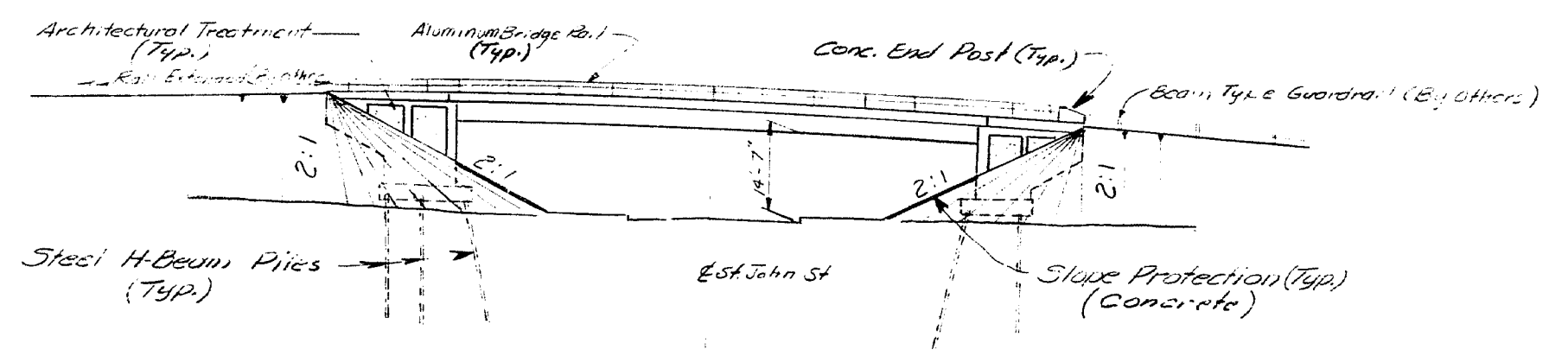


**PLAN**  
Scale: 1" = 25'  
I-295 One Span Structures  
Composite Welded Beams

**TRAFFIC**

I-295	AADT 1970	AADT 1990	DHV	T	ST. JOHN ST.
24,676	5800	7000	10%	8%	
23,510					



**ELEVATION**  
Looking North  
along  
St. John St.

BRIDGE QUANTITIES			
Item No.	DESCRIPTION	Quantity	Unit
203.00	Gravel Borrow	380	Cu. Yd.
* 304.10	Aggregate Subbase Course - Gravel	130	Cu. Yd.
501.20	Steel H-beam Piles 74 lbs/ft.	1850	L.F.
502.21	Structural Concrete, Abutts & Retaining Walls	790	Cu. Yd.
502.202	Structural Concrete, Roadway & Sidewalk Slabs on Steel Bridges	1	L.S.
* 502.302	Structural Concrete, Approach Slabs	1	L.S.
503.12	Reinforcing Steel, Fab. & Delivered	152,000	-C.
503.15	Reinforcing Steel, Placing	160,000	-C.
504.202	Structural Steel, Fab. & Delivered - St. John St.	1	L.S.
504.202	Structural Steel, Erected - St. John St.	1	L.S.
505.202	Shear Connectors - St. John St.	1	L.S.
506.402	Field Painting, Structural Steel - St. John St.	1	L.S.
507.06	Bridge Railing	570	L.F.
* 508.10	Membrane Waterproofing	1210	Sq. Yd.
502.07	French Drains - Storms only	50	Cu. Yd.
503.09	Slope Protection - Port. Cem. Concrete	760	Sq. Yd.
505.20	Protective Coating for Concrete Surfaces	200	Sq. Yd.
520.07	Elastomeric Expansive Device (Type 1)	108	L.F.
609.13	Vertical Bridge Curb - Type 1	530	L.F.
638.002	Embedded work in Structures - St. John St.	1	L.S.

**MATERIALS**

Structural Steel: Flanges & Web for beams shall conform to A.S.T.M. designation A-572 (Grade 50). All other steel shall conform to A.S.T.M. designation A-36 unless otherwise noted.  
Reinforcing Steel: Reinforcing steel shall conform to A.S.T.M. designation A615 (Grade 60) or A431, M31 Intermediate Grade.  
Concrete: All Concrete shall be Class "A"

**ALLOWABLE STRESSES**

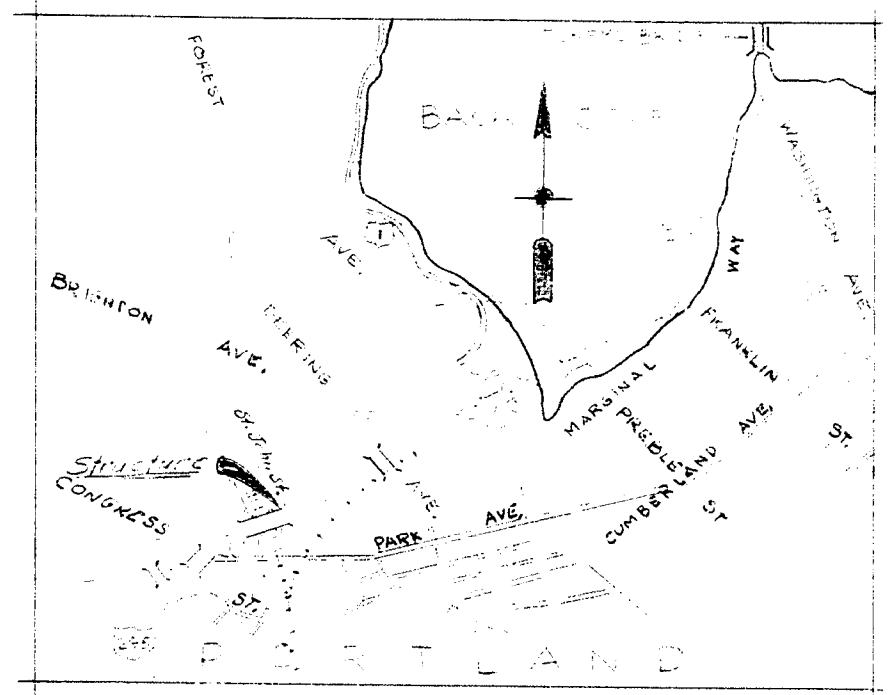
Structural Steel - A572 (Grade 50)  $f_y = 27,000$  psi  
 ~ A-36  $f_y = 20,000$  psi  
 Reinforcing Steel  $f_y = 20,000$  psi  
 Concrete  $f_c = 1,200$  psi

\* Not part of this contract.  
NOTE:

Estimated Quantity of Structural Steel, Fab., Del., Erected and Painted = 398,000 lbs.  
 Estimated Quantity of Shear Connectors = 2312 Studs = 2300 lbs.  
 Estimated Quantity of Concrete Item 502.202 = 385 C.Y.  
 Estimated Quantity of Concrete Item 502.302 = 71 C.Y.  
 Estimated Quantity of Embedded Work in Structures, St. John = 310' in A 3" PVC Plus F.H. app's

**SPECIFICATIONS**

DESIGN - A.A.S.H.O. Standard Specifications for Highway Bridges 1969 with Interim Specifications 1970.  
 CONTRACT - State of Maine, State Highway Commission, Standard Specifications, Highways and Bridges, Revision of June 1968.  
 LINE LOCATION - H.S. 20-44

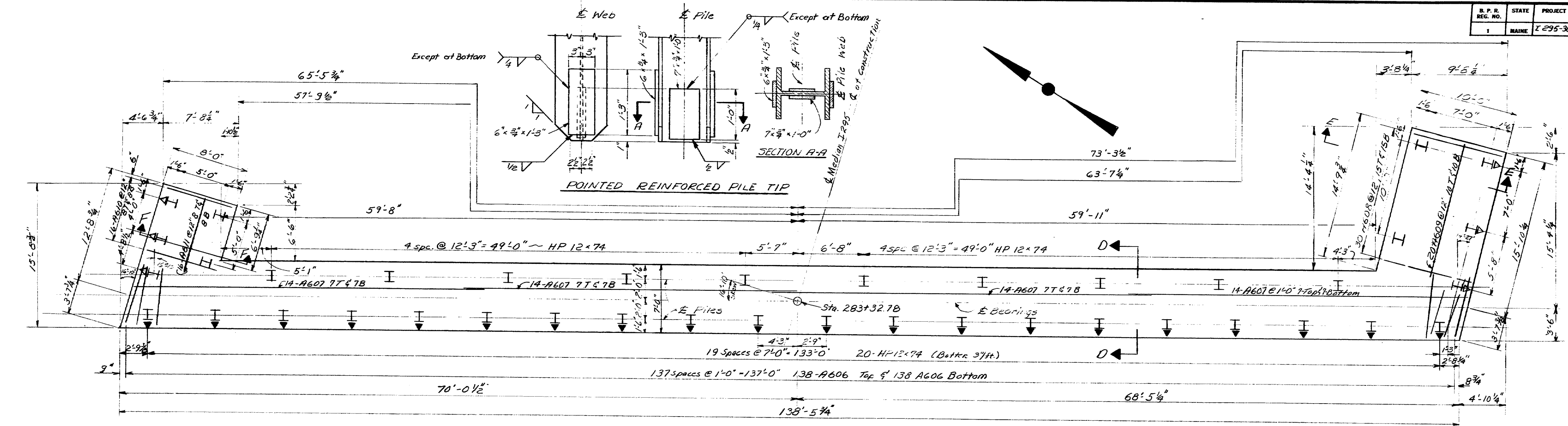


LOCATION MAP

DESIGN TRACE - H.S. 20-44 CHECK - E.S.S.	BRIDGE NO. SURVEY PLOT
STATE HIGHWAY COMMISSION	
INTERSTATE 295 & RAMP CS-7 OVER ST. JOHN STREET IN THE CITY OF PORTLAND CUMBERLAND COUNTY	
GENERAL PLAN	
SHEET 62 OF 85 AUGUSTA, MAINE MAY 1971	

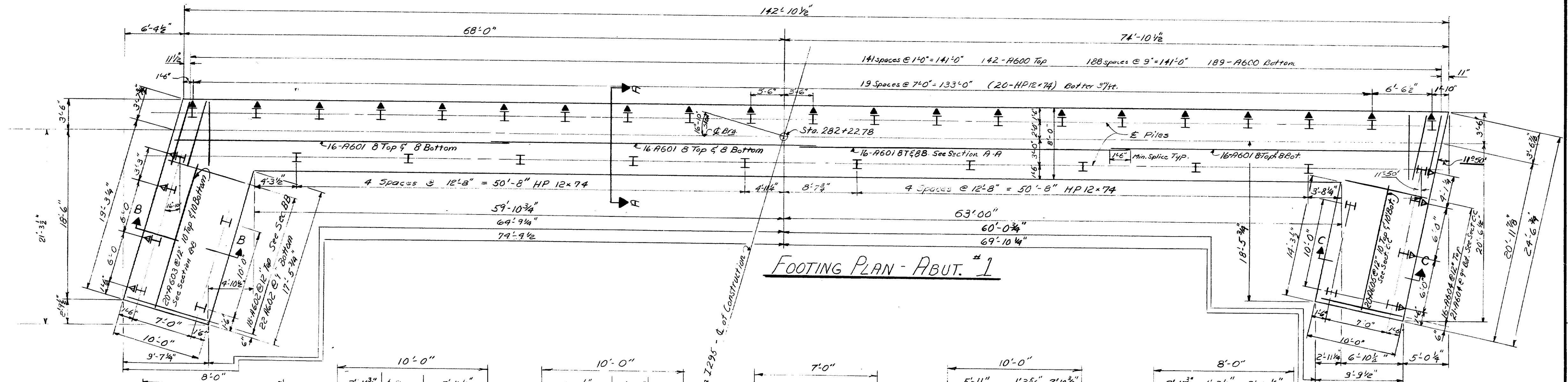
152-146

S.P.R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	295-3(5)48	63	85

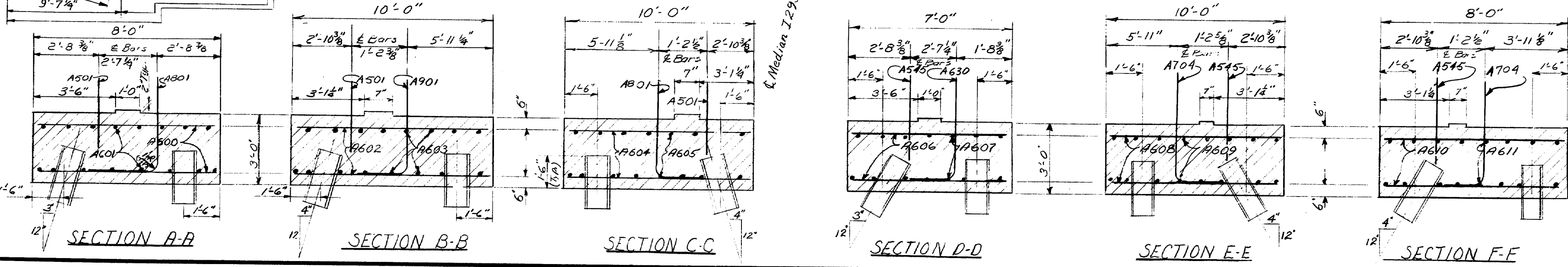


FOOTING PLAN - ABUT. #2

NOTE:  
For Pile notes see sheets #65



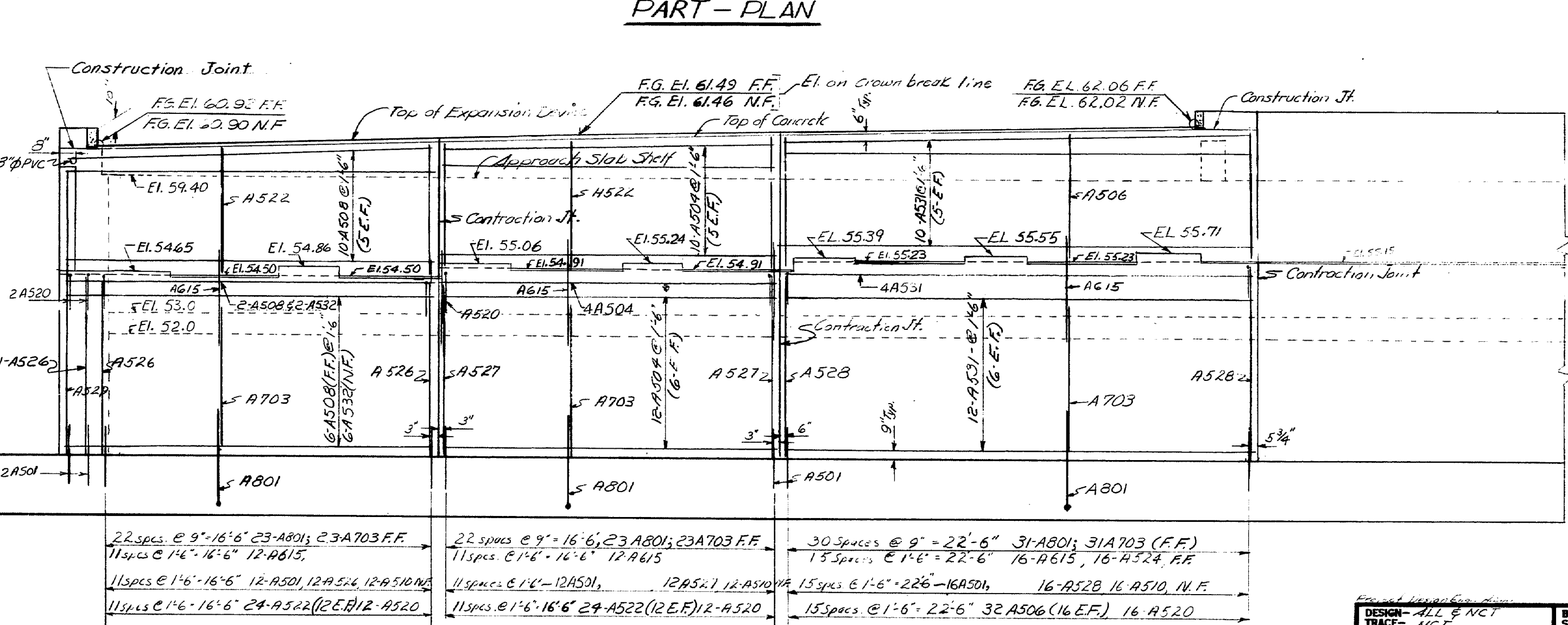
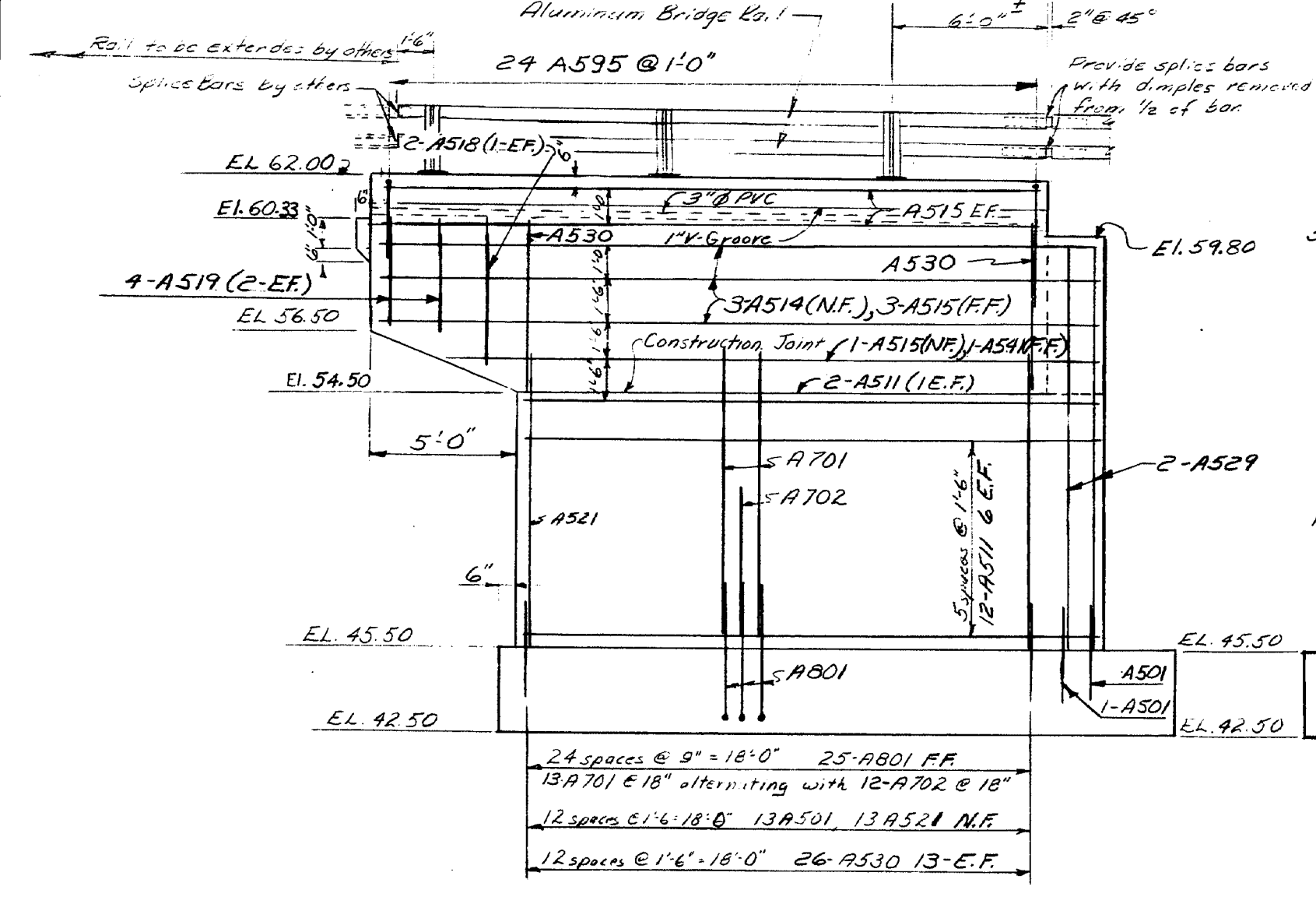
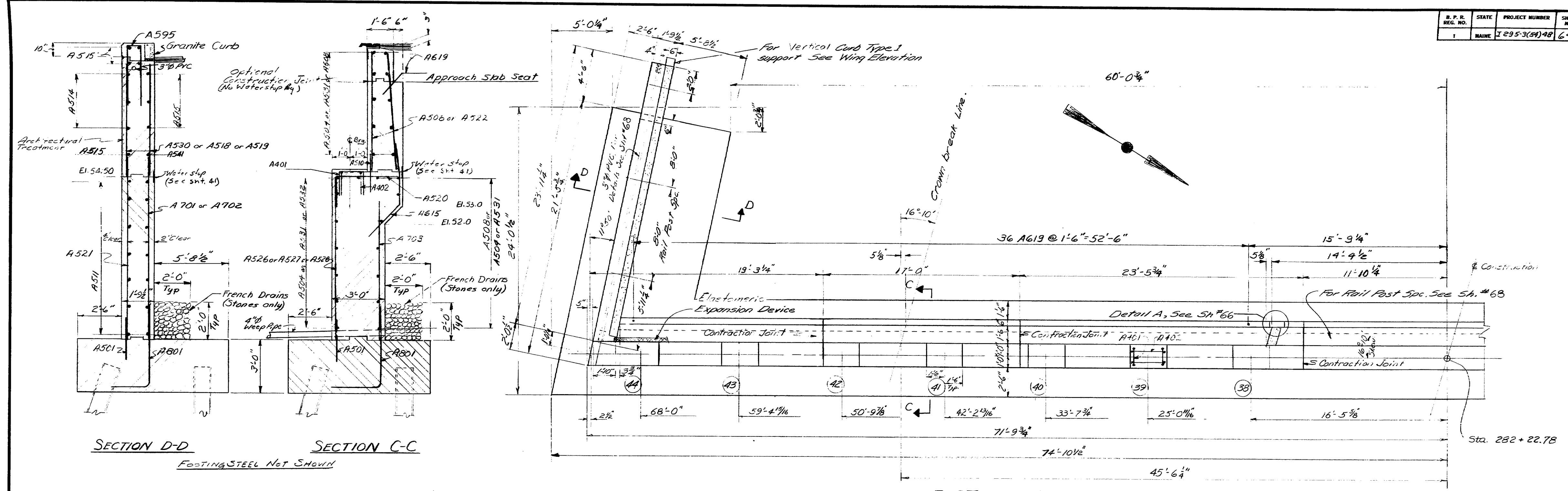
FOOTING PLAN - ABUT. #1



DESIGN - N.C.T.	BRIDGE NO.
TRACE - N.C.T.	SURVEY -
CHECK - E.S.C.	PLOT -
STATE HIGHWAY COMMISSION	
INTERSTATE 295 & RAMP CS-7	
OVER	
ST. JOHN STREET	
IN THE CITY OF	
PORTLAND	
CUMBERLAND COUNTY	
FOOTING	
SHEET 63 OF 85 AUGUSTA, MAINE MAY 1971	

152-147

F.P.R. REC. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	2253(9A)98	64	85



WING ELEVATION

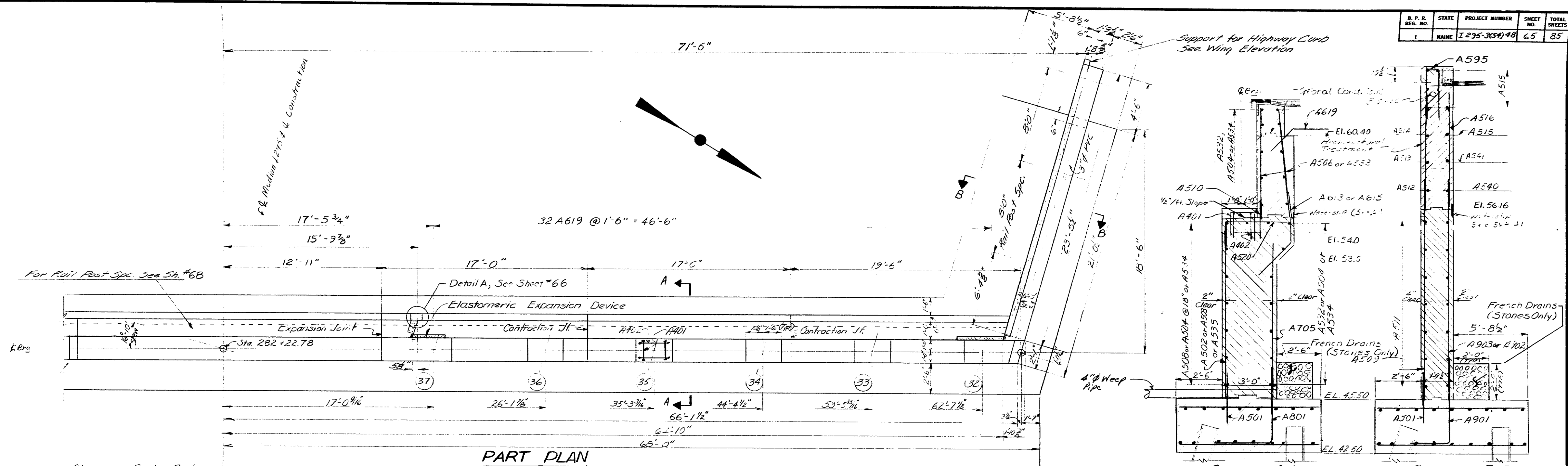
PART - ELEVATION

NOTE: For Footing notes see sheet # 65

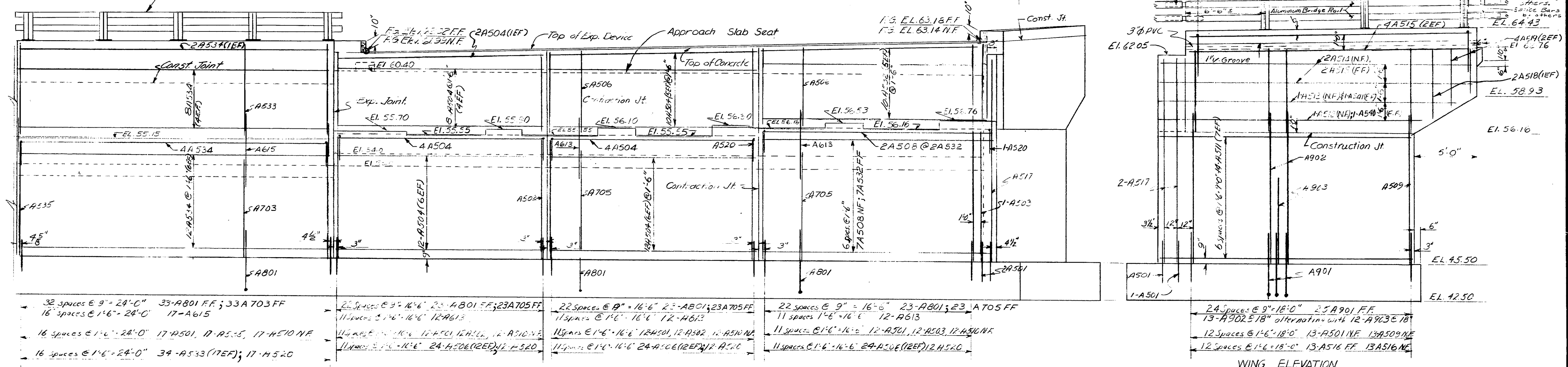
DESIGN - ALL & NET	BRIDGE NO.
TRACE - N.C.T.	SURVEY -
CHECK - E.P.C.	PILOT -
STATE HIGHWAY COMMISSION	
<b>INTERSTATE 295 &amp; RAMP CS-7</b>	
OVER	
<b>ST. JOHN STREET</b>	
IN THE CITY OF	
<b>PORTLAND</b>	
<b>CUMBERLAND COUNTY</b>	
ABUTMENT NO. 1	
SHEET 64 OF 85 AUGUSTA, MAINE MAY 1971	

152-198

F.P.R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	I 295-3(39) 48	65	85



Aluminum Bridge Rail See Sheets #68 and #69



**ABUTMENT NOTES**

Reinforcing steel to have 2" clear cover except as shown.  
 Position reinforcing steel to clear swayed anchor bolts.  
 Reinforcing steel splices to be a minimum of 24 bar diameters.  
 Chamfer all exposed edges of concrete 1/8" unless otherwise indicated.  
 Place weep holes 20' apart. The exact location is to be determined by the Engineer. Weep holes are to be 4" diameter.  
 Abutment concrete to be Class "A".  
 Footing concrete shall be cured for at least 7 days prior to placing breast wall concrete.

**PART ELEVATION**

**PILES**  
 Piles shall be HP 12x74  
 Maximum Pile Load = 36 tons  
 Piles marked → to be battered 3/4% in direction of arrow.  
 Piles marked ← to be battered 4/4% in direction of arrow.  
 Piles shall be driven to ledge or practical refusal.  
 All piles to have pointed reinforcement. See Sheet 63 for details.  
 Alternate types of pointed pile tips may be used if they are equal or better than the pointed reinforced pile tips shown, if approved by the Engineer.  
 Estimated driving lengths of piles are estimated from available soils information, with no allowance for pile cutoffs and no allowance for unusual pile penetration.

Abut #1	Abut #2	Estimated Length	No. Reqd.
20' to 25'	16' to 23'		43
			40

**For Details refer as follows:**

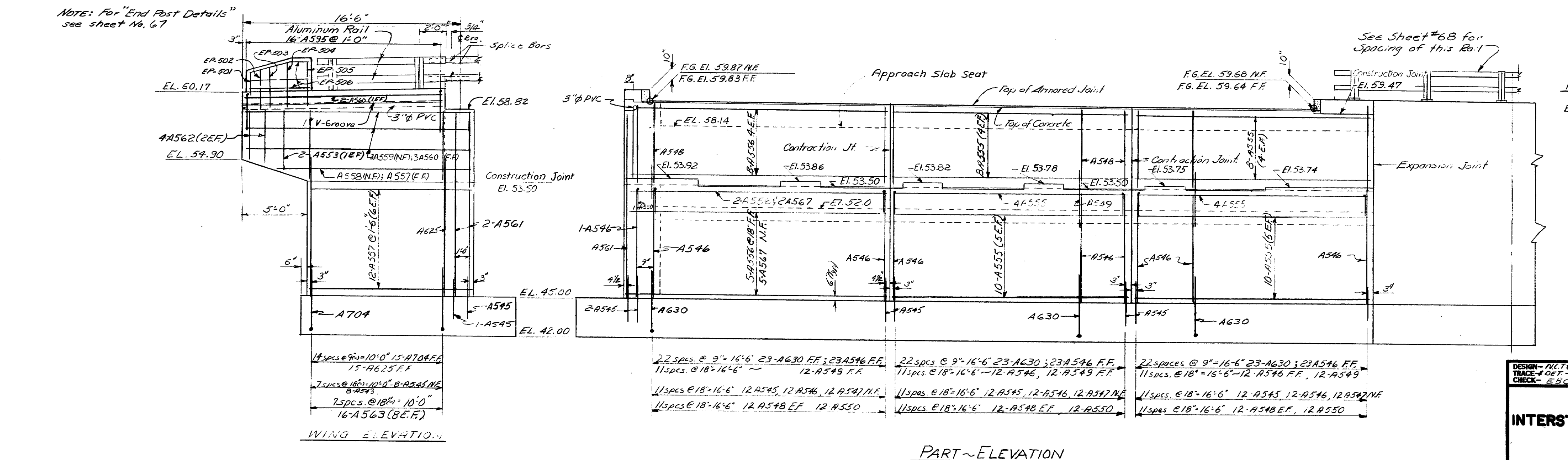
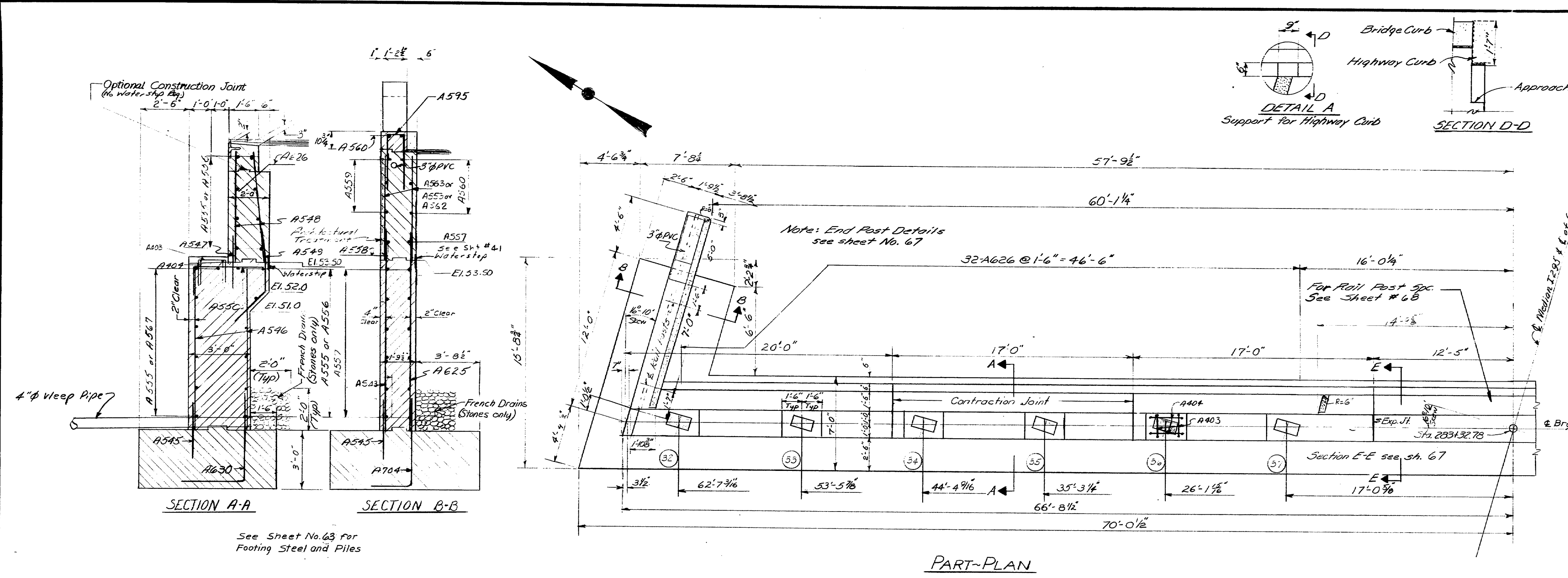
- Architectural Treatment - Sheet # 69
- End Post Details - Sheet # 67
- Armored Joint - Sheet # 75
- Elastomeric Expansion Device - Sheet # 76
- Vertical Bridge Curb - Sheet # 73
- Slope Protection Details - Sheet # 78
- Piles - Sheet # 63

Work this Sheet with Sheet 64

DESIGN - ALL ENCT	BRIDGE NO.
TRACE - E.B.C.	SURVEY -
CHECK - E.B.C.	SLOT -
STATE HIGHWAY COMMISSION	
<b>INTERSTATE 295 &amp; RAMP CS-7</b>	
OVER	
<b>ST. JOHN STREET</b>	
IN THE CITY OF	
<b>PORTLAND</b>	
<b>CUMBERLAND COUNTY</b>	
ABUTMENT NO. 1	
SHEET 65 OF 85 AUGUSTA, MAINE MAY 1971	

152-149

B. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	I 295-3(9)48	66	85



NOTE: For "End Post Details" see sheet No. 67

See Sheet No. 63 for Footing Steel and Piles

NOTE: For Abutment Piles notes See sheet #65

For Details refer as follows:  
 Armored Joint Sheet # 75  
 Elastomeric Expansion Device Sheet # 76  
 Slope Protection Details Sheet # 78  
 End Post Details Sheet # 67  
 Vertical Bridge Curb Sheet # 73  
 Architectural Treatment Sheet # 73  
 Piles Sheet # 65

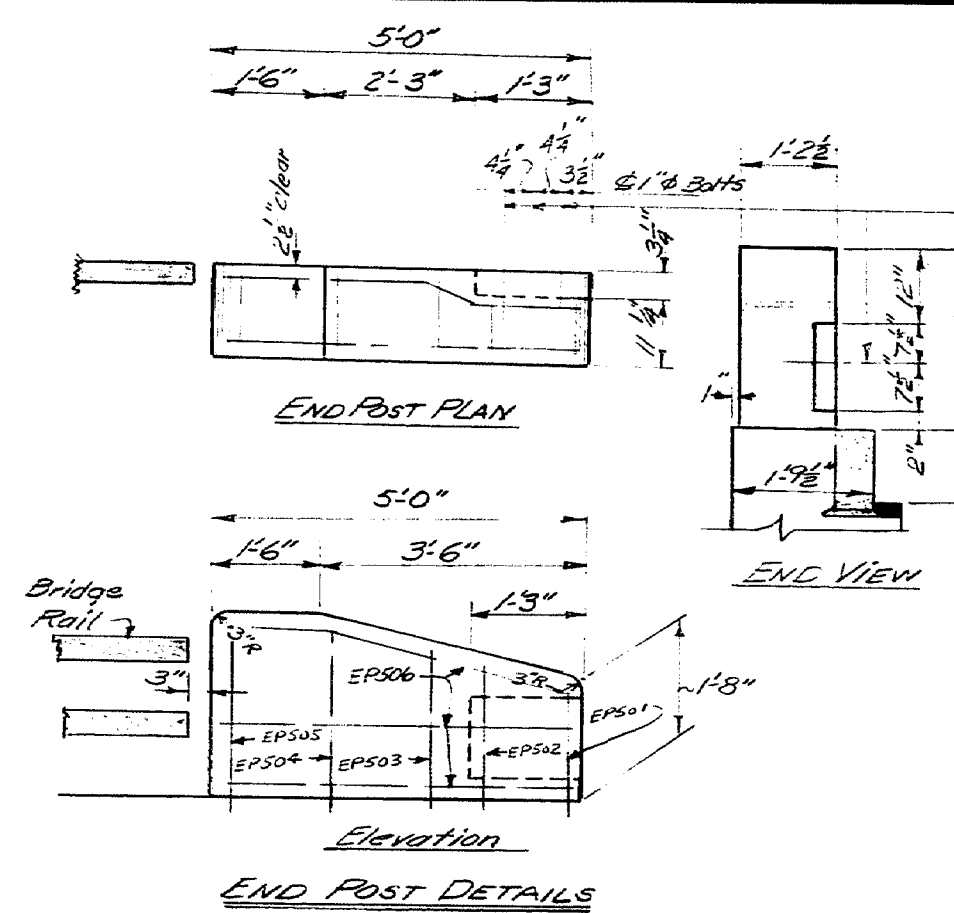
Abutment concrete to be Class "A"

DESIGN - NCT/MZ TRACE - JGT/NCT CHECK - EJC	BRIDGE NO. - SURVEY - PLOT -
STATE HIGHWAY COMMISSION	
<b>INTERSTATE 295 &amp; RAMP CS-7</b>	
OVER	
<b>ST. JOHN STREET</b>	
IN THE CITY OF	
<b>PORTLAND</b>	
<b>CUMBERLAND COUNTY</b>	
ABUTMENT NO. 2	
SHEET 66 OF 85 AUGUSTA, MAINE MAY 1971	

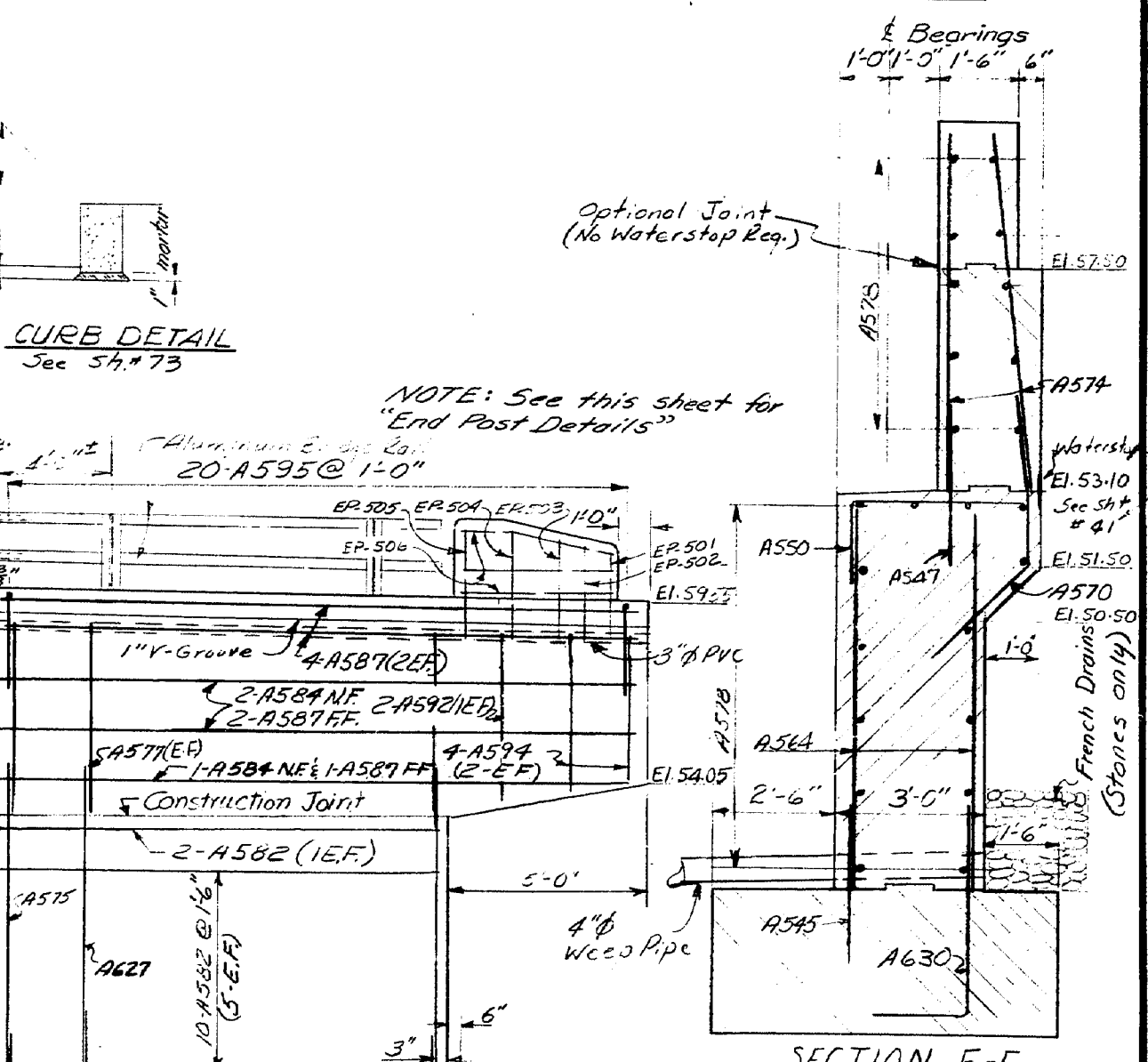
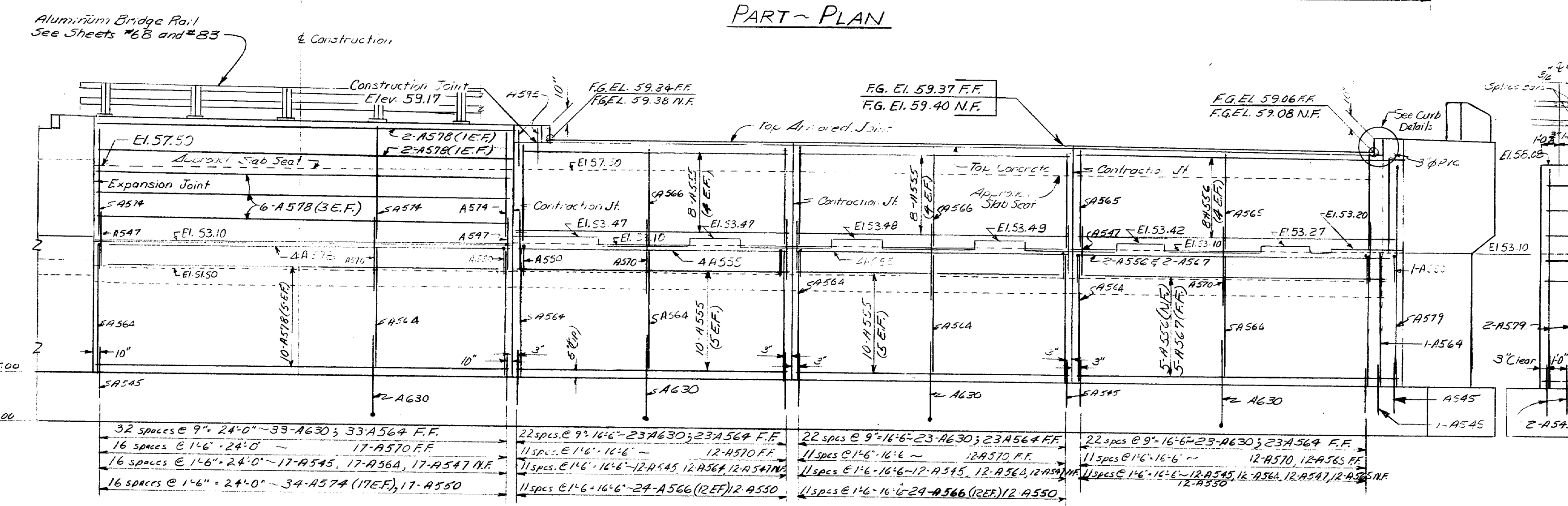
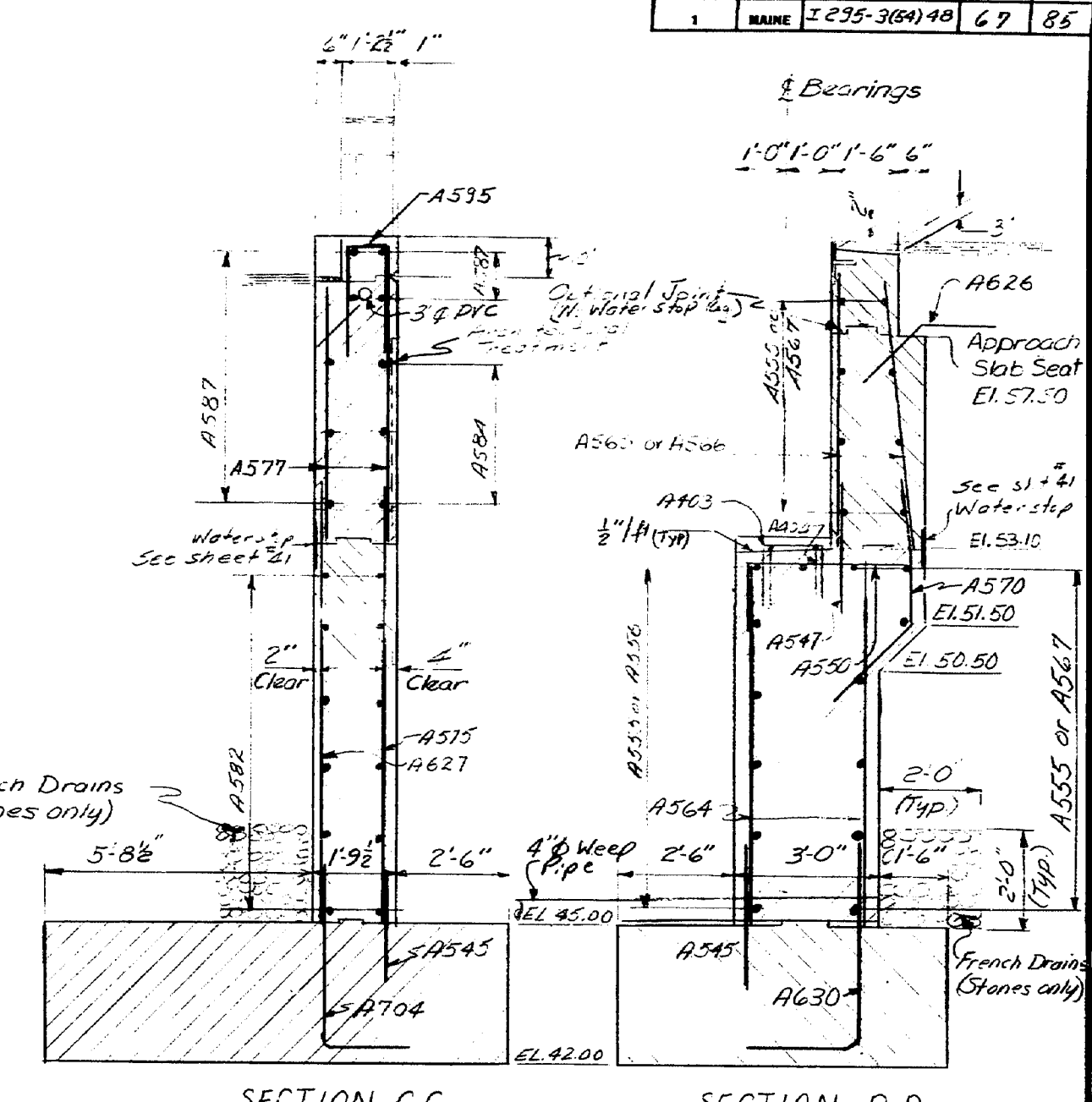
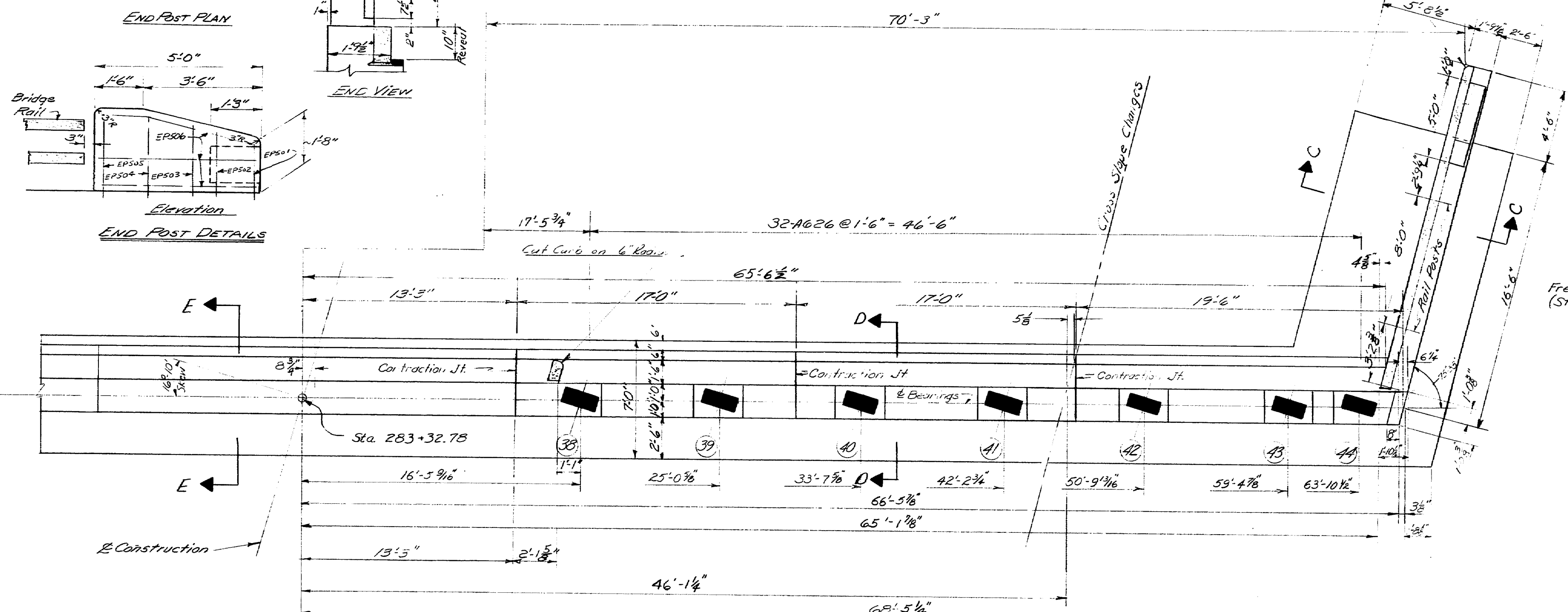
Work this sheet with sheet #67

152-150

S.P.R. REC. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	295-3(2)48	67	85



Furnishing and setting anchor bolts, nuts and washers will be incidental to Item 202.21. See also Standard Details August 1969 @ Guard Rails.



32 spaces @ 9'-2 1/2" - 33-A630; 33-A564 F.F.	22 spaces @ 9'-11 1/2" - 23-A630; 23-A564 F.F.	22 spaces @ 9'-11 1/2" - 23-A630; 23-A564 F.F.	20 spaces @ 9'-11 1/2" - 21-A704 F.F.
16 spaces @ 1'-6" - 24'-0" - 17-A570 F.F.	11 spaces @ 1'-6" - 12'-6" - 12-A570 F.F.	11 spaces @ 1'-6" - 12'-6" - 12-A570 F.F.	21-A621 F.F.
16 spaces @ 1'-6" - 24'-0" - 17-A545, 17-A364, 17-A547 N.F.	11 spaces @ 1'-6" - 12'-6" - 12-A545, 12-A364, 12-A547 N.F.	11 spaces @ 1'-6" - 12'-6" - 12-A545, 12-A364, 12-A547 N.F.	10 spaces @ 1'-6" - 14'-6" - 22-A571 (I.E.F.)
16 spaces @ 1'-6" - 24'-0" - 34-A574 (I.E.F.), 17-A550	11 spaces @ 1'-6" - 14'-6" - 24-A566 (I.E.F.), 17-A550	11 spaces @ 1'-6" - 14'-6" - 24-A566 (I.E.F.), 17-A550	10 spaces @ 1'-6" - 14'-6" - 11-A575, N.F.

**WING ELEVATION**

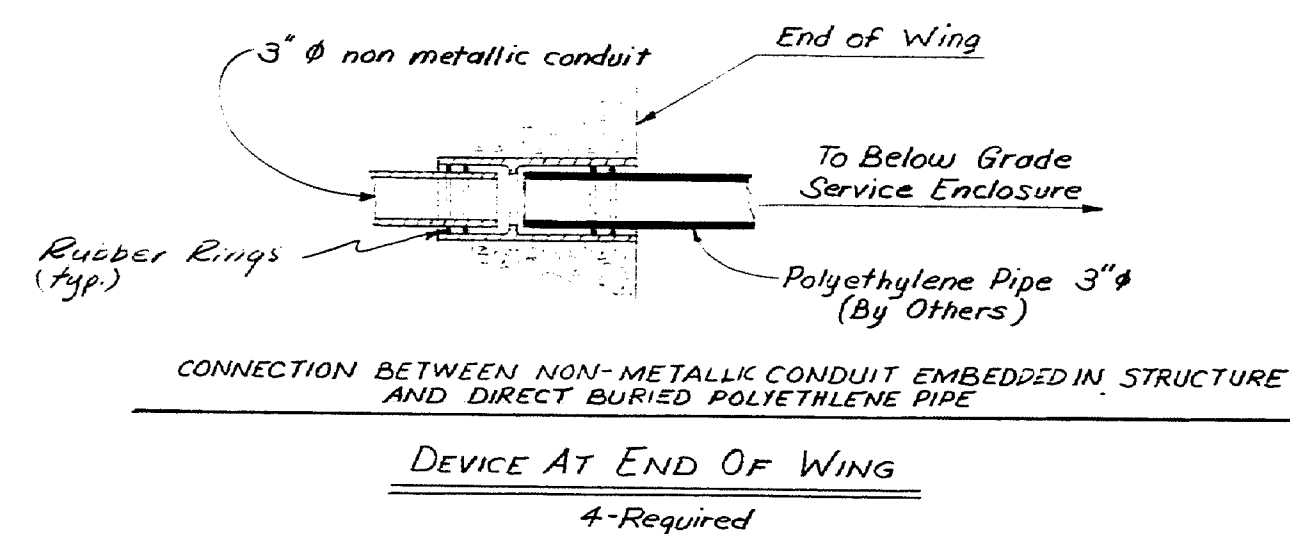
NOTE: See this sheet for "End Post Details"

NOTE: For Reinforcement see sheet #65

STATE HIGHWAY COMMISSION  
**INTERSTATE 295 & RAMP CS-7**  
 OVER  
**ST. JOHN STREET**  
 IN THE CITY OF  
**PORTLAND**  
 CUMBERLAND COUNTY  
 ABUTMENT NO. 2  
 SHEET 67 OF 85 AUGUSTA, MAINE MAY 1971

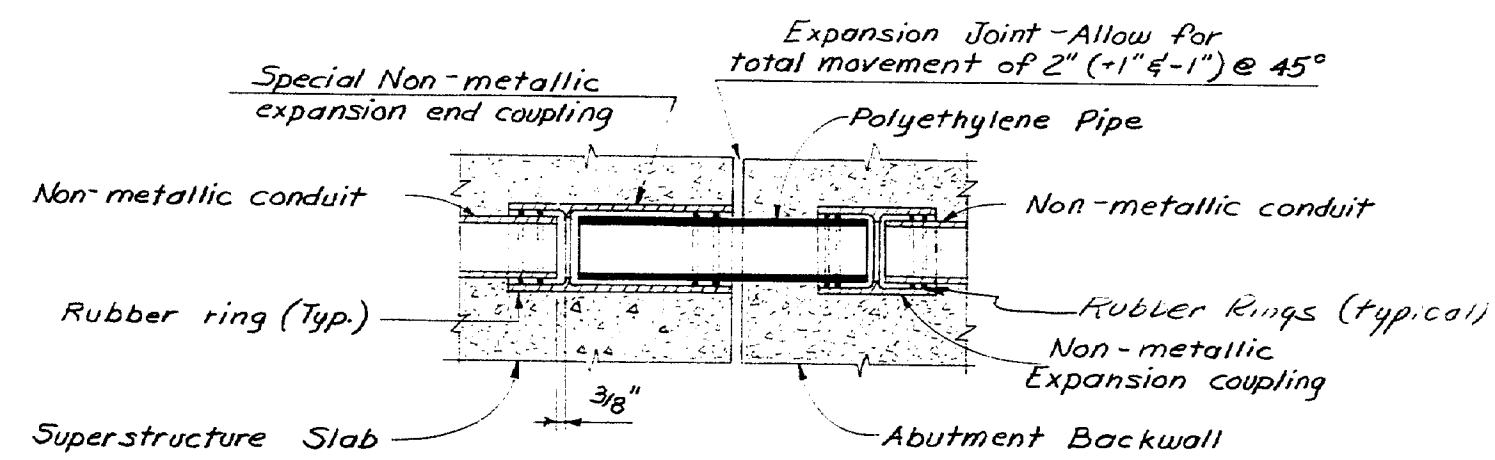
152-151

E. P. & R. REC. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	I 295-3(87) 48	68	85



DEVICE AT END OF WING

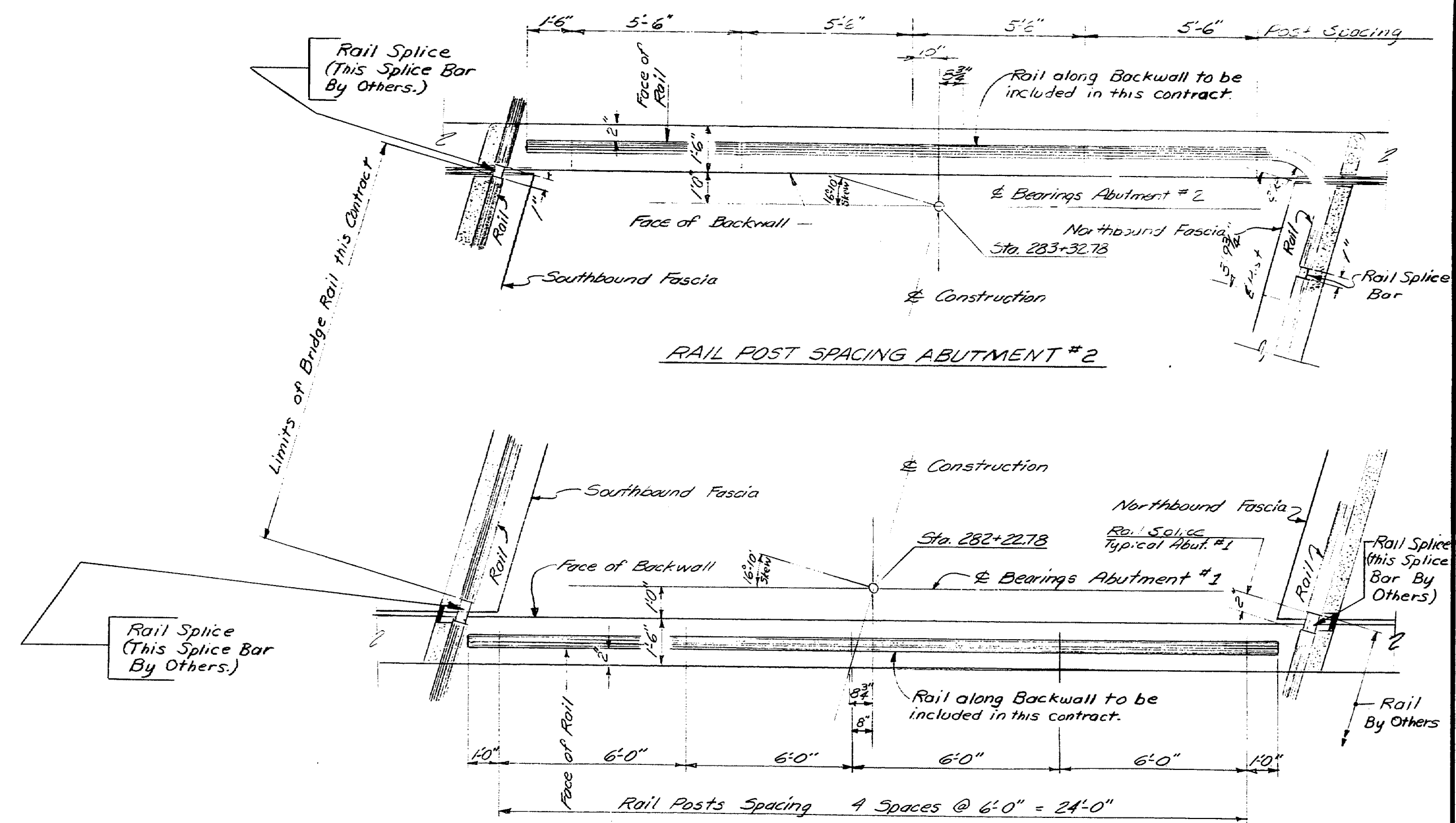
4-Required



EXPANSION DEVICE FOR NON-METALLIC CONDUIT

AT ABUTMENT & END OF SLAB

4-Required



RAIL POST SPACING ABUTMENT #2

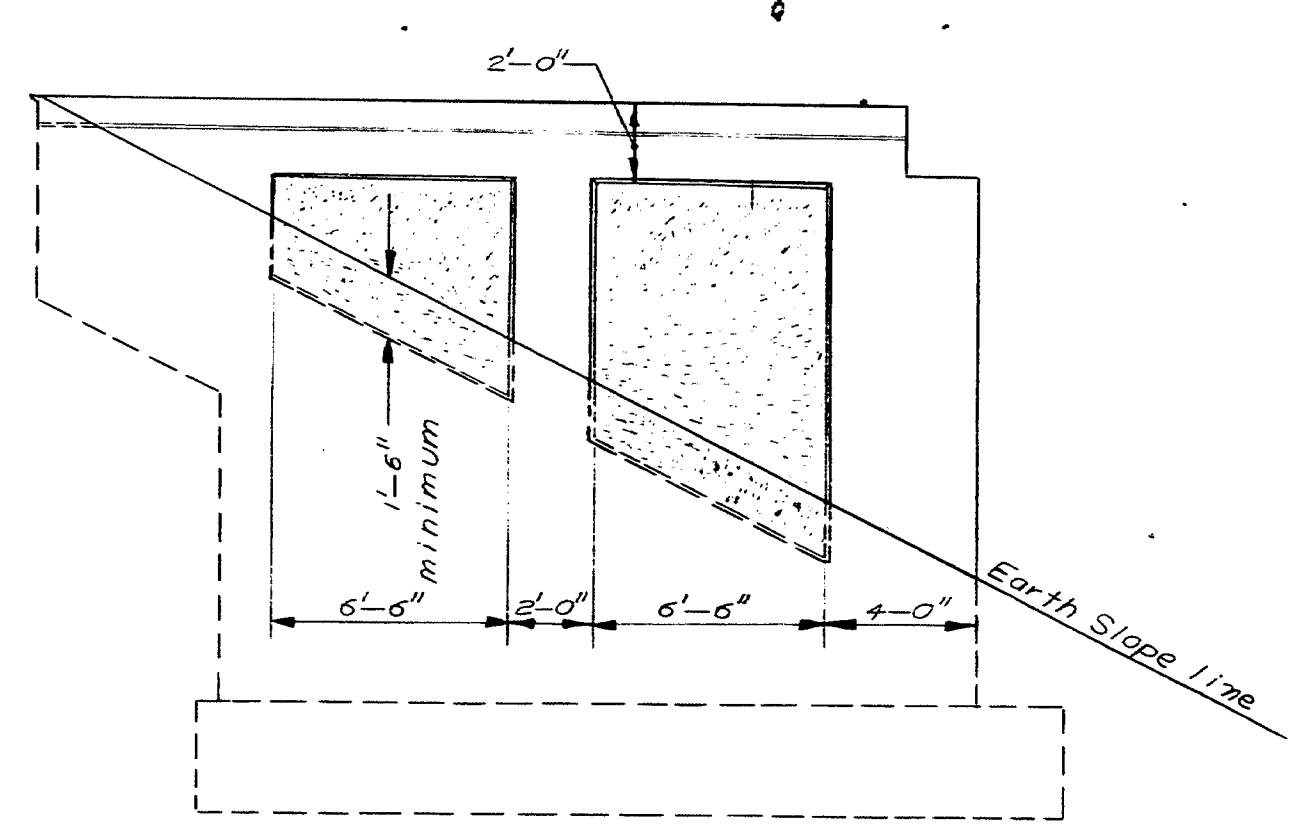
RAIL POST SPACING ABUTMENT #1

NOTE:  
For Rail Post Anchor Bolt setting  
see Standard Detail Sheet (BD-106-69)

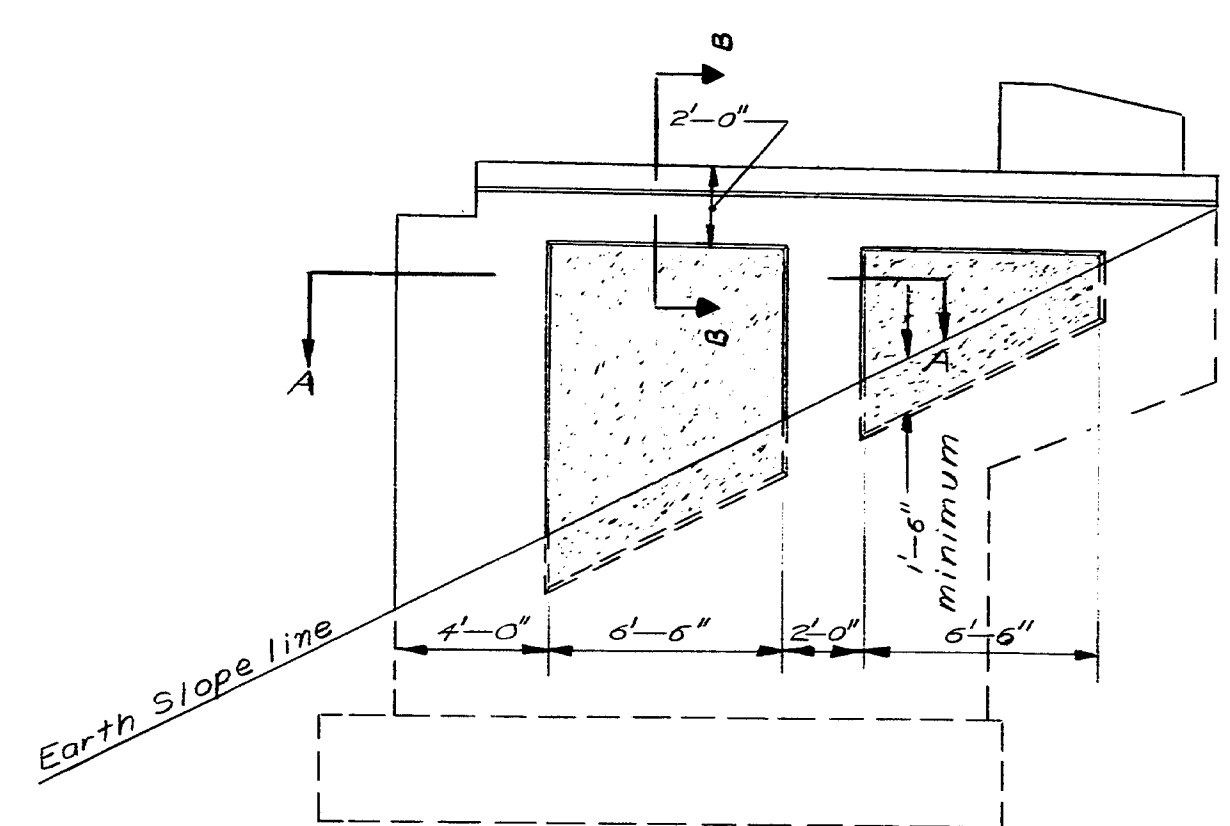
DESIGN - ALLEGOT	BRIDGE NO. SURVEY -
TRACE - D.P.E.H.P.	PLOT -
CHECK - E.G.C.	
STATE HIGHWAY COMMISSION	
INTERSTATE 295 & RAMPCS-7	
OVER	
ST. JOHN STREET	
IN THE CITY OF	
PORTLAND	
CUMBERLAND COUNTY	
-RAIL POST SPACING AT ABUTMENTS-	
-ELECTRICAL DETAIL-	
SHEET 68 OF 85 AUGUSTA, MAINE MAY 1971	

152-152

REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	I 295-33048	69	85

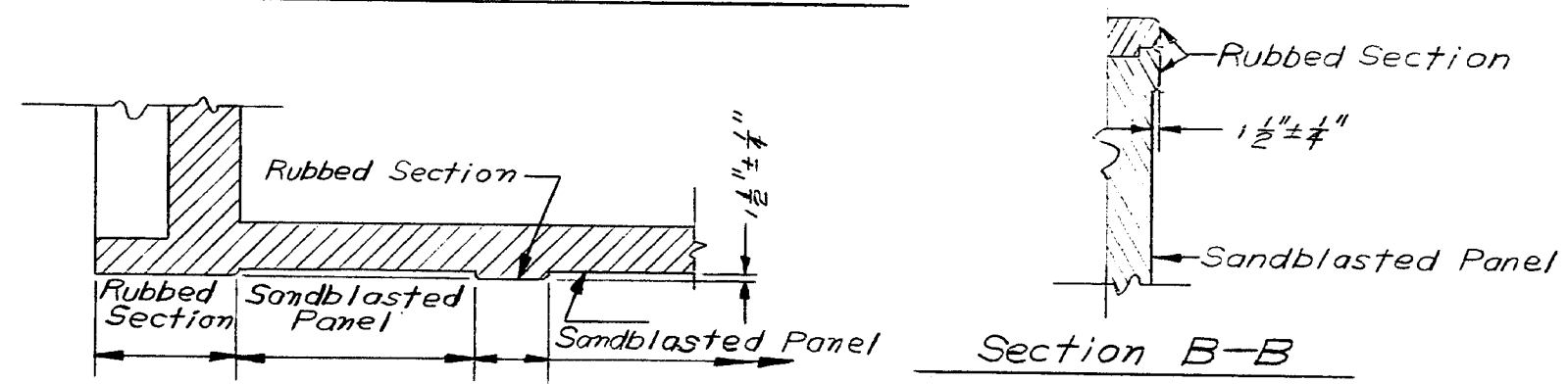


South Wing—Abutment No. 1



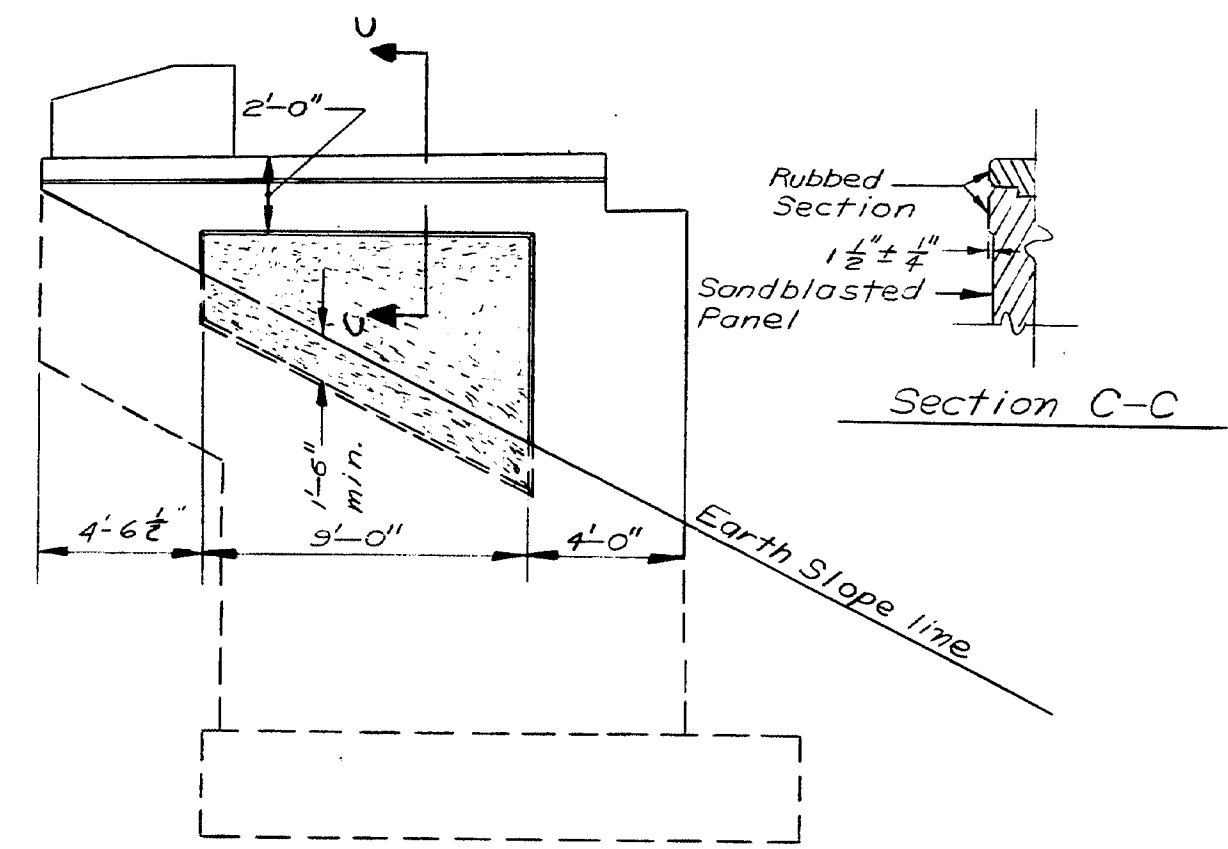
South Wing—Abutment No. 2

Shaded Areas Are Sandblasted,  
Typical On All Wings

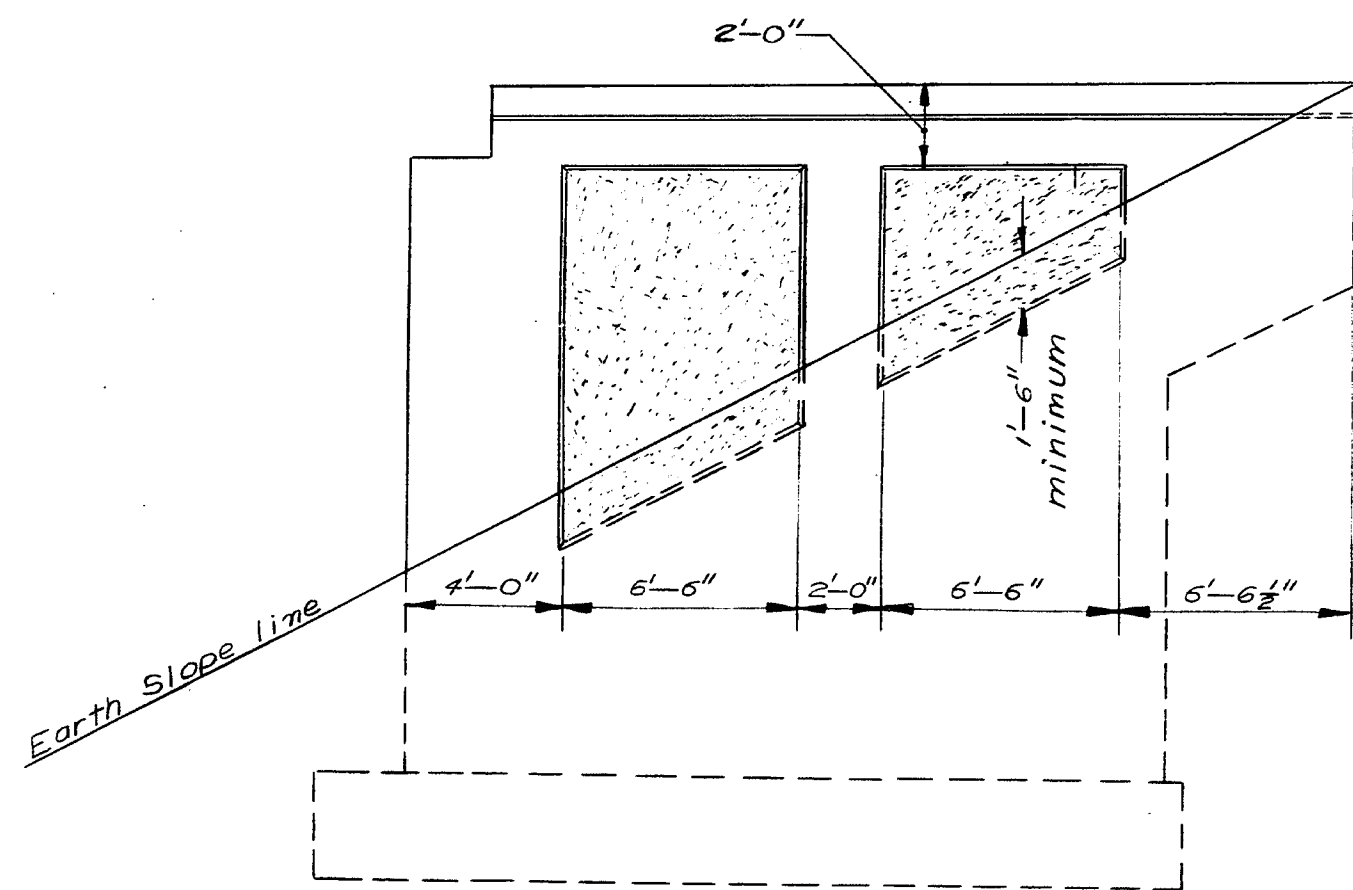


Section A-A

Section B-B



North Wing—Abutment No. 2



North Wing—Abutment No. 1

**Notes:**

All surfaces so designated on the plans shall be sandblasted. These surfaces shall be carried to a minimum depth of 1/8 inches below the finished ground.  
Special care shall be exercised so that form joints at the exposed face of concrete shall be tight.  
Before sandblasting, all fins and projections in the concrete shall be removed and all holes patched to create a surface of uniform texture.  
In order to insure a consistent surface texture for the areas to be architecturally treated, concrete aggregate shall be from the same source and portland cement shall be from the same manufacturer throughout the entire placement of the abutment wings and breastwall.  
At the time the concrete is placed, the contractor shall cast 3 sample slabs (6"X2'X4").  
Prior to sandblasting, the samples shall be sandblasted, each a different degree of penetration with a maximum depth of 3/8 inch approximately, and under the direction of the Engineer. The most desirable sample will be chosen by the Engineer, and the designated areas shall be sandblasted to match this sample.  
Concrete shall not be sandblasted for at least 28 days after placement.  
The contractor shall take all the necessary steps to protect materials and equipment from damage by the sandblasting operation. Personnel shall be properly equipped: sandblast hood for operator, and respirators and goggles for all other personnel exposed to dust.  
Payment for the sandblasting shall be included in the contract unit price for Item 502-21, "Structural Concrete Abutments and Retaining walls."

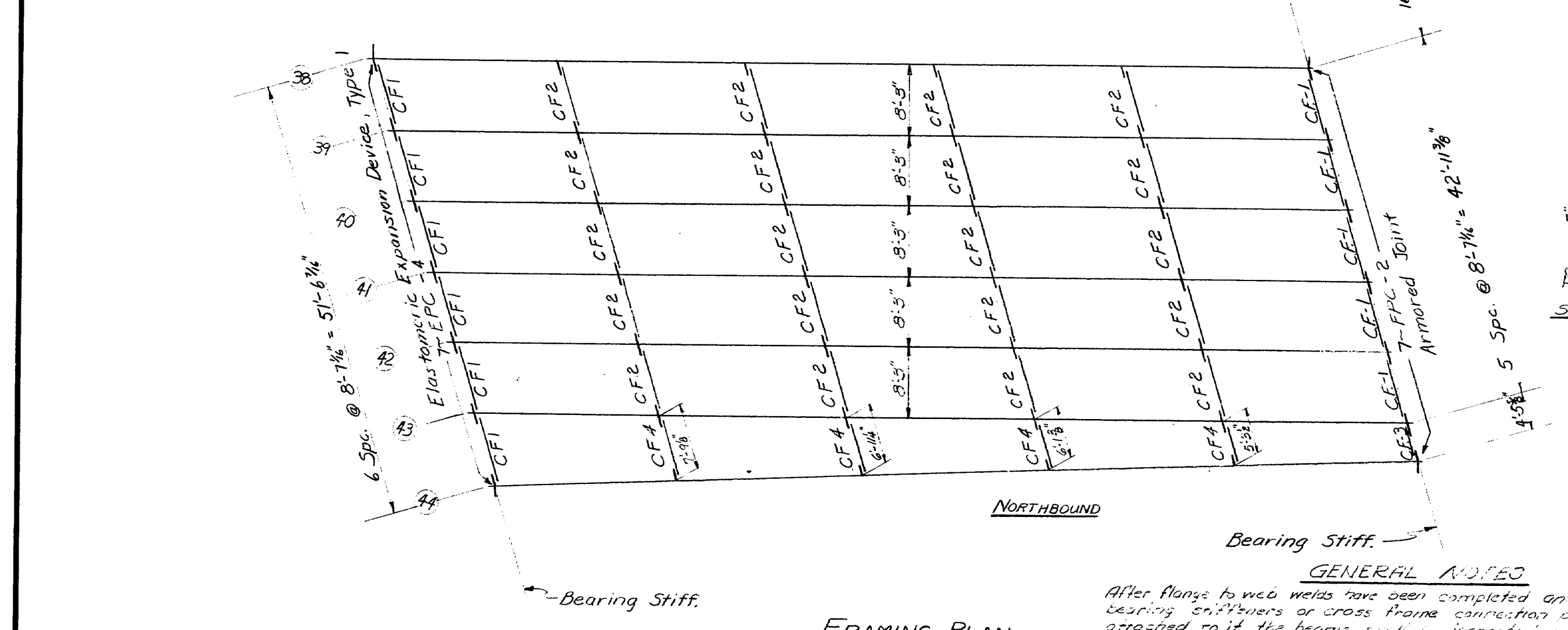
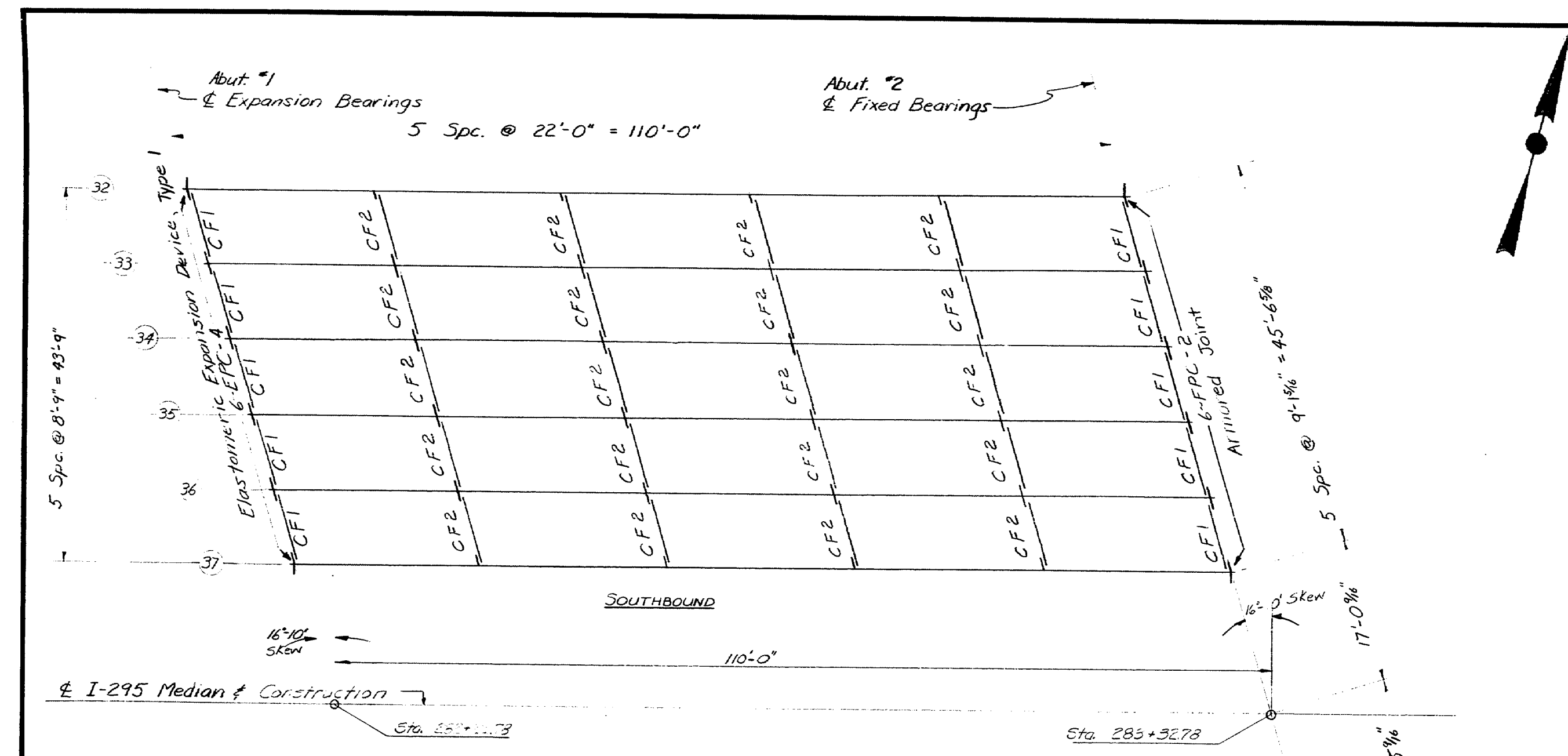
DESIGN - DETAILED	DATE
CHECKED	
REVISIONS	
FIELD CHANGES	
<b>PLANS</b>	

DESIGN - <i>ERC</i>	BRIDGE NO.
CHECK - <i>ERC</i>	SURVEY -
	PLAT -
STATE HIGHWAY COMMISSION	
INTERSTATE 295 & RAMP CS-7	
OVER	
ST. JOHN STREET	
IN THE CITY OF	
PORTLAND	
CUMBERLAND COUNTY	
ARCHITECTURAL TREATMENT	
SHEET 69 OF 85 AUGUSTA, MAINE MAY 1971	

152-153



B. P. R.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	I 295-3(9) 40	70	85



**FRAMING PLAN**

**GENERAL NOTES**

After flange to web welds have been completed and before any bearing stiffeners or cross frame connection plates are attached to it, the beams shall be inspected and shall be in accordance with American Welding Society Specifications for Welded Structures and Reinforcing Bars, AWS D 1.1 and AWS A 5.1.

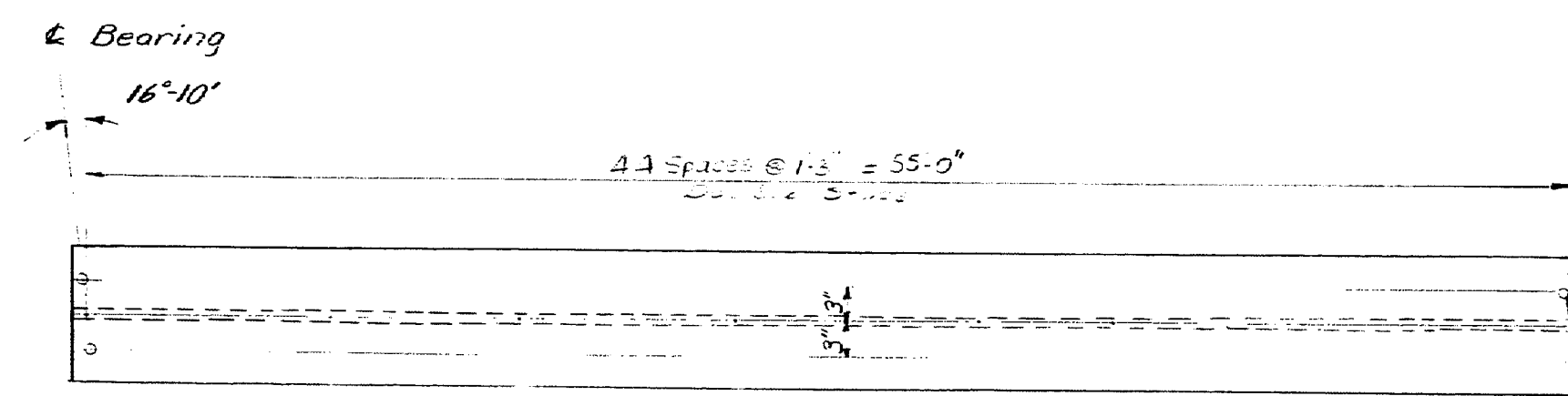
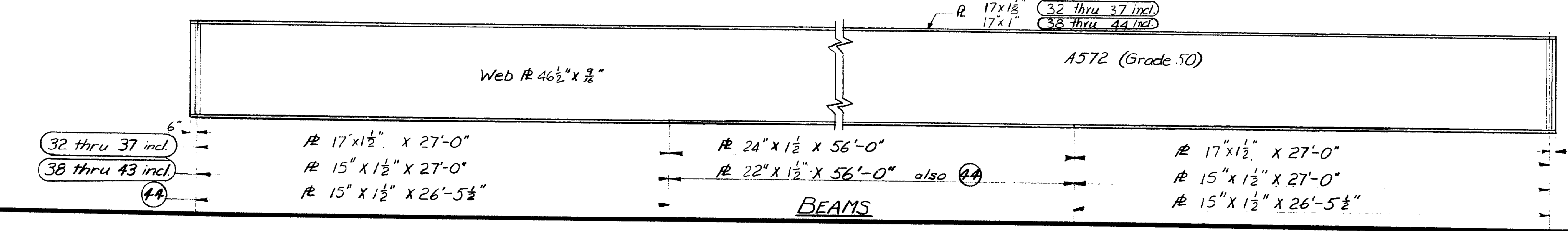
A maximum of two (2) transverse shop butt weld splices will be permitted to fabricate any complete web plate or flange plate, per beam.

Transverse web splices shall not be nearer than 1'-0" to a flange splice.

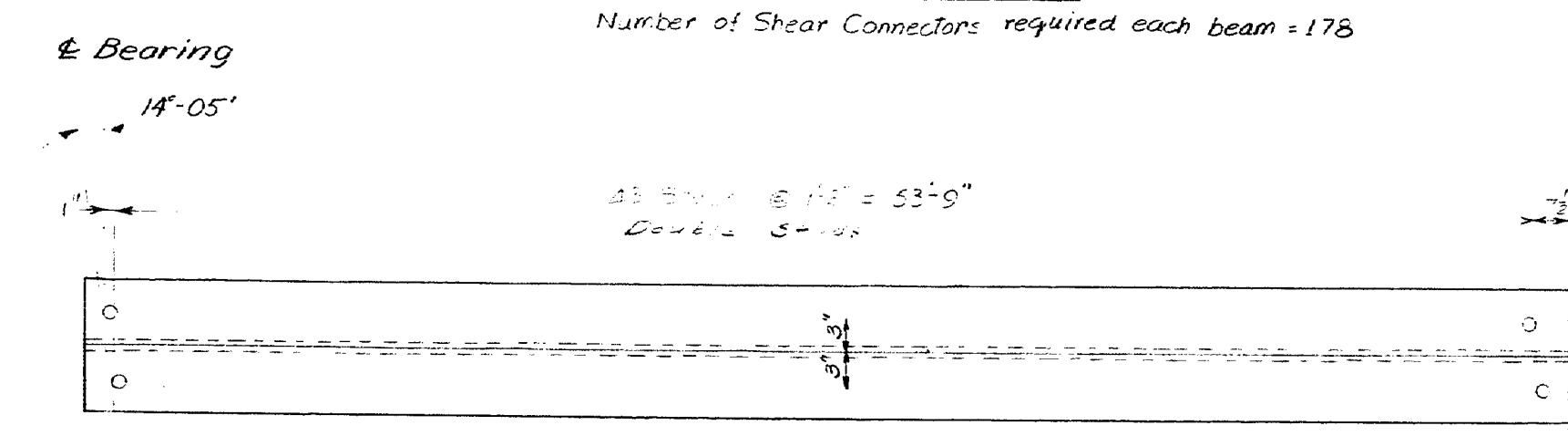
Location and details of butt weld shop splices shall be shown on shop detail drawings for approval by the Engineer.

No web butt welds will be allowed within 10' of center of the beam.

**NOTE:**  
All beam dimensions are horizontal.  
For slope of beams see Bottom of Slab Elevations sheet # 71



**Beams 32 thru 43**  
Number of Shear Connectors required each beam = 176



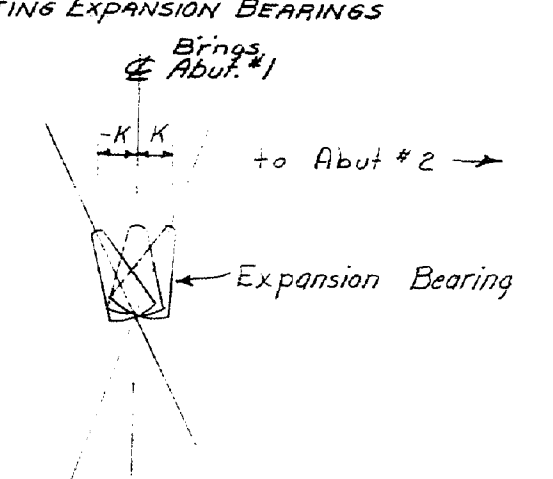
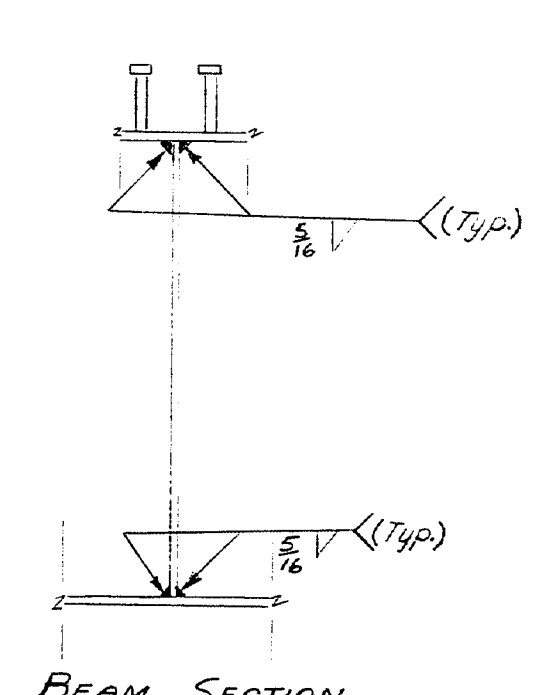
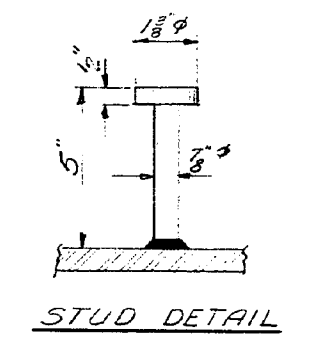
**Beam 44**  
Number of Shear Connectors required this beam = 176

**SHEAR CONNECTORS**

Total Number required = 2312  
Weight = 2259 lbs

TABLE FOR SETTING EXPANSION BEARINGS

Temp. In Degrees F.	X
-30	1 1/8"
-15	1"
0	7/8"
15	3/4"
30	5/8"
45	1/2"
60	3/8"
75	1/4"
90	1/8"
105	0



Fixed Bearings Abut. #2

**NOTE:**  
The bearing stiffeners shall be plumb after erection. Cross frame connection plates may be set plumb or normal to flange plates. Whichever method chosen shall be used throughout the entire job.

DESIGN - ALL  
TRACE - Def. Sprawl  
CHECK - E.B.C.

BRIDGE NO. SURVEY PLOT

STATE HIGHWAY COMMISSION

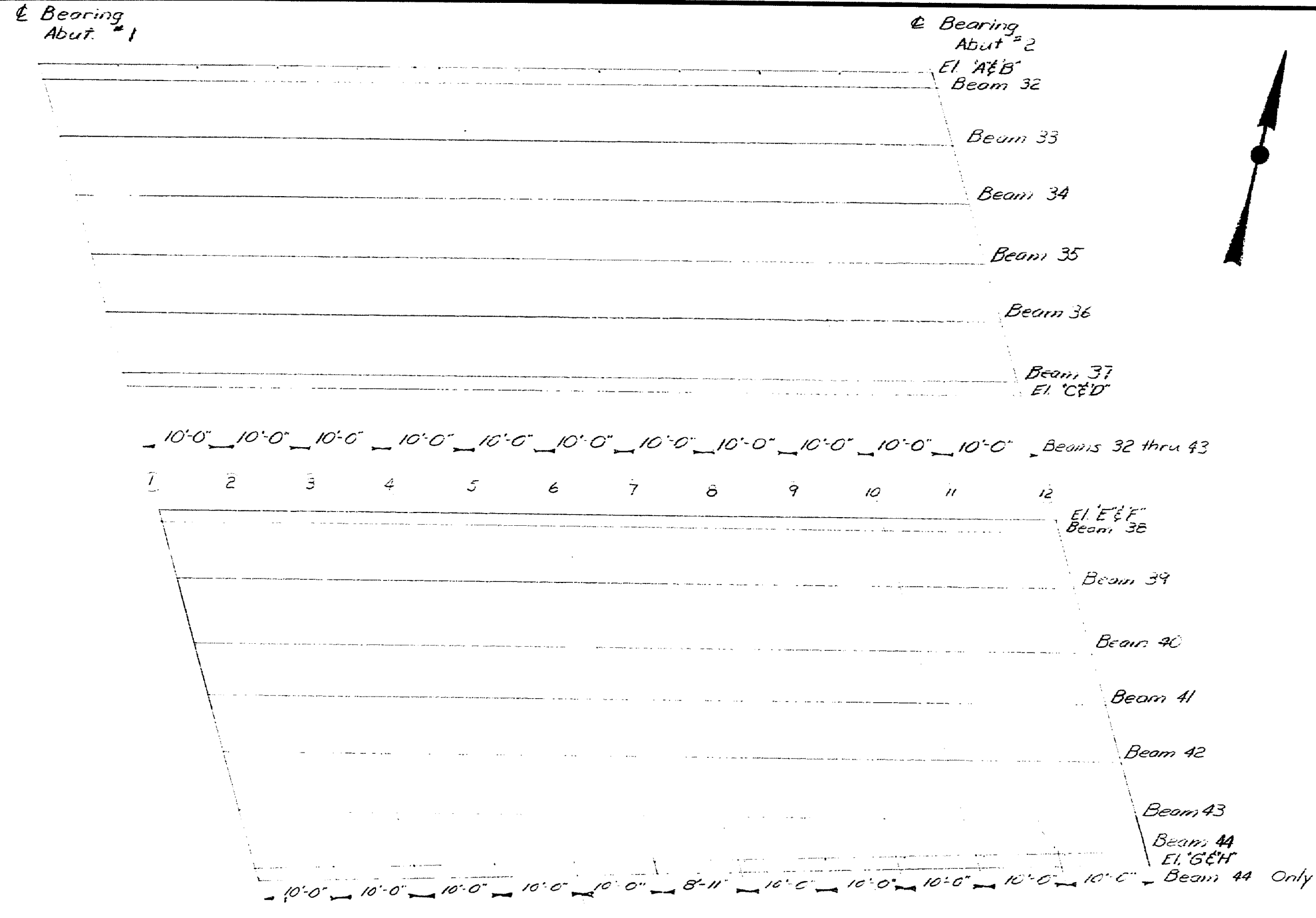
**INTERSTATE 295 BRAMPCS-7**  
OVER

**ST. JOHN STREET**  
IN THE CITY OF  
**PORTLAND**  
**CUMBERLAND COUNTY**  
STRUCTURAL STEEL

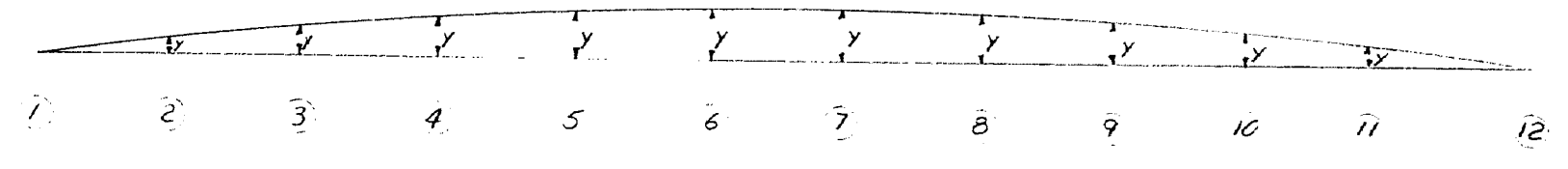
SHEET 70 OF 85 AUGUSTA, MAINE MAY 1971

152-154

B. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	E 295-364/48	71	85



BLOCKING DIAGRAM



CAMBER DIAGRAM

Beams	1	2	3	4	5	6	7	8	9	10	11	12
32 thru 44	0	2 1/8	3 1/8	5	6	6 3/8	6 5/8	6	5 1/8	3 3/8	2 1/8	0

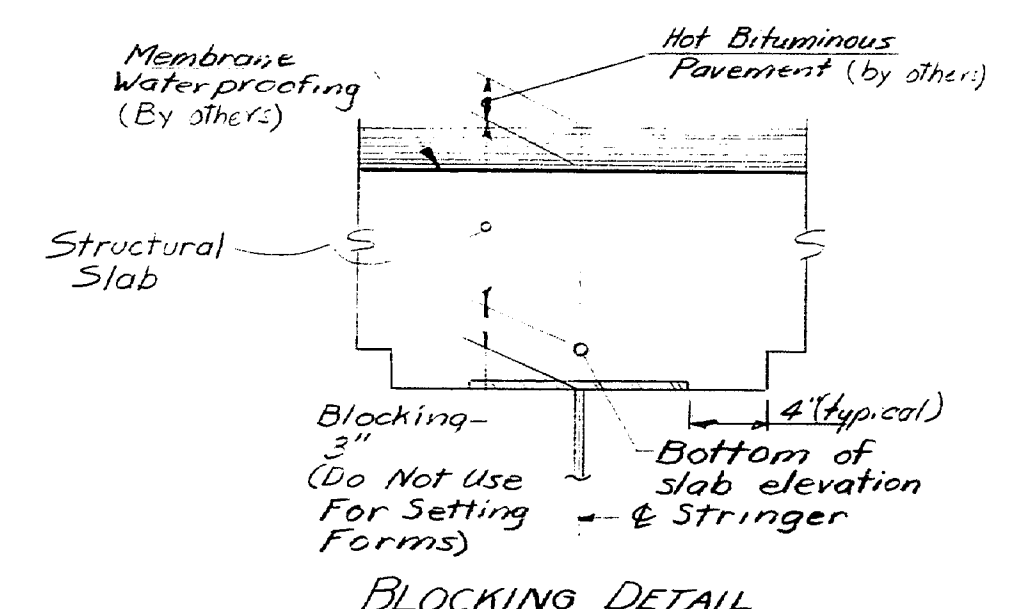
CAMBER SCHEME

NOTE:  
All beams shall be cambered as shown above to compensate for dead load deflection and vertical curvature.

BOTTOM OF SLAB AND CURB FASCIA ELEVATIONS

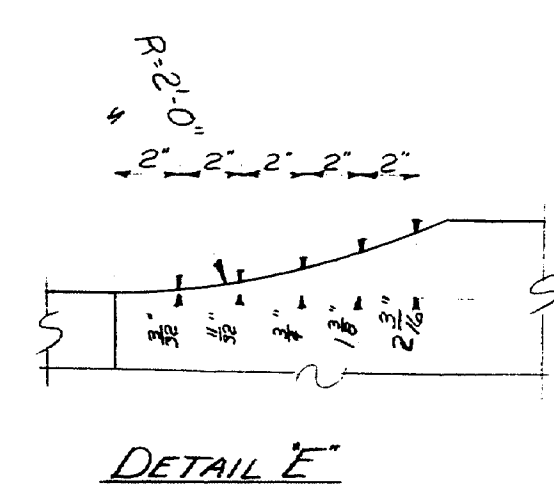
	1	2	3	4	5	6	7	8	9	10	11	12
El. 'A'	62.27	62.12	61.95	61.75	61.53	61.27	60.97	60.64	60.28	59.88	59.45	59.01
El. 'B'	63.94	63.79	63.62	63.43	63.22	62.97	62.66	62.33	61.97	61.55	61.17	60.74
Beam 32	61.7	61.53	61.35	61.15	60.93	60.67	60.37	60.04	59.68	59.28	58.85	58.41
Beam 33	61.94	61.79	61.62	61.43	61.22	60.97	60.66	60.33	60.12	59.75	59.35	58.94
Beam 34	61.71	61.55	61.37	61.17	60.95	60.69	60.39	60.06	59.70	59.30	58.89	58.46
Beam 35	61.51	61.35	61.17	60.97	60.75	60.49	60.19	60.05	59.68	59.28	58.85	58.41
Beam 36	61.31	61.15	60.97	60.77	60.55	60.29	60.02	60.17	59.85	59.45	59.20	58.83
Beam 37	61.11	60.95	60.77	60.57	60.35	60.09	60.15	59.83	59.43	59.18	58.81	58.41
El. 'C'	61.04	60.88	60.70	60.50	60.29	60.03	59.77	59.48	59.15	58.80	58.45	58.00
El. 'D'	62.35	62.20	62.02	61.82	61.61	61.35	61.04	60.79	60.52	60.22	59.88	59.53
El. 'E'	61.08	60.92	60.74	60.54	60.33	60.07	59.75	59.63	59.30	58.94	58.56	58.17
El. 'F'	62.84	62.69	62.51	62.31	62.10	61.84	61.53	61.31	60.98	60.63	60.25	59.87
Beam 38	61.12	60.96	60.78	60.58	60.37	60.11	59.85	59.57	59.25	58.91	58.55	58.19
Beam 39	60.96	60.80	60.62	60.42	60.21	60.05	59.85	59.57	59.25	58.91	58.55	58.19
Beam 40	60.30	60.14	60.06	60.12	60.25	60.45	60.75	61.15	61.65	62.25	62.95	63.75
Beam 41	60.25	60.09	60.01	60.15	60.35	60.65	61.05	61.55	62.15	62.85	63.65	64.55
Beam 42	60.47	60.31	60.23	60.37	60.57	60.87	61.27	61.77	62.37	63.07	63.87	64.77
Beam 43	60.27	60.11	60.03	60.17	60.37	60.67	61.07	61.57	62.17	62.87	63.67	64.57
Beam 44	60.06	60.03	60.19	60.39	60.69	61.09	61.59	62.19	62.89	63.69	64.59	65.49
El. 'G'	59.30	59.14	59.06	59.20	59.40	59.70	60.10	60.60	61.20	61.90	62.70	63.60
El. 'H'	61.72	61.56	61.38	61.18	60.96	60.70	60.39	60.04	59.65	59.22	58.75	58.24

Note: Dead load deflections will be furnished by the Engineer, if required.

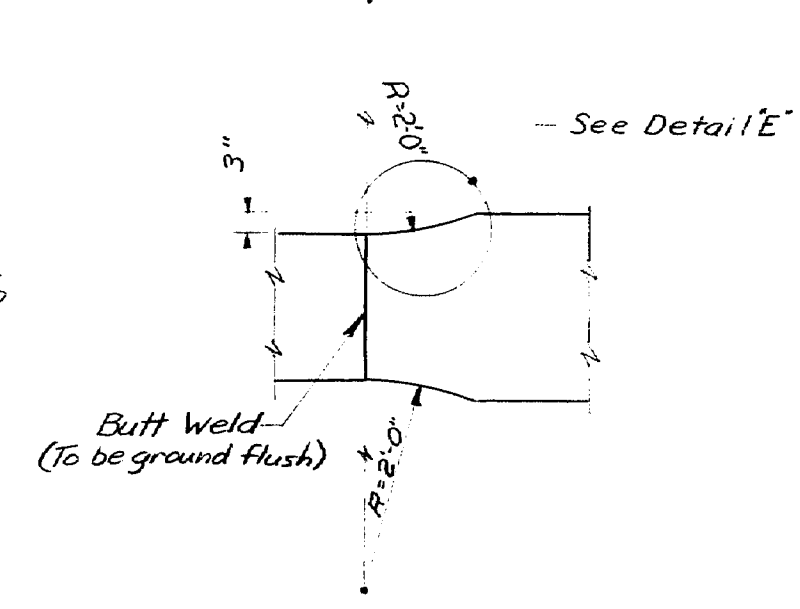


BLOCKING DETAIL

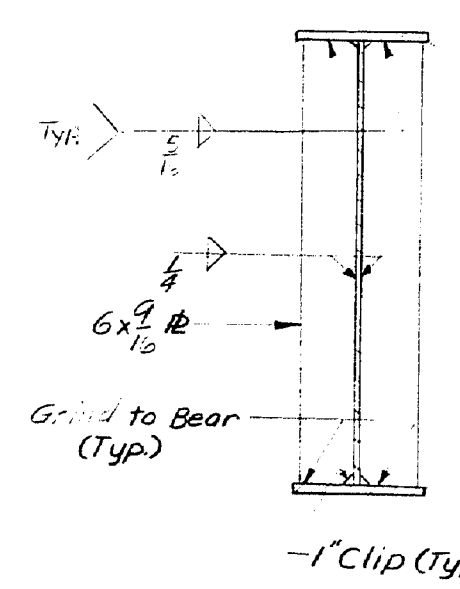
NOTE:  
To compensate for dead load deflections, as well as possible irregularities in beams, the bottom of slab elevations shall be set at the points indicated before any of the slab formwork is started.



DETAIL E



FLANGE WIDTH TRANSITION

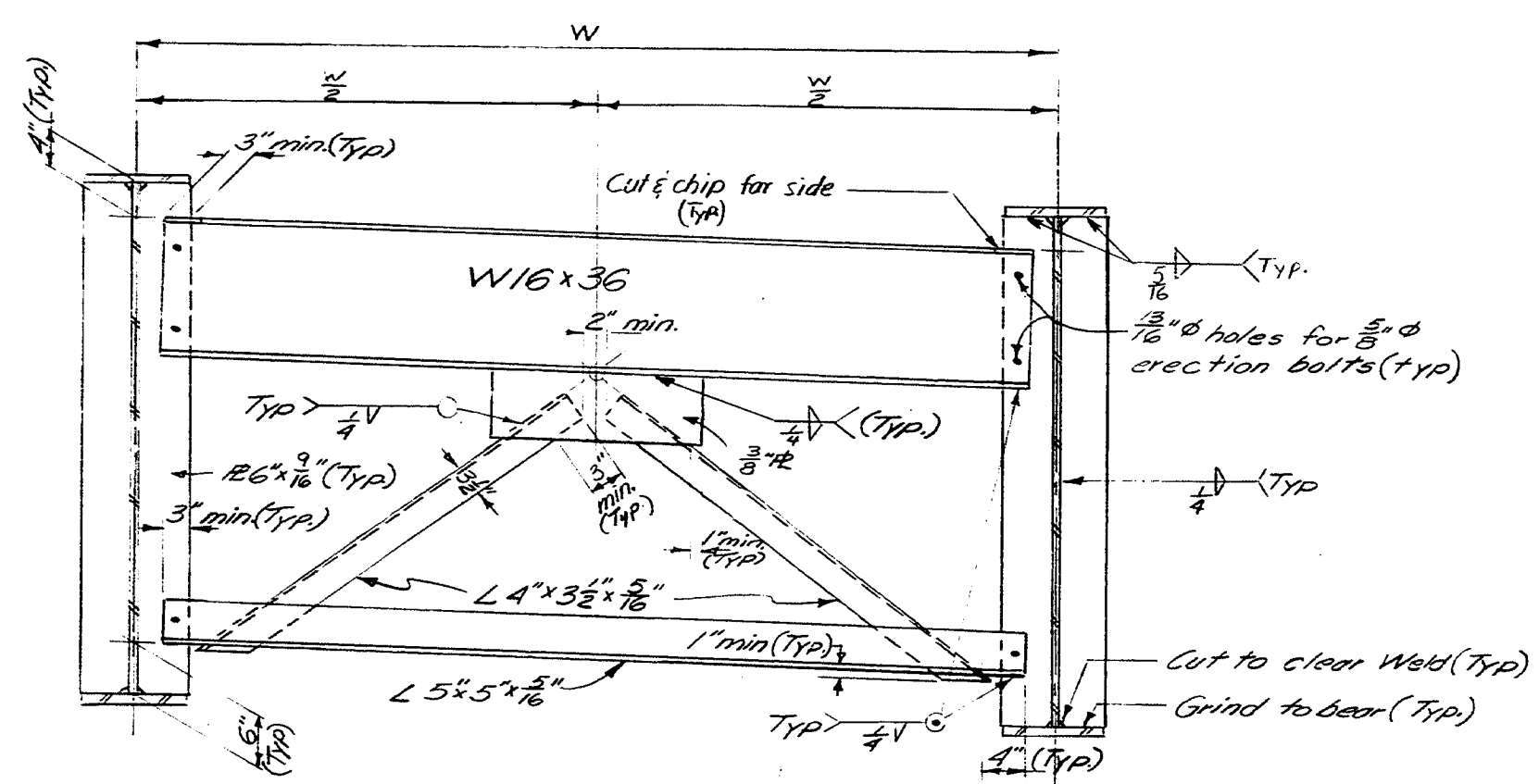


BEARING STIFFNESS DETAIL

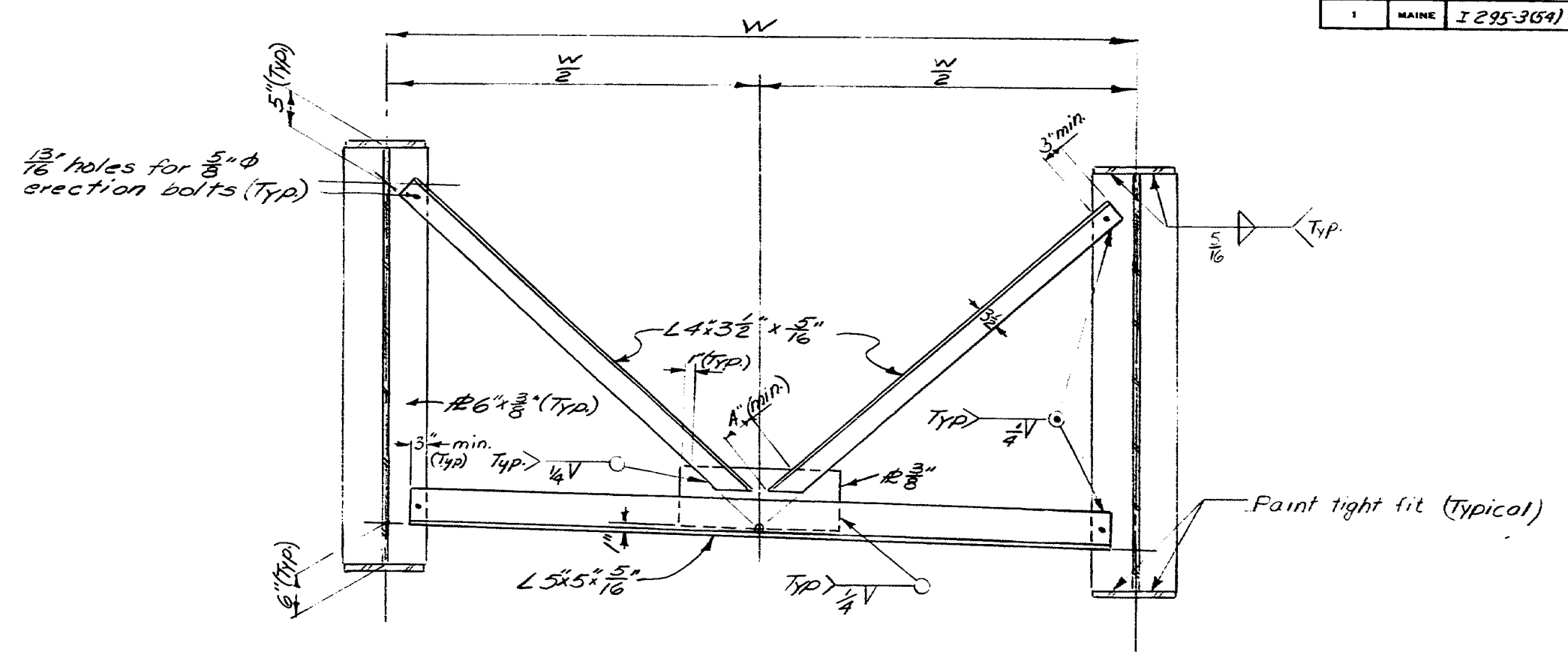
DESIGN - ALL	BRIDGE NO.
TRACE - DET. SPAN	SURVEY -
CHECK - E.B.C.	PLAT -
STATE HIGHWAY COMMISSION	
INTERSTATE 295 & RAMP CS-7	
OVER	
ST. JOHN STREET	
IN THE CITY OF	
PORTLAND	
CUMBERLAND COUNTY	
STRUCTURAL STEEL & BOTTOM SLAB ELEV.	
SHEET 71 OF 85 AUGUSTA, MAINE MAY 1971	

152-155

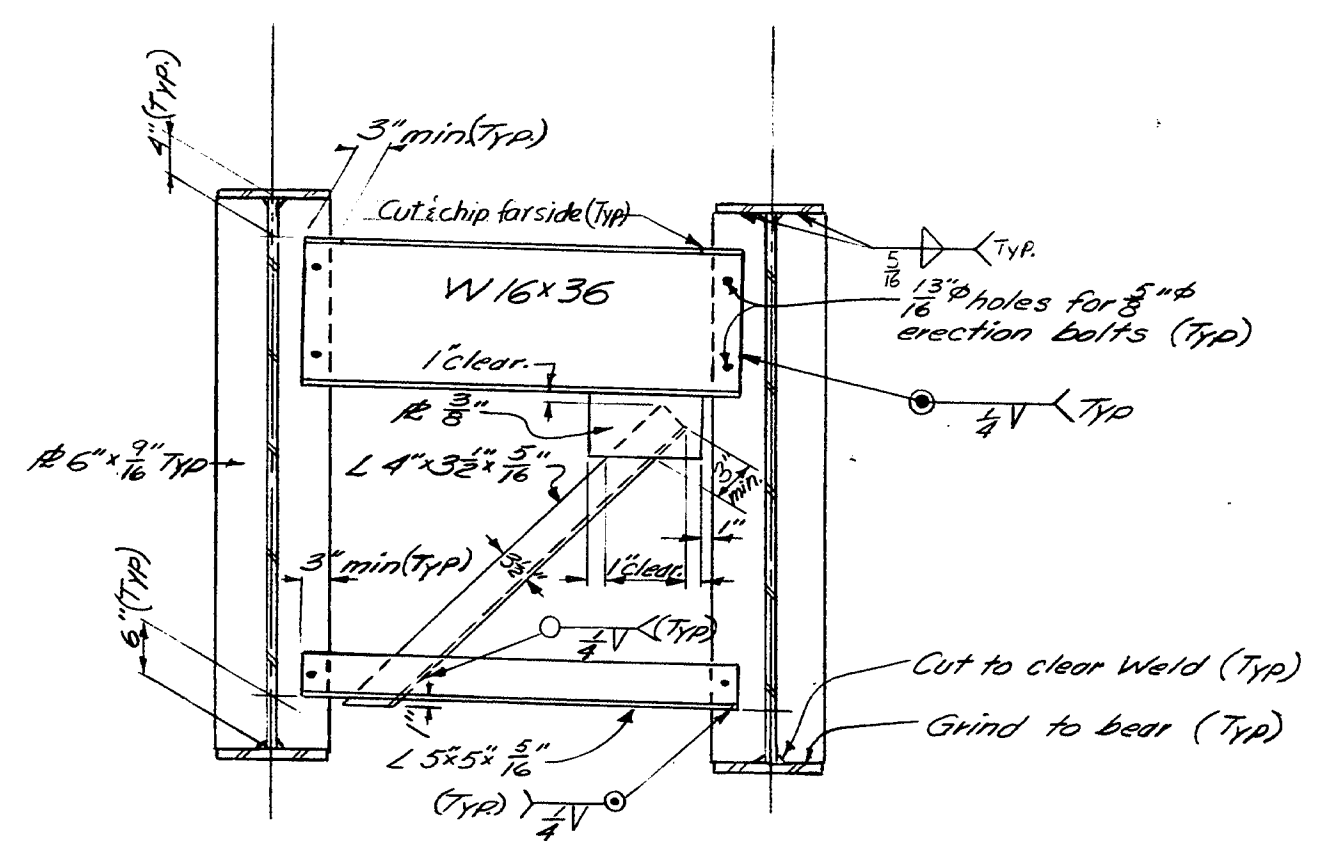
S.P.R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	I 295-364) 10	72	85



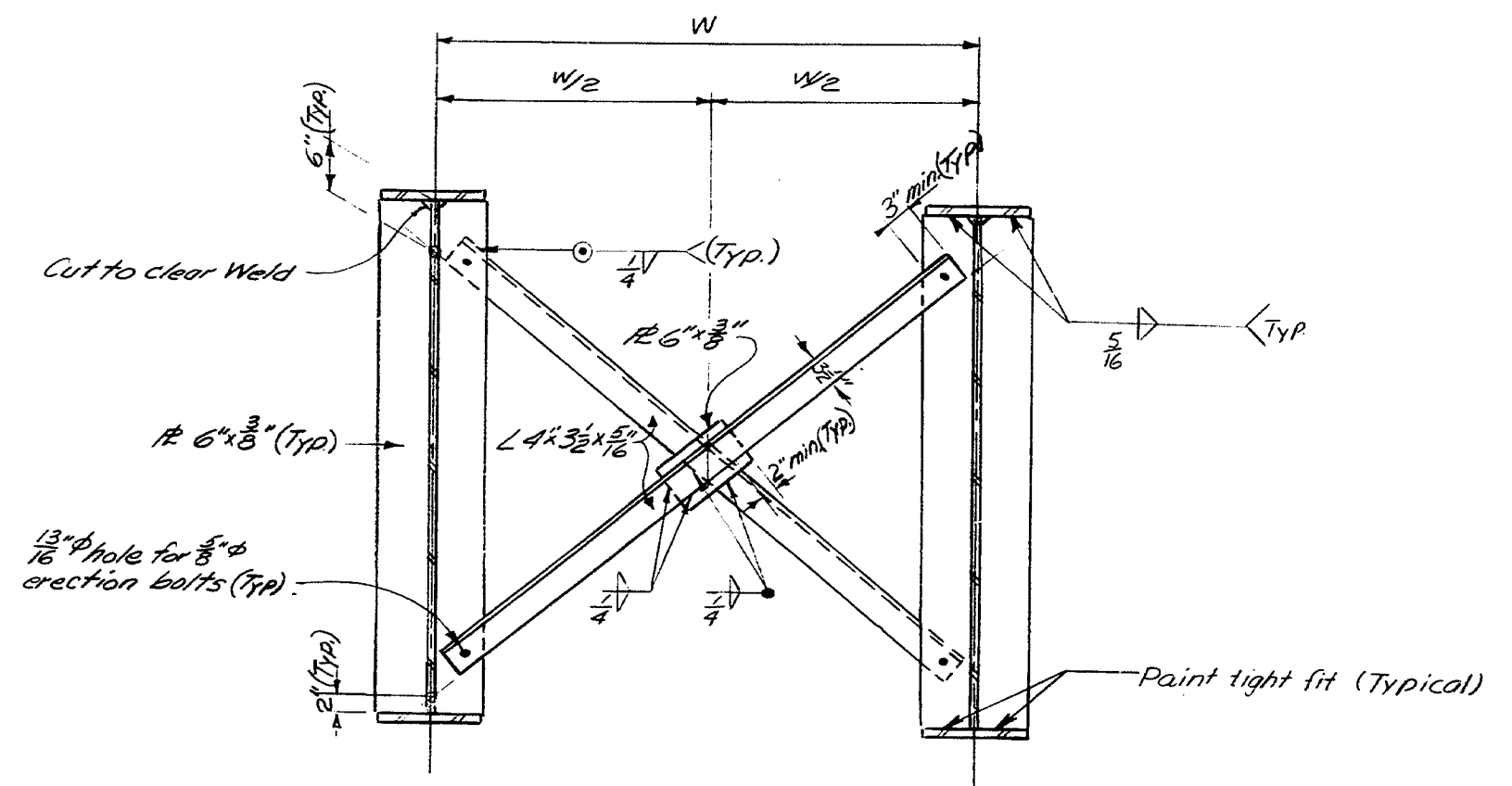
**CROSS FRAME "CF-1"**  
Number Required (21)



**CROSS FRAME "CF-2"**  
Number Required (40)



**CROSS FRAME "CF-3"**  
1 Required



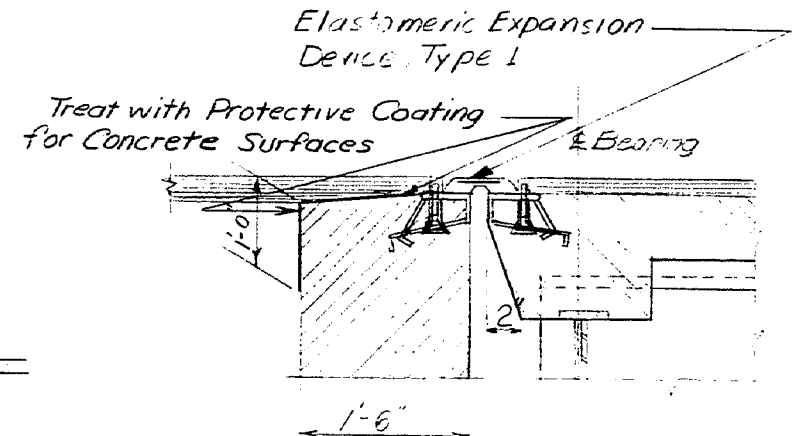
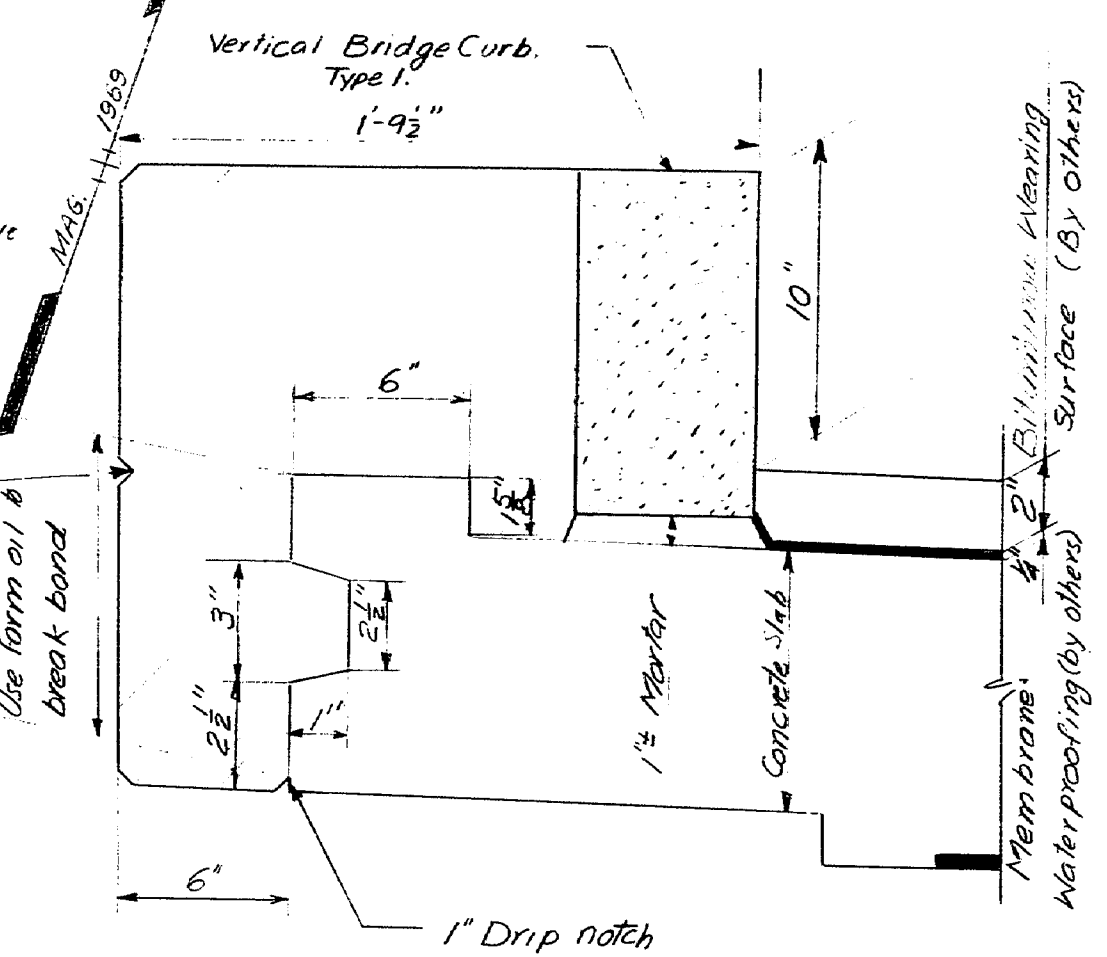
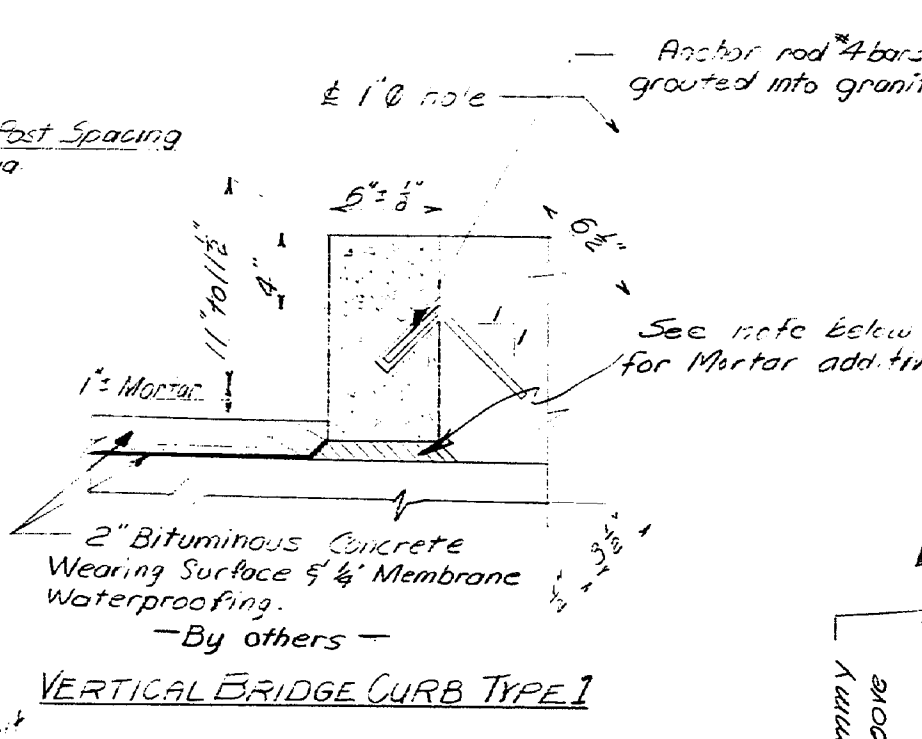
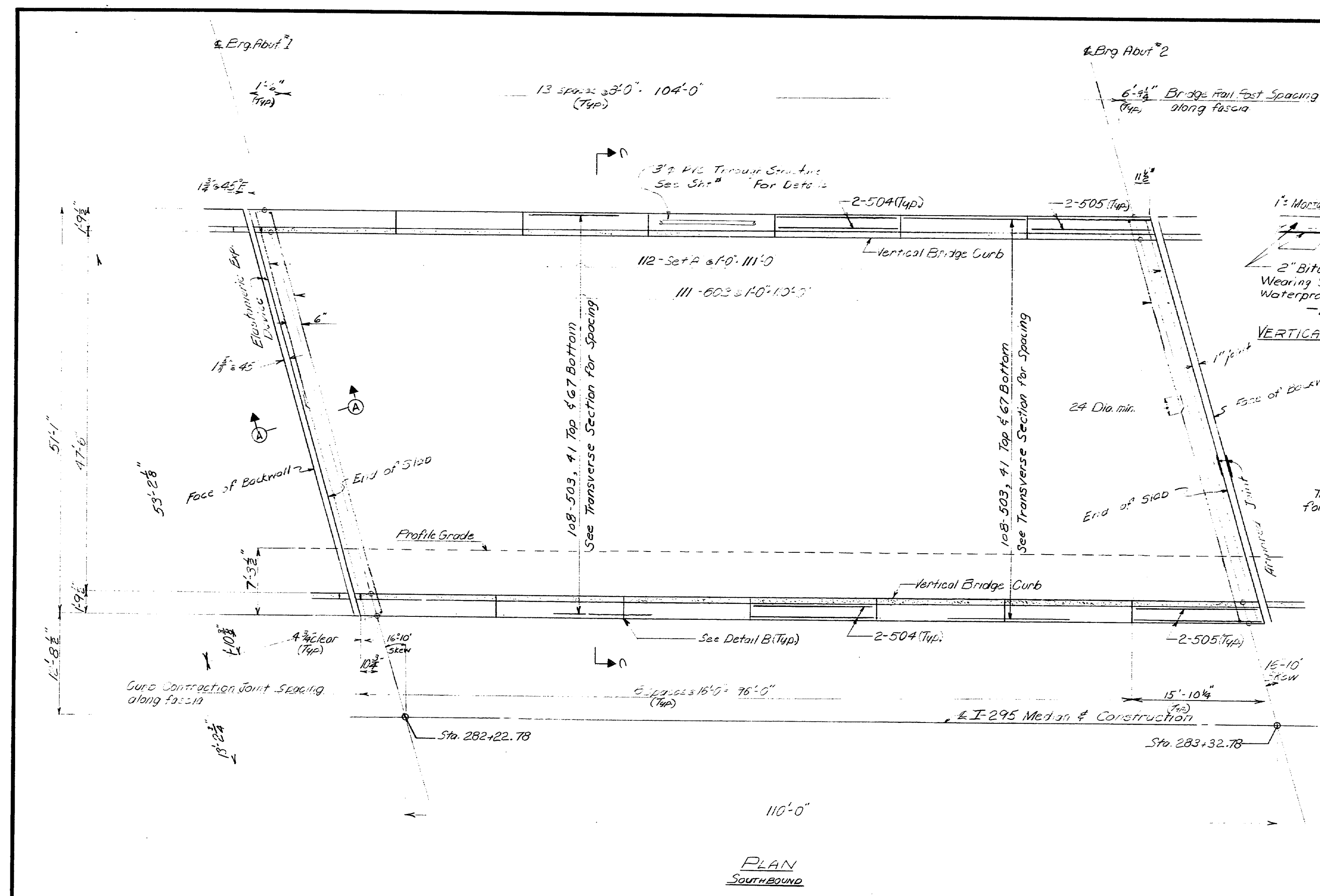
**CROSS FRAME "CF-A"**  
Number Required (4)

DESIGN - DETAILED	DATE
CHECKED	
REVISIONS	
FIELD CHANGES	
<b>PLANS</b>	

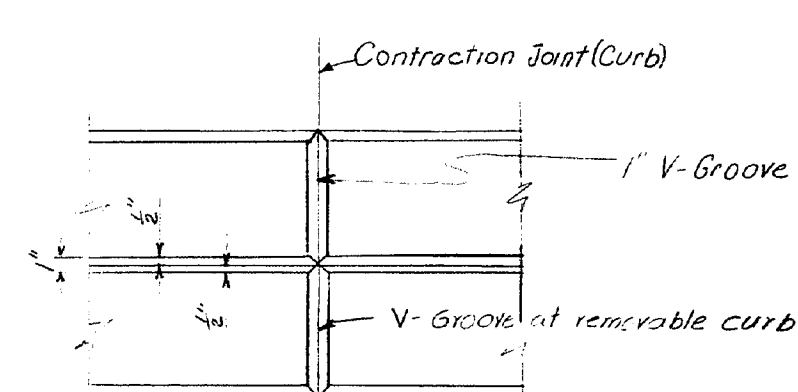
DESIGN - G.S.J.	BRIDGE NO.
TRACE - W.P.	SURVEY -
CHECK - E.B.C.	PILOT -
STATE HIGHWAY COMMISSION	
<b>INTERSTATE 295 &amp; RAMP CS-7</b>	
OVER	
<b>ST. JOHN STREET</b>	
IN THE CITY OF	
<b>PORTLAND</b>	
<b>CUMBERLAND COUNTY</b>	
CROSS FRAMES	
SHEET 72 OF 85	AUGUSTA, MAINE MAY 1971

152-156

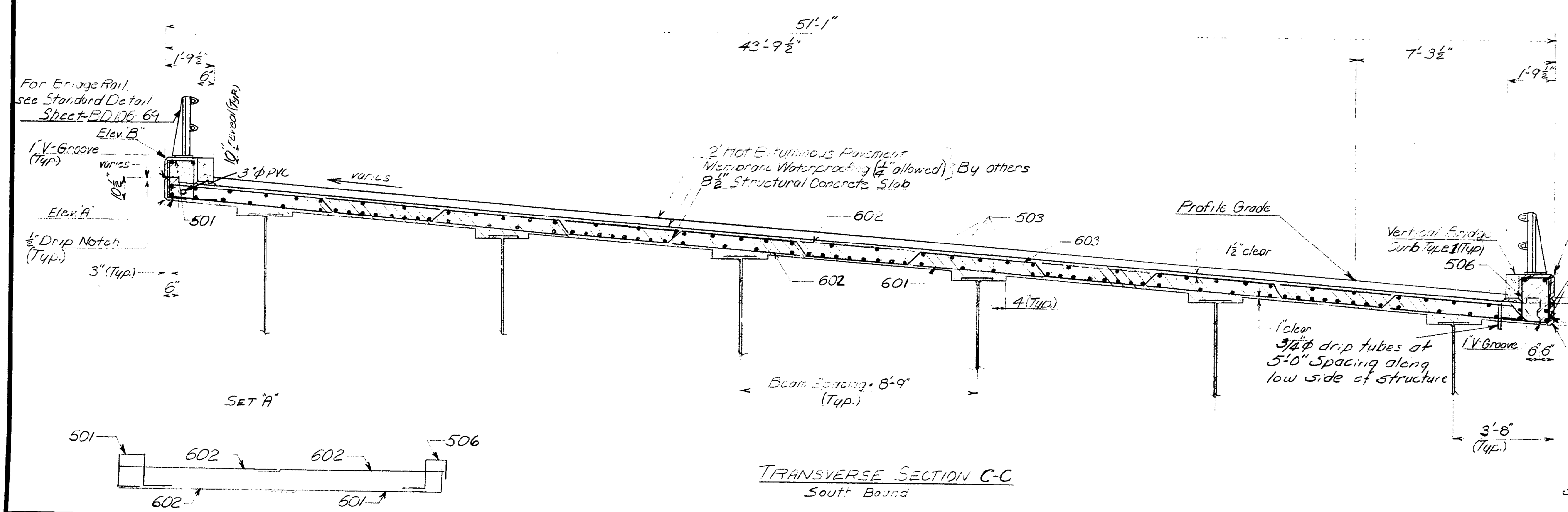
S.P.R. REC. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	Z 295-384148	73	85



NOTE: Mortar for bedding of and for joints in the Granite Curb shall contain an approved Non-Shrink additive.



- GENERAL SUPERSTRUCTURE NOTES
- (1) At all curb joints, break the bond between concrete surfaces with a clear approved form oil. Form V-groove on outside face of curb at vertical joint. Provide joints in vertical bridge curb construction joints.
  - (2) For bridge rail, see Standard Detail Sheets BD 106-69 Aluminum Rail.
  - (3) For Rail Post layout see this sheet and sheets #66 & #67
  - (4) All exposed edges to be chamfered 2".
  - (5) Vertical Bridge Curb will be paid for under Item 509.3
  - (6) Apply Protective Coating for Concrete Surfaces to the top of Curbs & completely coat fascia down to drip notch and concrete End Rail.



- TRANSVERSE SECTION NOTES
1. For Elevations A, B, C & D See Curb Fascia Elevations Table Sheet # 71
  2. Elevations A, B, C & D are to be set on the fascia forms BEFORE superstructure reinforcing steel and structural slab concrete is placed.

DESIGN - ALL  
TRACE - DWP - ENFS/PROU  
CHECK - EBC

BRIDGE NO. SURVEY PLOT

STATE HIGHWAY COMMISSION

INTERSTATE 295 & RAMPS 7 OVER

ST. JOHN STREET

IN THE CITY OF

PORTLAND

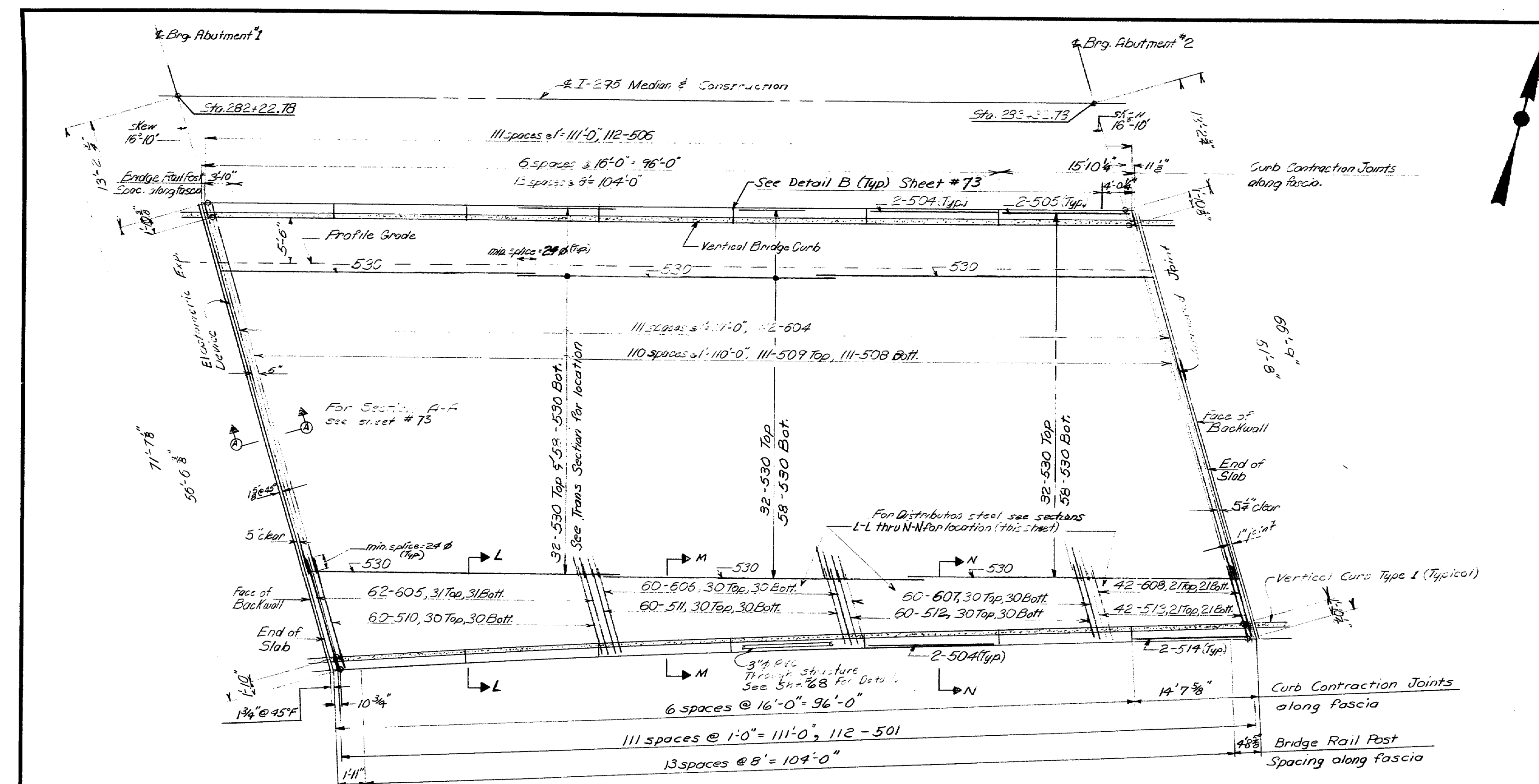
GUMBERLAND COUNTY

SUPERSTRUCTURE S.B.

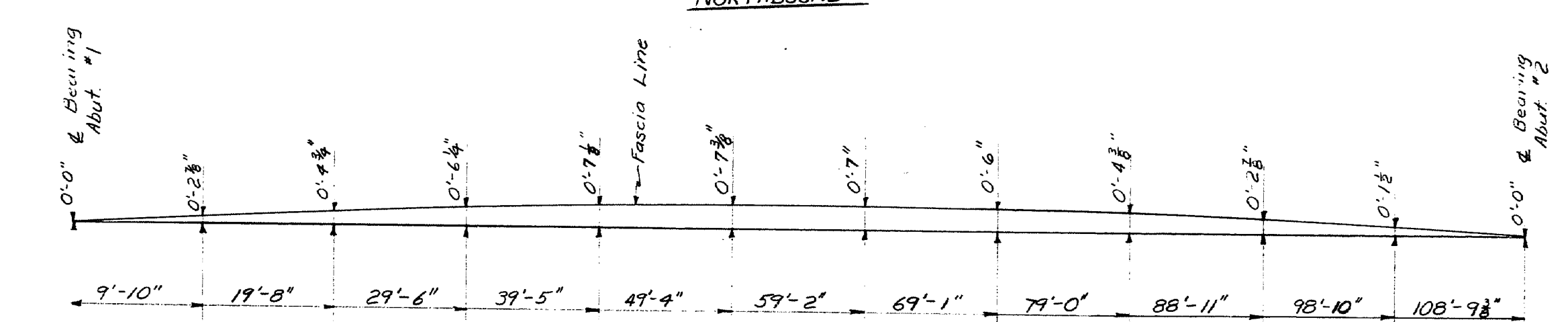
SHEET 73 OF 85 AUGUSTA, MAINE MAY 1971

152-157

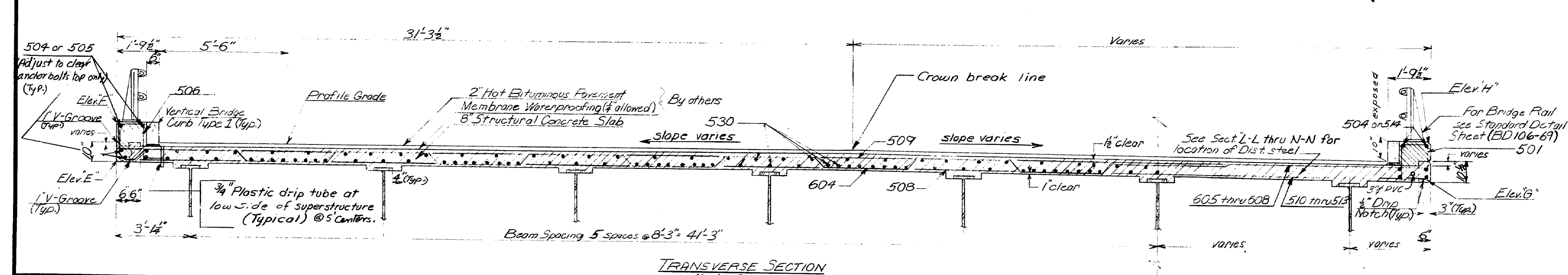
R.P.R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	I-295-309/40	79	85



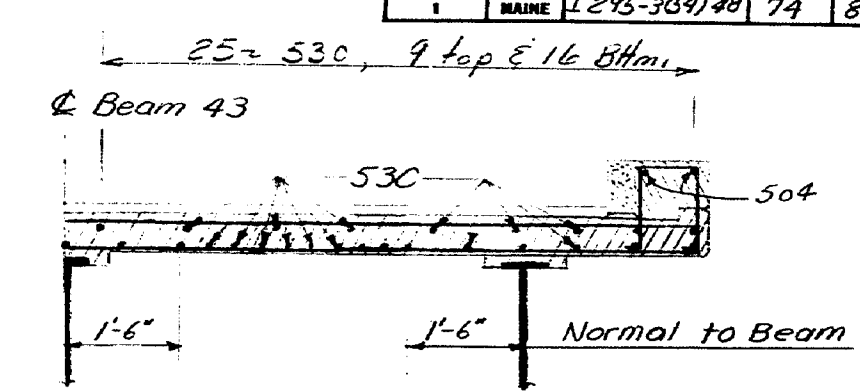
PLAN NORTHBOUND



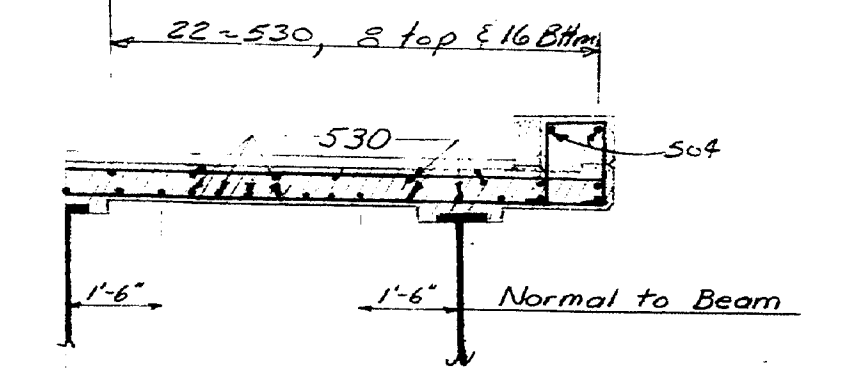
FASCIA LAYOUT - SOUTH CURB



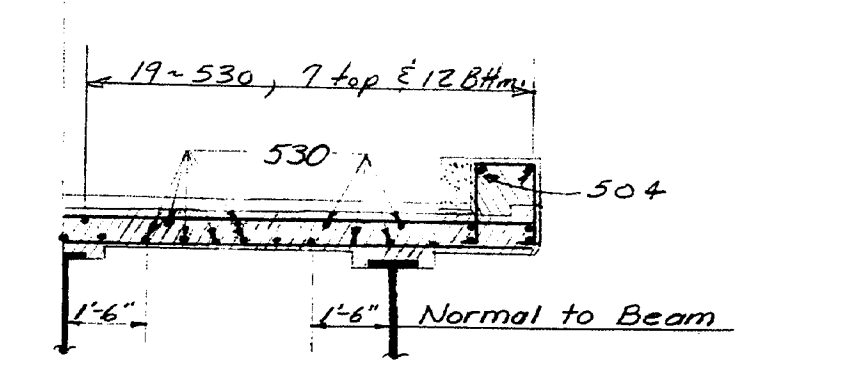
TRANSVERSE SECTION North Bound



SECTION L-L



SECTION M-M



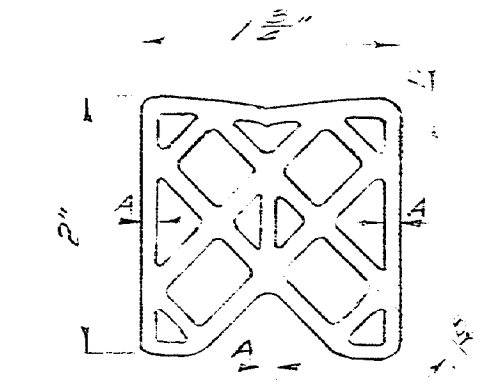
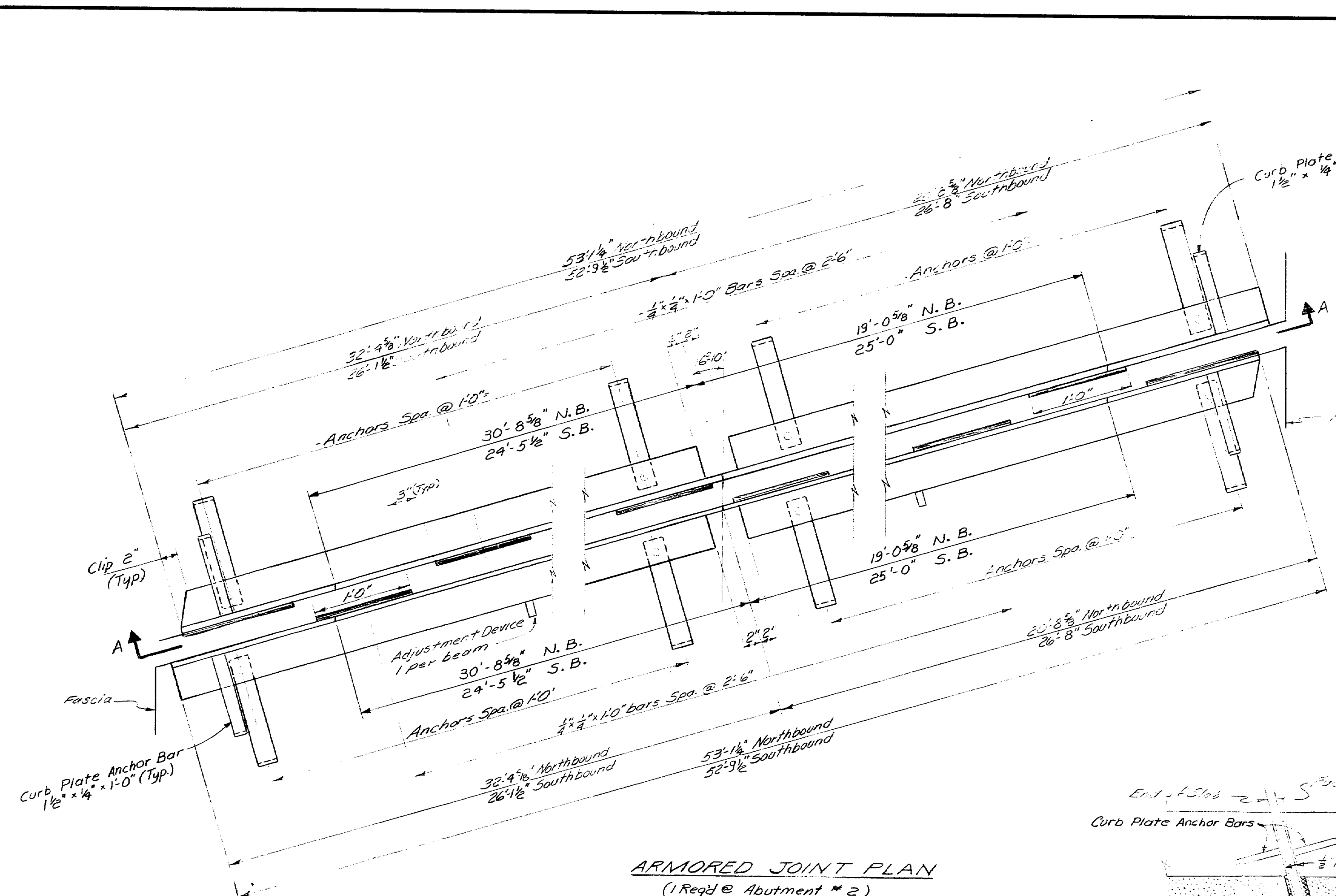
SECTION N-N

Transverse Section Notes  
 1. For Elevations E, F, G & H See Curb Fascia Elevation Table, Sheet # 71  
 2. Elevations E, F, G & H are to be set on the fascia forms before superstructure reinforcing steel and slab concrete are placed.

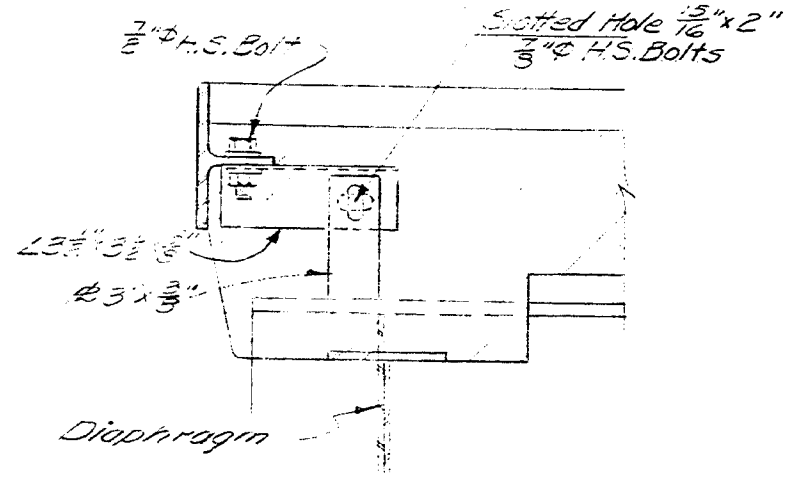
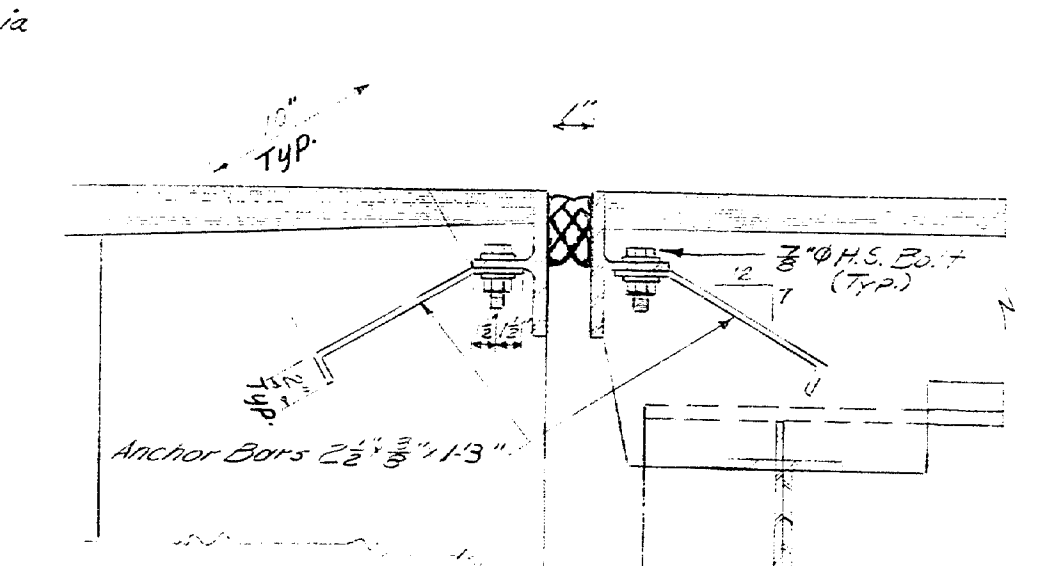
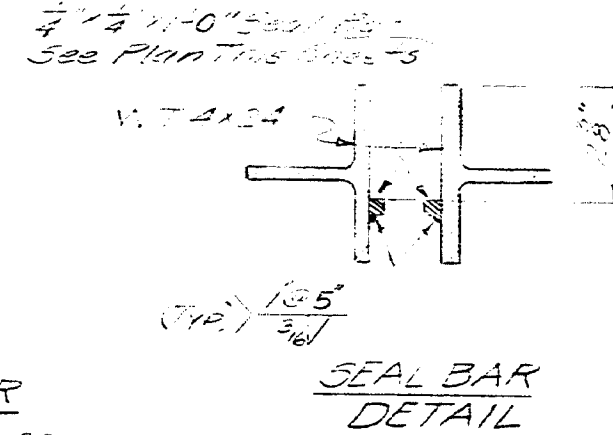
DESIGN - A.L.L. TRACE - D.L. - D.M. - C.M. CHECK - E.B.C.	BRIDGE NO. SURVEY PLOT
STATE HIGHWAY COMMISSION	
<b>INTERSTATE 295 &amp; RAMPS-7</b>	
OVER	
<b>ST. JOHN STREET</b>	
IN THE CITY OF	
<b>PORTLAND</b>	
<b>CUMBERLAND COUNTY</b>	
SUPERSTRUCTURE N.B.	
SHEET 79 OF 85 AUGUSTA, MAINE MAY 1971	

152-158

F.P.R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	I 295-369 48	75	85

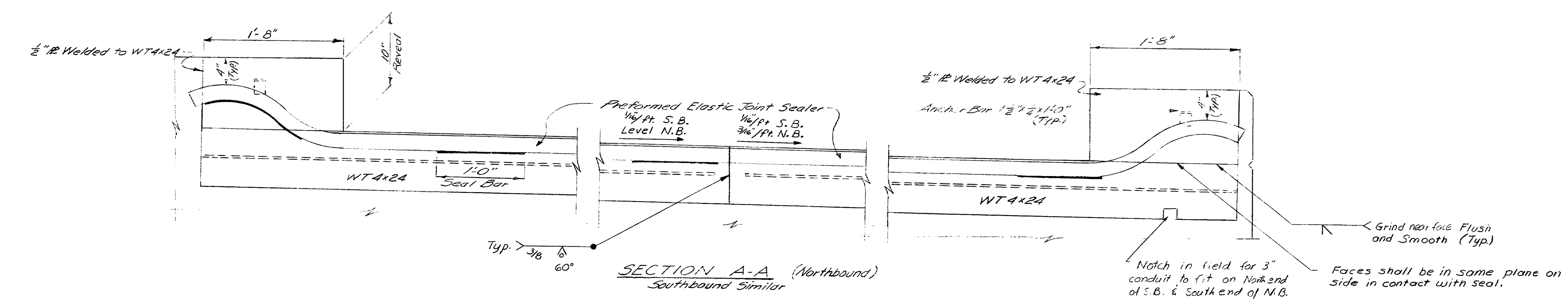
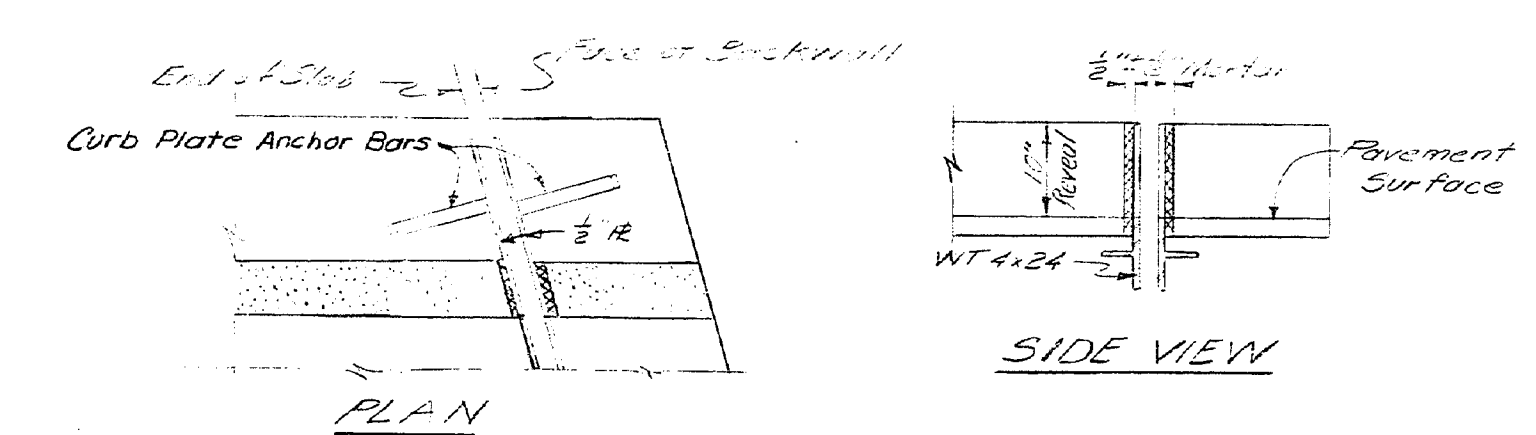


**PREPARED ELASTIC JOINT SEALER**  
 The configuration of the preformed elastic joint sealer may be changed from that shown in order to conform with shapes as produced by various manufacturers. However, the cross-section (A-E) dimensions, including those of the internal elements & the shell (A-E), shall be approved by the Engineer before ordering the Preformed Elastic Joint Sealer.



**ADJUSTMENT DEVICE DETAIL**  
 13'-4\"/>

Note: for details not shown see sheet BD 10A-66



DESIGN - <i>ESC</i>	BRIDGE NO. SURVEY - <i>ESC</i>
TRACE - <i>ESC</i>	PLOT - <i>ESC</i>
STATE HIGHWAY COMMISSION	
<b>INTERSTATE 295 &amp; RAMP CS-7</b>	
OVER	
<b>ST. JOHN STREET</b>	
IN THE CITY OF	
<b>PORTLAND</b>	
<b>CUMBERLAND COUNTY</b>	
ARMORED JOINT	
SHEET 75 OF 85 AUGUSTA, MAINE MAY 1971	

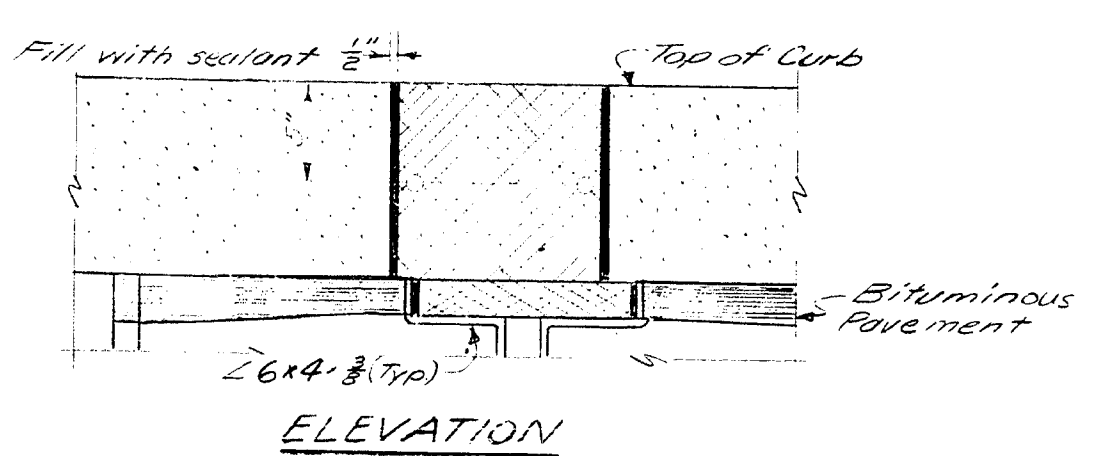
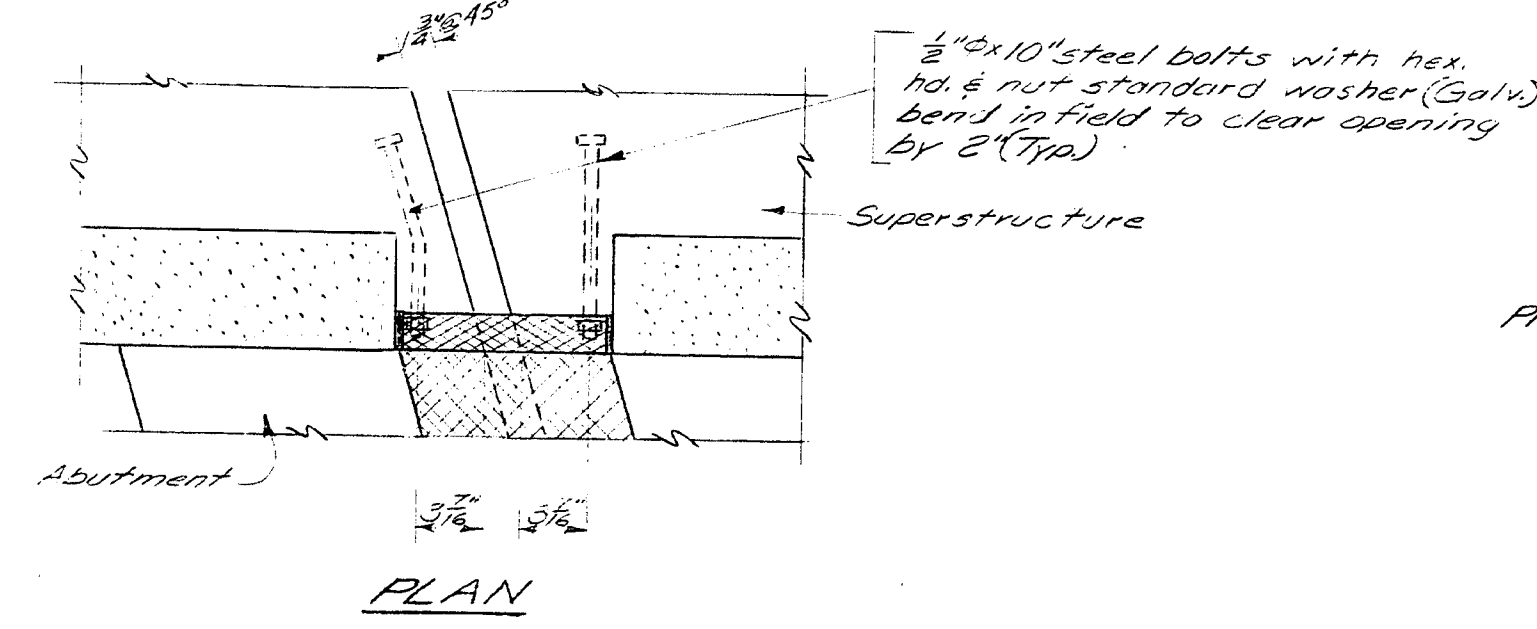
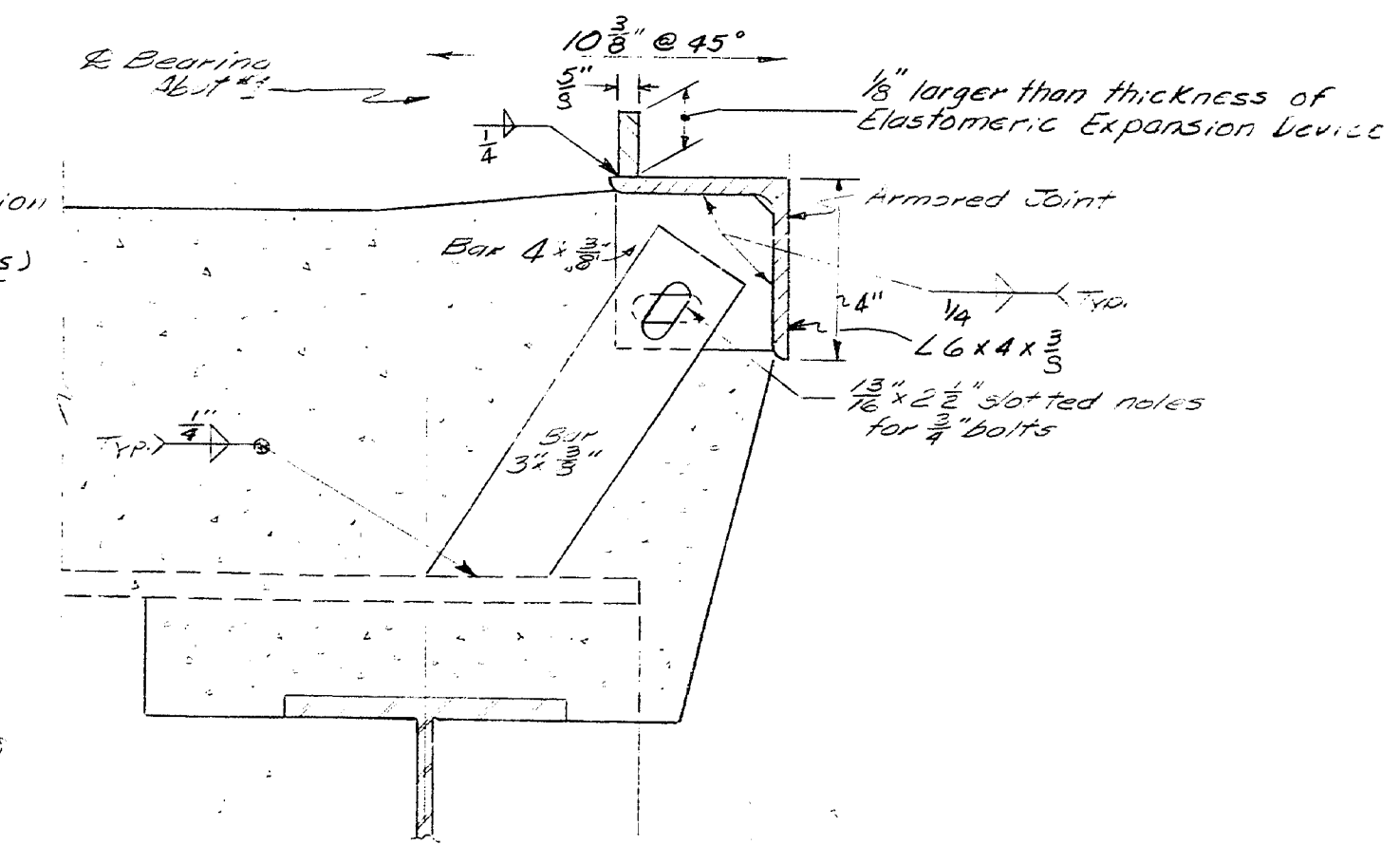
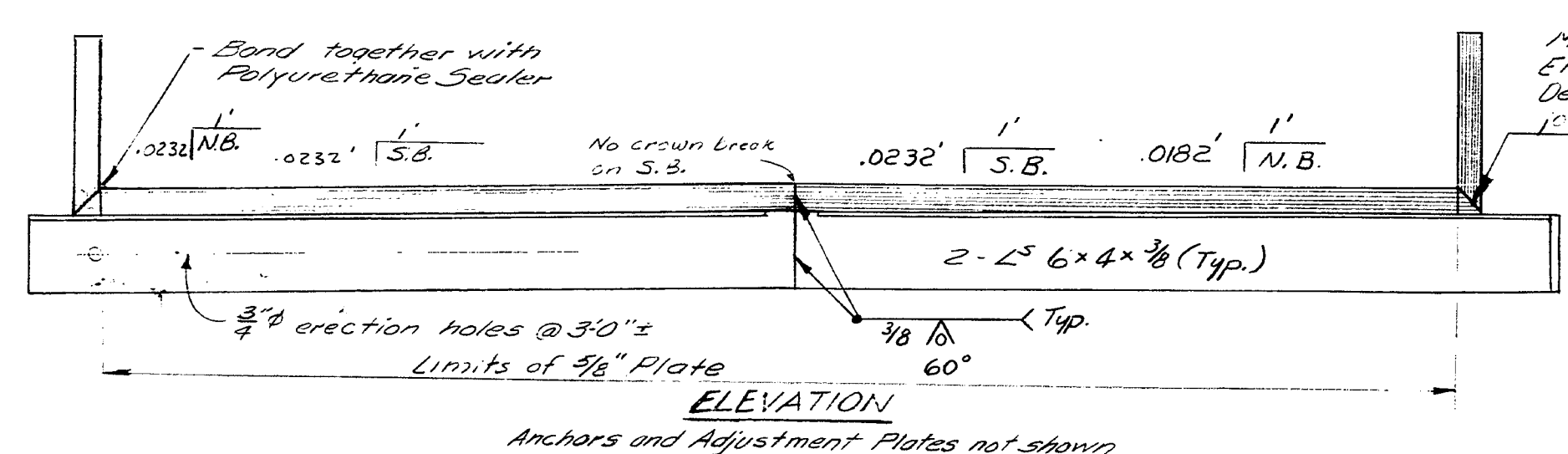
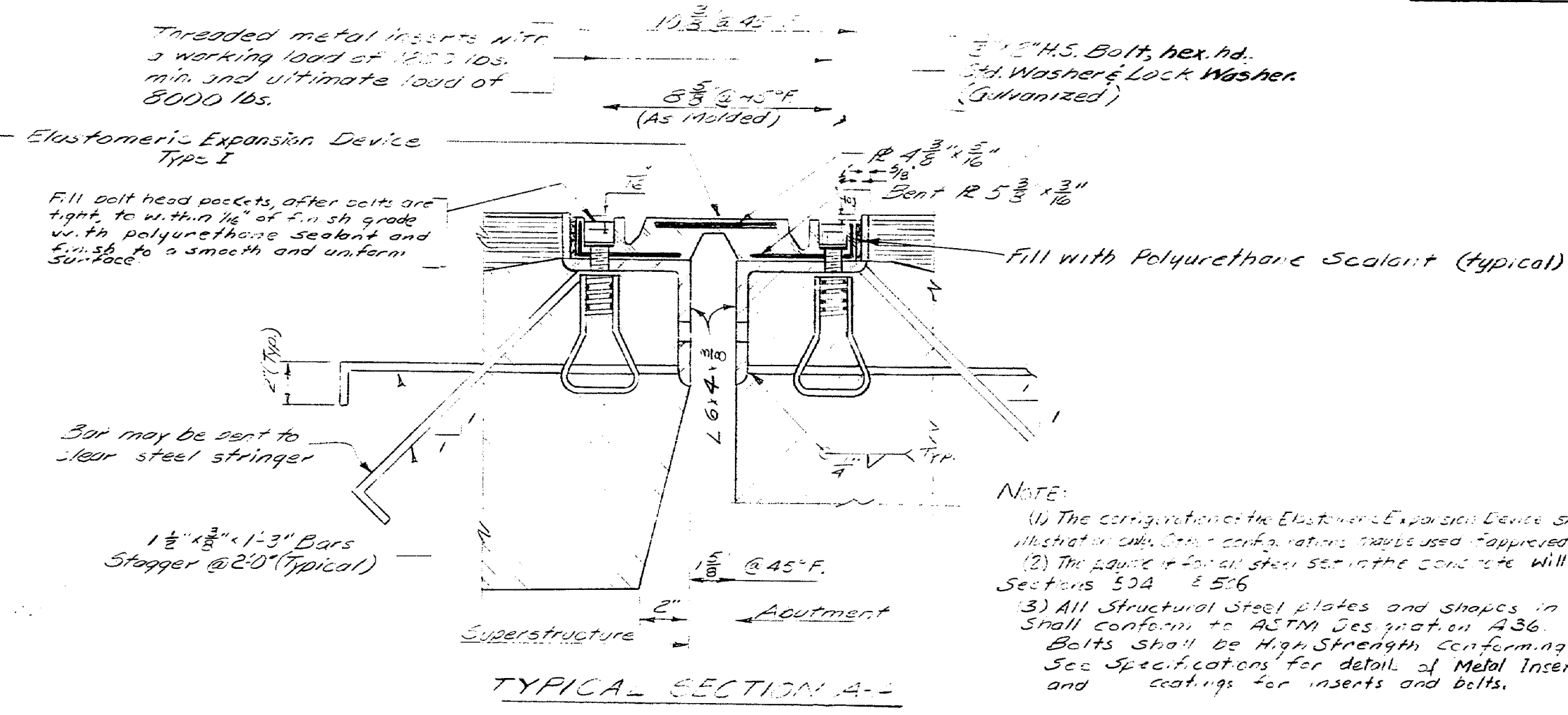
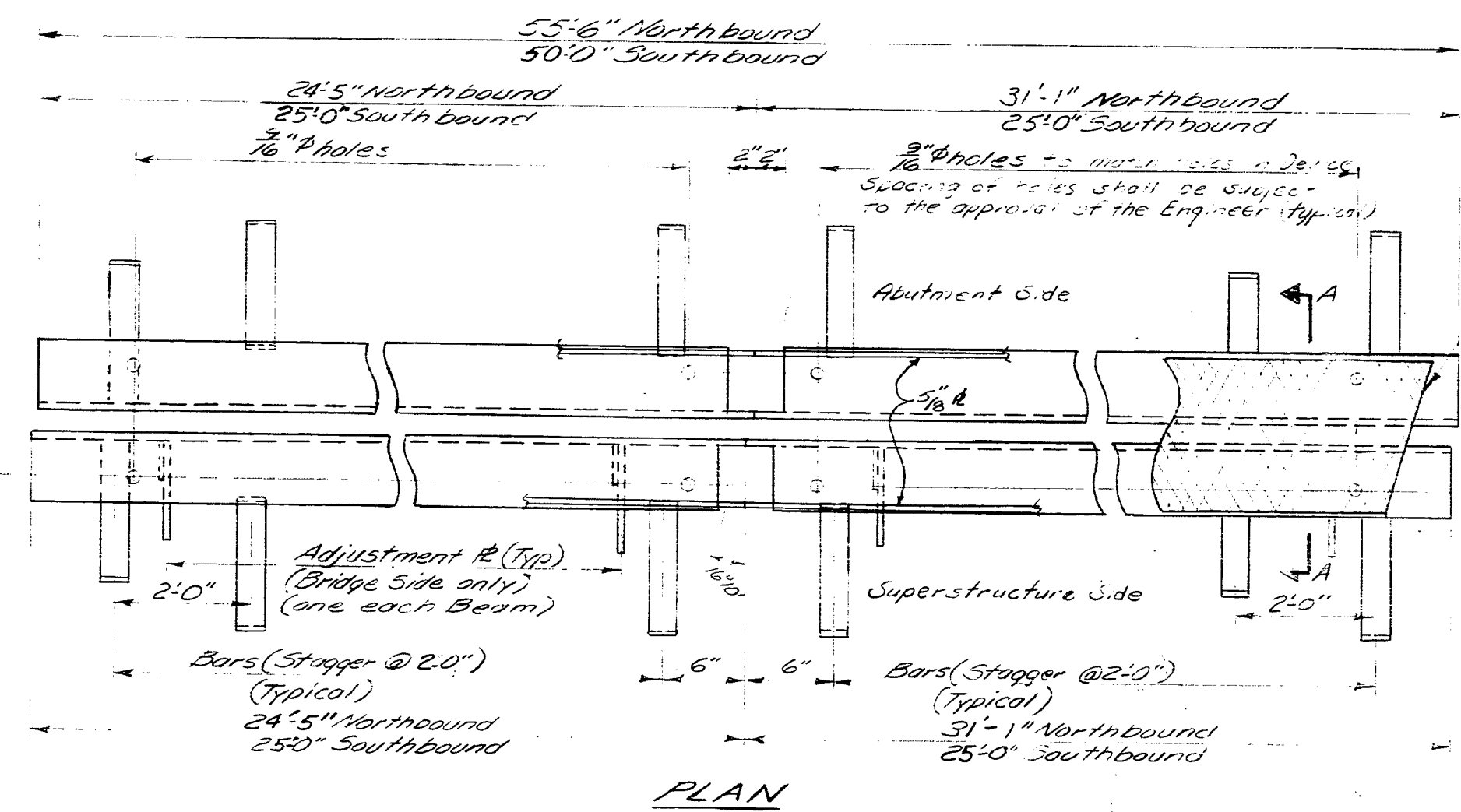
DATE	BY	REVISIONS

DESIGN - DETAILED  
 CHECKED -  
 REVISIONS  
 FIELD CHANGES

**PLANS**

152-159

R.P.R.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	I 295-369 48	76	85



DATE	BY
DESIGN - DETAILED	
CHECKED	
REVISIONS	
FIELD CHANGES	

PLANS

DESIGN - [initials]  
TRACE - [initials]  
CHECK - EBC

BRIDGE NO. SURVEY - [initials]  
PLOT - [initials]

STATE HIGHWAY COMMISSION

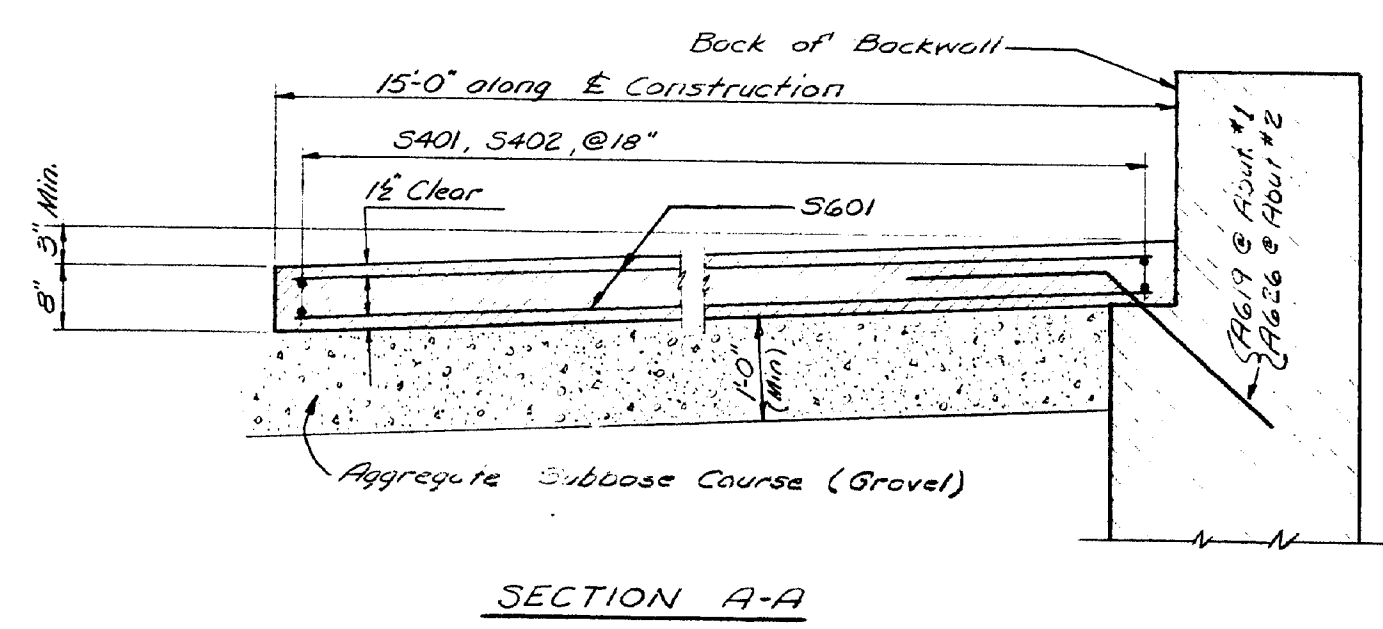
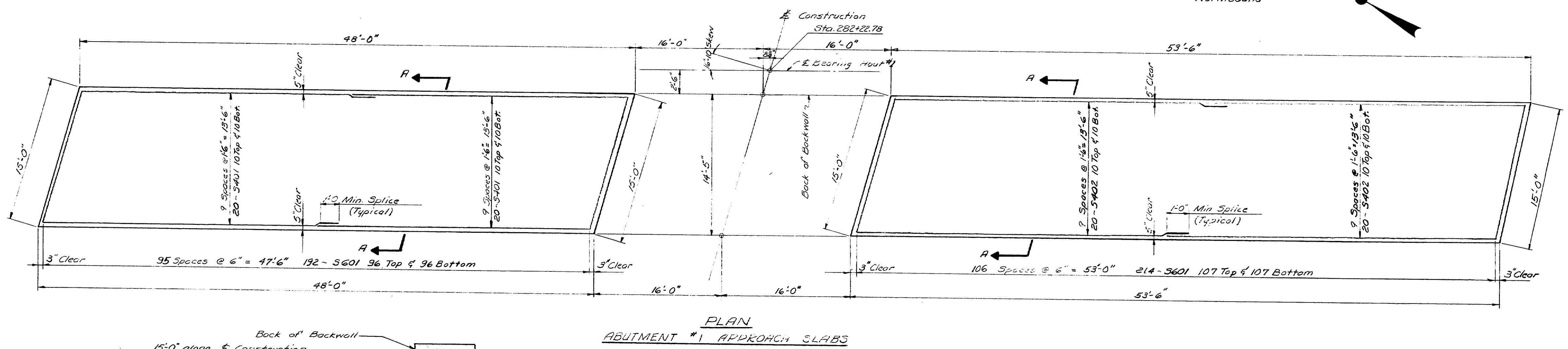
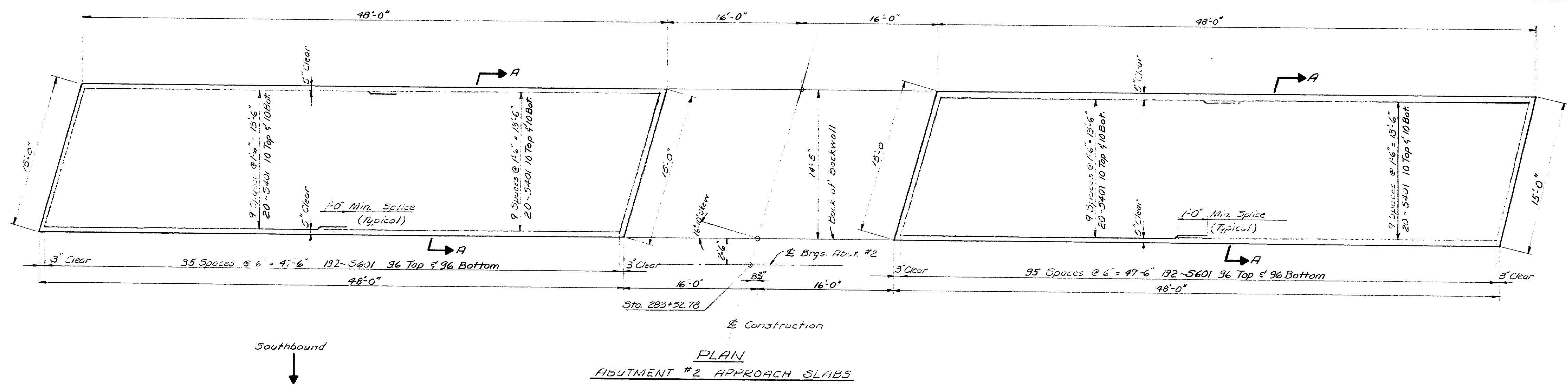
INTERSTATE 295 & RAMP CS-7  
OVER  
ST. JOHN STREET  
IN THE CITY OF  
PORTLAND  
CUMBERLAND COUNTY

ELASTOMERIC EXPANSION DEVICE

SHEET 76 OF 85 AUGUSTA, MAINE MAY 1971

152-160

D.P.R.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	I-295-35(1) 48	77	85



NOTE: Approach slabs and 1'-0" of Aggregate Subbase by others, not a part of this contract.

STATE HIGHWAY COMMISSION  
 INTERSTATE I-295 & RAMP CS-7  
 OVER  
 ST. JOHN STREET  
 IN THE CITY OF  
 PORTLAND  
 CUMBERLAND COUNTY  
 APPROACH SLABS  
 SHEET 77 OF 85 AUGUSTA, MAINE MAY 1971

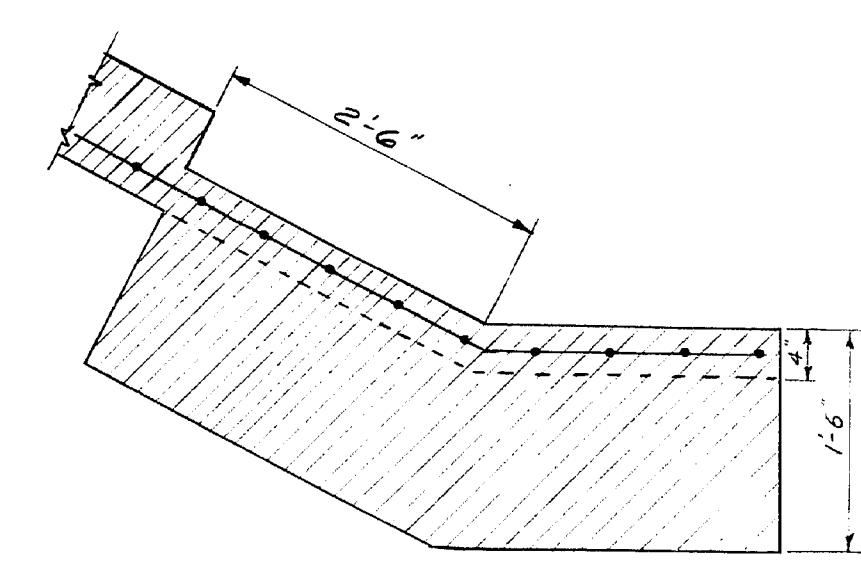
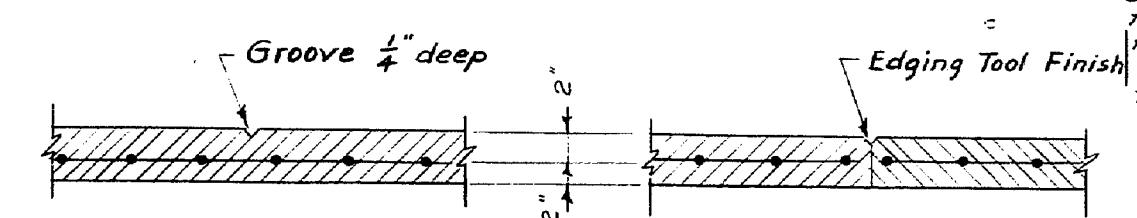
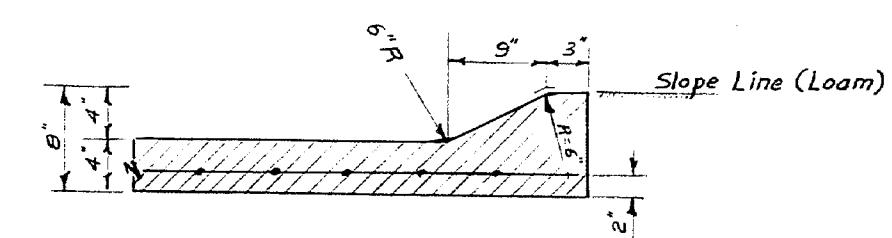
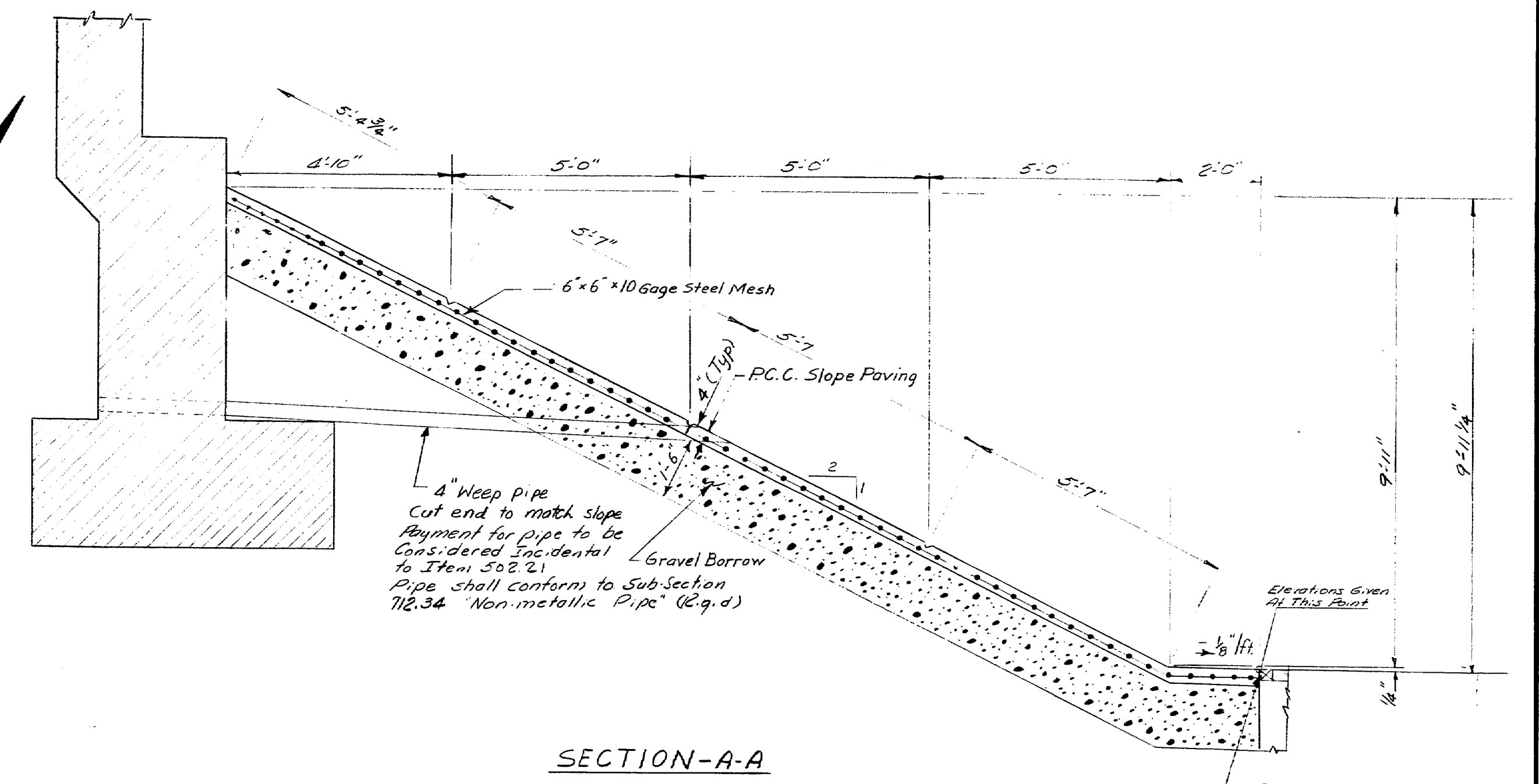
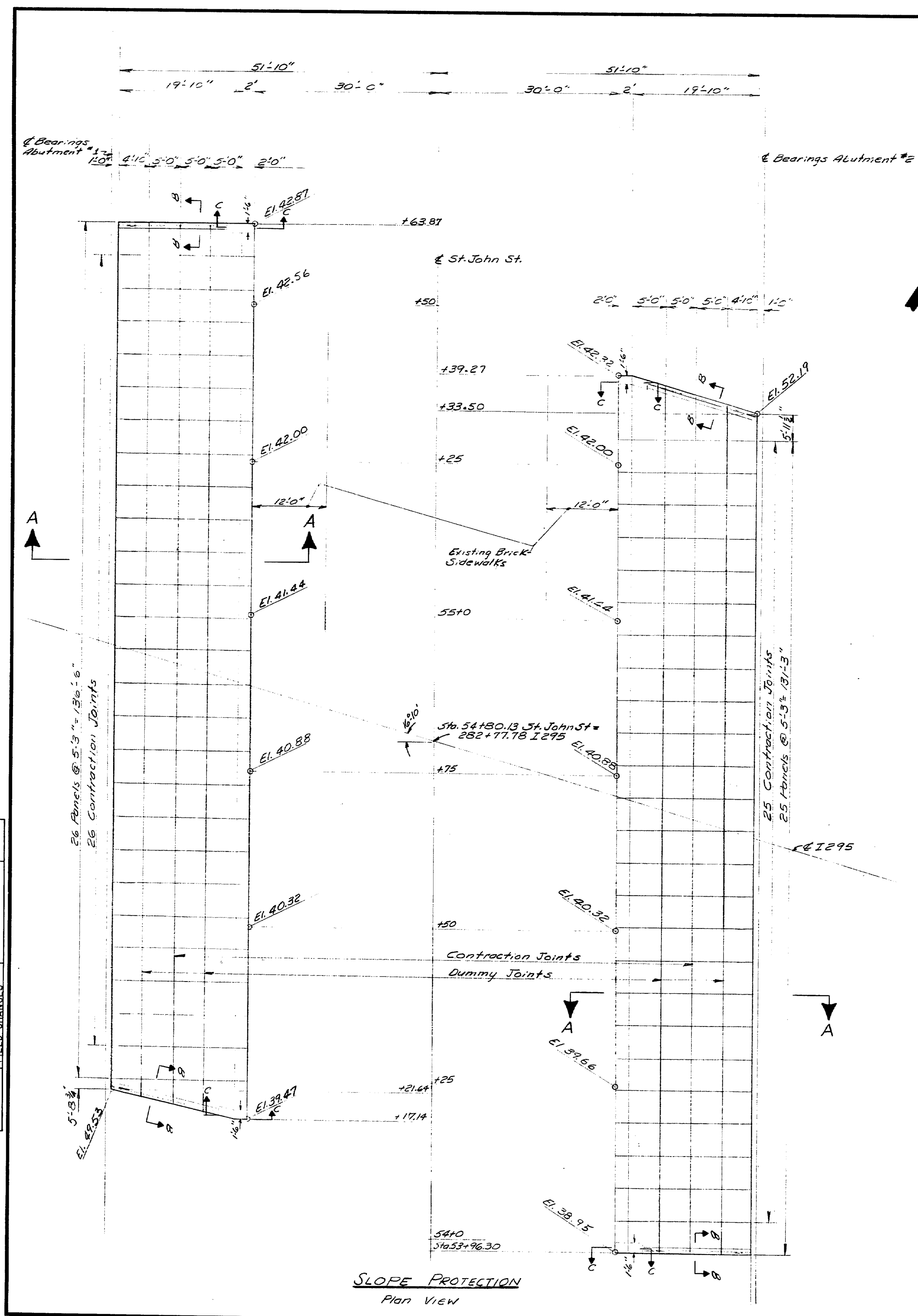
152-161

BY	DATE
DESIGNED - DETAILED	5-71
CHECKED	5-71
REVISIONS	
FIELD CHANGES	

PLANS



R.P.N.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	I 295-389-48	78	85



Notes:  
 Steel mesh shall not pass through any contraction joint.  
 Coat concrete faces at contraction joints with asphalt paint to break bond.  
 Portland Cement Concrete for slope protection shall be "Class A".

DESIGN - DETAILED	DATE
CHECKED	5-71
REVISIONS	ALL PAVING
FIELD CHANGES	6-71

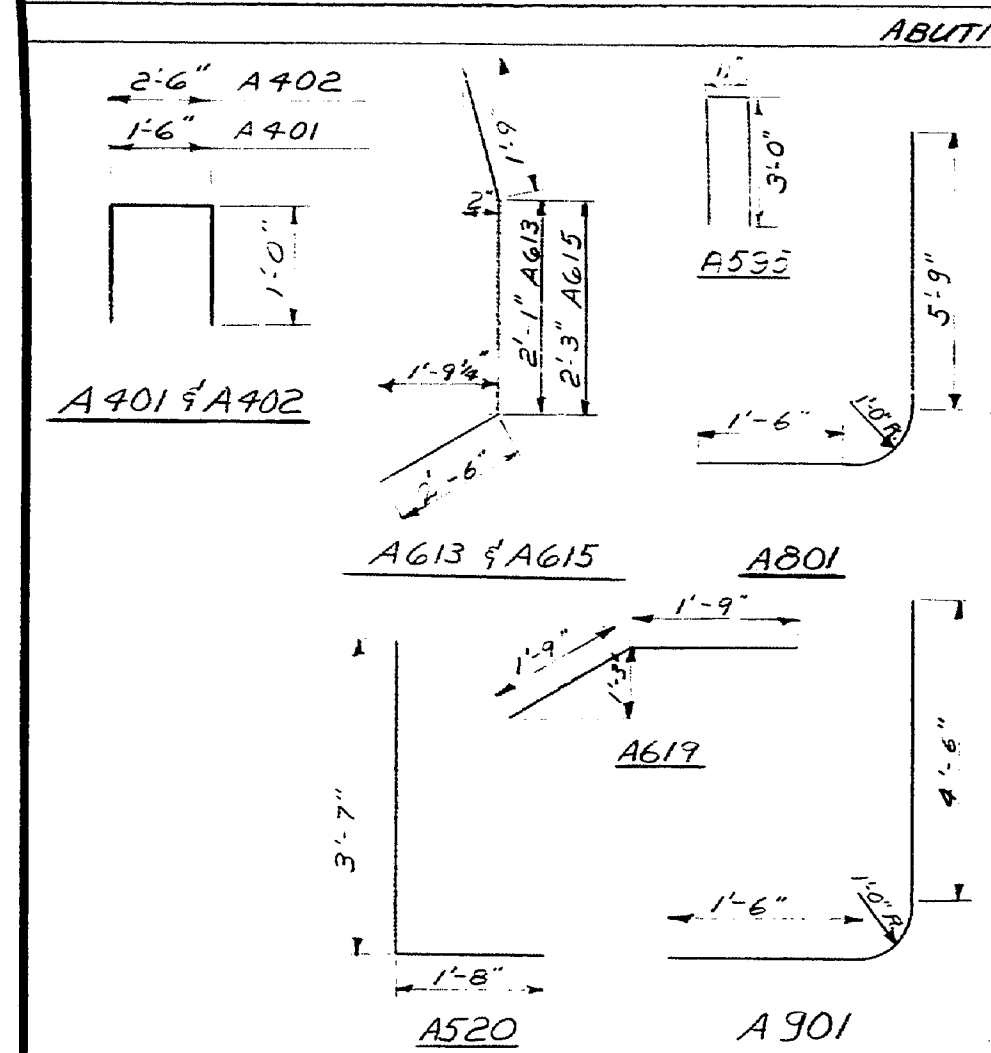
PLANS

STATE HIGHWAY COMMISSION  
 INTERSTATE 295 & RAMP CS-7  
 OVER  
 ST. JOHN STREET  
 IN THE CITY OF  
 PORTLAND  
 CUMBERLAND COUNTY  
 SLOPE PROTECTION  
 SHEET 78 OF 85 AUGUSTA, MAINE MAY 1971

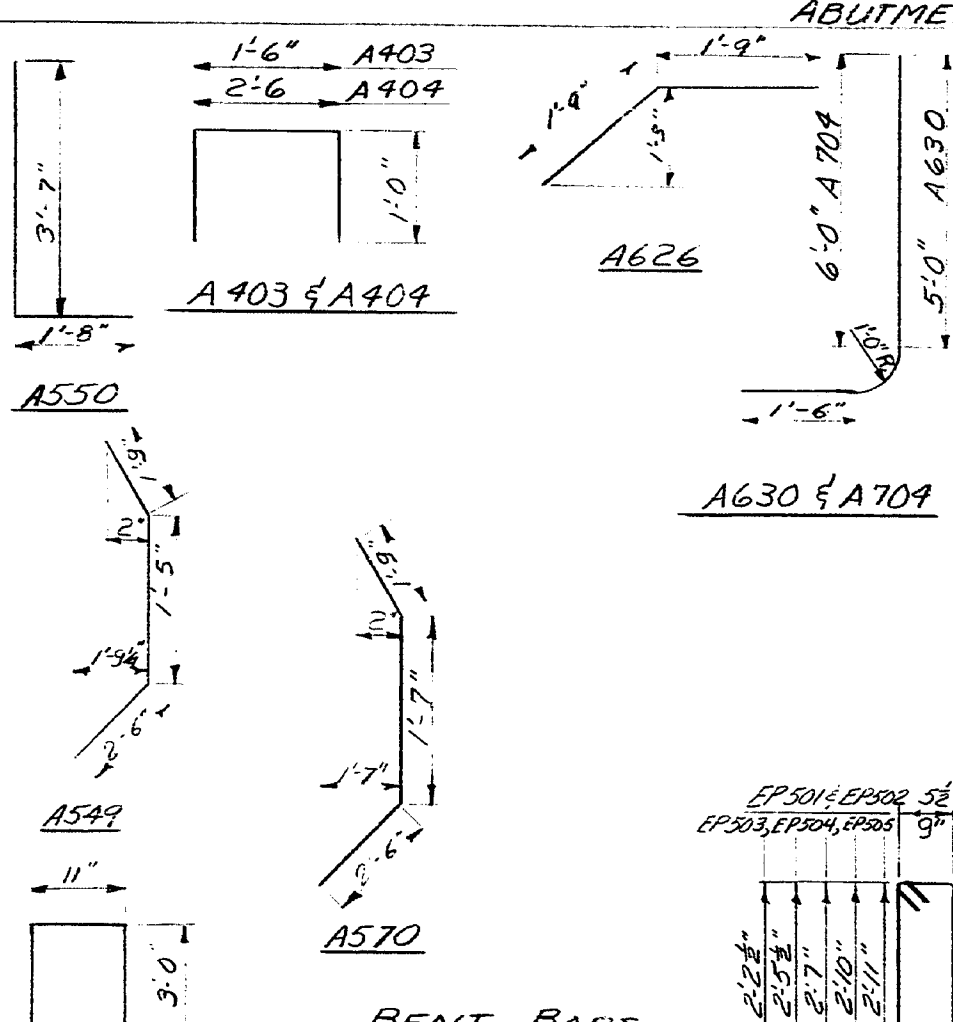
152-162

**REINFORCING STEEL SCHEDULE**

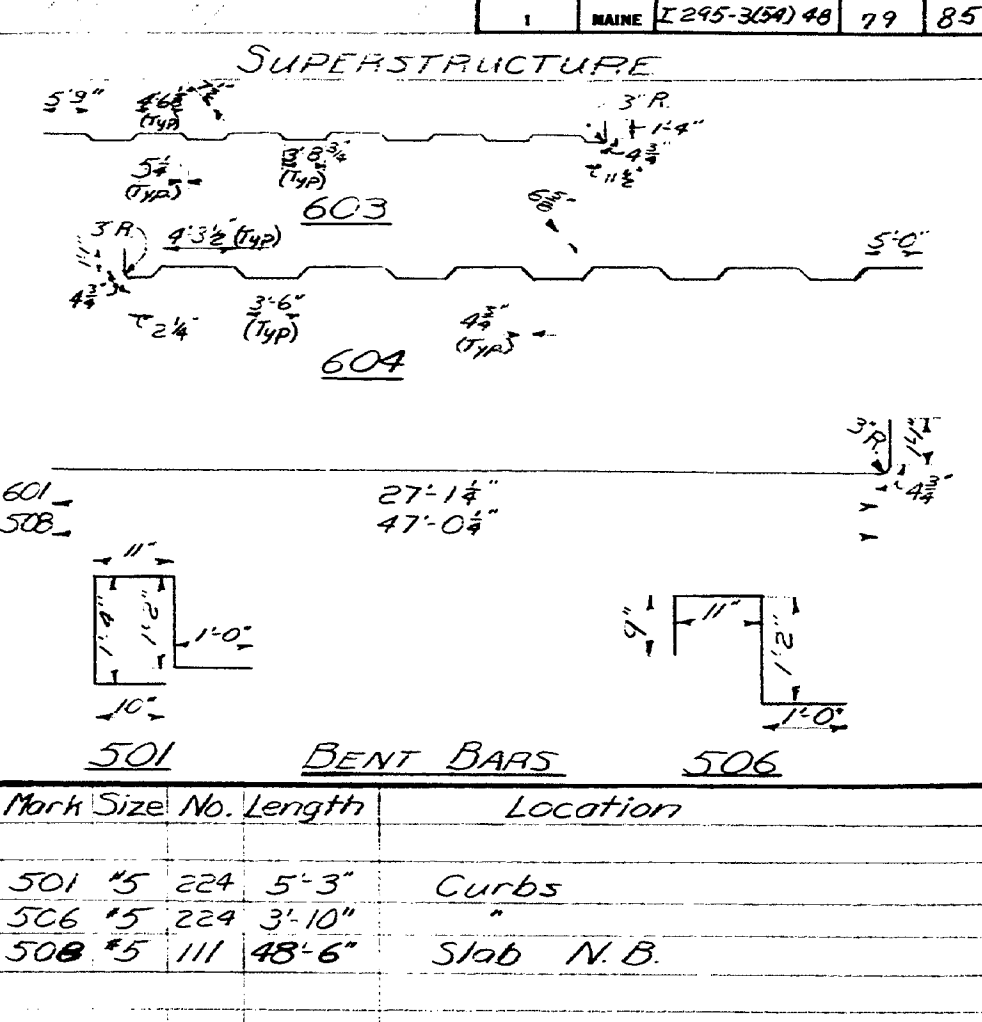
B. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	245-300-00	79	85



Mark	Size	No.	Length	Location
A530	#5	26	6'-0"	Back wall Wing
A531	#5	26	23'-0"	Back wall & Breast Wall
A532	#5	27	19'-0"	"
A533	#5	34	7'-5"	"
A534	#5	26	24'-0"	"
A535	#5	17	5'-3"	Breast Wall
A540	#5	1	19'-6"	North Wing
A541	#5	2	21'-0"	Wings
A600	#6	331	7'-6"	Footing
A601	#6	64	37'-0"	"
A602	#6	40	9'-6"	"
A603	#6	20	19'-0"	"
A604	#6	37	9'-6"	"
A605	#6	20	19'-0"	"



Mark	Size	No.	Length	Location
A565	#5	24	5'-6"	Back Wall
A566	#5	48	5'-10"	"
A567	#5	22	19'-6"	Breast Wall & Back Wall
A574	#5	34	7'-0"	"
A575	#5	11	9'-9"	South Wing
A577	#5	22	4'-9"	South Wing
A578	#5	24	25'-2"	Back Wall & Breast Wall
A579	#5	2	13'-0"	Curtain Wall
A580	#5	12	16'-3"	South Wing
A584	#5	3	21'-6"	"
A587	#5	7	11'-6"	"
A592	#5	2	4'-6"	South Wing
A594	#5	4	3'-10"	South Wing
EP506	#5	12	4'-6"	End Post



Mark	Size	No.	Length	Location
A520	#5	96	5'-3"	Breast Wall
A595	#5	50	6'-11"	Wing Wall
A613	#6	36	6'-4"	Breast Wall
A615	#6	57	6'-6"	"
A619	#6	68	3'-6"	Approach Slab
A801	#8	204	8'-10"	Footing Dowels
A901	#9	25	7'-7"	Footing

Mark	Size	No.	Length	Location
A701	#7	13	10'-3"	North Wing
A702	#7	12	6'-0"	"
A703	#7	110	7'-6"	Breast Wall
A705	#7	69	8'-6"	"
A902	#9	13	12'-0"	Wing Wall
A903	#9	12	6'-6"	"

Mark	Size	No.	Length	Location
A403	#4	26	3'-6"	Bearing Area
A404	#4	26	4'-6"	"
A549	#5	36	5'-8"	Breast Wall
A550	#5	31	5'-3"	"
A570	#5	53	5'-10"	Breast Wall
A595	#5	36	6'-11"	Wings

Mark	Size	No.	Length	Location
A606	#6	276	6'-6"	Footing
A607	#6	58	37'-0"	"
A608	#6	30	9'-6"	"
A609	#6	20	16'-3"	"
A610	#6	16	7'-6"	"
A611	#6	16	10'-8"	"
A625	#6	15	10'-2"	North Wing
A627	#6	21	9'-9"	South Wing

Mark	Size	No.	Length	Location
501	#5	224	5'-3"	Curbs
506	#5	229	3'-10"	"
508	#5	111	48'-6"	Slab N.B.
601	#6	112	28'-7"	Slab S.B.
603	#6	111	56'-6"	Crankbar S.B.
604	#6	112	51'-9"	N.B.

Mark	Size	No.	Length	Location
A401	#4	26	3'-6"	Bearing Area
A402	#4	26	4'-6"	"

Mark	Size	No.	Length	Location
A626	#6	69	3'-6"	Approach Slab
A630	#6	171	8'-1"	Footing Dowels
A704	#7	36	9'-1"	Footing Dowels

Mark	Size	No.	Length	Location
EP501	#5	2	6'-0"	End Post
EP502	#5	2	6'-6"	"
EP503	#5	2	7'-4"	"
EP504	#5	2	7'-0"	"
EP505	#5	2	8'-0"	"

Mark	Size	No.	Length	Location
A626	#6	69	3'-6"	Approach Slab
A630	#6	171	8'-1"	Footing Dowels
A704	#7	36	9'-1"	Footing Dowels

Mark	Size	No.	Length	Location
503	#5	216	56'-5"	Distribution Steel S.B.
504	#5	72	15'-8"	Curbs
505	#5	10	15'-1"	"
509	#5	111	47'-3"	Slab N.B.
510	#5	60	12'-0"	"
511	#5	60	10'-8"	"
512	#5	60	9'-5"	"
513	#5	42	7'-2"	"
514	#5	2	14'-0"	S. Curb N.B.
530	#5	342	36'-8"	Distribution Steel N.B.

Mark	Size	No.	Length	Location
A501	#5	125	3'-0"	Footing Dowels
A502	#5	24	9'-8"	Breast Wall
A503	#5	12	10'-3"	"
A504	#5	78	16'-6"	" & Back Wall
A506	#5	104	6'-0"	Back Wall
A508	#5	27	18'-3"	Back Wall & Breast Wall
A509	#5	13	12'-0"	North Wing
A510	#5	93	3'-0"	Breast Wall Dowels
A511	#5	28	20'-0"	Wings
A512	#5	7	21'-6"	North Wing
A513	#5	1	24'-0"	"
A514	#5	5	25'-0"	Wings
A515	#5	14	23'-0"	"
A516	#5	26	6'-9"	North Wing
A517	#5	2	16'-0"	Curtain Wall
A518	#5	4	5'-5"	Wings
A519	#5	8	4'-3"	"
A521	#5	13	10'-3"	South Wing
A522	#5	48	6'-0"	Back Wall
A526	#5	13	3'-9"	Breast Wall
A527	#5	12	9'-3"	"
A528	#5	16	9'-7"	"
A529	#5	2	14'-0"	Curtain Wall

Mark	Size	No.	Length	Location
A543	#5	8	10'-2"	North Wing
A545	#5	114	3'-5"	Footing Dowels
A546	#5	106	8'-3"	Breast Wall
A547	#5	89	3'-0"	" Dowels
A548	#5	72	5'-8"	Back Wall
A553	#5	2	4'-8"	North Wing
A555	#5	88	16'-6"	Breast Wall & Back Wall
A556	#5	22	18'-9"	"
A557	#5	73	12'-3"	North Wing
A558	#5	1	15'-2"	"
A559	#5	3	17'-0"	"
A560	#5	5	15'-0"	"
A561	#5	2	13'-7"	Curtain Wall
A562	#5	4	4'-3"	North Wing
A563	#5	16	5'-5"	North Wing
A564	#5	156	7'-10"	Breast Wall

Mark	Size	No.	Length	Location
EP501	#5	2	6'-0"	End Post
EP502	#5	2	6'-6"	"
EP503	#5	2	7'-4"	"
EP504	#5	2	7'-0"	"
EP505	#5	2	8'-0"	"

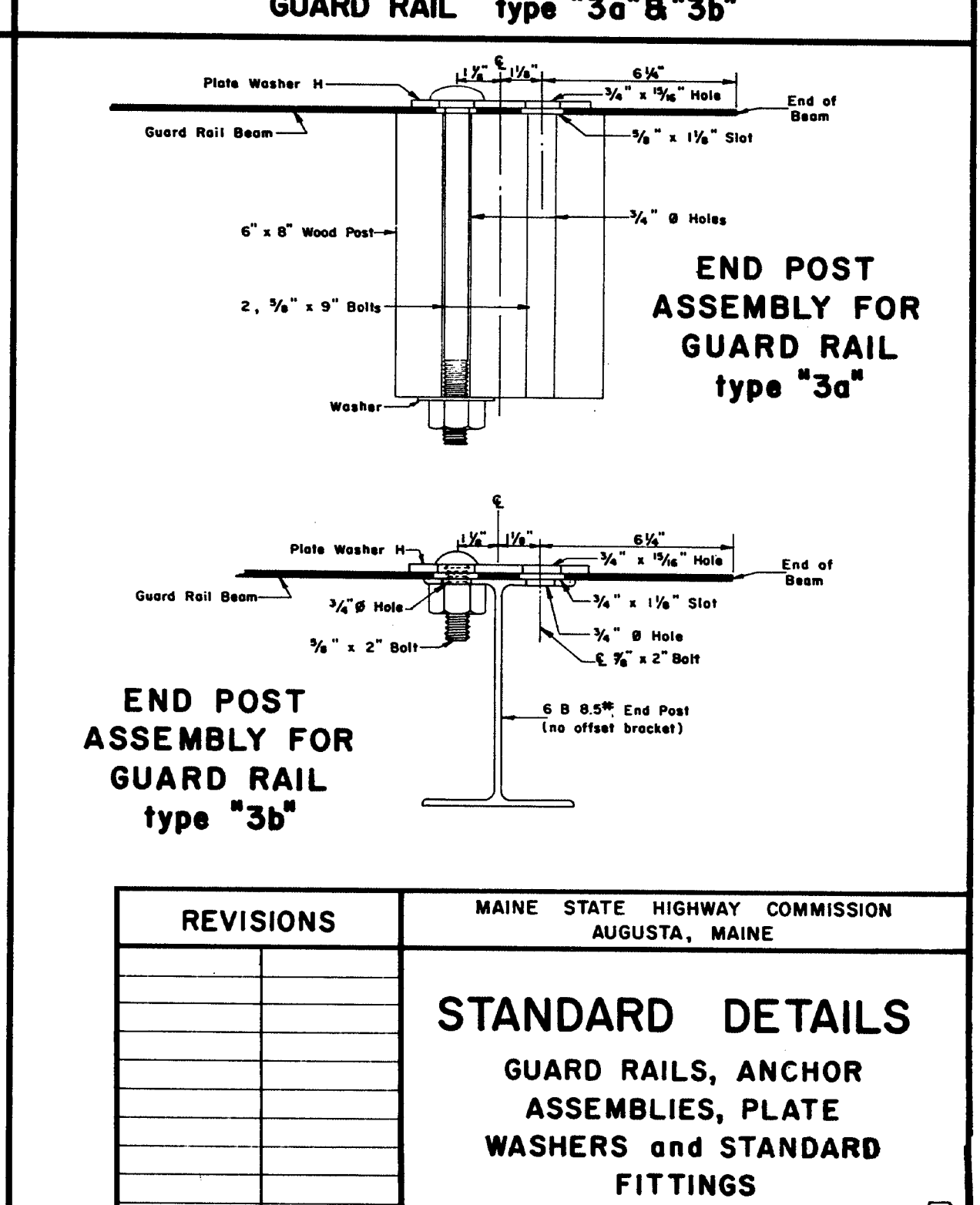
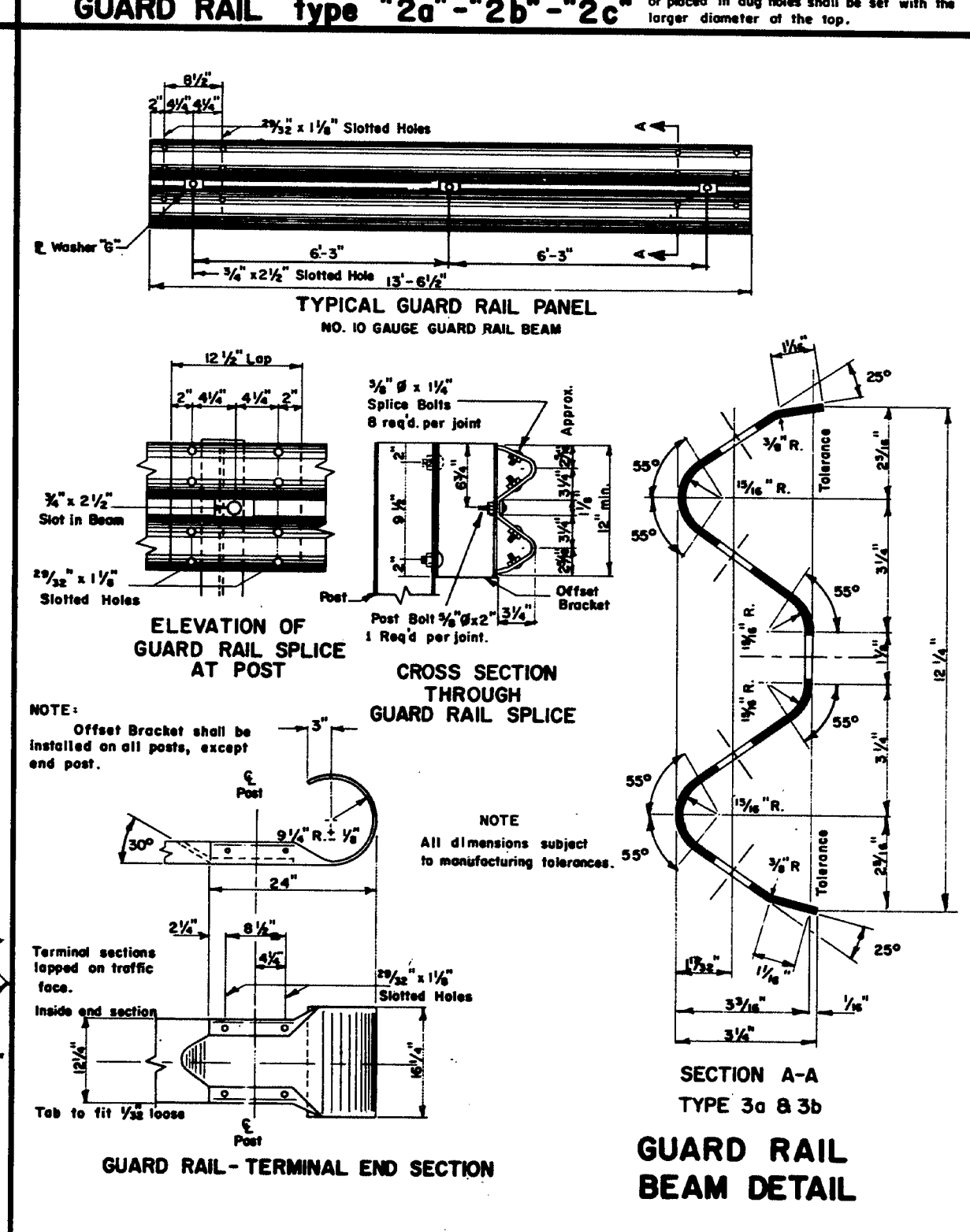
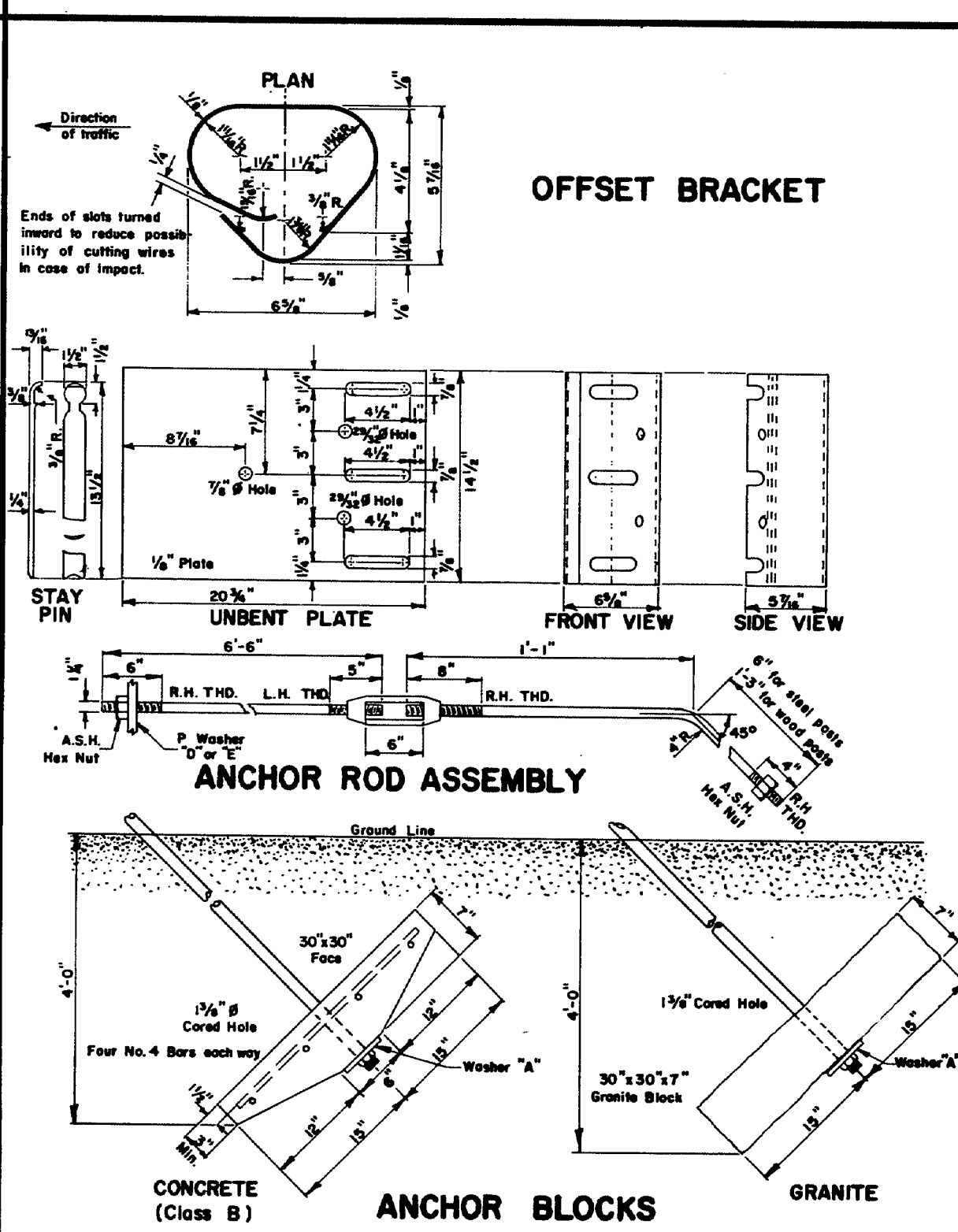
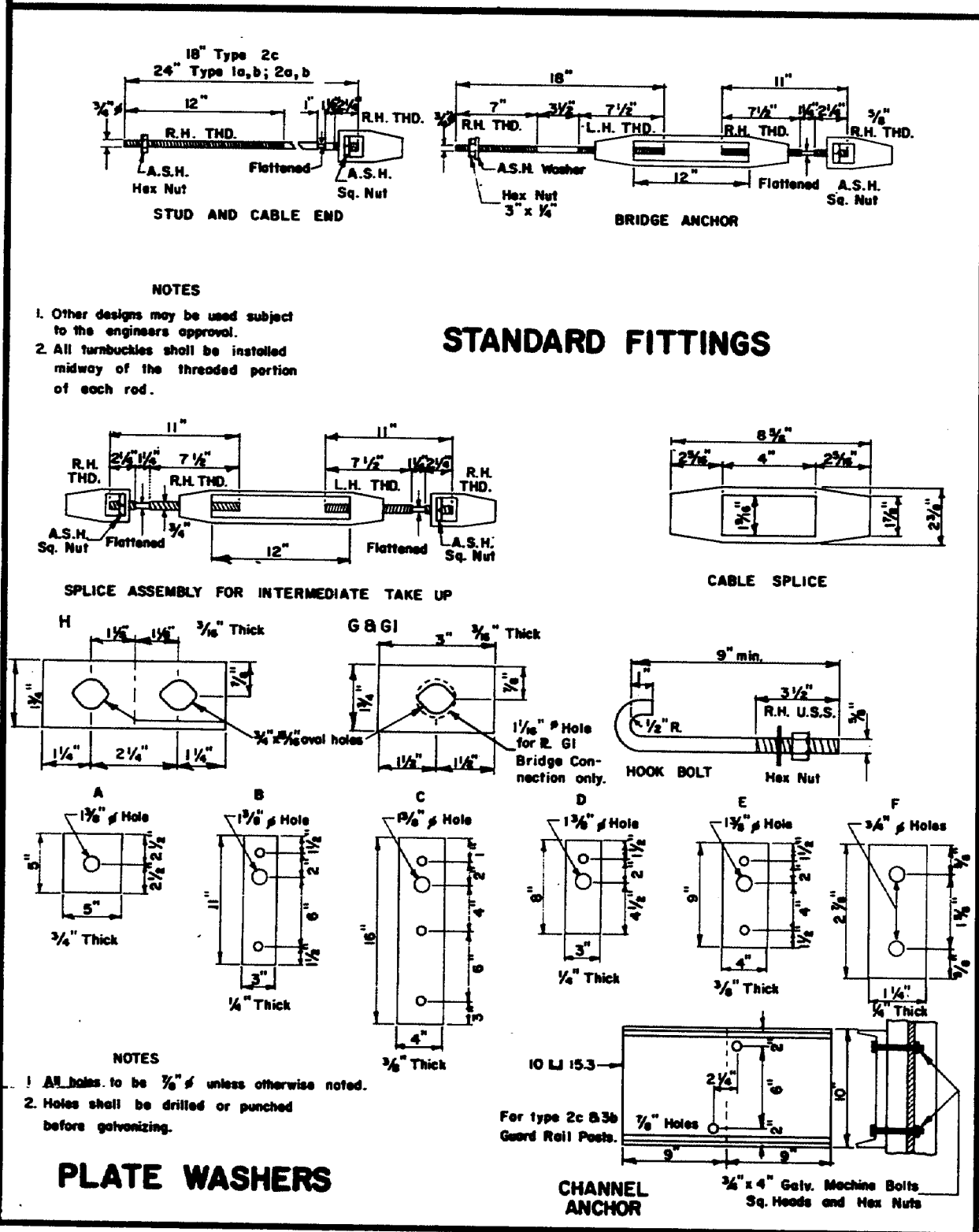
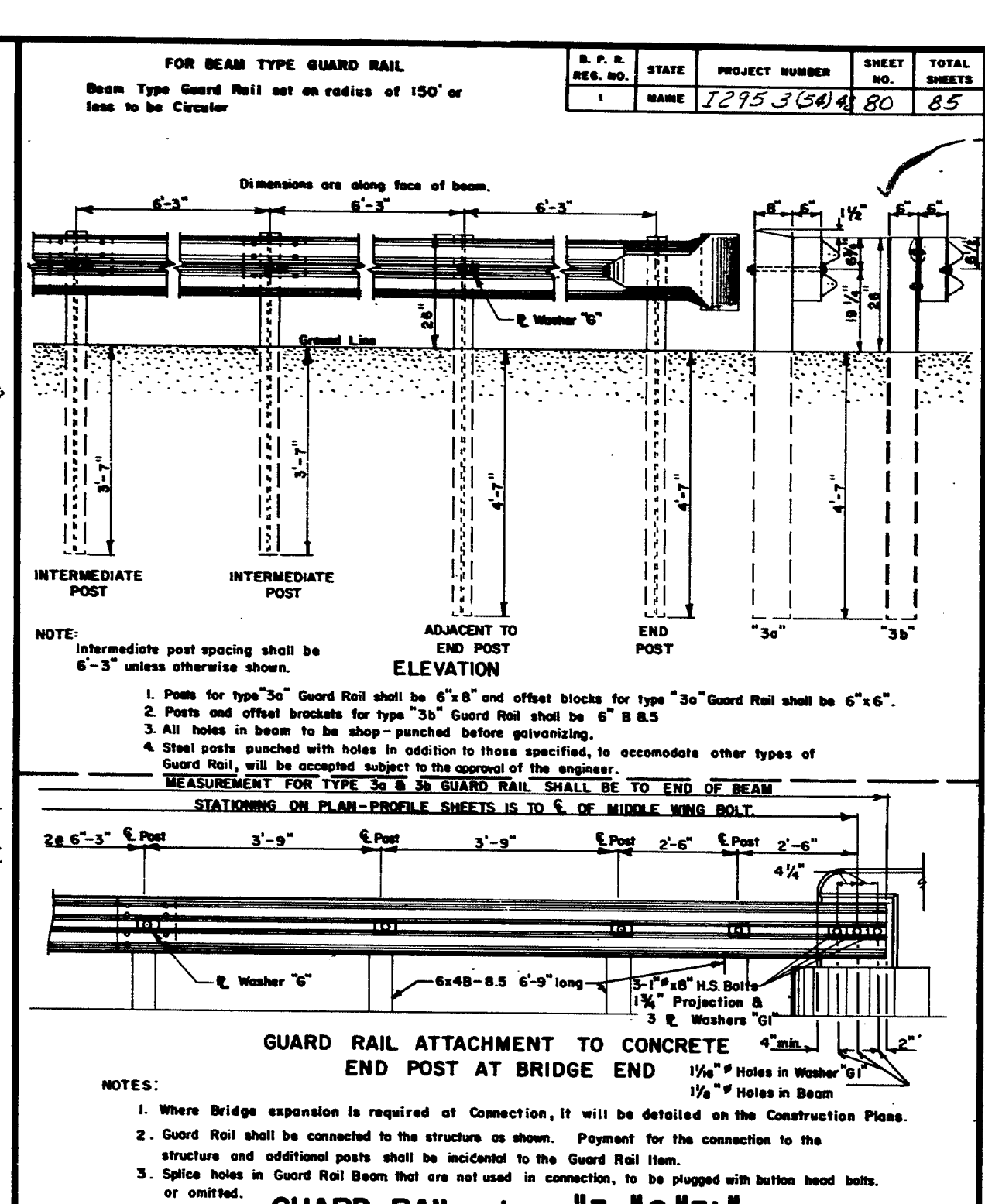
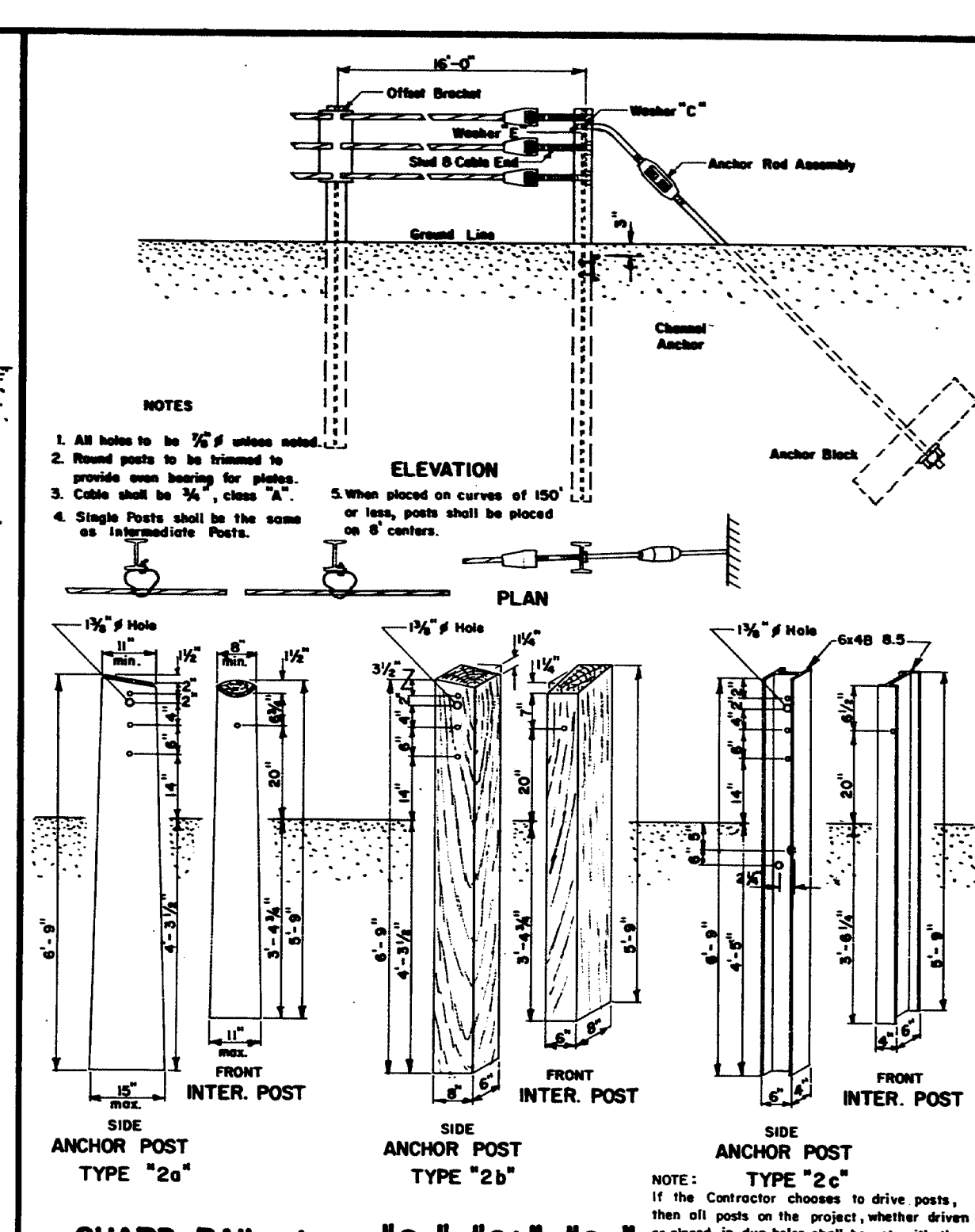
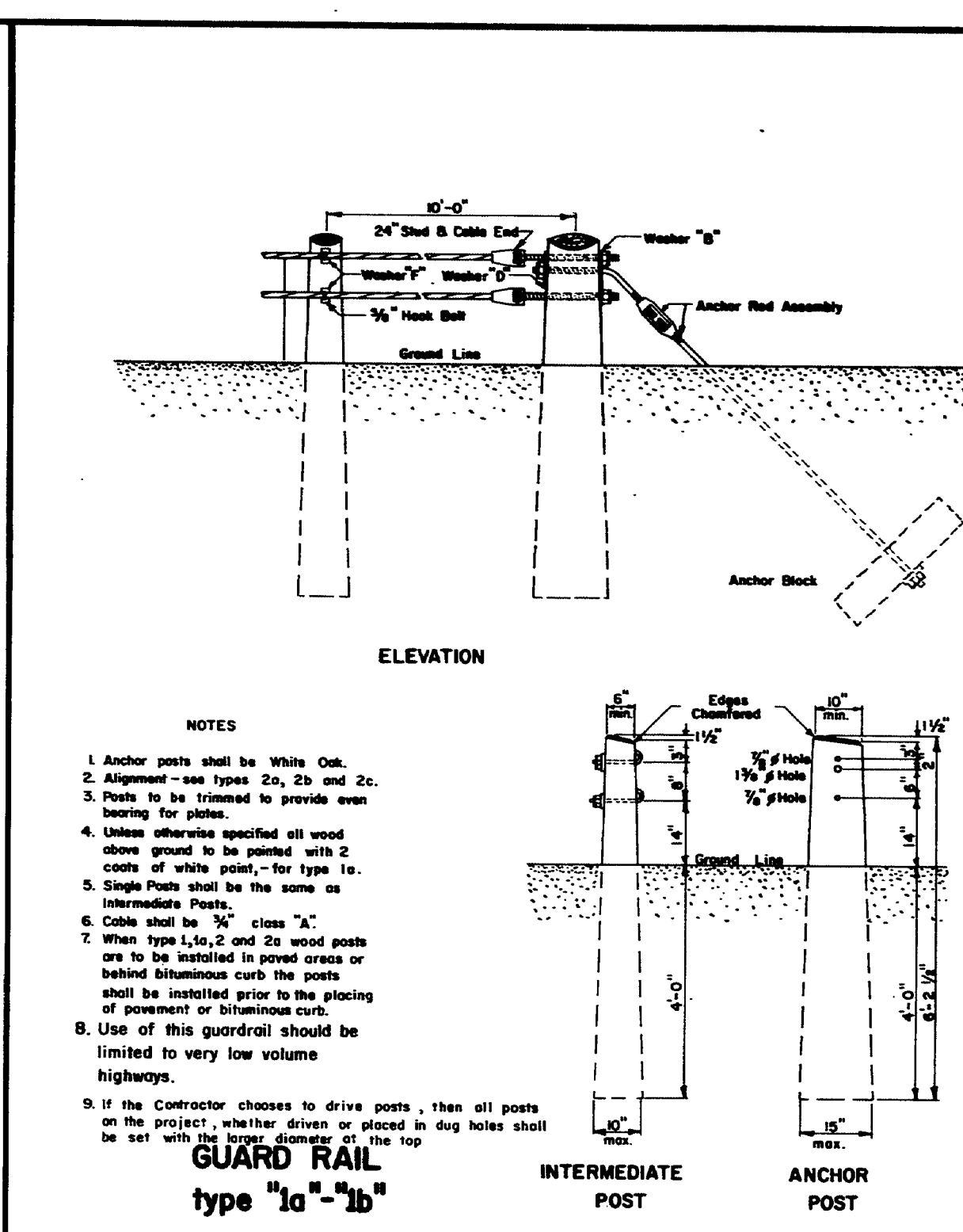
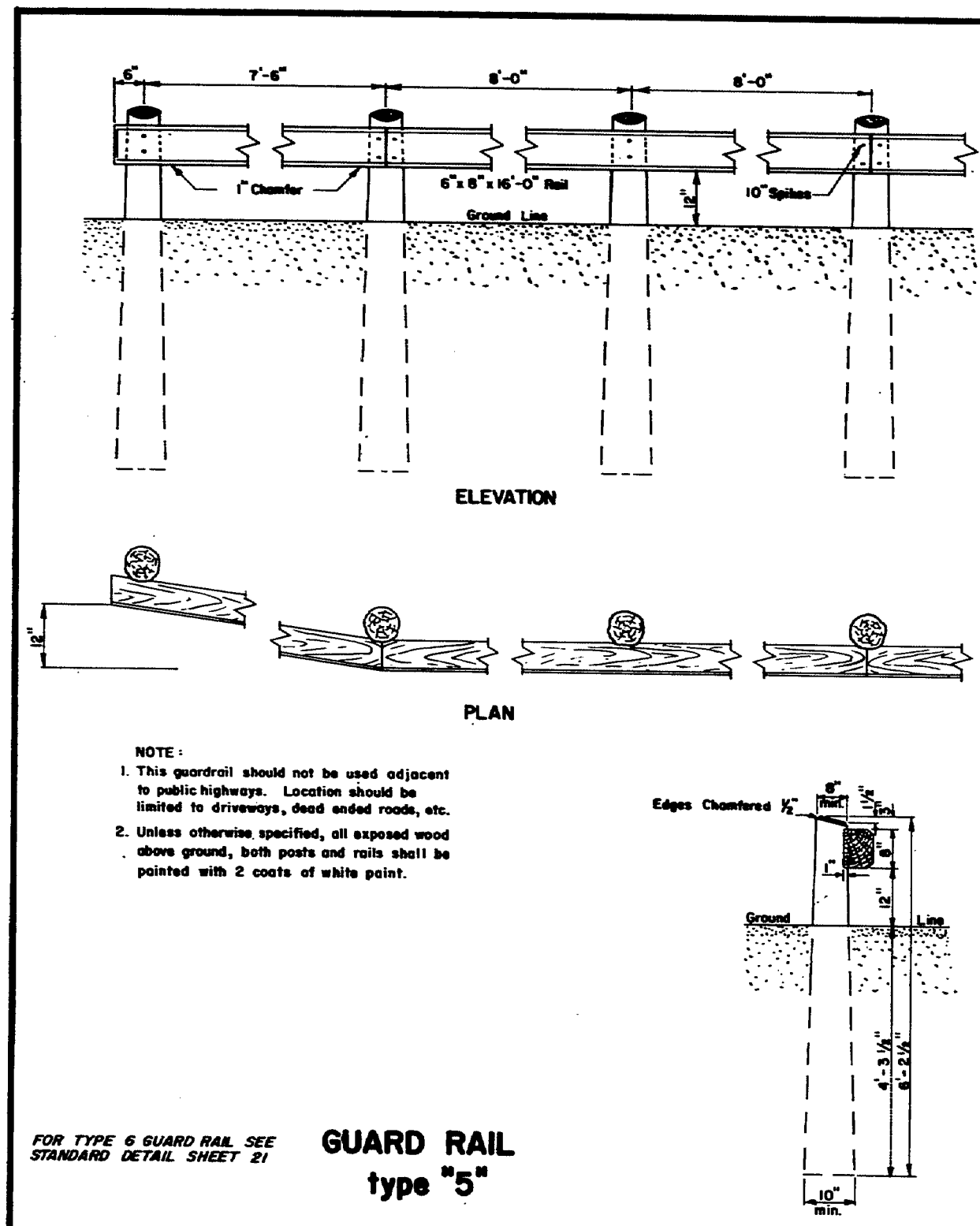
Mark	Size	No.	Length	Location
5401	#4	120	24'-6"	
5402	#4	40	27'-3"	
5601	#6	790	14'-0"	

Mark	Size	No.	Length	Location
602	#6	336	27'-6"	Slab S.B.
605	#6	62	12'-0"	" N.B.
606	#6	60	10'-8"	"
607	#6	60	9'-5"	"
608	#6	42	7'-2"	"

**Notes:**  
 1. Dimensions are to center of bars  
 2. Reinforcing Steel bars shall conform to the requirements of AISC Designation: M51, Intermediate Grade, or to ASTM Designation: A615, Grade 60.

DESIGN - ALL	DEL. ACT.	BRIDGE NO.
TRACE - SURVEY	D.M.R.	SURVEY PLOT
CHECK - E.S.C.		
STATE HIGHWAY COMMISSION		
INTERSTATE 295 & RAMP CS-7		
OVER		
ST. JOHN STREET		
IN THE CITY OF		
PORTLAND		
CUMBERLAND COUNTY		
REINFORCING STEEL SCHEDULE		
SHEET 79 OF 85 AUGUSTA, MAINE MAY 1971		

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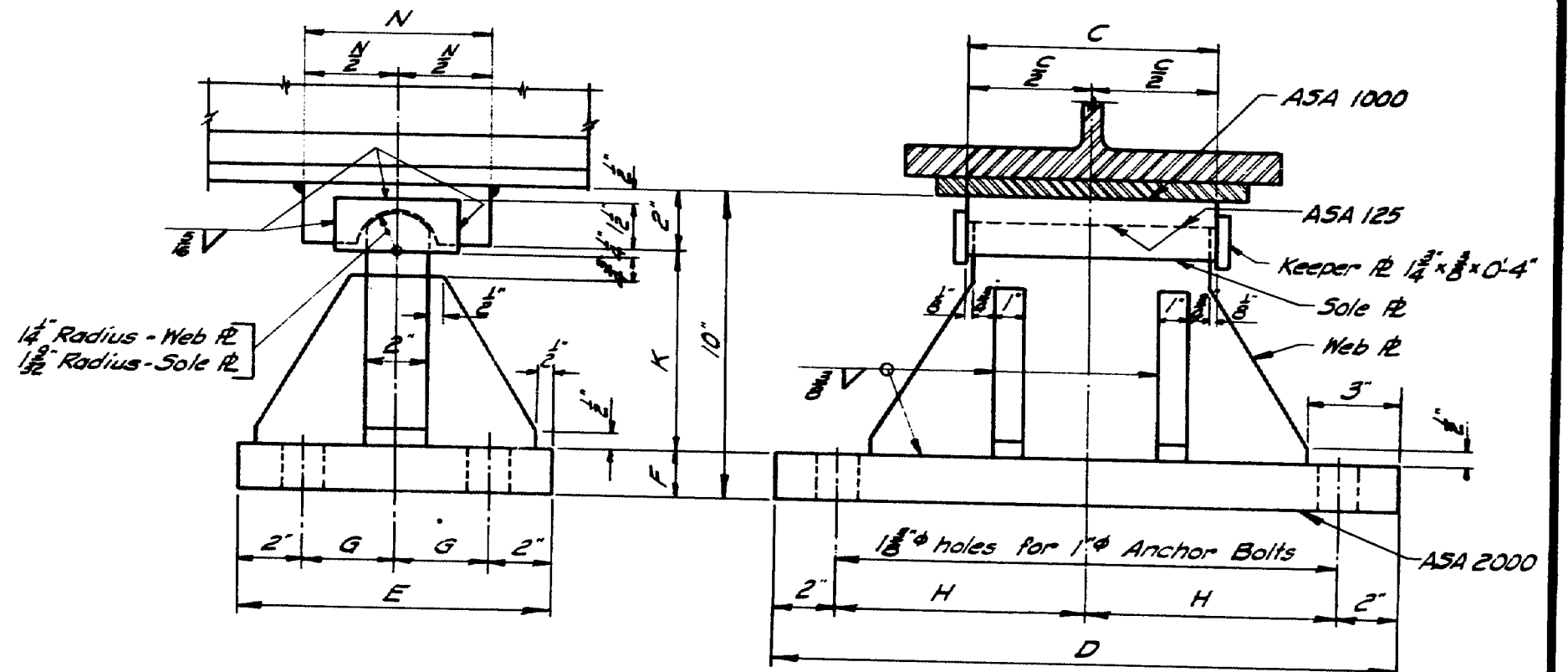
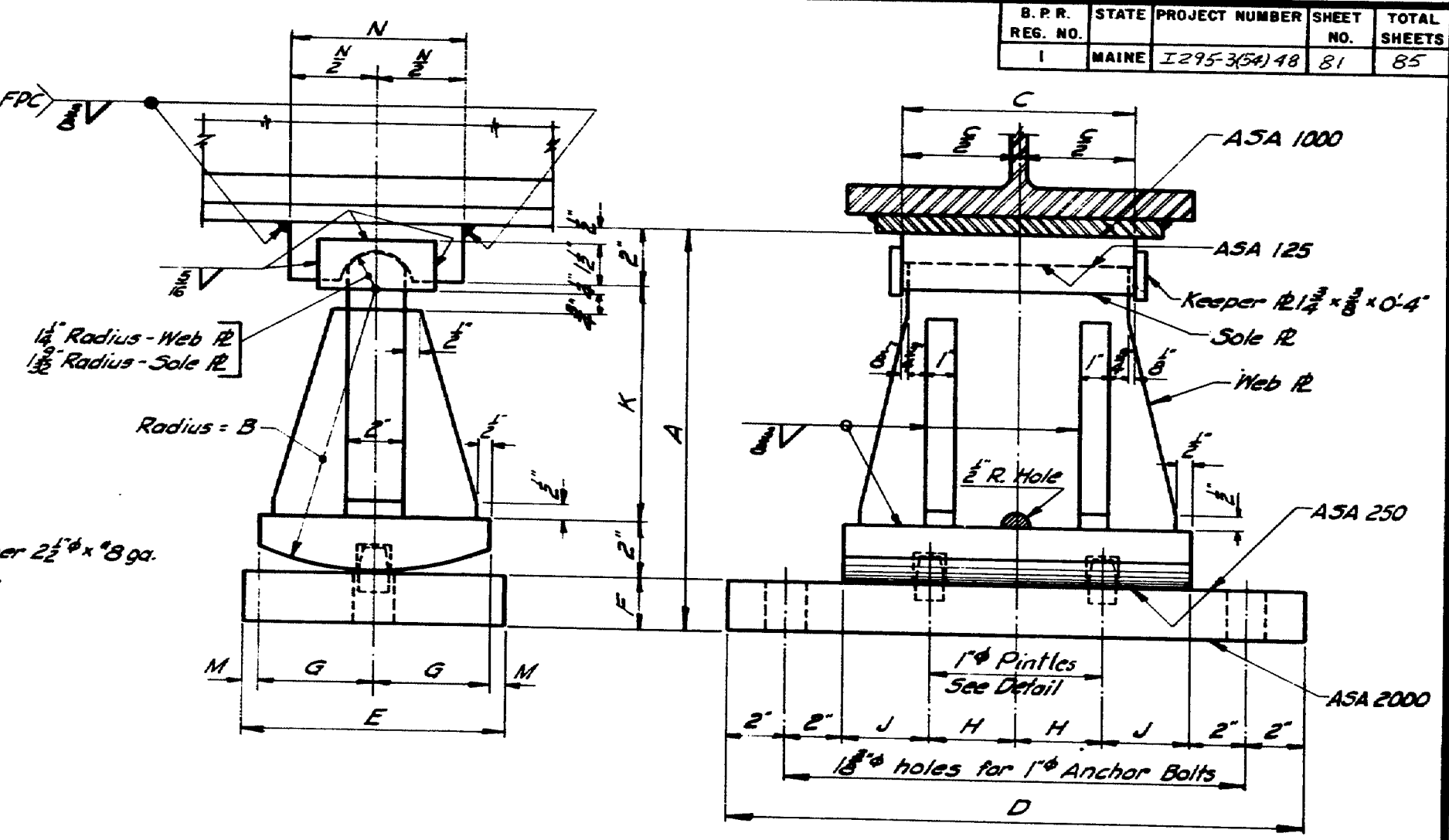
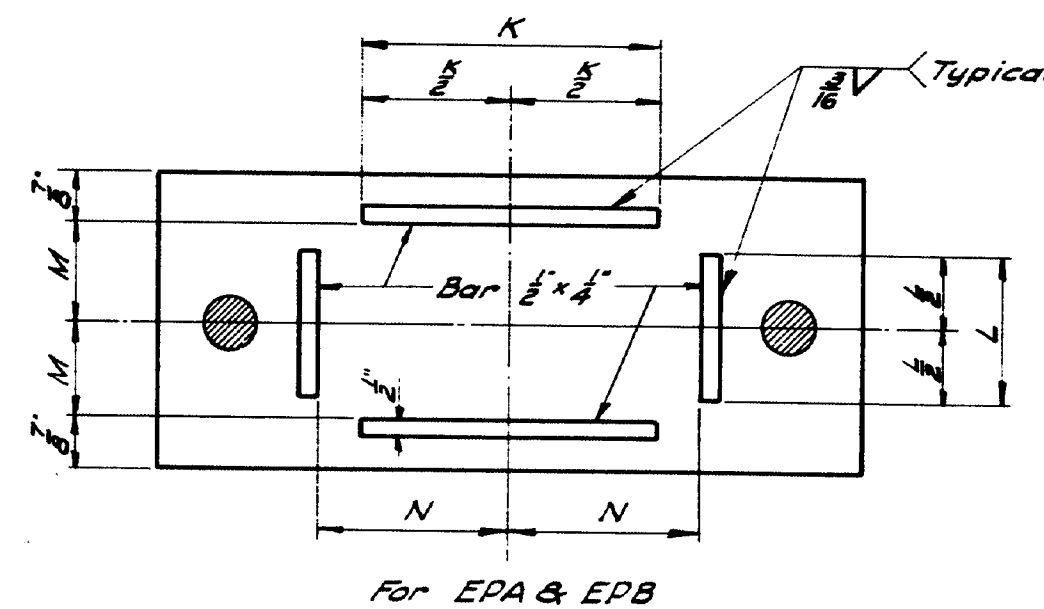
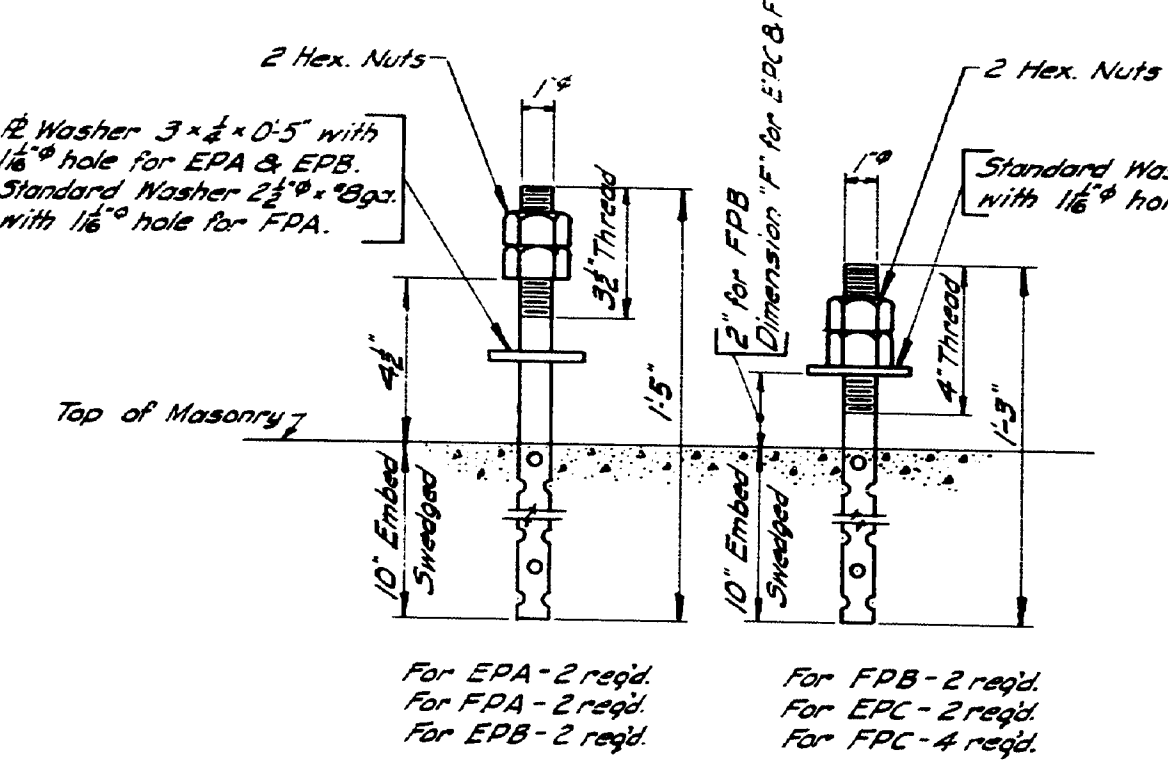
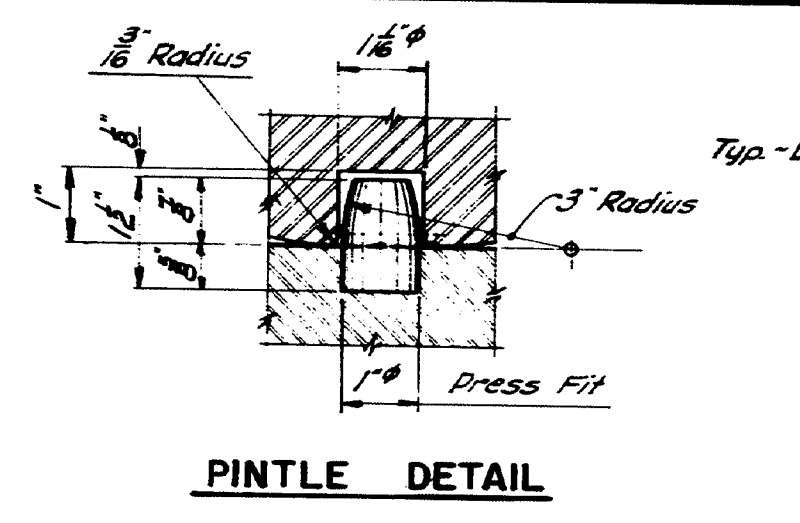
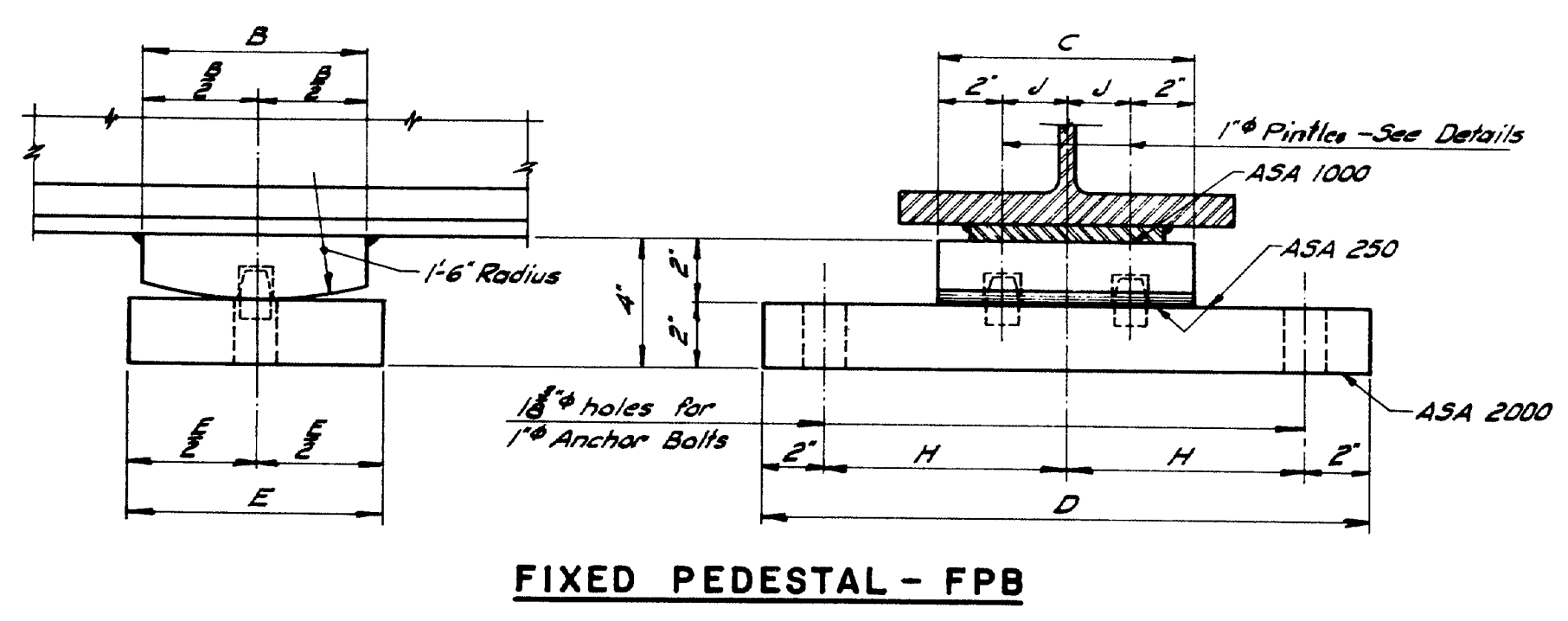
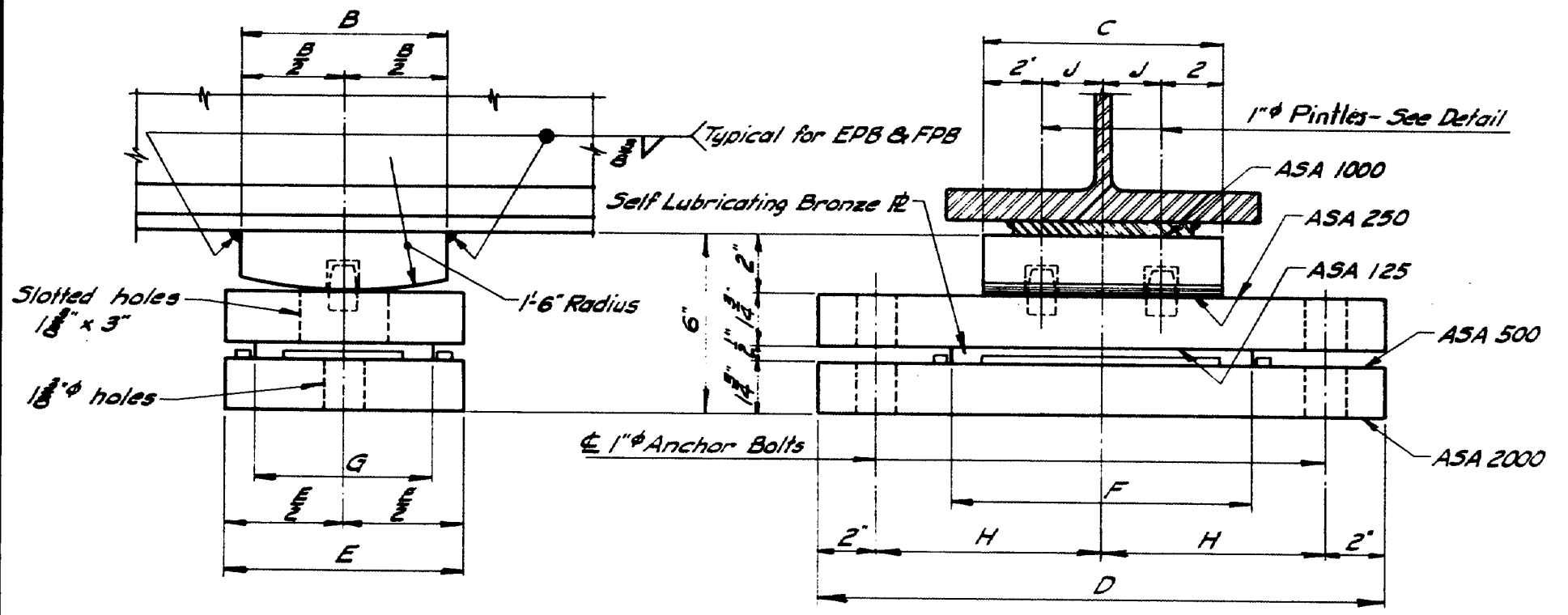
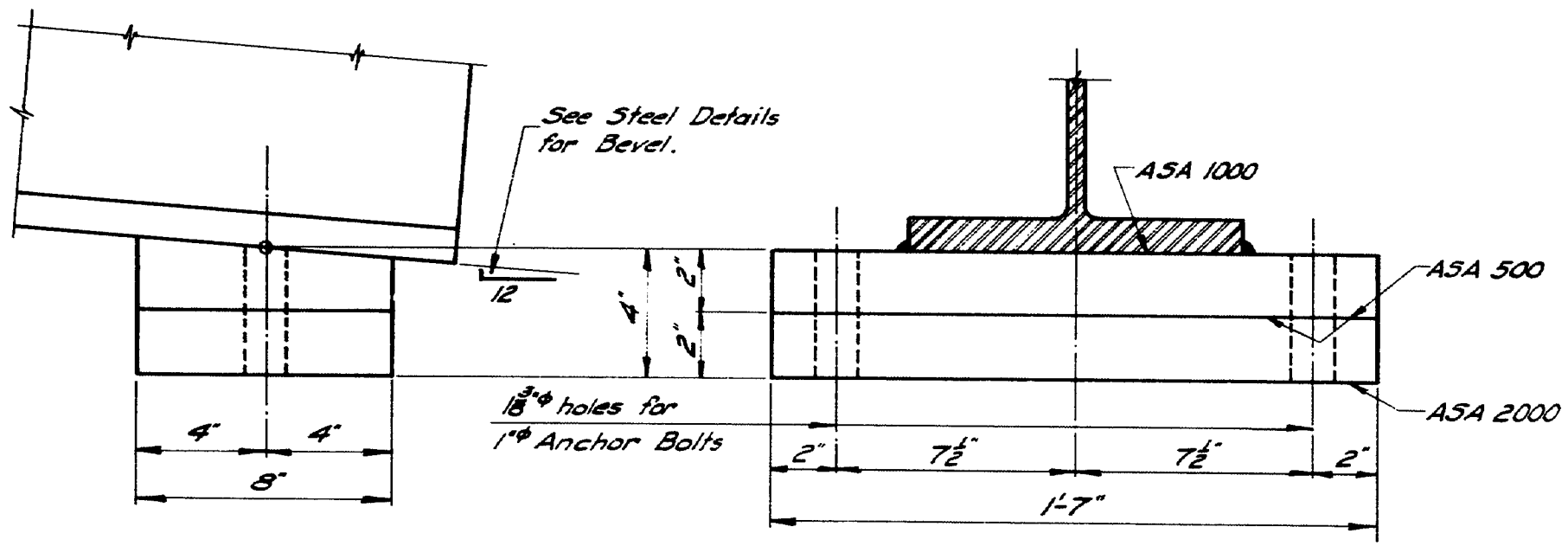
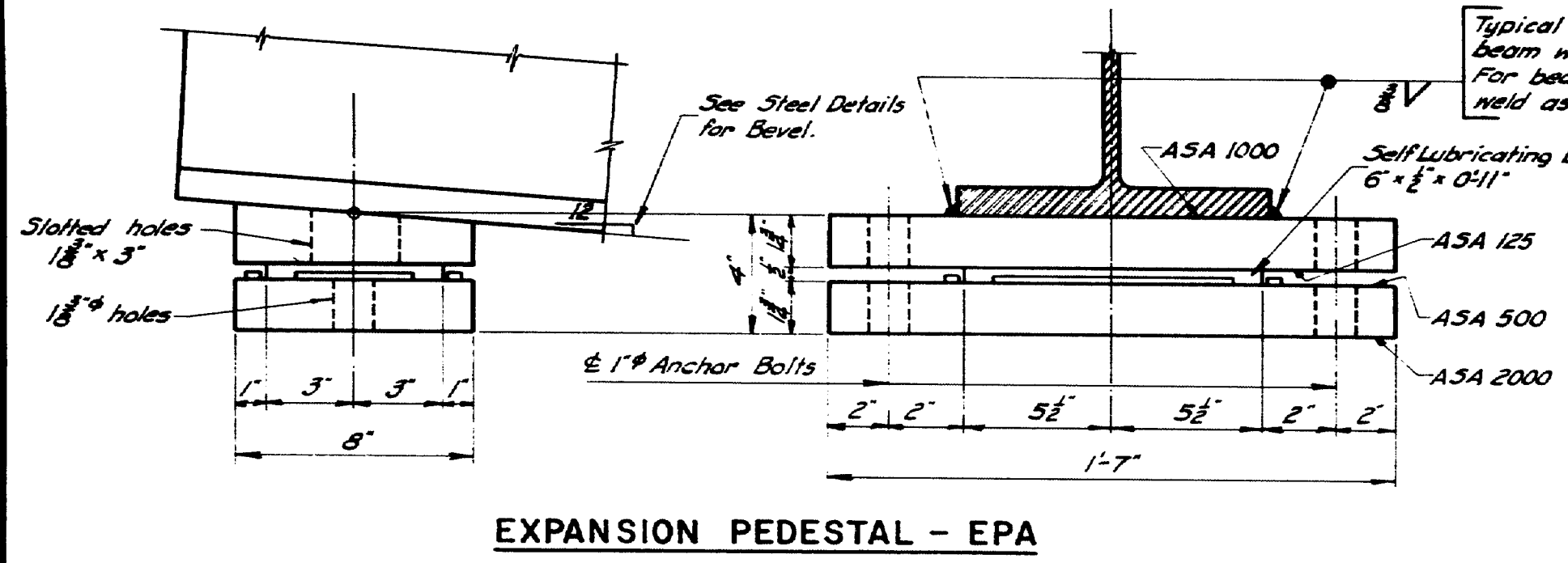


REVISIONS		MAINE STATE HIGHWAY COMMISSION AUGUSTA, MAINE	

**STANDARD DETAILS**  
GUARD RAILS, ANCHOR ASSEMBLIES, PLATE WASHERS and STANDARD FITTINGS

AUG. 1969

152-164



PEDESTALS - ALLOWABLE LOADS & DIMENSIONS	Load	A	B	C	D	E	F	G	H	J	K	L	M	N
EPA	132K	-	-	-	-	-	-	-	-	-	8"	4"	3 1/2"	5 1/2"
FPA	150K	-	-	-	-	-	-	-	-	-	-	-	-	-
EPB-1	120K	-	6"	8"	1'-7"	8"	10"	6"	7 1/2"	2"	8"	4"	3 1/2"	5 1/2"
EPB-2	165K	-	7"	10"	1'-8"	9"	1'-0"	7"	8"	3"	10"	5"	3 1/2"	6 1/2"
EPB-3	224K	-	8"	1'-1"	2'-0"	10"	1'-4"	7"	10"	4 1/2"	1'-2"	5"	3 1/2"	6 1/2"
FPB-1	120K	-	6"	8"	1'-7"	8"	-	-	7 1/2"	2"	-	-	-	-
FPB-2	165K	-	7"	10"	1'-8"	9"	-	-	8"	3"	-	-	-	-
FPB-3	224K	-	8"	1'-2"	2'-0"	10"	-	-	10"	5"	-	-	-	-
EPC-1	70K	3 1/2"	6"	8"	1'-8"	8"	1'-3"	3"	3"	4 1/2"	-	-	-	6"
EPC-2	100K	1 1/2"	8"	8"	1'-8"	8"	1'-3"	3"	3"	6 1/2"	-	-	-	6"
EPC-3	130K	1'-2"	10"	8"	1'-8"	9"	1'-4"	4"	3"	8 1/2"	-	-	-	7"
EPC-4	160K	1'-2"	10"	8"	1'-10"	9"	1'-4"	4"	3"	8 1/2"	-	-	-	7"
EPC-5	190K	1'-2"	10"	9"	2'-0"	10"	2"	4 1/2"	5"	3"	8 1/2"	-	-	8"
EPC-6	220K	1'-4"	1'-0"	10"	2'-0"	1'-0"	2 1/2"	5"	5"	3"	10 1/2"	-	-	8"
EPC-7	290K	1'-4"	1'-0"	1'-0"	2'-2"	1'-0"	2 1/2"	5"	5"	4"	10 1/2"	-	-	8"
FPB-1	100K	-	-	8"	1'-8"	9"	1'-4"	4"	8"	-	6 1/2"	-	-	6"
FPC-2	160K	-	-	8"	1'-8"	10"	1'-4"	4"	8"	-	6 1/2"	-	-	7"
FPC-3	190K	-	-	9"	2'-0"	10"	1'-4"	4"	10"	-	6 1/2"	-	-	8"
FPC-4	220K	-	-	10"	2'-0"	1'-0"	1'-4"	4"	10"	-	6 1/2"	-	-	8"
FPC-5	250K	-	-	1'-0"	2'-0"	1'-0"	2"	4"	10"	-	6"	-	-	8"

NOTE: At the location of bearing pedestals the concrete bridge seats shall be dressed one inch larger all around than size of masonry plates and to exact elevations shown on the plans. If dressed areas are below the surface of the surrounding bridge seat a small channel shall be cut to the edge of the bridge seat for drainage where required by the Engineer. Channels shall have a min. width of 2" and min. slope of 1/8" per foot. No separate payment for this work will be made as it shall be considered incidental to contract items.

**DESIGN SPECIFICATIONS**  
A.A.S.H.O., Standard Specifications for Highway Bridges, 1969

**A.S.T.M. STEEL CLASSIFICATION**  
Anchor Bolts - A36  
All other - A36

Revised- Design Specifications and A.S.T.M. Steel Classification 1959.

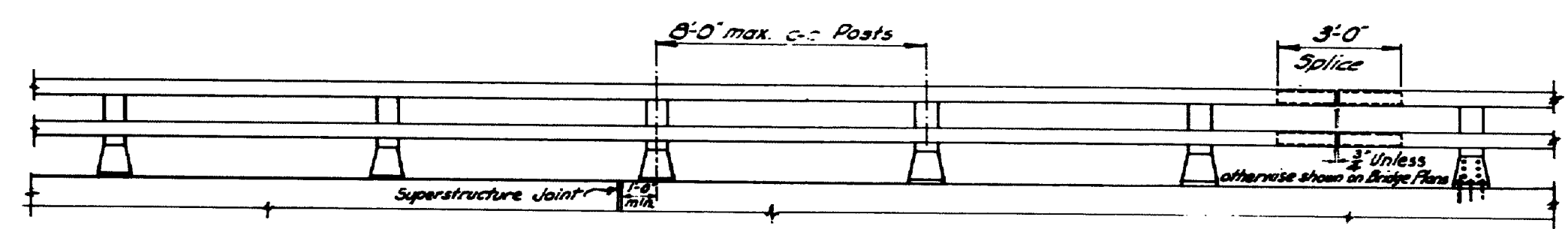
MAINE STATE HIGHWAY COMMISSION  
AUGUSTA, MAINE

**STANDARD DETAILS**  
(BD 101 - 70)

**BEARING PEDESTALS**

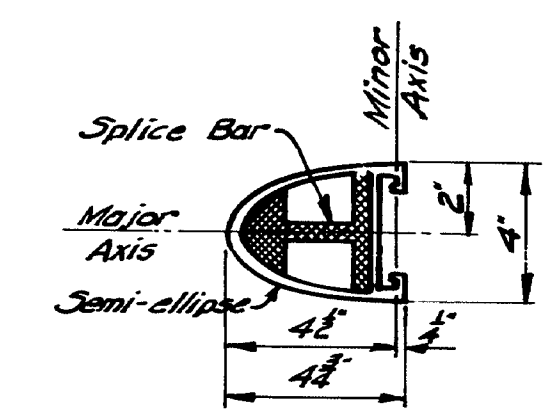
JANUARY 1970

B.P.R.	STATE	PROJECT NUMBER	SHEET	TOTAL SHEETS
1	MAINE	7275 3(A)48	53	55

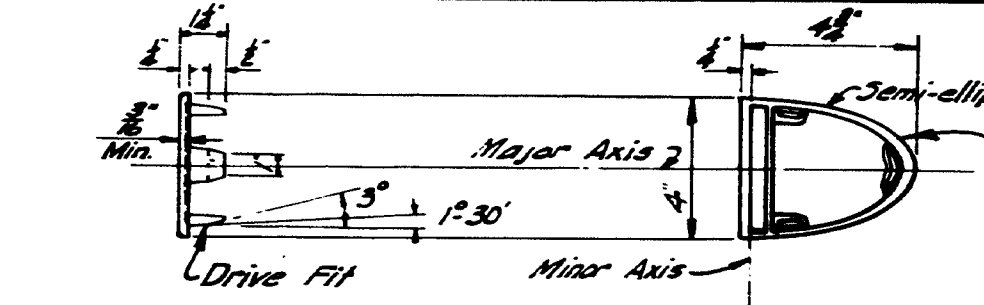


**RAIL - ELEVATION**  
 Lengths of rail shall be attached to a minimum of (4) four rail posts, wherever possible, and in any case never less than (2) two.

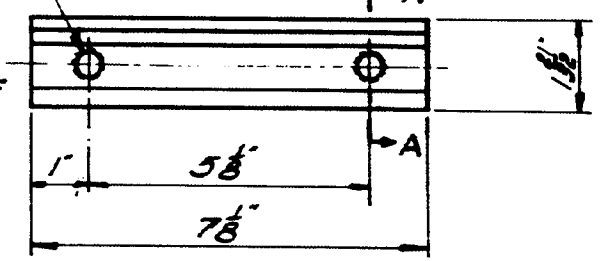
NOTE - Rail posts are to be set normal to grade unless otherwise shown on Bridge Plans.



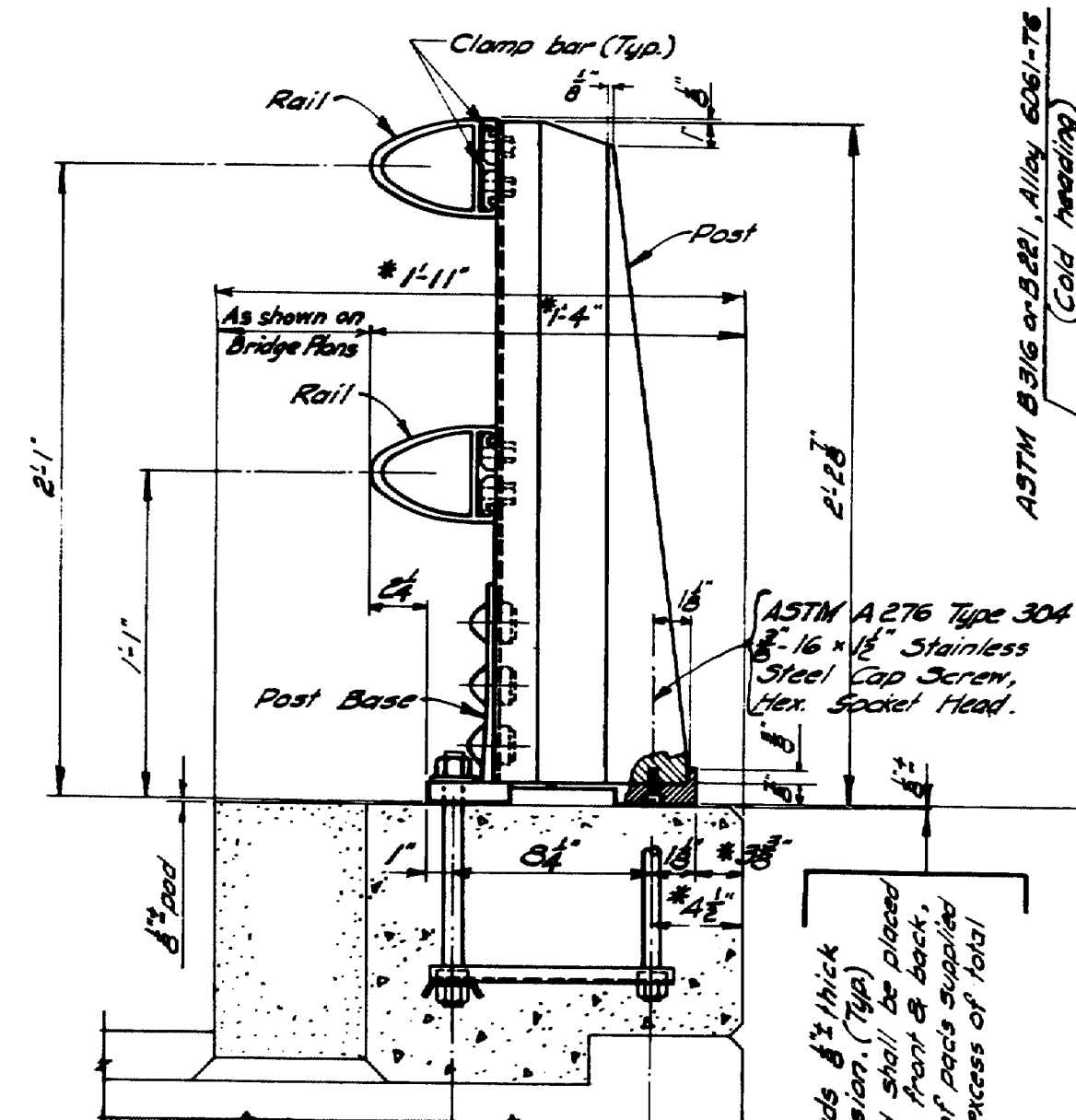
**RAIL SECTION**  
 See "Rail Detail"



**RAIL CAP**  
 ASTM B26 or B108, Aluminum Assoc. Alloy 43-F or 356F



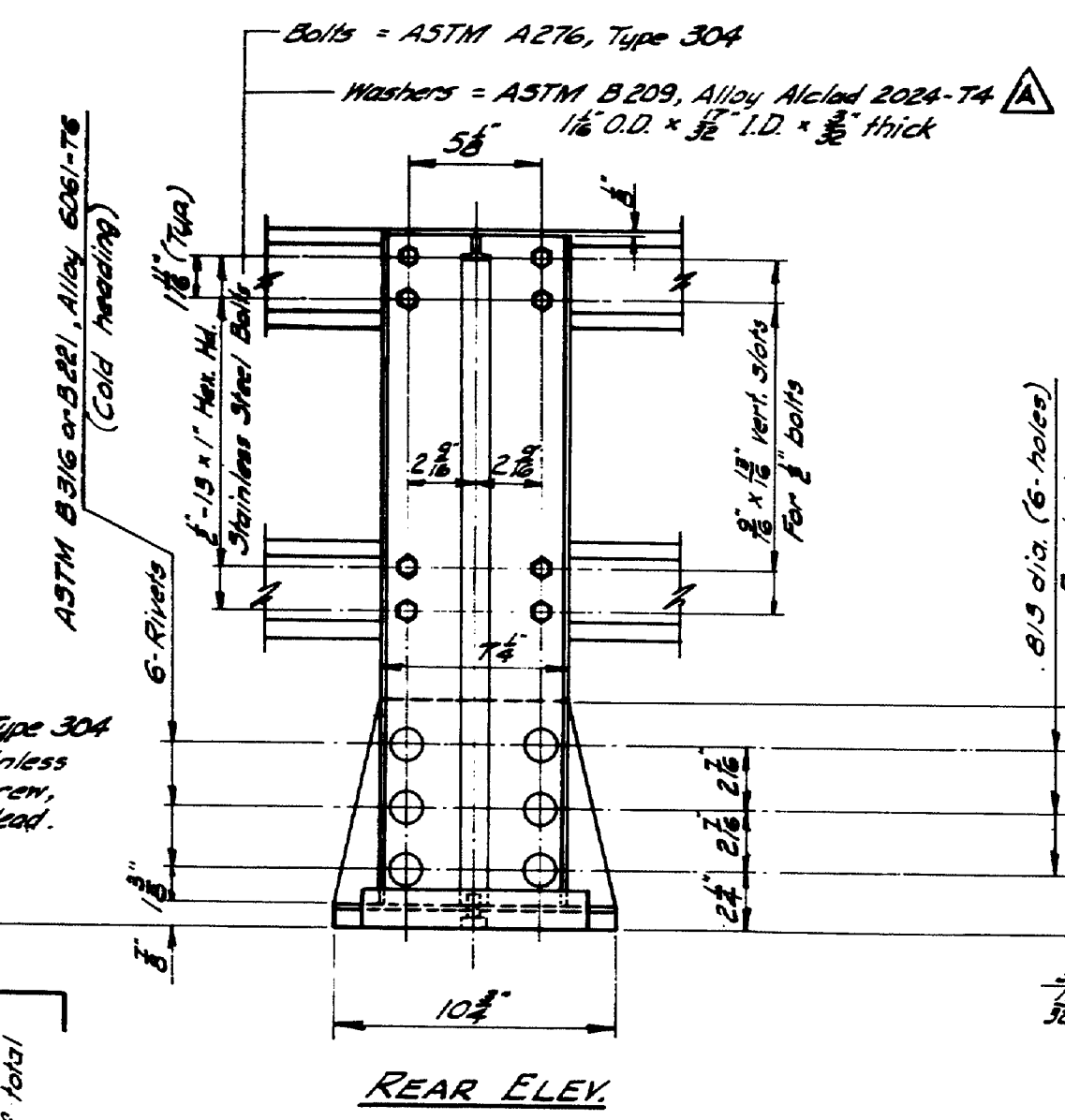
**CLAMP BAR**



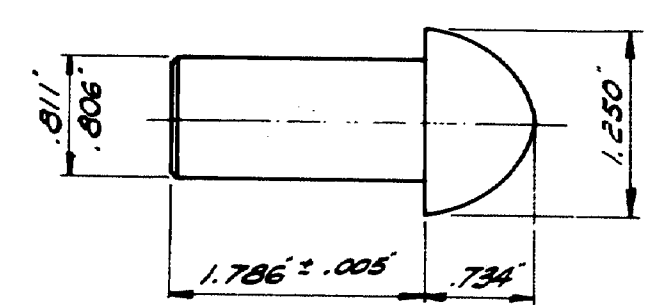
**BRIDGE RAIL Assembly**

\* Preferable minimum dimensions.

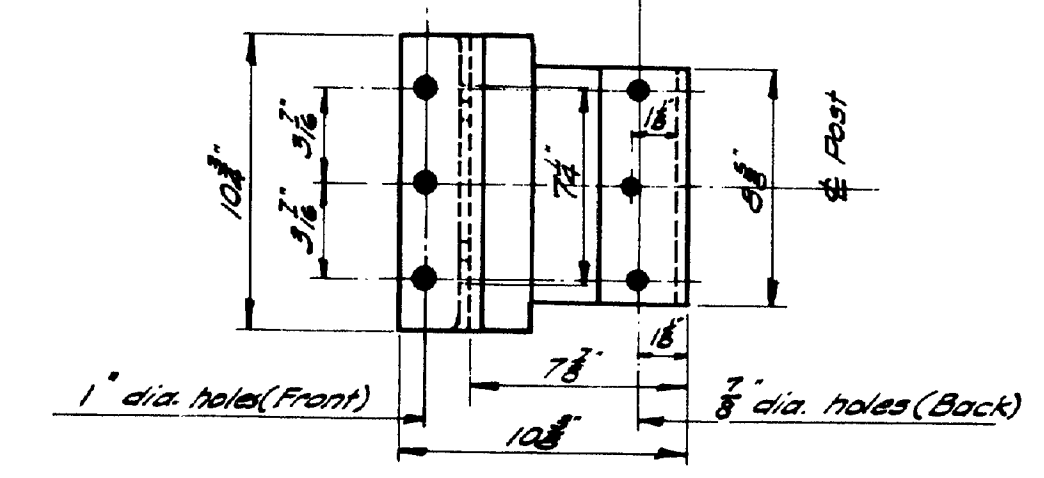
Performed Pads 3/8\"/>



**REAR ELEV**

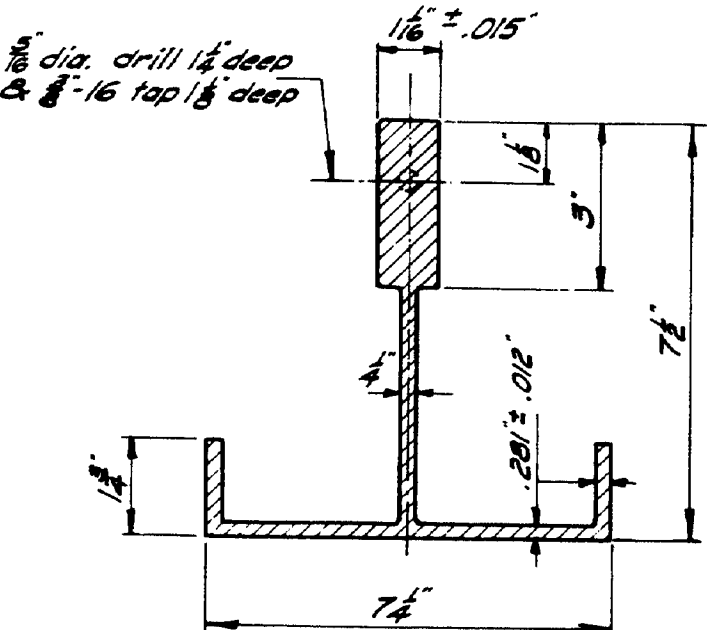


**RIVET**  
 Strap rivet rail post to base

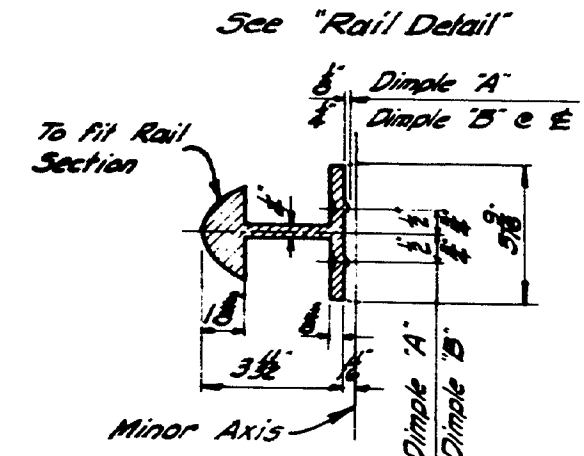


**POST BASE (Bottom View)**

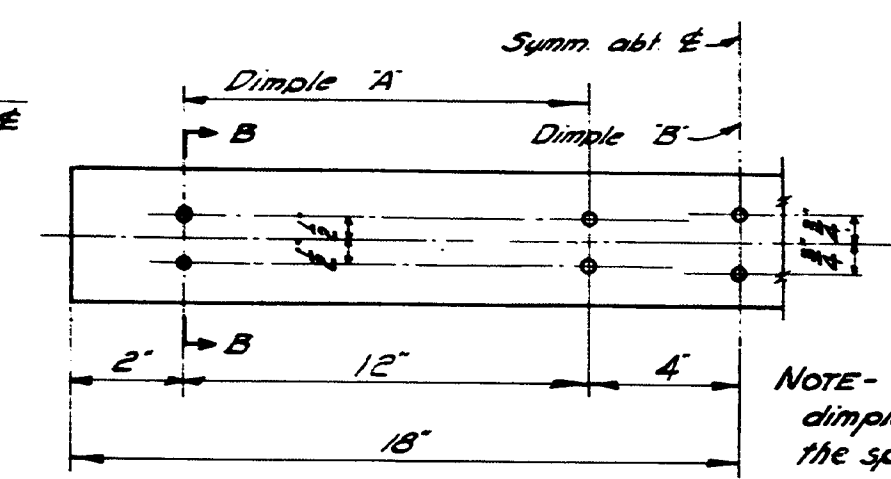
Post & Post Base = ASTM B221, Alloy 6061-T6.



**POST SECTION**

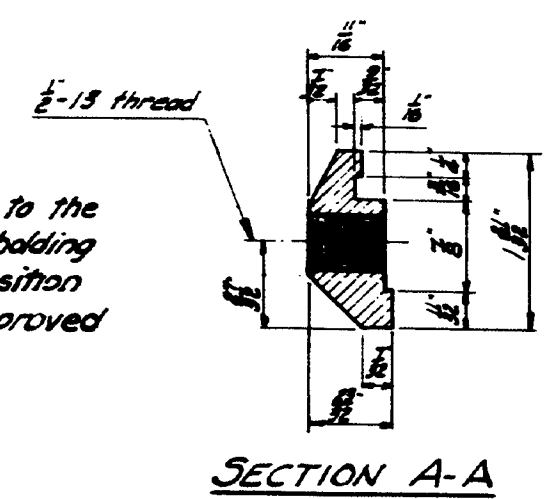


**SECTION B-B**

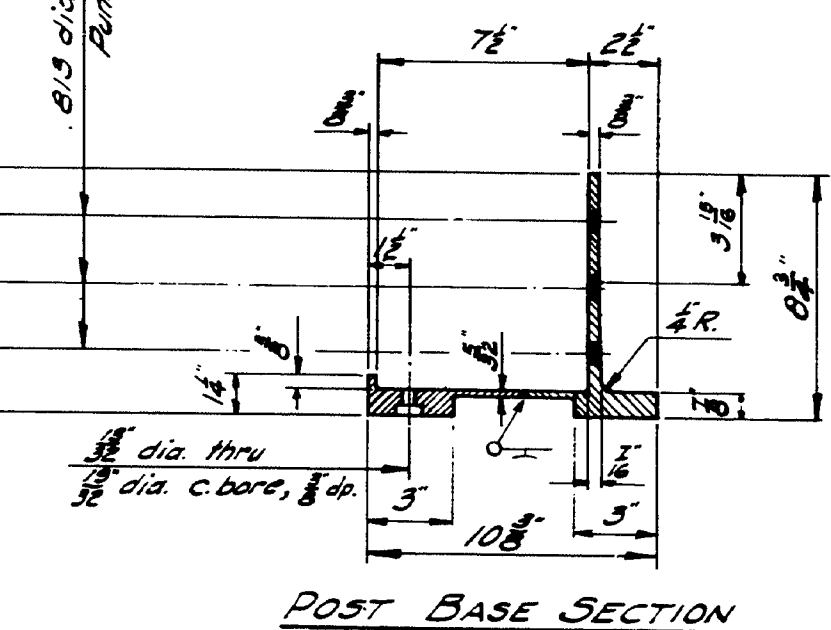


**SPLICE BAR**

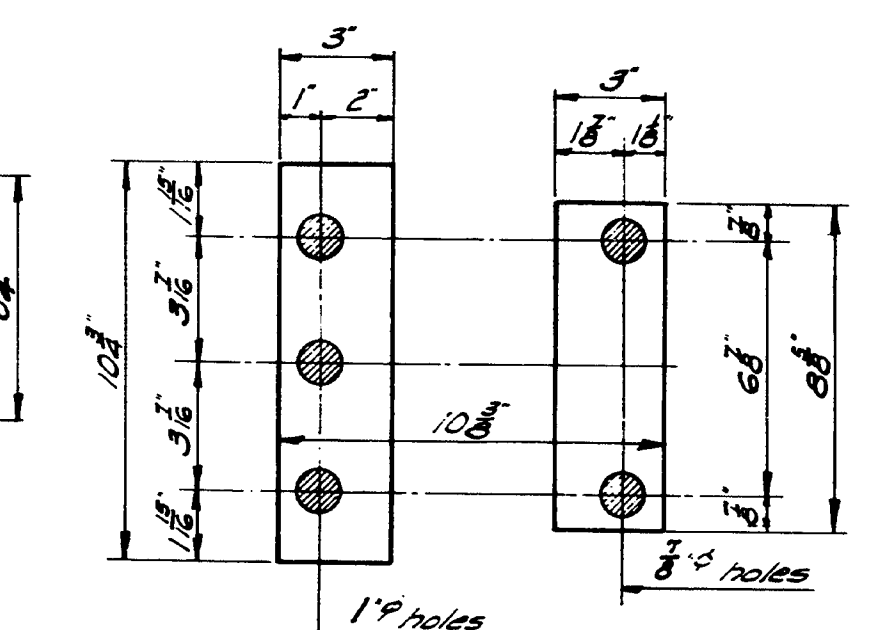
NOTE - An alternate to the dimple system for holding the splice bar in position may be used if approved by the Engineer.



**SECTION A-A**

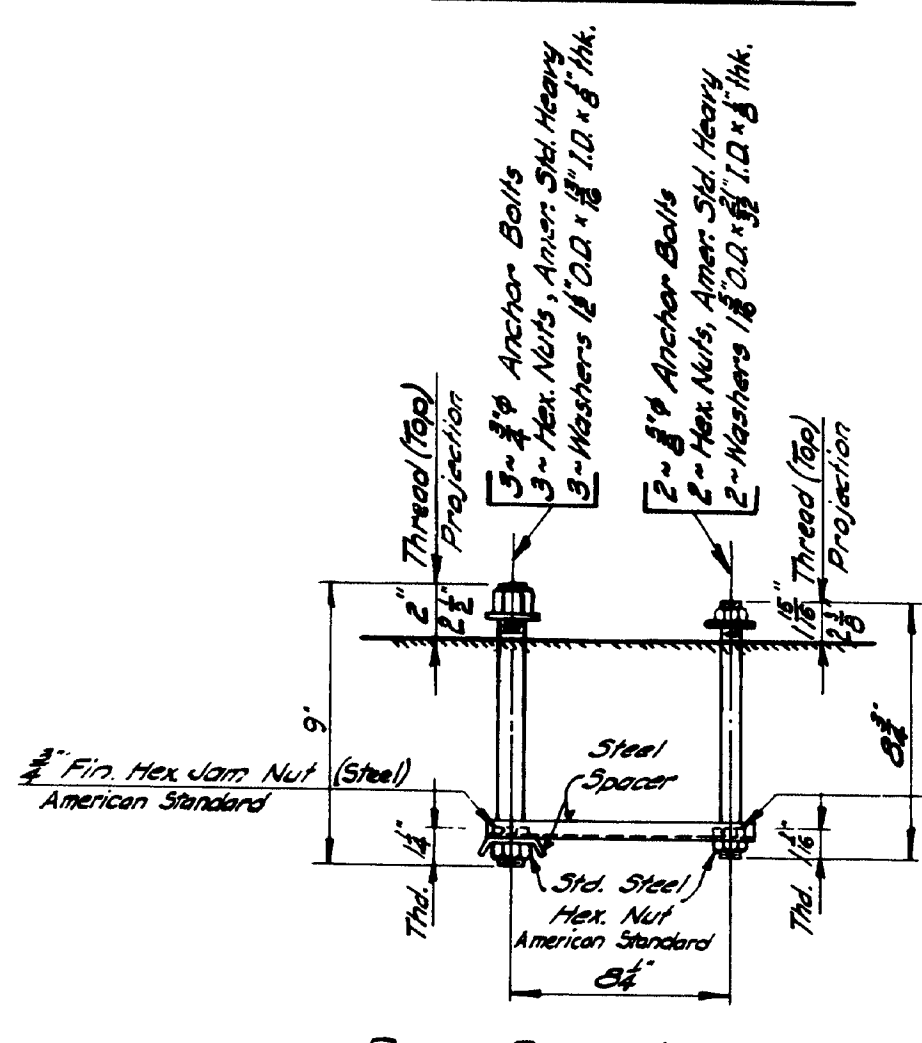


**POST BASE SECTION**



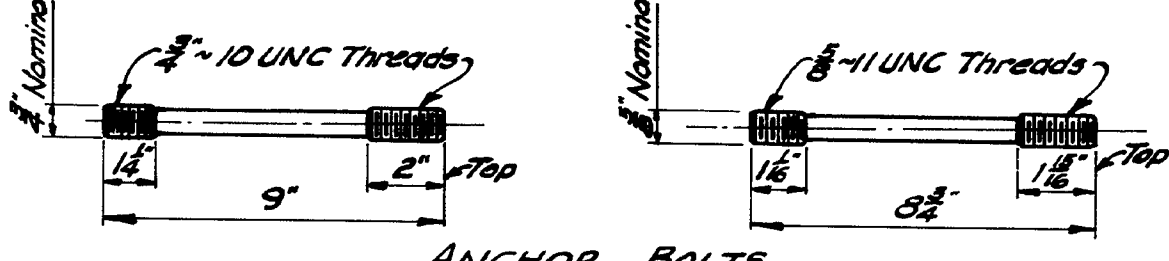
**PREFORMED PADS**

See Subsection 713.03 Standard Specifications Revision of June 1968 for pad.



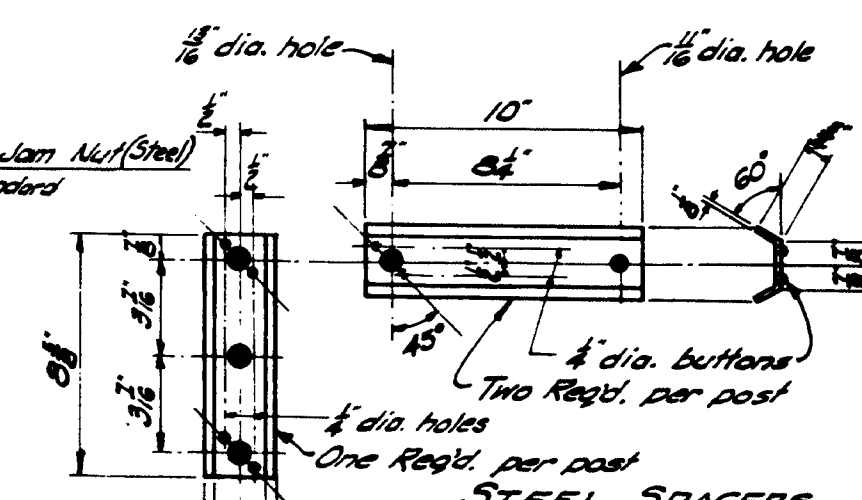
**RAIL POST ANCHORAGE Assembly**

NOTE: Anchor Bolts, exposed Hex Nuts (Amer. Std. Heavy) and washers shall conform to Designation "Stainless" ASTM A276. Ultimate Tensile Strength 100,000 psi minimum, Elongation 15% minimum. Hex Nuts embedded in concrete shall conform to Steel Designation ASTM A307. \* See Supplemental Specification.



**ANCHOR BOLTS**

If cut threads are used bolt diameter shall be not less than nominal diameter. If rolled threads are used bolt diameter shall be not less than root diameter of nominal diameter.



**STEEL SPACERS FOR ANCHORAGE**  
 ASTM A36

DESIGN SPECIFICATIONS

A.A.S.H.O. 1969 and Interim Specifications.

3-25-70	Changed ASTM B221, to include Alloy 6351-T5 for Rail, Splice & Clamp Bars.
	Changed ASTM Designations A276 & B209 A276 - 75 to 74 (Washers)
	Changed A.A.S.H.O. Design Specifications from 1965 to 1969.
MARK	ALTERATIONS

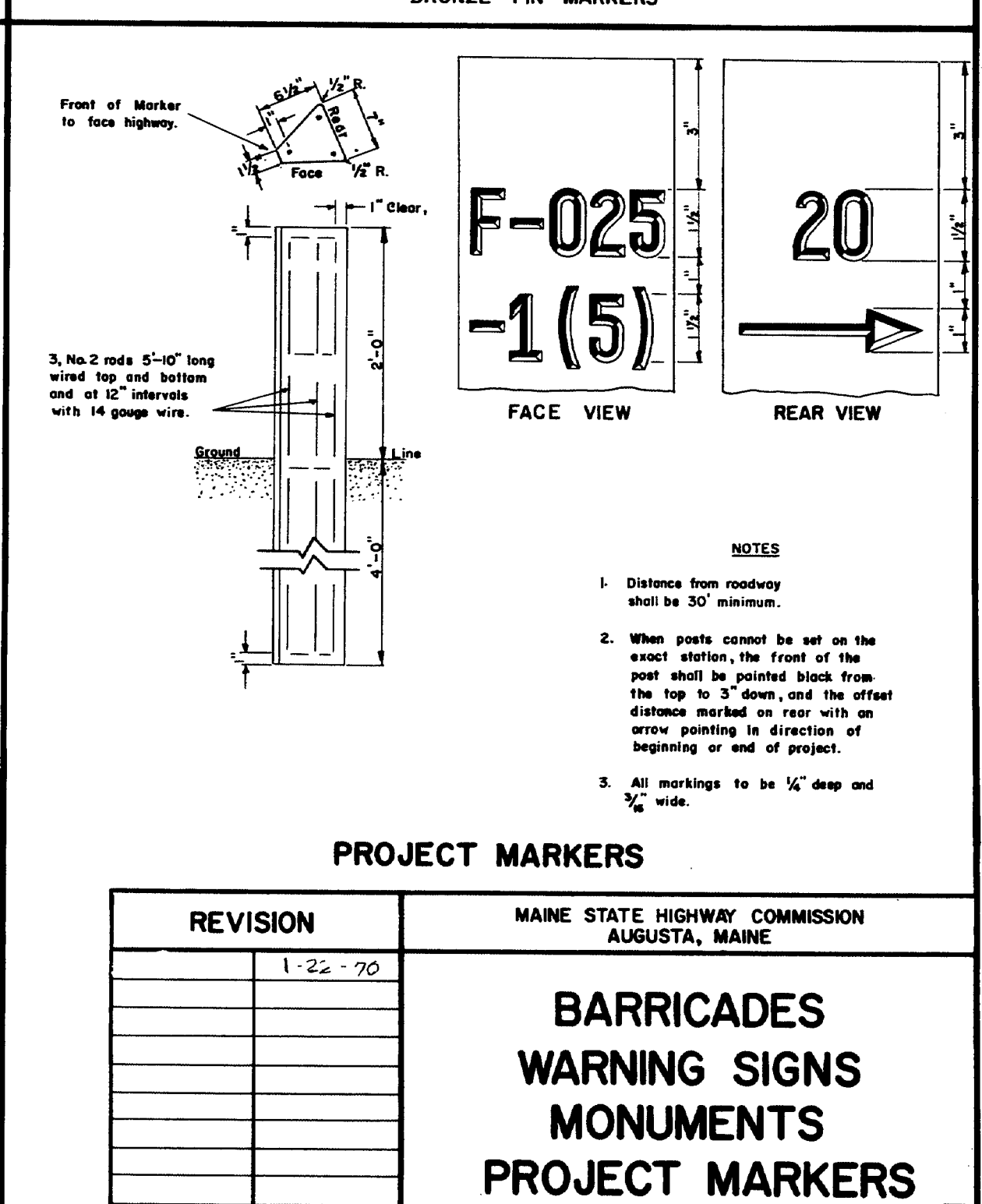
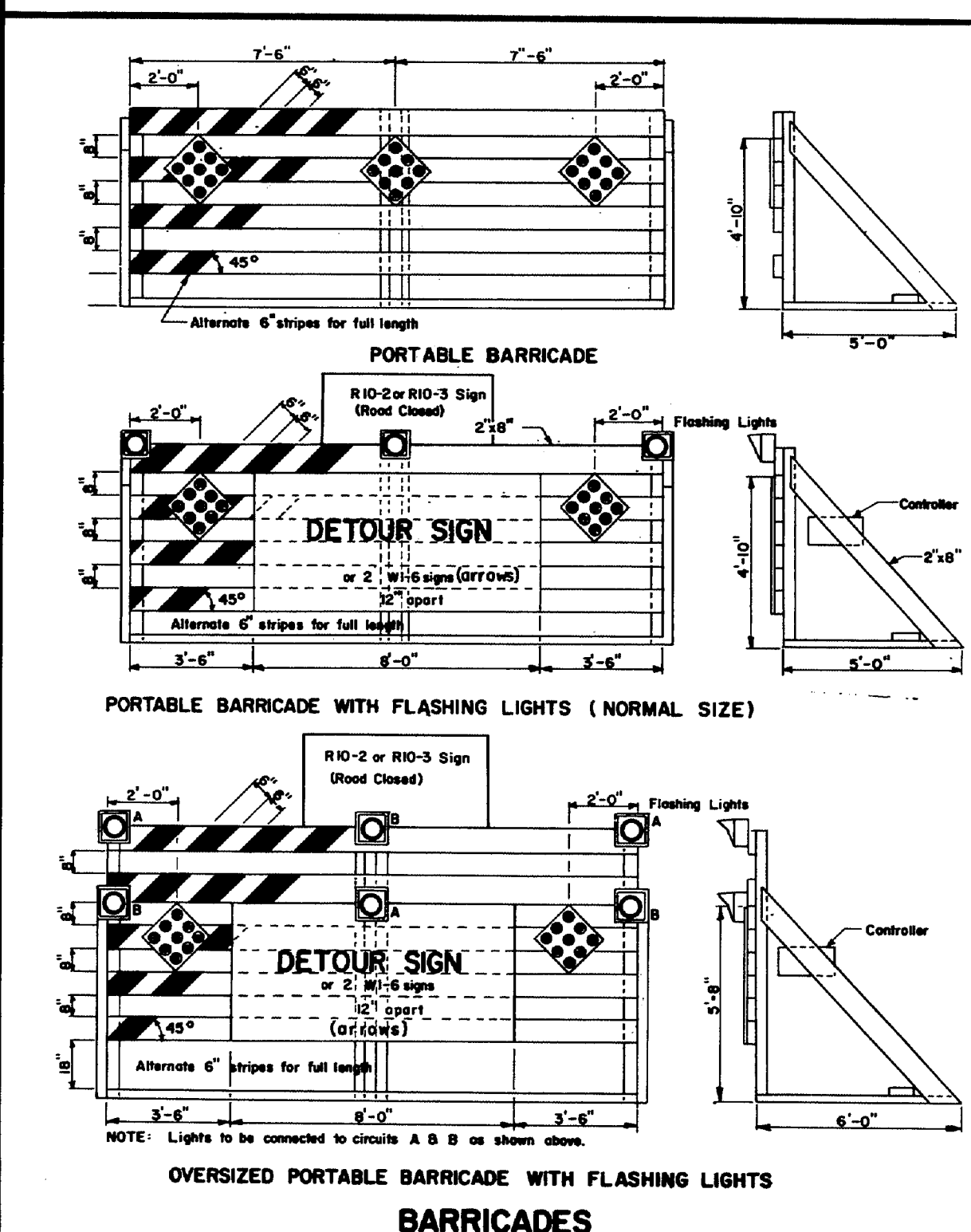
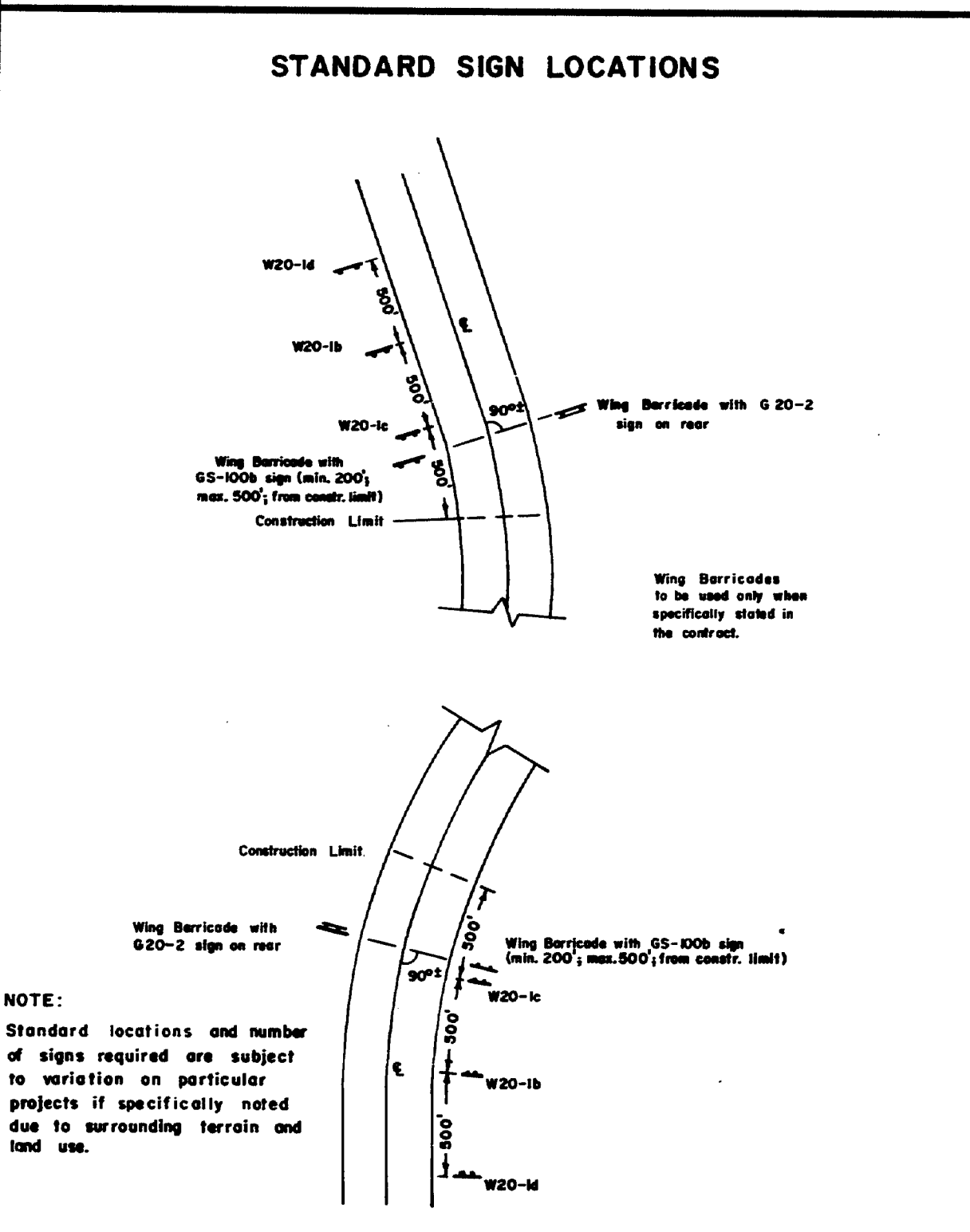
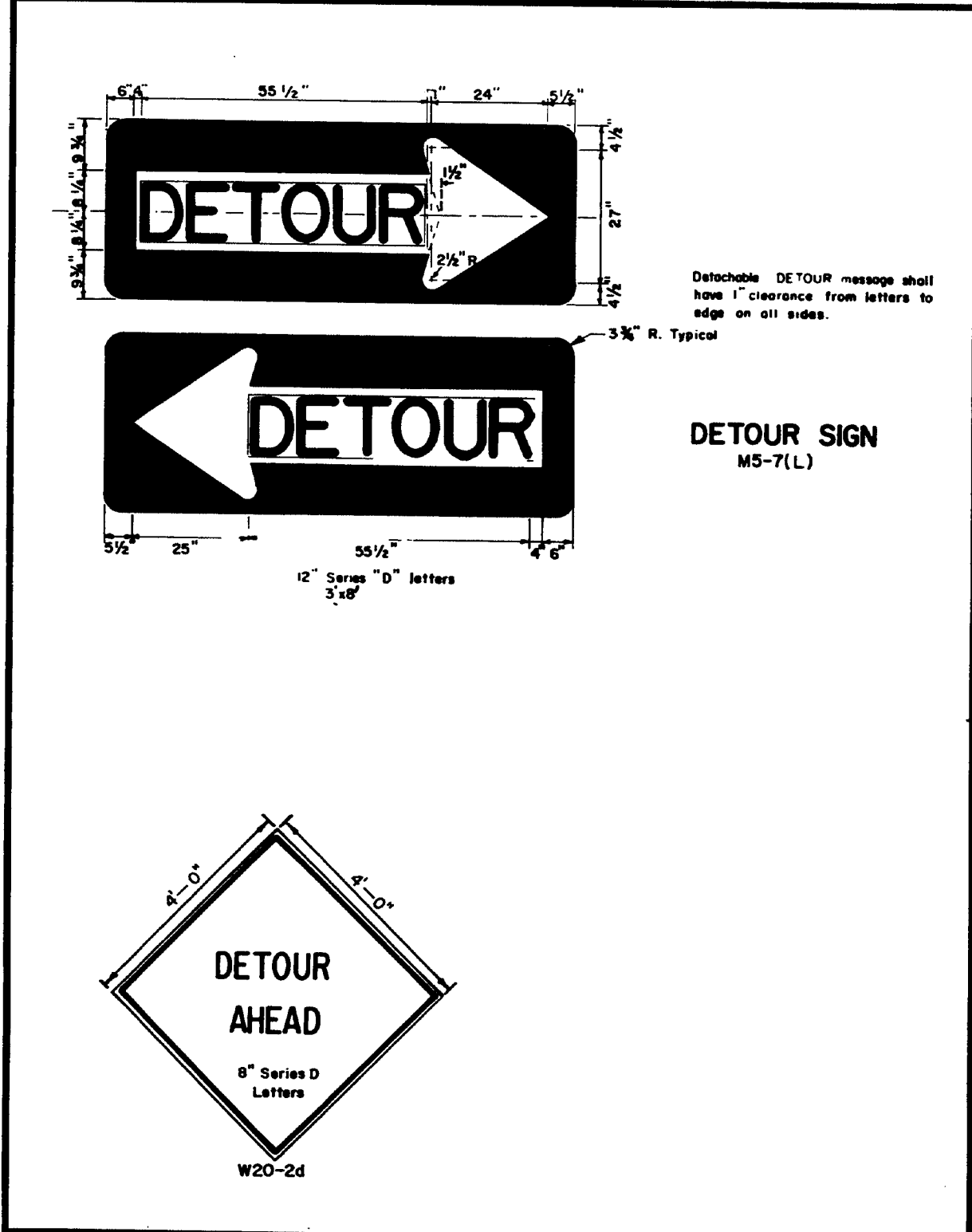
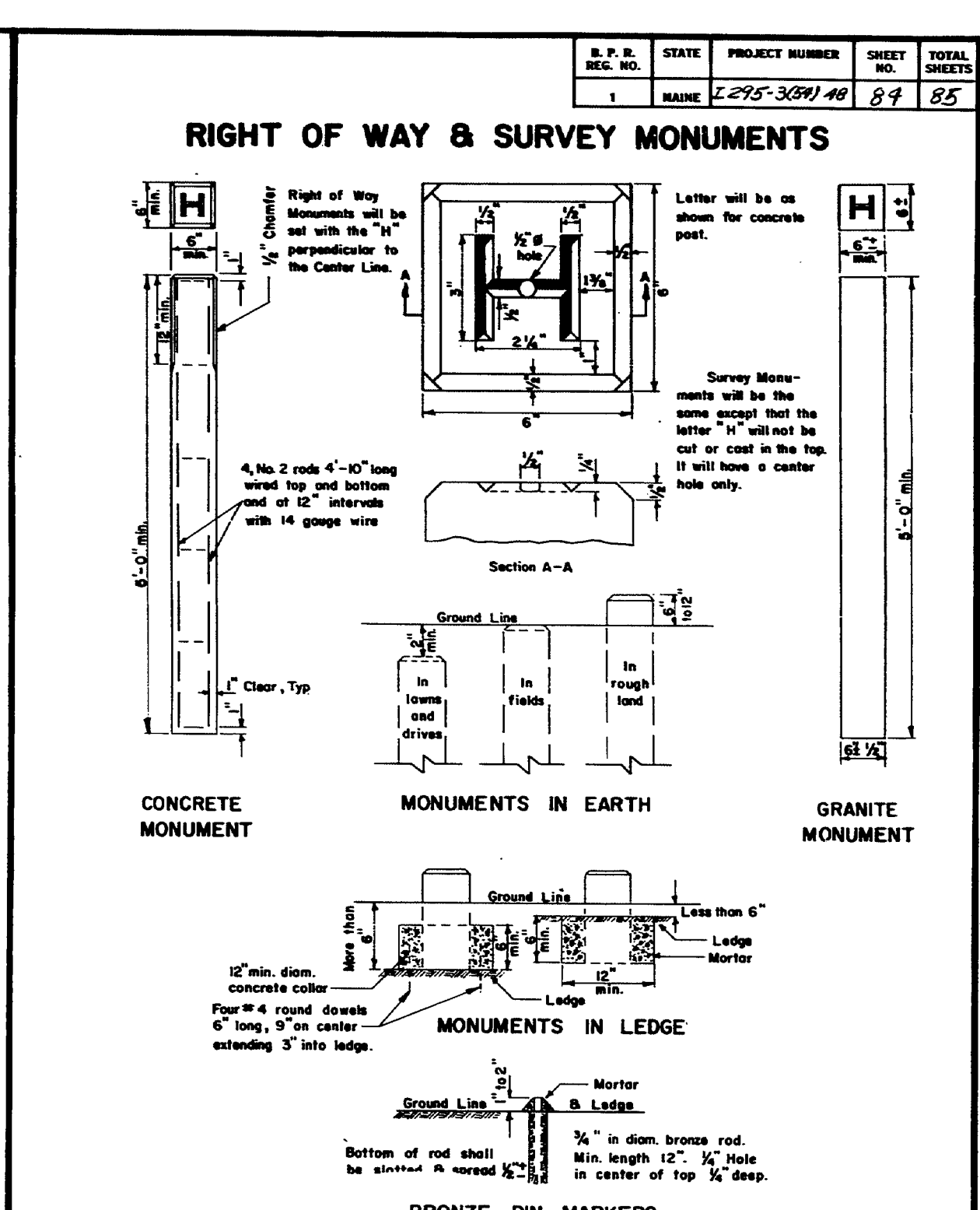
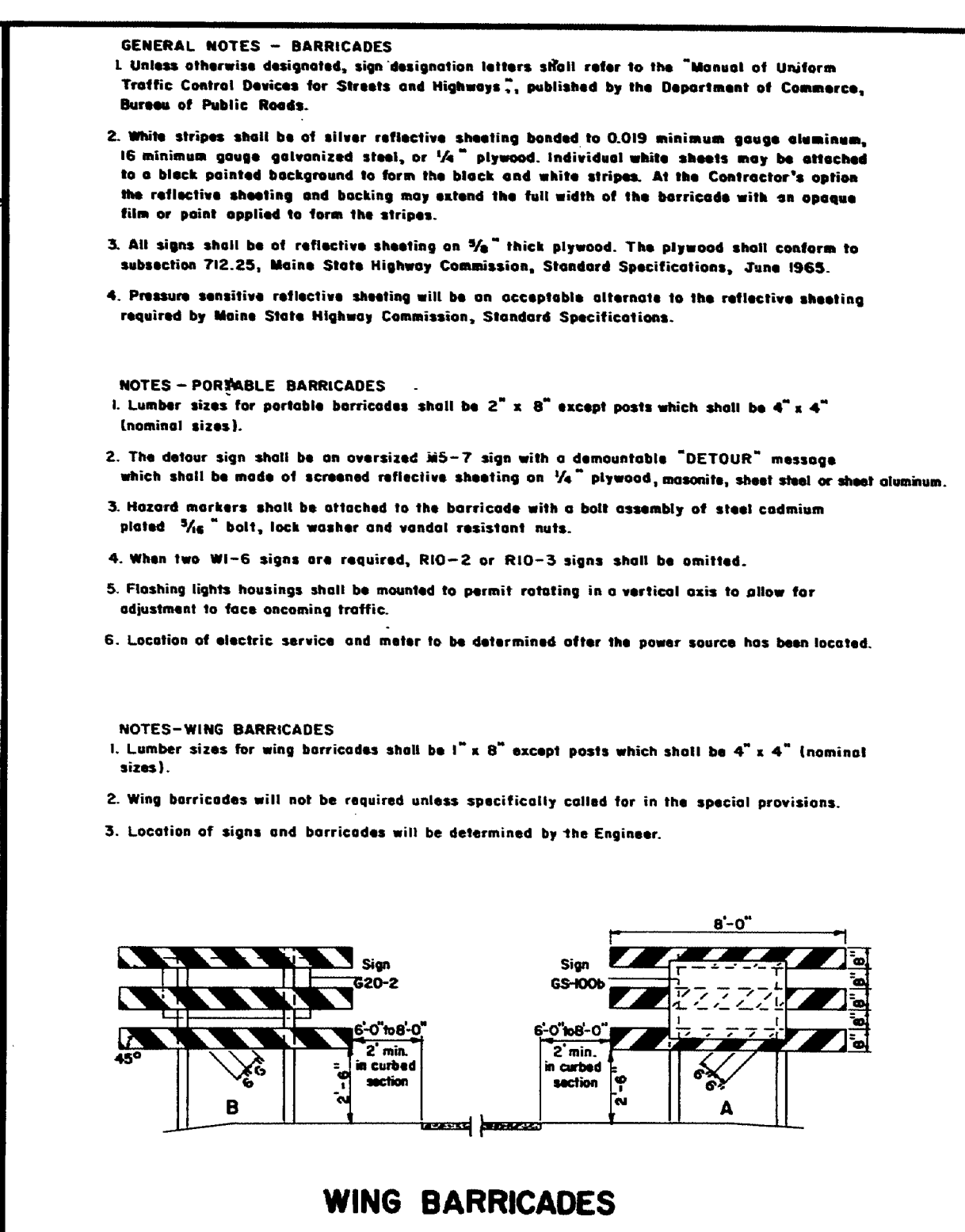
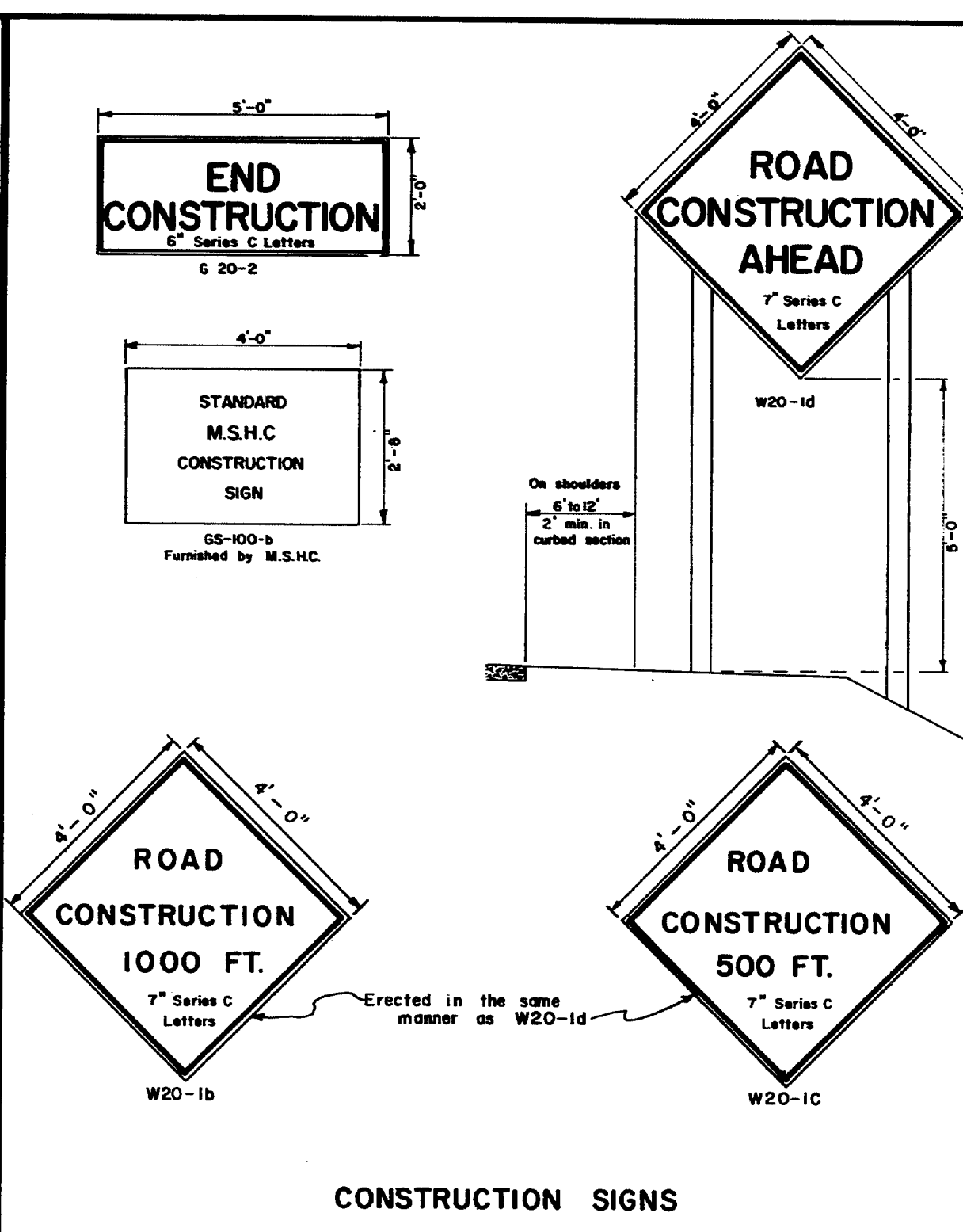
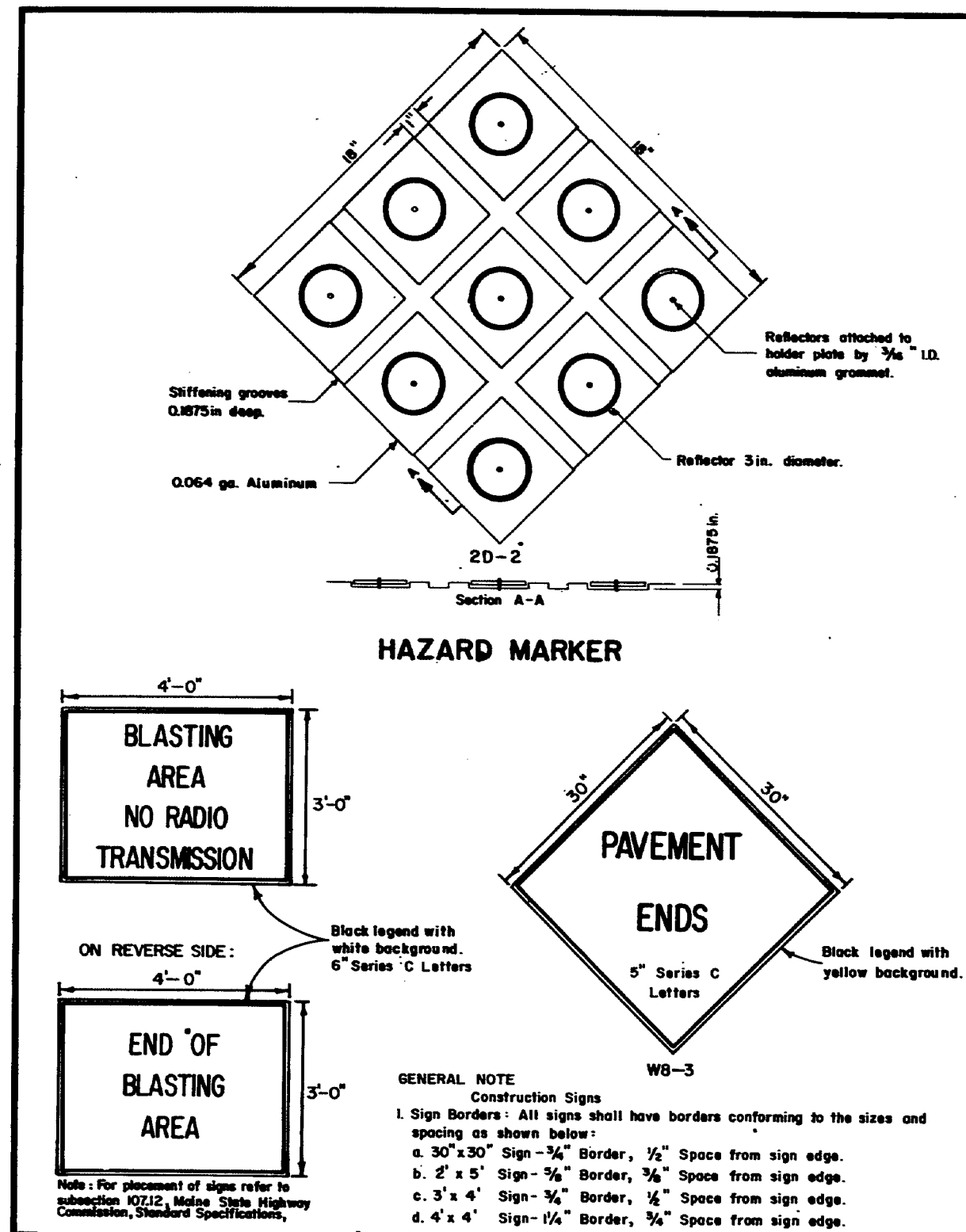
MAINE STATE HIGHWAY COMMISSION  
 AUGUSTA, MAINE

**STANDARD DETAILS**  
 (BD 106 - 69)

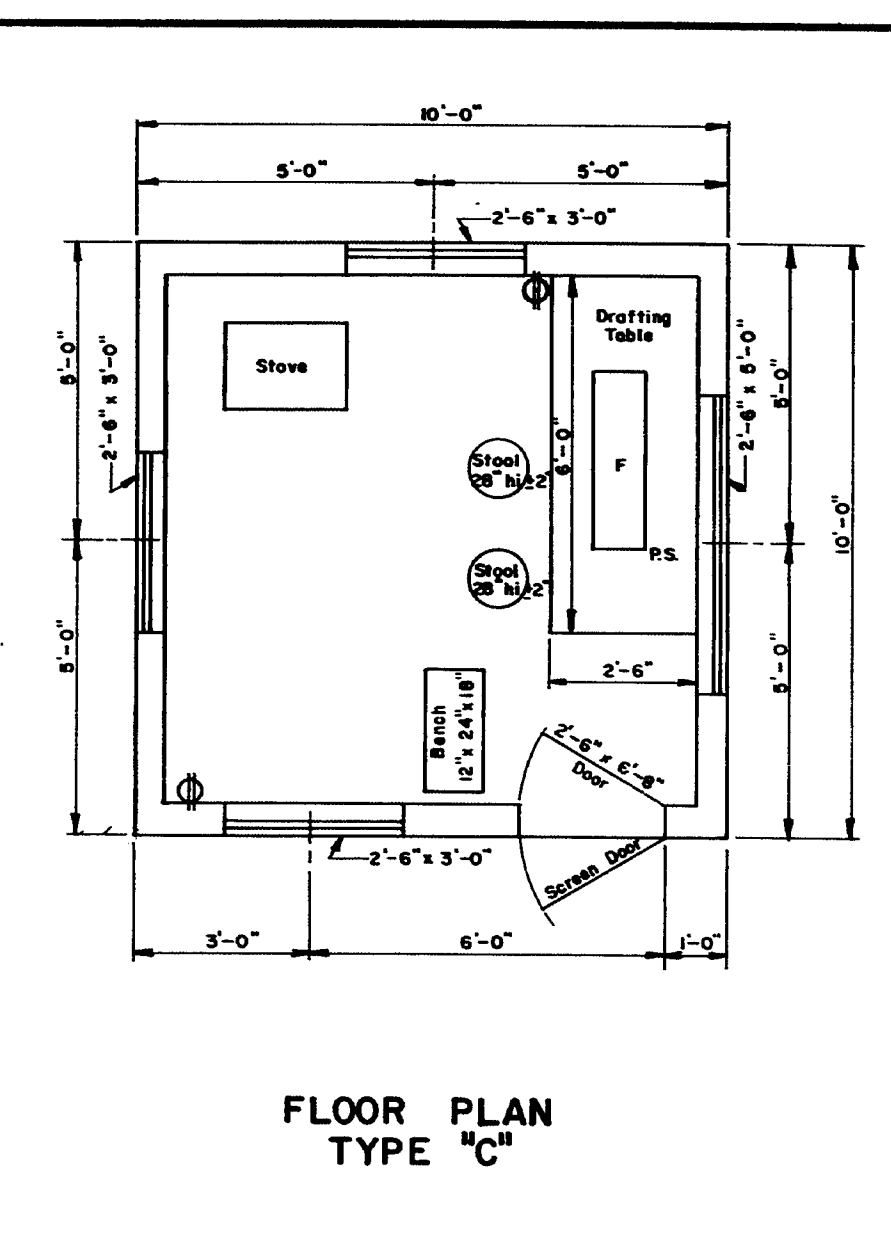
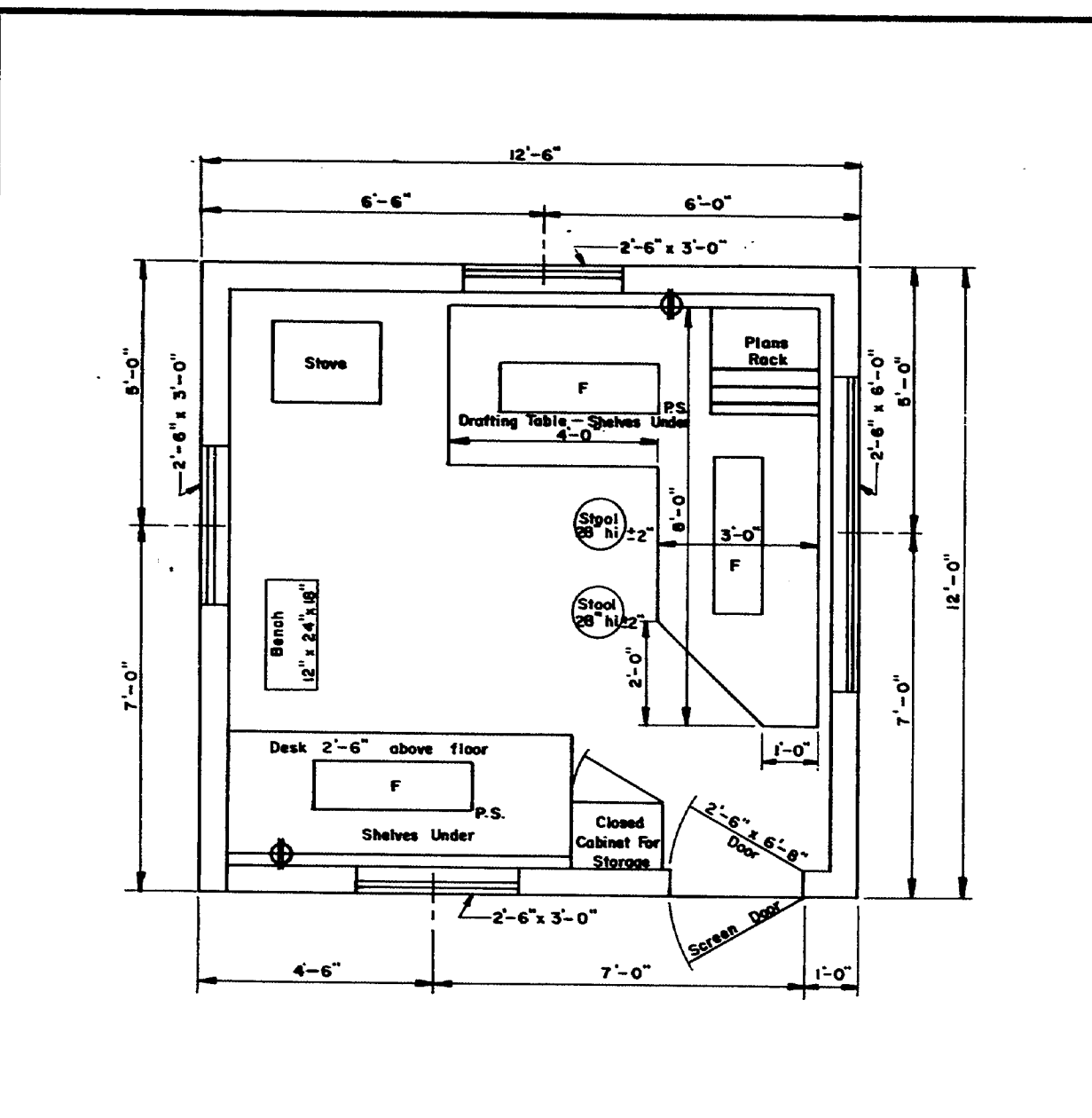
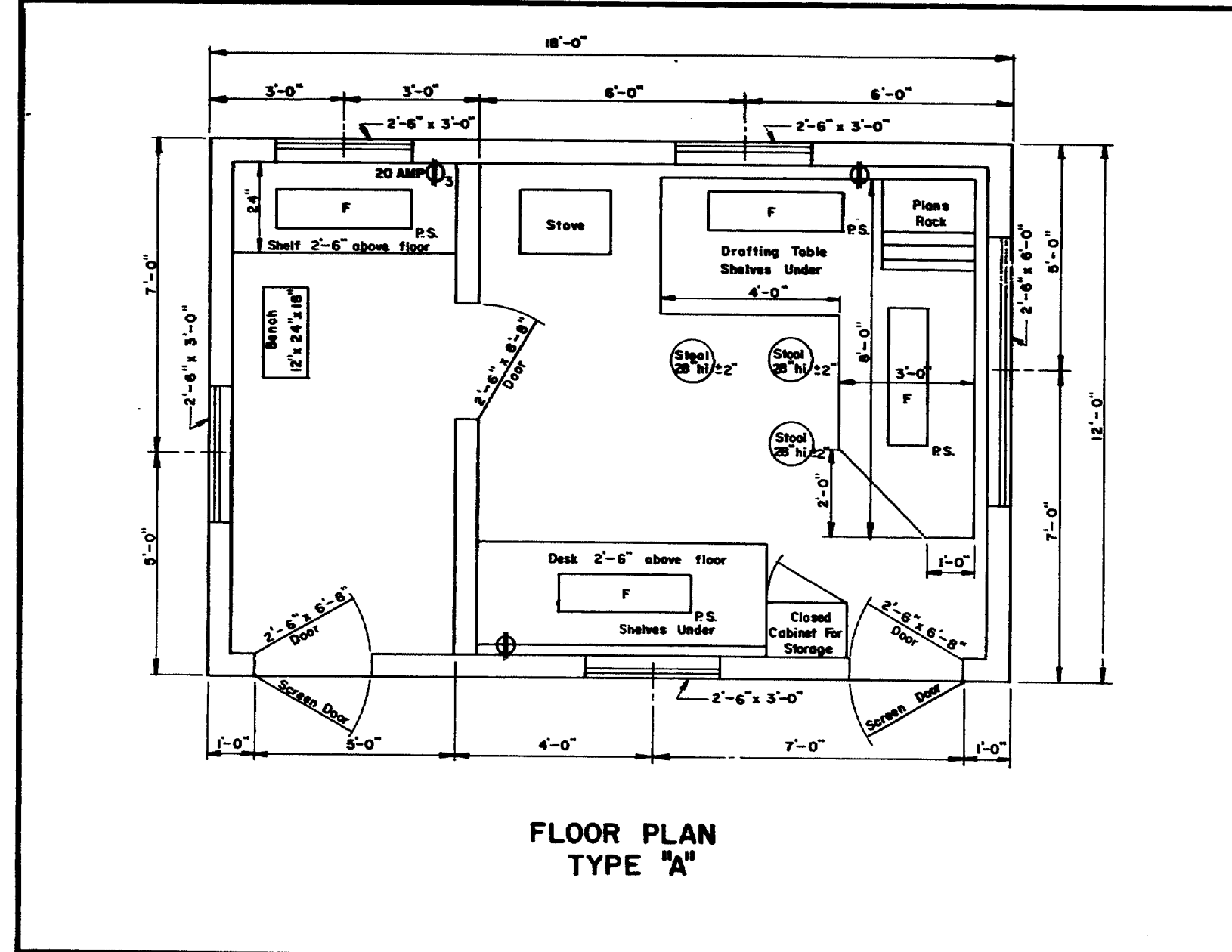
**ALUMINUM RAILING**  
 2 - BAR (SEMI-ELLIPSE)  
 EXTRUDED POST

JANUARY 1969

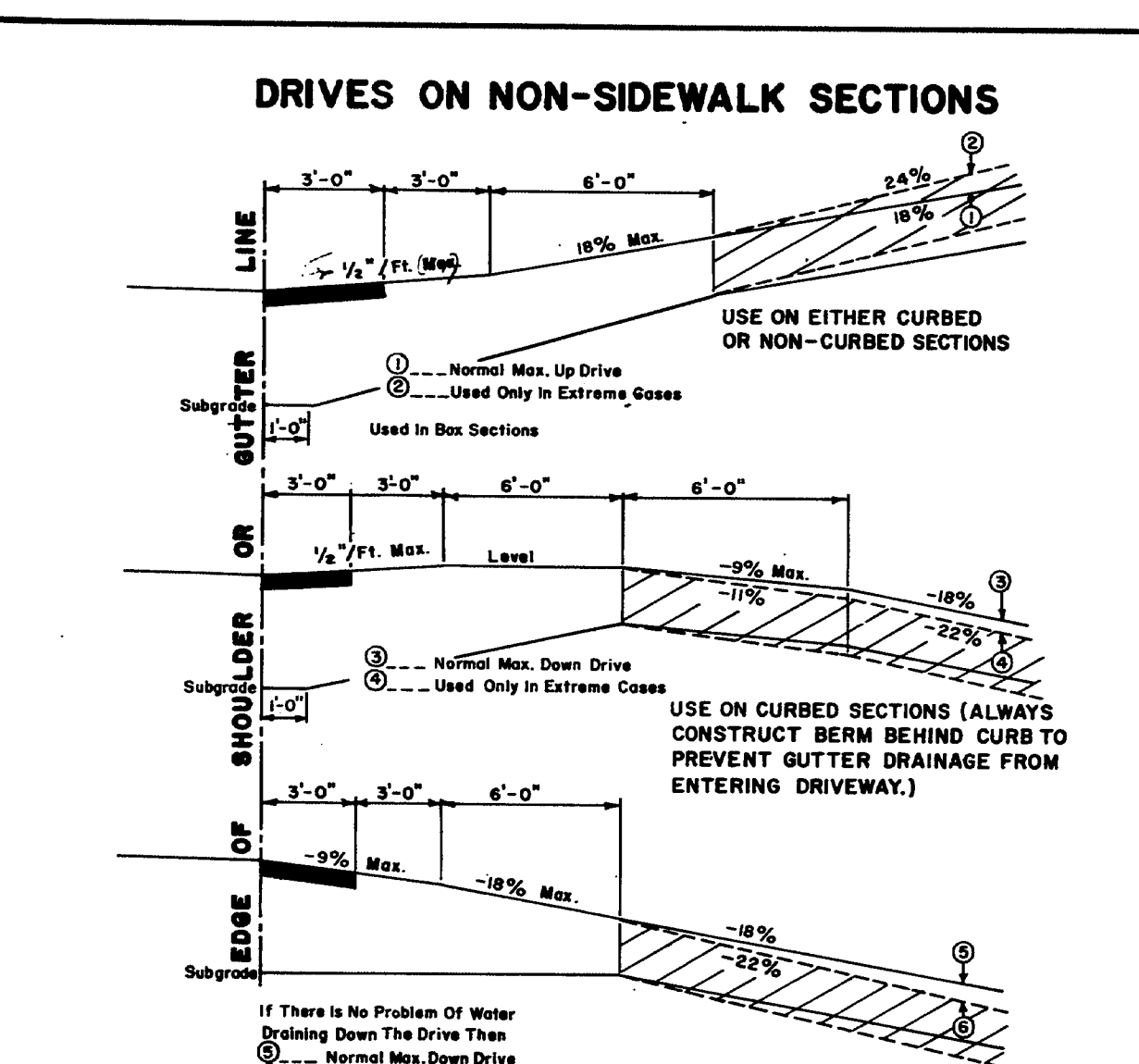
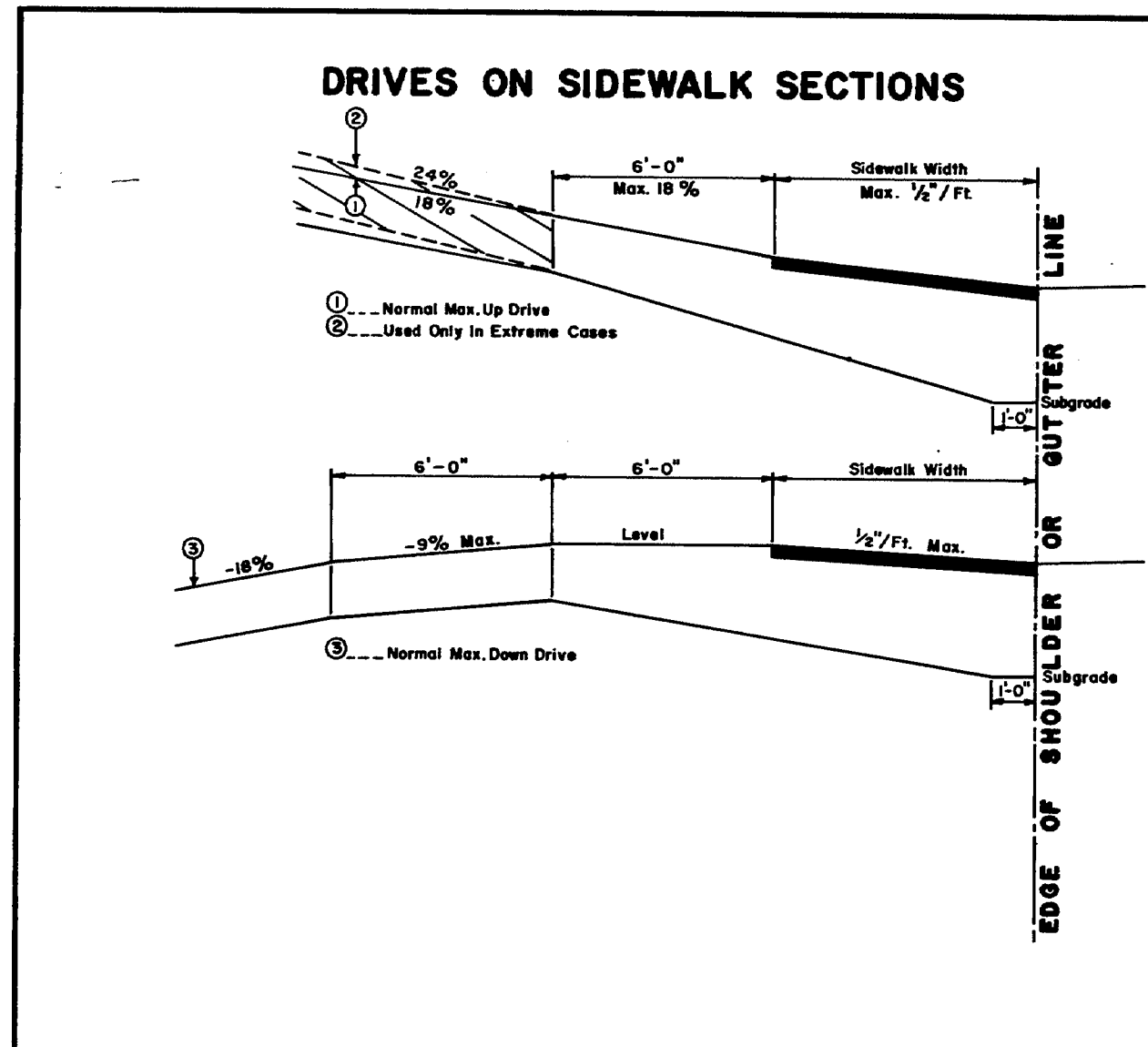
152-166



S. P. R. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	2295-3(B) 48	85	85

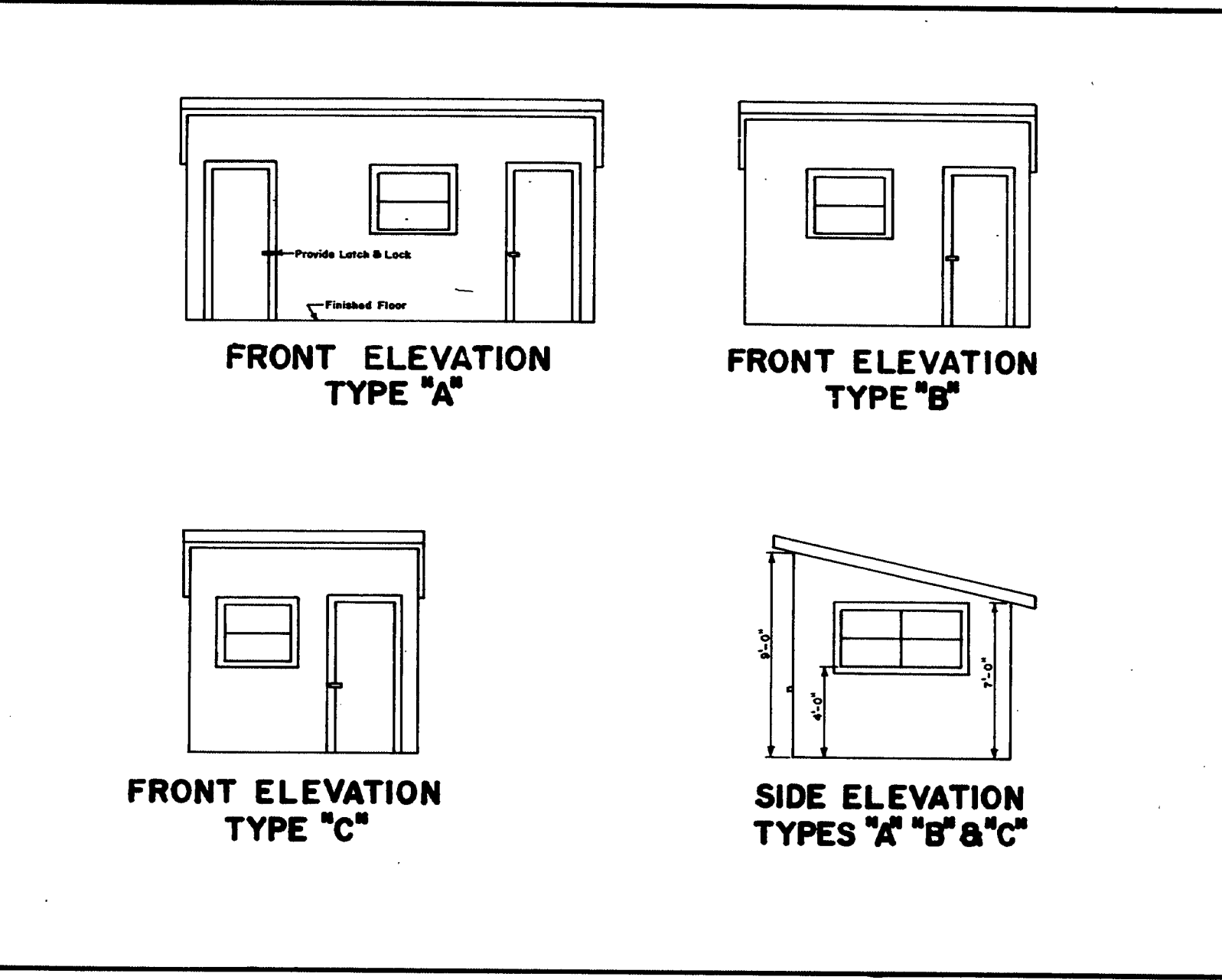


- GENERAL NOTES**
- Drafting table shall be 3'-4" high at front edge and placed 2" from studs to allow prints to hang down behind table when in use.
  - Shelves under desk shall be constructed to receive 1 1/2" x 14" x 25" transfiles.
  - Windows shall be double hung.
  - Stovepipe shall not be in direct contact with combustible material; the pipe shall be surrounded with at least 6" of fireproof material.
  - Continuous 110 volt 60 cycle electric service shall be supplied.
  - The engineer may rearrange the items shown on the plan views during construction of the field office.
  - FURNISHINGS TO BE SUPPLIED:
    - 2 Straight back chairs for types A and B
    - 1 Bench for types A, B & C
    - 3 Stool for type A
    - 2 Stools for types B & C
  - SYMBOLS:
    - F Fluorescent lights (2 light, rapid start 48" strips and 40 watt bulbs.)
    - P.S. Pull switch
    - ⊕ Duplex wall outlet—15 amp unless otherwise noted.
    - ⊕ Triplex Wall Outlet
  - For the Type "A" Field Office one clean 55 gal. drum shall be supplied, installed on a suitable rock and equipped with a spigot suitable for drawing off water. The drum shall be furnished with water at all times.



- GENERAL NOTES**
- The sidewalk width shall be paved in all cases.
  - All residential or commercial drives over 10% to be paved.
- NOTES ON MAXIMUM DRIVEWAY PROFILES**
- These profiles are a guide for the majority of cases, but should be field checked when the main line grade is steep (4% to 6% or greater) or the angle of approach to the drive is unusual.
  - Generally the majority of drives on a project will be built with flatter profiles than these maximum cases.
  - When grading drives which are flatter than the maximum profiles the following rule of thumb should be used, do not exceed a grade % change of more than 9% in a 6 foot increment of driveway length. This applies to both up and down profiles.

- GENERAL NOTES**
- The first 3' shown as pavement shall be paved only when abutting a paved area.
  - All residential or commercial drives over 10% to be paved.
- NOTES ON MAXIMUM DRIVEWAY PROFILES**
- These profiles are a guide for the majority of cases, but should be field checked when the main line grade is steep (4% to 6% or greater) or the angle of approach to the drive is unusual.
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REVISIONS	MAINE STATE HIGHWAY COMMISSION AUGUSTA, MAINE
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