

# 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

**LIST OF DRAWINGS**

Title Sheet.....	1
Abutment No. 1 - Joint.....	2
Abutment No. 1 - Trough.....	3
Abutment No. 2 - Joint.....	4
Abutment No. 2 - Trough.....	5
Pier No. 6 - Joint.....	6
Pier No. 6 - Trough.....	7
Miscellaneous Details.....	8

## WATERVILLE/WINSLOW KENNEBEC COUNTY DONALD V. CARTER BRIDGE OVER KENNEBEC RIVER

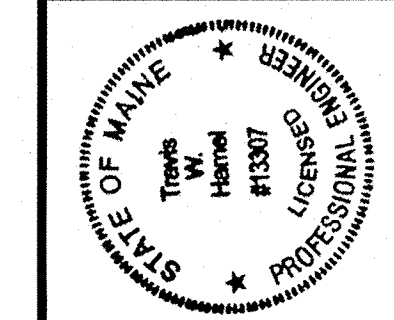
DONALD V CARTER  
FEDERAL AID PROJECT NO. 2952810  
BRIDGE NO. 1141

Lat. 44.53072° N Long. 69.64658 W

<u>PROJECT LOCATION</u>	DONALD V CARTER BRIDGE (#1141) LOCATED OVER LOWER KENNEBEC RIVER LOCATED 0.30 OF A MILE NORTHWEST OF ROUTE 201
<u>OUTLINE OF WORK</u>	FABRICATION AND DELIVERY



STATE OF MAINE DEPARTMENT OF TRANSPORTATION	APPROVED	DATE
ACTING COMMISSIONER: <i>[Signature]</i>	<i>[Signature]</i>	1-12-26
		CHIEF ENGINEER: <i>[Signature]</i>



<i>[Signature]</i>	SIGNATURE
13307	P.E. NUMBER
01/12/2026	DATE

PROJECT INFORMATION	
PROGRAM	BRIDGE
PROJECT MANAGER	TRAVIS HAMEL
DESIGNER	BRET GRENER, P.E.
CONSULTANT	HNTB
PROJECT RESIDENT	
CONTRACTOR	
PROJECT COMPLETION DATE	

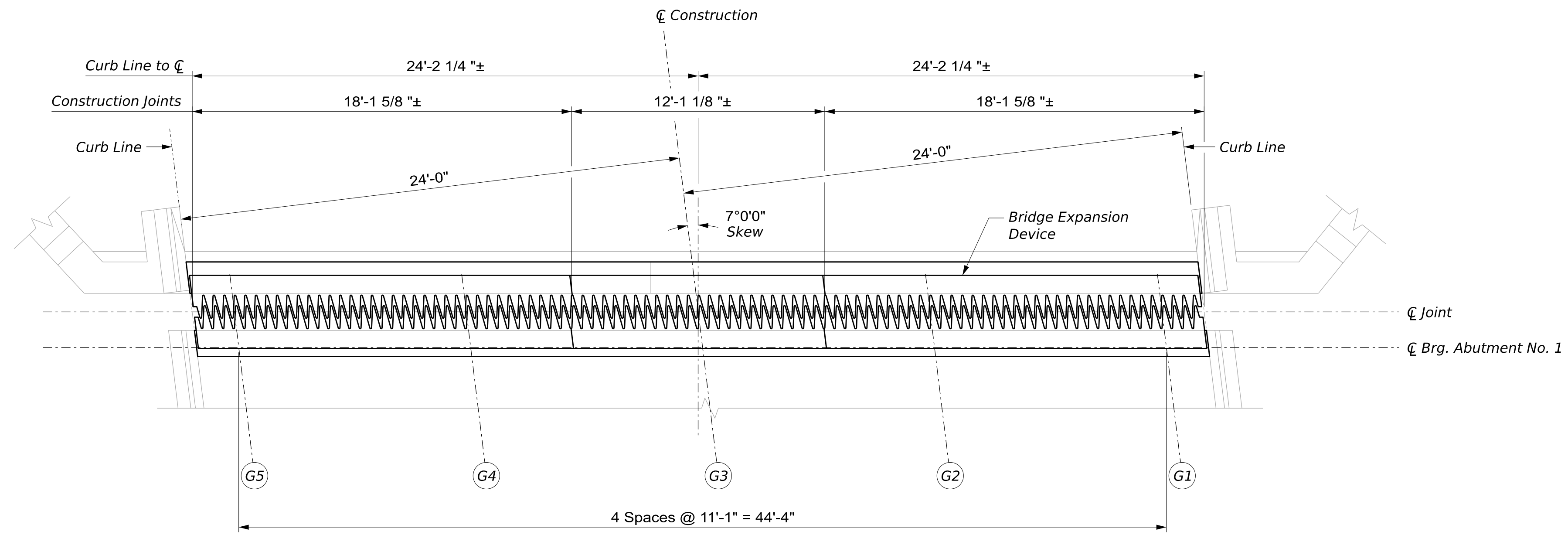
WIN 029528.10

**WATERVILLE/WINSLOW  
DONALD V. CARTER BRIDGE**

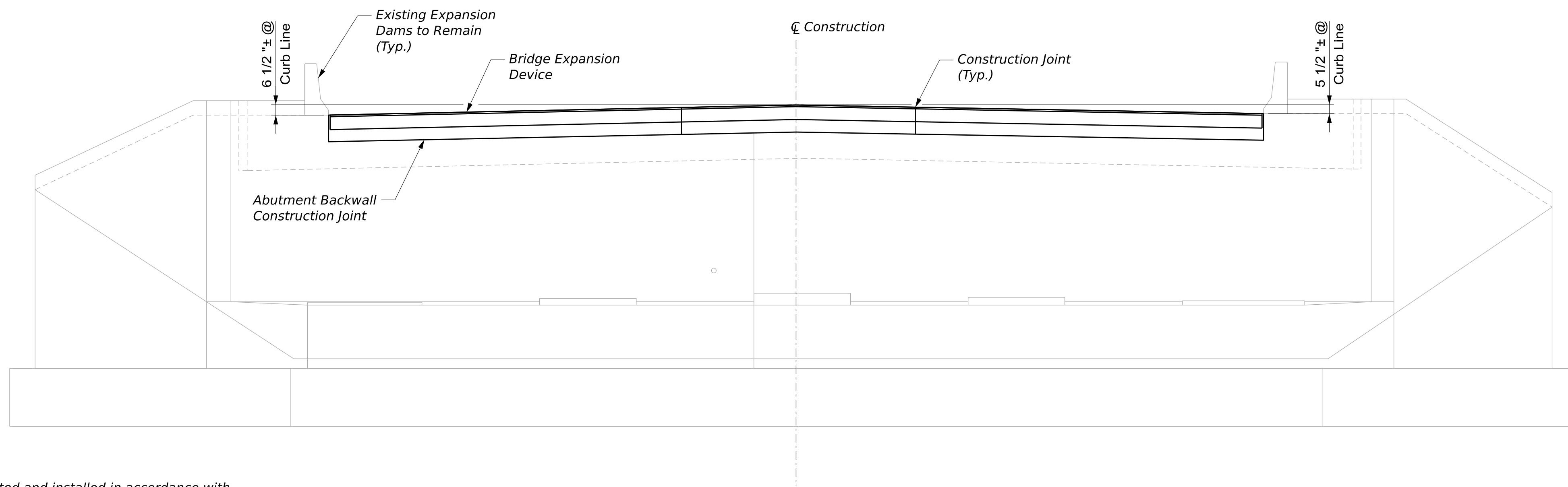
**TITLE SHEET**

<b>SHEET NUMBER</b>
<b>1</b>
OF 8

Username: ebeausoleil Date: 1/12/2026



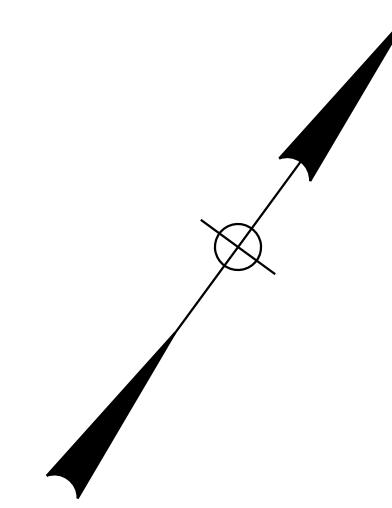
ABUTMENT NO. 1 PLAN



ABUTMENT NO. 1 ELEVATION

**EXPANSION DEVICE NOTES:**

- Expansion Device - Finger Joints shall be fabricated and installed in accordance with Standard Details 521(01) thru 521(12). Expansion device opening shall be adjusted for temperature in the field at the time of installation in accordance with MaineDOT Standard Detail 521(11). The joint geometry shall conform to the following:
  - \* Abutment No. 1 - Type E Set to 6 1/8 inch(es) at 45 degrees (Dimension "J")
  - \* Abutment No. 2 - Type C Set to 4 1/8 inch(es) at 45 degrees (Dimension "J")
  - \* Pier No. 6 - Type D Set to 5 1/8 inch(es) at 45 degrees (Dimension "J")
- The finger joints for both abutments shall be installed in three stages to accommodate the bridge deck and abutment construction joint locations. Connection between the three stages shall be achieved using a prequalified V-groove field weld.
- Finger joint embedded anchor studs specified in Standard Details 521 shall be replaced with loop anchor as detailed in this plan set and spaced at 1'-0".
- Payment for curtain troughs shall be incidental to Item 521.23 Expansion Device - Finger Joint. FRP downspouts are not part of this Contract and shall be fabricated and installed by Others.
- Silicone sealant shall be selected from The MaineDOT Qualified Products List for Bridge Seals and Joints.



STATE OF MAINE  
DEPARTMENT OF TRANSPORTATION  
Federal Project No. 2952810

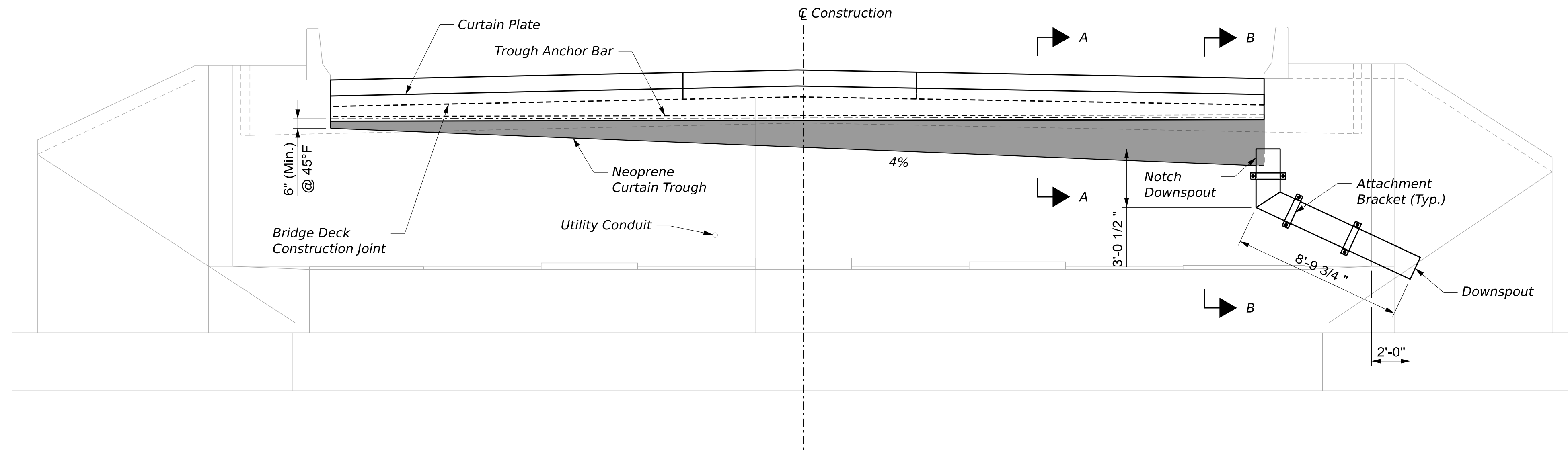
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P.E. NUMBER  
DATE

PROJ. MANAGER	TRAVIS-HAMEL	BY	DATE
DESIGN-DETAILED	B. GRENER	E. BEAUSOLEIL	11/14/25
CHECKED-REVIEWED	K. BRAVLEY	A. STEPHENS	11/14/25
DESIGN-DETAILED 2			
DESIGN-DETAILED 3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

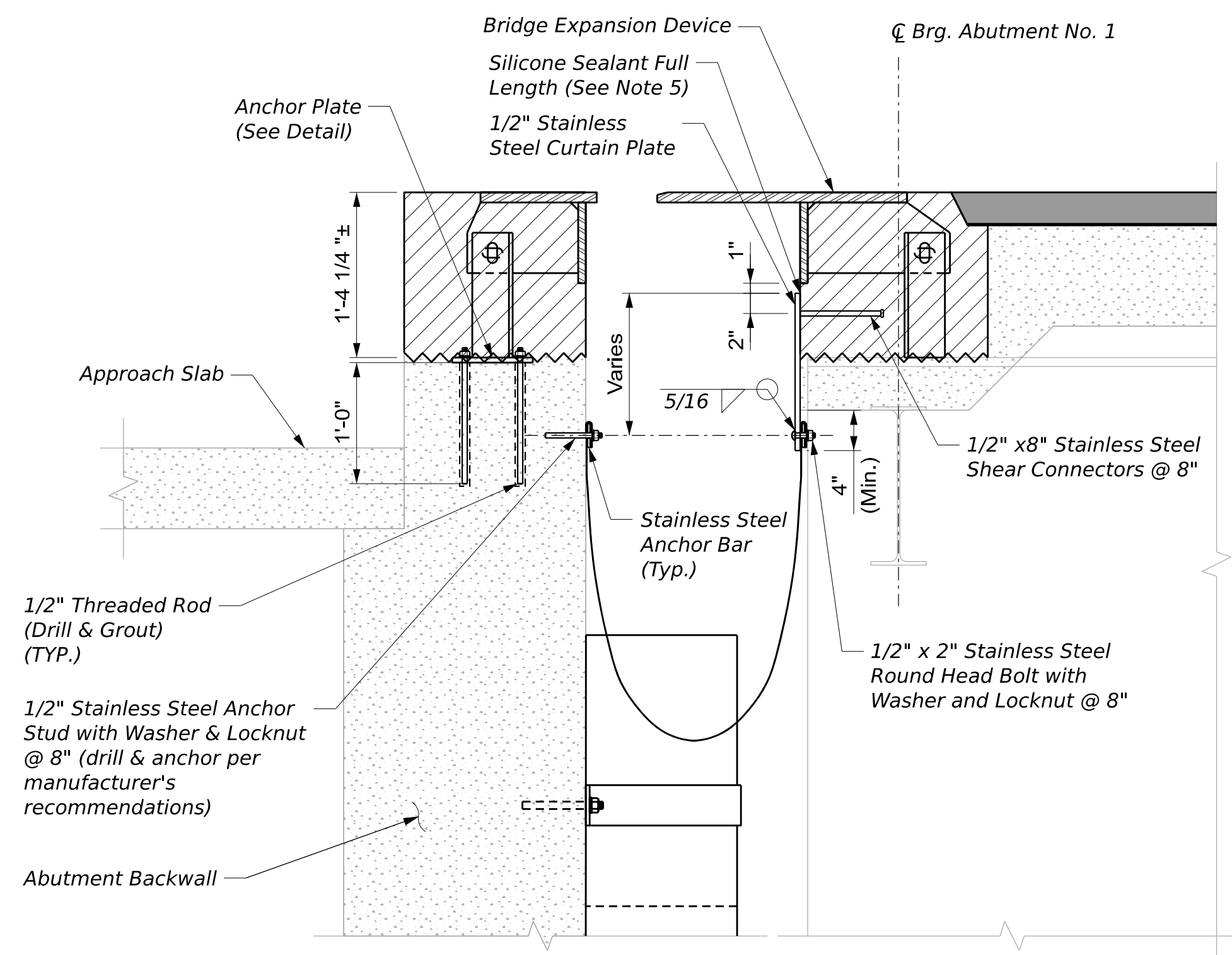
DONALD V CARTER BRIDGE NO. 1141  
CROSSING KENNEBEC RIVER  
WATERVILLE/WINSLOW  
ABUTMENT NO. 1 - JOINT

SHEET NUMBER  
2  
OF 8

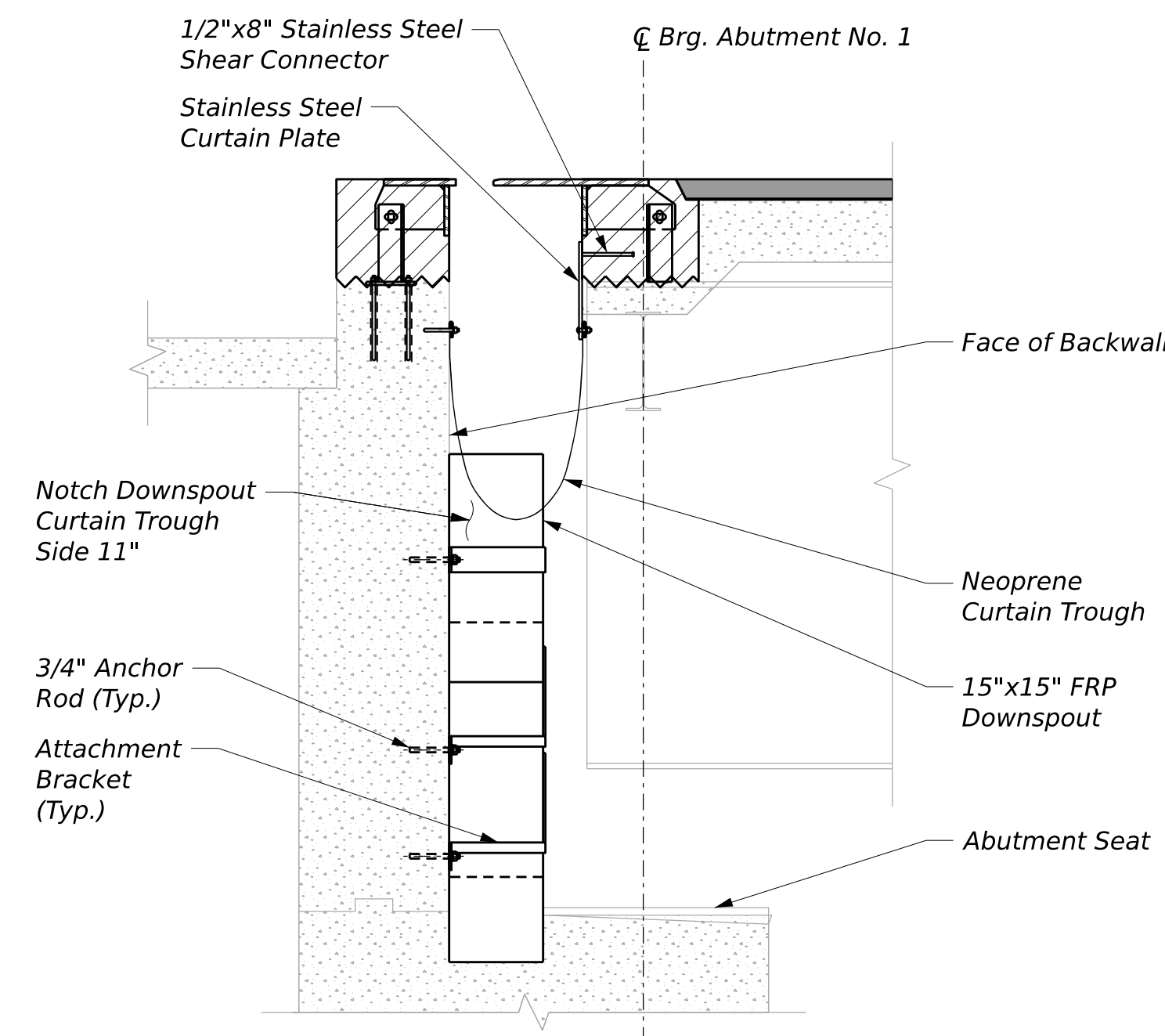




ABUTMENT NO. 1 ELEVATION



SECTION A-A



SECTION B-B

STATE OF MAINE  
DEPARTMENT OF TRANSPORTATION  
Federal Project No. 2952810

SIGNATURE  
P.E. NUMBER  
DATE

PROJ. MANAGER	TRAVIS HAMEL	BY	DATE
DESIGN-DETAILED	B. GRENER	E. BEAUSOLEIL	11/14/25
CHECKED-REVIEWED	K. BRAVLEY	A. STEPHENS	11/14/25
DESIGN-DETAILED 2			
DESIGN-DETAILED 3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

DONALD V CARTER BRIDGE NO. 1141  
CROSSING KENNEBEC RIVER  
WATERVILLE/WINSLOW  
ABUTMENT NO. 1 - TROUGH

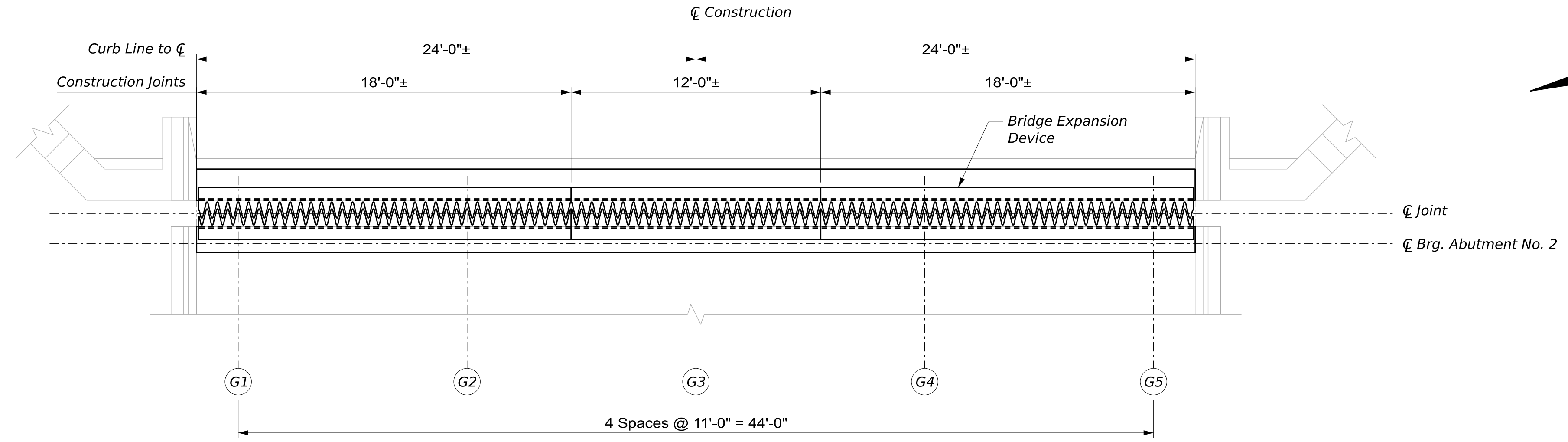
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OF 8

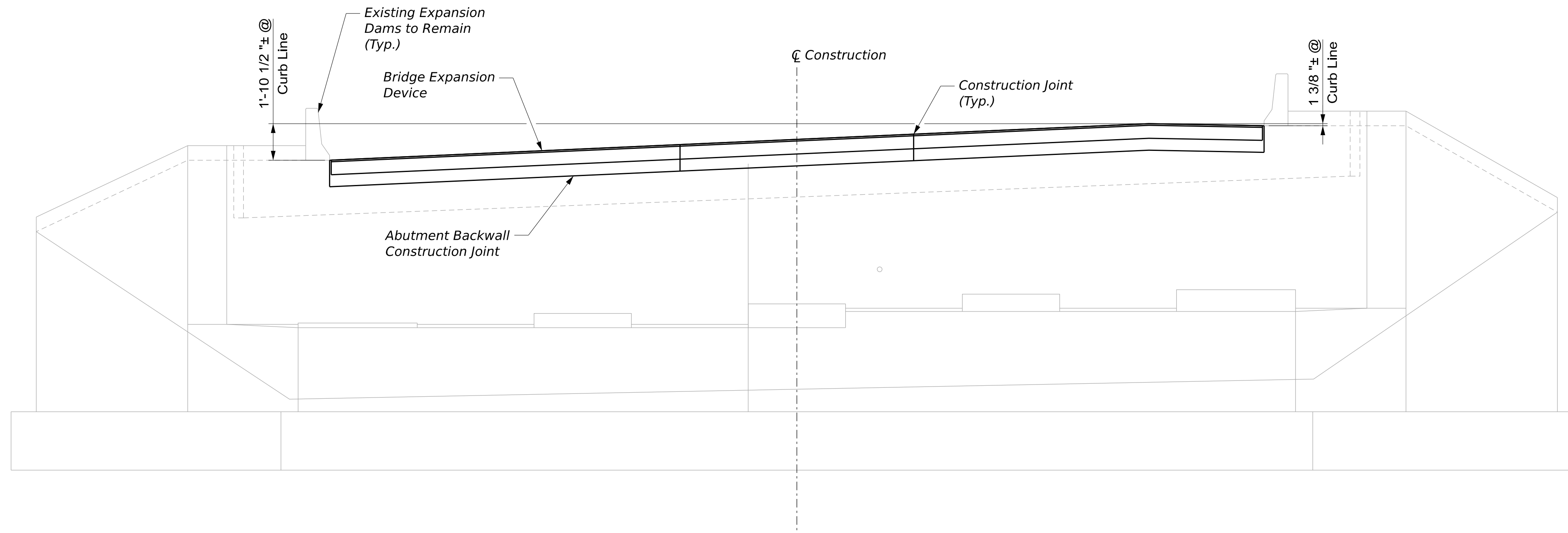


Date: 11/21/2025

Username: ebeausoleil



ABUTMENT NO. 2 PLAN



ABUTMENT NO. 2 ELEVATION

STATE OF MAINE  
DEPARTMENT OF TRANSPORTATION  
Federal Project No. 2952810  
WIN 029528.10

SIGNATURE  
P.E. NUMBER  
DATE

PROJ. MANAGER	TRAVIS HAMEL	BY	DATE
DESIGN-DETAILED	B. GRENER	E. BEAUSOLEIL	11/14/25
CHECKED-REVIEWED	K. BRAVLEY	A. STEPHENS	11/14/25
DESIGN-DETAILED 2			
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REVISIONS 1			
REVISIONS 2			
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FIELD CHANGES			

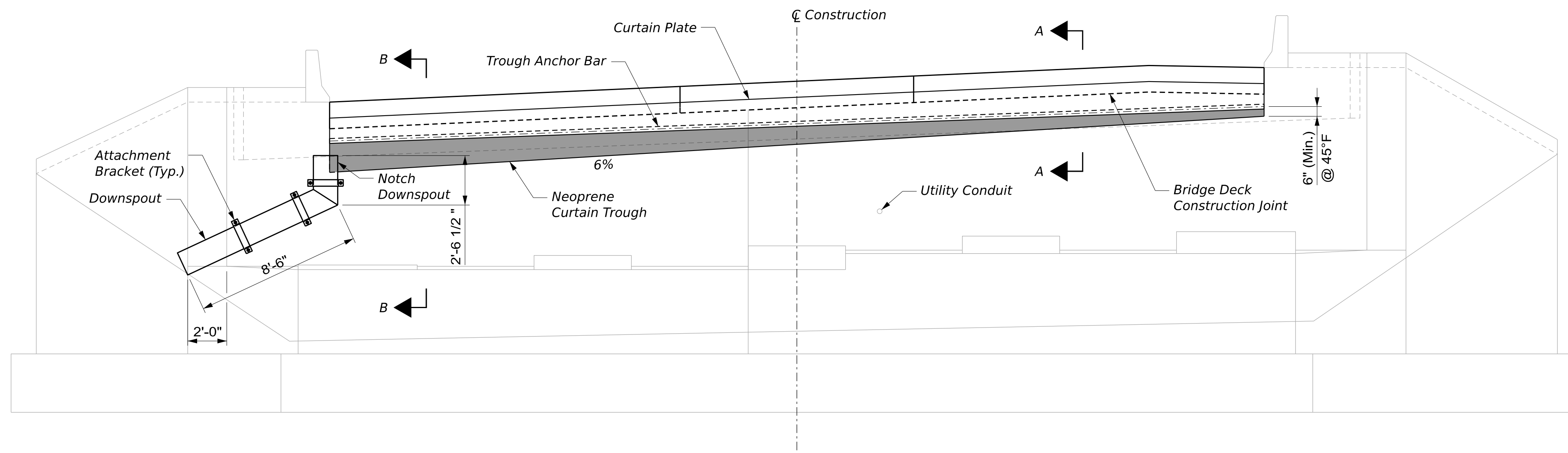
DONALD V. CARTER BRIDGE BRIDGE NO. 1141  
CROSSING KENNEBEC RIVER  
WATERVILLE/WINSLOW  
ABUTMENT NO. 2 - JOINT

SHEET NUMBER

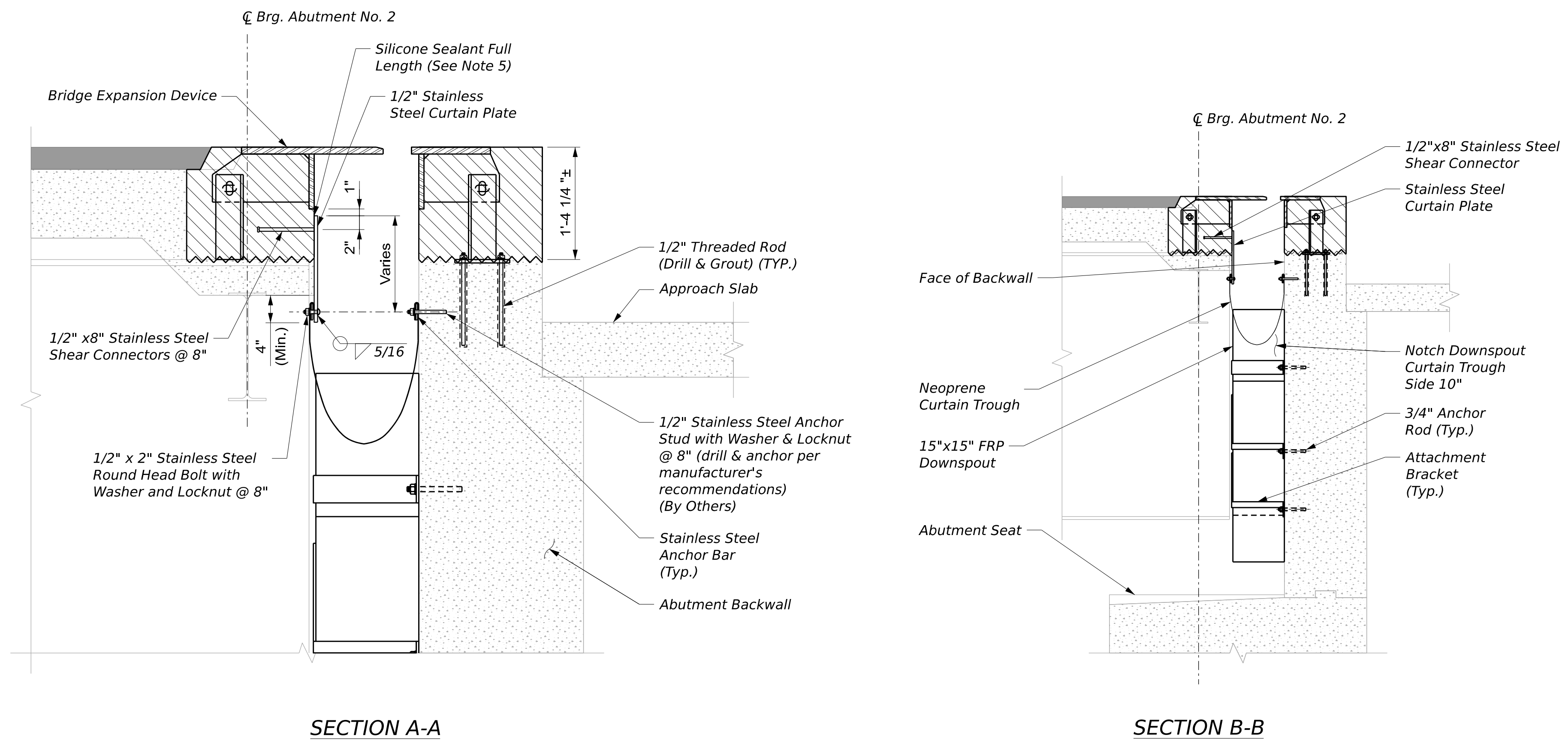
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OF 8





ABUTMENT NO. 2 ELEVATION



SECTION A-A

SECTION B-B

STATE OF MAINE		DEPARTMENT OF TRANSPORTATION	
Federal Project No. 2952810		WIN 029528.10	
PROJ. MANAGER	TRAVIS HAMEL	BY	DATE
DESIGN-DETAILED	B. GRENER	E. BEAUSOLEIL	11/14/25
CHECKED-REVIEWED	K. BRAVLEY	A. STEPHENS	11/14/25
DESIGN-DETAILED02			
DESIGN-DETAILED03			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			
SIGNATURE		P.E. NUMBER	
DATE			

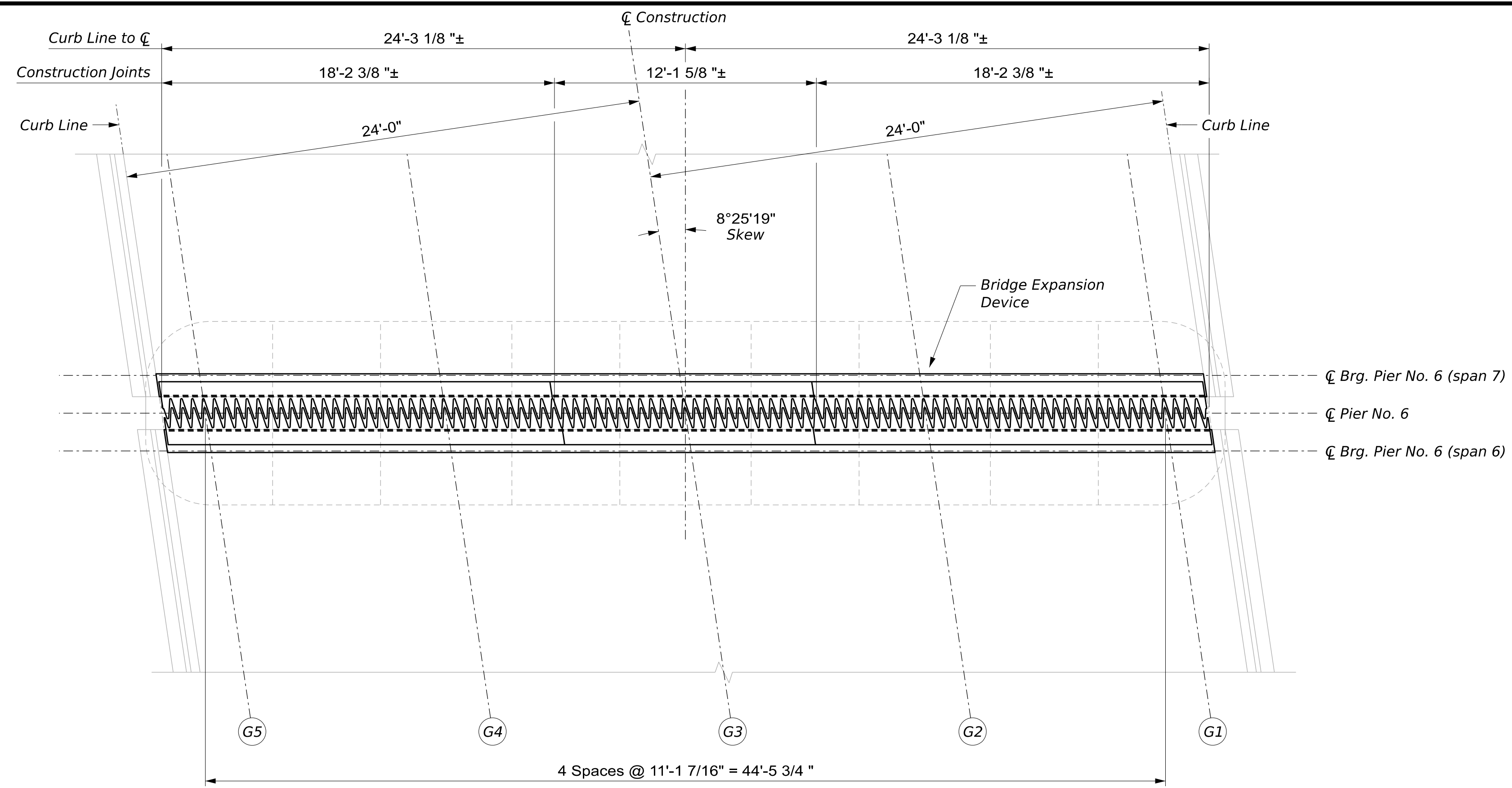
DONALD V CARTER BRIDGE NO. 1141  
 CROSSING KENNEBEC RIVER  
 WATERVILLE/WINSLOW

ABUTMENT NO. 2 - TROUGH

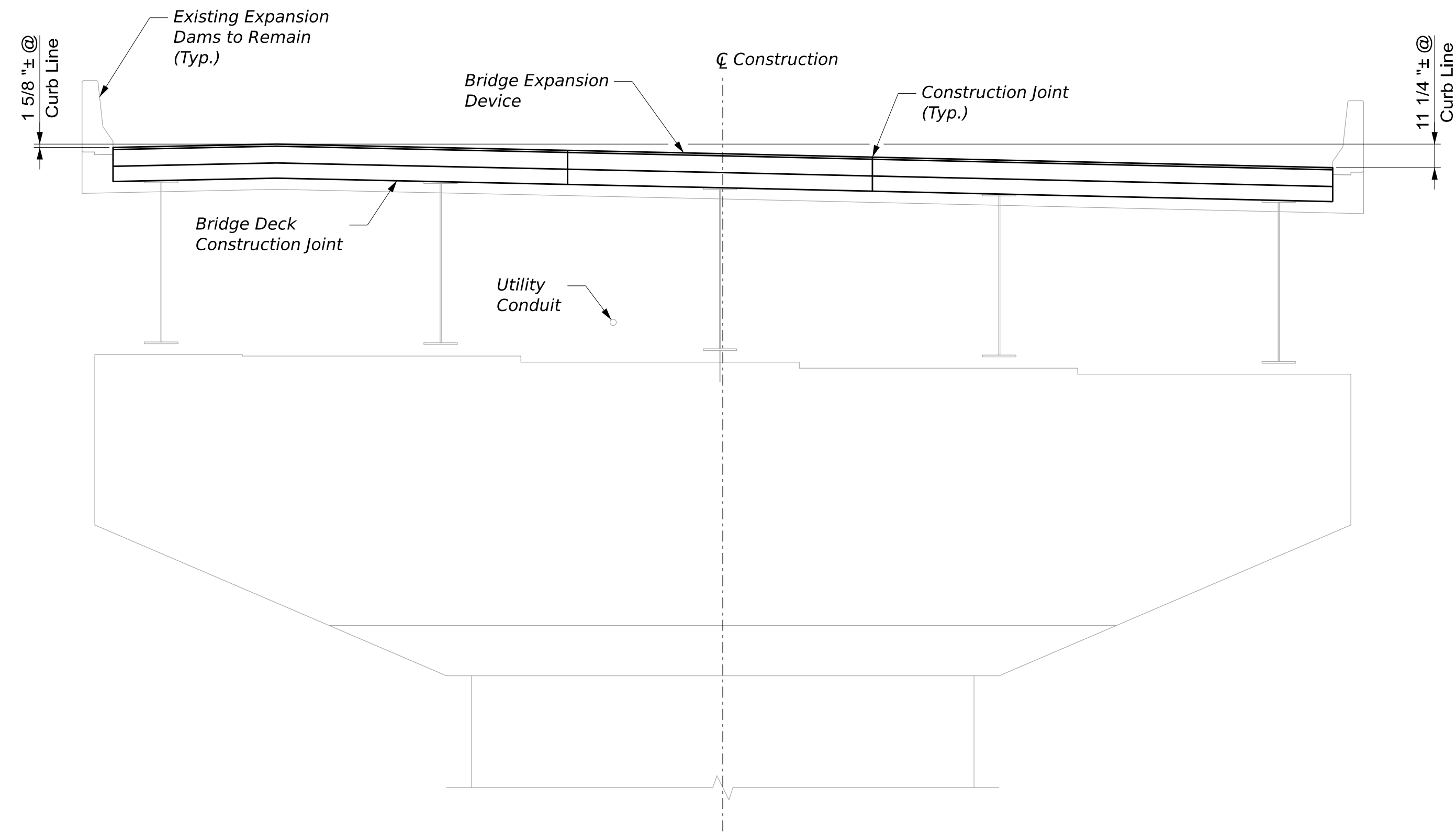
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 OF 8



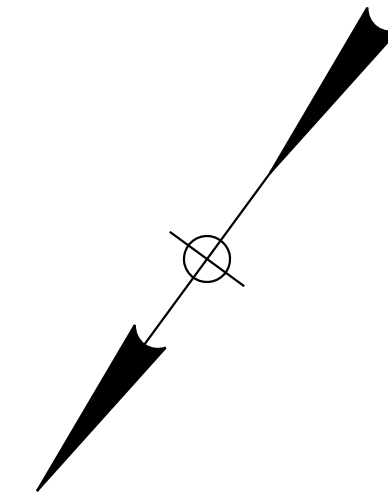
Username: ebeausoleil Date: 11/21/2025



PIER NO. 6 PLAN



PIER NO. 6 ELEVATION  
(Looking Downstation)



STATE OF MAINE  
DEPARTMENT OF TRANSPORTATION  
Federal Project No. 2952810  
WIN 029528.10

SIGNATURE  
P.E. NUMBER  
DATE

PROJ. MANAGER	TRAVIS HAMEL	BY	DATE
DESIGN-DETAILED	B. GRENIER	E. BEAUSOLEIL	11/14/25
CHECKED-REVIEWED	K. BRAVLEY	A. STEPHENS	11/14/25
DESIGN-DETAILED 2			
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REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

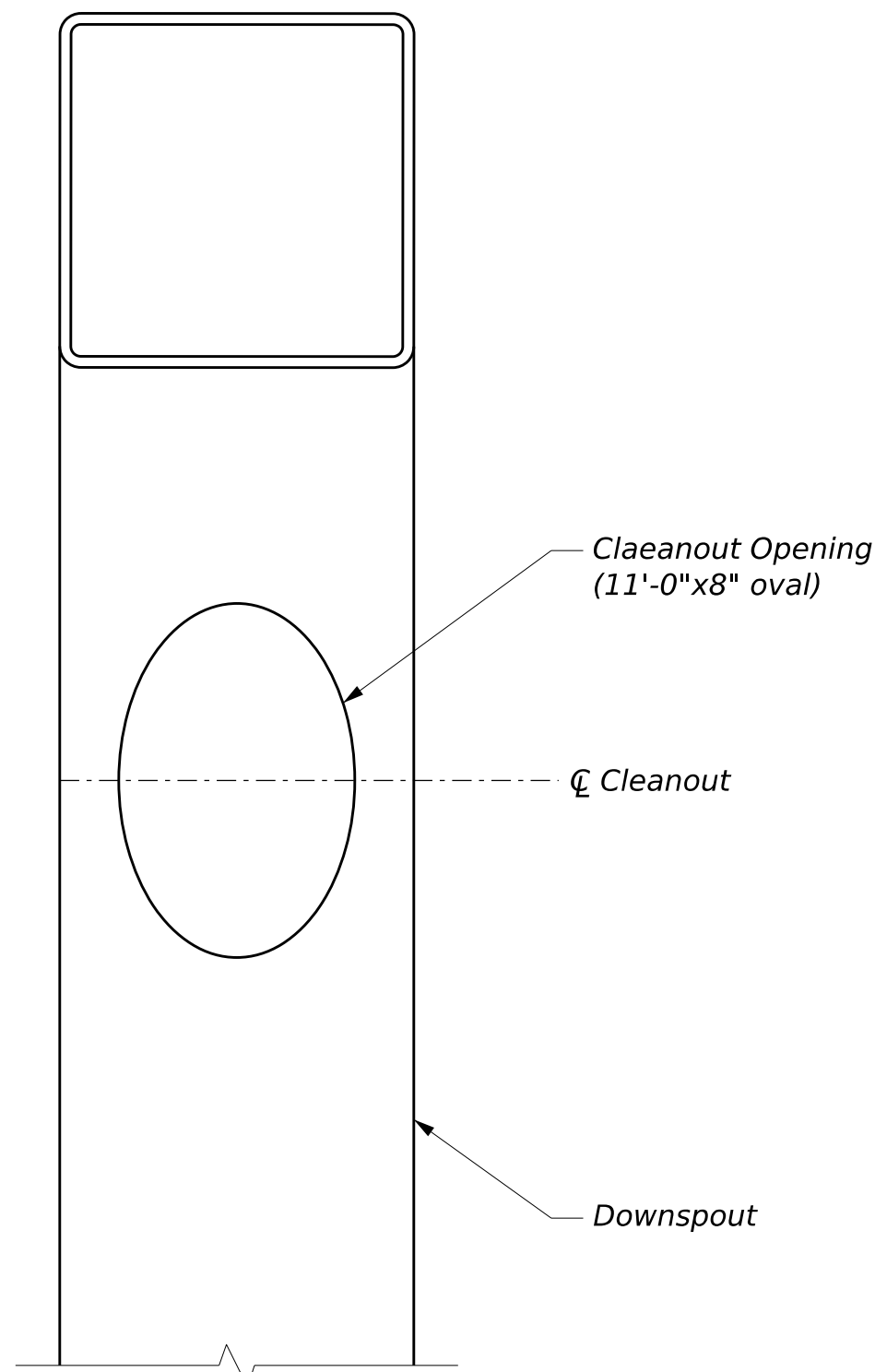
DONALD V CARTER BRIDGE NO. 1141  
CROSSING KENNEBEC RIVER  
WATERVILLE/WINSLOW  
PIER NO. 6 - JOINT

SHEET NUMBER

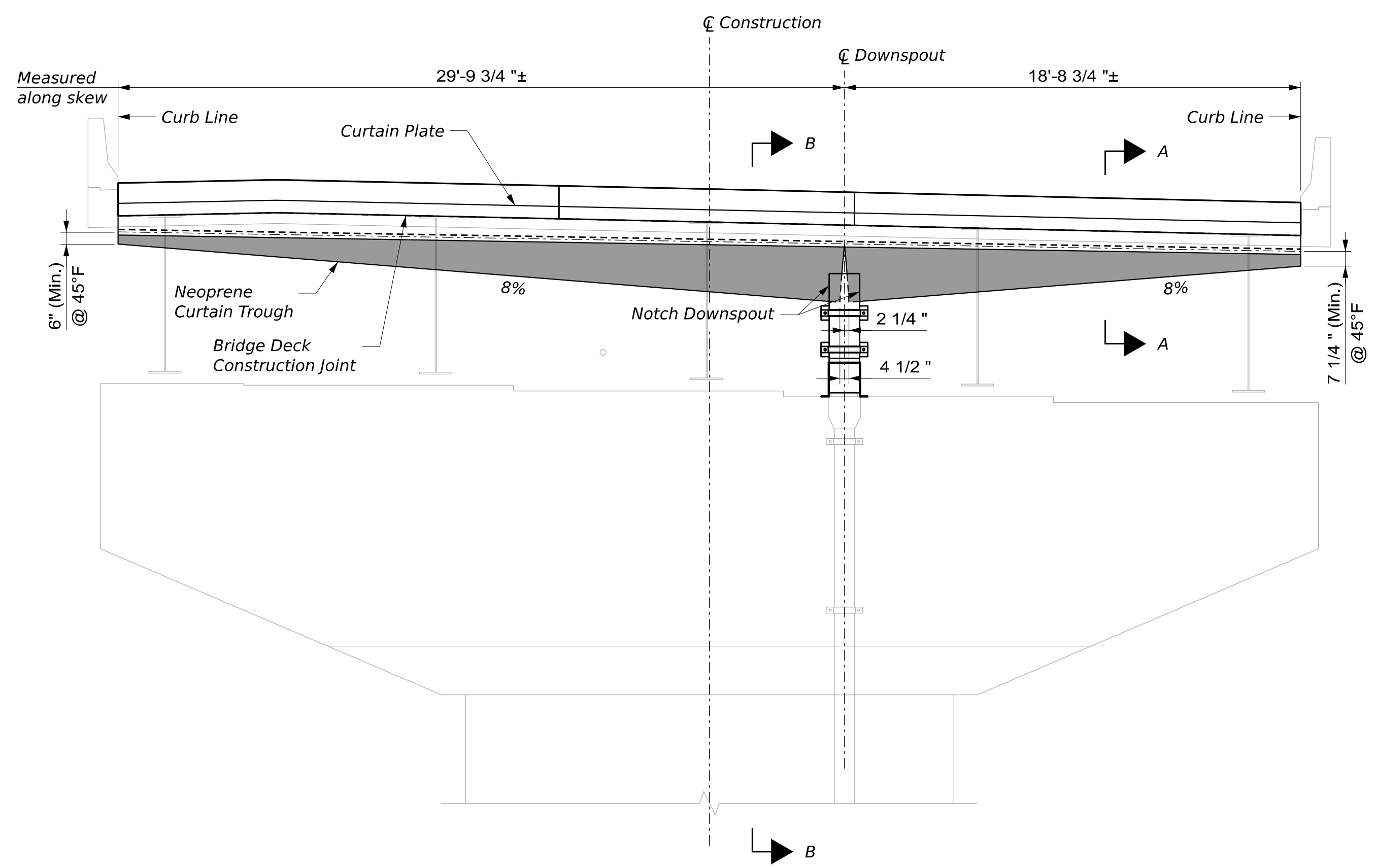
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OF 8

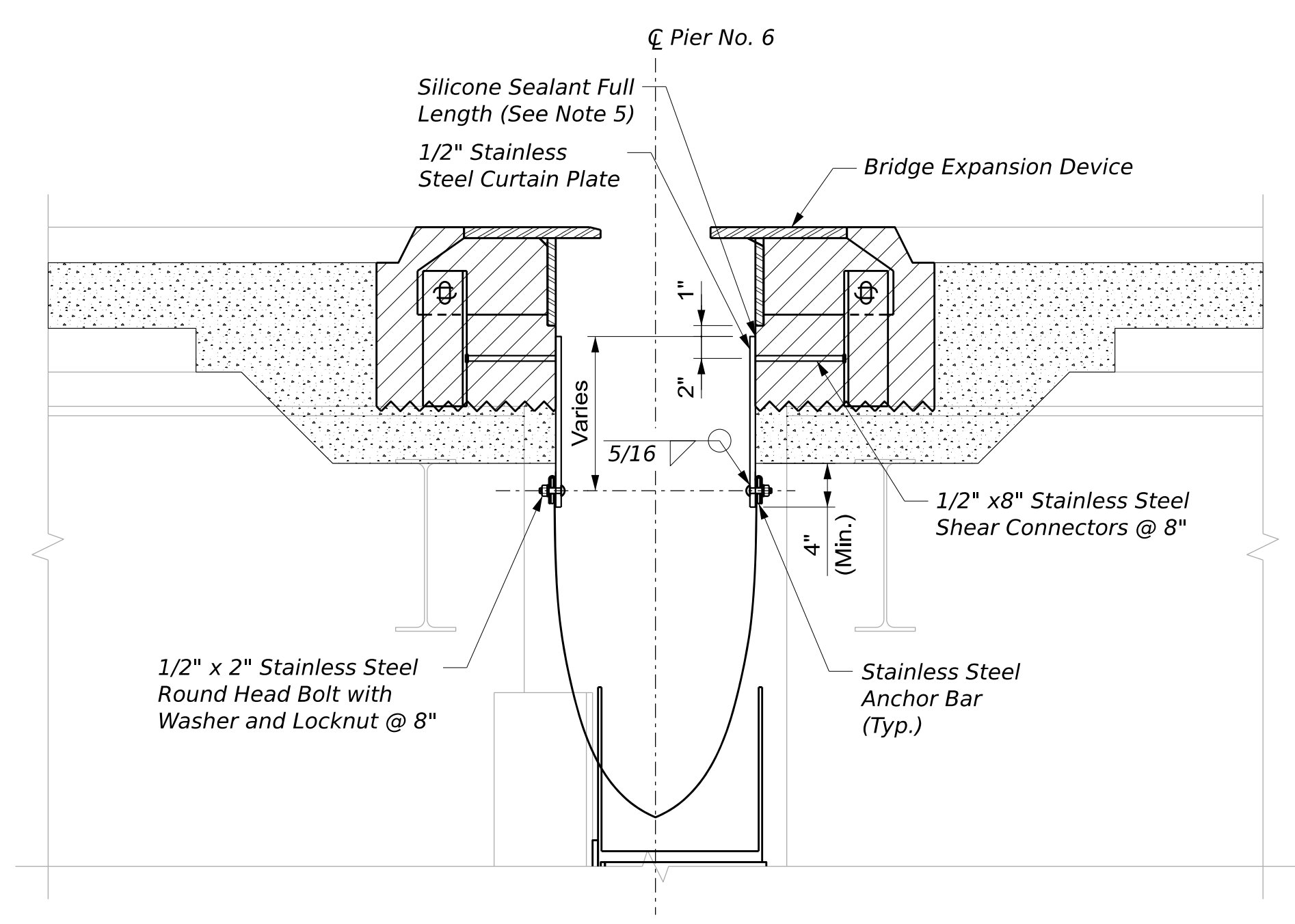




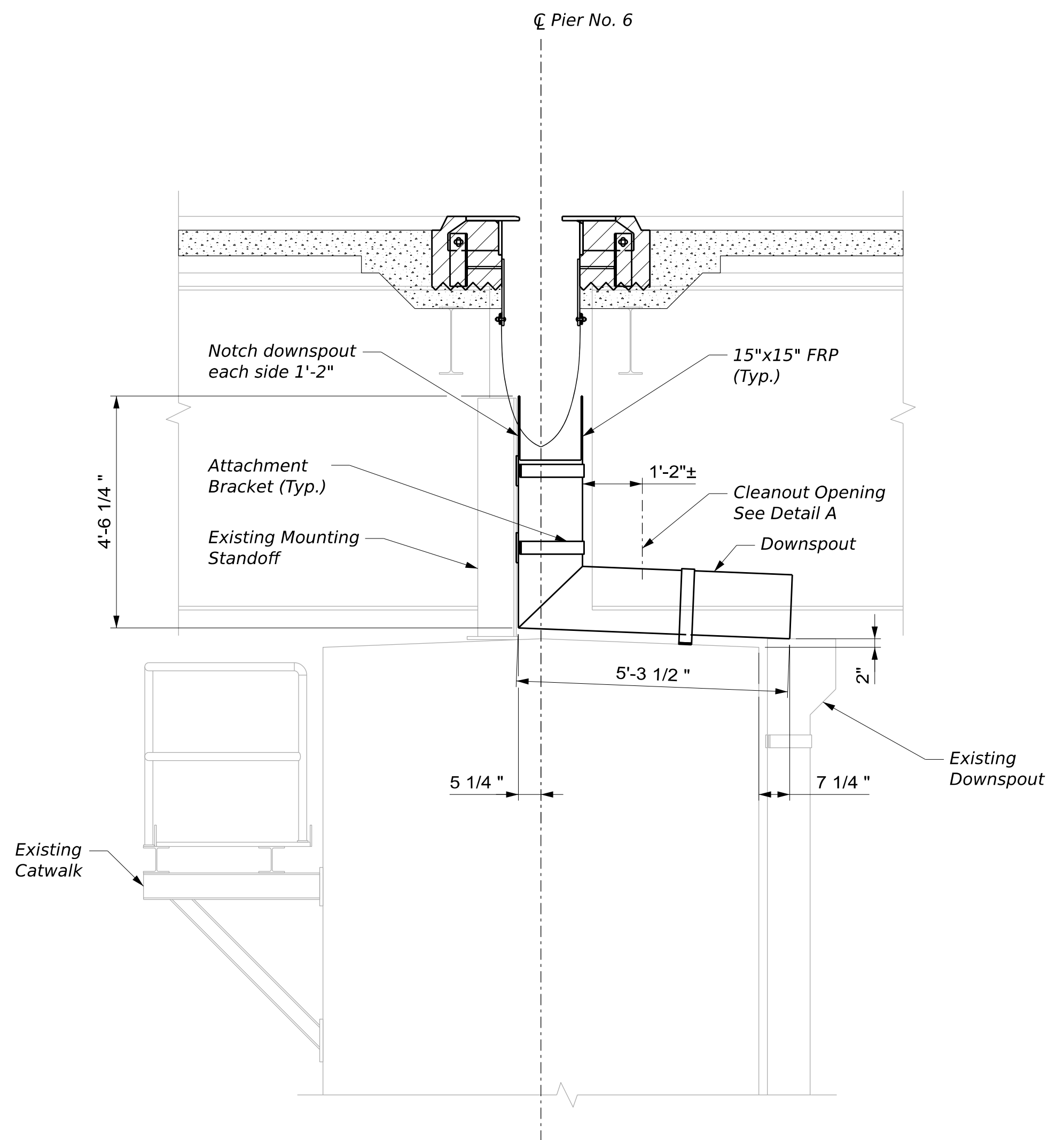
DETAIL A



PIER NO. 6 ELEVATION  
(Looking Downstation)  
(Catwalk not shown for clarity)



SECTION A-A



SECTION B-B

STATE OF MAINE		DEPARTMENT OF TRANSPORTATION	
Federal Project No. 2952810		WIN 029528.10	
PROJ. MANAGER	TRAVIS HAMEL	DATE	
DESIGN-DETAILED	B. GRENER	BY	E. BEAUSOLEIL 11/14/25
CHECKED-REVIEWED	K. BRADLEY	DATE	A. STEPHENS 11/14/25
DESIGN-DETAILED02		SIGNATURE	
DESIGN-DETAILED03		P.E. NUMBER	
REVISIONS 1		DATE	
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
		FIELD CHANGES	

DONALD V CARTER BRIDGE NO. 1141  
CROSSING KENNEBEC RIVER  
WATERVILLE/WINSLOW

PIER NO. 6 - TROUGH

SHEET NUMBER  
7  
OF 8

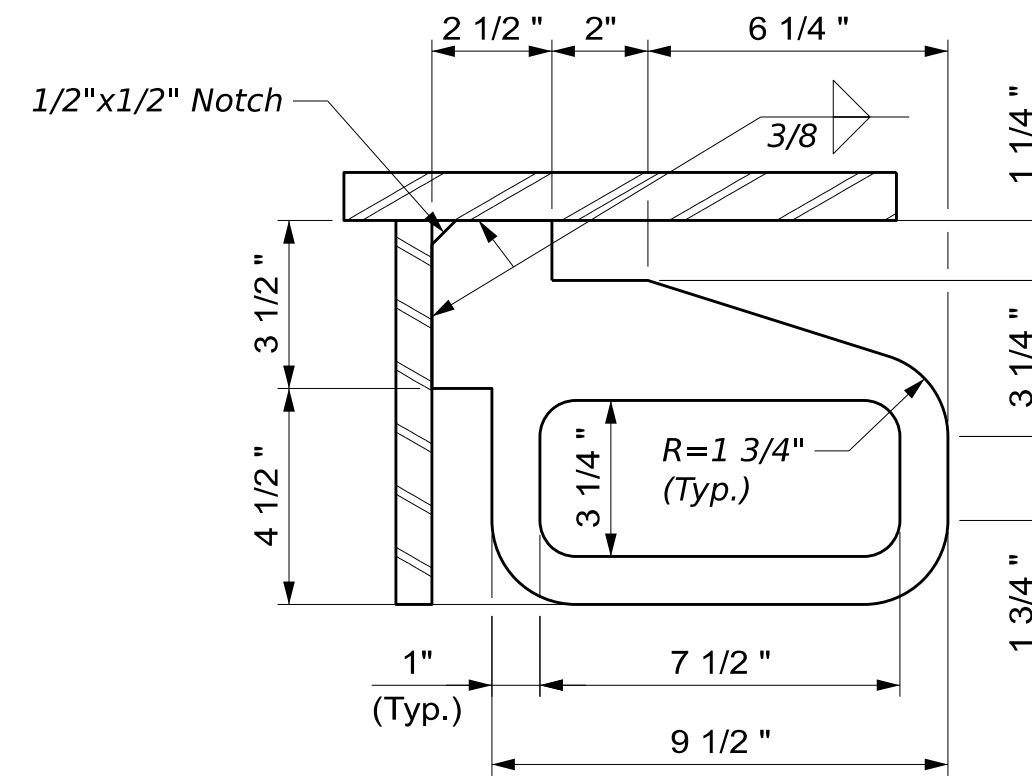


**DOWNSPOUT NOTES:**

- FRP Downspouts shall be designed and detailed based on the dimensions for the downspouts shown, and in accordance with Special Provisions Section 502, Fiber Reinforced Polymer Bridge Drains and Downspouts. Downspouts are not part of this Contract and shall be fabricated and installed by Others.
- The exact position of the downspouts shall be determined in the field and shall be coordinated with geometry of trough.
- All plates and bars shall conform to AASHTO M270 Grade 36.
- Brackets shall be galvanized in accordance with AASHTO M111 (ASTM 123) after fabrication.
- All rods and related hardware shall be ASTM A307 and shall be galvanized in accordance with ASTM (AASHTO M232).

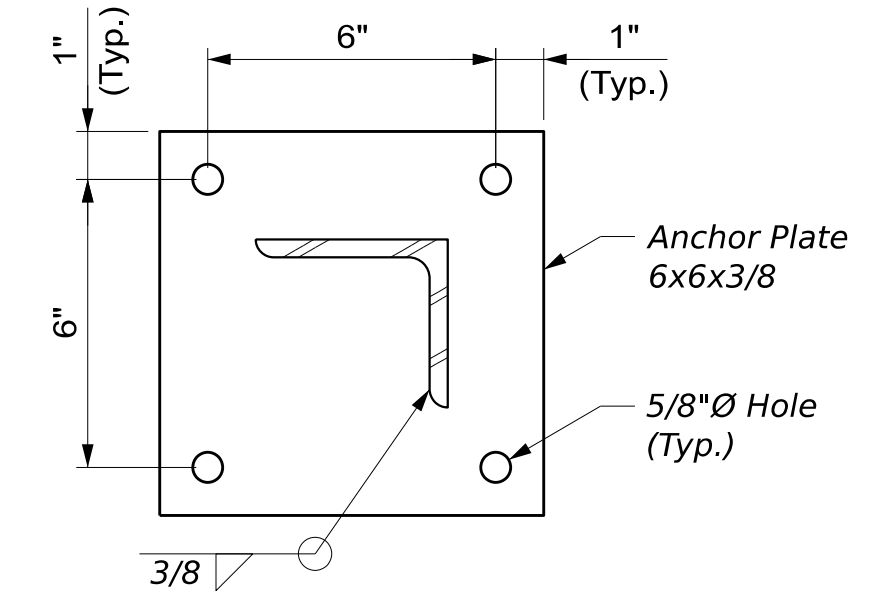
**CURTAIN TROUGH NOTE:**

- Trough shall maintain a minimum clearance of 3" from utility conduits and sheathing when the bridge is in its fully expanded (maximum temperature) condition.

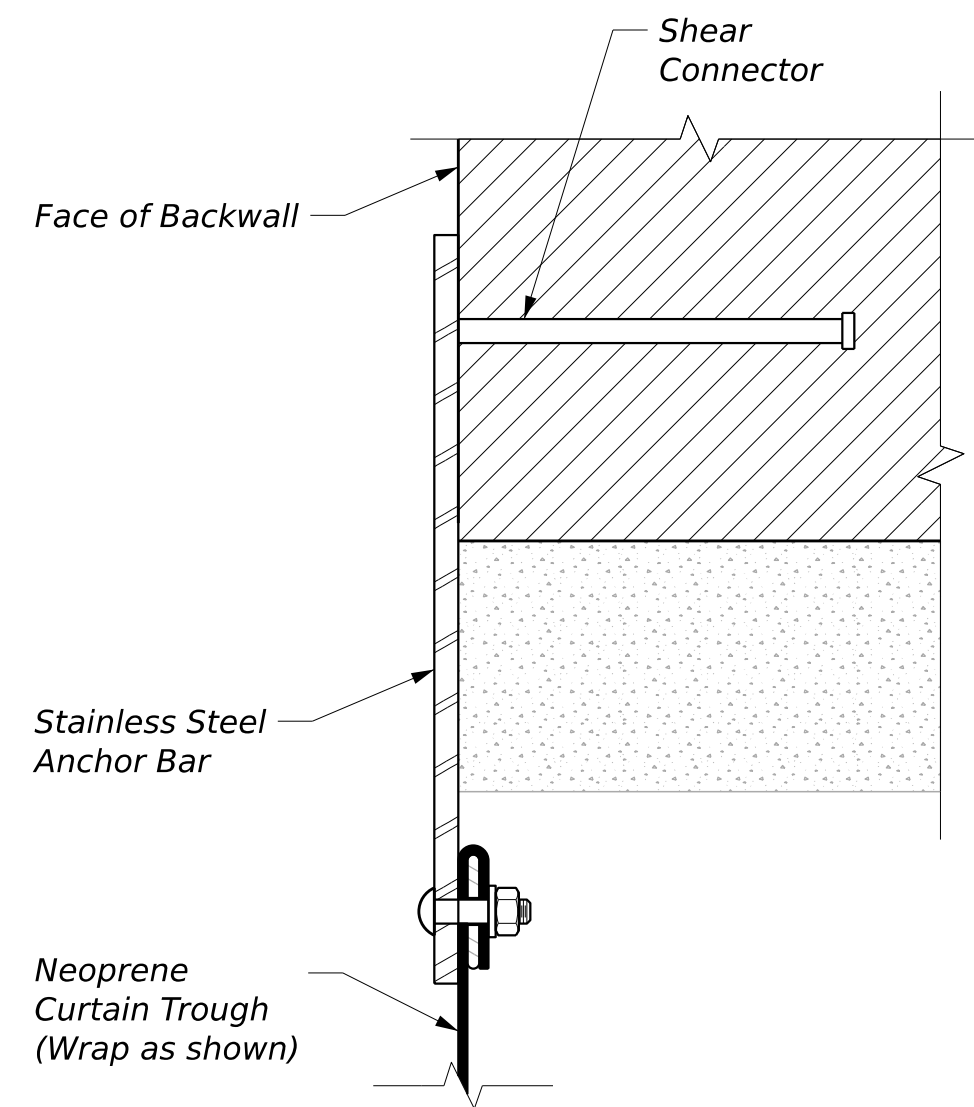


**LOOP ANCHOR DETAIL**

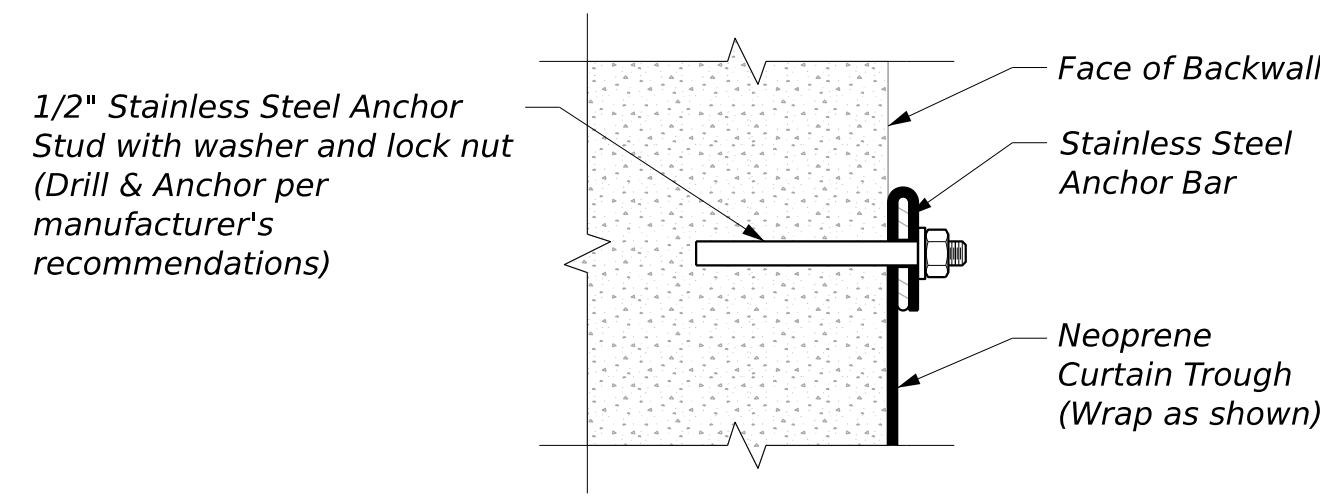
NOTE: Interior Radius = 3/4" (Typ.)  
For Reinforcement Assemblies 5/8" Plate  
(Finger Joint Armor Screened for Clarity)



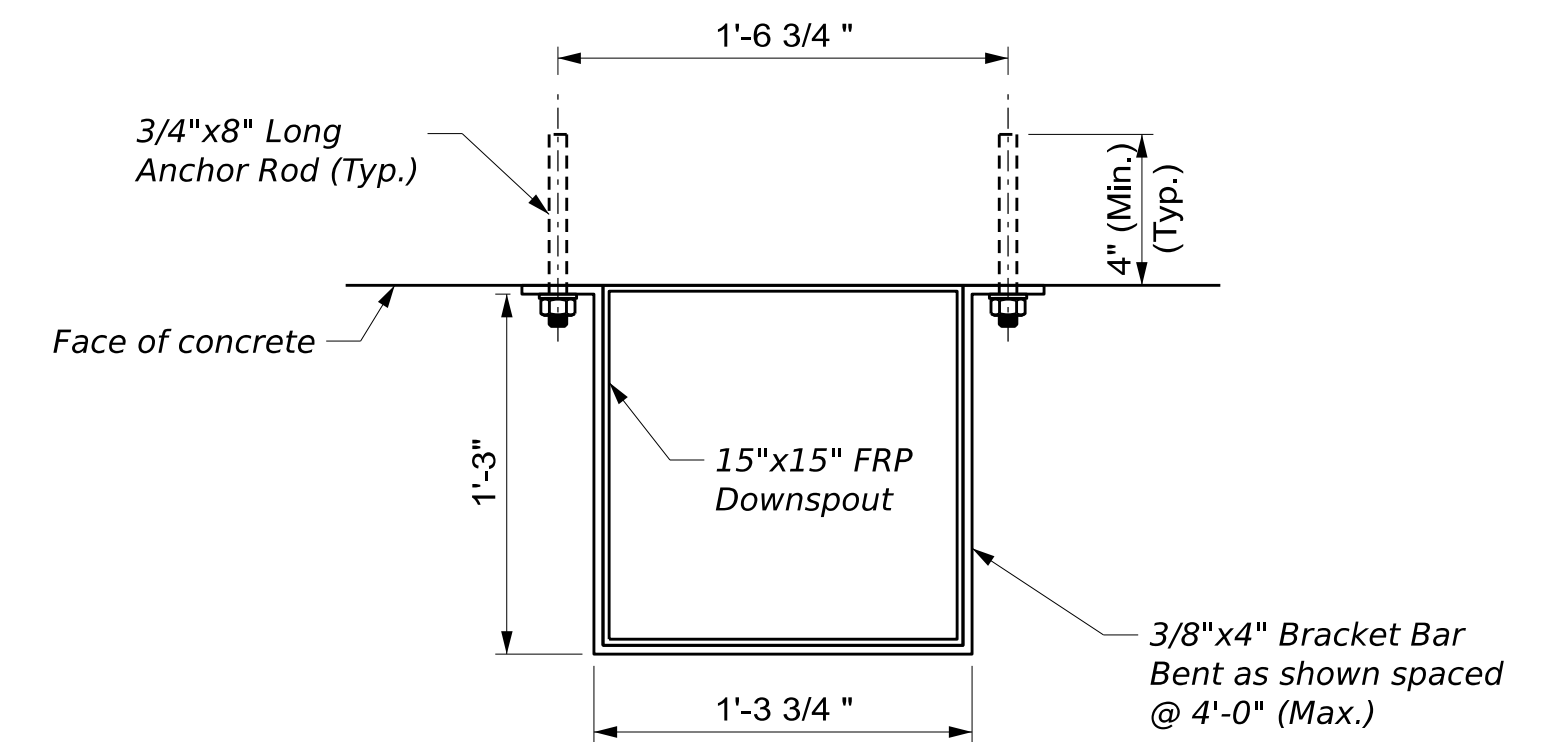
**ANCHOR PLATE DETAIL**



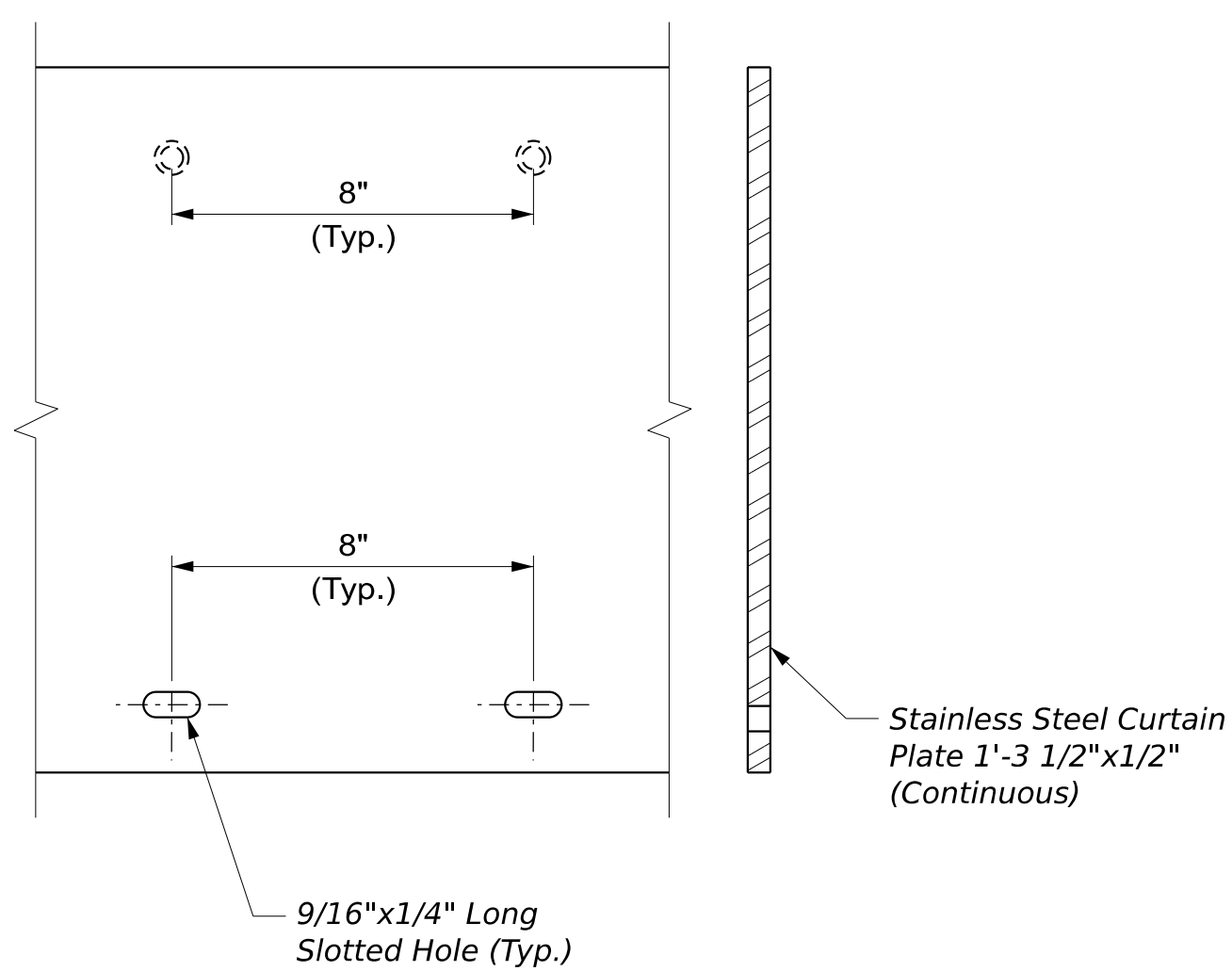
**TROUGH ANCHOR DETAIL - DECK END**



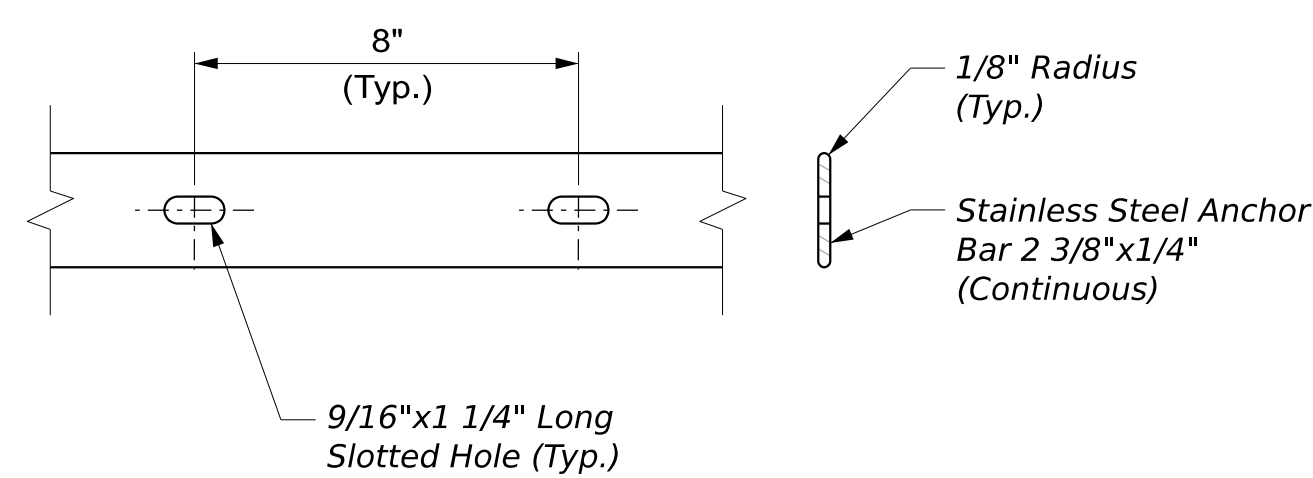
**TROUGH ANCHOR DETAIL - BACKWALL**



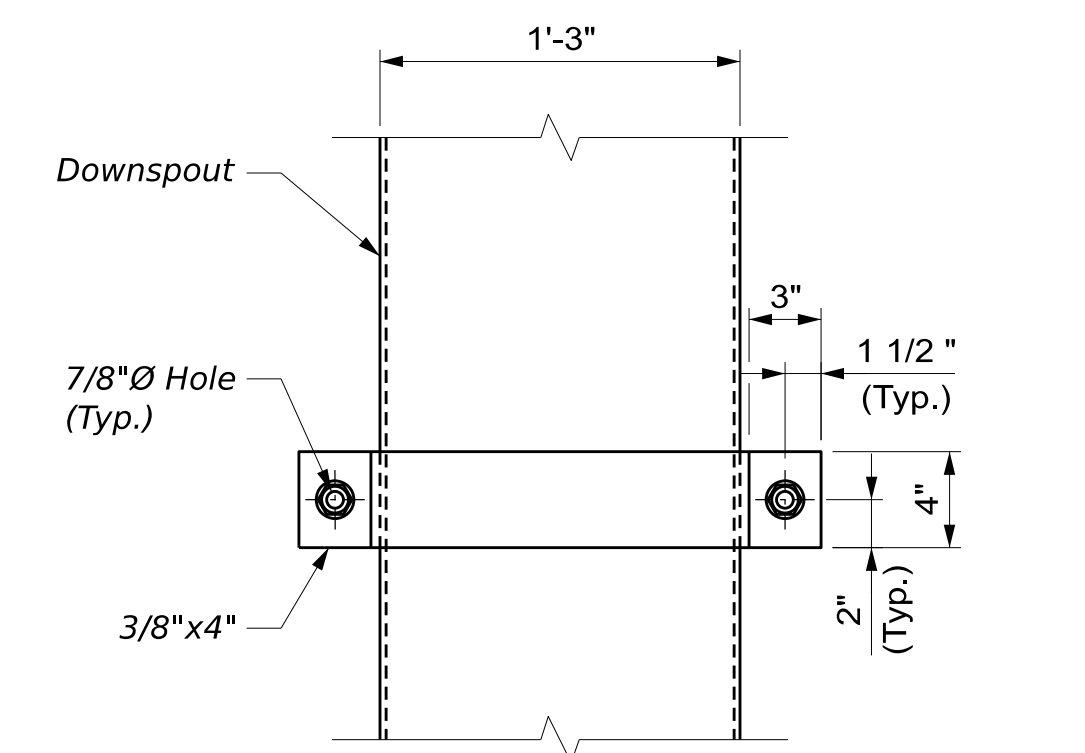
**DOWNSPOUT ATTACHMENT BRACKET DETAIL**



**CURTAIN PLATE**



**ANCHOR BAR**



**ELEVATION VIEW OF ATTACHMENT BRACKET**

STATE OF MAINE  
DEPARTMENT OF TRANSPORTATION  
Federal Project No. 2952810  
WIN 029528.10

PROJ. MANAGER	TRAVIS HAMEL	BY	DATE
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CHECKED-REVIEWED	K. BRAVLEY	A. STEPHENS	11/14/25
DESIGN-DETAILED			
REVISIONS 1			
REVISIONS 2			
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FIELD CHANGES			

DONALD V. CARTER BRIDGE BRIDGE NO. 1141  
CROSSING KENNEBEC RIVER  
WATERVILLE/WINSLOW  
MISCELLANEOUS DETAILS

SHEET NUMBER  
**8**  
OF 8

