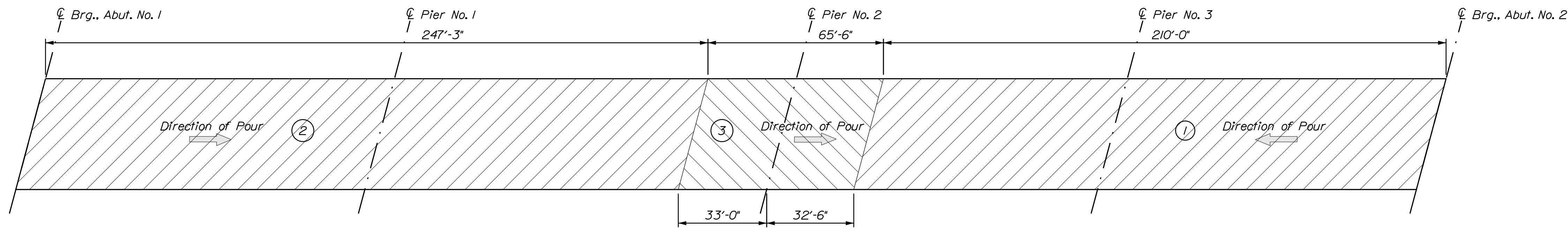
DESIGN-DETAILED
CHECKED-REVIEWED
DESIGN-DETAILED
DESIGN-DETAILED
REVISIONS 1
REVISIONS 2
REVISIONS 3
REVISIONS 4
FIELD CHANGES

SIGNATURE
P.E. NUMBER
DATE

SHEET NUMBER
69
OF 88



PROPOSED SECTION



DECK PLACEMENT SEQUENCE

SUPERSTRUCTURE NOTES

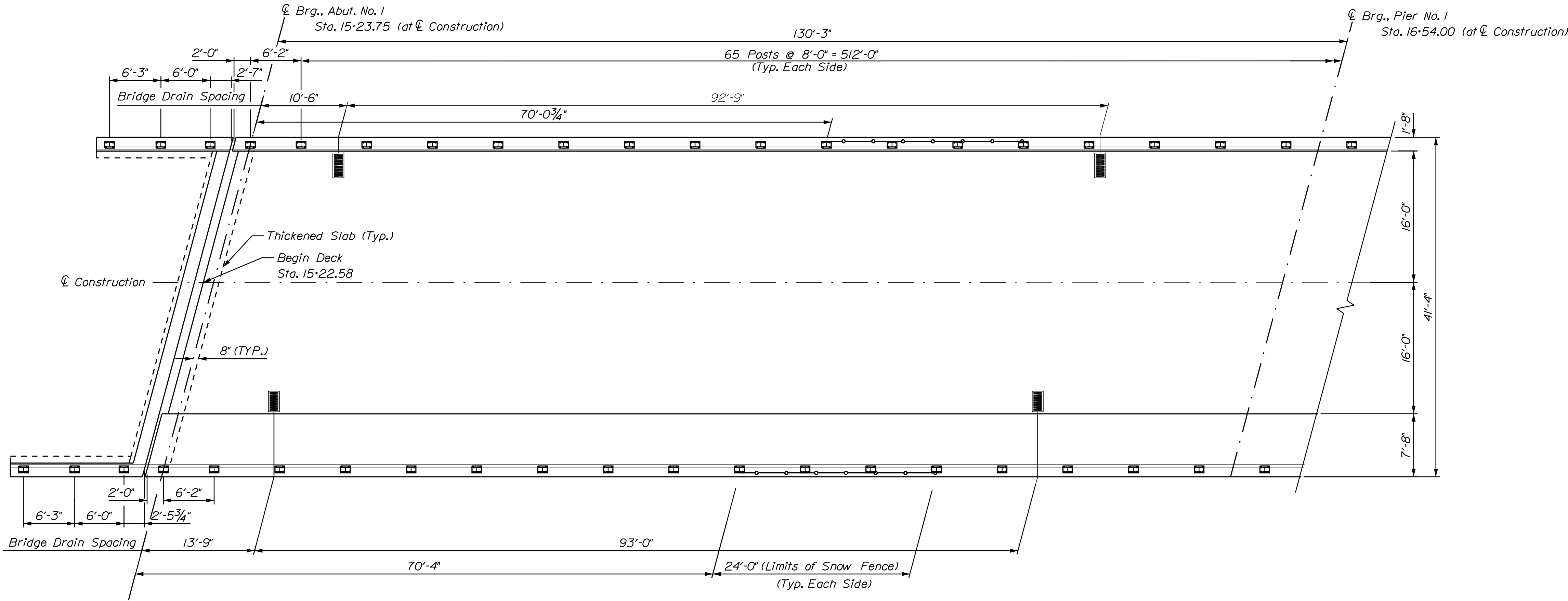
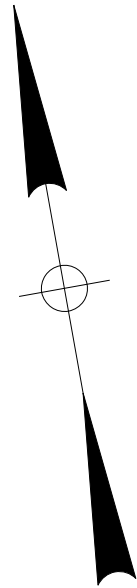
1. The theoretical blocking used for design of the structure is 4.5 inch at the centerline of bearing of the abutments and piers. Refer to Standard Detail 502(03) for blocking details.
2. Reinforcing steel shall have a minimum concrete cover of 2 inches unless otherwise noted.
3. Form a one inch V-groove on the fascias at the horizontal joint between the curb and slab.
4. The superstructure slab concrete shall be placed in accordance with the Deck Placement Sequence shown on this sheet. Concrete in a placement shall be kept plastic one complete span behind the span being placed. A minimum of 5 days shall elapse between successive partial placements. The superstructure slab concrete placement sequence shall be approved by the Resident.
5. Precast Concrete Deck Panels are not allowed on this project.
6. The gland seal to be furnished shall have minimum Movement Rating(s) as follows:
Abutment No. 2 = 1.5 inches
7. Additional reinforcing steel around the bridge drains shall be as shown. Flare transverse reinforcing bars to clear drains. Cut one transverse bar if necessary (top and bottom).

STATE OF MAINE DEPARTMENT OF TRANSPORTATION	2516100	
	WIN	25161.00
	BRIDGE NO. 5801	BRIDGE PLANS

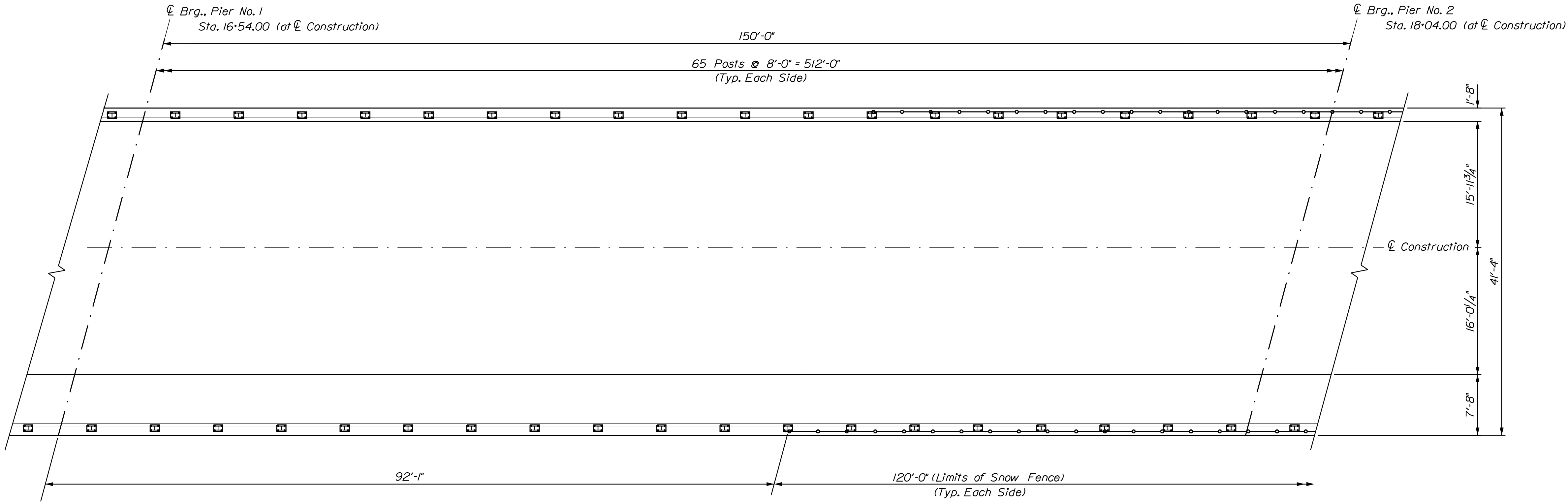
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Gerald Dastie	CT	RF	RF						
BY	CT	RF							
DATE	03/2025	03/2025							
SIGNATURE			P.E. NUMBER			DATE			

TUTTLE ROAD BRIDGE INTERSTATE 295, RTE US 1 & MCRR CUMBERLAND CUMBERLAND COUNTY	SUPERSTRUCTURE SECTION	
	AND NOTES	
	SHEET NUMBER	

70

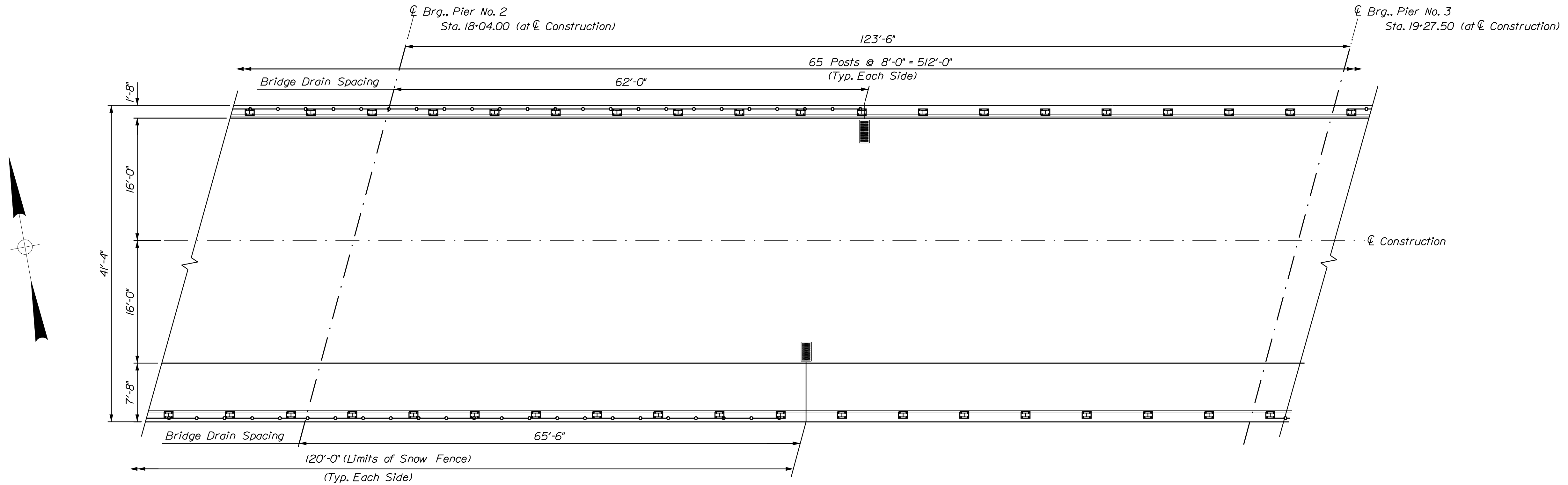


SUPERSTRUCTURE PLAN - SPAN NO. 1

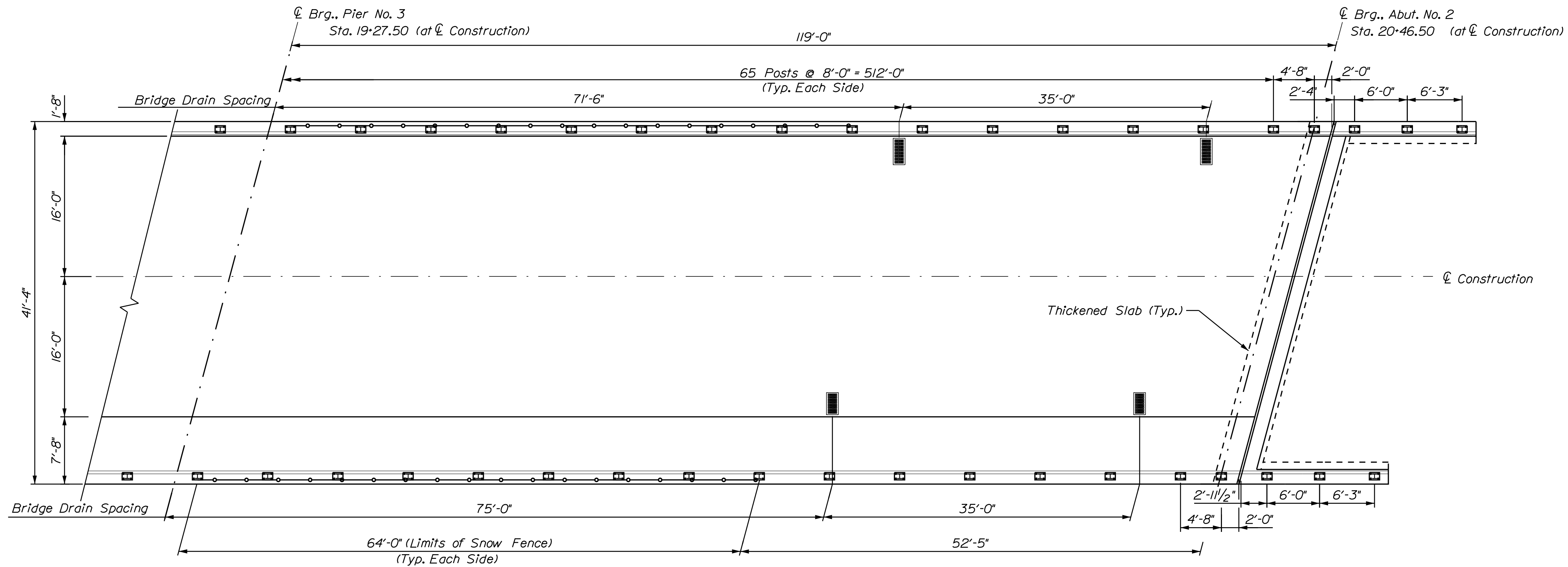


SUPERSTRUCTURE PLAN - SPAN NO. 2

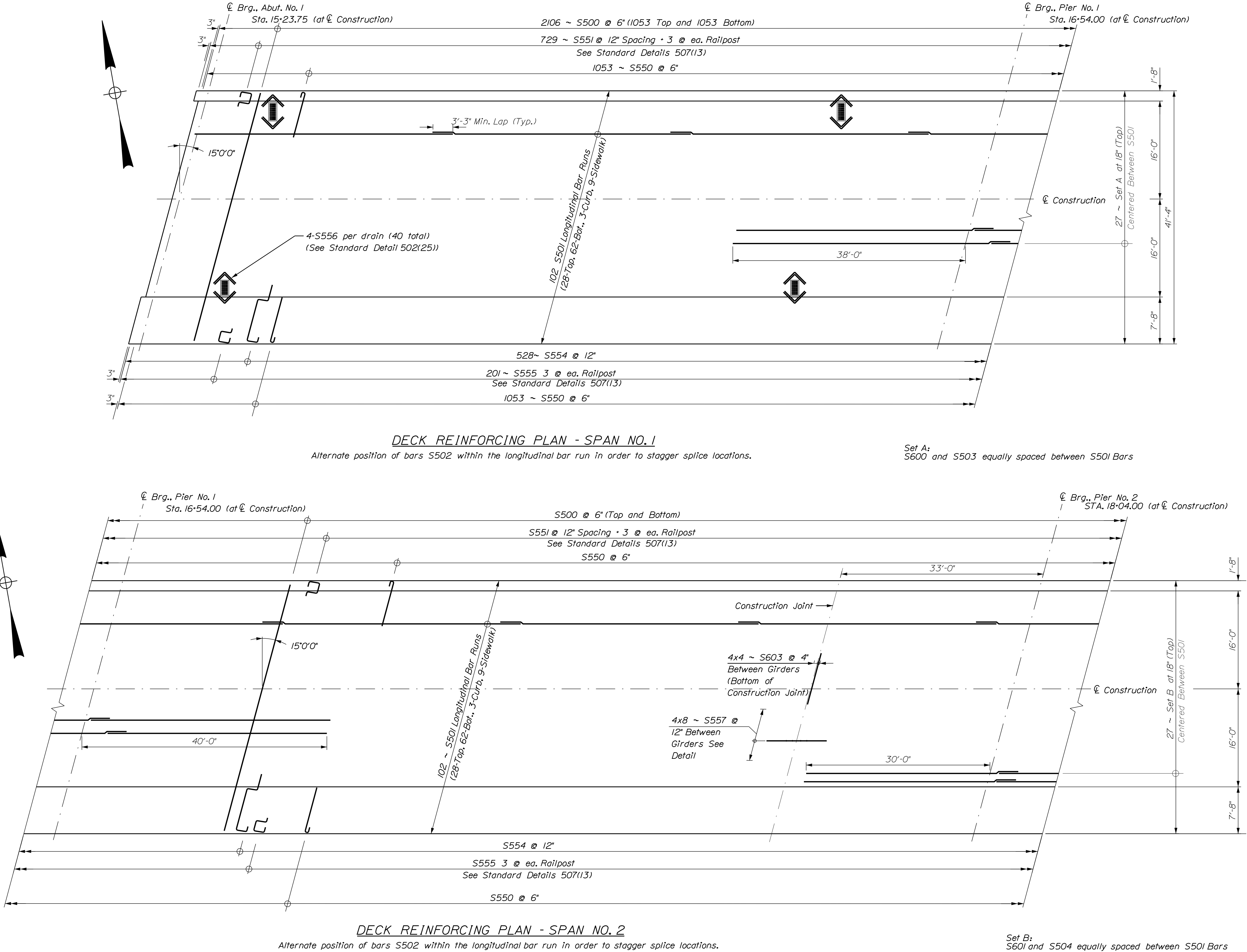
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PROJ. MANAGER		BY		DATE		SIGNATURE		P.E. NUMBER		DATE	
DESIGN-DETAILED		Gerald Dostie		03/2025		03/2025					
CHECKED-REVIEWED		CNU		RF							
DESIGN-DETAILED		CNU		RF							
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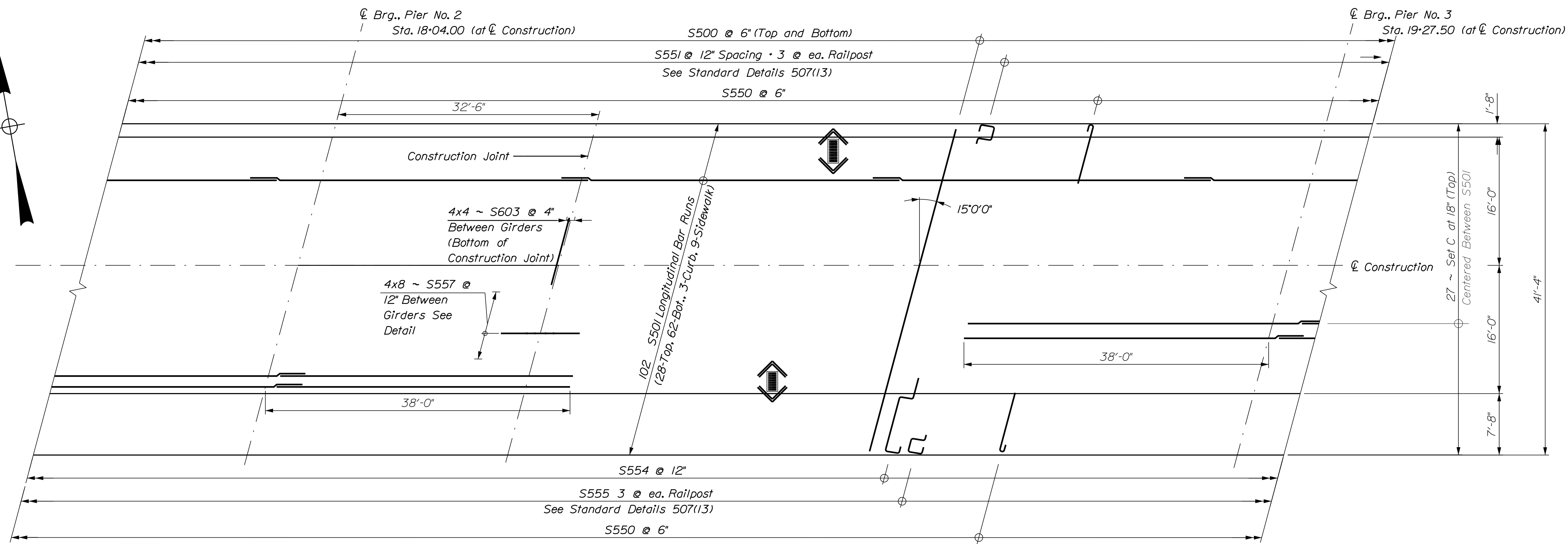
SUPERSTRUCTURE PLAN - SPAN NO. 3



SUPERSTRUCTURE PLAN - SPAN NO. 4



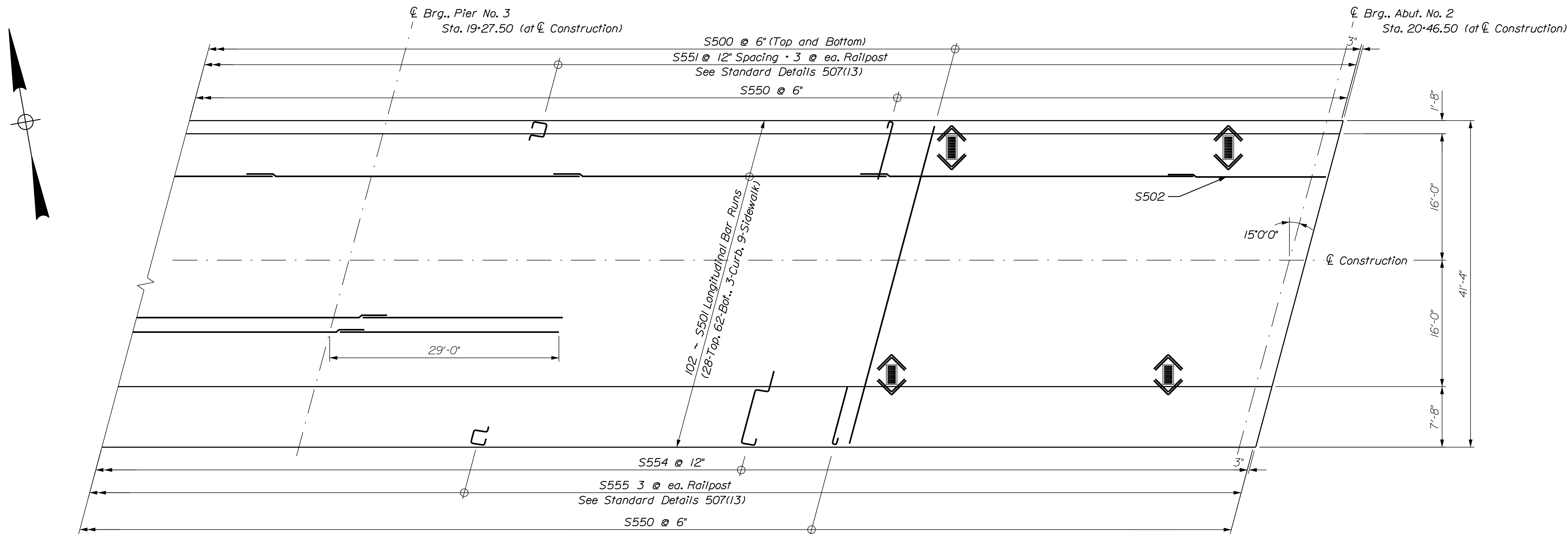
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										CUMBERLAND COUNTY										2516100									
										DECK REINFORCING PLAN 1										BRIDGE NO. 5801									
OF 88										PROJ. MANAGER										WIN									
										DESIGN-DETAILED										25161.00									
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DECK REINFORCING PLAN - SPAN NO. 3

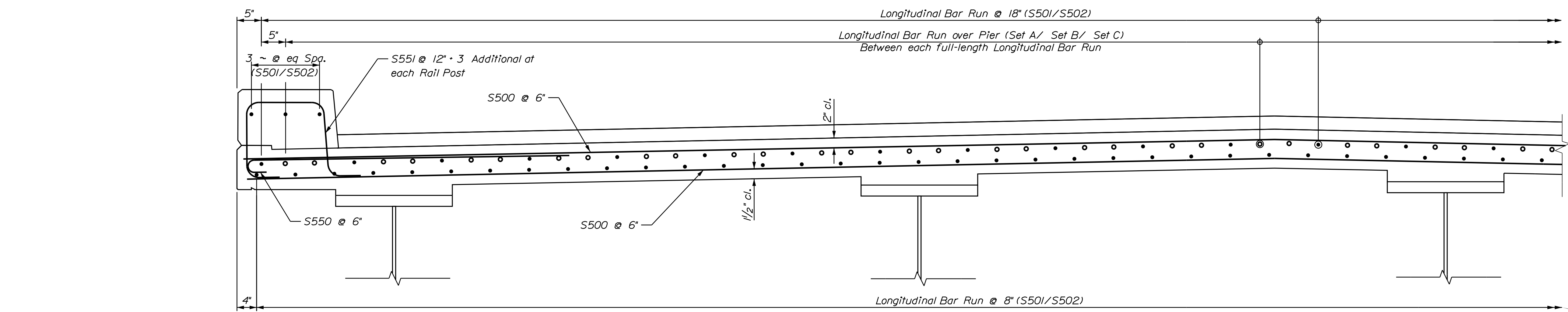
Alternate position of bars S502 within the longitudinal bar run in order to stagger splice locations.

Set C:
S602 and S505 equally spaced between S501 Bars

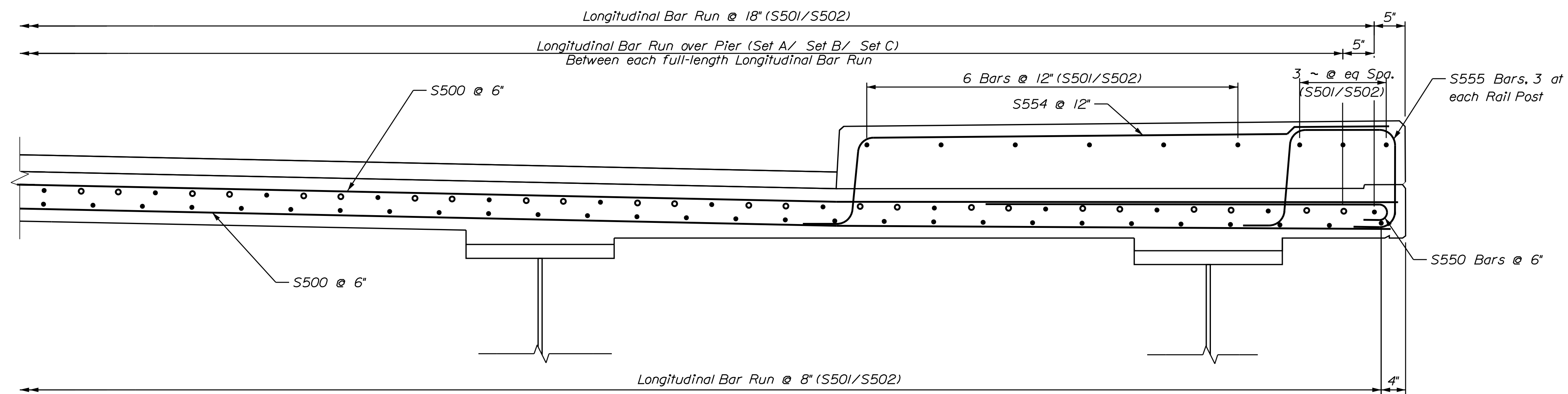


DECK REINFORCING PLAN - SPAN NO. 4

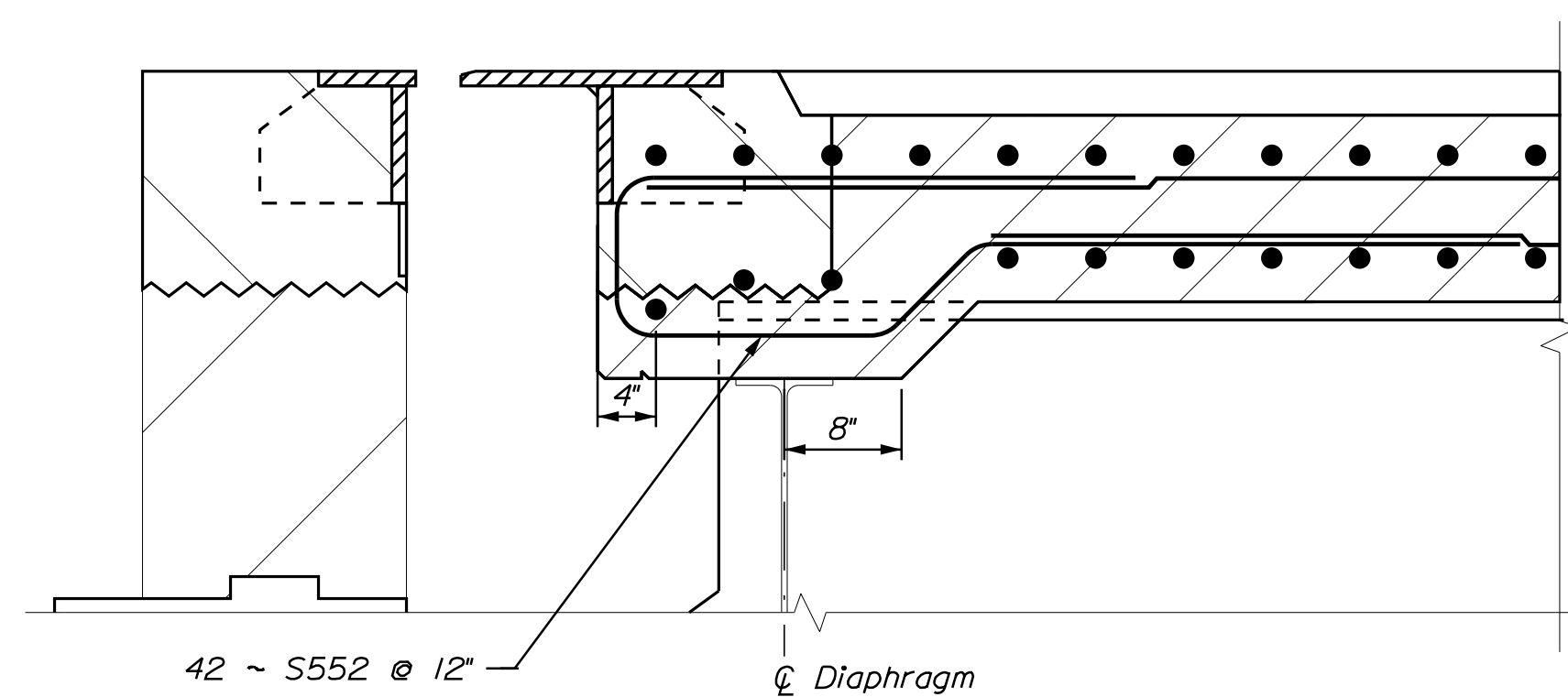
Alternate position of bars S502 within the longitudinal bar run in order to stagger splice locations.



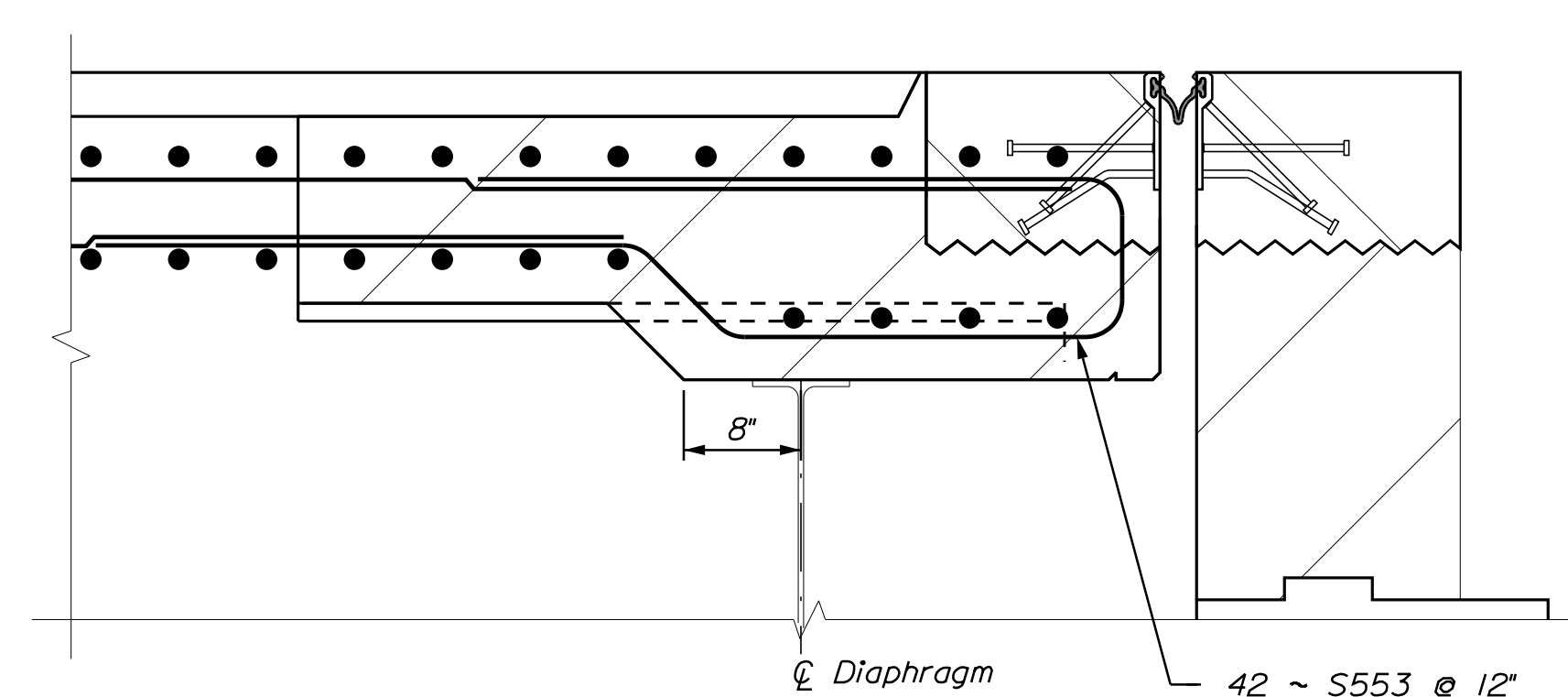
PARTIAL DECK REINFORCING SECTION



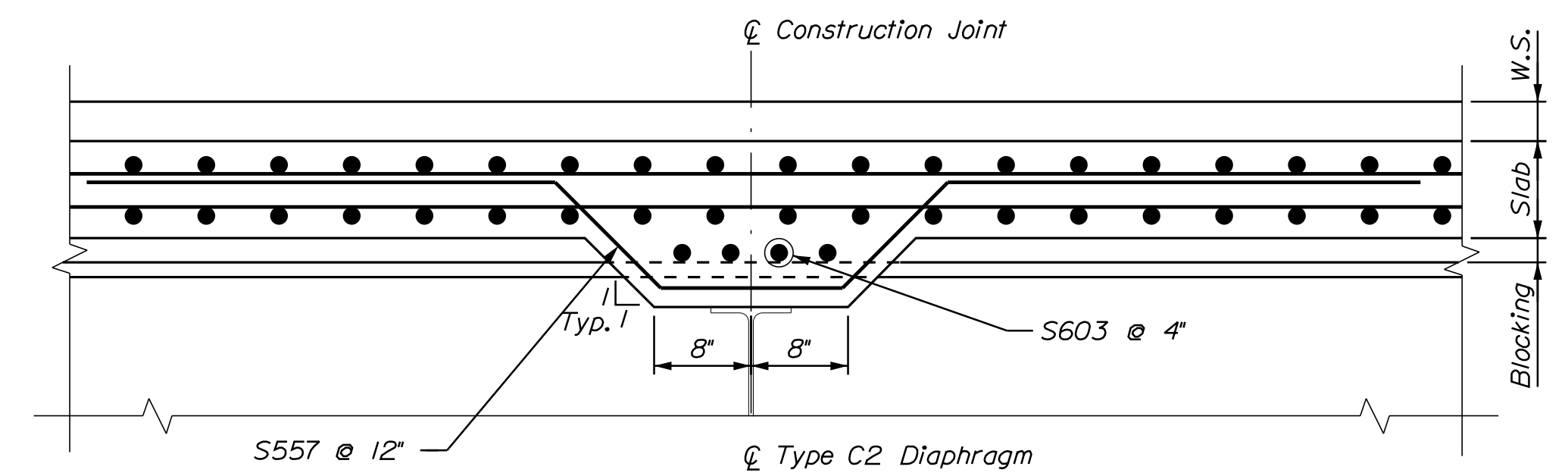
PARTIAL DECK REINFORCING SECTION



DECK END DETAIL ABUT NO. 1

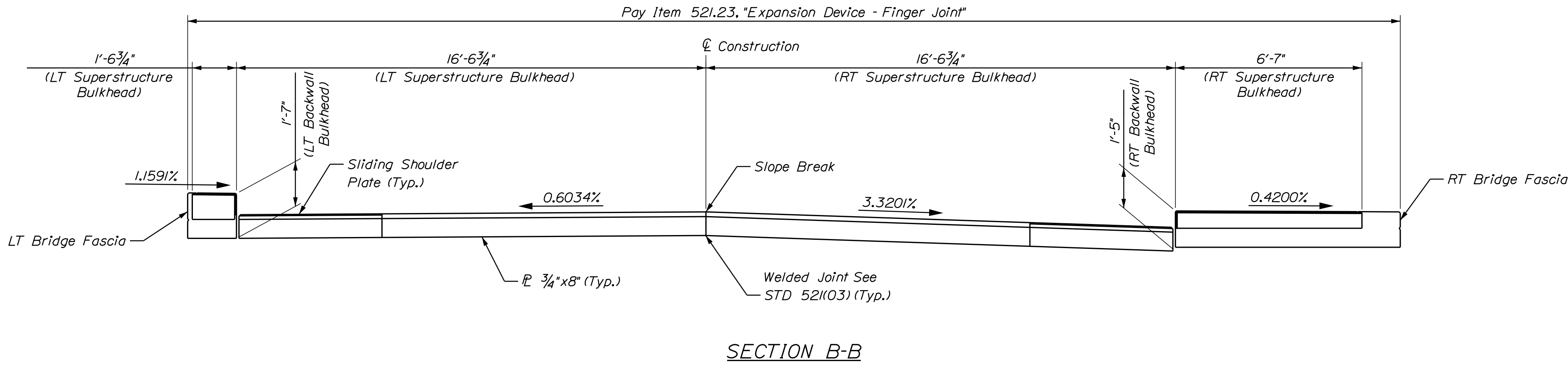
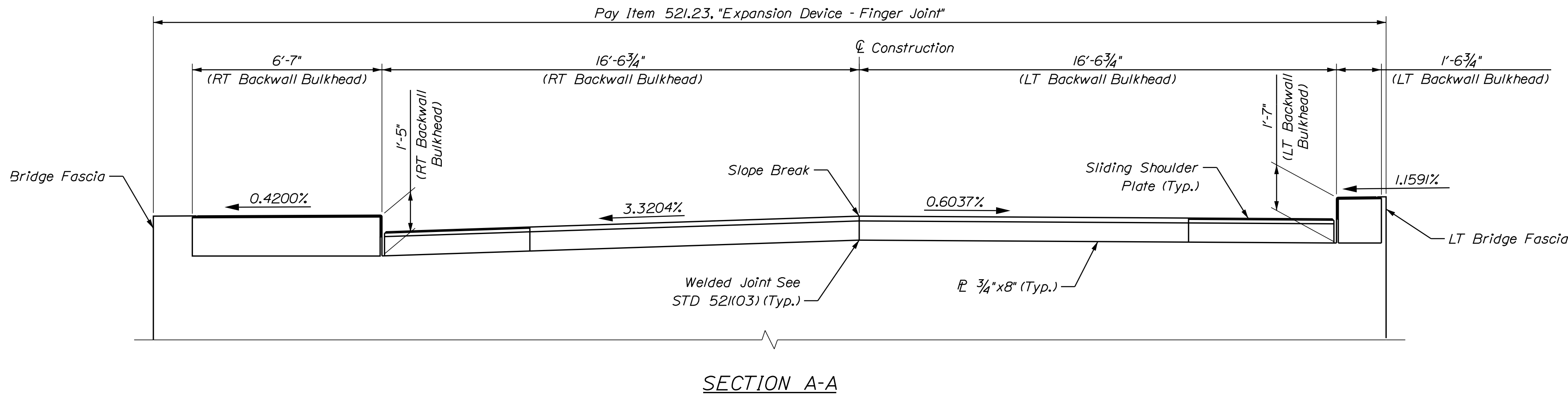
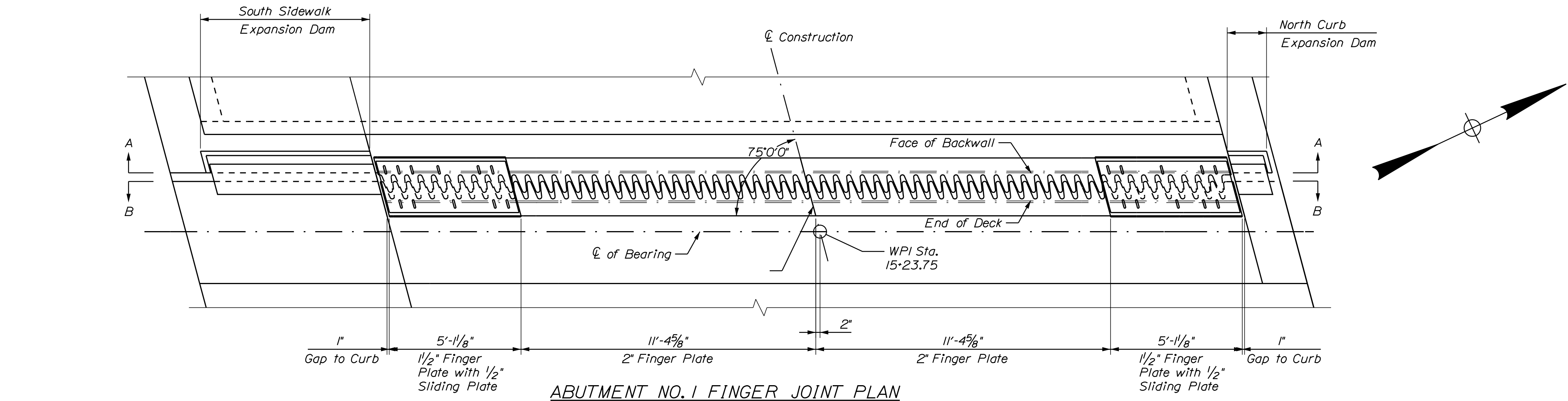


DECK END DETAIL ABUT NO. 2

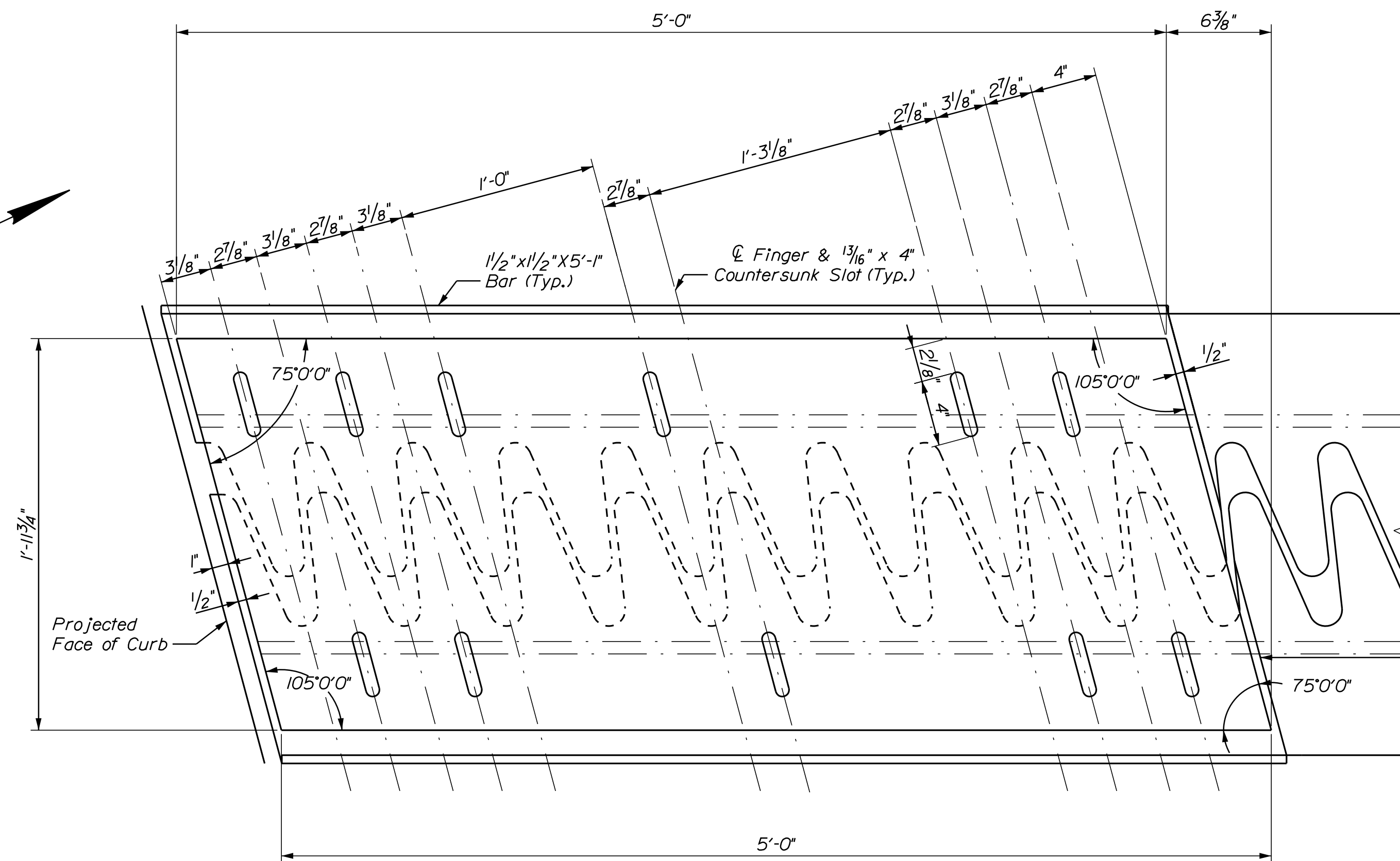


LONGITUDINAL SECTION AT CONSTRUCTION JOINT

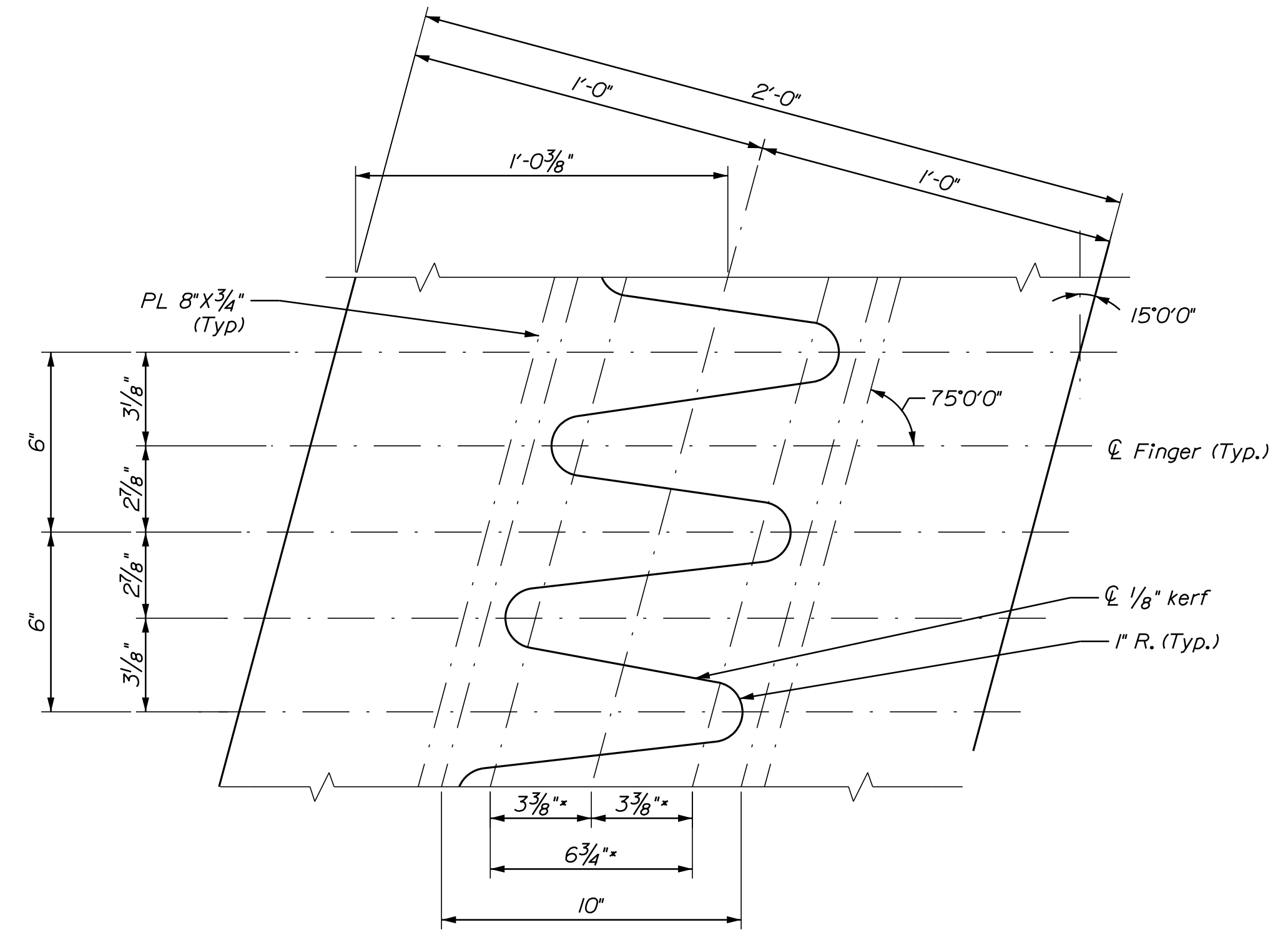
SHEET NUMBER		TUTTLE ROAD BRIDGE		PROJ. MANAGER		Gerold Dostle		BY		DATE		STATE OF MAINE	
75 OF 88		INTERSTATE 295, RTE US 1 & MCRR CUMBERLAND CUMBERLAND COUNTY DECK REINFORCING SECTIONS		DESIGN-DETAILED		CNU		CNU		03/2005		DEPARTMENT OF TRANSPORTATION	
				CHECKED-REVIEWED		RF		RF		03/2025			
				DESIGN-DETAILED02								SIGNATURE	
				DESIGN-DETAILED03									
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REVISIONS 2													
REVISIONS 3													
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												WIN	
												25161.00	
												BRIDGE PLANS	



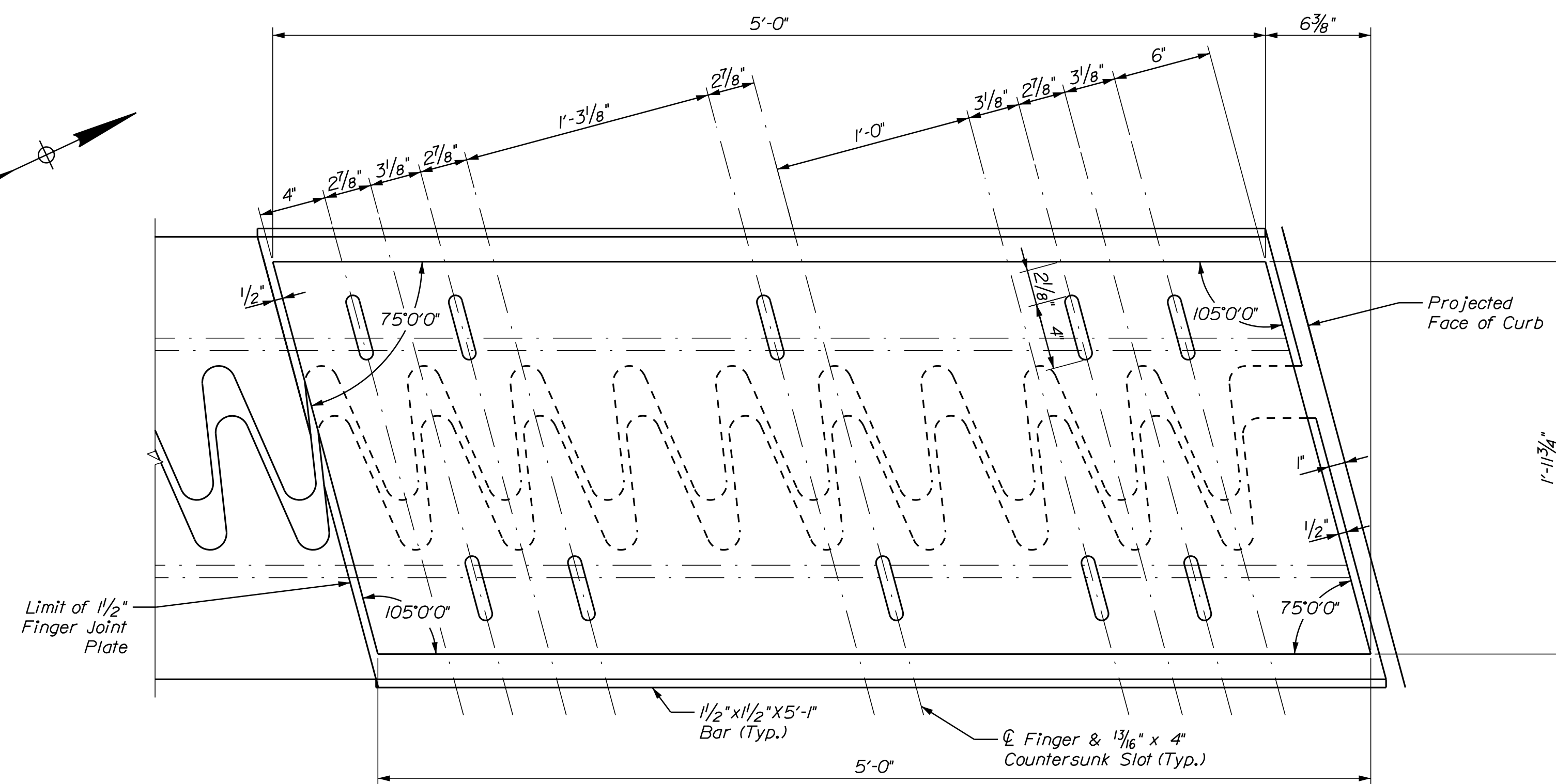
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PROJ. MANAGER		Gerald Dastie		BY		DATE		SIGNATURE		P.E. NUMBER		DATE	
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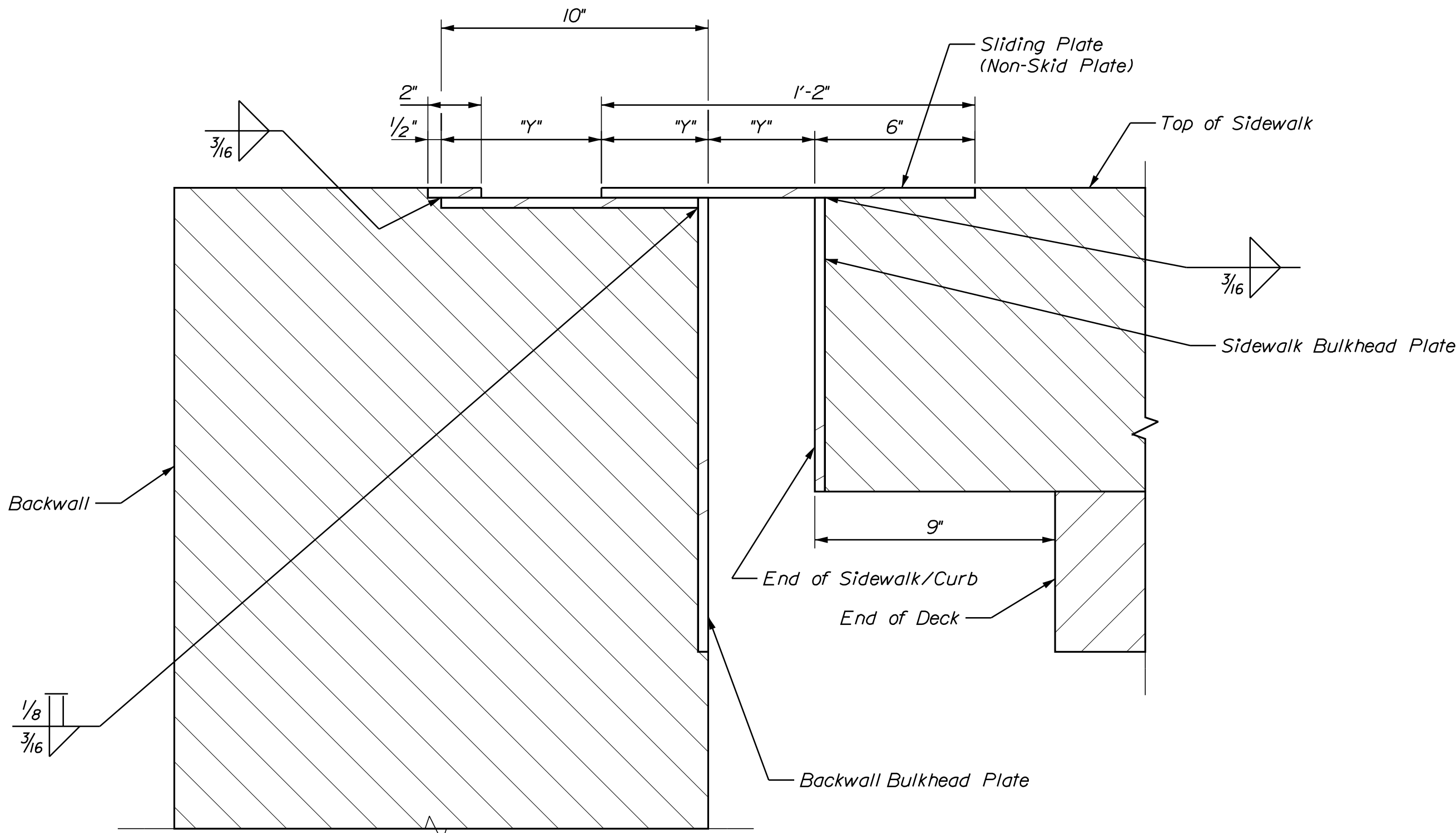
SOUTH SLIDING SHOULDER PLATE DETAIL
(Sidewalk Expansion Dam not Shown for Clarity)



FINGER CUTTING DETAIL
* Dimension prior to cutting plate



NORTH SLIDING SHOULDER PLATE DETAIL
(Sidewalk Expansion Dam not Shown for Clarity)

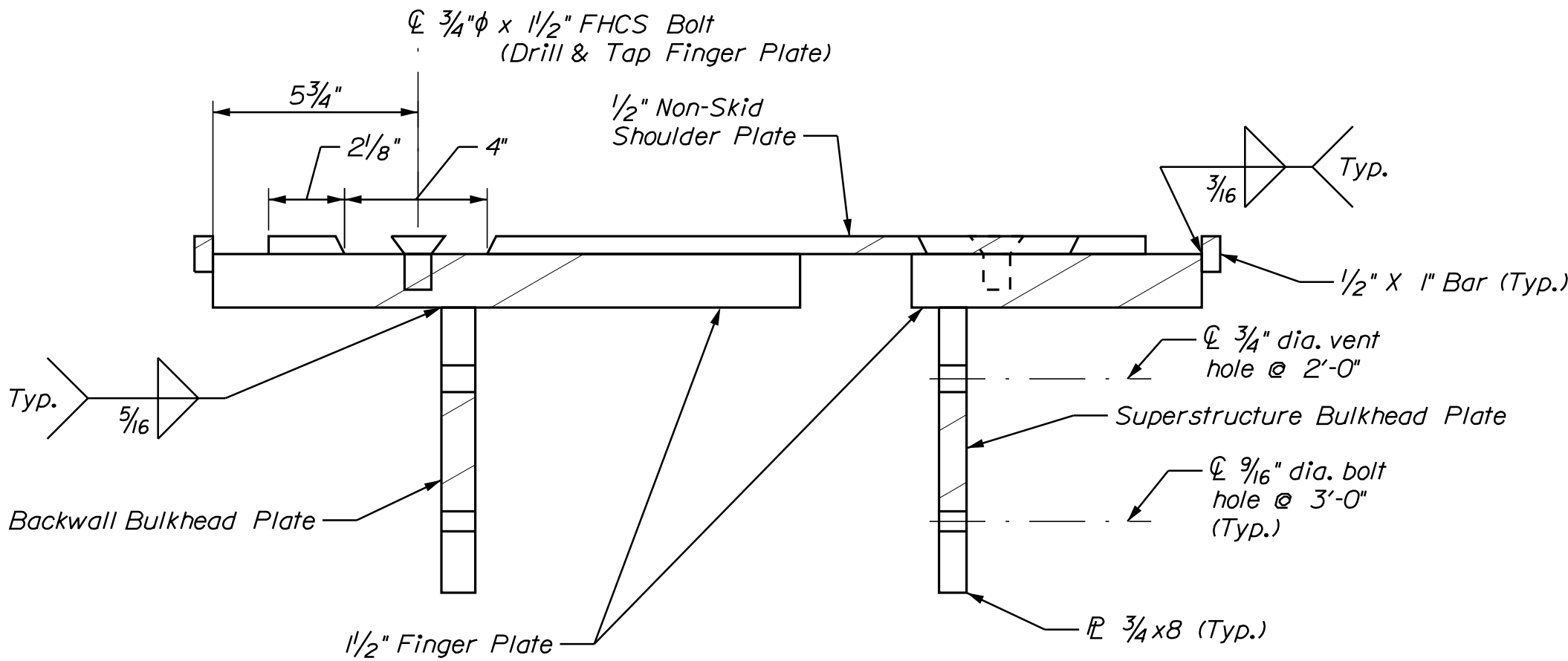


TYPICAL SIDEWALK SECTION
Southeast Expansion Dam Shown, Other Locations Similar
All Plates 3/8" Thick

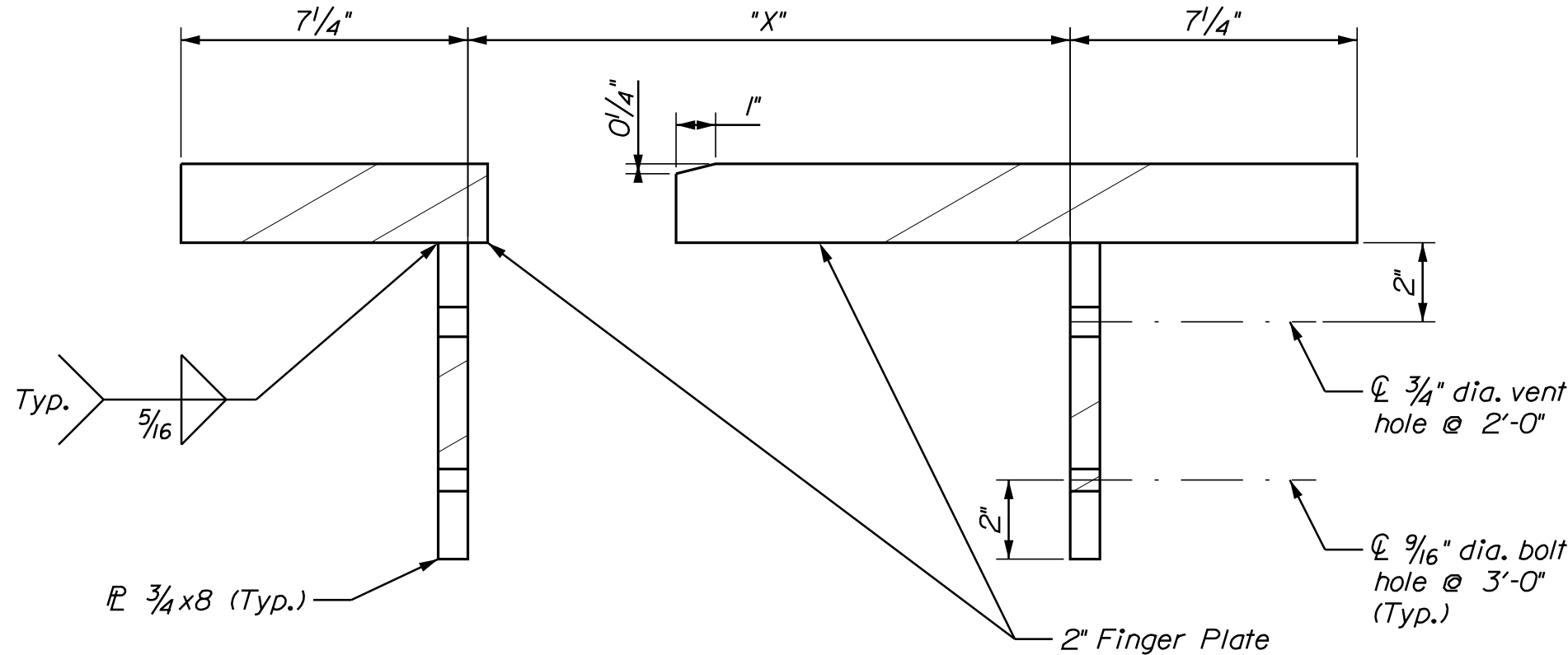
NOTES:

1. See sheet "Finger Joint Layout" for Finger Joint Plan and Finger Joint Elevation.
2. See sheet "Finger Joint Details I" for Sliding Shoulder Plate Details and Finger Joint Cutting Details.
3. Anchor Studs and Adjustment devices shall be installed on finger joint and bulkhead plates in accordance with STD 52(101), 52(104), 52(105), 52(109), & 52(110).
4. Finger joint materials and fabrication shall be in accordance with STD 52(112), and Specifications Section 521.
5. Countersunk bolts shown in Shoulder Plate Details shall be secured in the final position with a threadlocker material, as approved by the Resident. Countersunk bolts shall be secured such that the shoulder plate is allowed to slide with thermal movements and the head of the bolt does not project above the top surface of the plate.
6. Sidewalk expansion dams are detailed and shall be fabricated for the neutral 45°F condition. "X" and "Y" Dimensions shall be adjusted for the ambient temperature at the time of installation. Detail "E" as shown in STD 52(110) will be applicable to all locations with overlapping sliding plates in the sidewalk expansion dams, as detailed in the Plans.
7. Unless noted otherwise, all exposed corners for plates in the sidewalk expansion dam assembly and sliding shoulder plate assembly shall be chamfered 1/4".
8. Only standard details specifically referenced shall be consulted during fabrication and installation. In the event of a discrepancy between referenced details and the Plans, the Plans shall take precedence.

ABUTMENT NO. 1 FINGER JOINT SETTING TABLE		
TEMPERATURE (°F)	DIMENSION "X"	DIMENSION "Y"
5	1'-2 5/16"	5 5/16"
15	1'-2"	5"
25	1'-1 5/8"	4 5/8"
35	1'-1 1/16"	4 5/16"
45	1'-1"	4"
55	1'-0 11/16"	3 11/16"
65	1'-0 3/8"	3 3/8"
75	1'-0"	3"
85	11 1/16"	2 11/16"



SLIDING SHOULDER PLATE
TYPICAL SECTION
(All measurements along angle of finger)

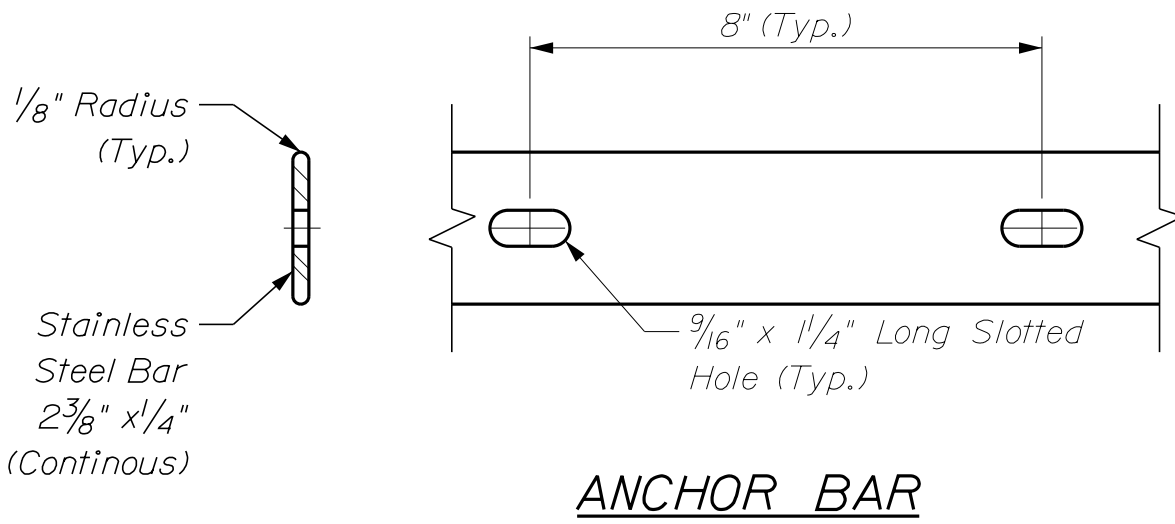
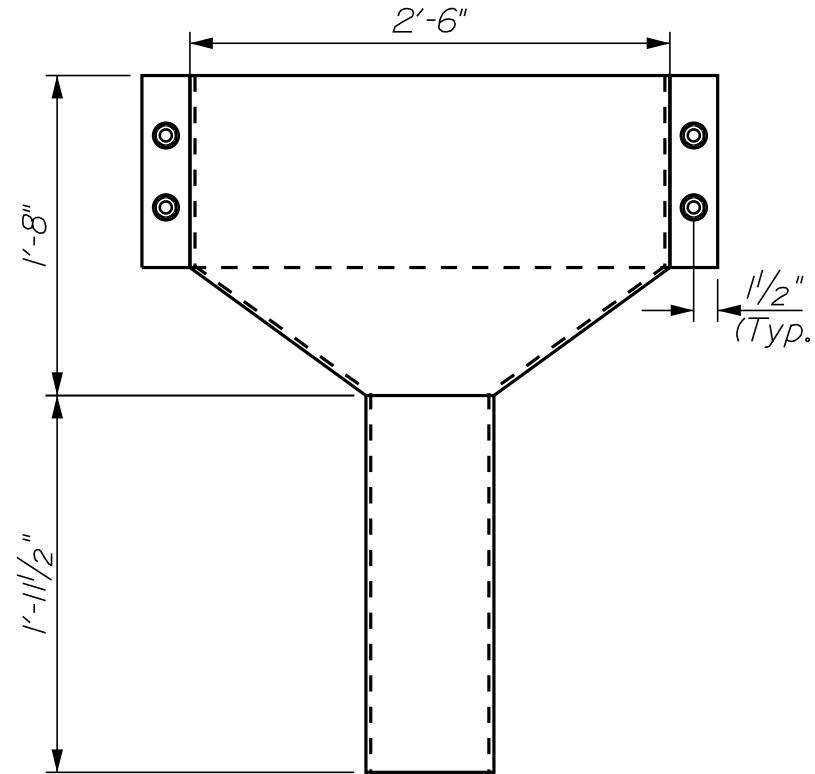
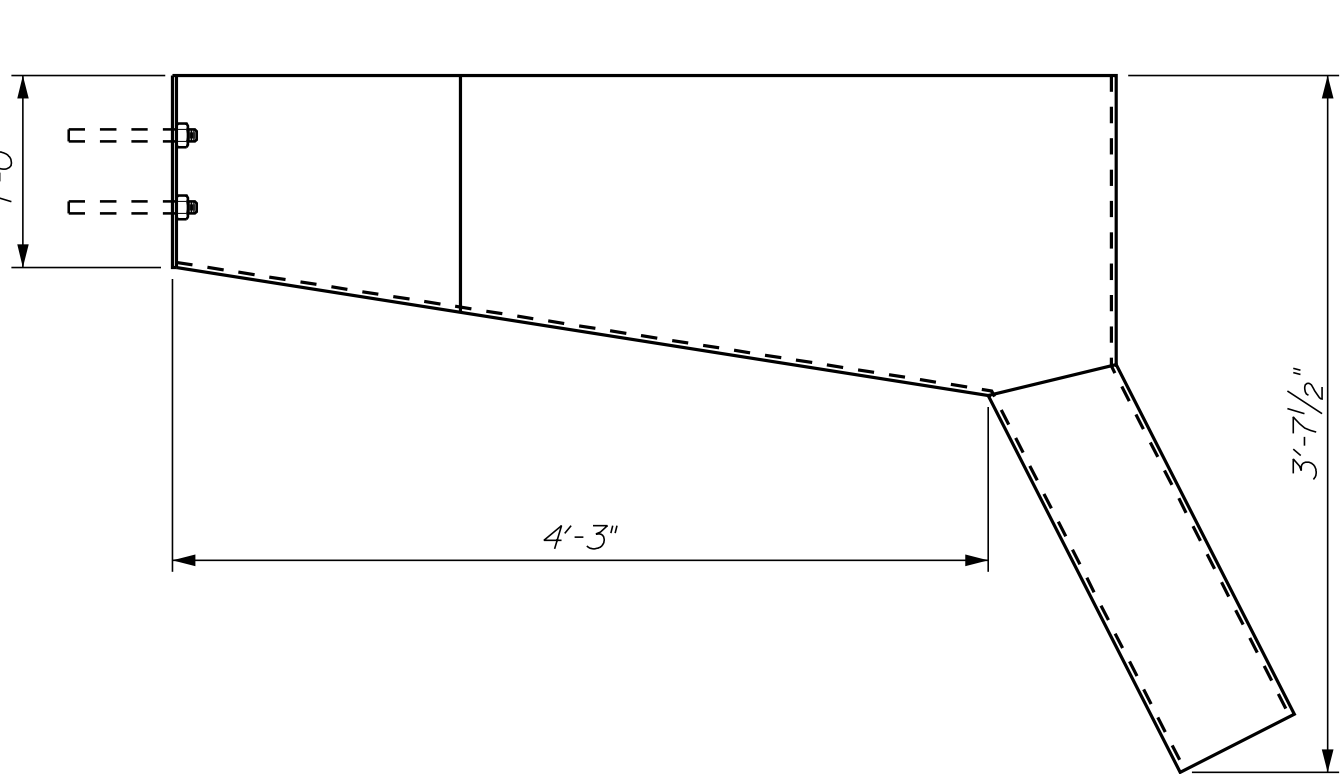
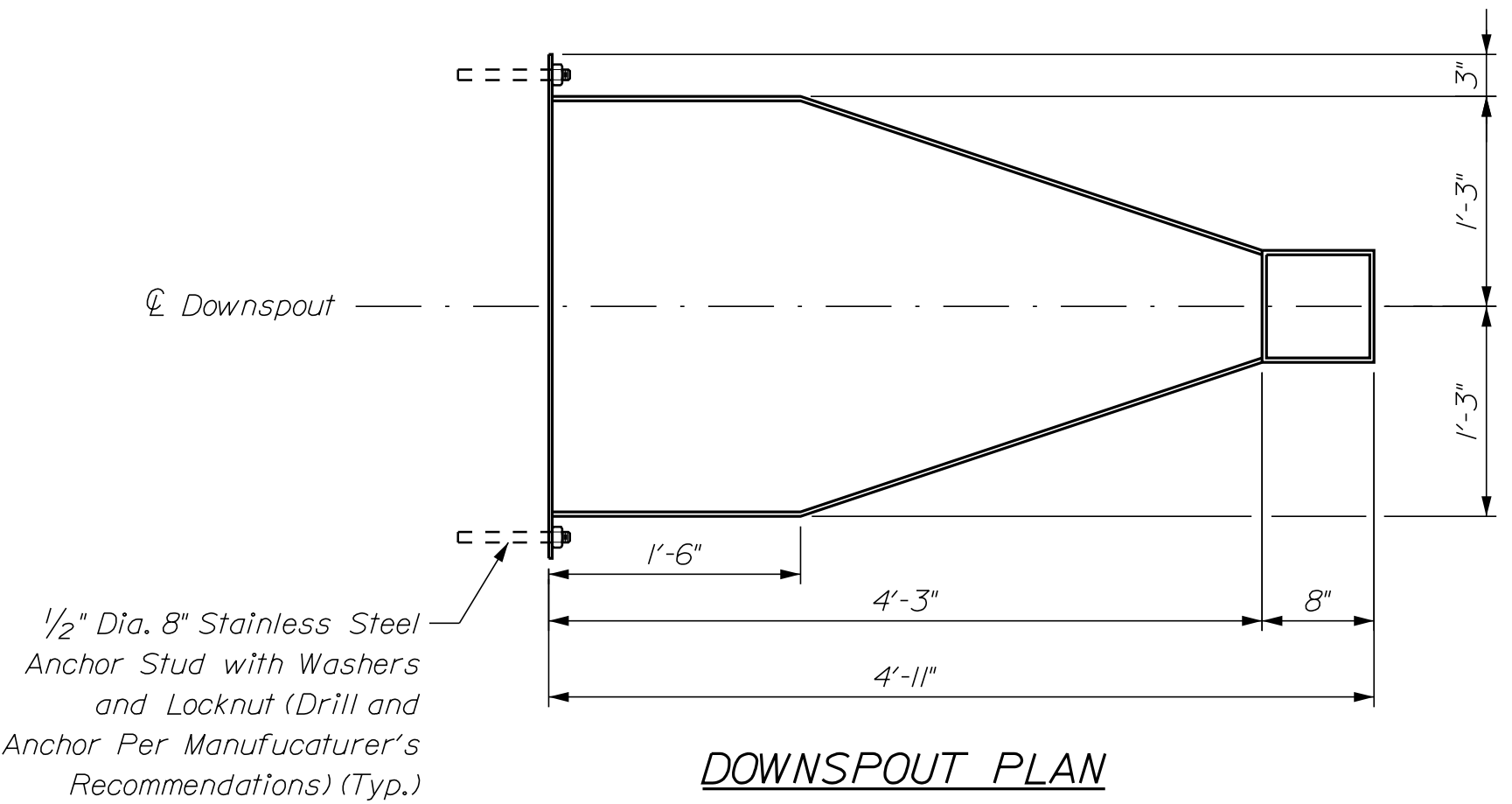
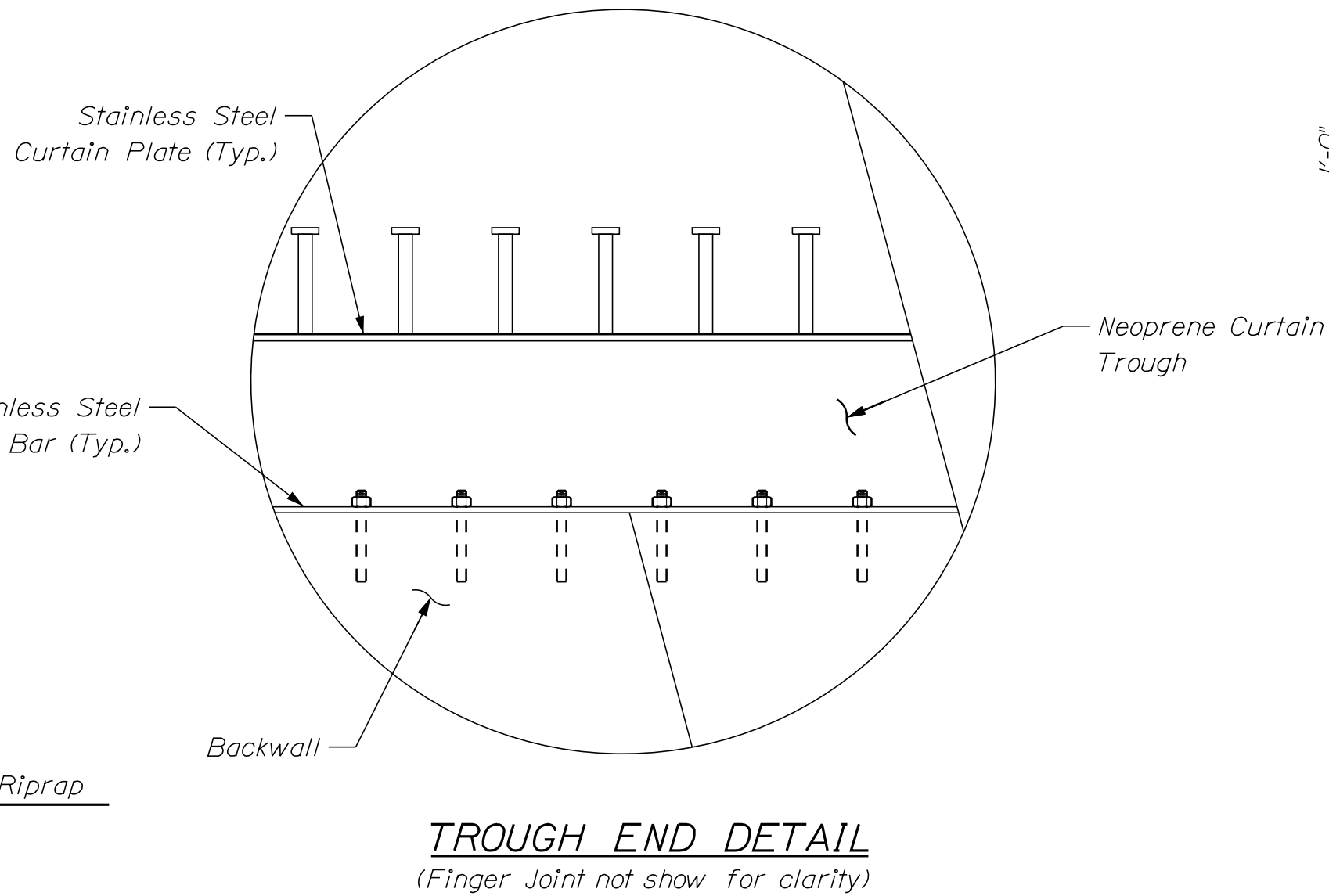
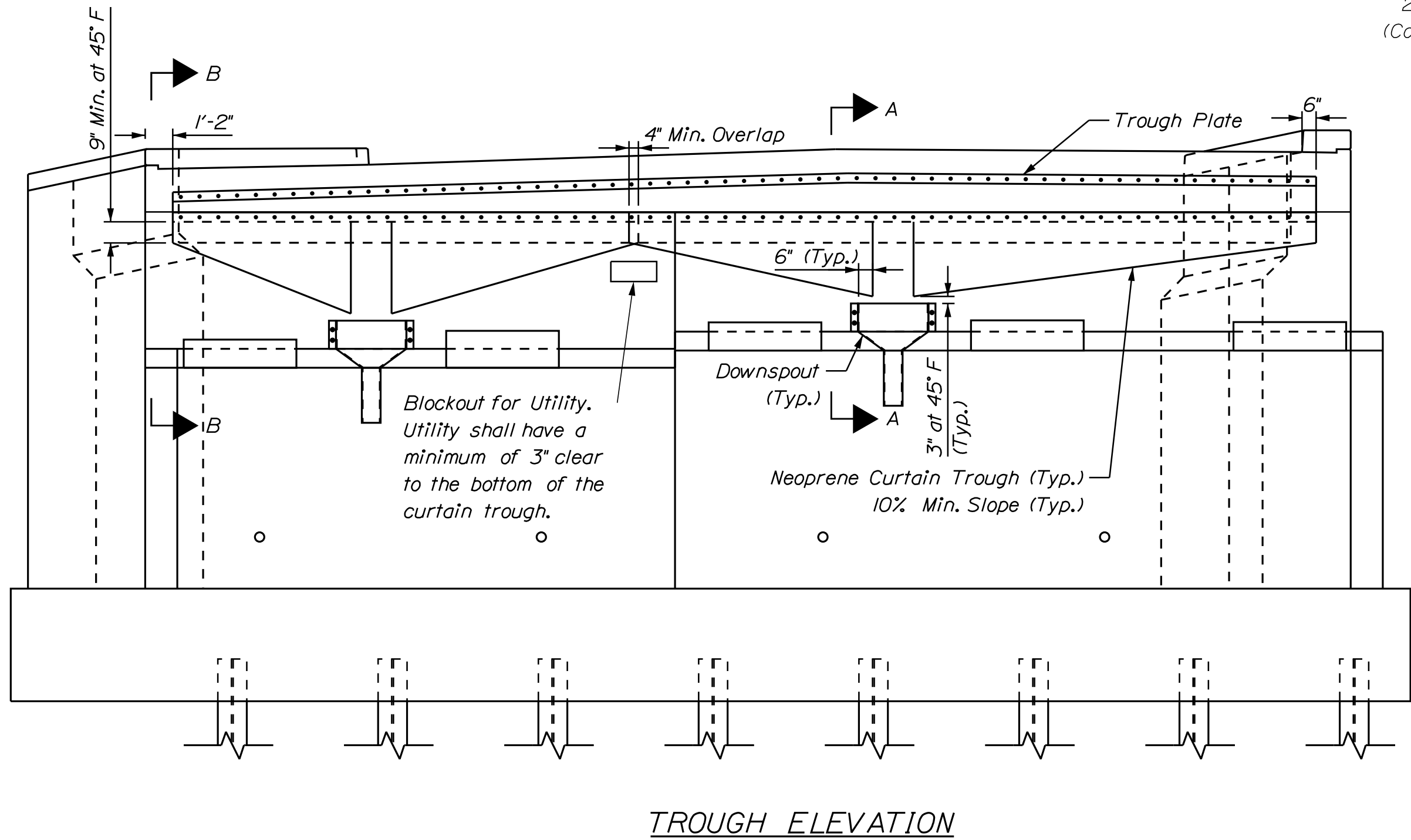
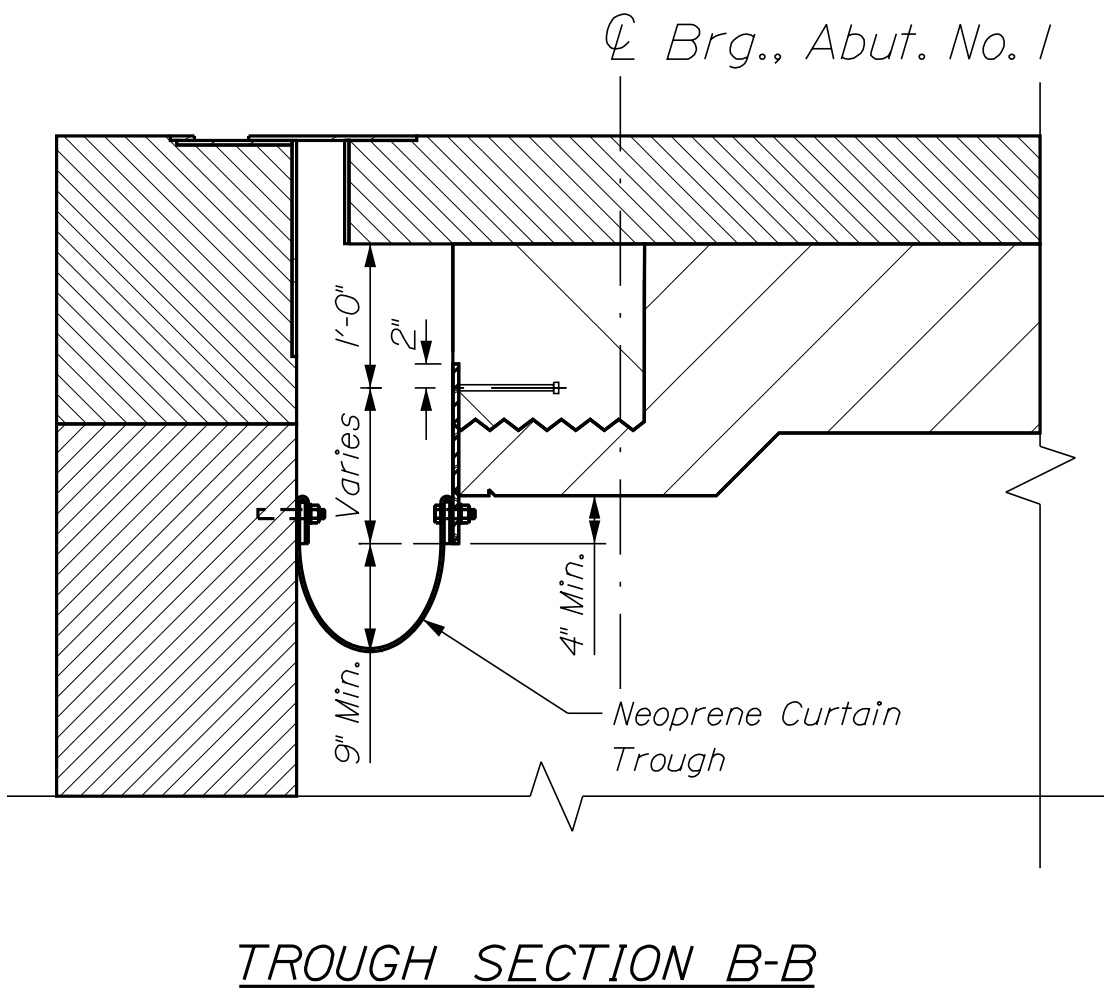
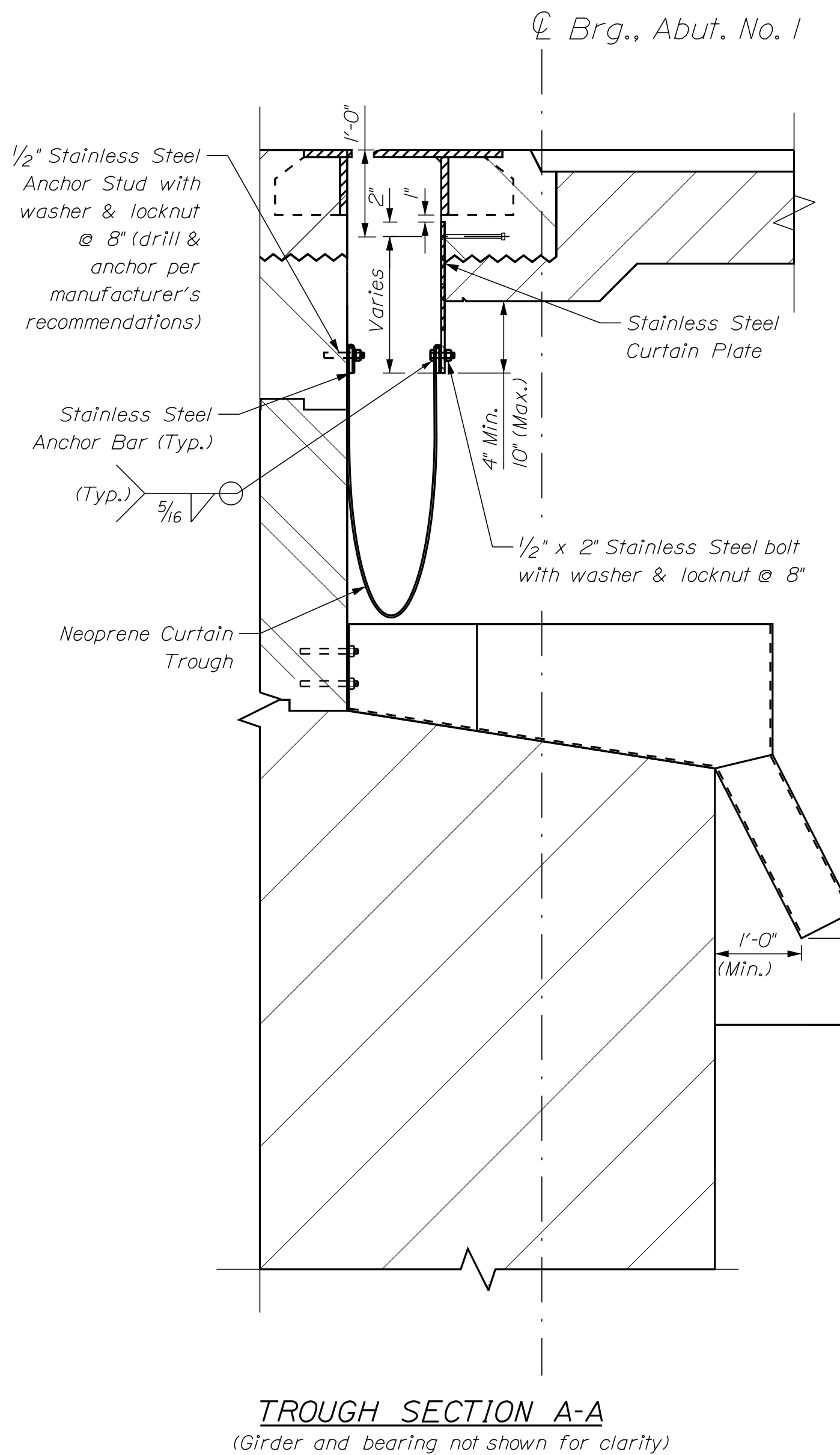


TYPICAL FINGER JOINT SECTION
(All measurements normal to end of deck and bulkhead plates)

STATE OF MAINE DEPARTMENT OF TRANSPORTATION 2516100	SIGNATURE		DATE
	P.E. NUMBER		DATE
	BRIDGE NO. 6601		BRIDGE PLANS

TUTTLE ROAD BRIDGE INTERSTATE 295, RTE US 1 & MCRR CUMBERLAND CUMBERLAND COUNTY FINGER JOINT DETAILS 2	PROJ. MANAGER	Gerald Dastie	BY	DATE
	DESIGN-DETAILED	CT	CT	03/2025
	CHECKED-REVIEWED	KZS	KZS	03/2025
	DESIGN-DETAILED			
	REVISIONS 1			
REVISIONS 2				
REVISIONS 3				
REVISIONS 4				
FIELD CHANGES				

SHEET NUMBER
78
OF 88



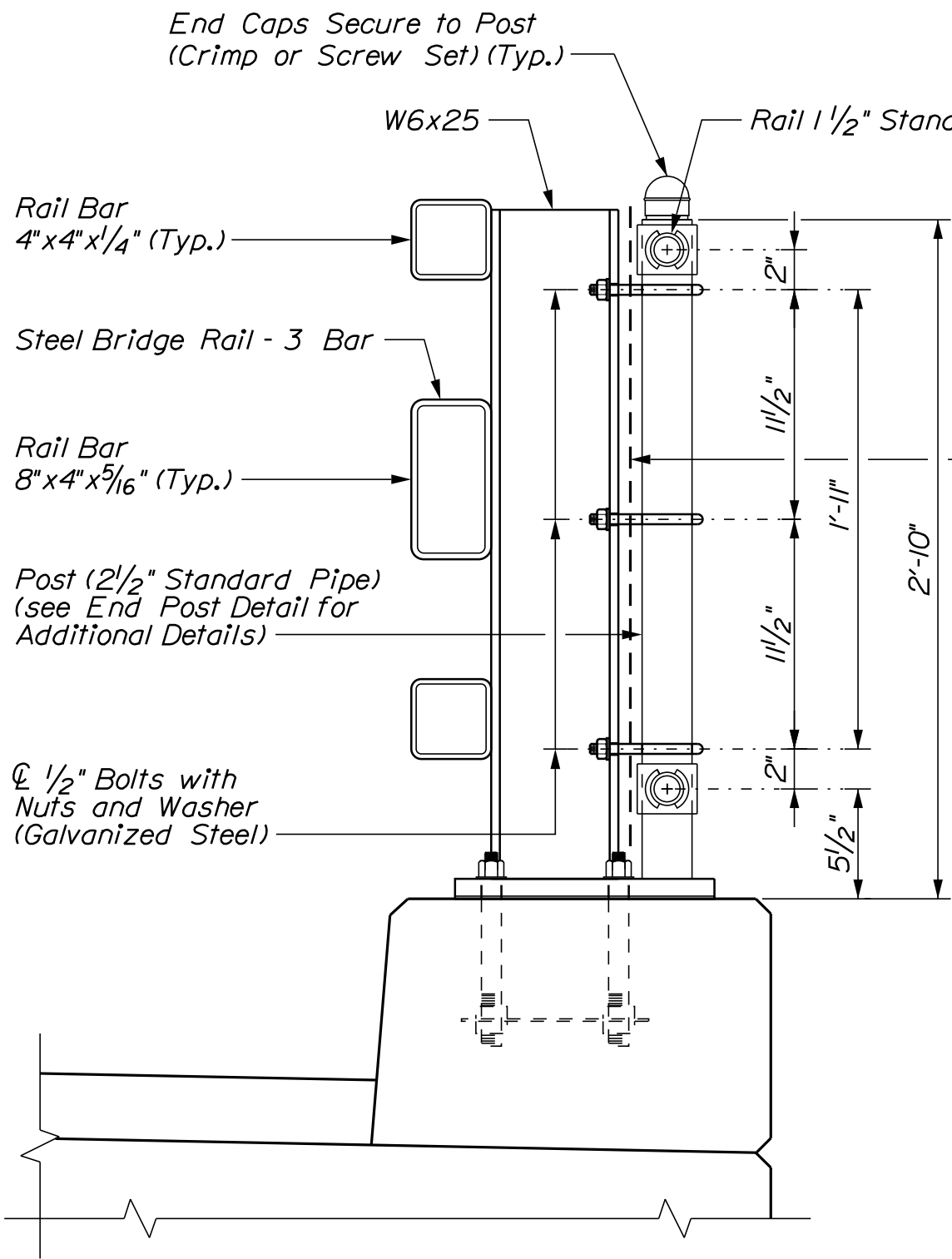
- DOWNSPOUT NOTES:**
1. The exact position of the downspout shall be determined in the field and shall be coordinated with Curtain Trough Details.
 2. All plates and bars shall conform to ASSHTO M270 Grade 36 and shall be galvanized in accordance with AASHTO MIII (ASTM I23) after fabrication.
 3. Brackets shall be galvanized in accordance with AASHTO MIII (ASTM I23) after fabrication.
 4. All rods and related hardware shall be ASTM A307 and shall be galvanized in accordance with AASHTO M 232 (ASTM A153).
 5. At Contractor's option, alternate downspout details and locations may be submitted to the Resident for approval.
 6. Any place where the galvanizing has been removed from the downspout either by cutting, burning, welding, placing, or any other means shall be repaired to the requirements of ASTM A780 and Annexes A1, A2 or A3.
 7. Downspout shall be fabricated using FRP composite material. Material and fabrication shall be in accordance with Special Provision 502, Fiber Reinforced Polymer Bridge Drains and Downspouts.

STATE OF MAINE		DEPARTMENT OF TRANSPORTATION		2516100		BRIDGE NO. 6601		WIN 25161.00		BRIDGE PLANS	
TUTTLE ROAD BRIDGE		INTERSTATE 295, RTE US 1 & MCRR		CUMBERLAND COUNTY		EXPANSION JOINT TROUGH		SHEET NUMBER		79	
PROJ. MANAGER		Gerald Dostle		BY		DATE		SIGNATURE		P.E. NUMBER	
DESIGN-DETAILED		CNU		RF		03/2025		DATE			
CHECKED-REVIEWED		CNU		RF		03/2025					
DESIGN-DETAILED		RF									
DESIGN-DETAILED											
REVISIONS 1											
REVISIONS 2											
REVISIONS 3											
REVISIONS 4											
FIELD CHANGES											

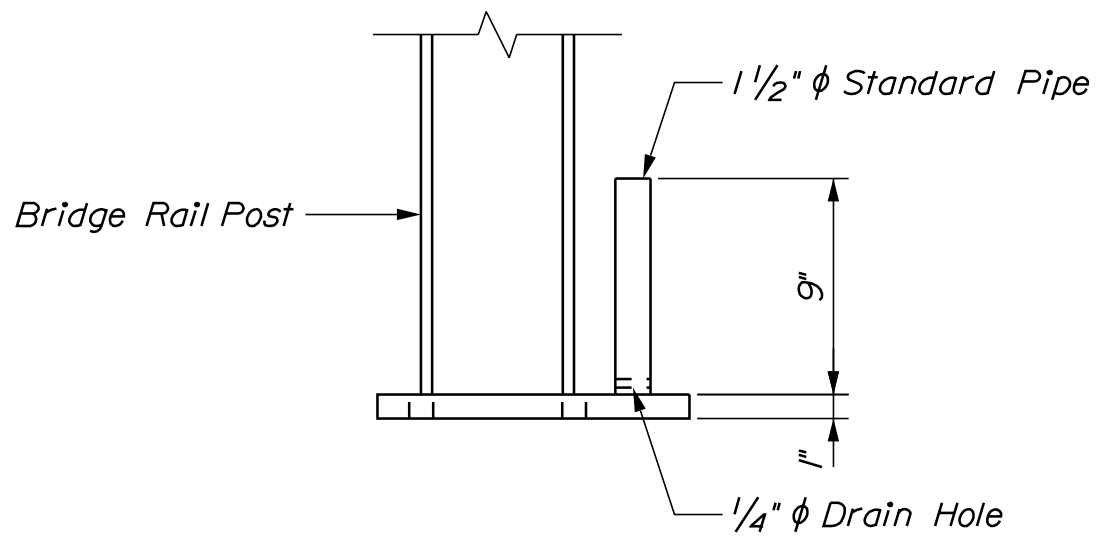
Date:5/25/2025

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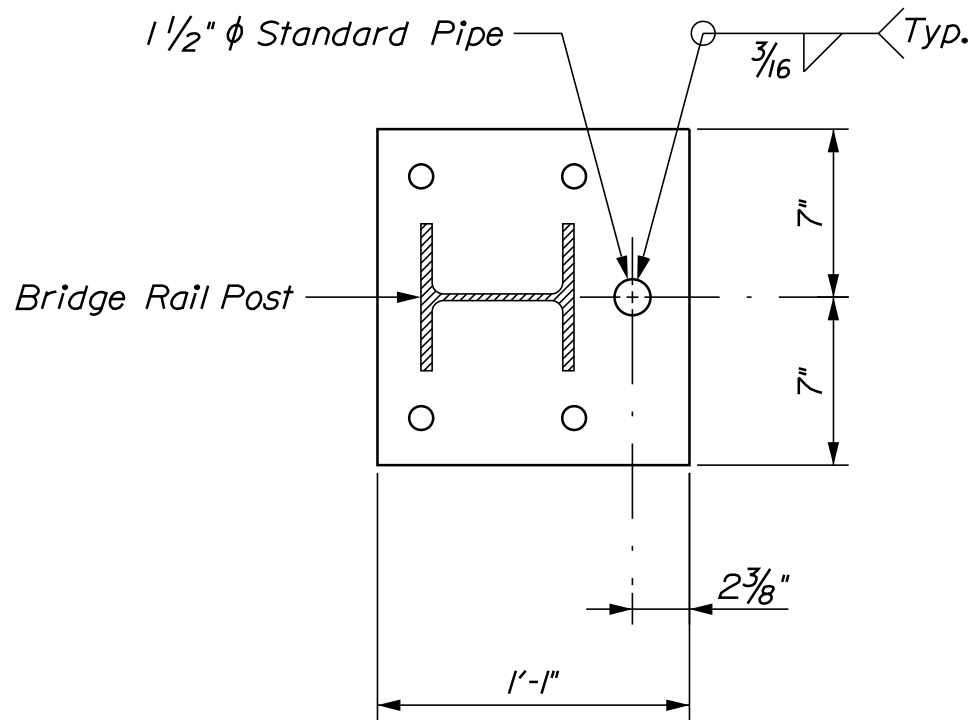
Filename: ...\\080_Superstructure_Snow Fence Detail.dwg: BRIDGE



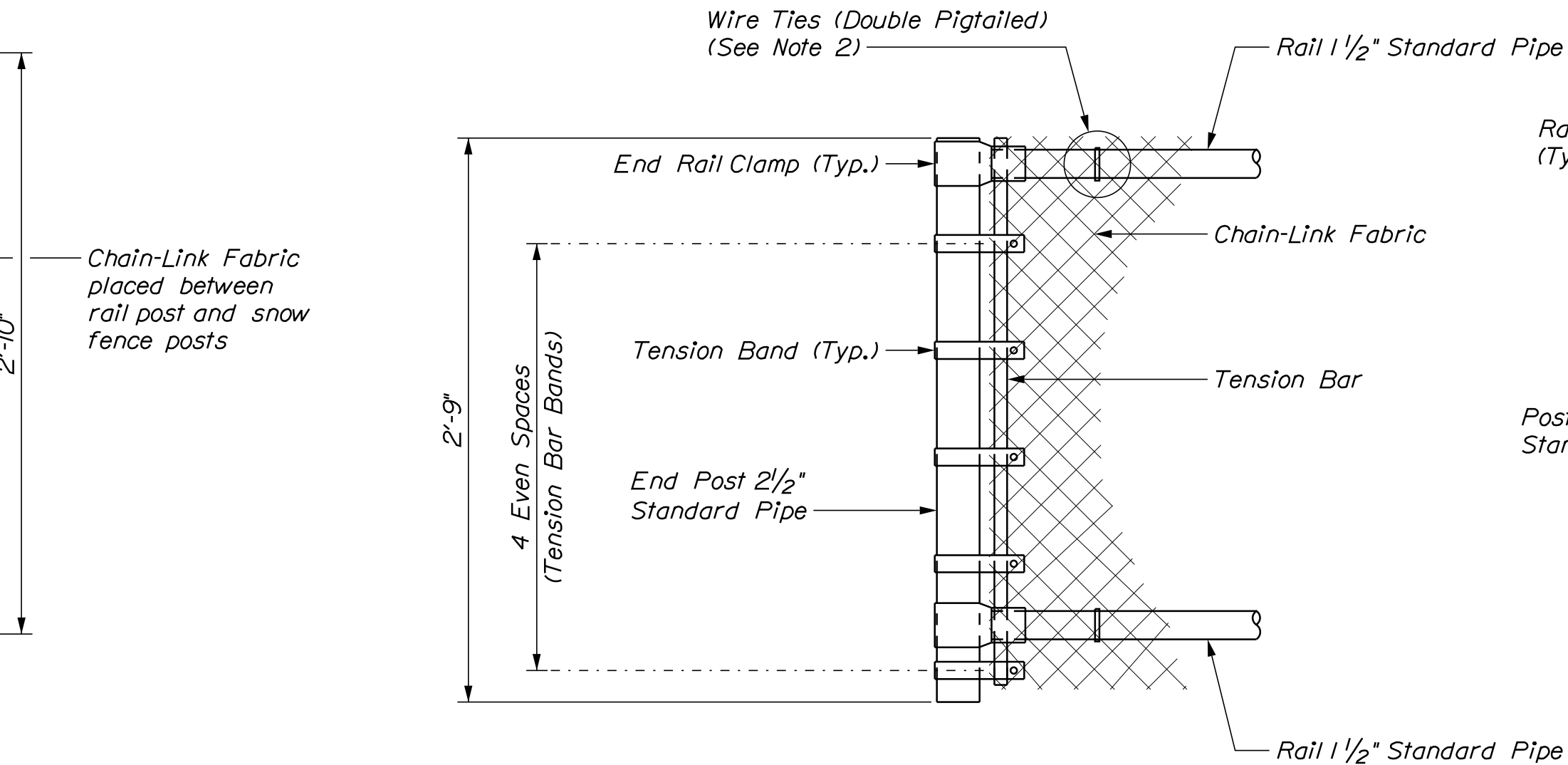
SNOW FENCE CONNECTION DETAIL



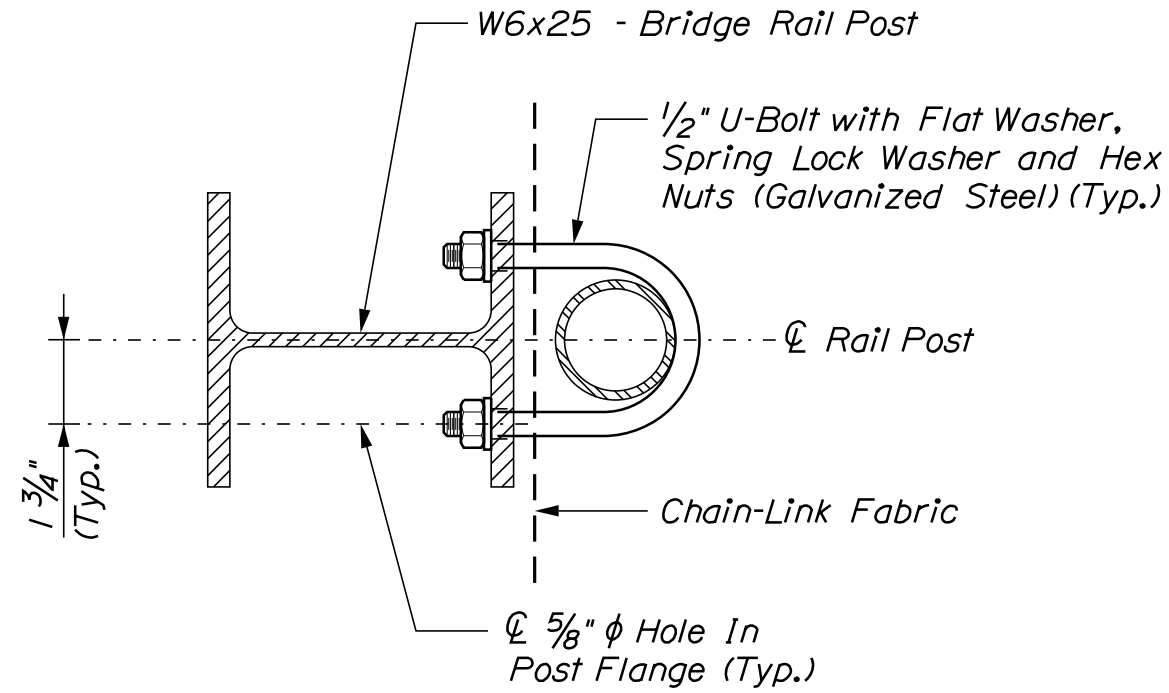
MODIFIED BASE PLATE ELEVATION



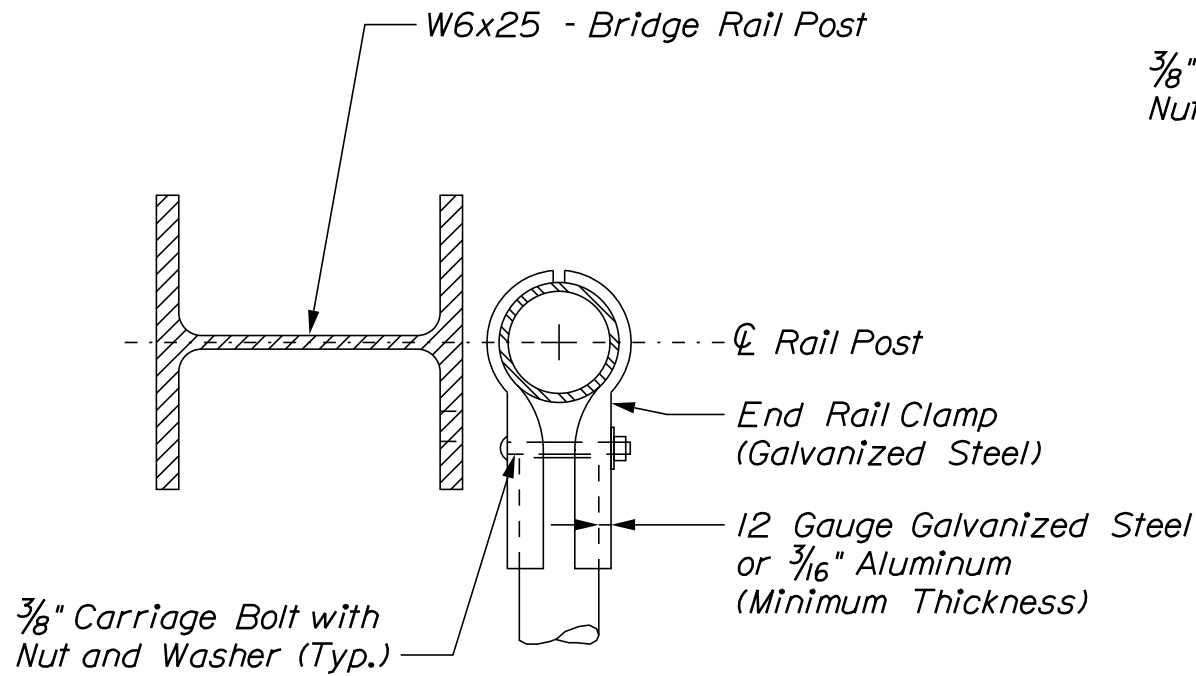
MODIFIED BASE PLATE DETAIL



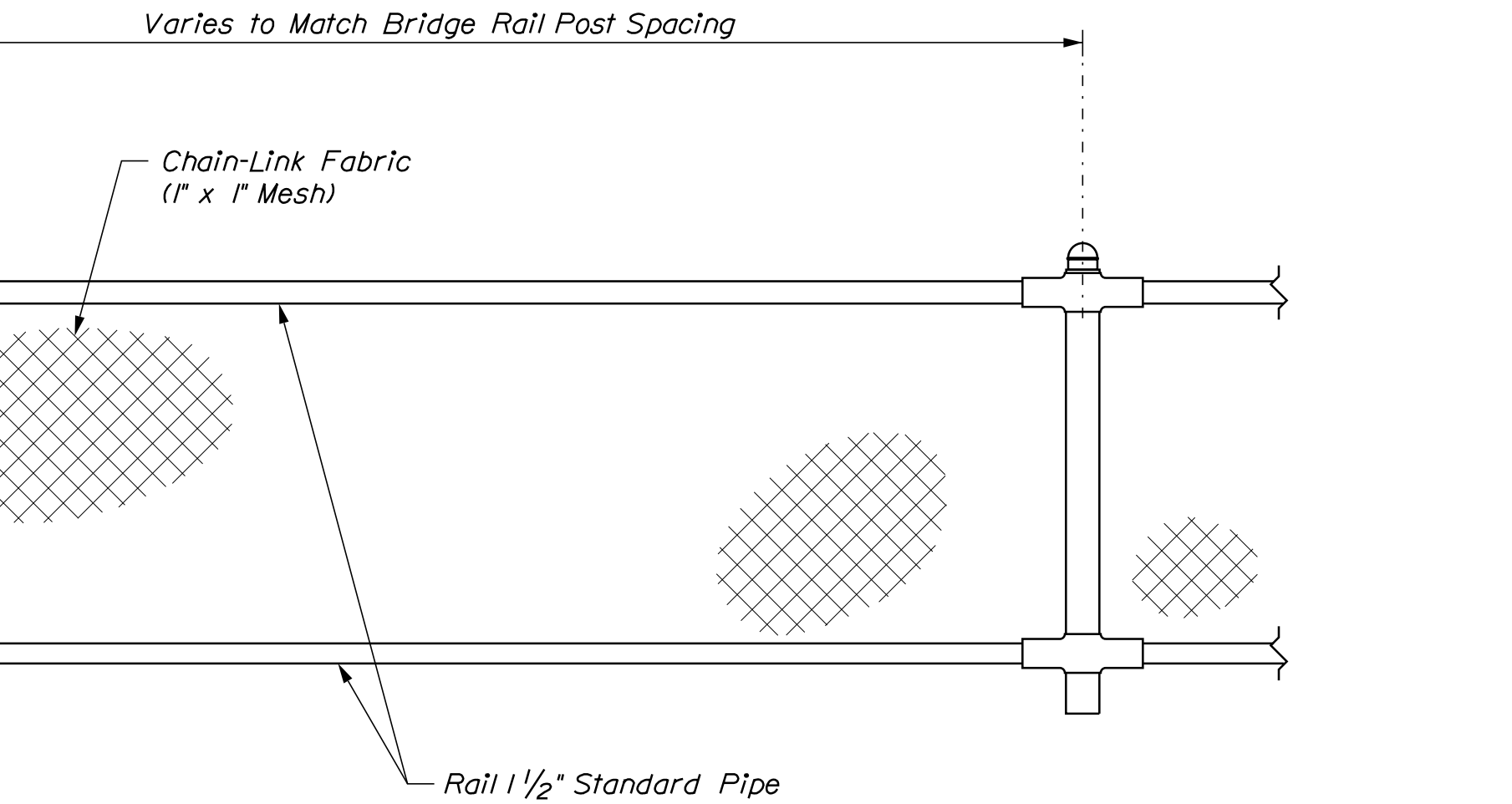
END POST DETAIL



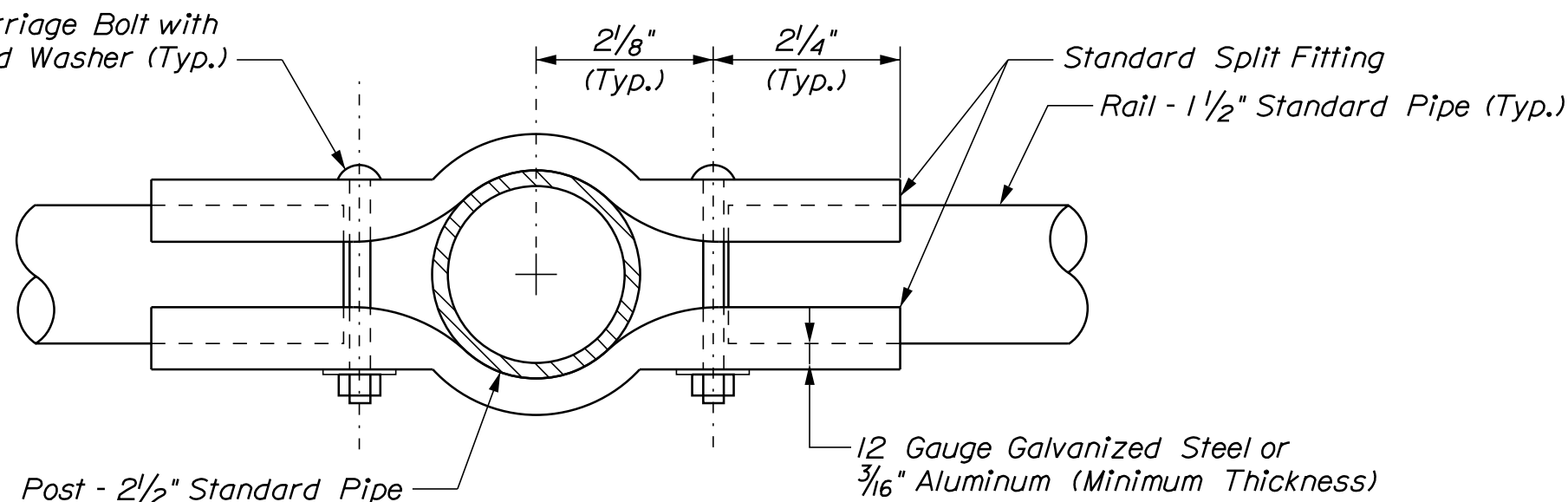
U-BOLT CONNECTION DETAIL
(At Interior Post)



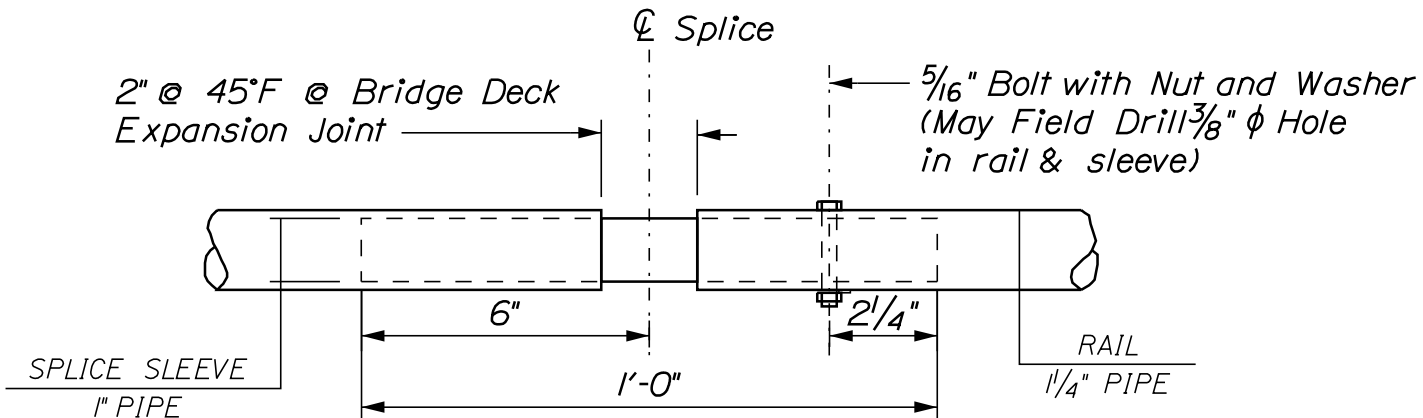
END POST DETAIL
(U-Bolt Not Shown)



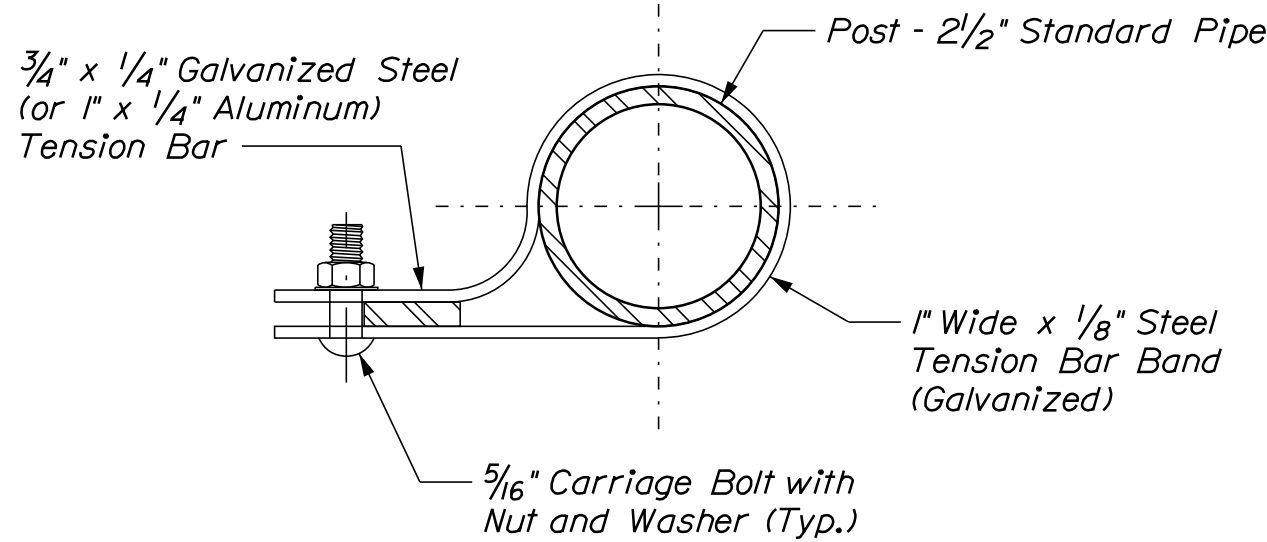
ELEVATION - SNOW FENCE



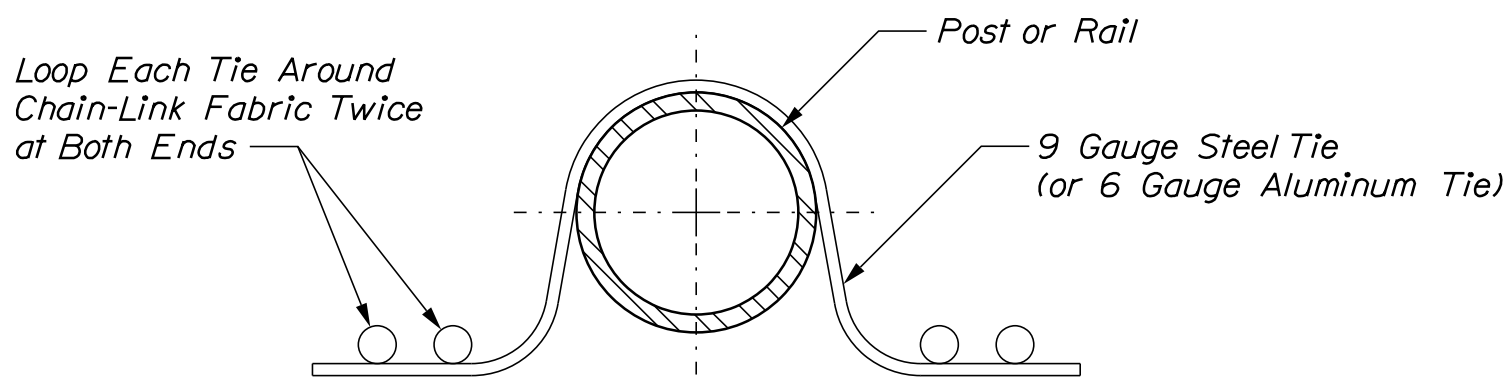
RAIL CLAMP DETAIL



RAIL SPLICE DETAIL
Scale: 3" = 1'-0"



TENSION BAND DETAIL



DOUBLE PIGTAILED TIE

SNOW FENCE NOTES

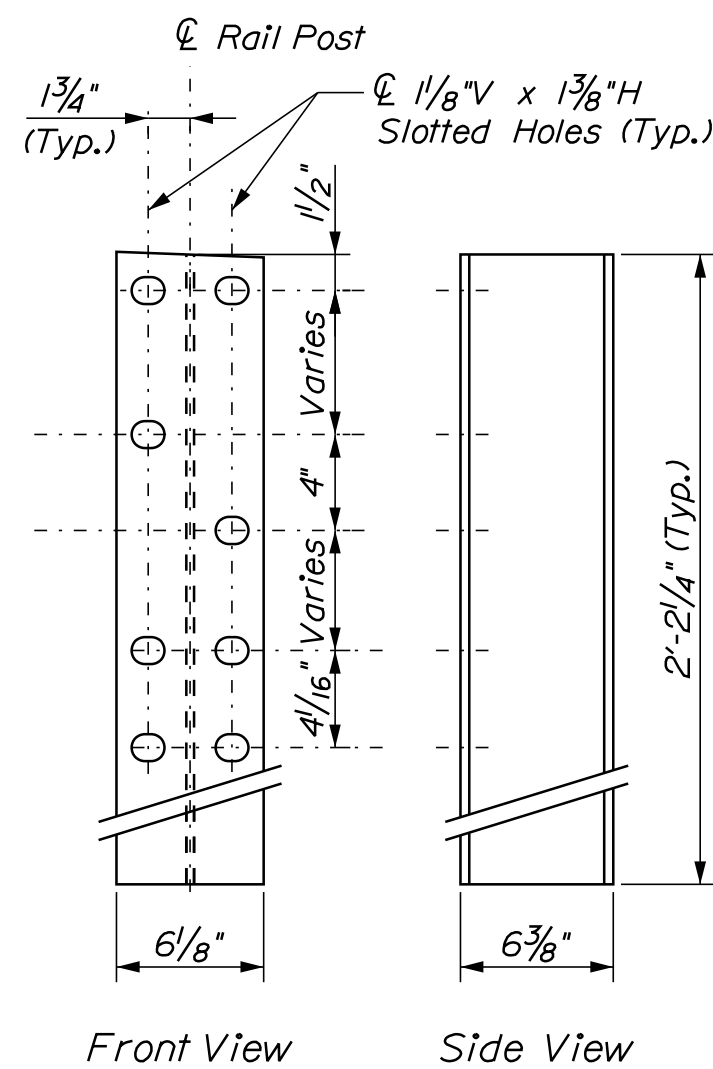
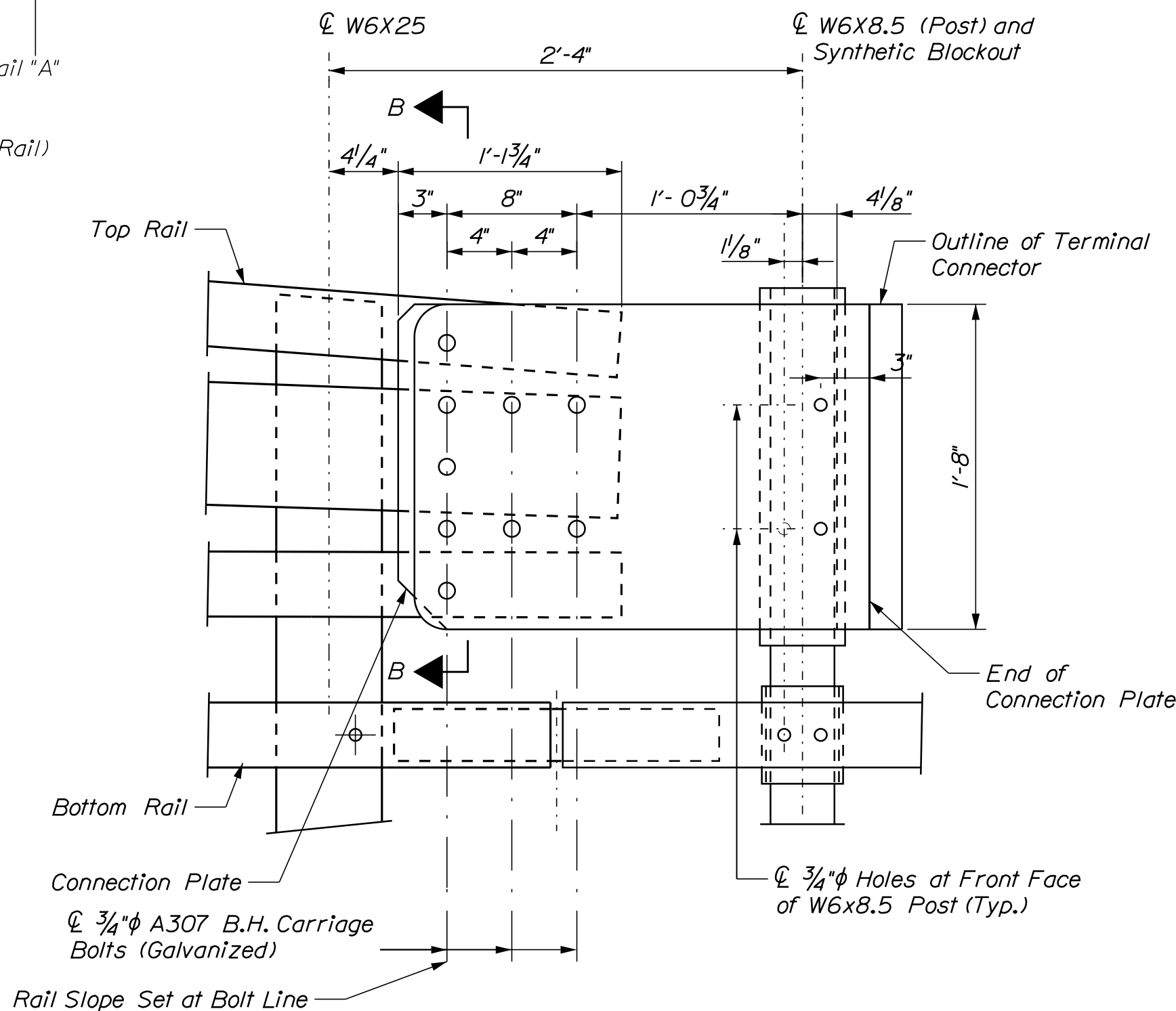
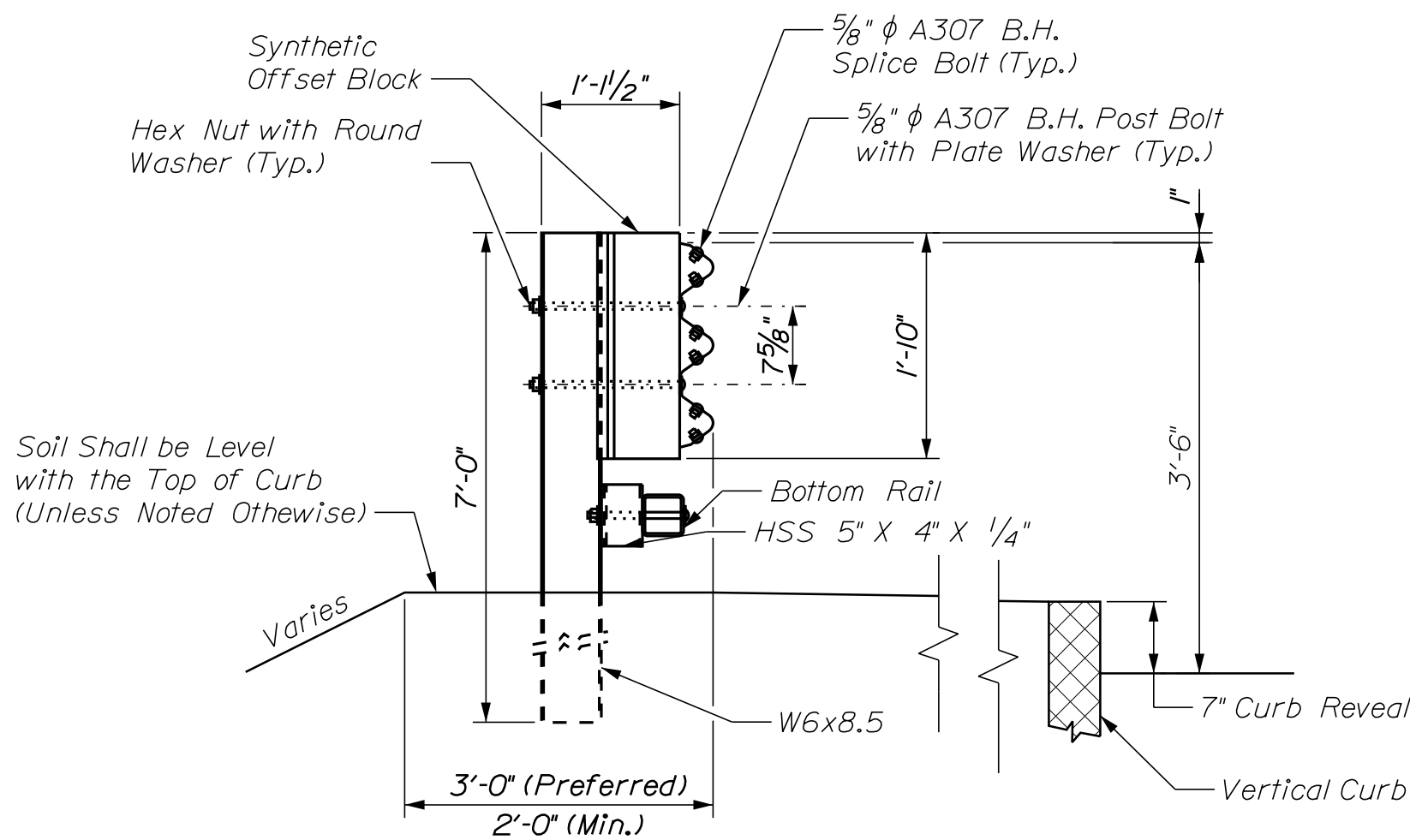
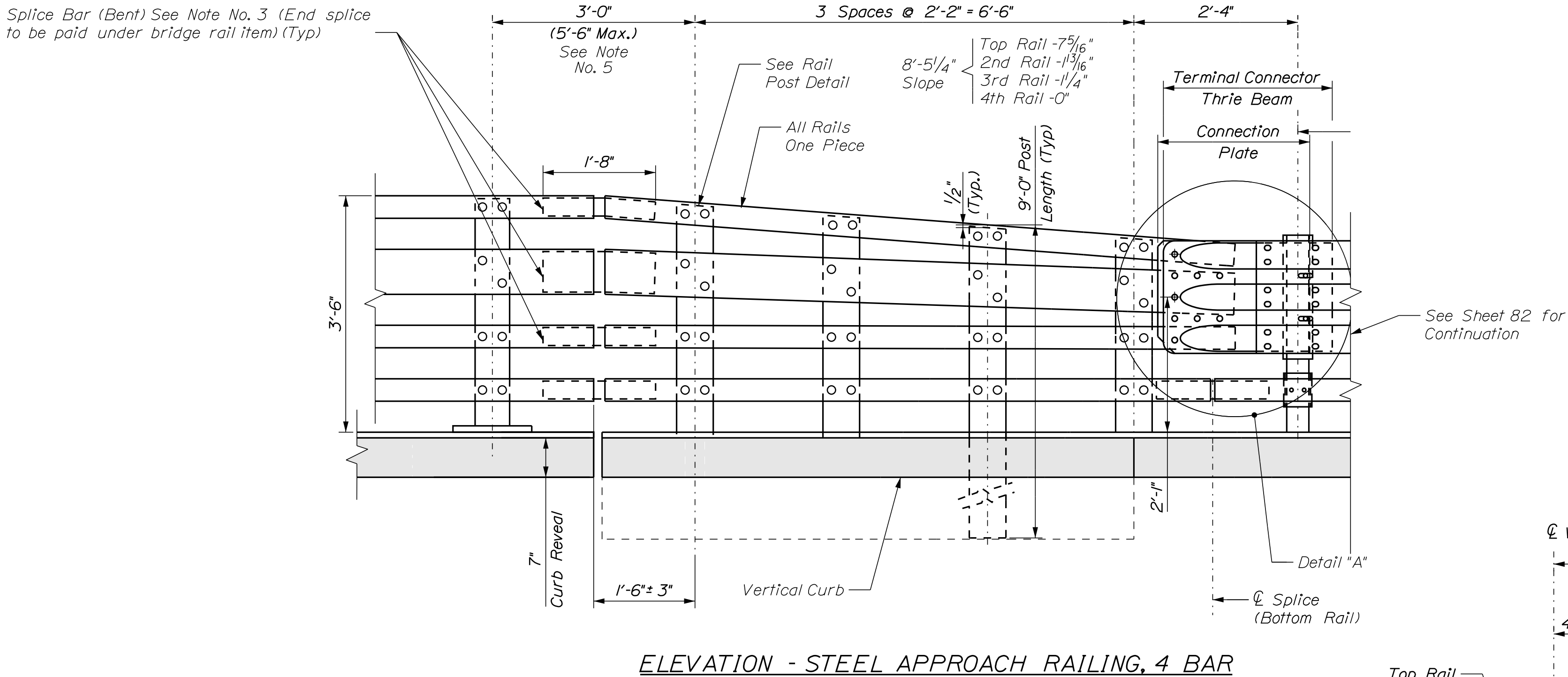
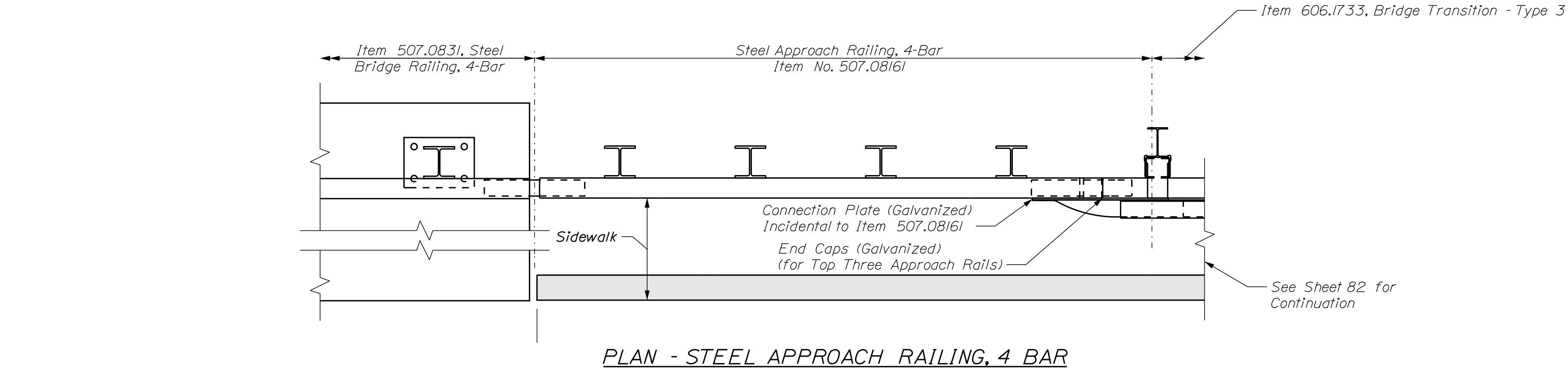
- Chain-Link fence shall conform to Section 710.03 and Special Provision Section 607. The size of wire mesh (fabric) shall be 1".
- Post and rail pipe shall be hot-dip galvanized steel conforming to the specifications. All pipe shall be schedule 40, standard weight. Nominal pipe sizes are shown.
- Tension bars, bar bands and end rail clamps shall be steel or aluminum alloy conforming to AASHTO M181 (ASTM F626). Steel components shall be hot-dip galvanized in accordance with AASHTO M111 (ASTM A123) or AASHTO M232 (ASTM A153) as applicable.
- All bolts and nuts shall be steel conforming to ASTM A307 and ASTM A563 grade A respectively. Washers shall be hardened steel commercial type A plain and shall meet the dimensional requirements of ANSI B18.22. All bolts, nuts and washers shall be hot-dip galvanized in accordance with AASHTO M111 (ASTM A123) or AASHTO M232 (ASTM A153) as applicable.
- Rail may be field cut (sawn) to fit post spacing. Galvanized rail, cut or drilled as allowed.
- Payment for the modified base plate will be considered incidental to related Contract items.

STATE OF MAINE	DEPARTMENT OF TRANSPORTATION
2516100	WIN
BRIDGE NO. 6601	25161.00
BRIDGE PLANS	

PROJ. MANAGER	DESIGN-DETAILED	CHECKED-REVIEWED	DATE	BY	DATE
Gerald Dostle	CNU	CNU	03/2025	CNU	03/2025
DESIGN-DETAILED	RF	RF			
DESIGN-DETAILED					
REVISIONS 1					
REVISIONS 2					
REVISIONS 3					
REVISIONS 4					
FIELD CHANGES					

TUTTLE ROAD BRIDGE	INTERSTATE 295, RTE US 1 & MCRR	CUMBERLAND COUNTY
SNOW FENCE DETAILS		

SHEET NUMBER
80
OF 88



NOTES:

1. All bridge approach rail materials, dimensions and sizes shall be the same as those of the bridge rail, unless otherwise noted. See MaineDOT Standard Details Section 507, Bridge Rail for additional information.
2. Carriage bolts shall be ASTM A307, and nuts shall be ASTM A563 Grade A or better (galvanized).
3. Weld splice bar to fit bend. Use complete joint penetration butt weld.
4. Three foot spacing to first post on bridge is standard. For longer expansion joints, the first post on the bridge may be located up to 5'-6" from the previous post in the approach.
5. For additional details, refer to MaineDOT Standard Details Section 507 for 3-Bar Rail. For Section B-B, refer to Standard Detail 507(24).

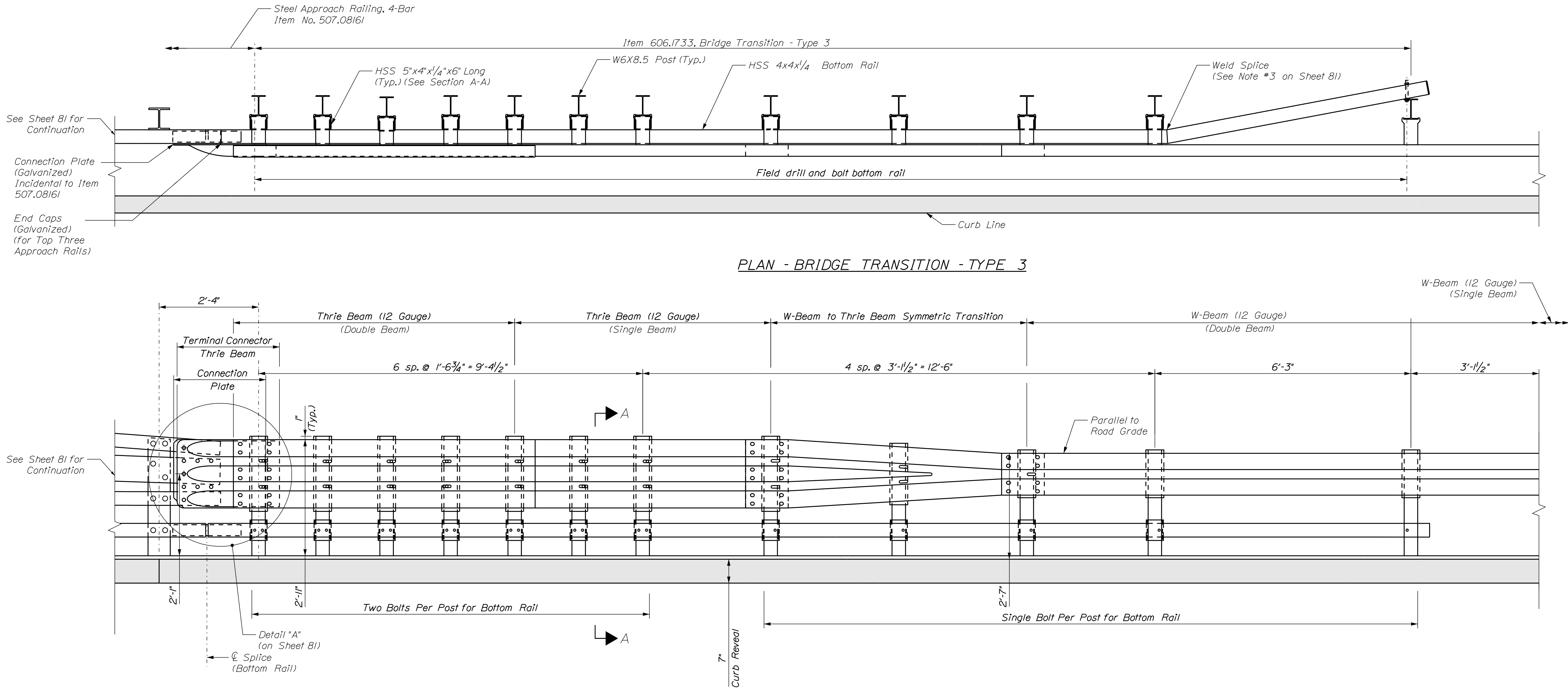
STATE OF MAINE				DEPARTMENT OF TRANSPORTATION			
				2516100			
				WIN			
				25161.00			
				BRIDGE NO. 6601			
				BRIDGE PLANS			

Date:5/25/2025

Username: common

Division: BRIDGE

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PLAN - BRIDGE TRANSITION - TYPE 3

ELEVATION - BRIDGE TRANSITION - TYPE 3

NOTES:
1. See notes on Sheet 81.
2. The HSS bottom rail shall be fabricated in accordance with Section 507.

TUTTLE ROAD BRIDGE INTERSTATE 295, RTE US 1 & MCRR CUMBERLAND CUMBERLAND COUNTY										PROJ. MANAGER		Gerald Dostie		BY		DATE		STATE OF MAINE DEPARTMENT OF TRANSPORTATION	
BRIDGE TRANSITION - TYPE 3										DESIGN-DETAILED		CNU		CNU		05/2025		SIGNATURE	
										CHECKED-REVIEWED		RF		RF		05/2025			
										DESIGN2-DETAILED2									
										DESIGN3-DETAILED3									
										REVISIONS 1						P.E. NUMBER		2516100	
										REVISIONS 2									
										REVISIONS 3									
										REVISIONS 4									
										FIELD CHANGES									
																DATE		WIN 25161.00	
SHEET NUMBER																BRIDGE NO. 5601		BRIDGE PLANS	
82																			
OF 88																			

Date:5/25/2025

Username: common

Filename: ... \083_Rebar_Reinforcing_Steel Schedule.Brgison: BRIDGE

STRAIGHT BARS								BENT BARS																	
MARK	QTY.	LENGTH	LOCATION	MARK	QTY.	LENGTH	LOCATION	MARK	QTY	LENGTH	TYPE	A	B	C	D	E	F	G	H	O	R	LOCATION			
APPROACH SLAB (Plain Reinforcing)								ABUTMENT NO. 1 (Low-Carbon Chromium)																	
								A550	86	7'-7"	L	5'-11"	1'-8"											Backwall Vertical	
AS500	32	31'-8"	Approach Slab Transverse					A551	9	16'-6 1/2"	L	15'-8 1/2"	0'-10"										Wingwall 1 Outside Face		
								A552	9	15'-7"	L	14'-9"	0'-10"										Wingwall 1 Inside Face		
AS600	128	15'-6"	Approach Slab Longitudinal					A553	9	17'-1"	L	16'-3"	0'-10"										Wingwall 2 Outside Face		
								A554	9	16'-11 1/2"	L	15'-3 1/2"	0'-10"										Wingwall 2 Inside Face		
ABUTMENT NO. 1 (Low-Carbon Chromium)								A555	16	15'-10"	H	0'-5"	3'-7 1/2"	3'-10 1/2"	3'-7 1/2"	3'-10 1/2"		0'-5"					Pedestal Tie		
A500	86	6'-10"	Backwall Vertical					A556	45	8'-9"	U	2'-7 1/2"	3'-6"	2'-7 1/2"									Pedestal Vertical Bar		
A501	18	42'-5"	Backwall Horizontal					A557	40	9'-0"	U	2'-7 1/2"	3'-9"	2'-7 1/2"									Pedestal Vertical Bar		
A502	16	2'-0"	Conduit Opening					A558	35	15'-2"	U	6'-11"	1'-4"	6'-11"									Top of Wingwalls		
A503	1	15'-11"	Wingwall 1 Horizontal Curb					A559	35	4'-4"	L	3'-6"	0'-10"										Top of Wingwalls Vertical		
A504	1	16'-1"	Wingwall 2 Horizontal Curb					A560	6	3'-0"	U	0'-10"	1'-4"	0'-10"									Wingwall 1 Wall End		
A505	44	4'-2"	Approach Slab Seat					A561	7	3'-0"	U	0'-10"	1'-4"	0'-10"									Wingwall 2 Wall End		
A600	20	42'-5"	Horizontal Stem					A650	44	18'-4"	U	8'-7"	1'-2"	8'-7"									Vertical Abutment Backwall		
A601	45	7'-8"	Wingwall Vert. Outside Face					A652	19	20'-1"	SU	6'-5"	4'-4"	1'-8"	7'-1"					0'-8"				Abutment Seat Right	
								A653	26	18'-11 1/2"	SU	5'-8 1/2"	4'-3 1/2"	1'-8"	6'-4 1/2"					0'-8"				Abutment Seat Left	
ABUTMENT NO. 1 FOOTING (Plain Reinforcing)								A654	9	21'-3"	L	20'-3"	1'-0"										Wingwall 1 Outside Face		
A602	118	10'-6"	Horiz. Transverse Footing					A655	9	17'-3 1/2"	L	16'-3 1/2"	1'-0"										Wingwall 1 Inside Face		
A603	24	43'-4"	Abut Footing Top and Bot.					A656	10	21'-10"	L	20'-10"	1'-0"										Wingwall 2 Outside Face		
								A657	10	17'-10 1/2"	L	16'-10 1/2"	1'-0"										Wingwall 2 Inside Face		
ABUTMENT NO. 2 (Low-Carbon Chromium)								A658	88	11'-2"	L	10'-2"	1'-0"										Abutment Footing Vertical Both Faces		
B500	86	7'-0"	Backwall Vertical					A659	35	7'-11"	V	6'-11"	1'-0"							0'-10"				Wingwall Inside Face Width Transition	
B501	18	42'-5"	Backwall Horizontal					A663	102	13'-3"	L	12'-3"	1'-0"										Wingwalls Footing Vertical Both Faces		
B502	16	2'-0"	Conduit Opening					A664	7	24'-9"	L	23'-9"	1'-0"										Abutment Seat Horizontal Left		
B503	1	15'-9"	Wingwall 3 Horizontal Curb					A665	7	26'-8 1/2"	U	1'-0"	24'-8 1/2"	1'-0"									Abutment Seat Horizontal Right		
B504	1	16'-5"	Wingwall 4 Horizontal Curb					A666	12	4'-4"	U	1'-0"	2'-4"	1'-0"									Wingwall 1 Wall End		
B505	44	4'-2"	Approach Slab Seat					A667	12	4'-4"	U	1'-0"	2'-4"	1'-0"									Wingwall 2 Wall End		
ABUTMENT NO. 2 FOOTING (Plain Reinforcing)								ABUTMENT NO. 1 FOOTING (Plain Reinforcing)																	
B600	20	42'-5"	Horizontal Stem					A660	118	12'-6"	U	1'-0"	10'-6"	1'-0"									Footing Abutment Bottom Transverse		
B601	46	7'-10"	Wingwall Vert. Outside Face					A661	24	24'-2"	U	1'-0"	22'-2"	1'-0"									Footing Wingwall 1 Bottom and Top Long		
								A662	24	22'-2 1/2"	U	1'-0"	20'-2 1/2"	1'-0"									Footing Wingwall 2 Bottom and Top Long		
ABUTMENT NO. 2 FOOTING (Plain Reinforcing)																									
B602	119	10'-6"	Horiz. Transverse Footing																						
B603	24	43'-4"	Abut Footing Top and Bot.					A852	24	9'-10"	SL	1'-4"	3'-0"	1'-2"	3'-0"				1'-4"				Pile Tension Tie		
								ABUTMENT NO. 2 (Low-Carbon Chromium)																	
								B550	86	7'-7"	L	5'-11"	1'-8"											Backwall Vertical	
								B551	9	16'-4 1/2"	L	15'-6 1/2"	0'-10"											Wingwall 3 Outside Face	
								B552	9	15'-5"	L	14'-7"	0'-10"											Wingwall 3 Inside Face	
								B553	9	17'-5 1/2"	L	16'-7 1/2"	0'-10"											Wingwall 4 outside face	
								B554	9	16'-6"	L	15'-8"	0'-10"											Wingwall 4 inside face	
								B555	17	15'-10"	H	0'-5"	3'-7 1/2"	3'-10 1/2"	3'-7 1/2"	3'-10 1/2"		0'-5"						Pedestal Tie	
								B556	45	8'-8"	U	2'-7"	3'-6"	2'-7"										Pedestal Vertical Bar	
								B557	40	8'-11"	U	2'-7"	3'-9"	2'-7"										Pedestal Vertical Bar	
								B558	35	14'-1"	U	6'-4 1/2"	1'-4"	6'-4 1/2"										Top of Wingwalls	
								B559	35	4'-11"	L	4'-1"	0'-10"											Top of Wingwalls Vertical	
								B560	6	3'-0"	U	0'-10"	1'-4"	0'-10"										Wingwall 3 Wall End	
								B561	7	3'-0"	U	0'-10"	1'-4"	0'-10"										Wingwall 4 Wall End	
								B650	44	17'-10"	U	8'-4"	1'-2"	8'-4"										Vertical Abutment Backwall	
								B652	19	18'-10"	SU	5'-10"	4'-4"	1'-8"	6'-6"						0'-8"				Abutment Seat Left
								B653	26	14'-9 1/2"	SU	4'-1"	4'-3 1/2"	1'-8"	4'-9"						0'-8"				Abutment Seat Right
								B654	9	21'-11 1/2"	L	20'-11 1/2"	1'-0"											Wingwall 3 Outside Face	
								B655	9	17'-11 1/2"	L	16'-11 1/2"	1'-0"											Wingwall 3 Inside Face	
								B656	9	22'-2 1/2"	L	21'-2 1/2"	1'-0"											Wingwall 4 Outside Face	
								B657	9	18'-3"	L	17'-3"	1'-0"											Wingwall 4 Inside Face	
								B658	88	11'-2"	L	10'-2"	1'-0"											Abutment Footing Vertical Both Faces	
								B659	35	8'-1"	V	7'-1"	1'-0"								0'-10"			Wingwall Inside Face Width Transition	
								B663	104	12'-7"	L	11'-7"	1'-0"											Wingwalls Footing Vertical Both Faces	
								B664	7	24'-10"	L	23'-10"	1'-0"											Abutment Seat Horizontal Left	
								B665	7	26'-8 1/2"	U	1'-0"	24'-8 1/2"	1'-0"										Abutment Seat Horizontal Right	
								B666	12	4'-4"	U	1'-0"	2'-4"	1'-0"										Wingwall 3 Wall End	
								B667	12	4'-4"	U	1'-0"	2'-4"	1'-0"										Wingwall 4 Wall End	
								ABUTMENT NO. 2 FOOTING (Plain Reinforcing)																	
								B660	119	12'-6"	U	1'-0"	10'-6"	1'-0"											Footing Abutment Bottom Transverse
								B661	24	23'-11"	U	1'-0"	21'-11"	1'-0"											Footing Wingwall 3 Bottom and Top Long
								B662	24	22'-5"	U	1'-0"	20'-5"	1'-0"											Footing Wingwall 4 Bottom and Top Long
								B852	24	9'-10"	SL	1'-4"	3'-0"	1'-2"	3'-0"				1'-4"					Pile Tension Tie	

Date:5/25/2025

Username: common

Division: BRIDGE

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STRAIGHT BARS								BENT BARS																
MARK	QTY.	LENGTH	LOCATION	MARK	QTY.	LENGTH	LOCATION	MARK	QTY	LENGTH	TYPE	A	B	C	D	E	F	G	H	O	R	LOCATION		
PIER 2 (Low-Carbon Chromium)				SUPERSTRUCTURE (Low-Carbon Chromium)				PIER 2 (Low-Carbon Chromium)																
2P500	6	40'-8"	Pier 2 Stem Horizontal	S500	2106	42'-5"	Transverse Deck	2P550	8	19'-10"	V				2'-10"	17'-0"			5'-5"				End of Pier 2 Stem Vertical	
2P501	2	40'-0"	Pier 2 Stem Horizontal	S501	1326	42'-2"	Longitudinal Deck	2P551	83	8'-4"	U	2'-8"	3'-0"	2'-8"									Top of Pier 2 Stem Stirrup	
2P502	2	39'-4"	Pier 2 Stem Horizontal	S502	102	20'-0"	Longitudinal Deck	2P552	30	8'-8"	U	3'-0"	2'-8"	3'-0"									End of Pier 2 Stem Stirrup	
2P503	2	38'-8"	Pier 2 Stem Horizontal	S503	54	40'-7 1/2"	Longitudinal Deck over Pier 1	2P553	3	14'-0"	H	0'-5"	3'-6"	3'-1"	3'-6"	3'-1"		0'-5"					Pedestal Tie	
2P504	2	38'-0"	Pier 2 Stem Horizontal	S504	54	35'-7 1/2"	Longitudinal Deck over Pier 2	2P554	20	7'-3"	U	2'-0"	3'-3"	2'-0"									Pedestal Vertical Bar	
2P505	2	37'-4"	Pier 2 Stem Horizontal	S505	54	35'-1 1/2"	Longitudinal Deck over Pier 3	2P555	25	6'-10"	U	2'-0"	2'-10"	2'-0"									Pedestal Vertical Bar	
2P506	2	36'-8"	Pier 2 Stem Horizontal																					
2P507	2	36'-0"	Pier 2 Stem Horizontal	S600	54	40'-11 1/2"	Longitudinal Deck over Pier 1	2P651	7	42'-8"	U	1'-0"	40'-8"	1'-0"									Top of Pier 2 Stem	
2P508	2	35'-4"	Pier 2 Stem Horizontal	S601	54	35'-11 1/2"	Longitudinal Deck over Pier 2	2P652	415	4'-4"	PI	0'-8"	2'-8"					1'-0"					Pier 2 Seismic Tie	
2P509	2	34'-8"	Pier 2 Stem Horizontal	S602	54	35'-5 1/2"	Longitudinal Deck over Pier 3	2P653	26	13'-0"	U	5'-2"	2'-8"	5'-2"									End of Pier 2 Stem Stirrup Seismic	
2P510	2	34'-0"	Pier 2 Stem Horizontal	S603	32	9'-0"	Transverse at CJ																	
2P511	2	33'-4"	Pier 2 Stem Horizontal					2P850	122	16'-3"	L	14'-11"	1'-4"										Pier 2 Footing Dowel	
2P512	2	32'-6"	Pier 2 Stem Horizontal																					
2P513	2	32'-4"	Pier 2 Stem Horizontal					PIER 2 FOOTING (Plain Reinforcing)																
2P514	2	32'-1"	Pier 2 Stem Horizontal					2P654	20	38'-6"	U	1'-0"	36'-6"	1'-0"									Pier 2 Footing	
2P515	2	31'-10"	Pier 2 Stem Horizontal																					
2P516	2	31'-8"	Pier 2 Stem Horizontal					2P851	148	11'-2"	U	1'-4"	8'-6"	1'-4"									Pier 2 Footing	
2P517	2	31'-5"	Pier 2 Stem Horizontal					2P852	8	9'-10"	SL	1'-4"	3'-0"	1'-2"	3'-0"			1'-4"						Pile Tension Tie
2P518	2	31'-2"	Pier 2 Stem Horizontal																					
2P519	2	31'-0"	Pier 2 Stem Horizontal					PIER 3 (Low-Carbon Chromium)																
2P520	2	30'-9"	Pier 2 Stem Horizontal					3P550	8	21'-3"	V				2'-10"	18'-5"			5'-10"				End of Pier 3 Stem Vertical	
2P521	2	30'-6"	Pier 2 Stem Horizontal					3P551	83	8'-4"	U	2'-8"	3'-0"	2'-8"									Top of Pier 3 Stem Stirrup	
2P522	2	30'-4"	Pier 2 Stem Horizontal					3P552	34	8'-8"	U	3'-0"	2'-8"	3'-0"									End of Pier 3 Stem Stirrup	
2P523	2	30'-1"	Pier 2 Stem Horizontal					3P553	5	14'-0"	H	0'-5"	3'-6"	3'-1"	3'-6"	3'-1"		0'-5"					Pedestal Tie	
2P524	2	29'-10"	Pier 2 Stem Horizontal					3P554	20	7'-4"	U	2'-0 1/2"	3'-3"	2'-0 1/2"									Pedestal Vertical Bar	
2P525	8	7'-4"	Pier 2 Stem-Footing Bar					3P555	25	6'-11"	U	2'-0 1/2"	2'-10"	3'-0 1/2"									Pedestal Vertical Bar	
2P800	4	4'-2"	Pier 2 Stem Vertical					3P651	7	42'-8"	U	1'-0"	40'-8"	1'-0"									Top of Pier 3Stem	
2P801	4	5'-8"	Pier 2 Stem Vertical					3P652	403	4'-4"	PI	0'-8"	2'-8"					1'-0"					Pier 3 Seismic Tie	
2P802	4	7'-2"	Pier 2 Stem Vertical					3P653	26	13'-0"	U	5'-2"	2'-8"	5'-2"									End of Pier 3 Stem Stirrup Seismic	
2P803	4	8'-8"	Pier 2 Stem Vertical																					
2P804	4	10'-2"	Pier 2 Stem Vertical					3P850	118	16'-3"	L	14'-11"	1'-4"										Pier 3 Footing Dowel	
2P805	4	11'-8"	Pier 2 Stem Vertical																					
2P806	4	13'-2"	Pier 2 Stem Vertical					PIER 3 FOOTING (Plain Reinforcing)																
2P807	4	14'-8"	Pier 2 Stem Vertical					3P654	20	38'-6"	U	1'-0"	36'-6"	1'-0"									Pier 3 Footing	
2P808	4	16'-2"	Pier 2 Stem Vertical																					
2P809	4	17'-8"	Pier 2 Stem Vertical					3P851	148	11'-2"	U	1'-4"	8'-6"	1'-4"									Pier 3 Footing	
2P810	4	19'-2"	Pier 2 Stem Vertical					3P852	40	9'-10"	SL	1'-4"	3'-0"	1'-2"	3'-0"			1'-4"						Pile Tension Tie
2P811	122	14'-6"	Pier 2 Stem Vertical																					
								SUPERSTRUCTURE (Low-Carbon Chromium)																
PIER 3 (Low-Carbon Chromium)								S550	2106	5'-6"	C	0'-7"	4'-11"										Deck Overhang	
3P500	6	40'-8"	Pier 3 Stem Horizontal					S551	729	5'-8 1/2"	SC	0'-10"	1'-4"	1'-4"	1'-4"			0'-10"					Curb Stirrup	
3P501	2	40'-0"	Pier 3 Stem Horizontal					S552	42	9'-6"	SJ	3'-0"	0'-7"	1'-5"	1'-1"	3'-5"							Deck End Abut 1	
3P502	2	39'-4"	Pier 3 Stem Horizontal					S553	42	10'-5 1/2"	SJ	3'-0"	0'-7"	2'-4 1/2"	1'-1"	3'-5"							Deck End Abut 2	
3P503	2	38'-8"	Pier 3 Stem Horizontal					S554	528	11'-5"	SC	0'-10"	1'-3"	7'-4"	1'-2"			0'-10"					Sidewalk Strirup	
3P504	2	38'-0"	Pier 3 Stem Horizontal					S555	201	5'-6"	S	0'-10"	1'-3"	1'-4"	1'-3"			0'-10"					Curb Stirrup Sidewalk Side	
3P505	2	37'-4"	Pier 3 Stem Horizontal					S556	40	6'-0"	L	3'-0"	3'-0"										Drainage Bars	
3P506	2	36'-8"	Pier 3 Stem Horizontal					S557	64	10'-8"	M		3'-3"	1'-5"	1'-4"	1'-5"	3'-3"		1'-0"				Construction Joint	
3P507	2	36'-0"	Pier 3 Stem Horizontal																					
3P508	2	35'-4"	Pier 3 Stem Horizontal																					
3P509	2	34'-8"	Pier 3 Stem Horizontal																					
3P510	2	34'-0"	Pier 3 Stem Horizontal																					
3P511	2	33'-4"	Pier 3 Stem Horizontal																					
3P512	2	32'-8"	Pier 3 Stem Horizontal																					
3P513	2	32'-0"	Pier 3 Stem Horizontal																					
3P514	2	31'-8"	Pier 3 Stem Horizontal																					
3P515	2	31'-5"	Pier 3 Stem Horizontal																					
3P516	2	31'-3"	Pier 3 Stem Horizontal																					
3P517	2	31'-0"	Pier 3 Stem Horizontal																					
3P518	2	30'-9"	Pier 3 Stem Horizontal																					
3P519	2	30'-7"	Pier 3 Stem Horizontal																					
3P520	2	30'-4"	Pier 3 Stem Horizontal																					
3P521	2	30'-1"	Pier 3 Stem Horizontal											</										

TYPE - BENDING DIAGRAMS

This figure is a detailed engineering plan for a proposed transportation project in Cumberland County, Maine. The plan shows the layout of a new road, including its alignment, stationing, and various easements and rights of way. Key features include:

- PLAN LEGEND:** Defines symbols for existing and proposed features, including roads, easements, and infrastructure.
- Scale:** A graphic scale bar indicates distances in feet (0 to 100).
- Control Information:** Provides details on the survey used, including the US State Plane NAD83(2011) Maine 2000 West Zone and a combined scale factor of 0.999981394.
- Parcel Information:** Identifies two parcels: Parcel No. (1) owned by John Marcelynas (0.86± AC.) and Parcel No. (2) owned by Donald Lester and Michelle Lester (2.44± AC.).
- Curve Data #1:** Provides details for a curve with a PI of 12+39.39, a degree of 14°19'26.2", and a radius of 400.00'.
- Right of Way & Track Map:** Shows the alignment of the proposed road and its relationship to existing infrastructure, including State Aid Highway No. 3 / Tuttle Road.
- Revisions Table:** A table at the bottom left tracks changes to the plan, including dates, descriptions, and the responsible parties.
- Project Information:** The plan is for State Aid Highway No. 3, Tuttle Road, in Cumberland County, Maine, under Federal Aid Project No. 2516100.

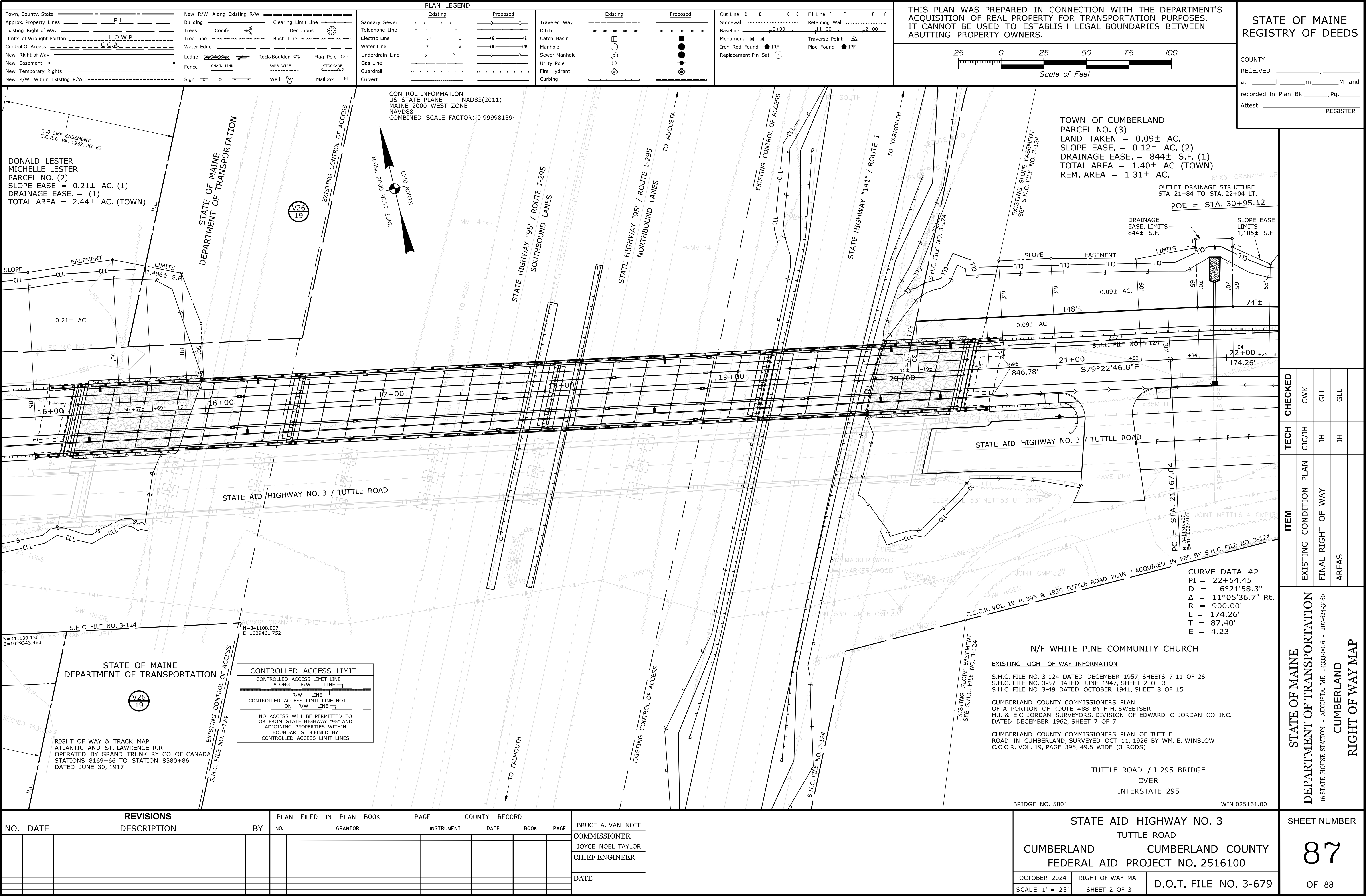
The plan is prepared in connection with the Department's acquisition of real property for transportation purposes and is not to be used to establish legal boundaries between abutting property owners.

Date:4/16/2025

Username: Jude.Hogan

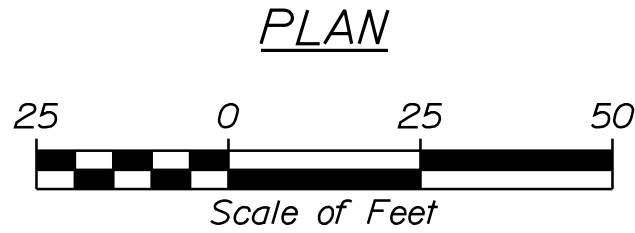
Division: ROW

Filename: ... \00\ROW\WSTA002_RWPLAN2.dgn



Filename: ... \00\ROW\MSTA\003_RWPLAN3.dgn

2. See *Special Provision Section 910* for further details.





Stantec Consulting Services Inc.
 2211 CONGRESS ST., PORTLAND, ME 04102
 Tel. 207.887.3449 Fax 207.883.3376

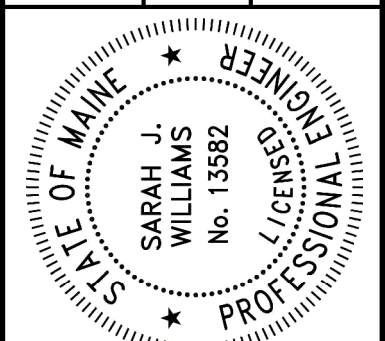
CONSOLIDATED COMMUNICATIONS

BRIDGE NO. 5801

WIN

25161.00

BRIDGE PLANS



PROJ. MANAGER	6. Dstle	BY	DATE
DESIGN-Detailed	KBJ	KBJ	MAR 2025
CHECKED-REVIEWED	SJM	SJM	MAR 2025
DESIGN-Detailed			
DESIGNS Detailed			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

TUTTLE ROAD BRIDGE
INTERSTATE 295, RTE 1 & MCRR
CUMBERLAND CUMBERLAND COUNTY

CONDUIT LAYOUT PLAN

SHEET NUMBER

C1

OF C3

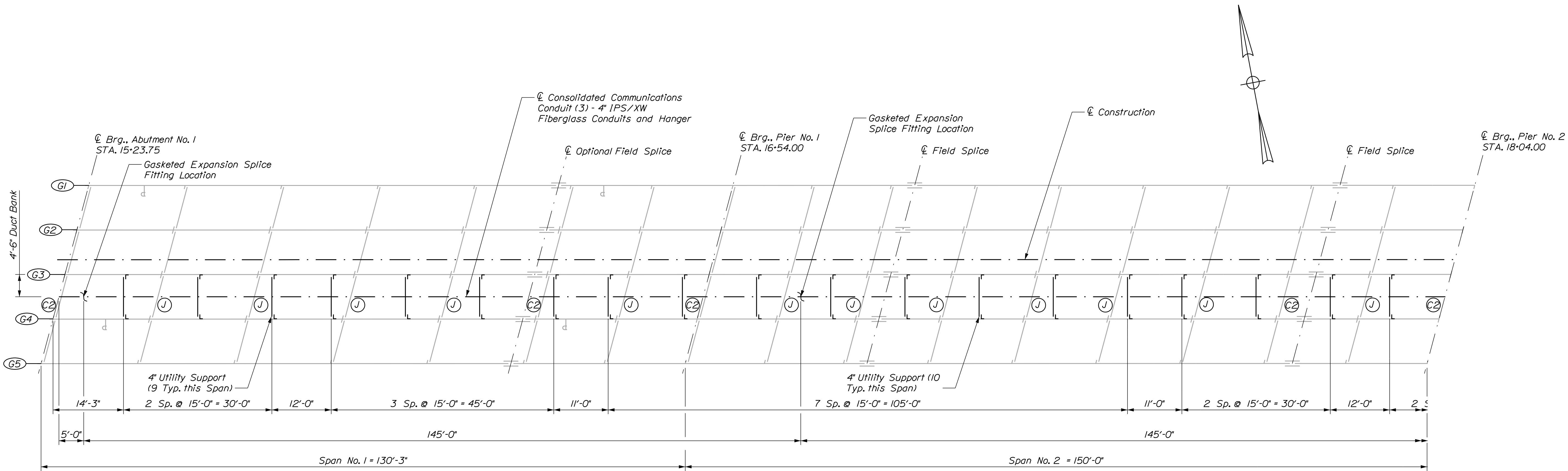


Date: 3/6/2025

Username: sjwilliams

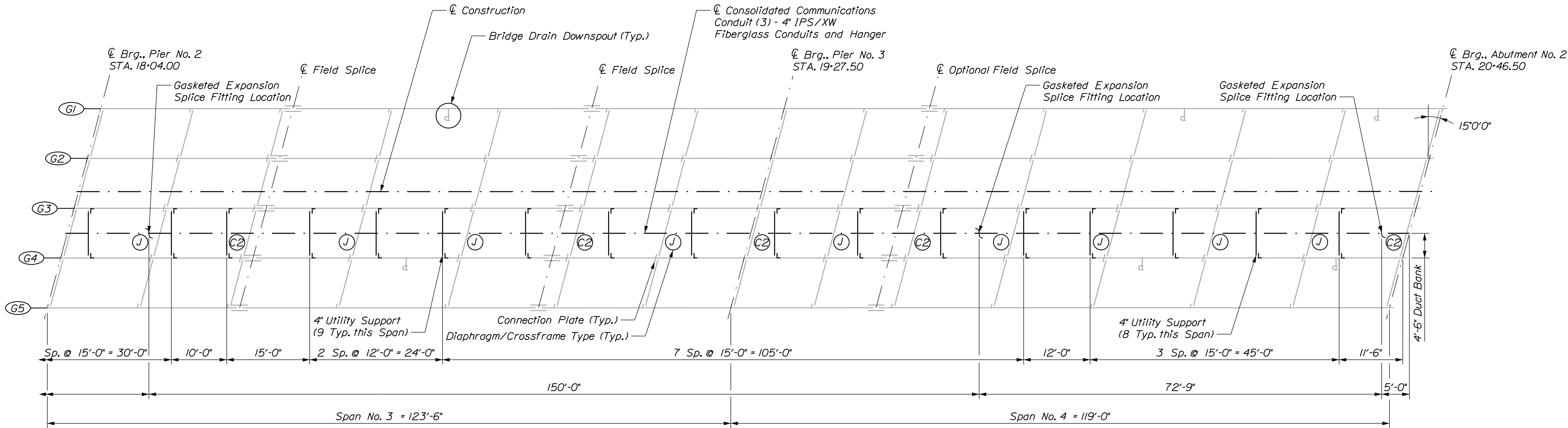
Division: UTILITIES

Filename: ...\\00\\BRIDGE\\MSTA_framing.dgn



FRAMING PLAN - SPAN NO. 1 & 2

- NOTES:
- 1. Dimensions are horizontal.
 - 2. See Sheet C3 for Additional Details and Notes.



FRAMING PLAN - SPAN NO. 3 & 4



Stantec Consulting Services Inc.
2211 CONGRESS ST., PORTLAND, ME 04102
Tel. 207.887.3449 Fax 207.883.3376

CONSOLIDATED COMMUNICATIONS

BRIDGE NO. 6601
WIN 25161.00
BRIDGE PLANS

PROJ. MANAGER	DESIGN-DETAILED	CHECKED-REVIEWED	REJ	BY	DATE	SIGNATURE	
						P.E. NUMBER	
						DATE	
TUTTLE ROAD BRIDGE INTERSTATE 295, RTE 1 & MCRR CUMBERLAND CUMBERLAND COUNTY						STATE OF MAINE SARAH J. WILLIAMS No. 15582 PROFESSIONAL ENGINEER	

TUTTLE ROAD BRIDGE
INTERSTATE 295, RTE 1 & MCRR
CUMBERLAND CUMBERLAND COUNTY

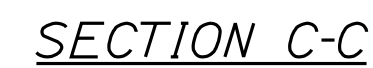
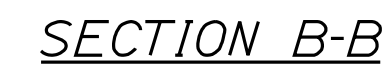
UTILITY SUPPORT PLAN

SHEET NUMBER

C2

OF C3





(Abutment No. 1 Shown, Abutment No. 2 Similar)



1. Consolidated Communications fiberglass conduits stop 3 feet beyond ends of bridge approach slabs and shall be encased in concrete beyond this limit. After entering the concrete they shall be housed in 4" PVC conduits and sealed. Total Consolidated Communications run per conduit utility pole to utility pole is approximately 650 feet.
2. All conduits located under the bridge shall be run in free air and suspended by their individual rack assemblies and shall be of the type specified on the drawings.
3. All sleeves running through the abutment backwalls shall be cast-in-place or run through existing block-outs then sealed off with a waterproof mortar when completed.
4. Conduits run under the bridge shall have expansion joints as shown.
5. These drawings are based on available bridge design drawings. Contractor shall verify all dimensions before fabrication and installation of conduits and supports.
6. Fiberglass duct supports are designed for a maximum cable load of 8.0 lbs per foot per 4" duct and a duct self-weight of 2.4 lbs per foot and hanger weight of 14 lbs. The total unfactored conduit load at a support is 0.7 Kips maximum.
7. 4" straight couplings shall be installed as required.
8. All connections between duct sections, expansion joints, adapters and couplings are to be bonded. Refer to manufacturer's instructions for bonding procedures.
9. Cap the ends of the ducts if the underground portion of the work is not done at the same time as the bridge portion.
10. All attachment rods, spacer rods, nuts, lock and flat washers are to be Hot-Dipped Galvanized.
11. Hanger Assembly to be Set Level.
12. This design is for the express purpose for use on the bridge on Tuttle Road over I-295 in Cumberland, Maine.
13. See MaineDOT WIN 2561.00 Contract Plans for additional bridge and approach roadway details.