

# FRAMING PLAN

NOTE: ALL DIMENSIONS ARE HORIZONTAL  
ALL BOLTS TO BE 3/8" A325, Type 1 (except at form brackets)

## FORM BRACKET HOLES

Form bracket holes are to be plugged with 5/8" X 1-1/2 carriage bolts. Heads to be on outside. Holes to be completely covered.

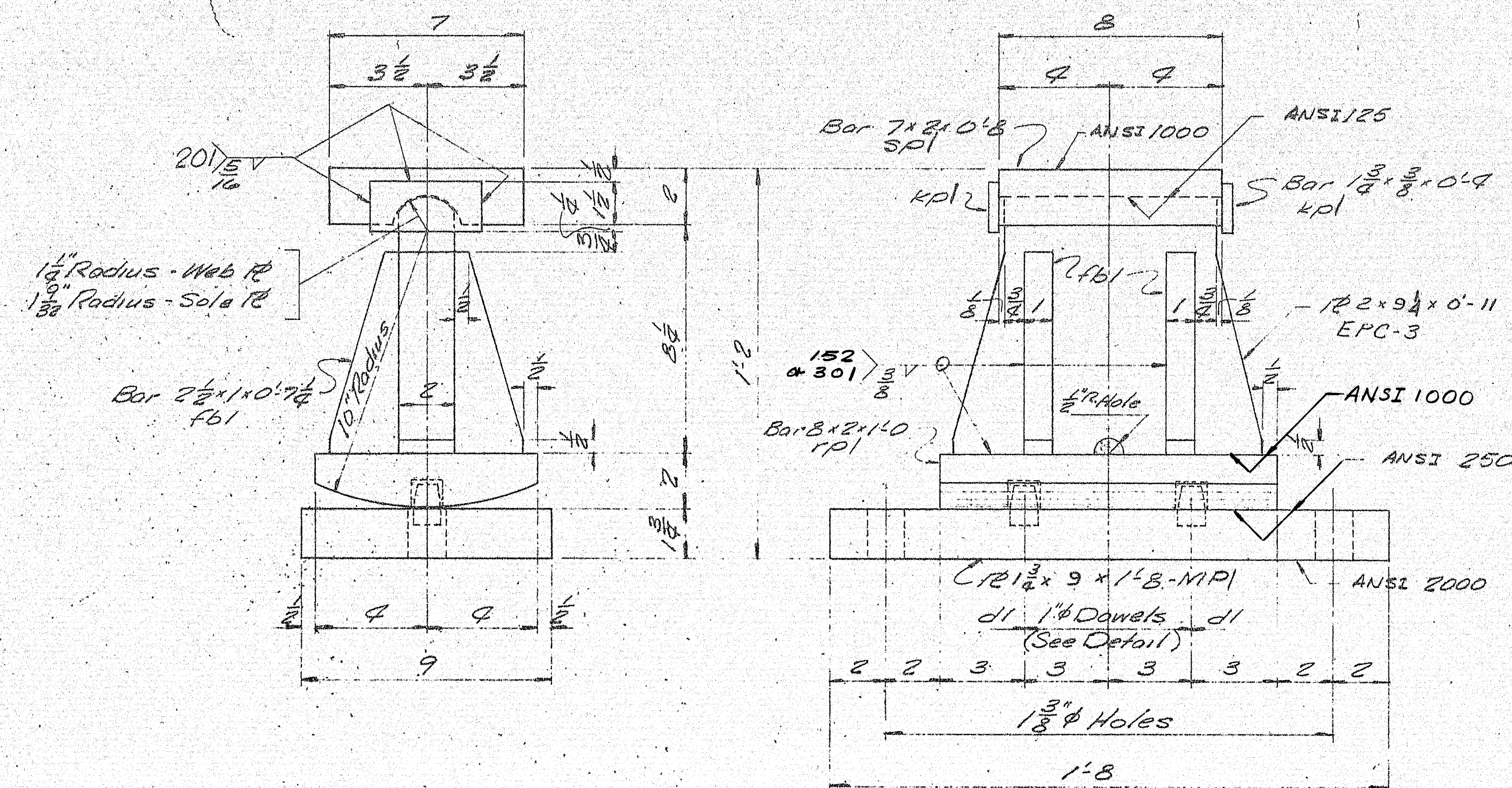
ITEM No. 504.7002  
PROJECT No. I-95-9(64) 289

APP

FRAMING PLAN			
REV.	PRINT DIST.	<p>Blancett &amp; Martin Inc. South Portland, Maine 04106</p> <p>JOB: FRENCH ROAD BRIDGE OVER I-95 NB, LUDLOW, MAINE</p> <p>CUSTOMER: DAY &amp; CURRIE CONSTRUCTION Co. DESIGNER: MAINE DEPT. OF TRANS.</p>	
CHECKED	8/10/76		
DRAWN	8/24/76		
	8/24/76		
	8/24/76		
ORDER NO.	JOB NO.	DRAWING NO.	
		8376-78 E-1	

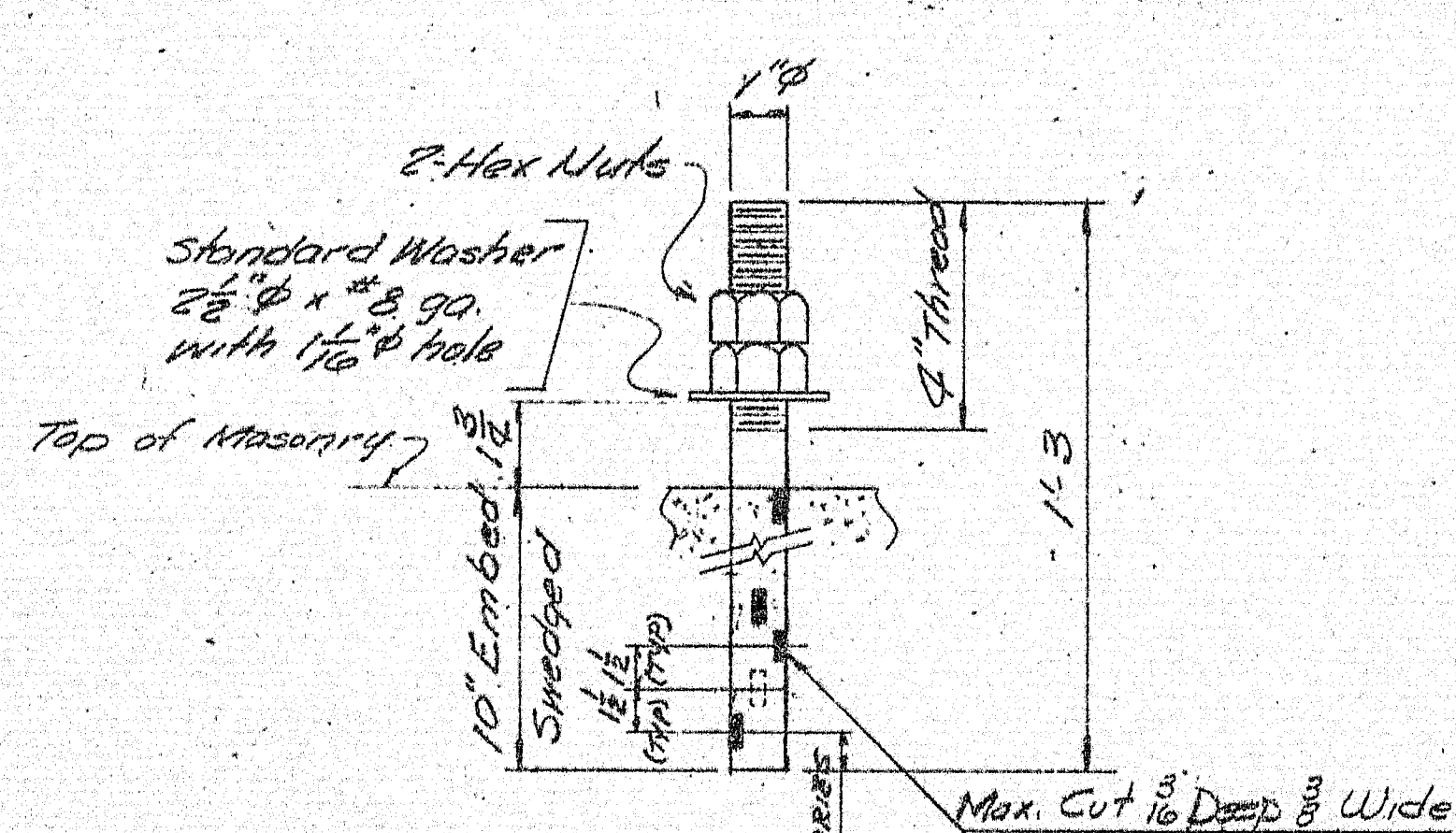
157-129





### EXPANSION PEDESTAL EPC-3

5-REQ'D.



### ANCHOR BOLT ABI

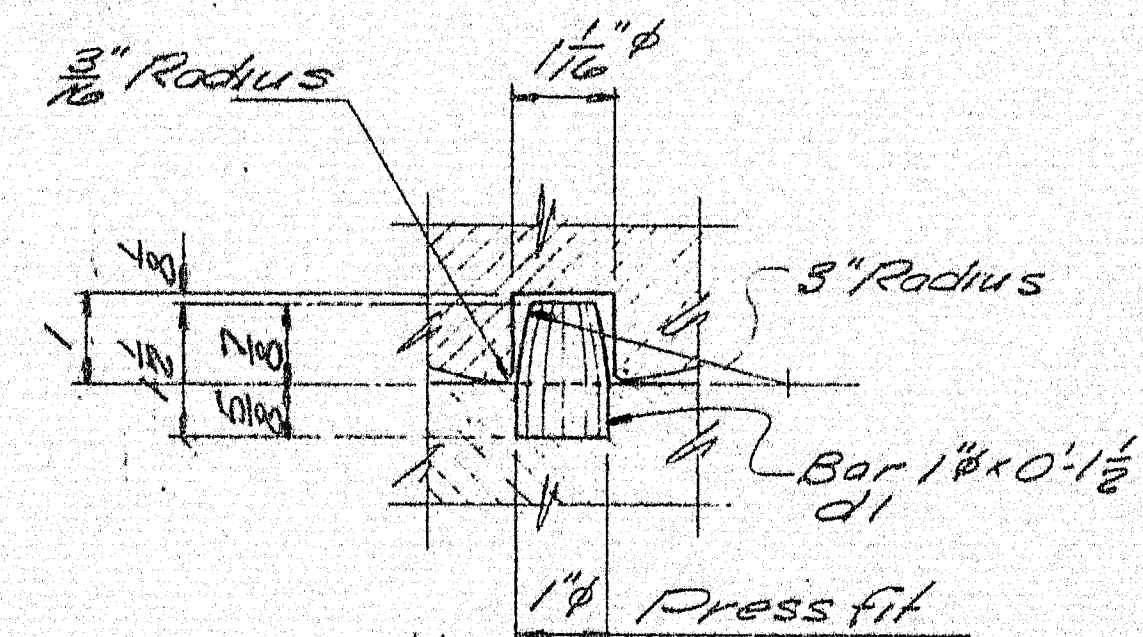
10-REQ'D.

#### PAINT NOTE:

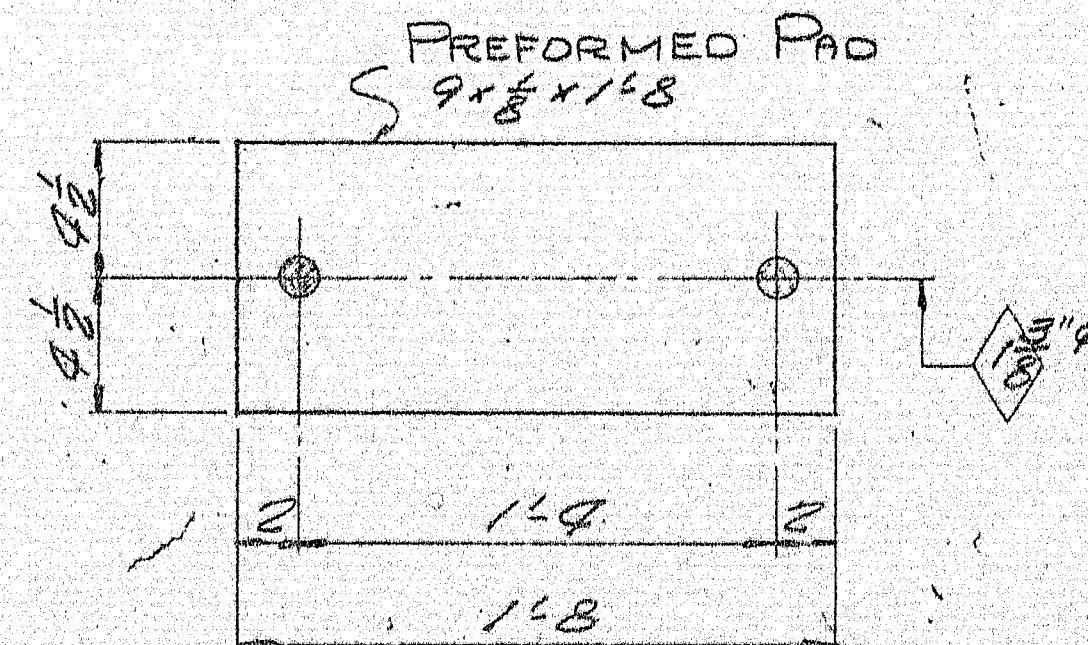
No paint on top of sole plates "3p" and 1" down from top on sides, coat with boiled linseed oil.

No paint on surface with ANSI 125 finish, coat with mixture of white lead and tallow.

No paint on Anchor Bolt, but inside masonry is to be painted. See notes on expansion bearing for more details of paint.



### PREFORMED PAD



### PREFORMED PAD

FPI - 5 REQ'D.

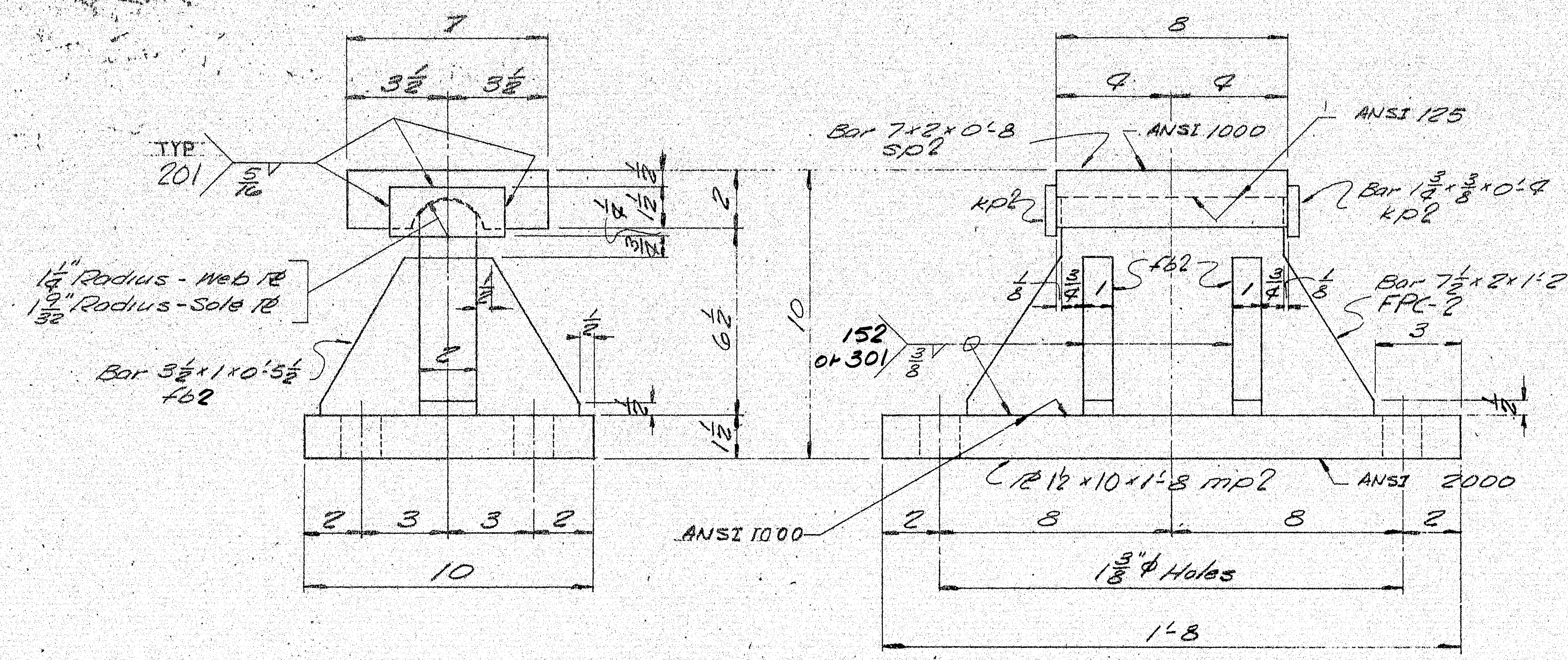
BILL OF MATERIAL									
SHIP	NO.	MARK	SHAPE	LENGTH	WT.	ITEM	REMARKS	BS 16-78	
								DWG. NO. 51-1	
EPC-3	5		R2x9 1/2	0 11		IF			
MPI	5		R2 1/2 x 9	1 8		IF			
	5	10	Bar 8x2	1 0		IF			
SPI	5		Bar 7x8	0 8		IF			
	20	FBI	Bar 2 1/2 x 1	0 7 1/2		IF			
	10	d1	Bar 1 1/4	0 1 1/2		IF			
	10	KPI	Bar 1 3/8 x 3/8	0 9		IF			
ABI	10		Bar 1 1/4	1 3		IF	SWEDGE		
	20	shop	1 1/2\" Hex			IN			
Field	10		1 1/2\" Washer			IN	STD. WASH. 2 1/2\" O.D. x 1 1/2\" Bore, 1/2\" hole.		
FPI	5		Pad 9x8	1 8		IF	Preformed Pad		
							REQ# 6076		
ITEM: 504.7002									
PROJECT NO. I-95-9(64)289									
Sole plates "spi" to be field welded to Abut. #1 end of stringers.									
Bearing material to be ASTM-A36, Anchor bolts to be A36.									
SHOP CONNECTIONS: Welded, See Welding Proc.									
FIELD CONNECTIONS: —									
HOLES: As noted									
PAINT: Basis Lead Silico Chromate, Orange									
AND As Noted									
Blast Clean									
APPROVED:									
2	9-10-76	BY	BEARING PEDESTAL DETAIL						
2s	9/24/76	DATE	Bancroft & Martin Inc.						
3p	9/24/76	Shop	South Portland 1, Maine						
2p	9/24/76	Const	FRENCH ROAD BRIDGE OVER I-95 NB						
			LUDLOW, MAINE						
CHKD		RGN	CUSTOMER DAY & CURRIE CONSTRUCTION CO.						
DRAWN	8/13/76	BB	DESIGNER MAINE DEPT. OF TRANS.						
REVISION			Job No. BS 16-78						
REVISION			DWG. NO. 51-1						

157-130

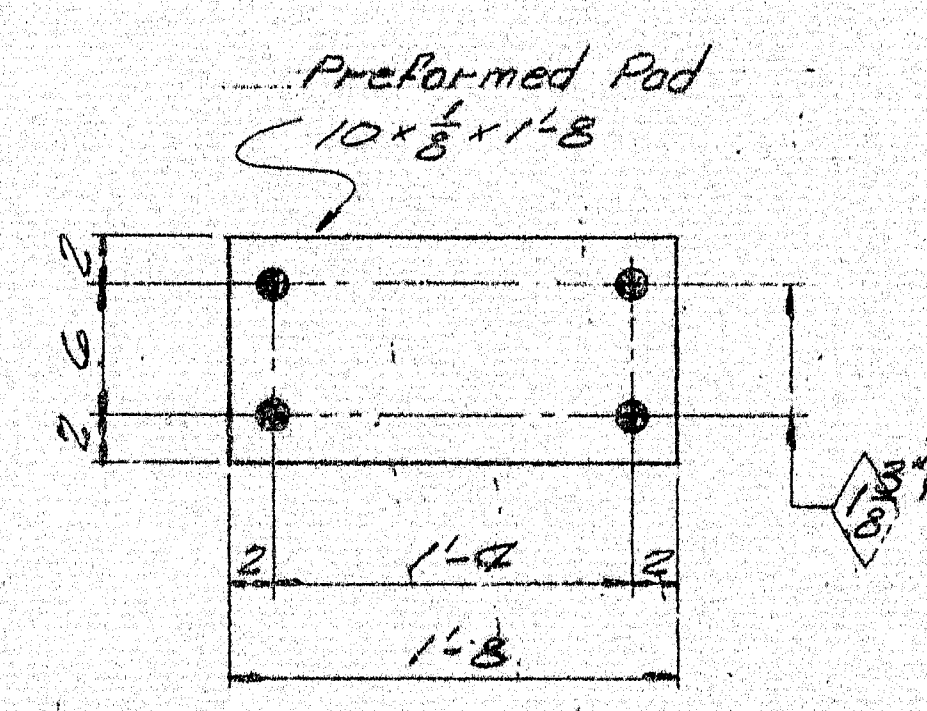




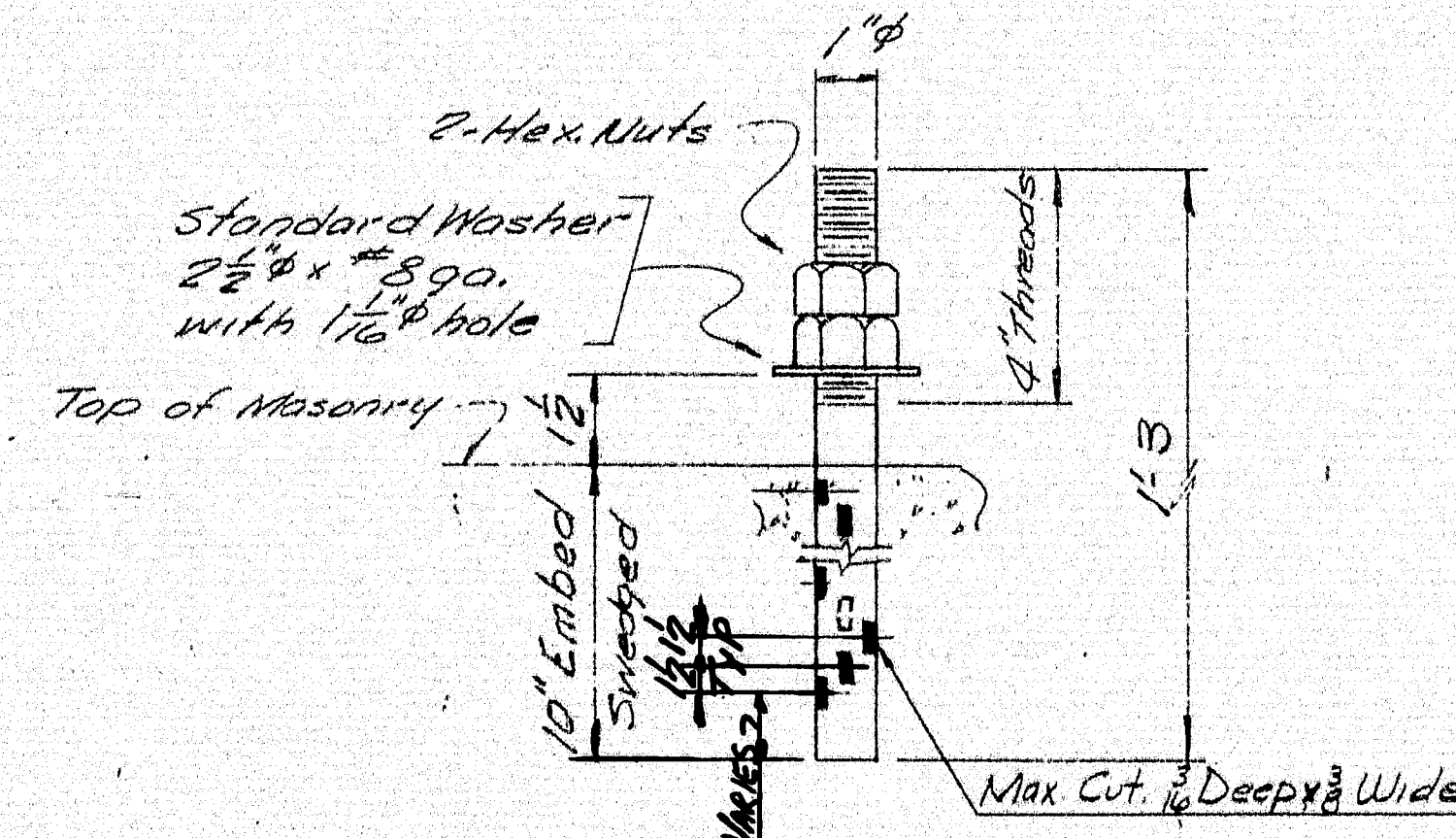




FIXED PEDESTAL FPC-2  
5-REQ'D.



PREFORMED PAD  
1 FP2 - 5REQ'D.



ANCHOR BOLT ABI  
20-REQ'D.

PAINT NOTES:  
No paint on top of sole plates "sp" and 1" down from top on sides; coat with boiled linseed oil.  
No paint on surface with ANSI 125 finish; coat with mixture of white lead and tallow.  
No paint on anchor bolts - oil heads.  
Masonry ties shall receive 2 coats of shop paint.

BILL OF MATERIAL									
SHIP	MARK	NO.	MARK	SHAPE	LENGTH	WT.	ITEM	REMARKS	
FRCE	5			Bar 7x2	1 2		1A		
		5	mp2	12x10	1 8		1B		
SP2	5			Bar 7x2	0 8		1C		
		10	kp2	Bar 1 3/8 x 1 3/8	0 2		1D		
		20	fb2	Bar 3/4 x 1	0 5 1/2		1E		
ABI	20			Bar 1" x 1"	1 3		1L	Swedged	
		40	shp	1" Hex. Nut			1N	A307	
Washer	20			1" Washer			1M	Std. Washer A307	
FP2	5			10x8	1 8		1K	Preformed Pad Req. No. 6076	

ITEM 504, 1002  
PROJECT NO. I-95-4(64) 289  
Sole plates "sp" to be field welded to stringers. C. Abut #2 end.  
Bearing material to be ASTM A36, Anchor bolts to be ASTM A36.  
BLAST CLEAN  
SHOP CONNECTIONS: see Welding Procedures.  
FIELD CONNECTIONS: -  
HOLES: As noted  
PAINT: Basic Lead Silica Chromate, Orange, AND AS NOTED

APPROVED:		PRINT		DIST.	
2	9/10/76	2	9/10/76	2	9/10/76
2	9/24/76	2	9/24/76	2	9/24/76
2	9/24/76	2	9/24/76	2	9/24/76
2	9/24/76	2	9/24/76	2	9/24/76
2	9/24/76	2	9/24/76	2	9/24/76
2	9/24/76	2	9/24/76	2	9/24/76
2	9/24/76	2	9/24/76	2	9/24/76
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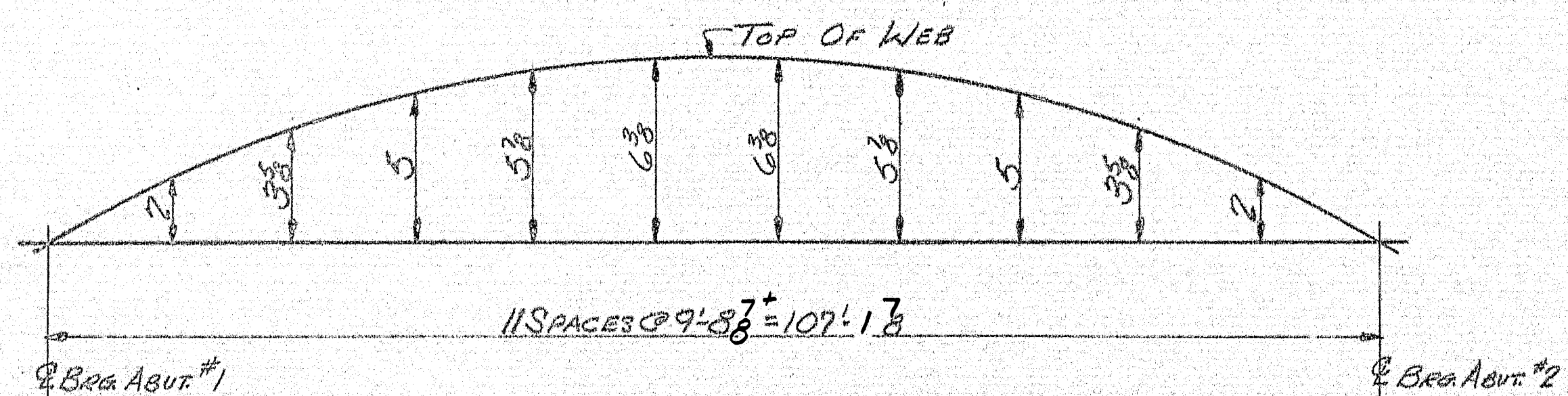
BEARING PEDESTAL DETAIL  
Bancroft & Martin Inc.  
South Portland 7, Maine  
FRENCH ROAD BRIDGE OVER I-95 NB  
LUDLOW, MAINE  
CUSTOMER: DAY & CURRIE CONSTRUCTION CO.  
DESIGNER: MAINE DEPT. OF TRANS.  
Job No. 8576-78 DWG. NO. 51-2

157-123







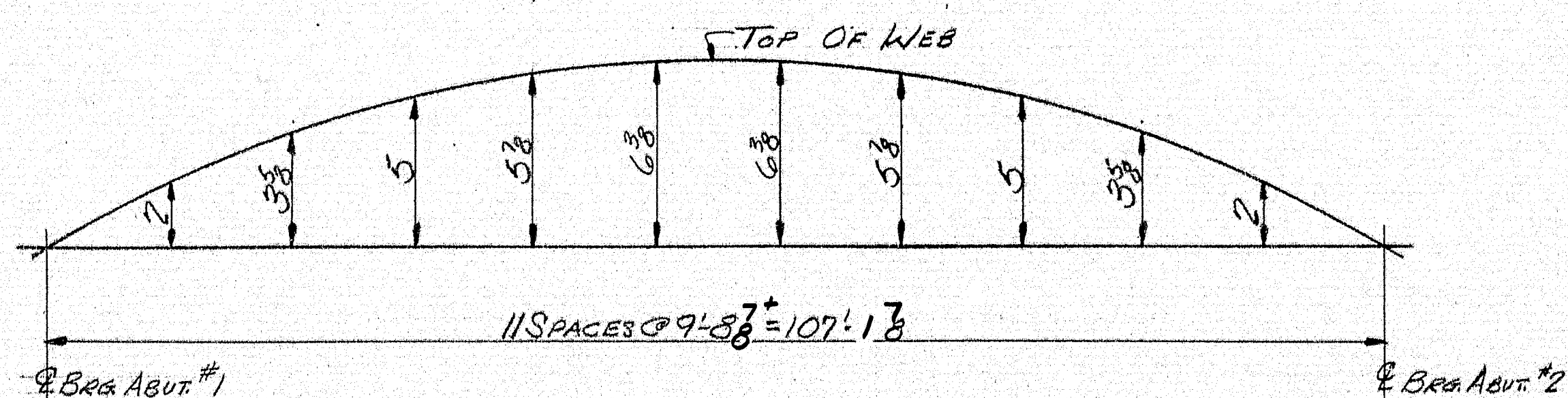
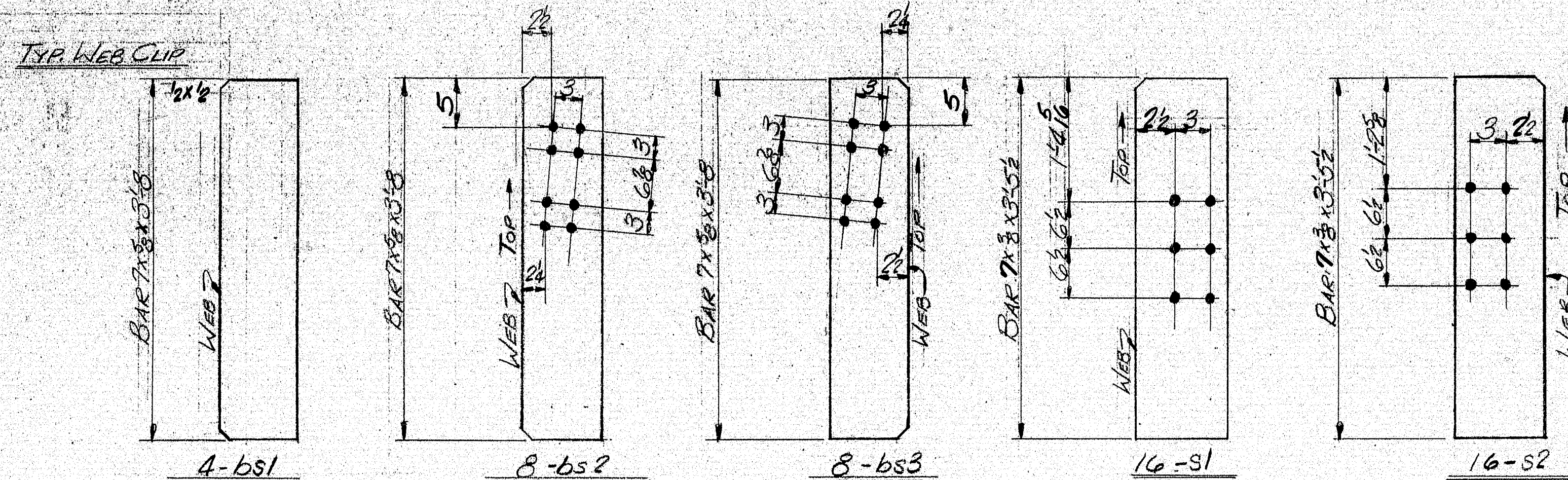


15  
16  $\phi$  HOLES

ITEM No. 504.7002  
PROJECT No. I-95-9(64)289

157-135





15  $\phi$  HOLES

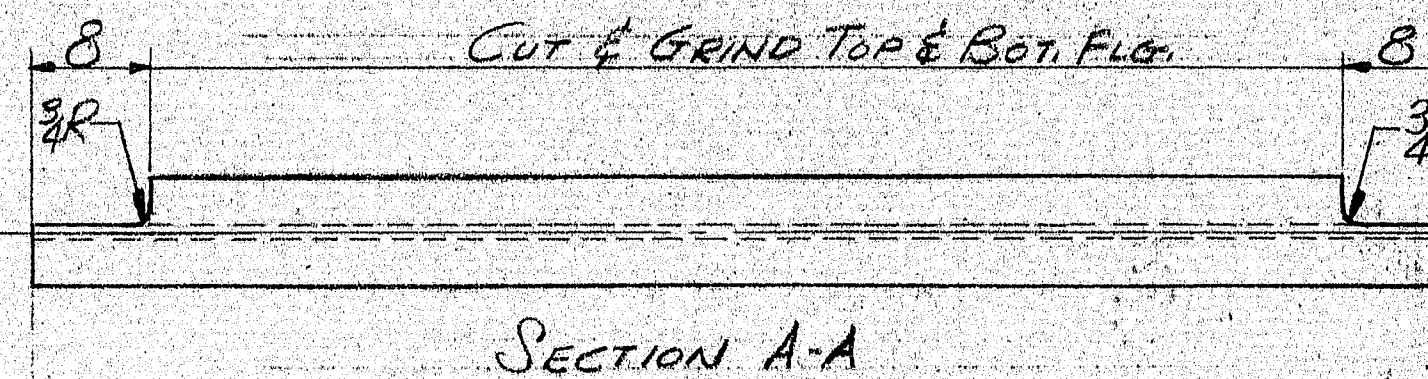
ITEM No. 504.7002

PROJECT No. I-95-9(64)289

APP.			
GIRDER DETAILS & COMPONENTS			
PRINT DIST.	2	9-10-76	AM
	25	9/28/76	SB
	13	"	SB
	22	"	SB
Bancroft & Martin Inc.			
South Portland, Maine 04106			
JOB: FRENCH ROAD BRIDGE OVER I-95 N.B.			
LUDLOW, MAINE			
CUSTOMER: DAY & CURRIE CONSTRUCTION Co.			
DESIGNER: MAINE DEPT. OF TRANS.			
REV.	ORDER NO.	JOB NO.	DRAWING NO.
CHECKED			
DRAWN	8/17/76	BB	BS76-78 52-2

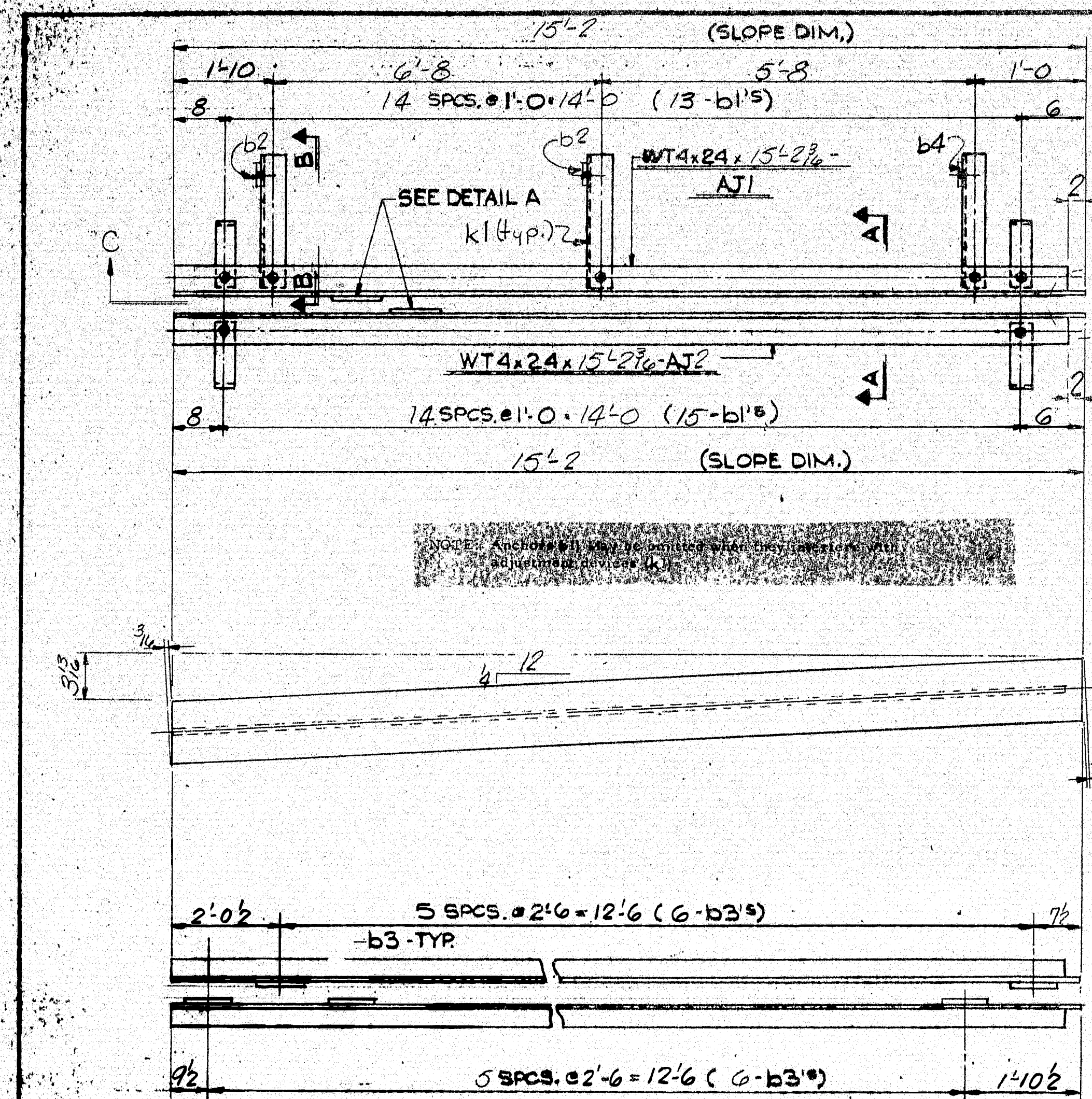
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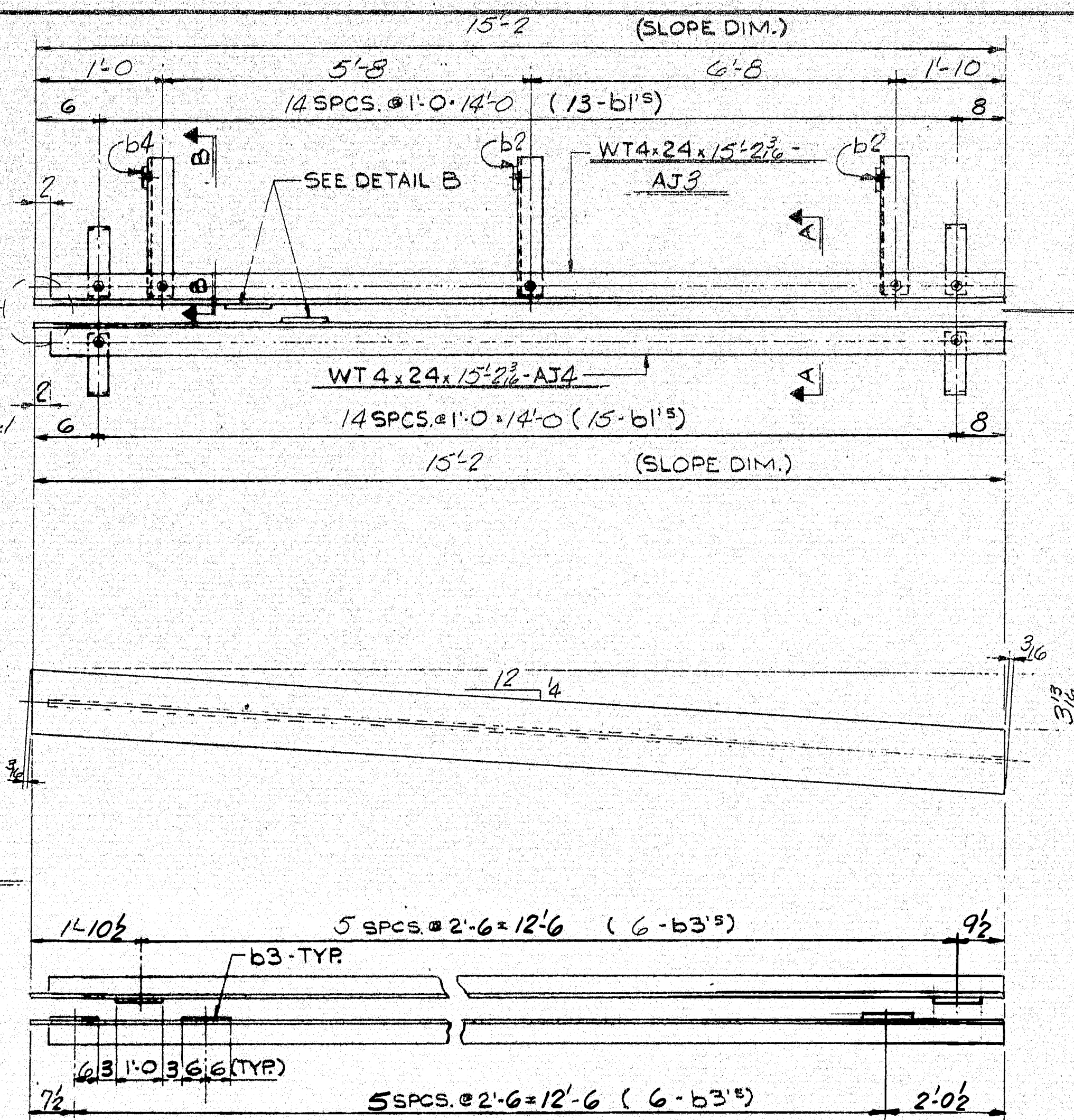
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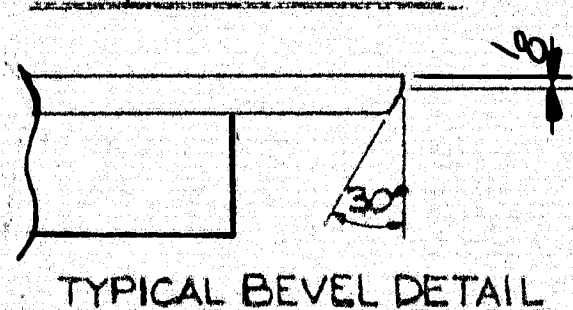




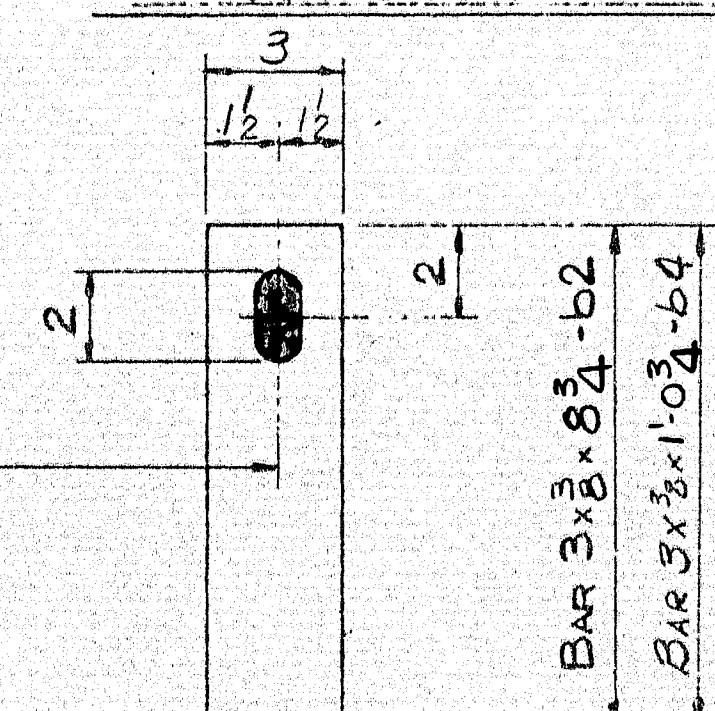
SECTION C-C



DETAIL B



b3-DETAIL

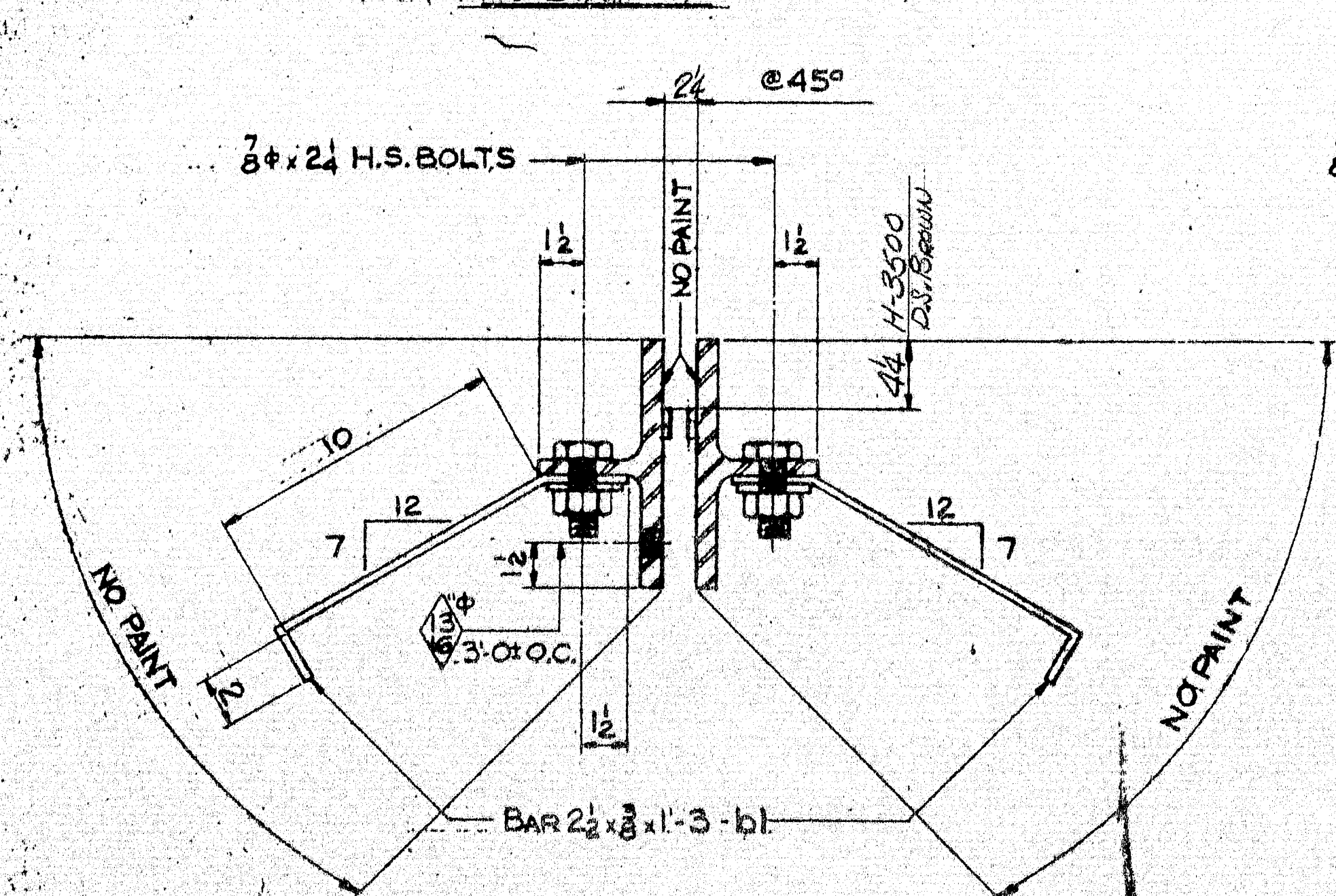


SECTION B-B

b4 & b2-DETAIL (NO PAINT)

BOLT TO K1 FOR SHIPMENT  
USE 3/4"  $\times$  2 1/2" H.S. BOLTS

DETAIL A

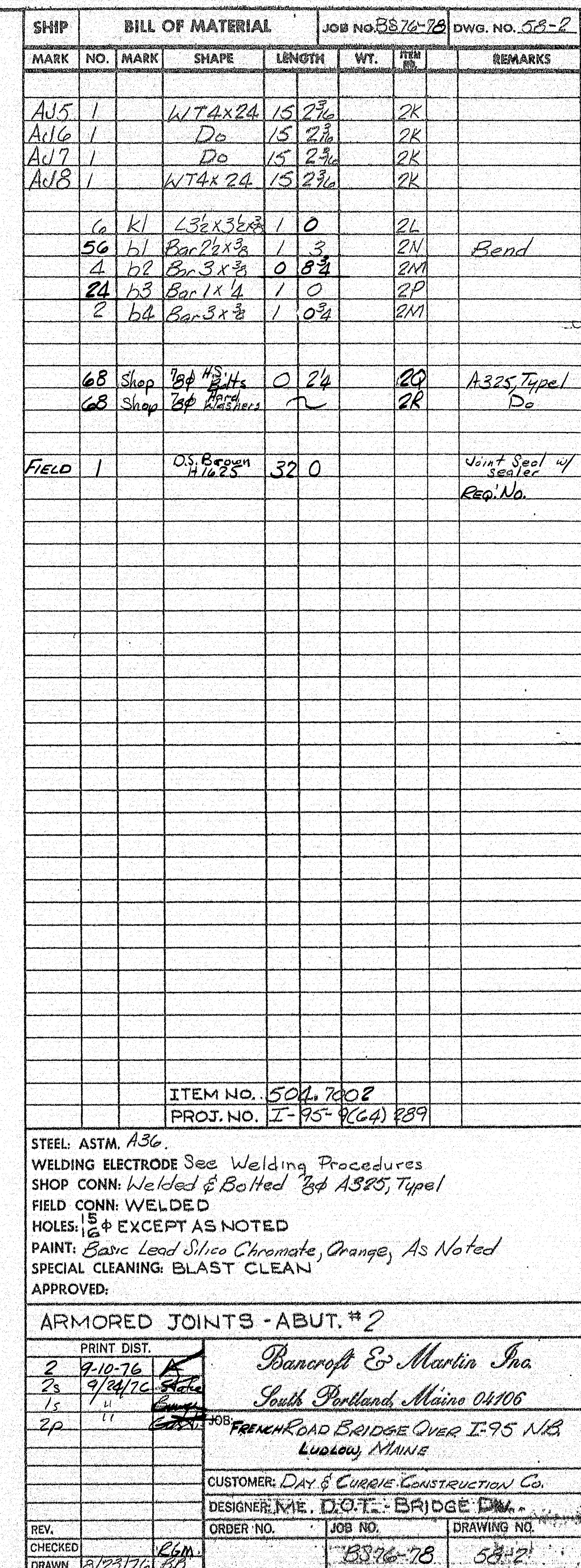


SECTION A-A

SHIP		BILL OF MATERIAL		JOB NO. B374-78		DWG. NO. 58-1	
MARK	NO.	MARK	SHAPE	LENGTH	WT.	ITEM NO.	REMARKS
AJ1	1		WT 4x24	15'-2 3/4"	2K		
AJ2	1		Do	15'-2 3/4"	2K		
AJ3	1		Do	15'-2 3/4"	2K		
AJ4	1		WT 4x24	15'-2 3/4"	2K		
	6	K1	L3 1/2" $\times$ 3 1/2"	1'-0"	2L		
	56	b1	Bar 2 1/2" $\times$ 3/8"	1'-3"	2N		Bend
	4	b2	Bar 3" $\times$ 3/8"	0'-8 1/2"	2M		
	24	b3	Bar 1" $\times$ 1/2"	1'-0"	2O		
	2	b4	Bar 3" $\times$ 3/8"	1'-0 3/4"	2M		
	68	shop	3/8" B.S. Washers	0'-2 1/4"	2Q		A325, Type 1
	68	shop	3/8" Hard Washers	-	2R		Do
FIELD	1		D.B. Brown	32'-0"			Joint Seal w/ Reeler
ITEM NO. 504, 7002							
PROJ. NO. I-95-9(64) 289							
STEEL: ASTM A36							
WELDING ELECTRODE See Welding Procedures							
SHOP CONN: Welded & Bolted 3/8" A325, Type 1							
FIELD CONN: WELDED							
HOLES: 5/8" $\phi$ EXCEPT AS NOTED							
PAINT: Basic Lead Silico Chromate, Orange, As Noted							
SPECIAL CLEANING: BLAST CLEAN							
APPROVED:							
ARMORED JOINTS - ABUT. #1							
PRINT DIST.				Bancroft & Martin Inc. South Portland, Maine 04106 JOB: FRENCH ROAD BRIDGE OVER I-95 N.B. LUDLOW, MAINE CUSTOMER: DAY & CURRIE CONSTRUCTION CO. DESIGNER: ME DOT - BRIDGE DIV. ORDER NO. JOB NO. DRAWING NO.			
2	7-10-76	A					
2	7-10-76	B					
2	7-10-76	C					
2	7-10-76	D					
REV.							
CHECKED							
DRAWN	3/23/76	RGM	ED				

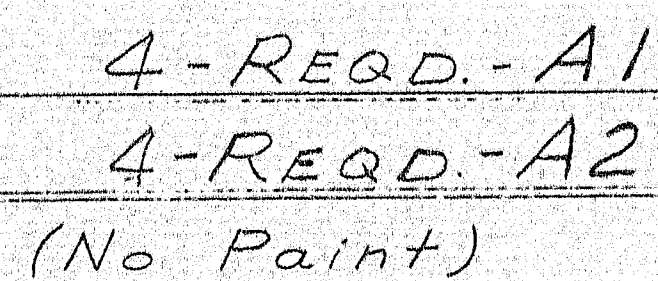
157-137





157-138



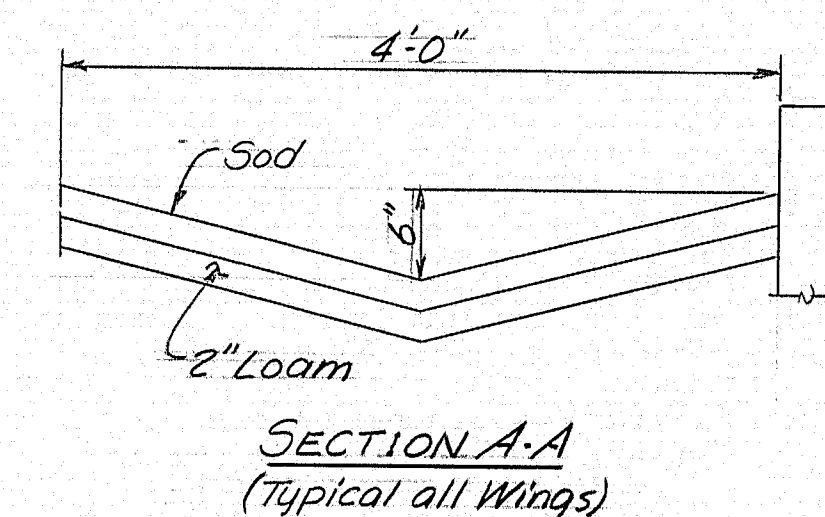
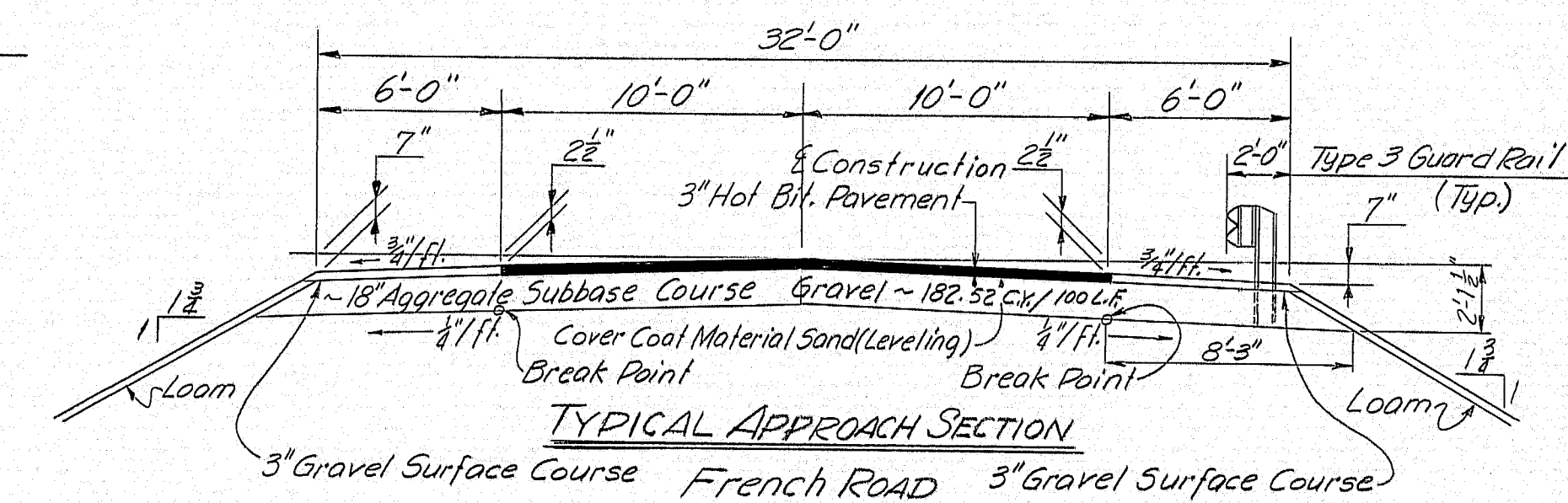
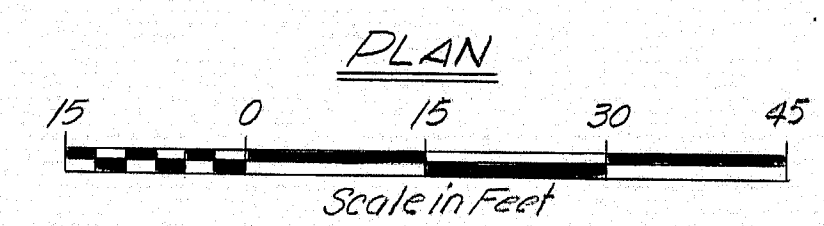
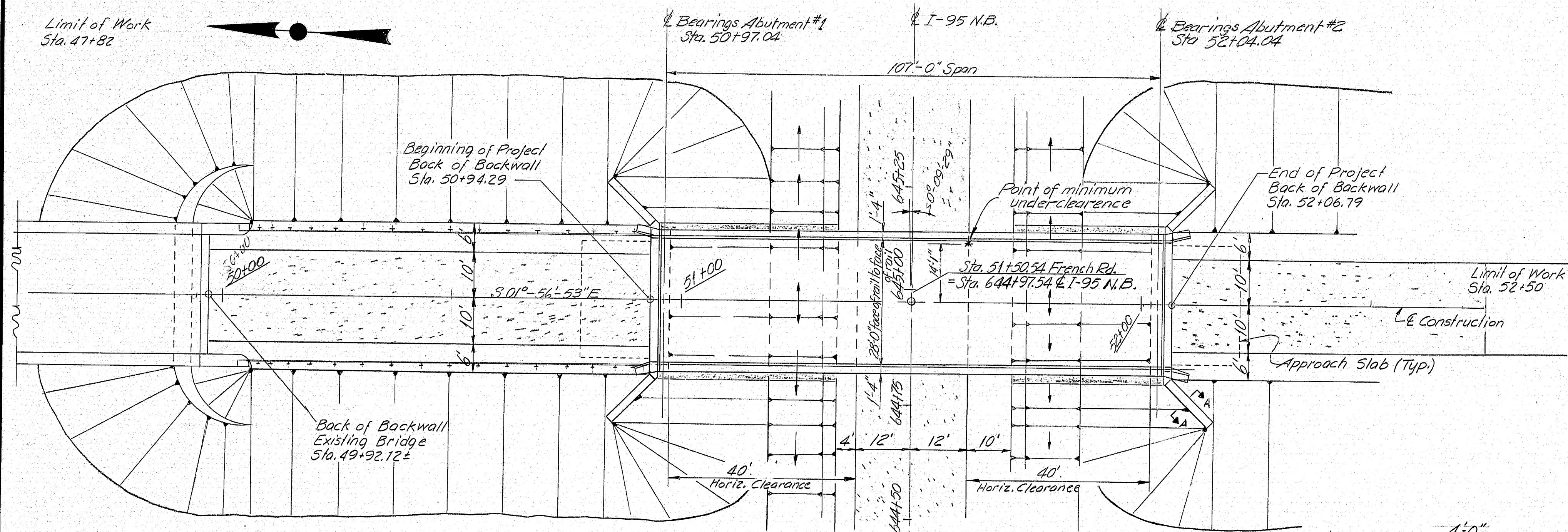


See State's Dir. for location

157-139



F.H.W.A. PROJ. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	1-95-9(64)289	21	43



**SPECIFICATIONS**

DESIGN: AASHO Standard Specifications for Highway Bridges 1973, with Interim Specifications 1974 & 1975

CONTRACT: State of Maine, State Highway Commission Standard Specifications, Highways and Bridges, Revision of June 1968

**DESIGN LOADING**

LIVE LOAD: HS20-44

**MATERIALS**

CONCRETE: Class A

REINFORCING STEEL: ASTM A615 Grade 60

STRUCTURAL STEEL:

Bottom Flange of Beams: ASTM A572-Grade 50

High Strength Bolts: ASTM A325

All Other: ASTM A36

**BASIC ALLOWABLE STRESSES**

CONCRETE:  $f_c = 1200$  psi  $h = 10$

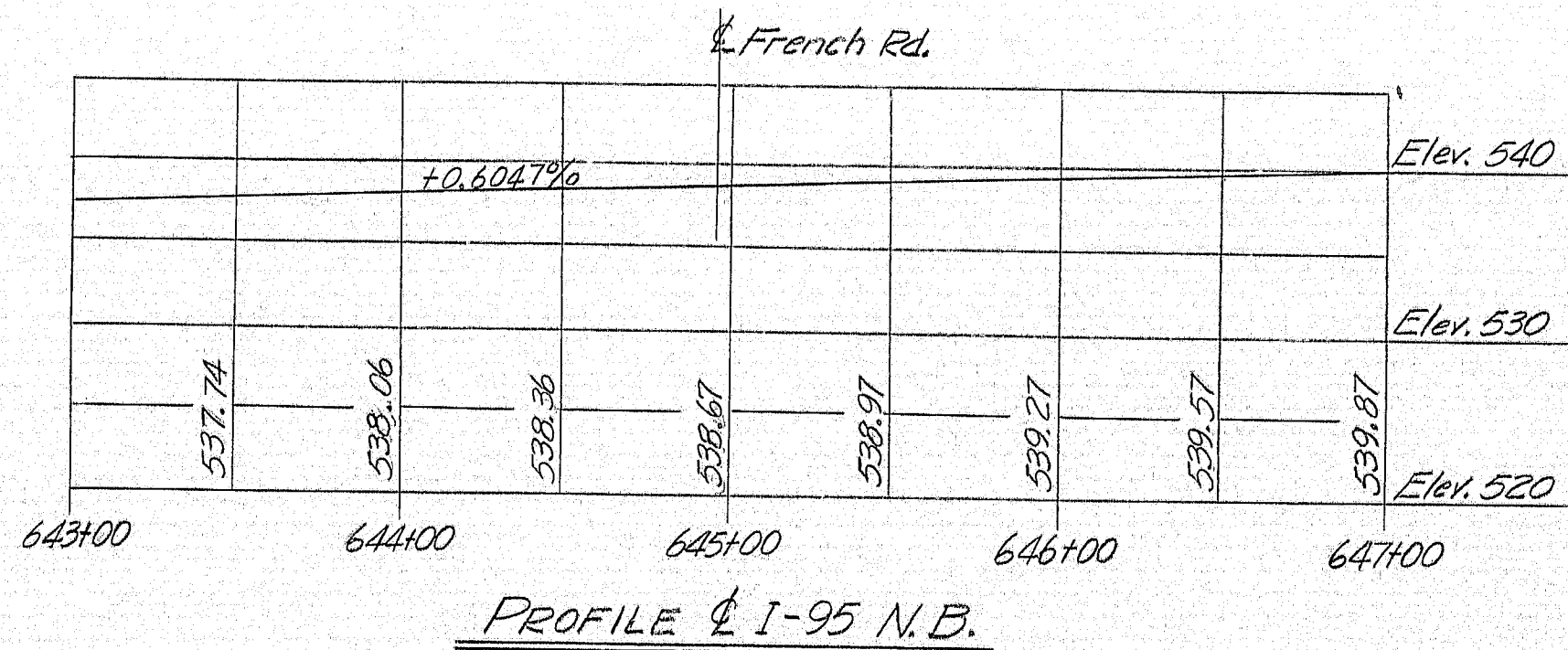
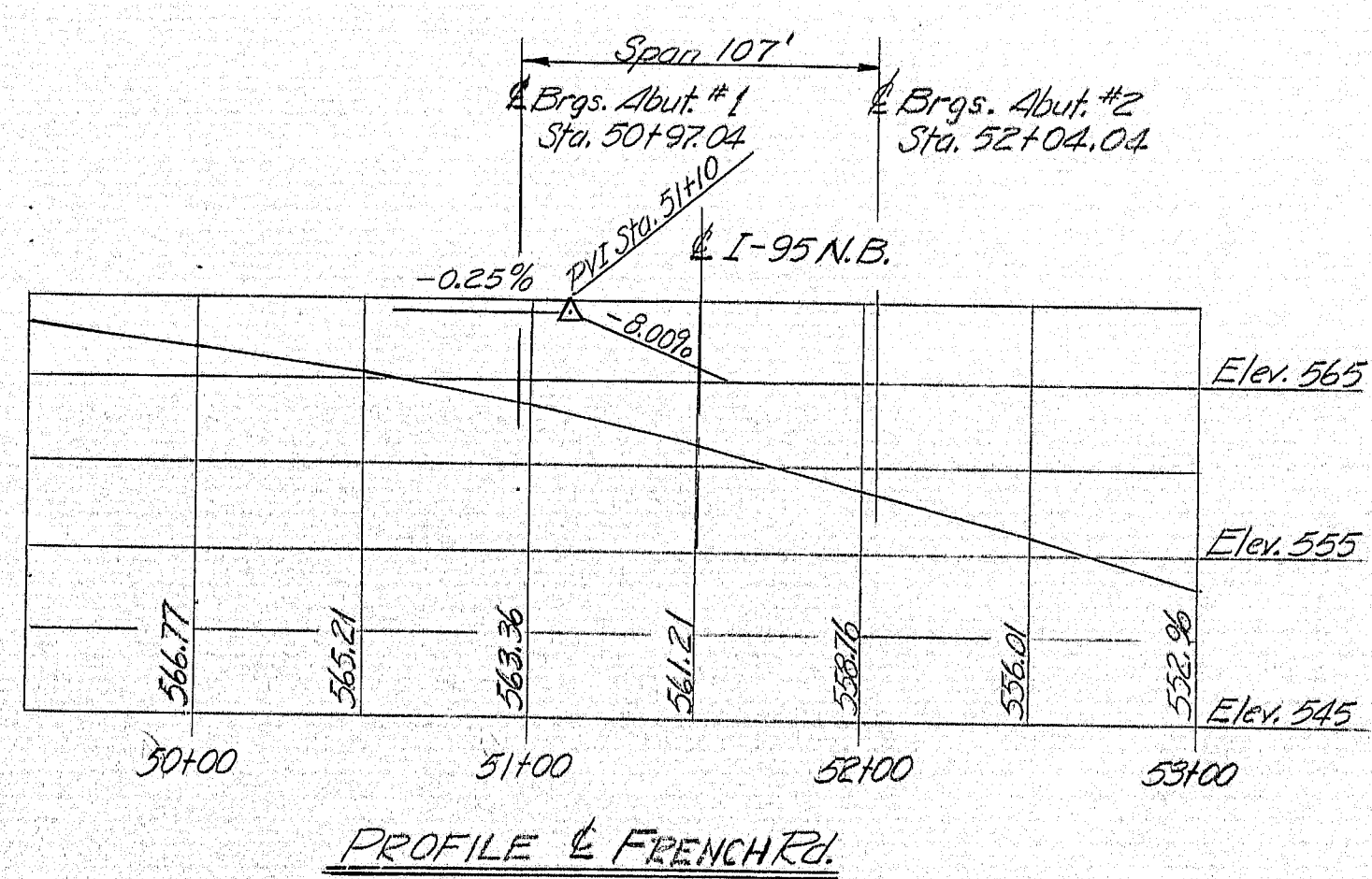
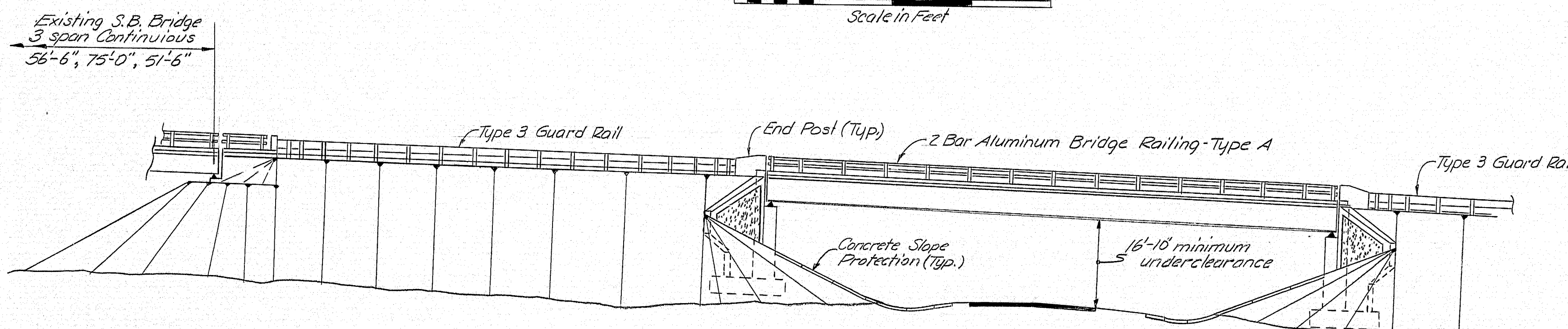
REINFORCING STEEL:  $f_s = 24,000$  psi

STRUCTURAL STEEL:

ASTM A572-Grade 50  $f_s = 27,000$  psi

ASTM A36  $f_s = 20,000$  psi

ASTM A325  $f_t = 13,500$  psi



PROJECT DESIGN ENGINEER	CDH	DATE
DESIGN - DETAILED	CDH	11/75
CHECKED	GRW	4-76
REVISIONS		
FIELD CHANGES		

STATE OF MAINE  
DEPARTMENT OF TRANSPORTATION

**FRENCH ROAD BRIDGE**

OVER

**INTERSTATE 95-N.B.**

IN THE TOWN OF

**LUDLOW**

**AROOSTOOK COUNTY**

GENERAL PLAN

SHEET 21 OF 43 AUGUSTA, MAINE MAY 1976

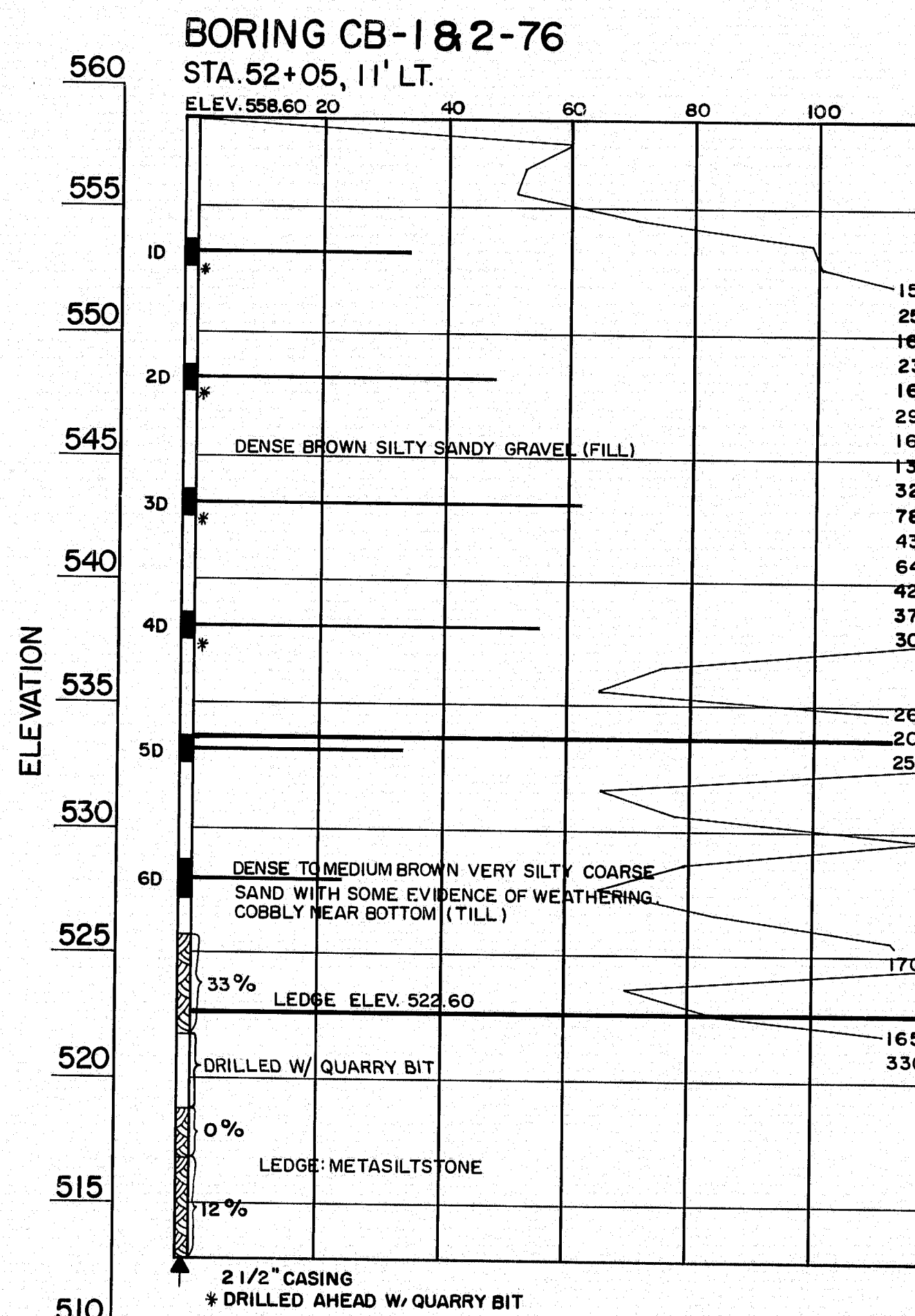
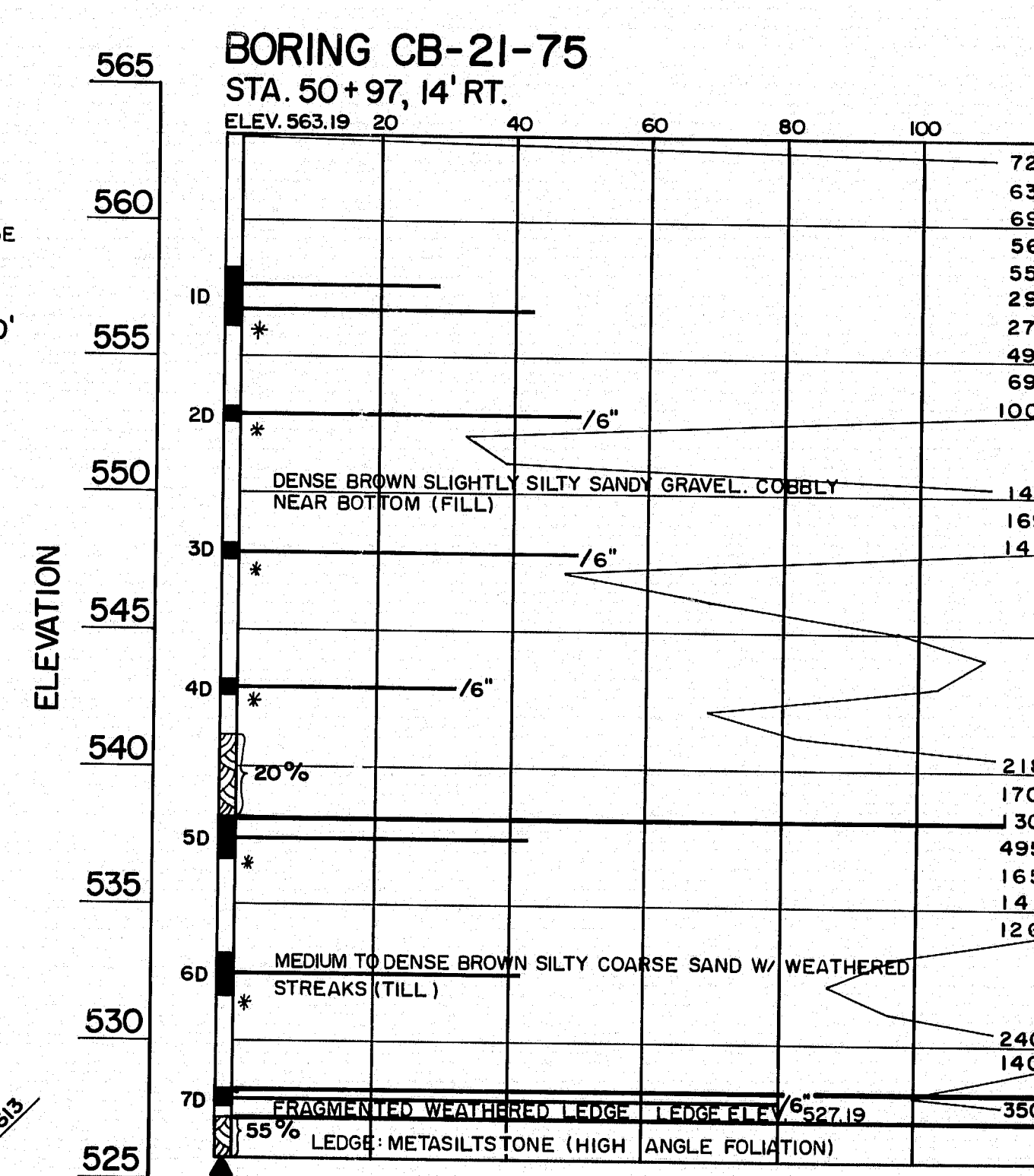
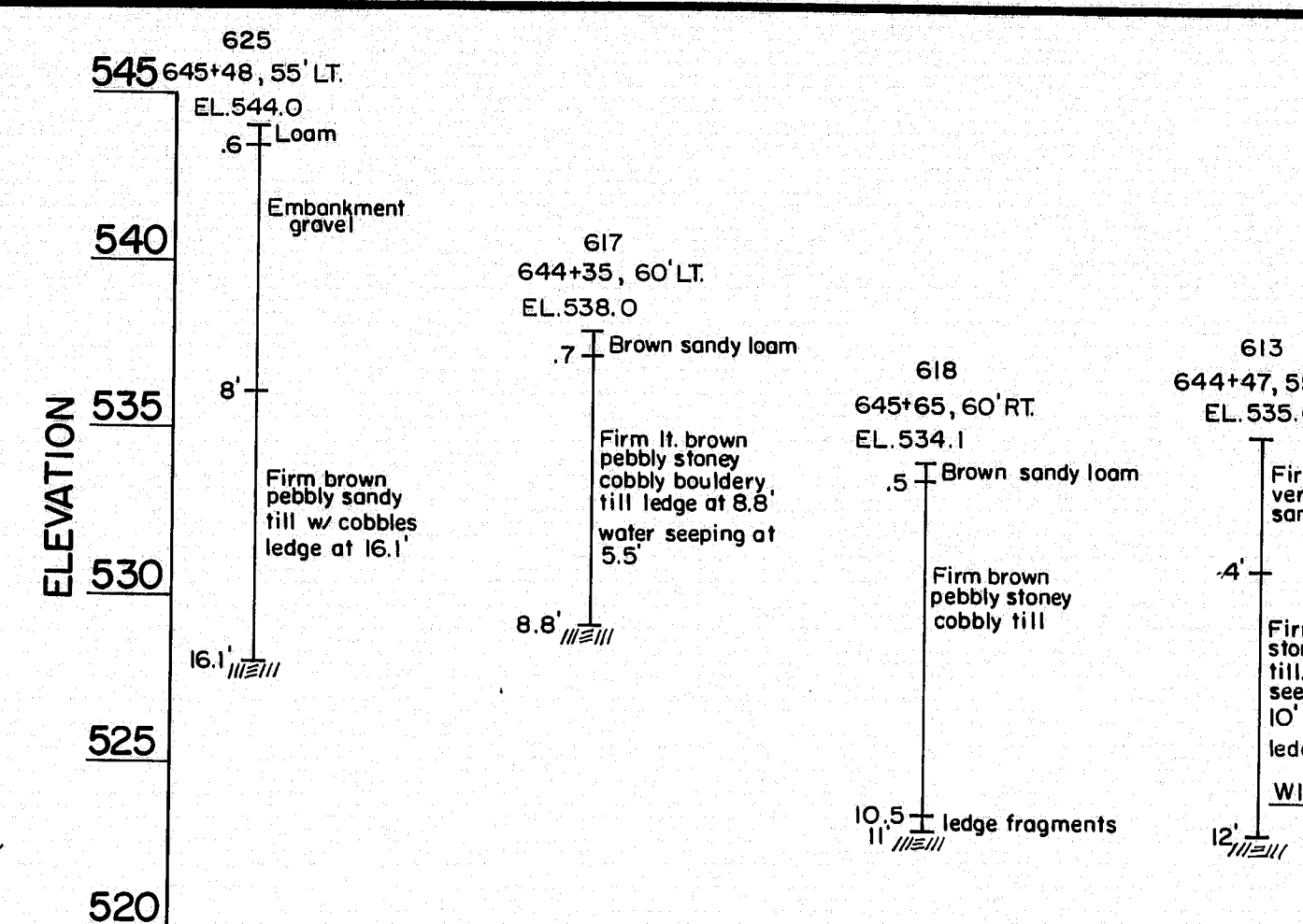
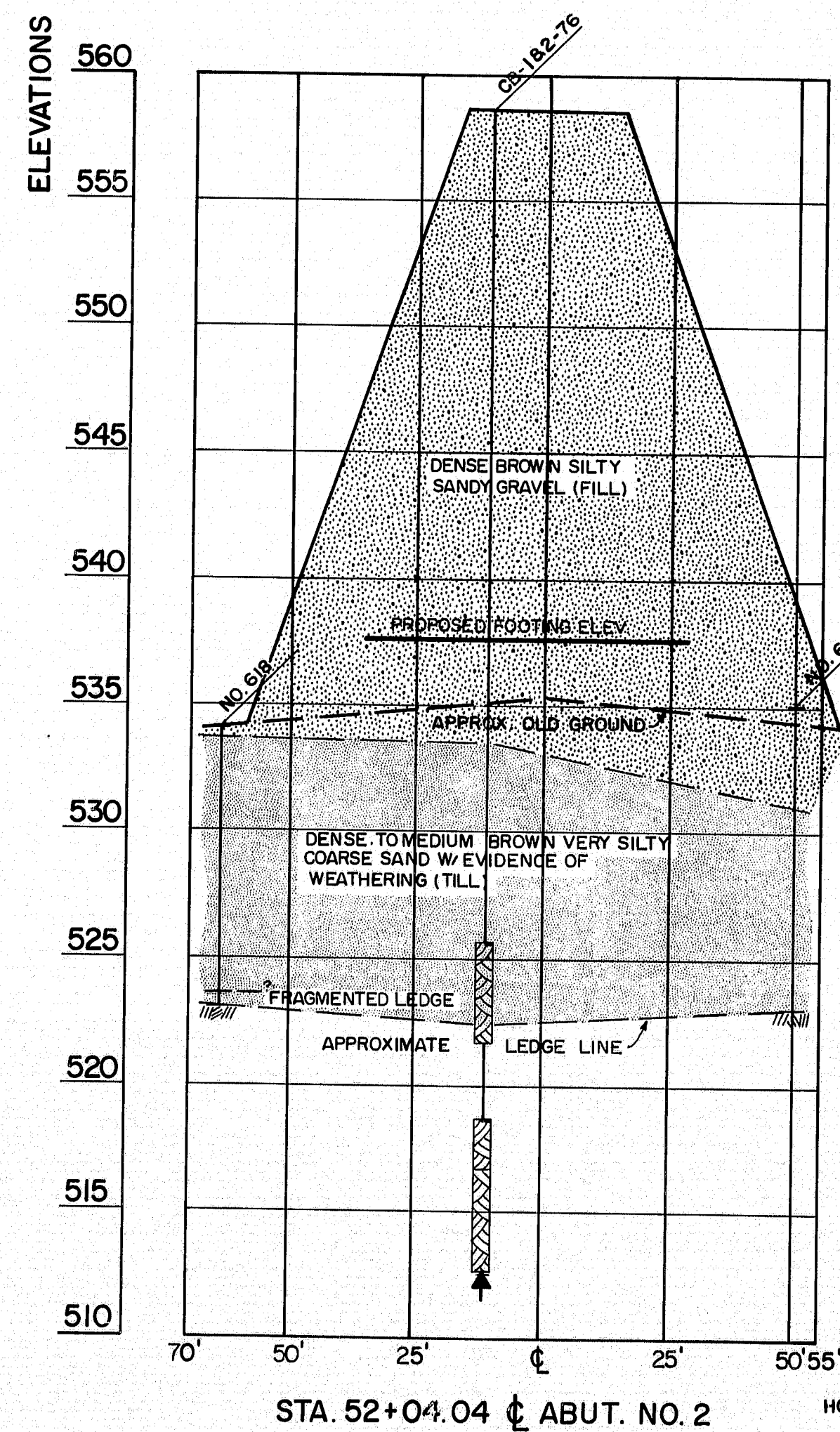
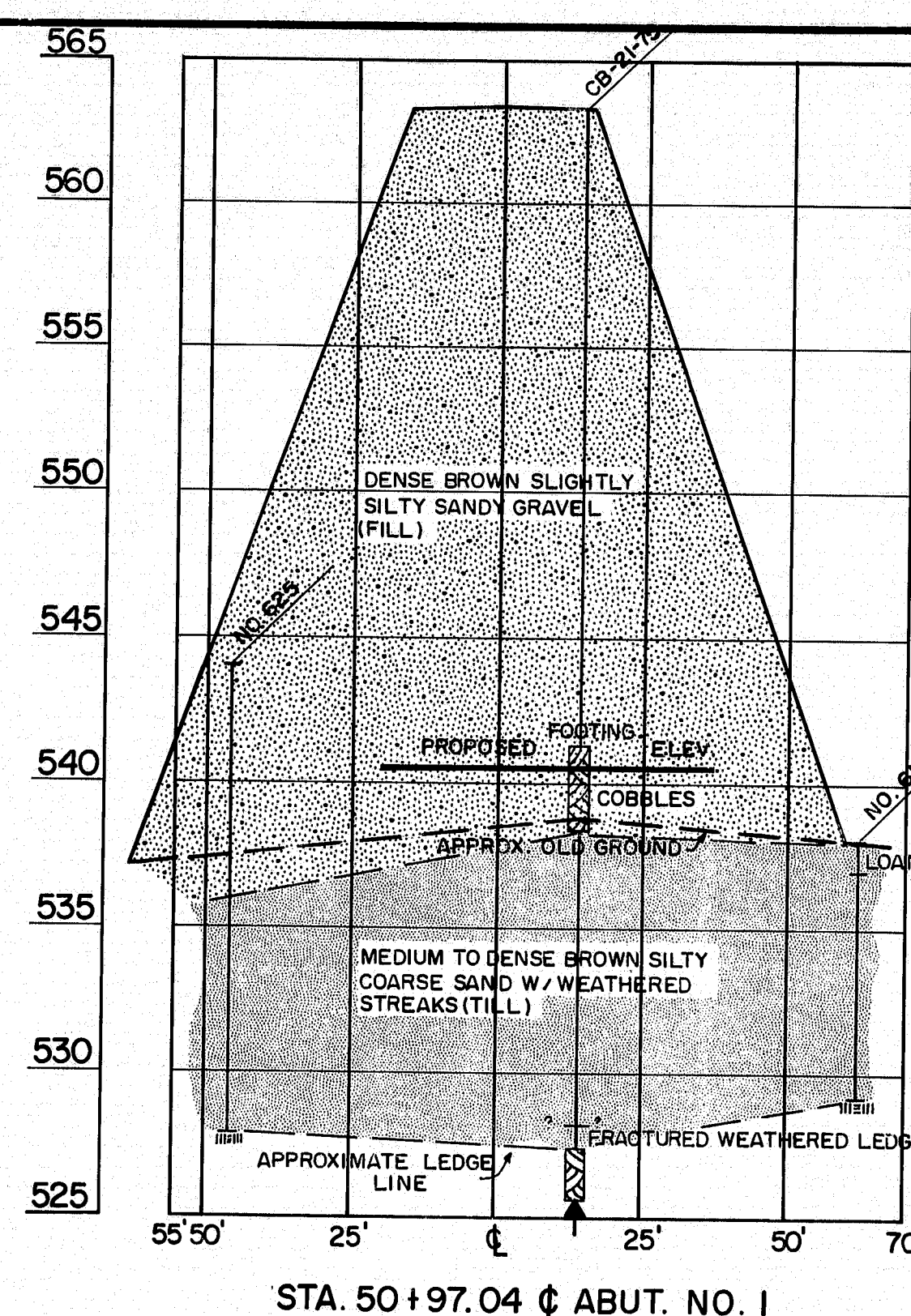
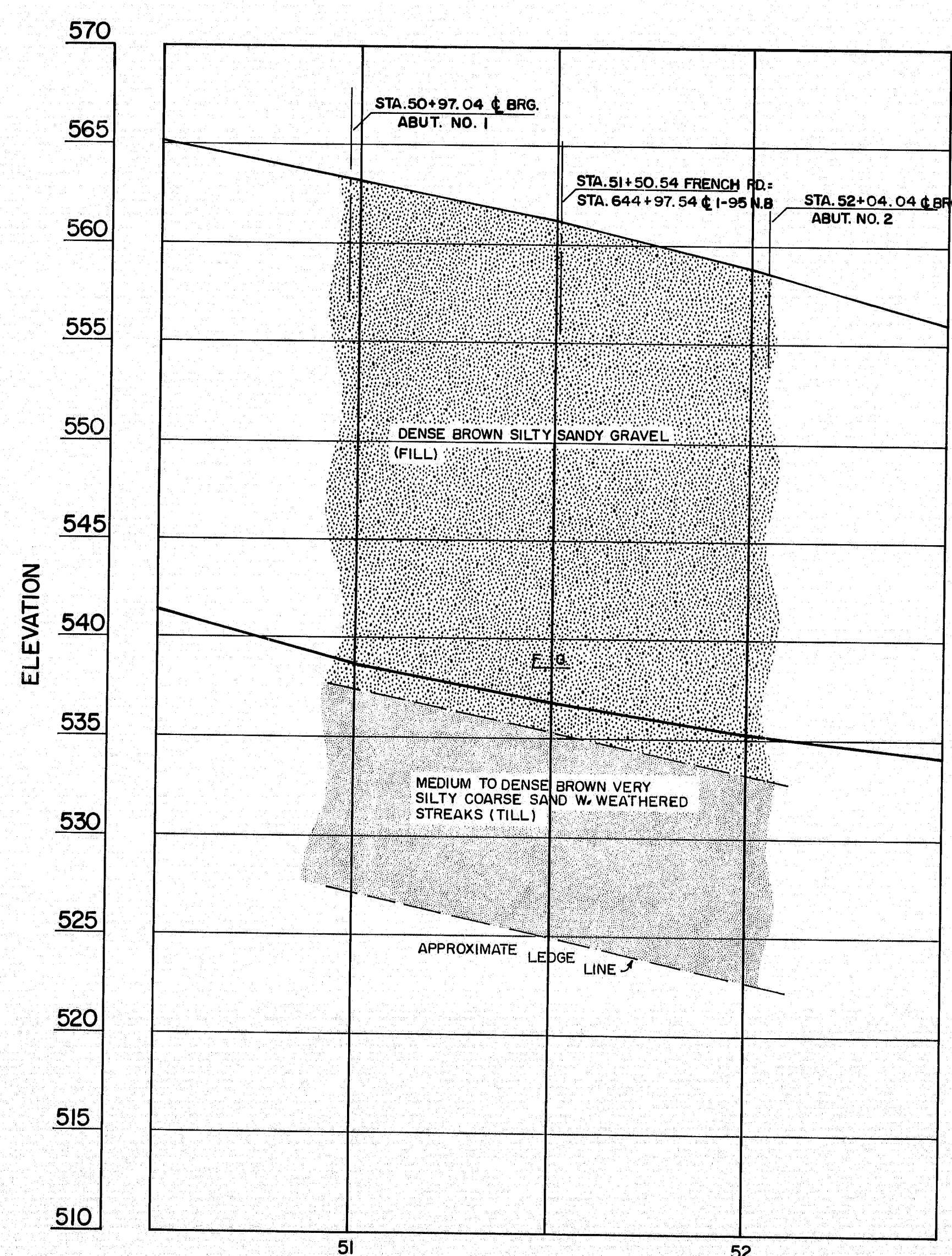
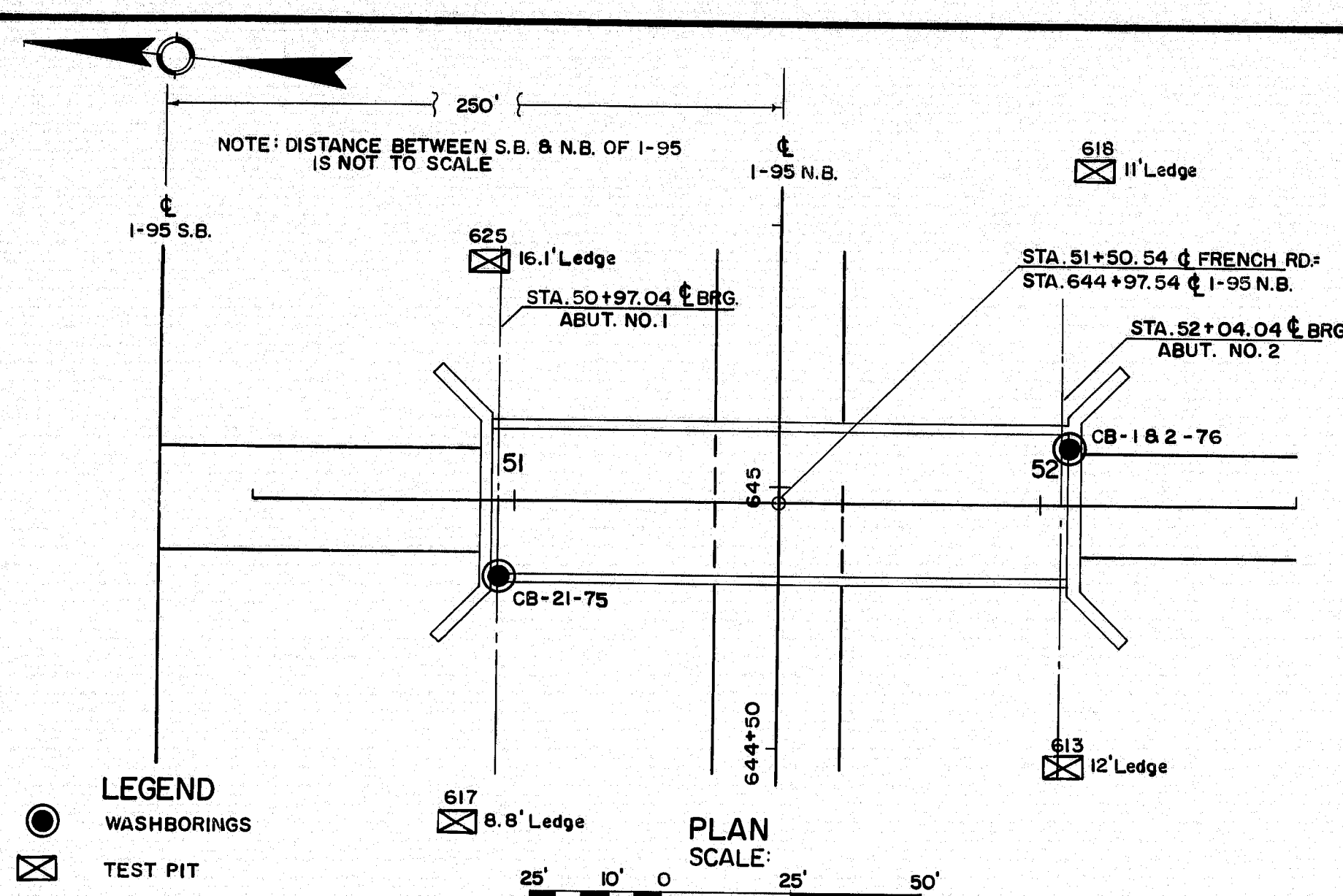
158-163







F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	1-95-9(64)289	23	43



**BORING NOTES**

All samples and vane are made ahead of casing

Number of blows required to drive extra heavy casing one foot with 400 ft. lbs. of energy per blow

Location of sample or sample attempt

Number and type of dry sample

S & H Sampler # 1290's

Number of blows required to drive spoon or tubing one foot with 350 ft. lbs. of energy per blow

Bottom of boring (may not be bottom of soil strata)

Location cored by diamond bit and per cent recovery of rock

STATE OF MAINE  
 DEPARTMENT OF TRANSPORTATION

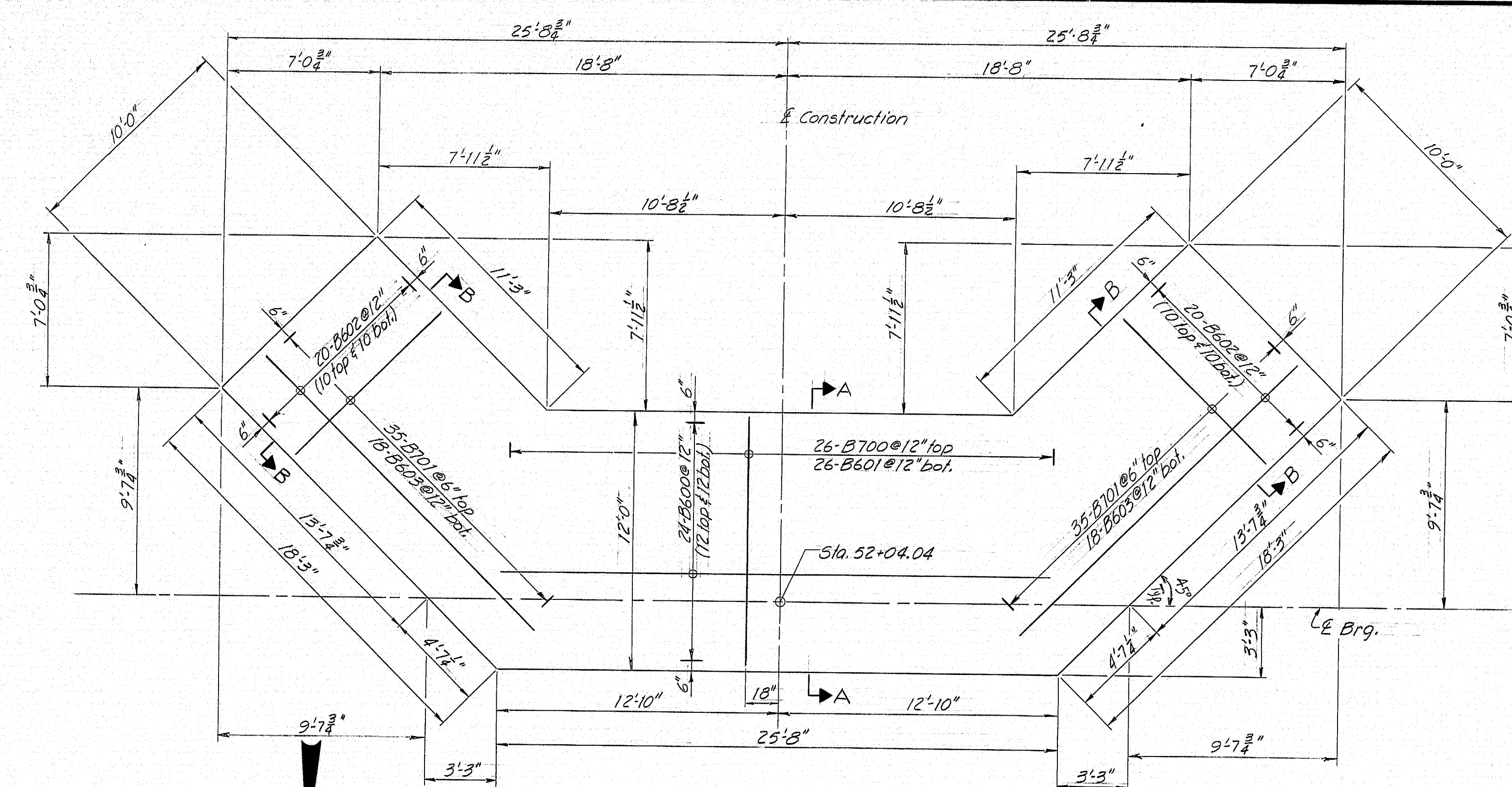
FRENCH ROAD BRIDGE  
 OVER  
 INTERSTATE 95-N.B.  
 IN THE TOWN OF  
 LUDLOW  
 AROOSTOOK COUNTY  
 FOUNDATION SURVEY

SHEET 23 OF 43 AUGUSTA, MAINE MAY 1976

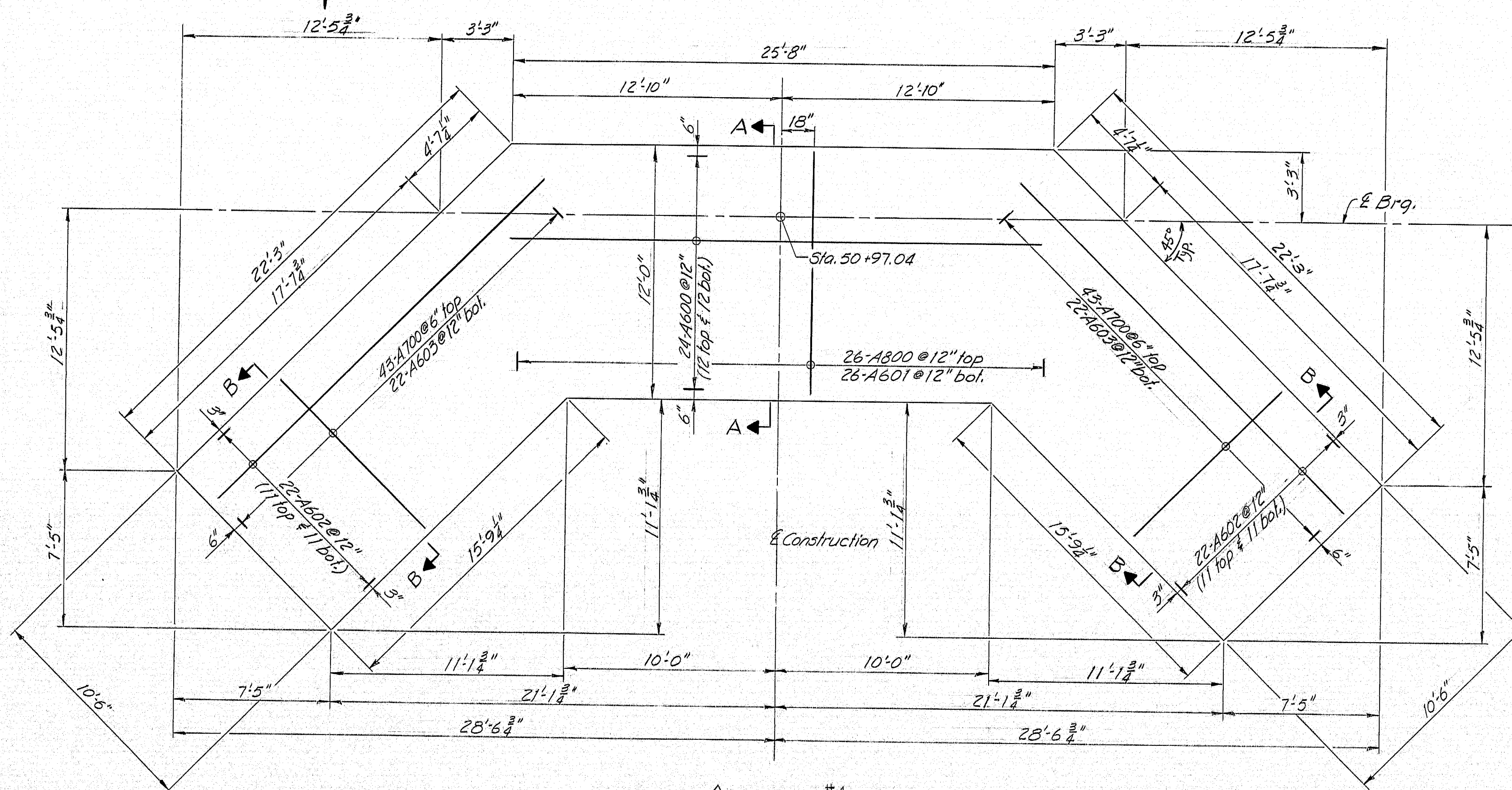
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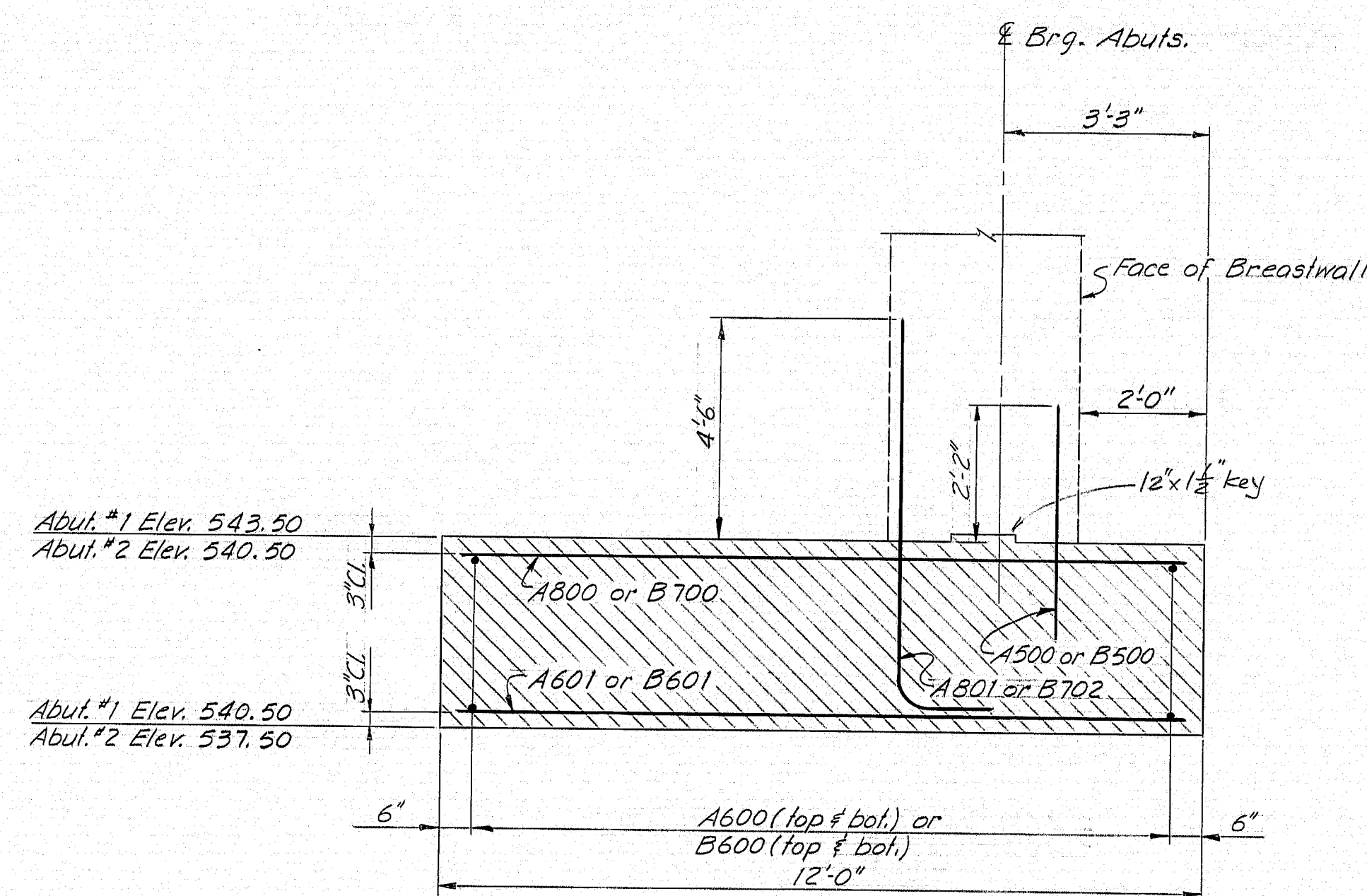
F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	1-95-2164/289	24	43



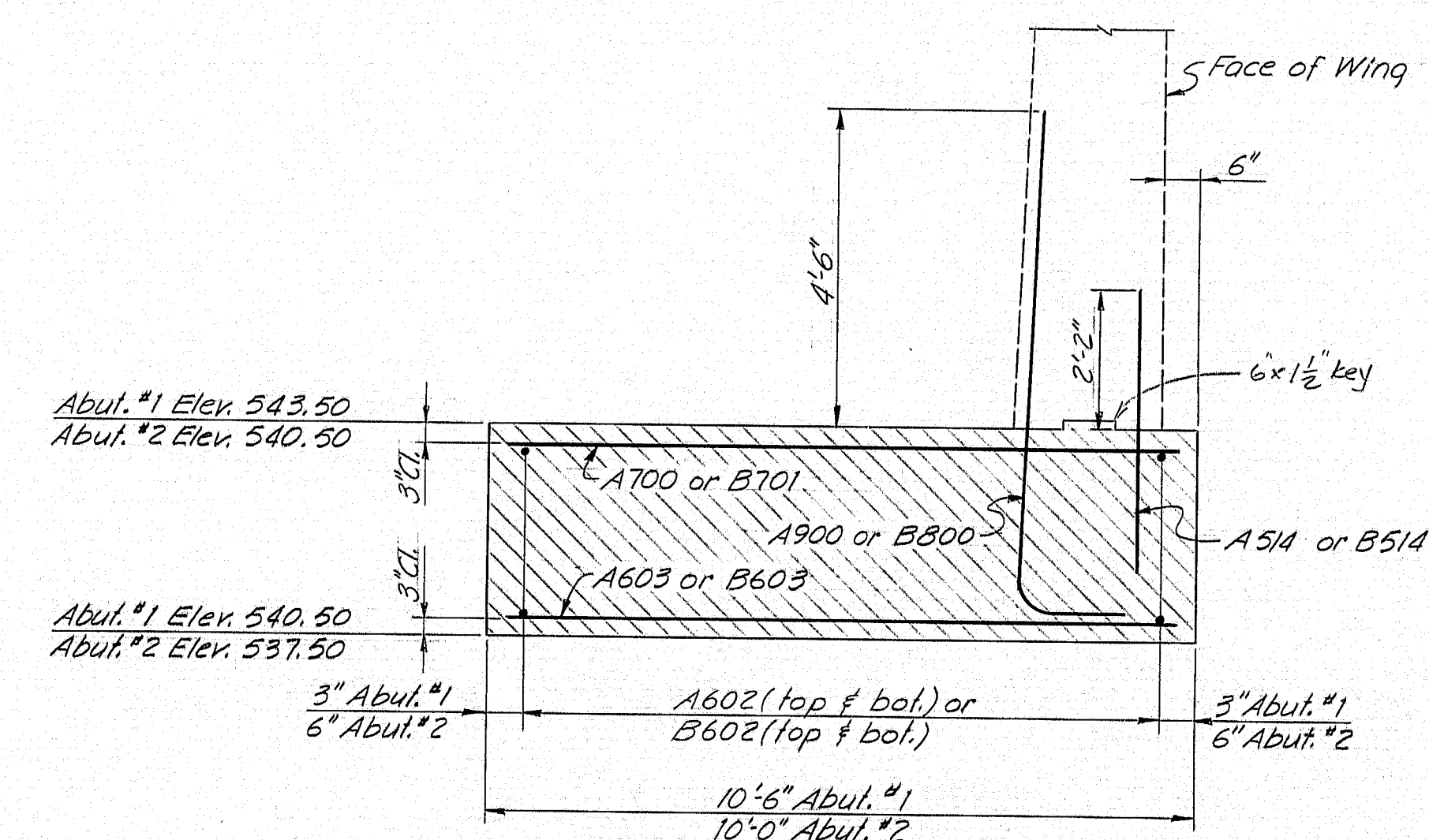
ABUTMENT #2



ABUTMENT #1



SECTION A-A



SECTION B-B

REINFORCING STEEL LEGEND

- A = Abutment #1
- B = Abutment #2

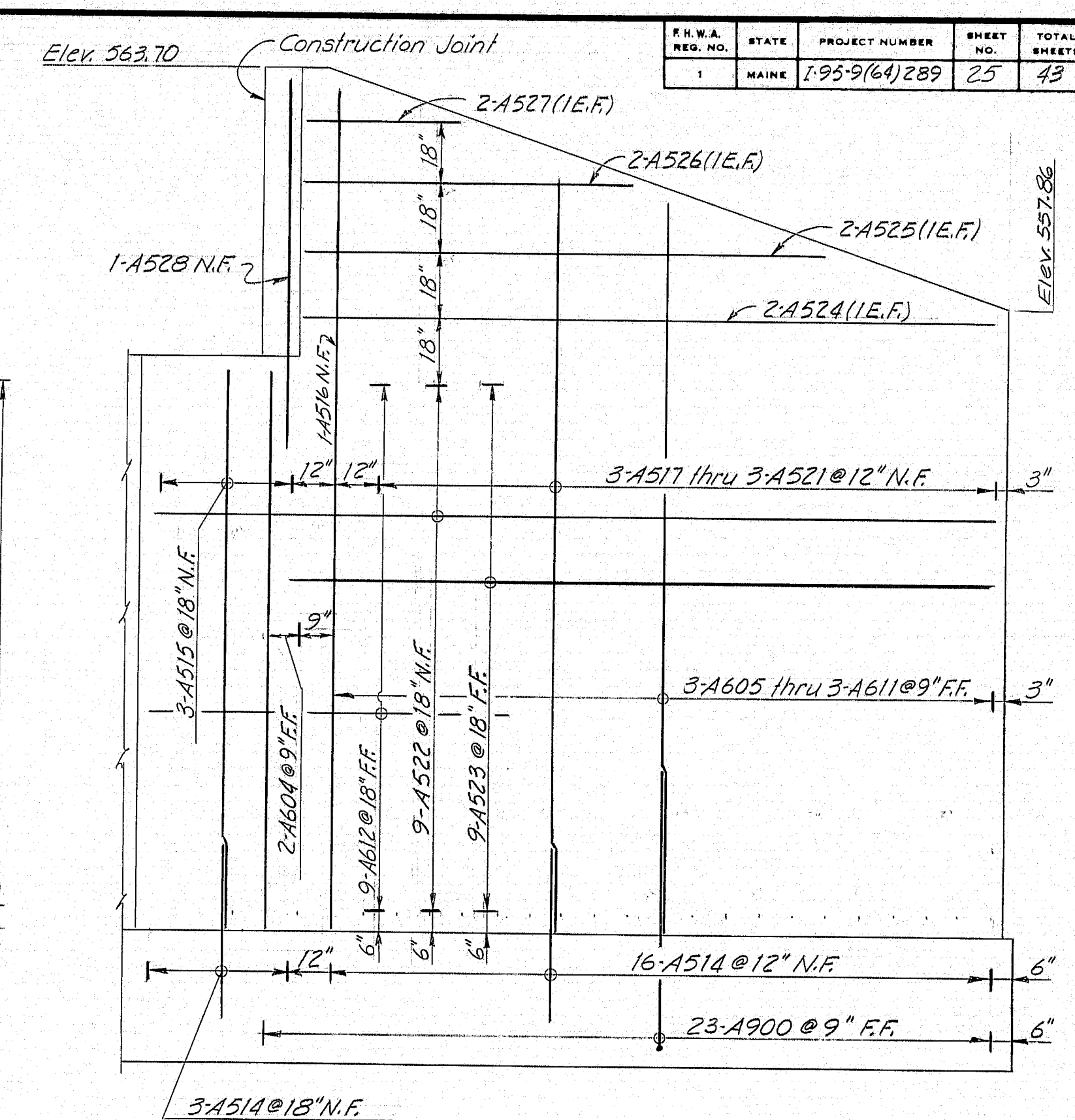
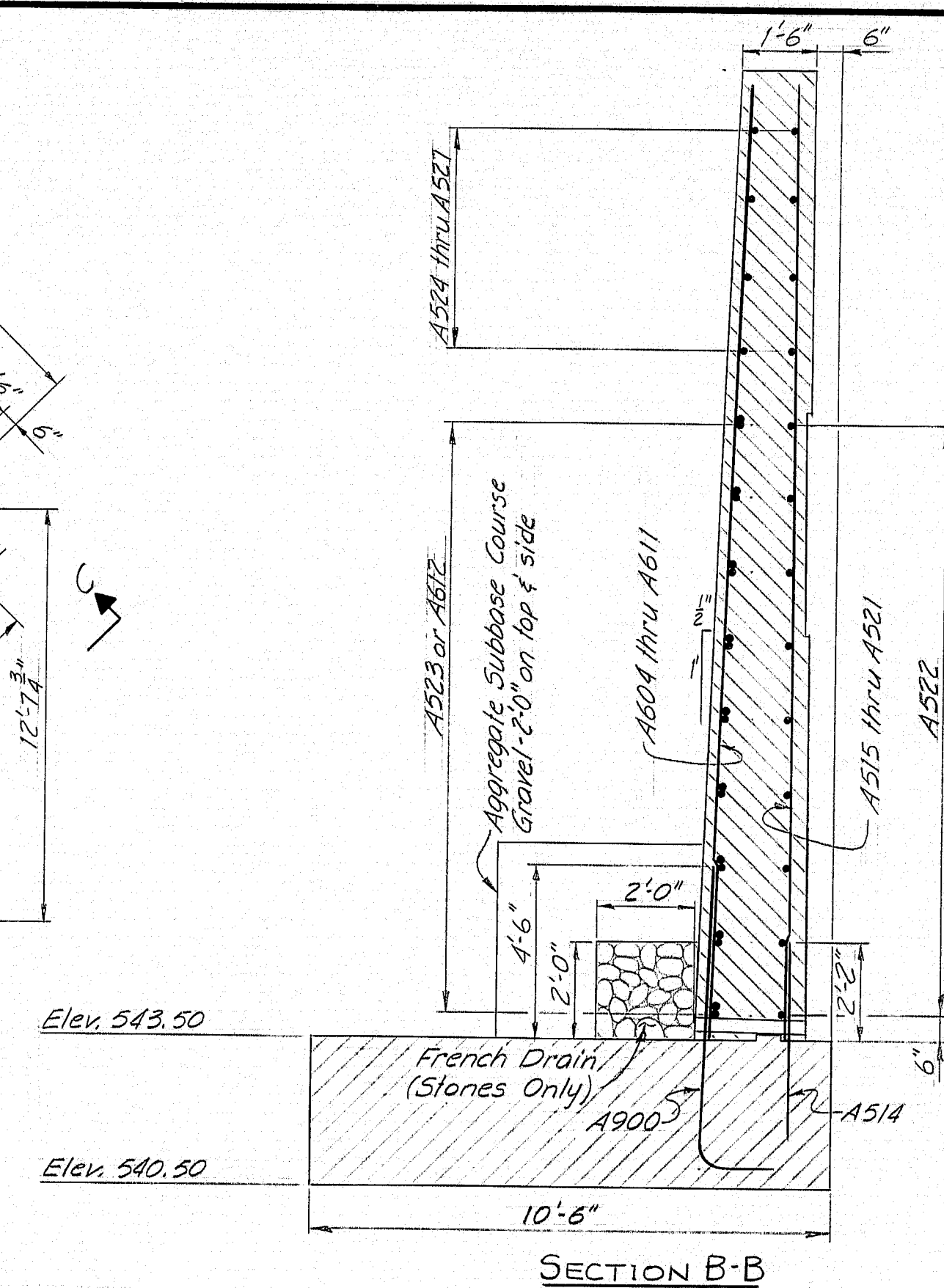
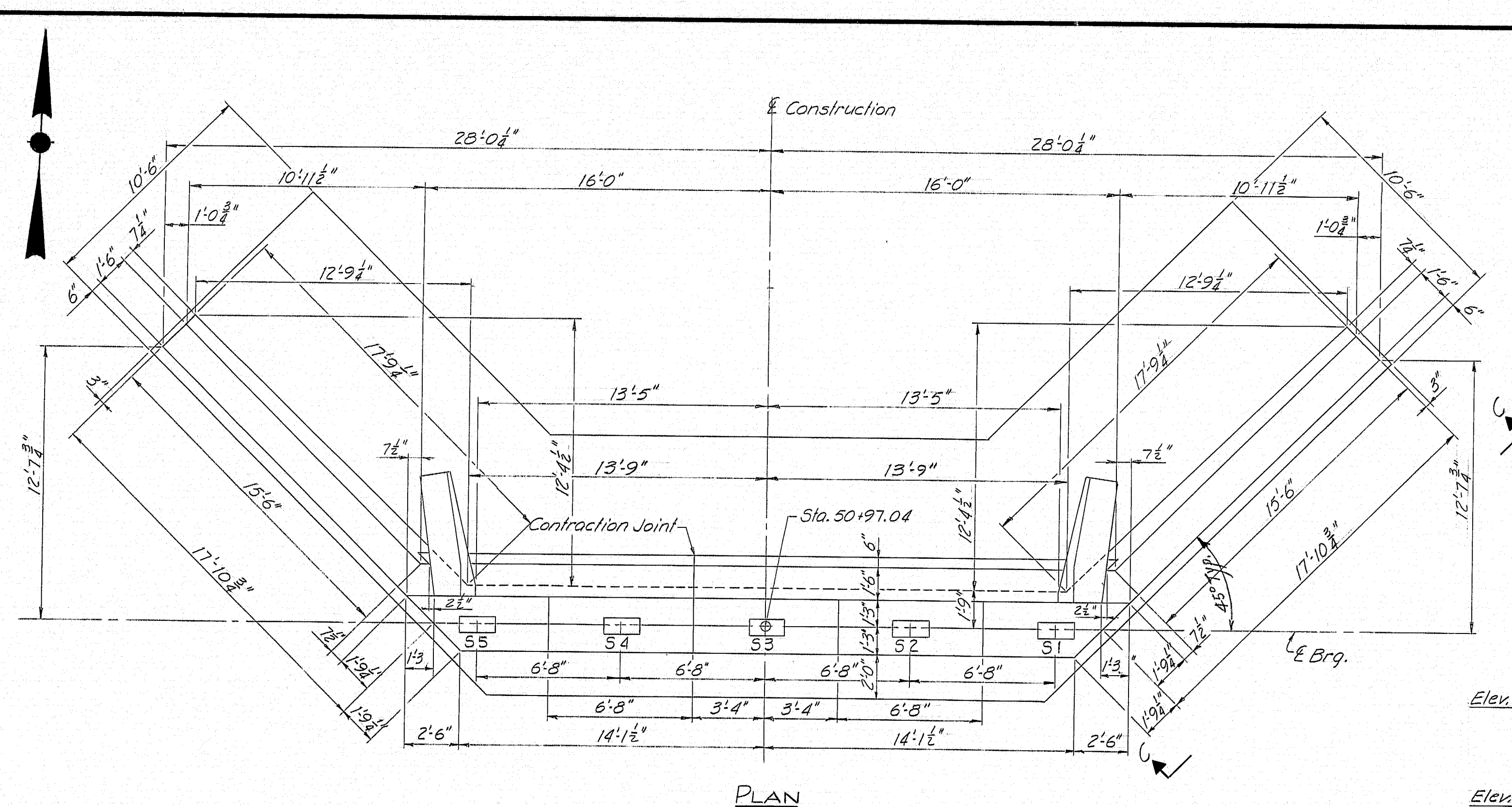
STATE OF MAINE  
DEPARTMENT OF TRANSPORTATION  
FRENCH ROAD BRIDGE  
OVER  
INTERSTATE 95-N.B.  
IN THE TOWN OF  
LUDLOW  
AROOSTOOK COUNTY

FOOTINGS  
SHEET 24 OF 43 AUGUSTA, MAINE MAY 1976

95-9(56) LUDLOW-FRENCH RD. FOOTINGS 158-166

PROJECT DESIGN ENGINEER	CDH	DATE
DESIGN - DETAILED	CDH	3-76
CHECKED	RCB	4-76
REVISIONS	GOI	
FIELD CHANGES		





## REFERENCES

REFERENCES

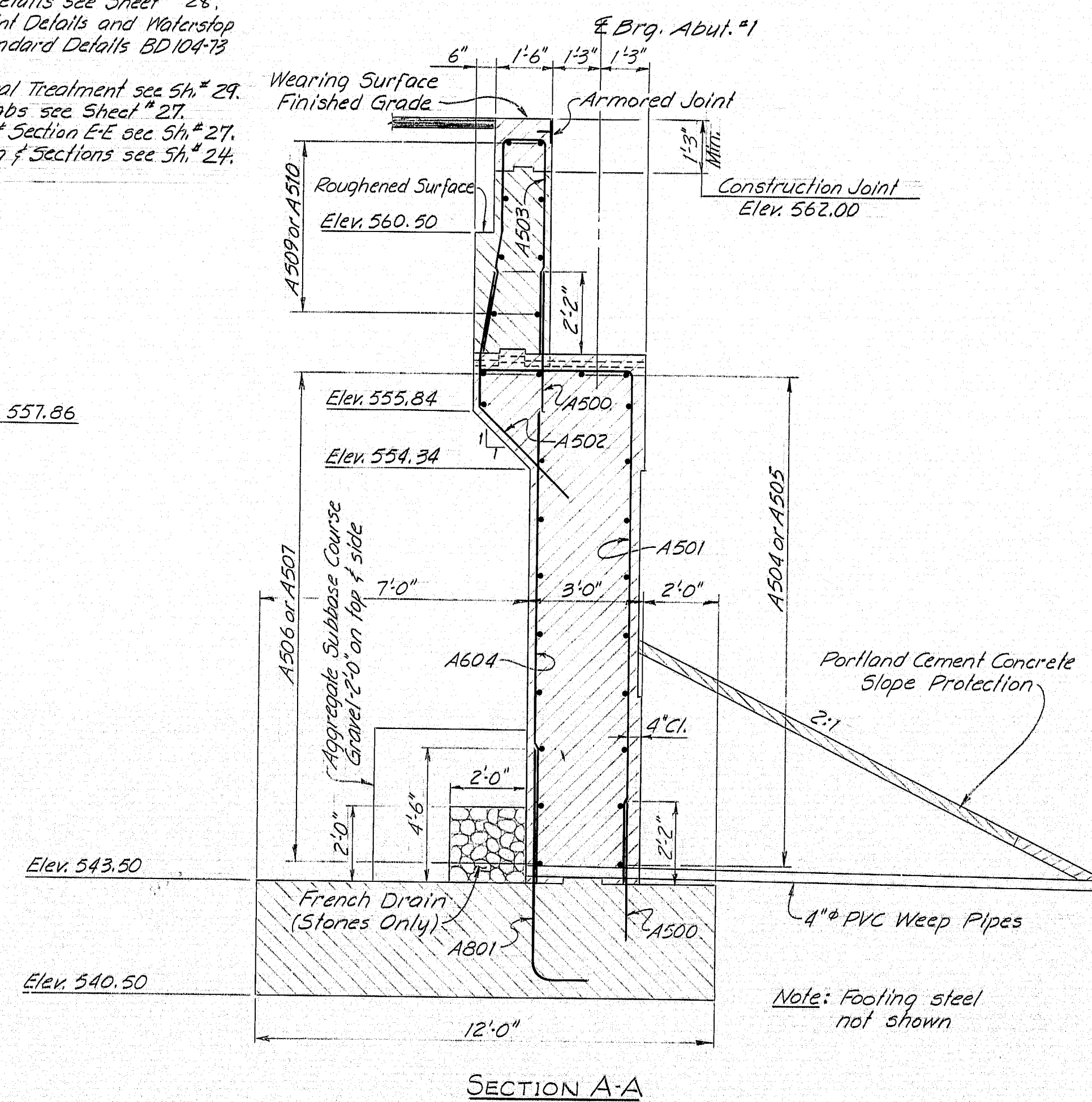
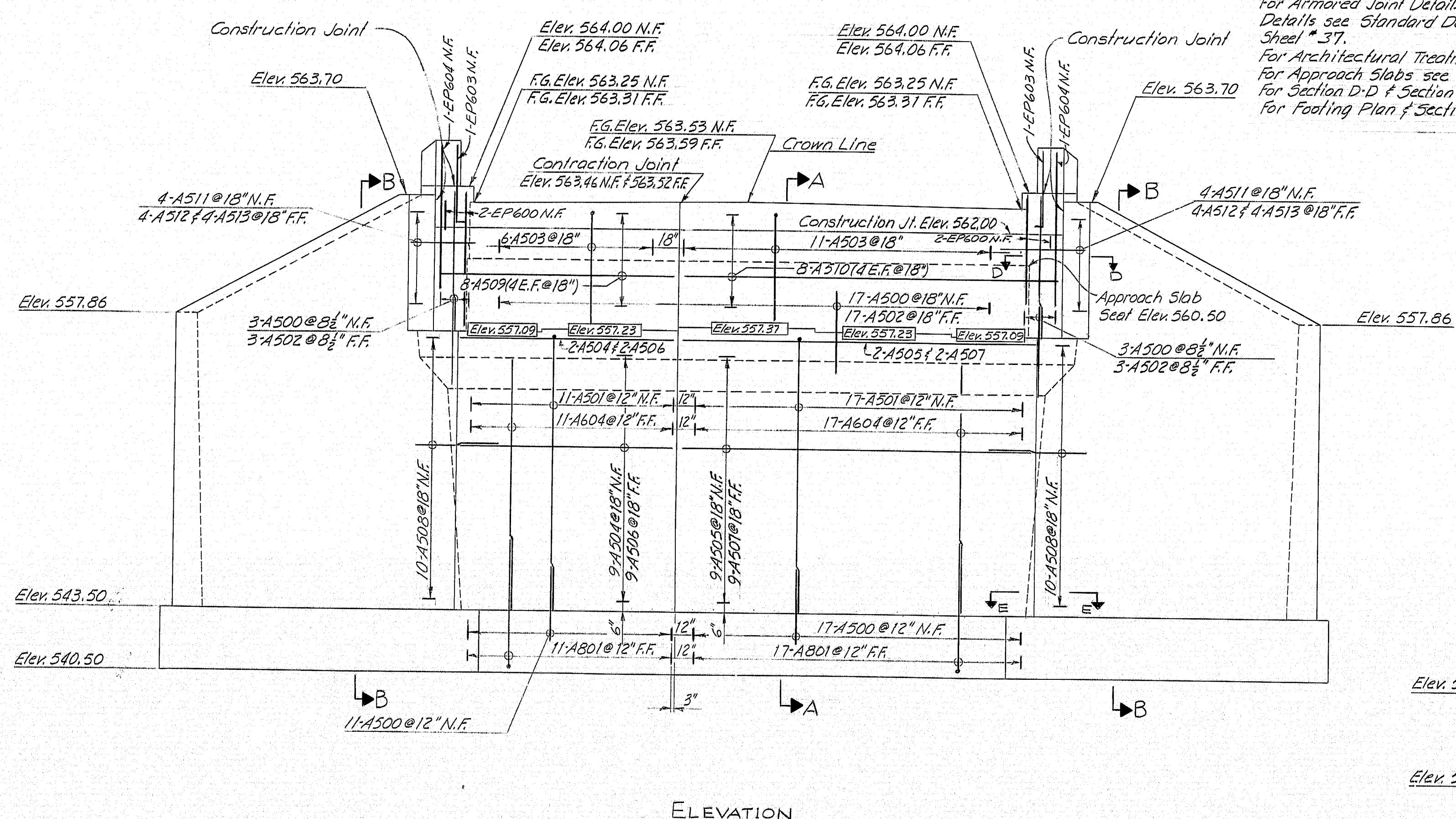
For End Post Details see Sheet # 28.  
For Armored Joint Details and Waterstop  
Details see Standard Details BD104-73  
Sheet # 37.  
For Architectural Treatment see Sh.# 29.  
For Approach Slabs see Sheet # 27.  
For Section D-D & Section E-E see Sh.# 27.  
For Footing Plan & Sections see Sh.# 24.

VIEW C-C  
(Typical both Wings)

## ABUTMENT NOTES

1. Chamfer all exposed edges of concrete a consistent dimension between  $\frac{1}{2}$ " and  $\frac{3}{4}$ " inclusive, unless otherwise indicated.
  2. Reinforcing steel shall have 2 inches cover unless otherwise indicated.
  3. Place reinforcing steel in bridge seats to clear anchor bolts.
  4. Break bond at vertical contraction joints by a method approved by the Engineer.
  5. Polyvinylchloride waterstops as shown on Standard Details BD-104 shall be placed in all vertical contraction and construction joints.
  6. Waterstops are not required in horizontal construction joints.
  7. Protective coating for concrete surfaces shall be applied to the following areas: top of backwall, concrete curbs, and posts and parapets.
  8. Place 4" diameter drains in breastwall and wings at 20 foot maximum spacing. Exact location to be determined by the Engineer in the field.
  9. Welding of reinforcing steel will be allowed in the top 2' of the abutment backwall.
  10. Maximum Soil Pressure = 3.6 Tons/sq.ft.
  11. See General Notes 6 and 7 on Profile Sheet #22.
- LELAND

LEGEND  
N.F = Near Face  
F.F = Far Face  
E.F = Each Face



PROJECT DESIGN ENGINEER	CDH	BY	DATE
DESIGN - DETAILED		C.D.H.	4-76
CHECKED		G.O.I.	4-76
REVIEWS			
FIELD CHANGES			

STATE OF MAINE  
DEPARTMENT OF TRANSPORTATION

FRENCH ROAD BRIDGE  
OVER  
INTERSTATE 95-N.B.  
IN THE TOWN OF  
LUDLOW  
AROOSTOOK COUNTY

ABUTMENT NO. 1

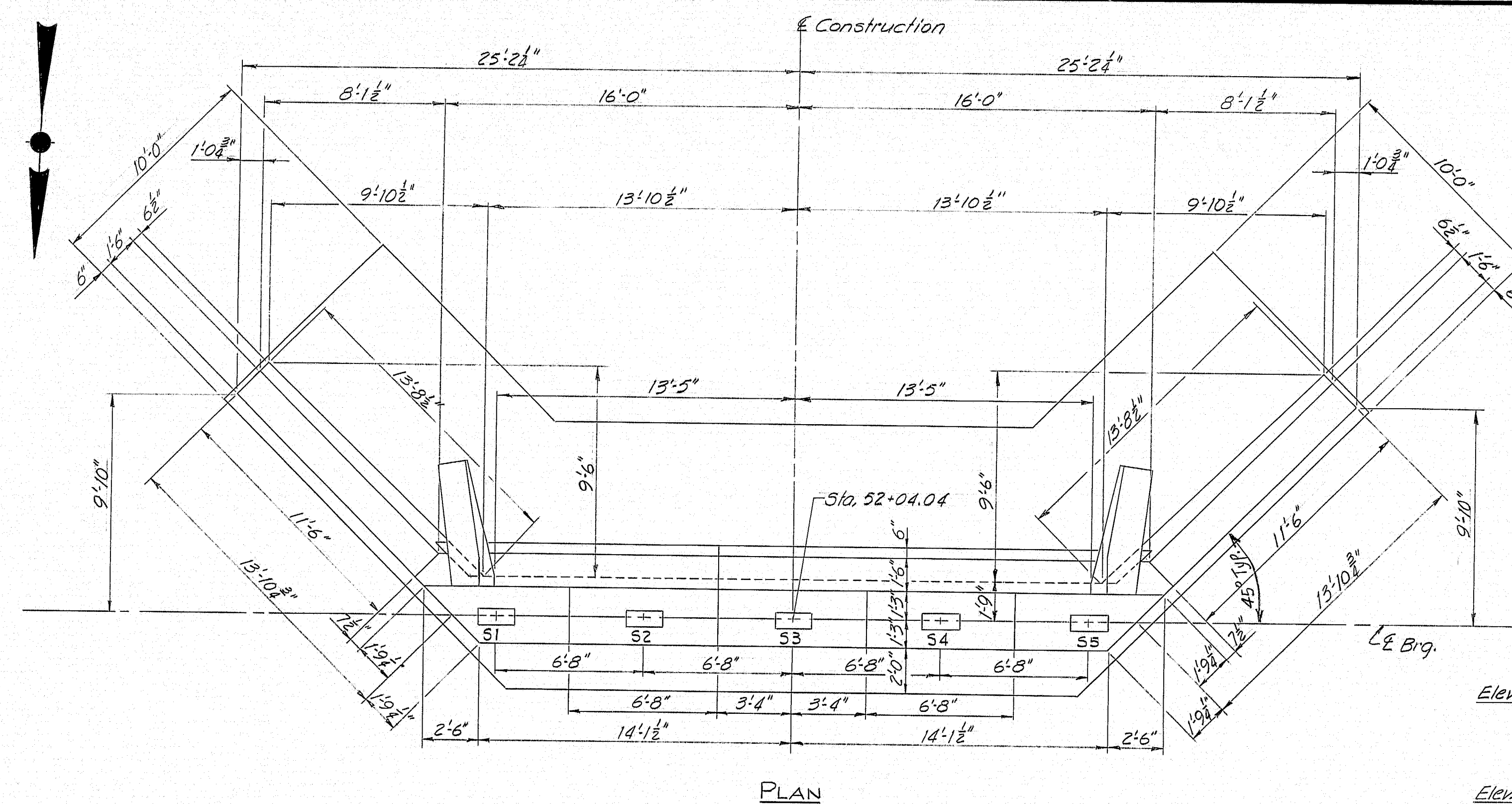
SHEET 25 OF 43 AUGUSTA, MAINE MAY 1976

959(5), LUDLOW-French Rd. Abut. #1 **158-167** 2000

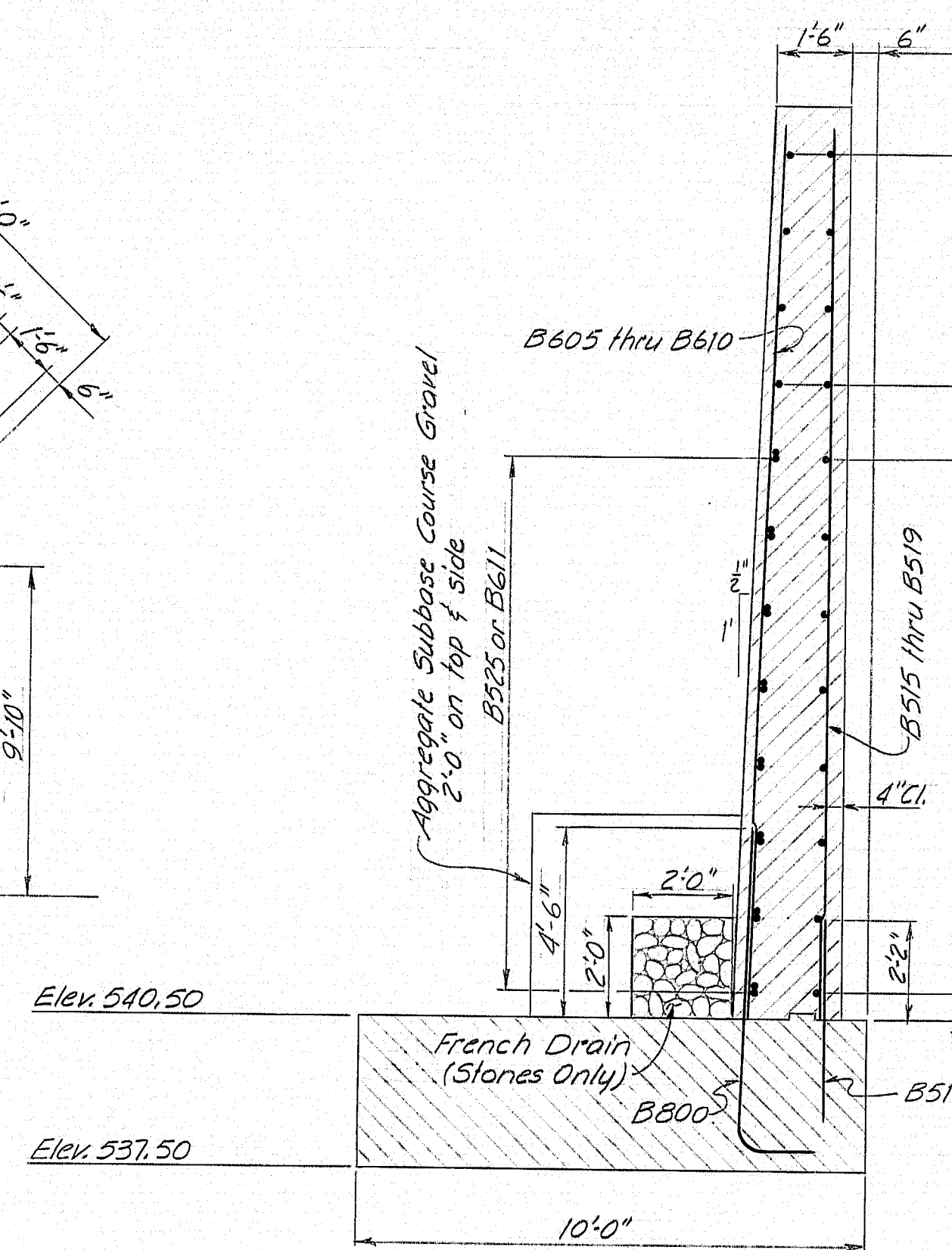


PROJECT DESIGN ENGINEER	CDH	DATE	4-76
DESIGN - CHECKED	CDH	BY	R.C.B.
REVISIONS	GO.T.	DATE	4-76
FIELD SURVEY			

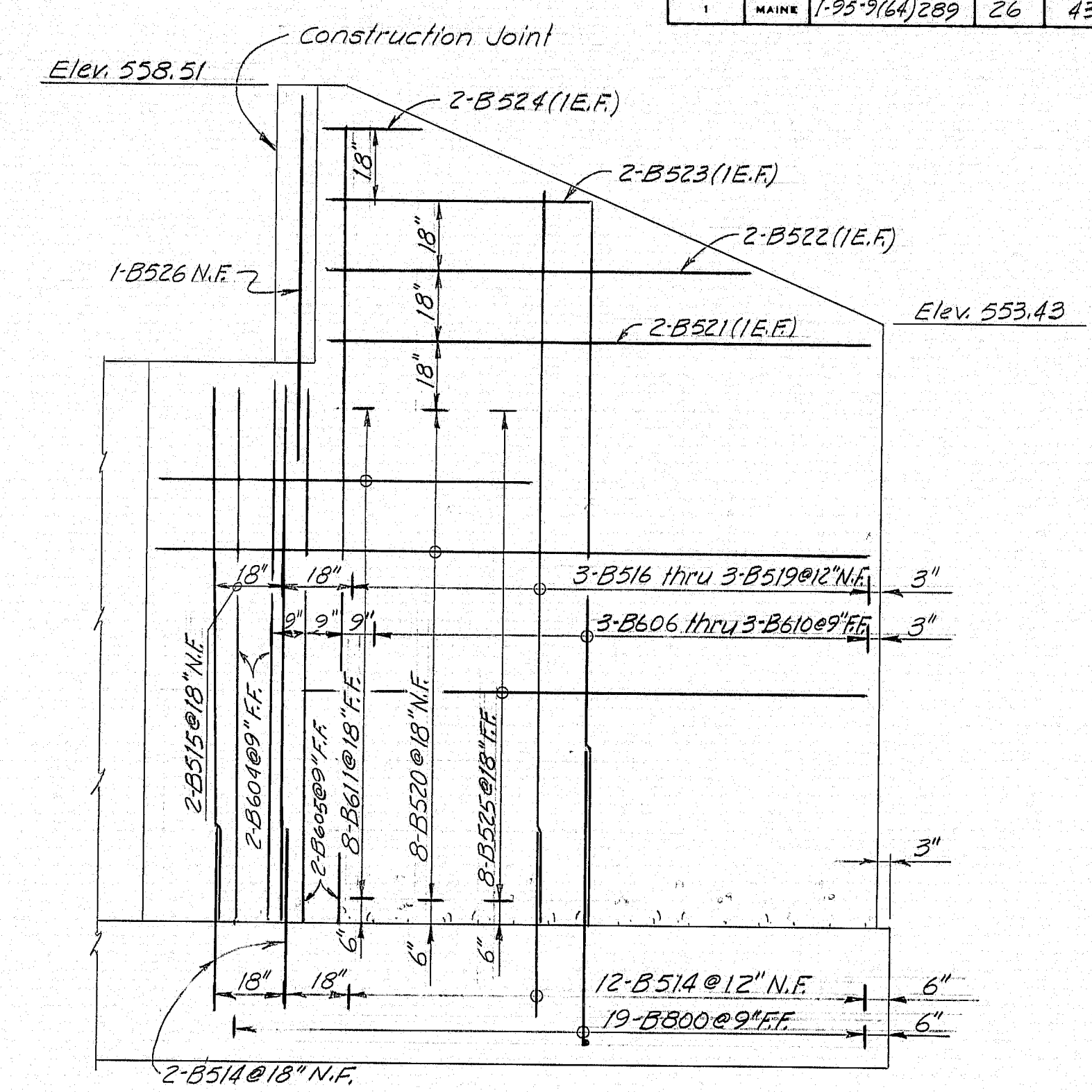
PLANS



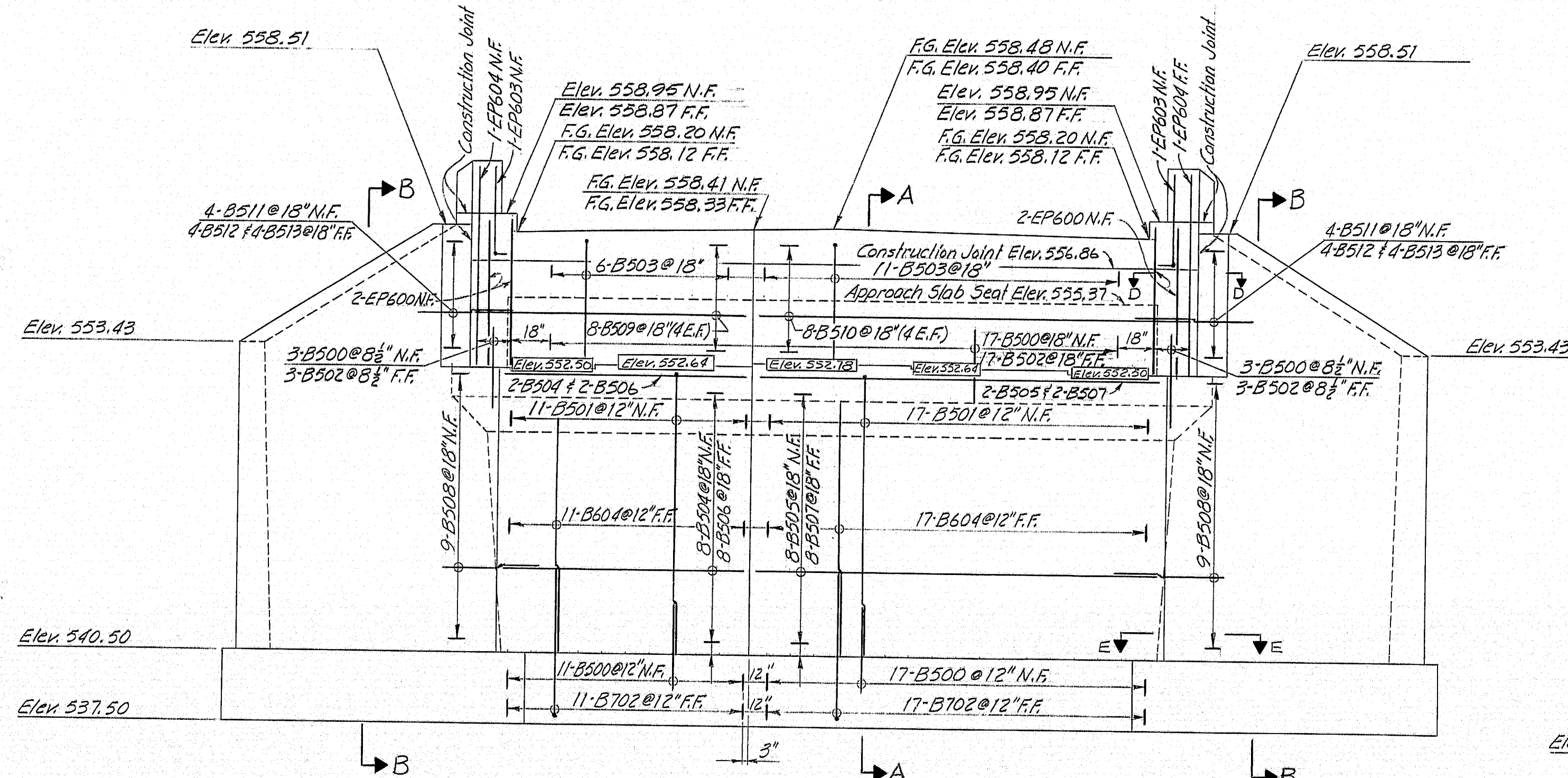
PLAN



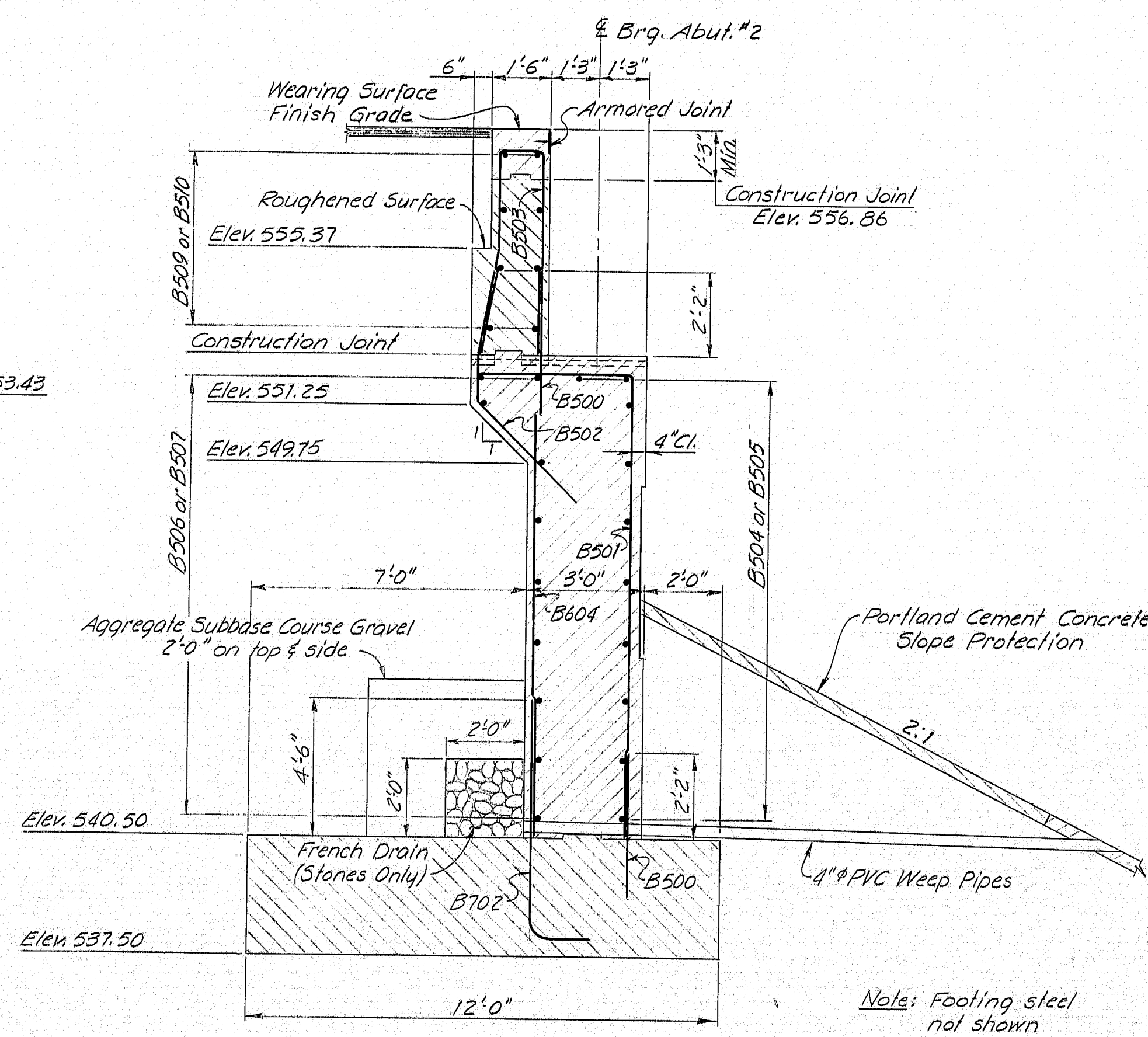
SECTION B-B



VIEW C-C



ELEVATION



SECTION A-A

REFERENCES

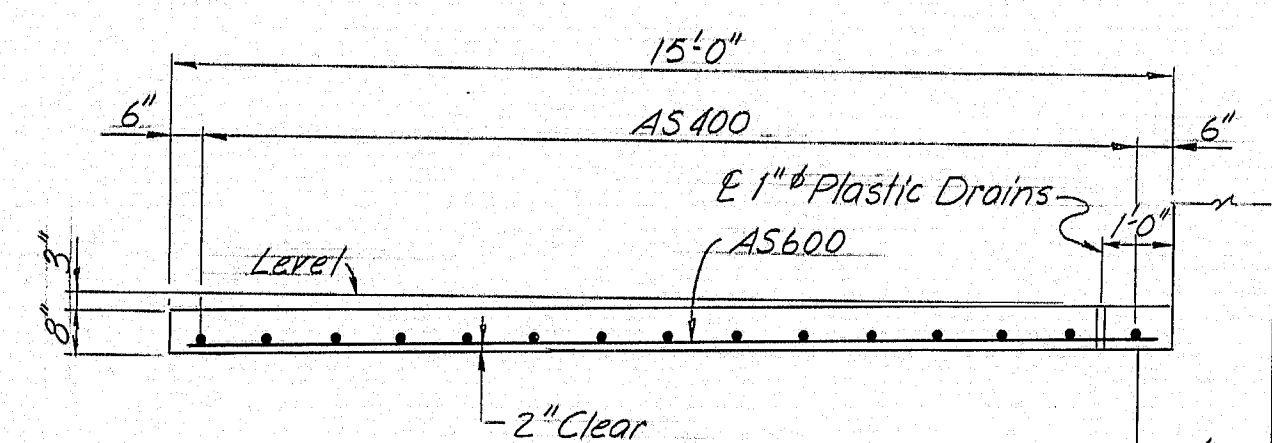
For End Post Details see Sheet # 28.  
For Armored Joint Details and Waterstop Details see Standard Details BD 104-73 Sheet # 37.  
For Architectural Treatment see Sheet # 29.  
For Approach Slabs see Sheet # 27.  
For Abutment Notes see Sheet # 25.  
For Section D-D & Section E-E see Sheet # 27.  
For Footing Plan & Section see Sheet # 24.

STATE OF MAINE DEPARTMENT OF TRANSPORTATION
FRENCH ROAD BRIDGE OVER INTERSTATE 95-N.B. IN THE TOWN OF LUDLOW AROOSTOOK COUNTY
ABUTMENT NO. 2 SHEET 26 OF 43 AUGUSTA, MAINE MAY 1976

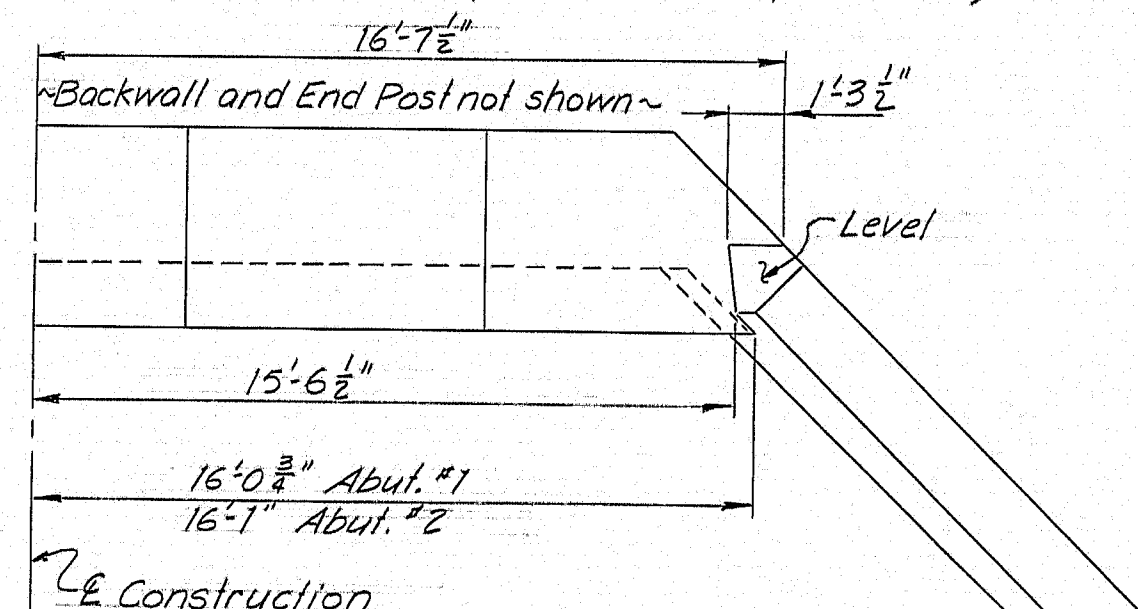
92-120 LUDLOW-FRENCH RD. Abut. #2 158-168



PROJECT DESIGN ENGINEER	CDH	BY		DATE	
PLANS	DESIGN - DETAILED		C.D.H.	R.C.B.	4-76
	CHECKED		G.O.T.		4-76
	REVISIONS				
	FIELD CHANGES				



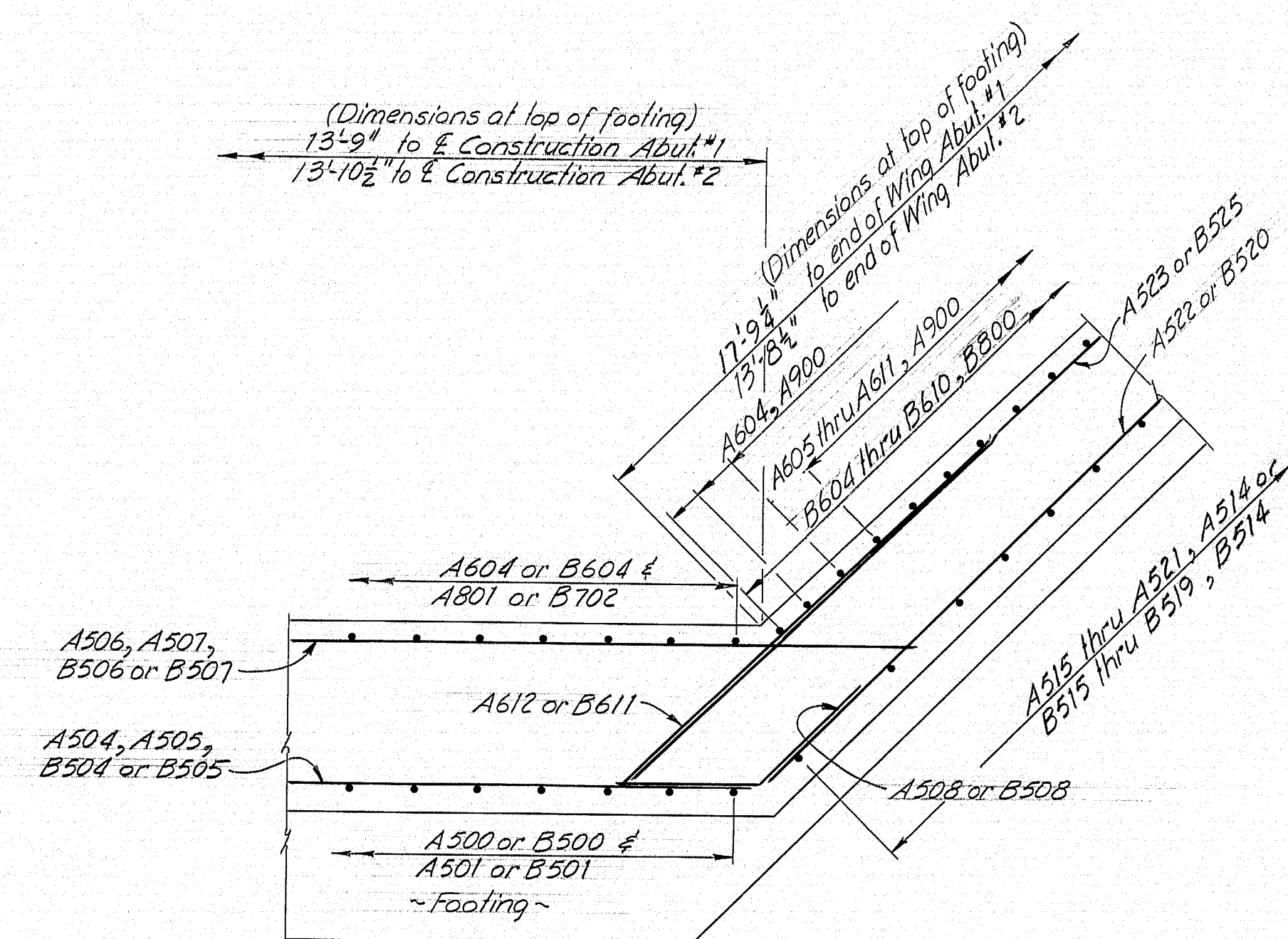
SECTION A-A



Hand-drawn elevation drawing of a building section, showing a construction joint and various dimensions. The drawing includes the following text and measurements:

- Construction Joint* (pointing to a vertical line on the roofline)
- Construction* (with a squiggly line pointing to the roofline)
- ~ Backwall and End Post not shown ~*
- 1" (vertical dimension)*
- 14'-4 3/8" Abut. #1*
- 14'-5" Abut. #2*
- 15'-7 1/2" Abut. #1*
- 16'-0" Abut. #2*
- 13'-9" Abut. #1*
- 13'-10 1/2" Abut. #2*

A = Abutment #1  
B = Abutment #2



SECTION E-E  
(Opposite hand for other side of Abutment)

95-9(56) Ludlow French Rd. Abut 158-169

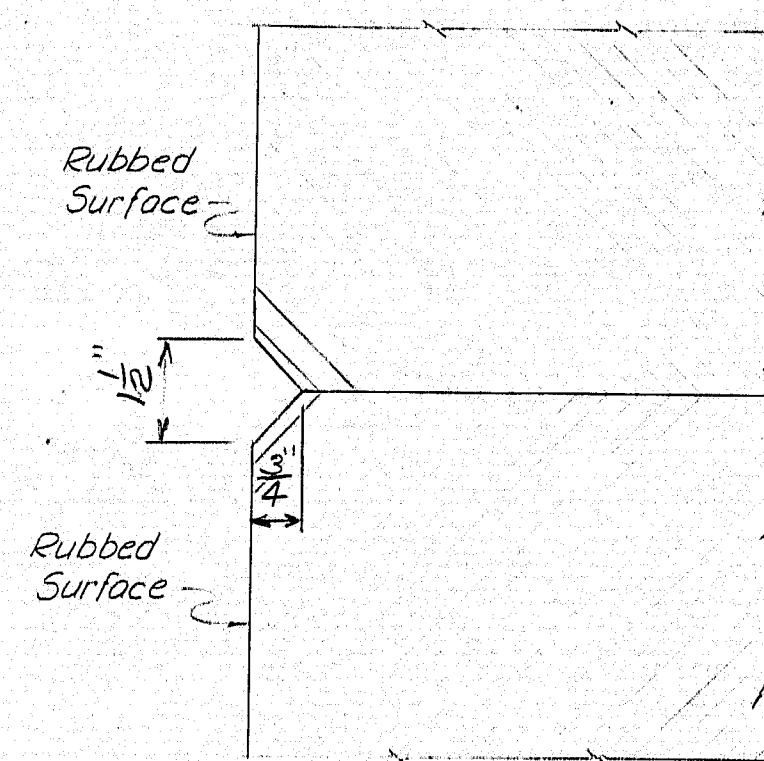
95-9(56) Ludlow French Rd. Abut 158-169



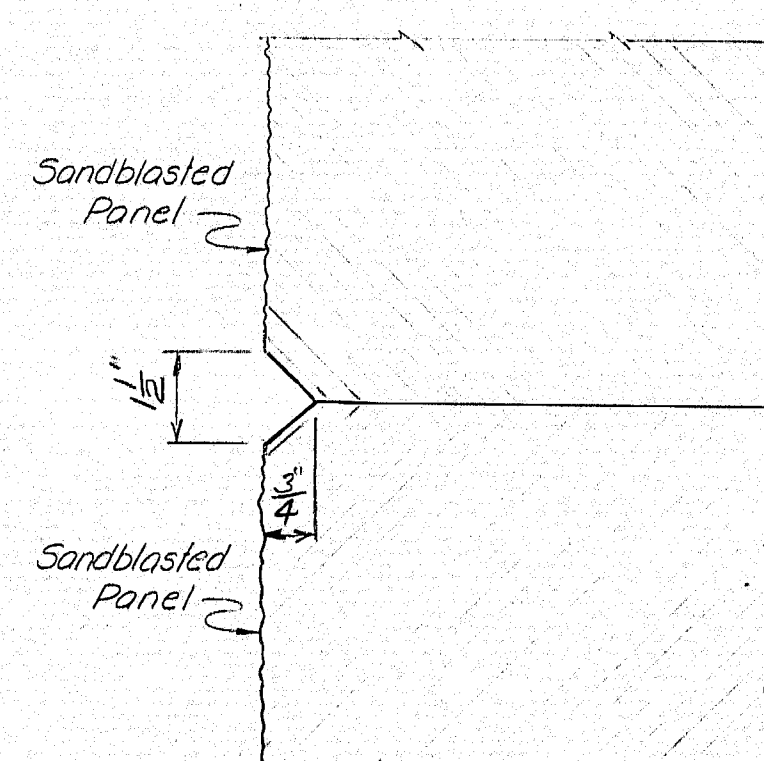




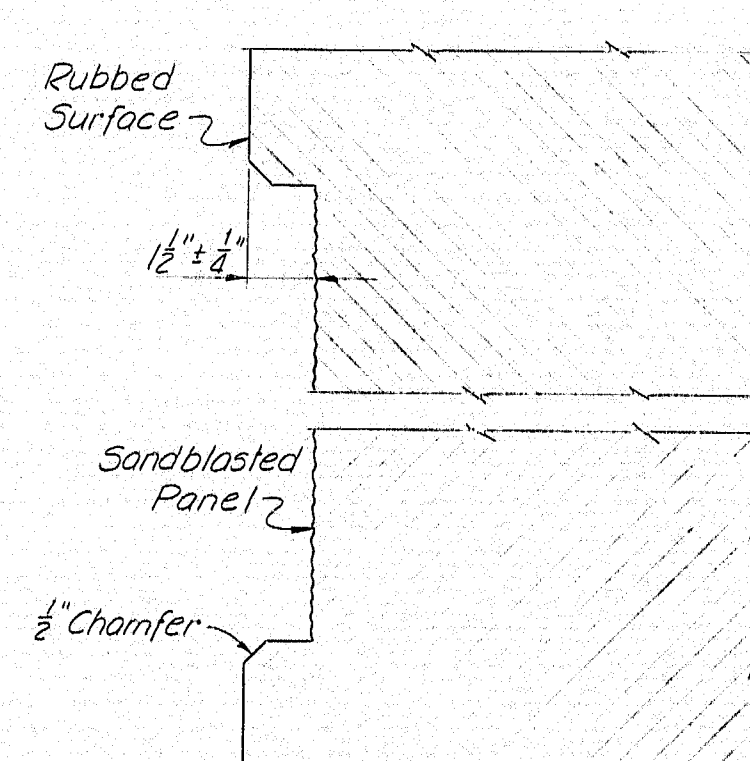
F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	1-99-9(4)200	29	43



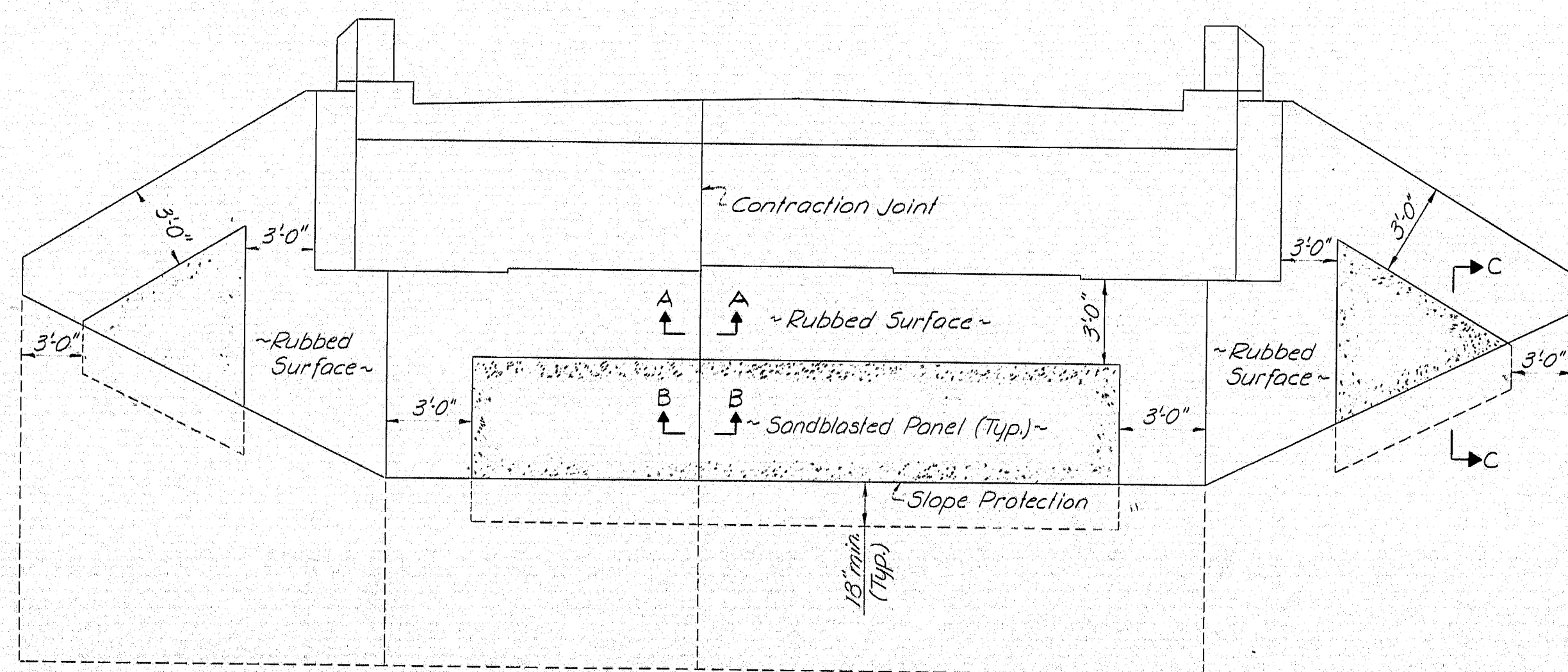
SECTION A-A



SECTION B-B



SECTION C-C



ABUTMENT ELEVATION

#### NOTES

All surfaces so designated on the plans shall be sandblasted. These surfaces shall be carried to a minimum depth of 18 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 abutments.

At the time the concrete is placed, the contractor shall cast 3 sample slabs (2'x2'x4').

Prior to sandblasting, the samples shall be sandblasted, each to a different degree of penetration with a maximum depth of 1/8 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 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.

The contractor shall conform to any applicable safety specifications, such as O.S.H.A., in the sandblasting operation.

Payment for sandblasting shall be included in the contract unit price for Item 502.21.

No deduction in the concrete pay volume will be made for the recess for the architectural treatment.

PROJECT DESIGN ENGINEER	CDH	DATE	2/76
DESIGN - CHECKED	R.C.B.	DATE	4/76
REVISIONS	GOI		
FIELD CHANGES			

PLANS

STATE OF MAINE  
DEPARTMENT OF TRANSPORTATION

FRENCH ROAD BRIDGE

OVER

INTERSTATE 95-N.B.

IN THE TOWN OF

LUDLOW

AROOSTOOK COUNTY

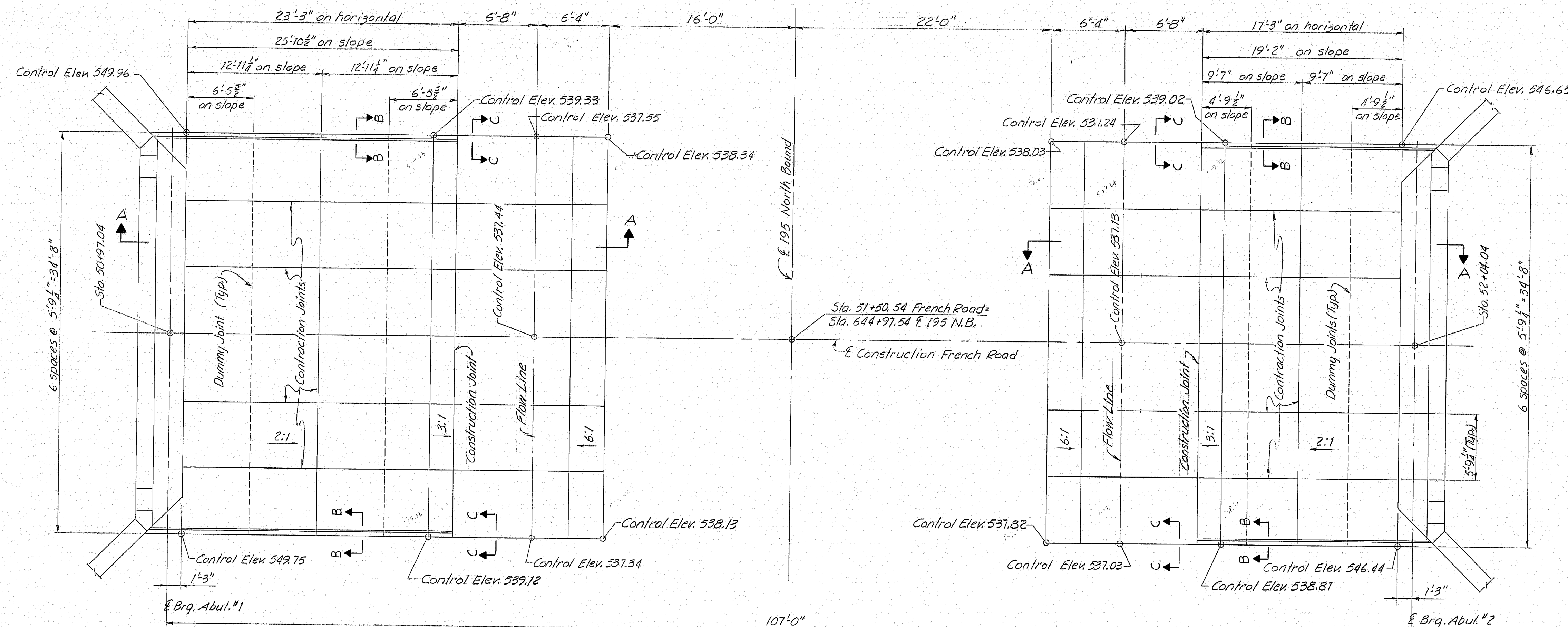
ARCHITECTURAL TREATMENT

SHEET 29 OF 43 AUGUSTA, MAINE May, 1976

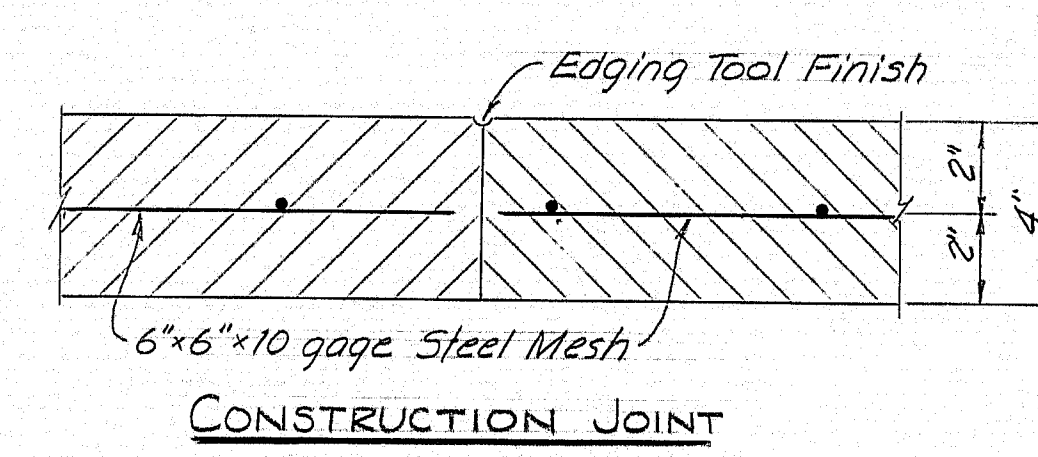
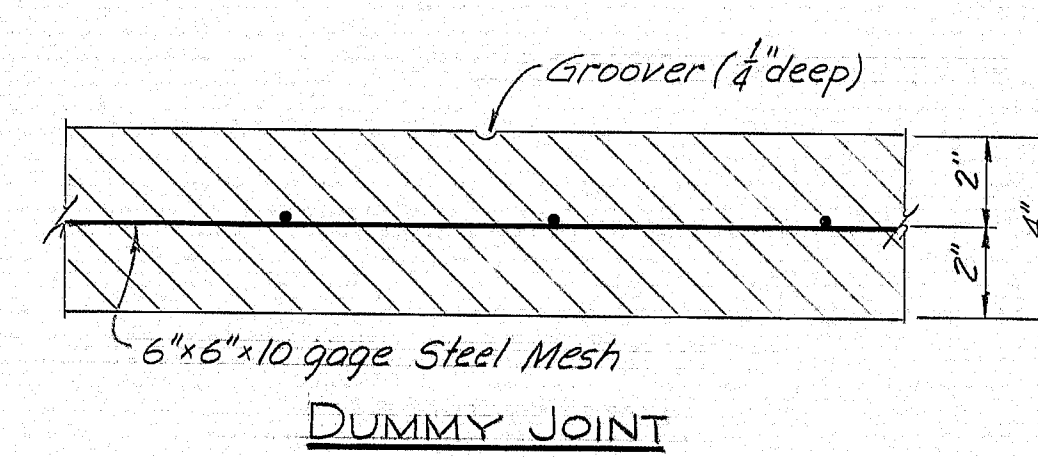
158-171



F.H.W.A. SHEET NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	1-95-9(64) 289	30	43

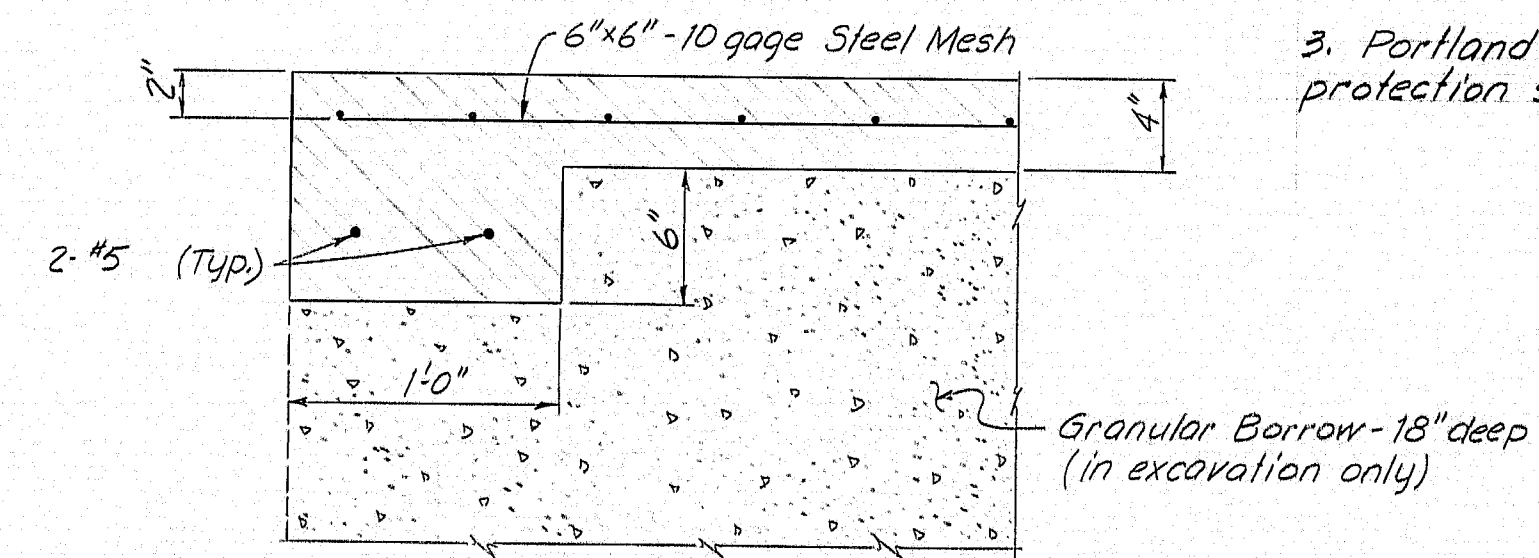
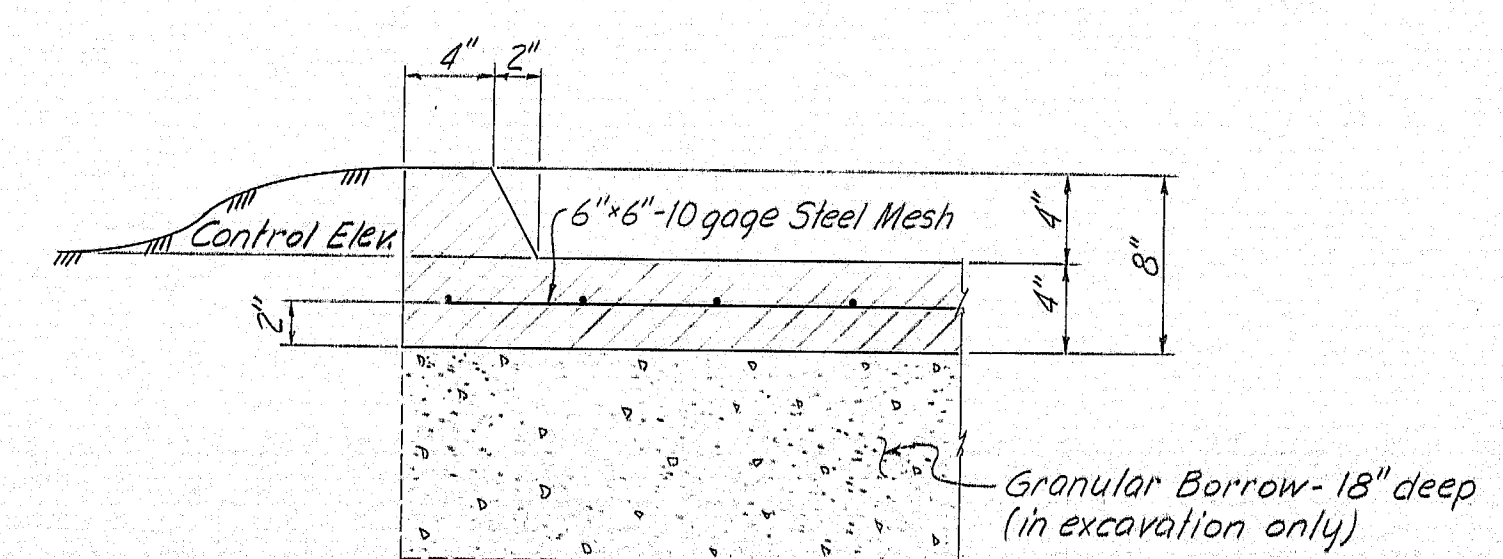
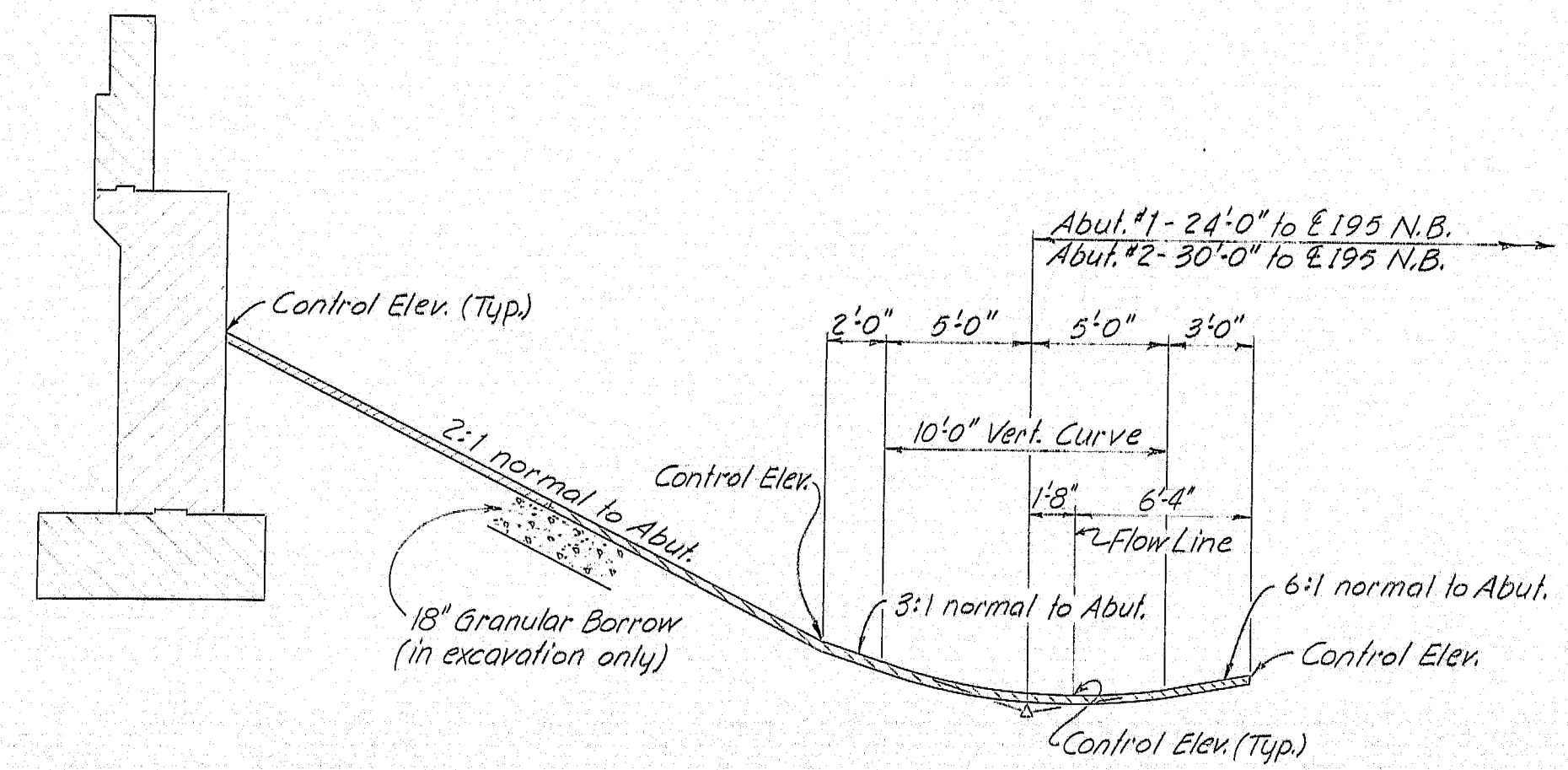


PLAN  
Portland Cement  
Concrete Slope Protection



# NOTES

1. Steel mesh shall not pass through any construction joint.
2. Break the bond in construction joints by a method approved by the Engineer.
3. Portland Cement Concrete for slope protection shall be Class A.



Payment for 2x5 bars shall be considered incidental to concrete slope protection item.

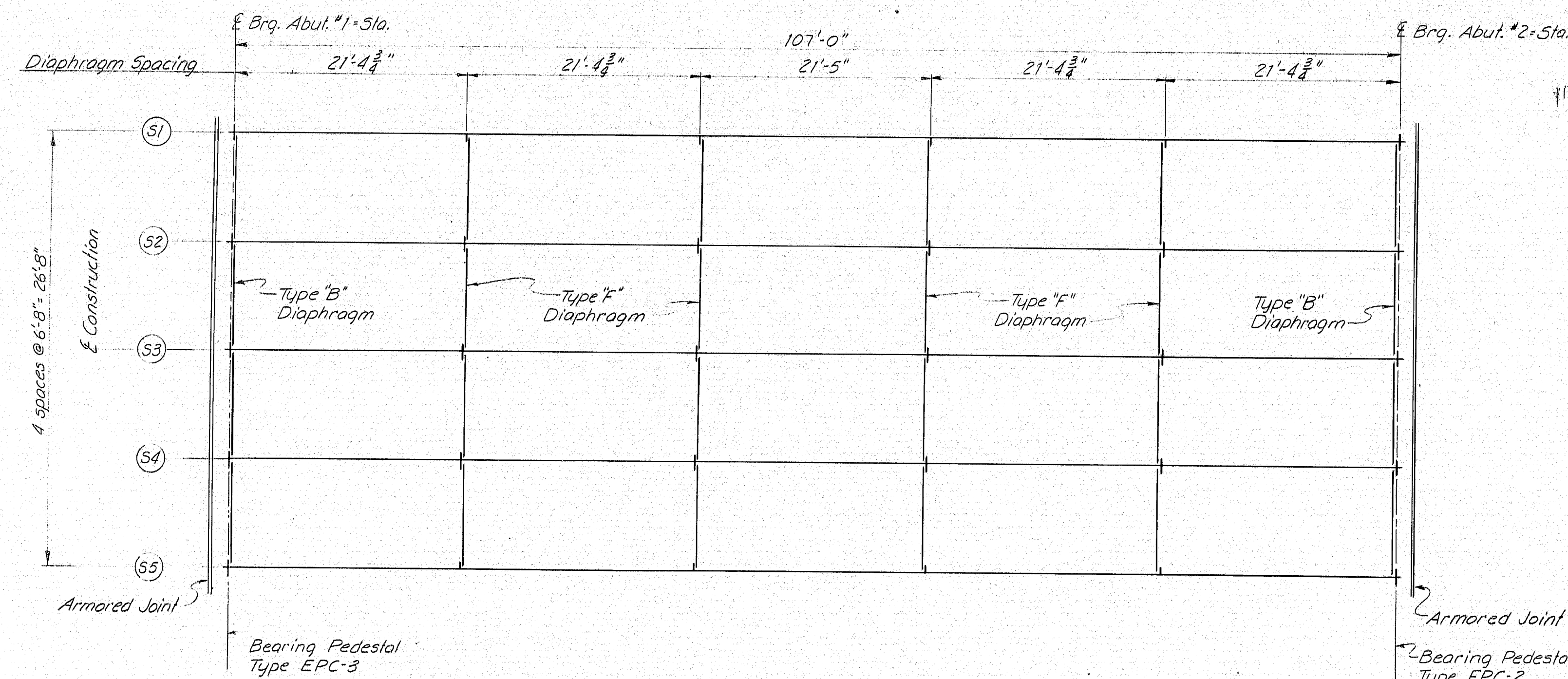
PROJECT DESIGN ENGINEER	DATE
CDH RCB	4-78
DESIGN DETAIL	REVISIONS
GOVT	4-78
PLANS	FIELD CHANGES

STATE OF MAINE DEPARTMENT OF TRANSPORTATION
FRENCH ROAD BRIDGE OVER INTERSTATE 95-N.B. IN THE TOWN OF LUDLOW AROSTOOK COUNTY SLOPE PROTECTION SHEET 30 OF 43 AUGUSTA, MAINE MAY 1976

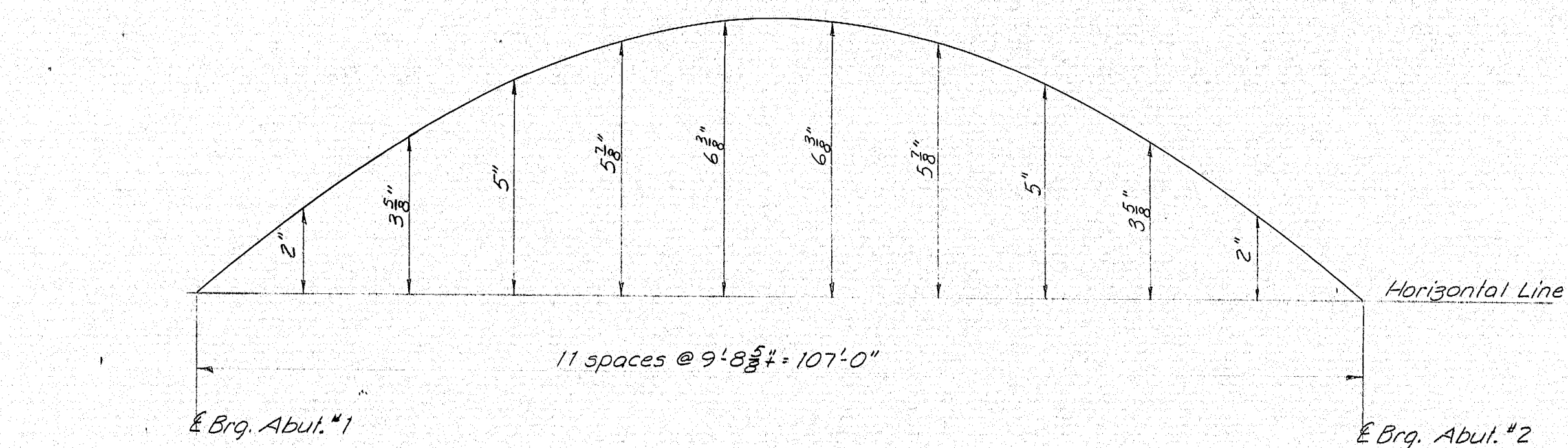
158-171



F.R.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	1-95-9(64)289	31	43



FRAMING PLAN  
(all dimensions are horizontal)



#### SEAL NOTES:

1. The seals furnished shall be as follows:

LOCATION	MOVEMENT RATING
Abut. #1	1 1/2"
Abut. #2	2"

2. Set joint opening according to the joint opening shown on the approved "Armored Joint" shop detail drawings.  
3. The seal characteristics shall be submitted to the Engineer for approval, prior to the fabrication of the armored joint.  
4. The following movements, due to dead loads (slab, curb and wearing surface), shall be taken into account when setting the armored joint:

LOCATION	OPEN
Abut. #1	0"
Abut. #2	2"

5. The maximum joint opening shall be 3 inches at -30°F measured parallel to E of construction.  
6. Seals shall run 2" beyond fascias.

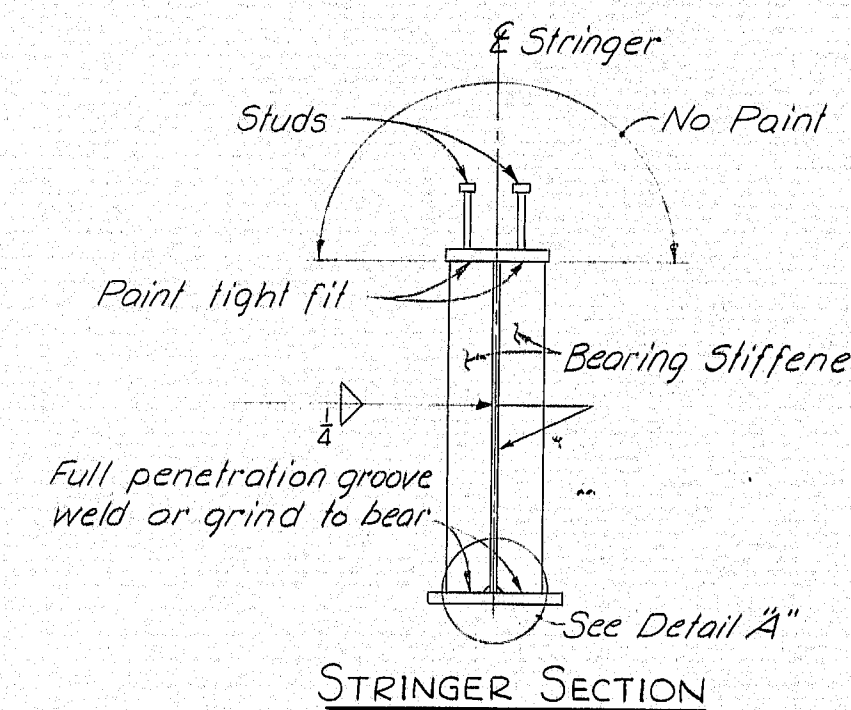
#### STRUCTURAL STEEL NOTES

- Camber ordinates, as shown, are computed to compensate for all dead load deflections and for the curvature of the finish grade profile.
- No transverse butt weld splices in the flange plates or web plates within 10 feet from E of span will be allowed.
- Sections of flange plates or web plates between transverse butt weld splices shall be not less than 20 feet in length unless otherwise shown on the plans.
- Butt weld splices in flanges shall be not closer than one foot from transverse welds in the web plates.
- Bearing stiffeners shall be plumb after erection and dead loading of the structure.

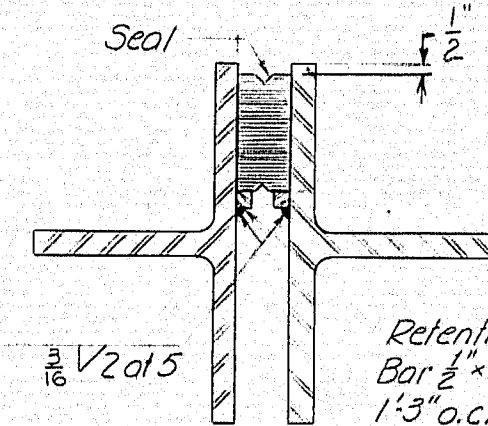
- Diaphragm connection plates may be either plumb or normal to the top flange.
- Armored joints shall extend to within 2 inches of the fascias.

#### REFERENCES

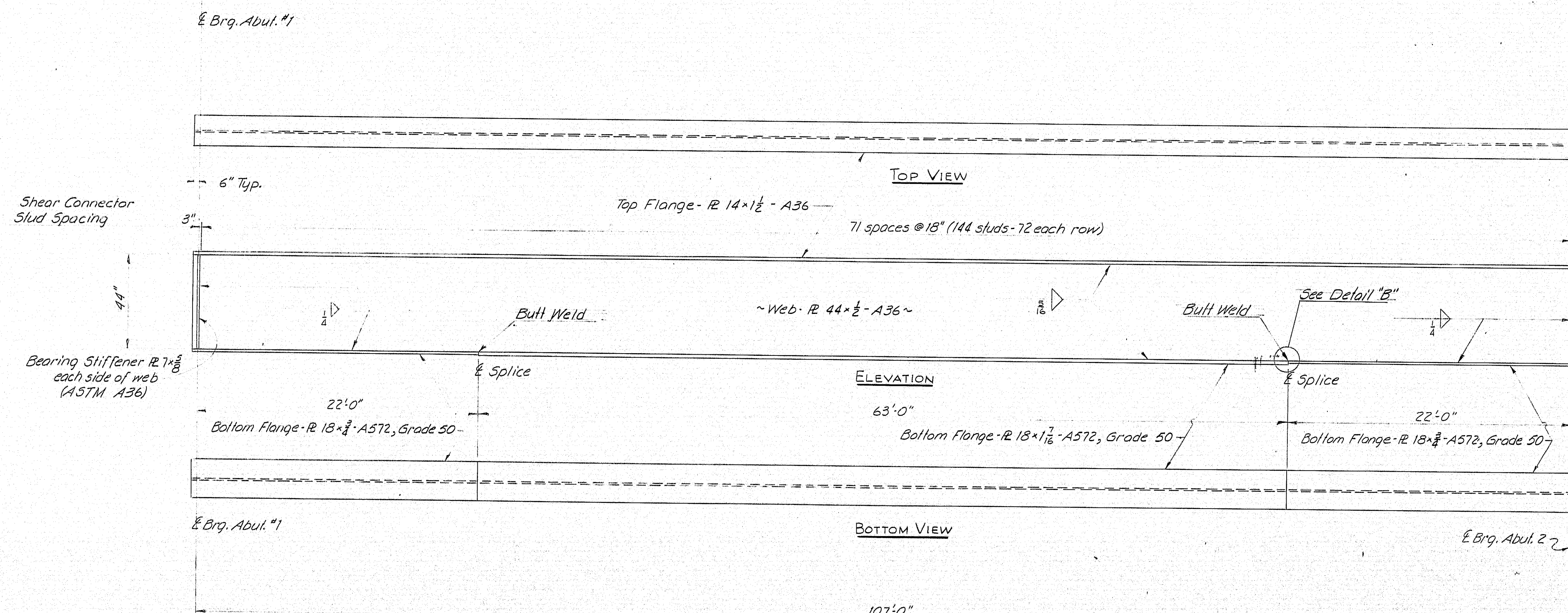
For Bearing Pedestals EPC-3 & FPC-2 see Standard Details (BD 101-74) sheet #36  
For Shear Connector Details & Armored Joint Details see Standard Details (BD 104-73) sheet #37  
For Diaphragm Details see Standard Details (BD 113-72) sheet #38



CAMBER DIAGRAM

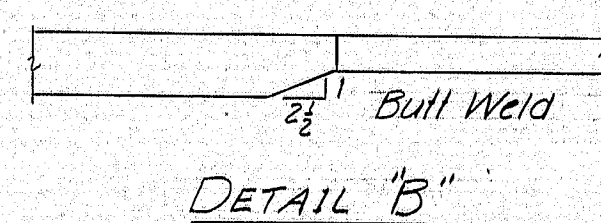


SEAL ARRANGEMENT  
(In Armored Joint)

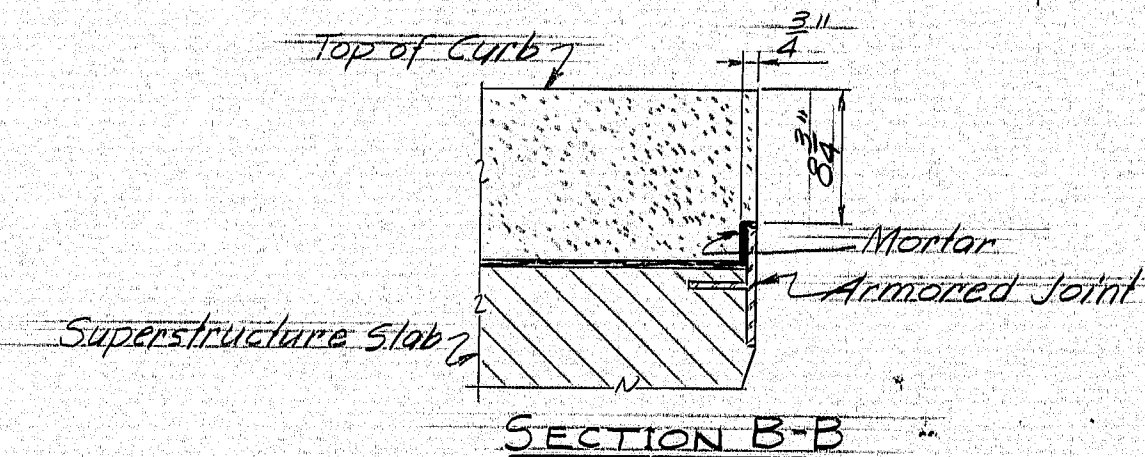


STRINGER DETAILS(S1-S5)

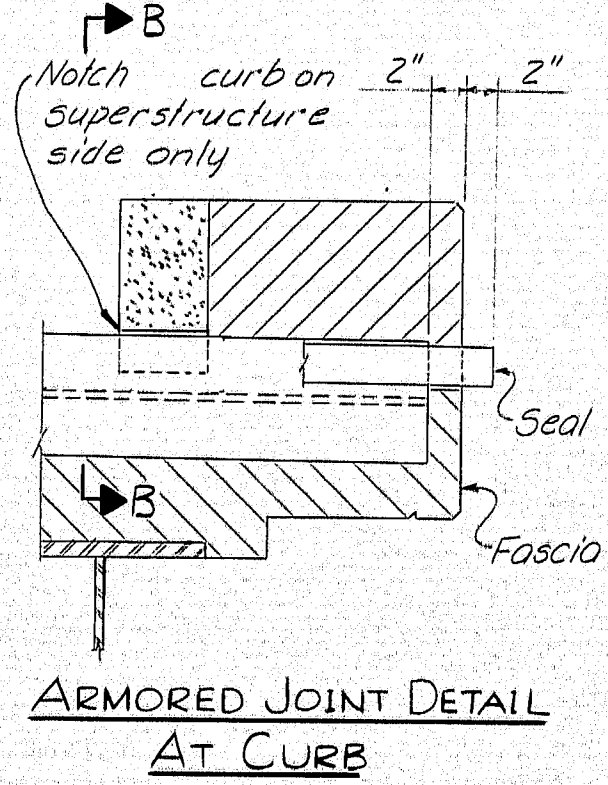
Studs per Stringer - 144  
Total Studs - 720



DETAIL "B"



SECTION B-B



ARMORED JOINT DETAIL  
AT CURB

PROJECT DESIGN ENGINEER	DATE
CDH	1-76
DESIGN - DETAILED	CHECKED
CDH	4-76
REVISIONS	FIELD CHANGES

STATE OF MAINE  
DEPARTMENT OF TRANSPORTATION

FRENCH ROAD BRIDGE

OVER

INTERSTATE 95-N.B.

IN THE TOWN OF

LUDLOW

AROOSTOOK COUNTY

STRUCTURAL STEEL

SHEET 31 OF 43 AUGUSTA, MAINE May, 1976

158-172



FHWA REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	1-95-9(64)289	34	43

GENERAL NOTES

- STATE OF MAINE
- 
- DEPARTMENT OF TRANSPORTATION

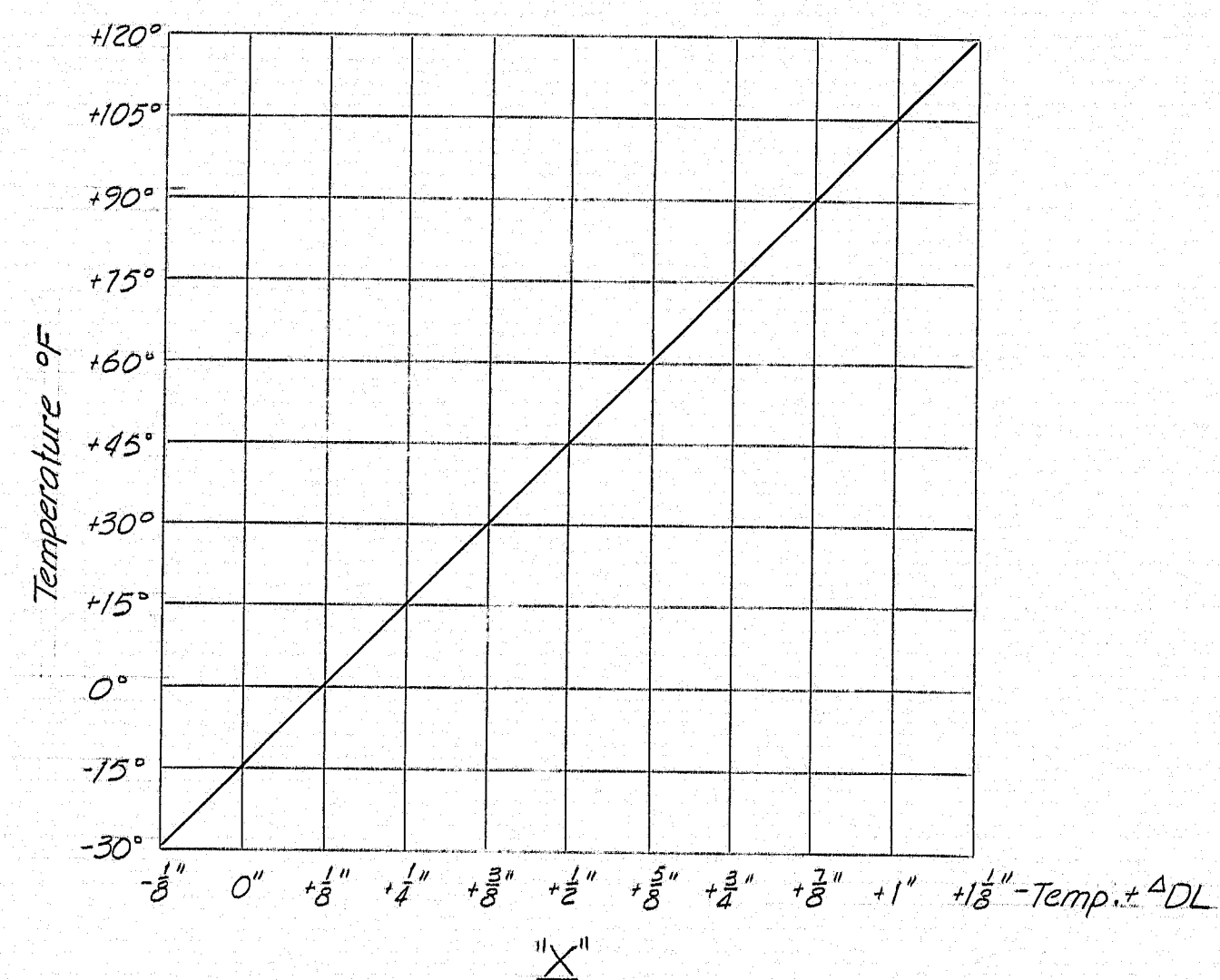
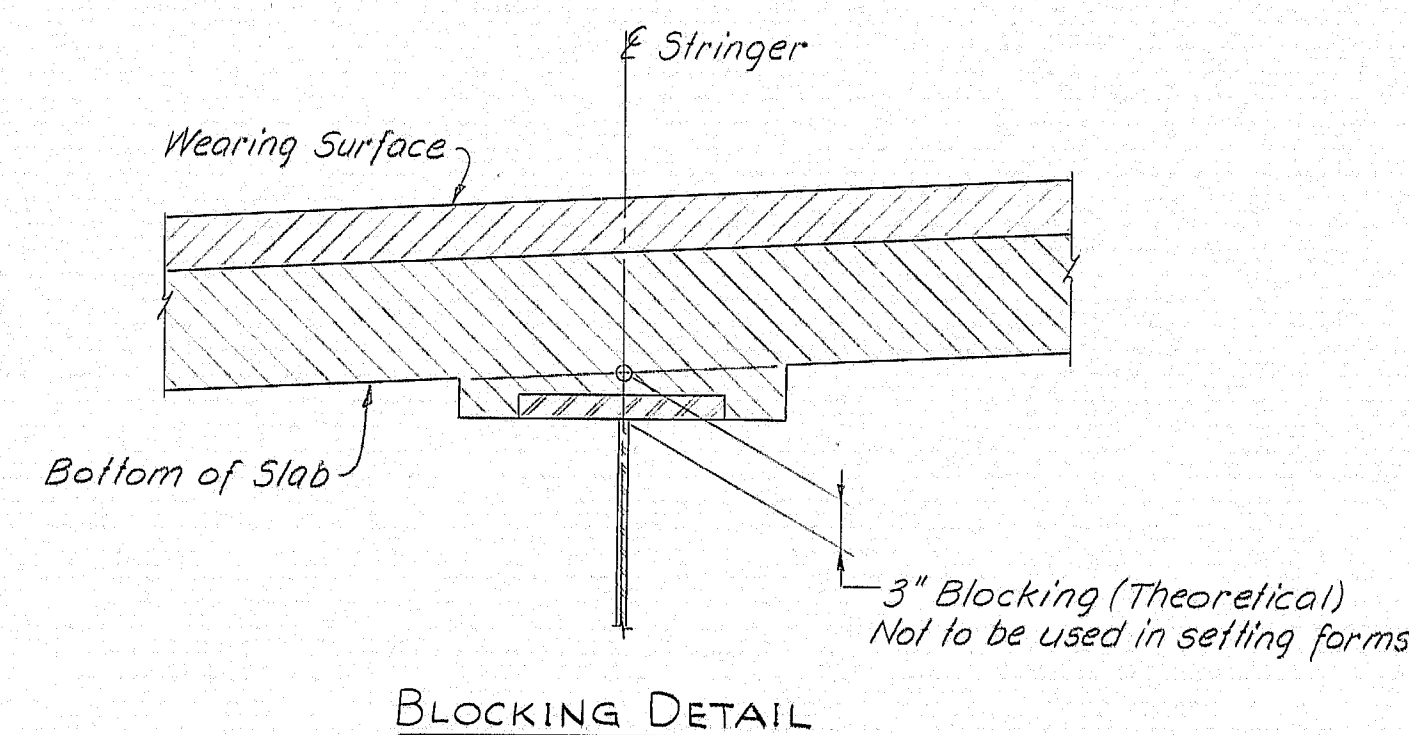
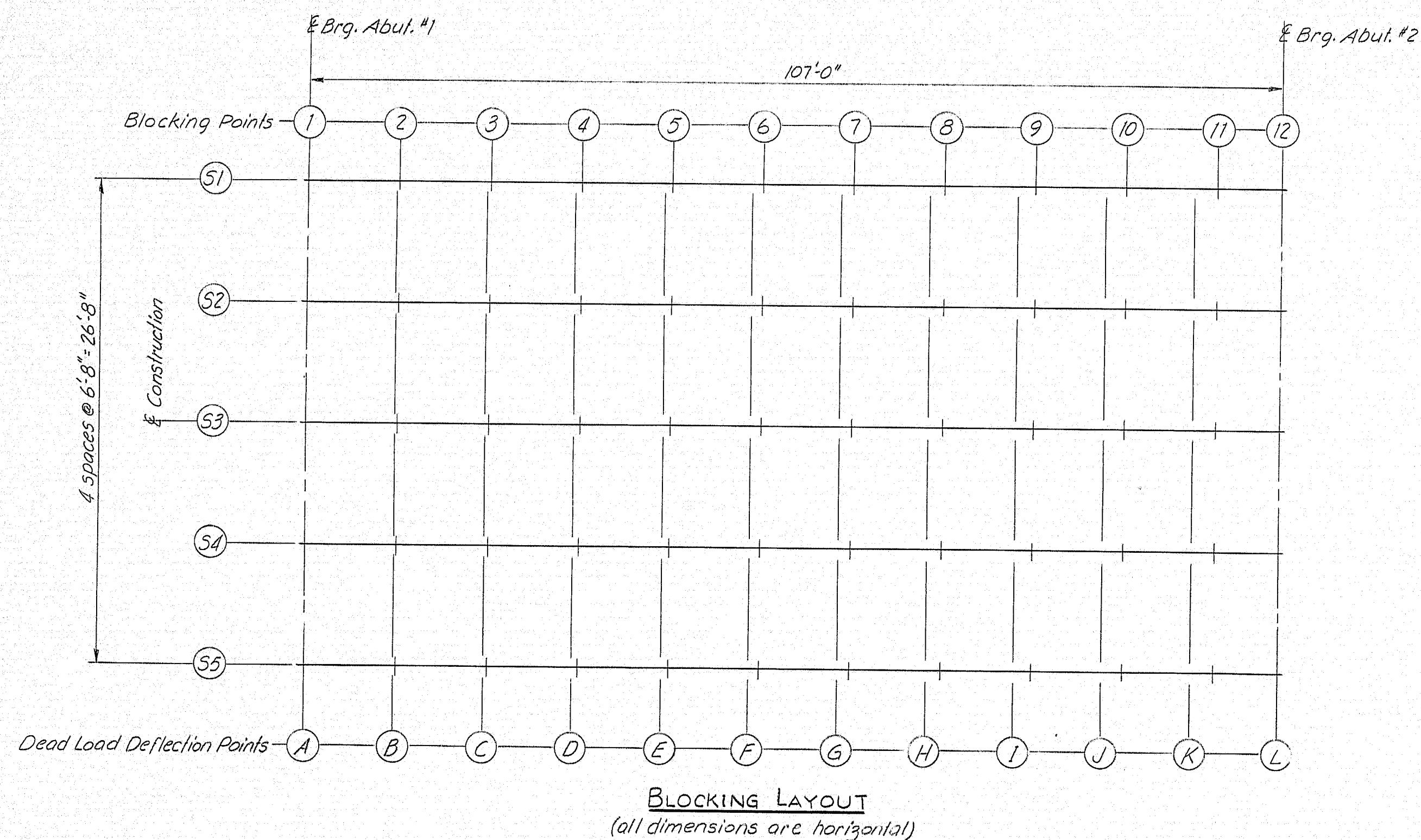
REINFORCING STEEL SCHEDULE  
SHEET 34 OF 43 AUGUSTA, MAINE MAY 1976

158-173

PLANS	Proj. Design Engineer CDH BY		DATE
	DESIGN - DETAIL	C.D.H.	4-76
	CHECKED	G.O.T.	4-76
	REVISIONS		
	FIELD CHANGES		



F.H.W.A. PROJ. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	1-95-9(64) 289	32	43

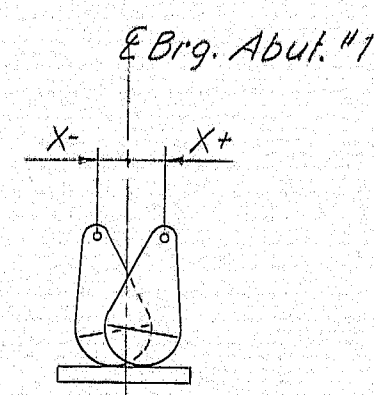


**ROCKER BEARING SETTING GRAPH**  
This table of bearing settings compensates for longitudinal movement due to temperature change and dead load deflection.

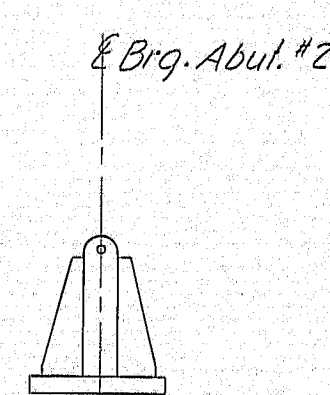
BOTTOM OF SLAB ELEVATIONS												
Span Points	1	2	3	4	5	6	7	8	9	10	11	12
Abut. #1	+10'	+20'	+30'	+40'	+50'	+60'	+70'	+80'	+90'	+100'	Abut. #2	
Stringers	S1 & S5	562.24	561.93	561.60	561.23	560.84	560.41	559.94	559.44	558.90	558.33	557.74
	S2 & S4	562.38	562.07	561.73	561.37	560.98	560.55	560.08	559.58	559.04	558.47	557.88
	S3	562.52	562.21	561.87	561.51	561.12	560.69	560.22	559.72	559.18	558.61	558.02

**NOTE:**  
Before taking elevations on the tops of the beams for purposes of setting bottom of slab elevations, the welding of shear connectors to the beams and the diaphragm connections to the beams shall have been completed.

DEAD LOAD DEFLECTIONS IN FEET												
Points	A	B	C	D	E	F	G	H	I	J	K	L
Abut. #1	+9'-0 3/8"	+19'-5 1/2"	+29'-2 1/4"	+38'-10 3/8"	+48'-7 3/8"	+58'-4 3/8"	+68'-1 1/8"	+77'-9 3/8"	+87'-6 3/8"	+97'-3 3/8"	Abut. #2	
Superimp.	0.000	0.022	0.042	0.058	0.069	0.074	0.074	0.069	0.058	0.042	0.022	0.000
Steel	0.000	0.022	0.042	0.058	0.069	0.074	0.074	0.069	0.058	0.042	0.022	0.000
Fluid	0.000	0.067	0.127	0.174	0.208	0.225	0.225	0.208	0.174	0.127	0.067	0.000



**ROCKER BEARING SETTING DIAGRAM**



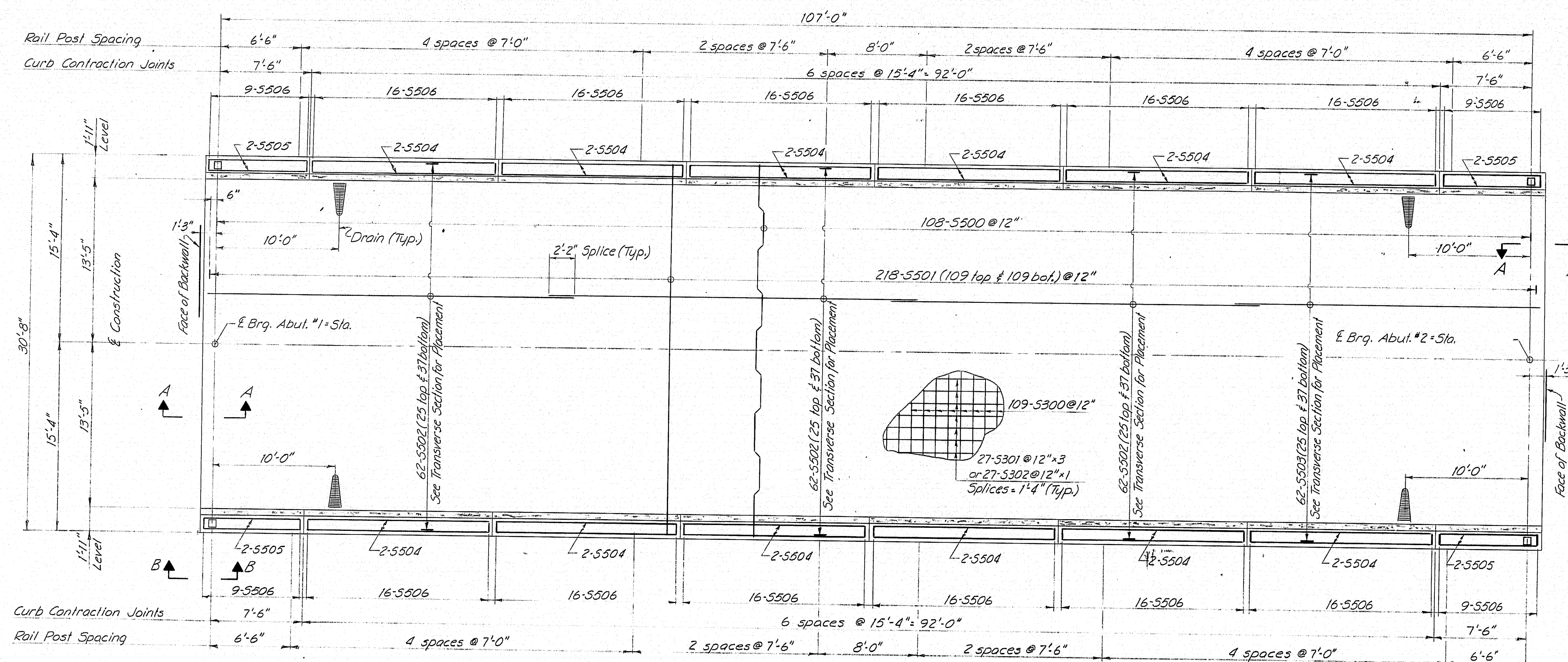
**NOTE:**  
Rocker setting data as shown shall be used as a guide only. No extra payment will be made for resettling of the rocker bearings, subsequent to the original setting, made by the contractor as required by the Engineer to make the rocker settings conform with paragraph four (4) of Subsection 504.58.

STATE OF MAINE DEPARTMENT OF TRANSPORTATION
FRENCH ROAD BRIDGE OVER INTERSTATE 95-N.B. IN THE TOWN OF LUDLOW AROOSTOOK COUNTY
BLOCKING SHEET 32 OF 43 AUGUSTA, MAINE

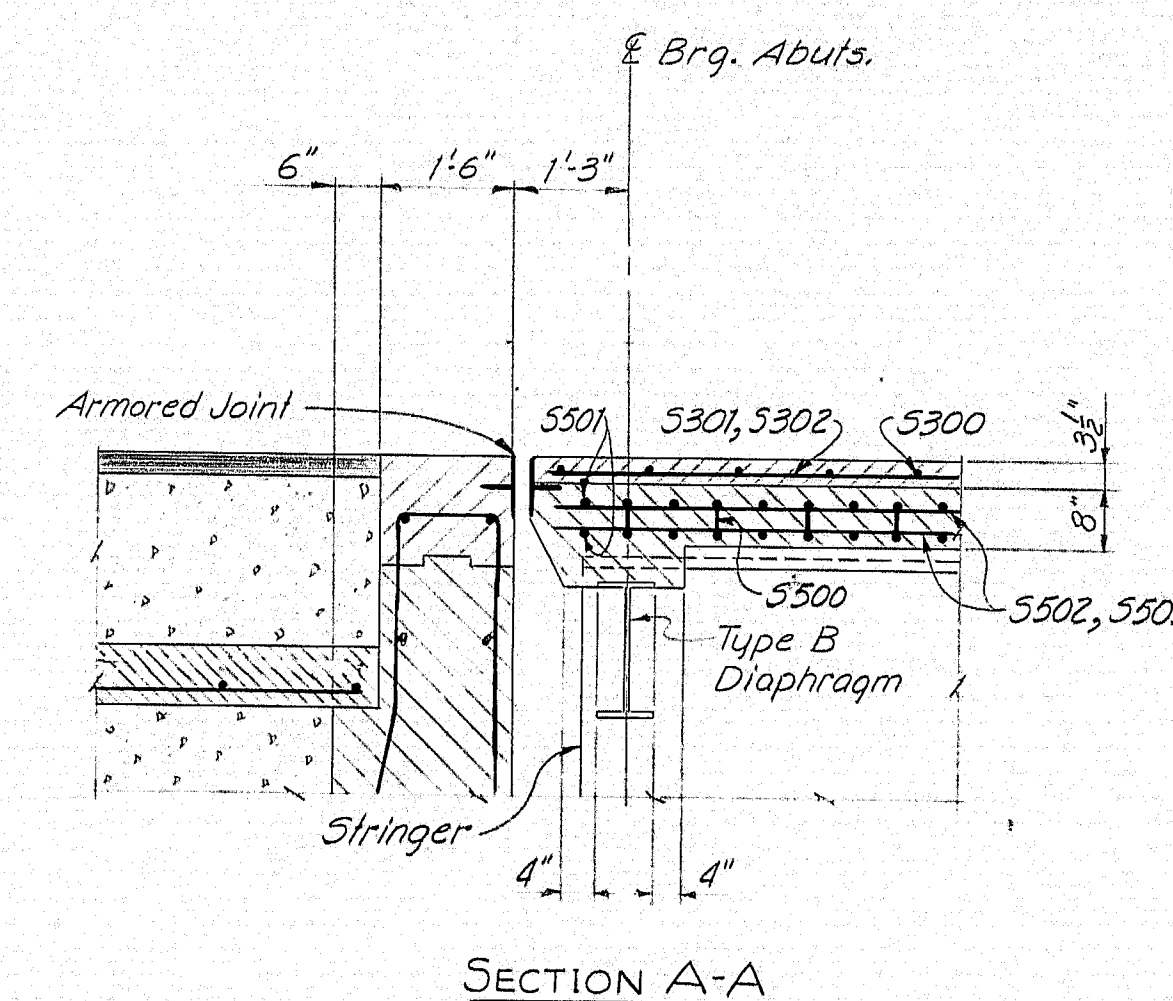
158-174



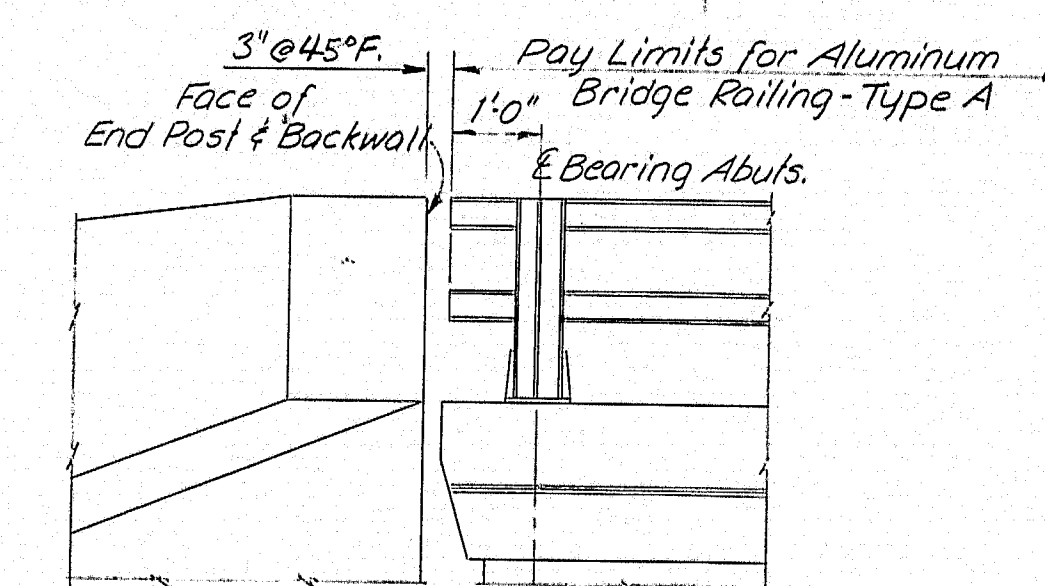
P.R.W.A. SHEET NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	1-95-9(64)289	332	43



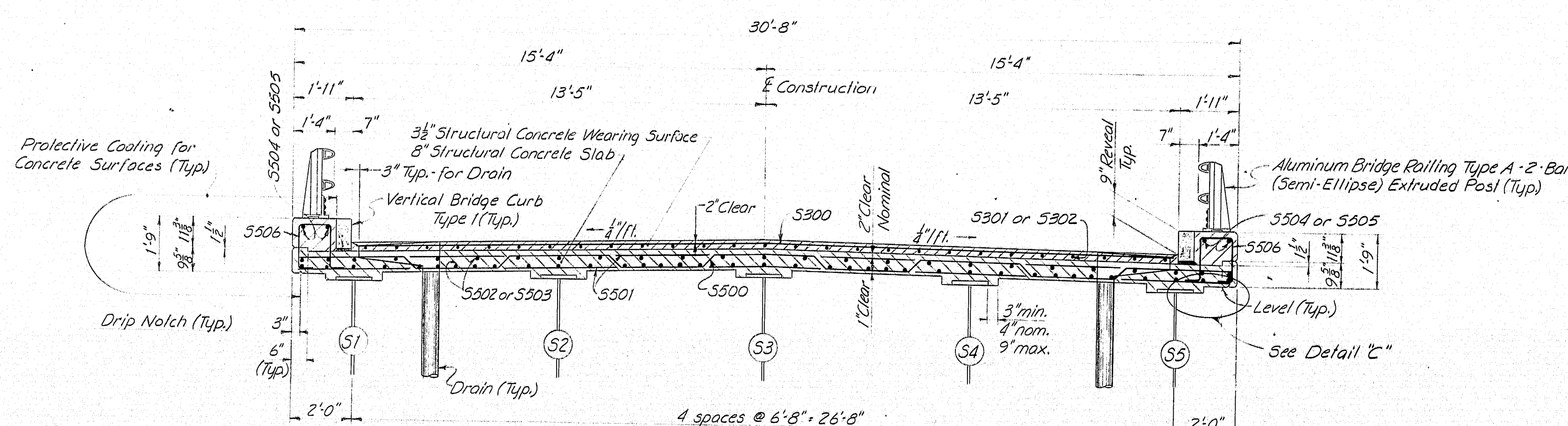
SUPERSTRUCTURE PLAN



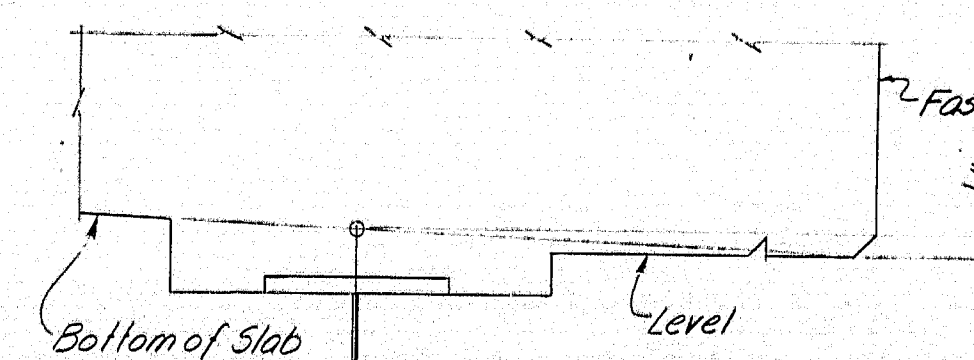
SECTION A-A



ELEVATION VIEW B-B  
(Typical all 4 corners)



TRANSVERSE SECTION



DETAIL 'C'

# REFERENCES

For Armored Joint, Drains and Curb Section see Standard Details (BD 104-73) sheet # 37  
For Aluminum Bridge Railing-Type A see Standard Details (BD 114-73) sheet # 39

# SUPERSTRUCTURE NOTES

1. Chamfer all exposed edges of concrete  $\frac{1}{2}$  inch unless otherwise indicated.
2. Form a 1 inch V-groove on the outside faces of each contraction joint in the curbs and at the joint between the curb and slab.
3. Break the bond in contraction joints in the concrete curbs by a method approved by the Engineer.
4. Provide joints in the Vertical Bridge Curb, Type 1 at each contraction joint in the concrete curb.
5. Reinforcing steel shall have a minimum cover of 2 inches unless otherwise indicated.
6. Reinforcing steel splices shall be as indicated on the plans.
7. Mortar for bedding and for joints in the granite curb shall be non-shrink grout.
8. The superstructure slab concrete shall be placed continuously.
9. Protective Coating for Concrete Surfaces shall be applied to the following areas: Top of concrete curbs, fascia down to the drip notch and the wearing surface.

STATE OF MAINE  
DEPARTMENT OF TRANSPORTATION

FRENCH ROAD BRIDGE

OVER

INTERSTATE 95-N.B.

IN THE TOWN OF

LUDLOW

AROOSTOOK COUNTY

SUPERSTRUCTURE

SHEET 33 OF 43 AUGUSTA, MAINE May, 1976

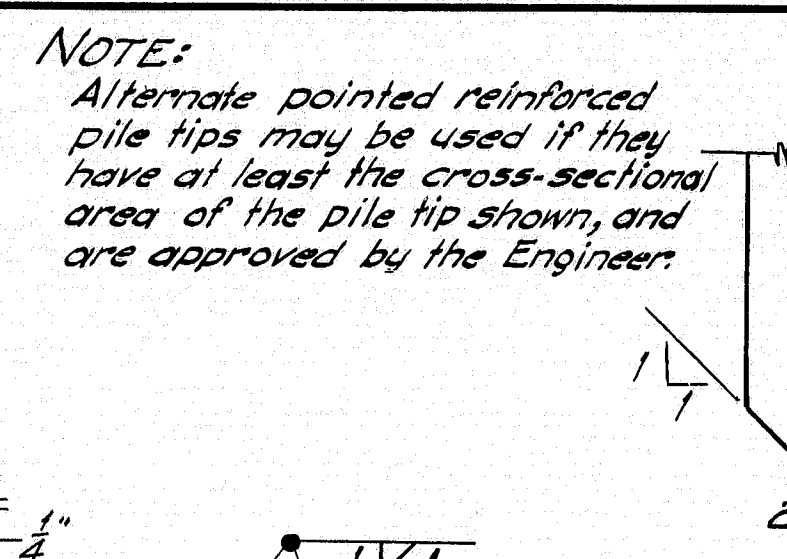
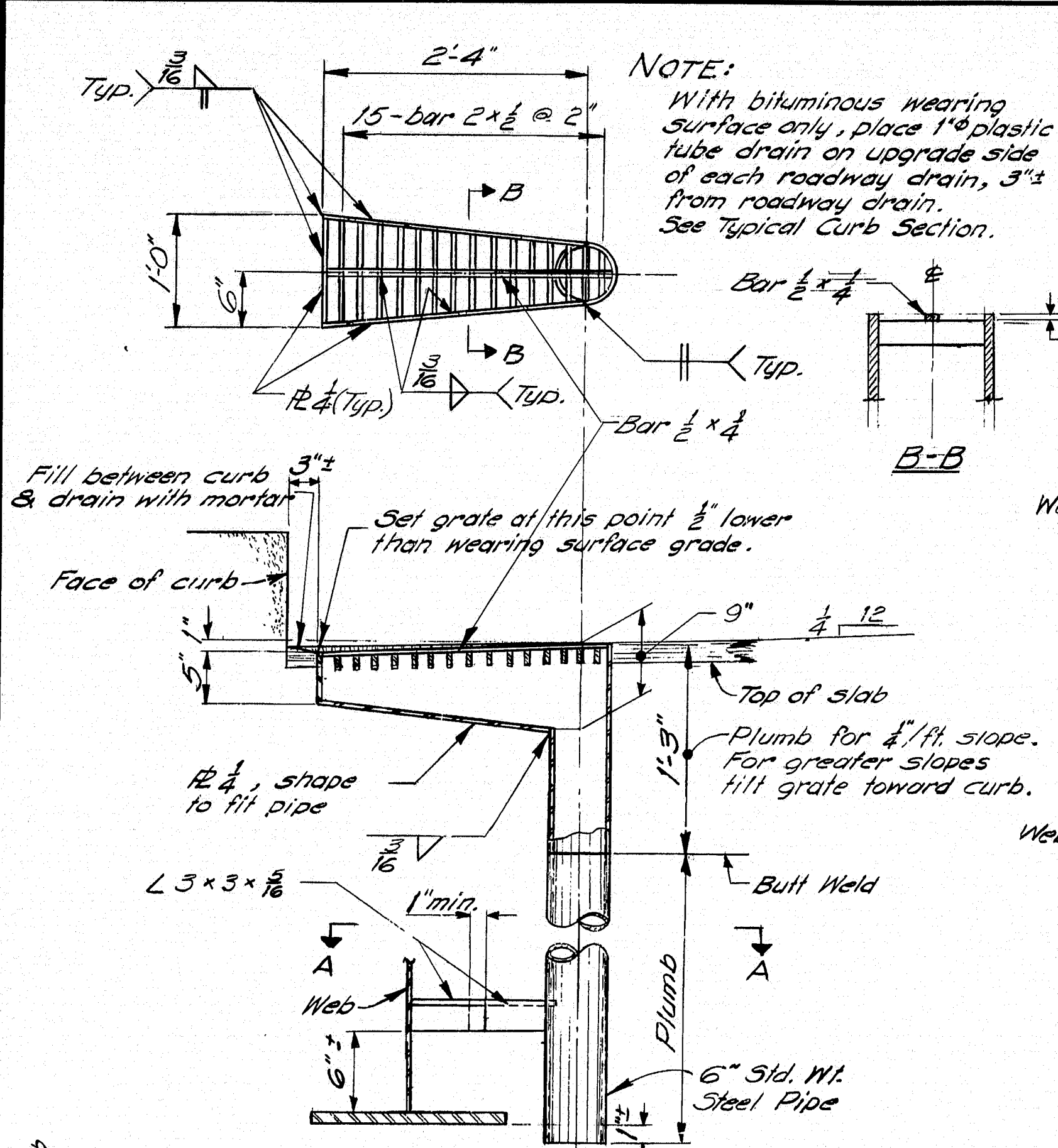
158-176

PROJECT DESIGN ENGINEER	CDH	BY	DATE
DESIGN - DETAILED		C.D.H.	1-76
CHECKED		R.C.B.	
REVISIONS		G.O.T.	4-76
FIELD CHANGES			







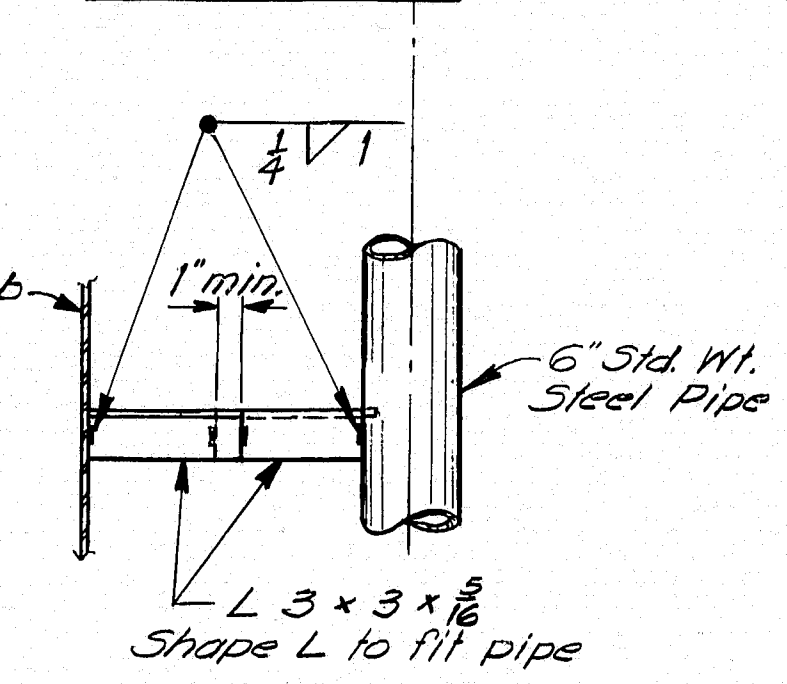


**POINTED REINFORCED PILE TIP**

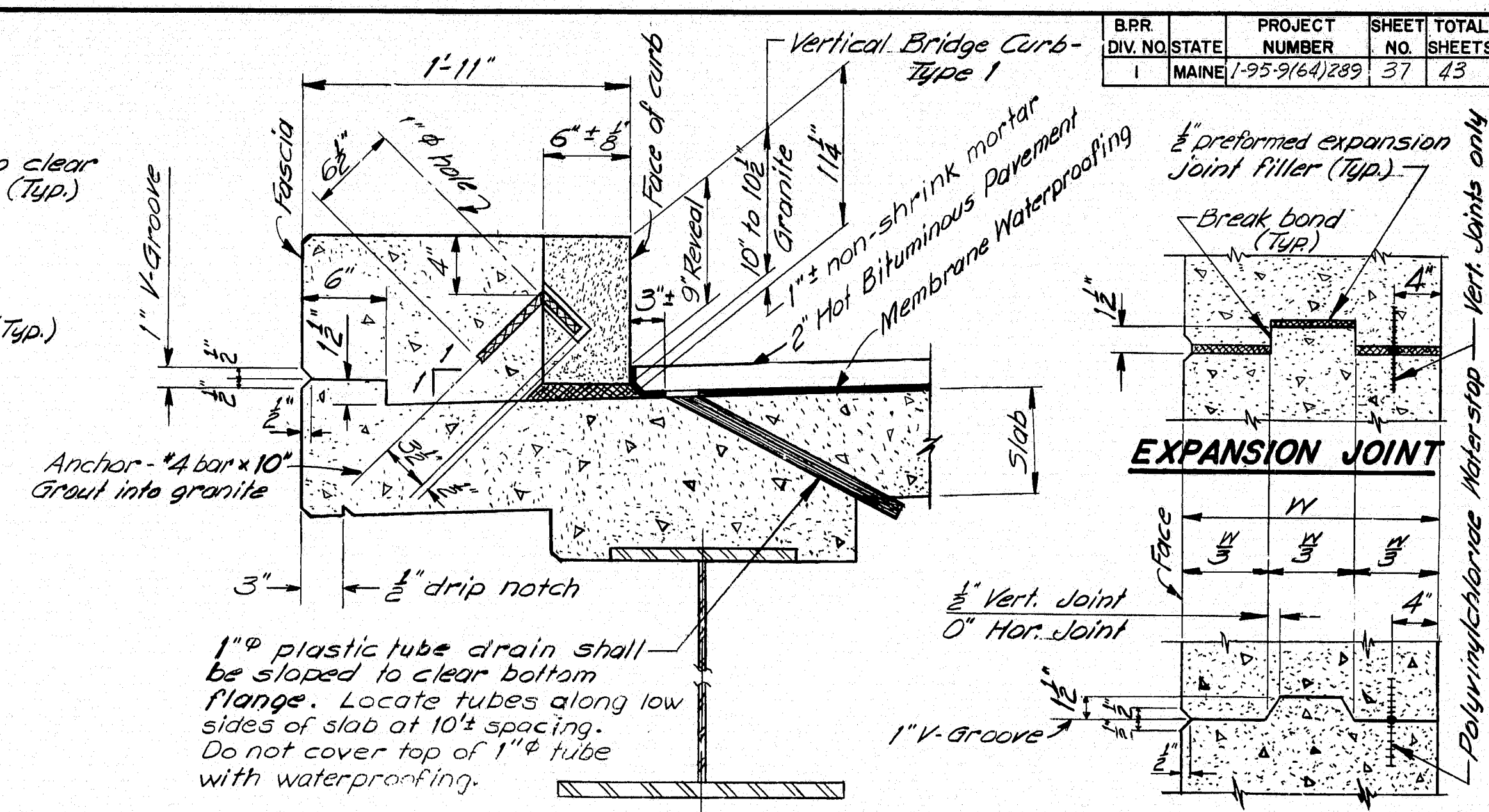
NOTE: Plates may be shop or field welded

PILE SIZE	REINFORCING SIZE
HP 10 x 42	8 # 3/8 x 1'-0"
HP 10 x 57	8 # 3/8 x 1'-0"
HP 12 x 53	10 # 3/8 x 1'-0"
HP 12 x 74	10 # 3/8 x 1'-0"
HP 14 x 73	12 # 3/8 x 1'-0"
HP 14 x 89	12 # 3/8 x 1'-0"

**SECTION A-A**



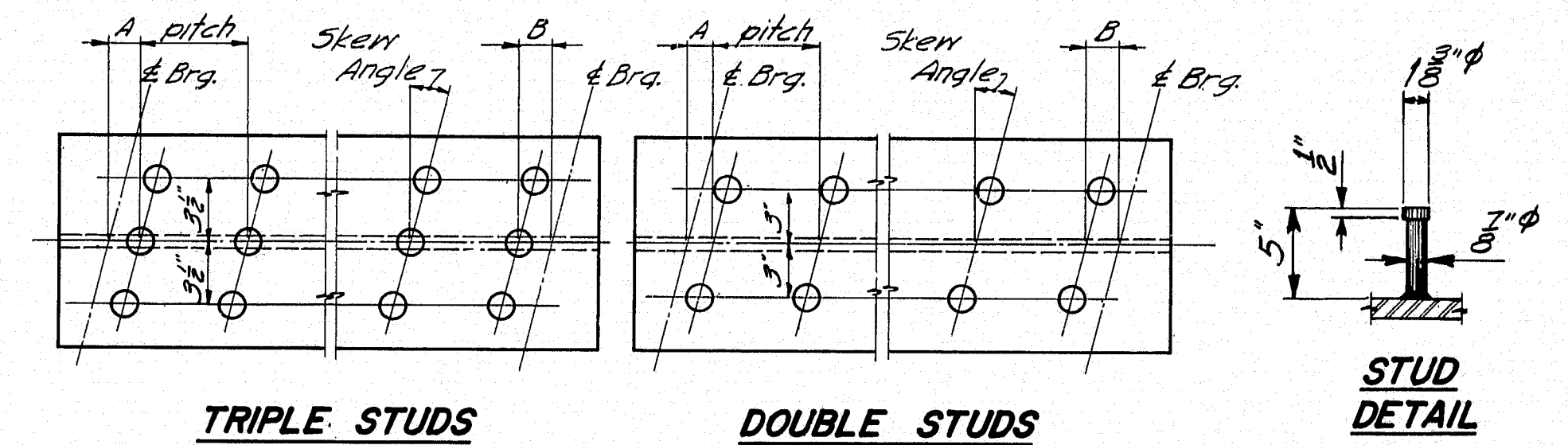
**POLYVINYLCHLORIDE WATERSTOP**



**CURB SECTION**

(Hot Bituminous Pavement only)

**CONSTRUCTION & CONTRACTION JOINTS**



**TRIPLE STUDS**

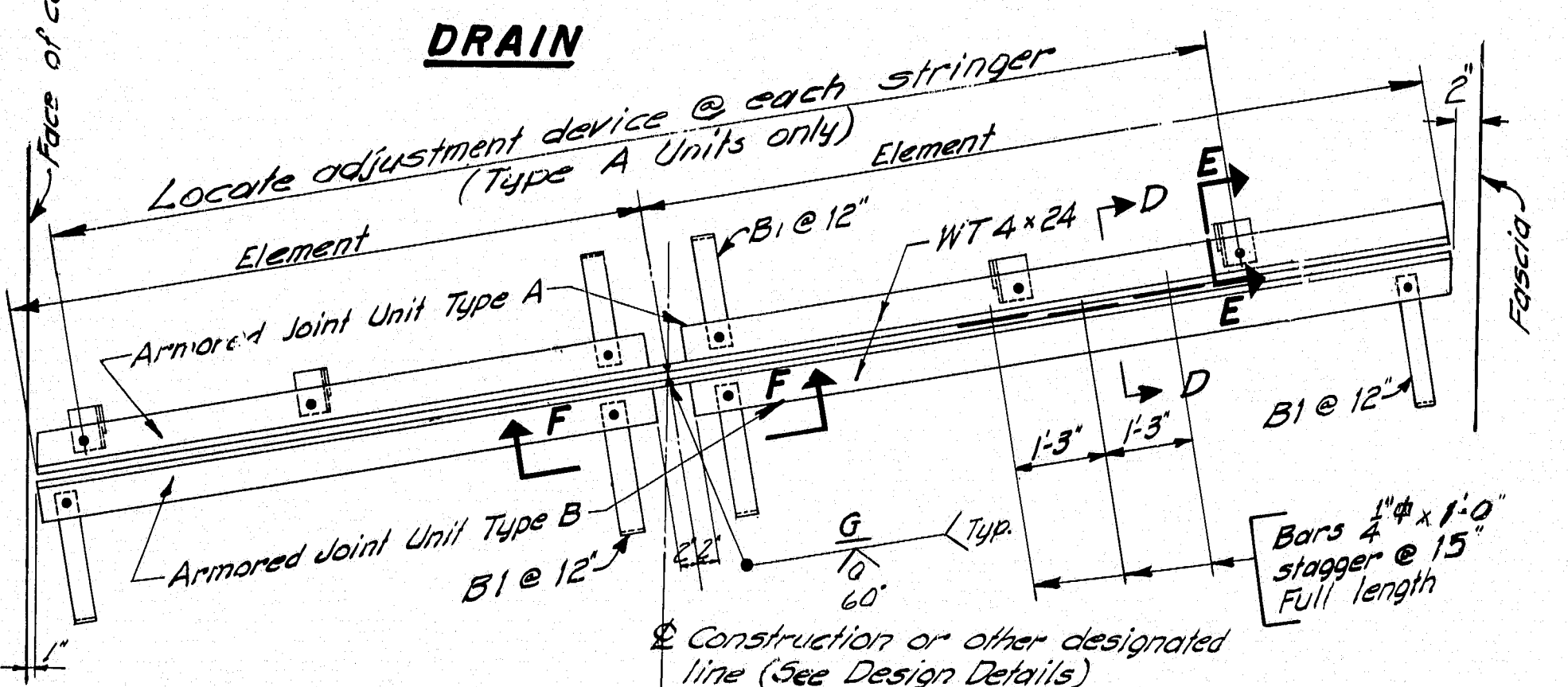
**DOUBLE STUDS**

**STUD DETAIL**

- NOTE**
1. Studs shall be granular or solid flux filled and automatically end welded to top flange in the shop or field.
  2. See the design details for Dimensions "A" & "B", stud pitch and skew angle for studs.

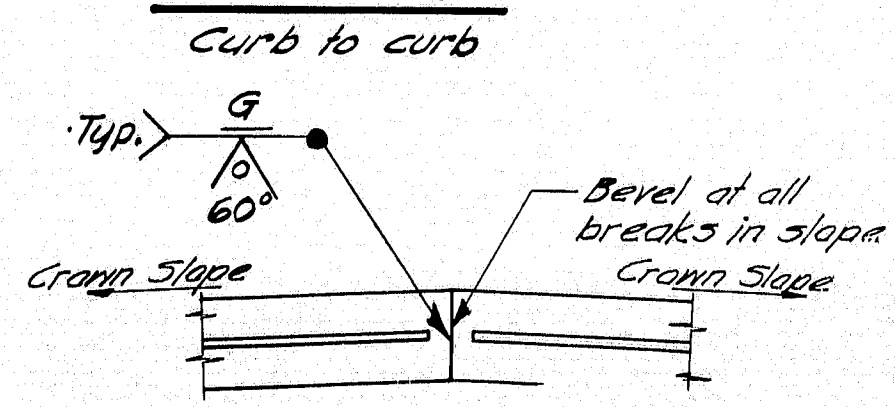
**SHEAR CONNECTORS**

- NOTE**
- Use only those items called for on design details. In case of conflict between these Standard Details and design details, the requirements of the design details shall be followed. Drains to be incidental, see sub-section 502.20



**DRAIN**

**HALF PLAN**



**HALF PLAN**

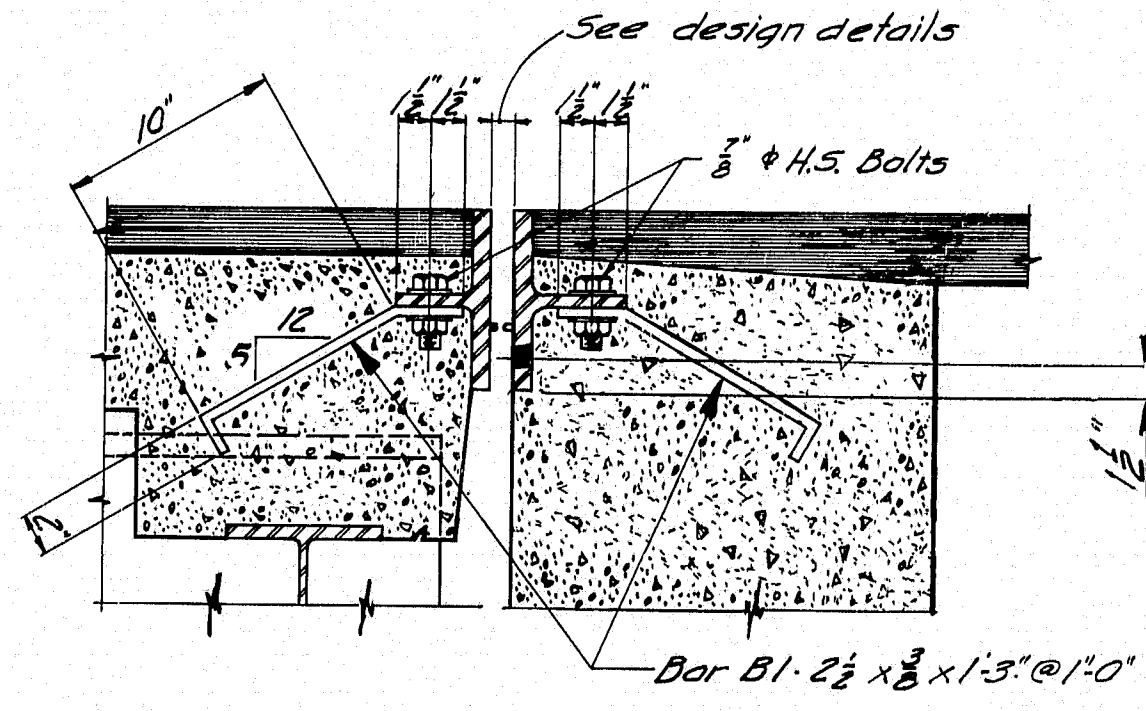
Fascia to fascia

**NOTE**

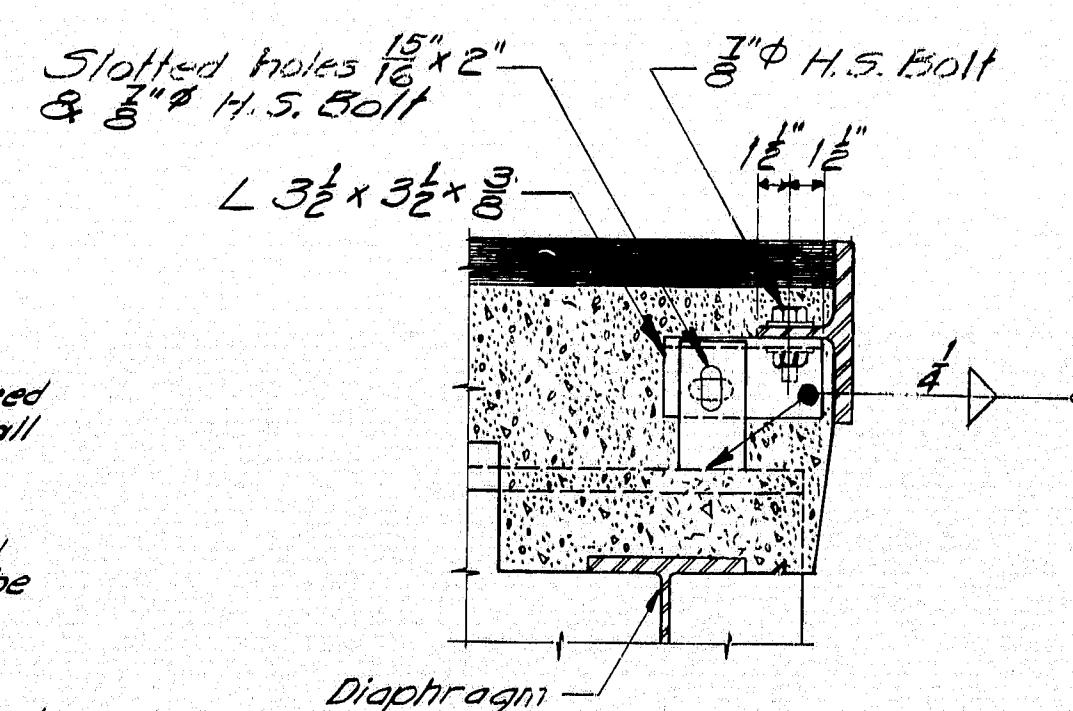
1. Type A Armored Joint Units are intended to be used for attachment to superstructures. Type B Armored Joint Units are intended to be used for attachment to abutments. At armored joints over piers, two (2) Type A Armored Joint Units shall be used.
2. When more elements than two (2) are required by the design details, the elements of both units shall be field welded together in the same manner as shown in Section F-F.
3. Armored Joints to be paid for as Structural Steel.

**ARMORED JOINT**

An armored joint consists of two armored joint units. See note 1.

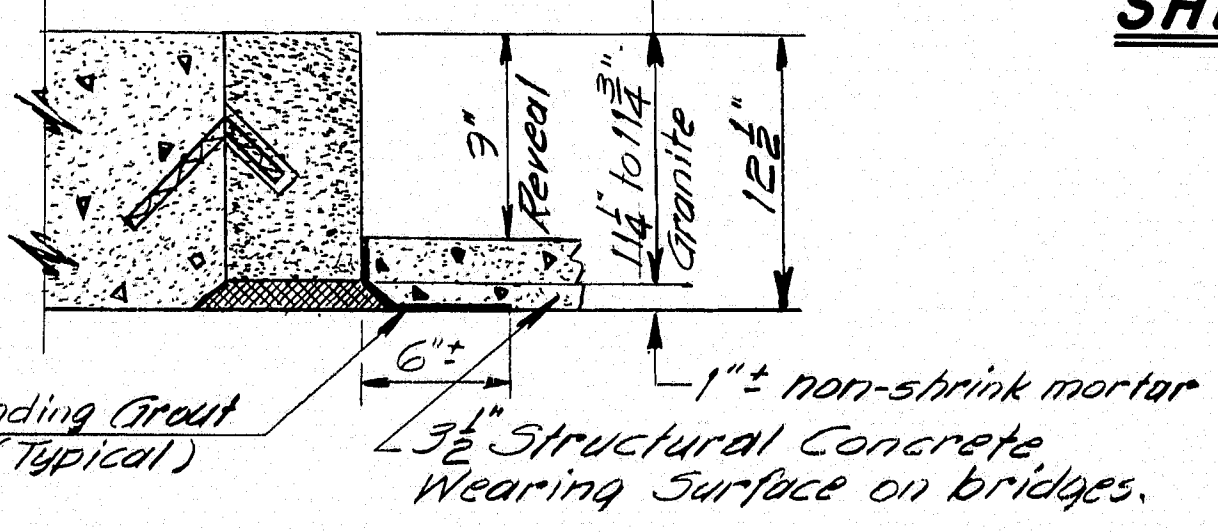


**SECTION D-D**



**SECTION E-E**

Shoring Adjustment Device Armored Joint Unit Type A only After Unit is in final position weld bar to angle with 1/2 fillet



**CURB SECTION**

(Structural Concrete Wearing Surface)

**CONSTRUCTION JOINT**

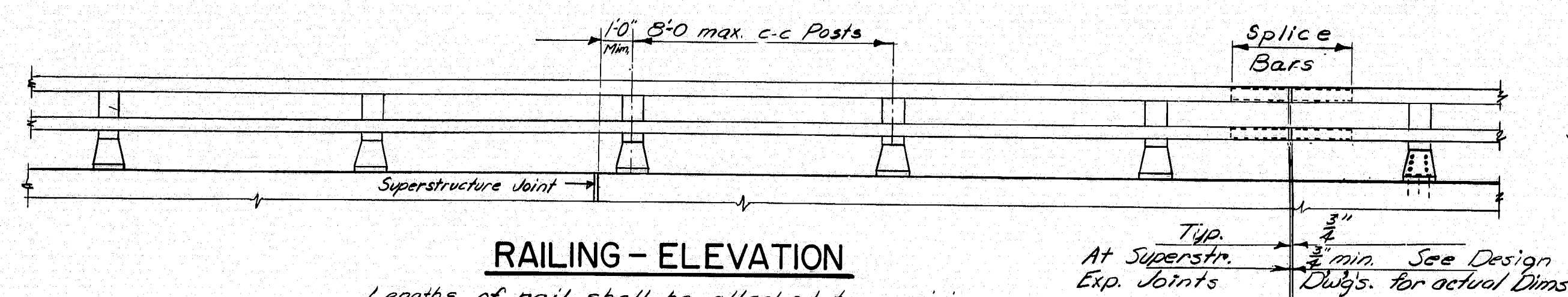
(Typical for concrete wear surf.)





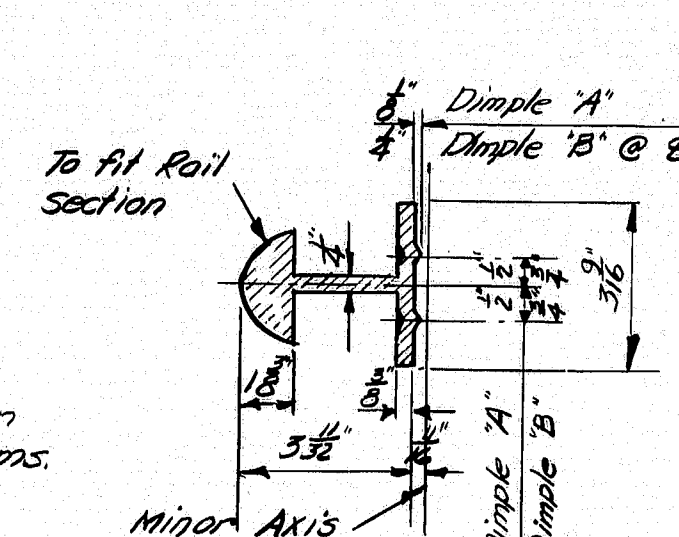


DESIGN SPECIFICATIONS  
A.A.S.H.O. Standard Specifications for  
Highway Bridges 1969 and  
Interim Specifications.

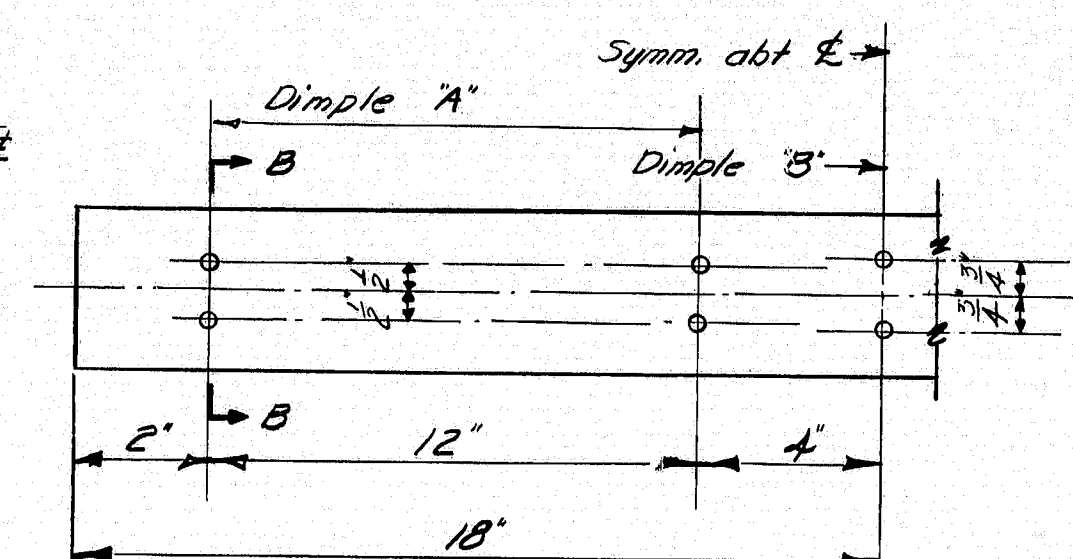


RAILING - ELEVATION

Lengths of rail shall be attached to a minimum of four (4) rail posts wherever possible, and in any case never less than two (2). Rail posts are to be set normal to grade unless otherwise shown on the Bridge Plans.

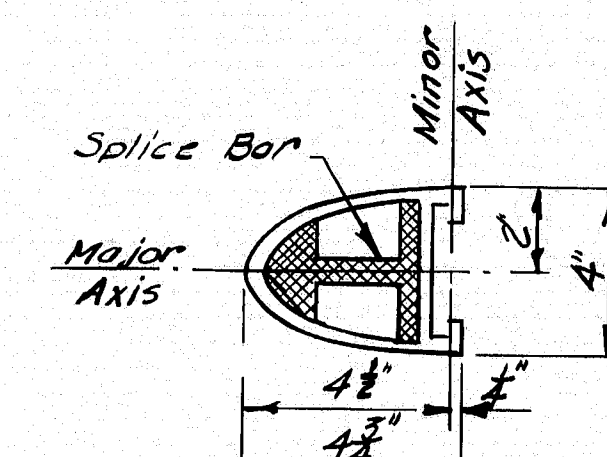


SECTION B-B

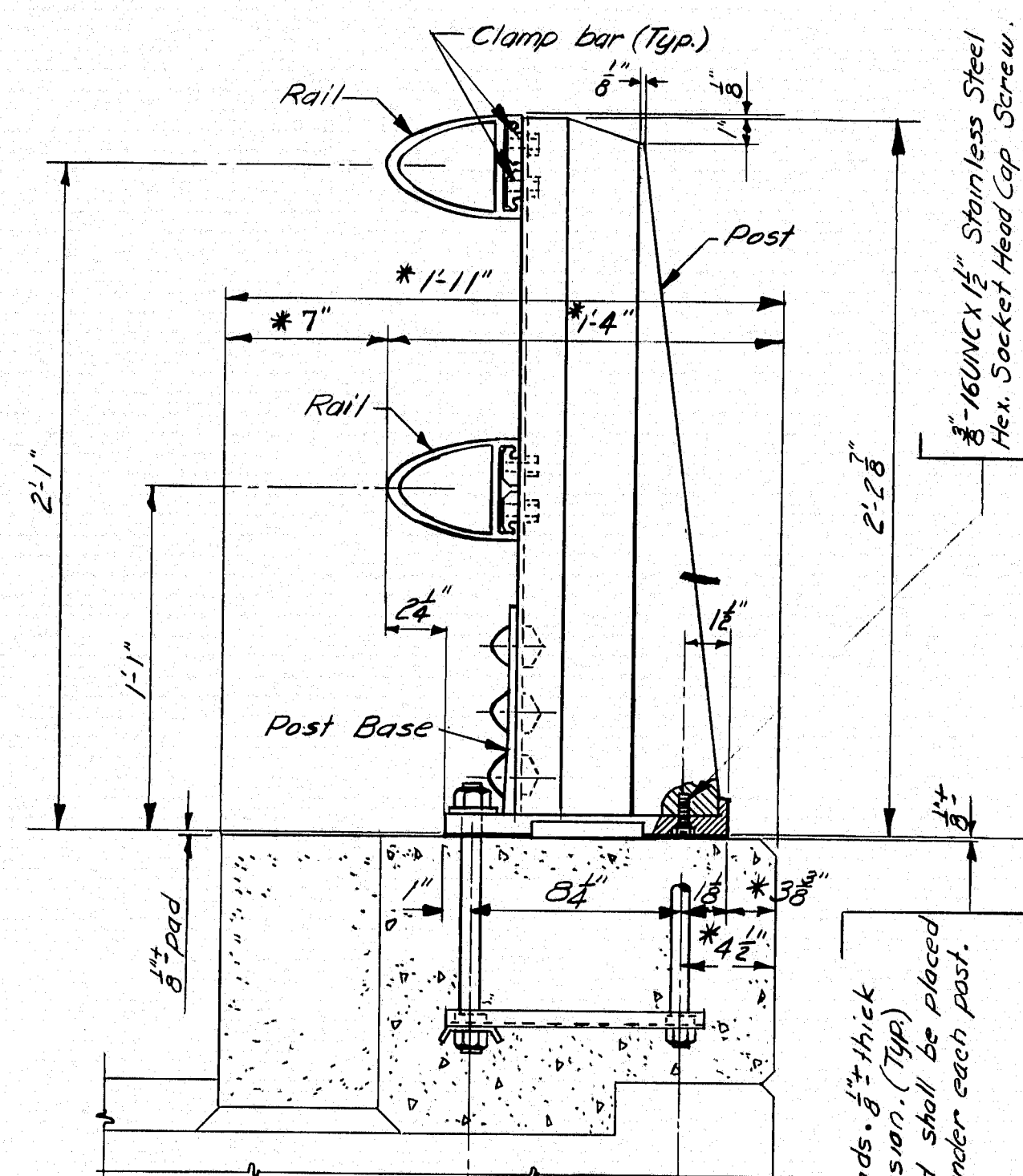


SPLICE BAR

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

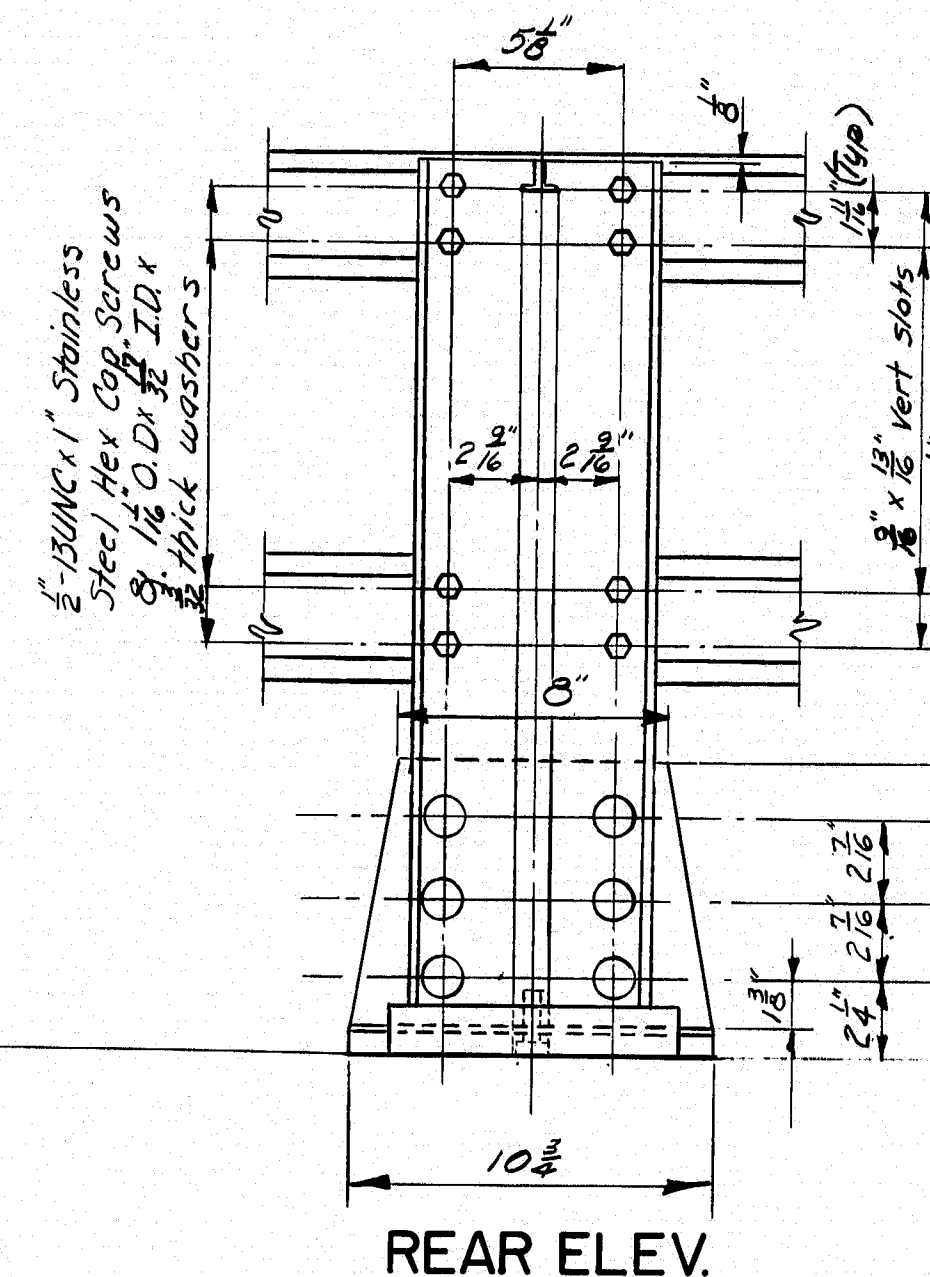


RAIL SECTION  
see "Rail Detail"

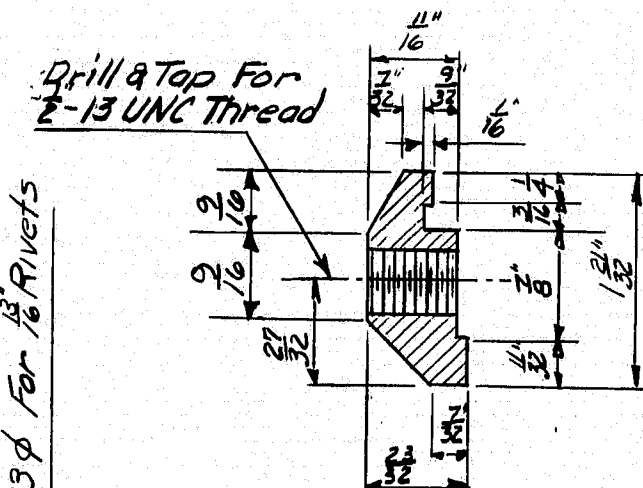


## BRIDGE RAILING

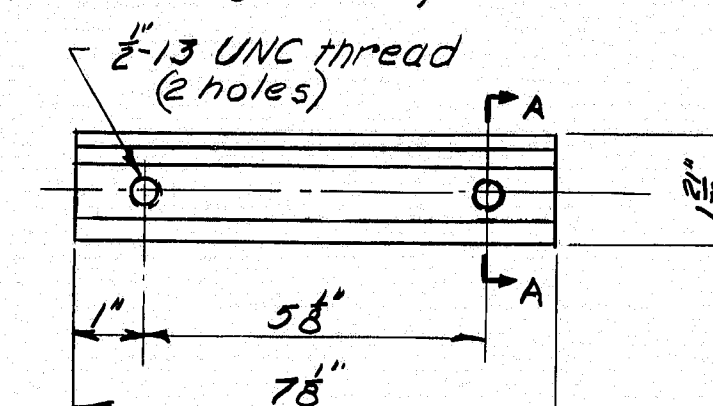
\* Preferable minimum dimensions. For actual dimensions see Bridge Plan.



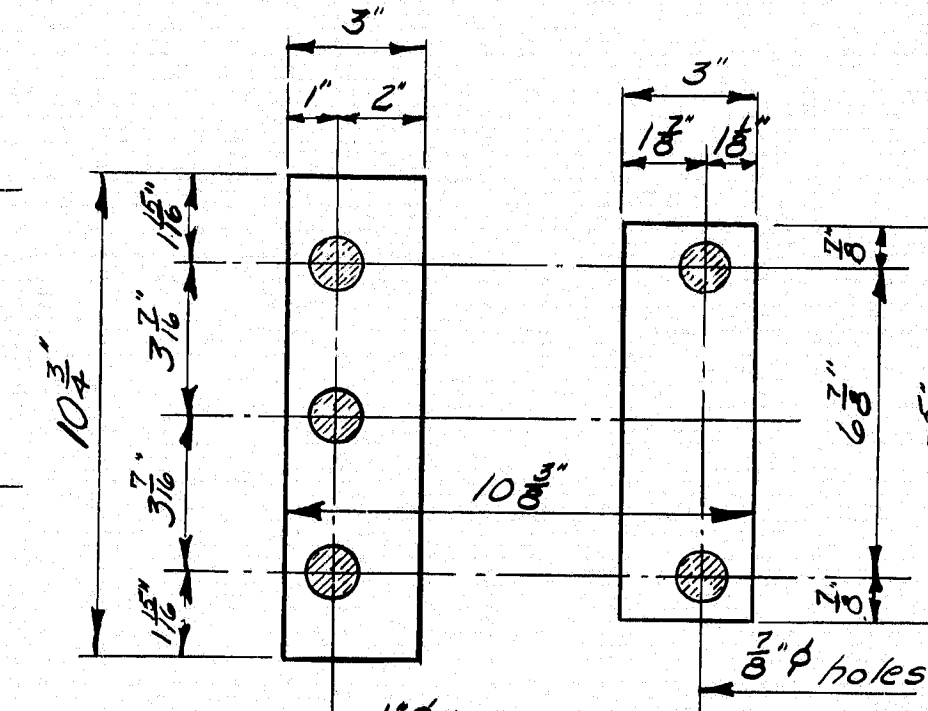
REAR ELEV.



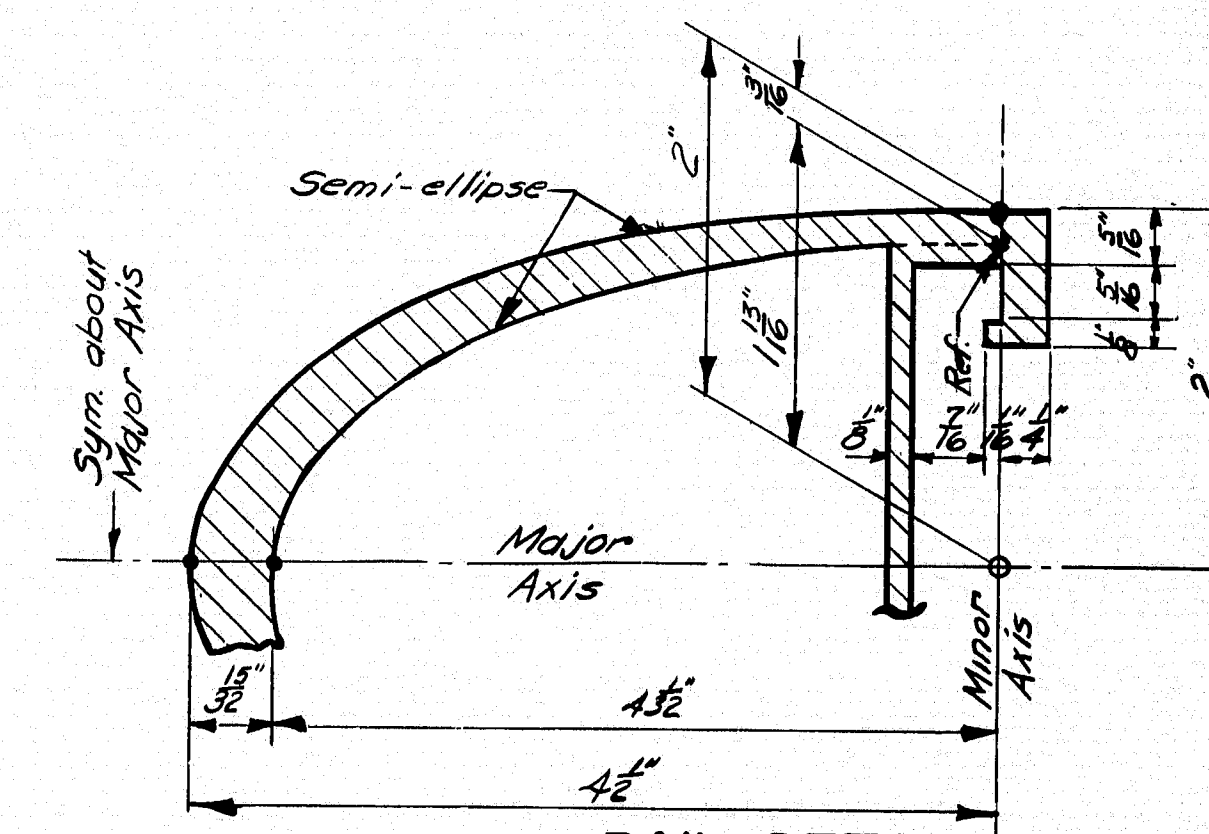
SECTION A-A



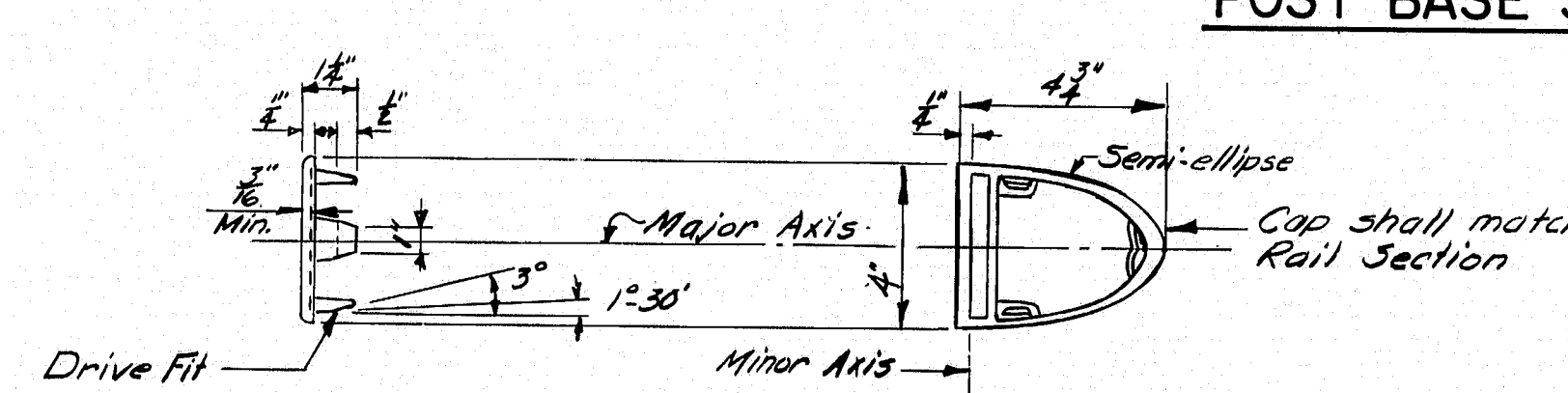
CLAMP BAR



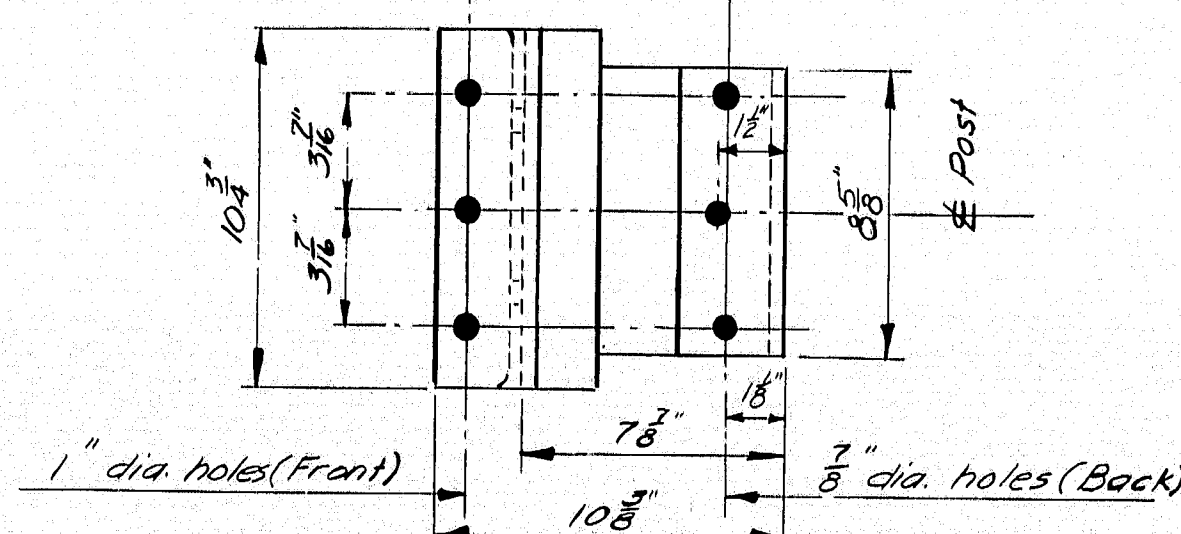
**PREFORMED PADS**



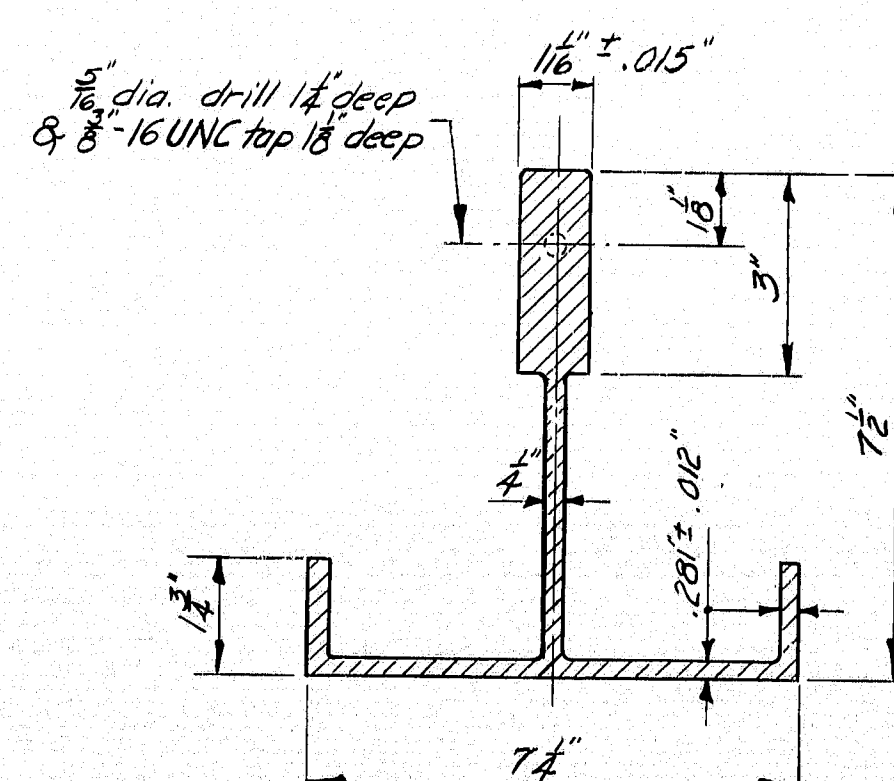
### RAIL DETAIL



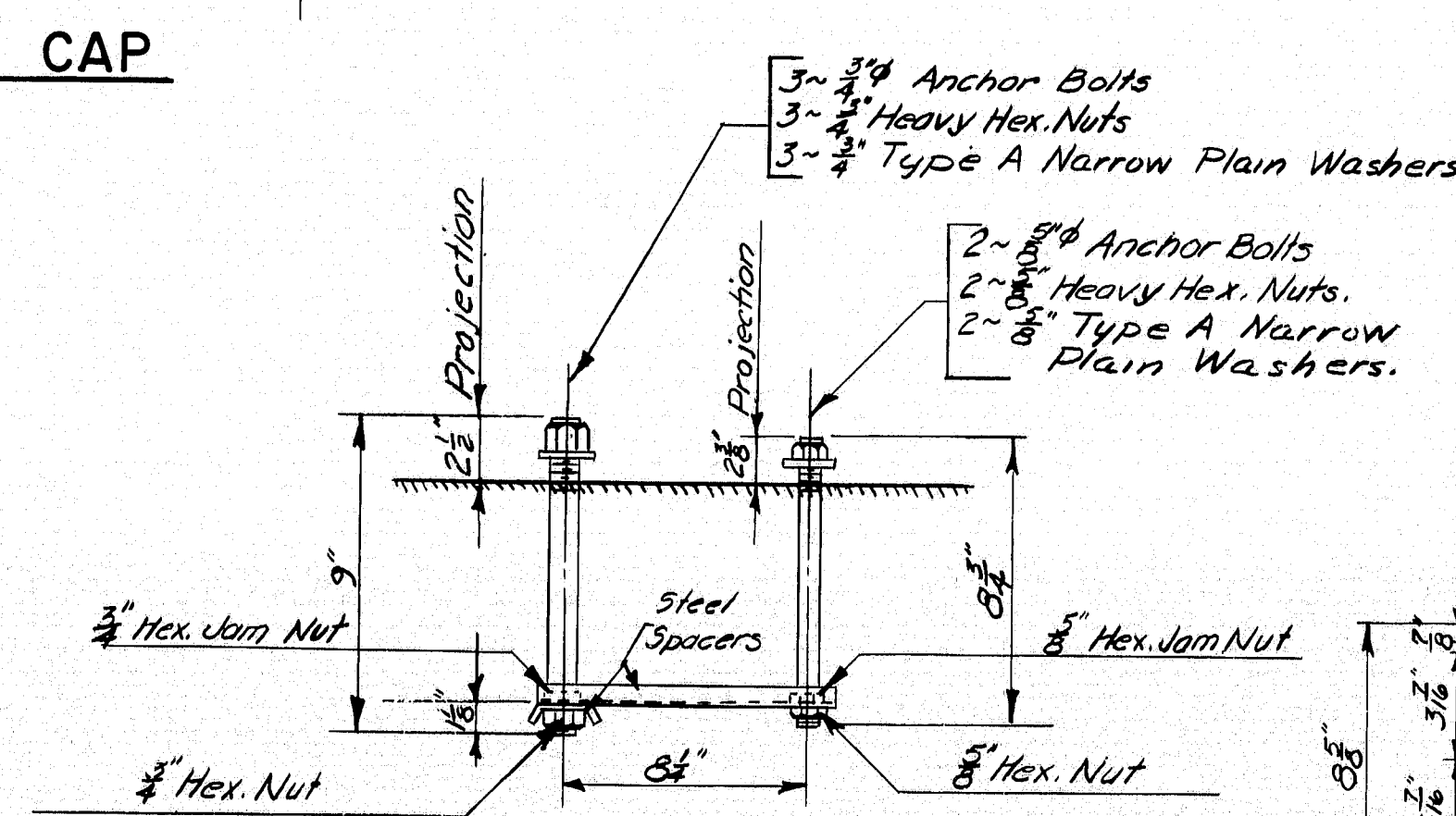
RAIL CAP



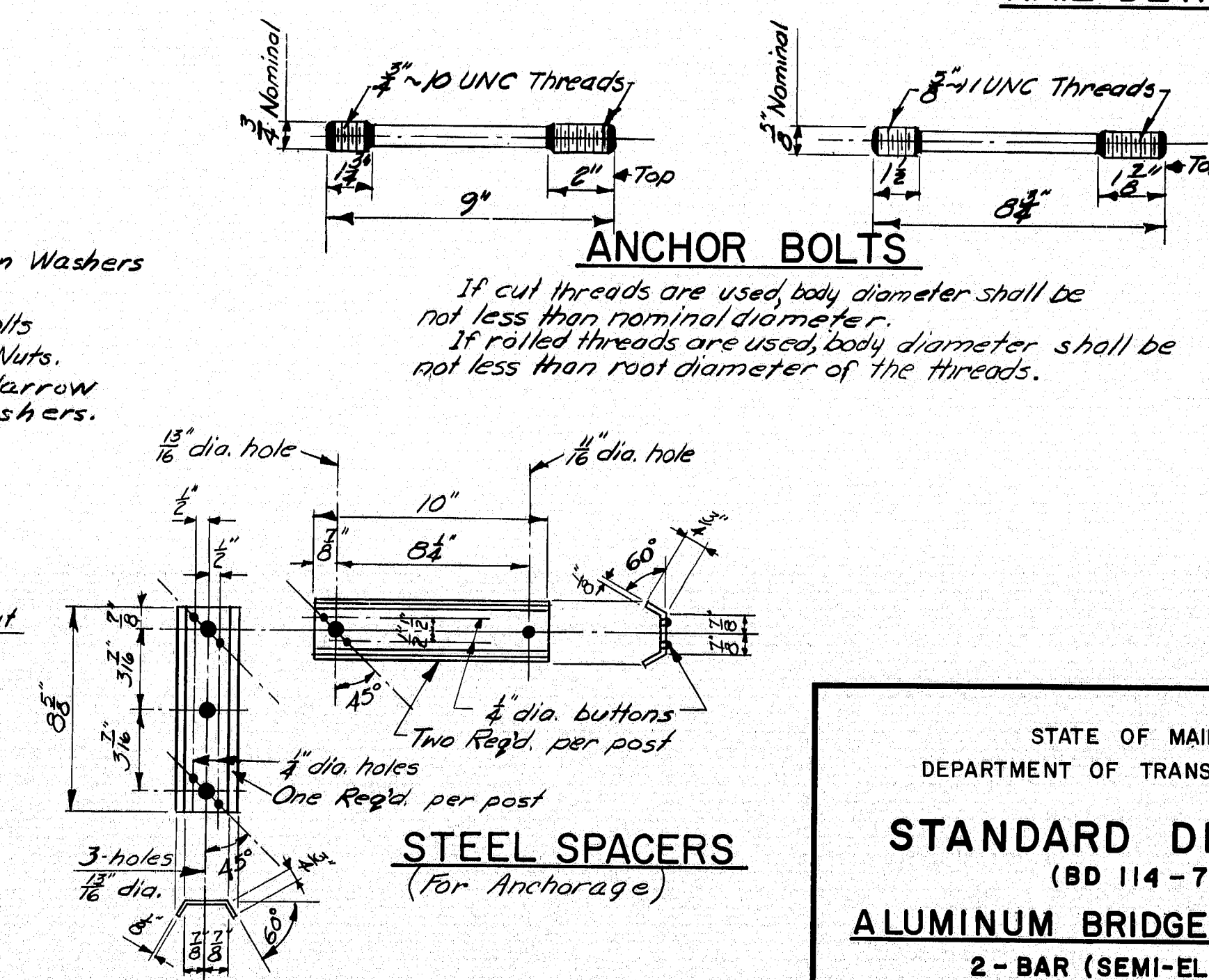
POST BASE  
(Bottom View)



## POST SECTION



## RAIL POST ANCHORAGE



ANCHOR BOLTS

If rolled threads are used, body diameter shall be not less than root diameter of the threads.

## STEEL SPACERS (For Anchorage)

STATE OF MAINE  
DEPARTMENT OF TRANSPORTATION

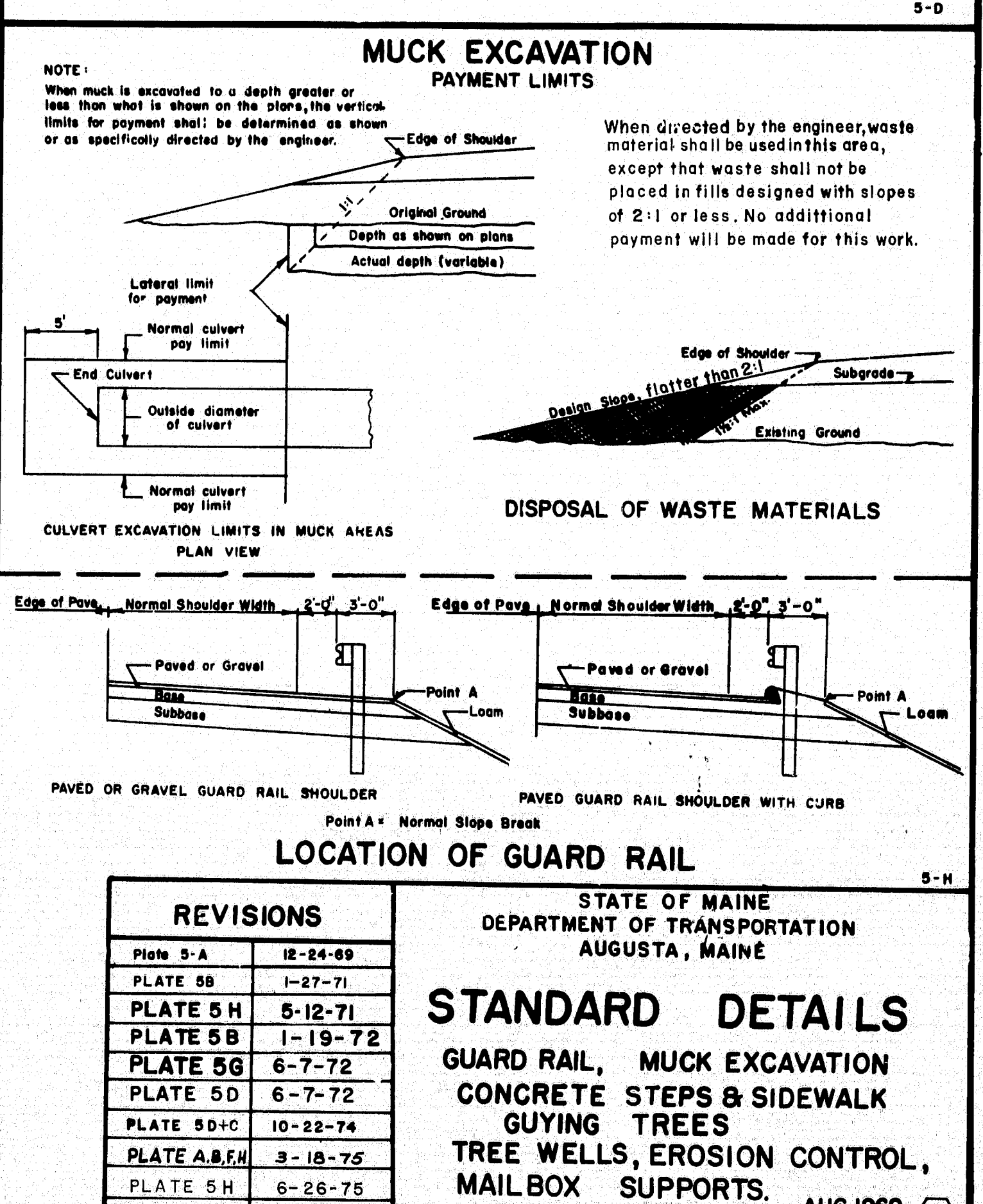
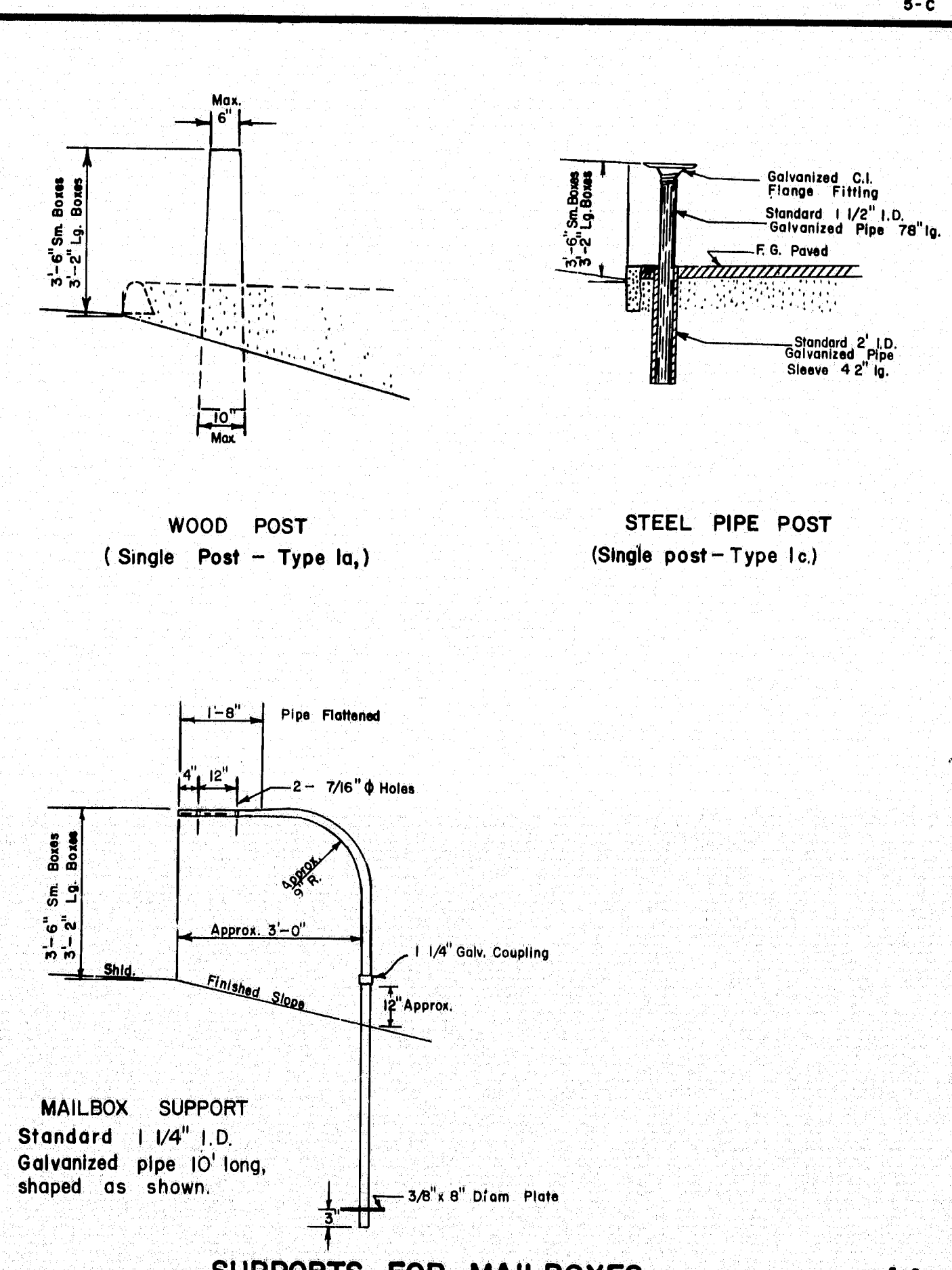
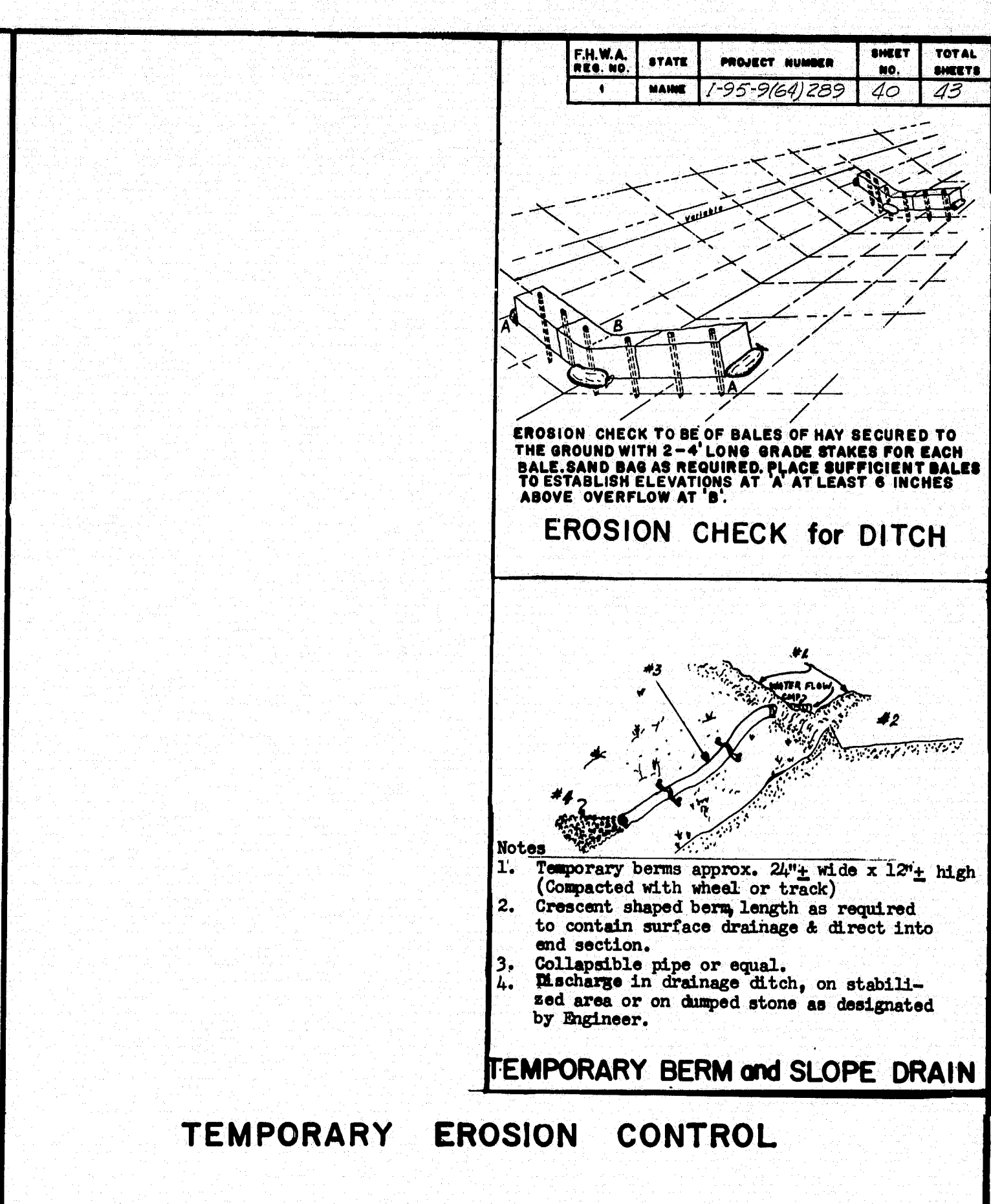
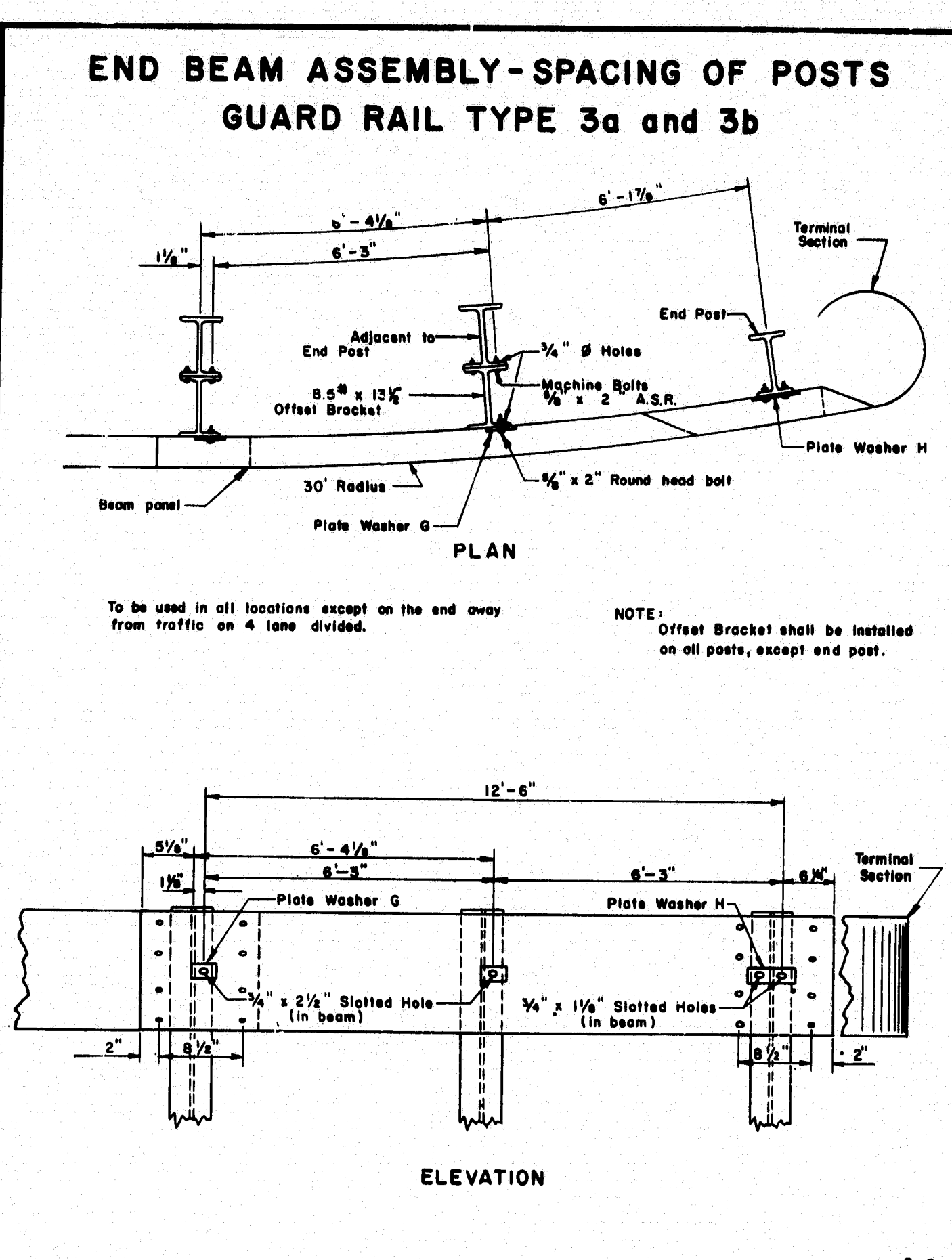
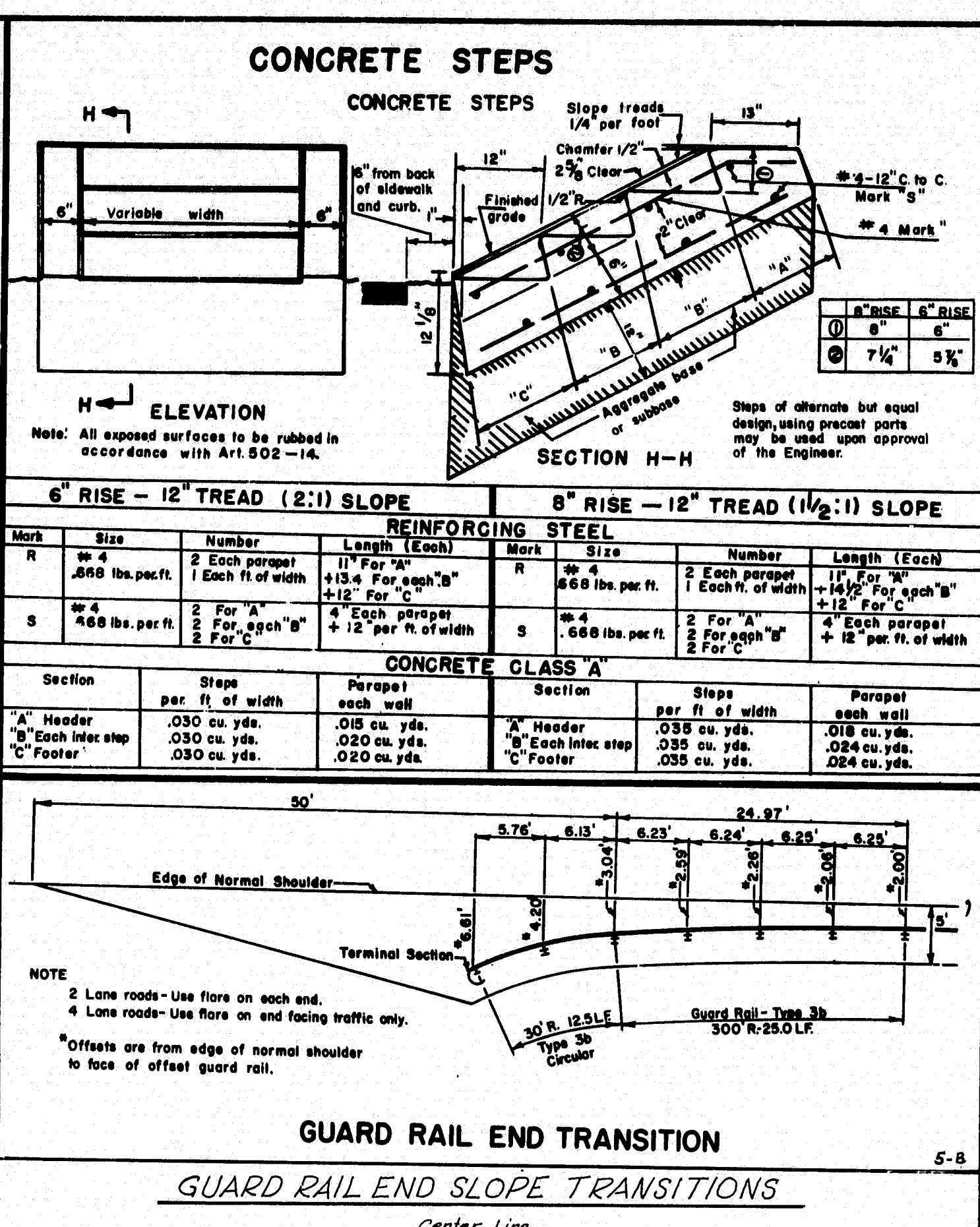
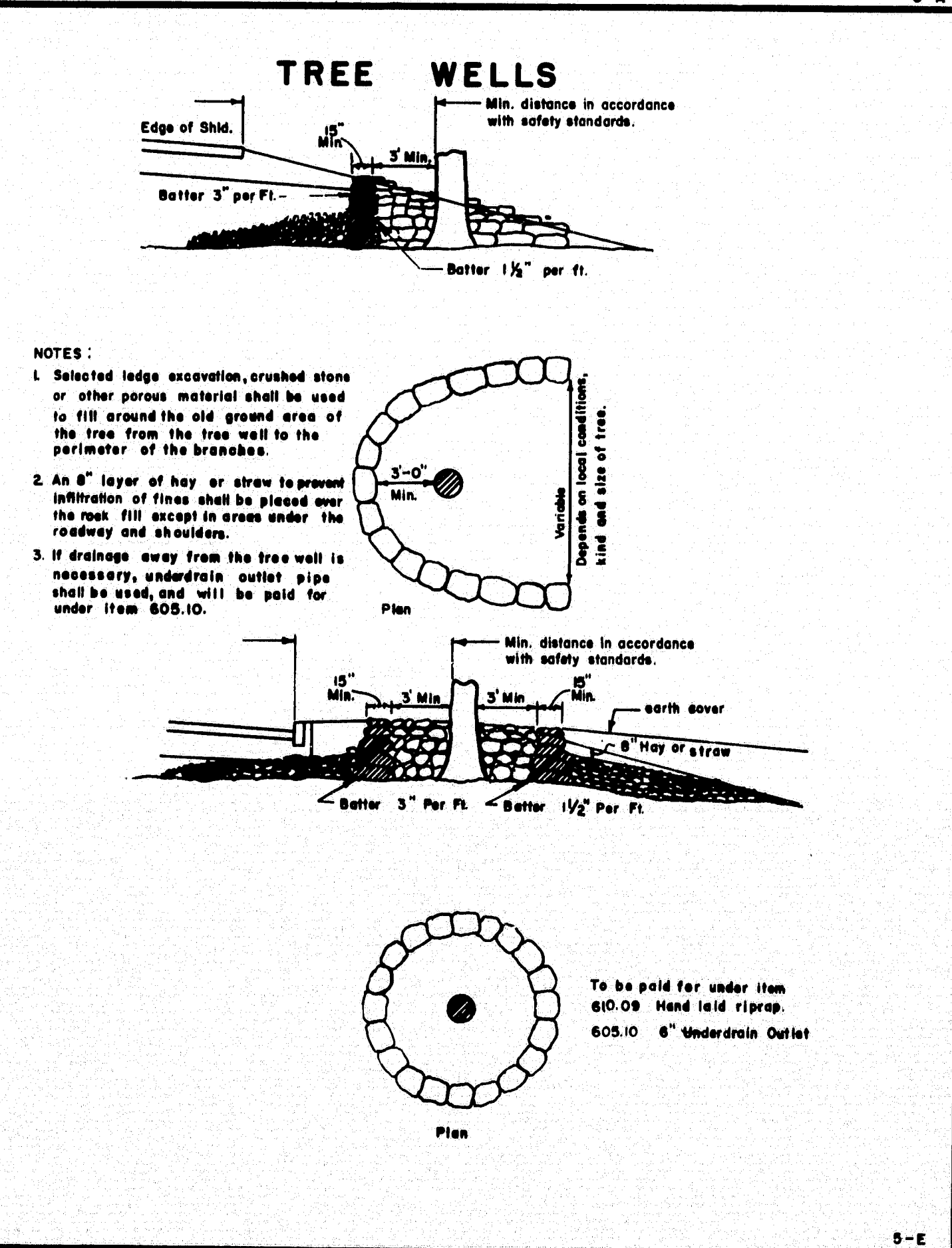
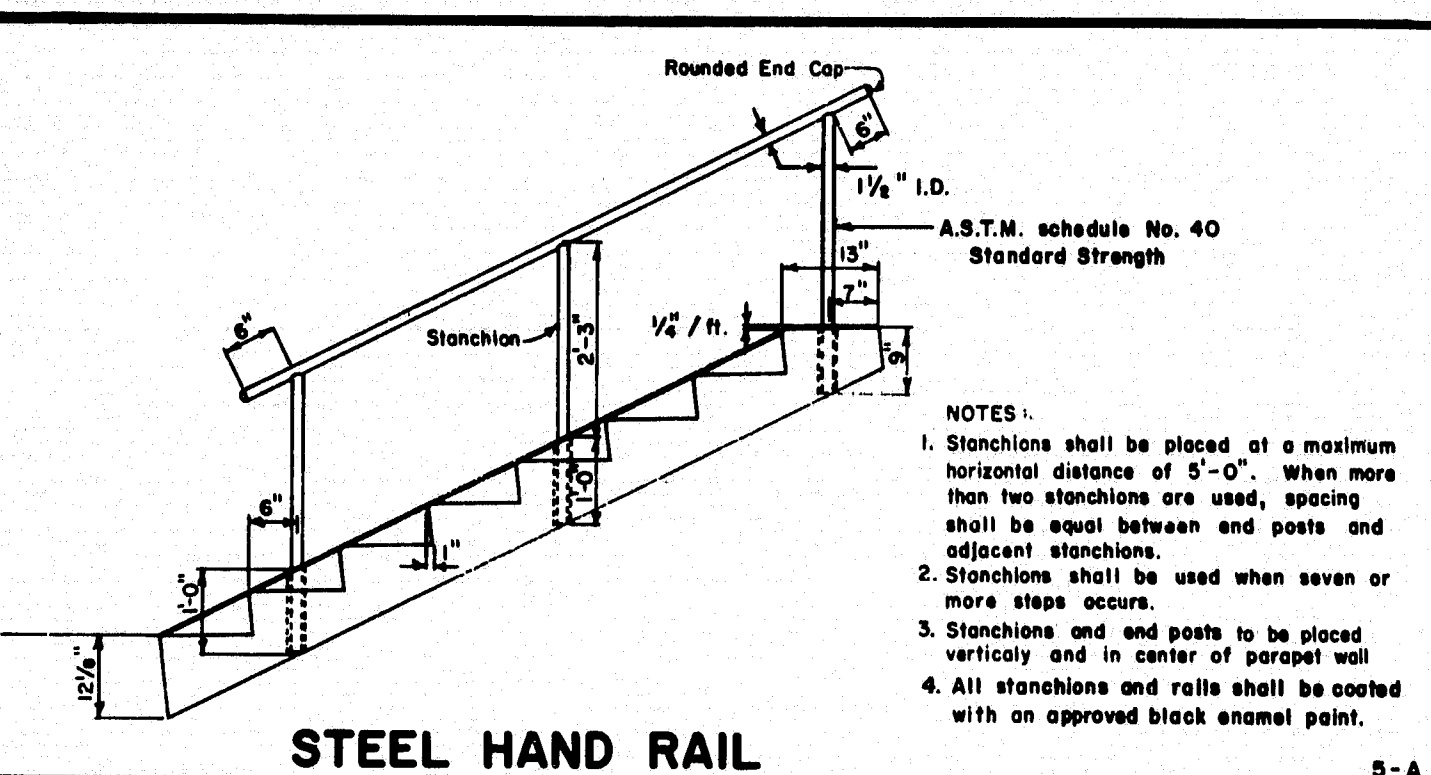
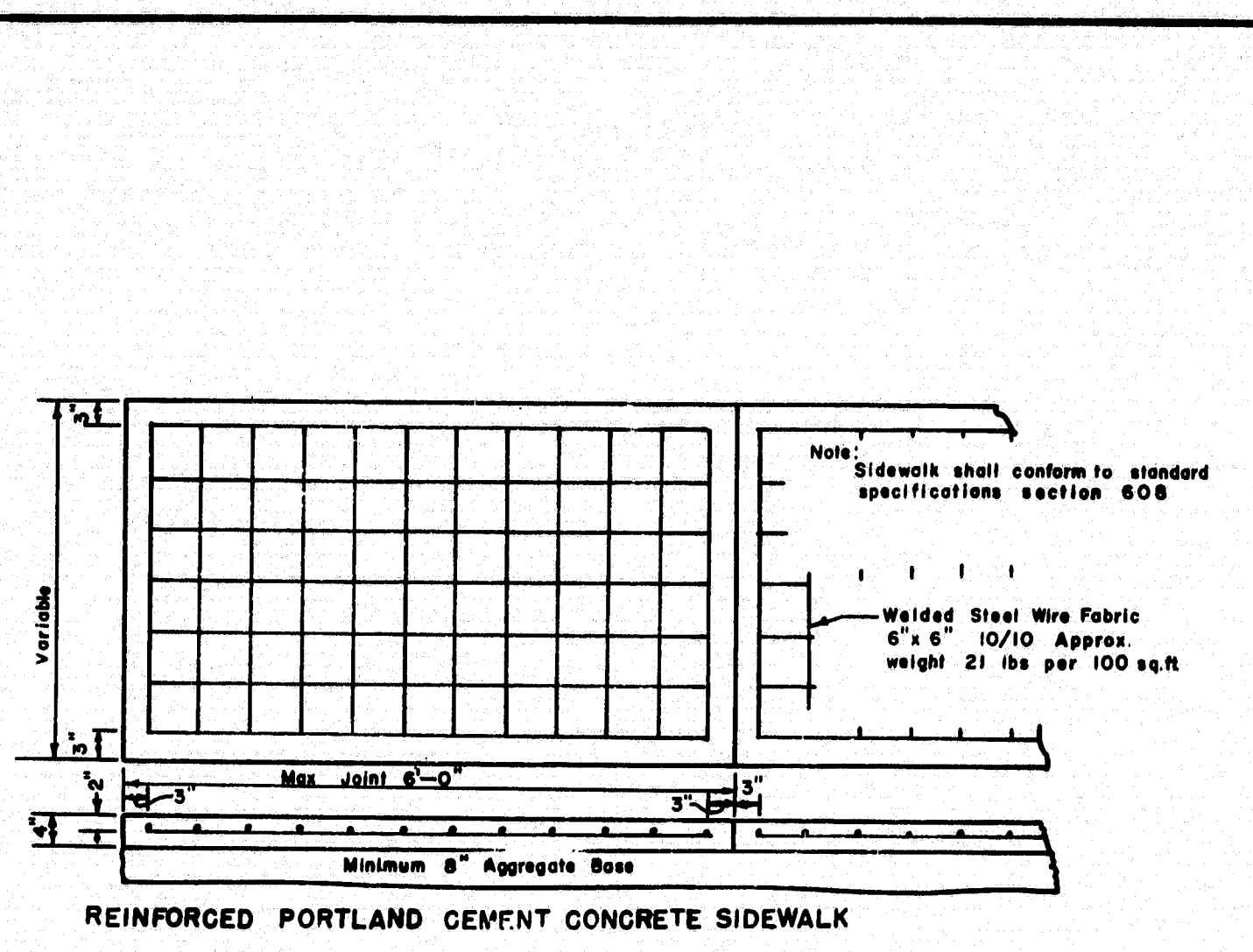
STANDARD DETAILS  
(BD 114-73)

**ALUMINUM BRIDGE RAILING**  
2 - BAR (SEMI-ELLIPSE)  
TYPE "A"

SHEET 39 OF 43 AUGUSTA, MAINE FEBRUARY 1973

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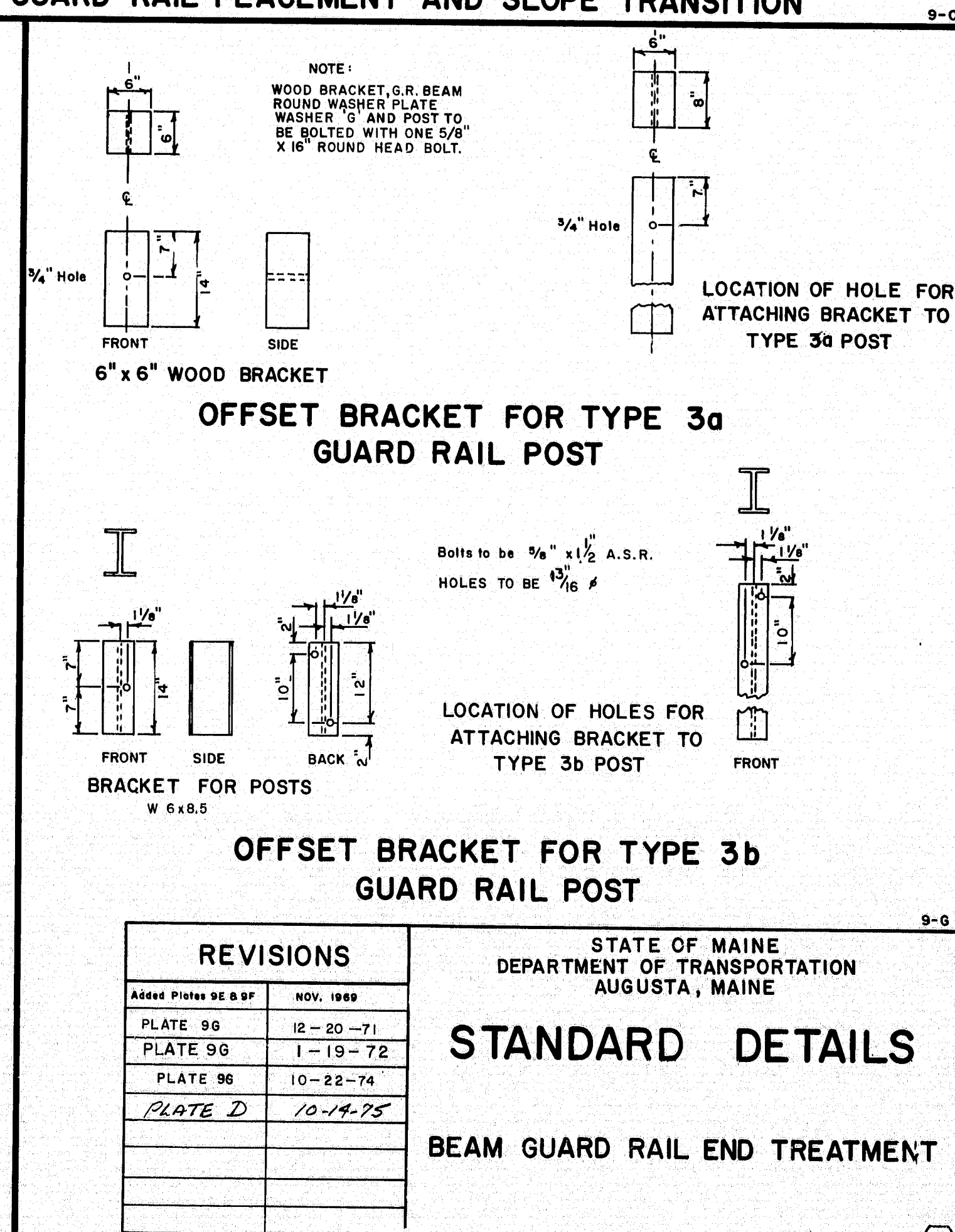
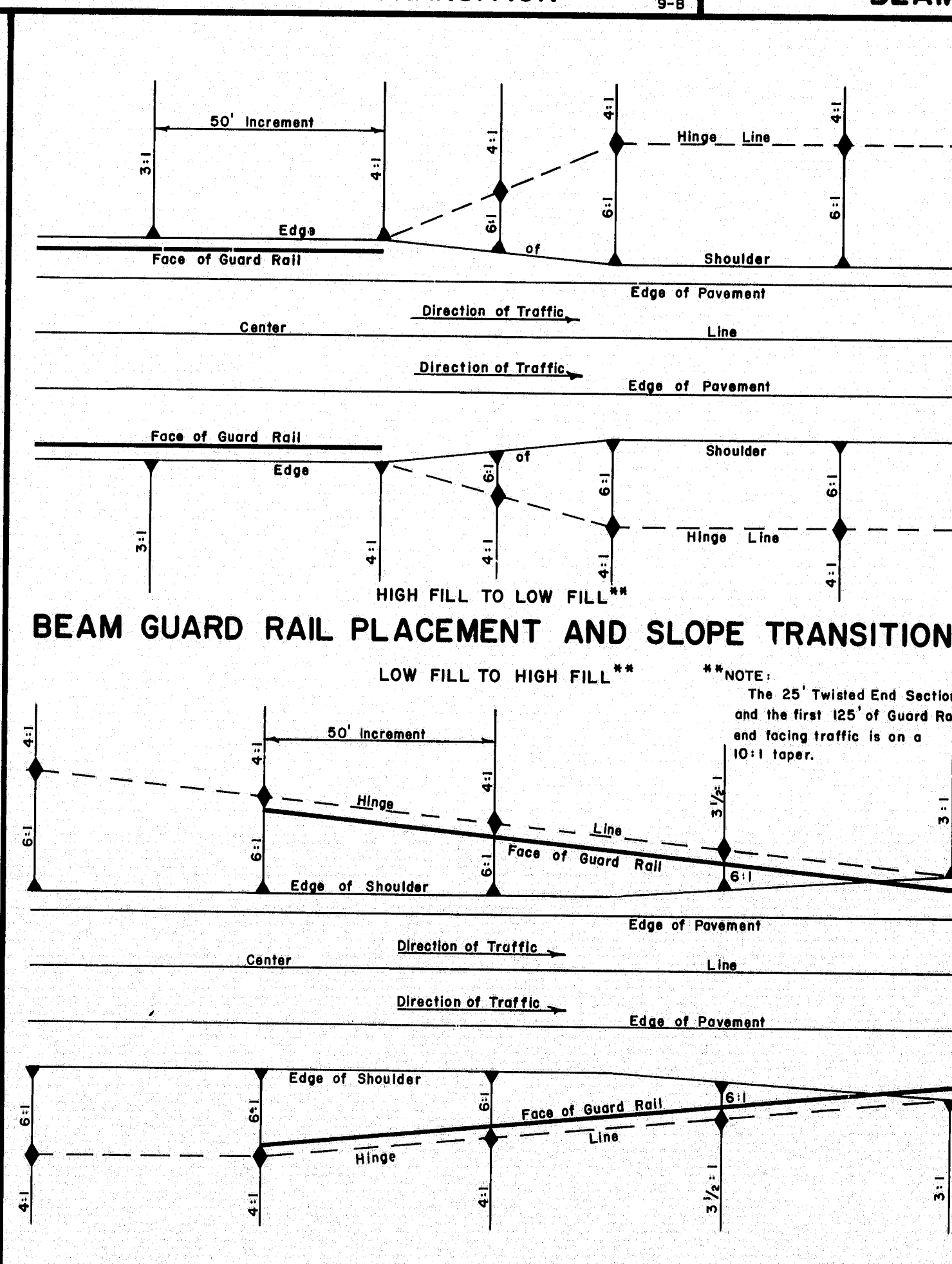
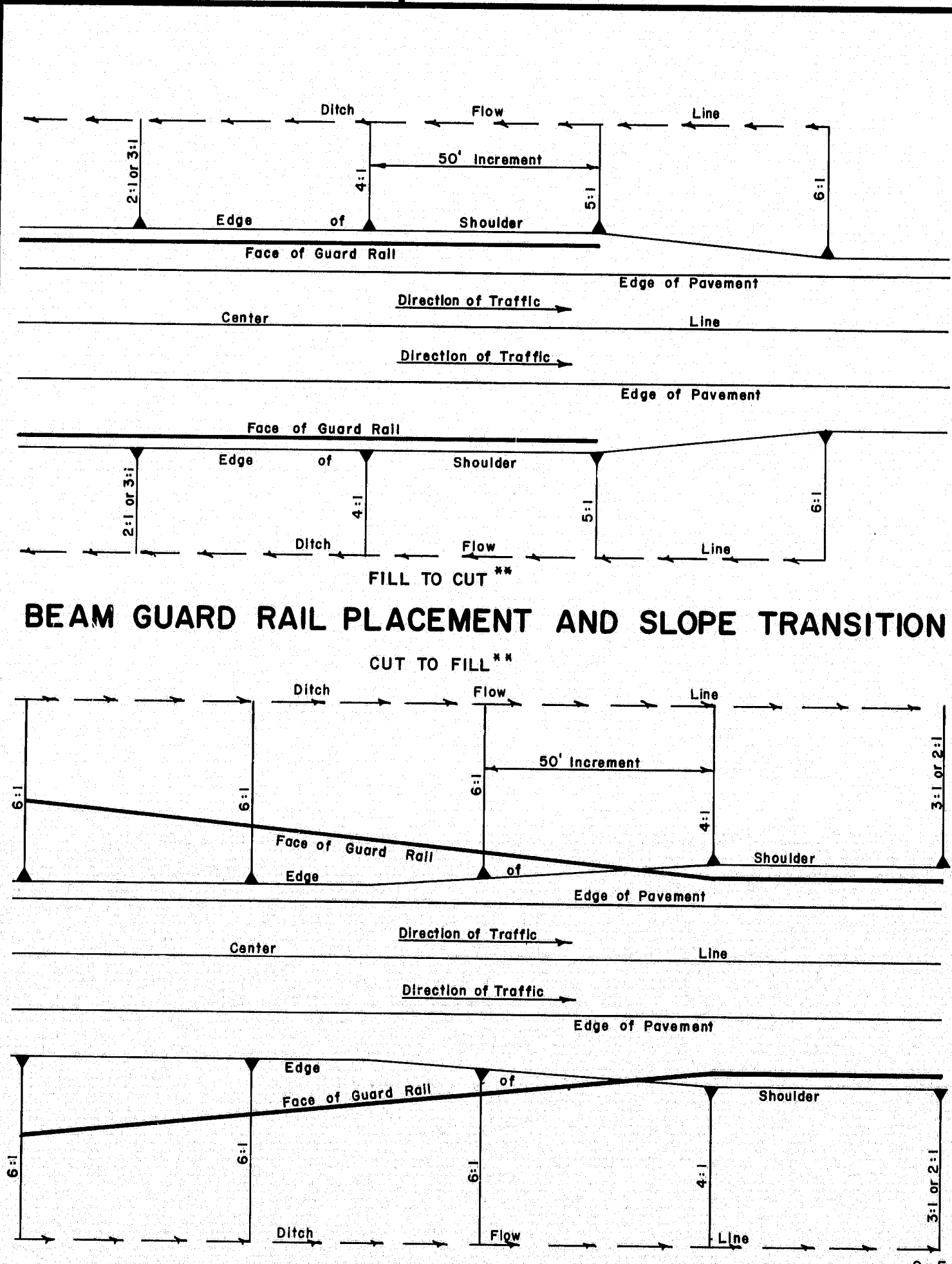
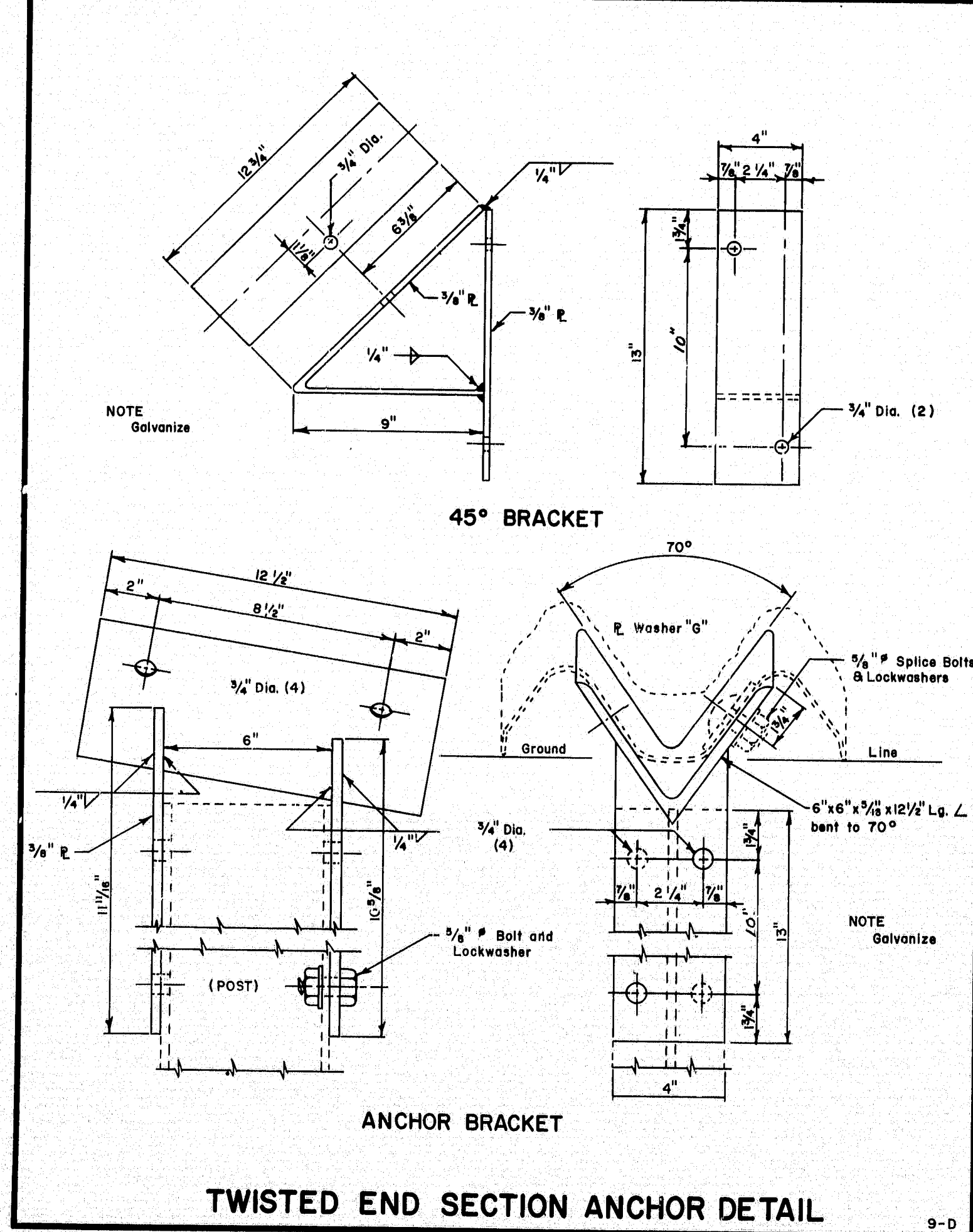
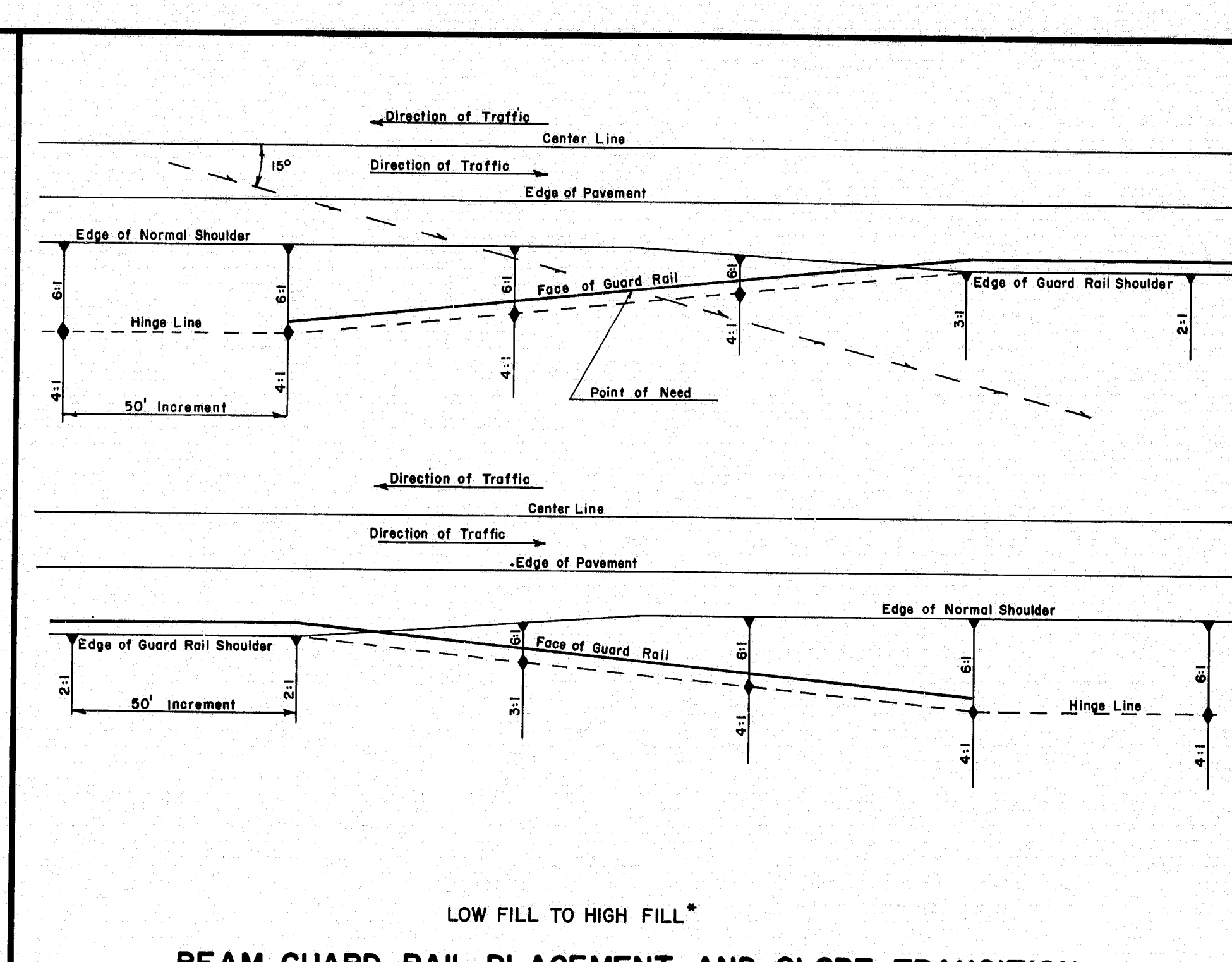
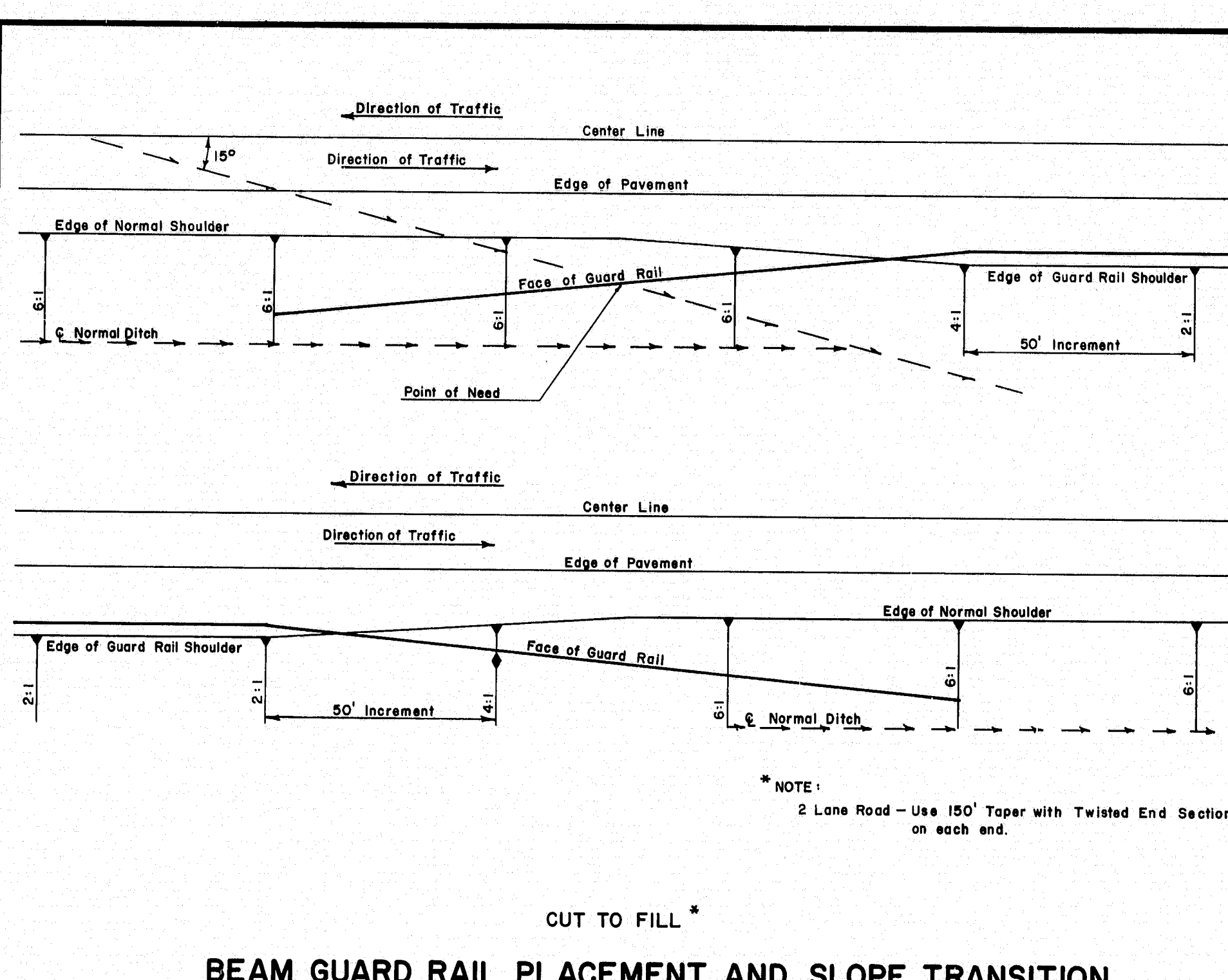
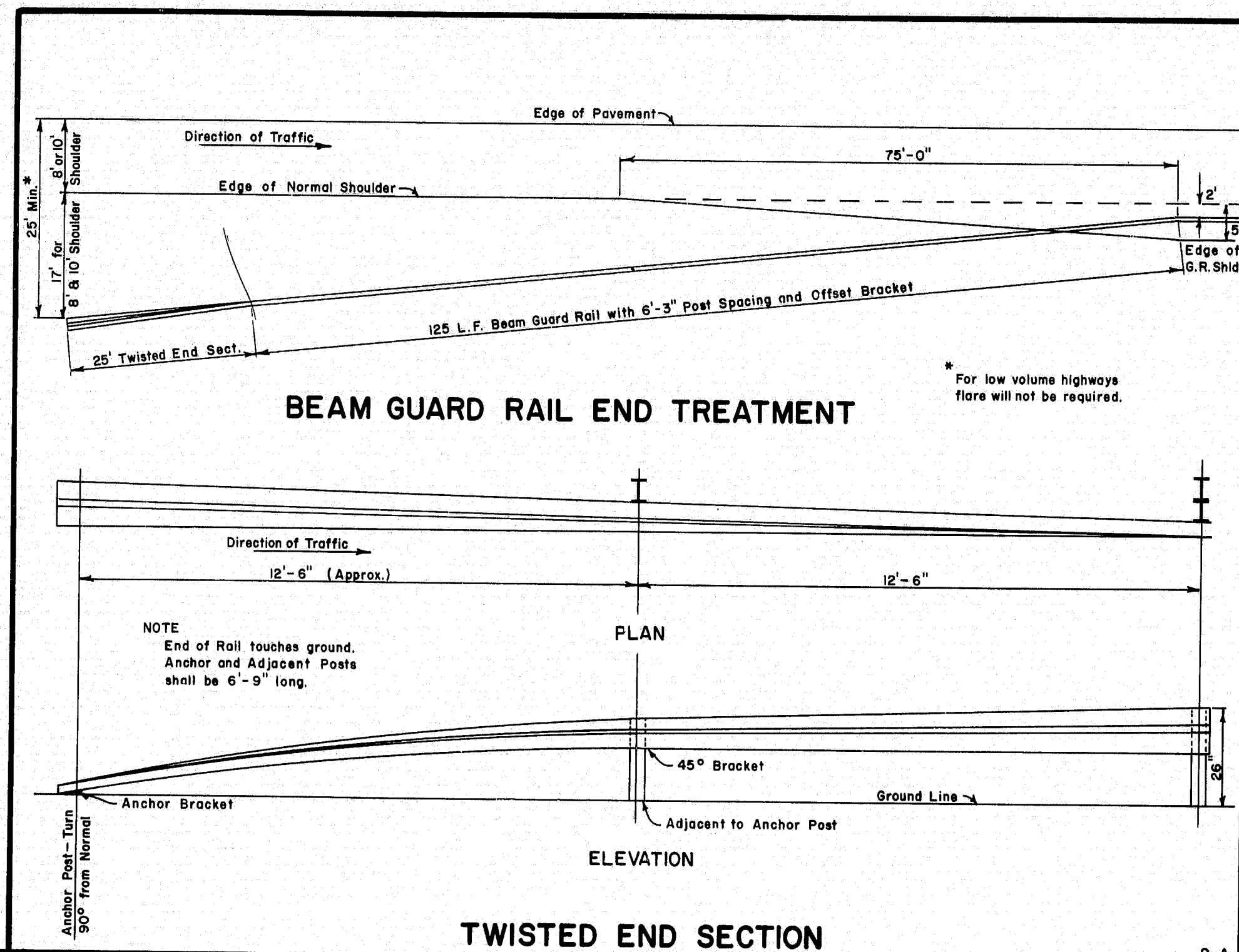


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REVISIONS	
Added Plate 96 & 97	NOV. 1969
PLATE 96	12-20-71
PLATE 96	1-19-72
PLATE 96	10-22-74
PLATE D	10-14-75

STATE OF MAINE  
DEPARTMENT OF TRANSPORTATION  
AUGUSTA, MAINE

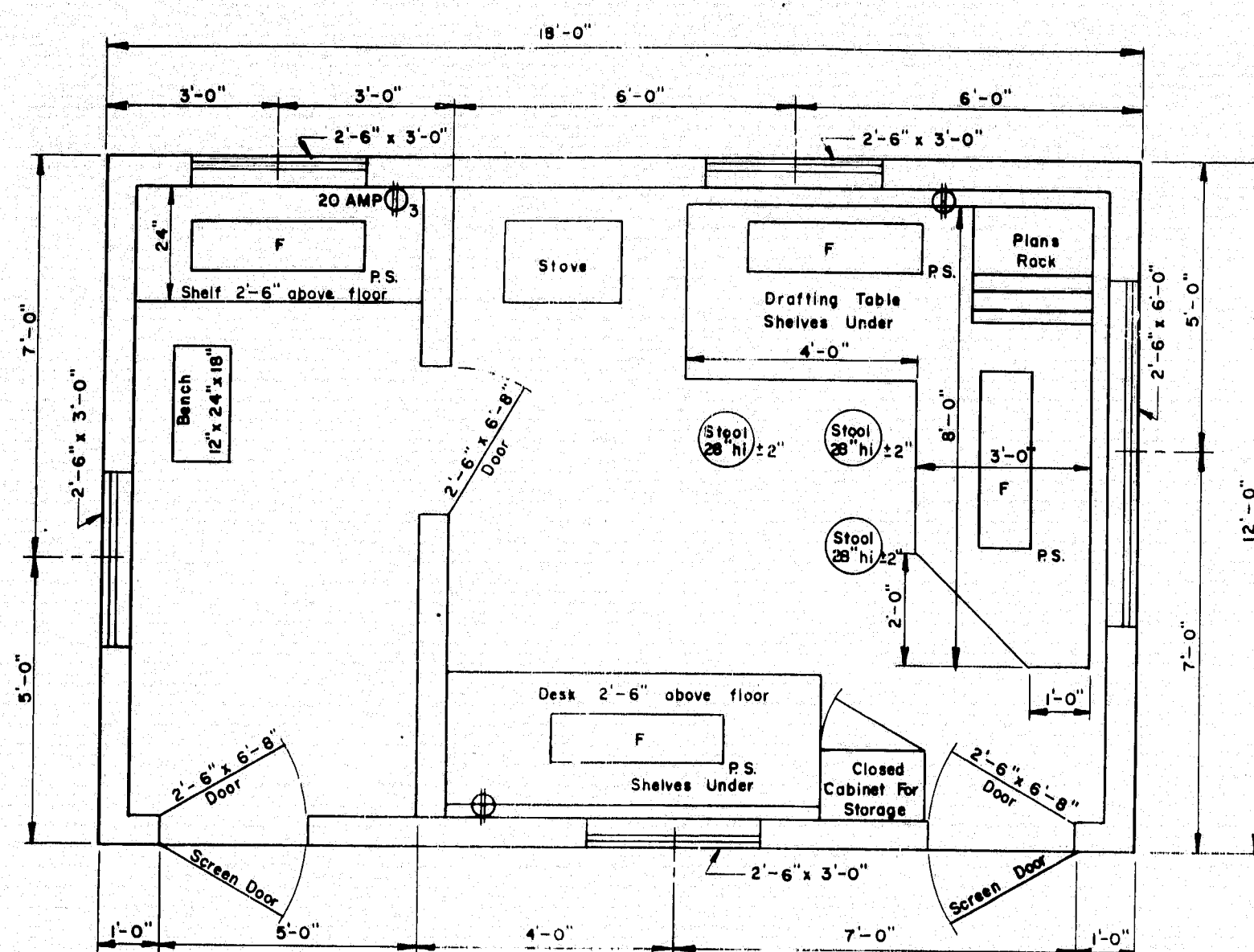
**STANDARD DETAILS**

**BEAM GUARD RAIL END TREATMENT**

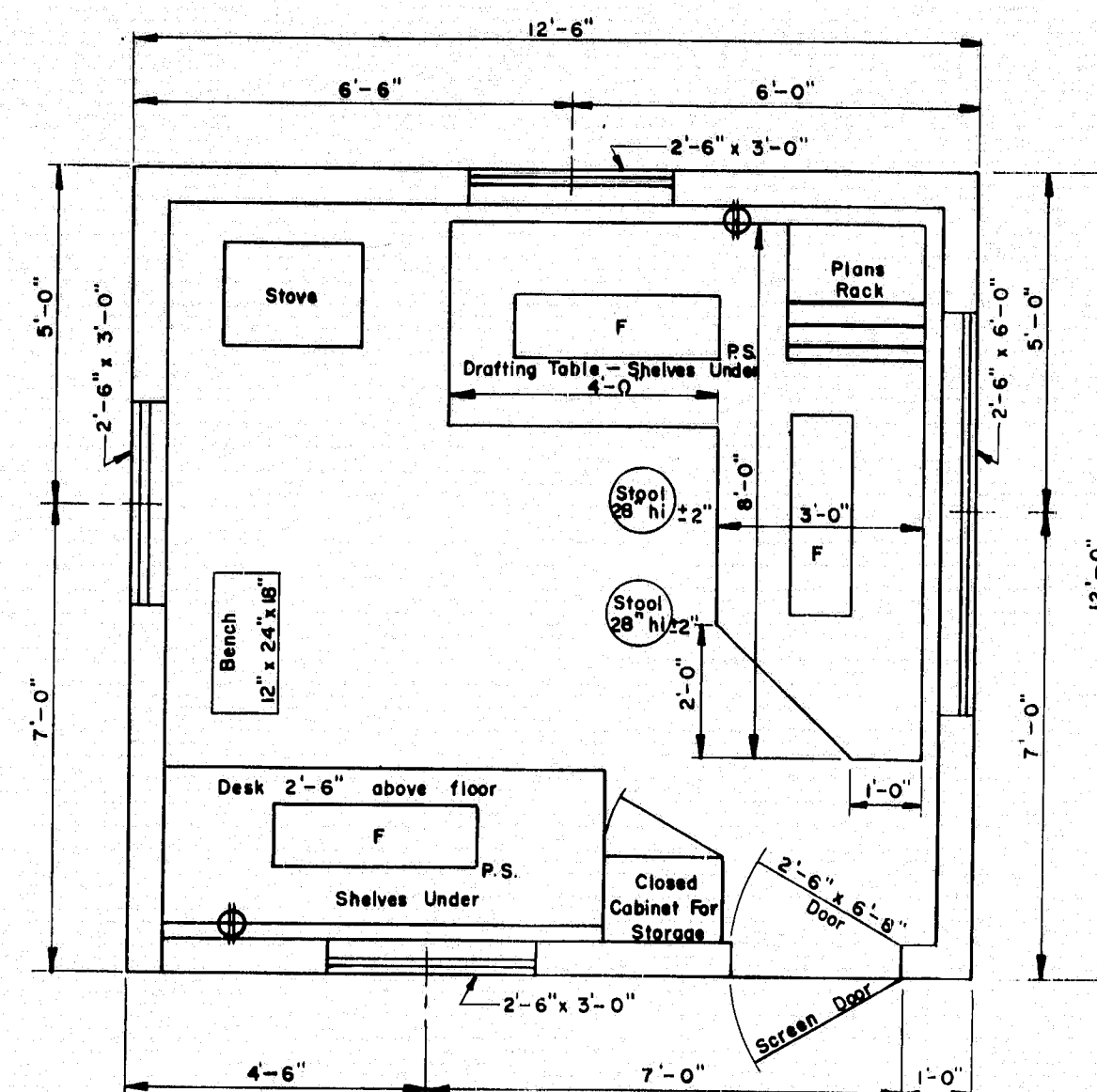
AUG. 1969

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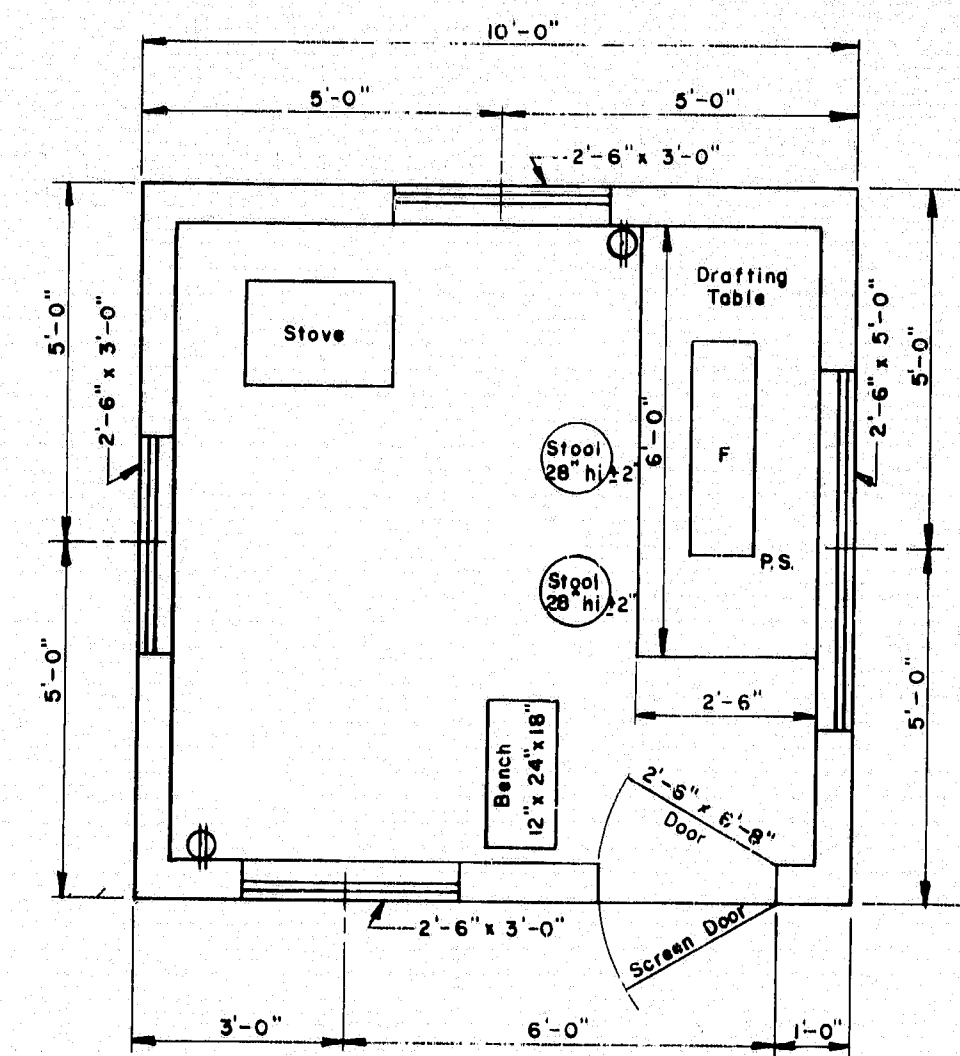




FLOOR PLAN  
TYPE "A"

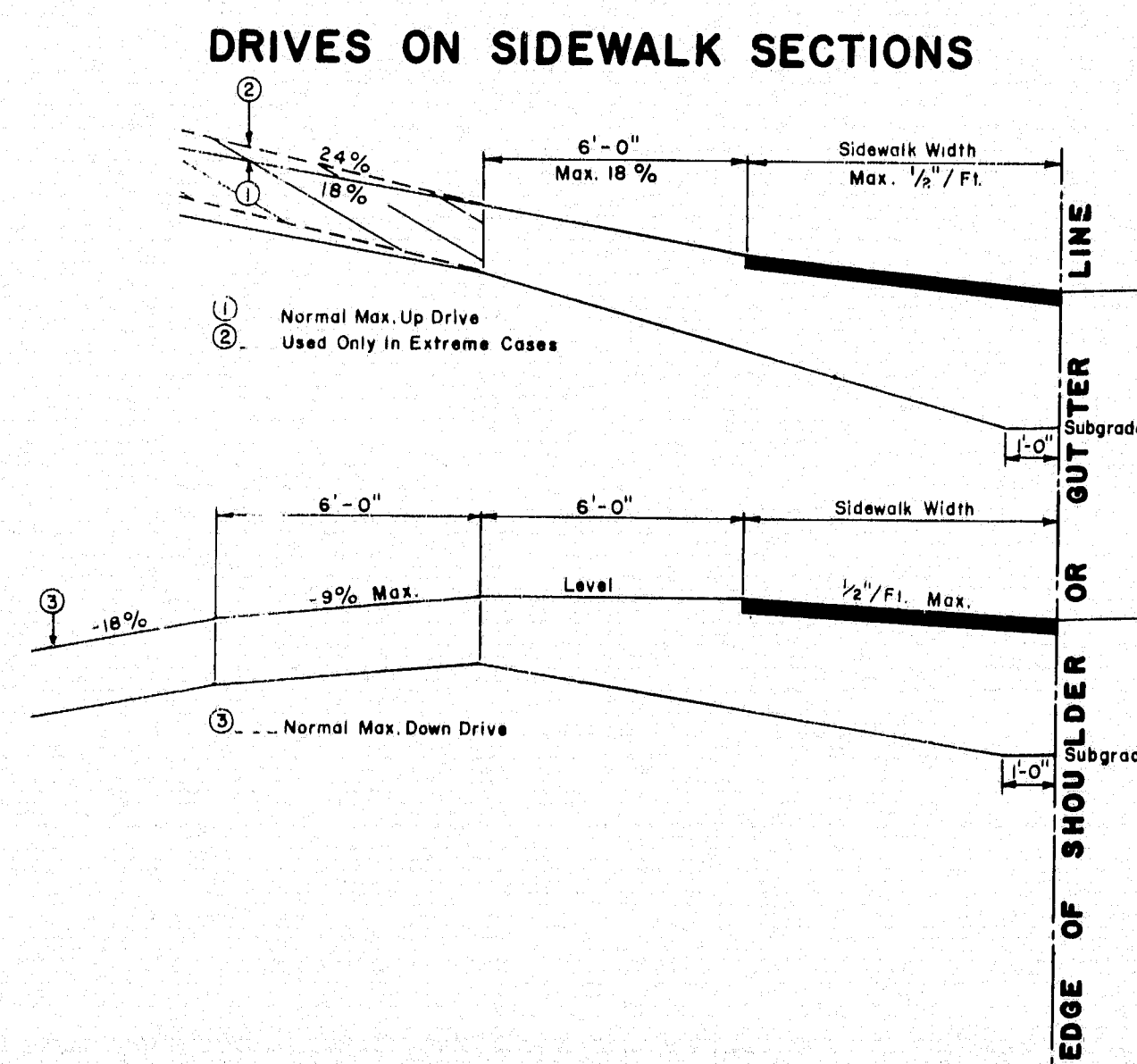


FLOOR PLAN  
TYPE "B"

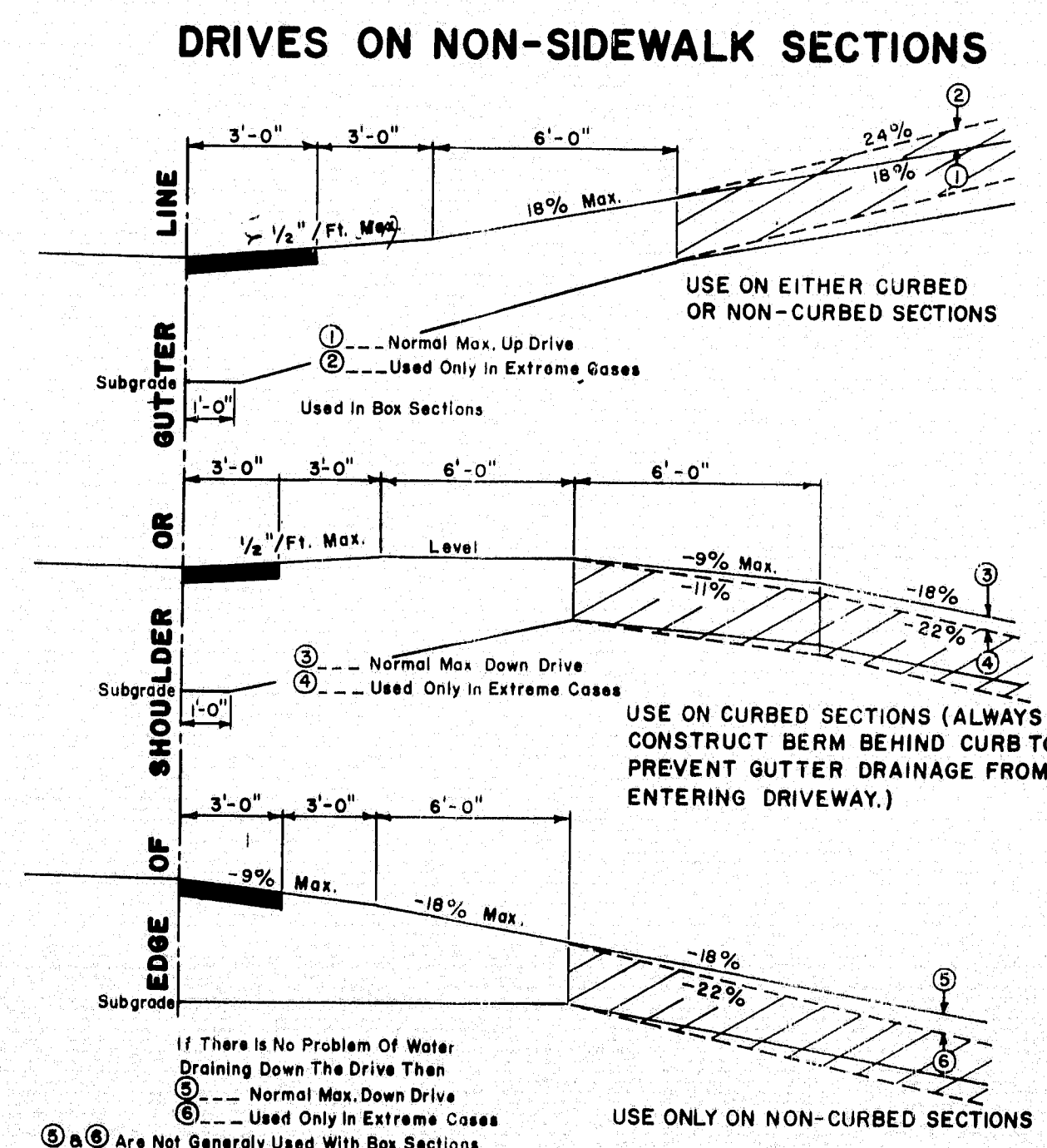


FLOOR PLAN  
TYPE "C"

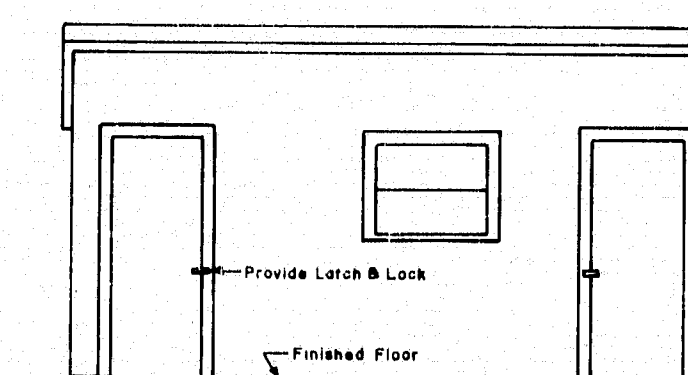
- GENERAL NOTES**
- Drafting table shall be 3'-4" high at front edge and placed 2" from studs to allow prints to hang down behind table when in use.
  - Shelves under desk shall be constructed to receive 11 1/2" x 14" x 25" transfiles.
  - Windows shall be double hung.
  - Stovepipe shall not be in direct 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:**
    - Straight back chairs for types A and B
    - Bench for types A, B & C
    - Stool for type A
    - Stools for types B & C
  - SYMBOLS:**
    - F: Fluorescent lights (2 light, rapid start 48" strips and 40 watt bulbs.)
    - PS: Pull switch
    - ⊕: Duplex wall outlet—15 amp unless otherwise noted
    - ⊕3: Triplex Wall Outlet
  - For the Type "A" Field Office one clean 55 gal. drum shall be supplied, installed on a suitable rack and equipped with a spigot suitable for drawing off water. The drum shall be furnished with water at all times.



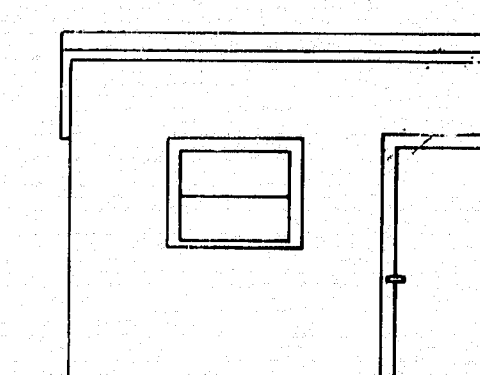
- GENERAL NOTES**
- The sidewalk width shall be paved in all cases.
  - All residential or commercial drives 10% and over shall be paved.
- NOTES ON MAXIMUM DRIVEWAY PROFILES**
- These profiles are a guide for the majority of cases, but should be field checked when the main line grade is steep (4% to 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.



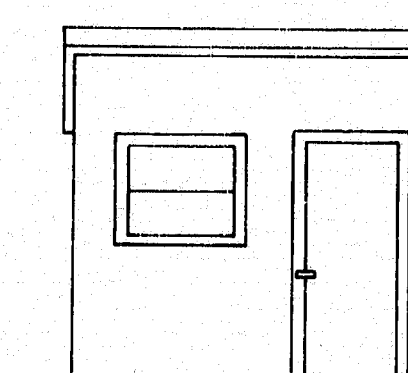
- GENERAL NOTES**
- The first 3' shown as pavement shall be paved only when abutting a paved area.
  - All residential or commercial drives 10% and over shall be paved.
- NOTES ON MAXIMUM DRIVEWAY PROFILES**
- These profiles are a guide for the majority of cases, but should be field checked when the 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.
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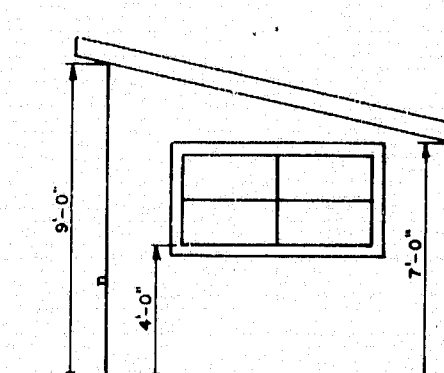
FRONT ELEVATION  
TYPE "A"



FRONT ELEVATION  
TYPE "B"



FRONT ELEVATION  
TYPE "C"



SIDE ELEVATION  
TYPES "A", "B" & "C"

REVISIONS	
PLATE	D'E 3-16-73

STATE OF MAINE  
DEPARTMENT OF TRANSPORTATION  
AUGUSTA, MAINE

## STANDARD DETAILS

DRIVEWAY DETAILS  
FIELD OFFICES  
TESTING LABORATORY

AUG. 1969

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