

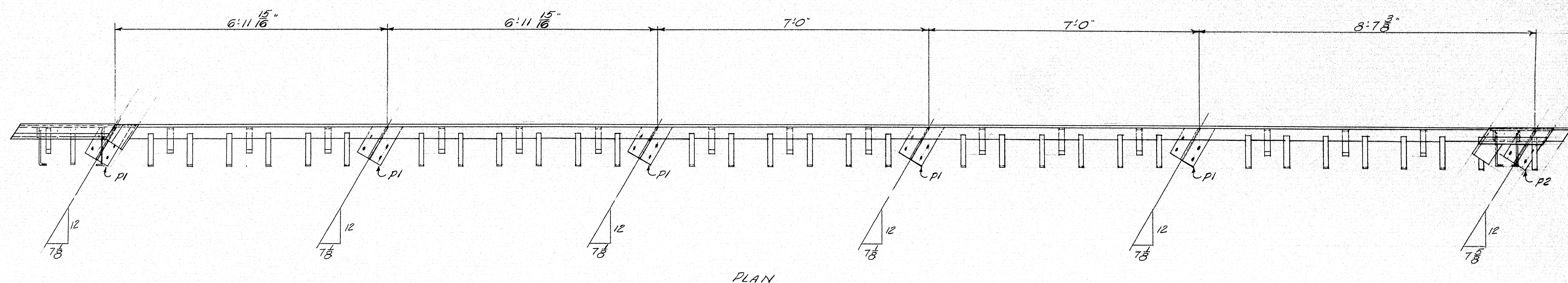
SHIP		BILL OF MATERIAL			DWG. NO. 60-254-54		
MARK	NO.	MARK	SHAPE	LENGTH	WT.	WT. DEDUCTION	REMARKS
ED5	1		Shop Assembly	—			
ED6	1		do	—			
	1	T1	5T4WF24	39 6 $\frac{13}{16}$		4	
	1	T2	do	38 4 $\frac{1}{2}$		4	
	10	P1	5T5WF19.5	1 1 $\frac{13}{16}$		47	
	1	P1	FB. 42 $\times\frac{3}{8}$	1 10 $\frac{3}{4}$		1	
	1	P7	do	2 7 $\frac{1}{4}$		1	
	1	P12	do	2 6 $\frac{13}{16}$		1	
	1	P13	do	1 10 $\frac{3}{8}$		1	
	1	P2	FB. 6 $\times\frac{3}{8}$	0 6		1	
	1	P19	do	0 6 $\frac{3}{4}$		1	
	1	P8	E. 5 $\frac{15}{16}\times\frac{3}{8}$	0 11 $\frac{1}{8}$		2	
	1	P13	do	0 9		2	
	1	P3	FB. 8 $\times\frac{1}{2}$	0 8 $\frac{5}{8}$			
	1	P20	FB. 5 $\frac{7}{16}\times\frac{3}{8}$	0 8 $\frac{5}{8}$			
	1	P4	E. 10 $\frac{1}{16}\times\frac{1}{2}$	1 7 $\frac{1}{16}$		1	
	1	P9	FB. 5 $\frac{5}{8}\times\frac{1}{2}$	2 11 $\frac{13}{16}$		11	
	1	P14	E. 9 $\frac{1}{2}\times\frac{1}{2}$	2 10 $\frac{1}{16}$		11	
	1	P21	E. 8 $\frac{3}{8}\times\frac{1}{2}$	1 7 $\frac{1}{16}$		2	
	1	P5	FB. 3 $\times\frac{1}{2}$	1 1 $\frac{1}{8}$			
	1	P6	do	1 1 $\frac{1}{16}$			
	1	P10	do	0 8 $\frac{13}{16}$			
	1	P11	do	0 6 $\frac{1}{16}$			
	1	P15	do	0 9 $\frac{1}{2}$			
	1	P16	do	0 11 $\frac{1}{4}$			
	1	P17	do	0 10 $\frac{1}{2}$			
	1	P22	do	1 0 $\frac{1}{2}$			
	1	P23	do	1 0			
	74	PA	FB. 12 $\times\frac{5}{16}$	1 0			
	32	PB	do	1 0			
SHIM A	10		FB. 8 $\times\frac{1}{4}$	0 8		2	
SHIM B	10		FB. 8 $\times\frac{1}{8}$	0 8		1	
SHIM C	20		FB. 8 $\times\frac{1}{16}$	0 8		1	
Field	40		3/8 M. Bolt	0 3			

APR 10-1960	EXPANSION DAM	
	Bancroft & Martin Rollings Mills Company	
	South Portland 7, Maine	
	INTERSTATE OVER VERANDA ST. PORTLAND, ME.	
F	CUSTOMER	E.C. SNODGRASS, INC.
F	DESIGNER	M.S.H.C.
	ORDER NO. _____	DWG. NO. 60-284-542

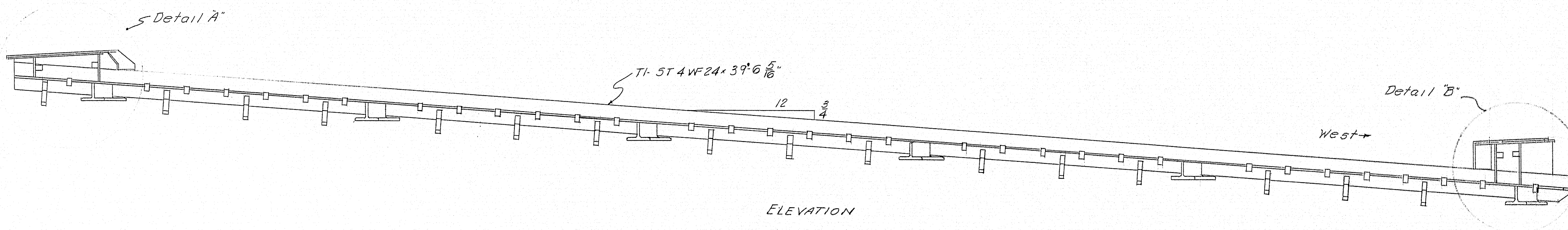
ADDENDUM

DRAWN	10-10-60	PLF	CUSTOMER	E.C. SNODGRASS, INC.	
REVISION	10-21-60	PLF	DESIGNER	M.S.H.C.	
REVISION			ORDER NO.		DWG. NO. 60-284-542
REVISION					

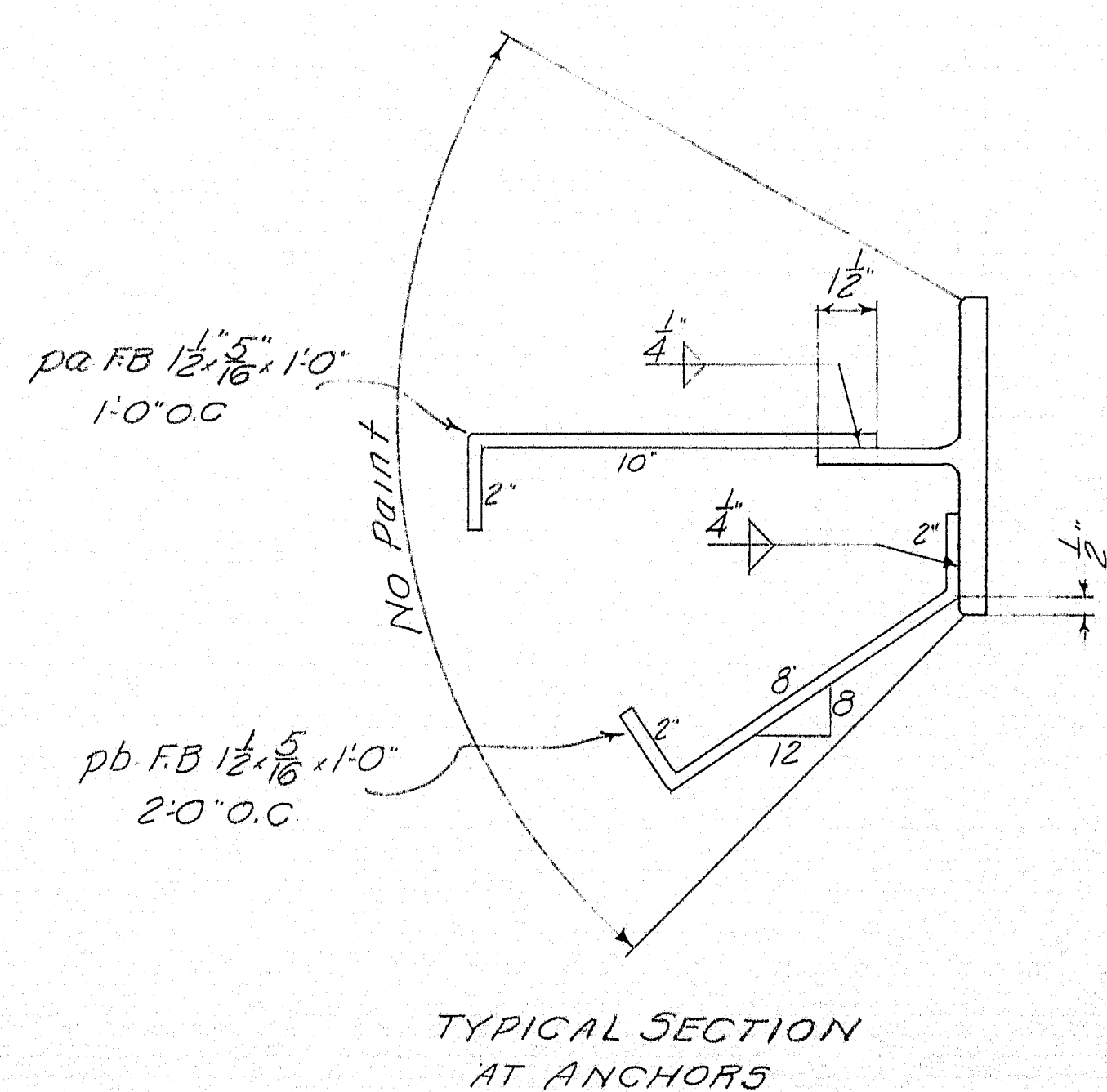




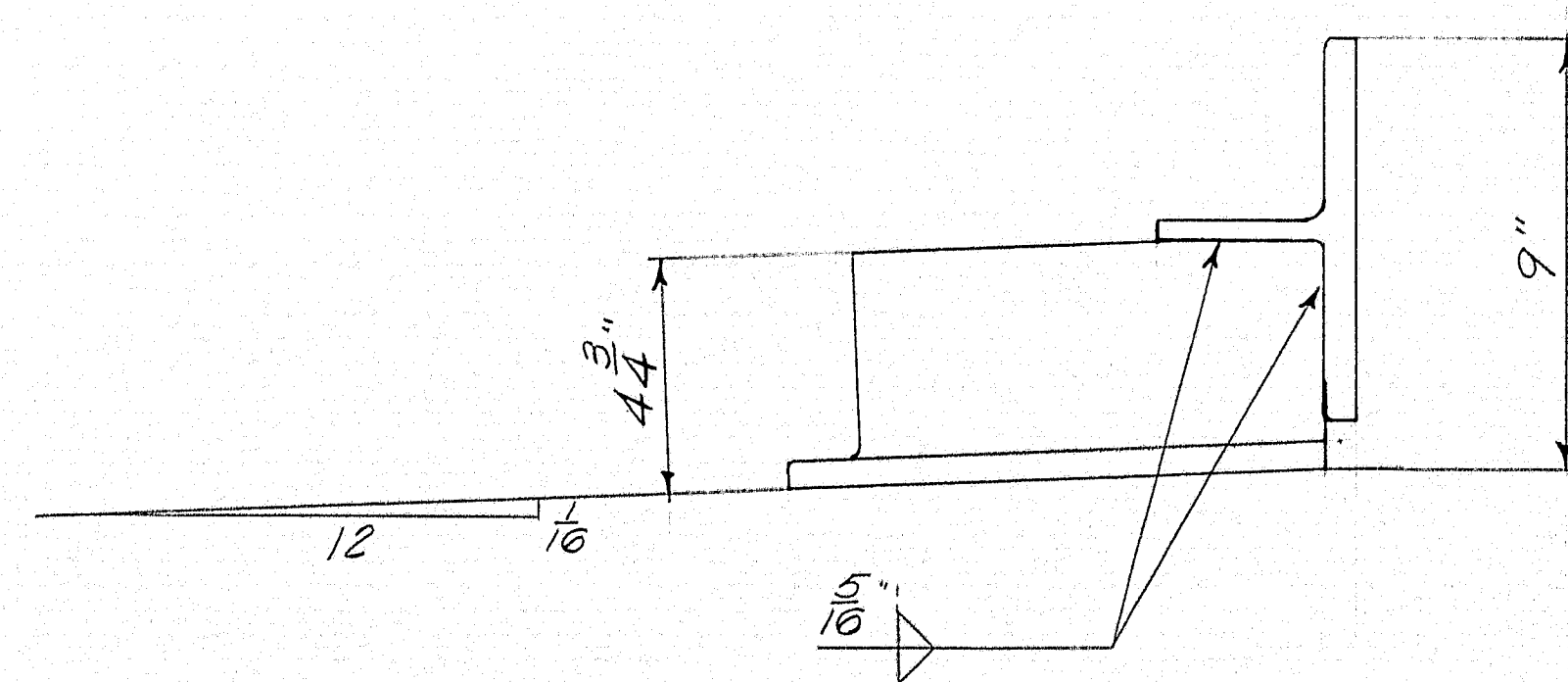
PLAN



ELEVATION  
EXPANSION DAM  
ED7-One Req'd



TYPICAL SECTION  
AT ANCHORS



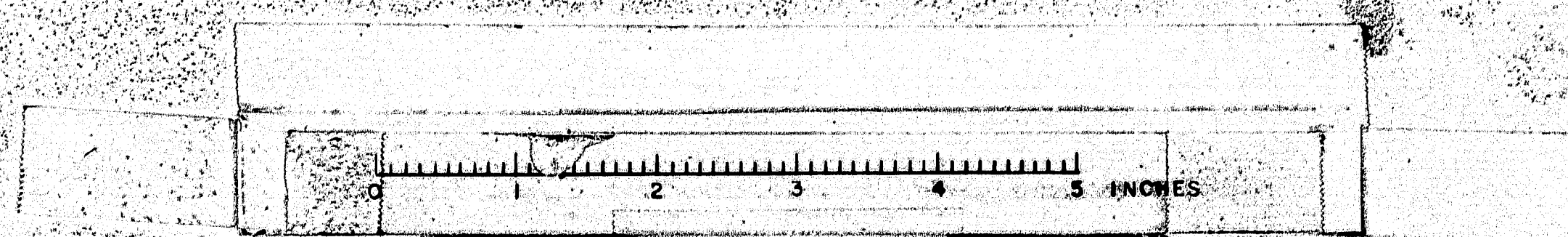
TYPICAL SECTION  
AT P1, P2, & P3

NOTES:  
Shop Conns: Welded  
Field Conns: 3/4" M. Bolts  
Holes: 1/8" unless noted  
Paint: Red Lead per M.S.H.C. Specs.  
All dimensions shown are slope dimensions.

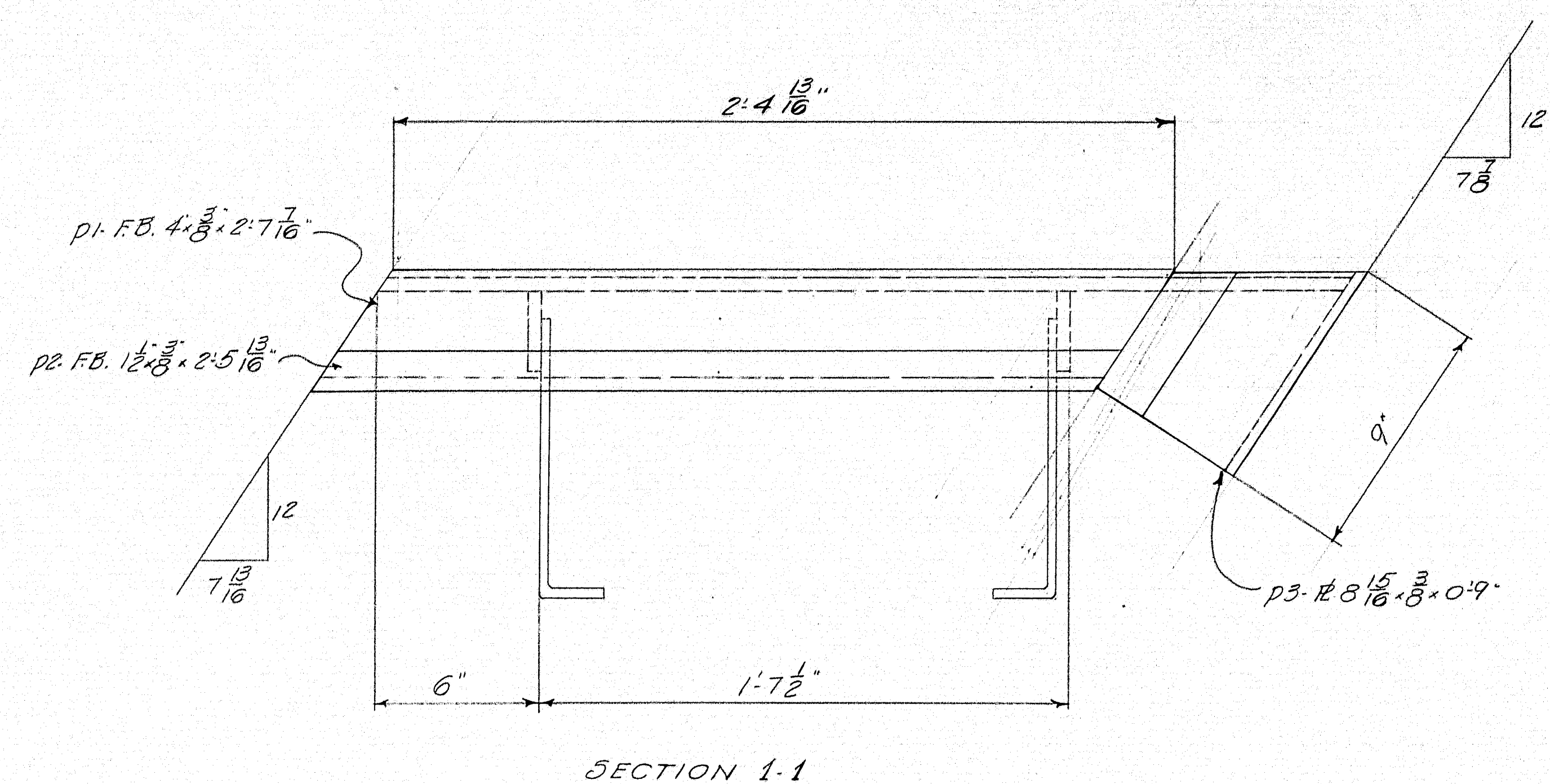
EXPANSION DAM	
Bancroft & Martin Rollings Mills Company South Portland 7, Maine	
INTERSTATE OVER VERANDA ST. PORTLAND, ME.	
CUSTOMER	E.C. SNODGRASS, INC.
DESIGNER	M.S.H.C.
ORDER NO.	DWG. NO. 60-284-543

APR 10-1960

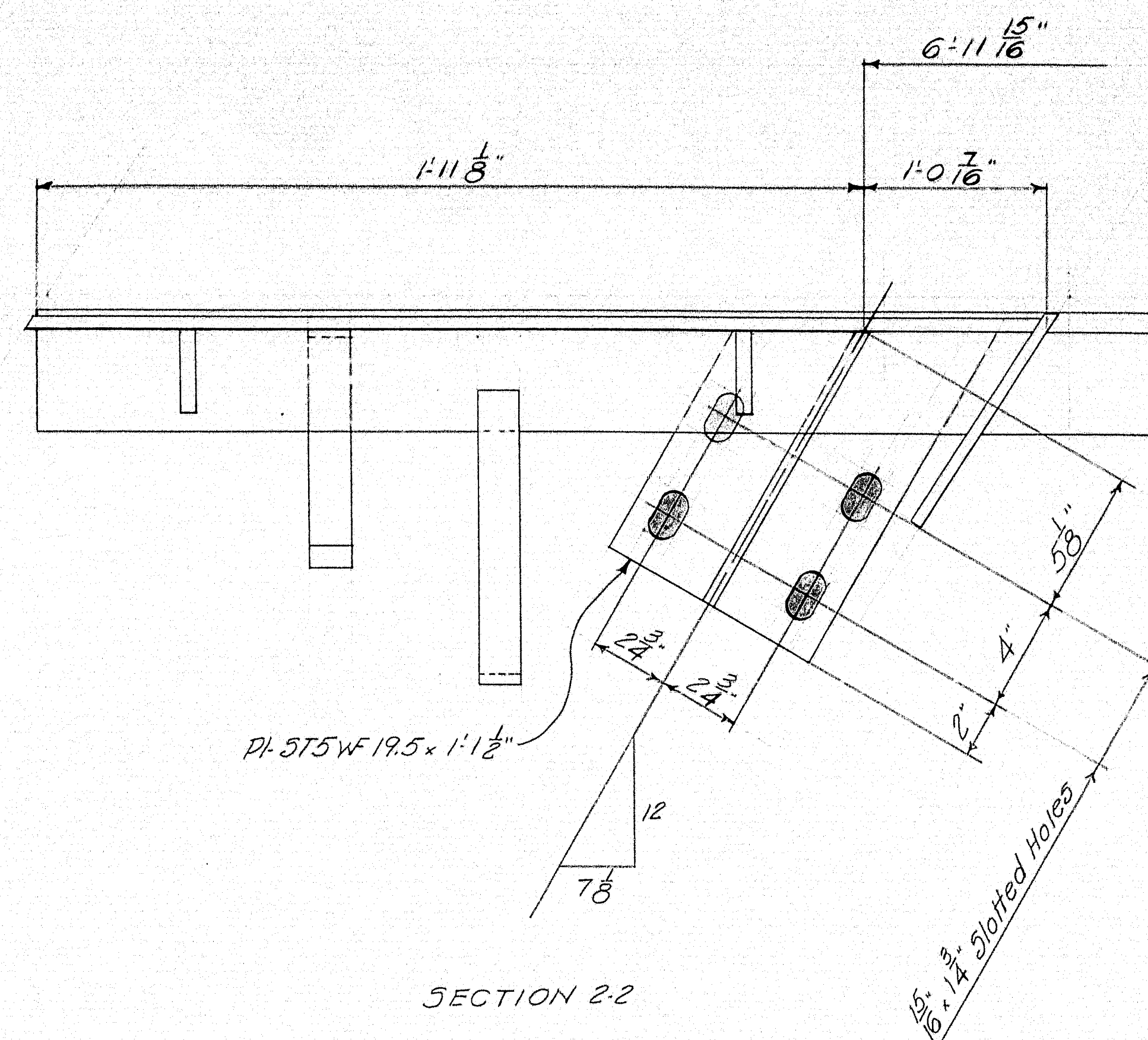
DRAWN	10-11-60 P.L.F.
REVISION	
REVISION	
REVISION	



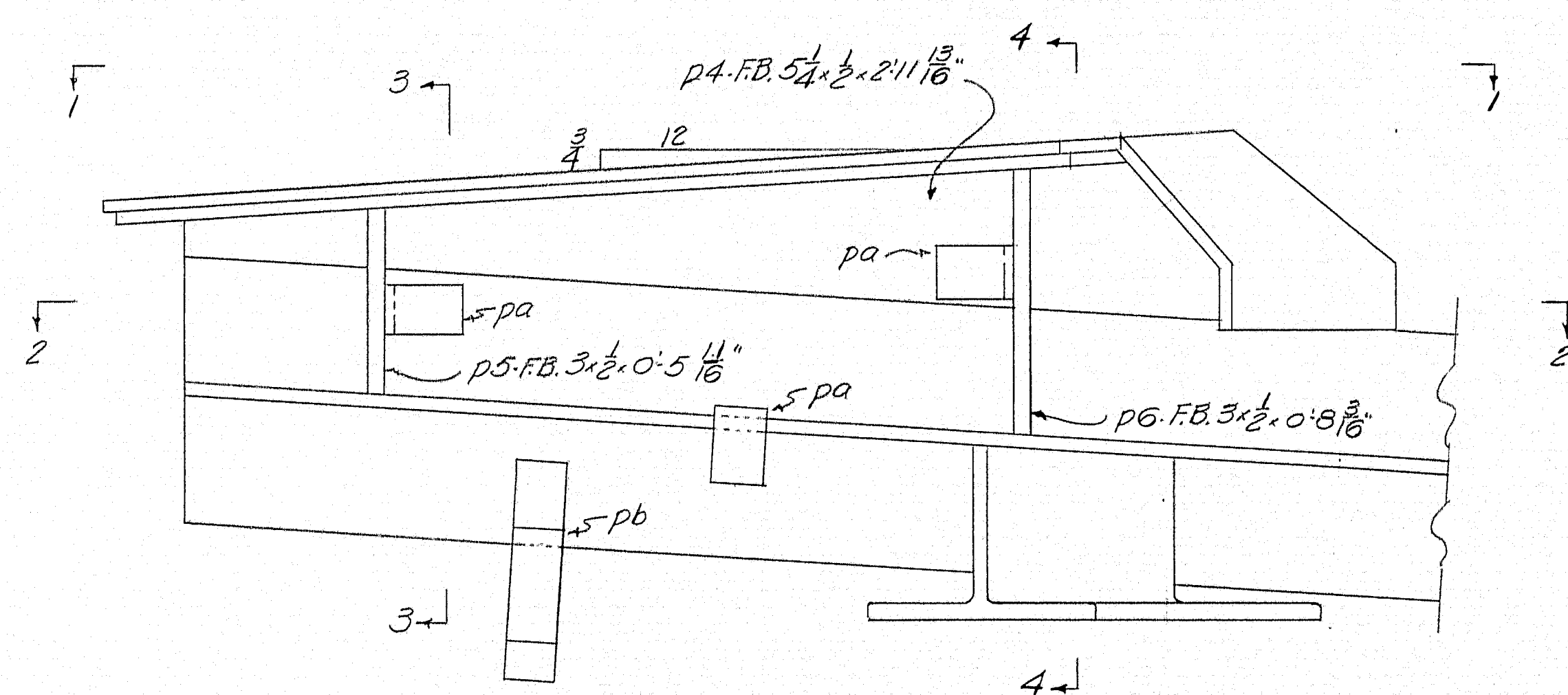




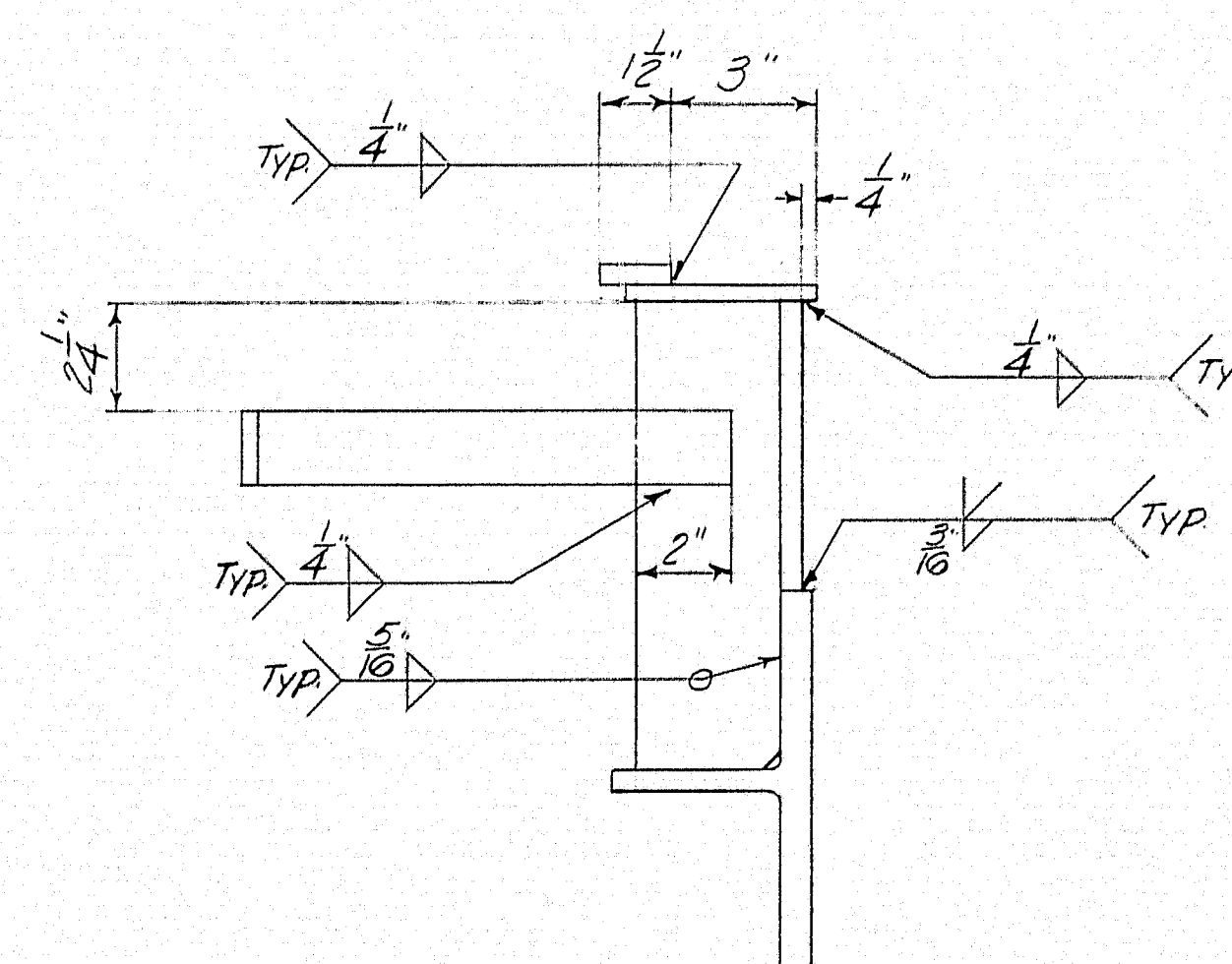
SECTION 1-1



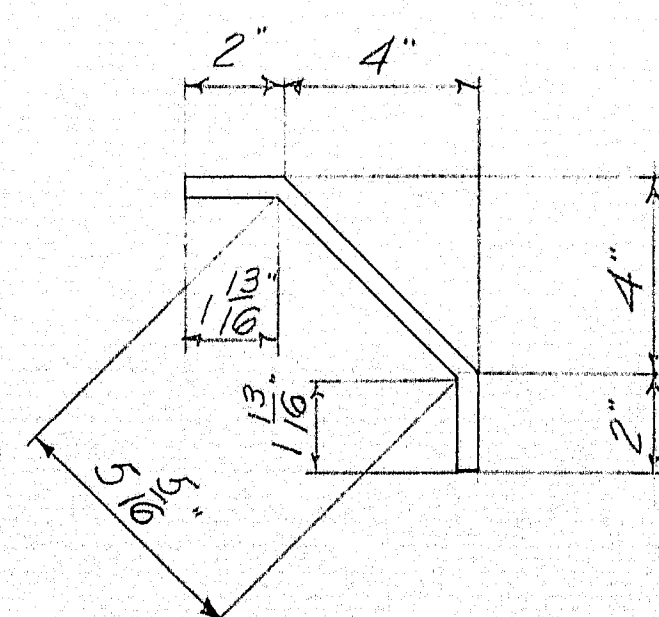
SECTION 2-2



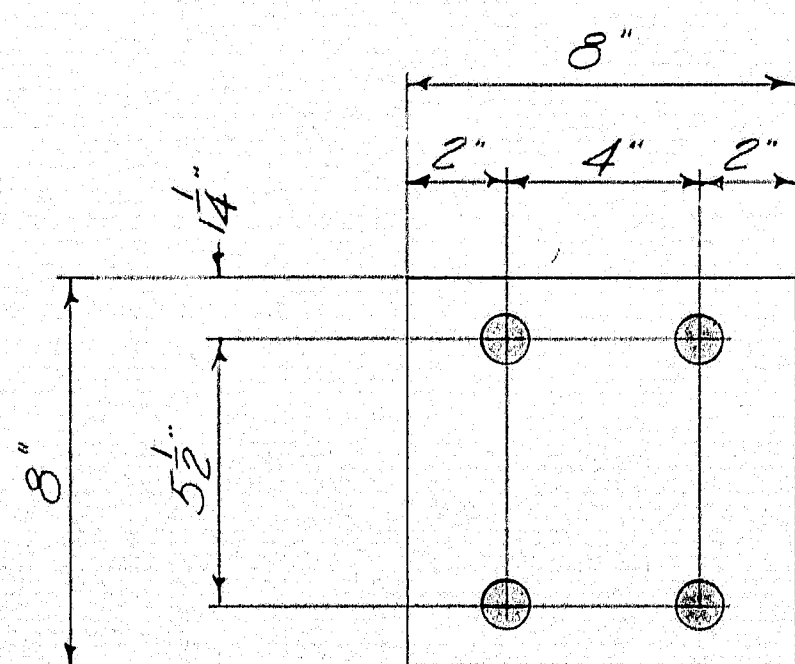
DETAIL 'A'



SECTION 3-3 - AS SHOWN  
SECTION 4-4 - SIMILAR



Bending detail for p3 & p23



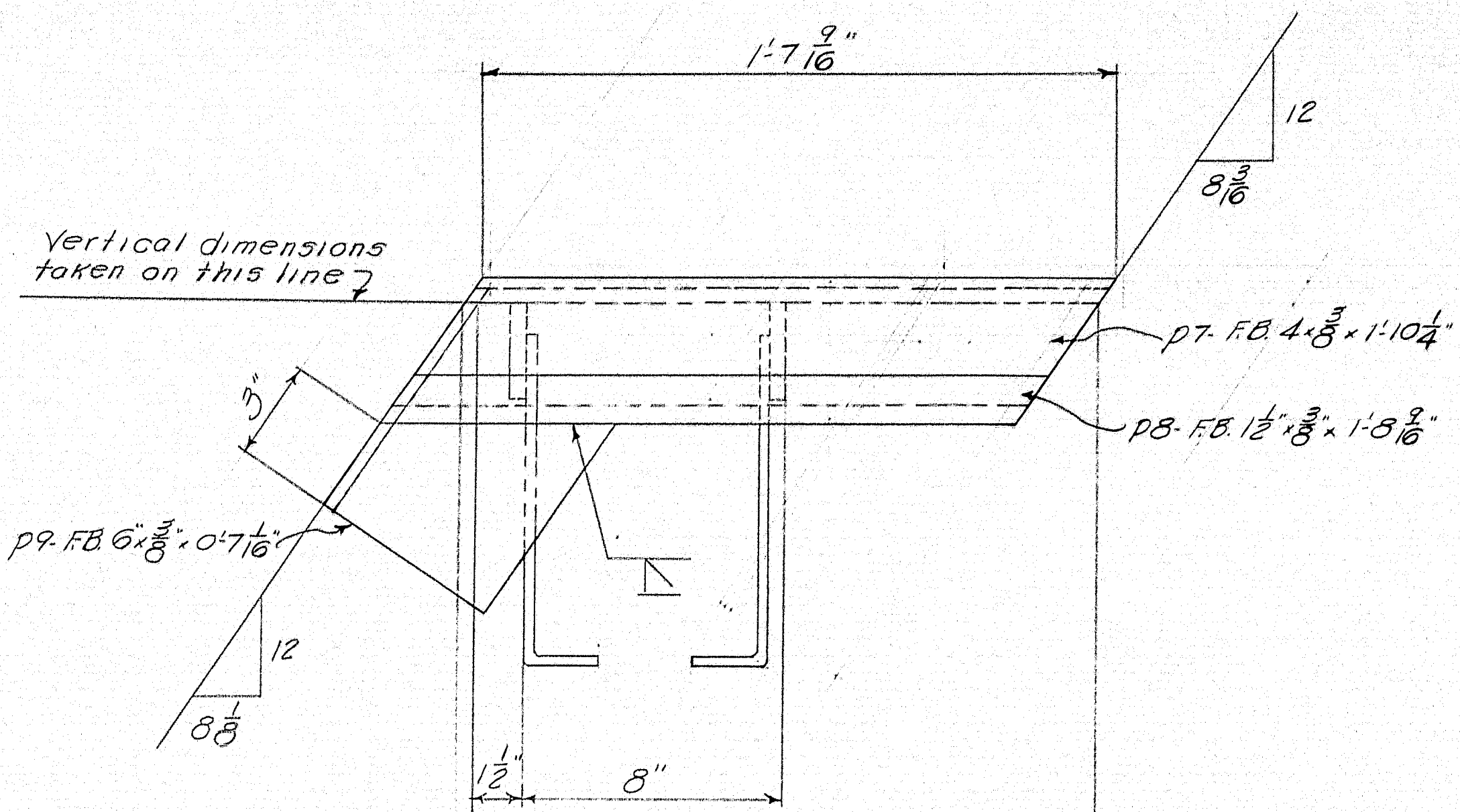
SHIM A (1/4" THICK) - 12 REQ'D  
SHIM B (1/8" THICK) - 12 REQ'D  
SHIM C (1/16" THICK) - 24 REQ'D

NOTES:  
Work this DWG with DWGS. 60-284-543 to 548 inc.

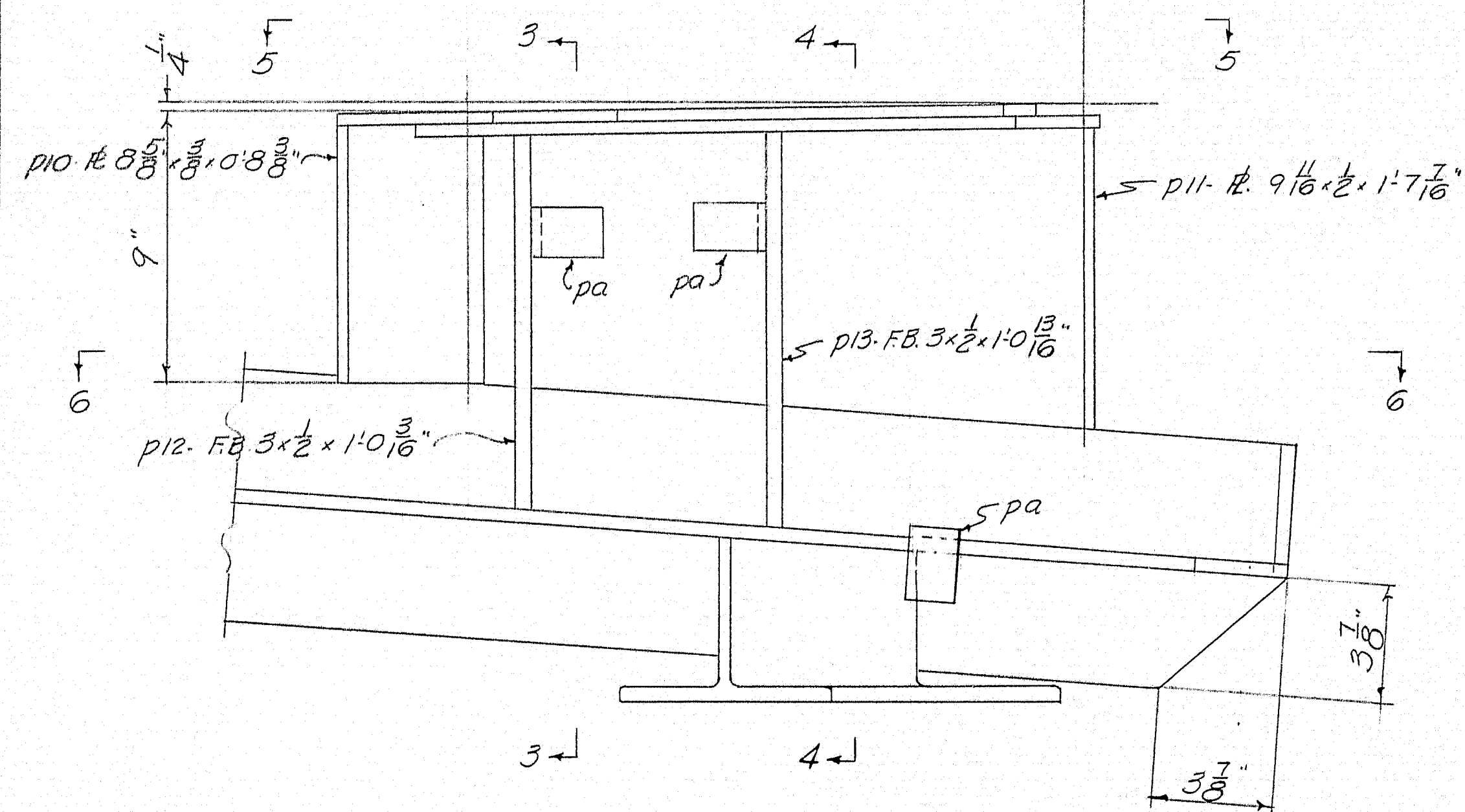
APR 10 1960		EXPANSION DAM	
		Bancroft & Martin Poling Mills Company	
		South Portland 7, Maine	
		INTERSTATE OVER VERANDA ST. PORTLAND, ME.	
DRAWN 10-12-60 P.L.F.		CUSTOMER E.C. SNODGRASS, INC.	
REVISION		DESIGNER M.S.H.C.	
REVISION		ORDER NO. _____	
REVISION		DWG. NO. 60-284-544	

c.l.h.

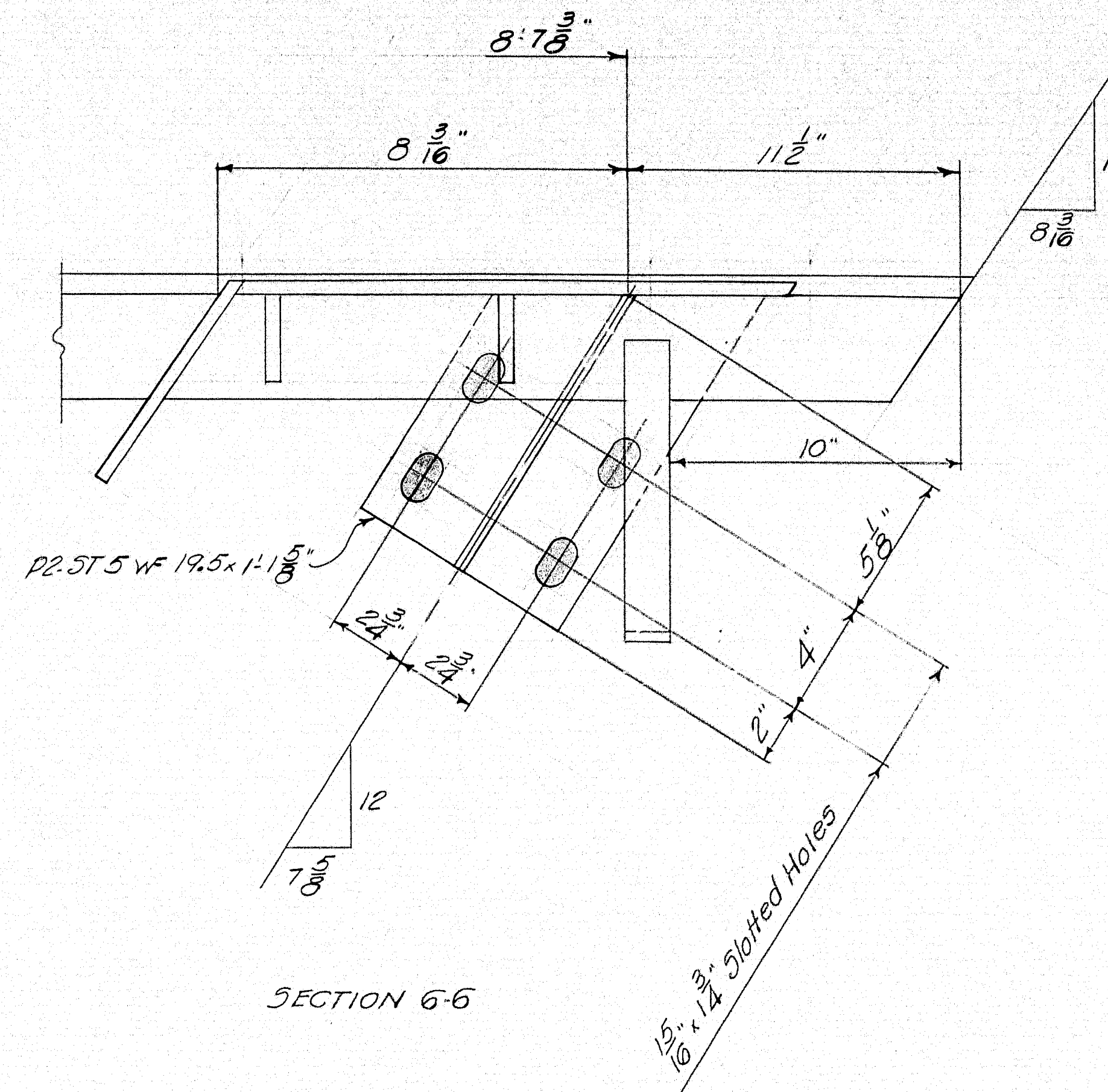




SECTION 5-5



DETAIL "B"

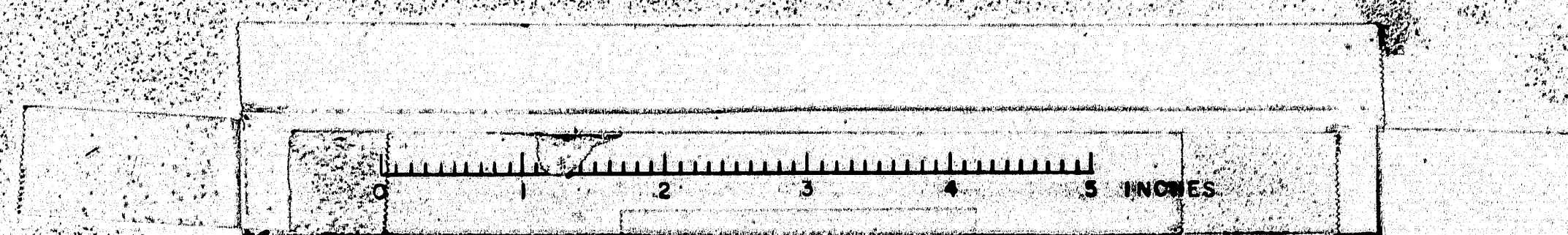


SECTION 6-6

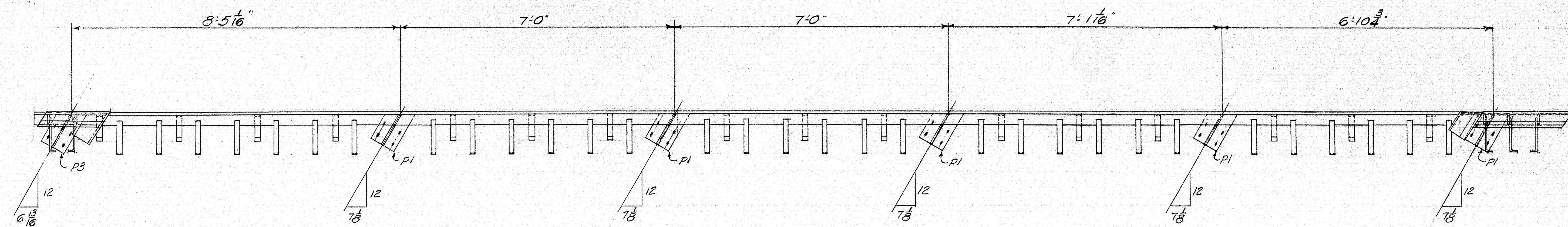
NOTES:  
Work this DWG. with DWGS 60-284-543 to 548 inc.

DRAWN	10-18-60	P.L.F.
REVISION		
REVISION		
REVISION		

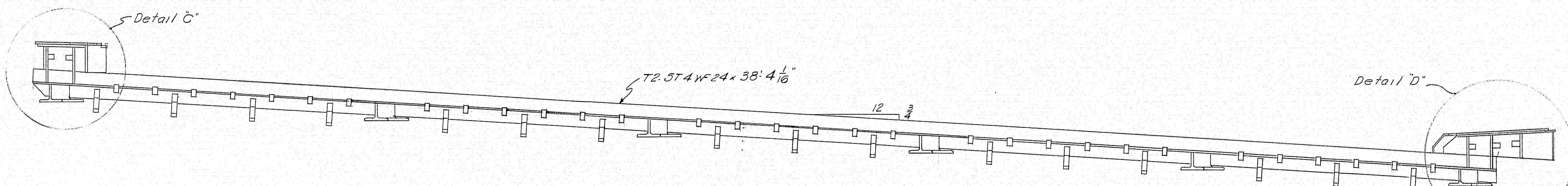
EXPANSION DAM
<i>Bancroft &amp; Martin Rolling Mills Company</i>
<i>South Portland 7, Maine</i>
INTERSTATE OVER VERANDA ST.
PORTLAND, ME.
CUSTOMER <i>E.C. SNODGRASS, INC.</i>
DESIGNER <i>M.S.H.C.</i>
ORDER NO. _____
DWG. NO. <i>60-284-543</i>







PLAN



ELEVATION

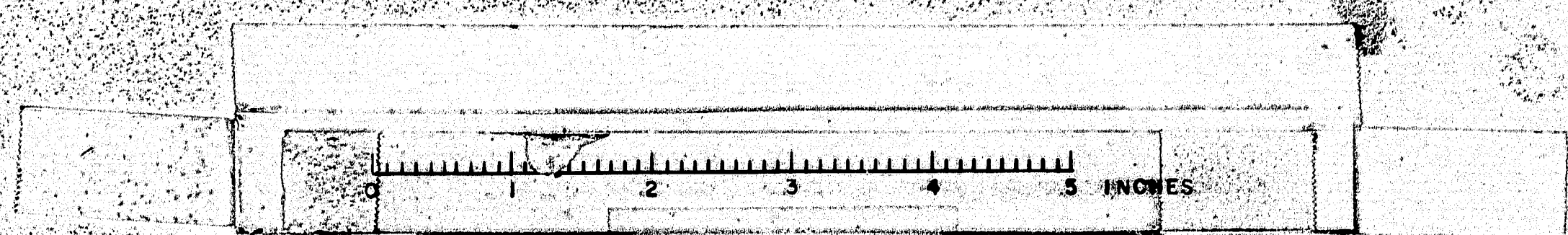
EXPANSION DAM  
EDB- One Req'd

NOTES:  
Work this DWG. with DWGS. 60-284-543 to 548 inc.

EXPANSION DAM			
Bancroft & Martin Holdings, Ltd. Company			
South Portland, Me.			
INTERSTATE OVER VERANDA ST.			
PORTLAND, ME.			
CUSTOMER E.C. SNODGRASS, INC.			
DESIGNER M.S.H.C.			
ORDER NO. _____		DWG. NO. 60-284-546	

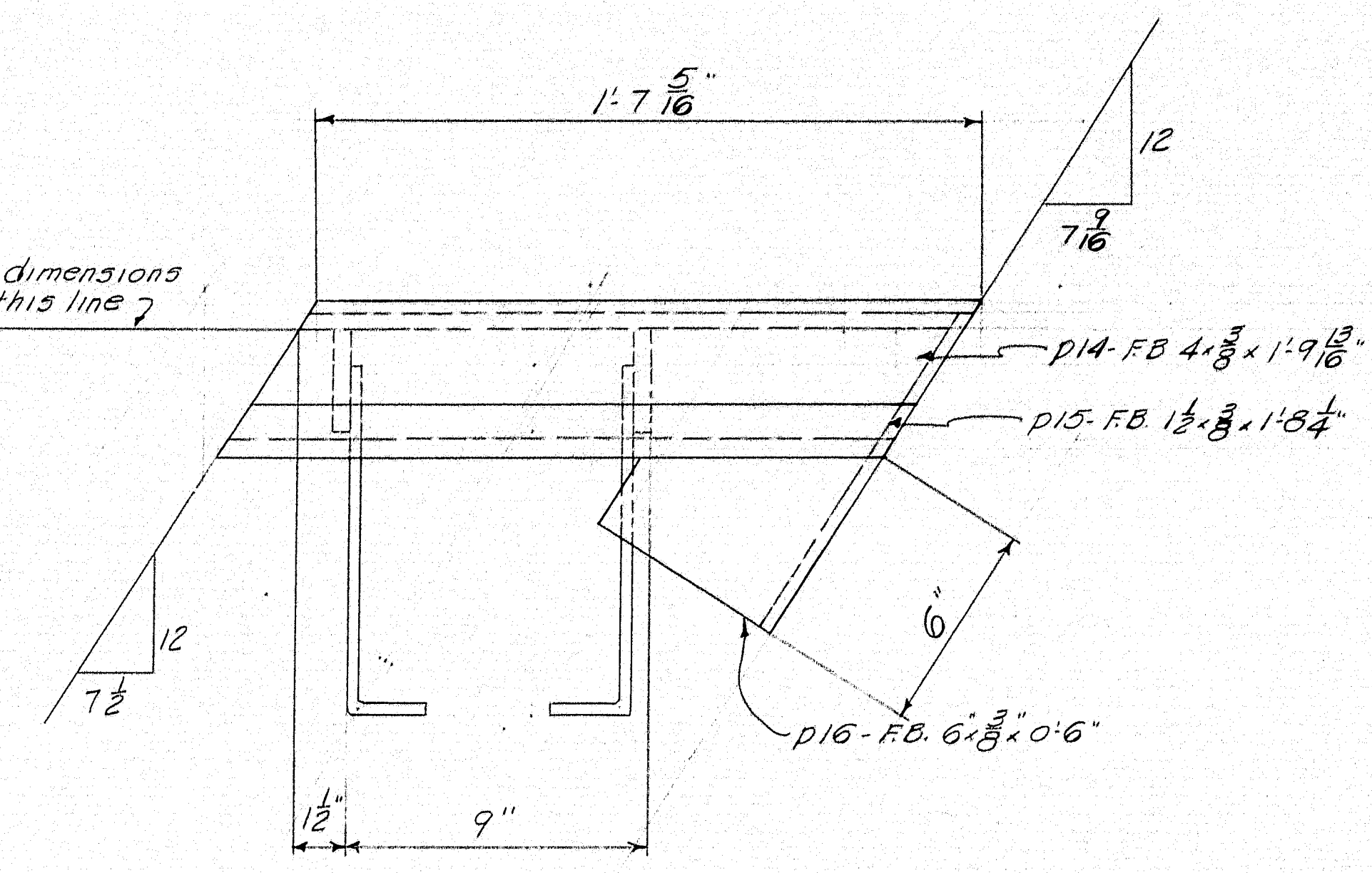
APP. 10-19-60

DRAWN	10-12-60	PLF
REVISION		
REVISION		
REVISION		

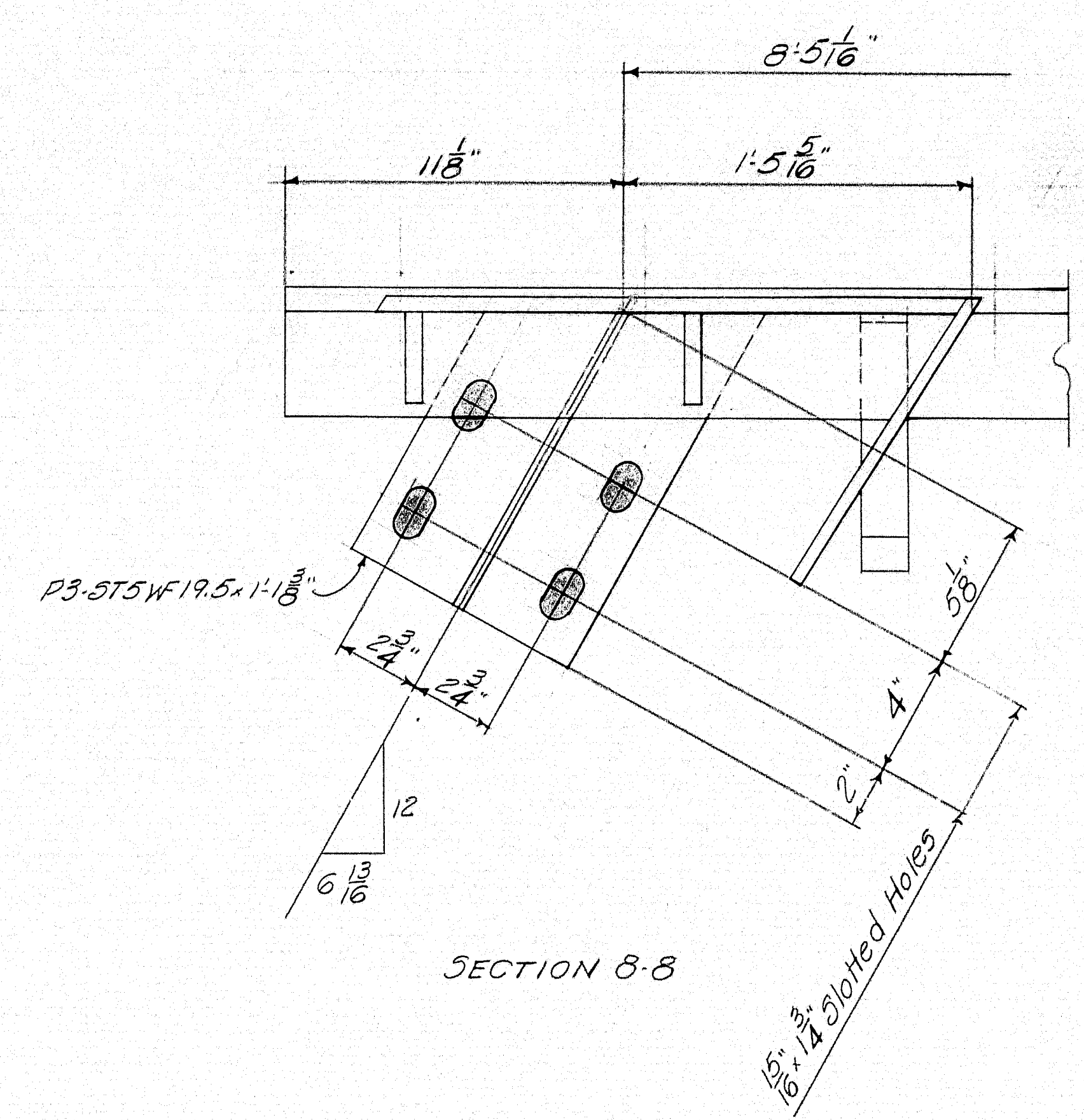




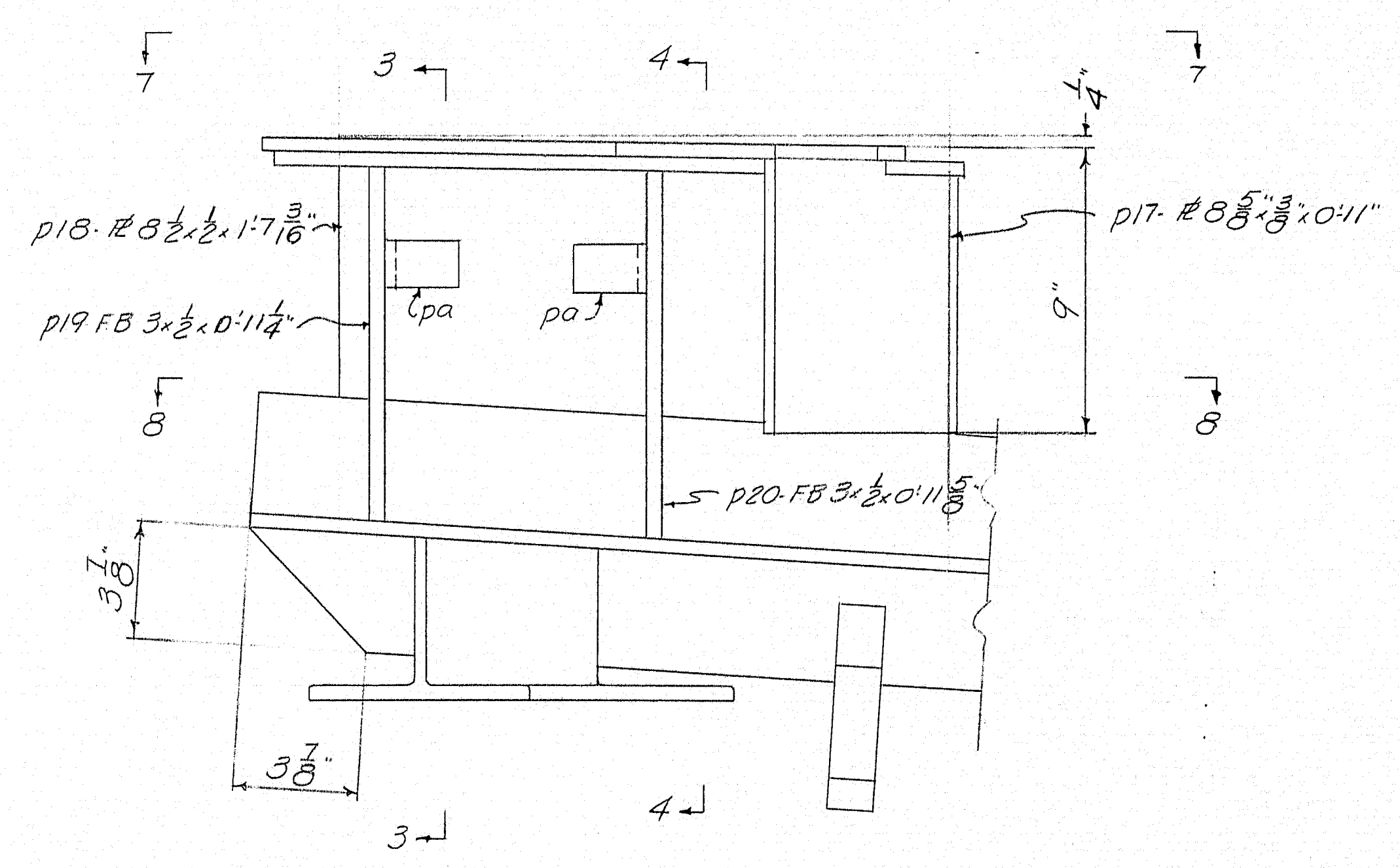
Vertical dimensions  
taken on this line 7



SECTION 7-7



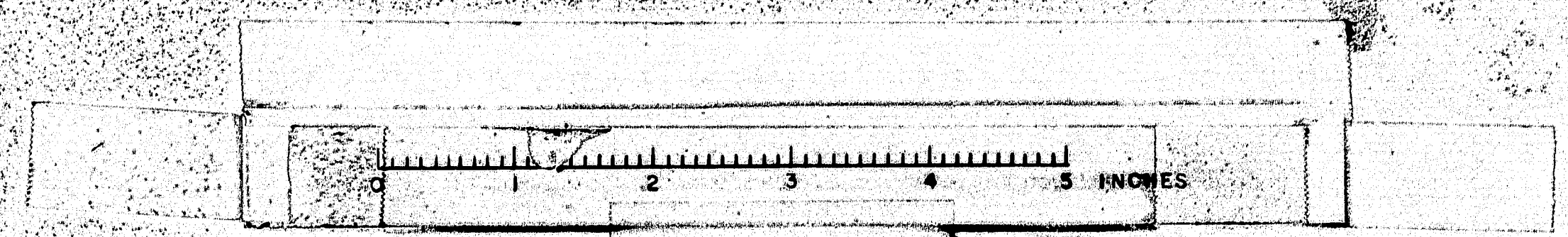
SECTION 8-8



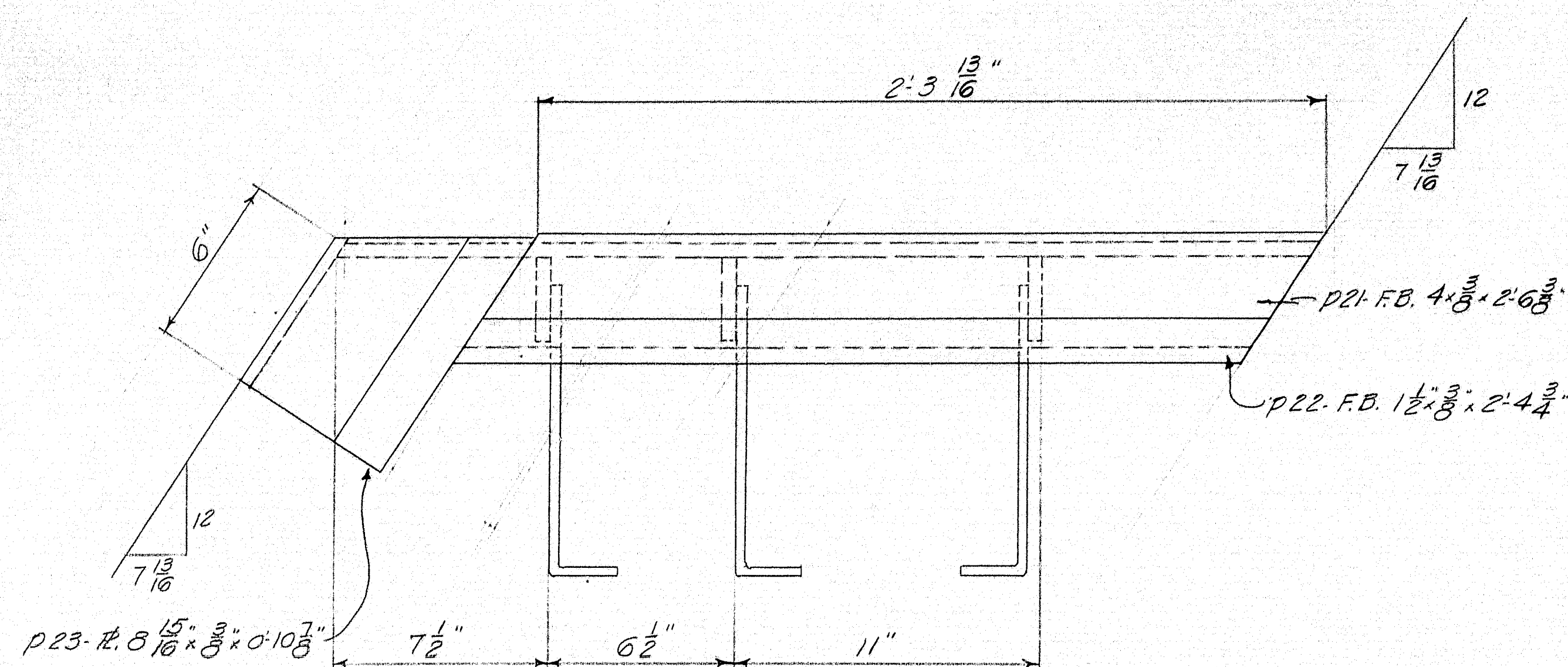
DETAIL "C"

NOTES:  
Work this DWG. with DWGS. 60-284-543 to 548 inc.

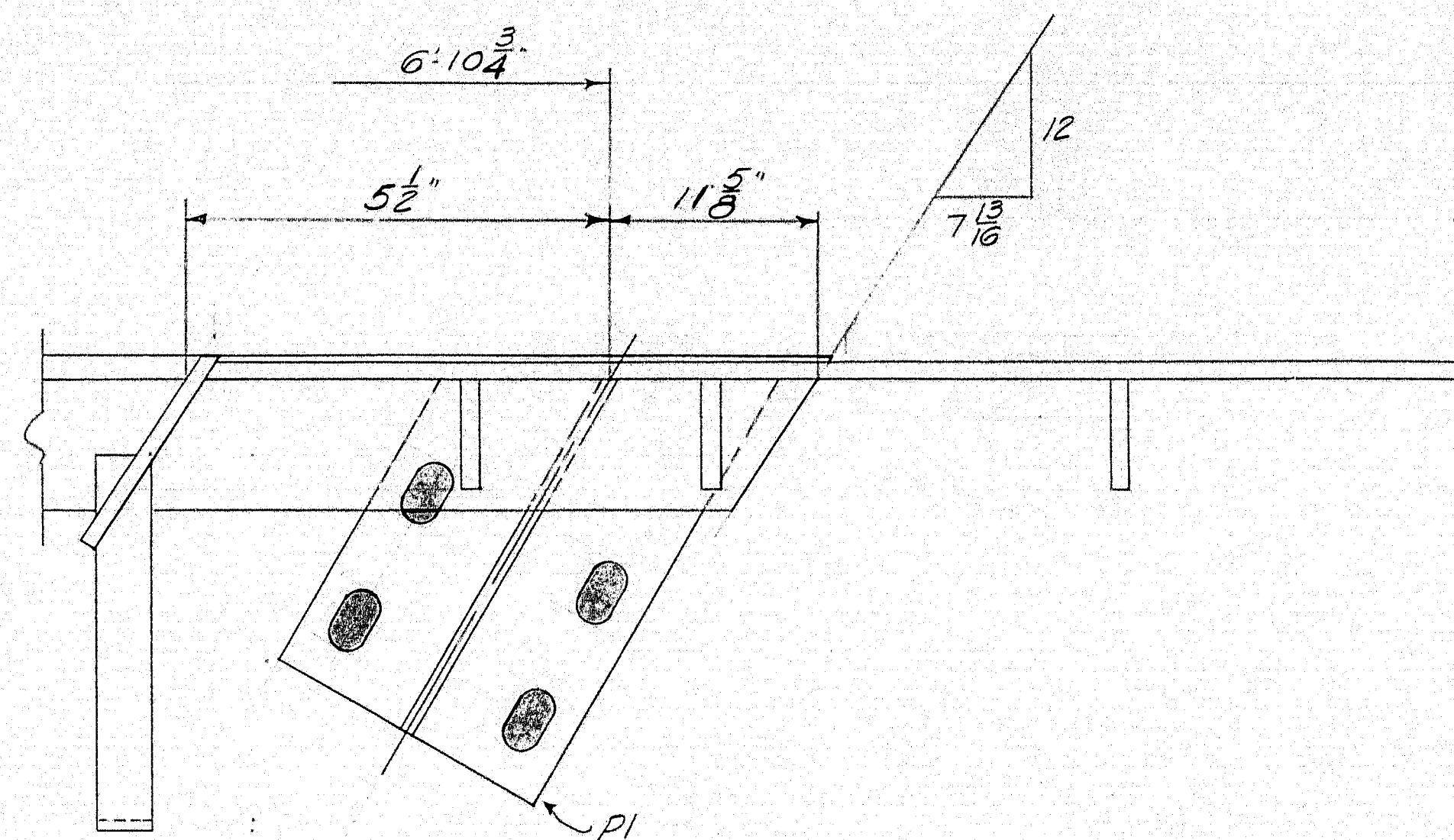
EXPANSION DAM	
Bancroft & Martin Holdings, Mill Company	
South Portland, Maine	
INTERSTATE OVER VERANDA ST. PORTLAND, ME.	
CUSTOMER	E.C. SNODGRASS, INC.
DESIGNER	M.S.H.C.
ORDER NO.	DWG. NO. 60-284-547



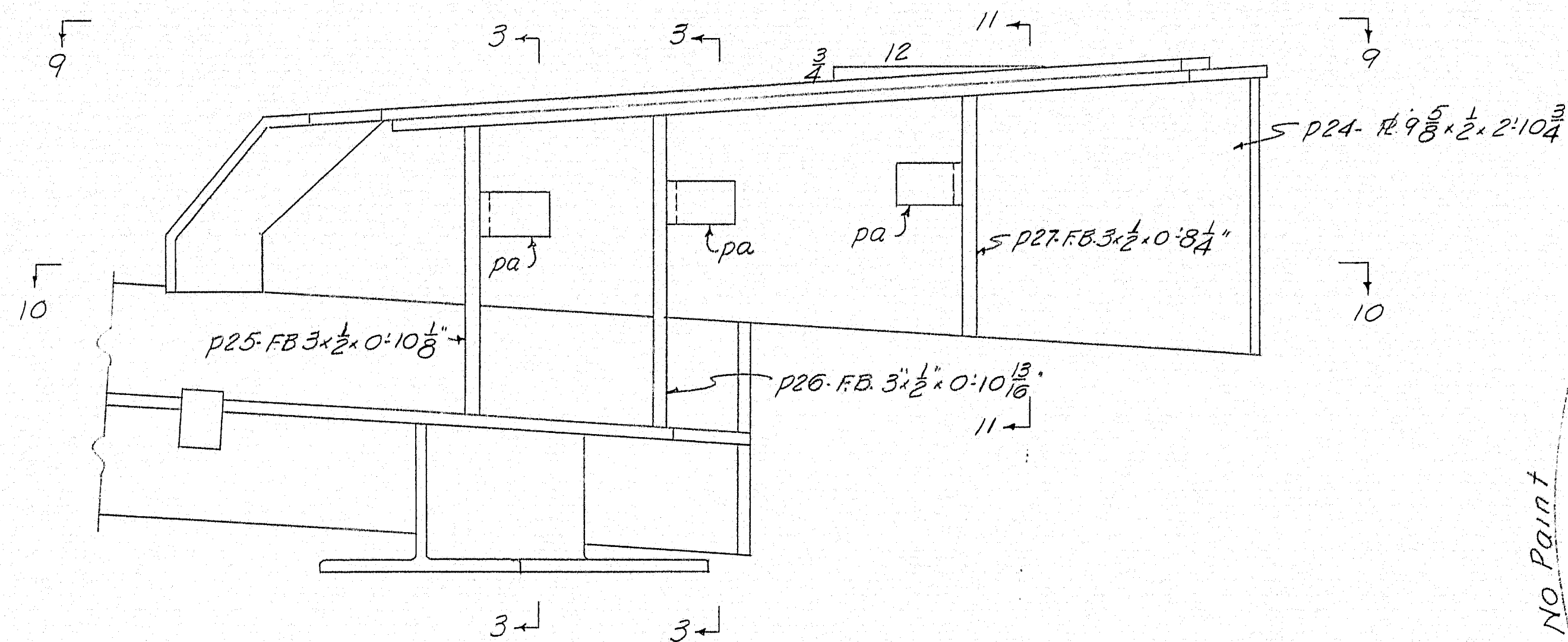




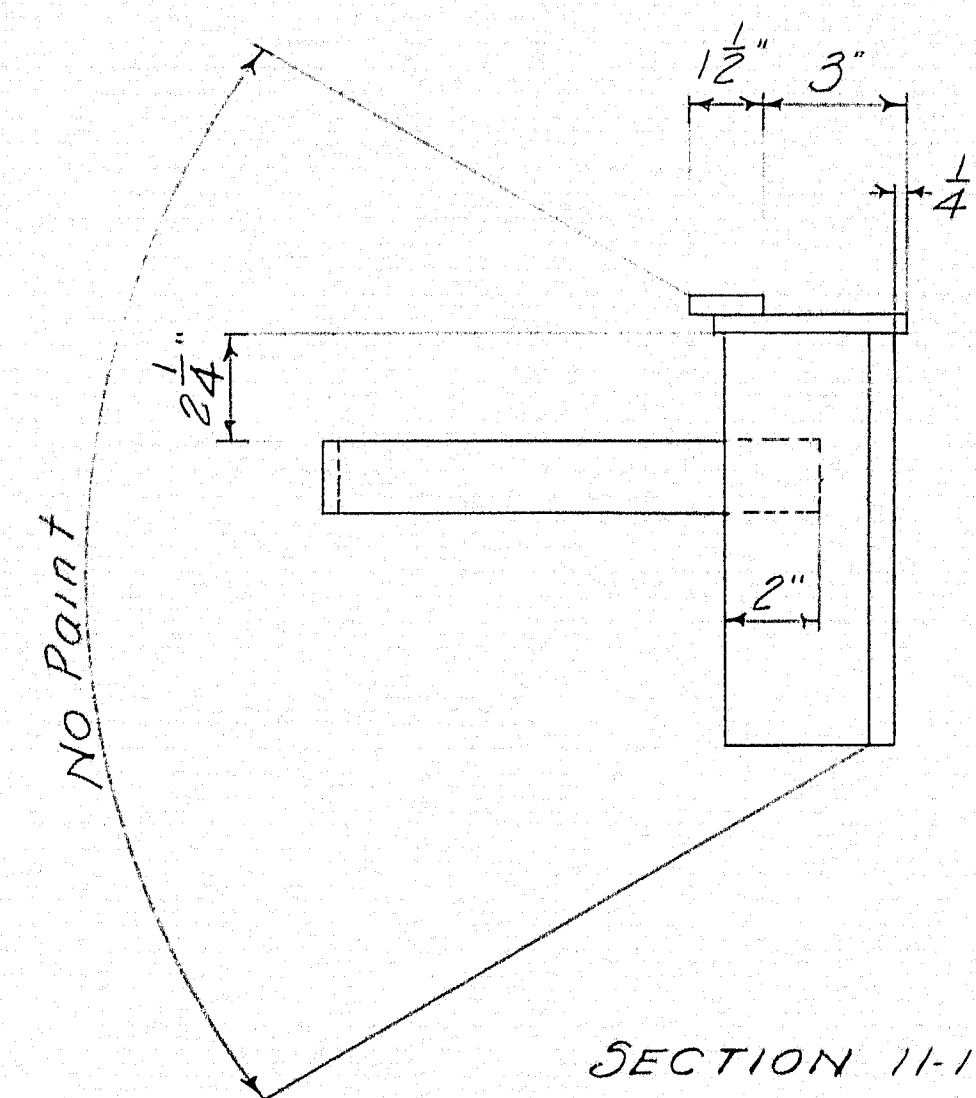
SECTION 9-9



SECTION 10-10



DETAIL "D"



SECTION 11-11

NOTE:-  
Work this DWG with DWGS 60-284-543 to 547 inc.

SHIP		BILL OF MATERIAL				DWG. NO. 60-284-548	
MARK	NO.	MARK	SHAPE	LENGTH	WT.	W.T. DEDUCTION	REMARKS
ED7	1		Shop Assembly				
ED8	1		do				
	1	T1	ST4 WF24	39 6 3/4			2
	1	T2	do	38 4 1/2			2
	10	P1	ST5 WF19.5	1 1/2			34
	1	P2	do	1 1/2			4
	1	P3	do	1 1/2			4
	1	P1	F.B. 4 x 3/8	2 7 1/2			1
	1	P7	do	1 10 1/4			1
	1	P14	do	1 9 1/2			1
	1	P21	do	2 6 3/4			1
	1	P2	F.B. 1 1/2 x 3/8	2 5 1/2			
	1	P8	do	1 8 1/2			
	1	P15	do	1 8 1/2			
	1	P22	do	2 4 1/2			
	1	P3	R. 8 1/2 x 3/8	0 9			2
	1	P23	do	0 10 3/4			2
	1	P9	F.B. 6 x 3/8	0 7 1/2			1
	1	P16	do	0 6			1
	1	P10	R. 8 1/2 x 3/8	0 8 3/4			
	1	P17	do	0 11			
	1	P4	F.B. 5 1/2 x 1/2	2 11 1/2			12
	1	P11	R. 9 1/2 x 3/8	1 7 1/2			4
	1	P18	R. 8 1/2 x 1/2	1 7 1/2			2
	1	P24	R. 9 5/8 x 1/2	2 10 3/4			13
	1	P5	F.B. 3 x 1/2	0 5 1/2			
	1	P6	do	0 8 1/2			
	1	P12	do	1 0 1/2			
	1	P13	do	1 0 1/2			
	1	P19	do	0 11 1/2			
	1	P20	do	0 11 1/2			
	1	P25	do	0 10 3/4			
	1	P26	do	0 10 3/4			
	1	P27	do	0 8 1/2			
	73	pa	F.B. 1 1/2 x 3/8	1 0			
	32	pb	do	1 0			
SHIP A	12		F.B. 8 x 4	0 8			2
SHIP B	12		F.B. 8 x 3	0 8			1
SHIP C	24		F.B. 8 x 1/2	0 8			1
Field	48		3/8 x M. Bolt	0 3 1/4			

This Bill of Mat'l. covers DWGS 60-284-543 to 548 inc.

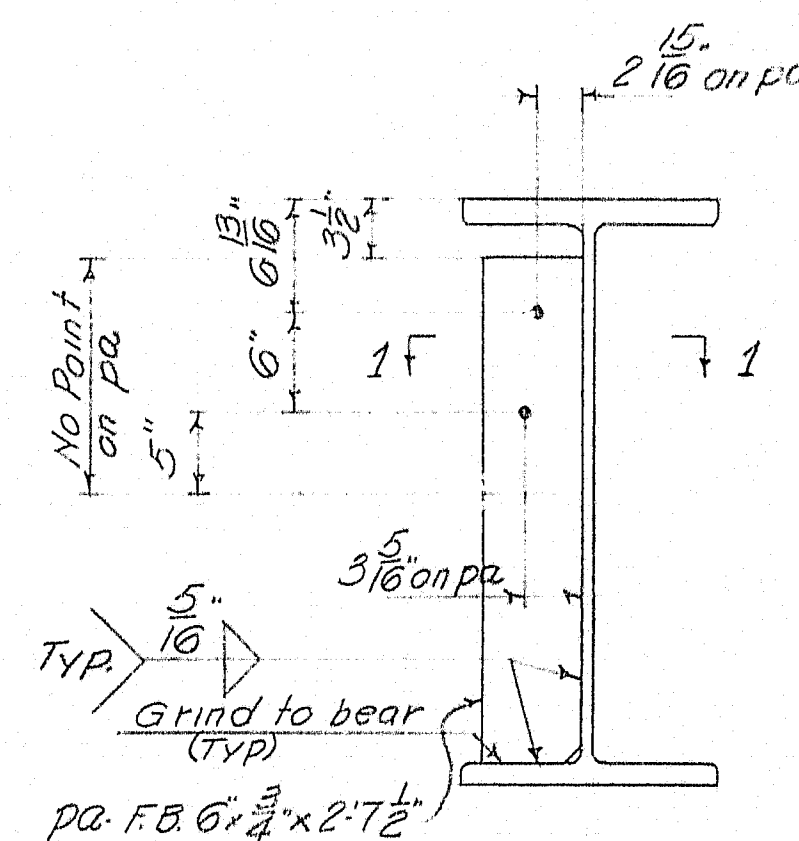
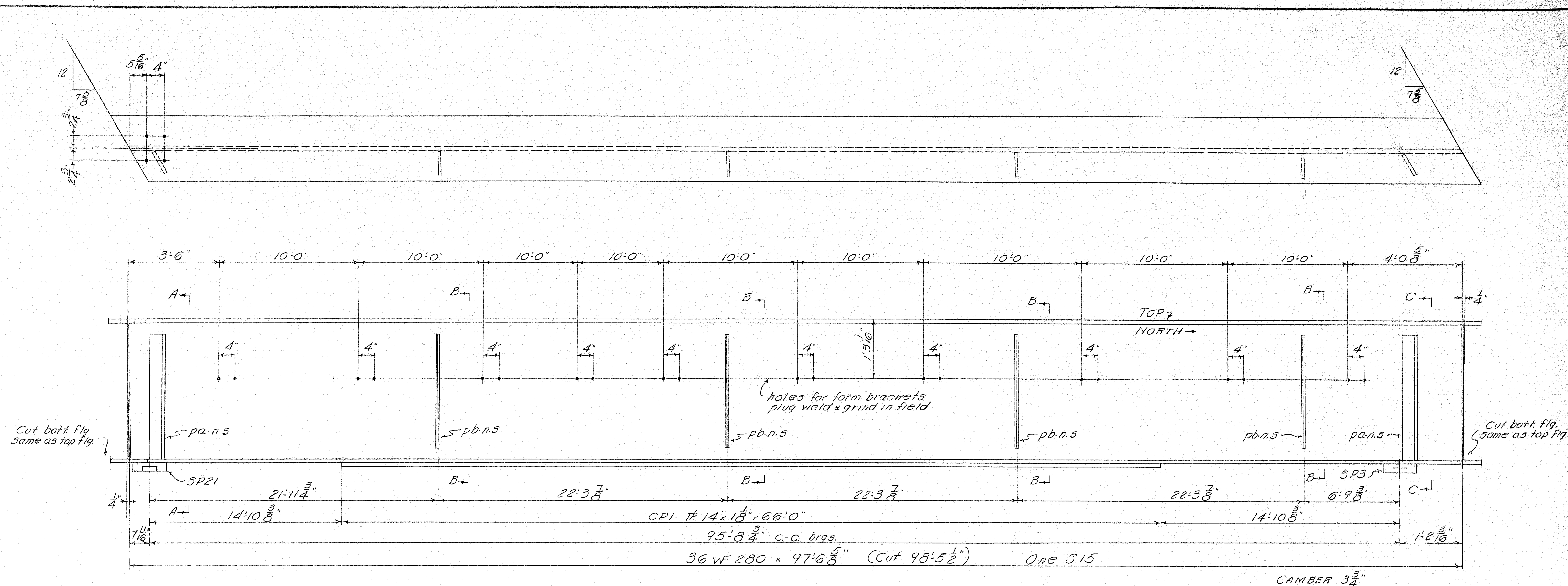
SHOP CONNECTIONS: Welded  
FIELD CONNECTIONS: 3/8" M. Bolts  
HOLES: 1/8" unless noted  
PAINT: Red Lead per M.S.H.C. Specs.

EXPANSION DAM	
Ranocraft & Martin Rolling Mills Company	
South Portland, Maine	
INTERSTATE OVER VERANDA ST.	
PORTLAND, ME.	
CUSTOMER E.C. SNODGRASS, INC.	
DESIGNER M.S.H.C.	
ORDER NO.	DWG. NO. 60-284-548

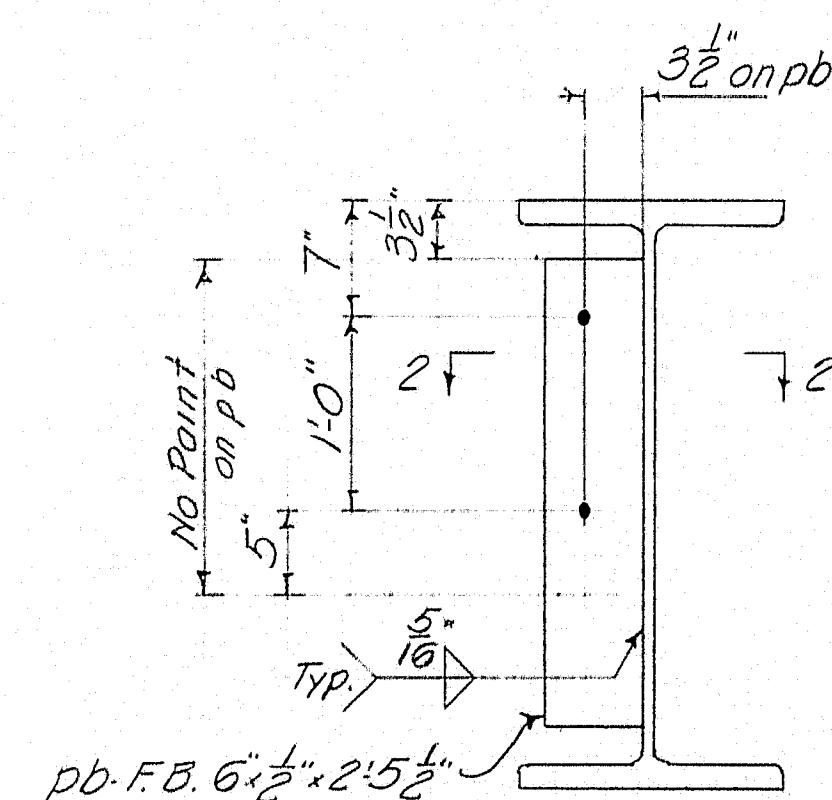
DRAWN	10-13-60	PLF
REVISION		
REVISION		
REVISION		

APR 10-19-60

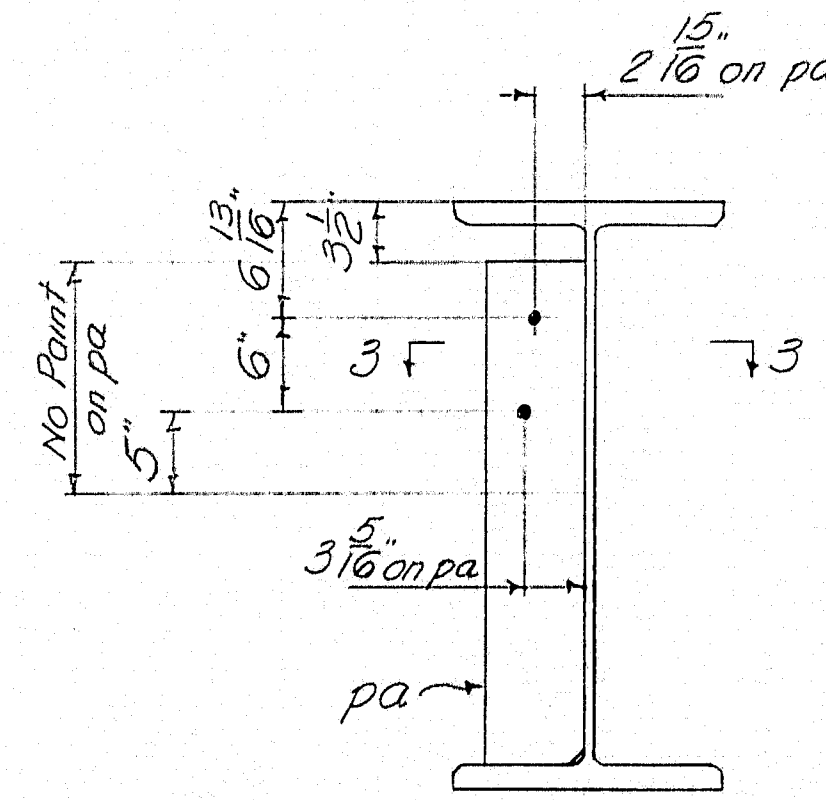




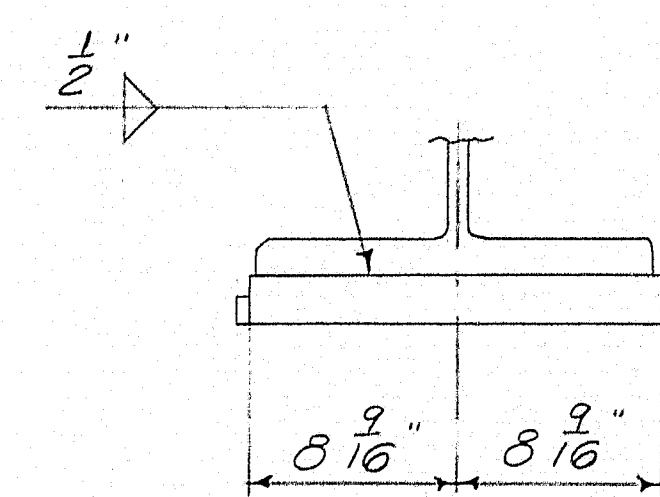
SECTION AA



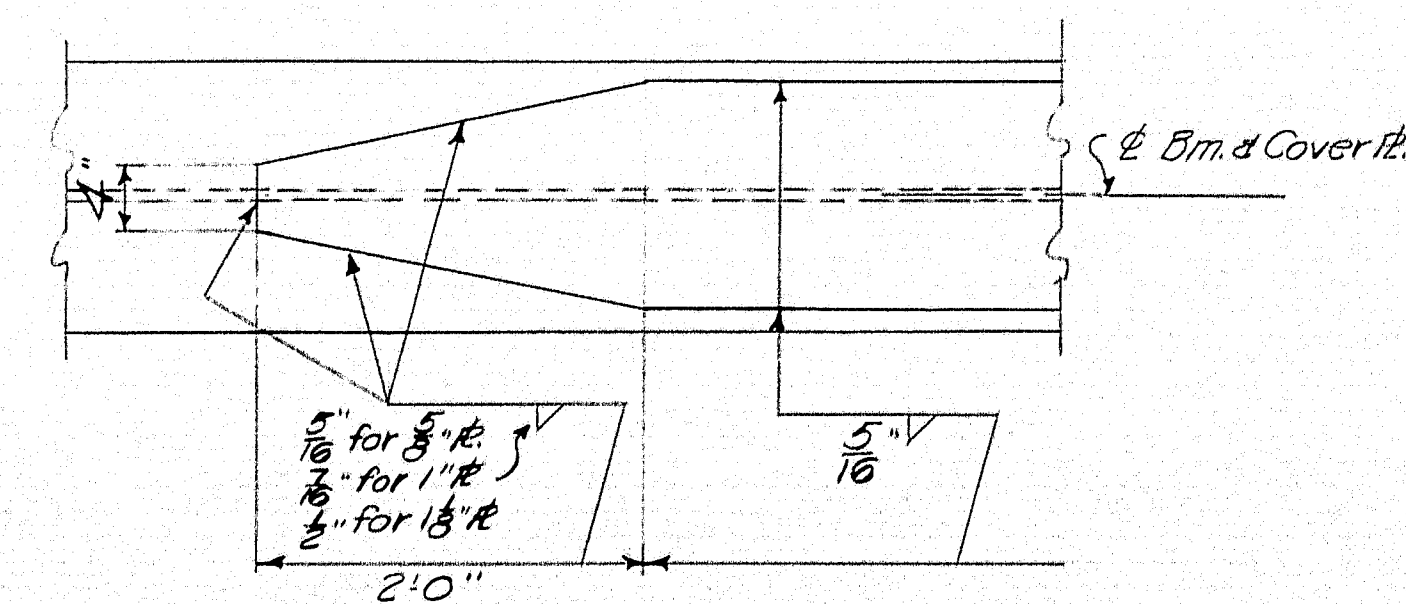
SECTION B-B



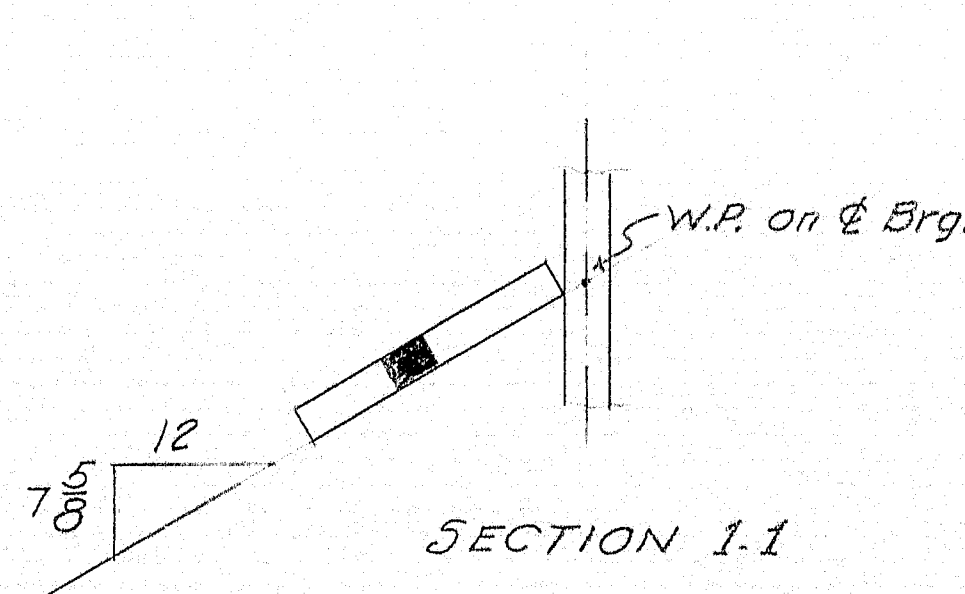
SECTION CC



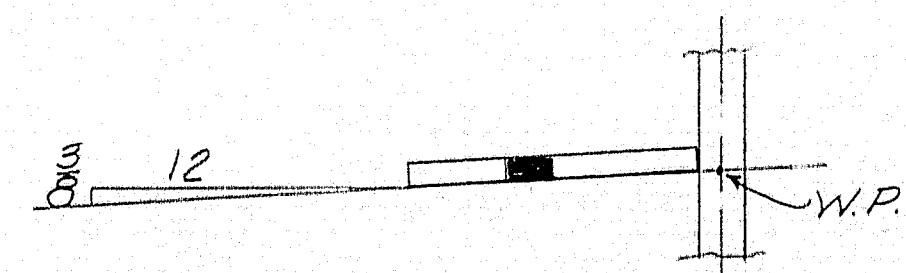
SECTION AT 5P3 & 5P21



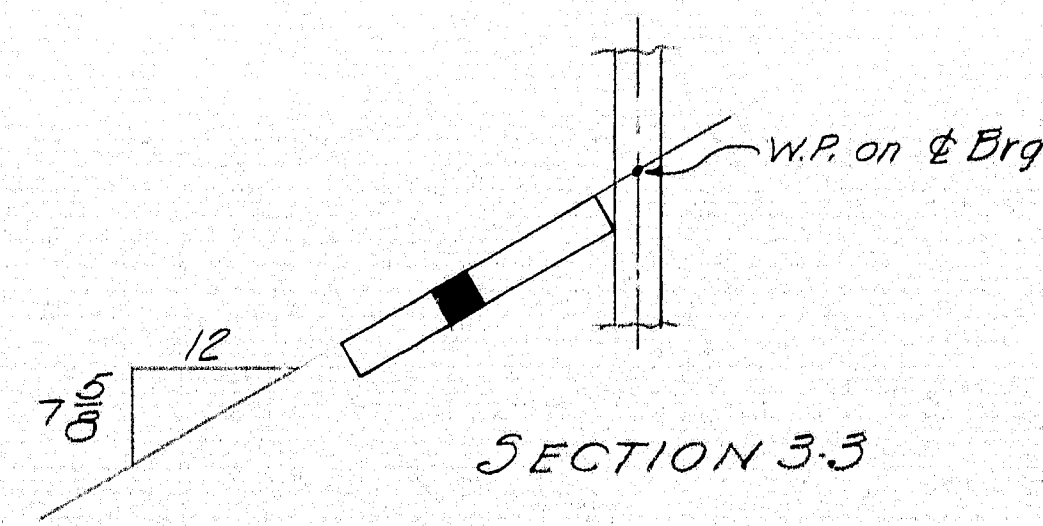
TYPICAL COVER PLATE DETAIL



SECTION 1-1



SECTION 2-2



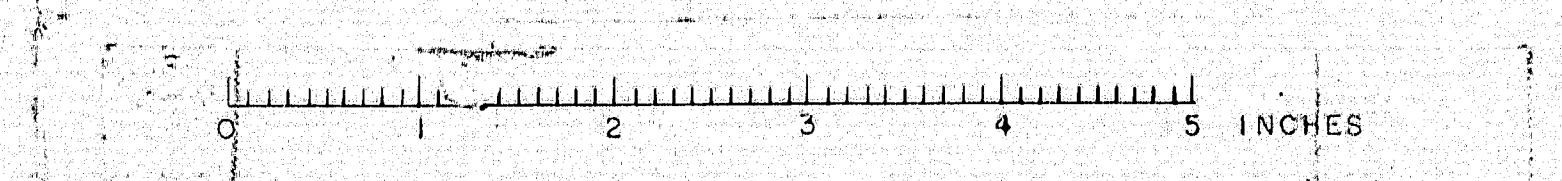
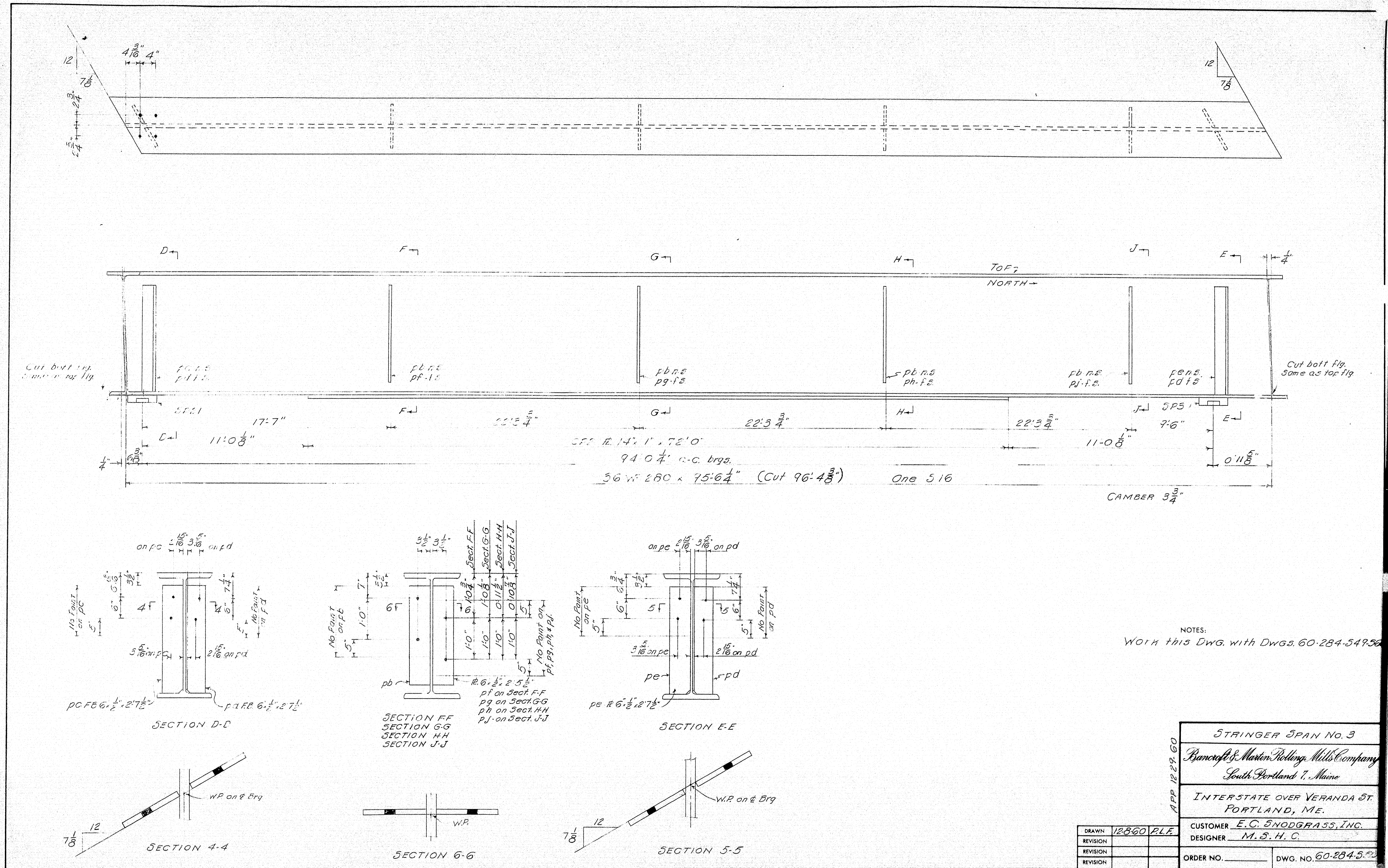
SECTION 3-3

NOTES:

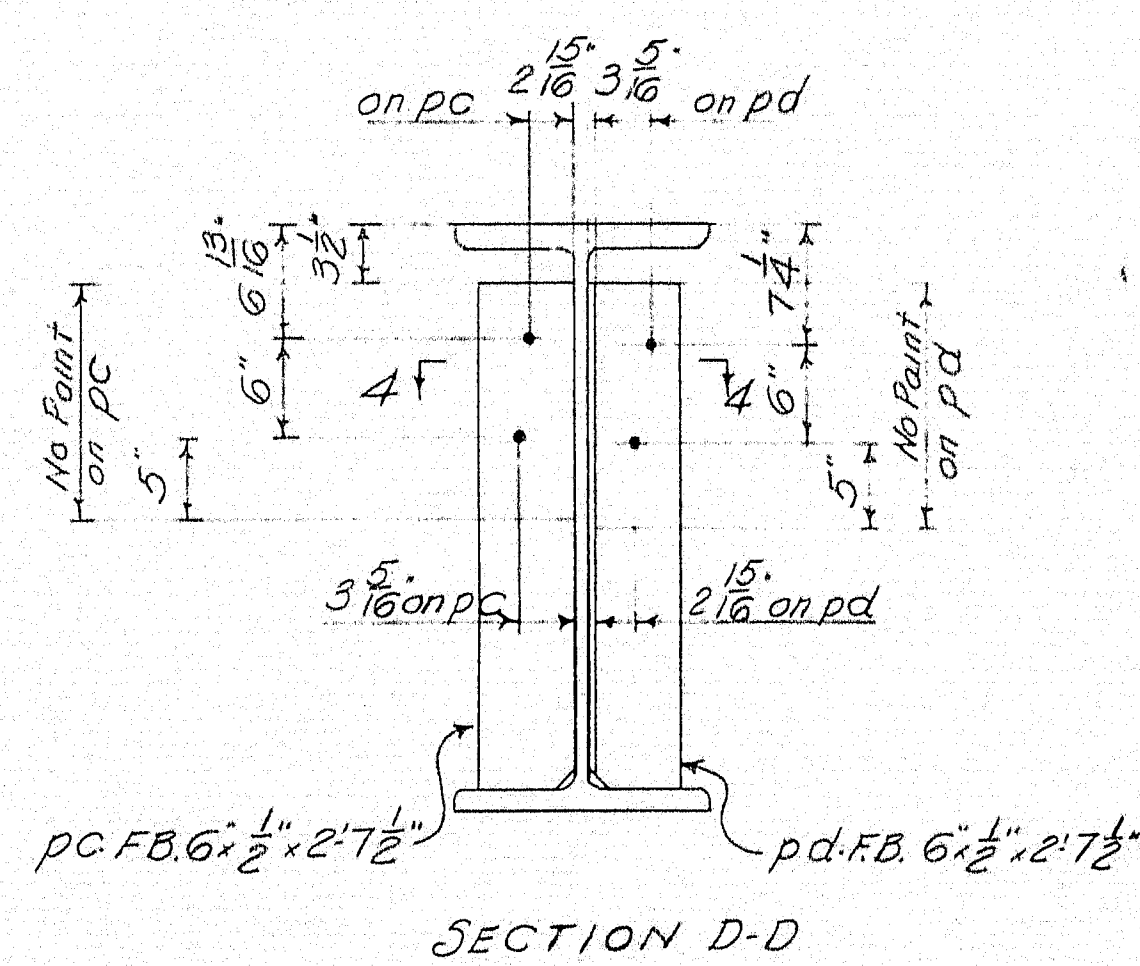
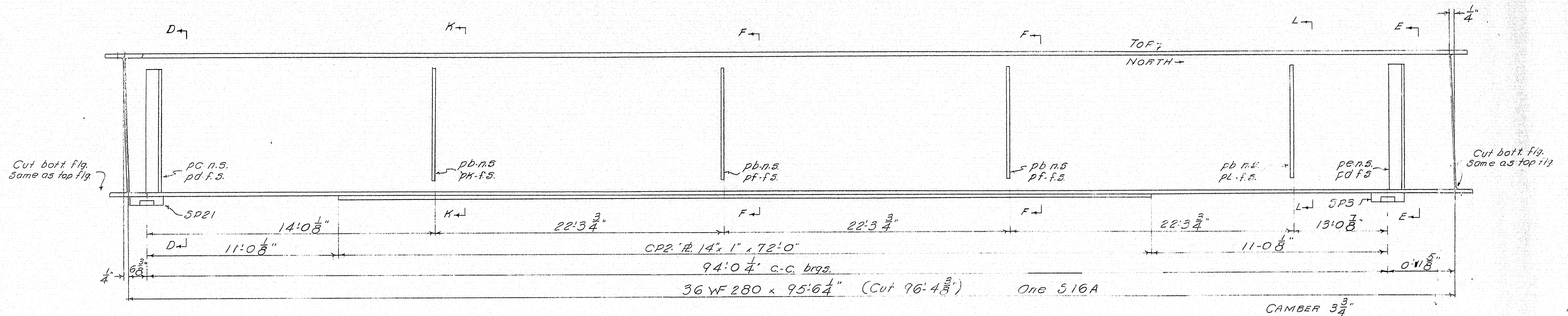
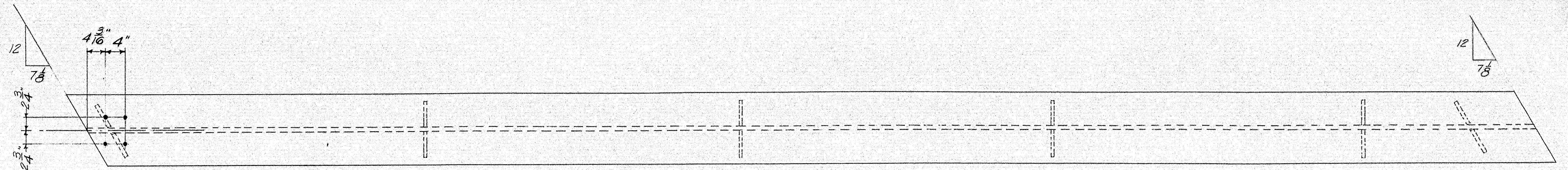
See Dwg. 60-254-51 & 52 for 5P3 & 5P21  
No paint top & edges of top flg.  
Holes: 1/2" - Ø  
Shop Paint: Red Lead per M.S.H.C. Specs.

DRAWN 12-60 RLF		STRINGER - SPAN NO. 3	
REVISION		Bancroft & Martin Rolling Mills Company	
REVISION		South Portland, Maine	
REVISION		INTERSTATE OVER VERANDA ST.	
REVISION		PORTLAND, ME.	
REVISION		CUSTOMER E.C. SNODGRASS, INC.	
REVISION		DESIGNER M.S.H.C.	
REVISION		ORDER NO. _____	
REVISION		DWG. NO. 60-254-549	

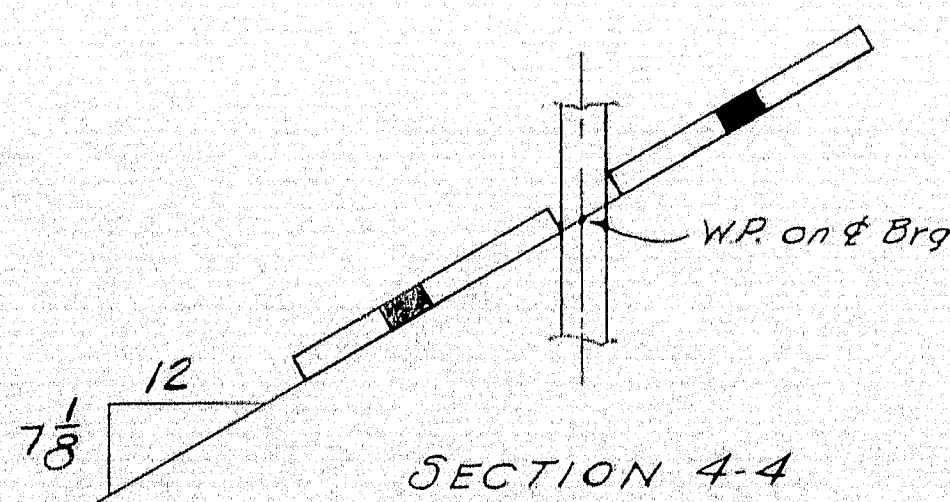




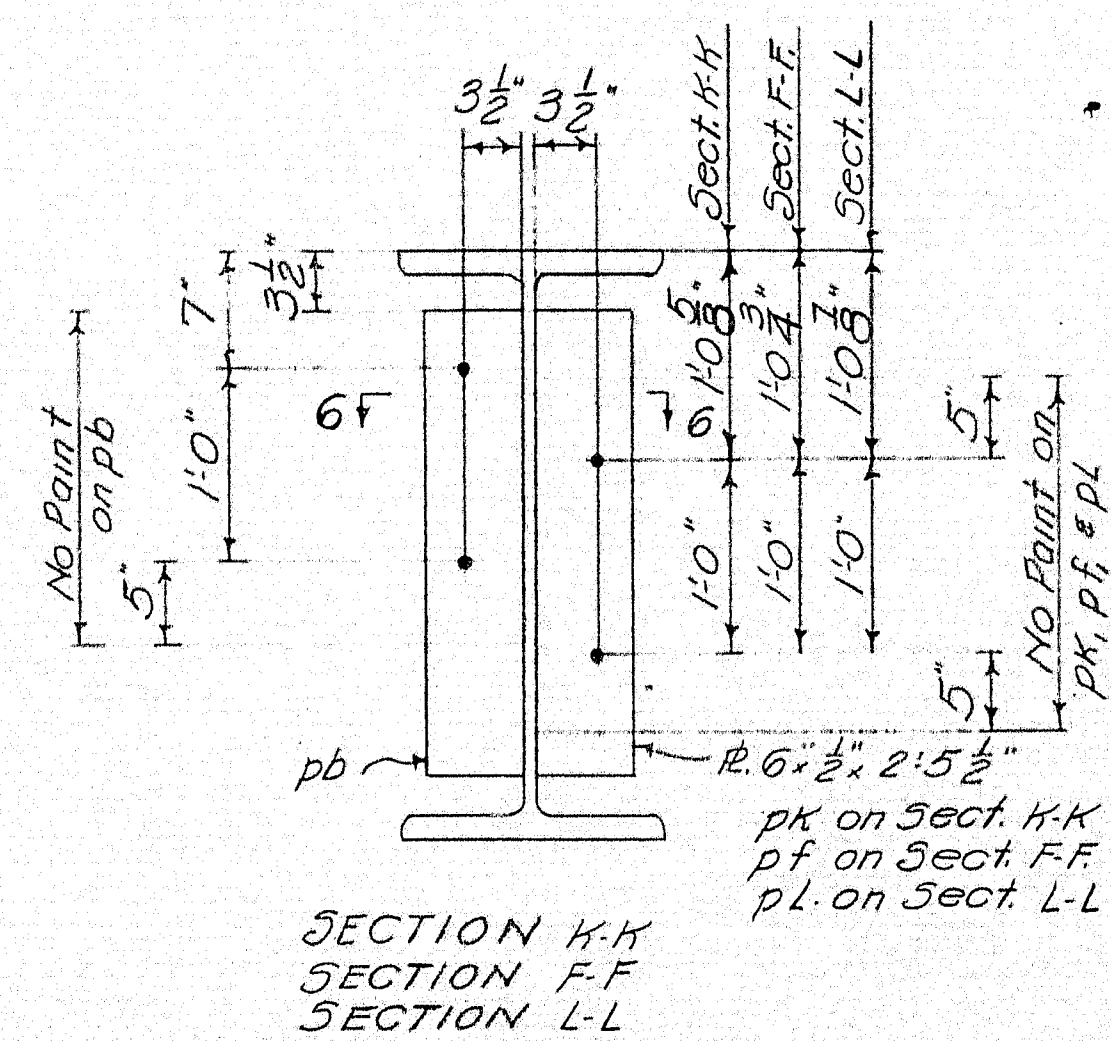




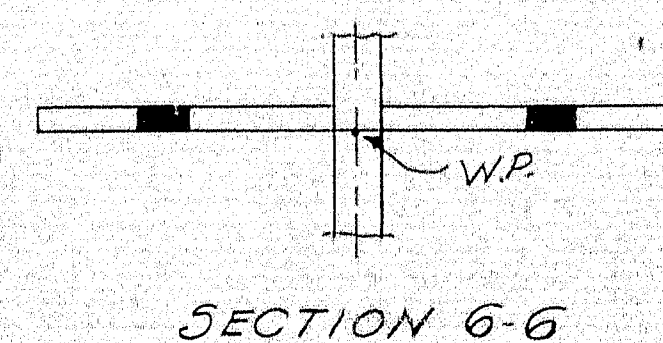
SECTION D-D



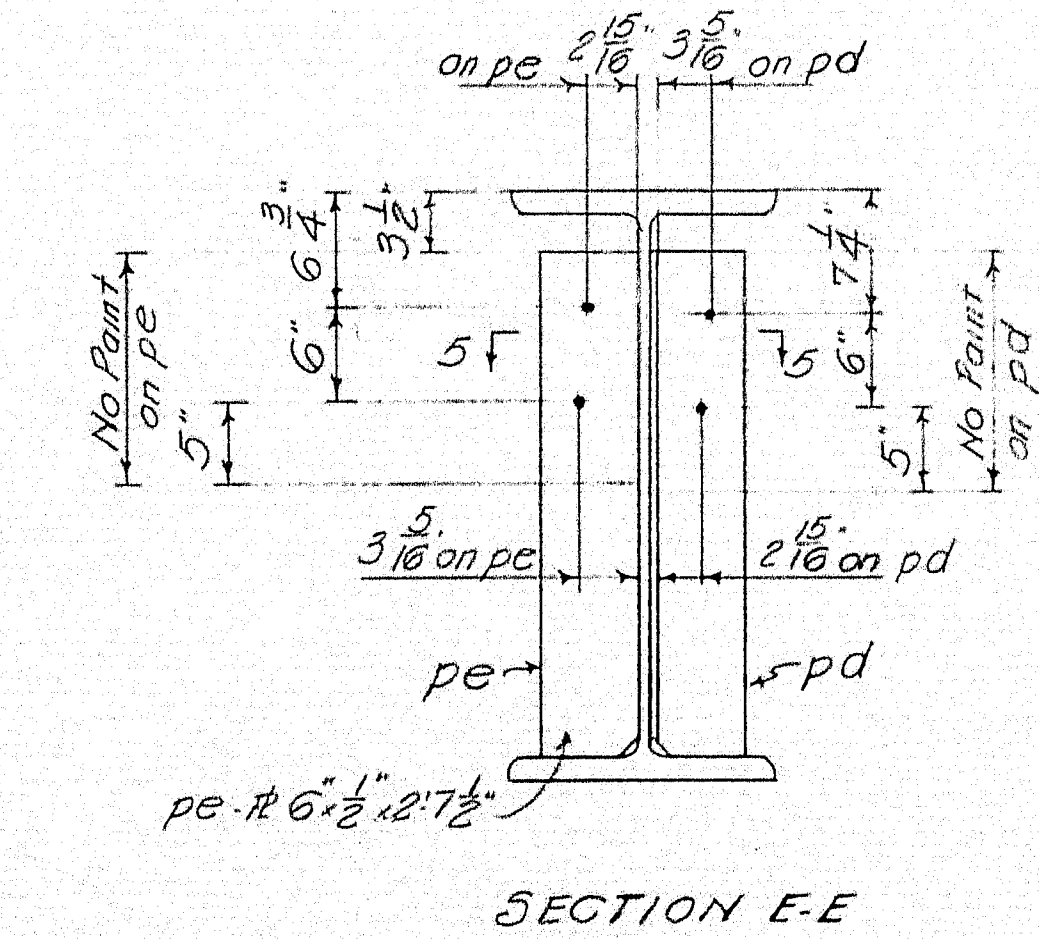
SECTION 4-4



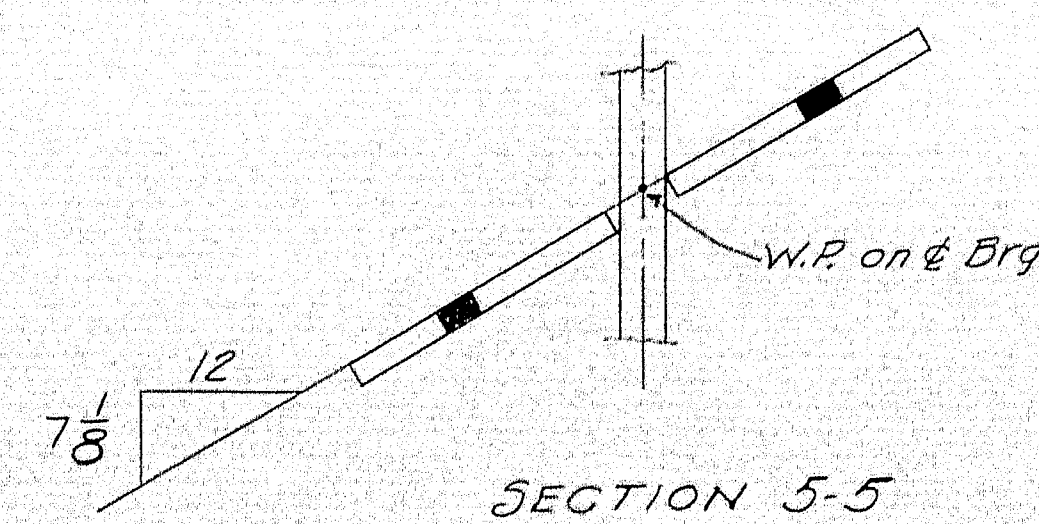
SECTION K-K  
SECTION F-F  
SECTION L-L



SECTION 6-6



SECTION E-E



SECTION 5-5

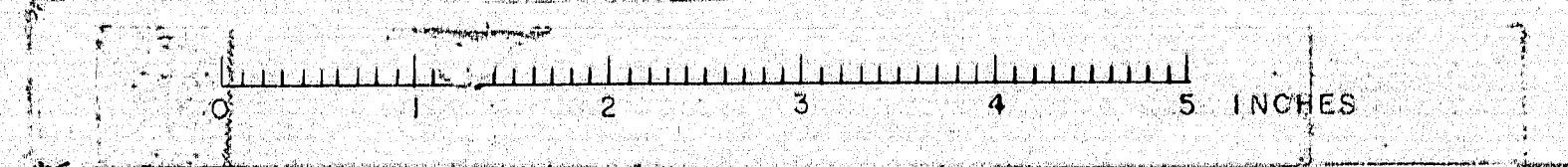
NOTES:  
Woin this DWG. with DWGS. 60-284-549, 550

APR 12-29-60	STRINGER SPAN NO. 3	
	Bancroft & Martin Rolling Mills Company	
	South Portland T. Maine	
	INTERSTATE OVER VERANDA ST. PORTLAND, ME.	
CUSTOMER		E. C. SNODGRASS, INC.
DESIGNER		M. S. H. C.
ORDER NO.		DWG. NO. 60-284-551

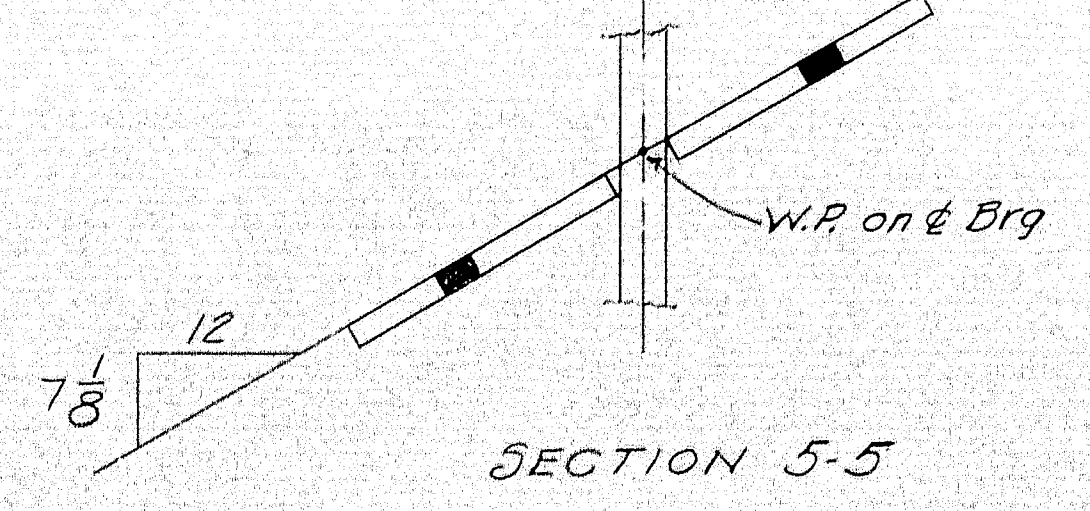
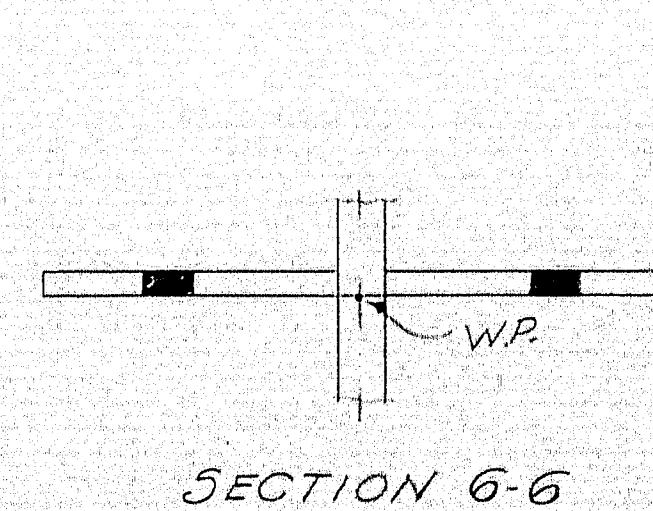
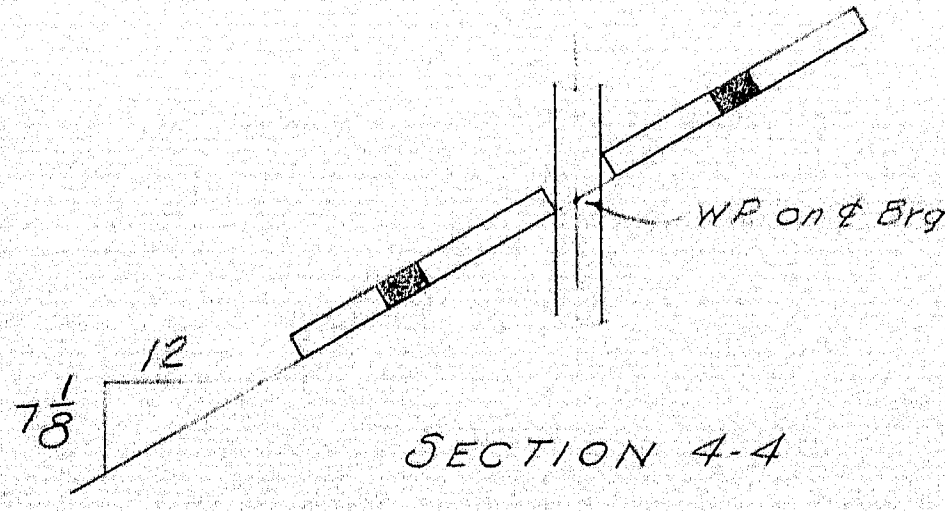
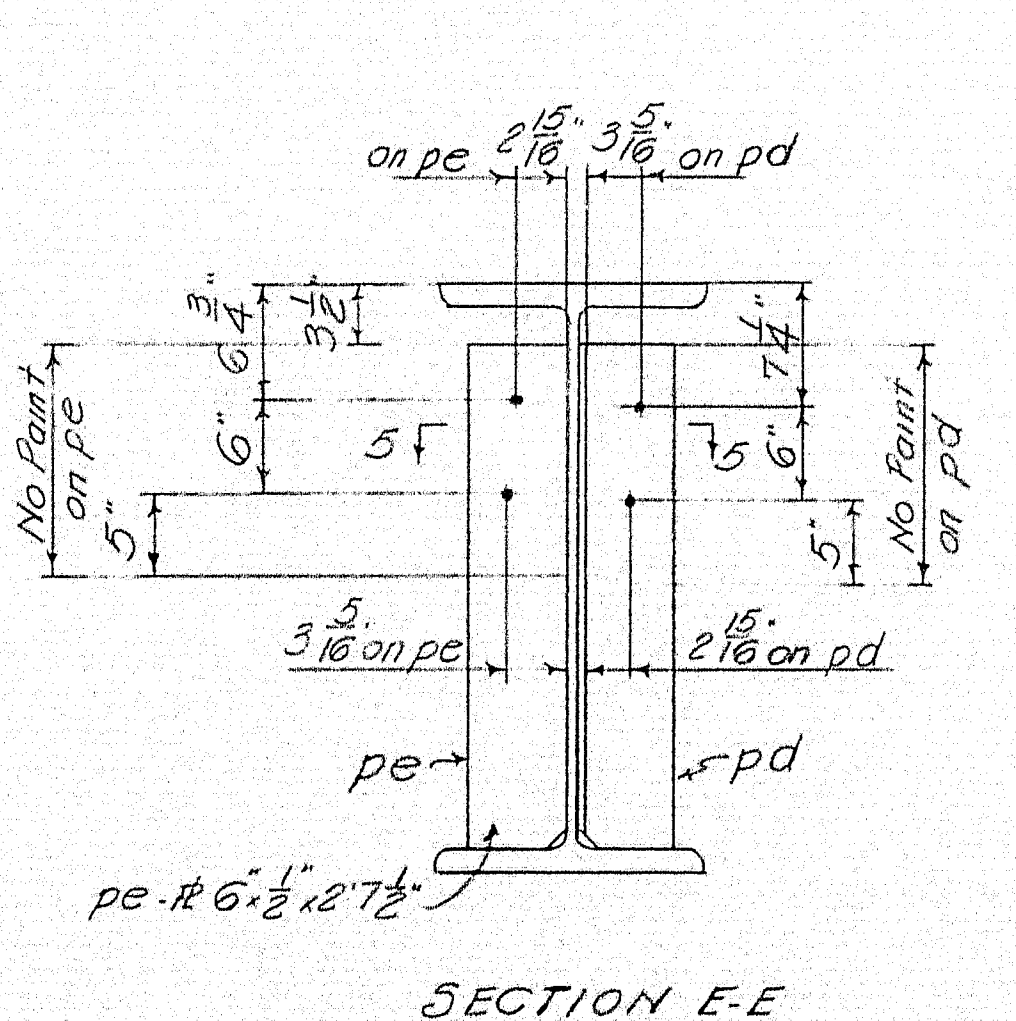
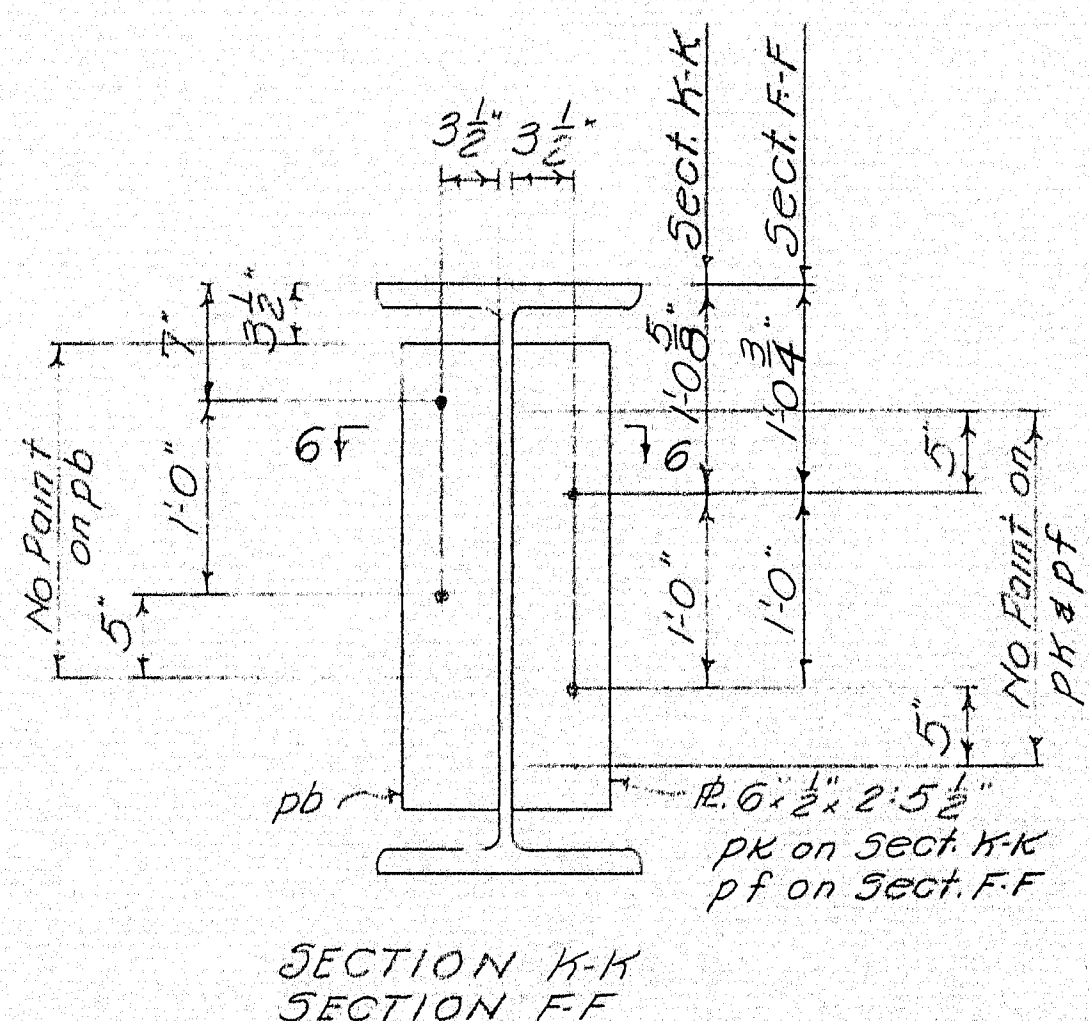
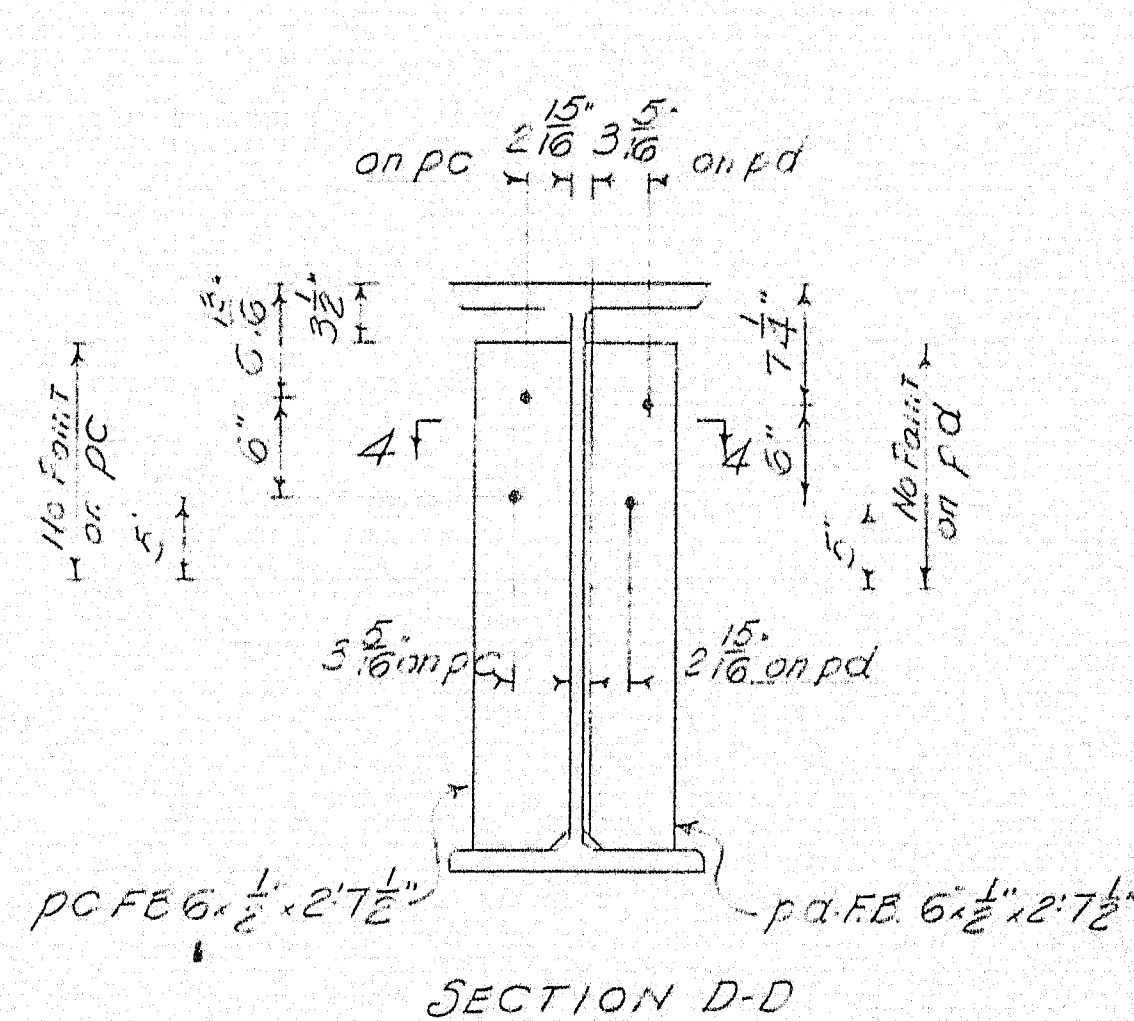
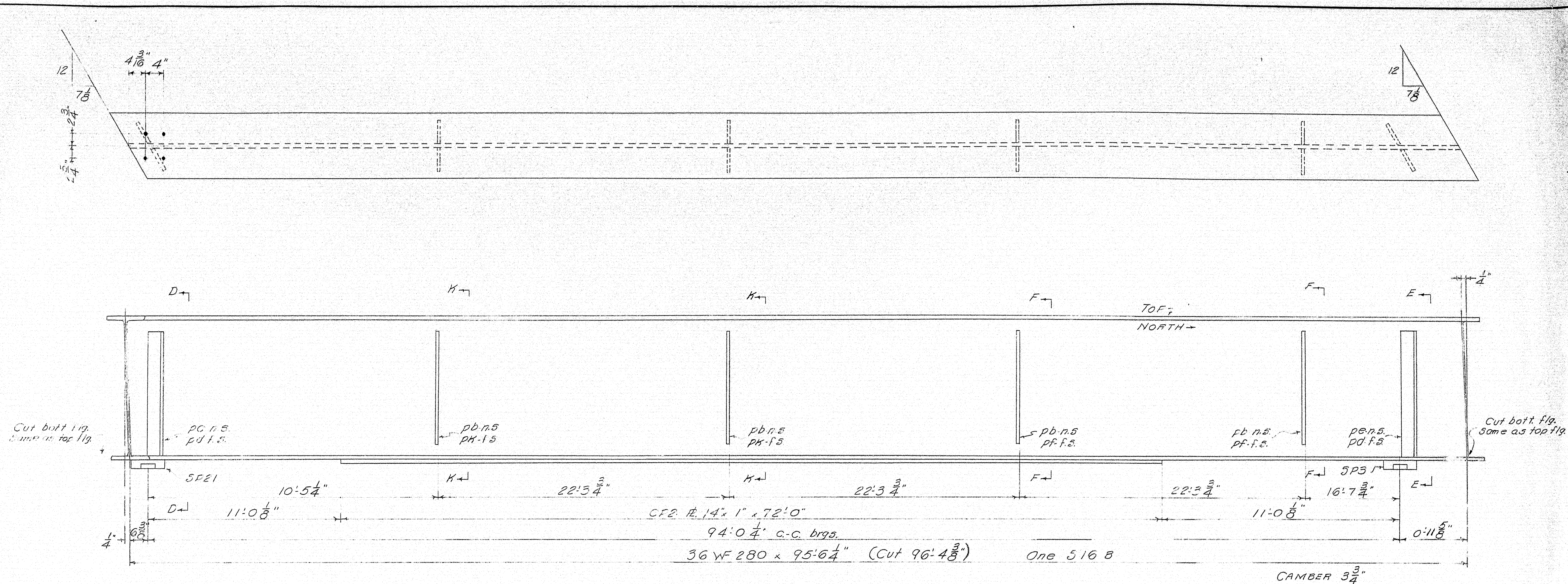
DRAWN	128-60	PLF
REVISION		
REVISION		
REVISION		

chkd

80-124

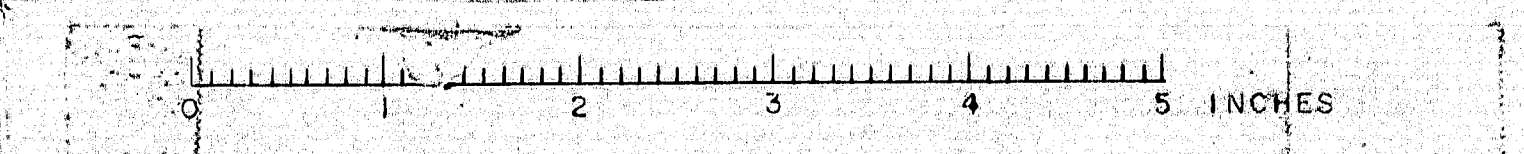




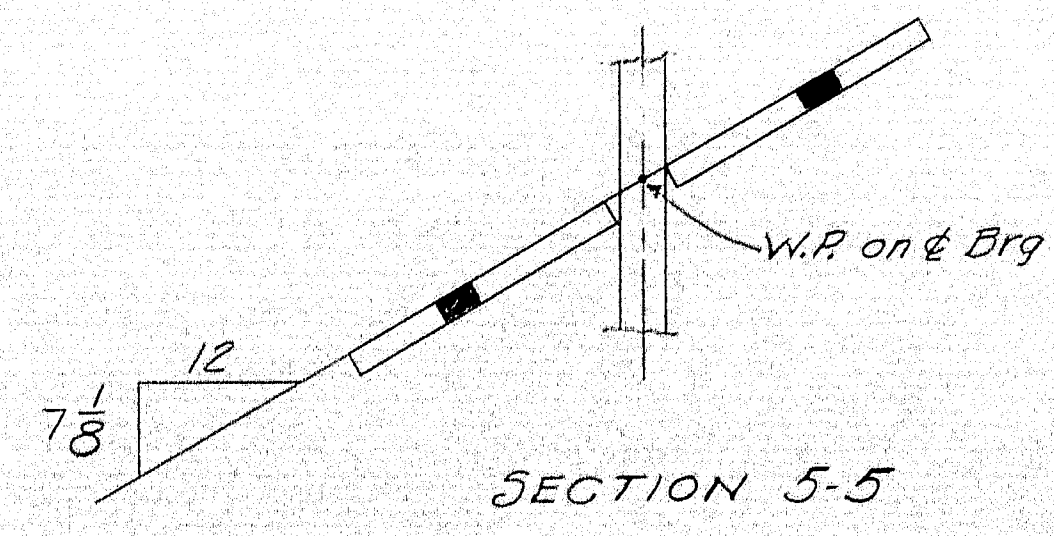
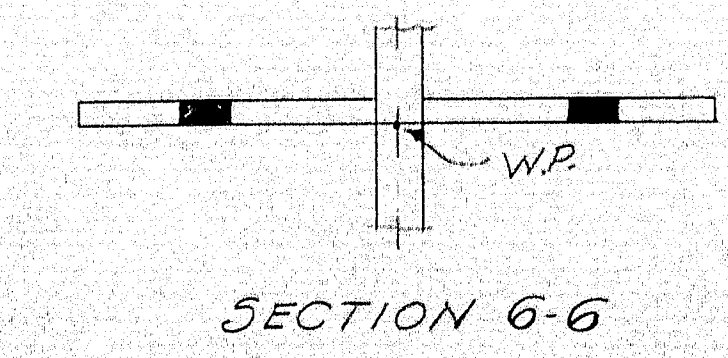
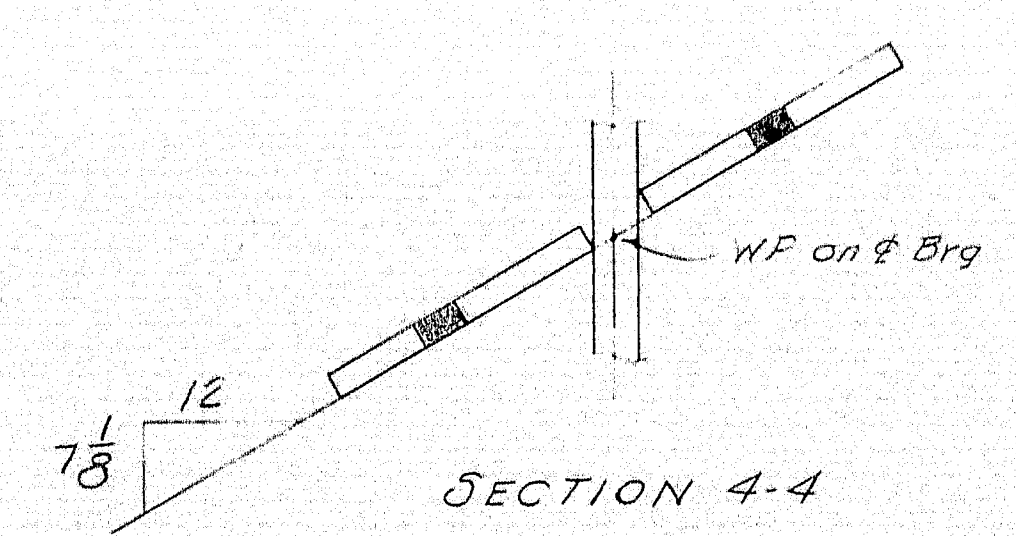
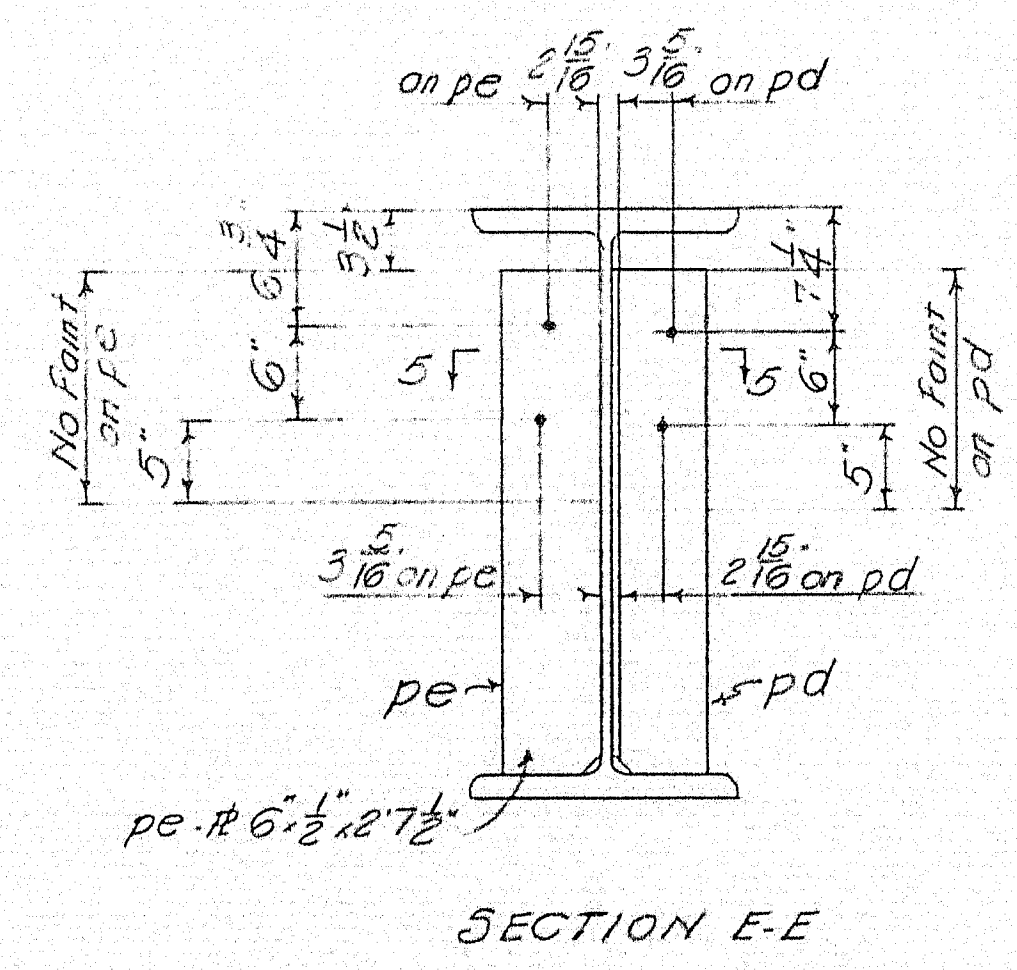
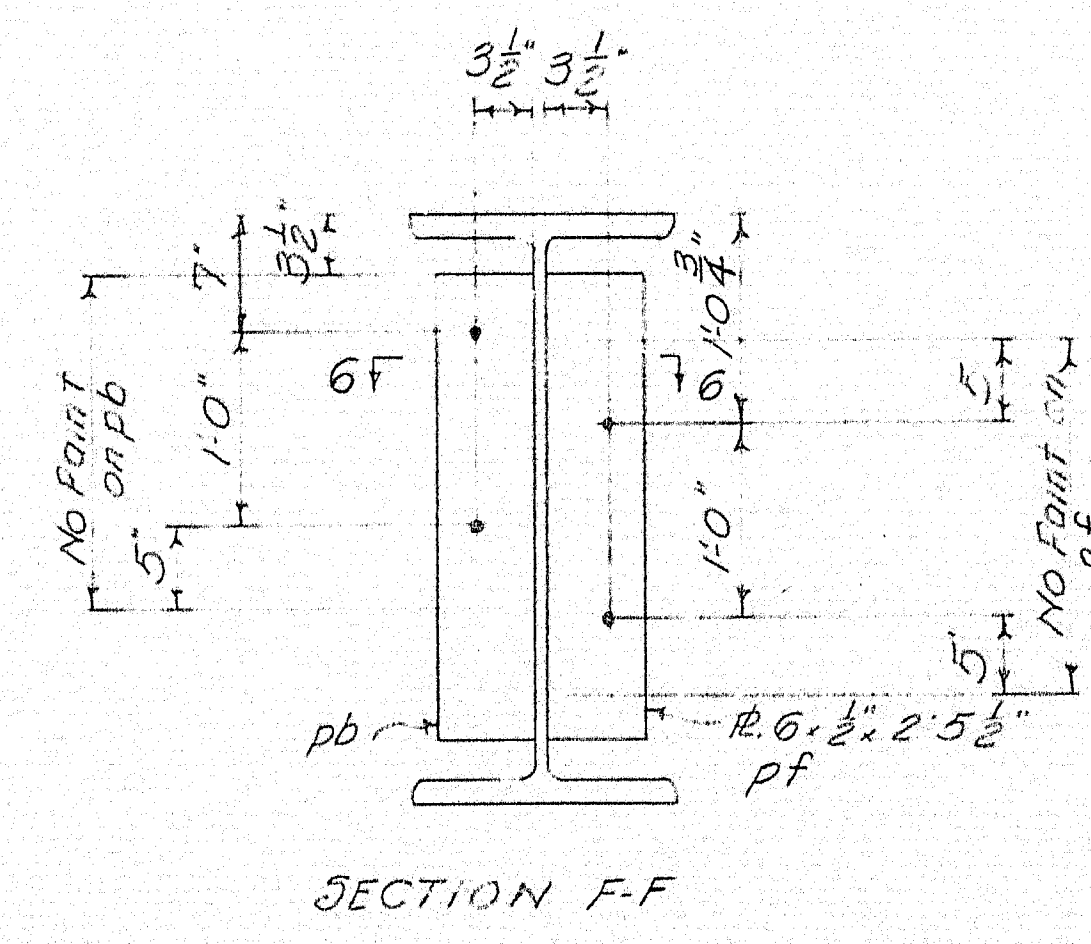
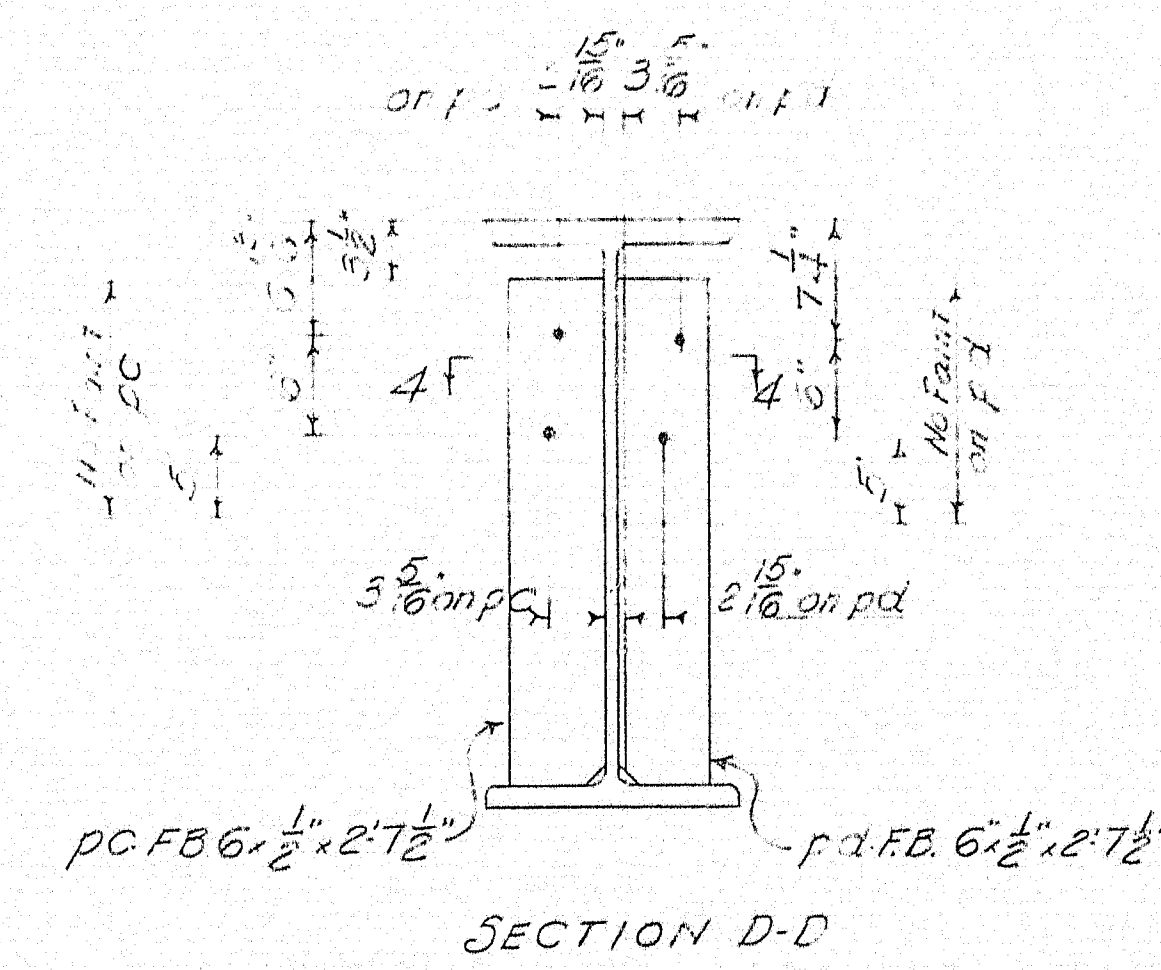
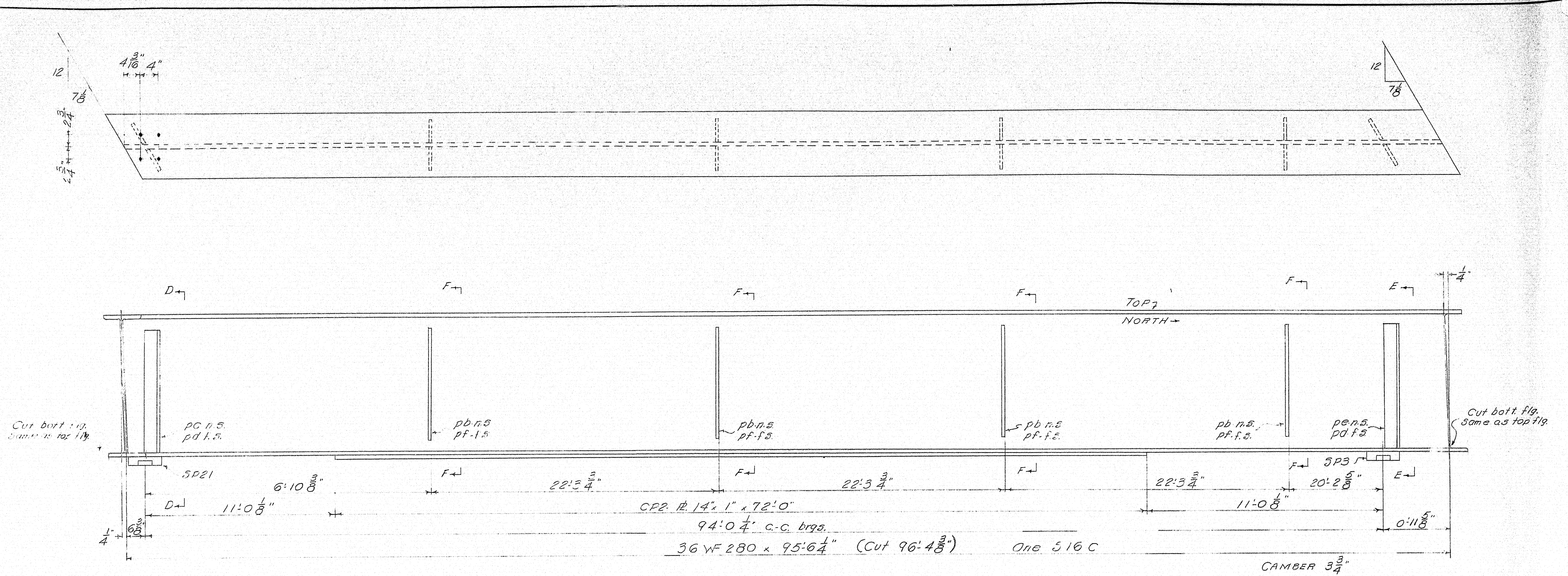


NOTES:  
 Work this DWG. with DWGS. 60-284-549.50

STRINGER SPAN NO. 3			
Bancroft & Martin Rolling Mills Company			
South Portland 7, Maine			
INTERSTATE OVER VERANDA ST. PORTLAND, ME.			
CUSTOMER E.C. SNODGRASS, INC.			
DESIGNER M.S.H.C.			
ORDER NO.		DWG. NO. 60-284-552	

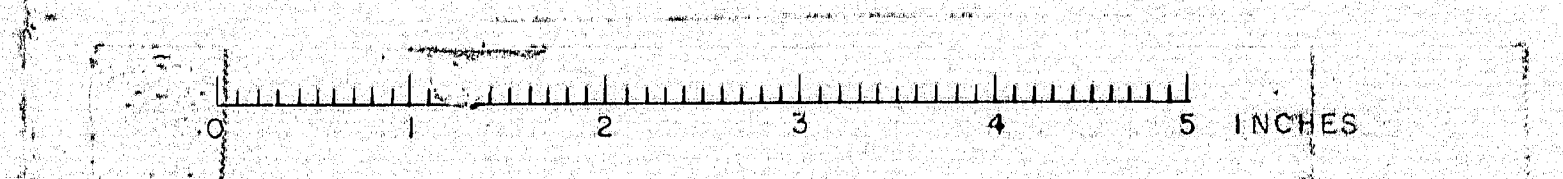






NOTES:  
 Work this DWG. with DWGS. 60-284-549-560

DRAWN 12860 PLE		STRINGER SPAN NO. 3	
REVISION		Bancroft & Martin Rolling Mills Company	
REVISION		South Portland, Maine	
REVISION		INTERSTATE OVER VERANDA ST.	
REVISION		PORTLAND, ME.	
REVISION		CUSTOMER E.C. SNODGRASS, INC.	
REVISION		DESIGNER M.S.H.C.	
REVISION		ORDER NO.	DWG. NO. 60-284-553



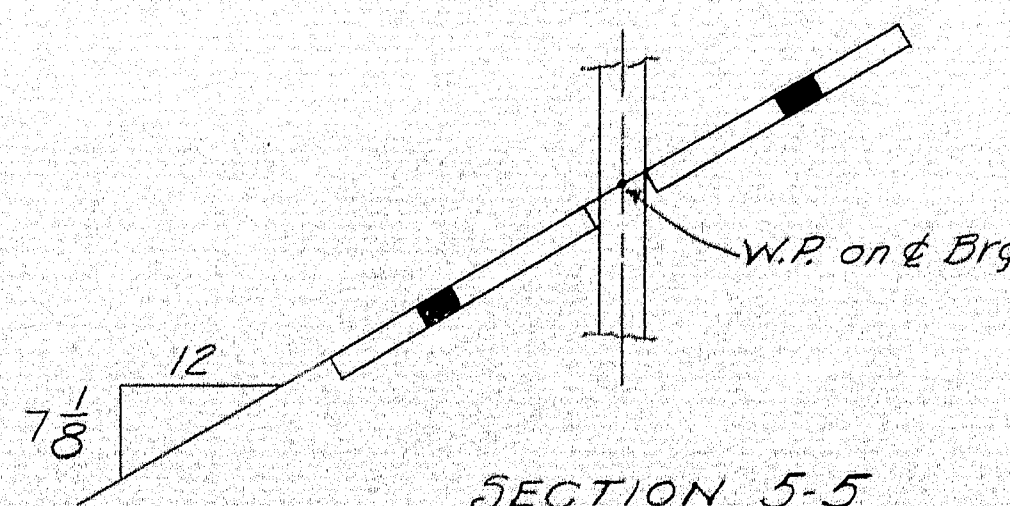
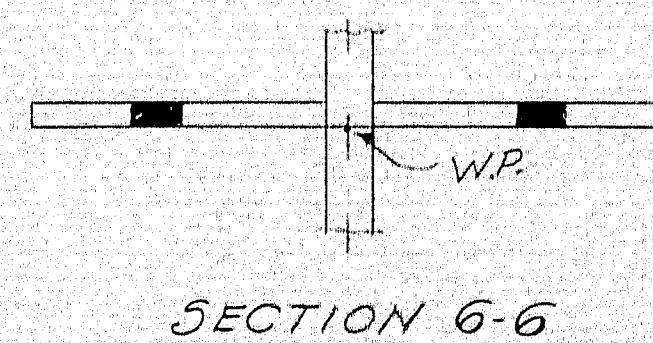
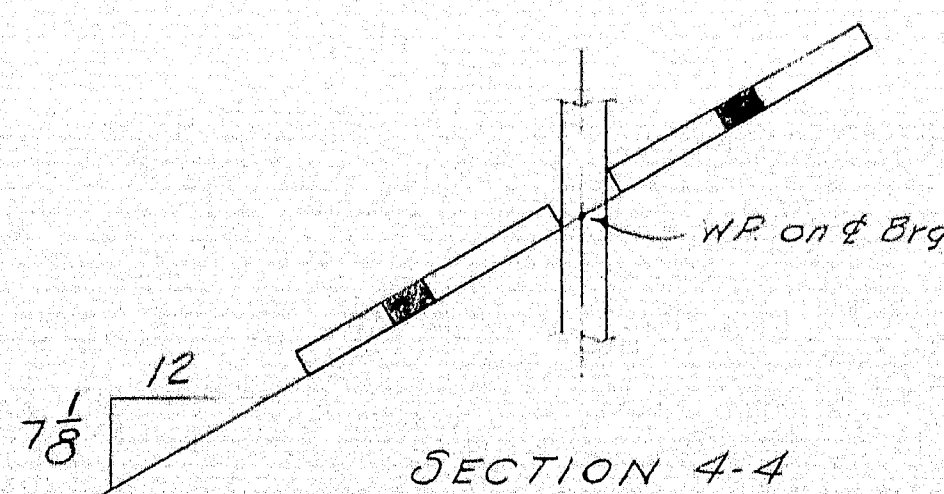
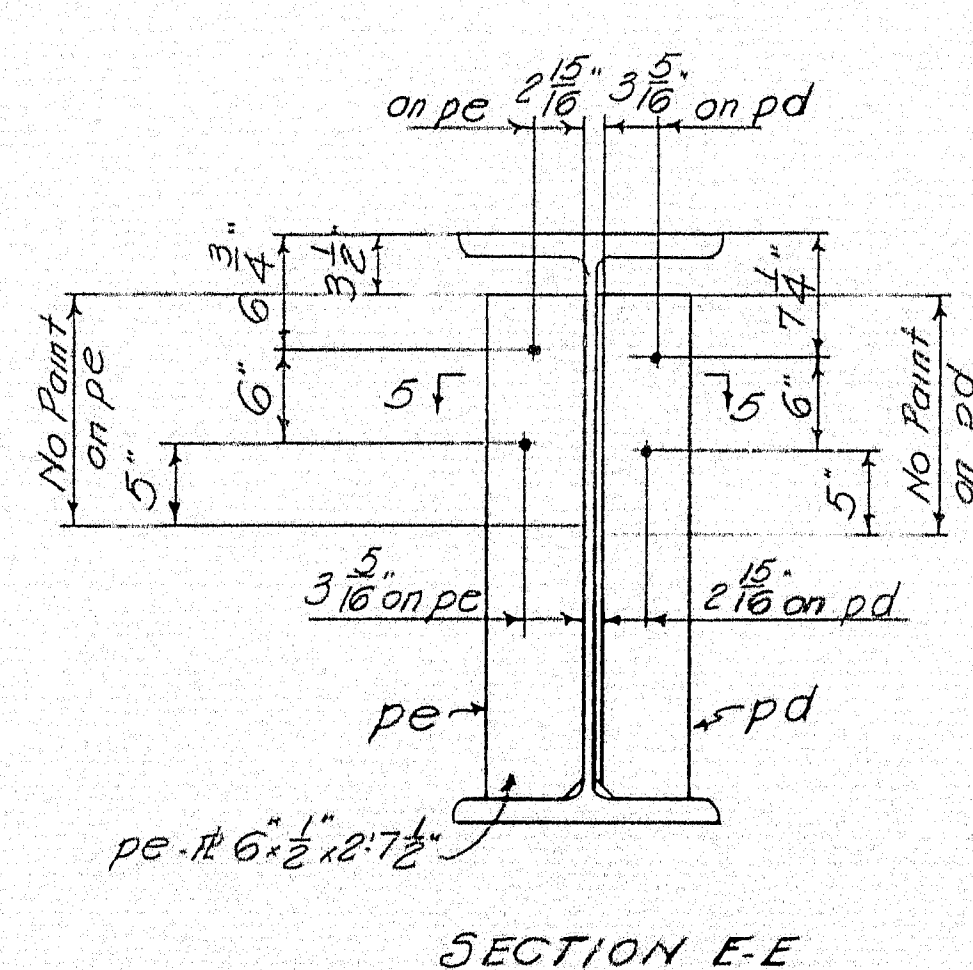
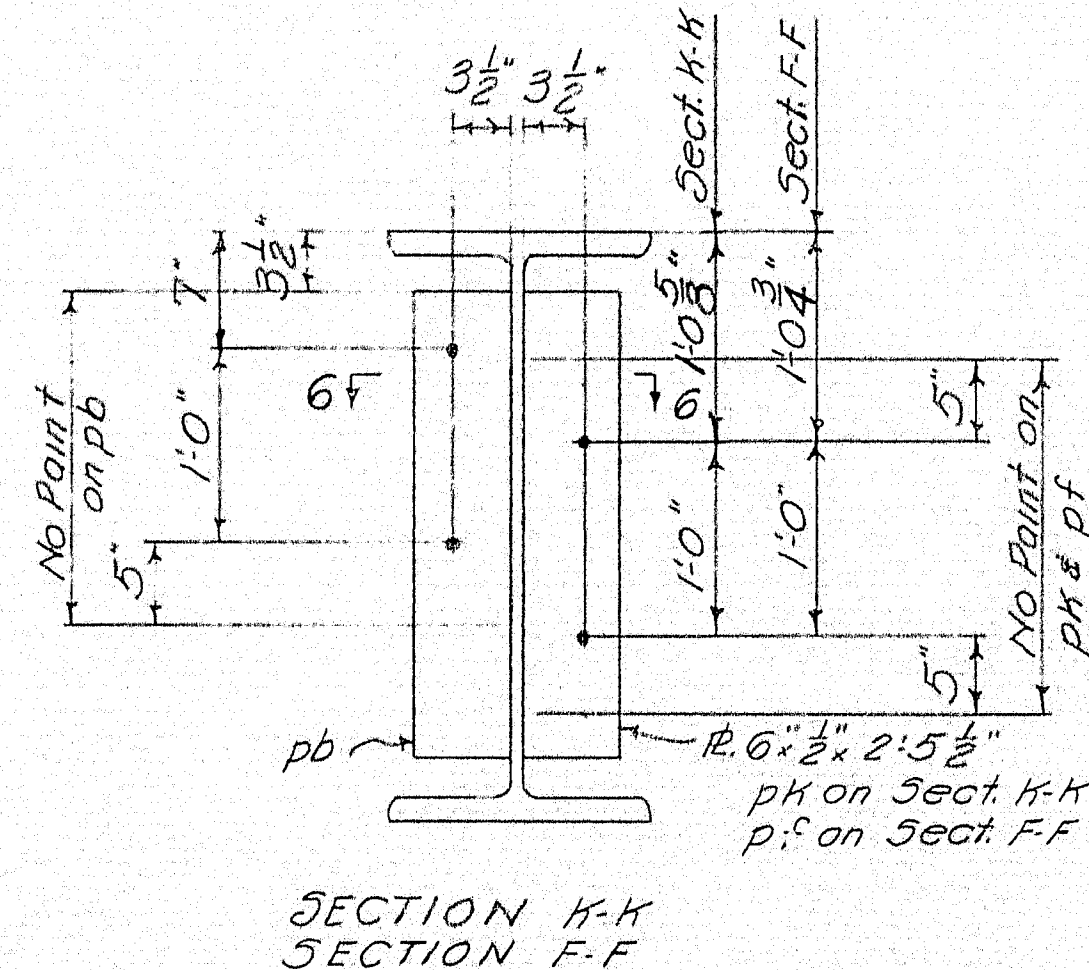
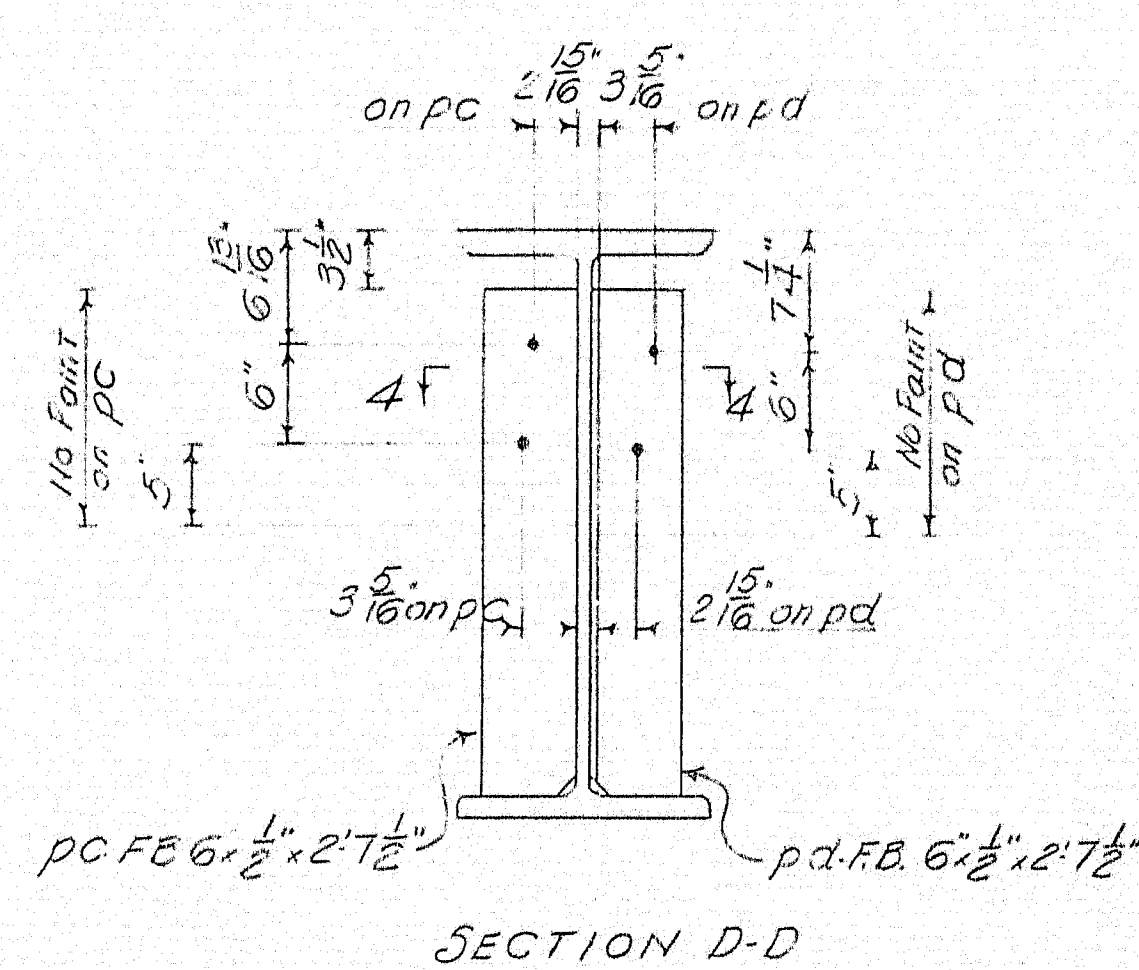
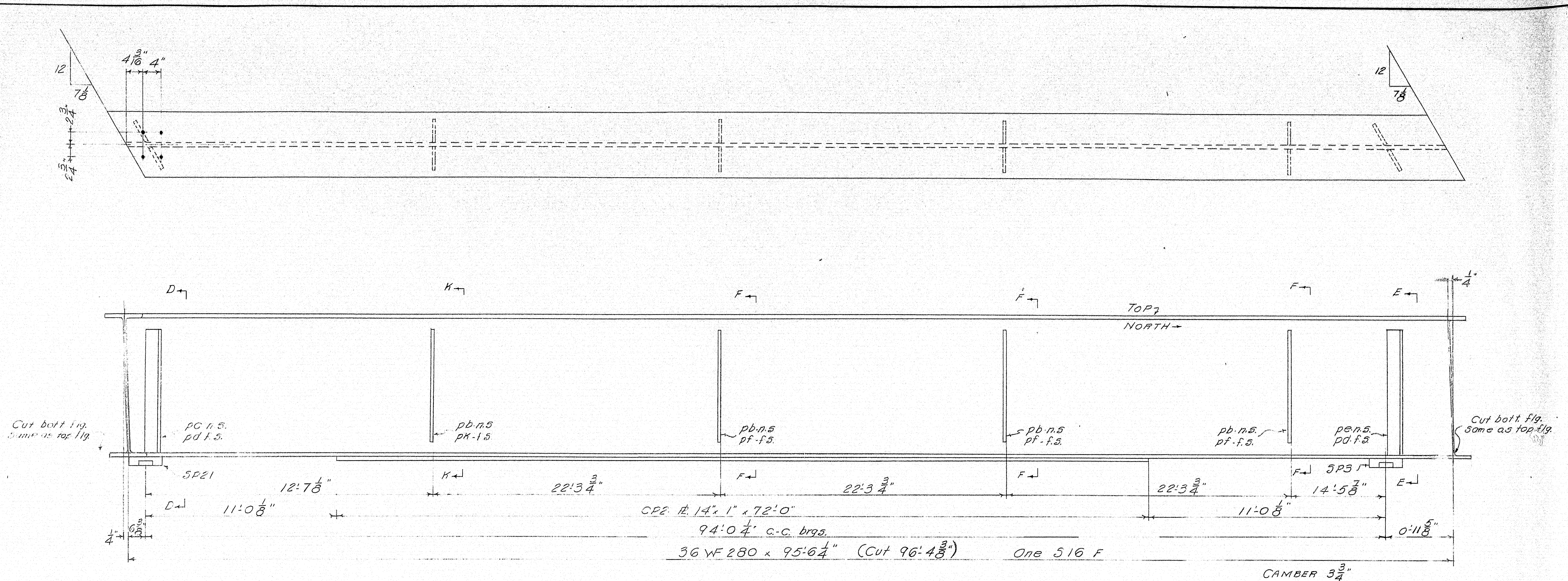












NOTES:  
Work this DWG. with DWGS. 60-284-549-560

STRINGER SPAN NO. 3	
Bancroft & Martin Rolling Mills Company	
South Portland 7, Maine	
INTERSTATE OVER VERANDA ST.	
PORTLAND, ME.	
CUSTOMER E.C. SNODGRASS, INC.	
DESIGNER M.S.H.C.	
ORDER NO.	DWG. NO. 60-284-556

DRAWN	12860	RLK
REVISION		
REVISION		
REVISION		

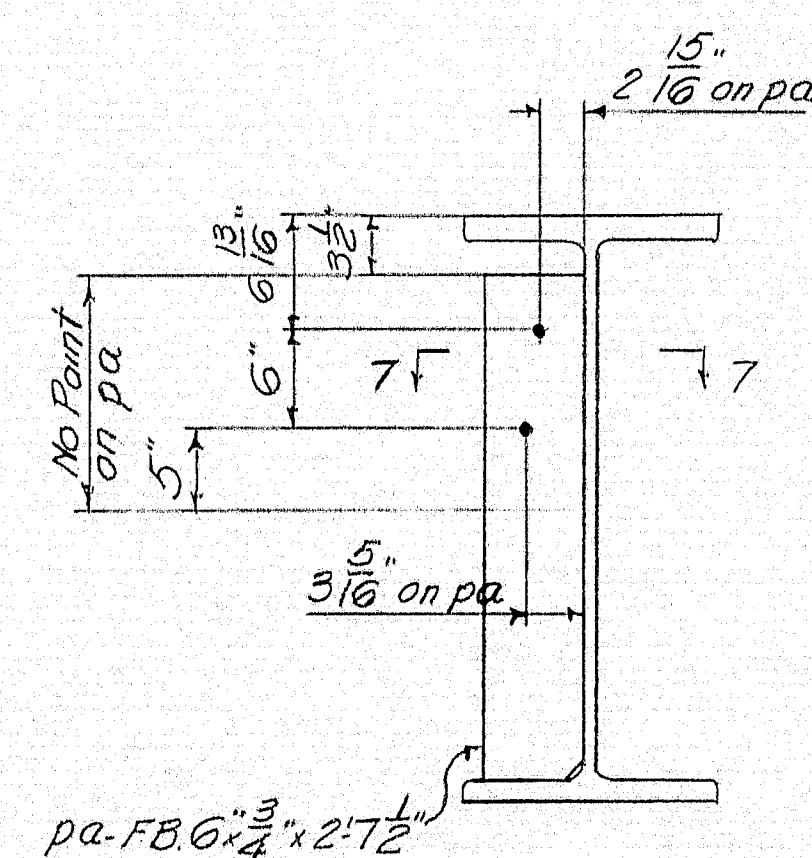
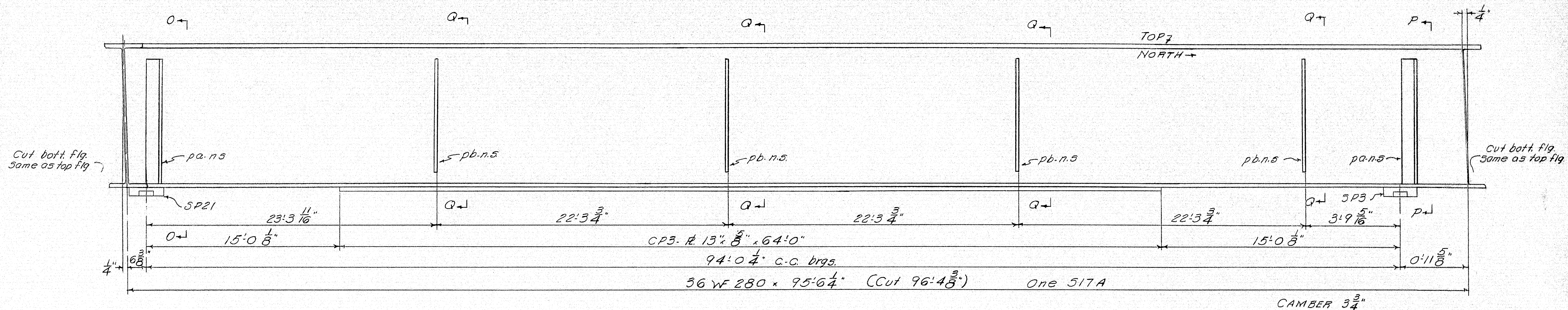
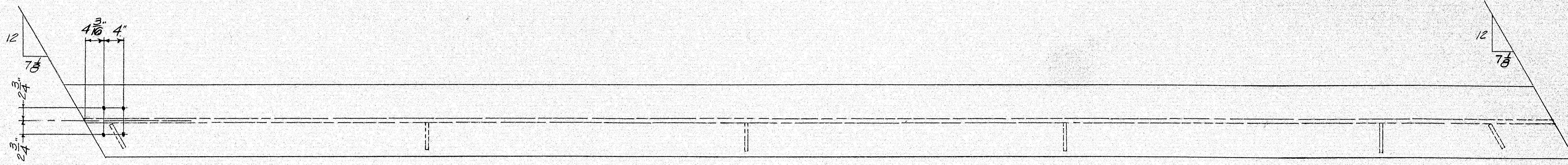




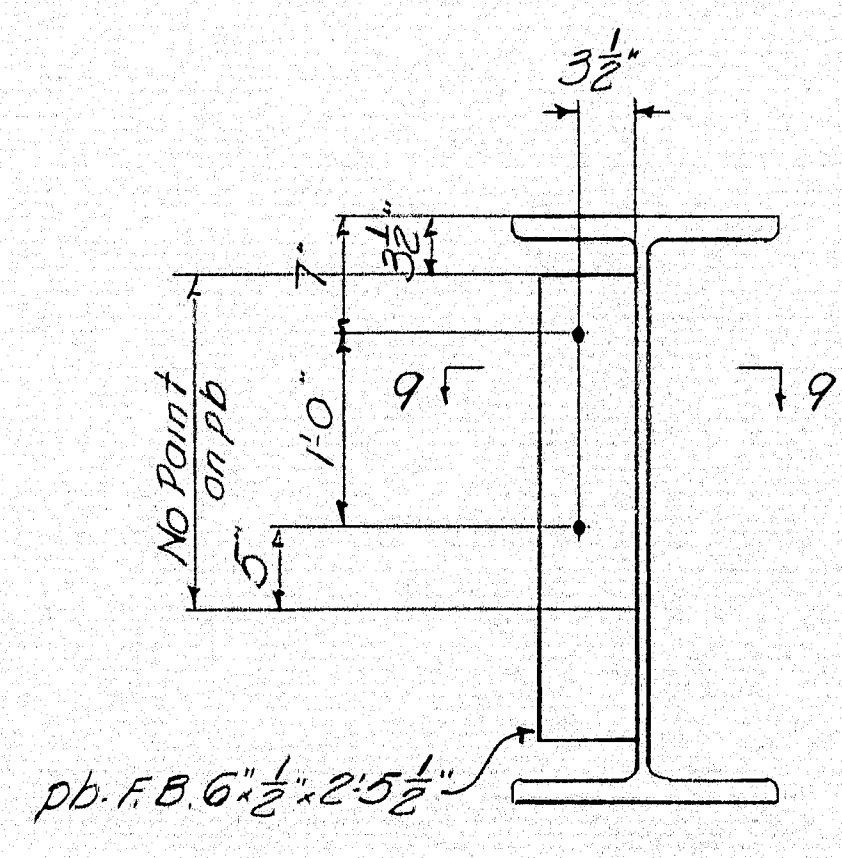




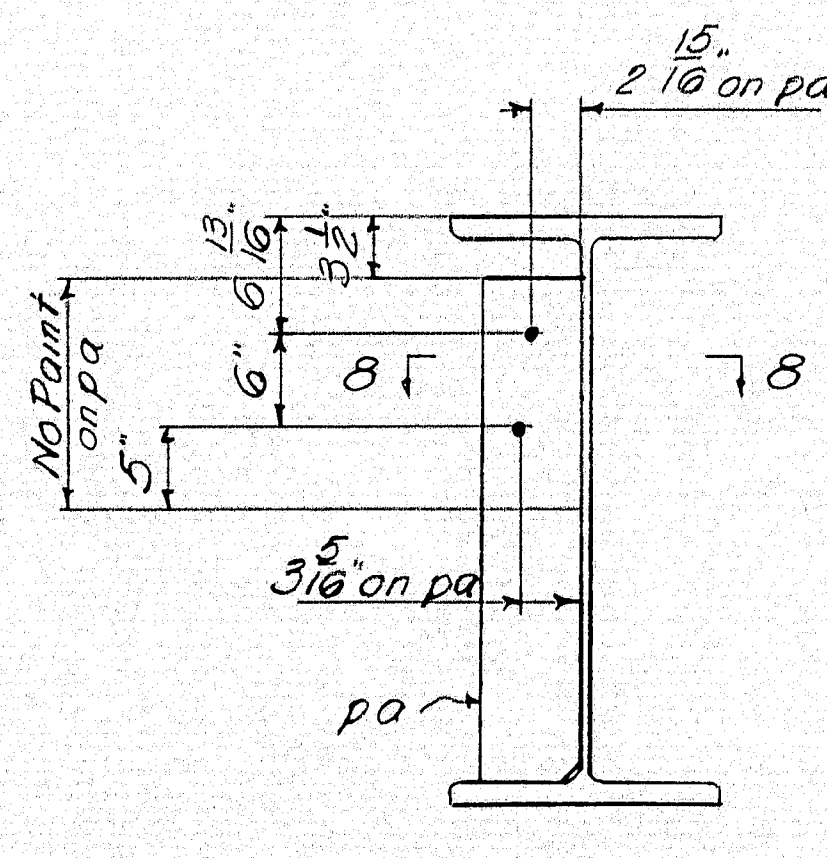




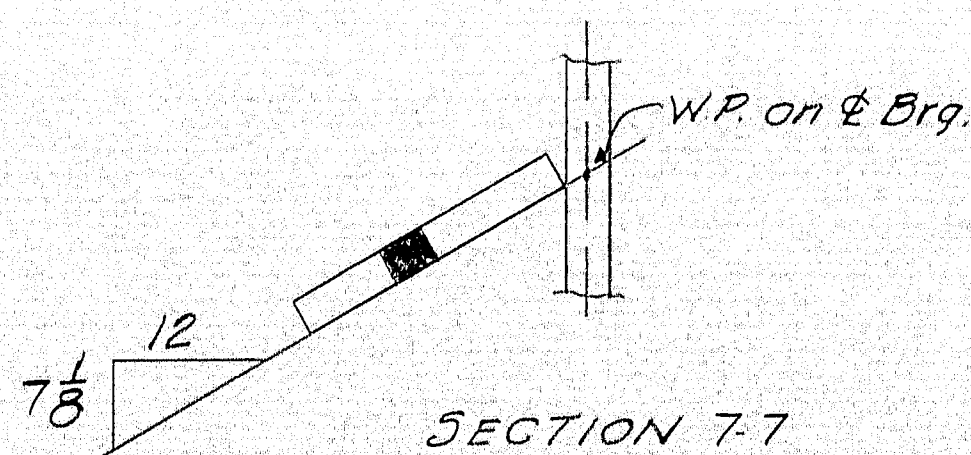
SECTION O-O



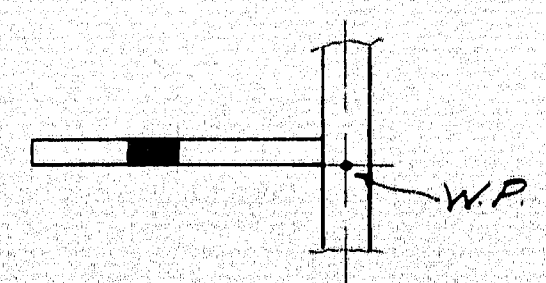
SECTION Q-Q



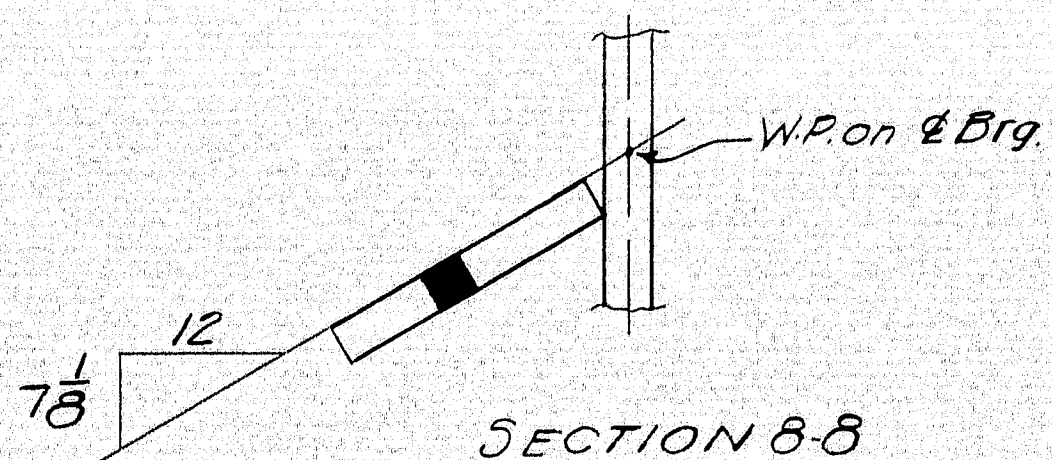
SECTION P-P



SECTION 7-7



SECTION 9-9



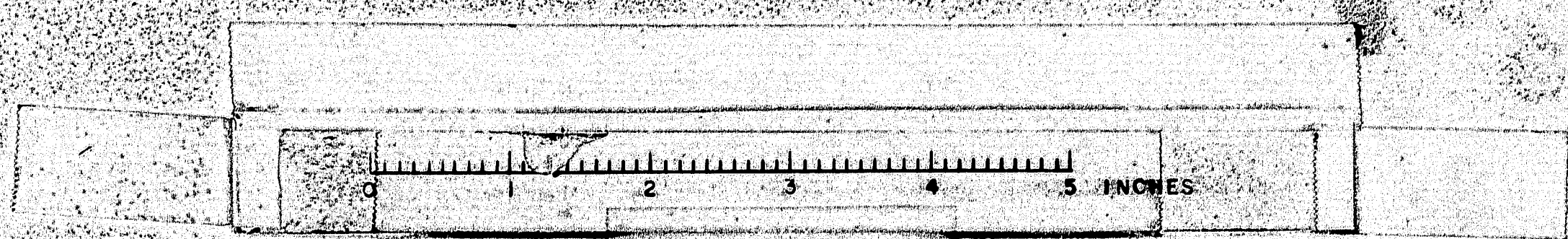
SECTION 8-8

NOTES:  
Work this DWG. with DWGS. 60-284-549 to 560

STRINGER-SPAN NO. 3	
Bancroft & Manton Rollings Mills Company South Portland, Maine	
INTERSTATE OVER VERANDA ST. PORTLAND, ME.	
CUSTOMER E.C. SNODGRASS, INC.	
DESIGNER M.S.H.C.	
ORDER NO. _____	DWG. NO. 60-284-559

check

80-132



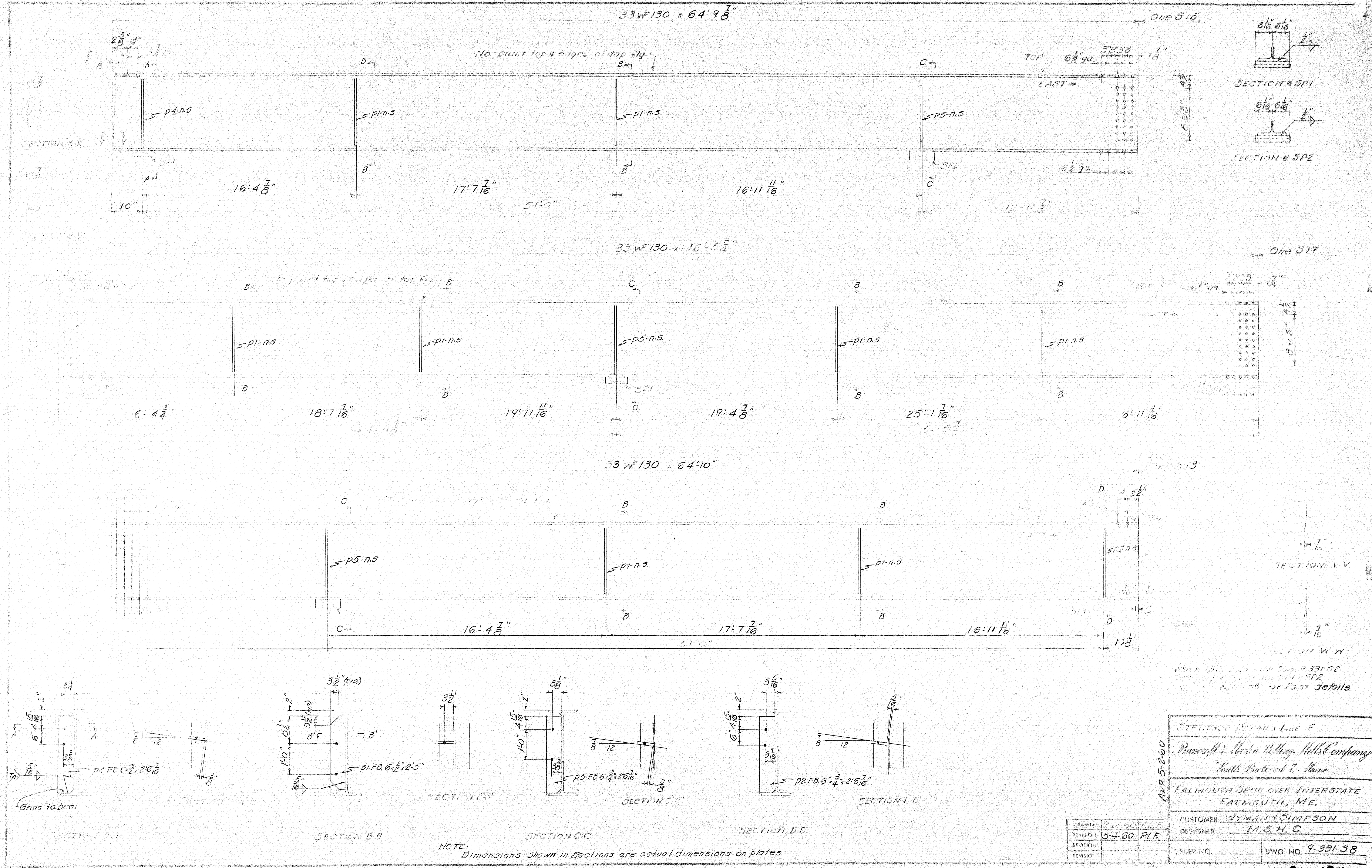












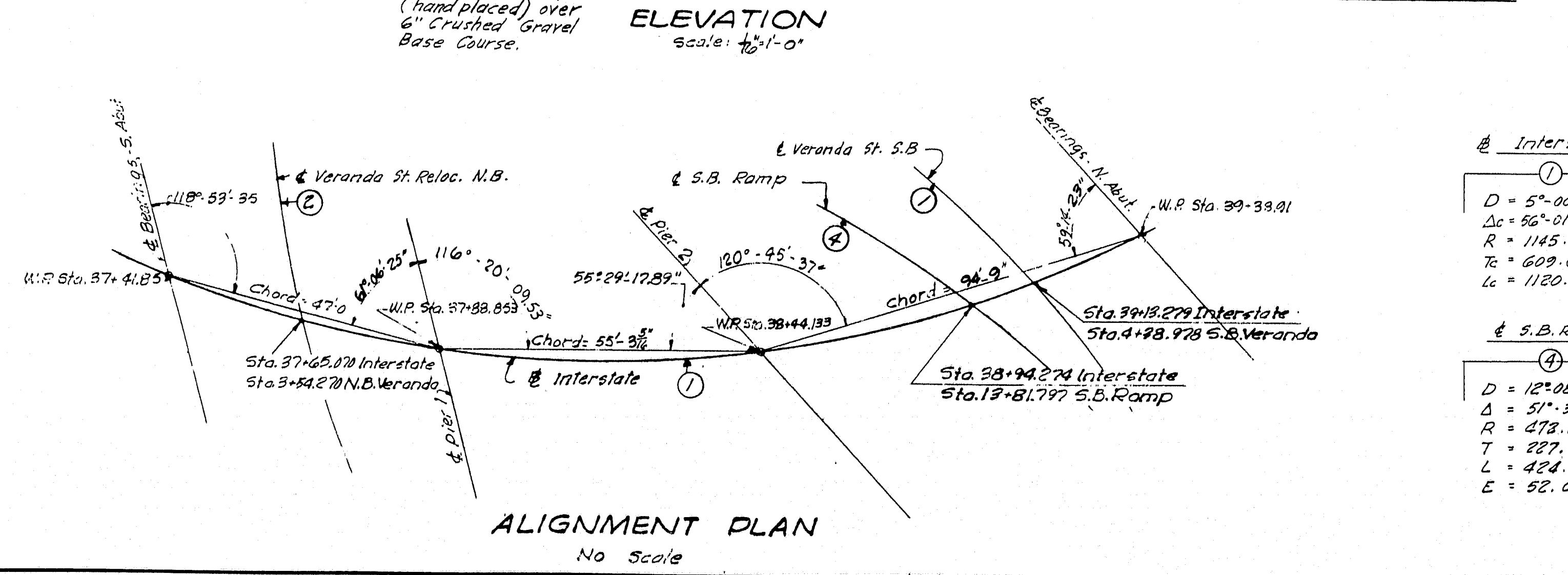
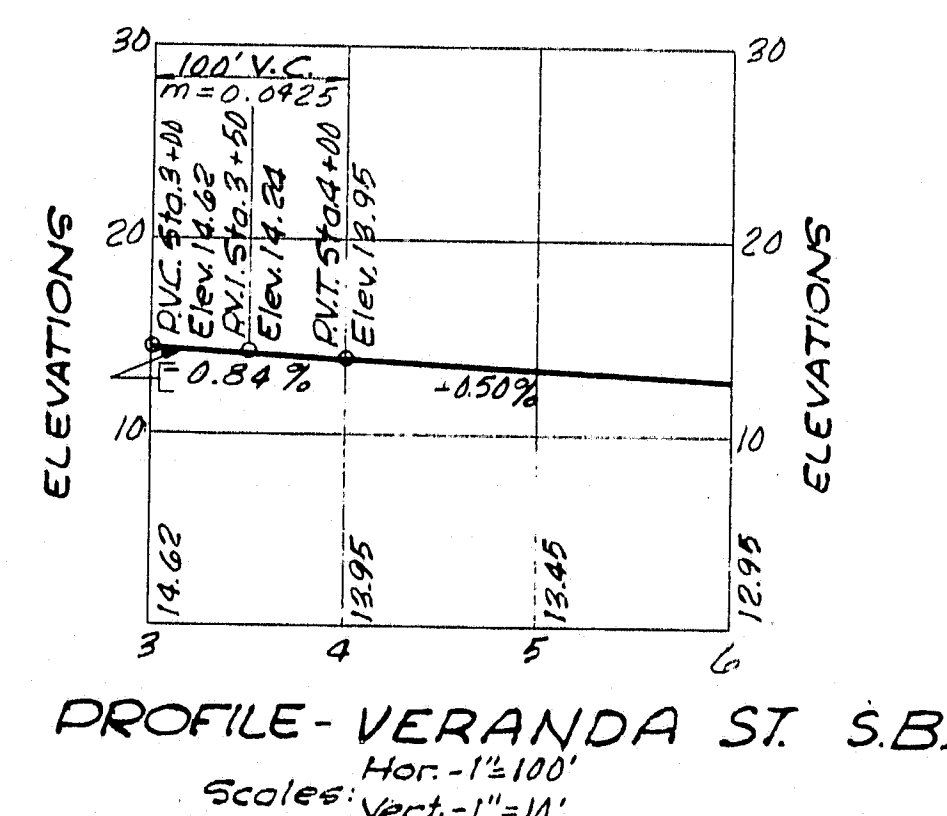
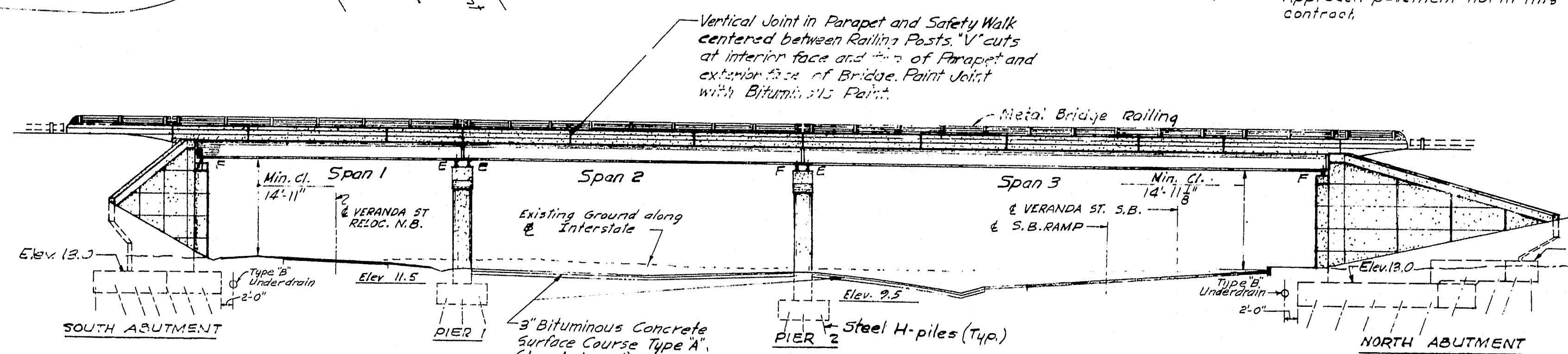
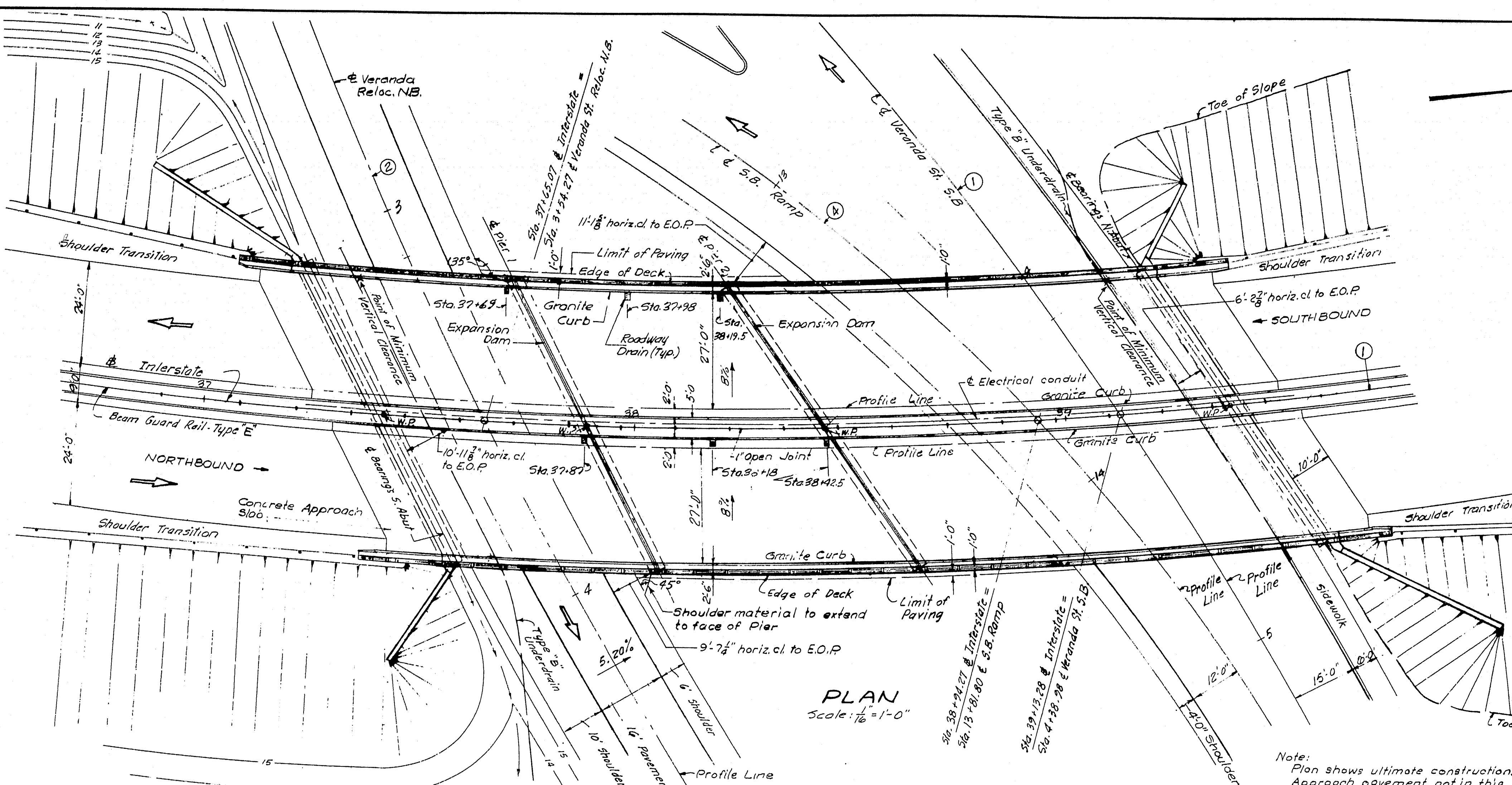
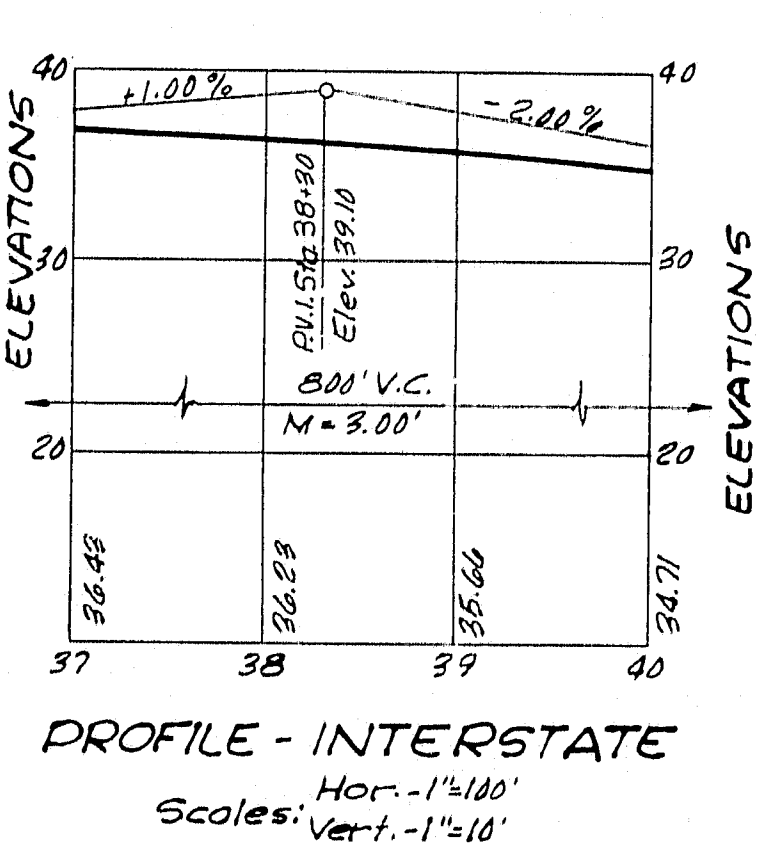
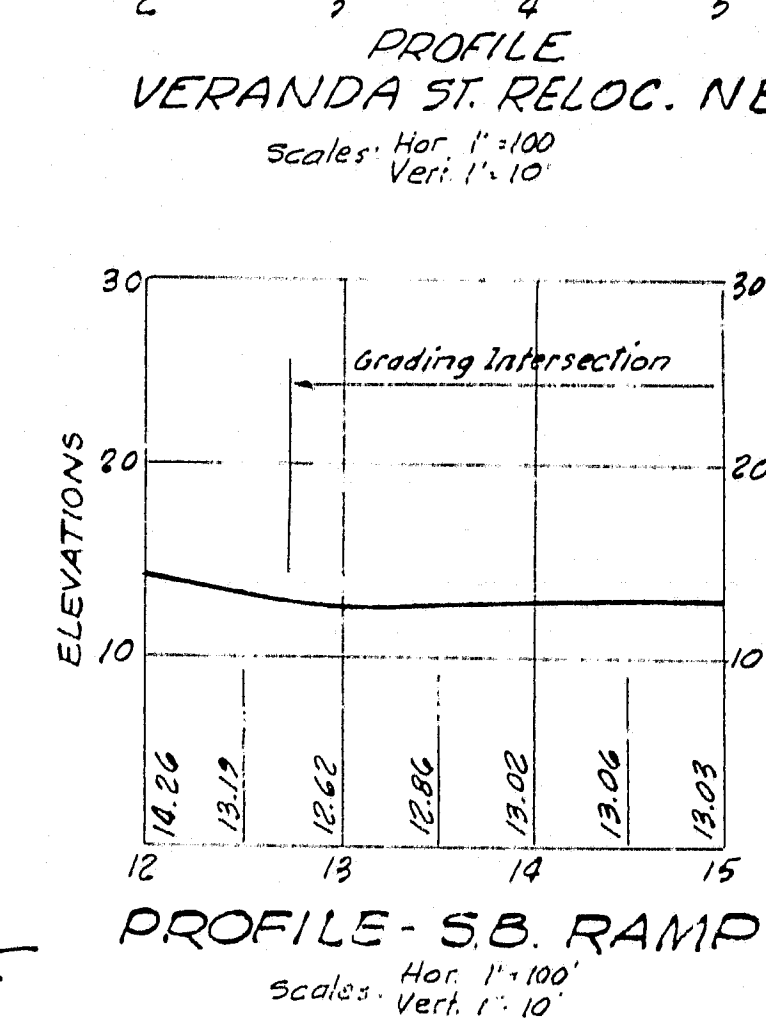
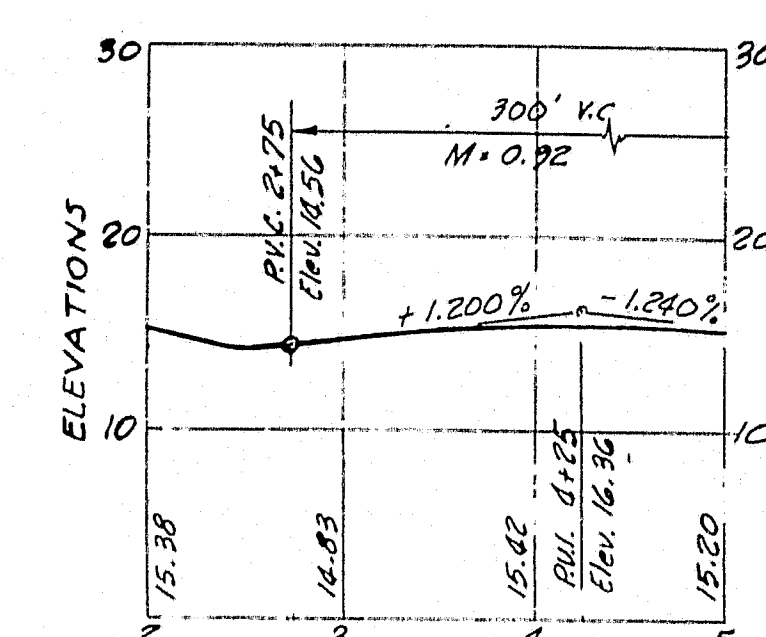
WORK DONE FOR THE STATE OF MAINE  
 FALMOUTH BRIDGE OVER INTERSTATE  
 FALMOUTH, ME.

STANDARD DETAIL LINE F	
Barnes & Morten Welding Metal Company	
North Portland, P. Maine	
FALMOUTH BRIDGE OVER INTERSTATE	
FALMOUTH, ME.	
CUSTOMER	WYMAN & SIMPSON
DESIGNER	M. S. H. C.
CHECK NO.	
DWG. NO.	9-331-58

APP 5-260



FINAL QUANTITIES		
ITEM	DESCRIPTION	UNIT QUANTITY
204-12	Structural Earth Excavation-Abutments & Retaining Walls	C.Y. 1,031
204-14	Structural Earth Excavation-Piers	C.Y. 373
302-7	Gravel Base Course-In Place Measurement	C.Y. 88
307-8	Reinforced Portland Cement Concrete-Approach Slabs	S.Y. 147.26
307-9	Portland Cement Concrete, Abutments and Retaining Walls	C.Y. 1,217.08
307-10	Portland Cement Concrete, Substructure Columns, Column Bases & Collision Walls	C.Y. 260.08
307-11	Portland Cement Concrete, Roadway and Sidewalk Slabs on Steel Bridges	C.Y. 443.16
307-12	Portland Cement	Bbl. 2,890
307-13	Cast Iron Roadway Drains	Each 6
307-14	Structural Steel, Fabricated and Delivered	Lb. 575,890
307-15	Structural Steel, Erection	Lb. 575,890
307-16	Structural Steel, Field Painting	Lb. 575,890
307-17	Reinforcing Steel, Delivered	Lb. 219,810
307-18	Reinforcing Steel, Placing	Lb. 219,810
307-19	Shear Connectors	Lb. 426
307-20	Steel H-Beam Piles 42 lbs./ft.	Lb. 5796.8
307-21	Steel H-Beam Piles 33 lbs./ft.	Lb. 16,894.5
307-22	Waterproofing Joints	L.F. 95.5
307-23	French Drains	C.Y. 426
307-24	Aluminum Rail, Delivered & Erected	L.F. 465.6
307-25	Vertical Granite Bridge Curb	L.F. 464
307-26	Sloped Granite Bridge Curb	L.F. 401.8
307-27	Guard Rail-Type "E" Double Face	L.F. 188
307-28	Rigid Steel Conduit-3"	L.F. 201

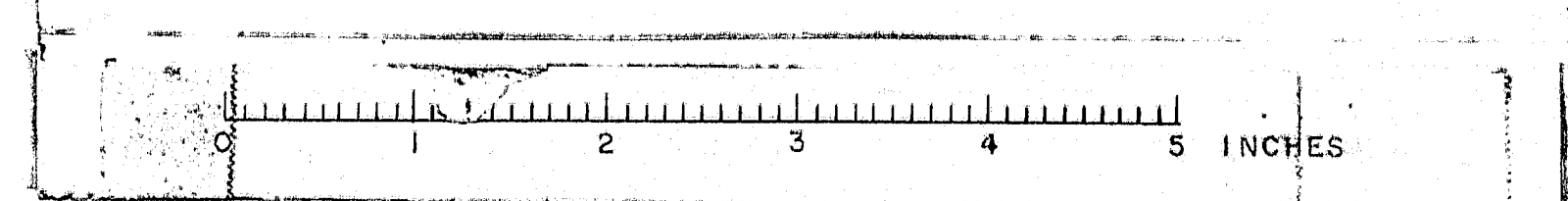


Station	Curve Data
Sta. 37+25.5	D = 5°-00'-00" Δ = 56°-01'-50" R = 1145.92' T = 609.69' L = 1120.61'
Sta. 38+25.5	D = 5°-52'-26.46" Δ = 18°-03'-18.50" R = 775.41' T = 154.97' L = 307.37' E = 12.23'
Sta. 39+25.5	D = 12°-08'-14.34" Δ = 51°-30'-00" R = 473.06' T = 237.70' L = 424.31' E = 52.04'
Sta. 40+25.5	D = 5°-08'-00" Δ = 15°-05'-00" R = 1116.15' T = 154.38' L = 306.82' E = 10.63'

- GENERAL NOTES**
- SPECIFICATIONS:**  
A.A.S.H.O. 1958  
Maine State Highway Commission, Standard Specifications and Special Provisions
  - LIVE LOAD:**  
H20-S16-44 Modified
  - FOUNDATIONS:**  
Design Capacity of Piles:  
12BP53(AS) TMENT (WINGWALLS) - 45 Tons  
10BP42 (PIERS) - 35 Tons
  - ALLOWABLE STRESSES:**  
Structural Steel: 18,000 p.s.i.  
Reinforcing Steel: 18,000 p.s.i.  
Concrete: 1,200 p.s.i.
  - CONCRETE:**  
Class "A" Footings, Piers, Abutments, Wingwalls, Approach Slabs & Decks
  - ELEVATIONS**  
Elevations are based on Elev. 0.00 at Mean Sea Level

STATE HIGHWAY COMMISSION AUGUSTA, MAINE	
PORTLAND-YARMOUTH INTERSTATE	
INTERSTATE OVER VERANDA STREET	
GENERAL PLAN AND ELEVATION	
SHEET NO. 30 OF 59	SCALE: AS NOTED
FAY, SPOFFORD & THORNDIKE, INC. ENGINEERS BOSTON, MASS.	
Qm-14 730	

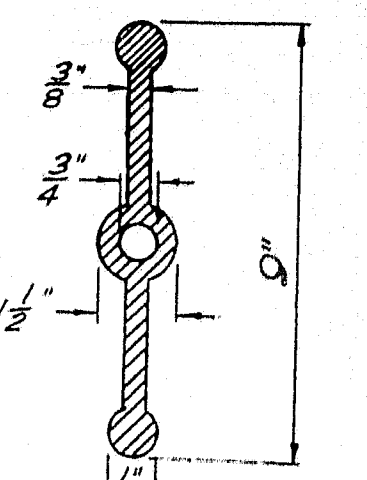
M-1349



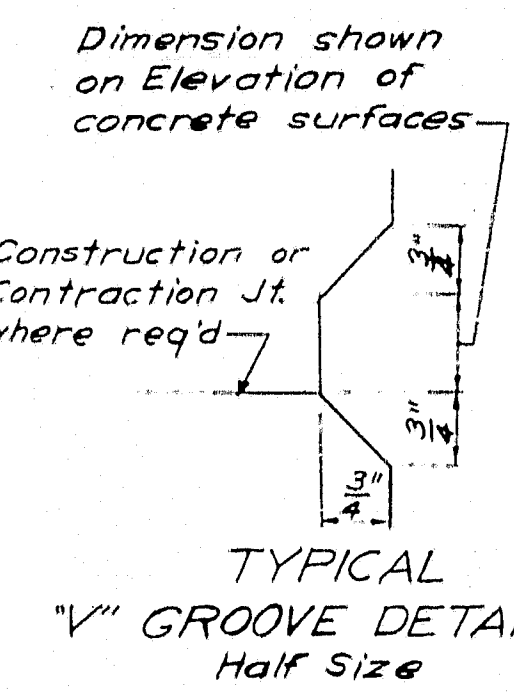


B.P. NO.	STATE	FED. AID	PROJ. NO.	SHEET	TOTAL
1	MAINE	1-295-3(2)	31	59	

# PORTLAND

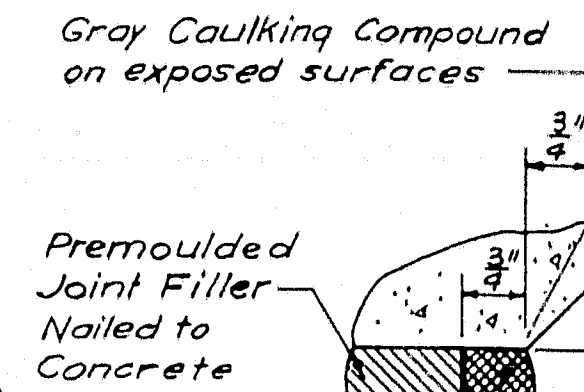


RUBBER WATERSTOP  
Scale: 3"=1'-0"

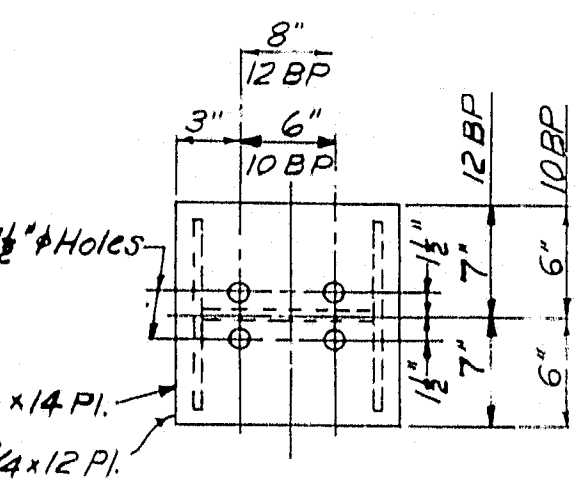


TYPICAL V-GROOVE DETAIL  
Half Size

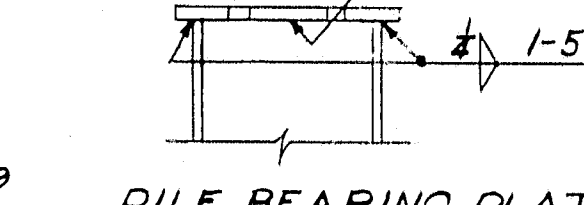
DETAIL "A"  
Half Size



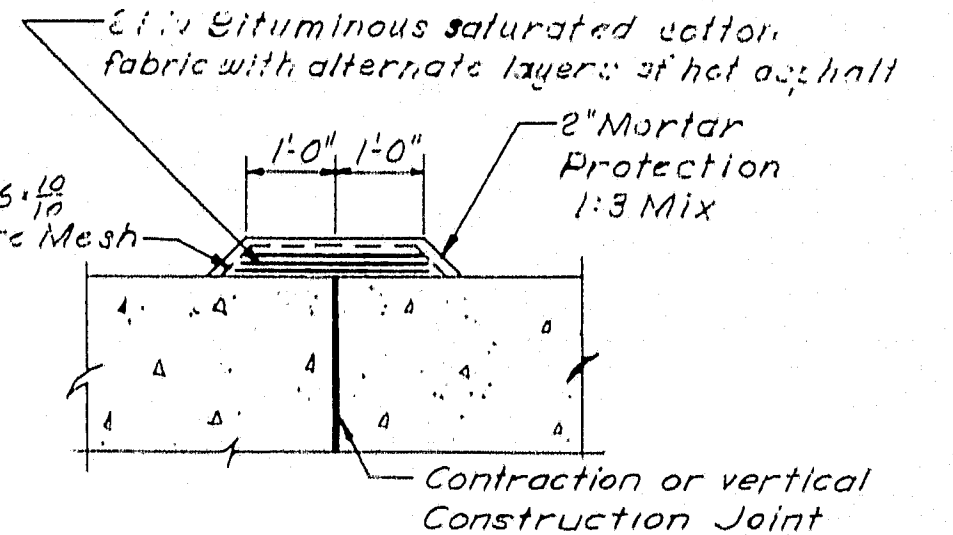
Gray Caulking Compound on exposed surfaces



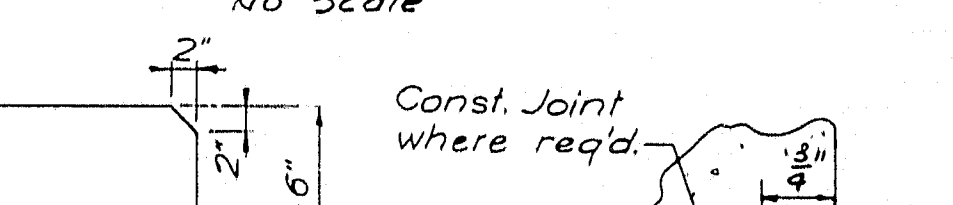
PILE BEARING PLATE  
No Scale



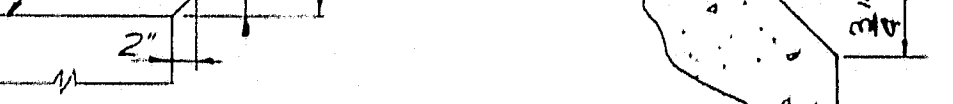
CORBEL DETAIL  
Scale: 3/4"=1'-0"



WATERPROOFING DETAIL  
No Scale



TYPICAL V-CUT DETAIL  
Half Size



CORBEL DETAIL  
Scale: 3/4"=1'-0"

TYPICAL DETAILS  
Scale as Noted

CONSTRUCTION NOTES

1. Reinforcing steel to have 2" min. concrete cover unless otherwise noted.
2. All bar splices to lap 20 diameters (12" min.) unless otherwise noted.
3. All bar embedments to be 35 diameters unless otherwise noted.
4. Bearing seats to be of sufficient height to permit bush hammering to the proper elevation.
5. Bearing seats to be placed integrally with the piers and abutments.
6. All exposed corners to have 3/4" chamfer.
7. Reinforcing steel in or beneath bearing seats to be positioned to clear swedge anchor bolts. For swedge anchor bolts see Bearing Types on Sheet No. 38.

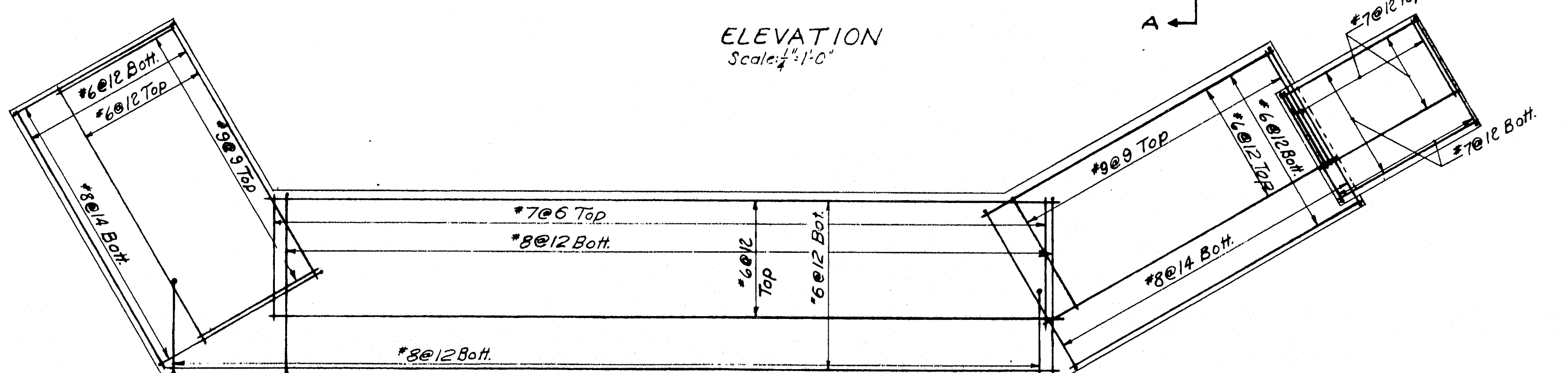
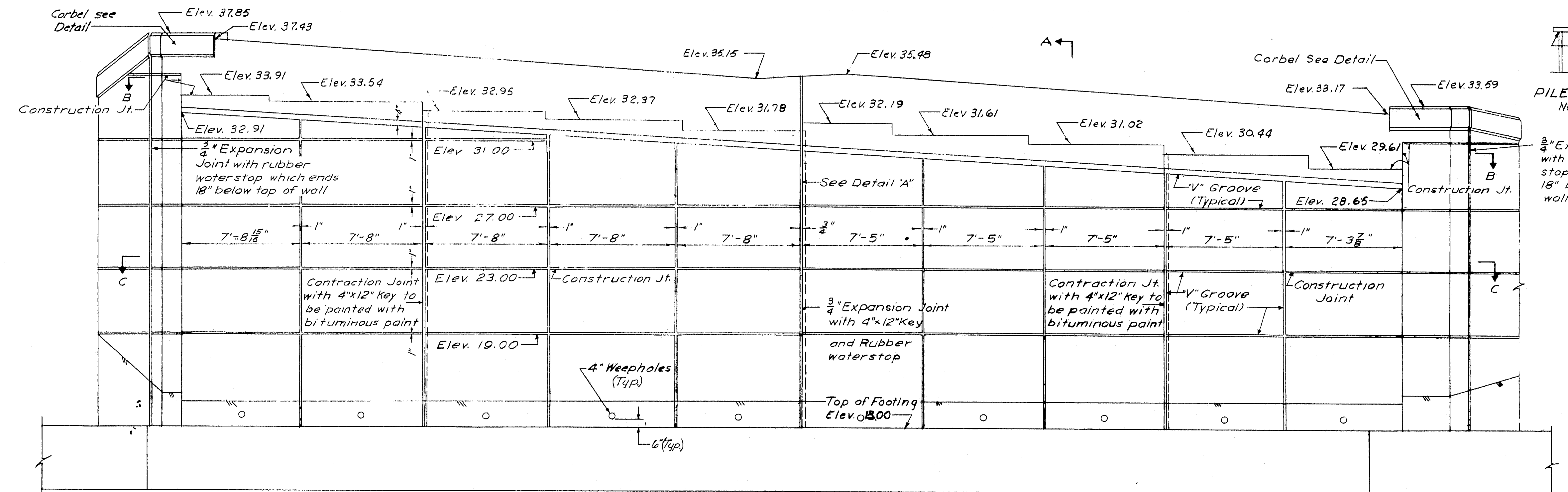
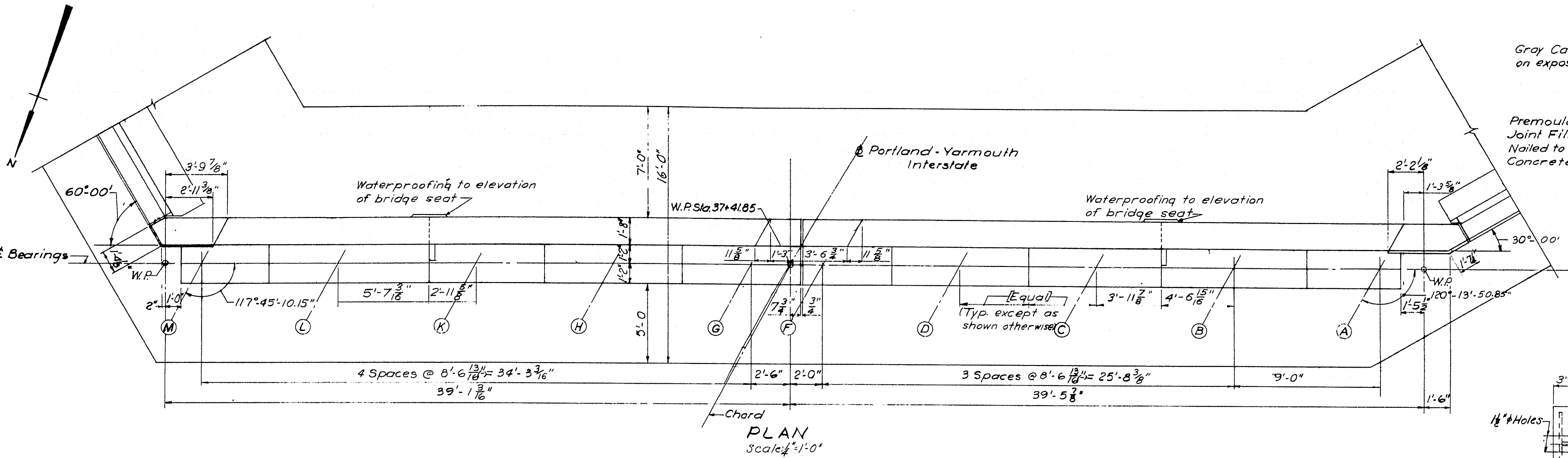
## NOTES:

For Sections A-A thru C-C see Sh. No. 33  
For Pile plan see Sh. No. 32  
For South Abut. Wingwalls see Sh. No. 32  
For Typical Bearing Seat Reinforcing Detail see Sh. No. 33

STATE HIGHWAY COMMISSION AUGUSTA, MAINE
PORTLAND-YARMOUTH INTERSTATE
INTERSTATE OVER VERANDA STREET
<b>SOUTH ABUTMENT</b>
SHEET NO. 31 OF 59
SCALE: AS NOTED
FAY, SPOFFORD & THORNDIKE, INC. ENGINEERS BOSTON, MASS.

Qm-14  
731

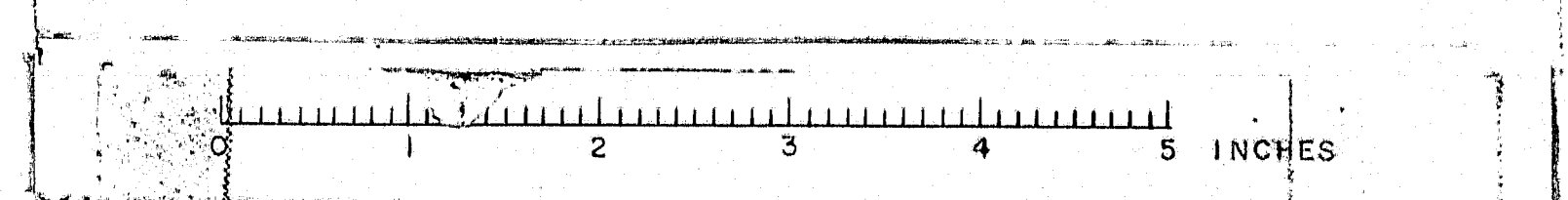
M-1350



FOOTING REINFORCING PLAN  
NORTH & SOUTH ABUTMENTS  
Scale: 3/8"=1'-0"

DES.	V.J.K.
DR.	R.E.M.
TR.	
CHK.	R.A.F.
APPD.	

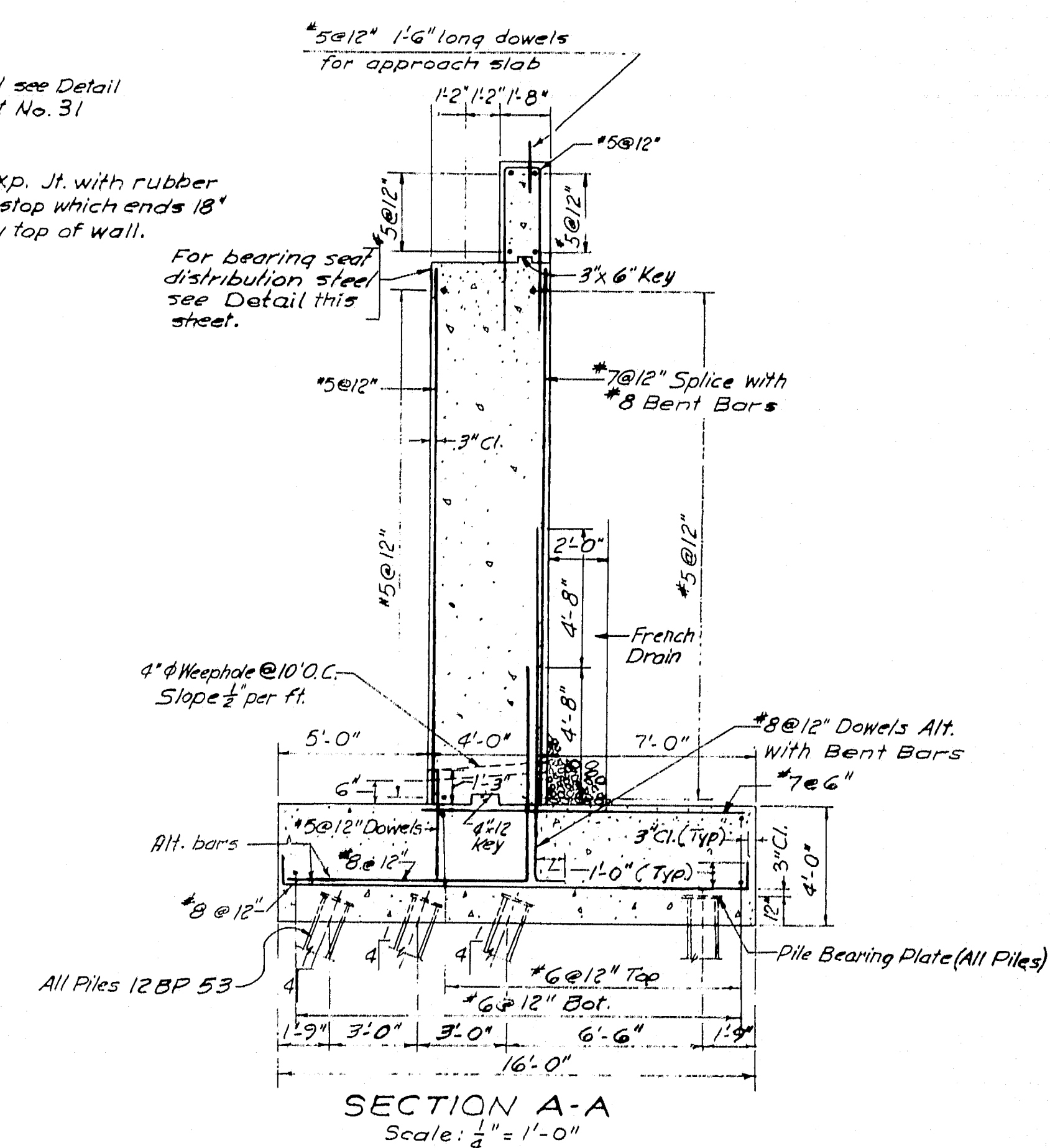
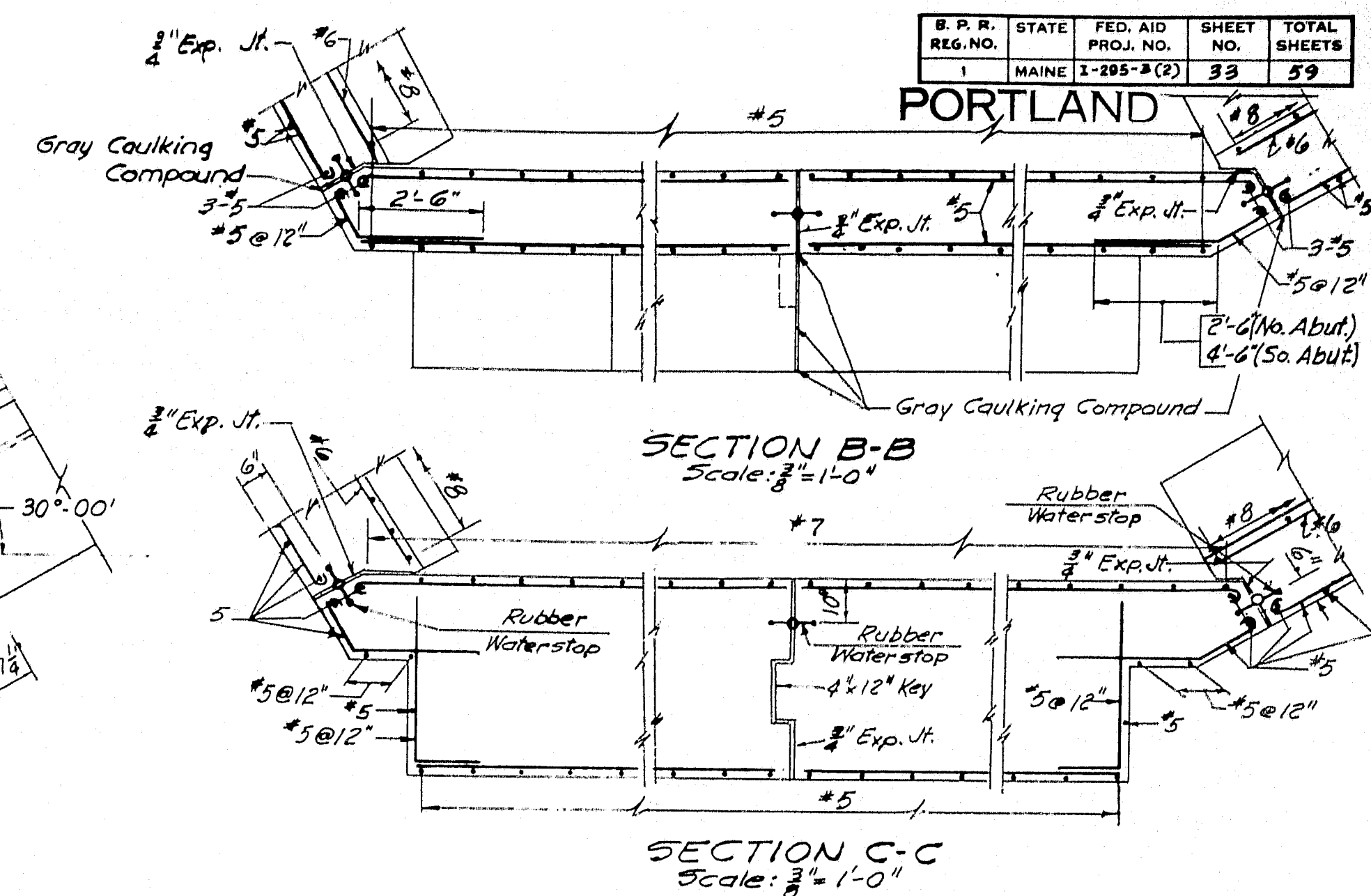
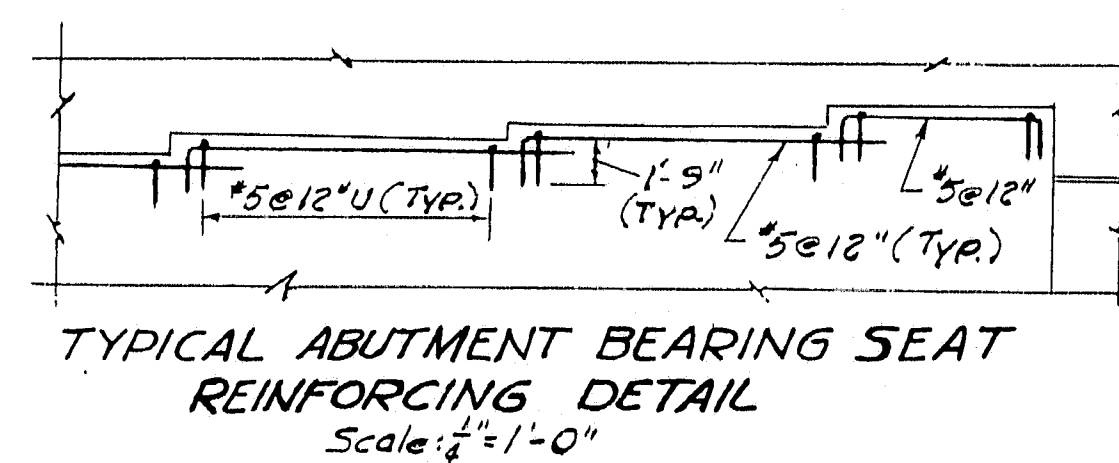
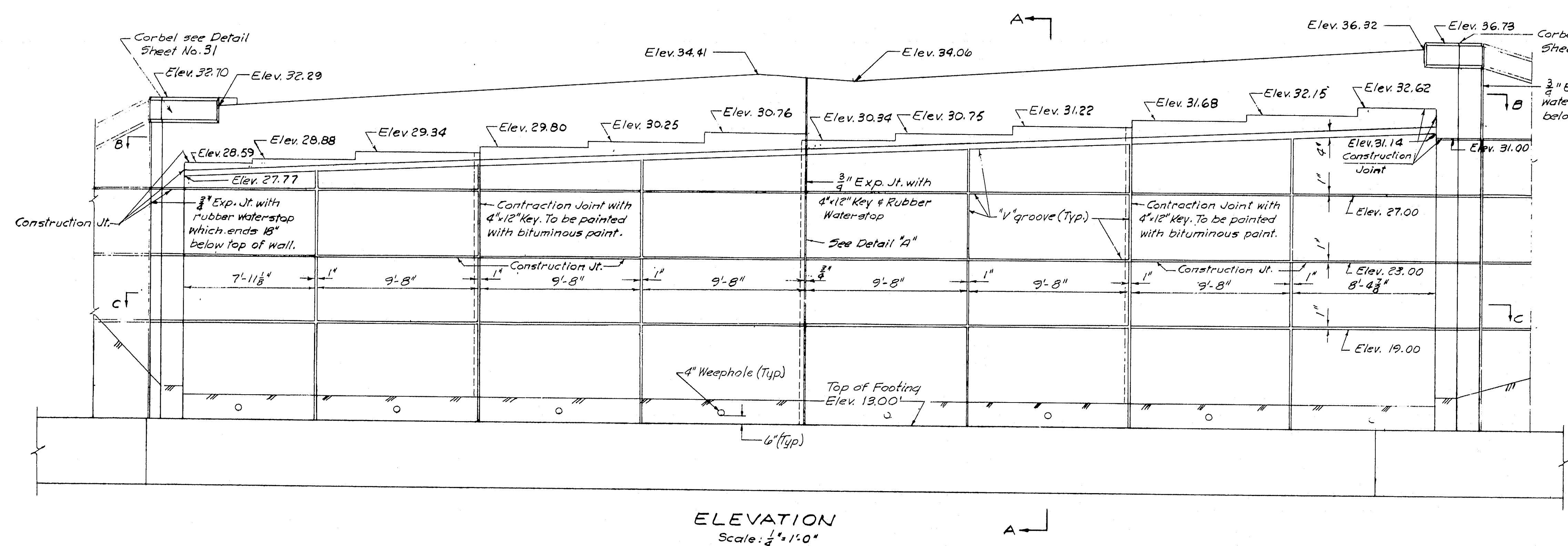
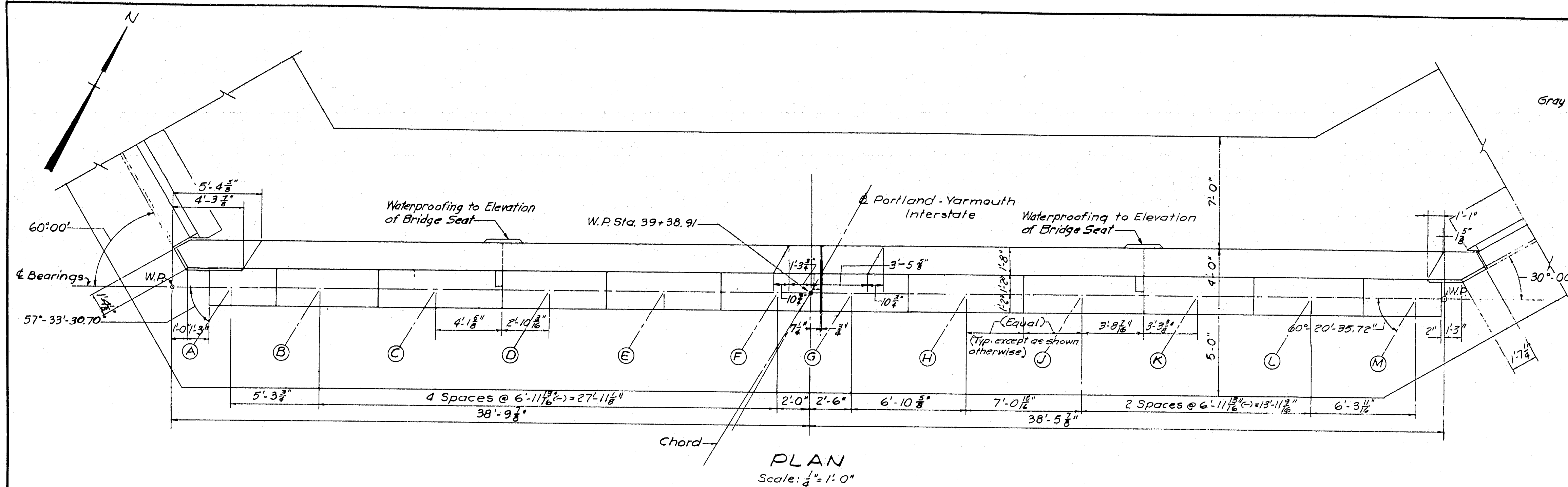
Book Blue Print-300-4-57











- Notes:
1. For Construction notes and typical Details see Sheet No. 31
  2. For North Abutment Wingwalls see Sheet No. 34
  3. For Pile Plan see Sheet No. 34
  4. For Footing Reinforcing Plan see Sheet No. 31

B. P. R. REG. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
1	MAINE	I-205-B(2)	33	59

PORTLAND

SECTION B-B  
Scale: 3" = 1'-0"

Scale:  $\frac{3}{8}'' = 1'-0''$

SECTION C-C  
Scale: 3" = 1' 0"

Scale:  $\frac{1}{4}$ " = 1'-0"

STATE HIGHWAY COMMISSION  
AUGUSTA, MAINE

PORTLAND-YARMOUTH INTERSTATE

INTERSTATE OVER VERANDA STREET

### NORTH ABUTMENT

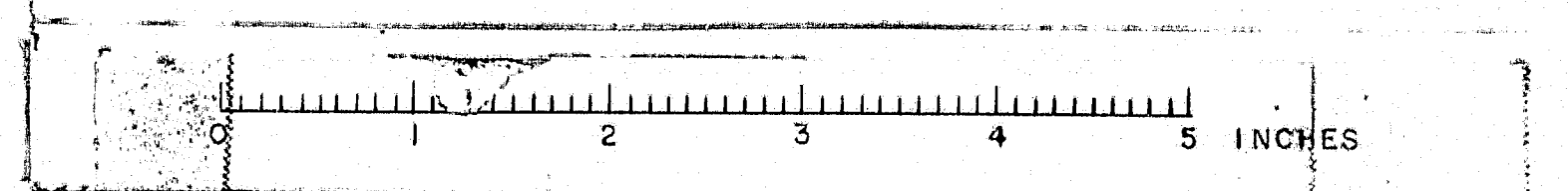
SHEET NO. 33 OF 59

SCALE: AS NOTED

FAY, SPOFFORD & THORNDIKE, INC.  
ENGINEERS BOSTON, MASS.

Qm-16  
733

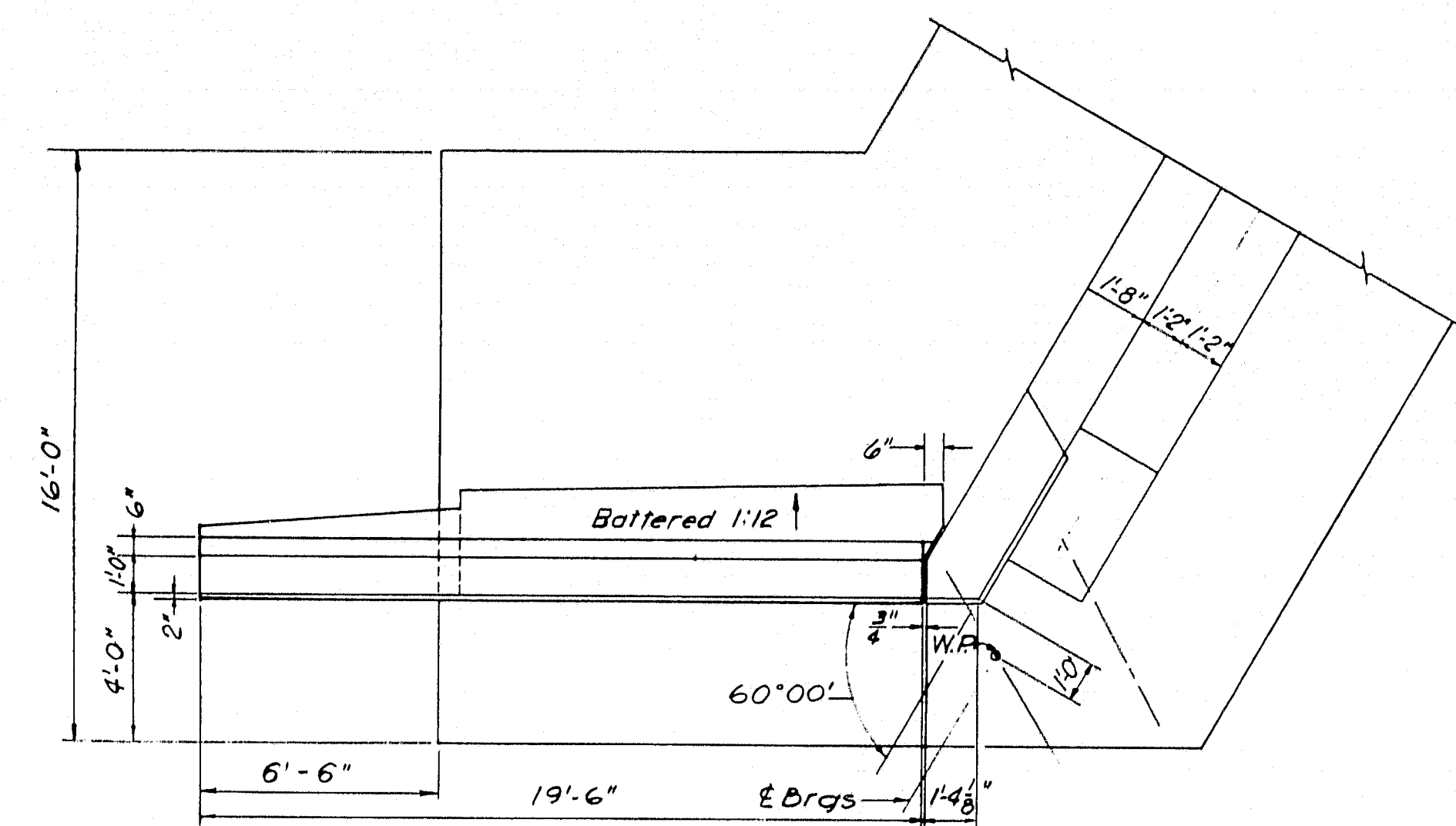
M-1352



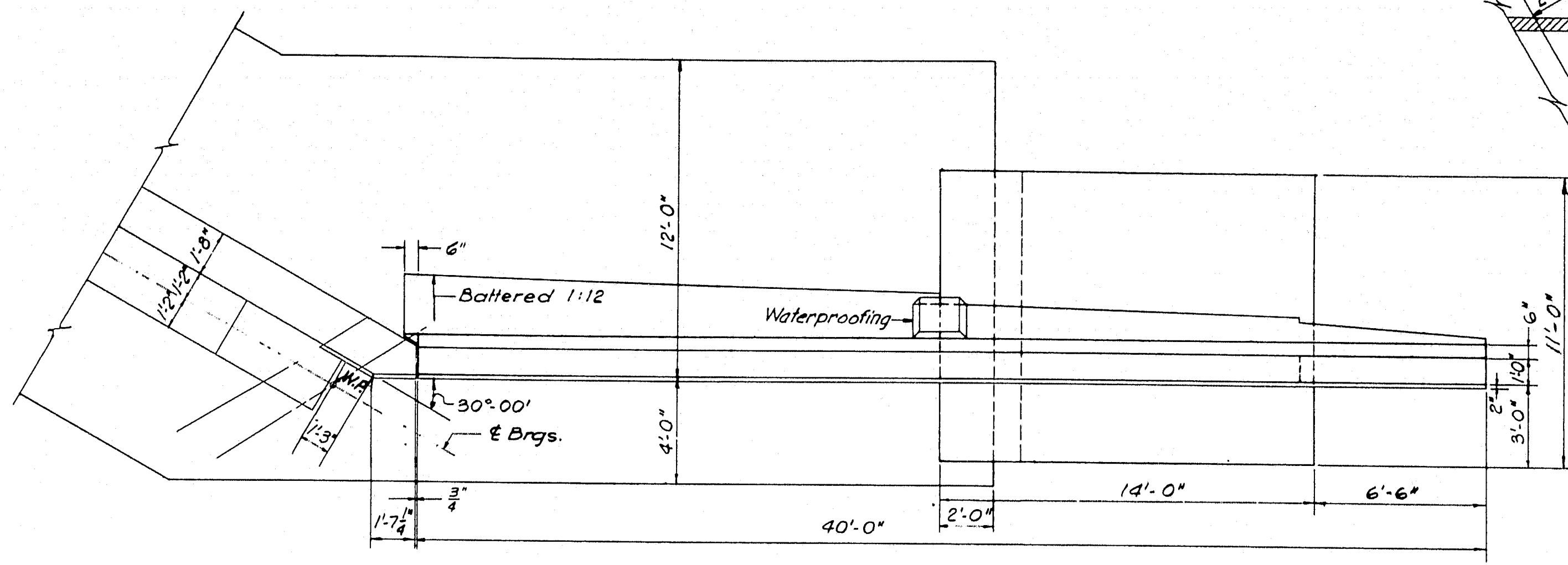


S. R. R.	STATE	FED. AID	SHEET	TOTAL
NO.	NO.	NO.	NO.	SHEETS
1	MAINE	1-195-3(2)	34	59

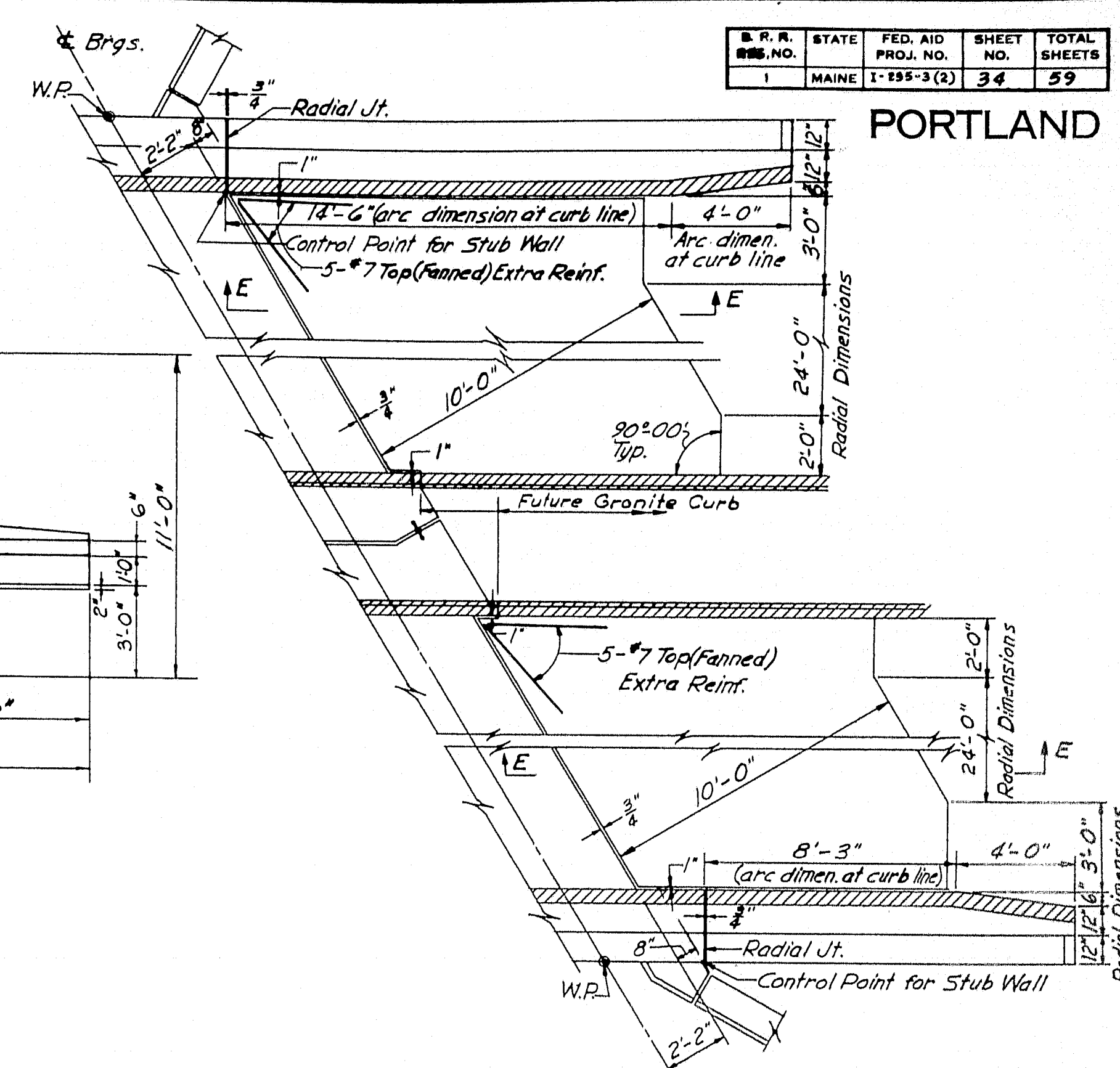
PORTLAND



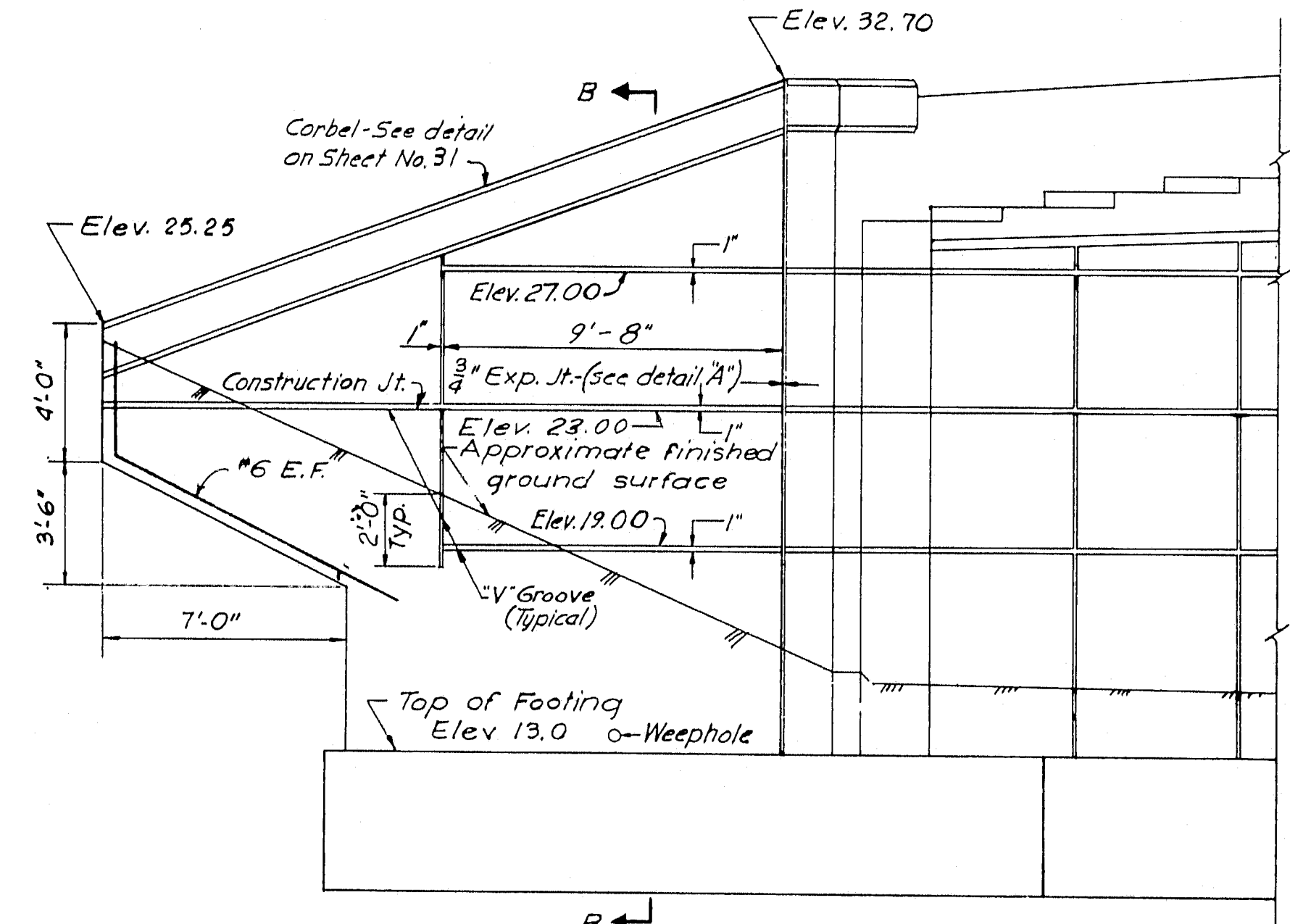
PLAN  
Scale:  $\frac{1}{4}$ " = 1'-0"



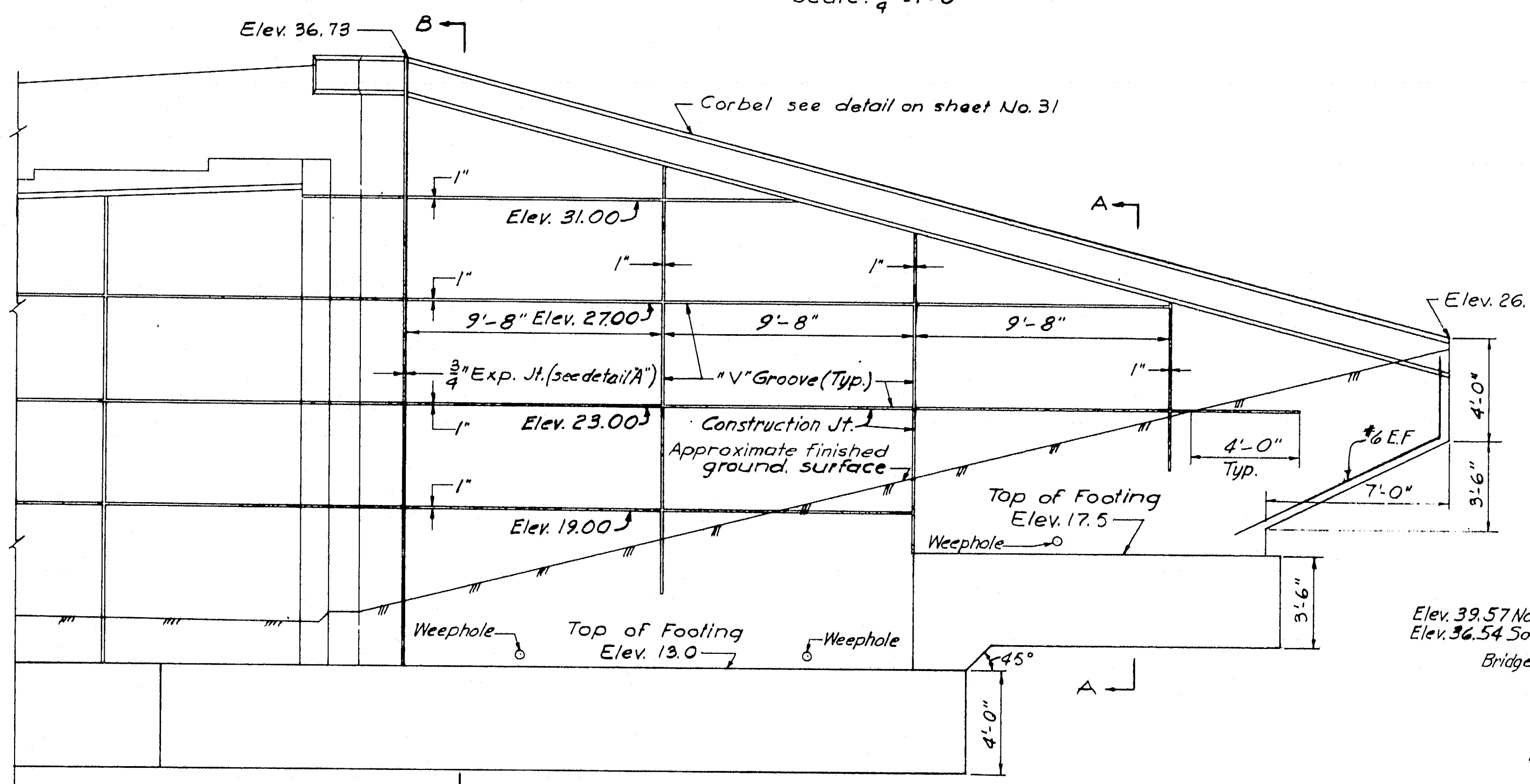
PLAN  
Scale:  $\frac{1}{4}$ " = 1'-0"



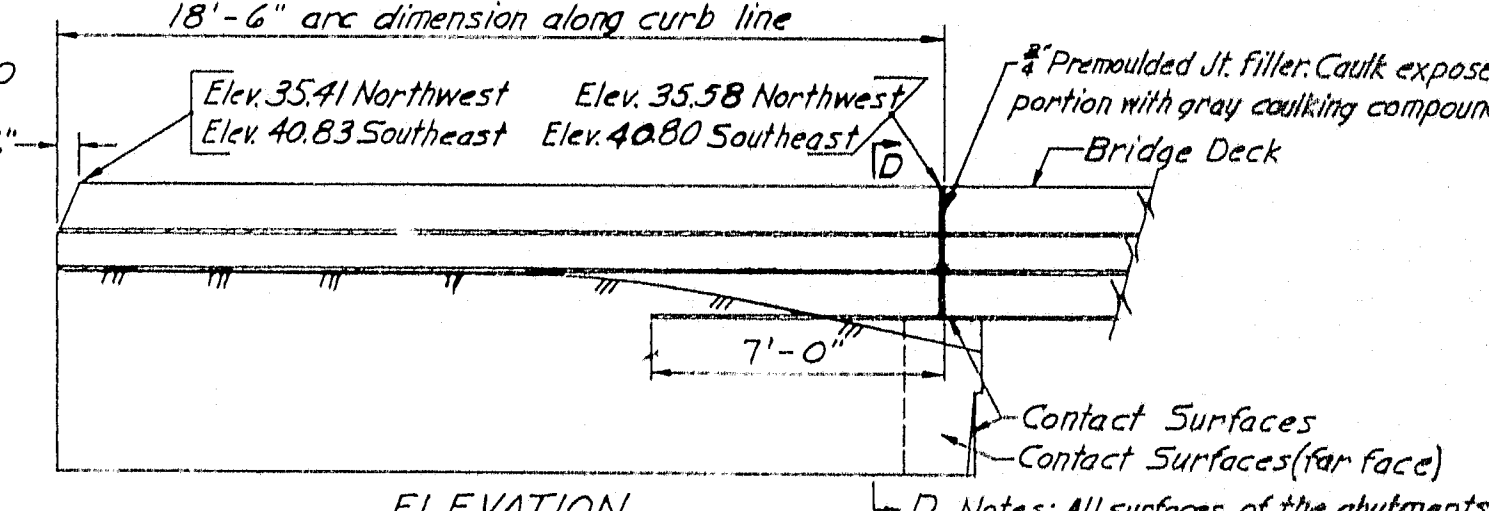
NORTH APPROACH SLABS & STUB WALLS  
(SOUTH APPROACH SLABS & STUB WALLS SIMILAR)  
Scale:  $\frac{1}{4}$ " = 1'-0"



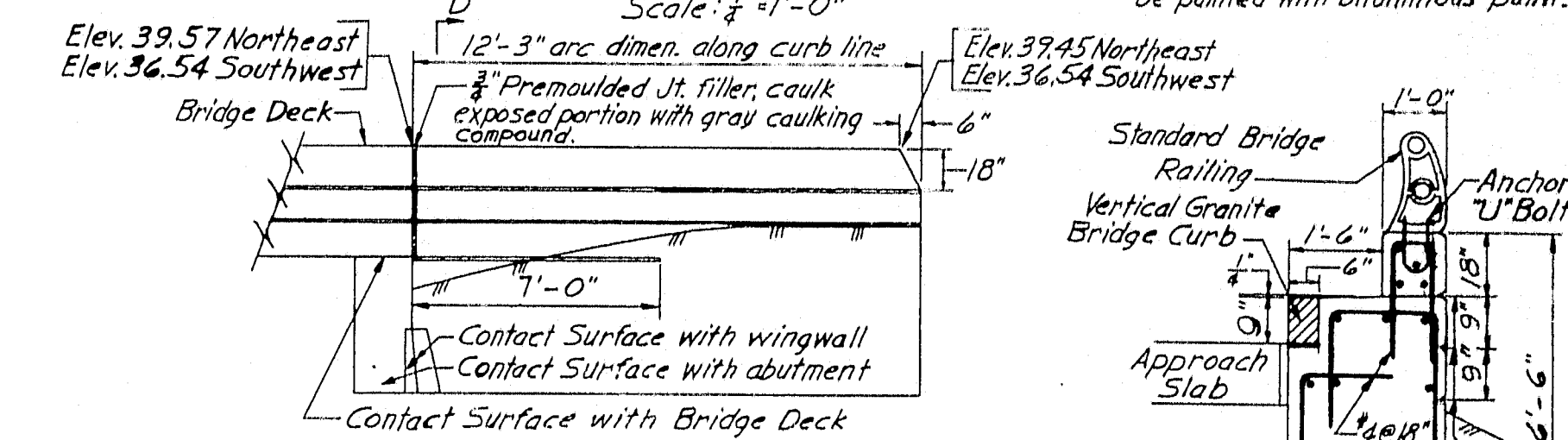
ELEVATION OF NORTHWEST WINGWALL  
Scale:  $\frac{1}{4}$ " = 1'-0"



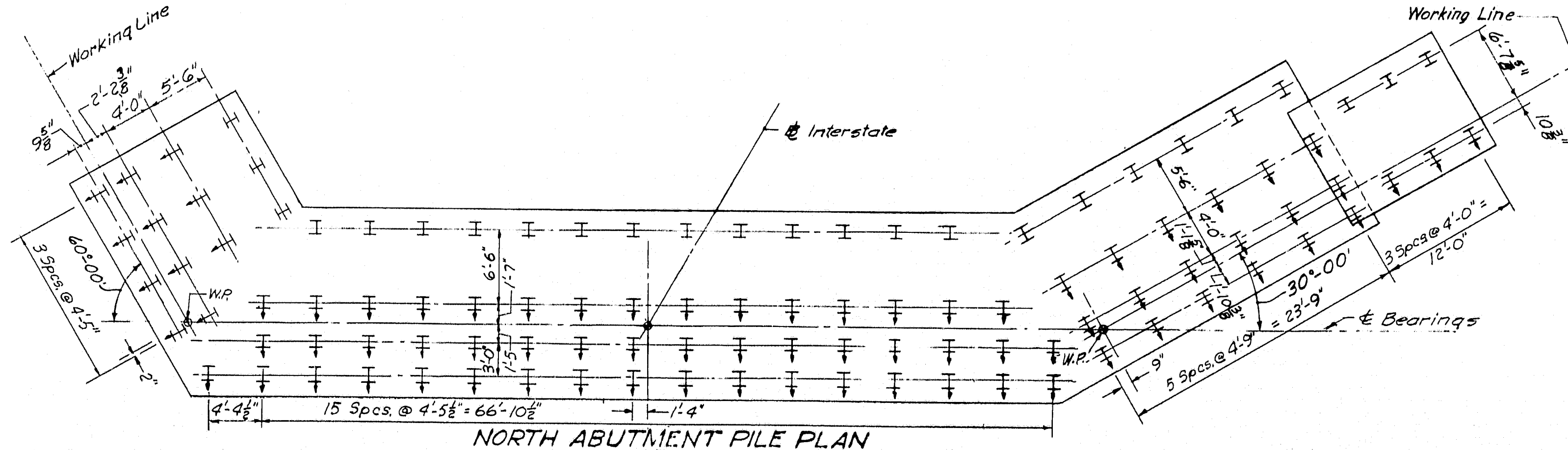
ELEVATION OF NORTHEAST WINGWALL  
Scale:  $\frac{1}{4}$ " = 1'-0"



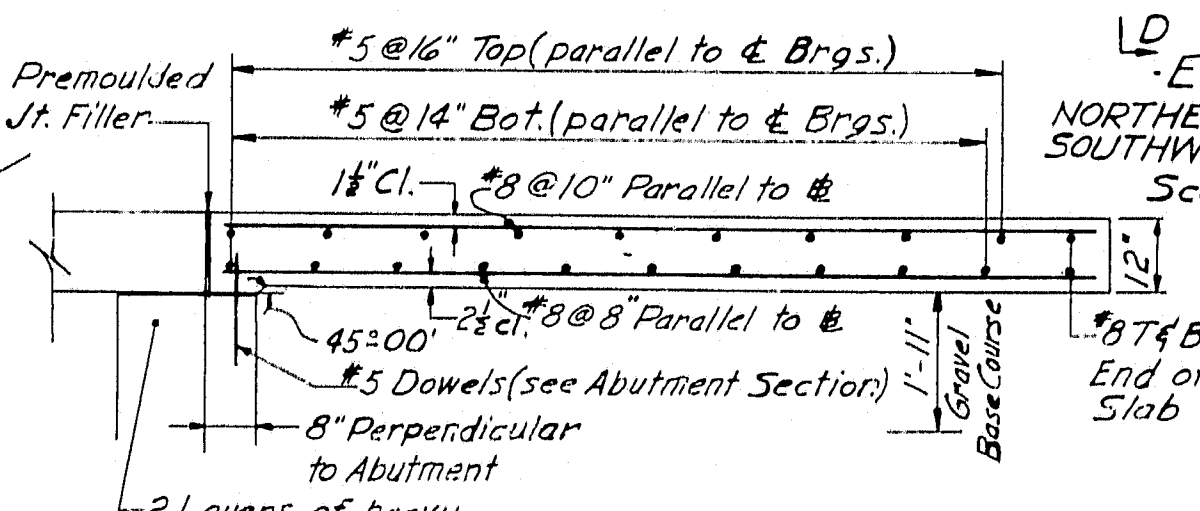
ELEVATION  
NORTHWEST STUB WALL  
SOUTHEAST STUB WALL  
Scale:  $\frac{1}{4}$ " = 1'-0"



ELEVATION  
NORTHEAST STUB WALL  
SOUTHWEST STUB WALL  
Scale:  $\frac{1}{4}$ " = 1'-0"



NORTH ABUTMENT PILE PLAN  
Scale:  $\frac{1}{8}$ " = 1'-0"



SECTION E-E  
Scale:  $\frac{1}{8}$ " = 1'-0"

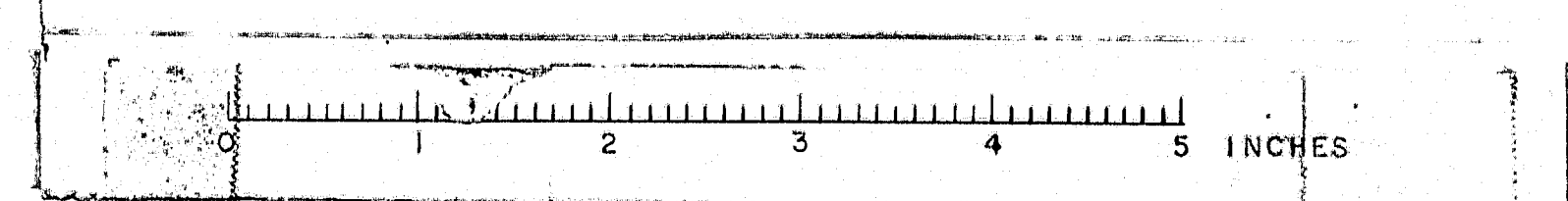
SECTION D-D  
Scale:  $\frac{1}{8}$ " = 1'-0"

STATE HIGHWAY COMMISSION AUGUSTA, MAINE	
PORTLAND-YARMOUTH INTERSTATE	
INTERSTATE OVER VERANDA STREET	
NORTH ABUTMENT WINGWALLS	
SHEET NO. 34 OF 59	SCALE: AS NOTED
RAY, SPROFFORD & THORNDIKE, INC. ENGINEERS BOSTON, MASS.	

M-1353

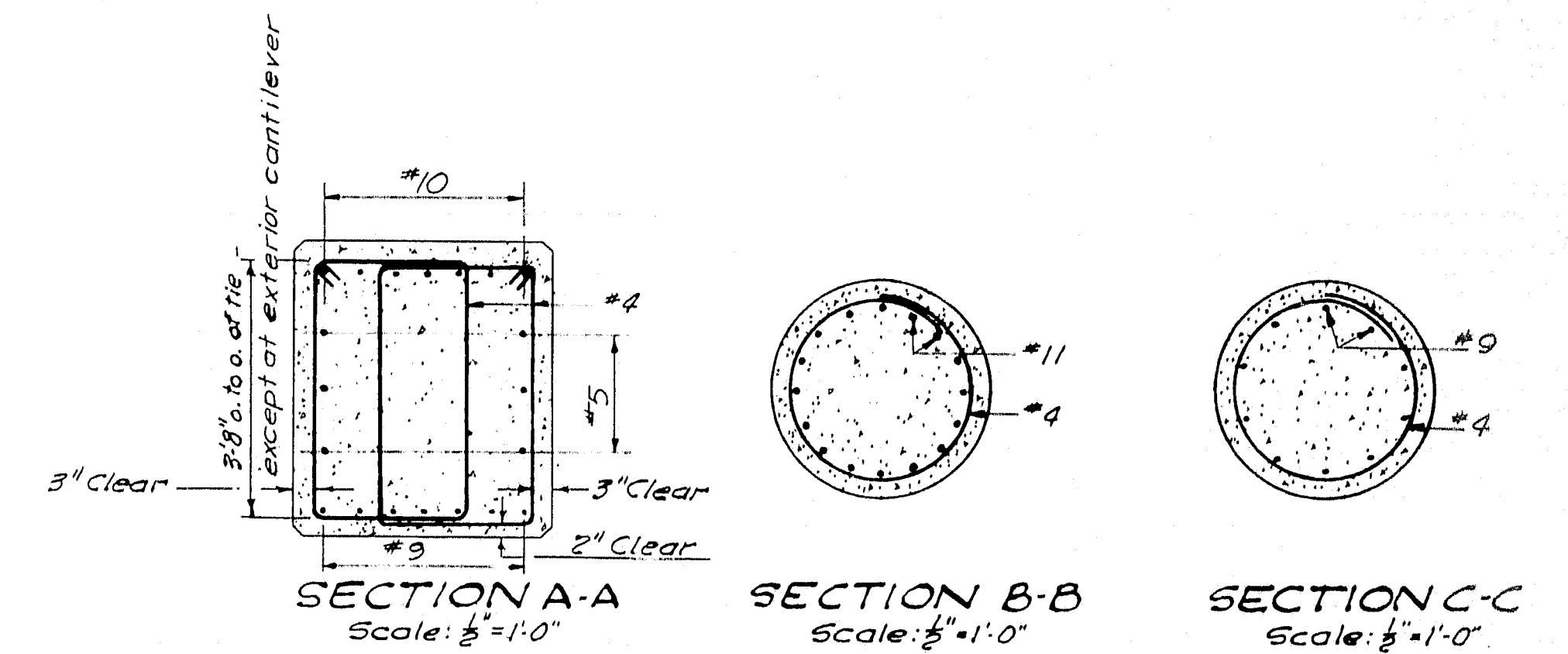
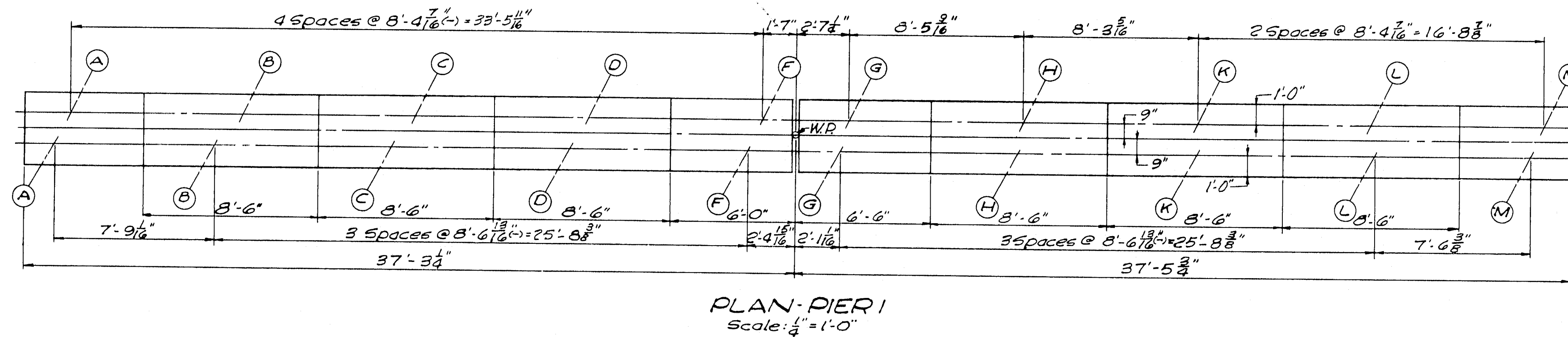
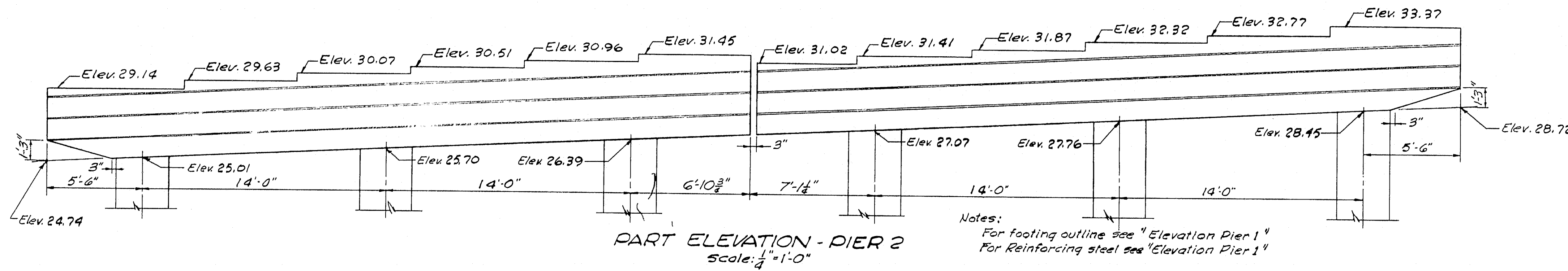
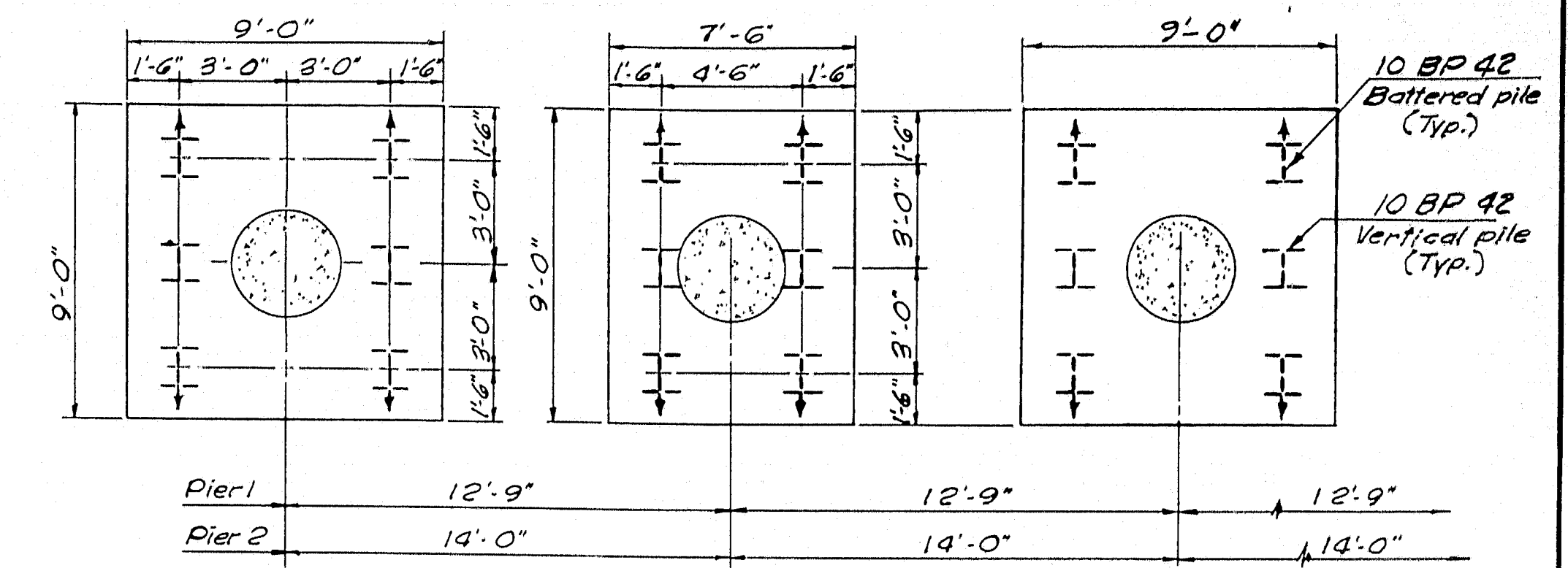
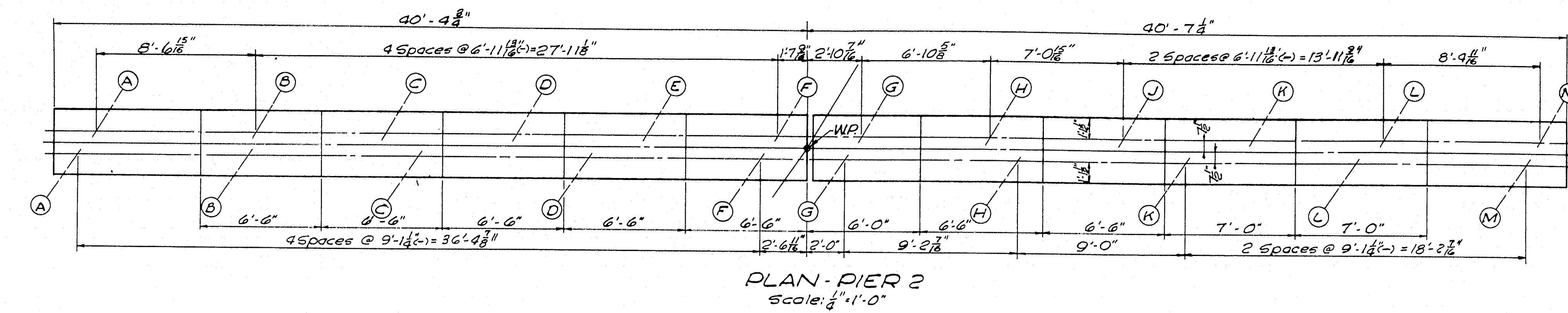
DES.	GCB
DR.	CAK-FW
TR.	
CHK.	VJK
APPD.	

Boston Blue Print 100-4-37

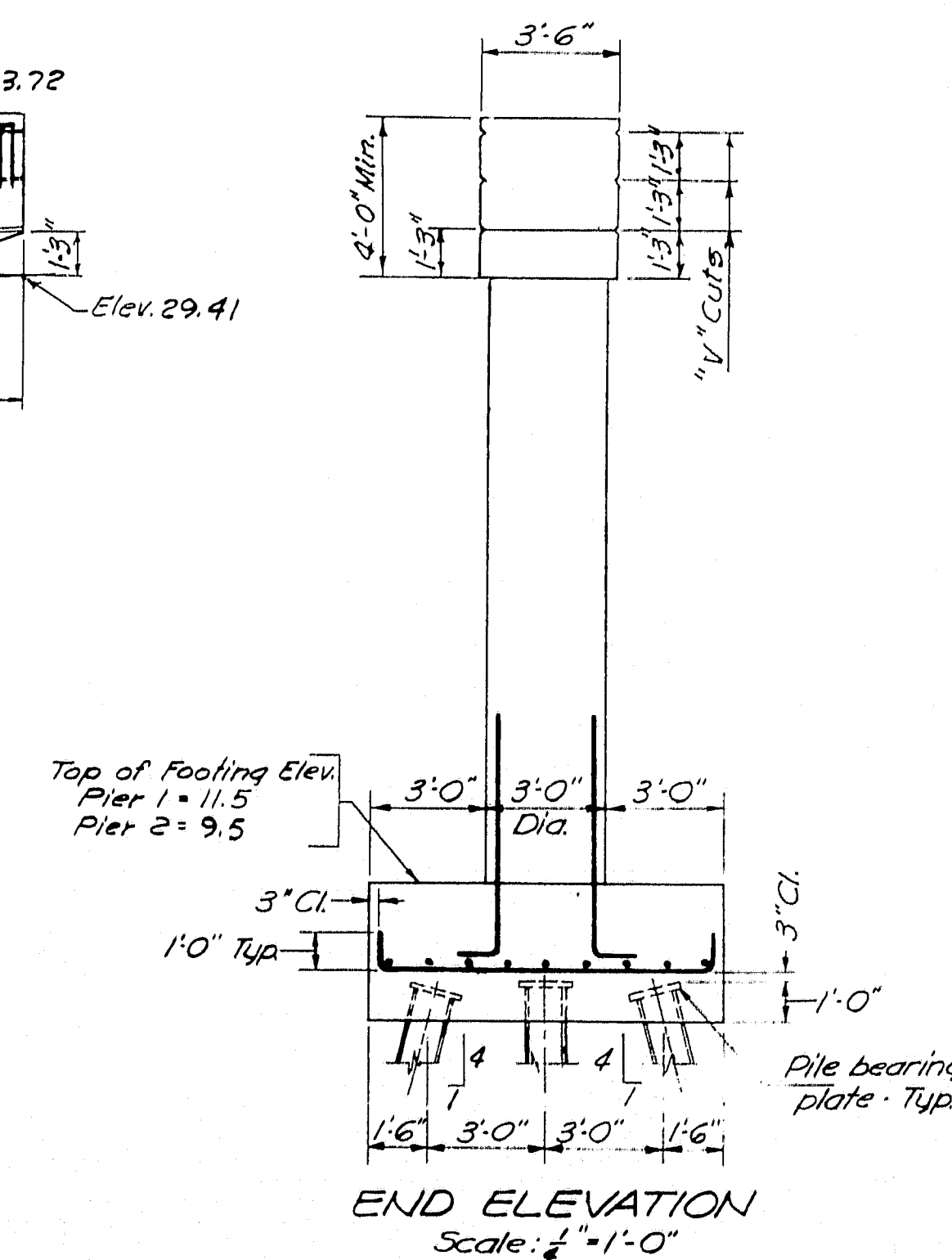
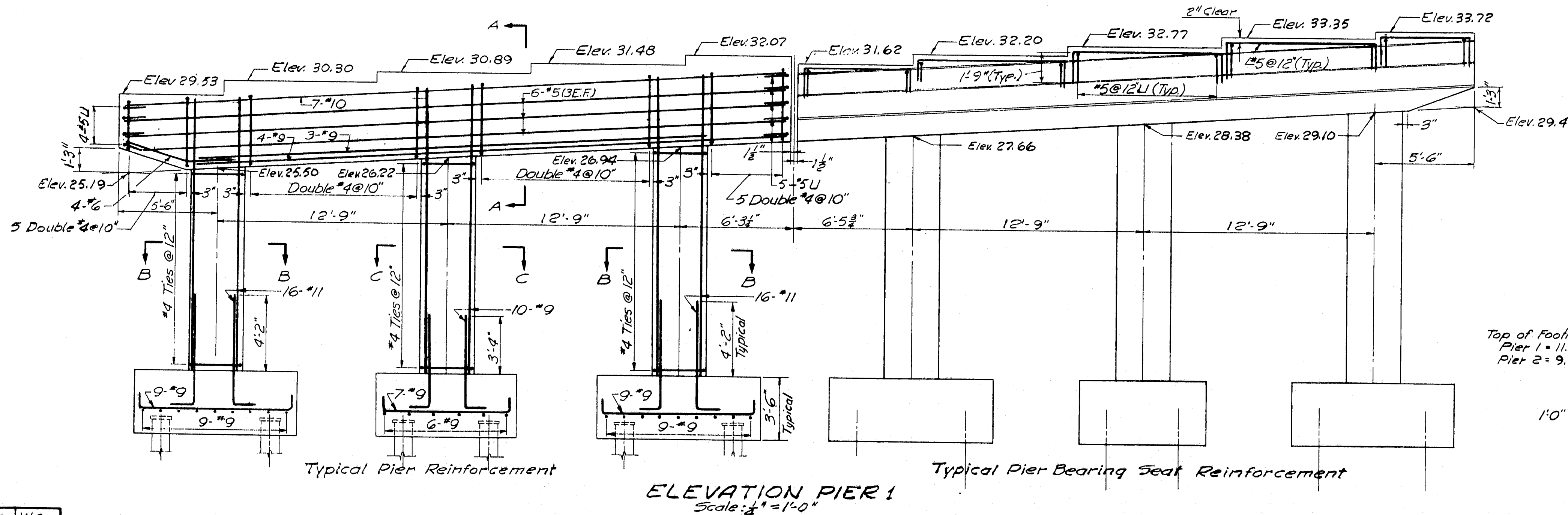




# PORTLAND

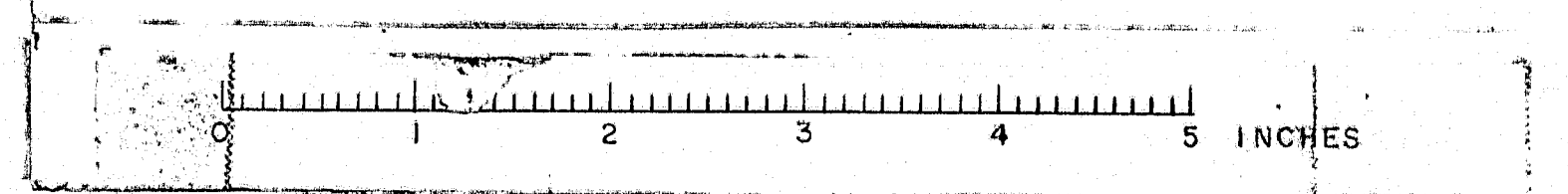


NOTE  
For Construction Notes and Typical Details  
see Sheet No. 31



STATE HIGHWAY COMMISSION AUGUSTA, MAINE	
PORTLAND-YARMOUTH INTERSTATE	
INTERSTATE OVER VERANDA STREET	
PIER DETAILS	
SHEET NO. 35 OF 59	SCALE: AS NOTED
FAY, SPOFFORD & THORNDIKE, INC. ENGINEERS	BOSTON, MASS.

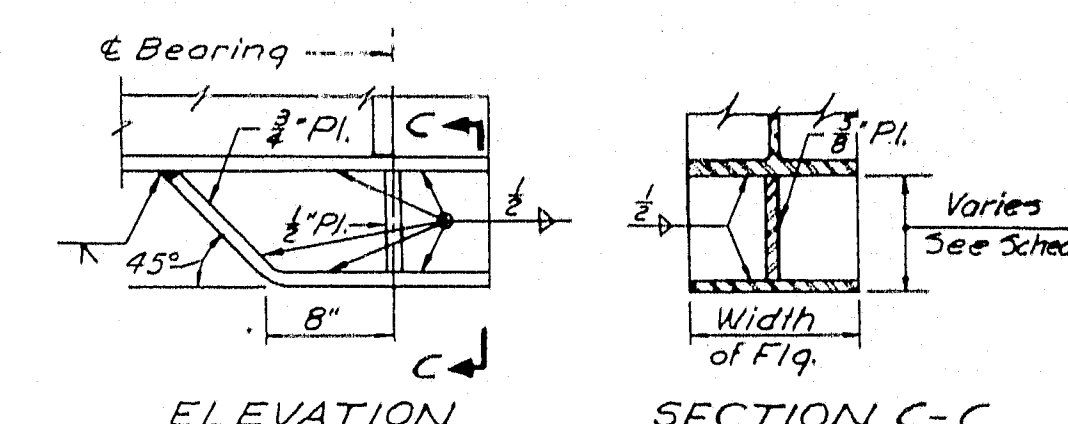
M-1354





SOLE PLATE THICKNESS AND PEDESTAL SCHEDULE

SPAN	SPAN 1		SPAN 2		SPAN 3	
	SOLE PL.	PIER 1	SOLE PL.	PIER 2	SOLE PL.	PIER 3
A	2"	2"	2"	2"	2"	2"
B	2"	2"	2"	2"	2"	2"
C	2"	2"	2"	2"	2"	2"
D	2"	2"	2"	2"	2"	2"
E	2"	2"	2"	2"	2"	2"
F	2"	2"	2"	2"	2"	2"
G	2"	2"	2"	2"	2"	2"
H	2"	2"	2"	2"	2"	2"
J	2"	2"	2"	2"	2"	2"
K	2"	2"	2"	2"	2"	2"
L	2"	2"	2"	2"	2"	2"
M	2"	2"	2"	2"	2"	2"



PEDESTAL DETAIL

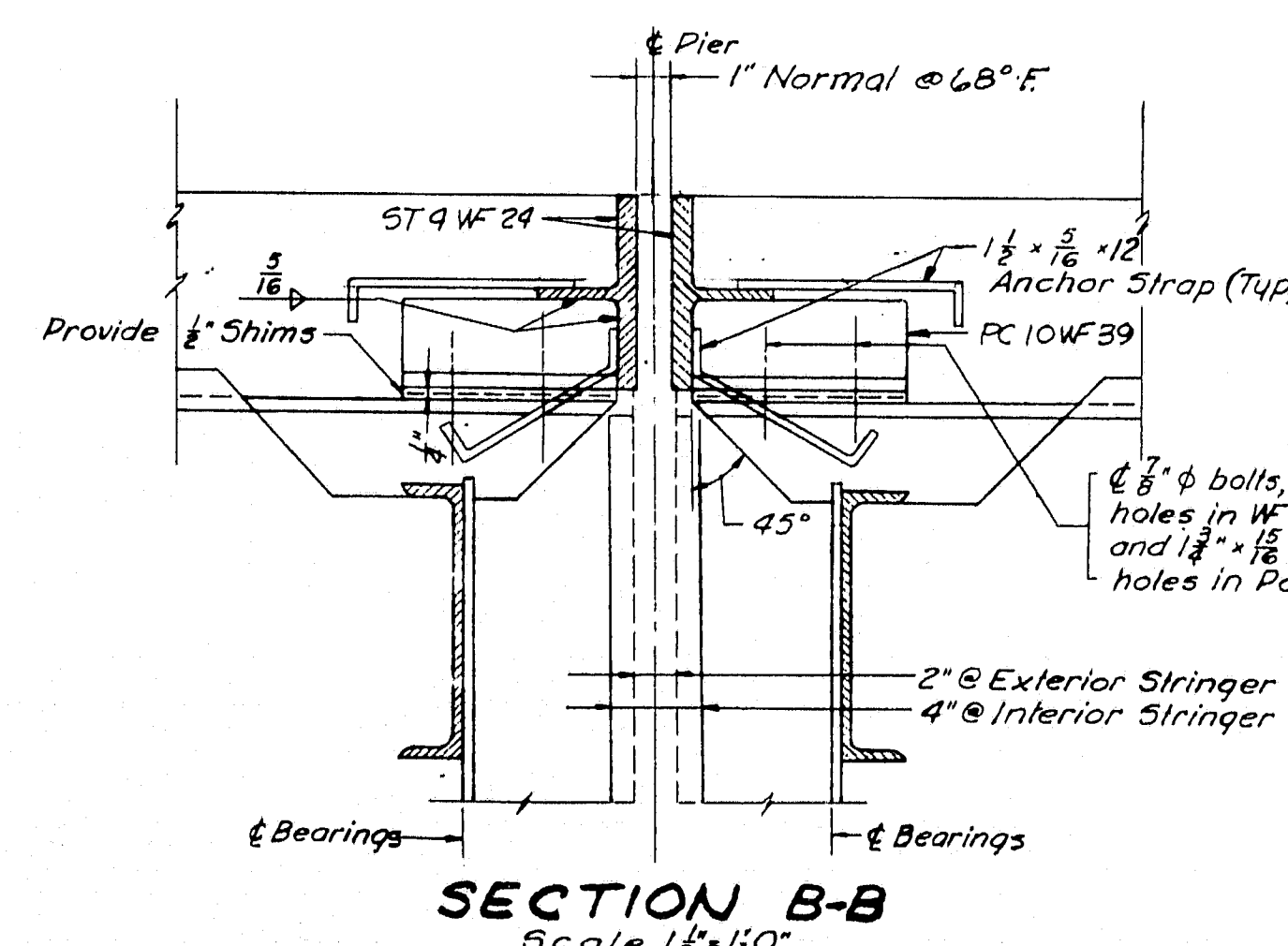
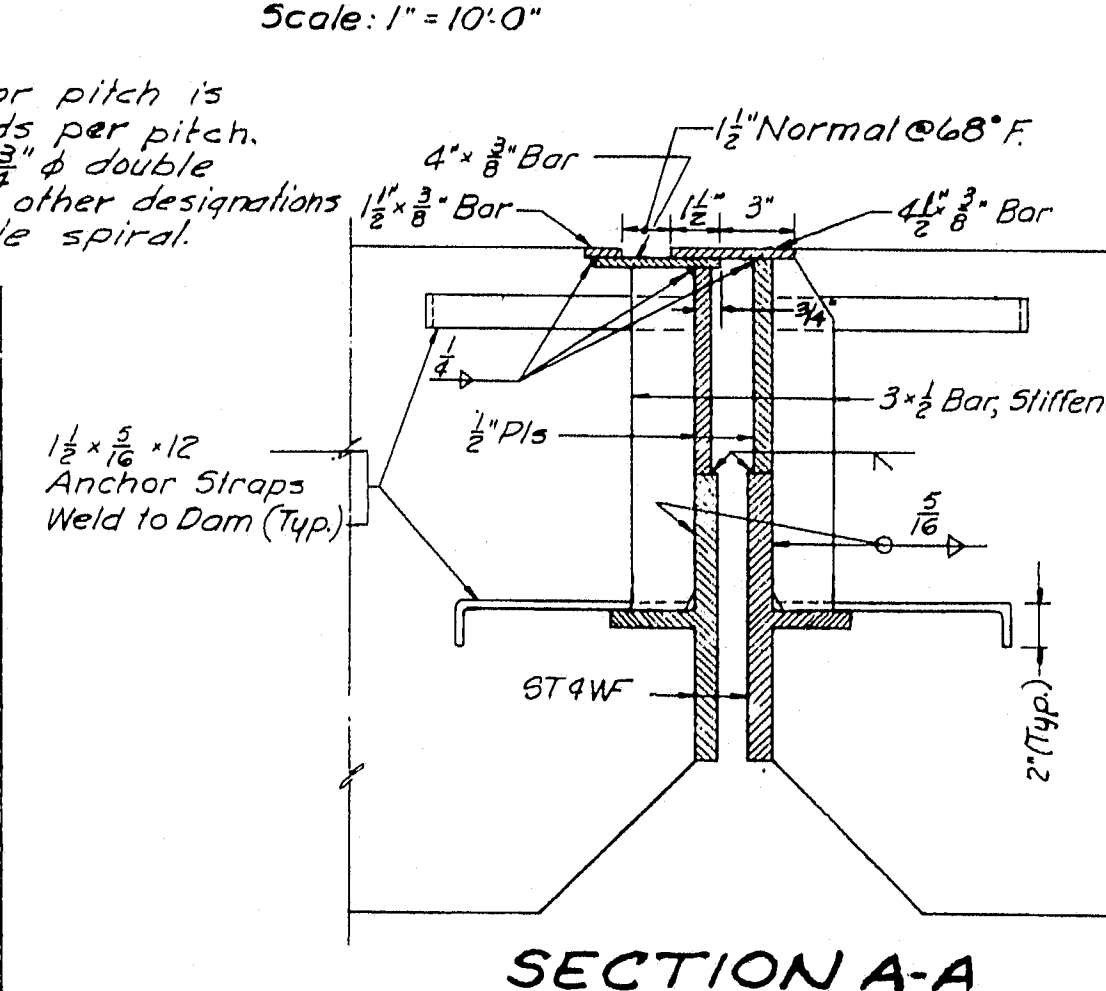
Scale: 1"=1'-0"

SCHEDULE FOR STRINGERS, COVER PLATES AND SHEAR CONNECTORS

NO.	SECTION	COVER PLATE	LP	SPIRAL SHEAR CONNECTORS				EQUIVALENT STUD SHEAR CONNECTORS			
				LENGTH	PITCH	LENGTH	PITCH	LENGTH	PITCH	LENGTH	PITCH
5-1	36WF150	8'-0"	1/2"	8'-0"	1@5"	8'-0"	1@7"	8'-0"	7 1/2"	8'-0"	10 1/2"
5-2	33WF130	8'-0"	3/8"	8'-0"	2@5 1/2"	8'-0"	2@7 1/2"	8'-0"	4"	8'-0"	5 1/2"
5-3	33WF130	8'-0"	3/8"	8'-0"	1@4 1/2"	8'-0"	1@6"	8'-0"	6 1/2"	8'-0"	9"
5-4	36WF150	8'-0"	1/2"	8'-0"	1@5"	8'-0"	1@7"	8'-0"	7 1/2"	8'-0"	10 1/2"
5-5	36WF150	8'-0"	3/8"	8'-0"	1@4 1/2"	8'-0"	1@6"	8'-0"	6 1/2"	8'-0"	9"
5-6	33WF130	8'-0"	3/8"	8'-0"	2@5 1/2"	8'-0"	2@7 1/2"	8'-0"	4"	8'-0"	5 1/2"
5-7	33WF130	8'-0"	3/8"	8'-0"	2@5 1/2"	8'-0"	2@7 1/2"	8'-0"	4"	8'-0"	5 1/2"
5-8	33WF130	8'-0"	3/8"	8'-0"	2@5 1/2"	8'-0"	2@7 1/2"	8'-0"	4"	8'-0"	5 1/2"
5-9	33WF141	8'-0"	3/8"	8'-0"	1@4 1/2"	8'-0"	1@6 1/2"	8'-0"	7"	8'-0"	9"
5-10	33WF141	8'-0"	3/8"	8'-0"	1@4 1/2"	8'-0"	1@6 1/2"	8'-0"	7"	8'-0"	9"
5-11	33WF130	8'-0"	3/8"	8'-0"	2@5 1/2"	8'-0"	2@7 1/2"	8'-0"	4"	8'-0"	5 1/2"
5-12	33WF130	8'-0"	3/8"	8'-0"	2@5 1/2"	8'-0"	2@7 1/2"	8'-0"	4"	8'-0"	5 1/2"
5-13	33WF130	8'-0"	3/8"	8'-0"	2@5 1/2"	8'-0"	2@7 1/2"	8'-0"	4"	8'-0"	5 1/2"
5-14	36WF150	8'-0"	1/2"	8'-0"	1@4"	8'-0"	1@6"	8'-0"	6"	8'-0"	8 1/2"
5-15	36WF150	8'-0"	1/2"	8'-0"	1@4"	8'-0"	1@6"	8'-0"	6"	8'-0"	8 1/2"
5-16	36WF280	14'-0"	3/4"	14'-0"	1@4"	14'-0"	1@5 1/2"	14'-0"	6"	14'-0"	8 1/2"
5-17	36WF280	14'-0"	3/4"	14'-0"	1@4"	14'-0"	1@5 1/2"	14'-0"	6"	14'-0"	8 1/2"
5-18	36WF280	14'-0"	3/4"	14'-0"	1@4"	14'-0"	1@5 1/2"	14'-0"	6"	14'-0"	8 1/2"

FRAMING PLAN

Scale: 1"=10'-0"

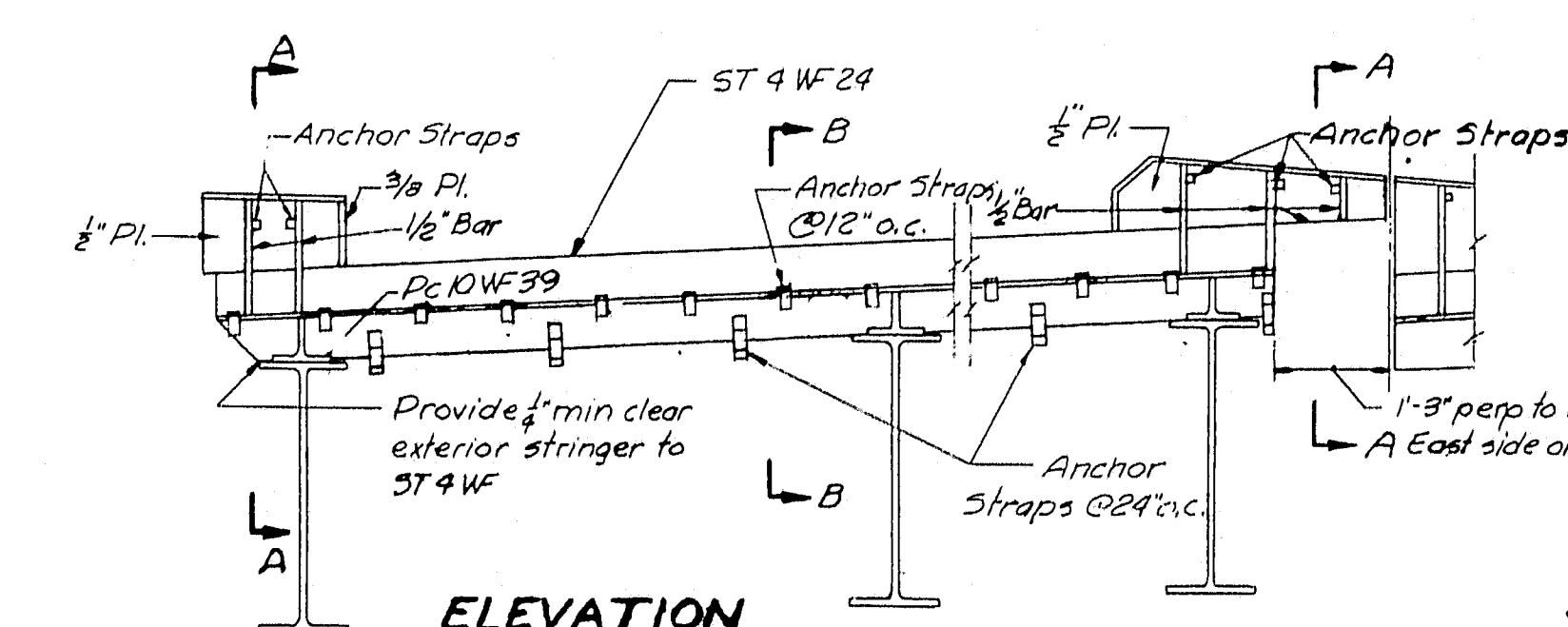


SECTION B-B

Scale: 1 1/2"=1'-0"

PLAN

Scale: 1/2"=1'-0"



Note: Where rolled stringers have cover plates, the steel for both shall conform to ASTM A373. All other structural steel shall conform to ASTM A-7 or A-373 unless specified otherwise.

FRAMING NOTES

- For diaphragm, bearing, and shear connector details see Sheet No. 36.
- All dimensions shown on Framing Plan are horizontal.
- Stringers shall be cambered the minimum amount likely to remain permanent.

STATE HIGHWAY COMMISSION  
AUGUSTA, MAINE

PORTLAND-YARMOUTH INTERSTATE

INTERSTATE OVER VERANDA STREET

FRAMING PLAN AND DETAILS

SHEET NO. 36 OF 59

SCALE: AS NOTED

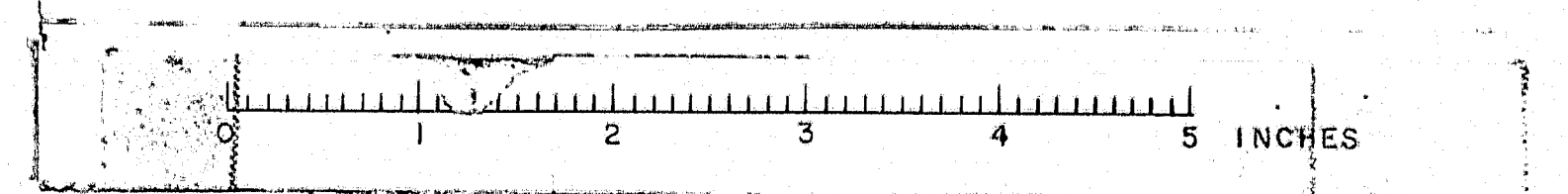
FAY, SPOFFORD & THORNDIKE, INC.  
ENGINEERS  
BOSTON, MASS.

9m-14  
736

M-1355

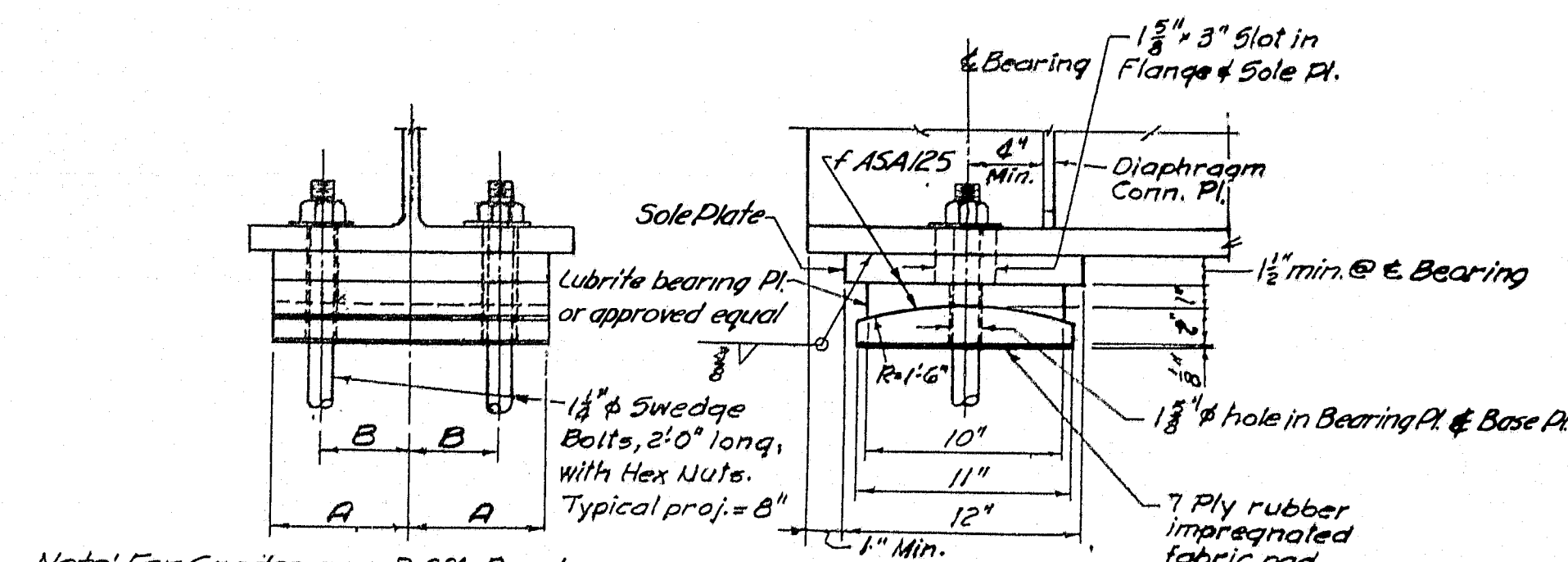


M-1356



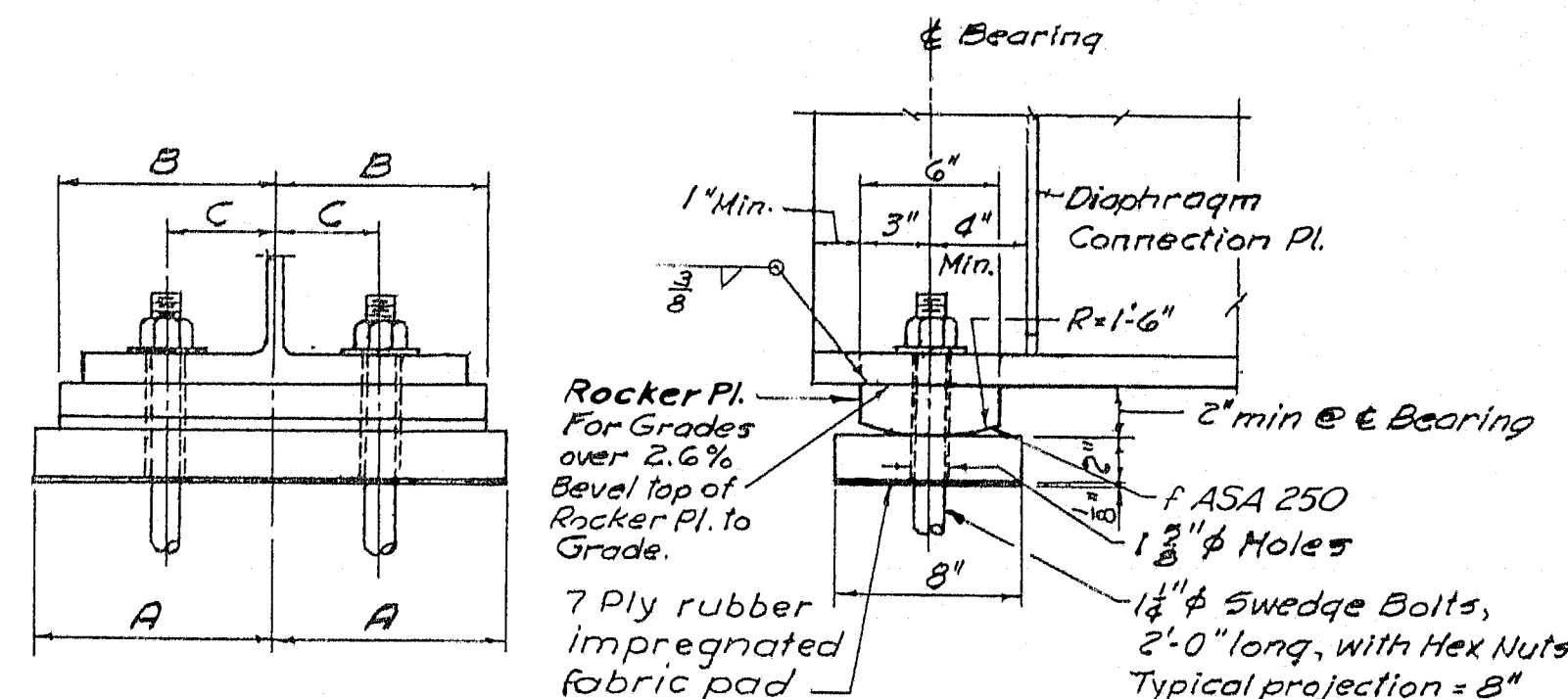


PORTLAND



Note: For Grades over 2.6%, Bevel top of Sole Plate to Grade.  
**TYPE A**  
(EXPANSION BEARING)  
Scale: 1 1/2 inch = 1'-0 inch

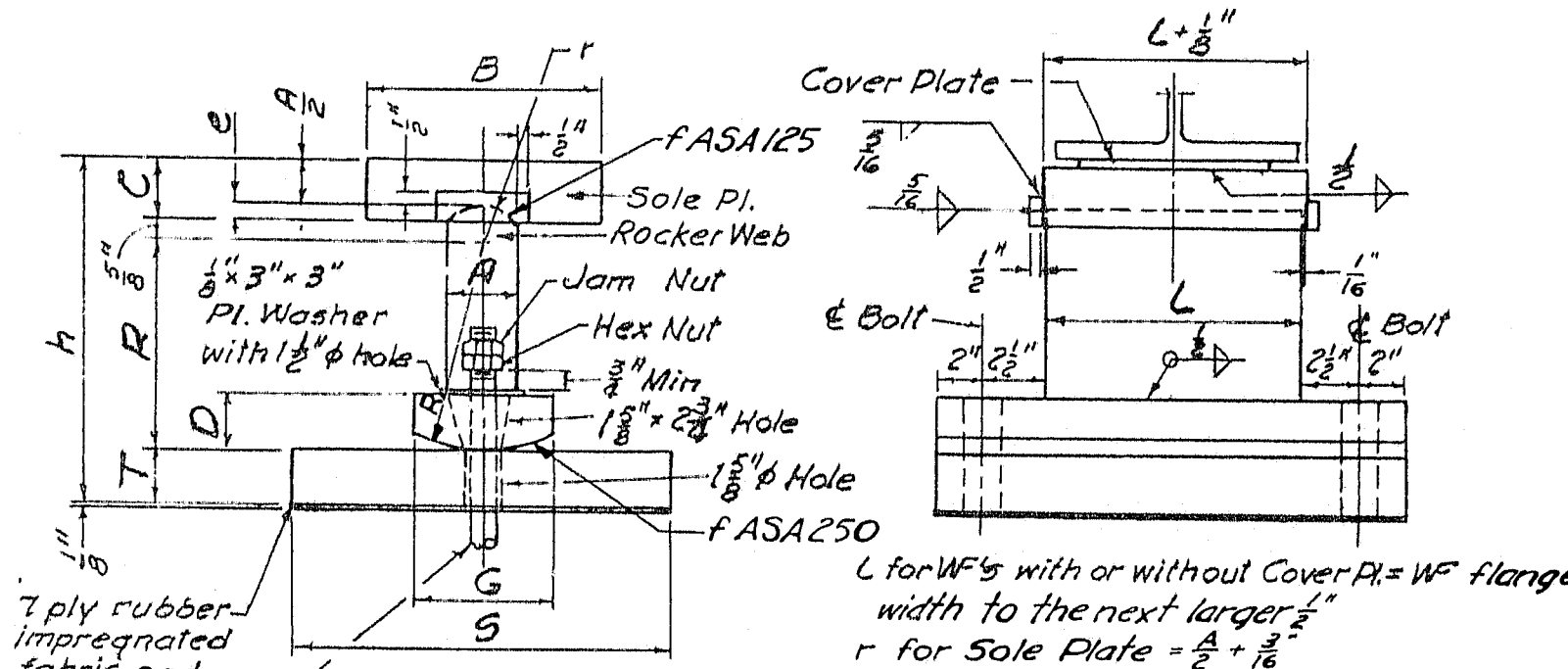
Note for Type "A" and "B" Bearings:  
All nuts to be drawn up finger tight, then backed off one turn and the threads of the bolts burred off at the face of the nuts with a pointed tool.



**TYPE B**  
(FIXED BEARING)  
Scale: 1 1/2 inch = 1'-0 inch

TYPE A (EXPANSION)		
FLANGE WIDTH	A	B
16 1/2"	7"	4 1/2"
12"	5"	2 3/4"
11 1/2"	5"	2 3/4"
10 1/2"	4 1/2"	2 3/4"
10"	4 1/2"	2 3/4"
9"	4"	2 3/4"

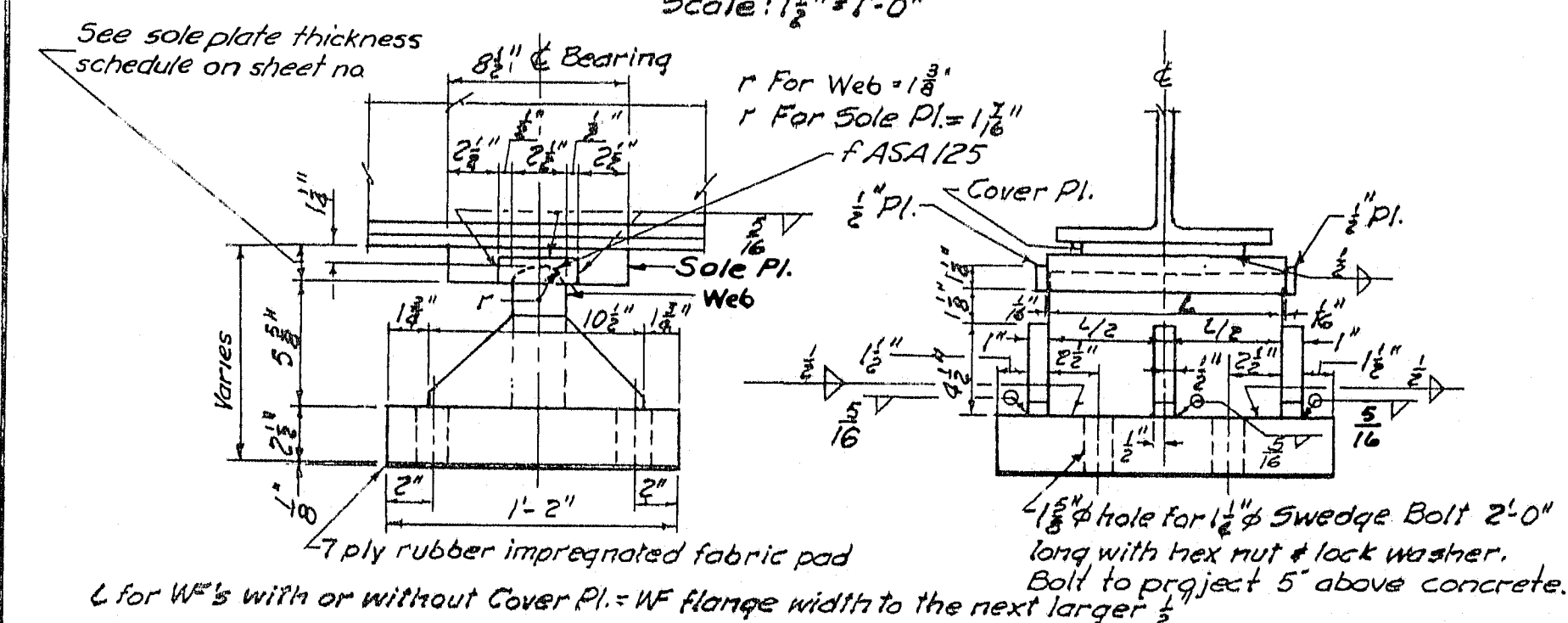
TYPE B (FIXED)			
FLANGE WIDTH	A	B	C
16½"	10"	9"	4½"
12"	8"	7"	2¾"
11½"	8"	7"	2¾"
10½"	7"	6"	2¾"
10"	7"	6"	2¾"
9"	7"	6"	2¾"



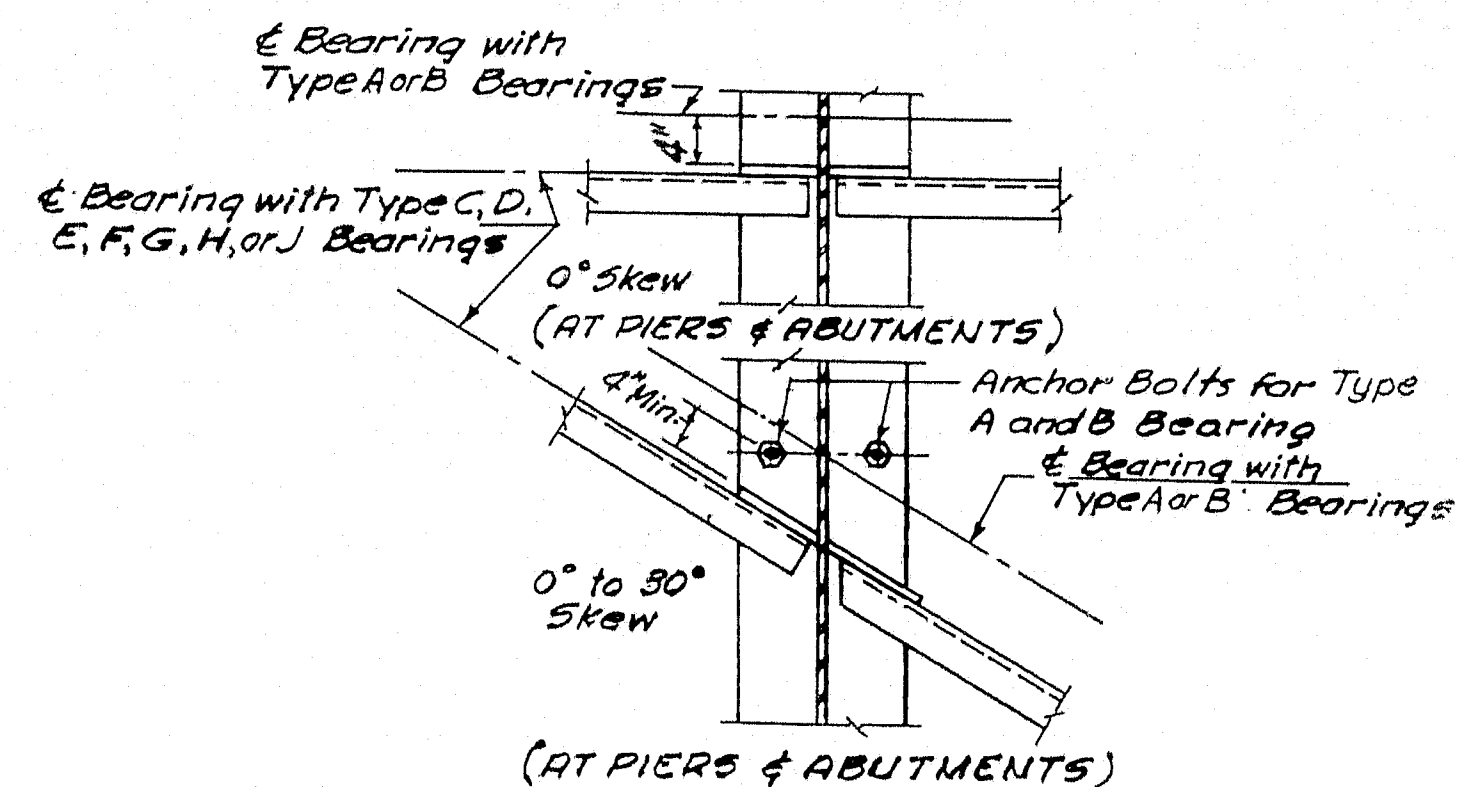
**TYPE C, D, E, F, G, H**  
(EXPANSION BEARING)  
Scale: 1 1/2 inch = 1'-0 inch

DIMENSIONS											
	A	B	C	D	E	G	H	R	S	T	
BEARING TYPE	C	2½"	8½"	See Note	2½"	¾"	6"	Varies	6"	12"	1½"
	D	2½"	8½"	2"	2½"	¾"	6"	11⅝"	7"	14"	1⅜"
	E	3"	10"	2½"	2½"	1"	6"	12⅝"	8"	14"	2"
	F	3"	10"	2½"	2½"	1"	6"	14⅜"	9"	16"	2¼"
	G	3½"	10"	3"	2½"	1½"	7"	16⅜"	10"	16"	2½"
	H	3½"	10"	3"	2½"	1½"	7"	17⅜"	11"	18"	2¾"

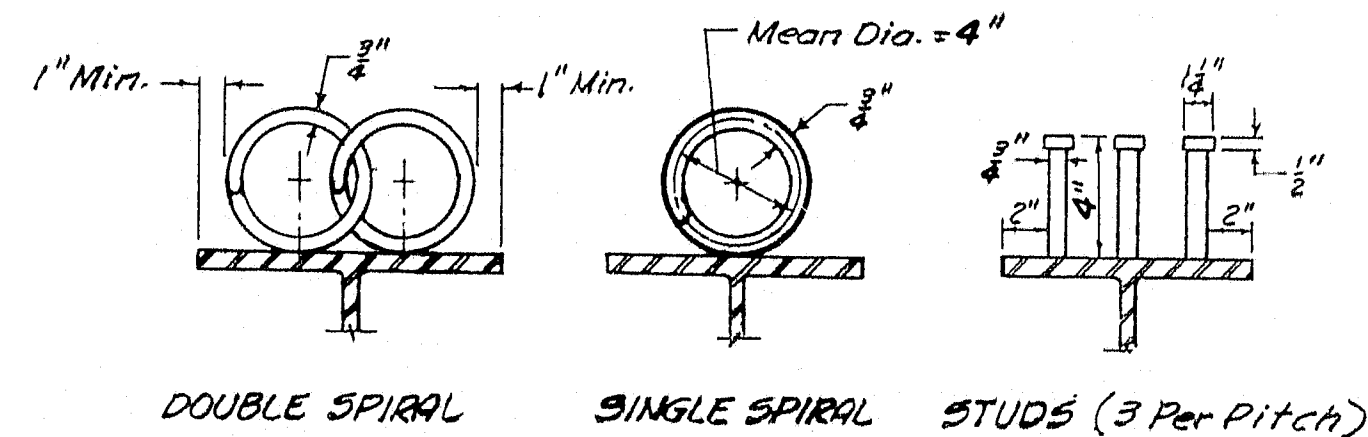
Note: Sole plate thickness varies. See sole plate thickness schedule on sheet no. 36.  
\* R is Rocker Radius and is concentric with r for Rocker Web.



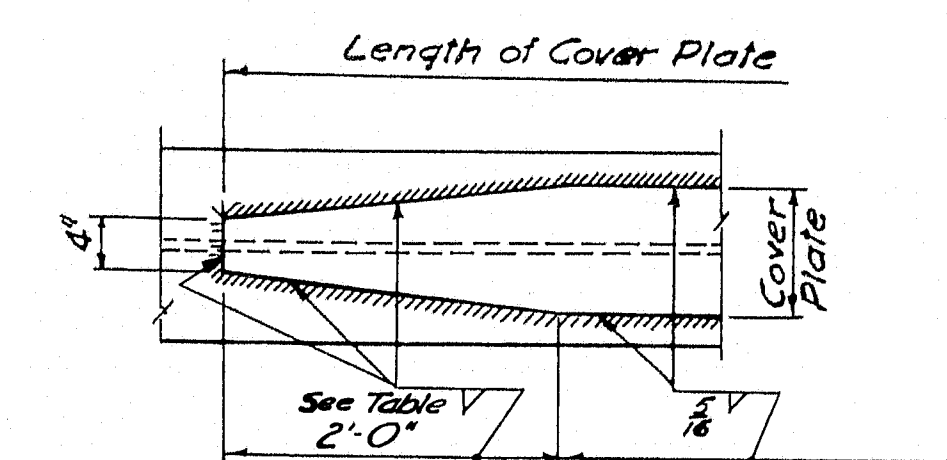
**TYPE J**  
(FIXED BEARING)  
Scale: 1 1/2 inch = 1'-0 inch



**TYPICAL DIAPHRAGM DETAILS**  
Scale: 3/4 inch = 1'-0 inch



**SHEAR CONNECTOR DETAILS**  
Scale: 1 1/2 inch = 1'-0 inch



**TYPICAL COVER PLATE DETAIL**  
No Scale

PLATE THICKNESS	FILLET WELD
3/8" to 3/4"	3/16"
7/8" to 1"	7/16"
1 1/8" to 1 1/4"	1/2"

- Spiral Notes**
1. All spirals to be fabricated with 3/8 inch plain bars and to have a mean diameter of 4 inches.
  2. Spirals to be welded to stringer flange with two 3/8 inch fillet welds, 2 1/2 inch long at each point of contact.
  3. Spiral lengths given on framing plan are net lengths and do not include any allowance for laps.
  4. Where spiral sections are joined, they shall be lapped for a distance of one-half the smaller pitch.

STATE HIGHWAY COMMISSION AUGUSTA, MAINE	
PORTLAND-YARMOUTH INTERSTATE	
INTERSTATE OVER VERANDA STREET	
FRAMING DETAILS	
SHEET NO. 38 OF 59	SCALE: AS NOTED

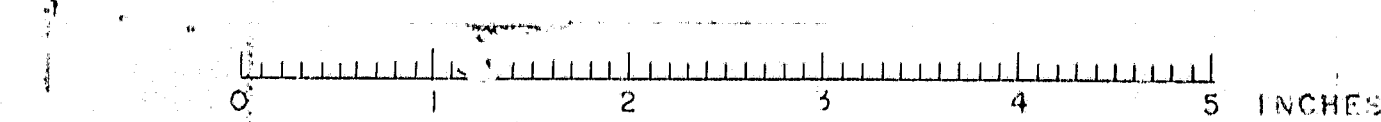
FAY, SPOFFORD & THORNDIKE, INC.  
ENGINEERS BOSTON, MASS.

Qm-14-738

M-1357

DES.	RWB02
DR.	RB
TR.	
CHK.	R.K.
APPD.	

Boston Blue Print 300-4-57

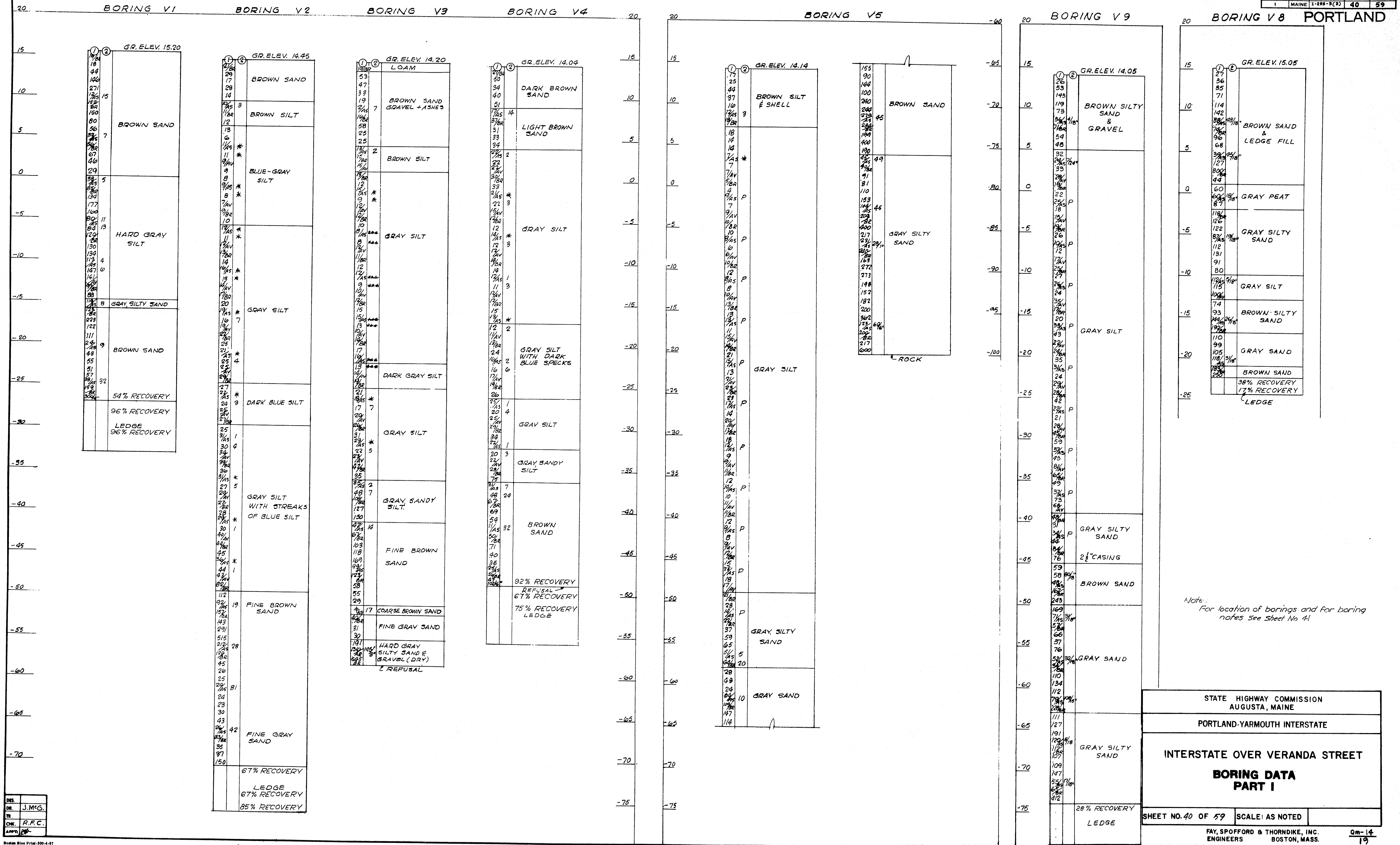




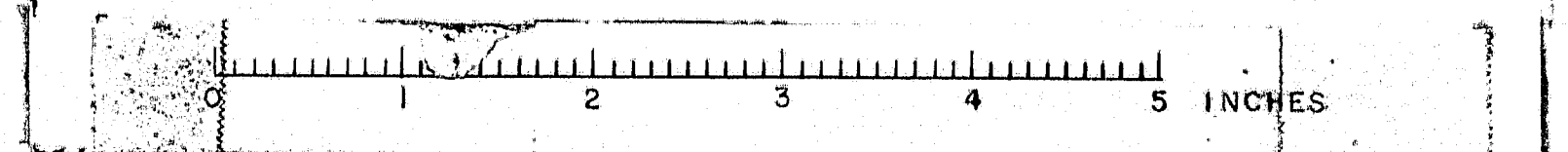
STATE HIGHWAY COMMISSION AUGUSTA, MAINE		
PORTLAND-YARMOUTH INTERSTATE		
INTERSTATE OVER VERANDA STREET		
RAILING DETAILS		
SHEET NO. 39 OF 52	SCALE: AS NOTED	
FAY, SPOFFORD & THORNDIKE, INC. ENGINEERS		Qm-14 739

MEDIAN RAIL POST NOTE  
Anchor bolts, bolts, brackets, base  
plates, posts, beam guard rail and  
fillings to be galvanized.



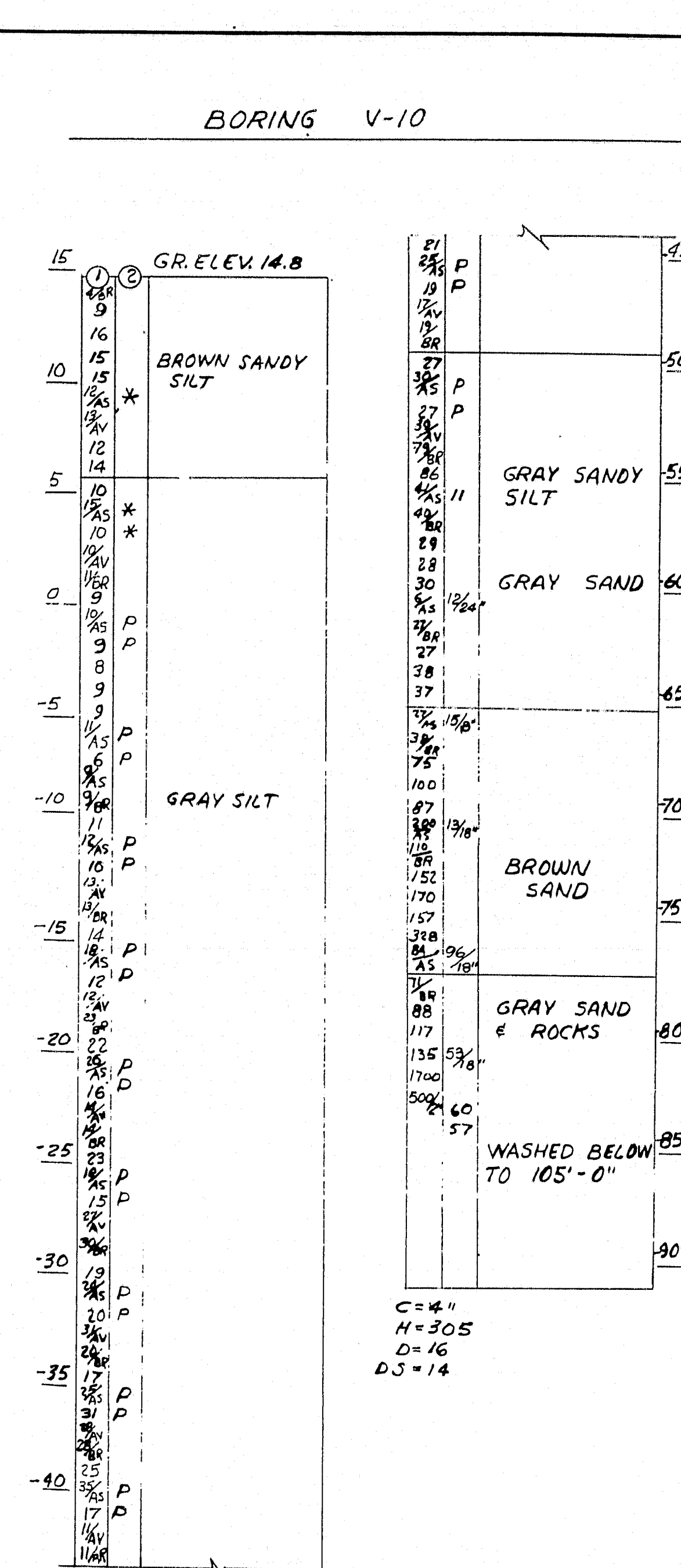
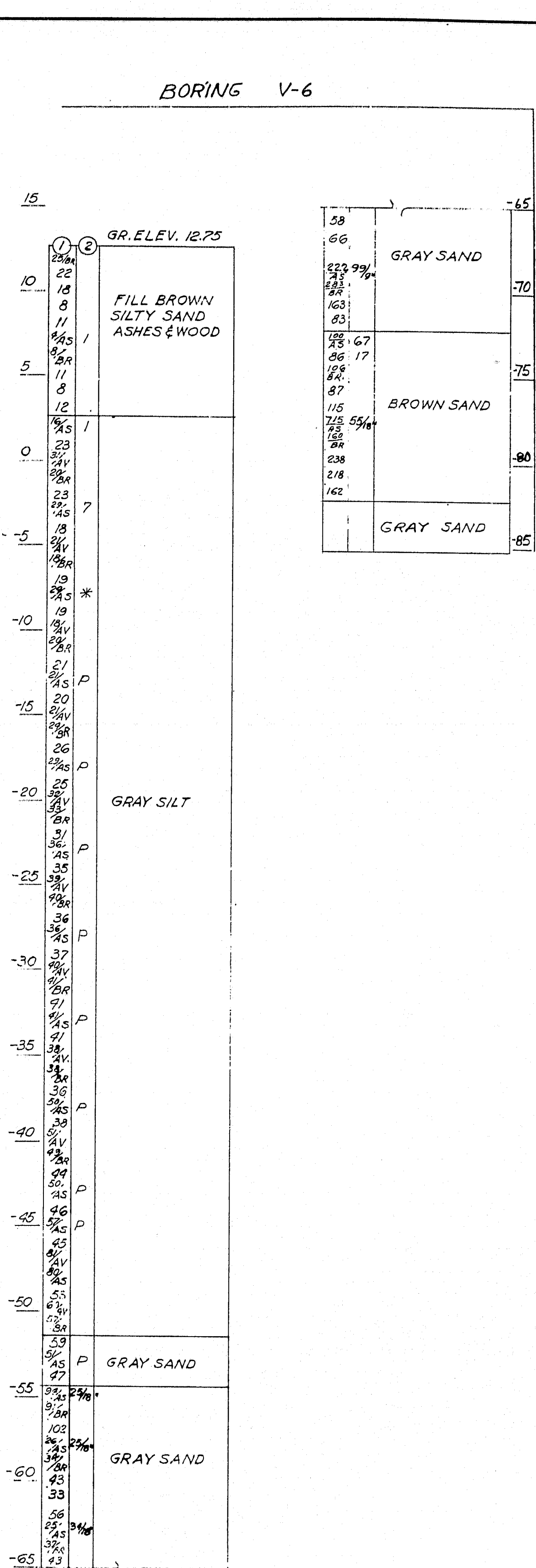
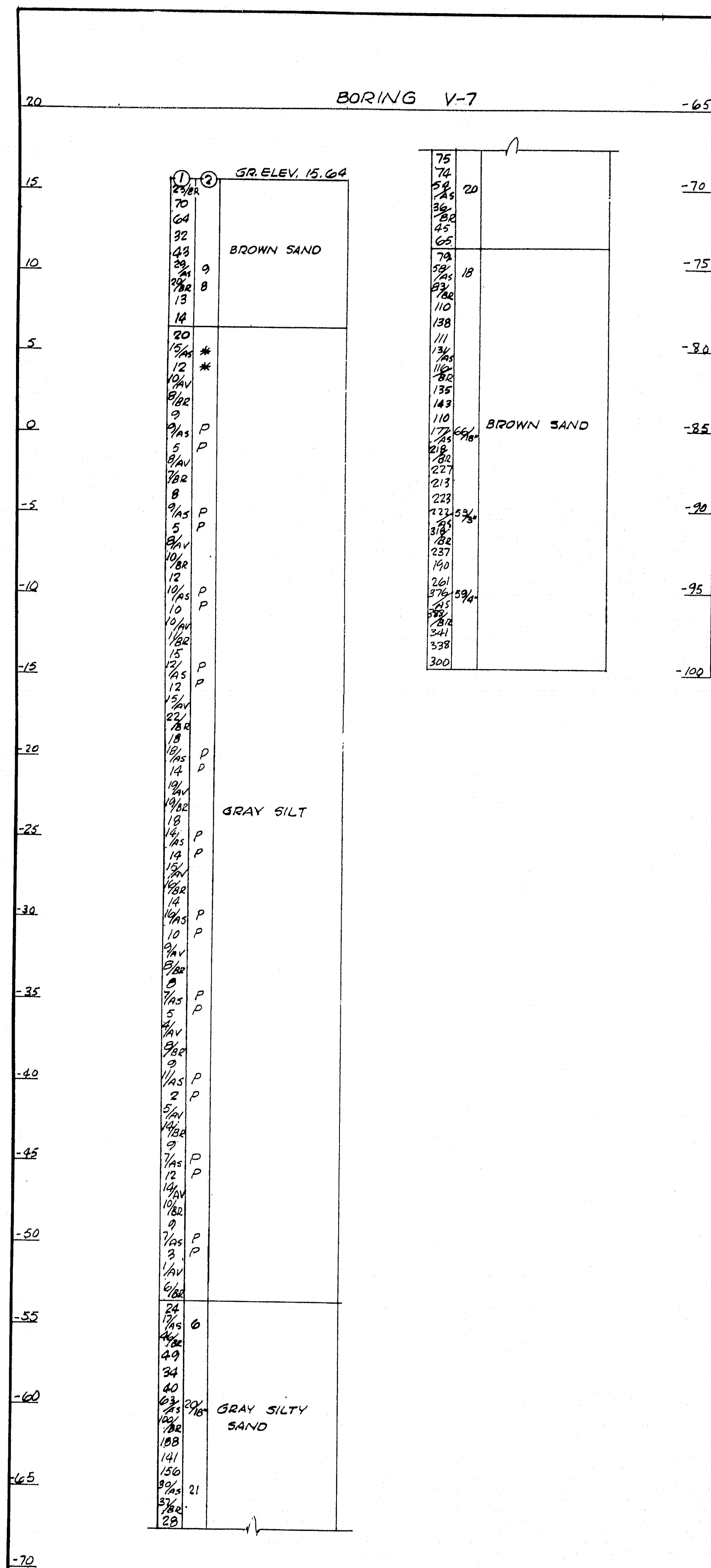


M-1359





# PORTLAND

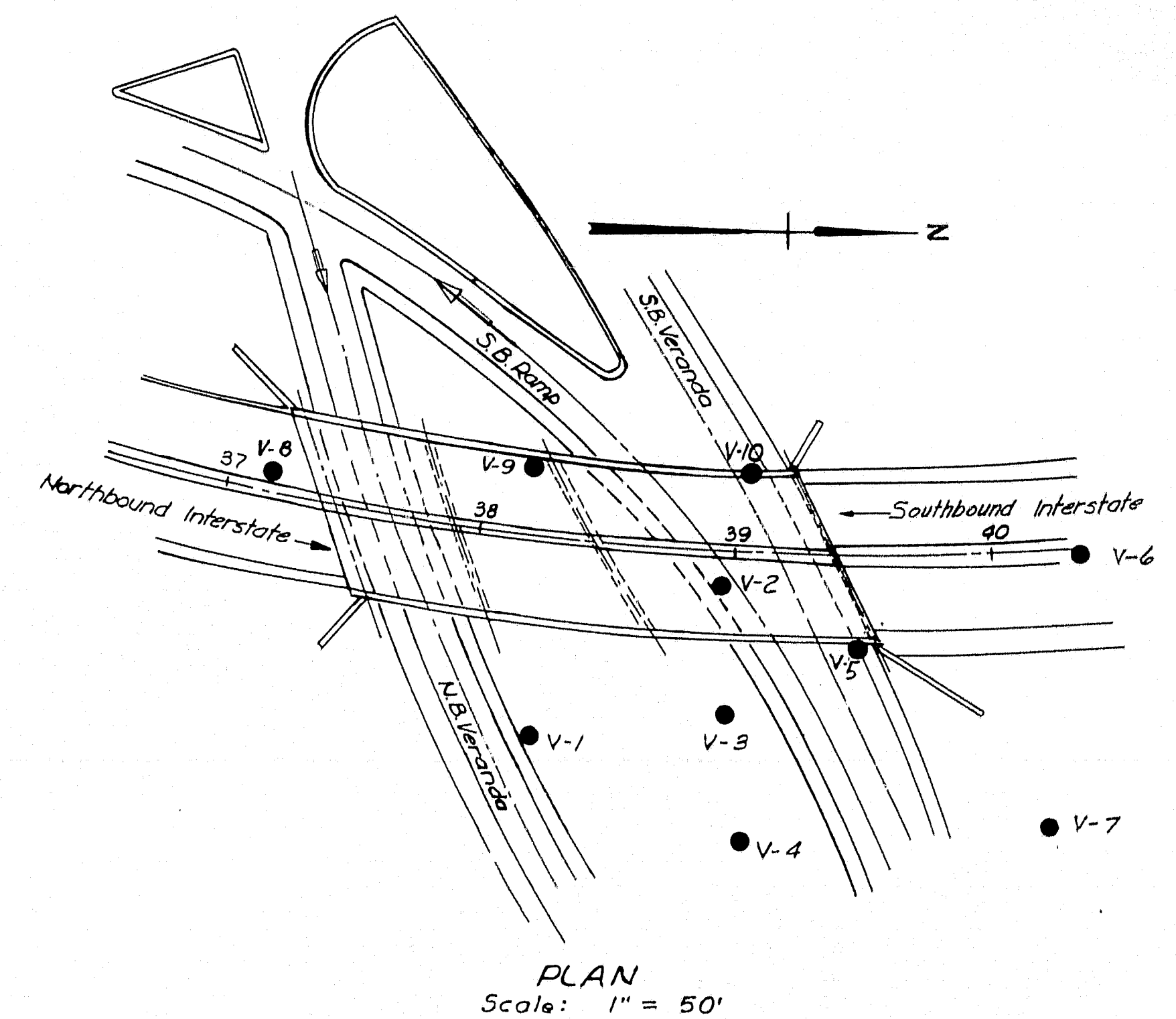


**GENERAL NOTES**

- BORINGS WERE MADE BY THE MAINE STATE HIGHWAY COMMISSION MARCH, APRIL, JULY & AUGUST, 1957.
- FIGURES IN COLUMN (1) = BLOWS PER FOOT ON CASING EXCEPT AS NOTED.
- FIGURES IN COLUMN (2) = BLOWS PER FOOT ON SAMPLER ROD EXCEPT AS NOTED.
- ELEVATIONS ARE REFERRED TO MEAN SEA LEVEL.
- ADDITIONAL SOIL INFORMATION OBTAINED FROM LABORATORY TESTS IS AVAILABLE FROM THE MAINE STATE HIGHWAY COMMISSION.

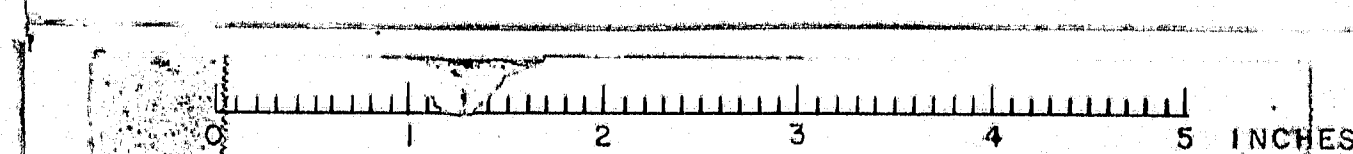
**LEGEND**

AS = CASING WAS DRIVEN AFTER SAMPLING.  
 C = DIAMETER OF CASING IN INCHES.  
 H = WEIGHT OF HAMMER IN POUNDS.  
 D = DROP ON CASING IN INCHES.  
 DS = DROP ON SAMPLER ROD IN INCHES.  
 AR = CASING WAS DRIVEN WASHING AHEAD OF CASING.  
 BR =  
 AV =  
 \* = WEIGHT OF HAMMER  
 \* = WEIGHT OF RODS  
 J = SAMPLER DRIVEN BY STATIC LOAD NOT EXCEEDING 1/2 TON  
 P = PISTON  
 \*\*\* = WEIGHT OF 3 MEN  
 \* = WEIGHT OF CASING



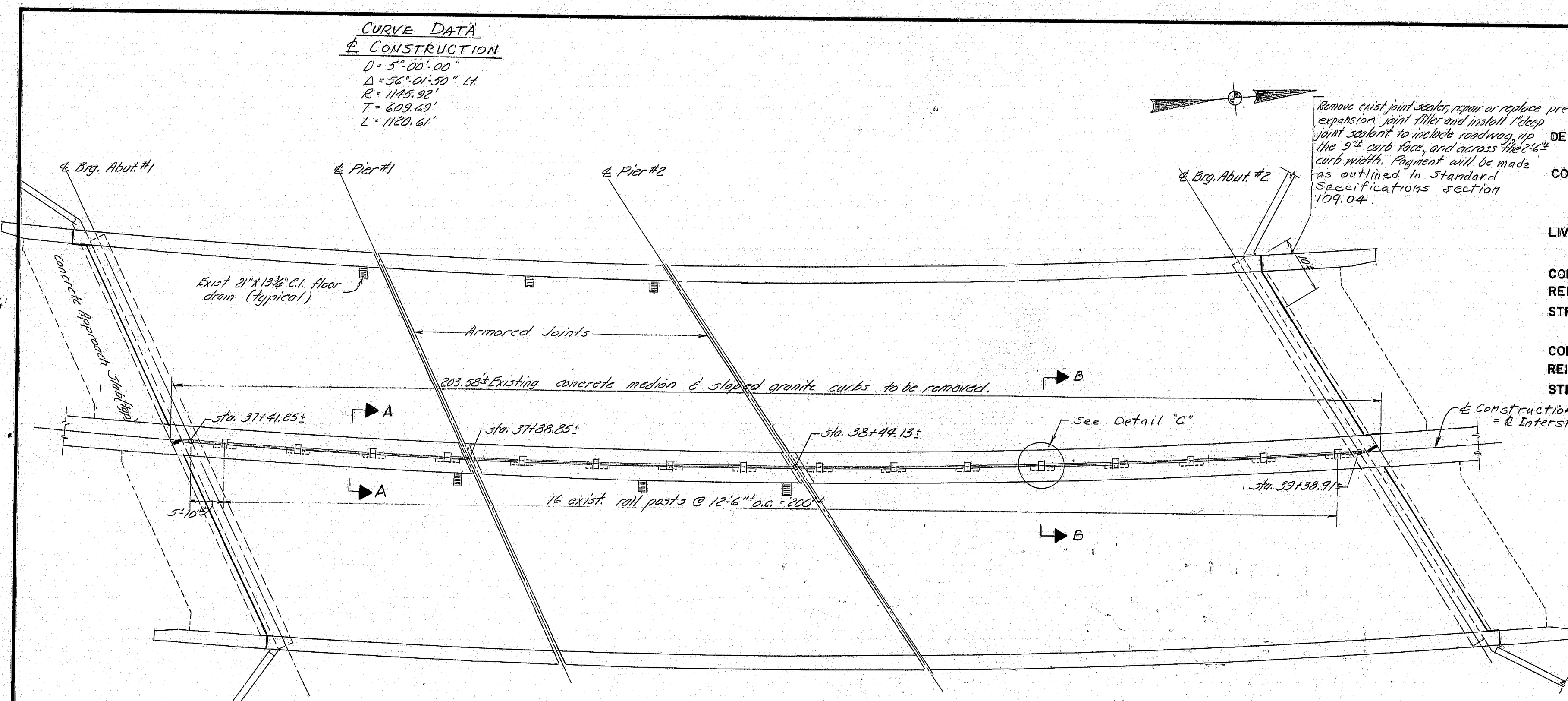
STATE HIGHWAY COMMISSION AUGUSTA, MAINE	
PORTLAND-YARMOUTH INTERSTATE	
INTERSTATE OVER VERANDA STREET	
BORING DATA PART II	
SHEET NO. 41 OF 59	SCALE: AS NOTED
FAY, SPOFFORD & THORNDIKE, INC. ENGINEERS BOSTON, MASS.	

M-1360





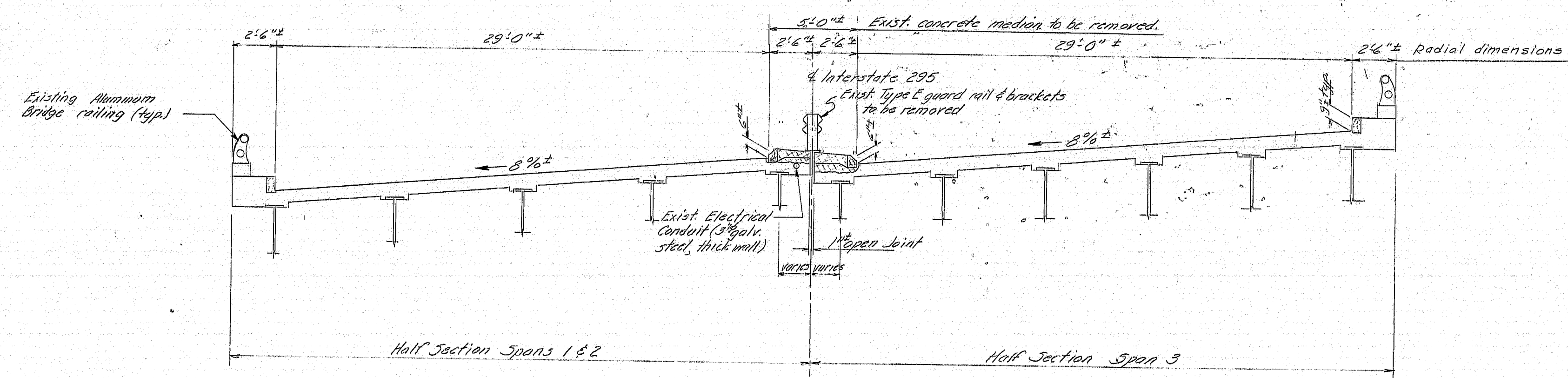
PROJECT DESIGN ENGINEER	DATE
DESIGNED BY	BY
CHECKED BY	CHECKED
REVISIONS	REVISIONS
FIELD CHANGES	FIELD CHANGES



**CURVE DATA**  
**E CONSTRUCTION**  
 D = 5°00'00"  
 Δ = 56°01'30" LH  
 R = 1443.92'  
 T = 609.63'  
 L = 1120.61'

Plans of the existing bridge are available for the Contractor's reference at the Bridge Design Office in Augusta. The plans are reproductions of original drawings as prepared for the construction of the bridge and it is very unlikely that the plans will show any construction field changes or any alterations which may have been made to the bridge during its life span.

Scale  
 0 5 10 15'



**TRANSVERSE SECTION**  
 (EXISTING)

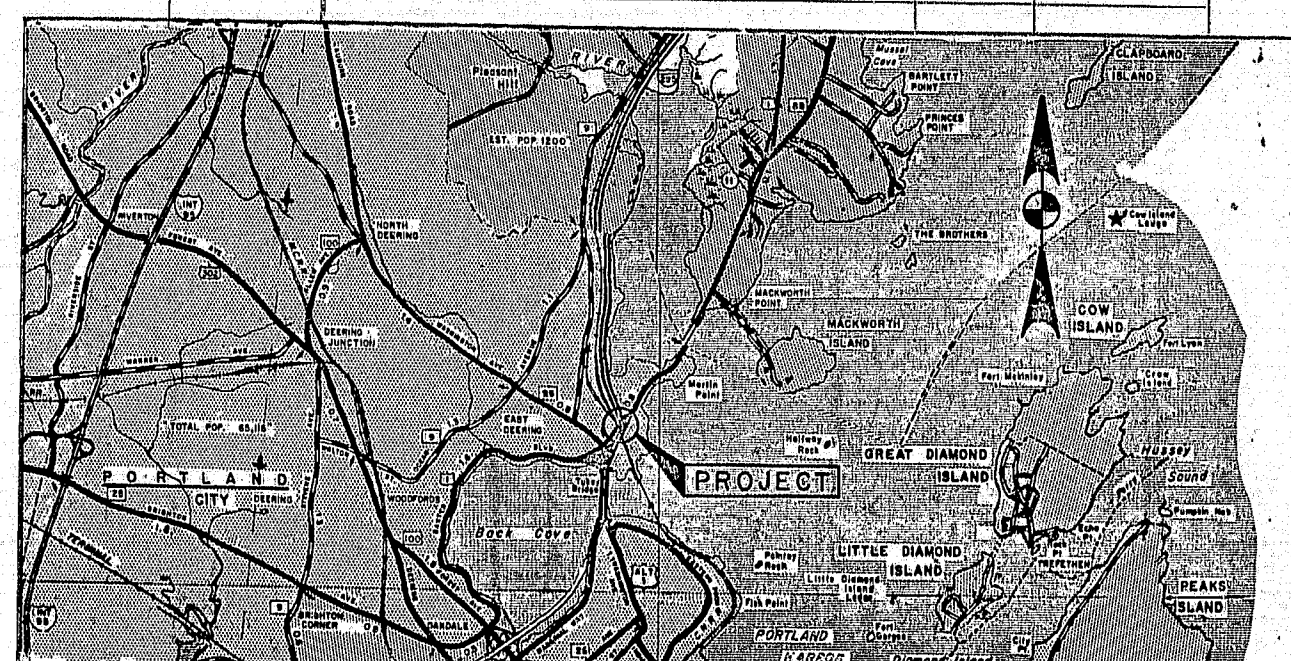
INDEX OF BRIDGE SHEETS
1 GENERAL PLAN & QUANTITIES
2 GUARD RAIL & MEDIAN DETAILS
3 APPROACH SLABS, REINFORCING STEEL & SLAB REPAIRS

**NOTES:**  
 For Sections A-A, B-B and Detail "C"  
 see sheet 2.  
 For General Notes see sheet no. 3.

**SPECIFICATIONS**  
 DESIGN: AASHTO, Specifications for Highway Bridges, 1973; and Interim Specifications 1974, 75, 76 & 77.  
 CONTRACT: State of Maine, State Highway Commission, Standard Specifications, Highways and Bridges, Revision of June 1968.  
**DESIGN LOADING**  
 LIVE LOAD: HS20-44, as Modified for Interstate Loading.  
**MATERIALS**  
 CONCRETE: ————— Class AA  
 REINFORCING STEEL: ————— ASTM A615 Grade 60  
 STRUCTURAL STEEL: ————— ASTM A36  
**BASIC ALLOWABLE STRESSES**  
 CONCRETE: —————  $f_c = 1200 \text{ psi}$   $n = 10$   
 REINFORCING STEEL: —————  $f_s = 24,000 \text{ psi}$   
 STRUCTURAL STEEL: ASTM A36 —————  $f_s = 20,000 \text{ psi}$

**TRAFFIC DATA**  
 ADT 1979 = 28,545  $F = 8\%$   
 ADT 1999 = 33,220  $D = 60\%$   
 DHV = 24.80  $V = 70 \text{ mph}$

ITEM NO.	DESCRIPTION	UNIT	QUANTITY
203.12	Removal of Exist. Struct. Concrete	C.Y.	43
302.42	Struct. Conc. Pour & Strike Slabs on St. Bridge	C.Y.	24
303.12	Reinfr. Steel Fabricated & Delivered	Lb.	1095
303.13	Reinfr. Steel, Placing	Lb.	1095
308.14	Membrane Water Proof - Epoxy Prim. Sealer	S.Y.	135
314.06	Curing Box for Concrete Cylinders	Each	1
515.20	Protective Coating for Concrete Surfaces	S.Y.	274
606.11B	Guard Rail Beam	L.F.	24
606.36A	Guard Rail, Rem. Modify & Reset Type 3B	L.F.	194
629.05	Labor, Straight Time	M.Hr.	10
631.10	Air Compressor (incl. operator)	M.Hr.	10
631.11	Air Tool (incl. operator)	M.Hr.	10
631.17	Truck - Small (incl. operator)	M.Hr.	10
631.22	Front End Loader (incl. operator)	M.Hr.	10



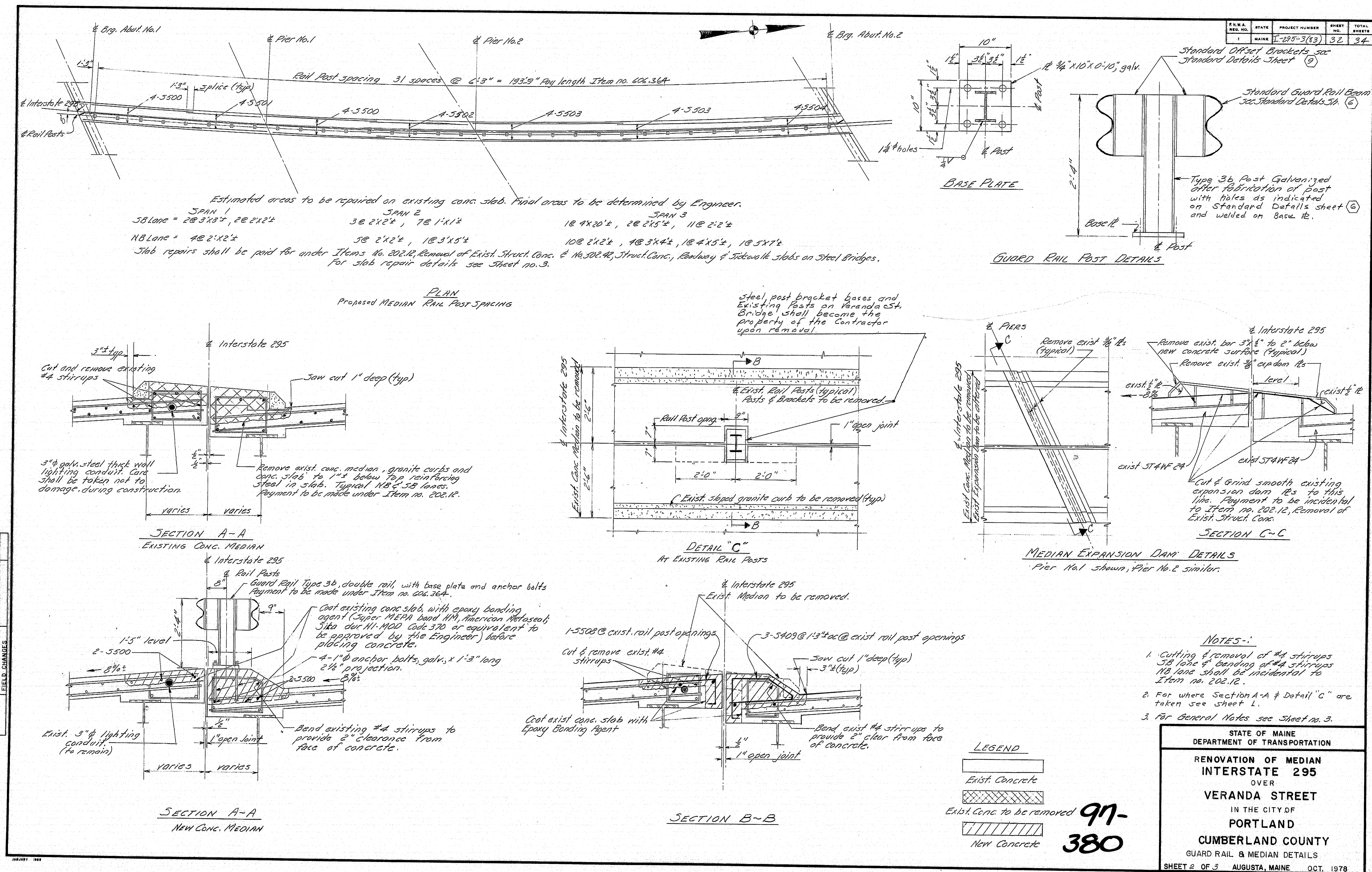
**LOCATION MAP**

STATE OF MAINE  
 DEPARTMENT OF TRANSPORTATION  
 RENOVATION OF MEDIAN  
 INTERSTATE 295  
 OVER  
 VERANDA STREET  
 IN THE CITY OF  
 PORTLAND  
 CUMBERLAND COUNTY  
 GENERAL PLAN & QUANTITIES  
 SHEET 1 OF 3 AUGUSTA, MAINE OCT. 1978

Bridge No. 5933

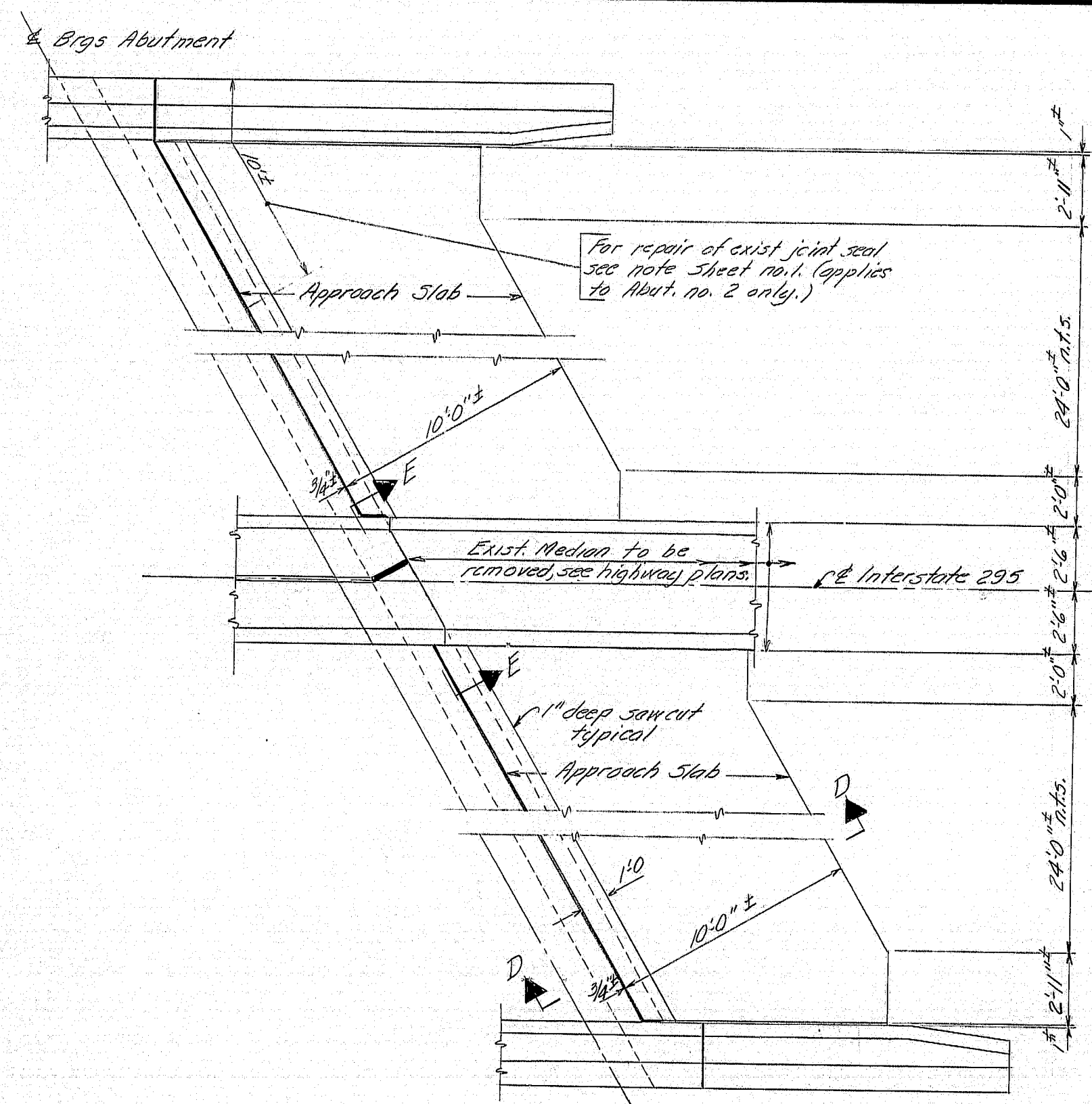
97-379



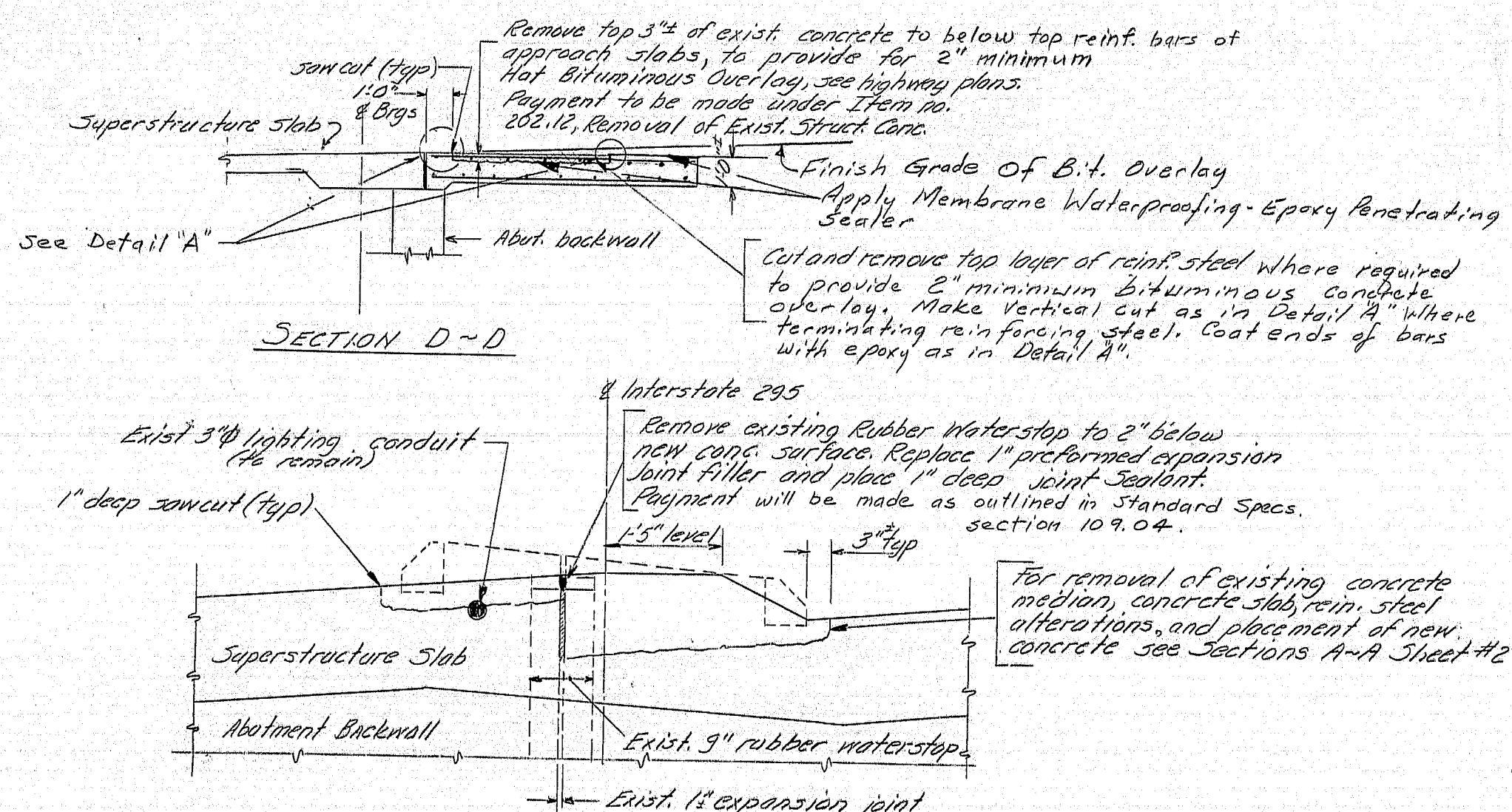




PROJECT DESIGN ENGINEER - CIVIL	DATE
DESIGN - DETAIL	10/1/78
CHECKED	10/1/78
REVISIONS	
FIELD CHANGES	



PLAN APPROACH SLABS ABUTMENT NO. 2  
Abutment No. 1 Similar



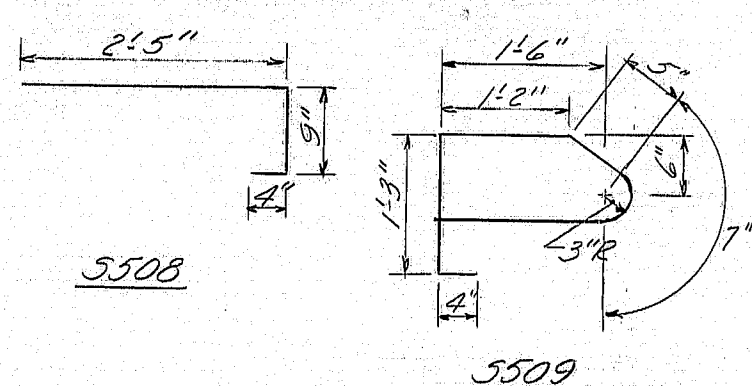
SECTION E-E

# REINFORCING STEEL SCHEDULE

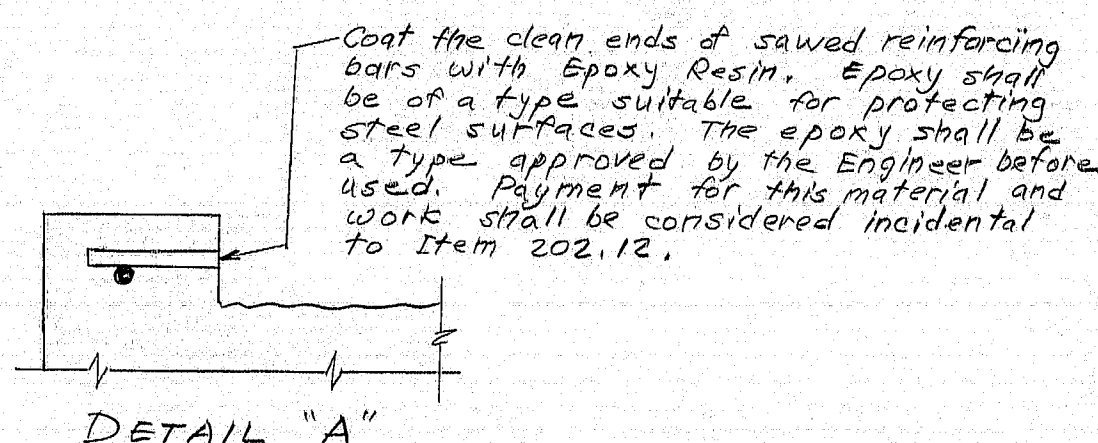
STRAIGHT BARS				
MARK	No.	LENGTH	LOCATION	
5500	8	30'-0"	Spans 1 & 2	
5501	4	21'-4"	Span 1	
5502	4	26'-2"	Span 2	
5503	8	40'-0"	Span 3	
5504	4	20'-1"	Span 3	

BENT BARS				
MARK	No.	LENGTH	LOCATION	
5508	16	3'-6"	1st @ Rail Post opps 58' lane	
5509	48	5'-4"	3rd @ Rail Post opps 16' lane	

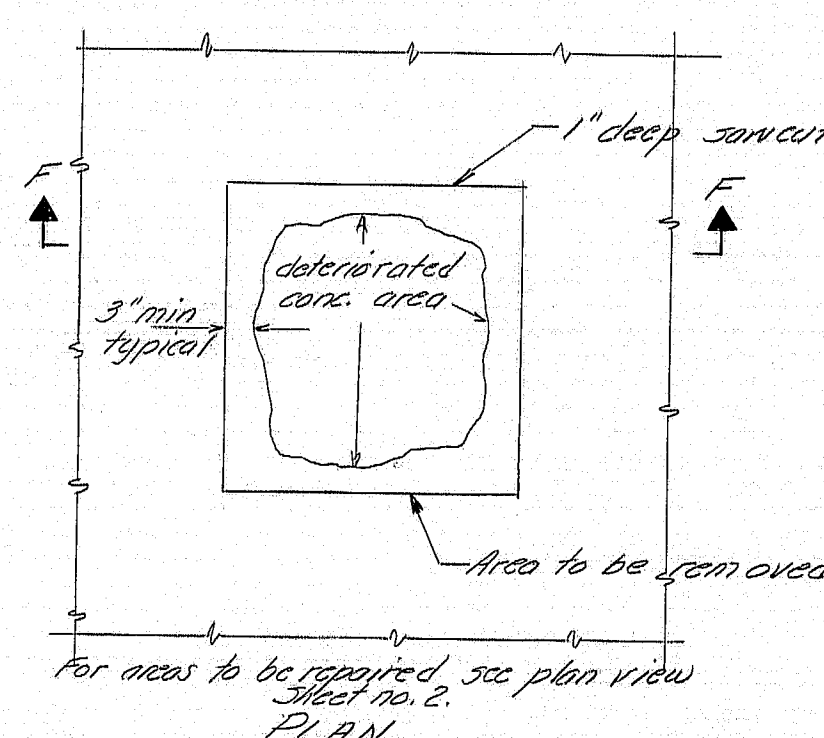
## BENDING DIAGRAMS



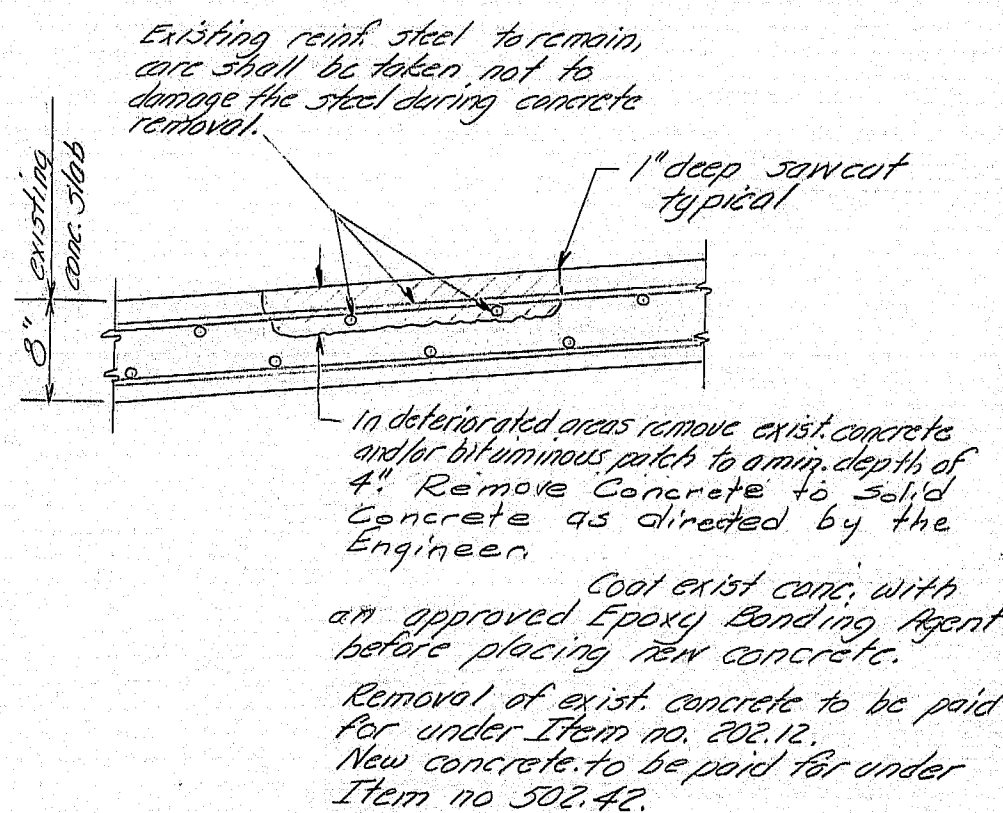
All dimensions are out to out of reinf. bar.  
Bending details and hooks shall conform to the recommendations of ACI Standard 318-65.  
Reinforcing bar ASTM A615 Grade 60.  
First digit following the letter of the Mark indicates size of reinf. bar.  
Mark (5500) bar size = #5



DETAIL "A"



For areas to be repaired, see plan view  
PLAN



SECTION F-F

## DETAILS OF CONCRETE REPAIRS TO SLAB

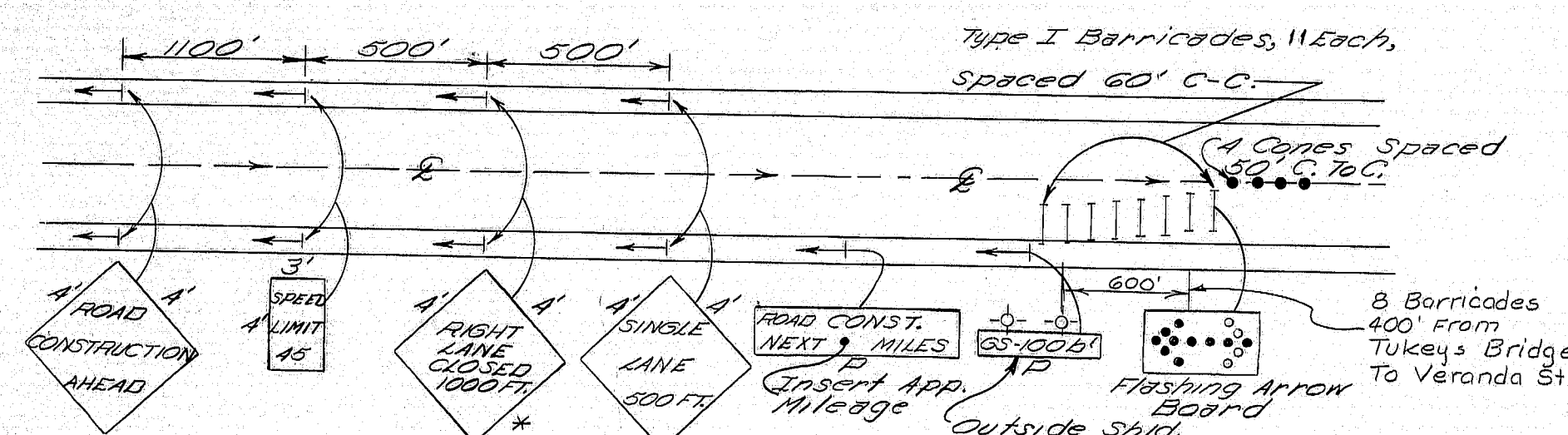
### GENERAL NOTES

- Chamfer all exposed edges of concrete a consistent dimension between 1/8" and 3/4" inclusive, unless otherwise noted.
- Reinforcing steel shall have a minimum cover of 2" unless otherwise indicated.
- Protective Coating for Concrete Surfaces shall be applied to all new concrete surfaces in Median (to include top, undermud of deck and 1" open joint), Abutment backwalls and repair patches in slab.
- All sawcuts required in the existing concrete will be considered incidental to Item no. 202.12, Removal of Existing Structural Concrete.
- All Epoxy banding of new concrete to existing concrete will be considered incidental to Item no. 202.12, Structural Concrete, Roadway and Side Walk Slabs on Steel Bridges.

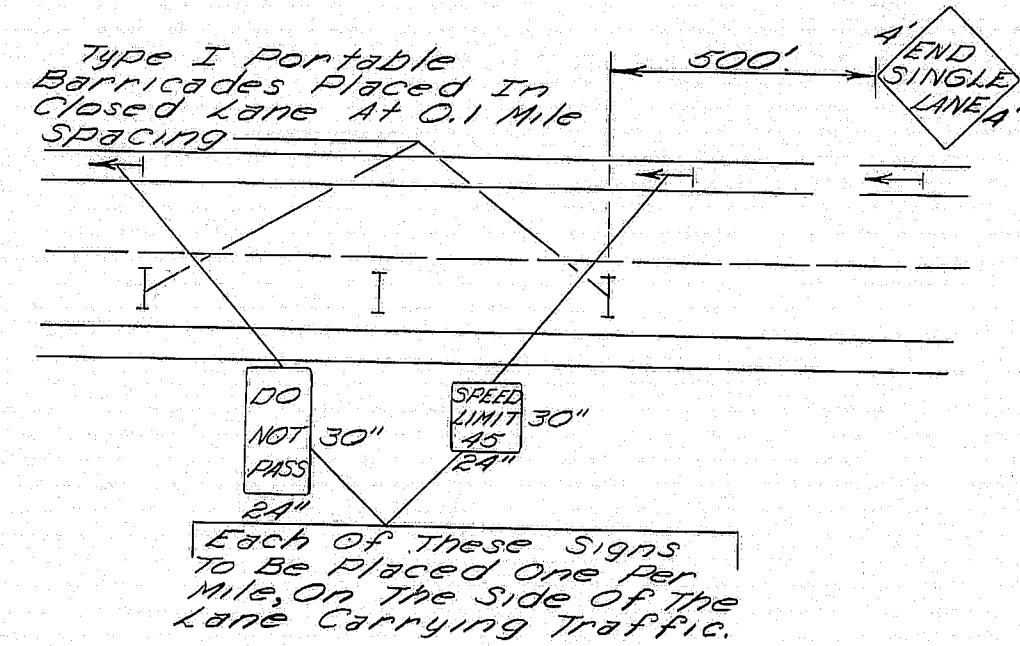
STATE OF MAINE DEPARTMENT OF TRANSPORTATION	
RENOVATION OF MEDIAN INTERSTATE 295 OVER VERANDA STREET IN THE CITY OF PORTLAND CUMBERLAND COUNTY APPROACH SLABS, REINFORCING STEEL & SLAB REPAIRS	
SHEET 3 OF 3	AUGUSTA, MAINE OCT. 1978

97-381

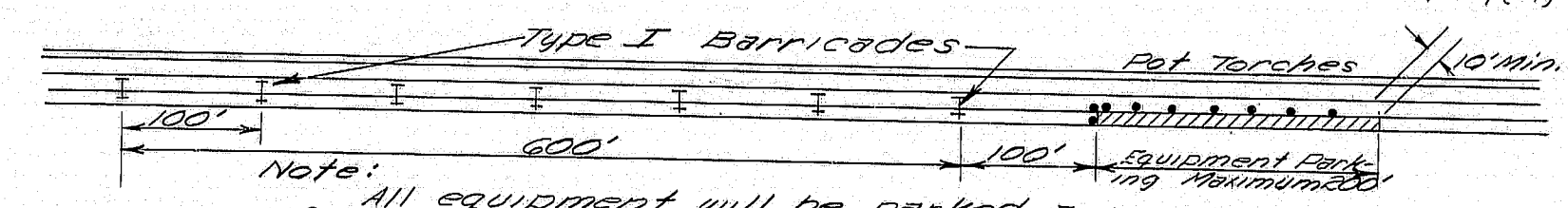




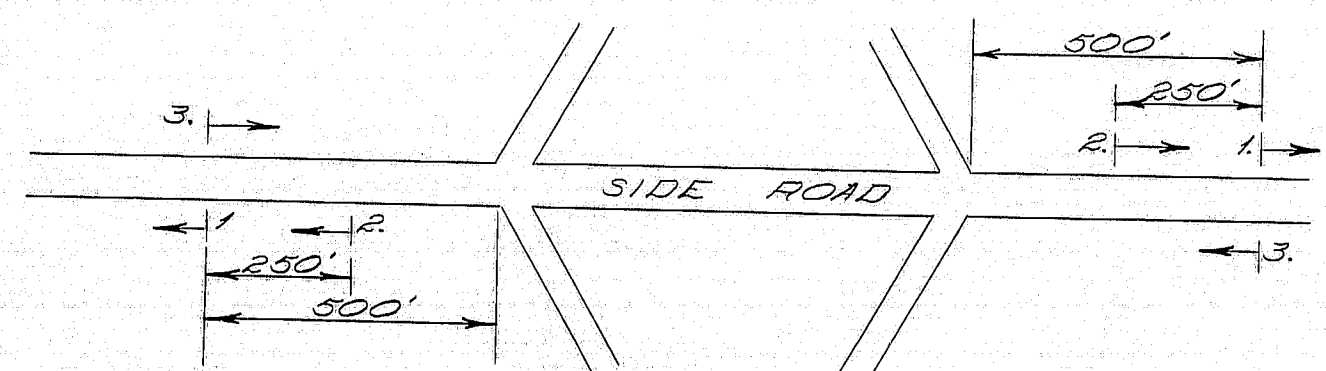
TYPICAL SIGNING DETAIL TO CLOSE A LANE ①



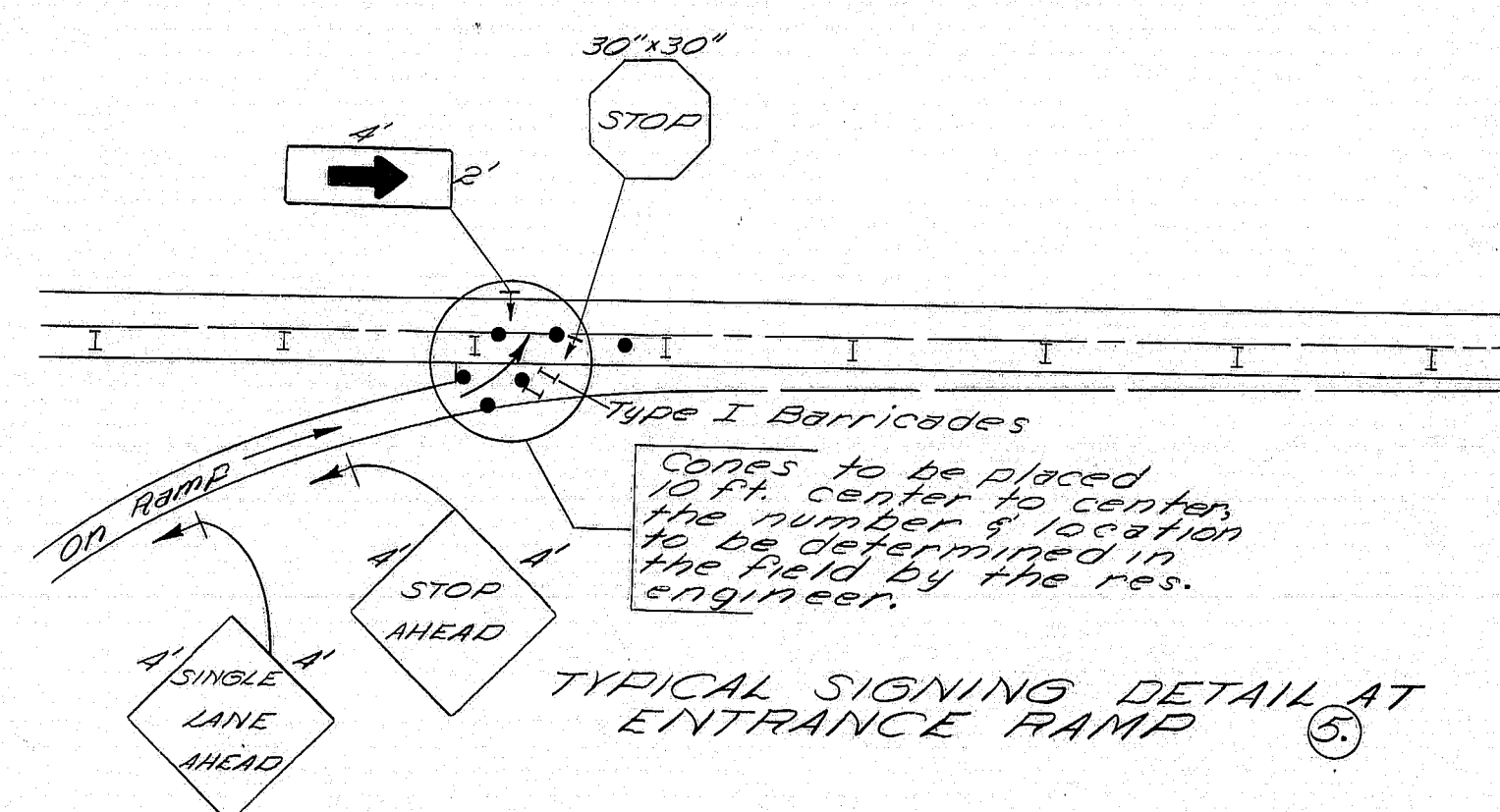
TYPICAL SIGNING DETAIL FOR CLOSED LANE ②



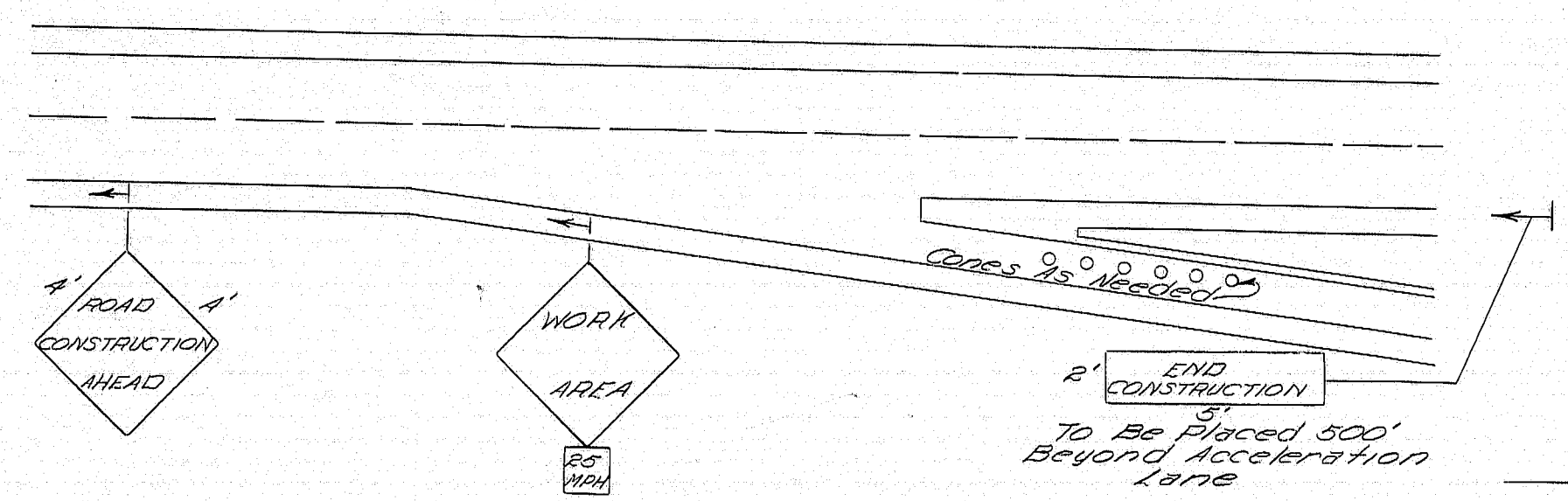
TYPICAL SIGNING DETAIL FOR EQUIPMENT PARKING ③



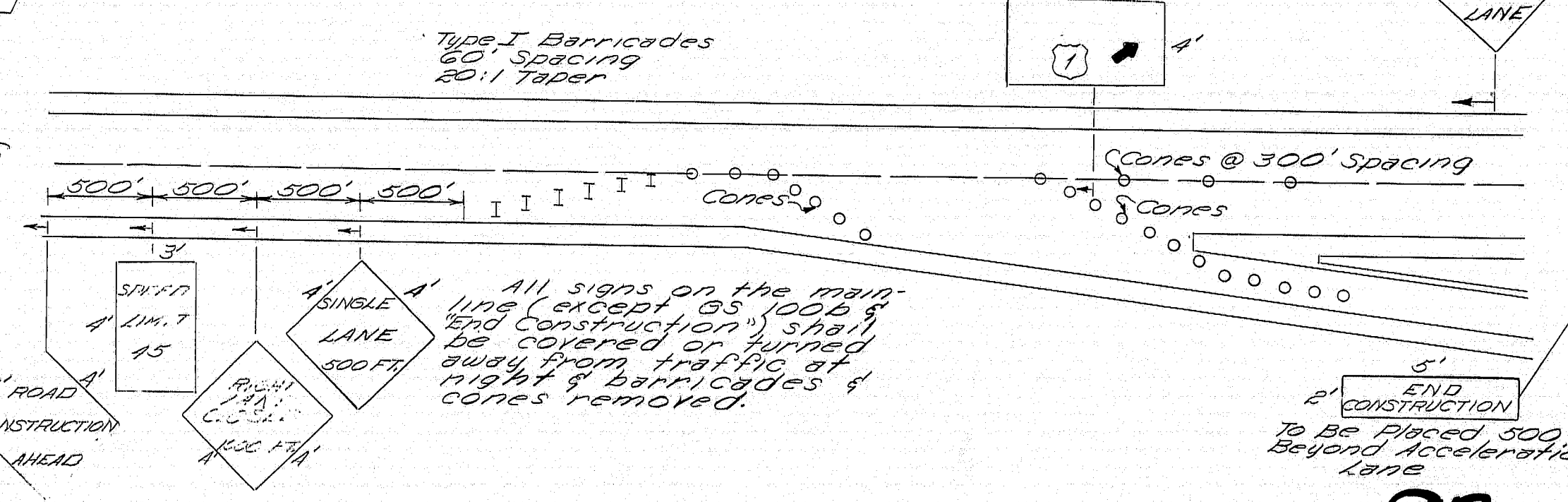
SIGNING DETAIL FOR SIDE ROAD ④



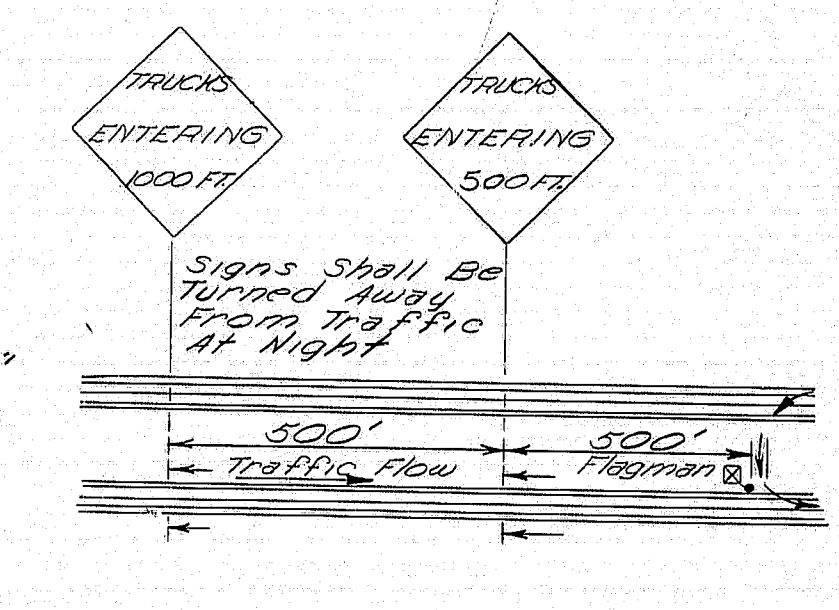
TYPICAL SIGNING DETAIL AT ENTRANCE RAMP ⑤



SIGNING DETAIL FOR WORK ON INTERCHANGE RAMP AWAY FROM MAINLINE ⑥



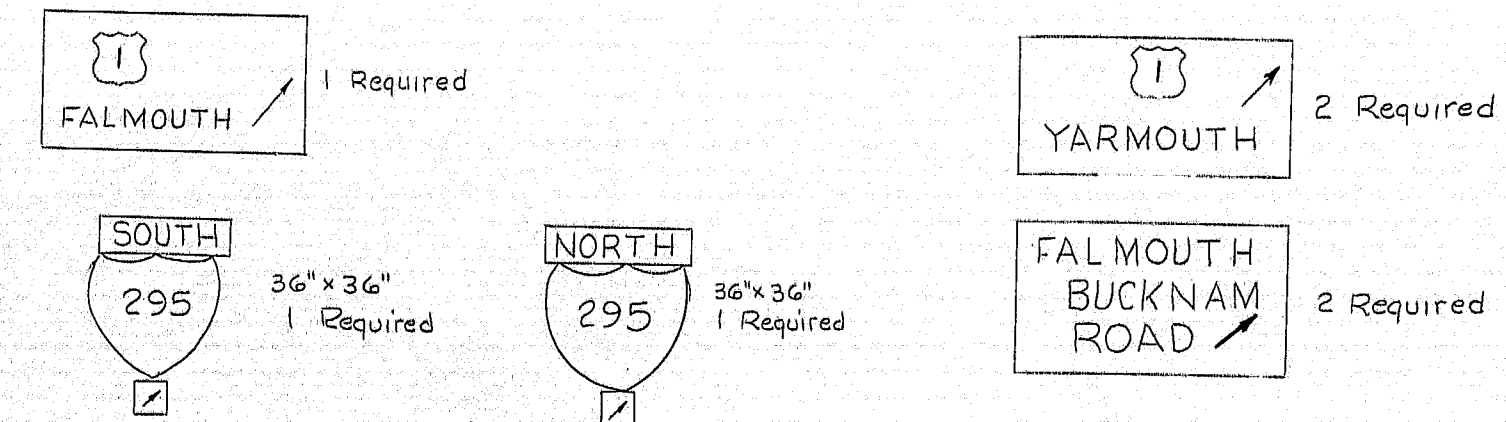
SIGNING DETAIL FOR WORK ON INTERCHANGE RAMP ADJACENT TO MAINLINE ⑦



TYPICAL SIGNING DETAIL FOR CROSSOVER ⑧

- GENERAL SIGNING NOTES**
- \* Signs shown with an asterisk shall read applicable to the lane that is closed.
  - All type I Barricades shall be re-located with strips going in opposite directions from the center of the barricade as shown.
  - All existing speed limit signs shall be turned away from traffic.
  - All construction signing shall be installed with the rear edge of the sign 2 ft. beyond and 5 ft. above the edge of existing shoulder as shown.
  - Signs marked (P) shall remain in place for the duration of the project.
  - End Construction signs shall be erected at the ends of the project adjacent to the wide shoulder.
  - The end single lane signs shall be erected adjacent to the lane carrying traffic.

PROJECT DESIGN ENGINEER	DATE
DESIGN - DETAIL	
REVISIONS	
FIELD CHANGES	
PLANS	



STATE OF MAINE  
DEPARTMENT OF TRANSPORTATION

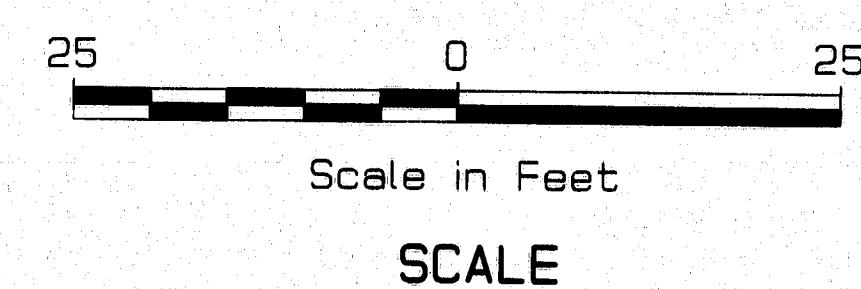
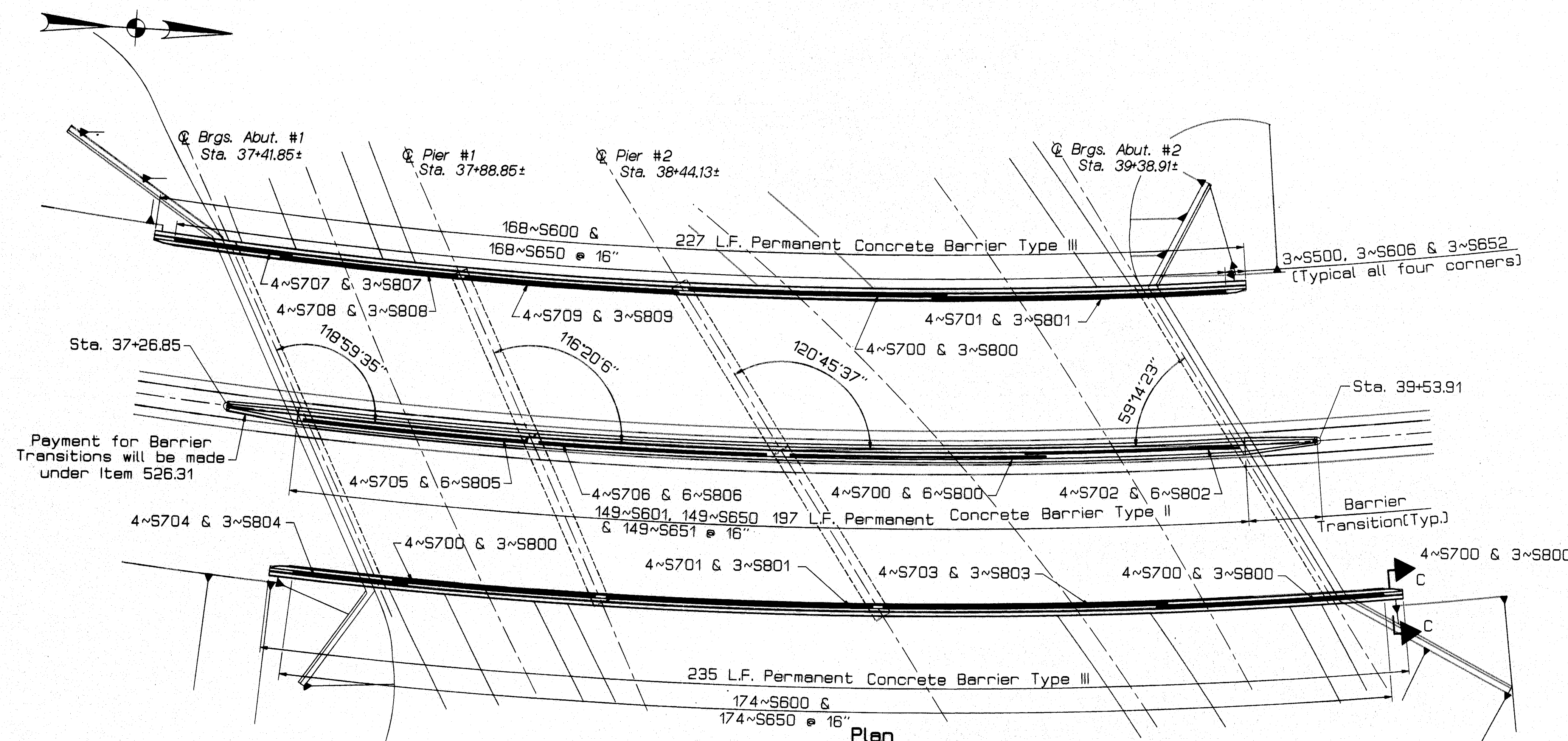
Typical Signing Detail for  
Interstate Overlays

Not To Scale

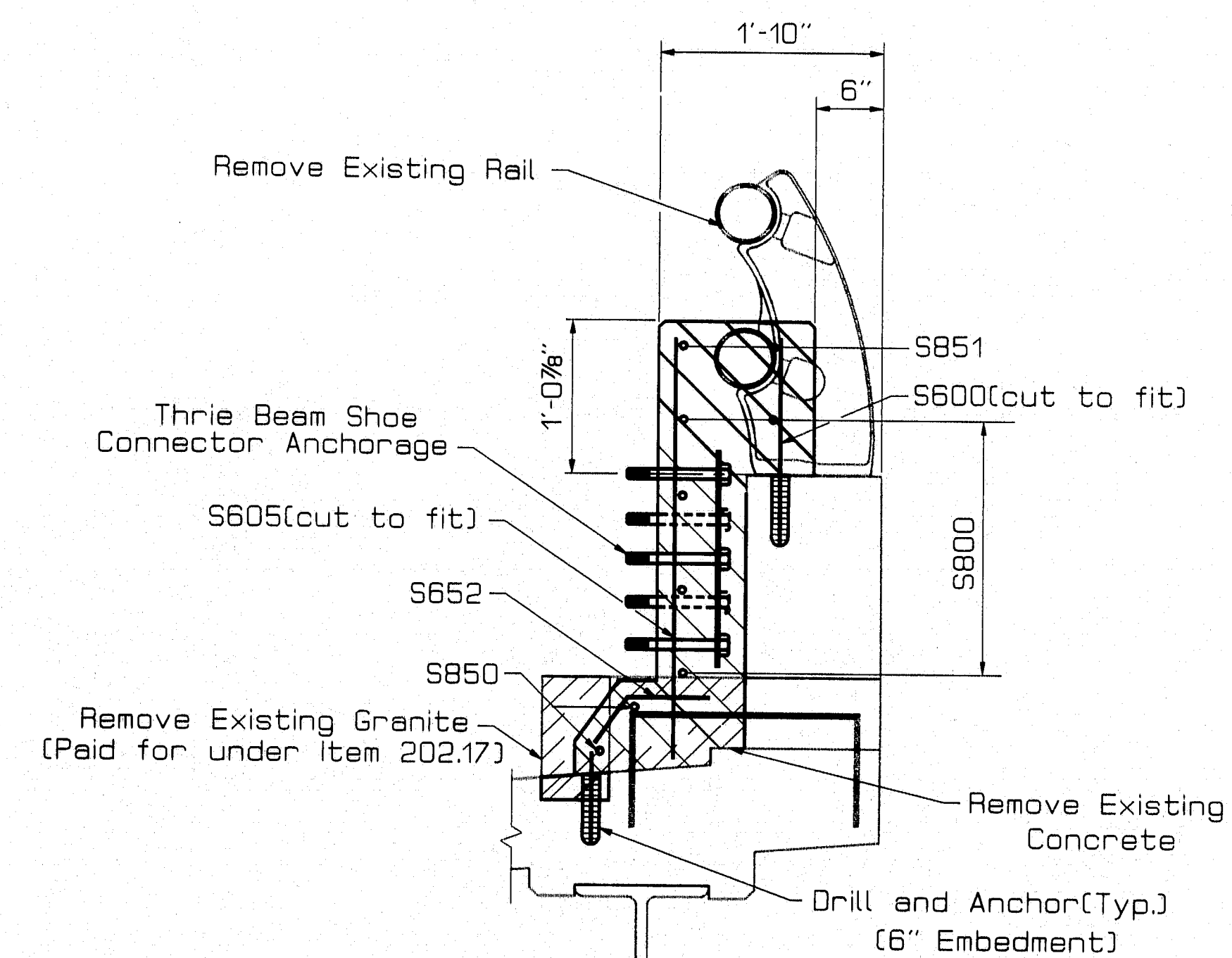
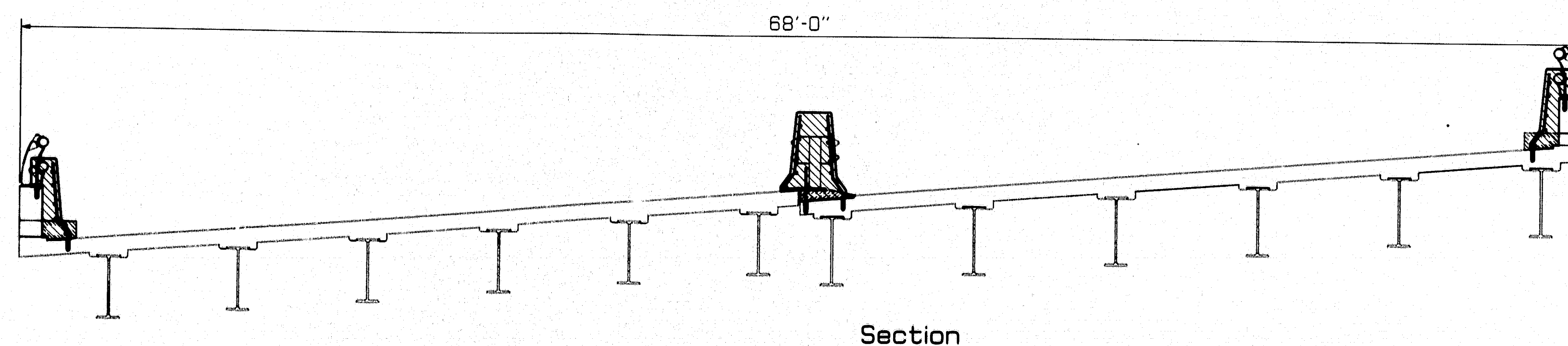
97-382

SHEET OF AUGUSTA, MAINE





**Scope of Work**  
Seal Superstructure Joints over Piers  
Remove and replace Bridge Railing



**SECTION C~C**

For Detail not shown  
see BD 462 - 94

**SPECIFICATION**

DESIGN: AASHTO Standard Specifications for Highway Bridges 1992

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

**DESIGN LOADING**

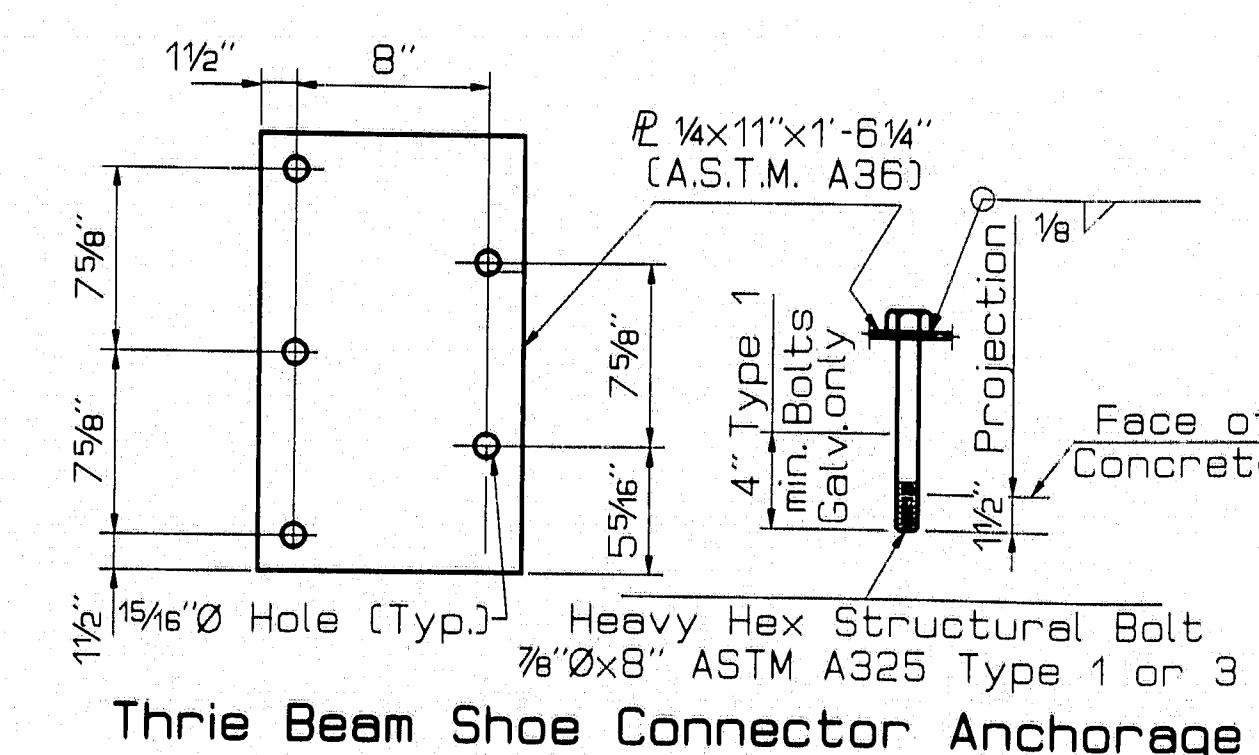
LIVE LOAD: HS20-44 modified(Existing)

**MATERIALS**

CONCRETE: ..... Class A  
REINFORCING STEEL: ..... ASTM A615 Grade 60  
STRUCTURAL STEEL: ..... ASTM A36

**BASIC ALLOWABLE STRESSES**

CONCRETE: .....  $f'c=4,000$ psi  
REINFORCING STEEL: .....  $f_y=60,000$ psi  
STRUCTURAL STEEL: .....  $f_y=36,000$ psi



(4~Required)(Payment will be incidental to Item 526.32)

PROJECT DESIGN ENGINEER	DATE
DESIGN-DRAWN	6-84
CHECKED	
APPROVED	
FIELD CHANGES	

18JAN94-010100

**NOTE:**  
All work contemplated under this contract to be governed by and in conformity with the Standard Specifications (Revision of October 1990) and supplementals thereto, as modified on the plans and in the Special Provisions.

Plans of existing bridge are available for the Contractor's reference at the Bridge Design Office in Augusta. These are reproductions of original drawings as prepared for the construction of the bridge and it is very unlikely that the plans will show any construction field changes or any alterations which may have been made to the bridge during its life span. A bridge deck evaluation is also available.

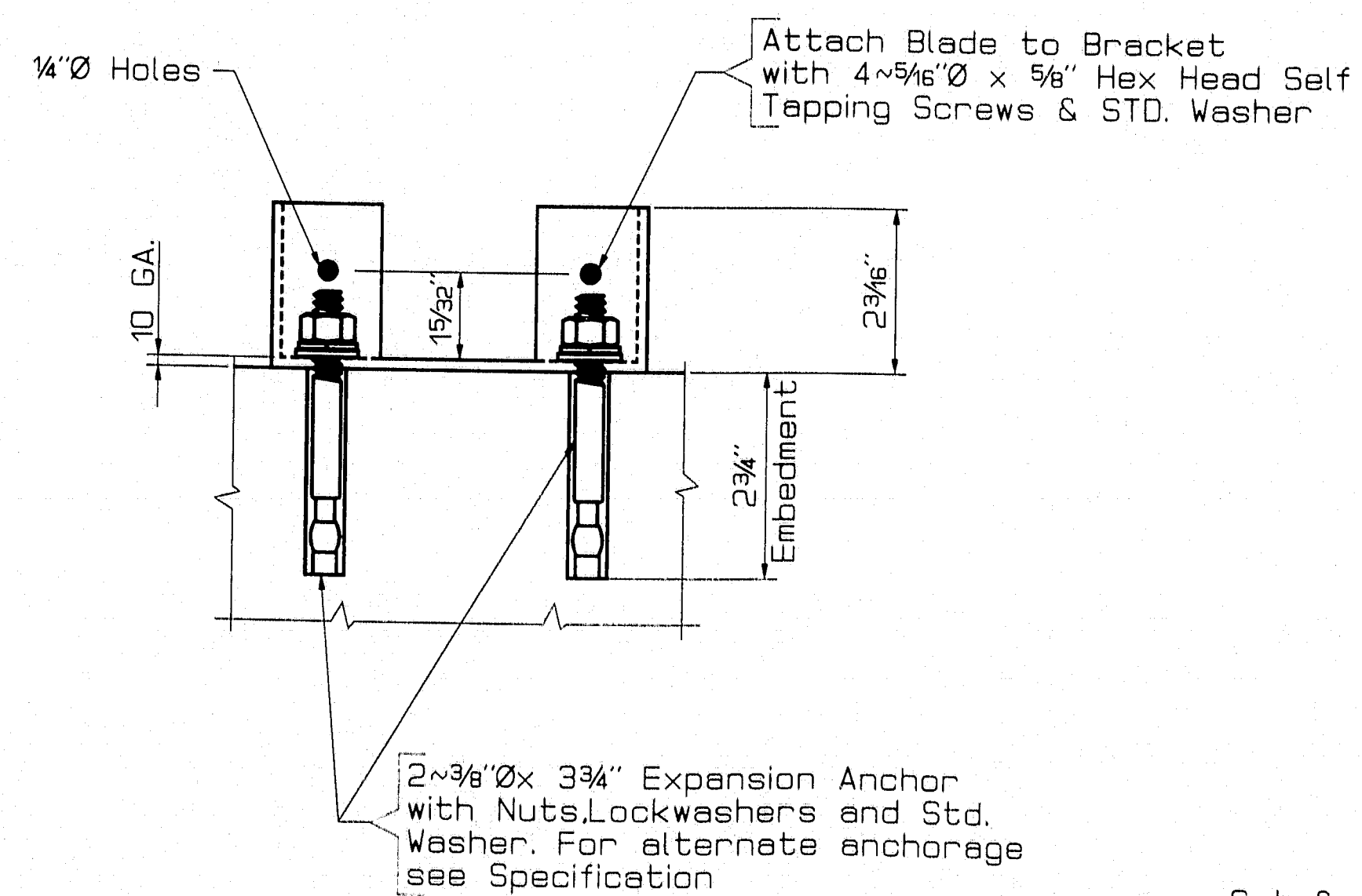
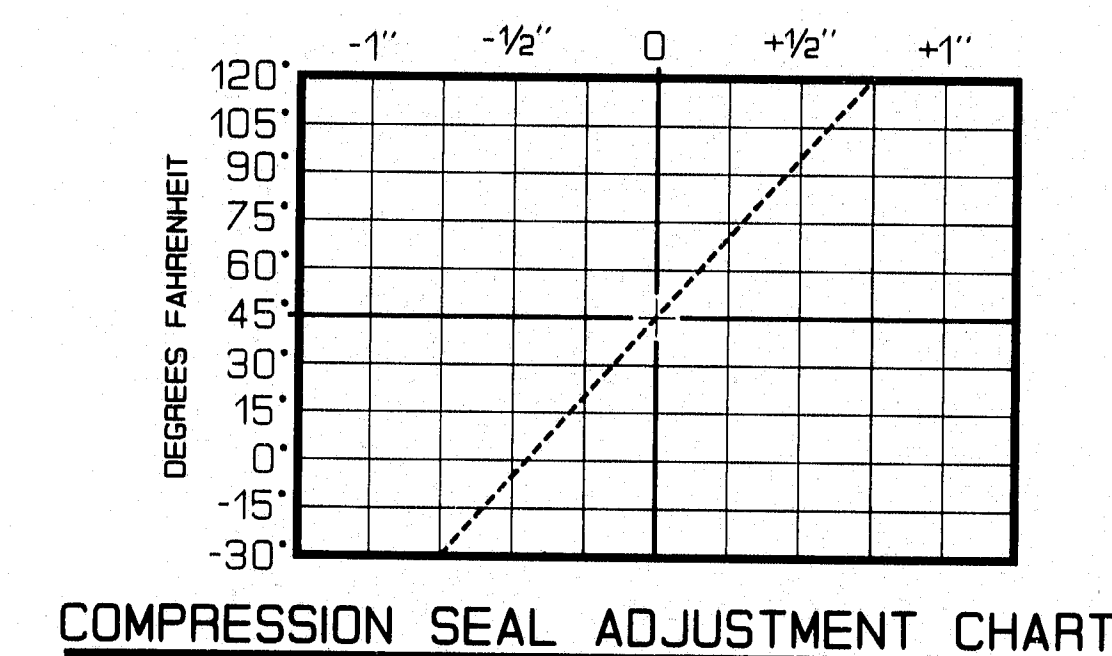
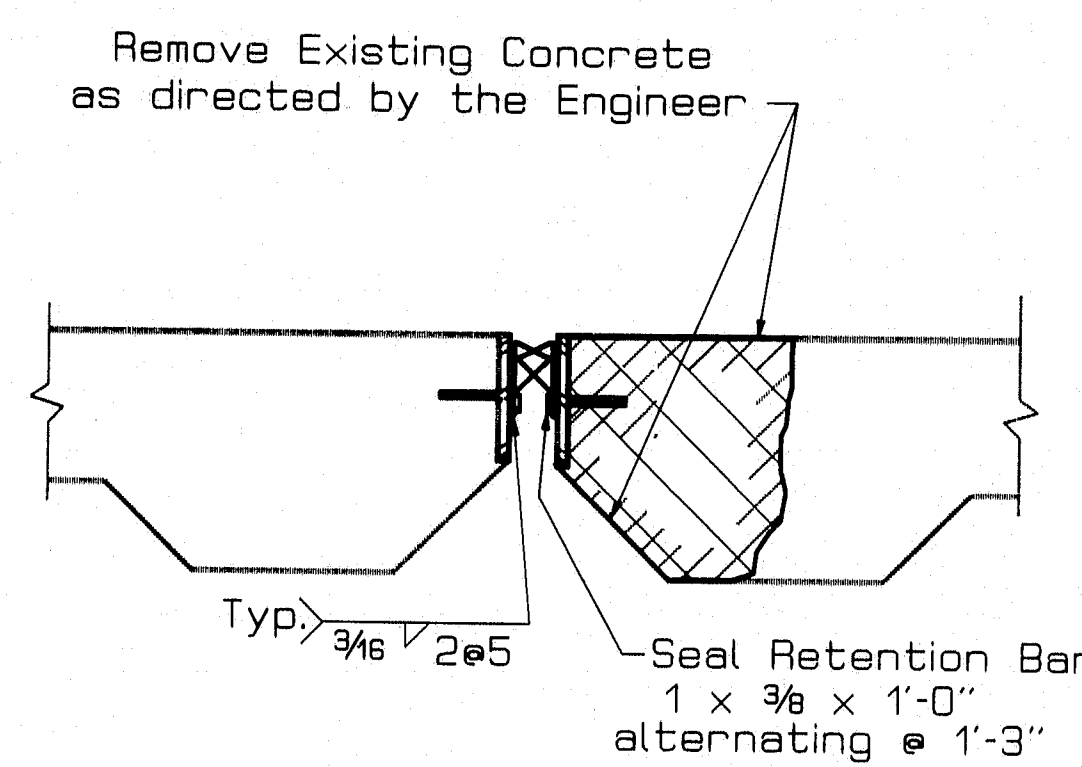
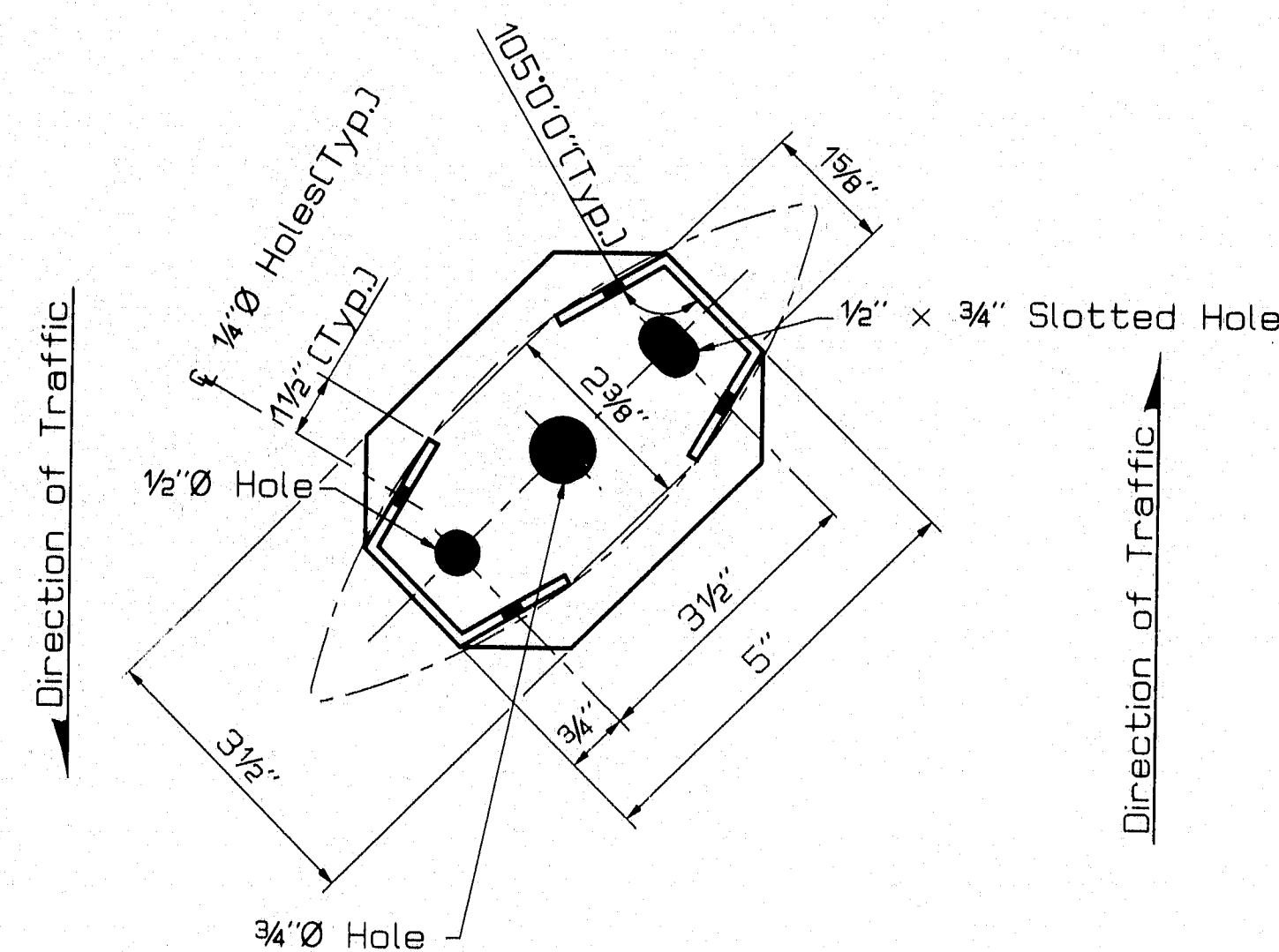
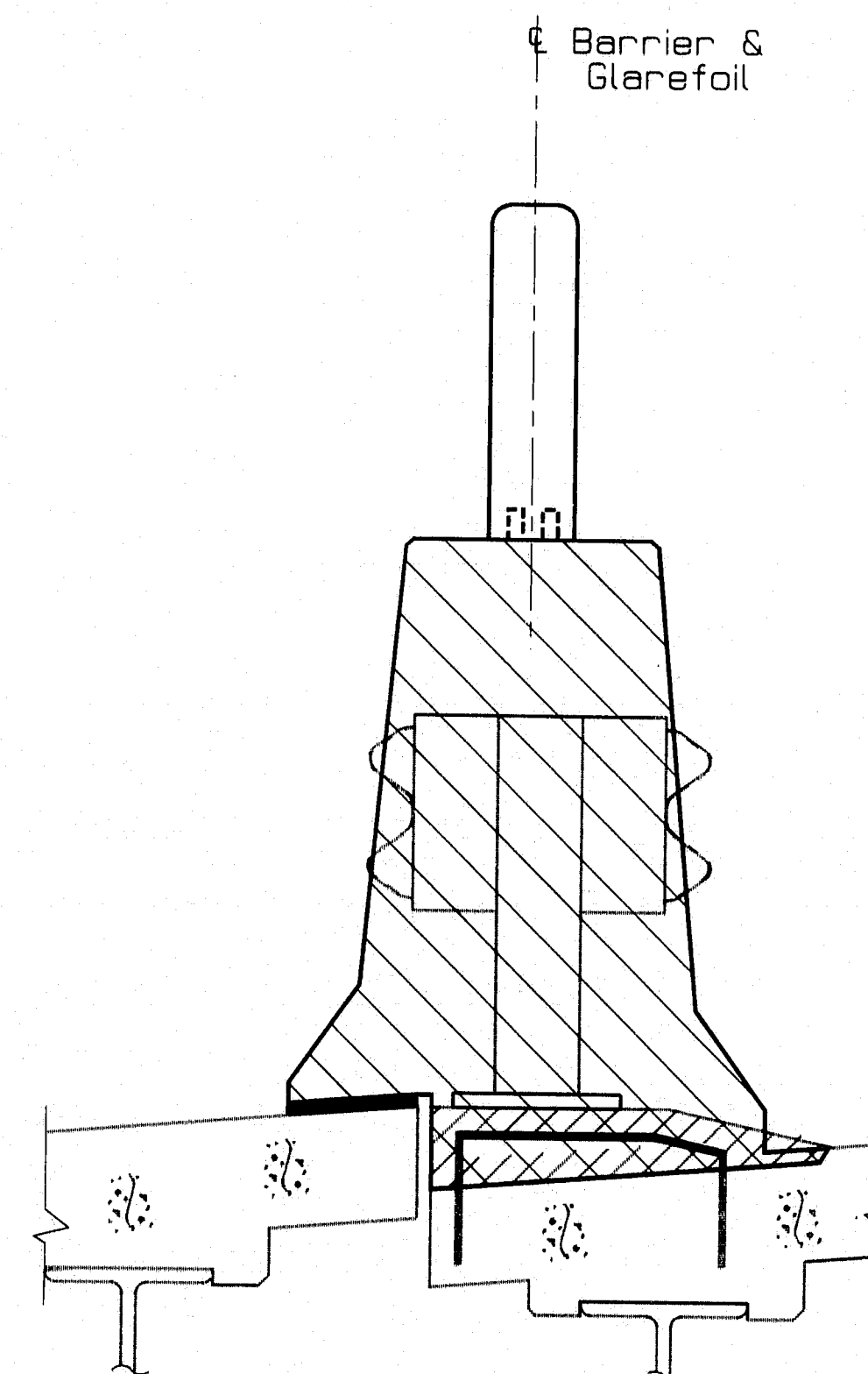
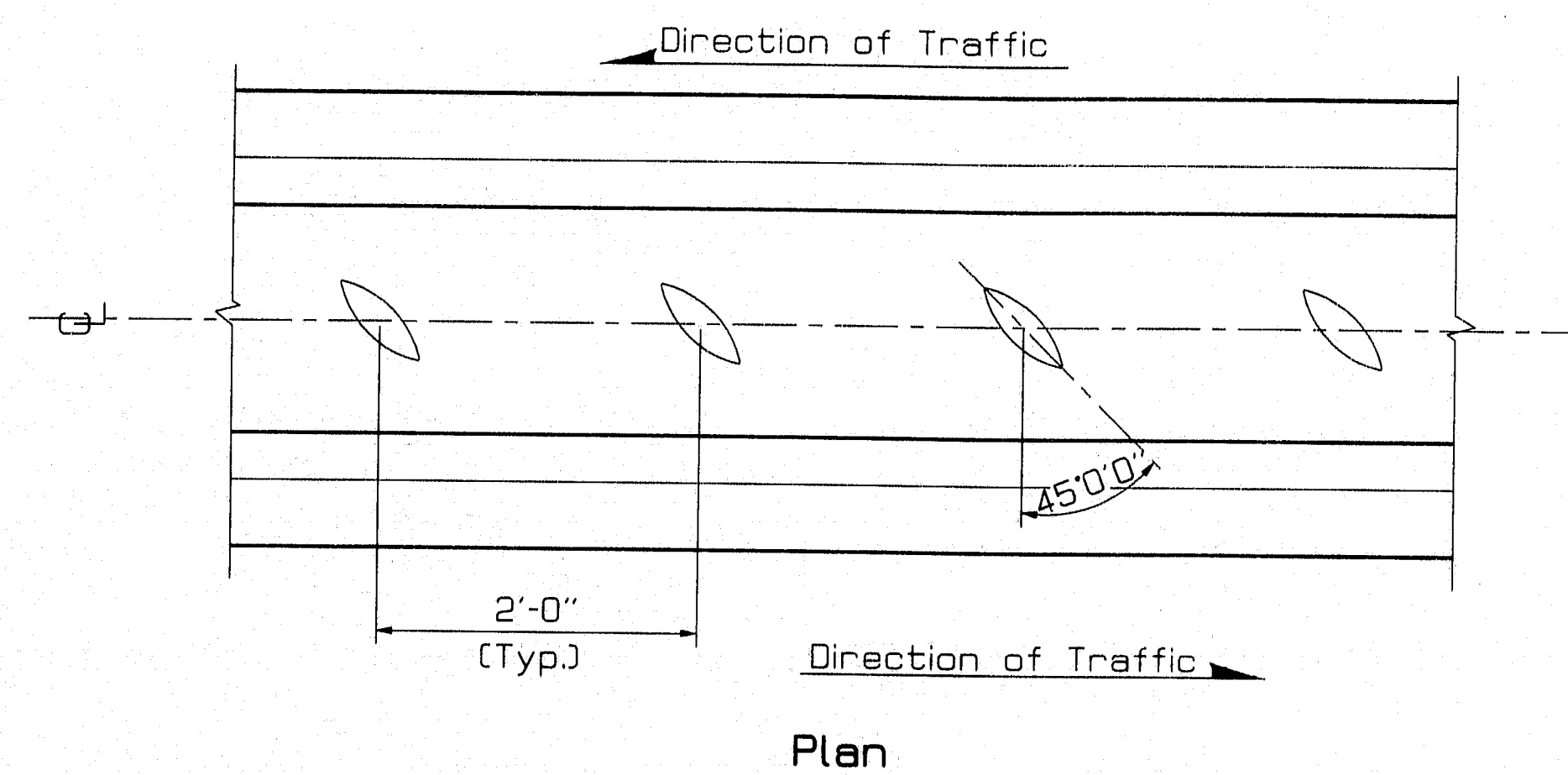
STATE OF MAINE  
DEPARTMENT OF TRANSPORTATION

I-295  
OVER  
VERANDA STREET  
IN THE CITY OF  
PORTLAND  
CUMBERLAND COUNTY  
GENERAL PLAN

SHEET OF AUGUSTA, MAINE May 1994



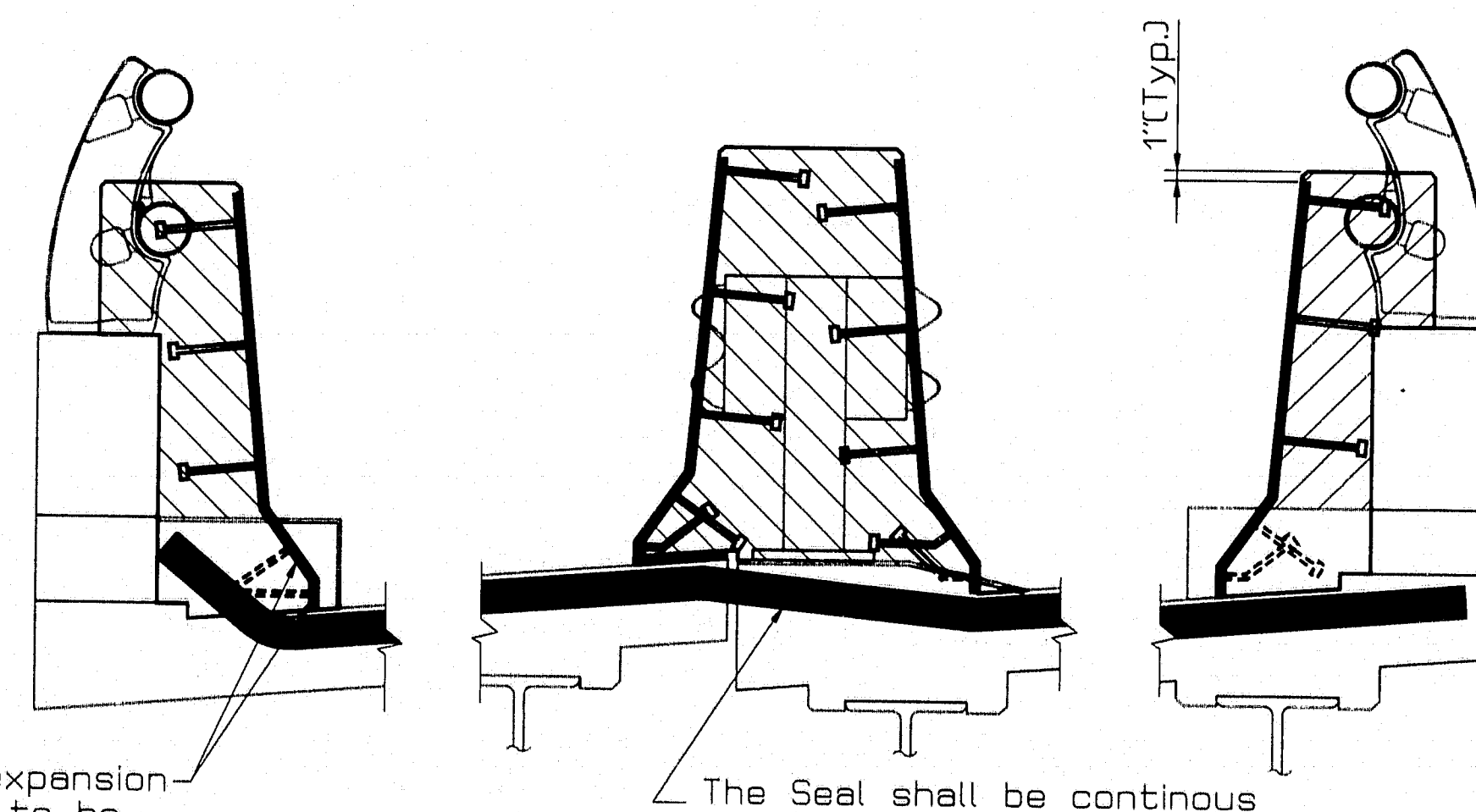
F.H.W.A. RES. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	IR-295-3(114)	36	37
PORTLAND			PIN 4172.00	



Cut & grind smooth existing expansion dam 2's to this line. Payment to be incidental to Item 202.12, Removal of Existing Structural Concrete (Typ.)

**Seal Detail**

An approved set accelerator add mixture shall be added to joint concrete. Payment shall be included in the Joint Modification Pay Item.



For Expansion Dam details not shown see BD 301-93

114-405

STATE OF MAINE  
DEPARTMENT OF TRANSPORTATION

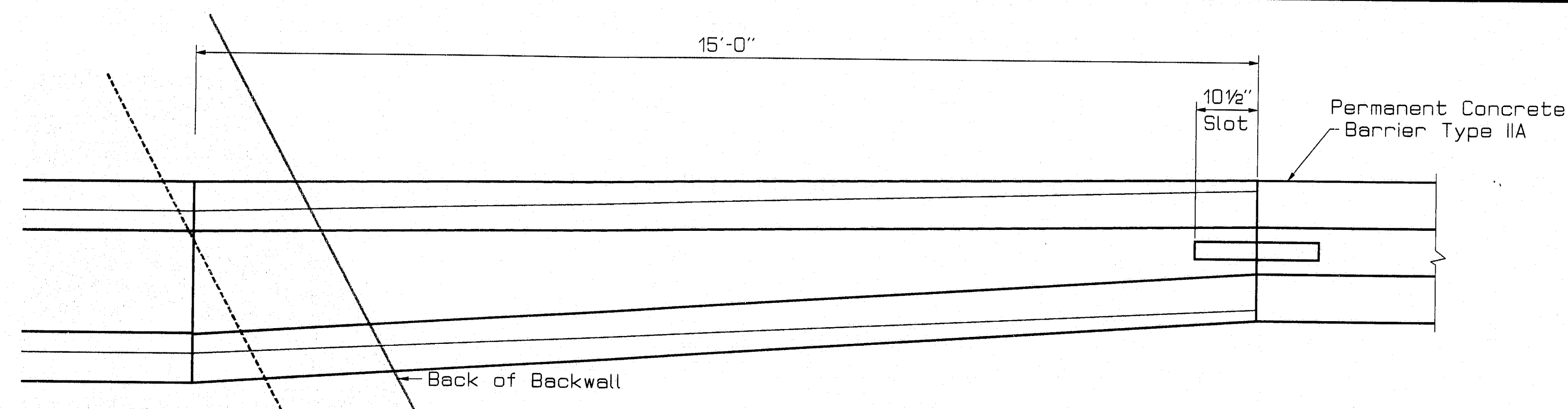
1-295  
OVER  
VERANDA STREET  
IN THE CITY OF  
PORTLAND  
CUMBERLAND COUNTY  
GLARE FOIL & SEAL DETAILS

SHEET OF AUGUSTA, MAINE May 1994

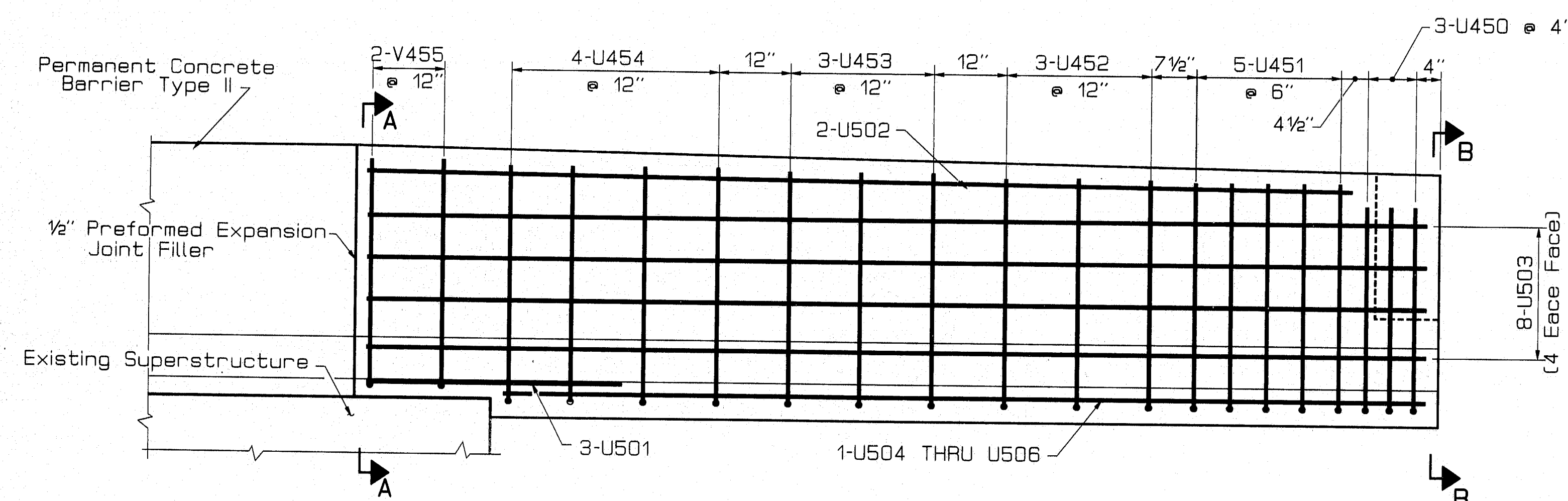
PROJECT DESIGN ENGINEER	DATE
BY	*
DESIGN-DETAILED	
CHECKED	
APPROVED	
FIELD ENGINEER	

07 JUN 94-010050

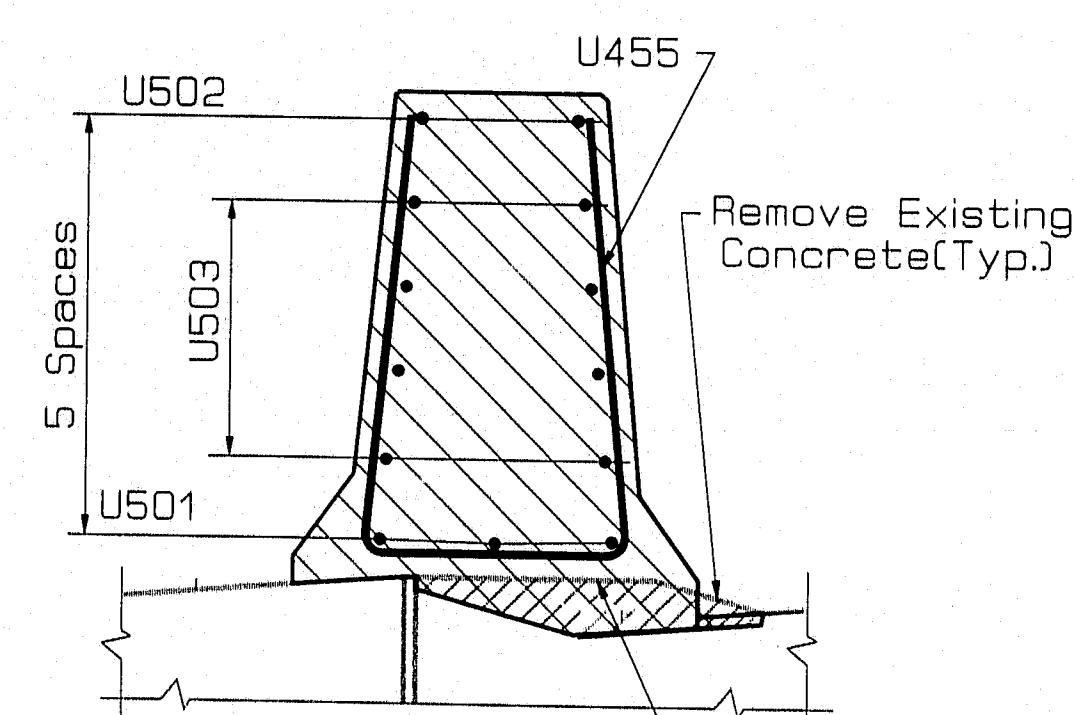




Concrete Barrier Transition Plan

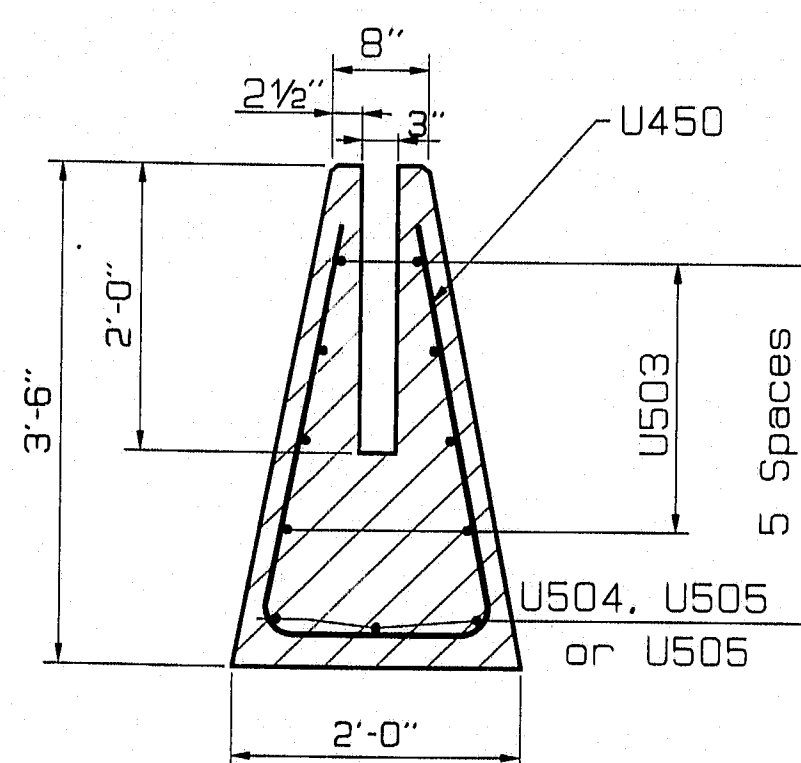


Concrete Barrier Transition Elevation



Section A-A

For details not shown see Permanent Concrete Barrier Type II



Section B-B

#### Reinforcing Steel Notes

- 1.-All dimensions are out to out of reinforcing bar
- 2.-Bending details and hooks shall conform to the recommendations of the current revision of ACI Standard 318
- 3.-First digit(s) following the letter of the mark indicates size of the bar. Mark (A502) bar size-#5

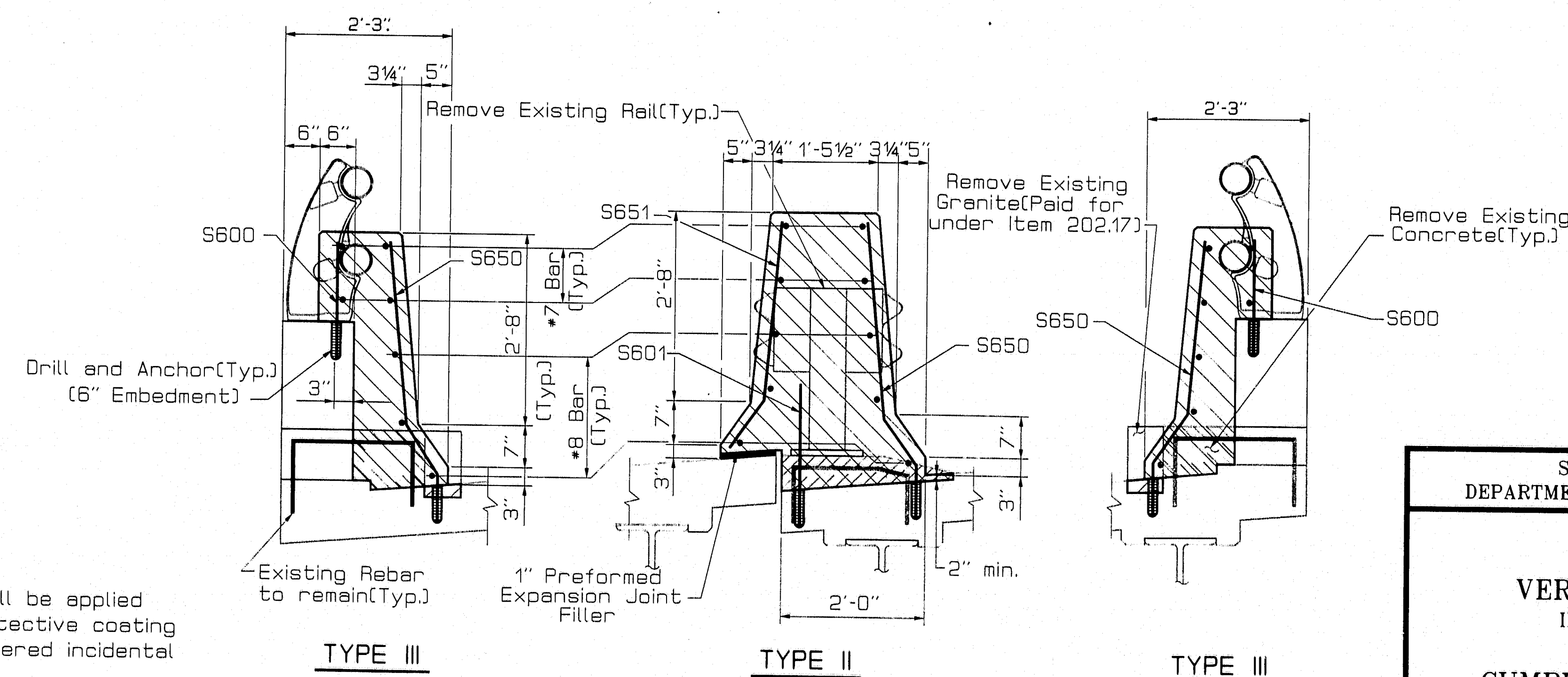
#### Note:

Protective Coating for Concrete Surfaces shall be applied to all exposed surfaces of new concrete. Protective coating will not be paid for directly, but will be considered incidental to Item 526.31 or 526.32.

REINFORCING STEEL SCHEDULE													
STRAIGHT BARS							STRAIGHT BARS						
MARK	NO.	LENGTH	LOCATION	MARK	NO.	LENGTH	LOCATION	MARK	NO.	LENGTH	LOCATION	MARK	NO.
S600	354	1'-7"	Barrier	S800	18	60'-0"	Barrier						
S601	149	2'-0"	Barrier	S801	6	58'-0"							
S605	12	3'-4"	Barrier	S802	9	40'-0"							
				S803	3	50'-0"							
S700	16	60'-0"	Barrier	S804	3	10'-0"							
S701	8	58'-0"		S805	6	46'-6"							
S702	8	40'-0"		S806	6	51'-9"							
S703	4	50'-0"		S808	3	20'-5"							
S704	4	10'-0"		S809	3	45'-10"	Barrier						
S705	4	46'-6"		U501	6	5'-9"	Barrier Transition						
S706	4	51'-9"		U502	4	13'-10"							
S708	4	20'-5"		U503	16	14'-8"							
S709	4	45'-10"	Barrier	U504	6	12'-3"	Barrier Transition						

BENT BARS													
MARK	NO.	LENGTH	TYPE	A	B	C	D	E	F	G	H	O	R
S650	456	4'-0"	Z		8"	10"	2'-6"			134"	534"		TYPE III BARRIER
S651	203	3'-4"	Z			10"	2'-6"			134"	534"		TYPE II BARRIER
S652	24	1'-6"	D	8"	3"	7"							TYPE III BAR. ENDS
U450	6	7'-3"	T	2'-10"	1'-7"	2'-10"						5 1/2"	Barrier Transition
U451	10	8'-0"	T	3'-2"	1'-8"	3'-2"						6"	
U452	6	8'-4"	T	3'-3"	1'-10"	3'-3"						8"	
U453	6	8'-6"	T	3'-3"	2'-0"	3'-3"						10"	
U454	8	8'-10"	T	3'-4"	2'-2"	3'-4"						1'-0"	
U455	4	8'-7"	T	3'-1"	2'-5"	3'-1"						1'-2"	Barrier Transition



Permanent Concrete Barrier

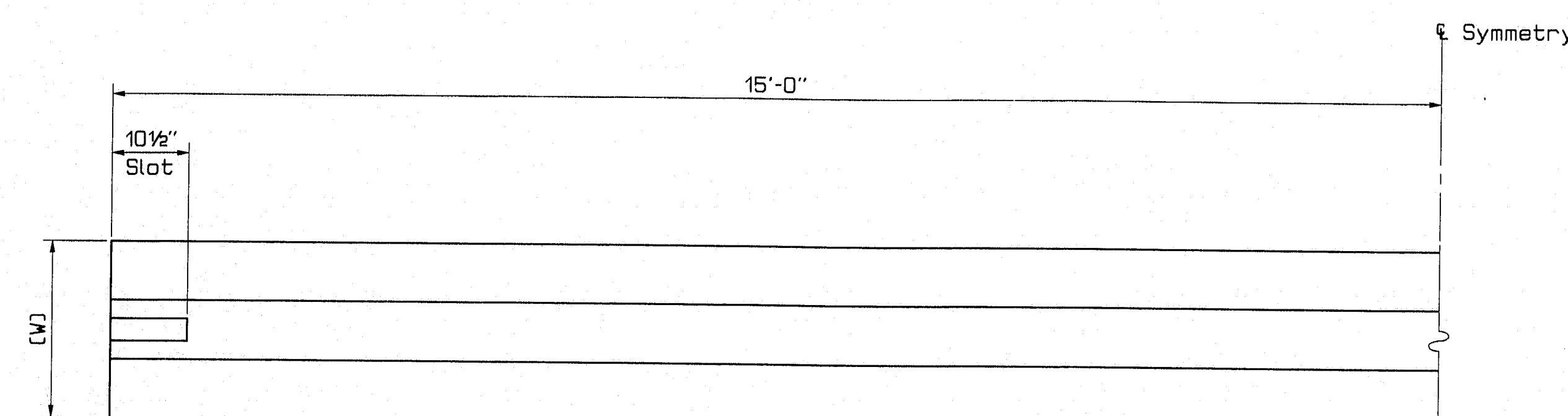
For details not shown see sheet of

114-406

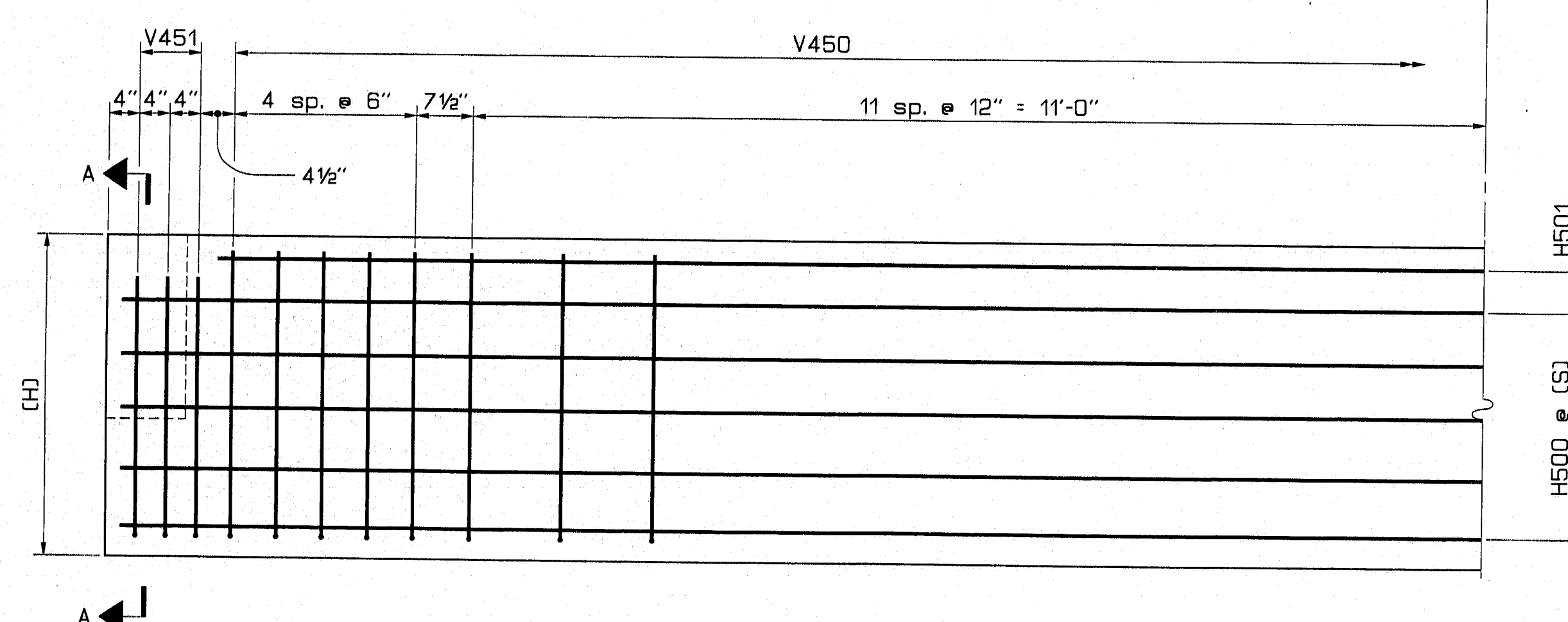
STATE OF MAINE  
DEPARTMENT OF TRANSPORTATION  
I-295  
OVER  
VERANDA STREET  
IN THE CITY OF  
PORTLAND  
CUMBERLAND COUNTY  
CONCRETE BARRIER  
BRIDGE DETAILS



F.H.D.A. REV. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	IR-295-3(114)	32	37



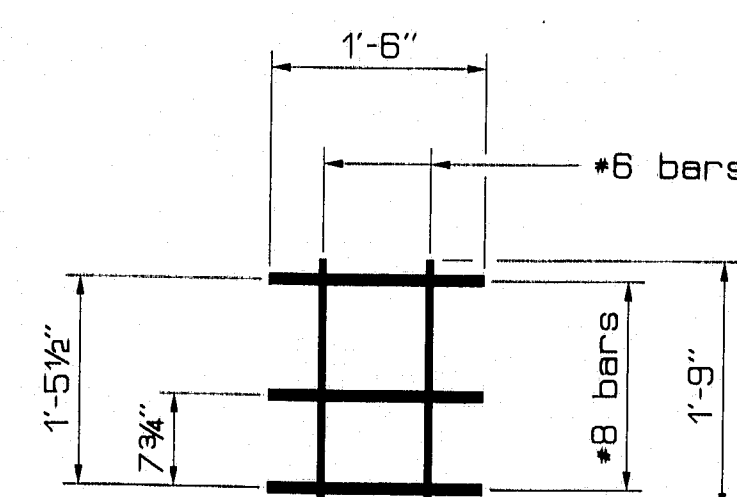
HALF PLAN



HALF ELEVATION

TABLE OF DIMENSIONS

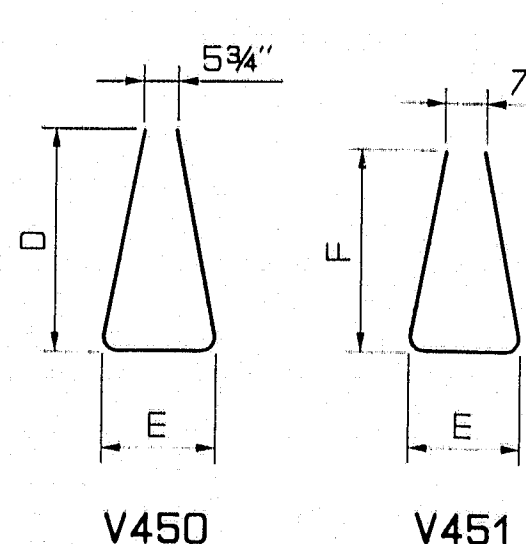
Barrier Type	Height (H)	Width (W)	Spacing (S)
II A	3'-6"	2'-0"	0'-7 1/2"
II B	4'-0"	2'-2 1/4"	0'-9"
II C	4'-6"	2'-4 1/2"	0'-10 1/2"



REBAR GRID

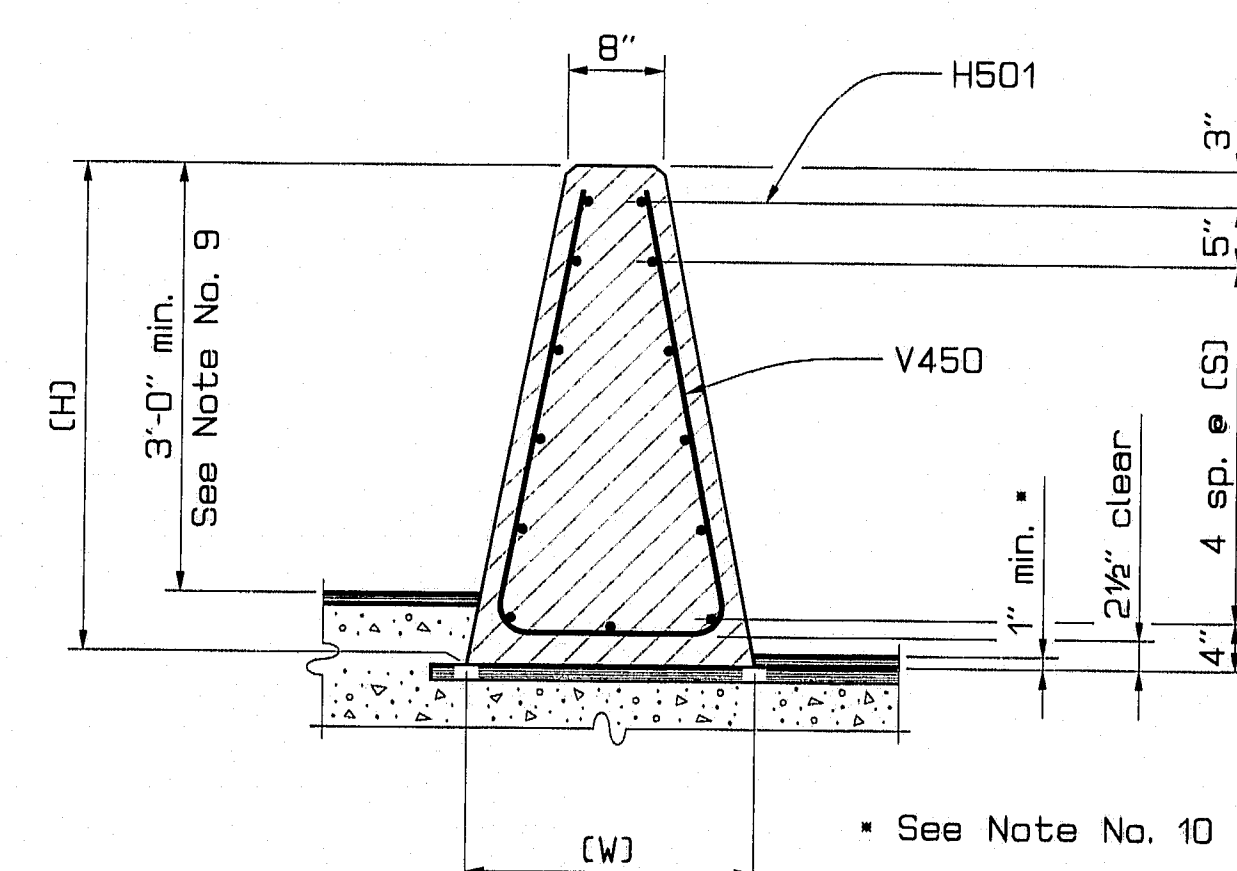
REINFORCING STEEL SCHEDULE

Mark	Size	Qty.	Total Bar Length		
			II A	II B	II C
V450	#4	33	7'-9"	8'-11"	10'-2"
V451	#4	6	7'-2"	8'-4"	9'-7"
H500	#5	11	29'-8"		
H501	#5	2	27'-8"		

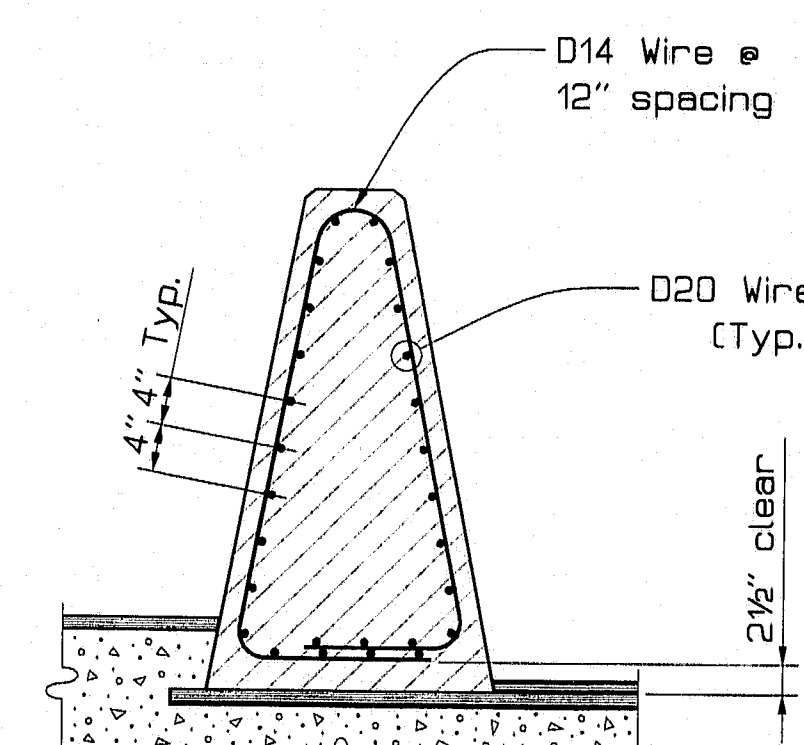


BAR BENDS

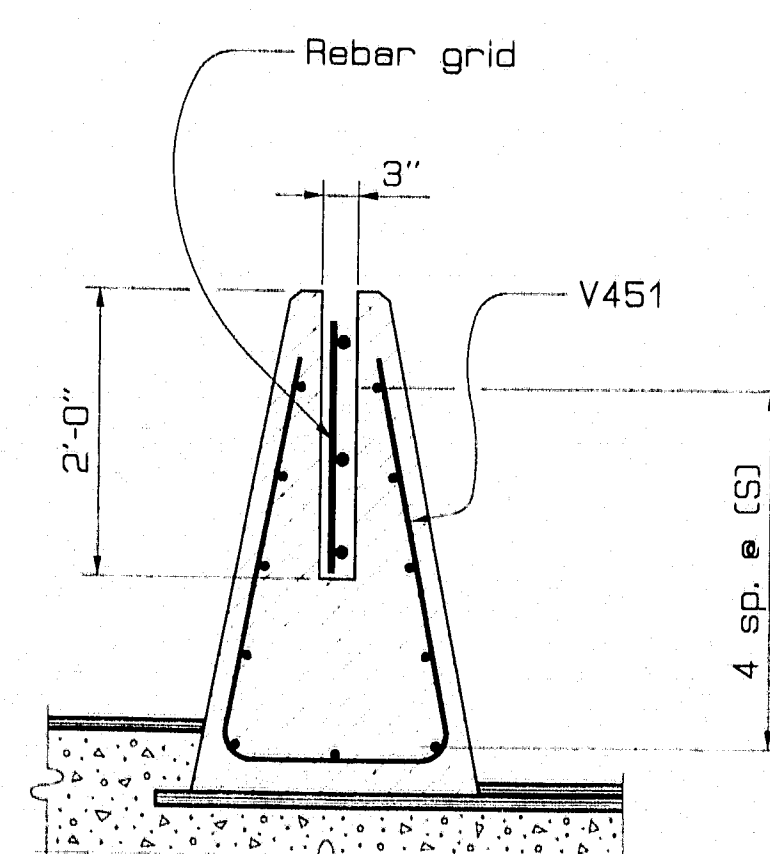
Dim.	Length		
	II A	II B	II C
D	3'-1 1/2"	3'-7 1/2"	4'-1 1/2"
E	1'-7"	1'-9 1/4"	1'-11 1/2"
F	2'-10"	3'-4"	3'-10"



TYPICAL SECTION



OPTIONAL SECTION  
Welded Wire Fabric



SECTION A-A  
Precast only

## NOTES

- Concrete barrier may be precast or cast - in - place. Precast sections shall be 30 feet ( $\pm 3/4$  inch) long unless otherwise indicated on the design plans.
- Precast barrier sections shall be joined by installing a rebar grid into adjacent slots and filling the slots with a material included on the Department's list of prequalified grouts. Rebar grid and slots shall be omitted for cast - in - place construction and at the extreme ends of precast installations.
- Welded wire fabric may be substituted for conventional reinforcement at the option of the Contractor. Welded wire fabric shall be 4 x 12 - D20 x D14 and shall meet the provisions of ASTM A497. Conventional reinforcement will be required in the end two feet, plus a development length of 18 inches, of each section of concrete barrier.
- Installation of Concrete Barrier Type II A, B, or C will be as indicated on the design plans.
- Reinforcing steel shall have a minimum cover of 1 1/2 inches unless otherwise indicated.
- Form a 3/4 - inch chamfer on the top and end edges of concrete.
- Lap splices in longitudinal reinforcing steel and welded wire fabric shall be a minimum of 1'-9".
- The maximum transition in barrier height shall be two inches in thirty feet. Longitudinal reinforcing steel shall be spaced uniformly throughout the transition. Barrier height transitions shall be determined in the field by the Engineer.
- The minimum effective barrier height is thirty inches. Barrier design height (H) shall allow for differences in roadway elevation and for up to six inches in future pavement overlays.
- A minimum pavement thickness of one inch is required at the base of the barrier for lateral support.
- The Reinforcing Steel Schedule indicates the quantities and lengths of bars required for one 30 - foot precast section.

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STATE OF MAINE  
DEPARTMENT OF TRANSPORTATION

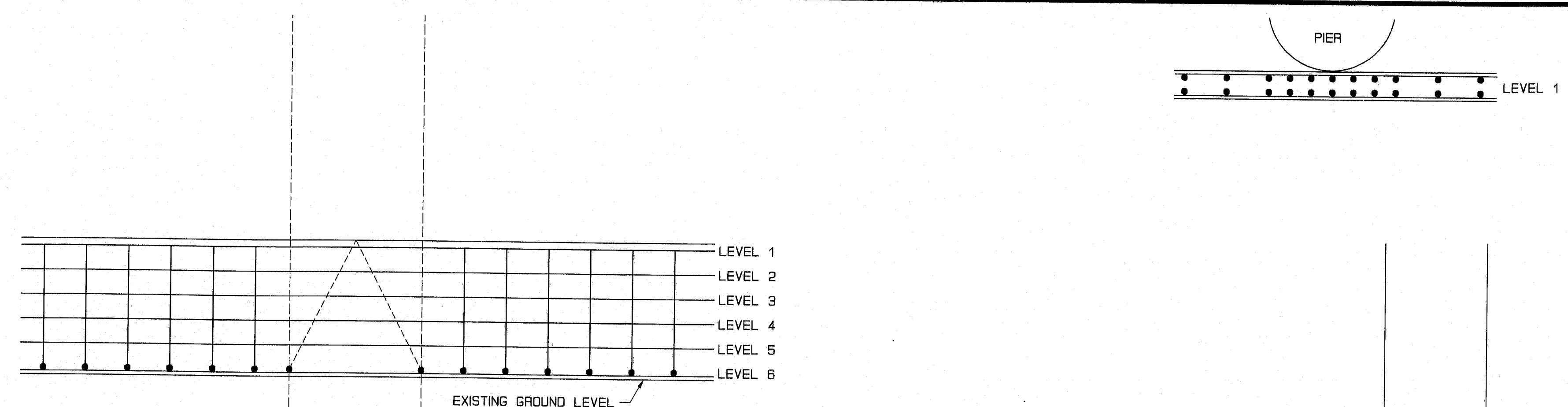
## STANDARD DETAILS

PERMANENT  
CONCRETE BARRIER  
TYPE II

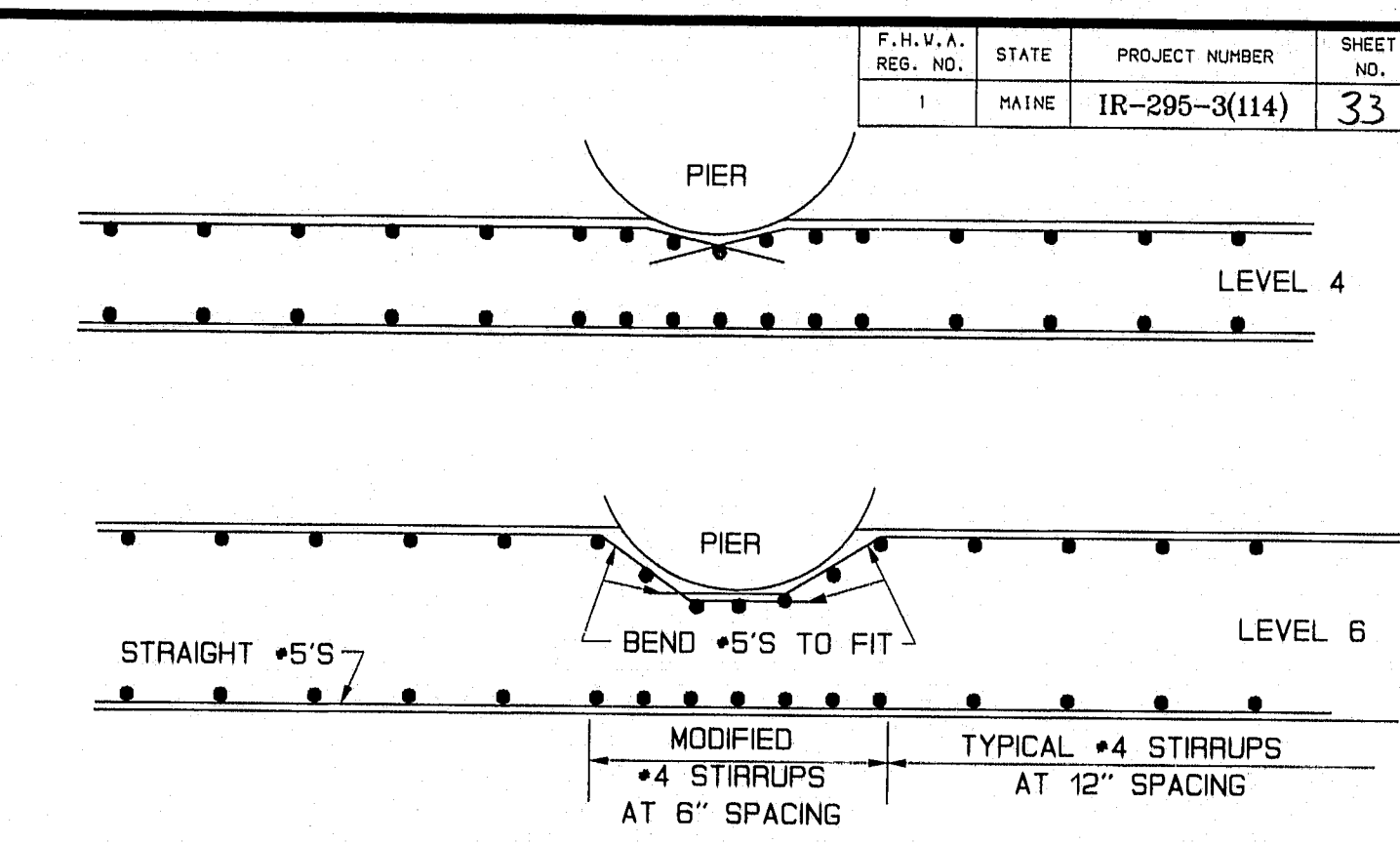
SHEET 1 OF 1 AUGUSTA, MAINE December 1993



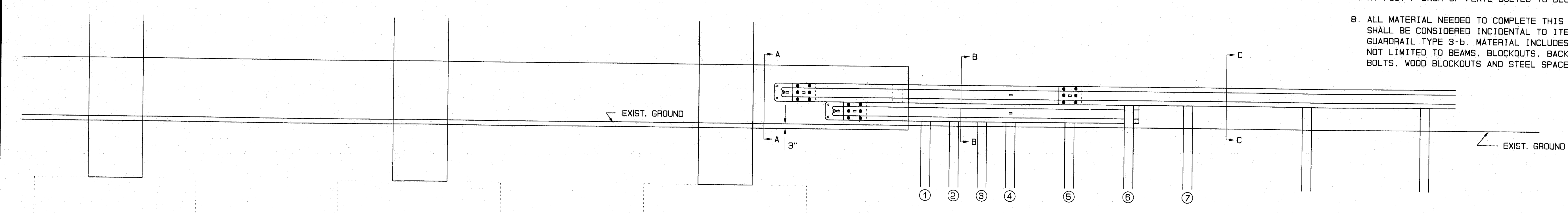
F.H.V.A. RES. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	IR-205-8(114)	33	37



PIER SECTION

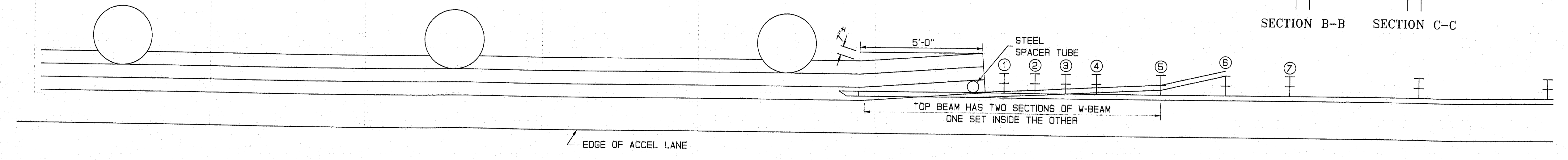
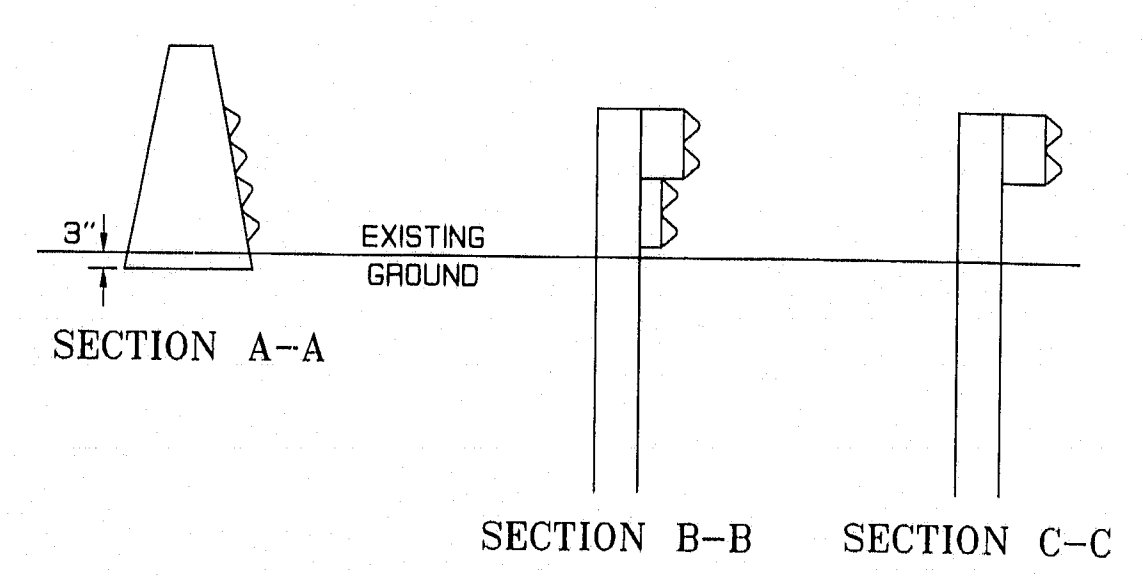


1. THIS GUARDRAIL TRANSITION IS APPROPRIATE FOR CONNECTION TO A CONCRETE SAFETY SHAPE.
2. STANDARD BARRIER HARDWARE HAS BEEN USED TO DEVELOP THIS GUARDRAIL TRANSITION. DESIGNATIONS PROVIDED IN THE PARTS LIST RELATE TO STANDARD ELEMENTS DETAILED IN "A GUIDE TO STANDARDIZED HIGHWAY BARRIER RAIL HARDWARE" (1979 AASHTO-AGC-ARTBA JOINT COOPERATIVE COMMITTEE.)
3. POSTS 1-6 REQUIRE AN ADDITIONAL HOLE TO ATTACH LOWER BLOCKS OR LOWER BEAM. NO EXTRA PAYMENT WILL BE MADE FOR ADDING ADDITIONAL HOLES.
4. RUBRAIL WOOD BLOCKS LOCATED ON POSTS 1 THROUGH 4 ARE OFFSET DRILLED AND SECURED WITH 5/8" CARRIAGE BOLTS (F-9(AS REQUIRED)-73) TO POSTS 2 AND 4; GUARDRAIL AND POSTS AT POST 1, 3 AND 5.
5. V-BEAM IS NOT BOLTED TO POSTS AT POSTS 2 THROUGH 4.
6. STEEL SPACER TUBE SCHEDULE 40 GALVANIZED PIPE 6"(I.D.)x9" AND ATTACHED BY A 5/8" CARRIAGE BOLT (F-9(AS REQUIRED)-73) AND RECTANGULAR PLATE WASHER F12-12-73.
7. AT POST 7 BACK-UP PLATE BOLTED TO BLOCK ONLY.
8. ALL MATERIAL NEEDED TO COMPLETE THIS CONNECTION SHALL BE CONSIDERED INCIDENTAL TO ITEM 606.17 GUARDRAIL TYPE 3-b. MATERIAL INCLUDES, BUT IS NOT LIMITED TO BEAMS, BLOCKOUTS, BACKUP PLATES BOLTS, WOOD BLOCKOUTS AND STEEL SPACER TUBE.



PROFILE VIEW

POST	THICKNESS
①	5"
②	4"
③	3"
④	2"



PLAN VIEW

DATE	BY	CHKD	DATE
1/7/82	JFN		

18JAN84-010100

114-408

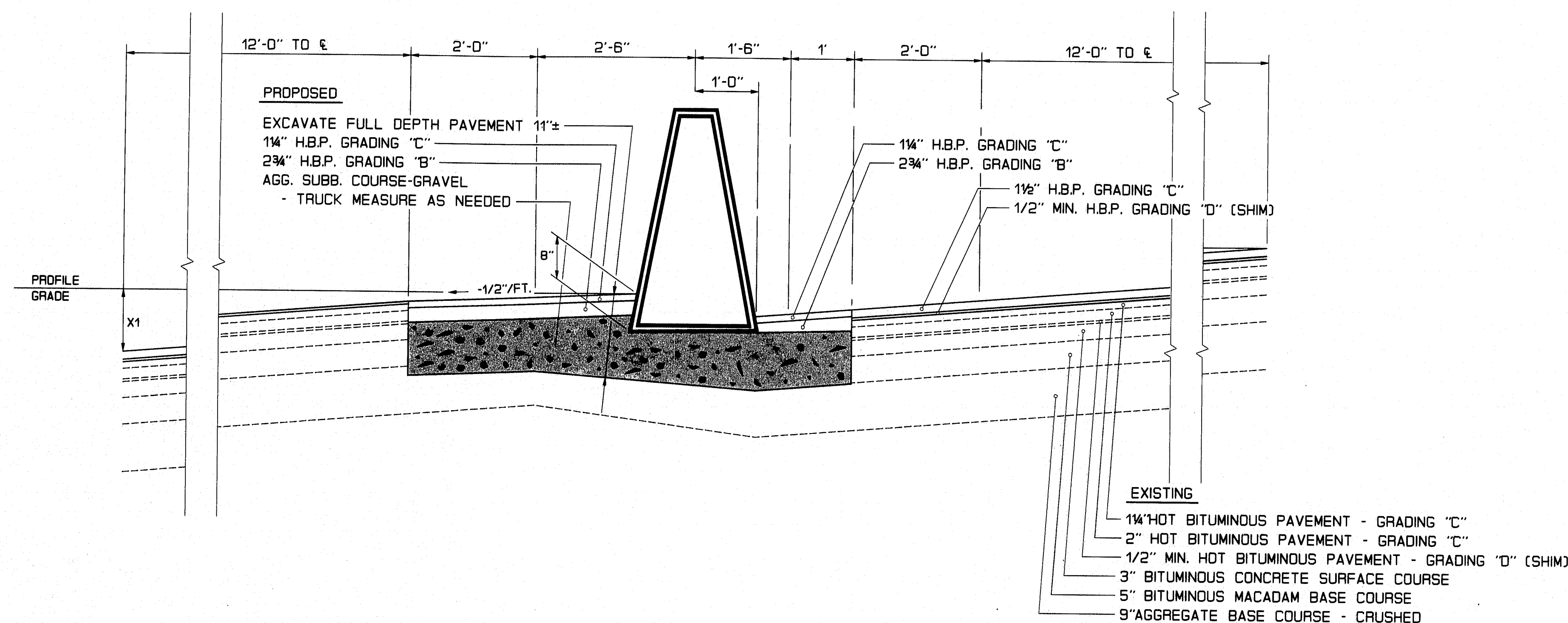
STATE OF MAINE  
DEPARTMENT OF TRANSPORTATION

PERMANENT CONCRETE  
BARRIER TYPE II  
ON S.B. BUCKNAM RD.  
ACCEL LANE

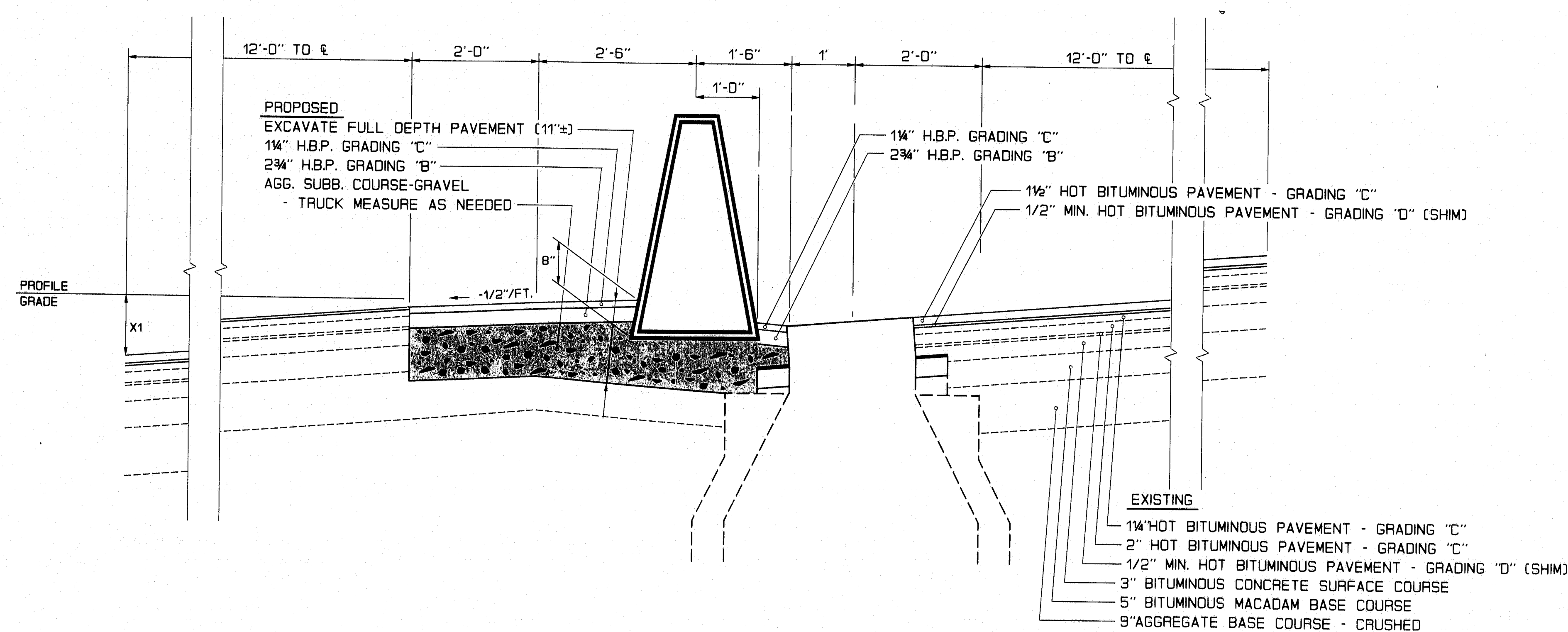
SHEET OF AUGUSTA, MAINE



F.D.V.A. REV. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	IR-295-3(114)	34	37



PERMANENT CONCRETE BARRIER TYPE IIA



PERMANENT CONCRETE BARRIER TYPE IIA

- NOTES:
- HIGH SIDE MEDIAN SHOULDER SHALL BE EXCAVATED TO A DEPTH OF 11".
  - ALL PAVEMENT COURSES SHALL BE STRAIGHT.
  - PAVEMENT CROSS-SLOPE SHALL BE 1/2" FT. ON THE HIGH SIDE MEDIAN.
  - THE LOW SIDE MEDIAN SHOULDER SHALL BE THE SAME CROSS-SLOPE AS THE TRAVELWAY.

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STATE OF MAINE  
DEPARTMENT OF TRANSPORTATION

PERMANENT CONCRETE  
BARRIER TYPE II  
& DRAINAGE DETAIL  
FOR B.C.T. WIDENING

SHEET 1 OF 1 AUGUSTA, MAINE