

F.R.W.A. DES. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	IR-95-8(193)	15	21

SCOPE OF WORK

1. Modify existing finger joint at abutment #1 and install new compression seal.
2. Modify existing joint armor at abutment #2 and install new compression seal.
3. Remove existing concrete end posts and curbs on abutment #2 and install new standard concrete end posts.
4. Install anchorage for guardrail connection to existing concrete end post on the west side of abutment #1.
5. Replace existing wearing surface and membrane with a new $\frac{1}{4}$ " membrane waterproofing and $2\frac{1}{2}$ " bituminous concrete wearing surface.
6. Clean and paint all existing structural steel below superstructure slab.
7. Maintain traffic on a 15 foot minimum width lane during construction.
8. Guard rail modified under approach work.

SPECIFICATIONS

DESIGN: AASHTO Standard Specifications for Highway Bridges 1989, and Interim Specifications 1990.

CONTRACT: State of Maine, Department of Transportation, Standard Specifications, Highways and Bridges, Revision of October 1990.

DESIGN LOADING

LIVE LOAD: HS20 Existing

MATERIALS

CONCRETE: ----- Class AA
REINFORCING STEEL: --- ASTM A615 Grade 60
STRUCTURAL STEEL: --- ASTM A36
High Strength Bolts, ASTM A325 Type 1

BASIC DESIGN STRESSES

CONCRETE: ----- $f'_c = 3000$ psi
REINFORCING STEEL: --- $f_y = 60,000$ psi
STRUCTURAL STEEL:
ASTM A36 - $F_y = 36,000$ psi
ASTM A325 - $F_v = 28,000$ psi

As Built Note:

N. End POSTS MOVED ONTO DECK
AND CAPTIVE OVER BACKWALL

Revised As Built

1991
E. Zimmerman

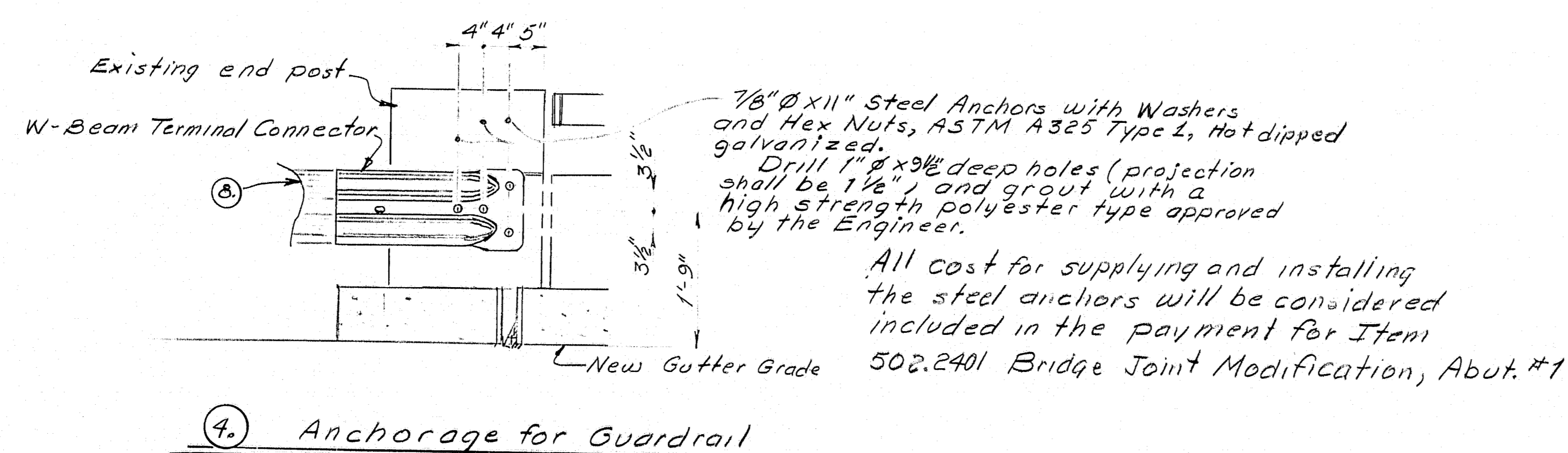
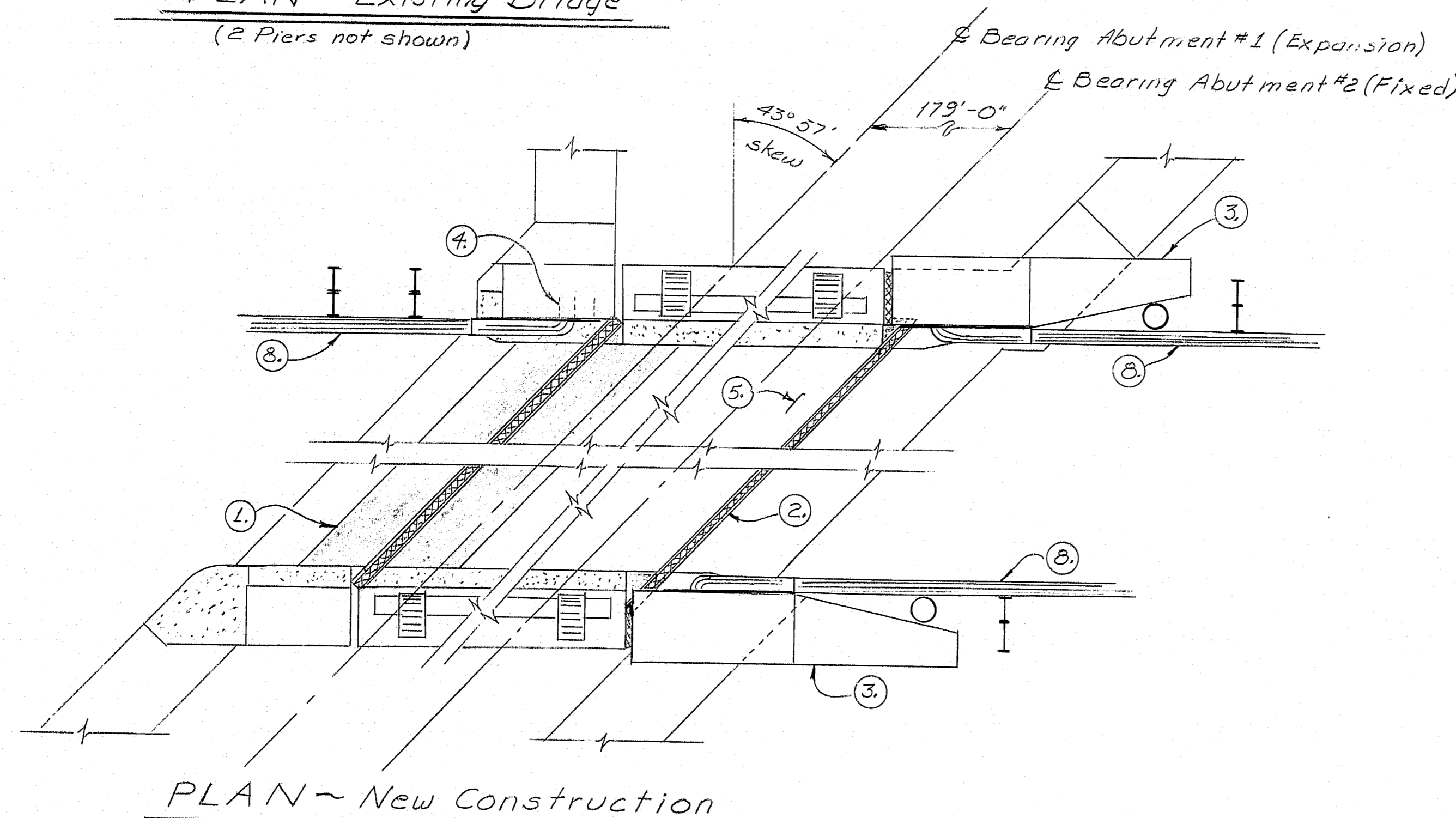
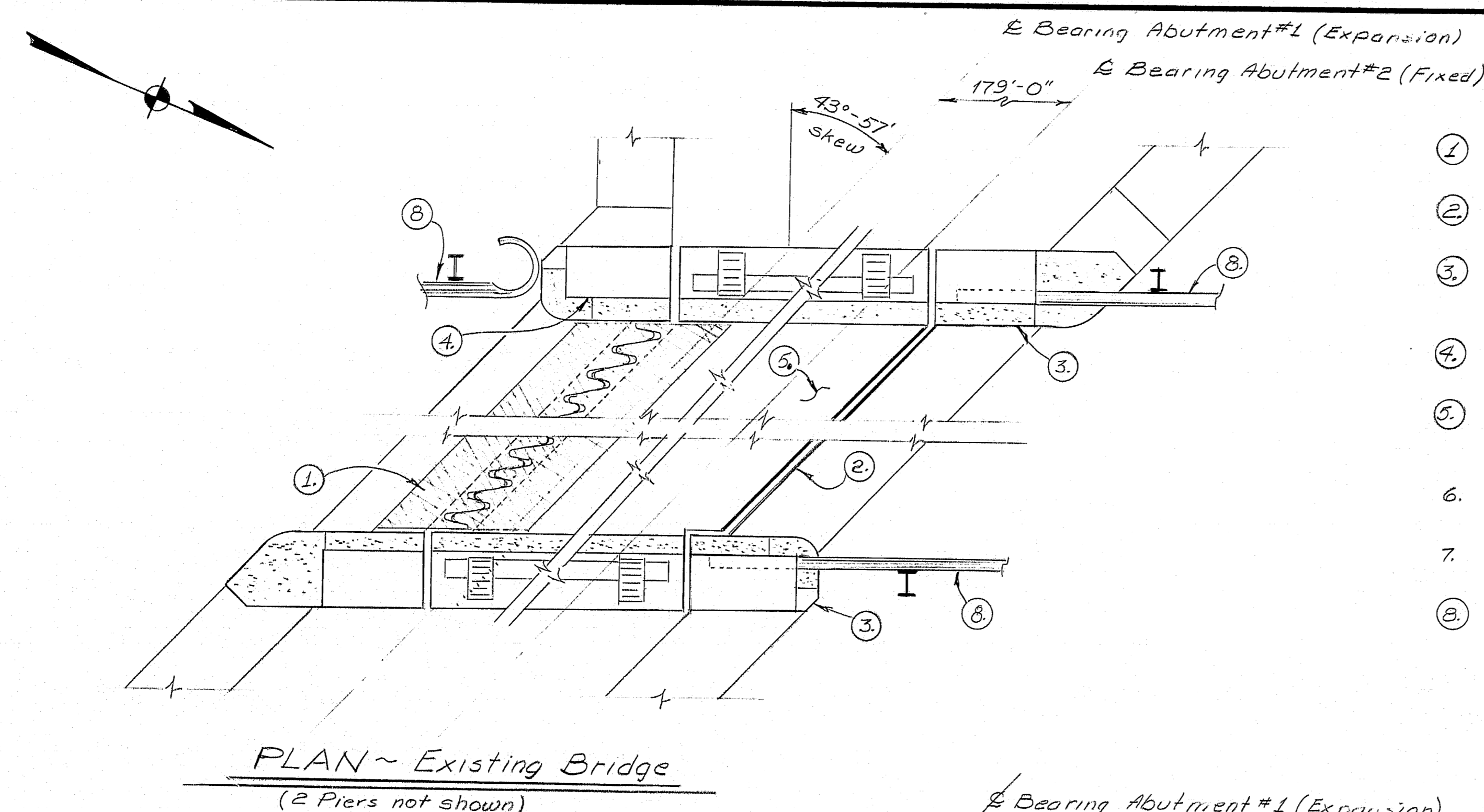
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

INTERSTATE 95/8
over
KIRKLAND ROAD

OLD TOWN
PENOBSCOT COUNTY
General Plan

SHEET 1 OF 4 AUGUSTA, MAINE

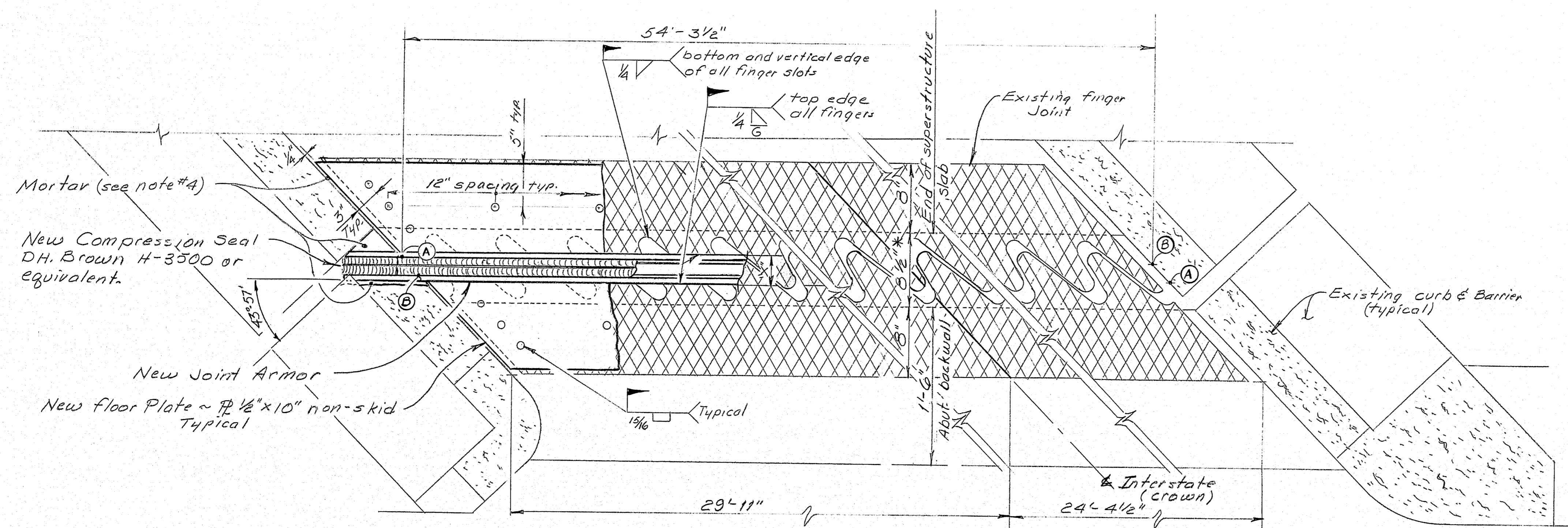
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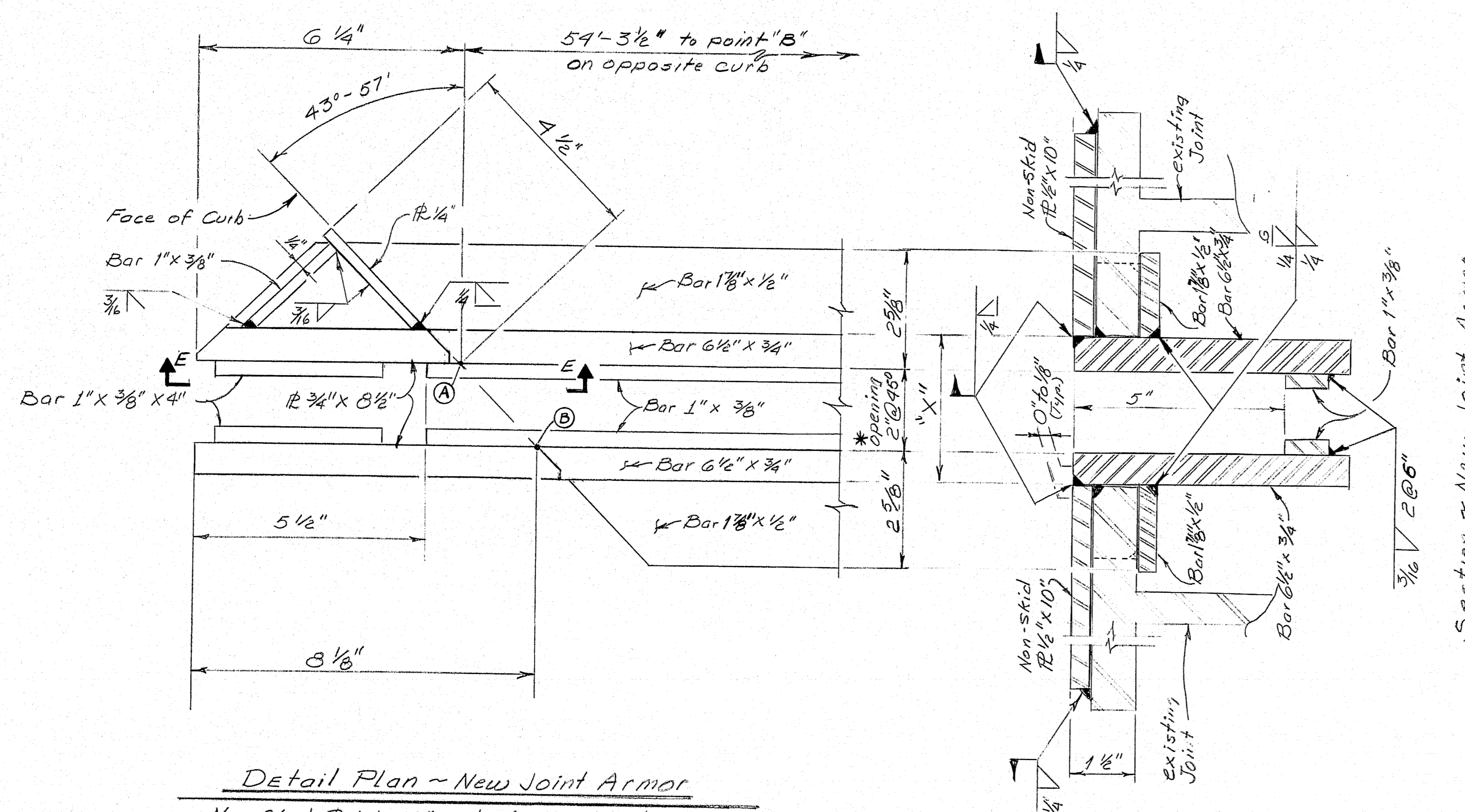
PROJECT DESIGN ENGINEER	DATE
BY L.A.W.	3/90
CHECKED	
REVISIONS	
FIELD CHANGES	

BRWING 45710-1

F.R.W.A. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	IR-95-B(43)	16	21

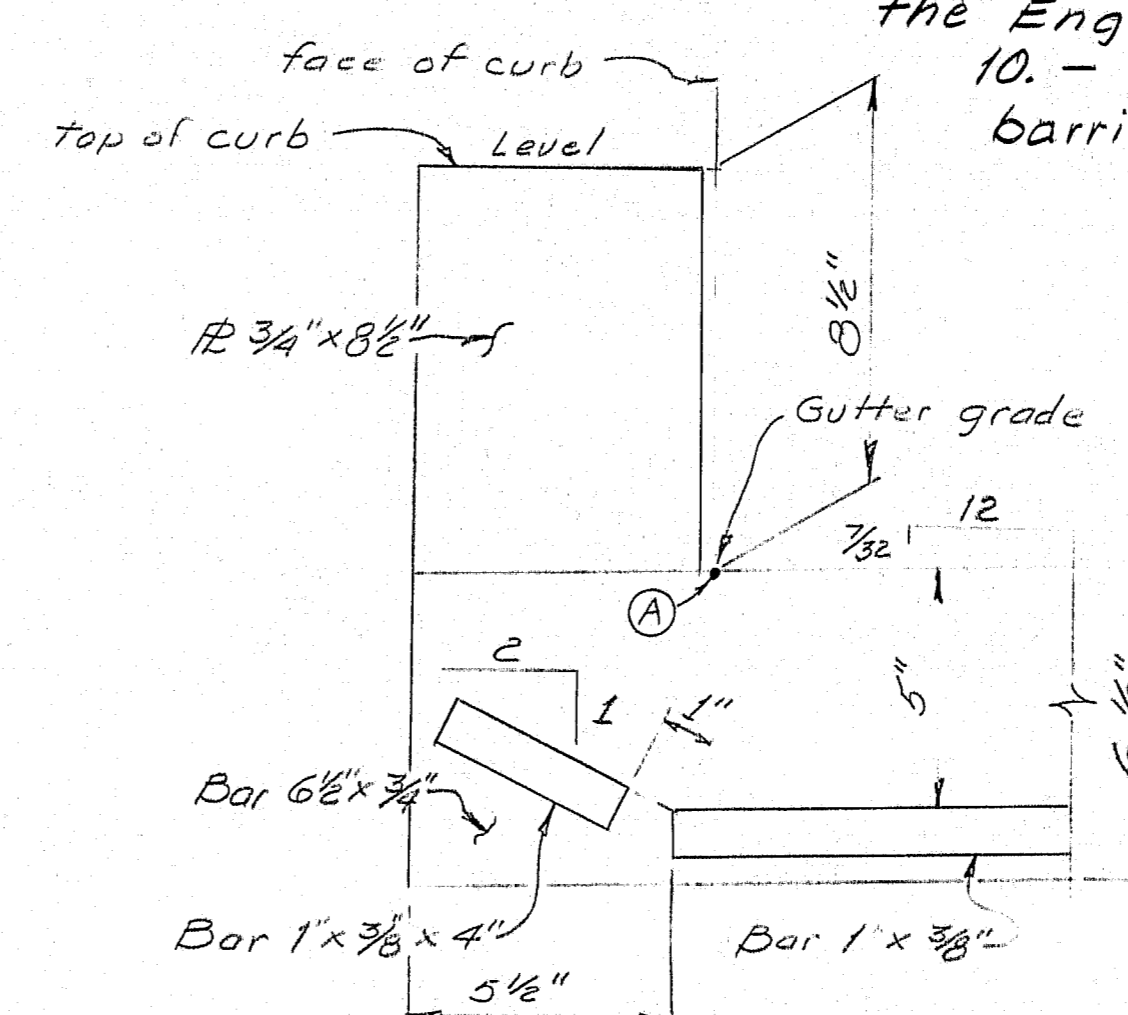


① PLAN - FINGER JOINT MODIFICATION AT ABUTMENT #1
Payment will be made under Item 520.2401 Bridge Joint Modification



Detail Plan - New Joint Armor
Non-skid $R \frac{1}{2} \times 10$ not shown this detail

Section - New Joint Armor



Section "E-E"
opposite side at point ②
similar

Stage Construction Joint

Construction Notes: Kirkland Road

1. - The existing joint fingers shall be cut off as shown to dimension "X" centered on the existing joint, and adjusted for temperature at time of measurement.
2. - Remove the existing granite curb and concrete under existing barrier concrete to $\frac{1}{4}$ ' outside the neat lines for the new joint armor, typical at points ②.
3. - The new joint armor shall be installed in two sections to provide for stage construction. The location of the stage construction joint shall be determined by the Contractor. The compression seals shall be installed in one piece, except as shown in the curb areas at abutment #2.
4. - Mortar for sealing the joint armor at the curb shall be an approved non-shrink type for sealing voids between steel and masonry.
5. - Before placing new structural concrete, the existing concrete to be in contact with the new concrete shall be coated with a bonding grout. The bonding grout shall be as specified in Subsection 502.11, (g), paragraph 7, of the Standard Specifications.
6. - Protective coating shall be applied to all exposed surfaces of new structural concrete in accordance with Section 515 of the Standard Specifications. The protective coating will not be paid for separately but will be considered included in the payment for related contract items.
7. - Guardrail attachments to the bridge shall be as shown on Standard Details BD 201-89 Concrete End Posts.
8. - Reinforcing Steel shall have 2" minimum cover.
9. - Depress pavement at bridge drains as directed by the Engineer.
10. - All work shall be done behind temporary concrete barrier.

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STATE OF MAINE
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INTERSTATE 95SB
over
KIRKLAND ROAD
OLD TOWN
PENOBSCOT COUNTY
Finger Joint Modification

SHEET 2 OF 4 AUGUSTA, MAINE

TEMPERATURE °F	120	105	90	75	60	45	30	15	0	-15	-30
Joint Opening	1 1/8"	1 1/4"	1 3/8"	1 1/2"	1 3/4"	2"	2 1/8"	2 3/8"	2 1/2"	2 3/4"	2 1/2"

* Abutment #1 - Joint Opening Setting Chart

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[illegible]

NOTE
JOINT ARMOR
THROUGH CURB
ELIMINATED, CARVED
OPENING IN granite
for seal
R Zimmerman

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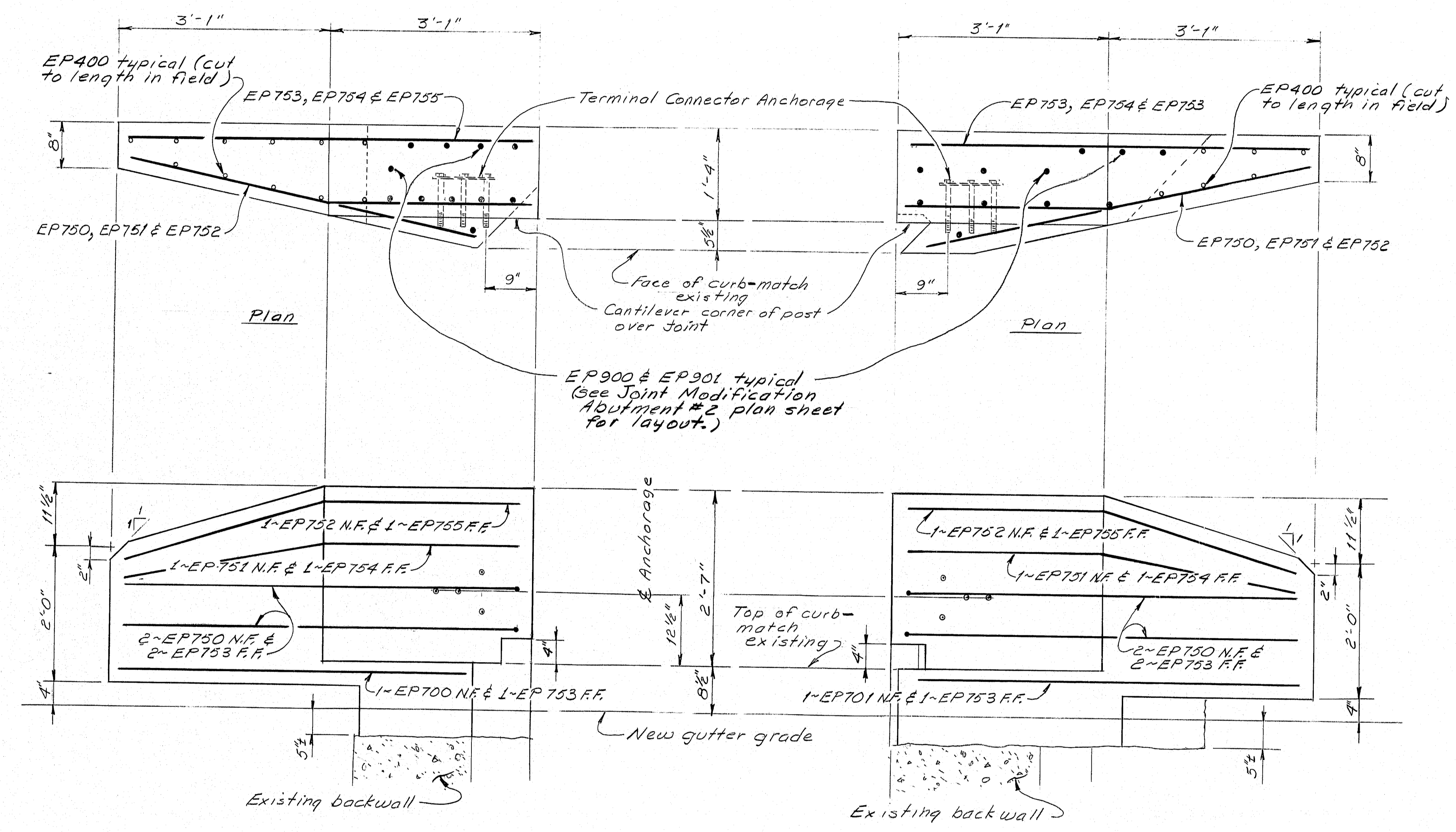
INTERSTATE 95SB
over
KIRKLAND ROAD

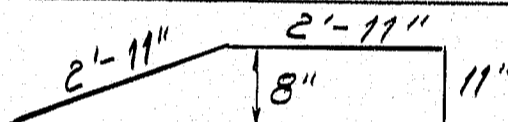
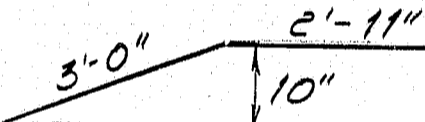
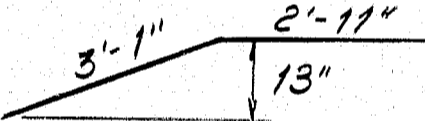
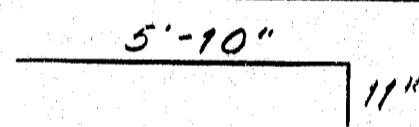
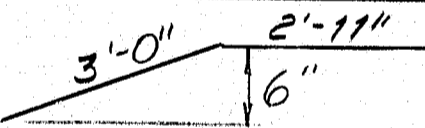
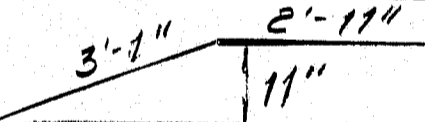
OLD TOWN
PENOBSCOT COUNTY

Joint Modification Abutment #2

SHEET 3 OF 4 AUGUSTA, MAINE

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REINFORCING STEEL				
MARK	No.	LENGTH	Remarks	
Straight Bars				
EP400	1	30'-0"	Cut to length in field #4 bar	
EP700	1	5'-3"	Curb #7 bar	
EP701	1	5'-7"	Curb #7 bar	
EP900	20	6'-6"	Drill for & Grout #9 bar	
EP901	2	2'-0"	" " " #9 bar	
Bent Bars				
EP750	4	6'-9"	 #7 bar	
EP751	2	5'-11"	 #7 bar	
EP752	2	6'-0"	 #7 bar	
EP753	3	6'-9"	 #7 bar	
EP754	2	6'-0"	 #7 bar	
EP755	2	5'-11"	 #7 bar	

All dimensions are out to out of bars.
Bending shall conform to the recommendations
of the current revision of ACI Standard 318.
Reinforcing Bar: ASTM A615 Grade 60.

Elevation
EAST POST

Elevation
WEST POST

③ NEW CONCRETE END POST - DETAILS

PROJECT DESIGN ENGINEER	DATE
DESIGN - DETAILED	12/12
CHECKED	
FIELD CHANGES	

See P. 16

EP MOVED onto Deck

AS BUILT 1991 R Zimmerman

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DEPARTMENT OF TRANSPORTATION

INTERSTATE 95SB
over
KIRKLAND ROAD

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PENOBSCOT COUNTY

End Post Details

SHEET 4 OF 4 AUGUSTA, MAINE

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