

ESTIMATED QUANTITIES					
ITEM NO.	DESCRIPTION	QUANTITY			UNIT
		17099.00	17100.00	TOTAL	
202.12	REMOVING EXISTING STRUCTURAL CONCRETE	6	292	298	CY
202.18	REMOVE EXISTING BITUMINOUS PAVEMENT (INCLUDING MEMBRANE)	2850	1300	1	LS
203.25	GRANULAR BORROW	0	325	325	CY
206.082	STRUCTURAL EARTH EXCAVATION - MAJOR STRUCTURES	25	280	305	CY
304.09	AGGREGATE BASE COURSE - CRUSHED	15	365	380	CY
403.207	HOT MIX ASPHALT 19.0 MM HMA	200	200	400	T
403.2081	12.5 MM POLYMER MODIFIED HOT MIX ASPHALT	250	150	400	T
403.2131	12.5 MM POLYMER MODIFIED HMA BASE	340	210	550	T
409.15	BITUMINOUS TACK COAT - APPLIED	300	150	450	G
502.219	STRUCTURAL CONCRETE, ABUTMENTS AND RET. WALLS	-	240	1	LS
502.31	STRUCTURAL CONCRETE APPROACH SLABS	-	110	1	LS
502.341	STRUCTURAL CONCRETE ROADWAY MEDIAN	3	3	6	CY
502.3412	STRUCTURAL CONCRETE, RAISED ISLAND	1	-	1	CY
502.49	STRUCTURAL CONCRETE CURBS AND SIDEWALK	1	3	1	LS
503.12	REINFORCING STEEL, FABRICATED AND DELIVERED	1100	17400	18500	LB
503.13	REINFORCING STEEL, PLACING	1100	17400	18500	LB
507.10	ALUMINUM BRIDGE RAIL, REMOVE & RESET	0	20	20	LF
508.14	HIGH PERFORMANCE WATERPROOFING MEMBRANE	1560	-	1	LS
510.301	EXPRESSWAY MEDIAN CROSSOVER	-	-	1	LS
515.21	PROTECTIVE COATING FOR CONCRETE SURFACES	40	280	1	LS
515.21	PROTECTIVE COATING FOR CONCRETE SURFACES - ACRYLIC ANTI-CARBONATION COATING	-	385	1	LS
518.50	REPAIR OF UPWARD FACING SURFACES - TO REINFORCING STEEL < 7.9 IN.	70	-	70	SF
520.245	BRIDGE JOINT MODIFICATION TYPE 5	2	1	3	EA
521.23	EXPANSION DEVICE FINGER JOINT - TYPE "C"	0	1	1	EA
521.23	EXPANSION DEVICE FINGER JOINT - TYPE "E"	0	1	1	EA
521.32	FABRIC TROUGH FOR FINGER JOINT (2100 LF)	0	2	2	EA
526.301	TEMPORARY CONCRETE BARRIER TYPE I	-	1800	1	LS
526.3401	PERMANENT CONCRETE TRANSITION BARRIER - MODIFIED	3	3	6	EA
527.34	WORK ZONE CRASH CUSHIONS	5	5	10	EA
606.1721	BRIDGE TRANSITION - TYPE I	7	7	14	EA
606.178	GUARDRAIL BEAM	250	750	1000	LF
606.24	GUARDRAIL TYPE 3D - SINGLE RAIL	25	50	75	LF
606.3581	GUARDRAIL, MODIFY EXISTING TO TYPE 3D	2400	7100	9500	LF
606.369	GUARDRAIL REMOVED AND STACKED	250	750	1000	LF
609.38	RESET CURB TYPE I	20	0	20	LF
610.18	STONE DITCH PROTECTION	0	20	20	CY
619.1401	EROSION CONTROL MIX	0	40	40	CY
620.58	EROSION CONTROL GEOTEXTILE	0	40	40	SY
620.6012	HDPE GEOMEMBRANE	0	110	110	SY
627.733	4 INCH WHITE OR YELLOW PAINTED PAVE MRK LINE	2000	16500	18500	LF
627.76	TEMPORARY PYMT. MARK LINE, WHITE OR YELLOW	-	-	1	LS
629.05	HAND LABOR, STRAIGHT TIME	40	40	80	HR
631.12	ALL PURPOSE EXCAVATOR (INCLUDING OPERATOR)	20	20	40	HR
631.15	ROLLER, EARTH AND BASE COURSE (INCLUDING OPERATOR)	20	20	40	HR
631.172	TRUCK - LARGE (INCLUDING OPERATOR)	20	20	40	HR
635.14	PREFABRICATED CONCRETE MODULAR GRAVITY WALL	0	1700	1700	SF
639.18	FIELD OFFICE TYPE A	0.5	0.5	1	EA
643.72	TEMPORARY TRAFFIC SIGNAL	1	0	1	LS
652.30	FLASHING ARROW BOARD	1	1	2	EA
652.312	TYPE III BARRICADE	20	40	60	EA
652.33	DRUM	40	50	90	EA
652.34	CONE	40	50	90	EA
652.35	CONSTRUCTION SIGNS	300	300	600	SF
652.361	MAINTENANCE OF TRAFFIC CONTROL DEVICES	90	90	1	LS
652.38	FLAGGER	200	200	400	HR
652.381	TRAFFIC OFFICERS	50	50	100	HR
652.41	PORTABLE CHANGEABLE MESSAGE SIGN	1	1	2	EA
656.75	TEMPORARY SOIL EROSION AND WATER POLLUTION CONTROL	-	-	1	LS
659.10	MOBILIZATION	-	-	1	LS

GENERAL CONSTRUCTION NOTES

1. 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.

2. All dimensions based on or relating to the existing bridges shall be verified in the field by the Contractor, i.e., existing joint opening, joint length and backwall width.

3. The Contractor shall use care not to damage the existing reinforcing steel which is to remain. Any damaged reinforcing steel shall be replaced as directed by the Resident at no expense to the Department.

4. Reinforcing Steel Schedules will be the responsibility of the Contractor. Refer to Subsection 503.03 of the Standard Specifications for more information. Payment for all work associated with developing reinforcing steel schedules will be considered incidental to related Contract items.

5. The reinforcing steel for drilled and anchored bars shall be paid for under items 503.12 and 503.13. No separate payment will be made for drilling and anchoring.

6. Reinforcing steel shall have 2 inches cover unless otherwise noted.

7. Protective Coating for Concrete Surfaces shall be applied to the following areas of new concrete:

All exposed surfaces of concrete curbs, Fascias down to the drip notch, Raised Median, All exposed surfaces of Concrete Transition Barriers & Median Barrier, 12 inches below the top of backwalls and wings on the back side, Exposed concrete surfaces at expansion devices.

8. Embeddment depth for each bar size shall be in conformance to pre-approved anchoring product manufacture's recommendations.

9. Payment for all work and materials used in the removal of each modular joint and the adjacent existing bridge materials to the lines shown on the plans shall be considered incidental to the respective finger joint pay item, Pay Item 521.23 Expansion Device - Finger Joint, Type E, and Pay Item 521.23 Expansion Device - Finger Joint, Type C.

10. The "Expansion Device - Finger Joint, Type E" consists of two superstructure elements with expansion dams as required. The "Expansion Device - Finger Joint, Type C" consists of one superstructure element and one substructure element with expansion dams as required.

11. For Veterans Remembrance Bridge the expansion/contraction lengths to be used for calculating the temperature-adjusted opening settings are: 867 feet for the Type E finger joint at Pier #2; and 571 feet for the Type C finger joint at Abutment #2.

12. Payment for any pavement used for the crossover is considered incidental to Pay Item No. 510.301 Expressway Median Crossover. Payment for all pavement used for other maintenance of traffic efforts, such as temporary pavement over bridge drains for lane shifts, is considered incidental to the contract, in accordance with the Special Provisions Section 652. Pay limits for the pavement pay items are the lines shown on the "Approach Longitudinal Pavement Section" on Sheets #4 and #13, and to the Main Street Bridge surface.

13. All abutment concrete placed above the expansion device construction joints, as shown in Sections A-A through E-E on Sheet #15 and as shown on the "Abutment No. 2 Expansion Joint" on Sheet #17, shall be Class LP concrete at no additional cost to the State.

14. All aluminum bridge rail, rail posts, and associated hardware which are to be removed shall be carefully salvaged by the Contractor and will remain the property of the Department. Payment will be considered incidental to related Contract items.

15. Wooden offset blocks should be used for the Bridge Transition Type I in the median barrier areas. Cutting of the wooden blocks will be necessary to minimize bending and warping of the thrie-beam transitions. Payment for field fitting the wooden offset blocks will be considered incidental to related contract items.

16. The glare screens in the area of reconstructing the median barriers for the bridge joint modifications and end treatments shall be removed. All associated hardware shall be carefully salvaged by the Contractor and will remain the property of the Department. Payment will be considered incidental to related Contract items.

17. The existing memorial plaques embedded within the concrete end posts on Veterans Remembrance Bridge shall be carefully removed and remounted into the new transition barriers. Payment shall be considered incidental to Item 526.3401, Permanent Concrete Transition Barrier - Modified.

18. The work at Veterans Remembrance Bridge requires sufficient earth excavation to remove and replace all approach slabs and the abutment backwalls down to the bridge seats, and sufficient earth excavation for the replacement of the Abutment No. 1 left wingwall, the post-tensioned wingwall at the Northwest corner. At Main Street Bridge, sufficient earth excavation behind both abutment backwalls is required for the Bridge Joint Modifications. All of this earth excavation will be paid for under Pay Item No. 206.082, Structural Earth Excavation - Major Structures. Earth excavation at the other three Veterans Remembrance Bridge wingwalls is considered paid under Pay Item No. 635.14, Prefabricated Concrete Modular Gravity Wall.

19. The quantity of approach roadway pavement removal as shown in the plans shall be included for pavement with the Main Street Bridge pavement removal under Pay Item No. 202.18, Remove Existing Pavement (Including Membrane).

20. Minimum splice lengths shall be 21 inches for #5 reinforcing bars and 25 inches for #6 reinforcing bars. Minimum embedment lengths shall be 15 inches for #5 reinforcing bars and 18 inches for #6 reinforcing bars, unless a drill and grout anchoring system with shorter bar lengths is approved by the Resident.
- STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
IM-1709(900)E
PIN 17099.00
BRIDGE NO. 5799
BRIDGE PLANS

PROJ. MANAGER
DESIGN-DETAILED
CHECKED-REVIEWED
DESIGNS-DETAILED
REVISIONS 1
REVISIONS 2
REVISIONS 3
REVISIONS 4
FIELD CHANGES

BY
DATE
R. MINION
05/2010

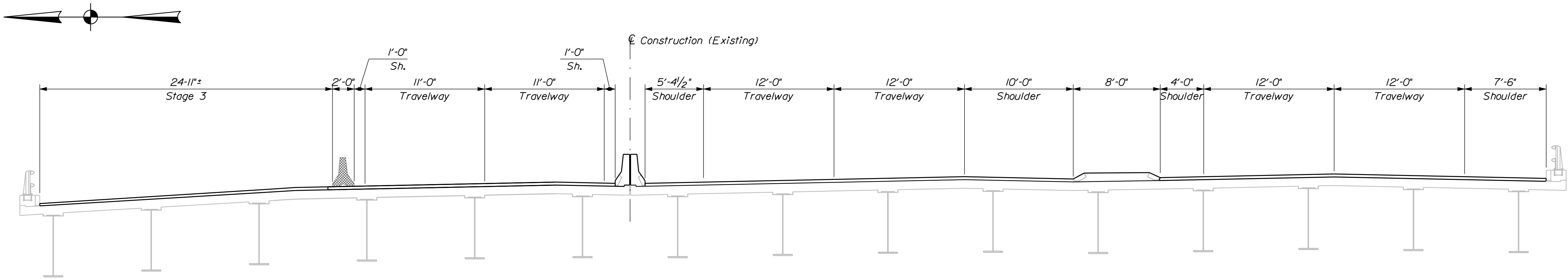
S. BOODE
R. BULGER

SIGNATURE
P.E. NUMBER
DATE

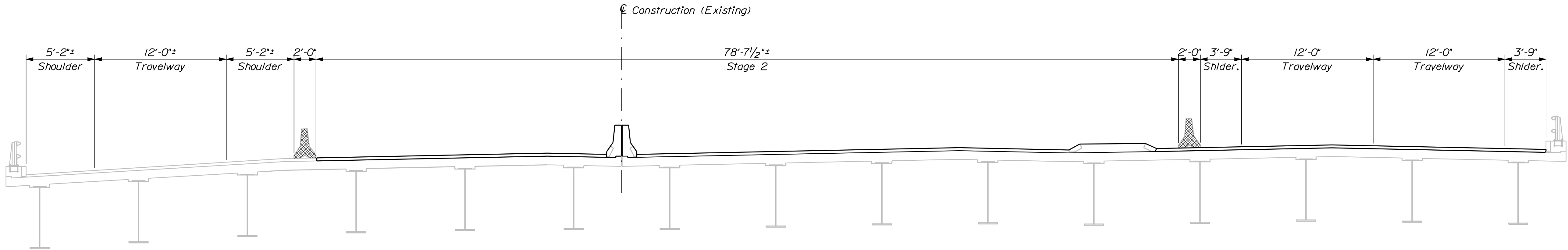
MAIN STREET BRIDGE
MAIN STREET
BANGOR
PENOBSCOT COUNTY

ESTIMATED QUANTITIES

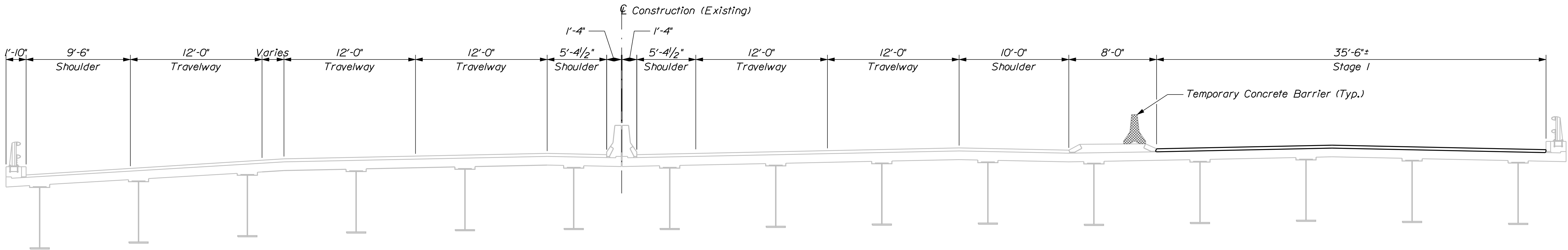
SHEET NUMBER
2
OF 28



STAGE 3



STAGE 2



STAGE 1

STATE OF MAINE		DEPARTMENT OF TRANSPORTATION		IM-1709(900)E		PIN 17099.00		BRIDGE NO. 5799		BRIDGE PLANS	
MAIN STREET BRIDGE		MAIN STREET		PENOBSCOT COUNTY		BANGOR		STAGE CONSTRUCTION		SHEET NUMBER	
3		OF 28		DATE		SIGNATURE		P.E. NUMBER		DATE	
PROJ. MANAGER		S. BOODE		BY		R. NIMON		DATE		05/2010	
CHECKED-REVIEWED		R. BULGER		DESIGN-REVIEWED		DESIGN-REVIEWED		DESIGN-REVIEWED		DESIGN-REVIEWED	
REVISIONS 1		REVISIONS 2		REVISIONS 3		REVISIONS 4		FIELD CHANGES		FIELD CHANGES	





1. Refer to Standard Details Sections 520 for details and information not shown.
2. The compression seal to be furnished shall have a minimum movement rating of:
Abutment Number 1 = $\frac{1}{2}$ "
Abutment Number 2 = $1\frac{3}{8}$ "
3. All new steel supplied for the bridge joint modification shall be galvanized steel.
4. The seal shall be approved by the Resident prior to fabrication of the joint armor.

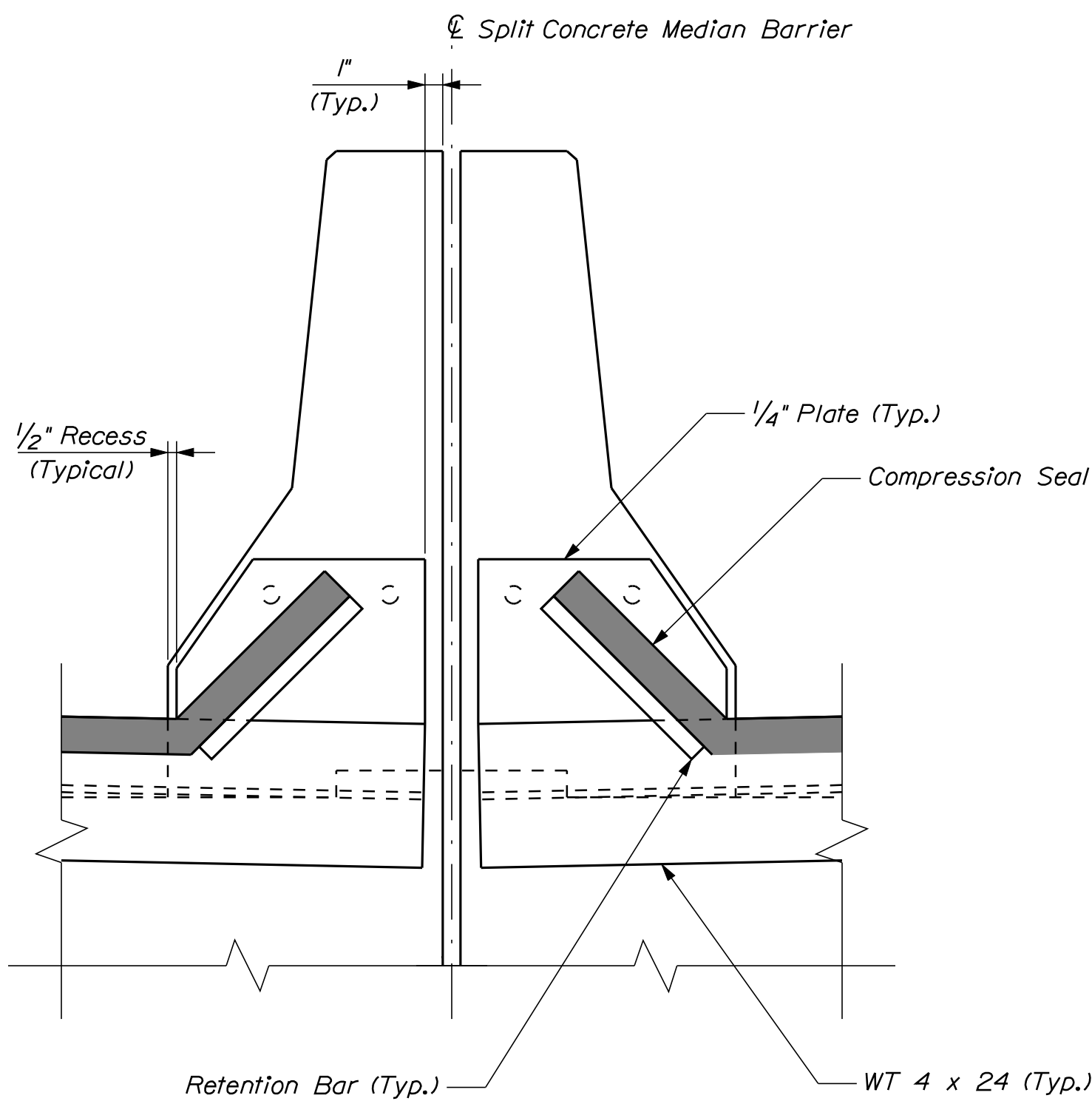
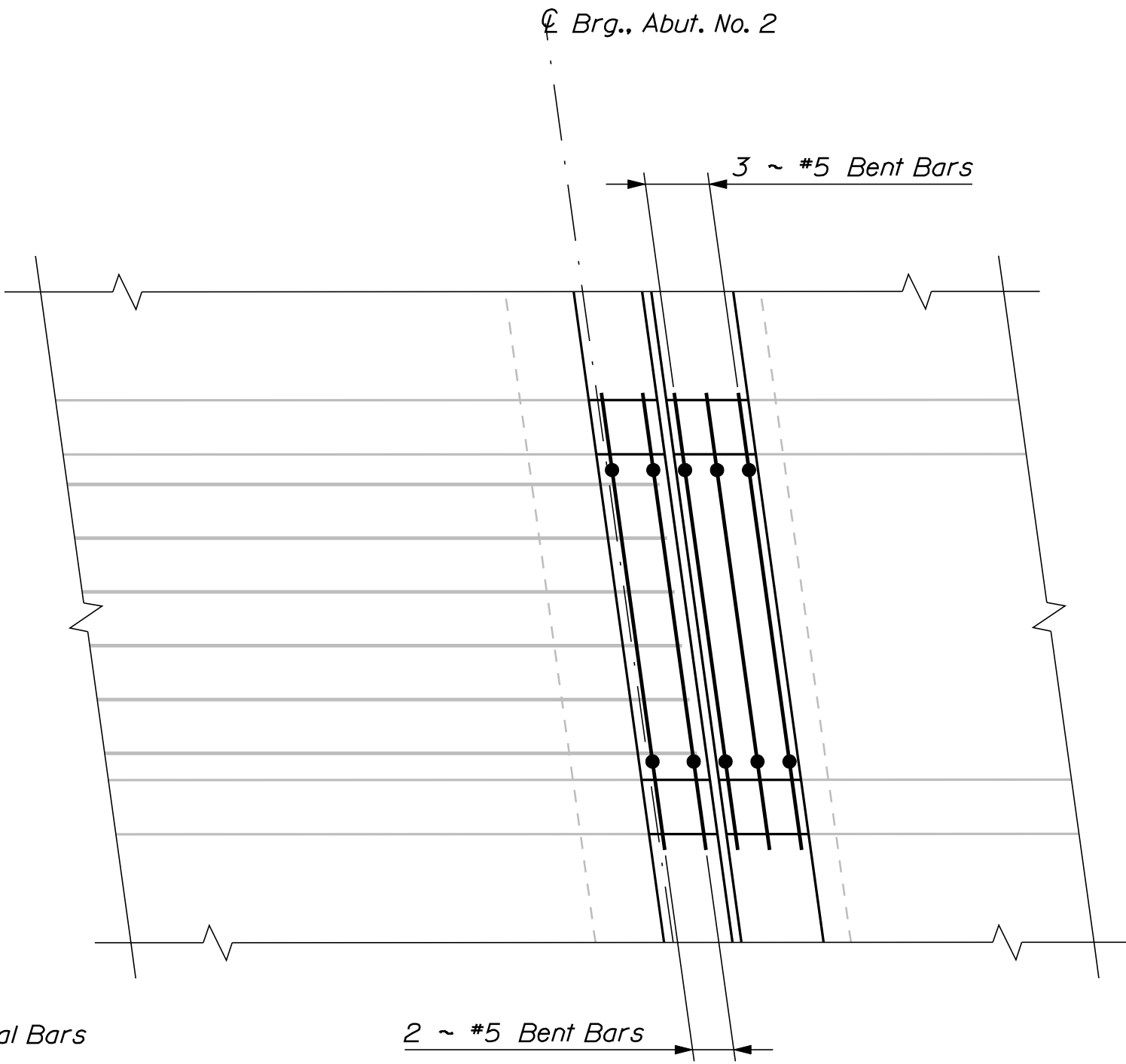
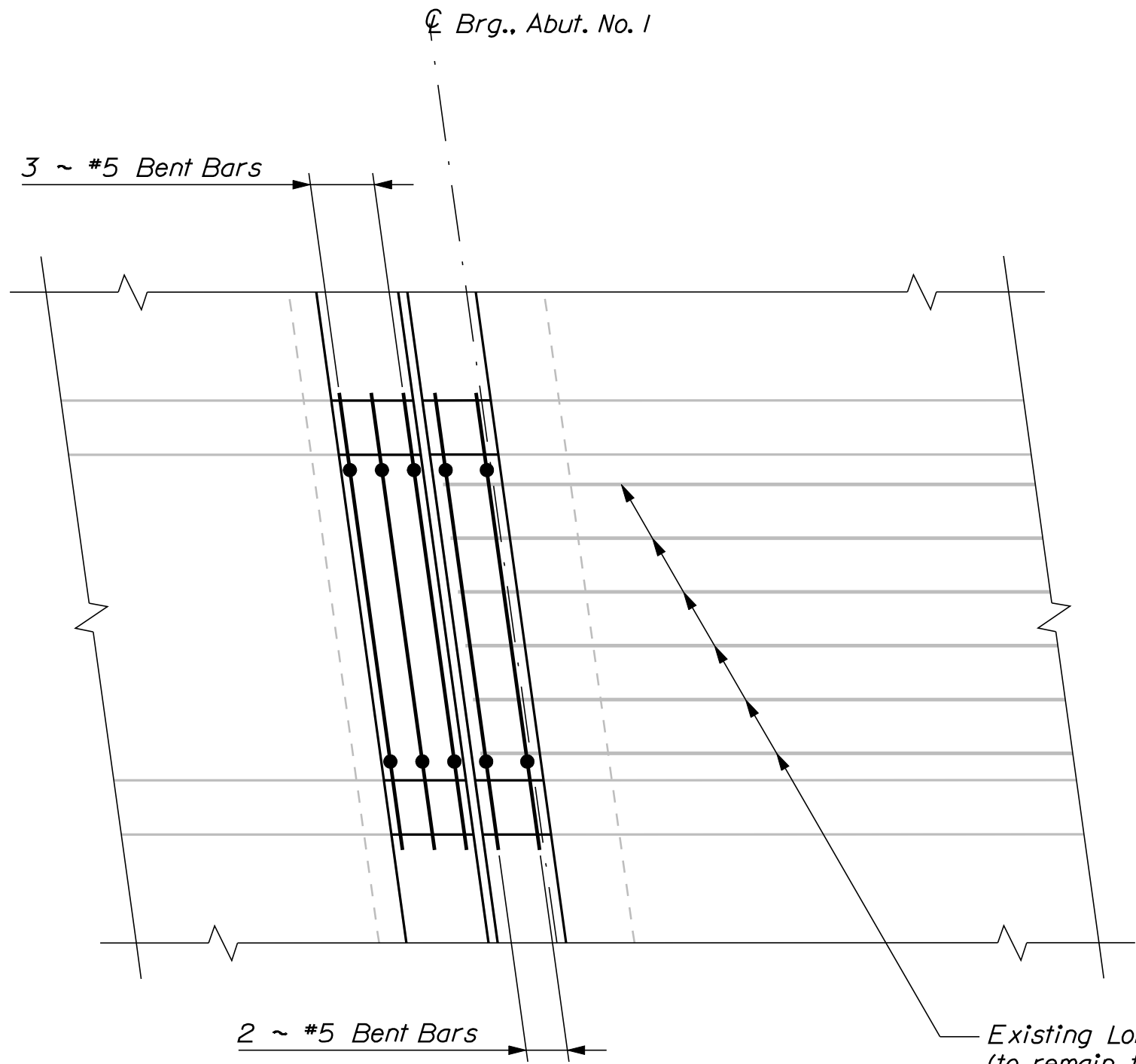


Diagram illustrating the cross-section of a bridge deck with the following components and labels:

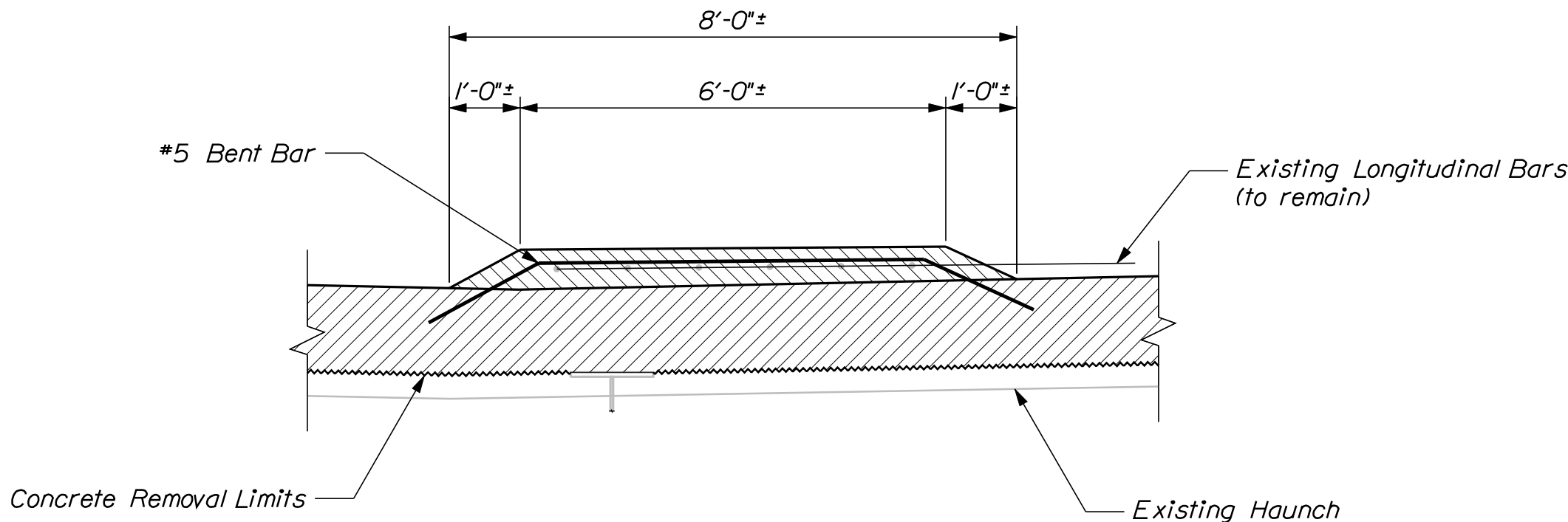
- Approximate Low Point**: Indicated by a dashed line on the left side of the deck.
- Raised Median**: Indicated by a dashed line on the right side of the deck.
- Raised Median @ End of Slab**: Indicated by a dashed line on the right side of the deck.
- Seal (Typ.)**: Indicated by a dashed line on the right side of the deck.
- Concrete Removal Limits**: Indicated by a dashed line on the left side of the deck.
- WT 4 X 24**: Indicated by a dashed line on the right side of the deck.
- Existing Haunch**: Indicated by a dashed line on the right side of the deck.
- 3'-0"±**: Dimension indicating the length of the concrete removal limits.

SEAL DETAIL @ RAISED MEDIAN

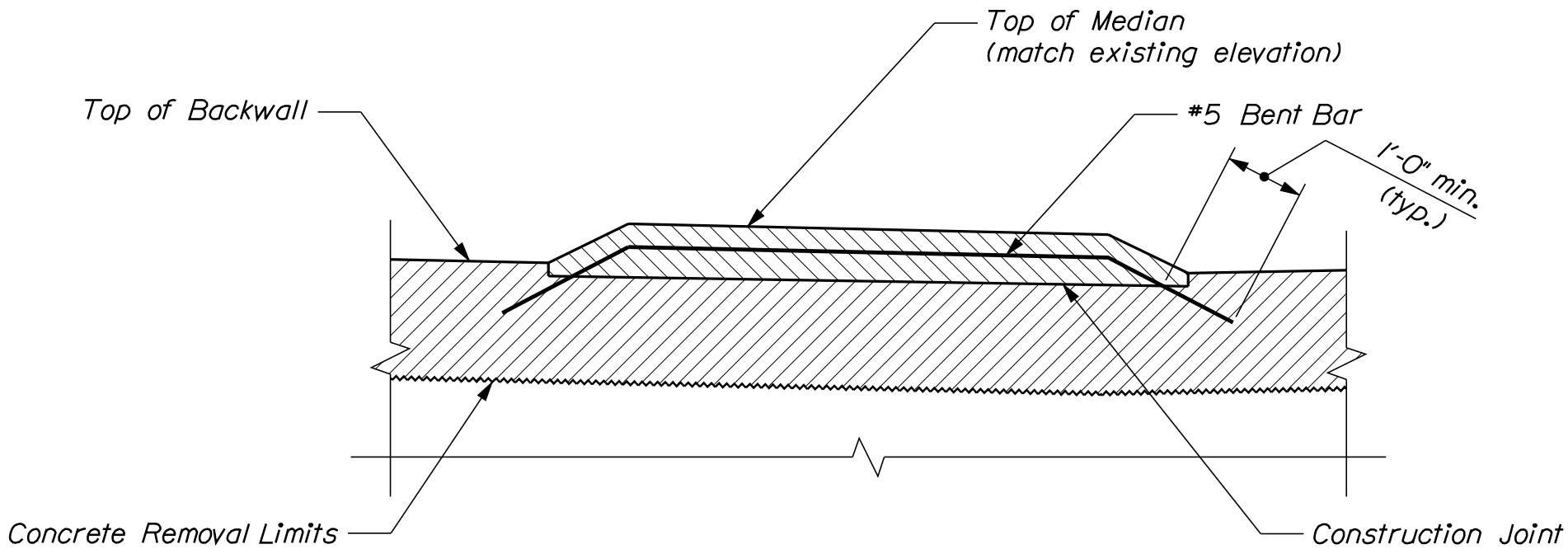
SHEET NUMBER 5 OF 28	MAIN STREET BRIDGE MAIN STREET BANGOR PENOBSCOT COUNTY				PROJ. MANAGER DESIGN-DETAILED CHECKED-REVIEWED DESIGN2-DETAILED2 DESIGN3-DETAILED3	S. BOODGE R. BULGER	BY R. NIMON	DATE 05/2010
	BRIDGE JOINT DETAILS				SIGNATURE			
					P.E. NUMBER			
					DATE			
STATE OF MAINE DEPARTMENT OF TRANSPORTATION IM-1709(900)E BRIDGE NO. 5799 PIN 17099.00 BRIDGE PLANS								



PLAN RAISED MEDIAN

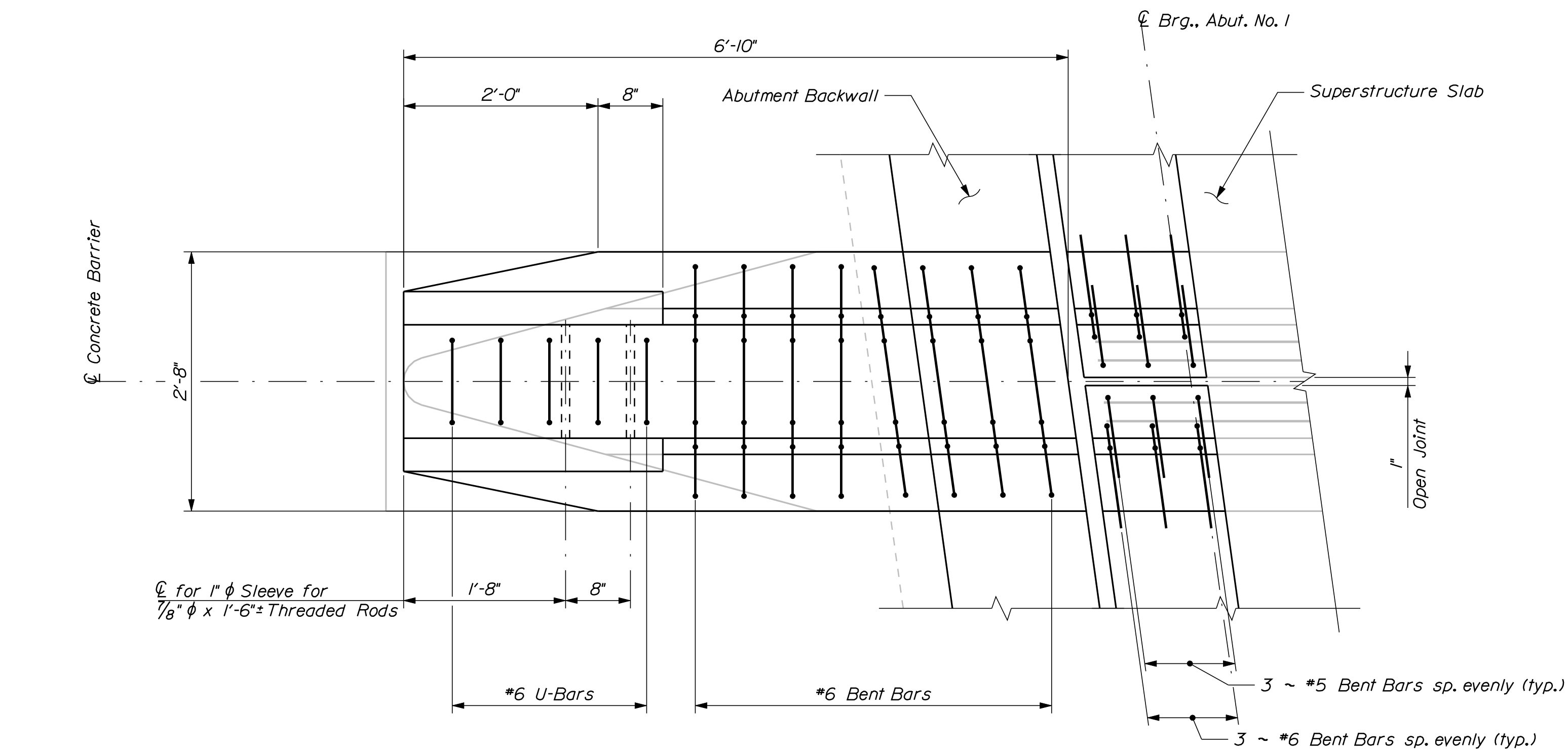


RAISED MEDIAN SECTION @ SUPERSTRUCTURE

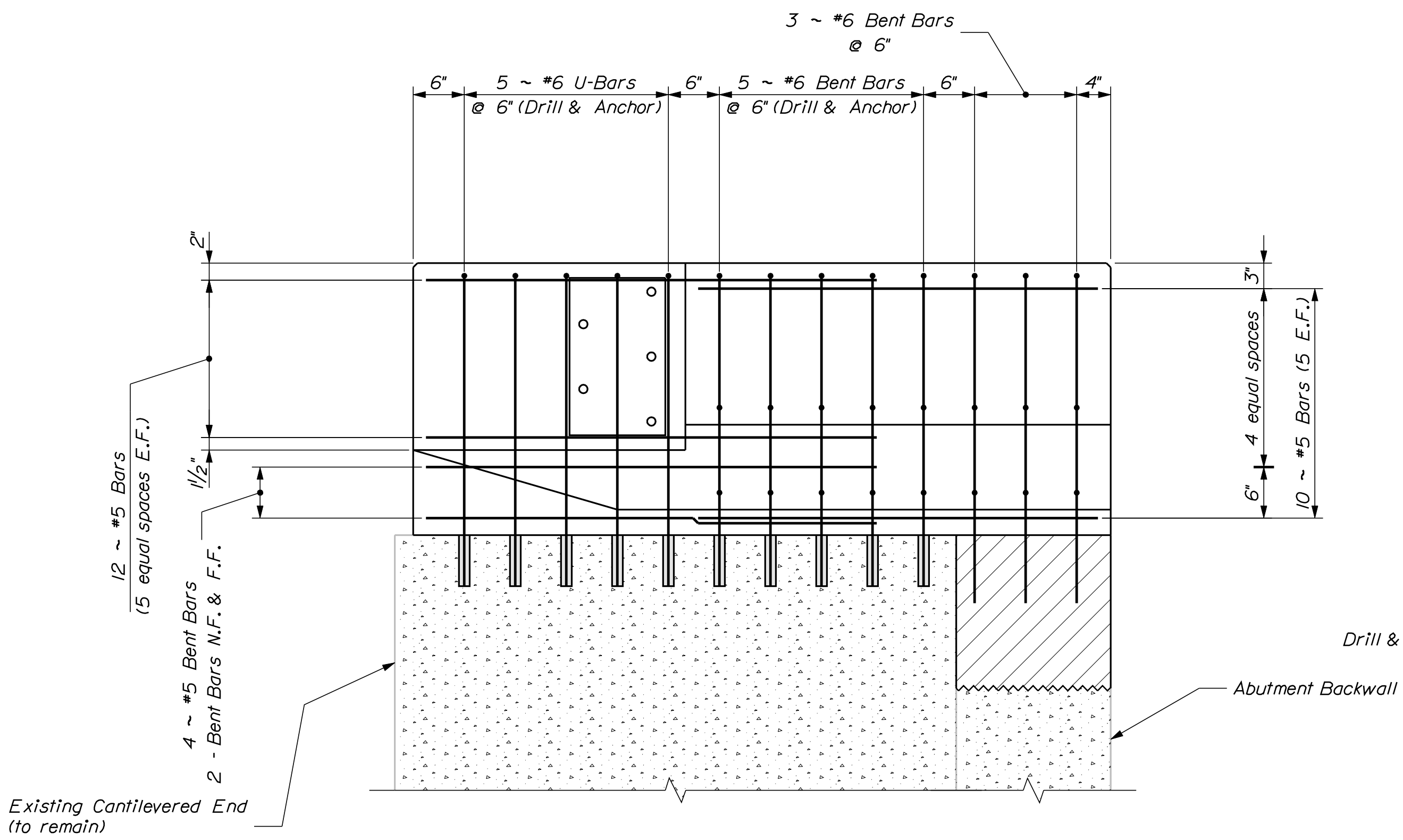


RAISED MEDIAN SECTION @ ABUTMENT BACKWALL

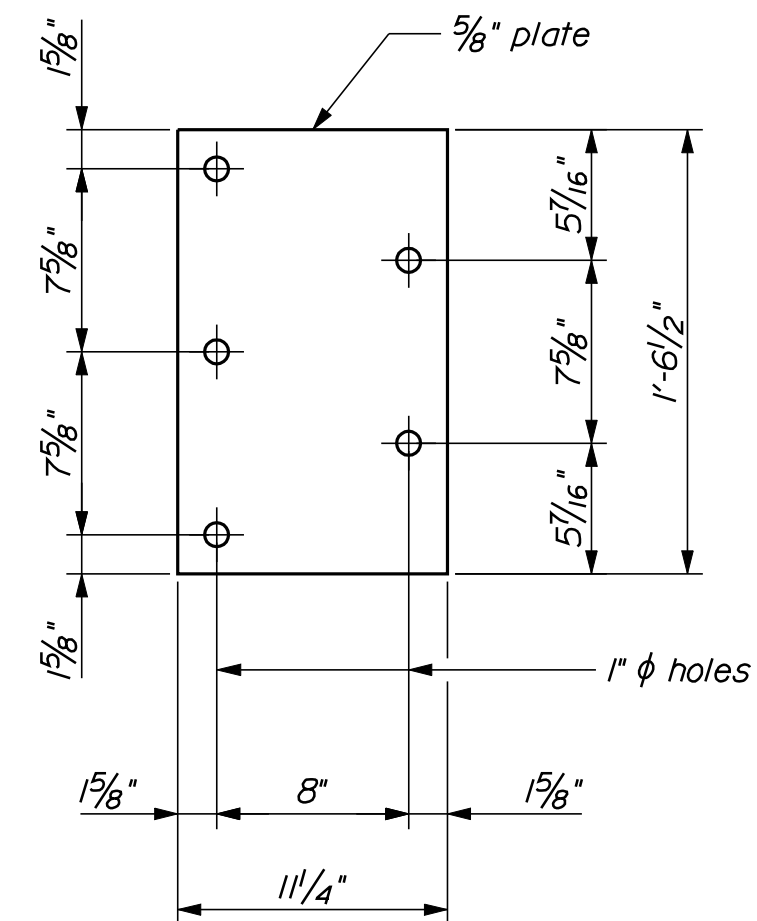
STATE OF MAINE DEPARTMENT OF TRANSPORTATION IM-1709(900)E					SIGNATURE	
					P.E. NUMBER	
					DATE	
MAIN STREET BRIDGE MAIN STREET PENOBSCOT COUNTY BANGOR RAISED MEDIAN DETAILS	PROJ. MANAGER	S. BOODE	BY	DATE		
	CHECKED-REVIEWED	R. BULGER	R. NIMON	05/2010		
	DESIGN-DETAILED					
	REVISIONS 1					
	REVISIONS 2					
					REVISIONS 3	
					REVISIONS 4	
					FIELD CHANGES	
SHEET NUMBER						
6						
OF 28						
				BRIDGE NO. 5799	PIN 170995.00	BRIDGE PLANS



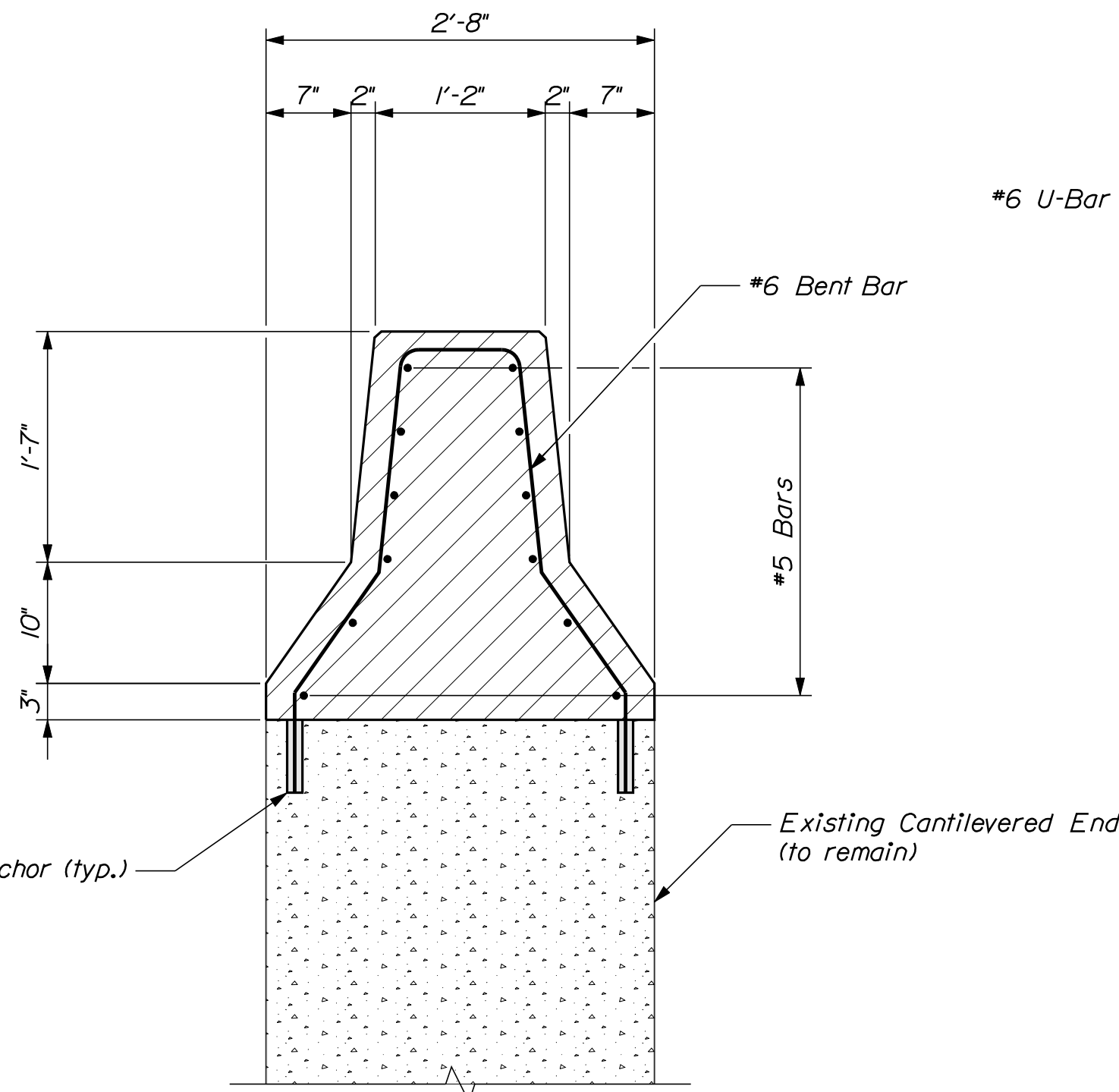
CONCRETE BARRIER PLAN
Abutment #2 Similar



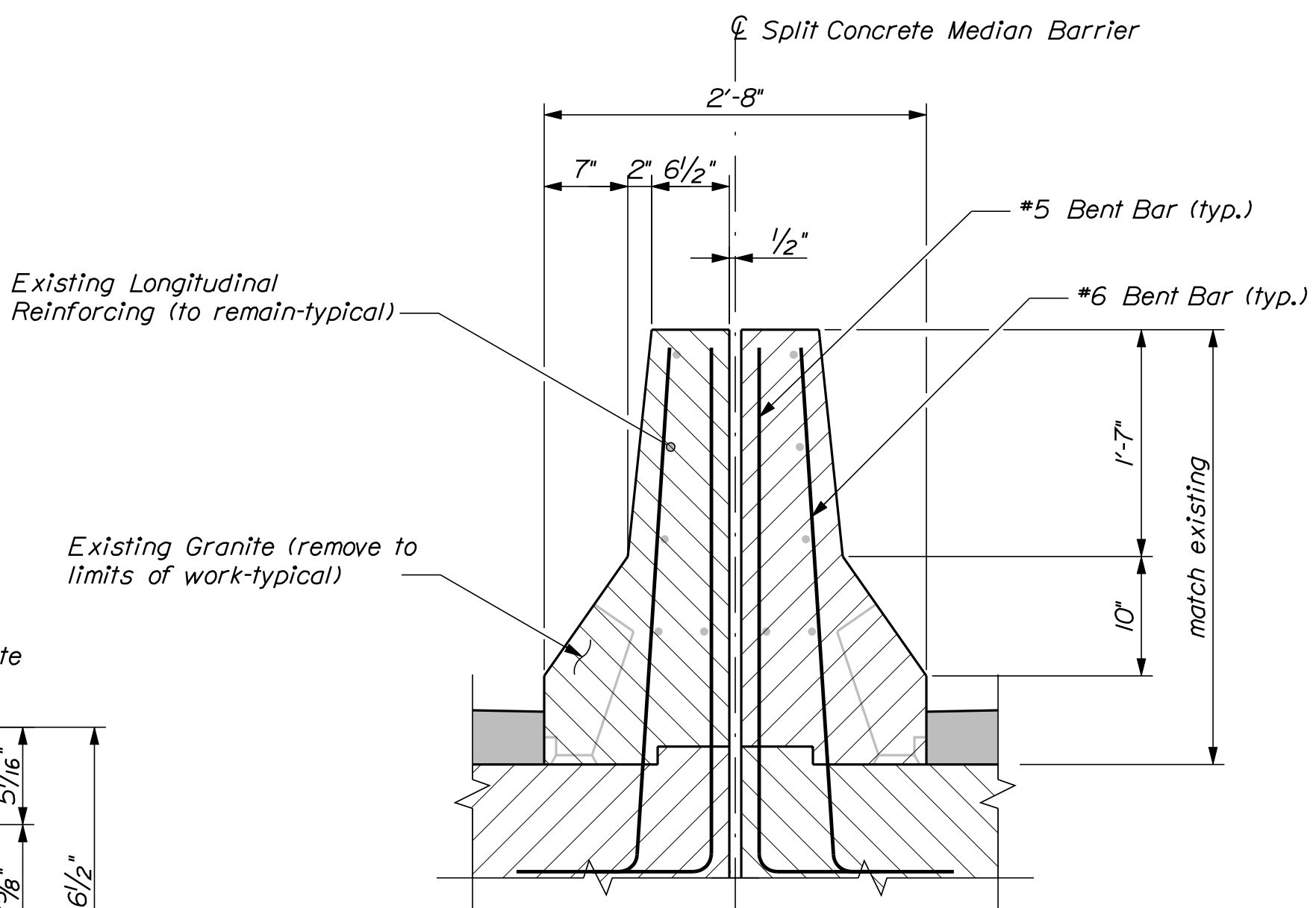
CONCRETE BARRIER ELEVATION
(Barrier on superstructure not shown for clarity)



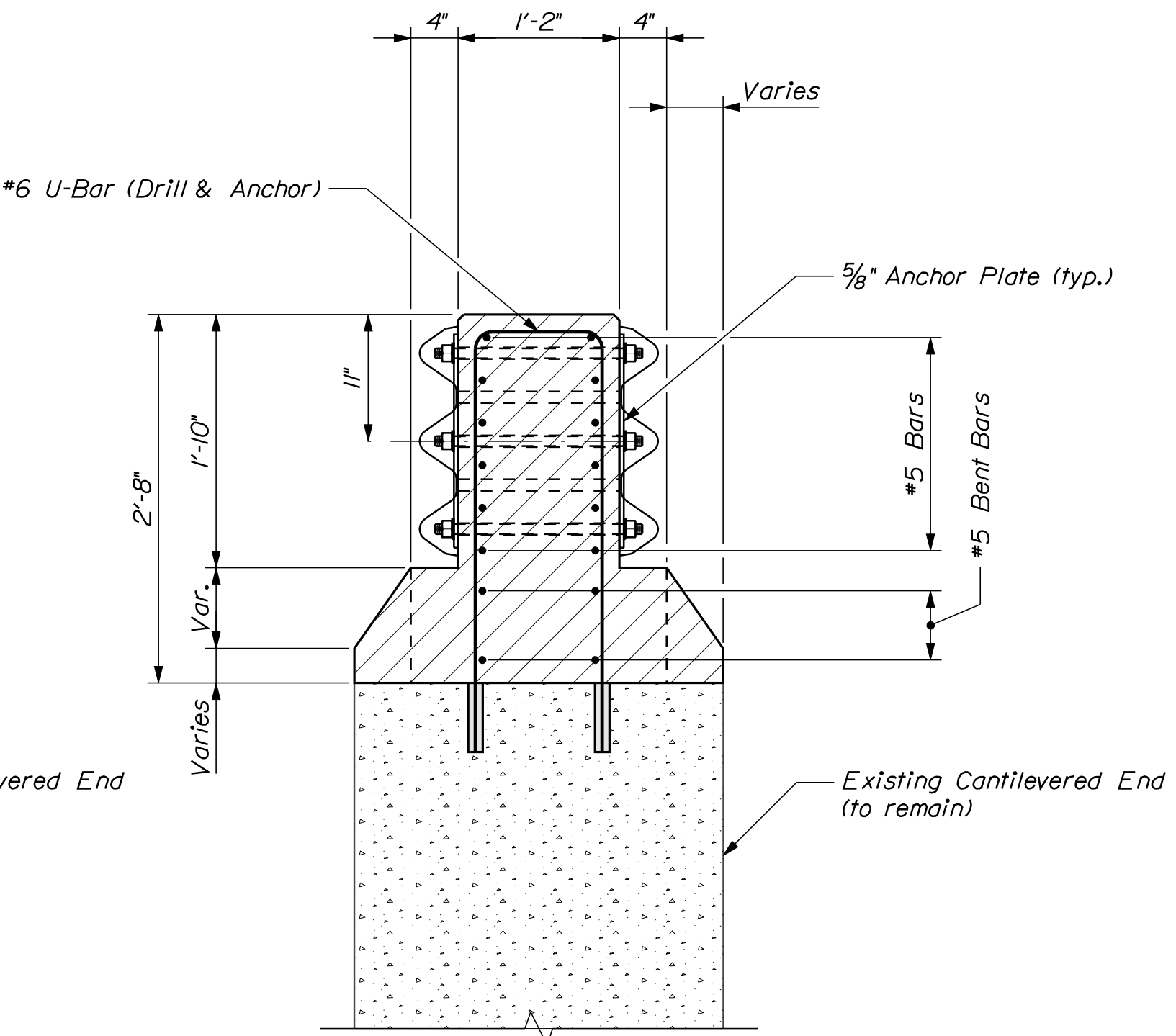
ANCHOR PLATE



CONCRETE BARRIER SECTION

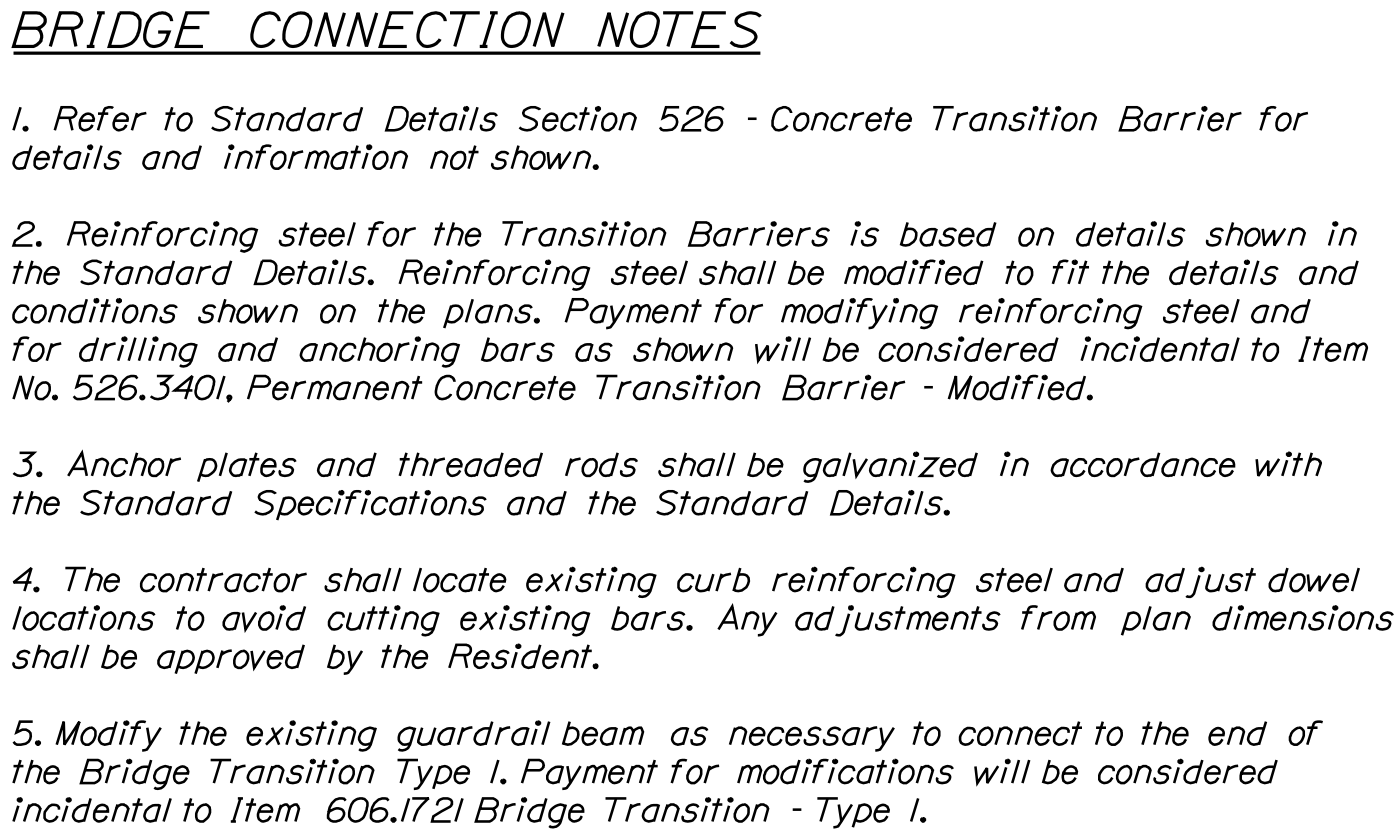


CONCRETE BARRIER SECTION @ SUPERSTRUCTURE

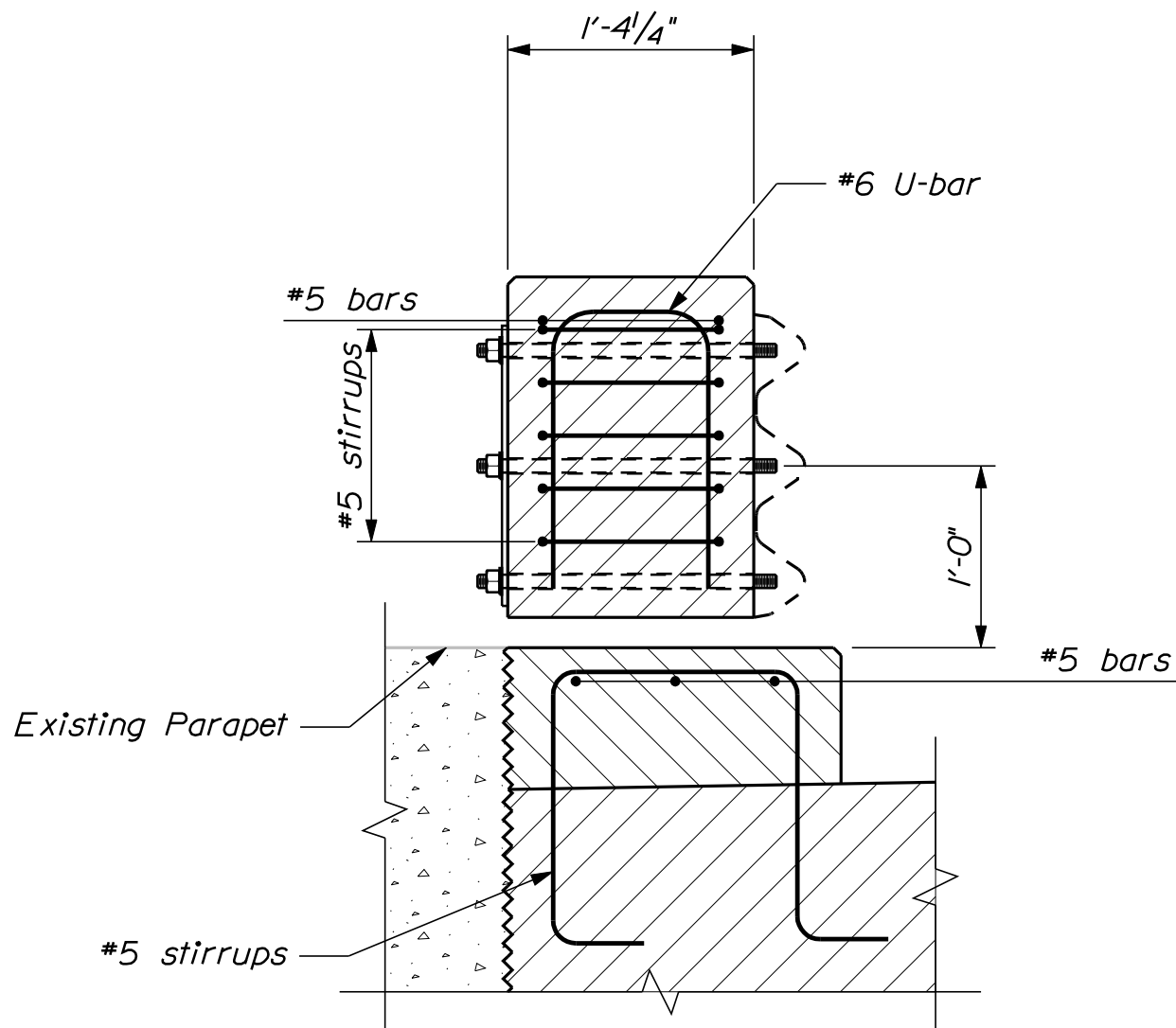


CONCRETE BARRIER RECESS SECTION

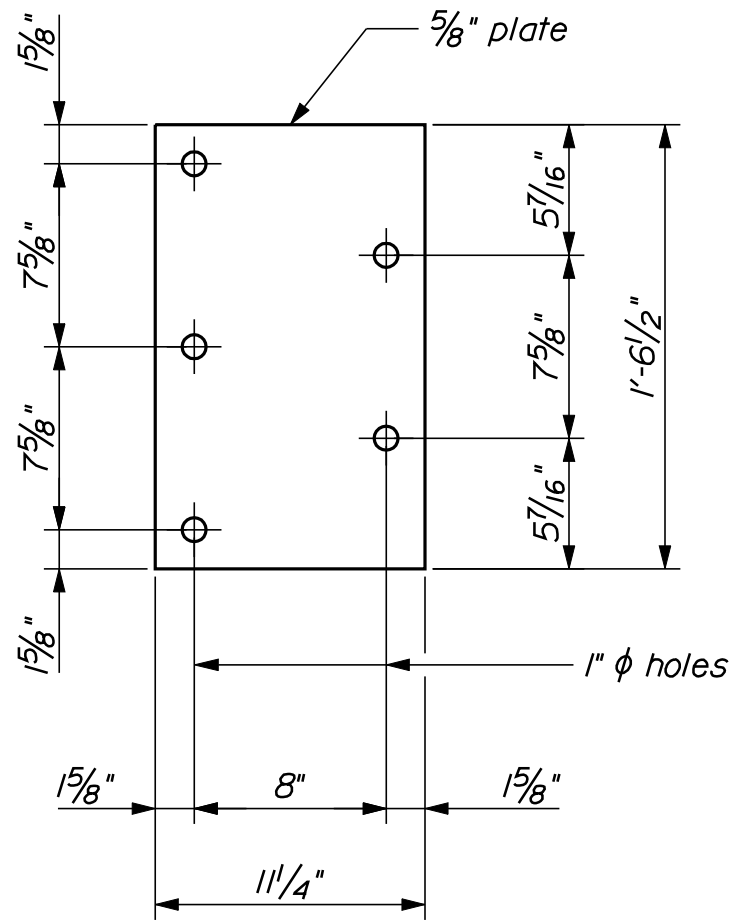
OF 28		SHEET NUMBER		MAIN STREET BRIDGE		PROJ. MANAGER		S. BOODE		BY		DATE		STATE OF MAINE	
				MAIN STREET		CHECKED-REVIEWED		R. BULGER		R. NIMON		05/2010		DEPARTMENT OF TRANSPORTATION	
				BANGOR		DESIGN-DETAILED									
				PENOBSCOT COUNTY		DESIGN-DETAILED 02								SIGNATURE	
						DESIGN-DETAILED 03									
						REVISIONS 1								P.E. NUMBER	
						REVISIONS 2									
						REVISIONS 3									
						REVISIONS 4									
						FIELD CHANGES								DATE	
				CONCRETE MEDIAN BARRIER										PIN	
														170999.00	
														BRIDGE NO. 5799	
														BRIDGE PLANS	



Typical all three corners



ANCHOR PLATE



Existing rail post (to remain)

#6 U-bars @ 6"

7"

#6 stirrups @ 6"

3/2"

4"

1" ϕ sleeve for 7/8" ϕ threaded rod (Typ.)

2 ~ #5 bars (I.E.F.)

4 SD. @ 3/2" = 1'-2"

5"

1'-11"

2"

3 ~ #5 bars

Existing long (to remain)

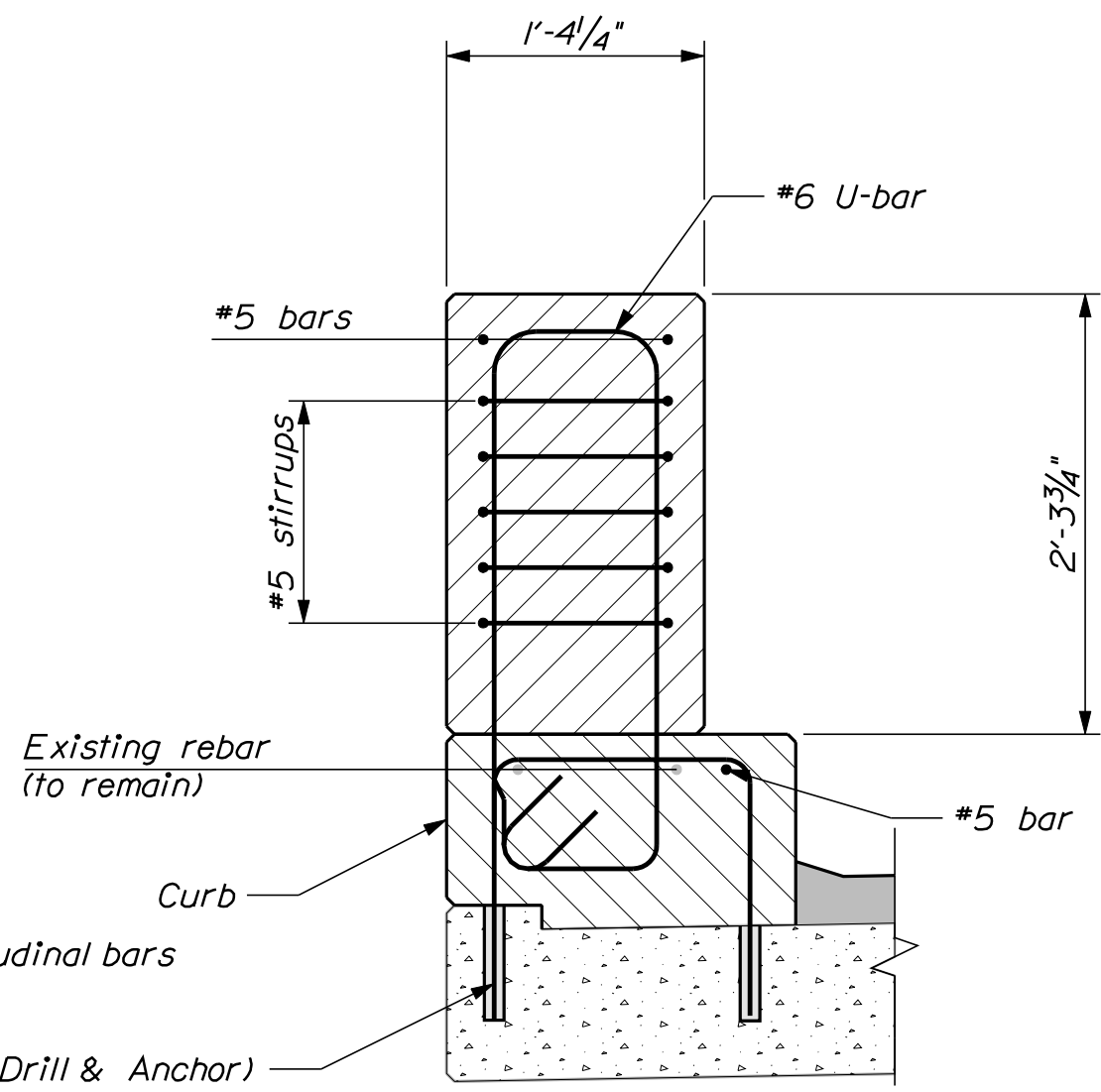
U-bar

#5 U-Bars

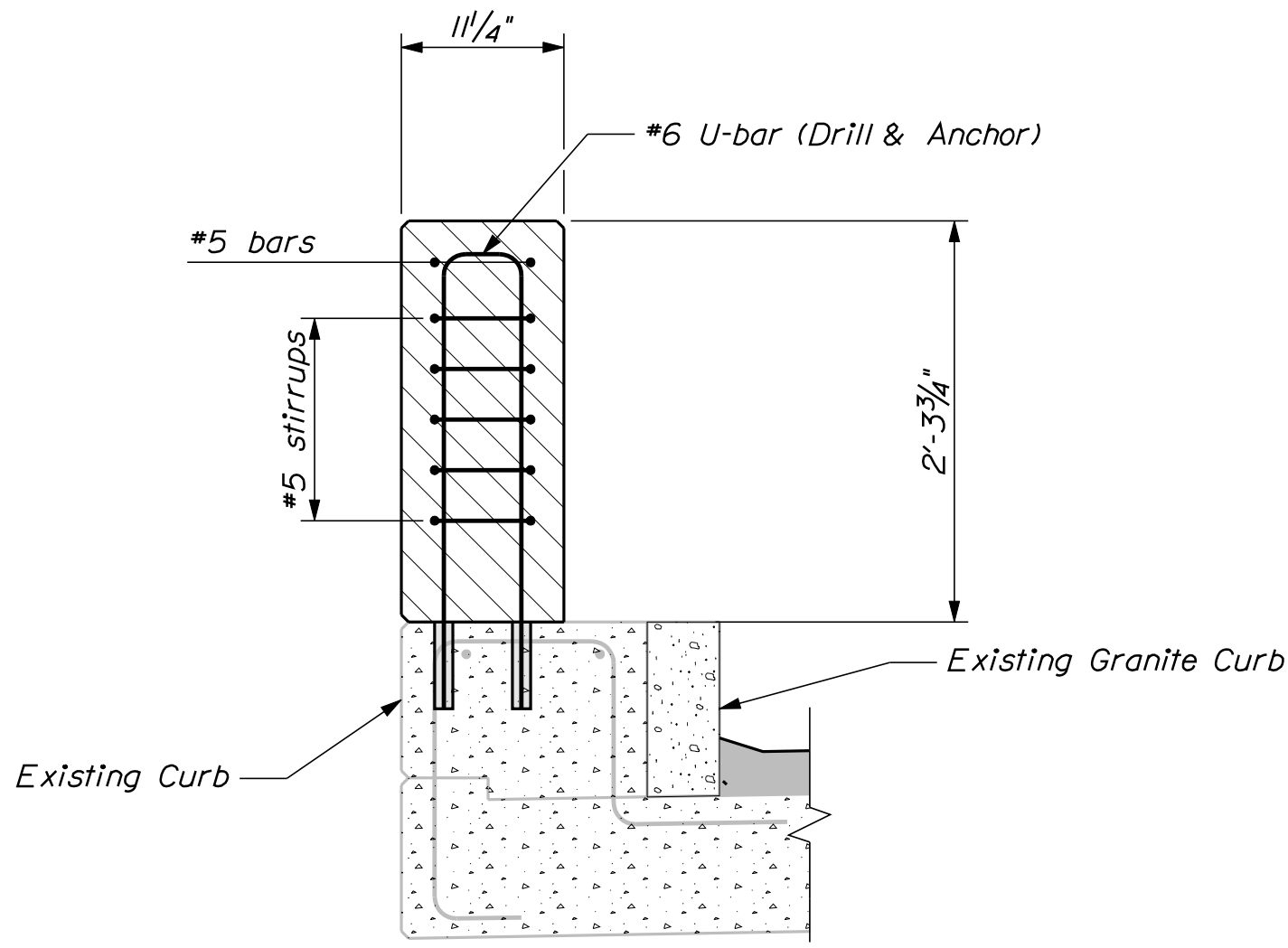
#5 stirrups

#5 stirrups

(Bridge rail not shown for clarity)



SECTION THROUGH STEM



SECTION THROUGH RECESS

<div> <div>OF 28</div> <div>SHEET NUMBER</div> </div>	<div> <div>MAIN STREET BRIDGE</div> <div>MAIN STREET</div> <div>BANGOR</div> <div>PENOBSCOT COUNTY</div> <div>CONCRETE TRANSITION BARRIER</div> </div>				<div> <div>PROJ. MANAGER</div> <div>DESIGN-DETAILED</div> <div>CHECKED-REVIEWED</div> <div>DESIGN-DETAILED 02</div> <div>DESIGN-DETAILED 03</div> <div>REVISIONS 1</div> <div>REVISIONS 2</div> <div>REVISIONS 3</div> <div>REVISIONS 4</div> <div>FIELD CHANGES</div> </div>	<div> <div>S. BUDGE</div> <div>R. BULGER</div> </div>	<div> <div>BY</div> <div>R. NIMON</div> </div>	<div> <div>DATE</div> <div>05/2010</div> </div>	<div> <div>STATE OF MAINE</div> <div>DEPARTMENT OF TRANSPORTATION</div> <div>IM-1709(900)E</div> <div>BRIDGE NO. 5799</div> <div>PIN 17099.00</div> <div>BRIDGE PLANS</div> </div>
					SIGNATURE				
					P.E. NUMBER				
					DATE				

Date:6/1/2010

Username: richard.nimon

Division: BRIDGE

Filename: ... \MSTAN001_Plon_TRAFFIC.dgn

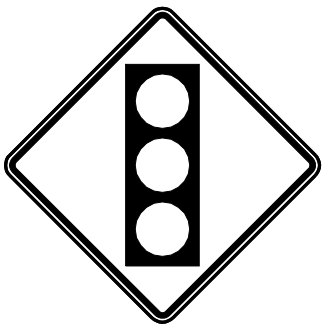
GENERAL NOTES

- 1.THE CONTRACTOR SHALL INSTALL AND MAINTAIN A TEMPORARY TRAFFIC SIGNAL FOR THE DURATION OF THE PROJECT. AT THE COMPLETION OF THE PROJECT THE CONTRACTOR SHALL REMOVE ALL SIGNAL EQUIPMENT INCLUDING DETECTORS AND SIGNS.
- 2.THE CONTRACTOR SHALL INPUT THE TIMING SHOWN ON THIS PLAN SHEET INTO THE TEMPORARY SIGNAL CONTROLLER.
- 3.THE CONTRACTOR SHALL SUPPLY AND PROGRAM ADVANCE DETECTION WITH DYNAMIC DILEMMA ZONE PROTECTION ON EACH MAIN STREET APPROACH AND STOP BAR (PRESENCE) DETECTION ON THE FARM STREET APPROACH. DETECTORS SHALL BE MOUNTED ON EXISTING UTILITY POLES.
- 4.THE CONTRACTOR SHALL PAINT A 24" STOP LINE ON EACH MAIN STREET APPROACH AS SHOWN ON THIS PLAN SHEET. UPON REMOVAL OF THE SIGNAL THE STOP BARS SHALL BE REMOVED FROM THE PAVEMENT TO THE SATISFACTION OF THE CONSTRUCTION MANAGER.
- 5.THE CONTRACTOR SHALL SUPPLY AND INSTALL A W3-3 (36" x 36") ADVANCE WARNING SIGN APPROXIMATELY 300' FROM THE STOP LINE OF EACH APPROACH TO THE INTERSECTION (3 NEEDED).
- 6.THE COST OF DETECTORS, PAVEMENT MARKINGS, ADVANCE WARNING SIGNS AND REGULATORY SIGNS AND THEIR INSTALLATION AND REMOVAL SHALL BE INCIDENTAL TO THE COST OF THE TEMPORARY TRAFFIC SIGNAL (ITEM NO. 643.72).


ATTACH SPAN WIRE, STABILIZING SPAN AND GUY WIRE WITH SIGNAL HEADS TO EXISTING UTILITY POLE.

ATTACH CONTROLLER CABINET, SPAN WIRE AND STABILIZING SPAN WITH SIGNAL HEADS TO EXISTING UTILITY POLE.

INSTALL 2 R3-5R SIGNS.



W3-3
36 x 36



R3-5R
30 x 36

TEMPORARY SIGNS

SIGNAL TIMING								
HEADS:		A1, A2		C1, C2		B1, B2		
	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	Phase 6	Phase 7	Phase 8
Min Green		5		3		5		
Extension		4		3		4		
Max I		30		25		30		
Max II		-		-		-		
Veh Clear		3.0		3.0		3.0		
Red Clear		2.3		2.5		2.3		
Walk		-		-		-		
Ped Clear		-		-		-		
Recall		soft		off		soft		
Flash		Y		R		Y		

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

PIN
17099.00

TRAFFIC PLANS

PROJ. MANAGER
S. BOOGE

CHECKED-REVIEWED
R. BULGER

DESIGN-DETAILED
M. DELOS

REVISIONS 1
REVISIONS 2
REVISIONS 3
REVISIONS 4
FIELD CHANGES

BY
R. NIMON

DATE

SIGNATURE

P.E. NUMBER

DATE

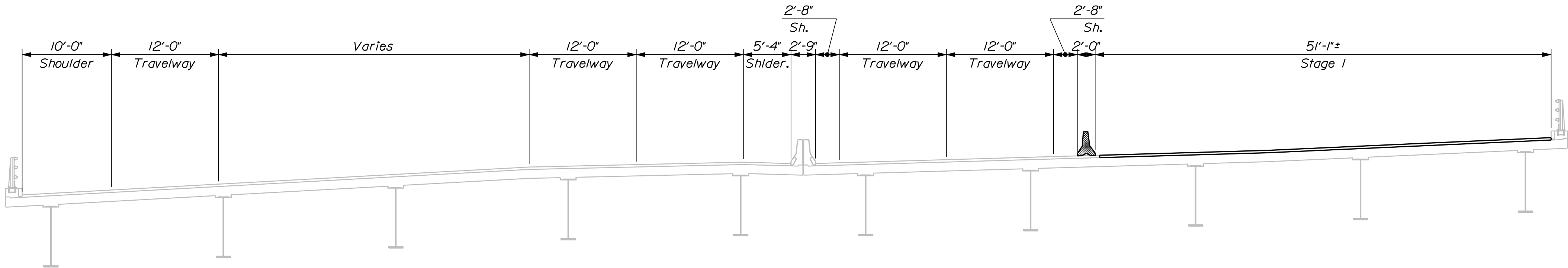
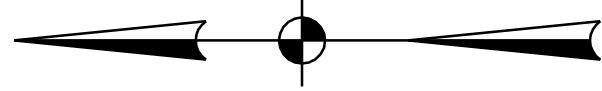
BANGOR
MAIN ST & FARM RD

TEMPORARY TRAFFIC SIGNAL

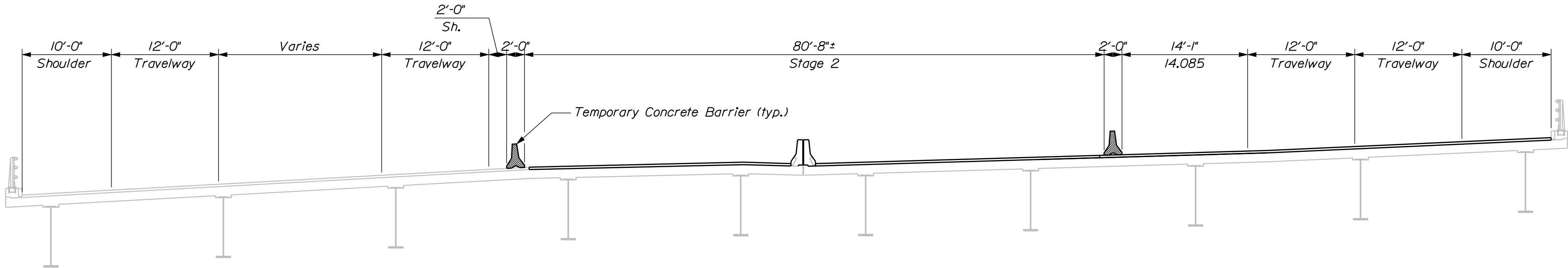
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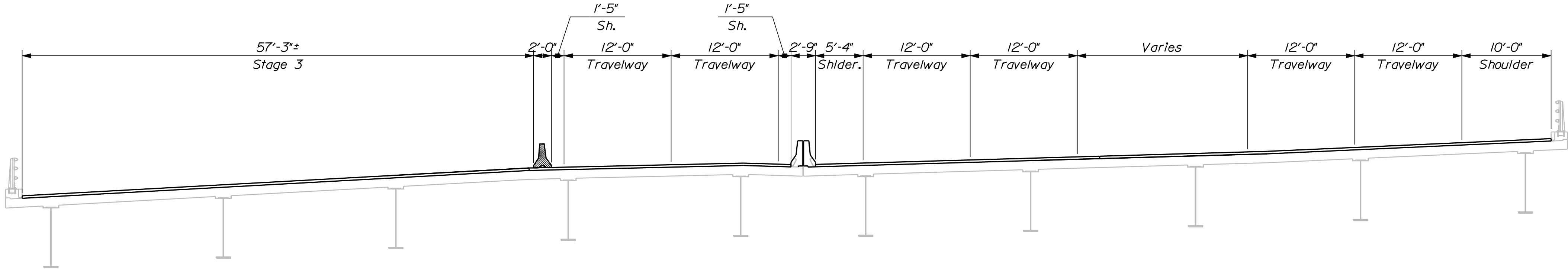
OF 28



STAGE 1 @ ABUTMENT 1



STAGE 2 @ ABUTMENT 1



STAGE 3 @ ABUTMENT 1

SHEET NUMBER

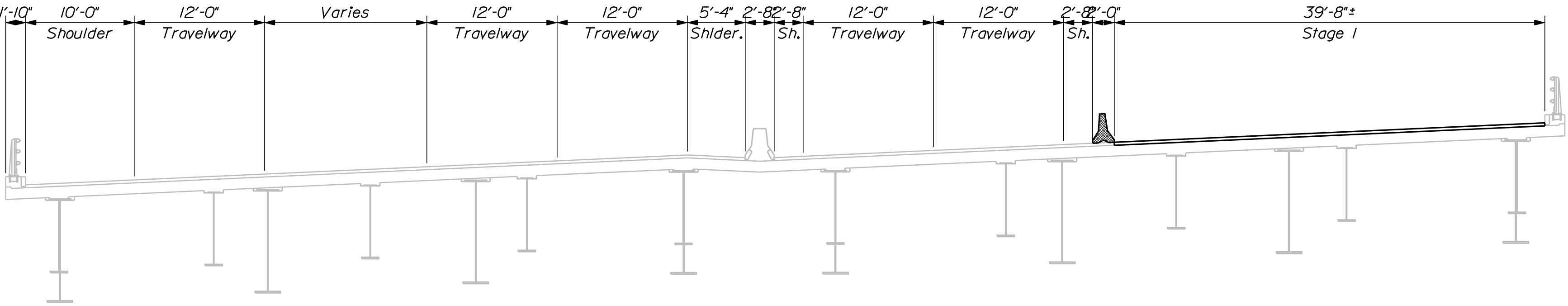
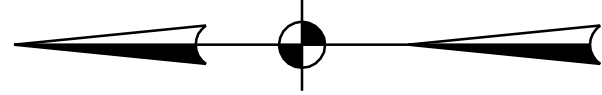
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OF 28

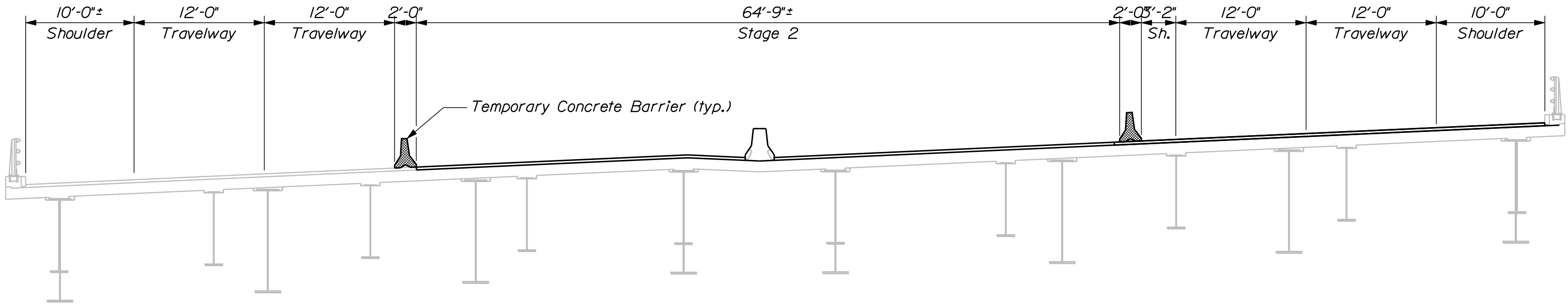
VETERANS REMEMBRANCE BRIDGE
PENOBSCOT RIVER
BANGOR-BREWER PENOBSCOT COUNTY
STAGE CONSTRUCTION
ABUTMENT NO. 1

PROJ. MANAGER	S. BOODE	BY	DATE
CHECKED-REVIEWED	R. BULGER	R. NIMON	05/2010
DESIGNS-DETAILED			SIGNATURE
DESIGNS-DETAILED			P.E. NUMBER
REVISIONS 1			DATE
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

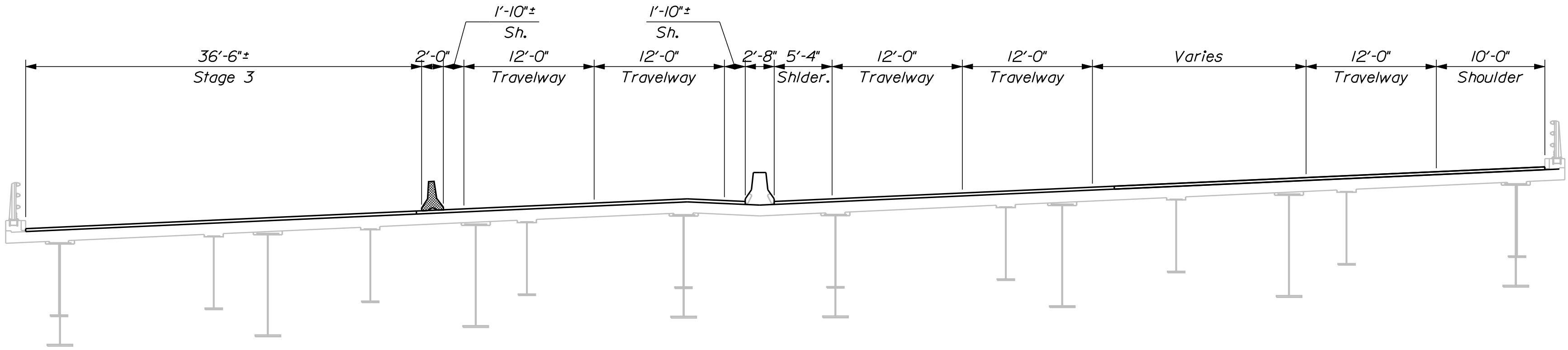
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
IM-A710(000)E
BRIDGE NO. 1558
PIN 17100.00
BRIDGE PLANS



STAGE 1 @ CL PIER 2

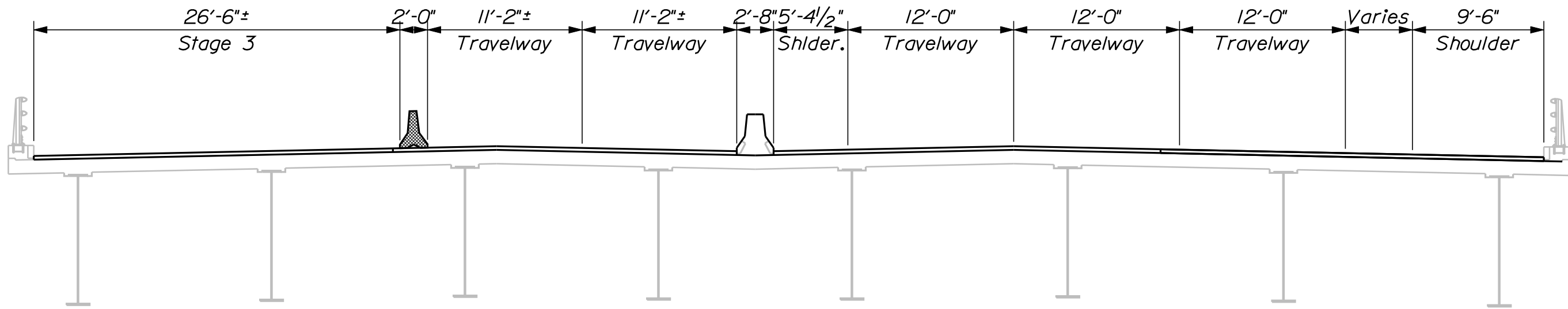
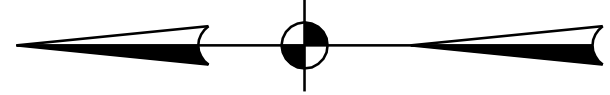


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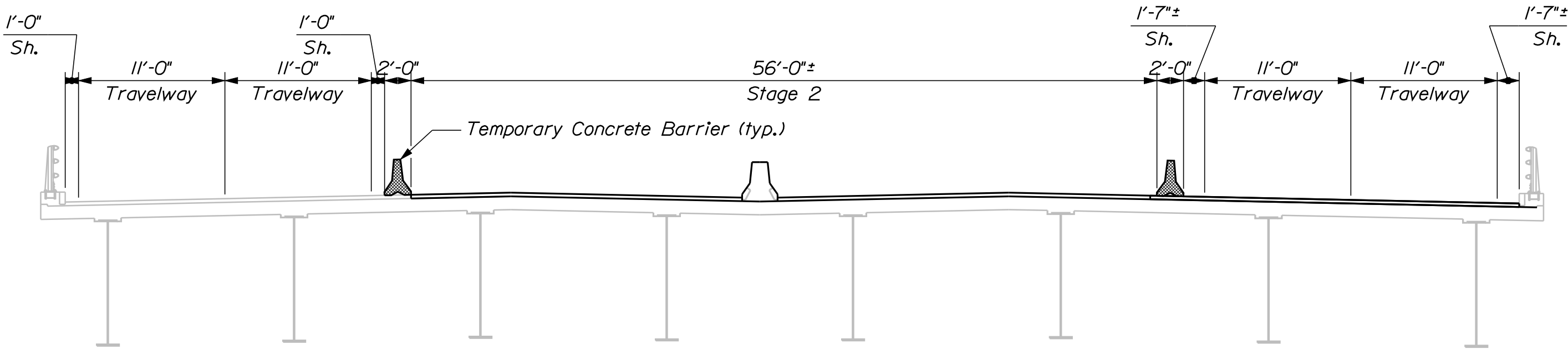


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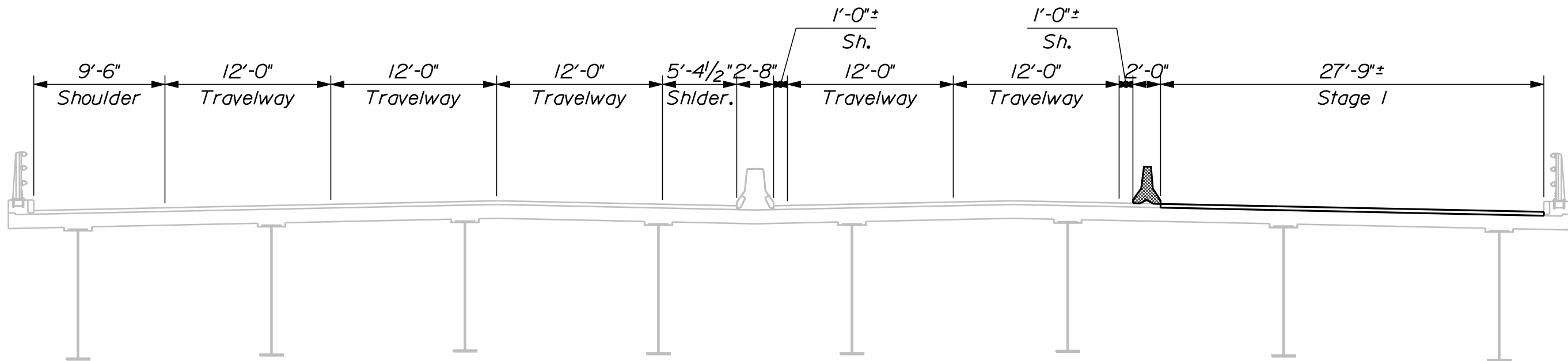
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	IM-A710(000)E			
	PIN 17100.00			
	BRIDGE NO. 1558			
STAGE CONSTRUCTION PIER NO. 2	PROJ. MANAGER	S. BOOGE	BY	DATE
	CHECKED-REVIEWED	R. BULGER	R. NIMON	05/2010
	DESIGNS-DETAILED			SIGNATURE
	DESIGNS-DETAILED			P.E. NUMBER
SHEET NUMBER 11 OF 28	REVISIONS 1			DATE
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FIELD CHANGES				



STAGE 3 @ ABUTMENT 2



STAGE 2 @ ABUTMENT 2



STAGE 1 @ ABUTMENT 2

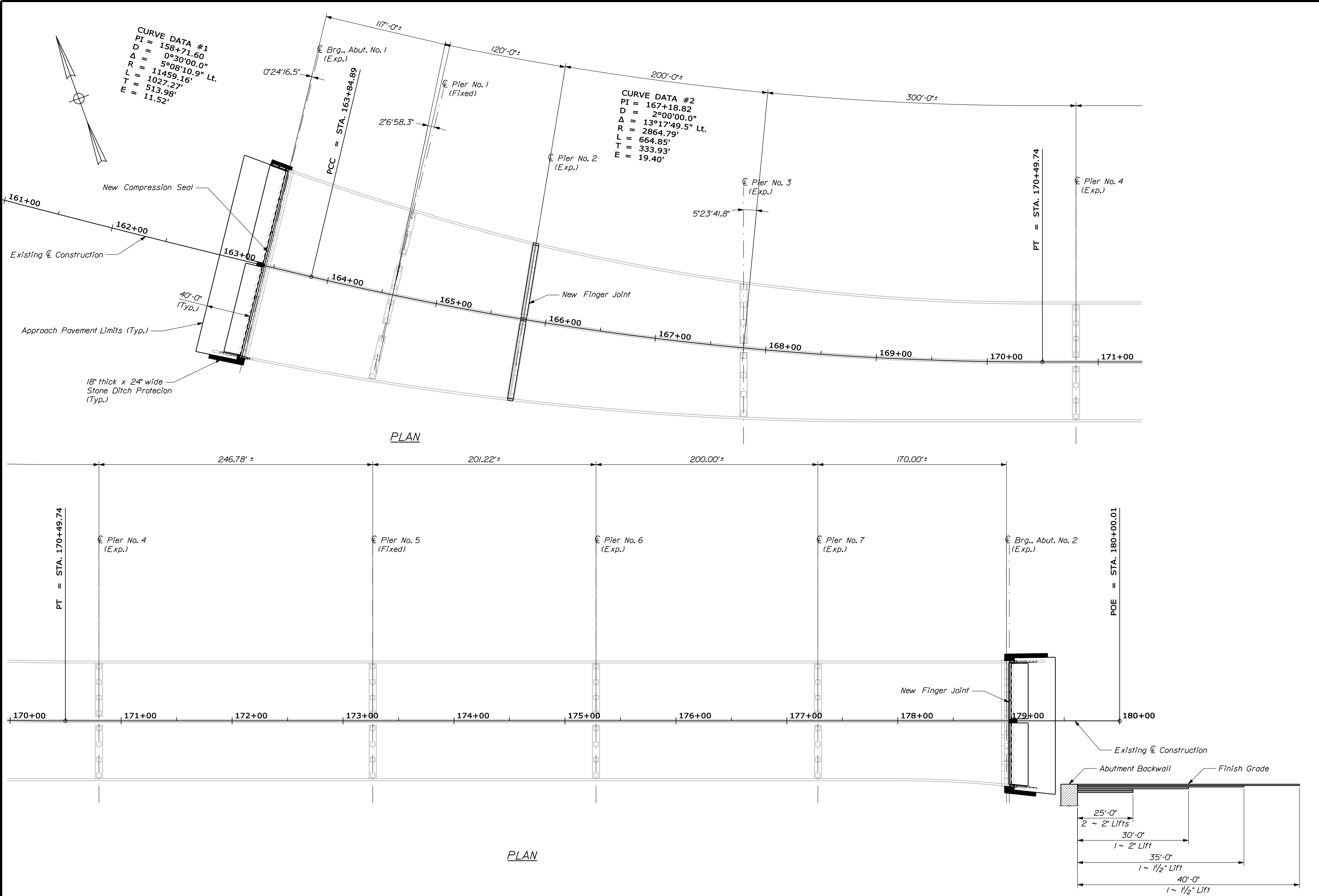
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STAGE CONSTRUCTION ABUTMENT NO. 2				DESIGN-DETAILED		R. BULGER	R. NIMON	05/2010		
				CHECKED-REVIEWED						SIGNATURE
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12										
OF 28										

Date:6/1/2010

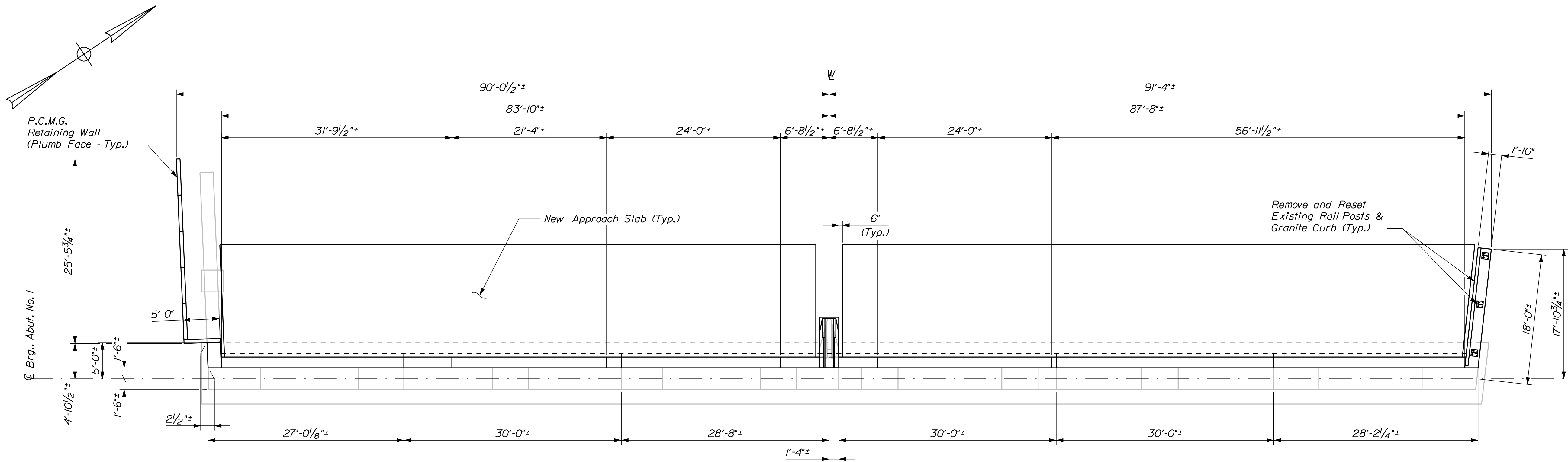
Username: richard.nimon

Division: BRIDGE

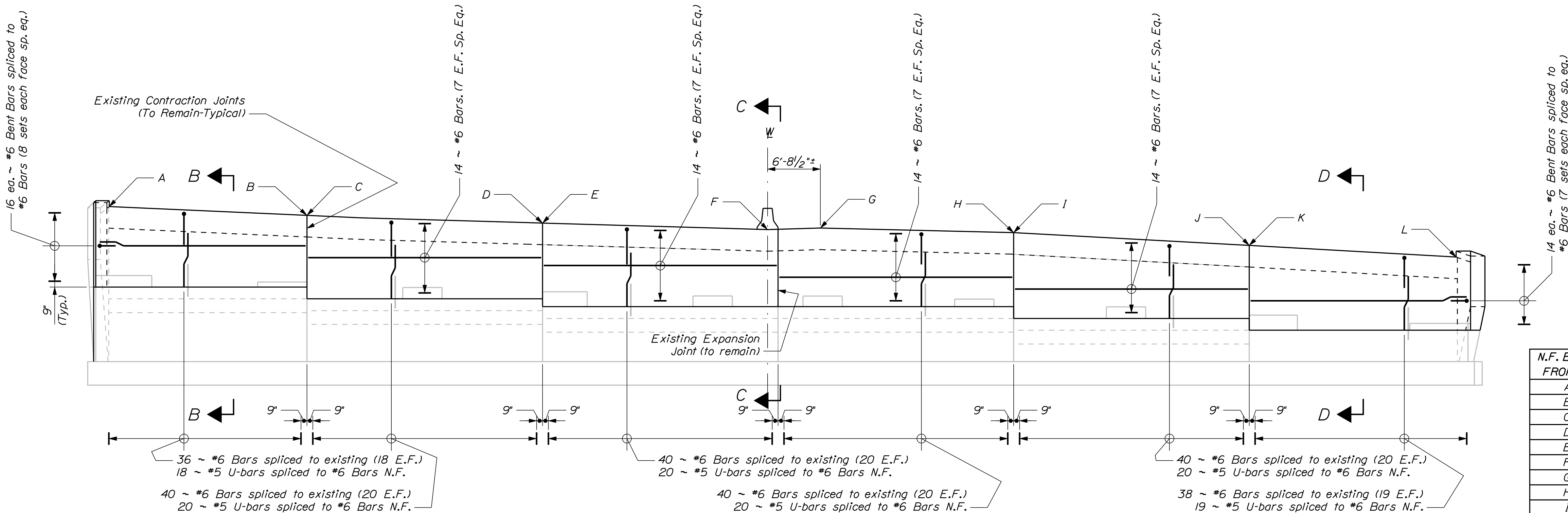
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STATE OF MAINE		DEPARTMENT OF TRANSPORTATION	
IM-A710(000)E		BRIDGE NO. 1558	
PIN		17100.00	
BRIDGE PLANS			
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PENOBSCOT RIVER		13	
BANGOR-BREWER		OF 28	
PENOBSCOT COUNTY			
BRIDGE PLAN			
SIGNATURE		DATE	
P.E. NUMBER			
DESIGN-DETAILED		BY	
CHECKED-REVIEWED		DATE	
DESIGN-DETAILED		R. NIMON	
DESIGN-DETAILED		05/2010	
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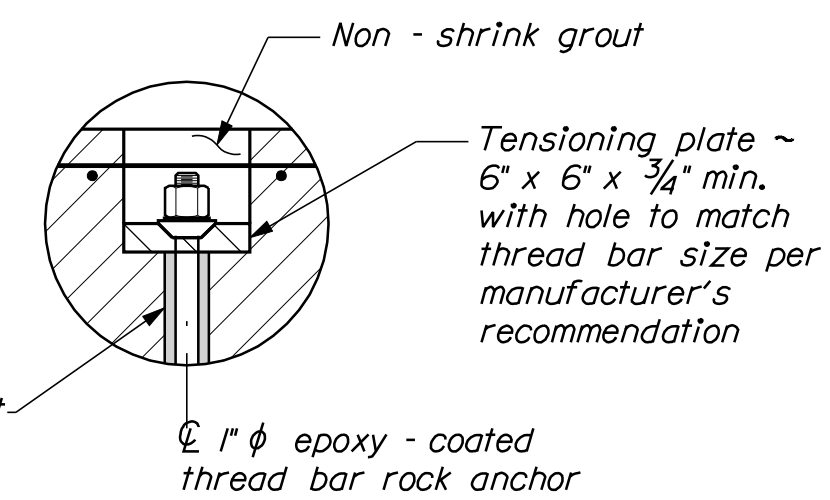


ABUTMENT NO. 1 PLAN



ABUTMENT NO. 1 ELEVATION

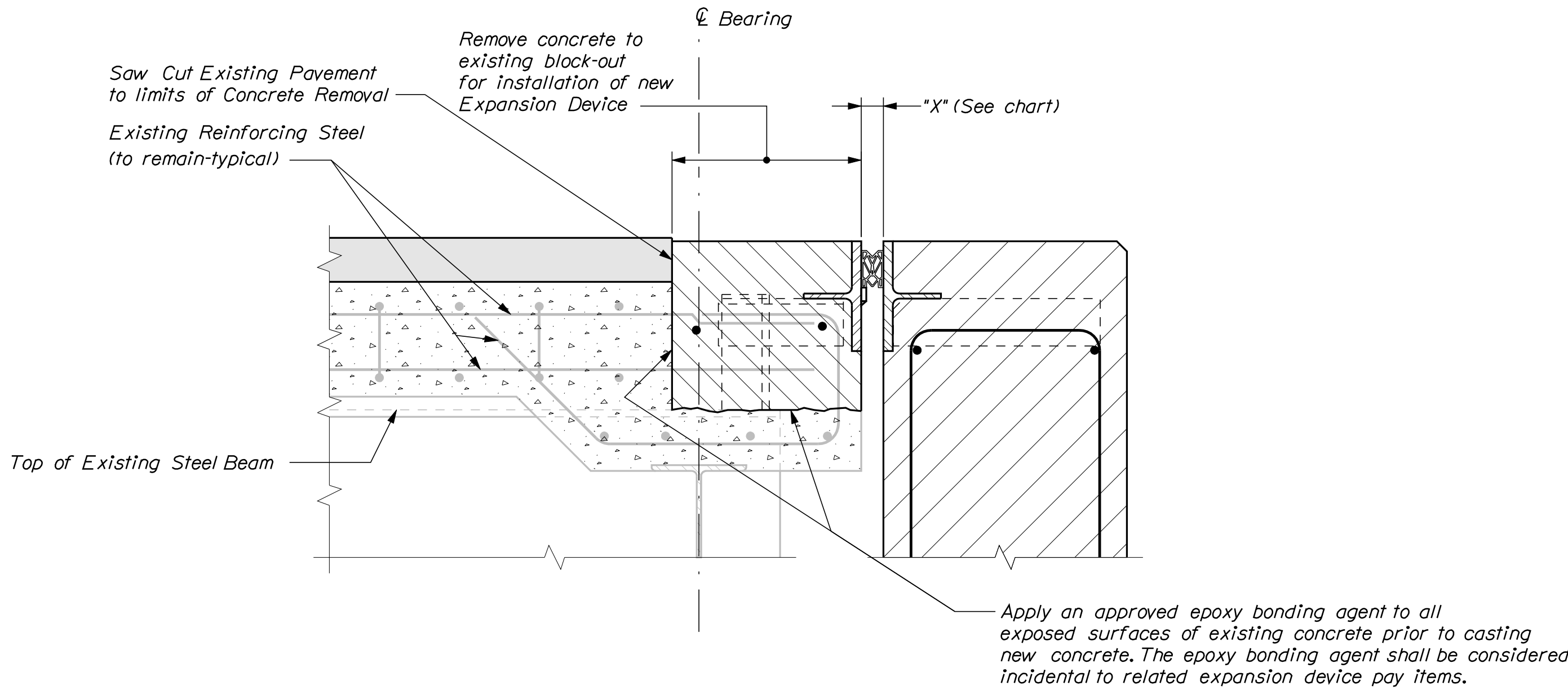
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14		OF 28		SIGNATURE		P.E. NUMBER		DATE			



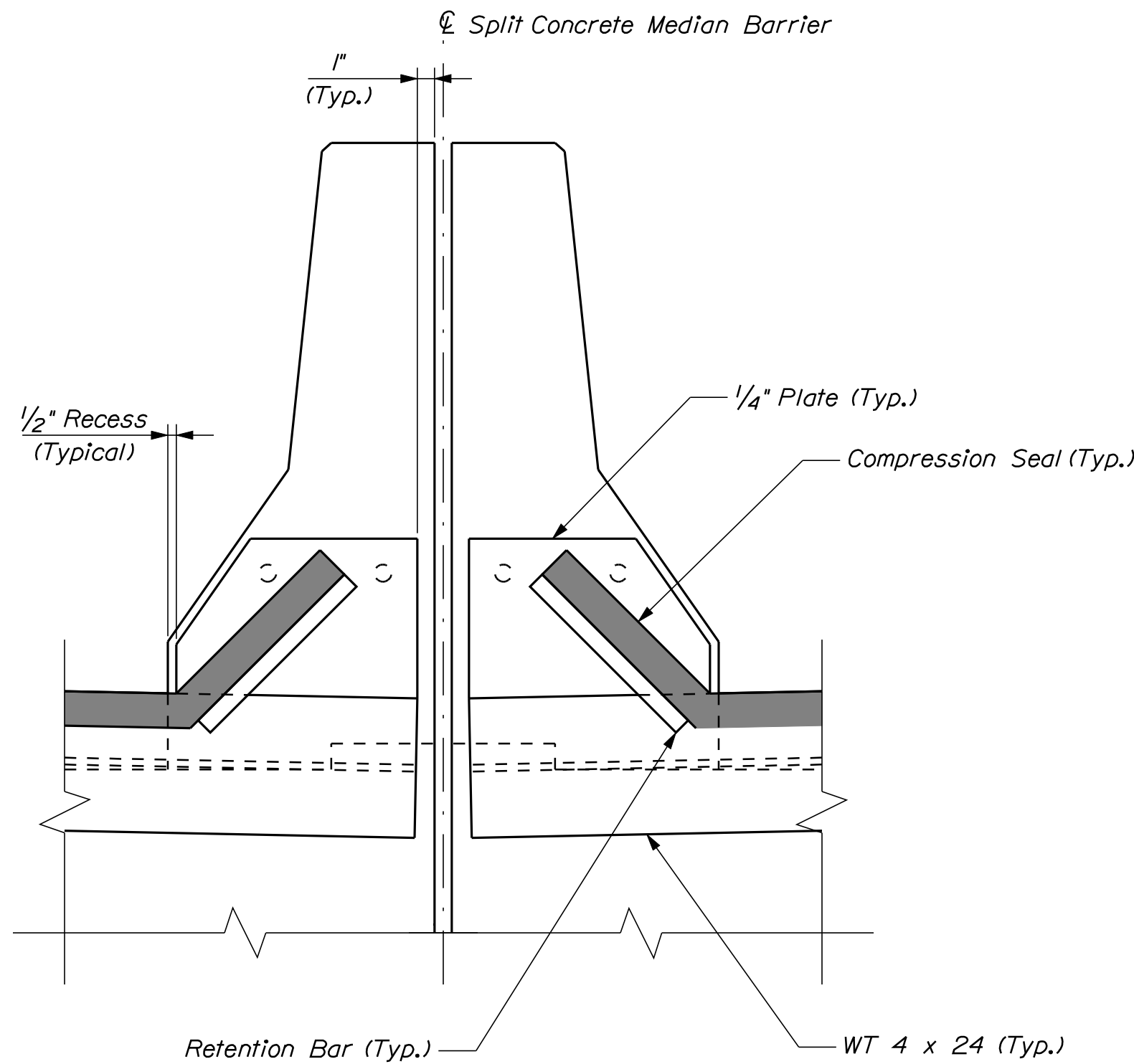
DETAIL A



<div>SHEET NUMBER</div> <div>15</div> <div>OF 28</div>	VETERANS REMEMBRANCE BRIDGE				PROJ. MANAGER	S. BOODEE	BY	DATE	STATE OF MAINE	
	PENOBSCOT RIVER				DESIGN-DETAILED	A.BULGER	R.NIMON	05/2010		DEPARTMENT OF TRANSPORTATION
	BANGOR-BREWER PENOBSCOT COUNTY				CHECKED-REVIEWED			SIGNATURE		
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					REVISIONS 1			P.E. NUMBER		
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									BRIDGE PLANS	



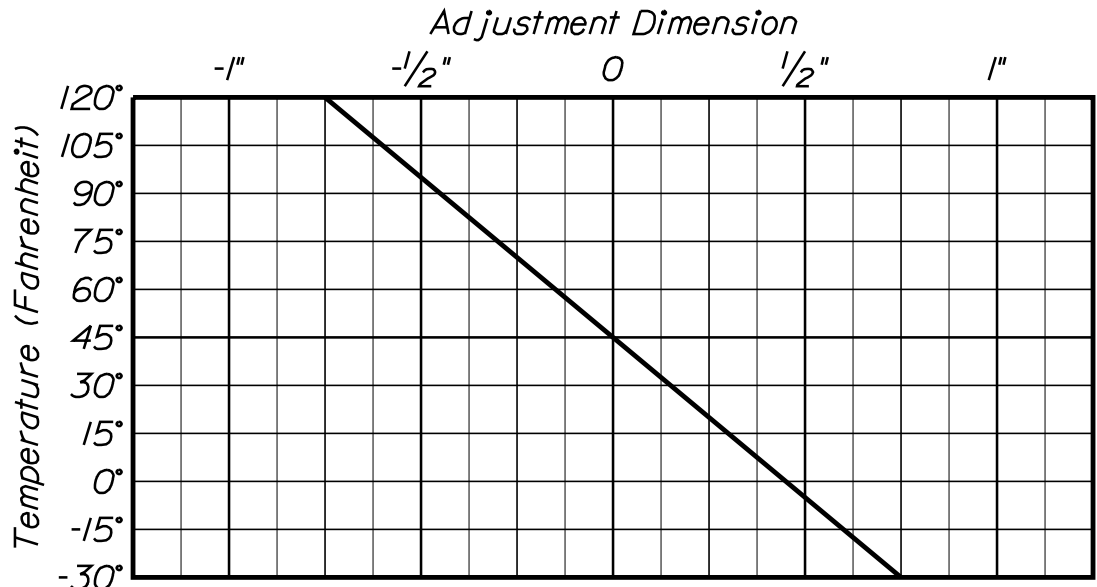
EXPANSION DEVICE - COMPRESSION SEAL SECTION
(See Standard Details, Section 520 Expansion Device - Compression Seal)



SEAL DETAIL @ CONCRETE MEDIAN BARRIER

BRIDGE JOINT NOTES

1. Refer to Standard Details Sections 520 for details and information not shown.
2. The compression seal to be furnished shall have a minimum movement rating of 1/2" at Abutment No. 1.
3. All new steel supplied for the bridge joint modification shall be galvanized steel.
4. The seal shall be approved by the Resident prior to fabrication of the joint armor.
5. Saw cut the existing pavement to the limits of concrete removal to place the new concrete for the joint armor. Payment will be considered incidental to related contract items.



COMPRESSION SEAL
ADJUSTMENT CHART

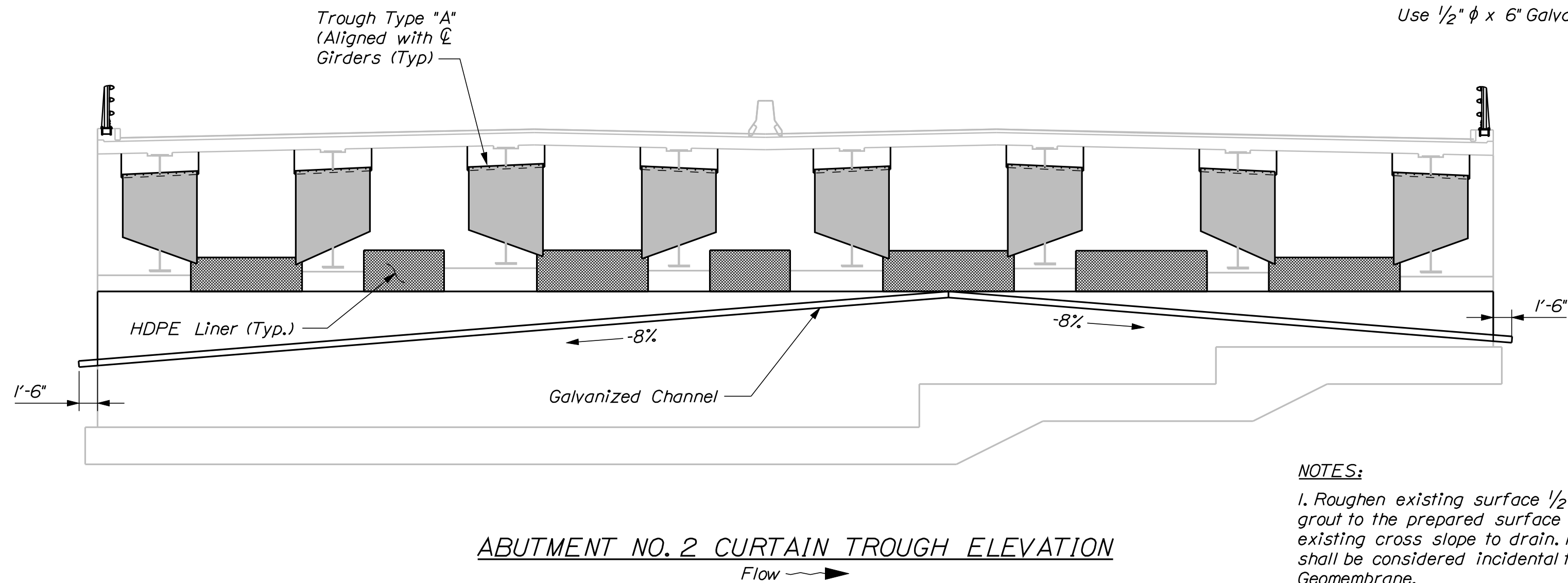
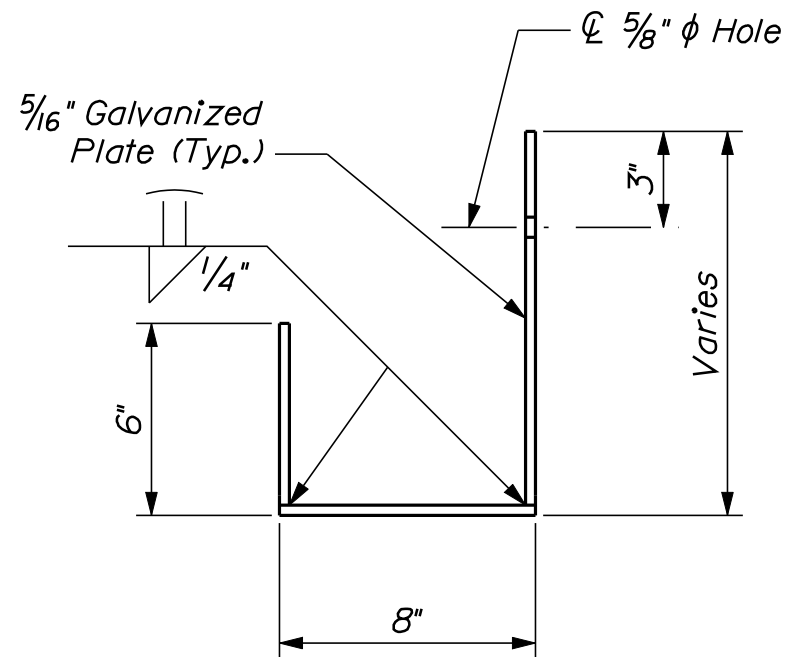
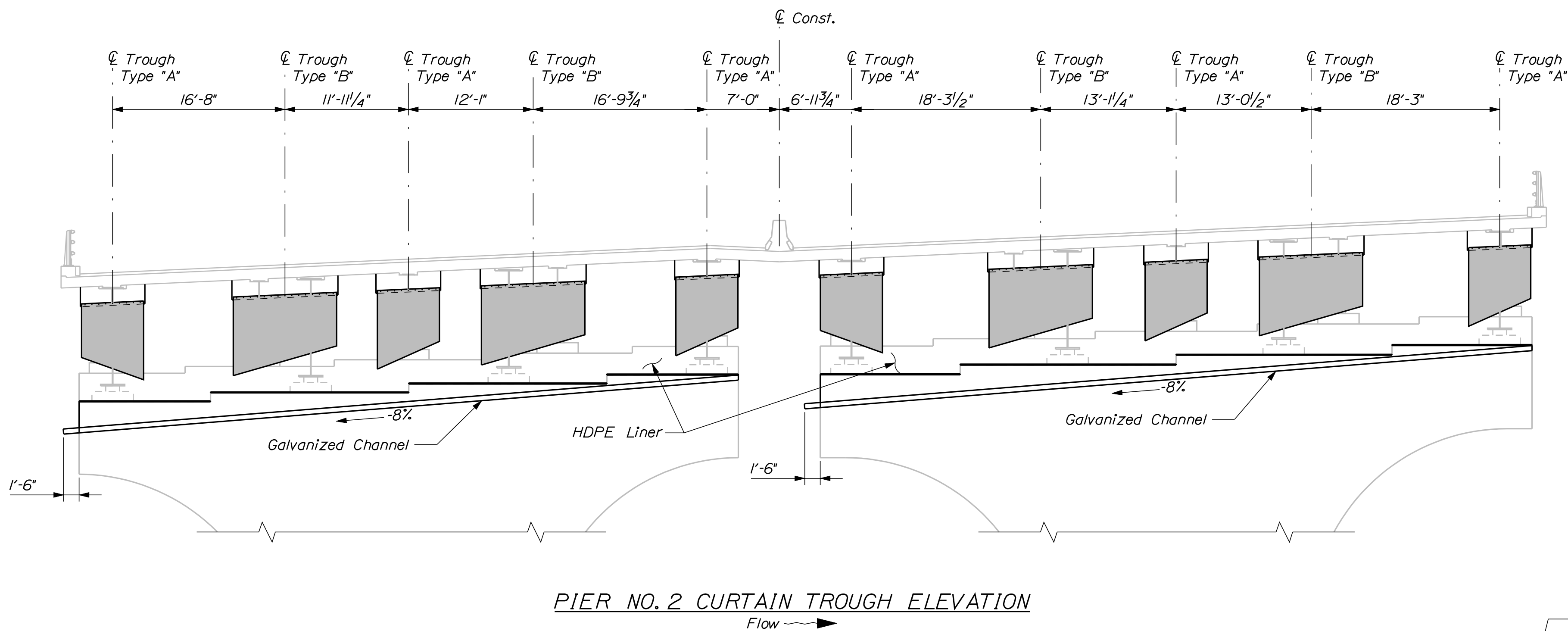
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BANGOR-BREWER		PENOBSCOT COUNTY		ABUTMENT NO. 1		COMPRESSION SEAL		SHEET NUMBER	
16		OF 28		SIGNATURE		P.E. NUMBER		DATE	
PROJ. MANAGER		S. BOOGE		BY		DATE		DATE	
DESIGN-DETAILED		R. BULGER		R. NIMON		05/2010		DATE	
CHECKED-REVIEWED								SIGNATURE	
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Date:6/1/2010

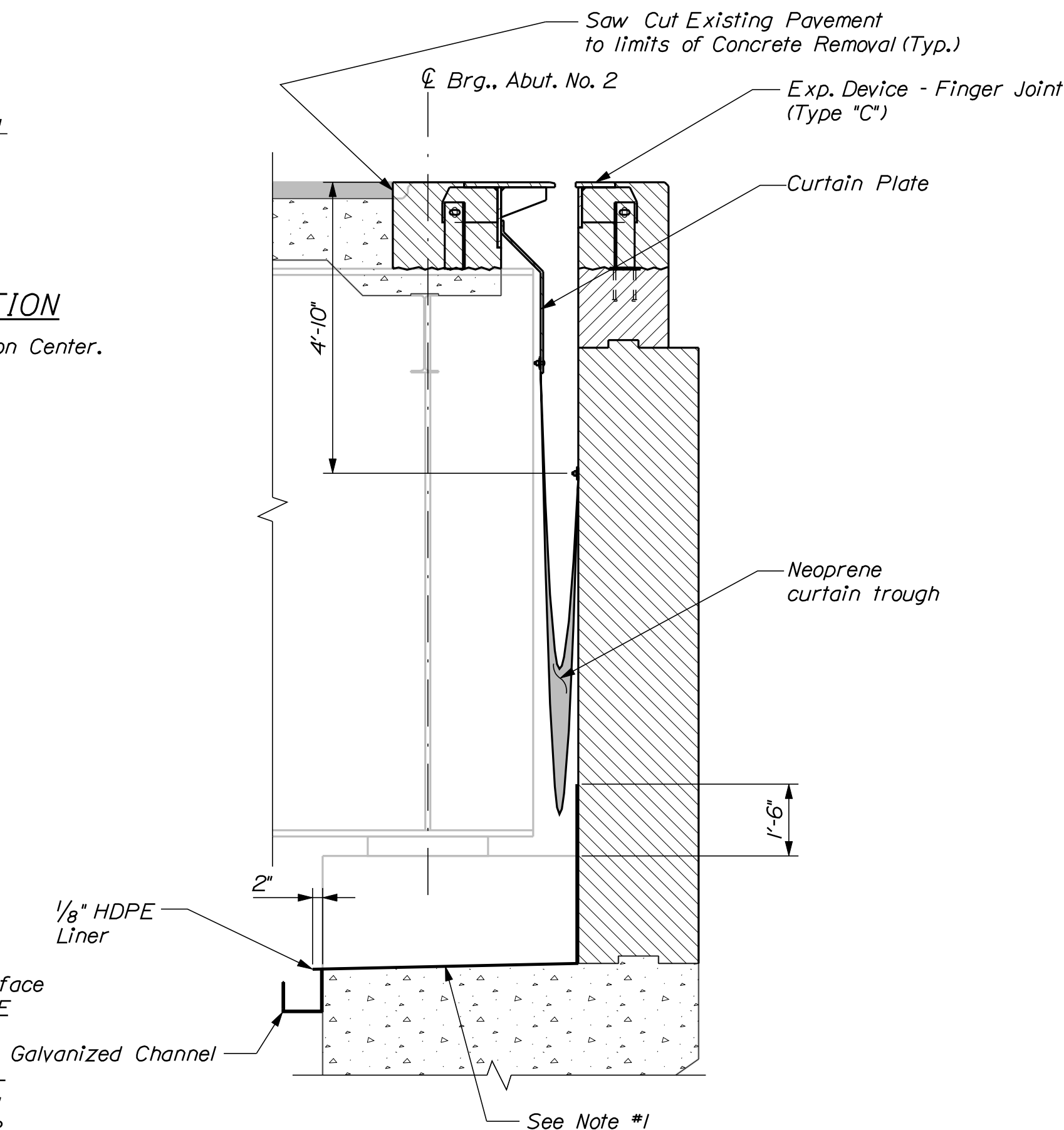
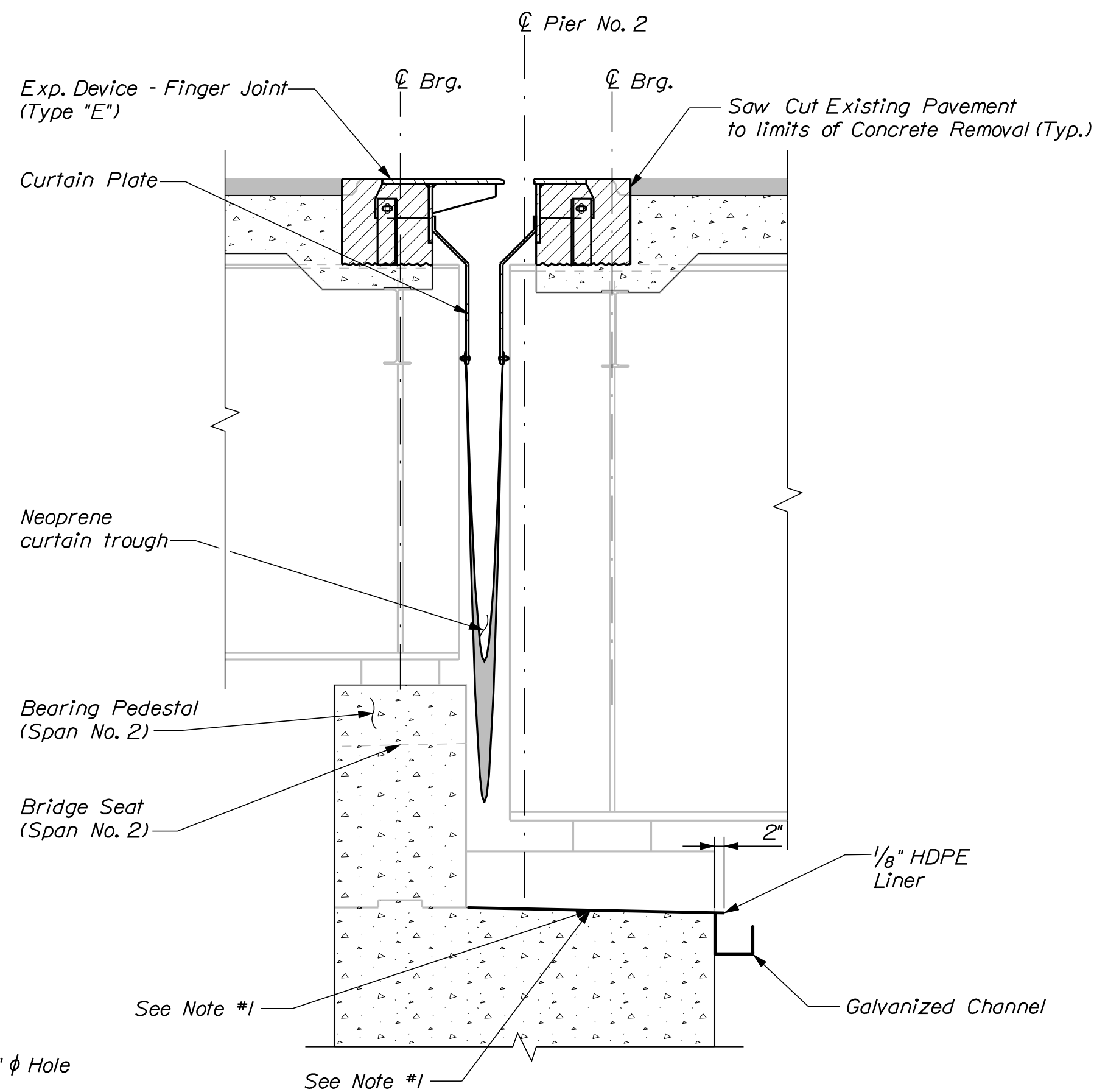
Username: richard.nimon

Division: BRIDGE

Filename: ... \017_Pier2_finger-joint1.dgn



- NOTES:
1. Roughen existing surface 1/2" and apply a 1/2" thick grout to the prepared surface maintaining 1/4" per foot existing cross slope to drain. Preparation of existing surface shall be considered incidental to Pay Item, 620.6012 HDPE Geomembrane.
 2. Protective Coating for Concrete Surfaces - Acrylic Anti-Carbonation Coating shall be applied to the inside vertical face of the pier cap adjacent to the troughs at Pier No. 2 and all vertical faces of the lower bearing pedestals for Pier No. 2 and the pedestals at Abutment No. 2.



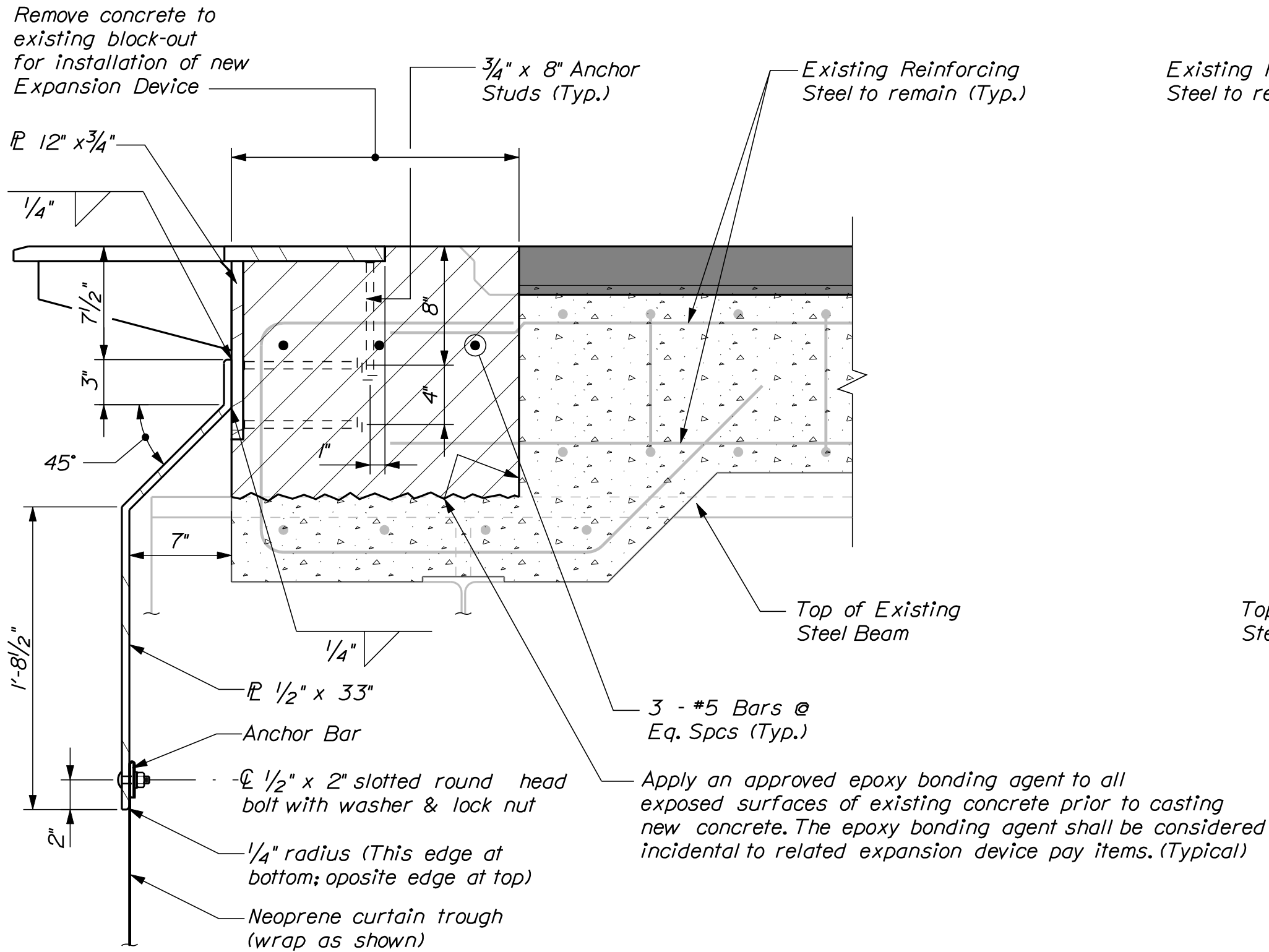
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				DATE							
				PROJ. MANAGER				DESIGN-DETAILED			
				S. BOODE				CHECKED-REVIEWED			
				R. BULGER				DESIGN-DETAILED			
				BY				REVISIONS 1			
				DATE				REVISIONS 2			
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VETERANS REMEMBRANCE BRIDGE				BANGOR-BREWER				EXPANSION JOINT & CURTAIN TROUGH DETAILS			
PENOBSCOT RIVER				PENOBSCOT COUNTY							
SHEET NUMBER				17				OF 28			

Date:6/1/2010

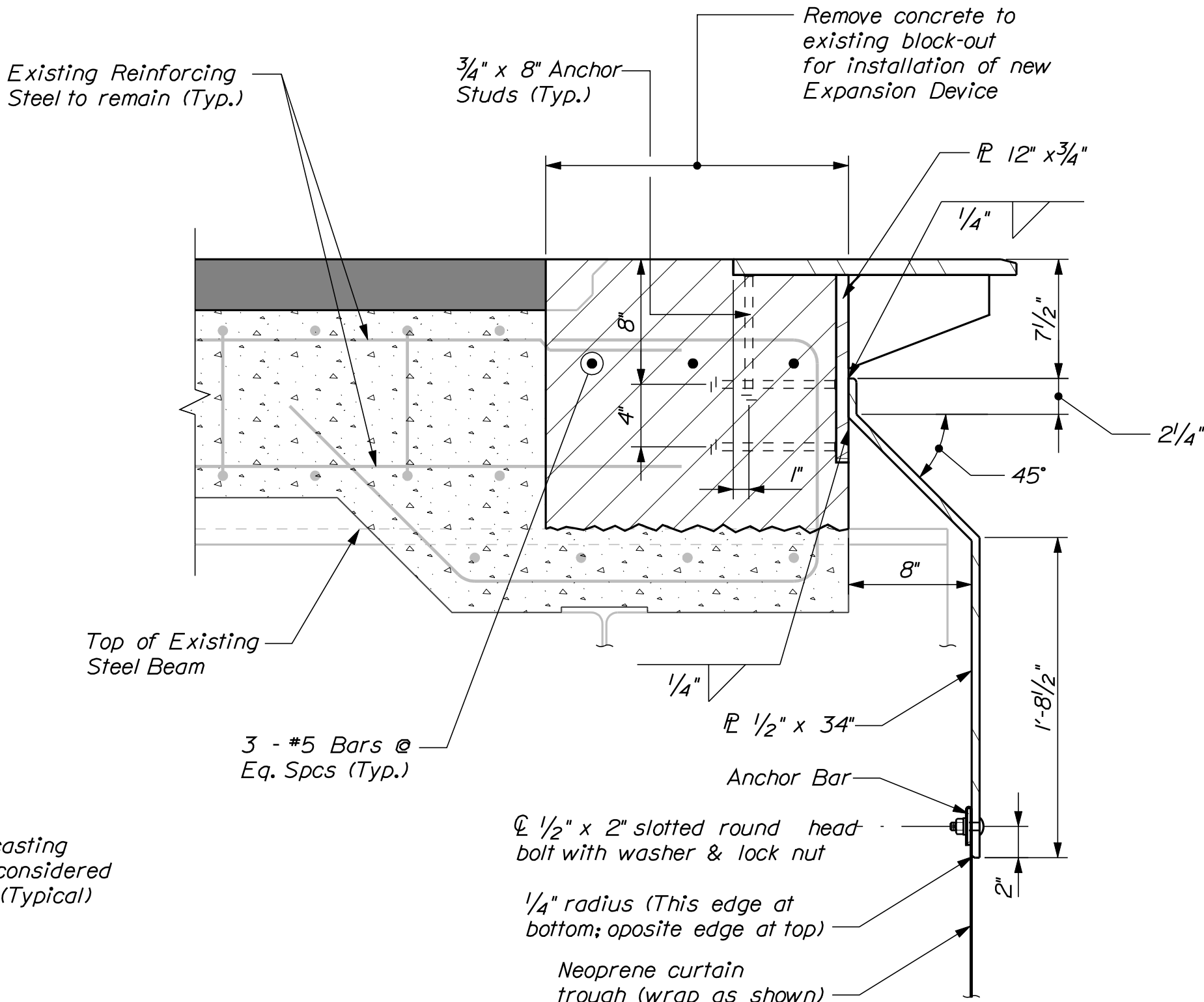
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Division: BRIDGE

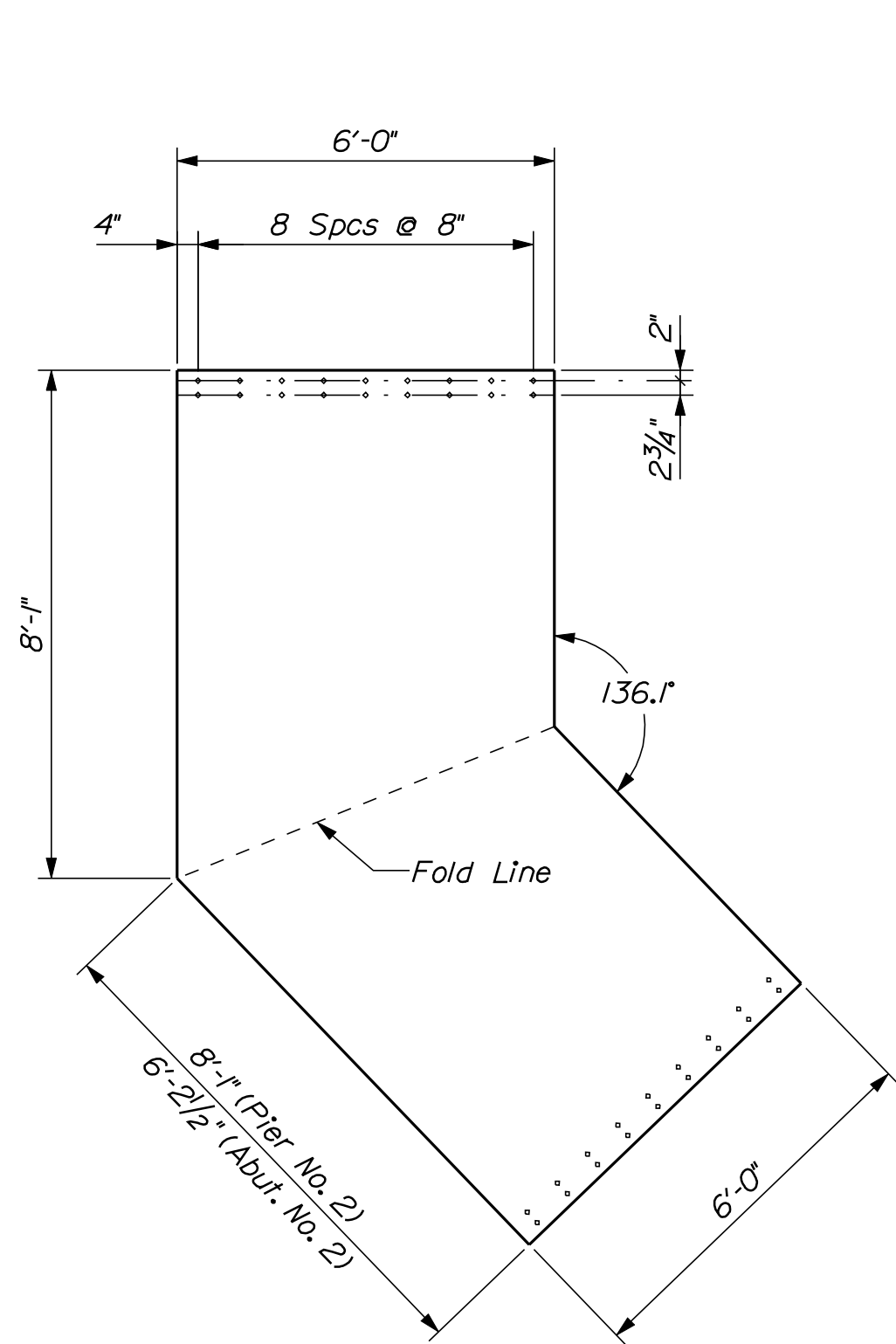
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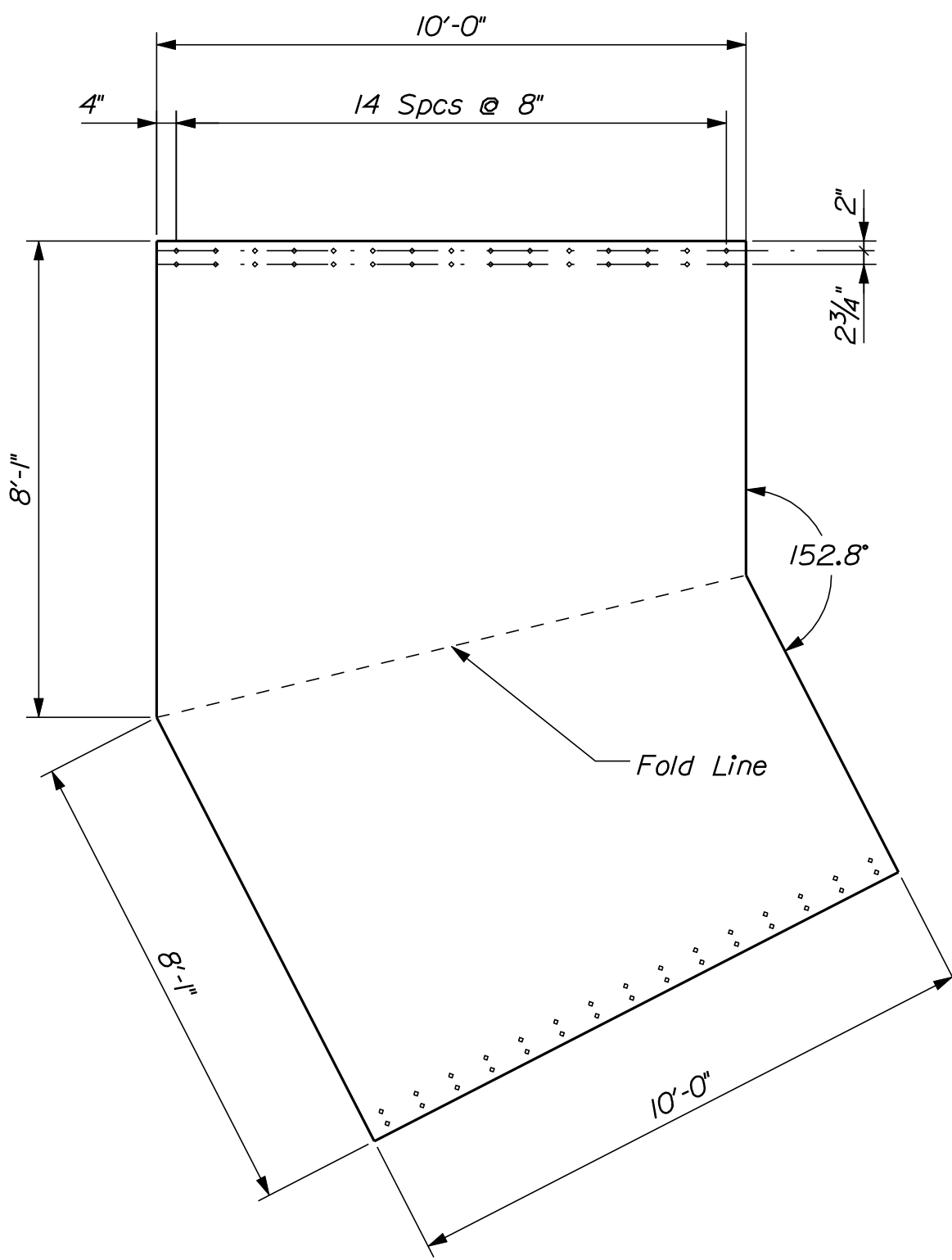
PIER NO. 2 CURTAIN PLATE DETAIL



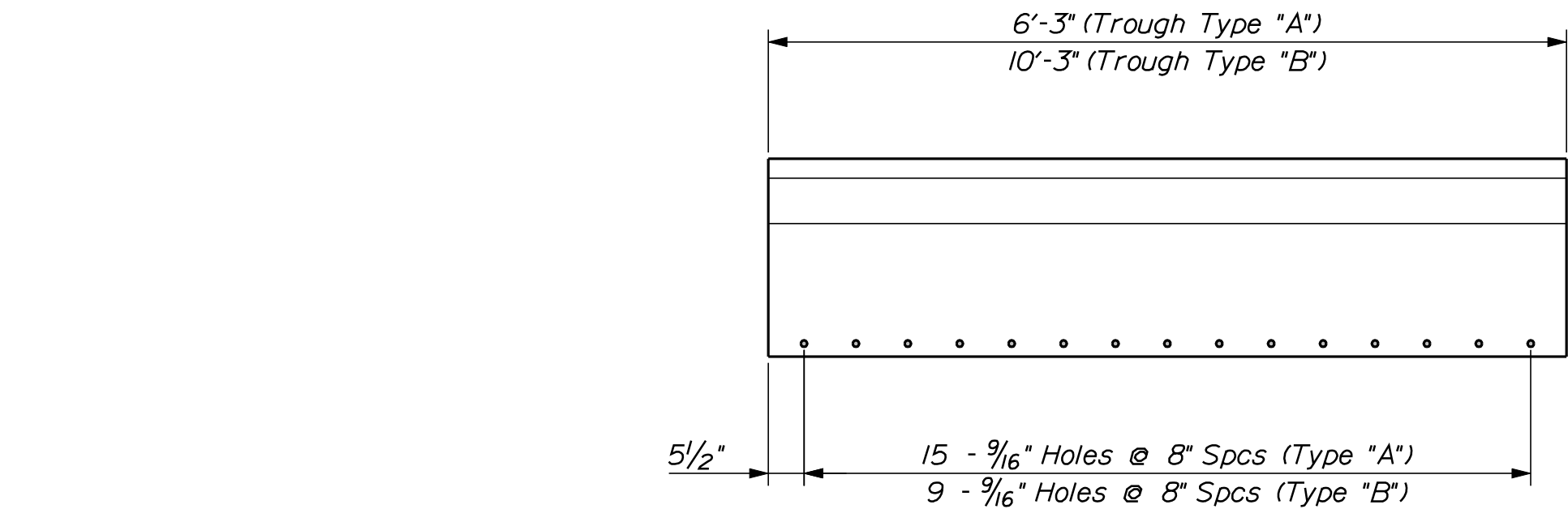
ABUTMENT NO. 2 CURTAIN PLATE DETAIL



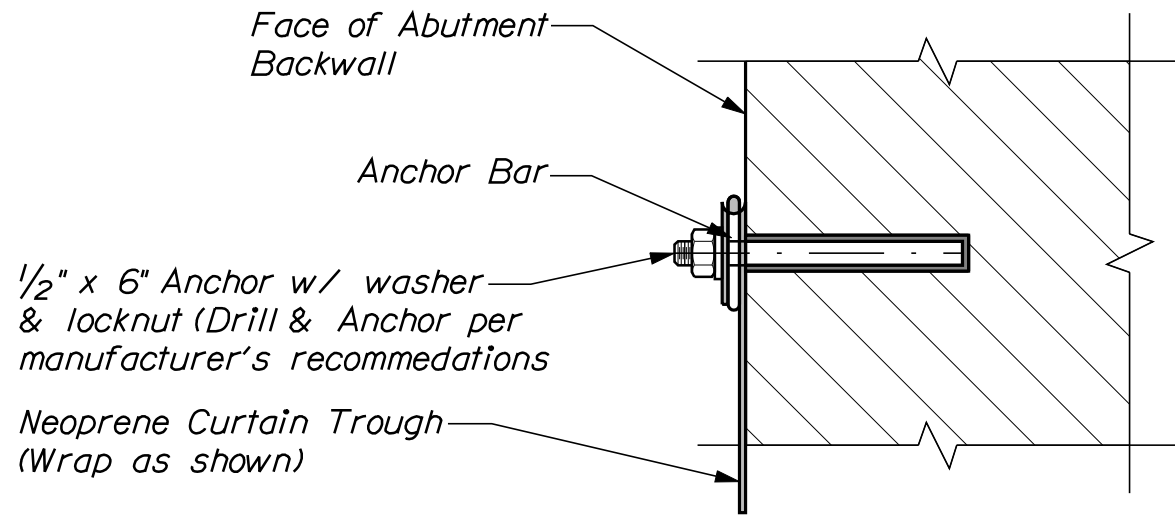
NEOPRENE SHEET
Trough "A"



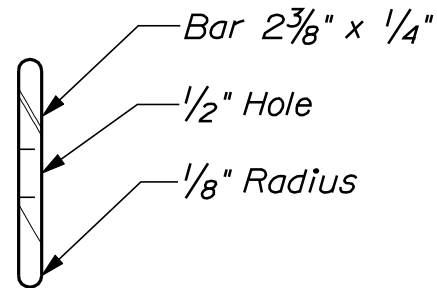
NEOPRENE SHEET
Trough "B"



TROUGH PLATE



ABUTMENT NO. 2 CURTAIN ANCHOR DETAIL

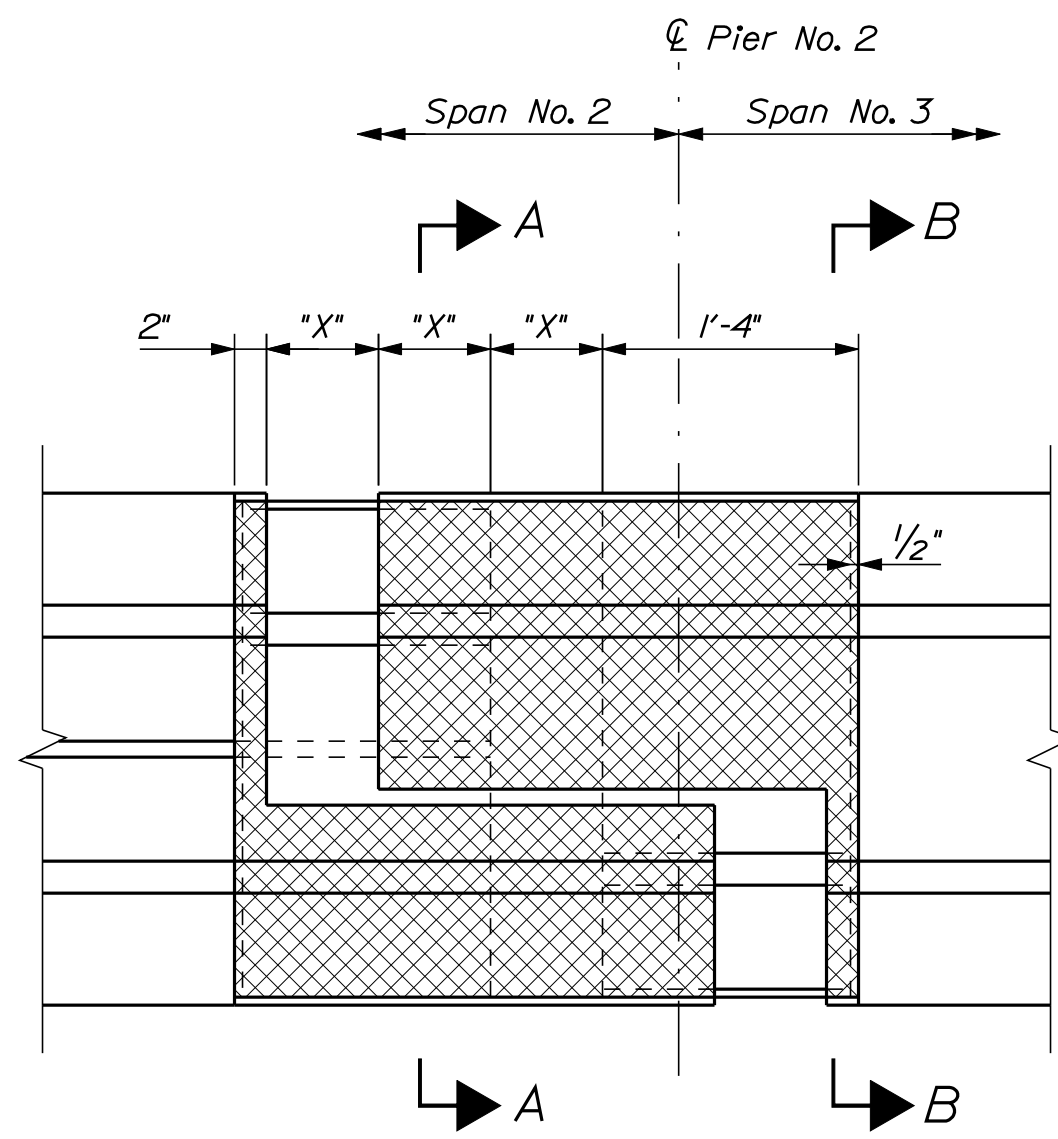


ANCHOR BAR
Match length and hole spacing to corresponding trough plate

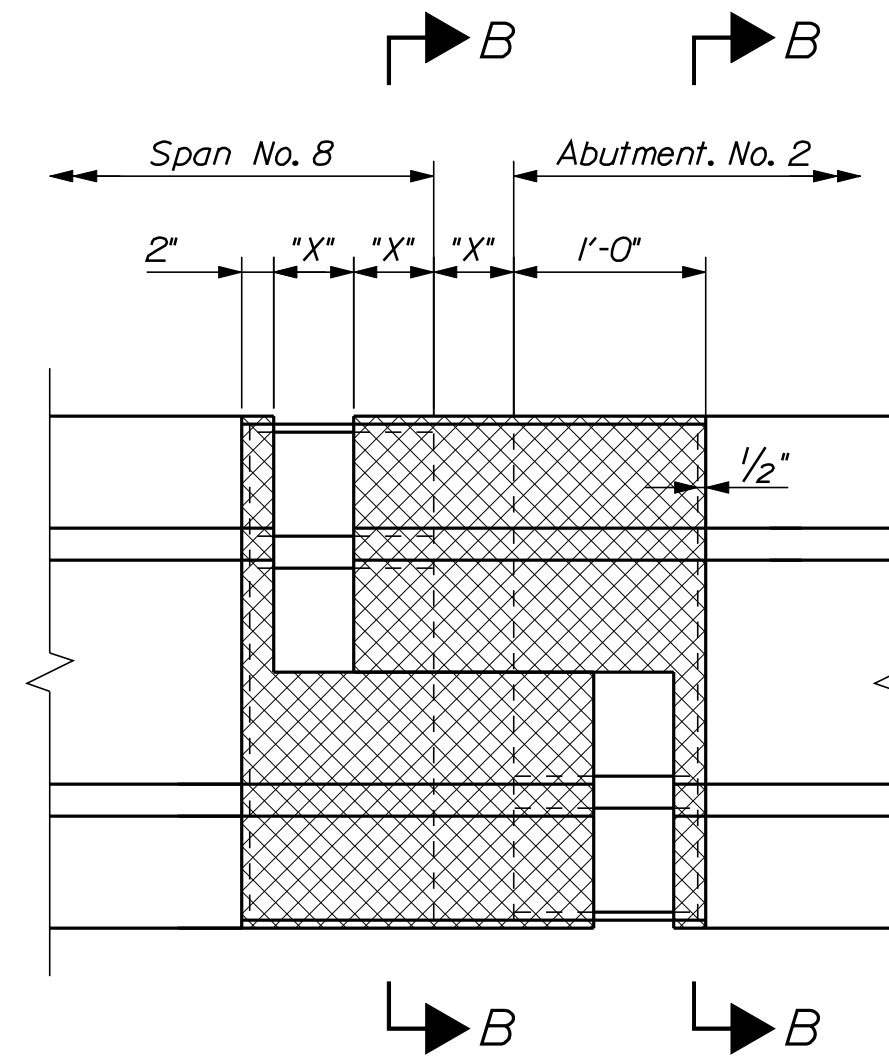
EXPANSION DEVICE AND CURTAIN TROUGH NOTES

1. Provide one Expansion Device - Finger Joint (Type "E") at Pier No. 2, and one Expansion Device - Finger Joint (Type "C") at Abutment No. 2. Construct Finger Joints in accordance with Standard Details Section 521.
2. Curb Expansion Dams shall be constructed in accordance with the Standard Details. Additional Expansion Dams will be required for the Median Barrier at each Pier No. 2 and Abutment No. 2. Median Barrier Expansion Dams shall be constructed in accordance with design drawings. For details not shown, refer to Standard Details.
3. Fabrication and materials for the curtain trough, including galvanization of steel components, shall be in accordance with the provisions of Section 521 of the Standard Specification.
4. Payment for curtain plates shall be considered incidental to the respective Expansion Device - Finger Joint pay item.
5. Payment for one set of curtain troughs for each joint (one set of ten(10) for Pier No. 2 & one set of eight (8) for Abutment No. 2), including anchor bars and hardware, will be made under Item No. 521.32, Fabric Trough for Finger Joint.
6. HDPE Liner shall be installed in the locations shown on the design drawings and securely fastened in accordance with Section 620 Special Provision. Payment for the HDPE liners will be made under Item, 620.6012 HDPE Geomembrane.
7. The Contractor shall take care in the installation of the HDPE membrane that the extruded anchors are completely undamaged and installed in the cementitious substrate in accordance with the manufacturer's recommendations. Payment for all work and materials needed to install the HDPE membrane and where required the grout bedding shall be considered paid for under Pay Item No. 620.6012, HDPE Geomembrane.
8. Joints at the top corners of the Median Barrier Expansion Dams shall be welded in accordance with the Standard Details. Any other corners of the Median Barrier profile may be fabricated from single bent plates or multiple welded plates at the Contractor's option.
9. Payment for all work and materials required to provide the galvanized channels as shown on the plans shall be considered incidental to Pay Item, 521.32 Fabric Trough for Finger Joint.
10. Refer to Standard Details Sections 521 for details and information not shown.

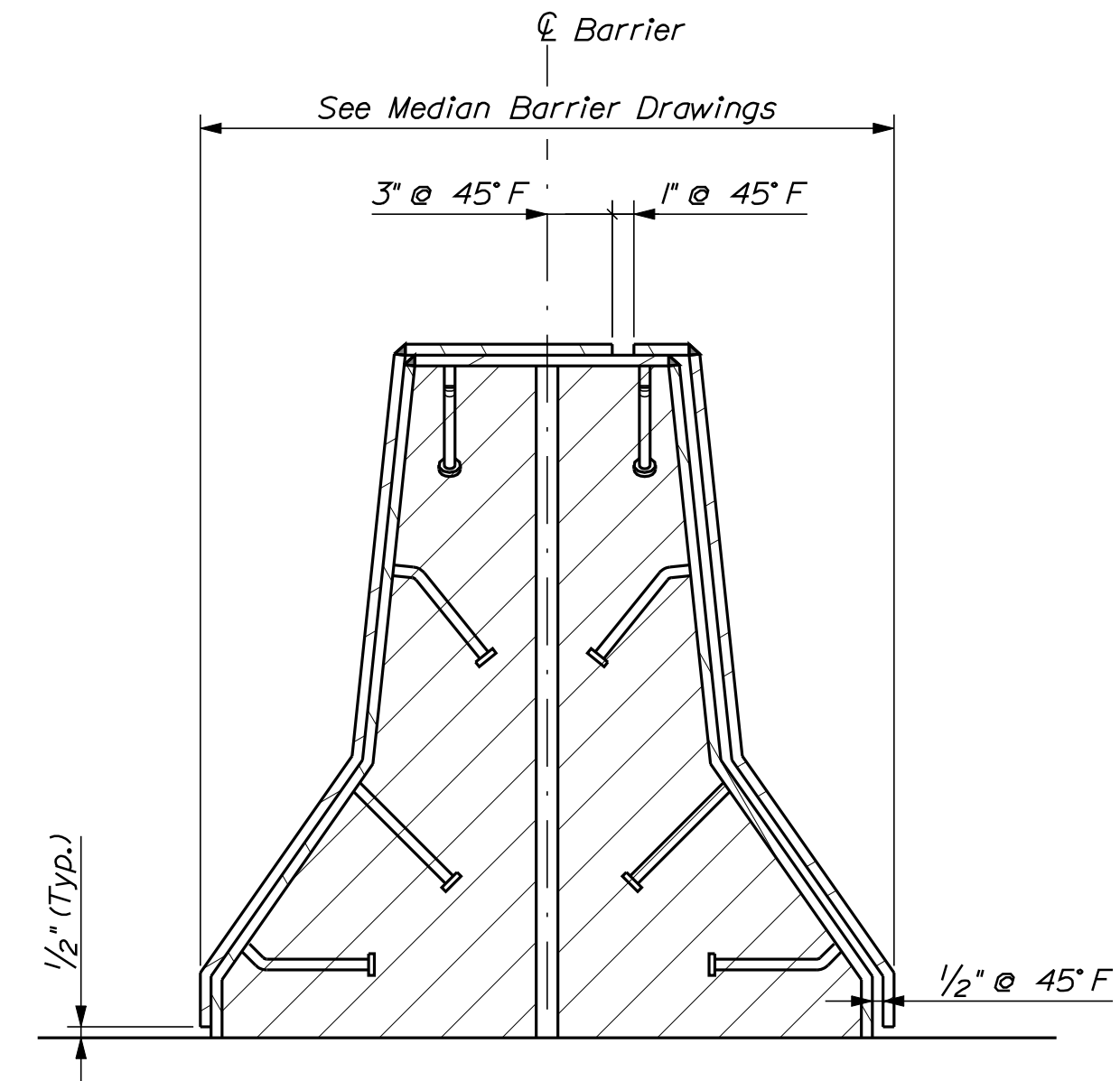
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								DESIGN-DETAILED		R. BULLGER		R. NIMON		05/2010					
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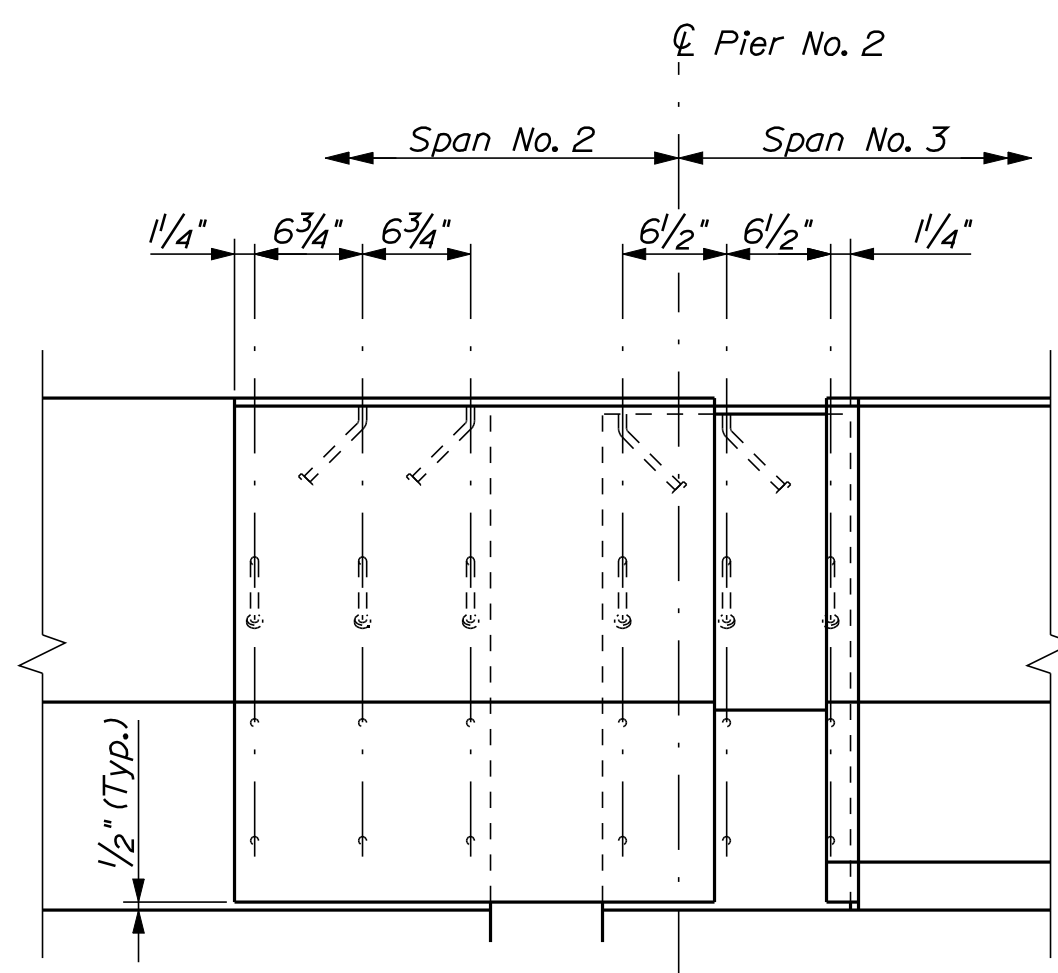
PIER NO. 2 EXPANSION DAM PLAN
"X" = 7" @ 45° F



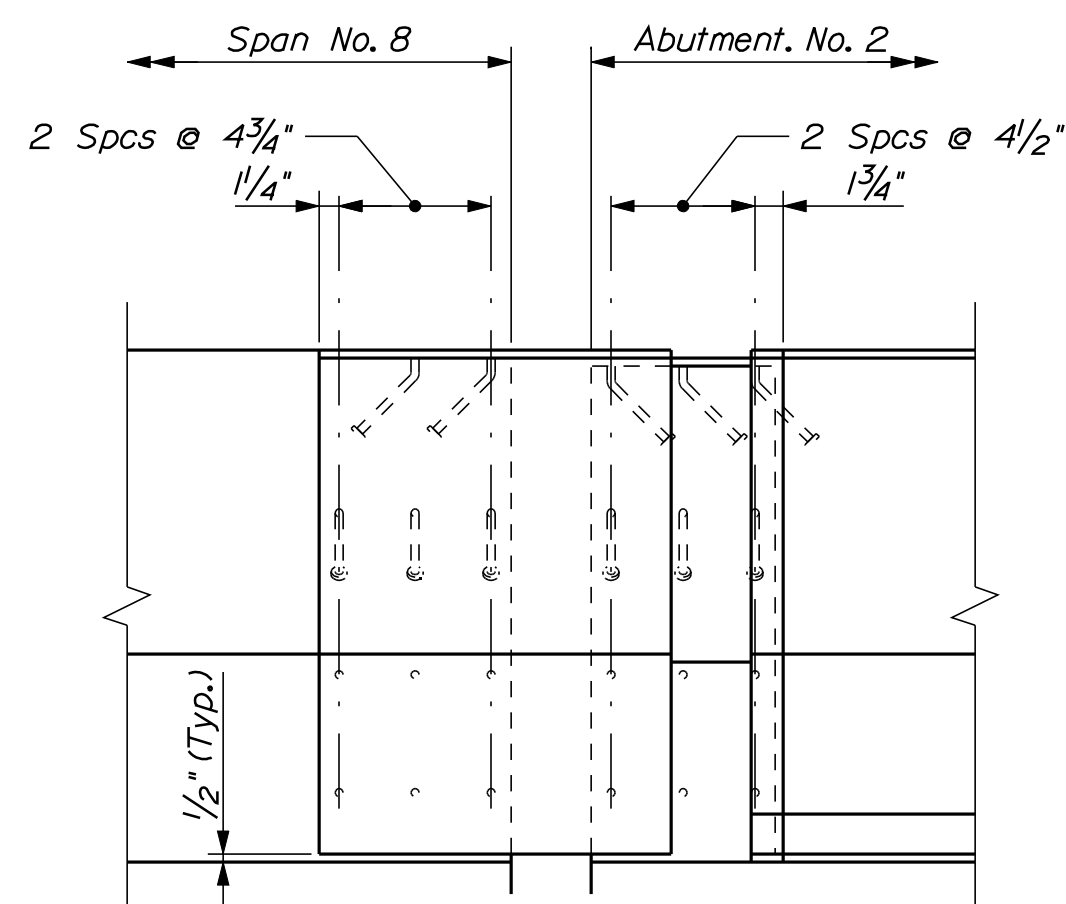
ABUTMENT NO. 2 EXPANSION DAM PLAN
"X" = 5" @ 45° F



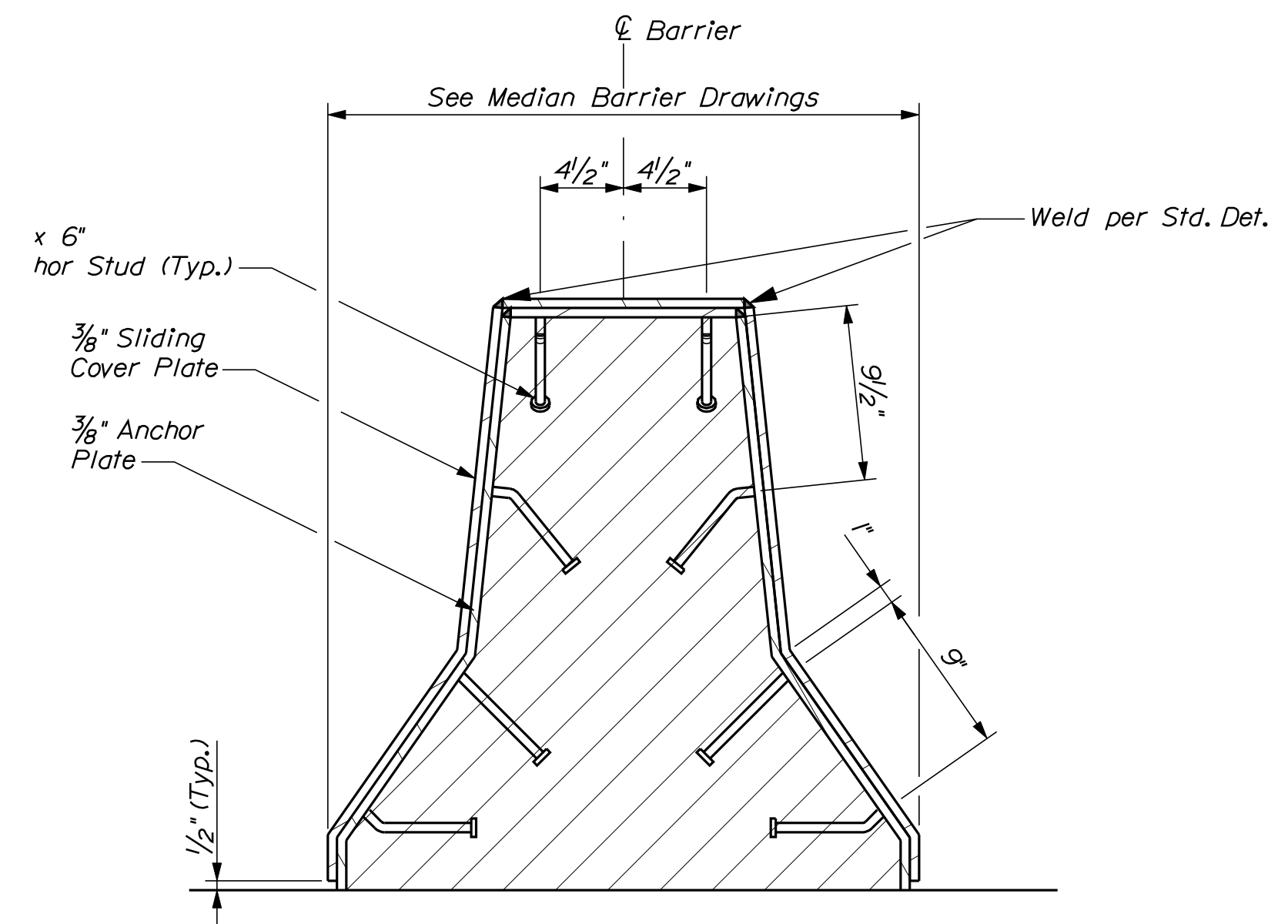
SECTION "A-A"
See Section "B-B" for plate
sizes and anchor stud layout



PIER NO. 2 EXPANSION DAM ELEVATION

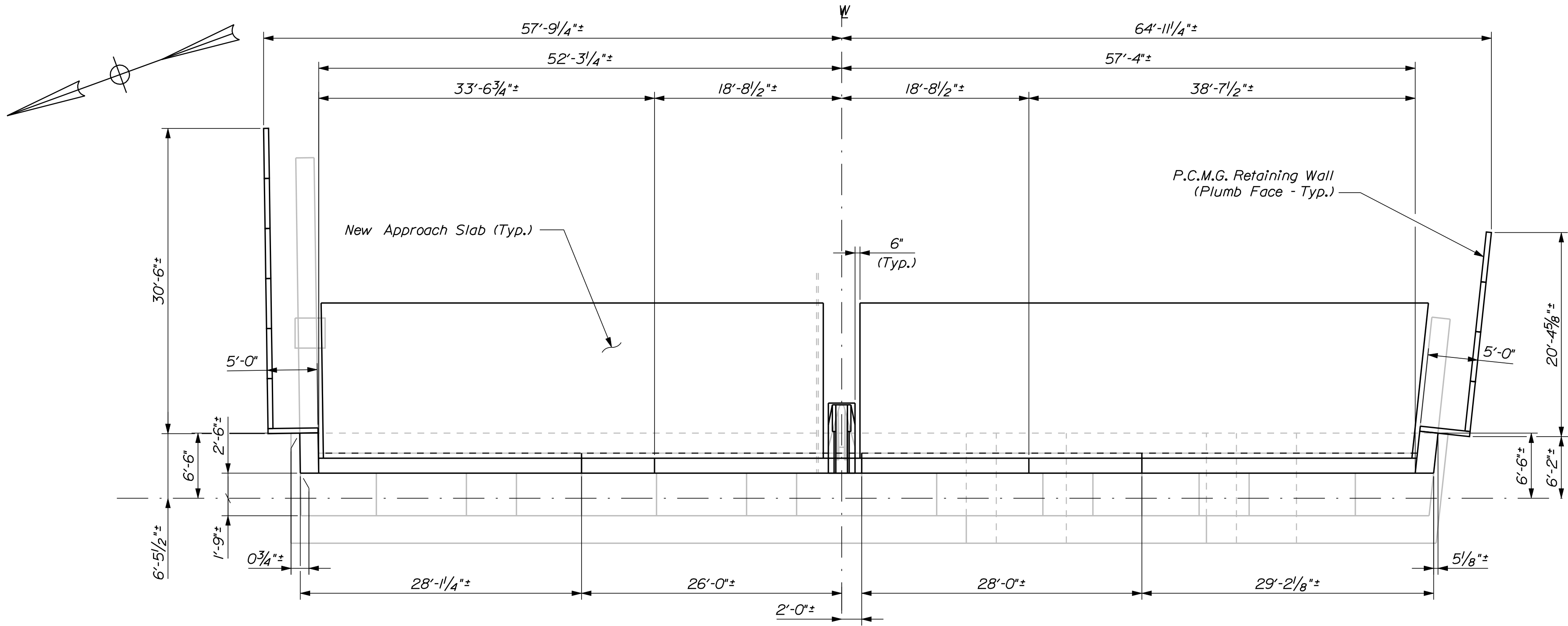


ABUTMENT NO. 2 EXPANSION DAM ELEVATION

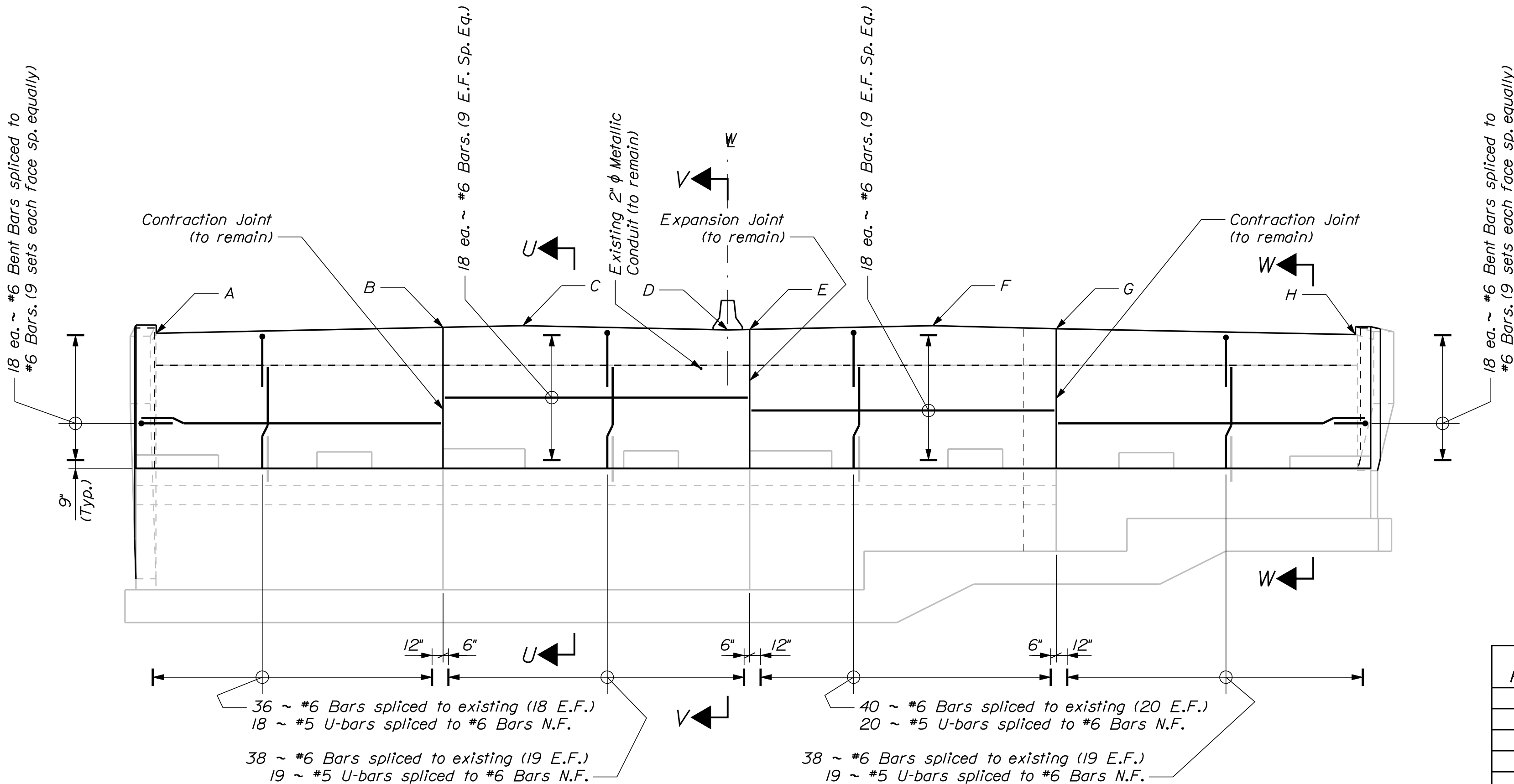


SECTION "B-B"

SHEET NUMBER 19 OF 28	VETERANS REMEMBRANCE BRIDGE PENOBSCOT RIVER BANGOR-BREWER PENOBSCOT COUNTY				PROJ. MANAGER DESIGN-DETAILED CHECKED-REVIEWED DESIGN2-DETAILED2 DESIGN3-DETAILED3 REVISIONS 1 REVISIONS 2 REVISIONS 3 REVISIONS 4 FIELD CHANGES	S. BOODE R. BULLIGER	R. NIMON	05/2010	STATE OF MAINE DEPARTMENT OF TRANSPORTATION IM-A710(000)E PIN 17100.00 BRIDGE NO. 1558 BRIDGE PLANS
								SIGNATURE	
								P.E. NUMBER	
								DATE	



ABUTMENT NO. 2 PLAN



ABUTMENT NO. 2 ELEVATION

NOTE:
Far face backwall heights should be adjusted to match existing profile grades.

BACKWALL HEIGHT FROM BRIDGE SEAT	
A	12'-4"±
B	12'-10 1/2"±
C	13'-0 3/8"±
D	12'-7 5/8"±
E	12'-8 1/8"±
F	13'-0 3/8"±
G	12'-9"±
H	12'-2 5/8"±

PREFABRICATED CONCRETE
MODULAR GRAVITY WALL NOTES

1. The Contractor shall provide a Prefabricated Concrete Modular Gravity (PCMG) Wall in accordance with Special Provision Section 635. The PCMG Wall shall be designed and stamped by a Registered Professional Engineer and the design shall be submitted to the Resident for review. Plan details are shown for estimating purposes only.

2. The precast units shall be one of the following, or equal:

"T-Wall" as manufactured by a licensed manufacturer of Neel Company

"DoubleWal" as manufactured by a licensed manufacturer of DoubleWal Corp., Plainville, Connecticut.

3. The factored bearing pressure for PCMG Walls shall not exceed the factored bearing resistance of 6.0 ksf for the strength limit state. The factored bearing pressure for the service limit state shall not exceed the factored bearing resistance of 6.0 ksf.

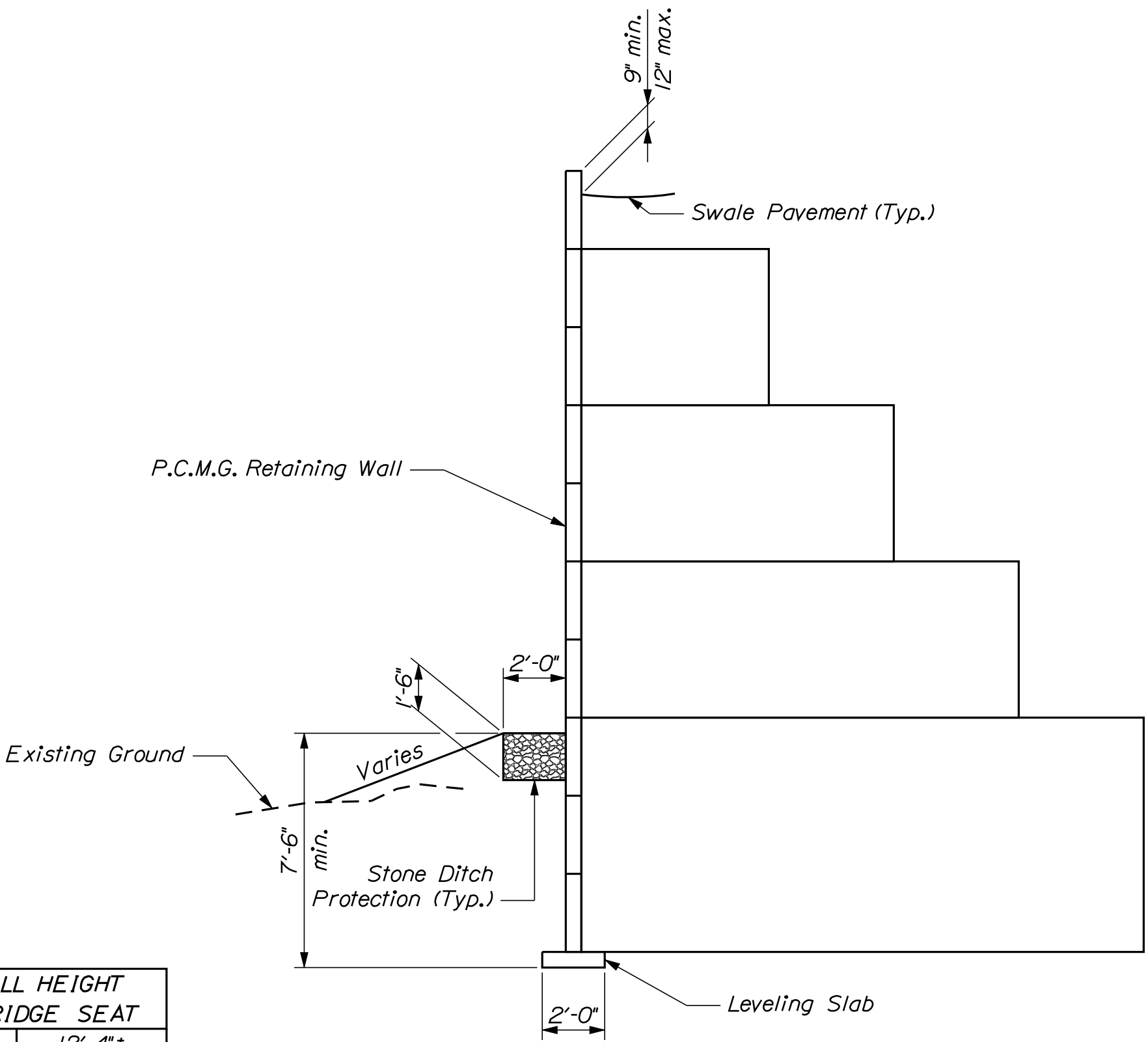
4. The PCMG Wall shall use corrosion resistant reinforcing steel. The maximum concrete permeability shall be 2,000 coulombs.

5. Compact the PCMG Wall area subgrade to 95% of the AASHTO T-180 maximum dry density before constructing any part of the wall.

6. The Contractor shall survey the existing sideslopes in front of and adjacent to the wingwalls and design the shapes of the fill slopes to be placed in front of the newly constructed wingwalls. The finished ground designs in front of rebuilt wingwalls must meet the approval of the Resident. To initiate the design by the PCMG designer/supplier, the Contractor must provide approved finish ground elevations including slopes and elevations both perpendicular to the wall faces and along the wall faces of each new PCMG wall.

ABUTMENT NOTES

1. The Contractor is hereby alerted to the two-inch diameter metal conduit carrying power through the Veterans Remembrance Bridge Abutment No. 2 backwall, as shown on the "Abutment No. 2 Elevation" detail. The Contractor shall work carefully so as to prevent any loss of power or damage to the conduit or power line during all phases of construction. No separate payment shall be made.

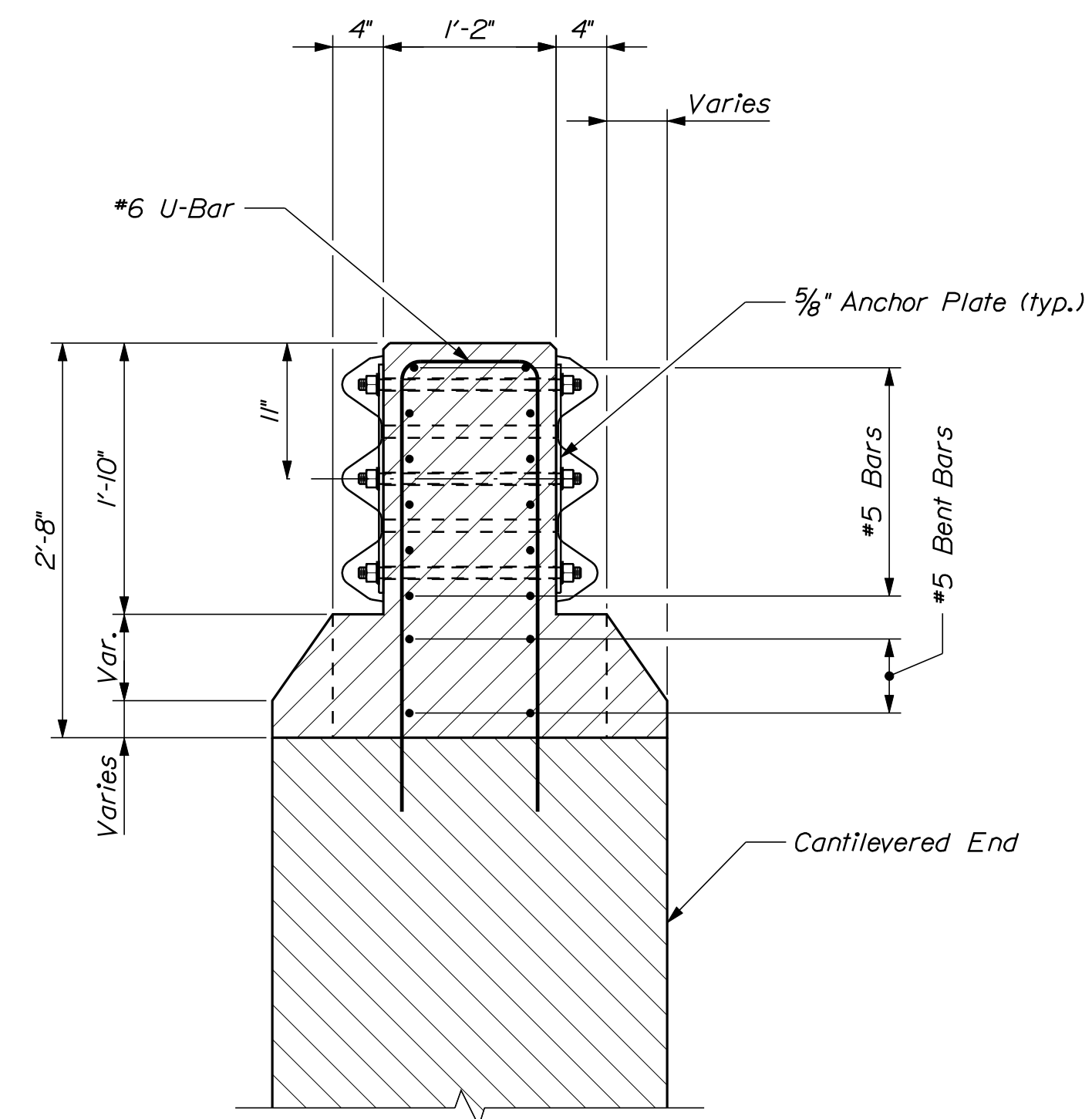
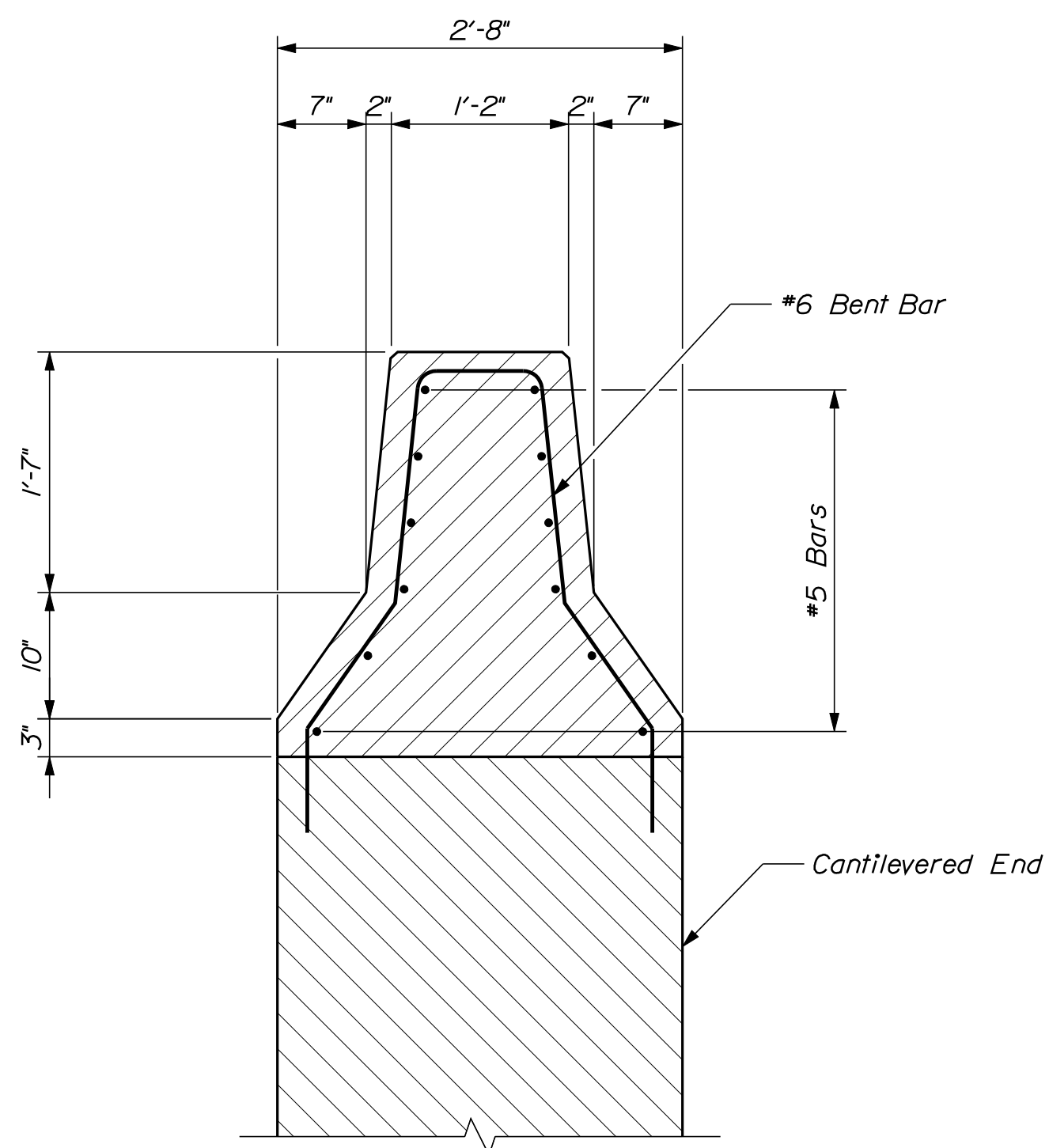
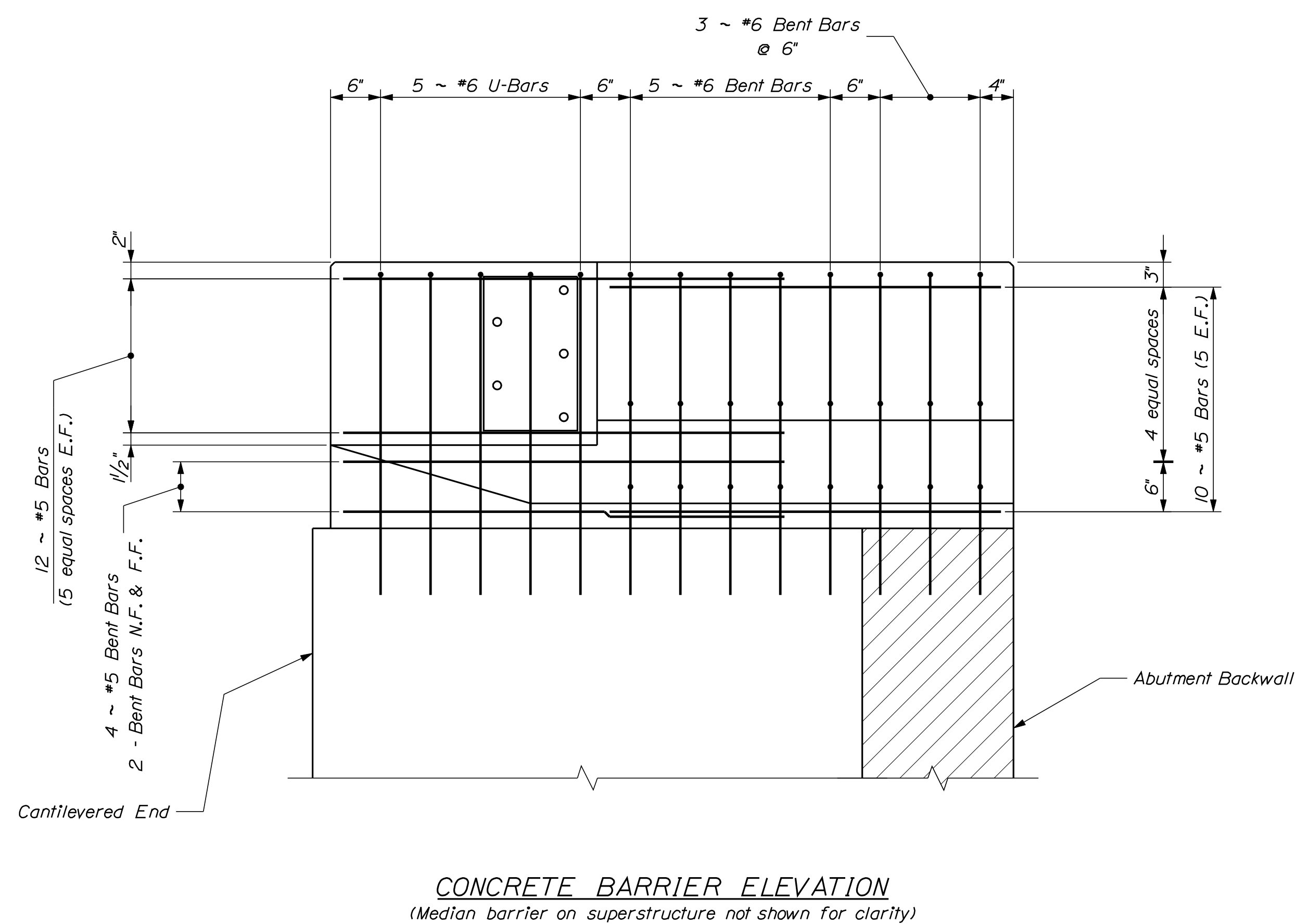
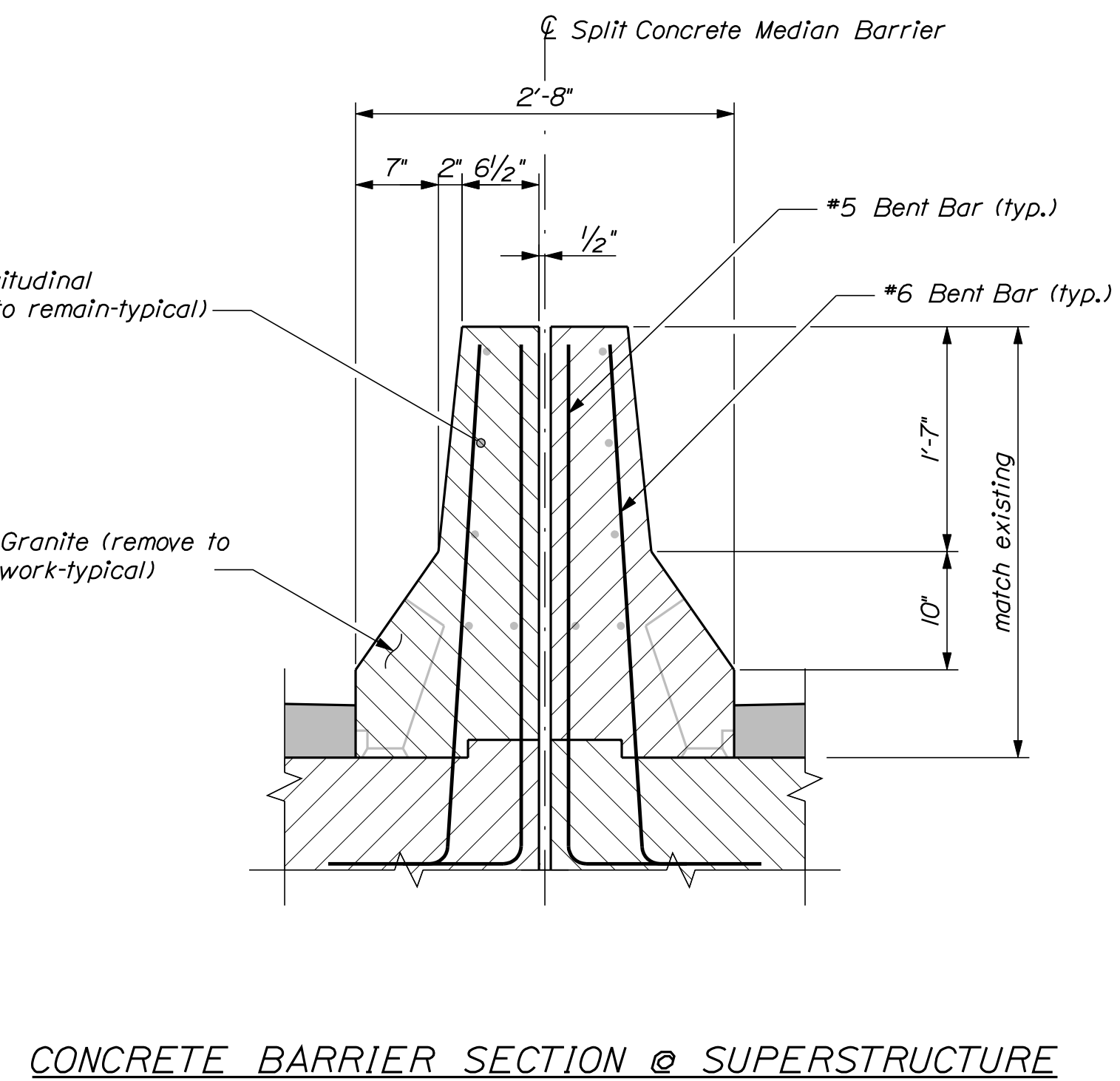
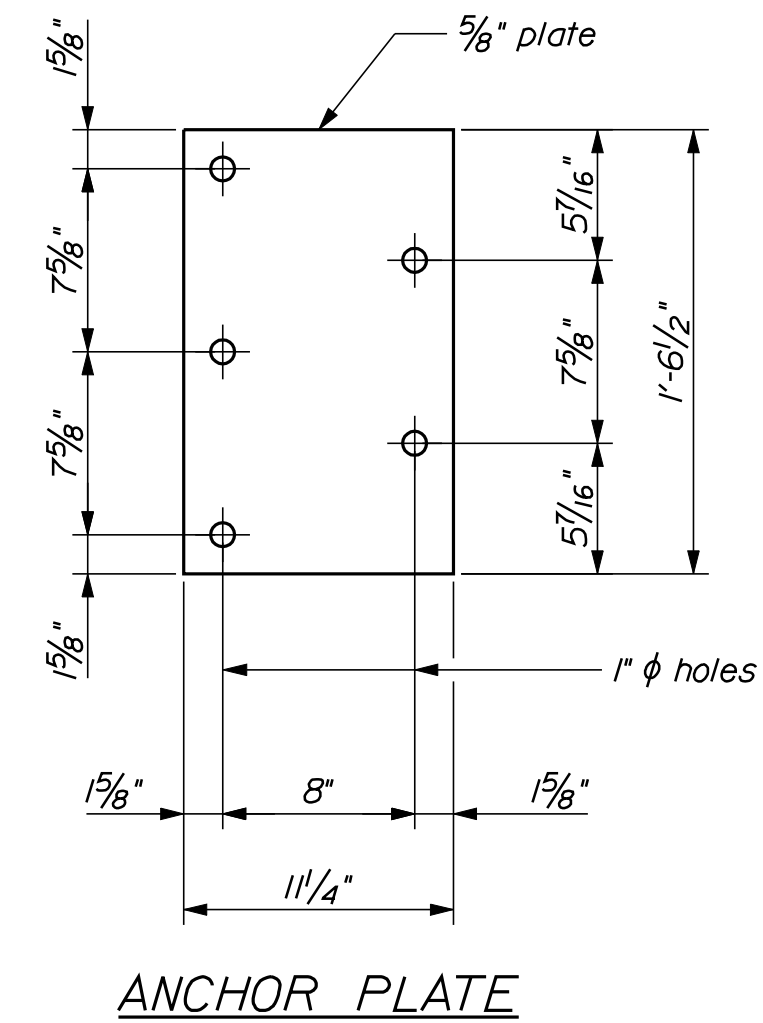
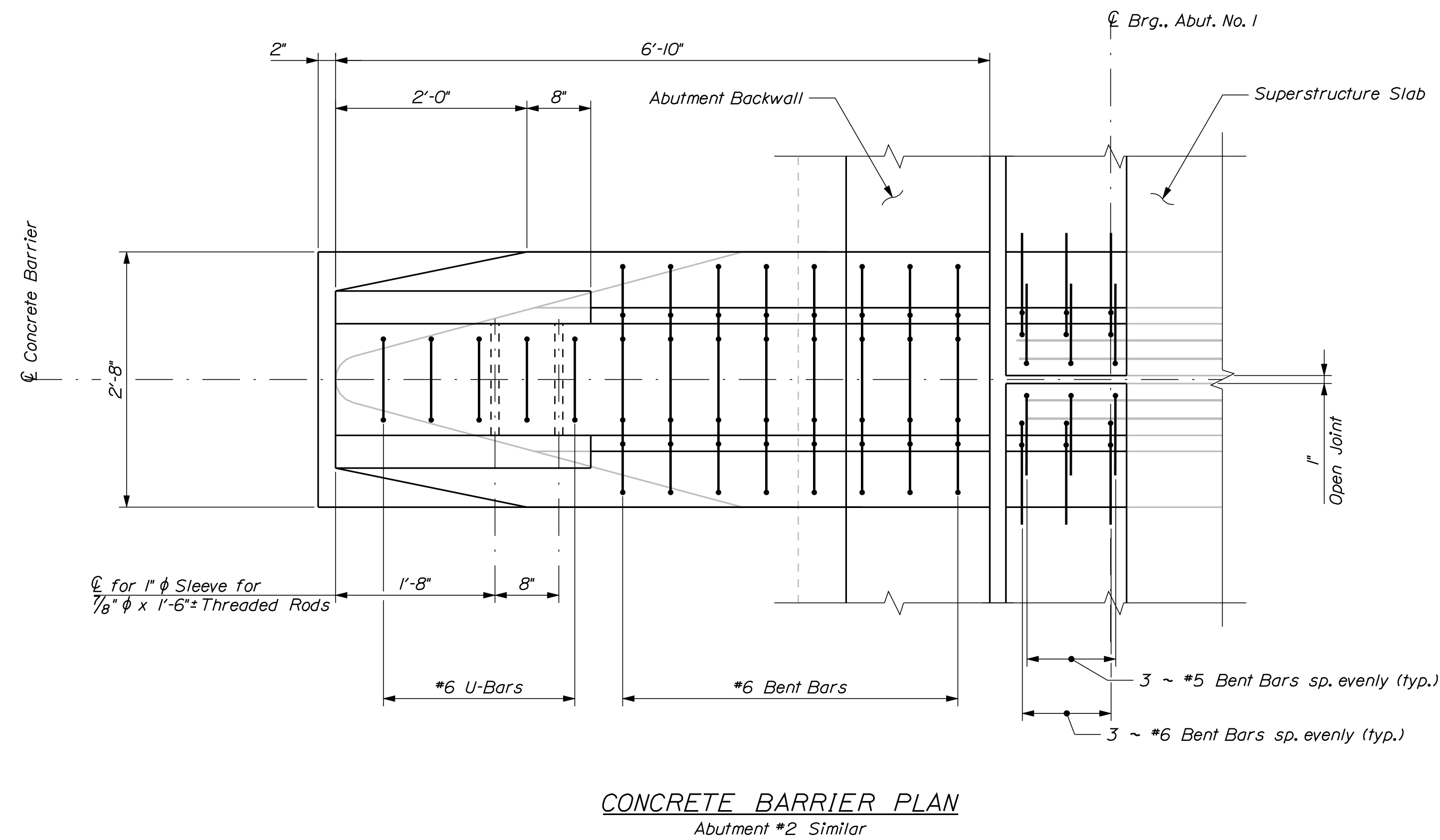


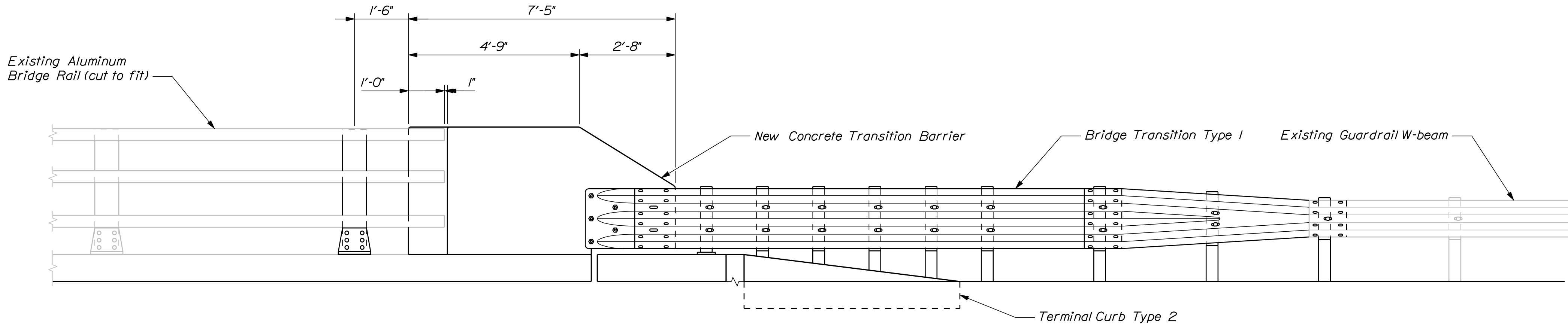
TYPICAL P.C.M.G. WALL SECTION
Slope survey provided by Contractor

STATE OF MAINE		DEPARTMENT OF TRANSPORTATION		IM-A710(000)E		PIN 17100.00		BRIDGE NO. 1558		BRIDGE PLANS	
VETERANS REMEMBRANCE BRIDGE		PENOBSCOT RIVER		BANGOR-BREWER		PENOBSCOT COUNTY		ABUTMENT NO. 2		SHEET NUMBER	
20		OF 28									



21 OF 28	SHEET NUMBER	VETERANS REMEMBRANCE BRIDGE PENOBSCOT RIVER BANGOR-BREWER PENOBSCOT COUNTY					PROJ. MANAGER	S. BOODE	BY	DATE	STATE OF MAINE DEPARTMENT OF TRANSPORTATION IM-A710(000)E	
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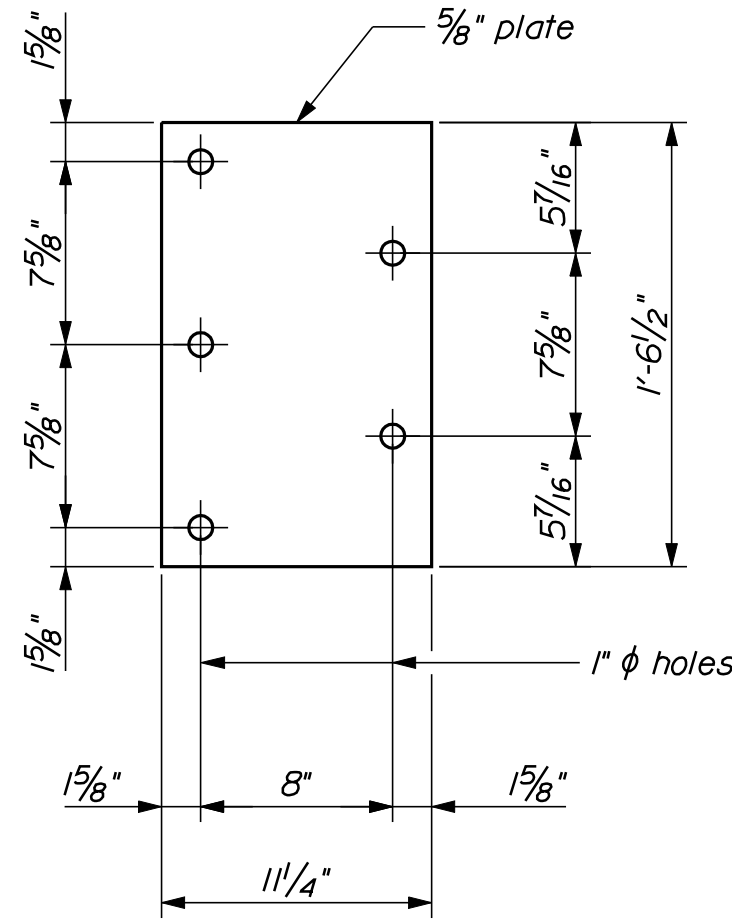
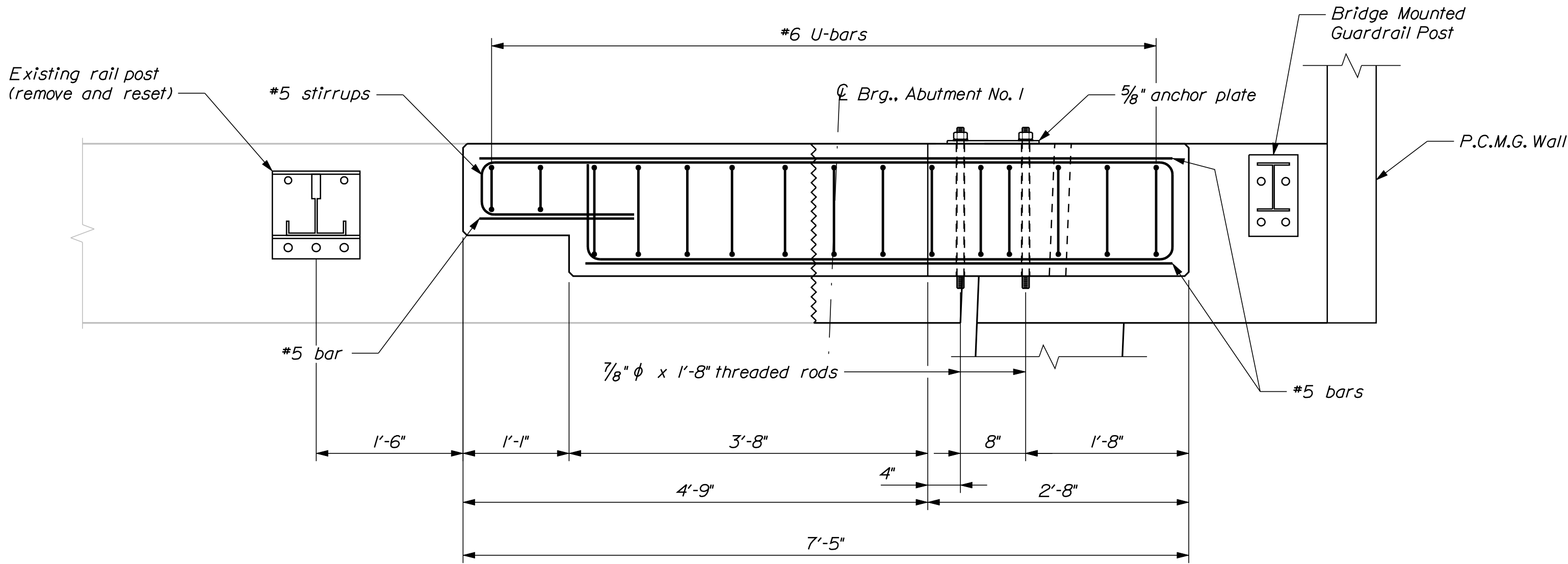




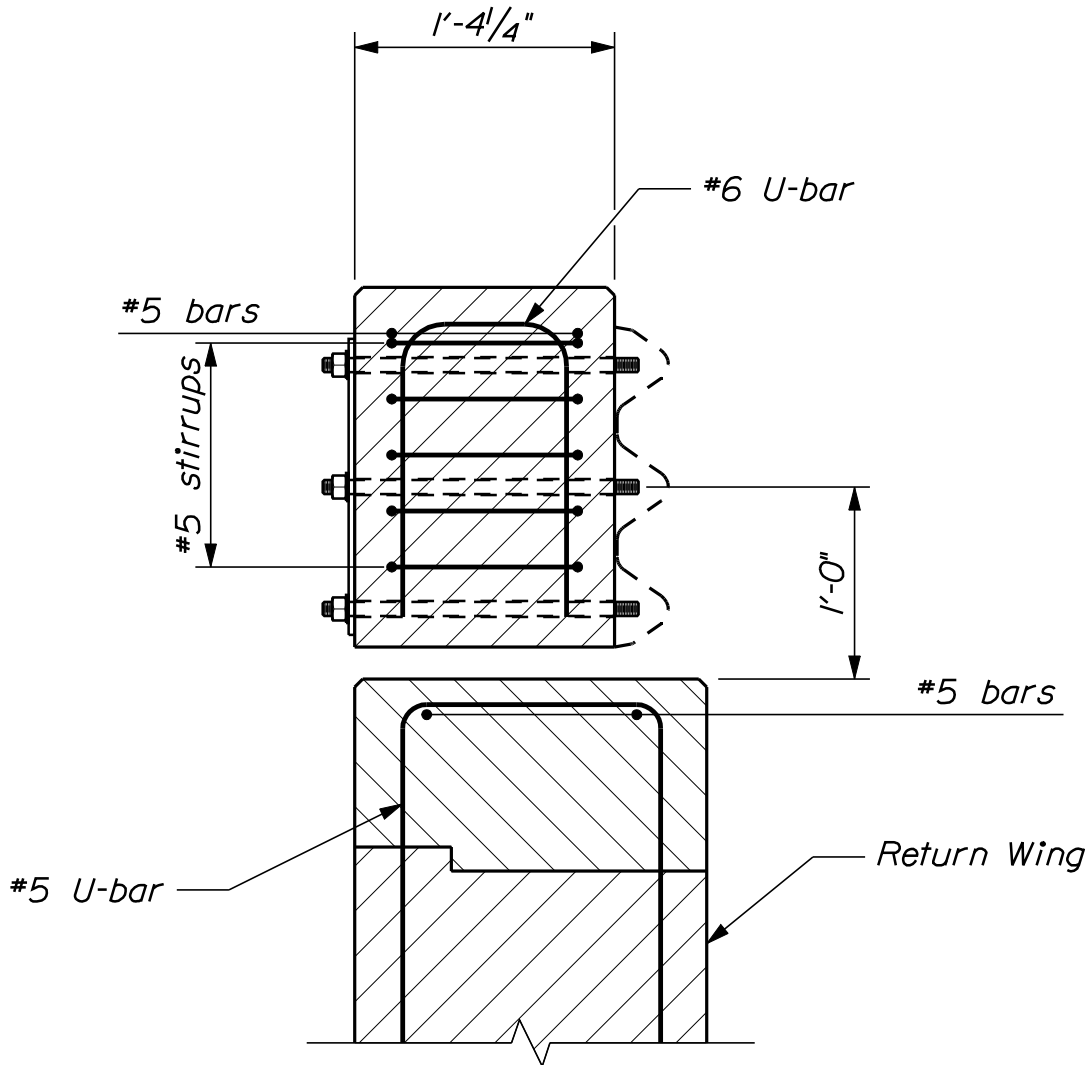
BRIDGE CONNECTION NOTES

1. Refer to Standard Details Section 526 - Concrete Transition Barrier for details and information not shown.
2. Reinforcing steel for the Transition Barriers is based on details shown in the Standard Details. Reinforcing steel shall be modified to fit the details and conditions shown on the plans. Payment for modifying reinforcing steel and for drilling and anchoring bars as shown will be considered incidental to Item No. 526.340I, Permanent Concrete Transition Barrier - Modified.
3. Anchor plates and threaded rods shall be galvanized in accordance with the Standard Specifications and the Standard Details.
4. The contractor shall locate existing curb reinforcing steel and adjust dowel locations to avoid cutting existing bars. Any adjustments from plan dimensions shall be approved by the Resident.

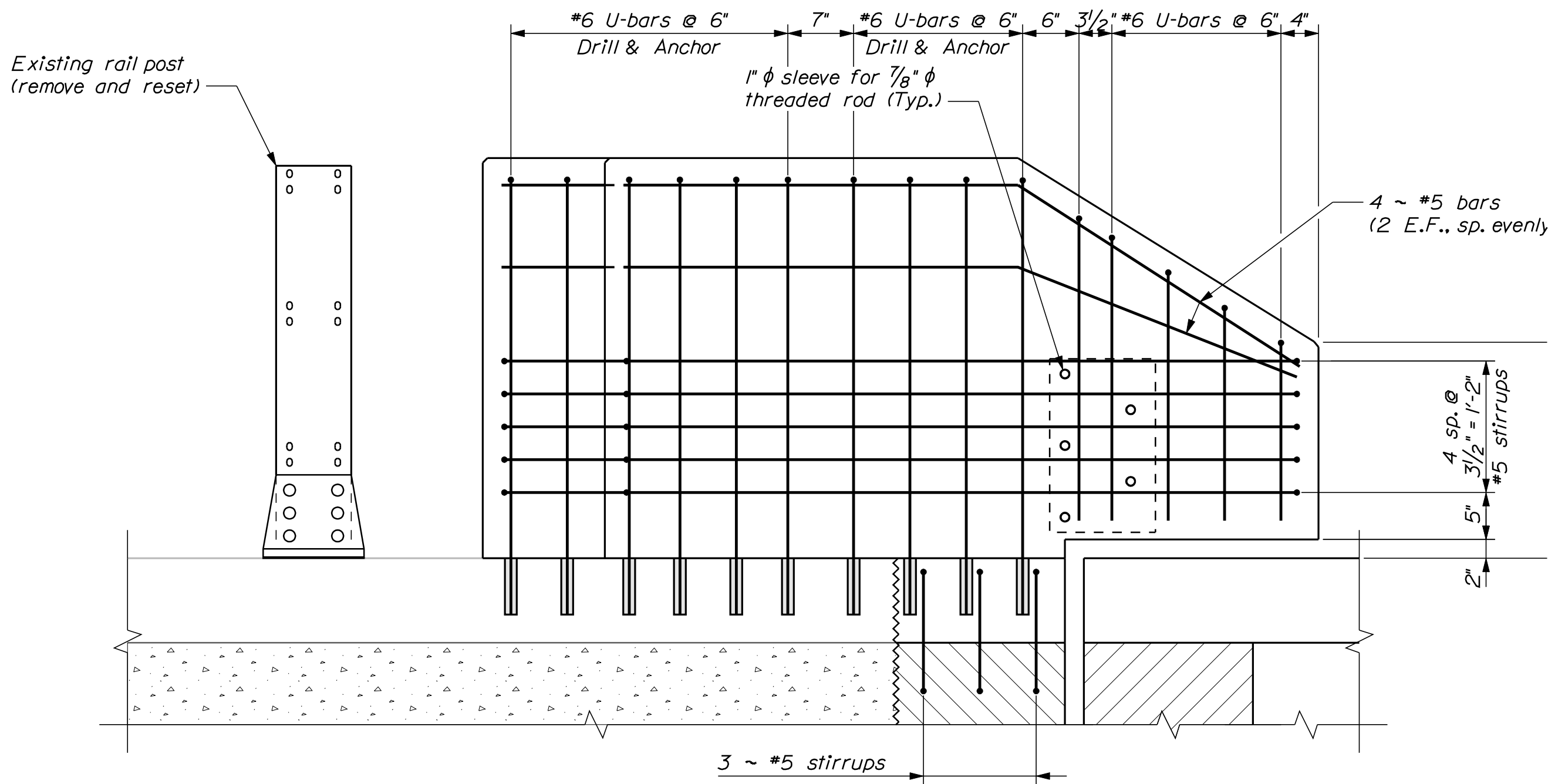
CONCRETE TRANSITION BARRIER



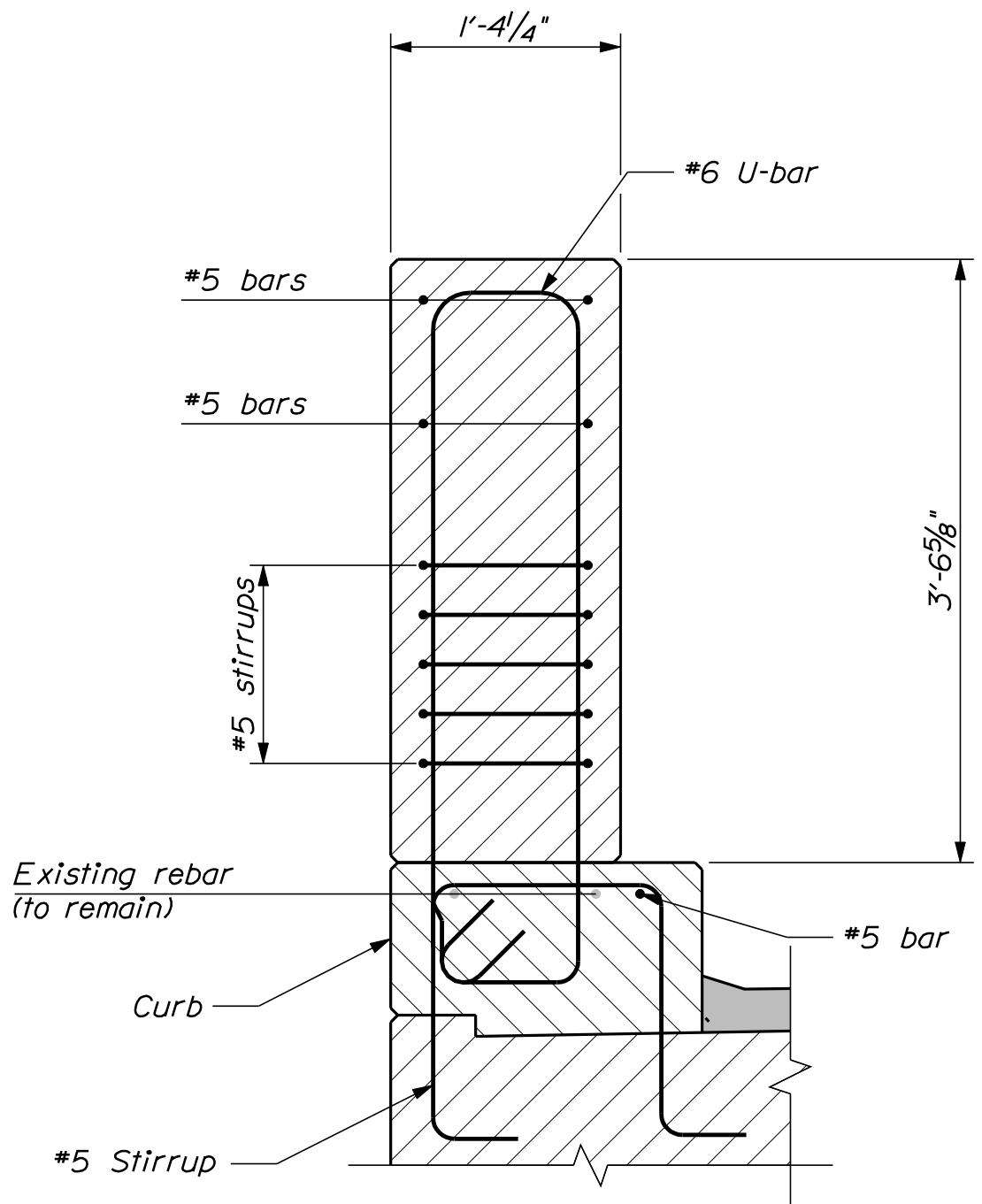
ANCHOR PLATE



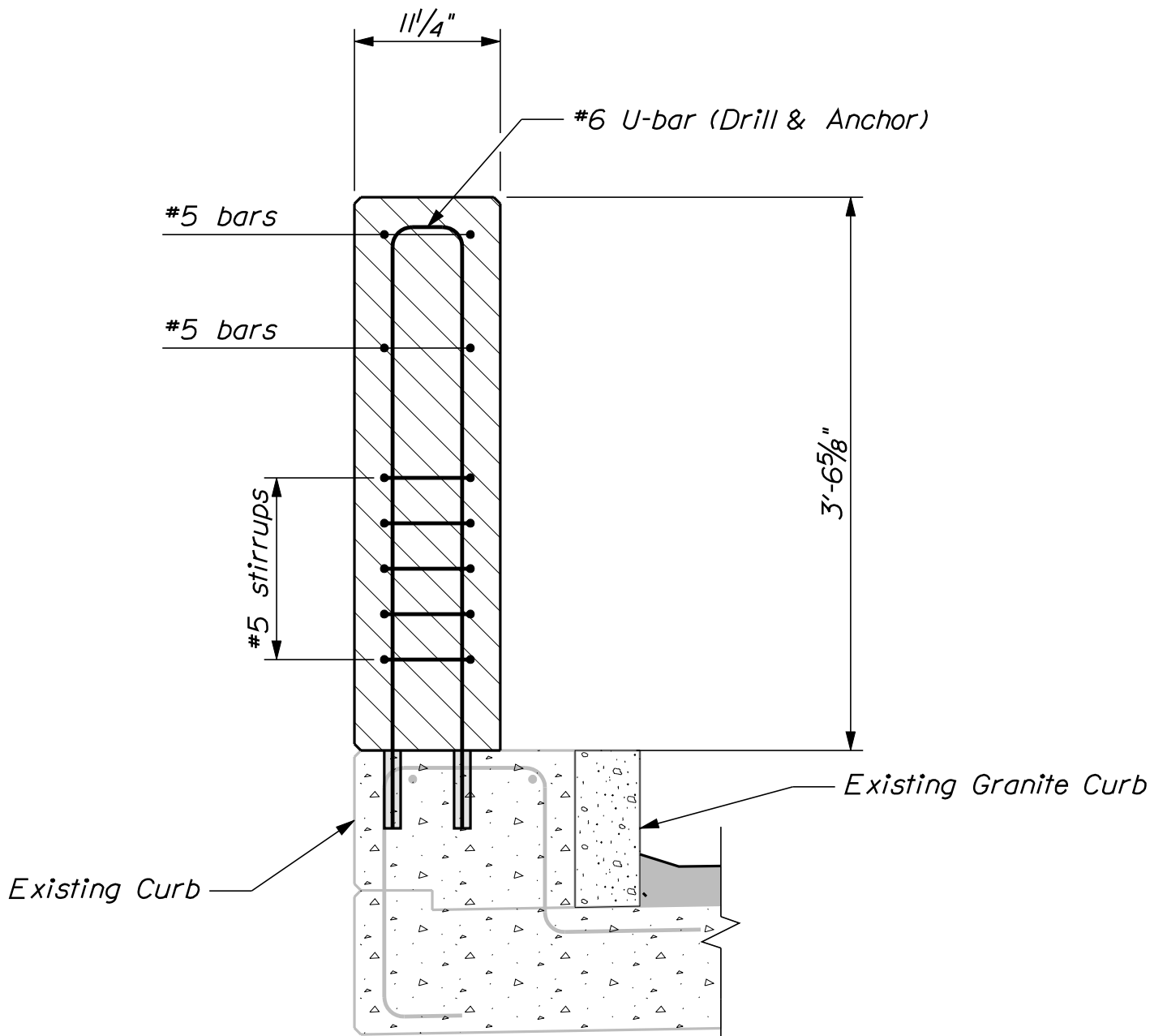
SECTION THROUGH NOSE



TRANSITION BARRIER ELEVATION
(Bridge rail not shown for clarity)

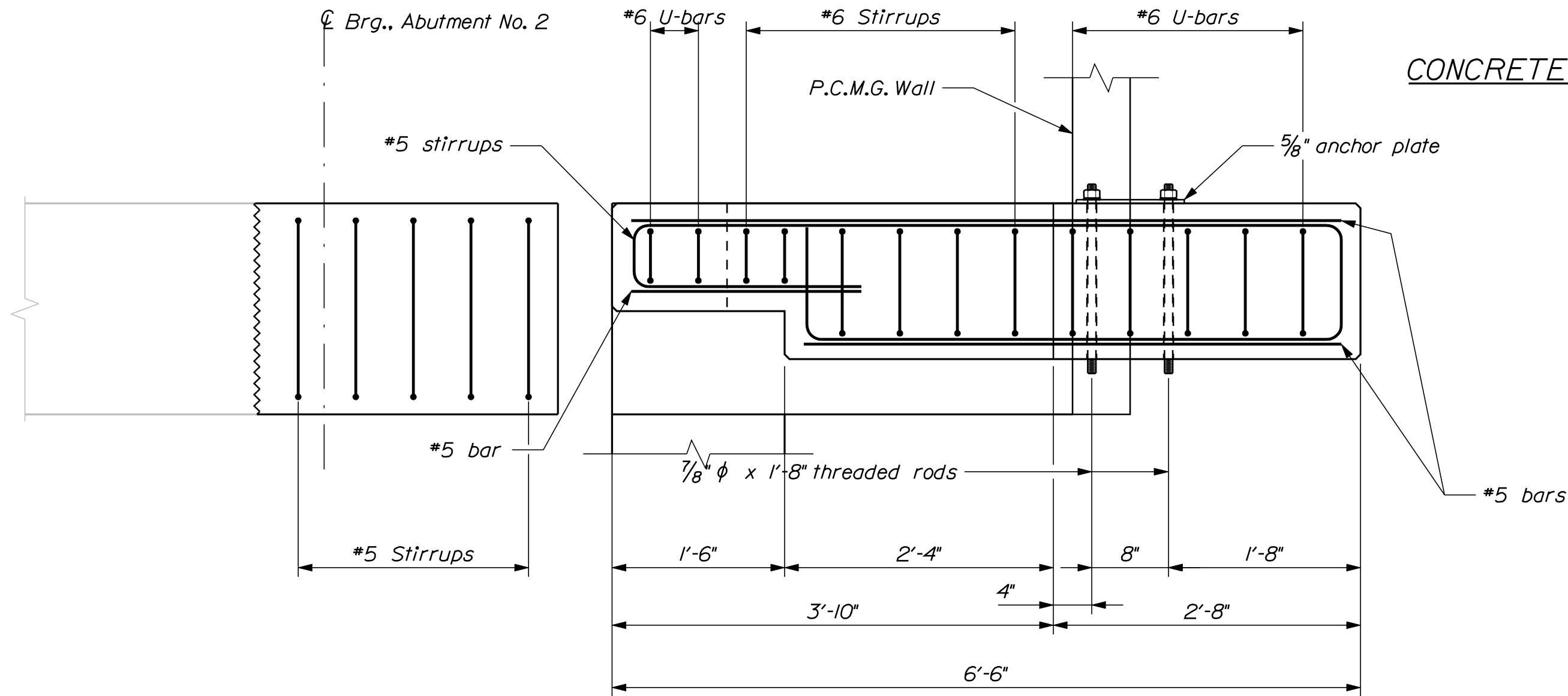
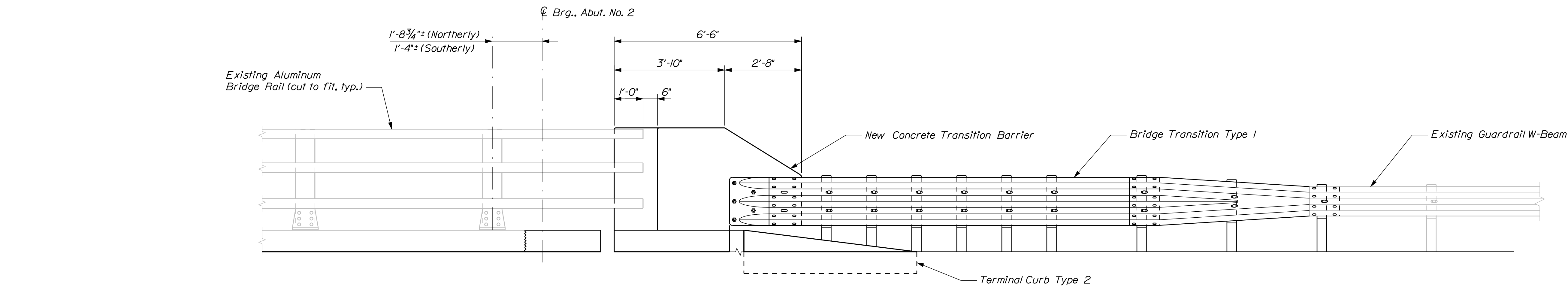


SECTION THROUGH STEM

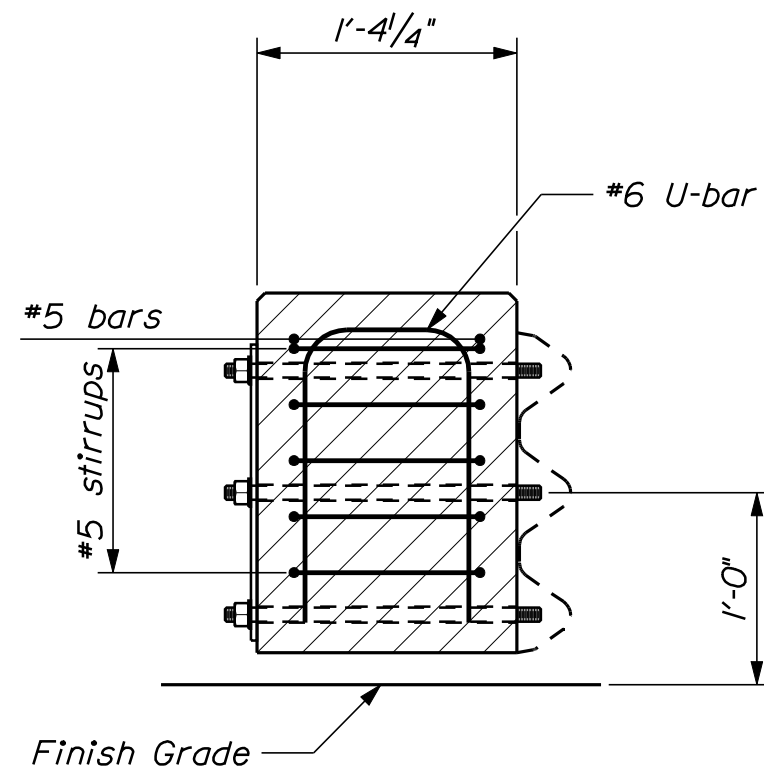


SECTION THROUGH RECESS

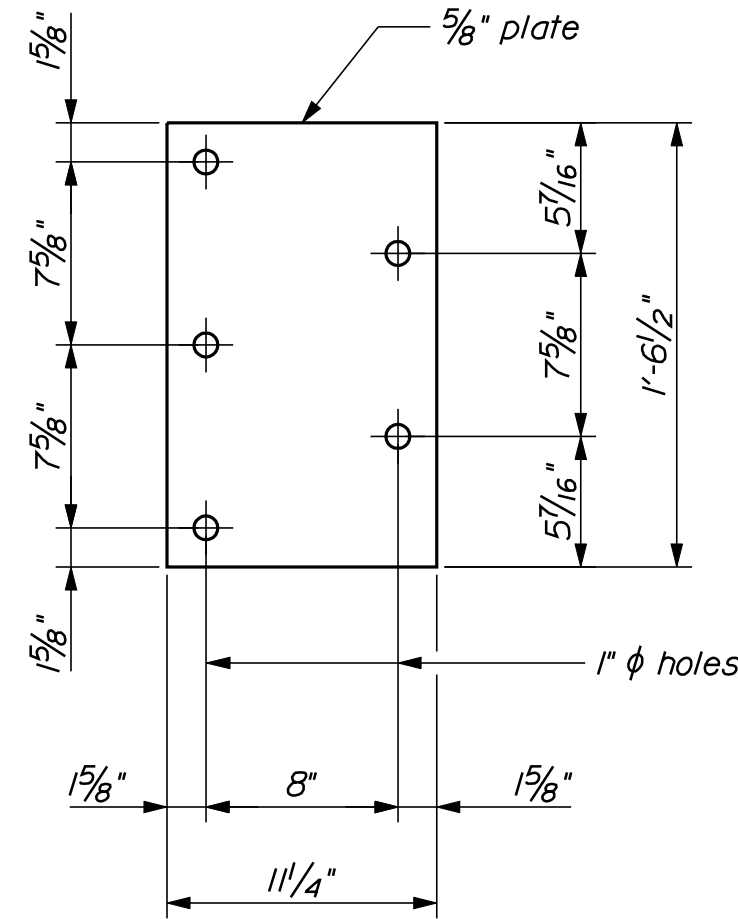
STATE OF MAINE DEPARTMENT OF TRANSPORTATION	IM-A710(000)E		PIN 17100.00		BRIDGE PLANS	
	BANGOR-BREWER		PENOBSCOT COUNTY		CONCRETE TRANSITION BARRIER	
	VETERANS REMEMBRANCE BRIDGE		PENOBSCOT RIVER		ABUTMENT NO. 1	
	SHEET NUMBER		23		OF 28	
PROJ. MANAGER	CHECKED-REVIEWED	DESIGNED-DETAILED	REVISIONS 1	REVISIONS 2	REVISIONS 3	REVISIONS 4
S. BOOGE	R. BULGER	R. NIMON				
BY	DATE	SIGNATURE	P.E. NUMBER	DATE		
R. NIMON	05/2010					



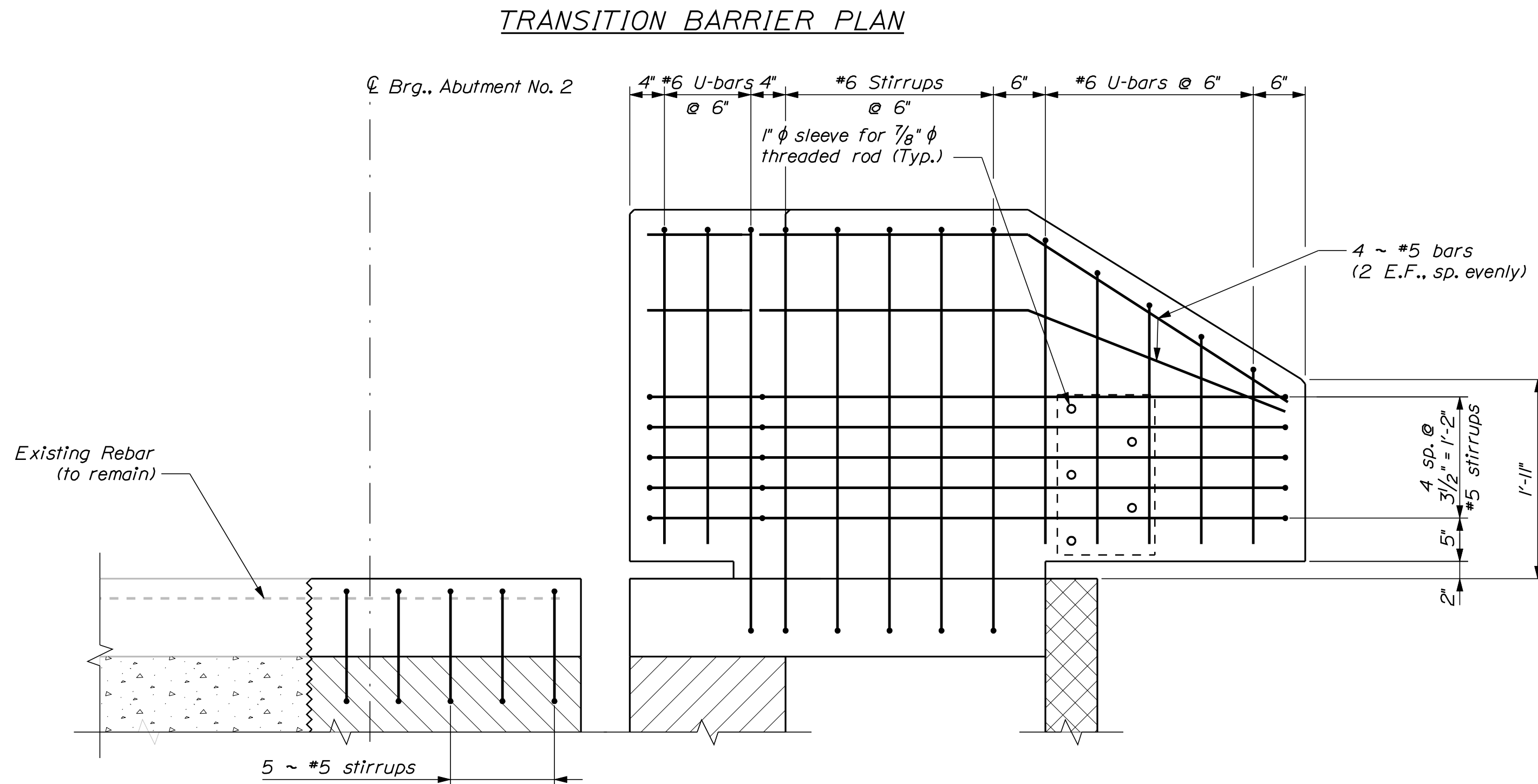
CONCRETE TRANSITION BARRIER



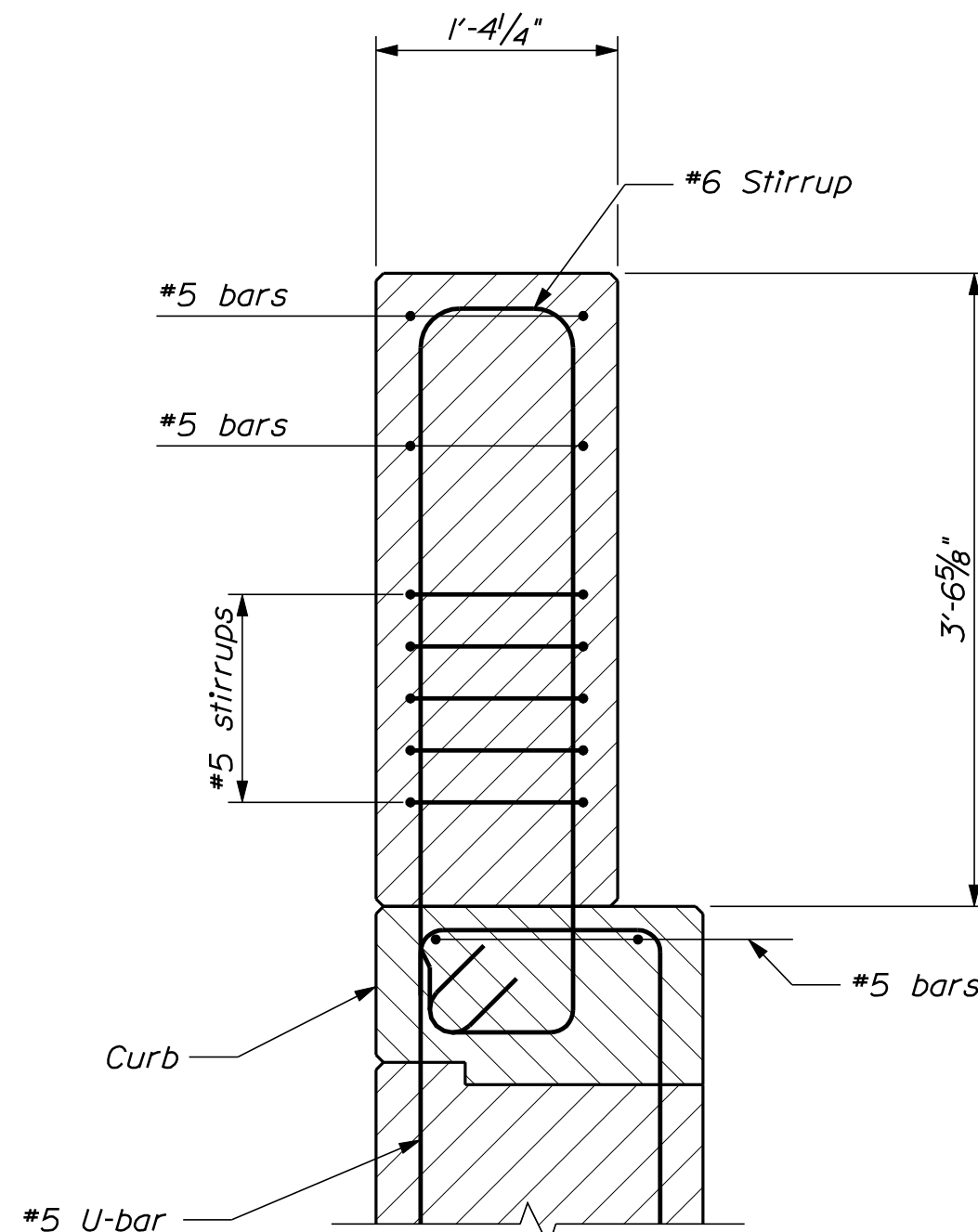
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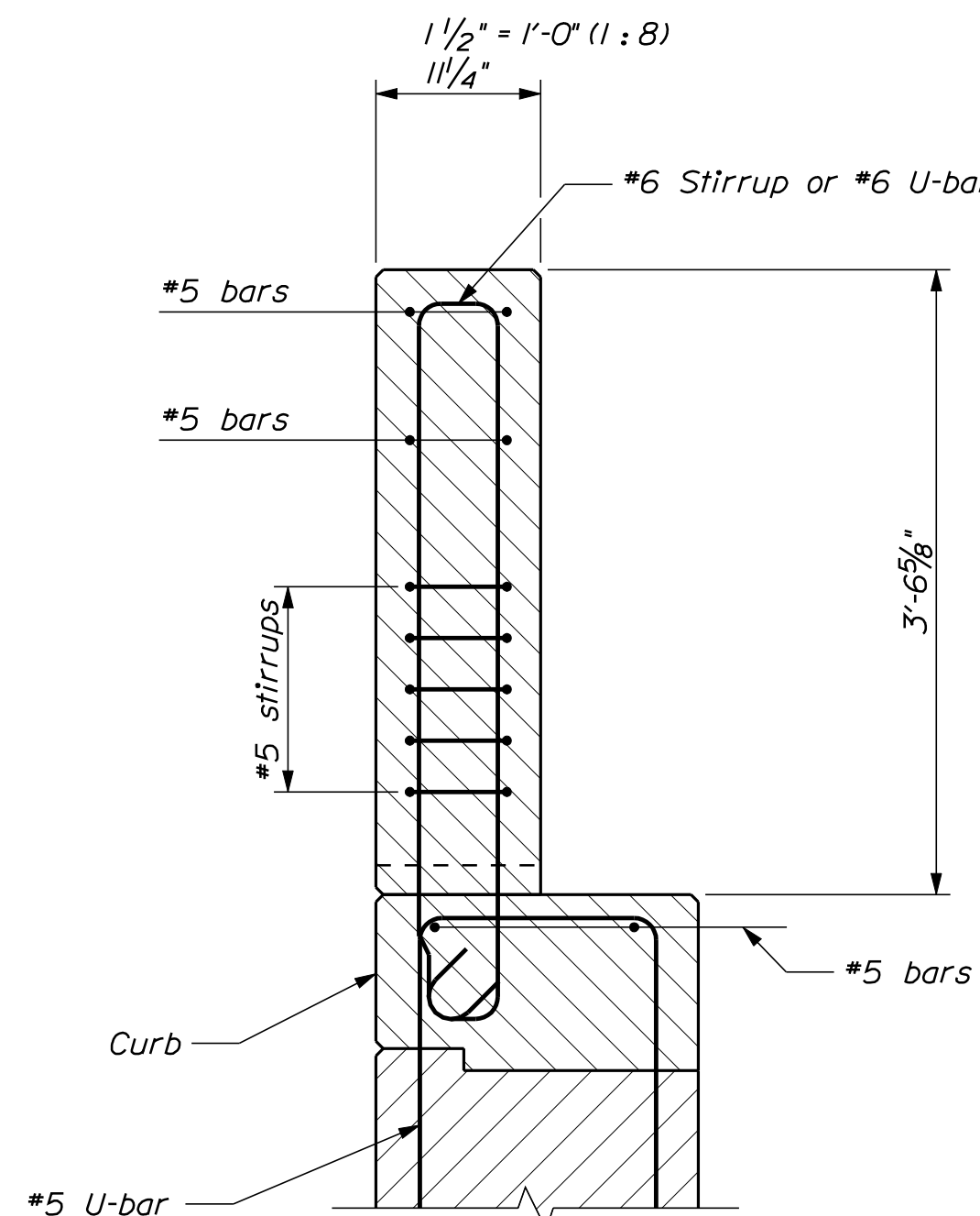
ANCHOR PLATE



TRANSITION BARRIER ELEVATION



SECTION THROUGH STEM

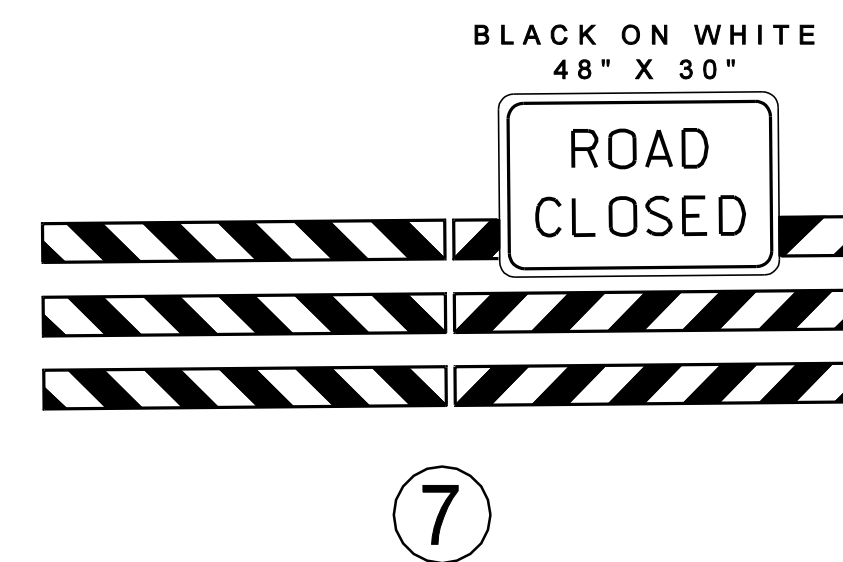


SECTION THROUGH RECESS

PROJ. MANAGER	S. BOODE	BY	DATE
DESIGN-DETAILED	R. BULGER	R. NIMON	05/2010
CHECKED-REVIEWED			
DESIGN-DETAILED			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

VETERANS REMEMBRANCE BRIDGE
PENOBSCOT RIVER
BANGOR-BREWER PENOBSCOT COUNTY
CONCRETE TRANSITION BARRIER
ABUTMENT NO. 2

DETOUR SIGNING PLAN
EASTBOUND OFF-RAMP CLOSURE
I-395 EB TO MAIN ST NB



SHEET NUMBER			VETERANS REMEMBRANCE BRIDGE			PROJ. MANAGER			S. BOODE		BY		DATE		STATE OF MAINE																				
25 OF 28			PENOBSCOT RIVER			BANGOR-BREWER			PENOBSCOT COUNTY			DESIGN-DETAILED			R. BULGER			R. WILSON			05/20/10			DEPARTMENT OF TRANSPORTATION											
												CHECKED-REVIEWED												SIGNATURE											
												DESIGN2-DETAILED2																							
												DESIGN3-DETAILED3																							
												REVISIONS 1												P.E. NUMBER											
			DETOUR PLAN																		IM-A710(000)E														
																								REVISIONS 2											
																								REVISIONS 3											
																								REVISIONS 4											
																								FIELD CHANGES											
																					BRIDGE NO. 1558			PIN			17100.00			BRIDGE PLANS					

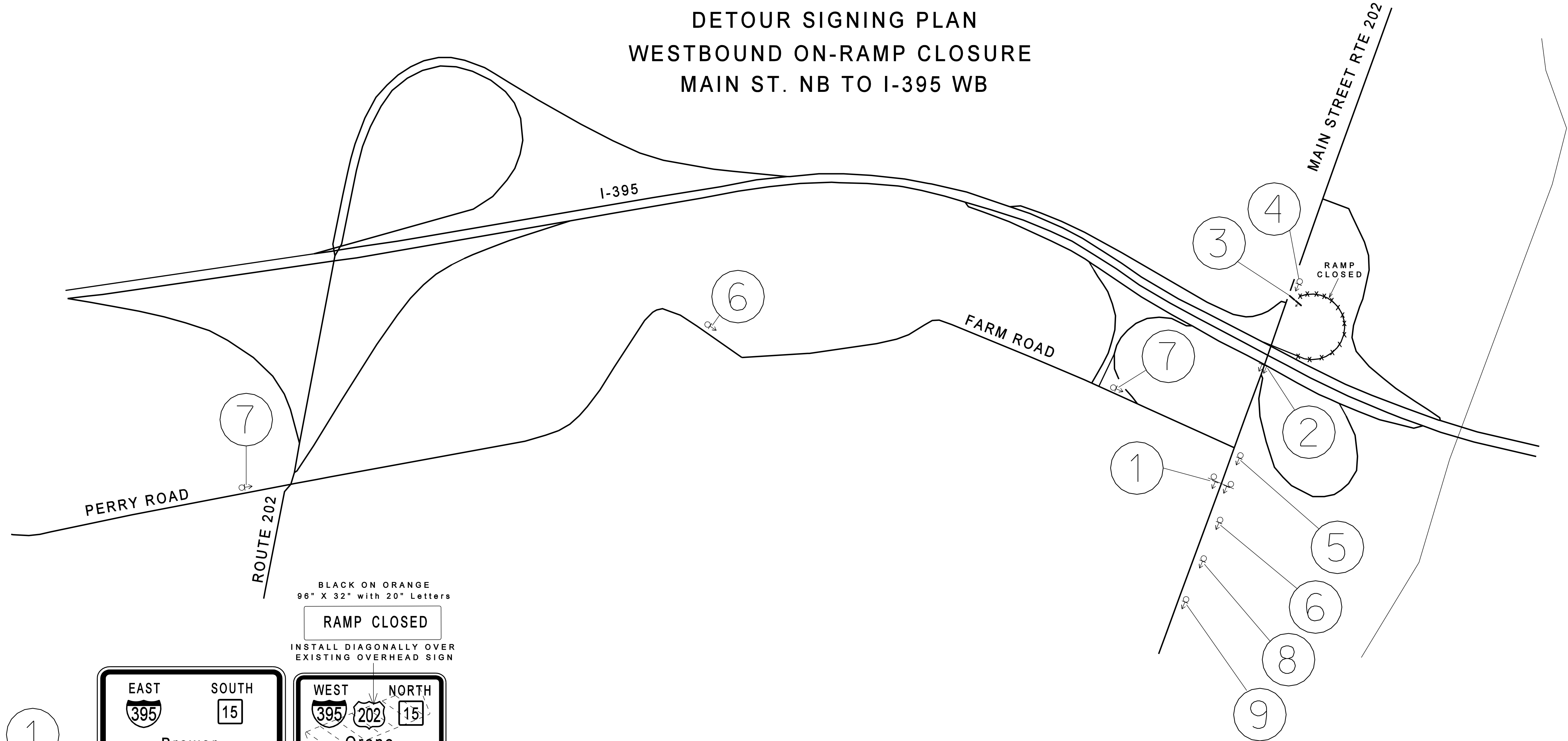
NOT TO SCALE

STAGES 2 & 3 - BANGOR

DETOUR SIGNING PLAN

WESTBOUND ON-RAMP CLOSURE

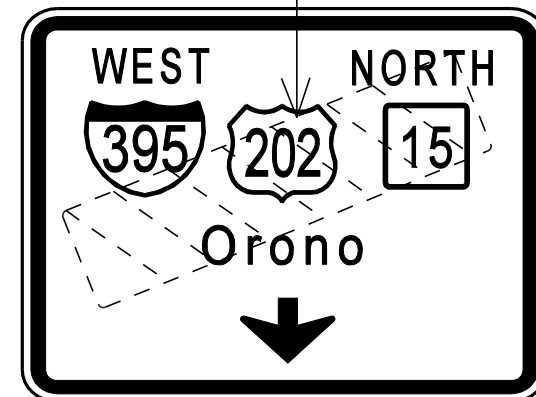
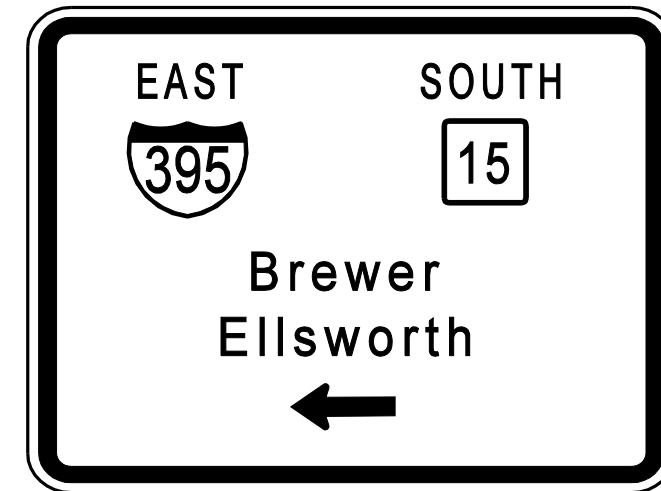
MAIN ST. NB TO I-395 WB



BLACK ON ORANGE
96" X 32" with 20" Letters

RAMP CLOSED

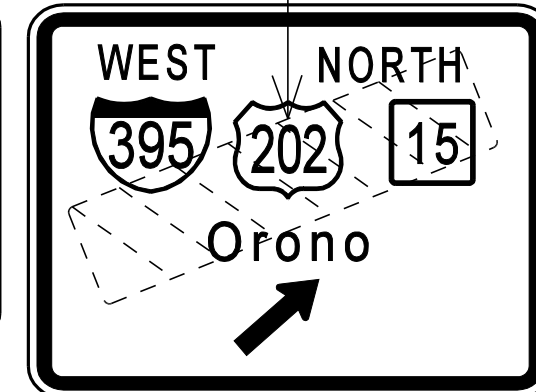
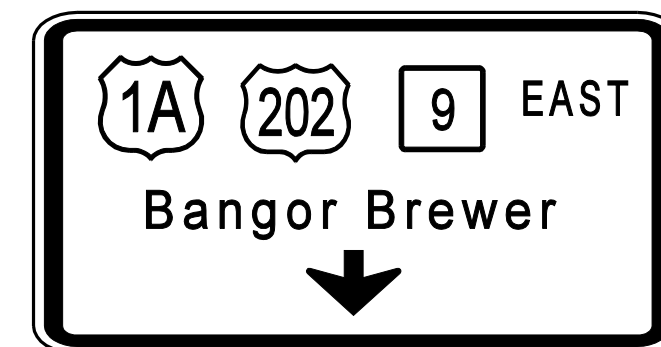
INSTALL DIAGONALLY OVER
EXISTING OVERHEAD SIGN



BLACK ON ORANGE
96" X 32" with 20" Letters

RAMP CLOSED

INSTALL DIAGONALLY OVER
EXISTING OVERHEAD SIGN



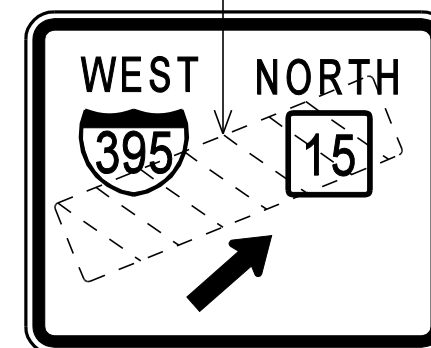
BLACK ON WHITE
48" X 30"

RAMP
CLOSED

BLACK ON ORANGE
60" X 24" with 16" Letters

RAMP CLOSED

INSTALL DIAGONALLY OVER
EXISTING SIGN



24" X 12" B/O

24" X 12" B/W

24" X 12" B/W

24" X 24"
R/W/BLUE


21" X 15" B/W






BLACK ON ORANGE
36" X 72"

[illegible]

10

JUNCTION 
All Points
North and South
2 1/2 MILES

EXIT 3
EAST
  
Downtown
Bangor
Hampden
EXIT 1/2 MILE

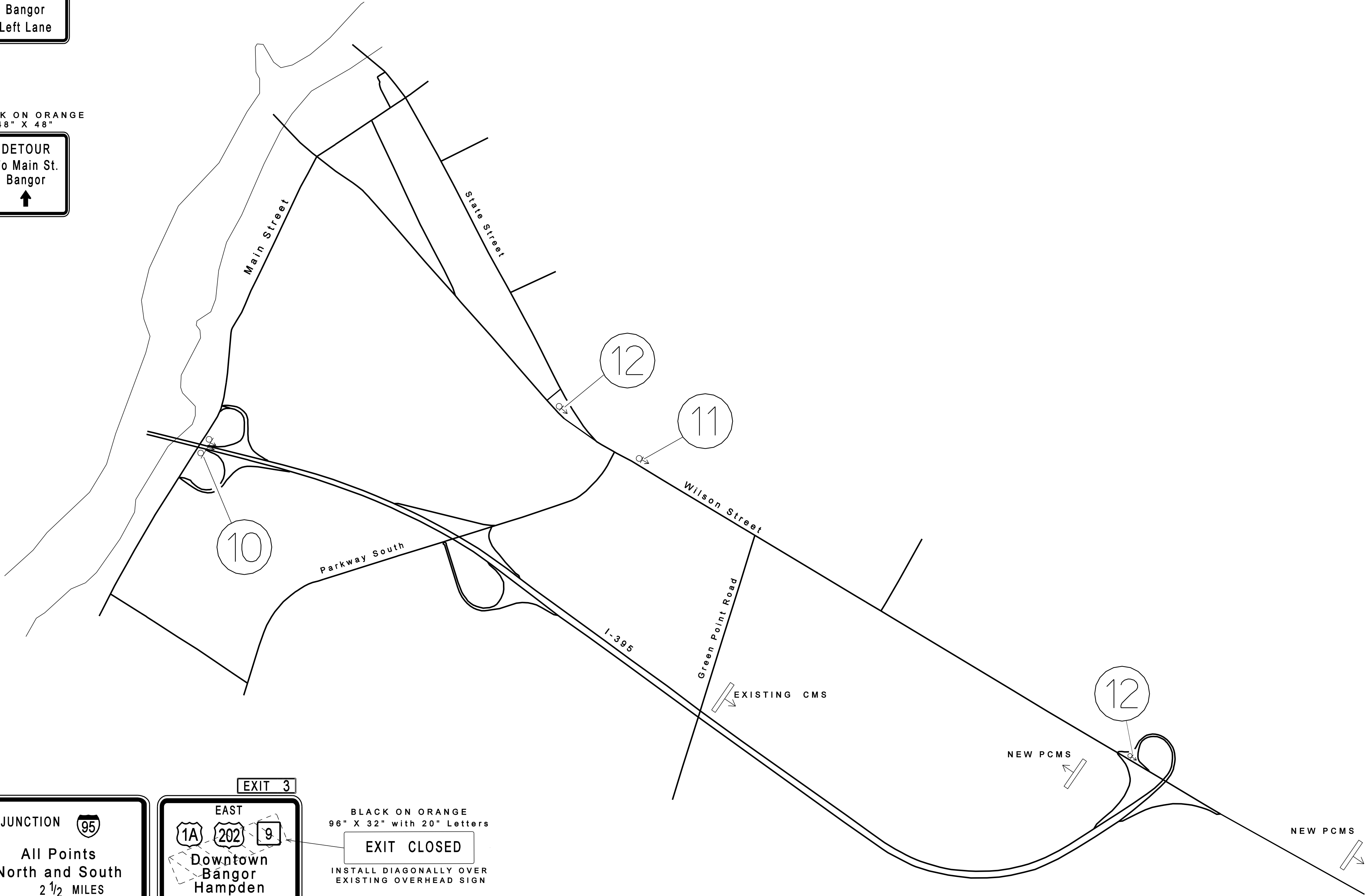
BLACK ON ORANGE
96" X 32" with 20" Letters
EXIT CLOSED
INSTALL DIAGONALLY OVER
EXISTING OVERHEAD SIGN

11

BLACK ON ORANGE
48" X 48"
DETOUR
To Main St.
Bangor
Left Lane

12

BLACK ON ORANGE
48" X 48"
DETOUR
To Main St.
Bangor
↑



NOT TO SCALE

STAGE 3

DETOUR SIGNING PLAN IN BREWER
WESTBOUND OFF-RAMP CLOSURE
I-395 WB TO MAIN ST BANGOR

VETERANS REMEMBRANCE BRIDGE

PENOBSCOT RIVER

BANGOR-BREWER PENOBSCOT COUNTY

DETOUR PLAN

SHEET NUMBER

27

OF 28

STATE OF MAINE

DEPARTMENT OF TRANSPORTATION

IM-A710(000)E

BRIDGE NO. 1558

PIN

17100.00

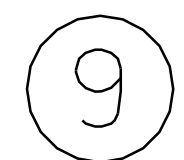
BRIDGE PLANS

PROJ. MANAGER	S. BOODE	BY	DATE
CHECKED-REVIEWED	R. BULGER	R. NIMON	05/2010
DESIGN-DETAILED			
DESIGNS DETAILLED			
DESIGNS DETAILLED			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE



BLACK ON ORANGE
48" X 48"

BLACK ON ORANGE
96" X 32" with 20" Letters

INSTALL DIAGONALLY OVER
EXISTING OVERHEAD SIGN



<div>28</div> <div>OF 28</div>		SHEET NUMBER		VETERANS REMEMBRANCE BRIDGE				PROJ. MANAGER		S. BODGE		BY		DATE		STATE OF MAINE DEPARTMENT OF TRANSPORTATION IM-A710(000)E	
				PENOBSCOT RIVER				DESIGN-Detailed		R.BULLER		R.NIMON		05/2010			
				BANGOR-BREWER PENOBSCOT COUNTY				CHECKED-REVIEWED						SIGNATURE			
								DESIGN2-Detailed2									
								DESIGN3-Detailed3						P.E. NUMBER			
DETOUR PLAN				REVISIONS 1												BRIDGE NO. 1558 PIN 17100.00 BRIDGE PLANS	
				REVISIONS 2													
				REVISIONS 3													
				REVISIONS 4													
				FIELD CHANGES								DATE					