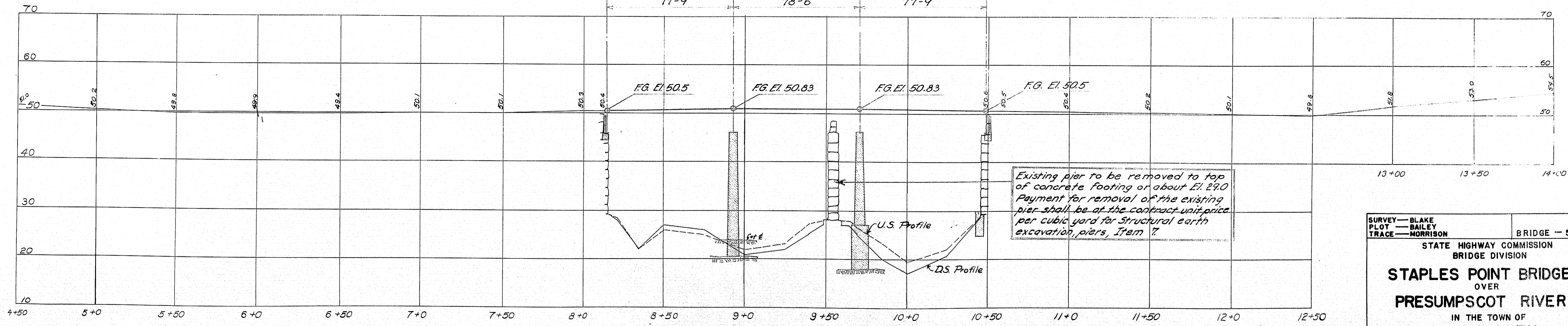


NOTES:
 EXISTING SUPERSTRUCTURE: Two (2) steel thru trusses. 4" transverse plank on 9 3/4" x 6" steel stringers. Wood loose and in poor condition. Steel good condition.
 EXISTING SUBSTRUCTURE: Abutment #1 and abutment #2 - split granite fairly laid in mortar. Mortar at and below water has fallen out. Stone in very good condition. Each abutment on concrete footing.
 Pier - same as abutments.
 STREAM: Tide water. Low tide El. 29.0 - High tide El. 36.6, March 9, 1949.
 Ordinary high tide = El. 38.6 - Extreme high tide = El. 40.6
 Flood in stream probably does not cause high water.
 FOUNDATIONS: No investigation.
 APPROACHES: Surface treated gravel. Good condition.

B.M. Elev. 50.72
 Top of Iron Pin in Top Stone Retaining Wall near Downstream Corner Backwall Abutment No. 1.

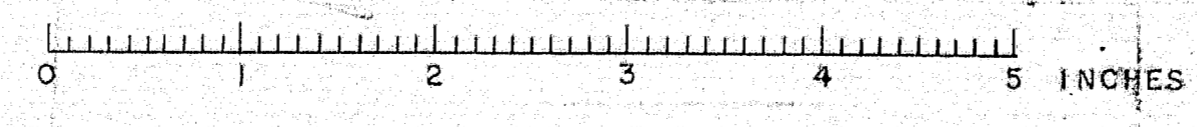
Note: Existing guard rail to be reset to line up with the center of the rail on the bridge for a distance of about forty (40) feet back of each abutment and to be parallel with the center line of the road for that distance, then tapered back into the existing guard rail in a distance of two or three panel lengths.

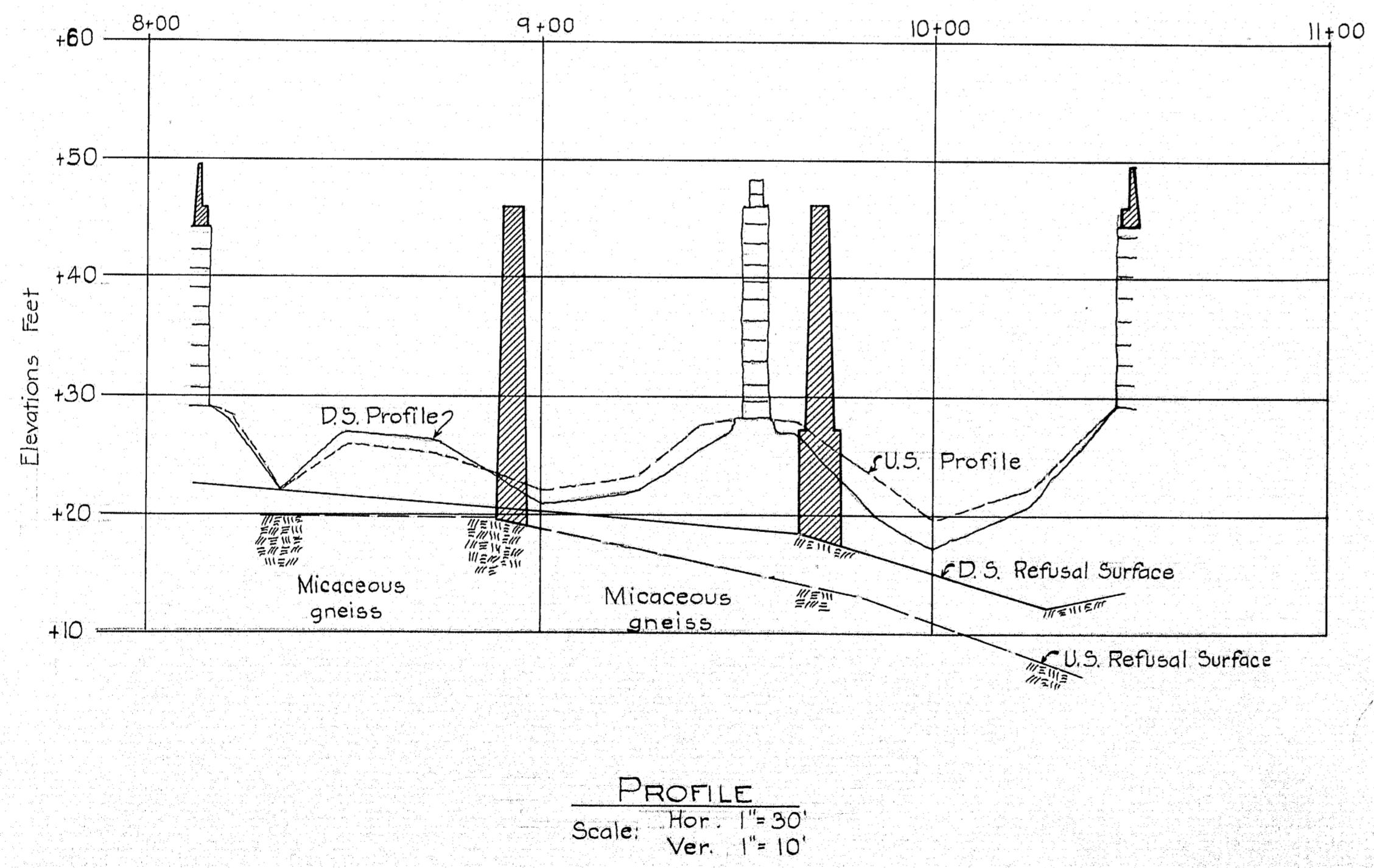
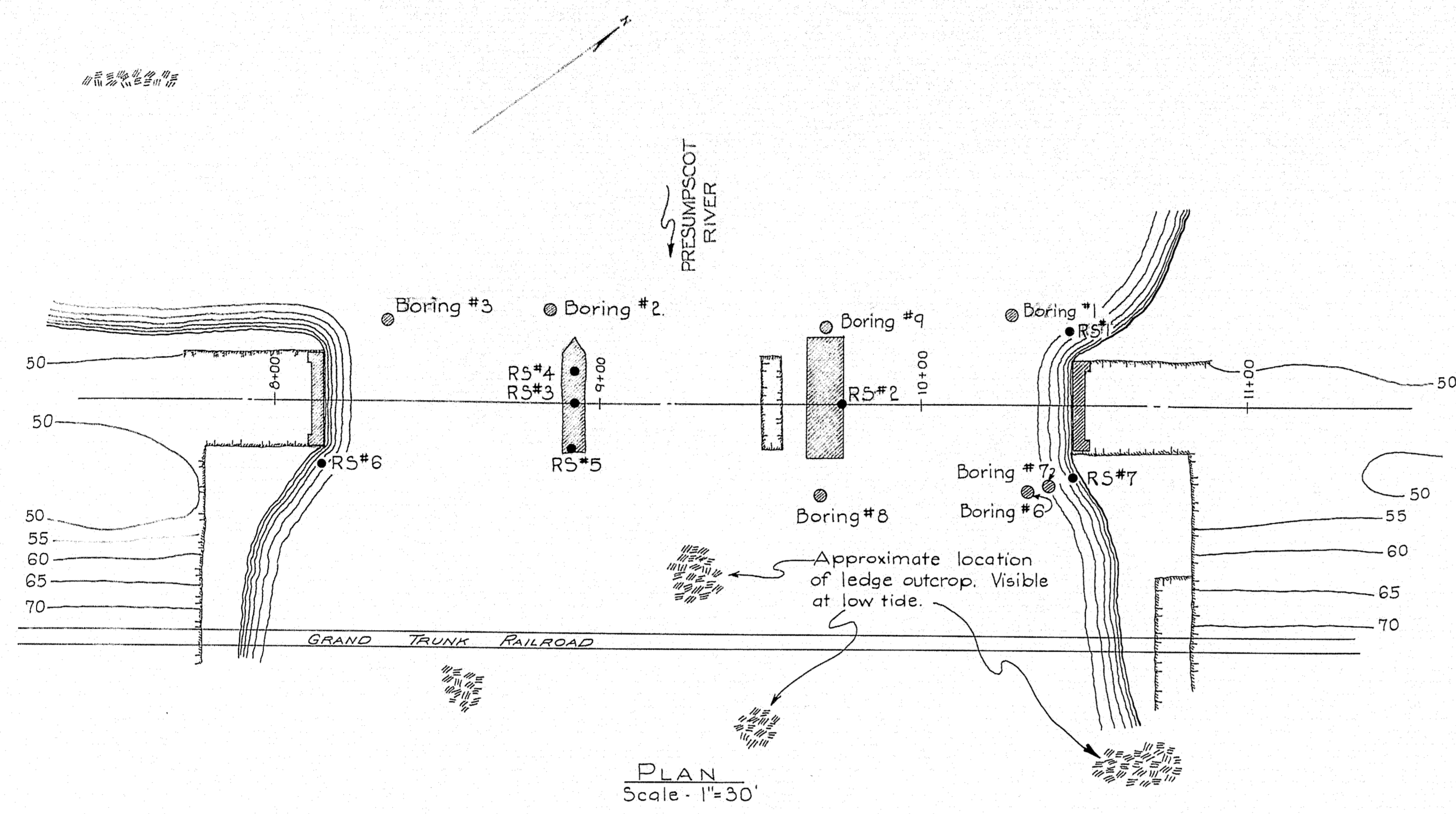
PLAN
 Scale: 1"=30'



PROFILE
 Scales: Hor. 1"=30', Vert. 1"=10'

SURVEY - BLAKE
 PLOT - BAILEY
 TRACE - MORRISON
 BRIDGE - 527B
 STATE HIGHWAY COMMISSION
 BRIDGE DIVISION
STAPLES POINT BRIDGE
 OVER
PRESUMPCOT RIVER
 IN THE TOWN OF
FALMOUTH
CUMBERLAND COUNTY
 SURVEY
 SHEET 1 OF 3 AUGUSTA, MAINE MARCH 1949

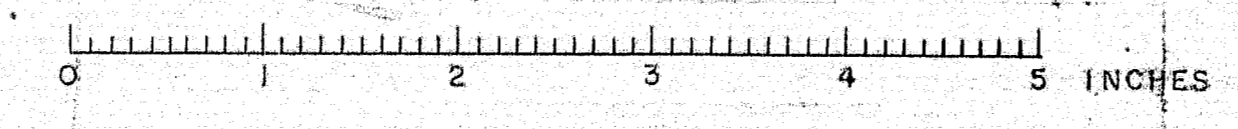


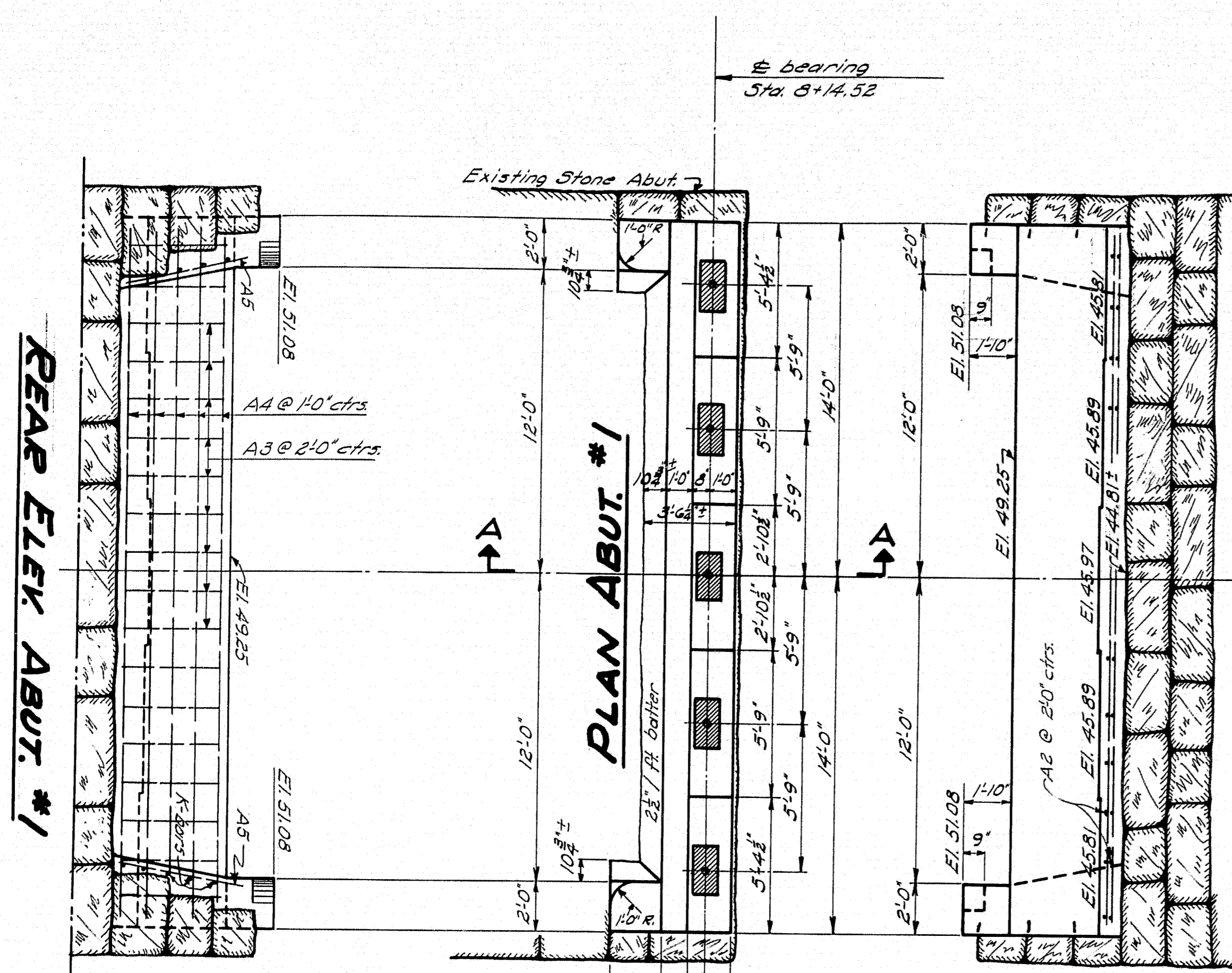


FOUNDATION DATA			
WASH BORINGS	EL. LEDGE	ROD SOUNDINGS	REFUSAL
# 1	+ 4.3	# 1	Abandoned
# 2	+20.0	# 2	+17.8 ±
# 3	+19.9	# 3	+24.0 ±
# 6	+12.6	# 4	+20.5 ±
# 7	+13.0	# 5	+20.8 ±
# 8	+18.1	# 6	+22.8 ±
# 9	+13.9	# 7	+13.5 ±

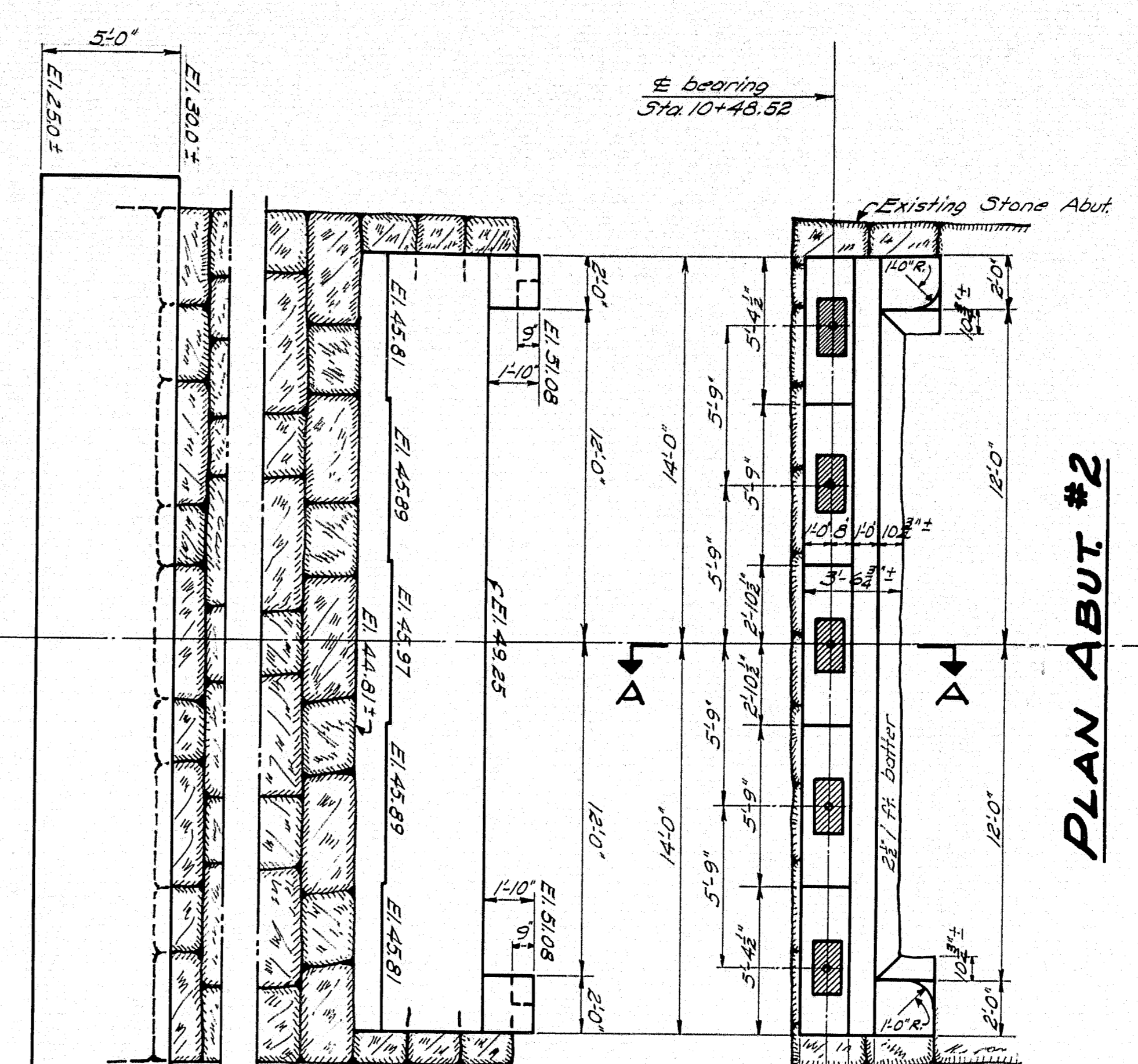
Note: The overburden in this area is chiefly of moderately loose granular material which is overlain by a thin surface deposit of soft cohesive soil and organic matter and underlain by a thin gravelly stratum which immediately overlies bedrock.

PLAN - HAMILTON	BRIDGE - 5278
STATE HIGHWAY COMMISSION BRIDGE DIVISION	
STAPLES POINT BRIDGE	
OVER	
PRESUMPCOT RIVER	
IN THE TOWN OF	
FALMOUTH	
CUMBERLAND COUNTY	
FOUNDATION DATA	
SHEET 2 OF 3 AUGUSTA, MAINE, MAY 1950	
49-21	

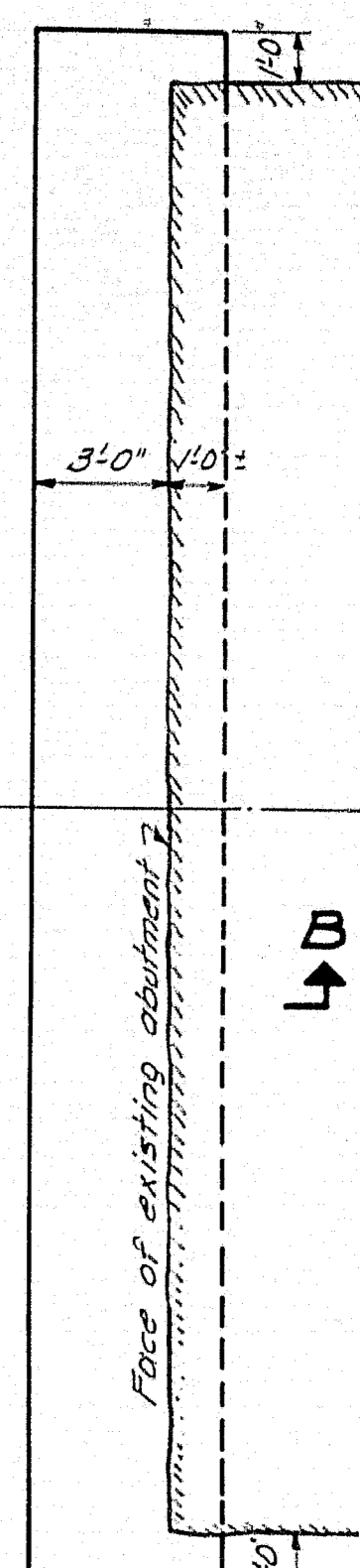




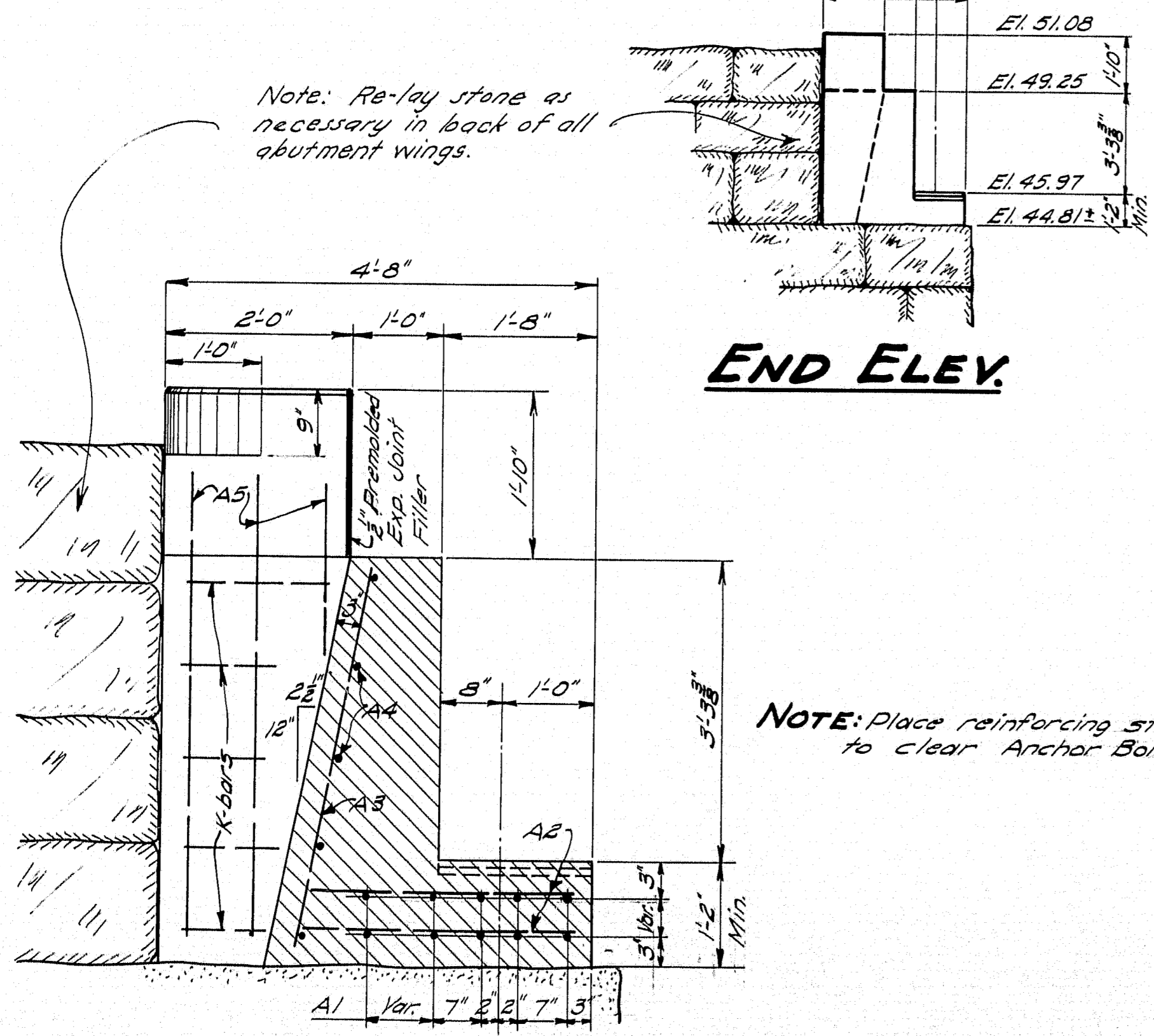
FRONT ELEV.



PLAN ABUT. #2



FOOTING PLAN ABUT. #2



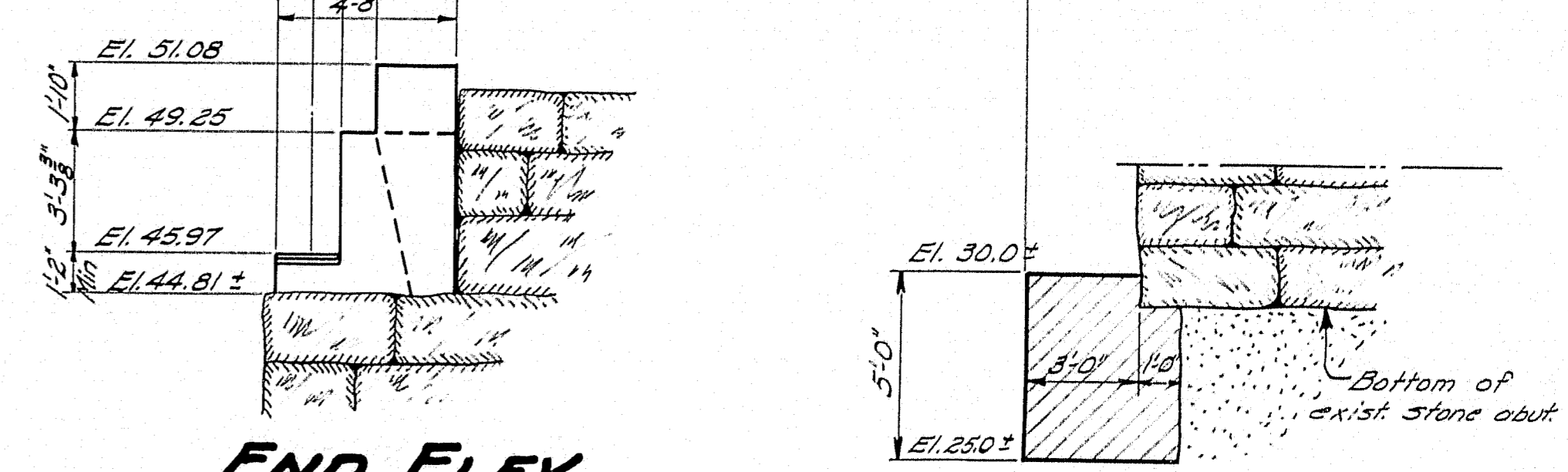
END ELEV.

SECT. A-A

NOTE:- Reinforcing the same for both abutments.
 Dress shaded bearing areas 1" larger all around than bearing plates to the exact elevations shown.
 The backfill for the abutment bridge seats and backwalls shall be placed up to finished grade. It shall conform to the specification for and be paid for as gravel base.

NOTE: Place reinforcing steel to clear Anchor Bolts.

Note: Re-lay stone as necessary in back of all abutment wings.



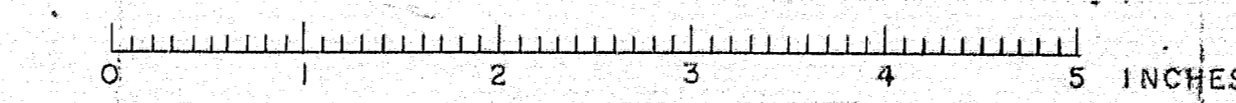
END ELEV.

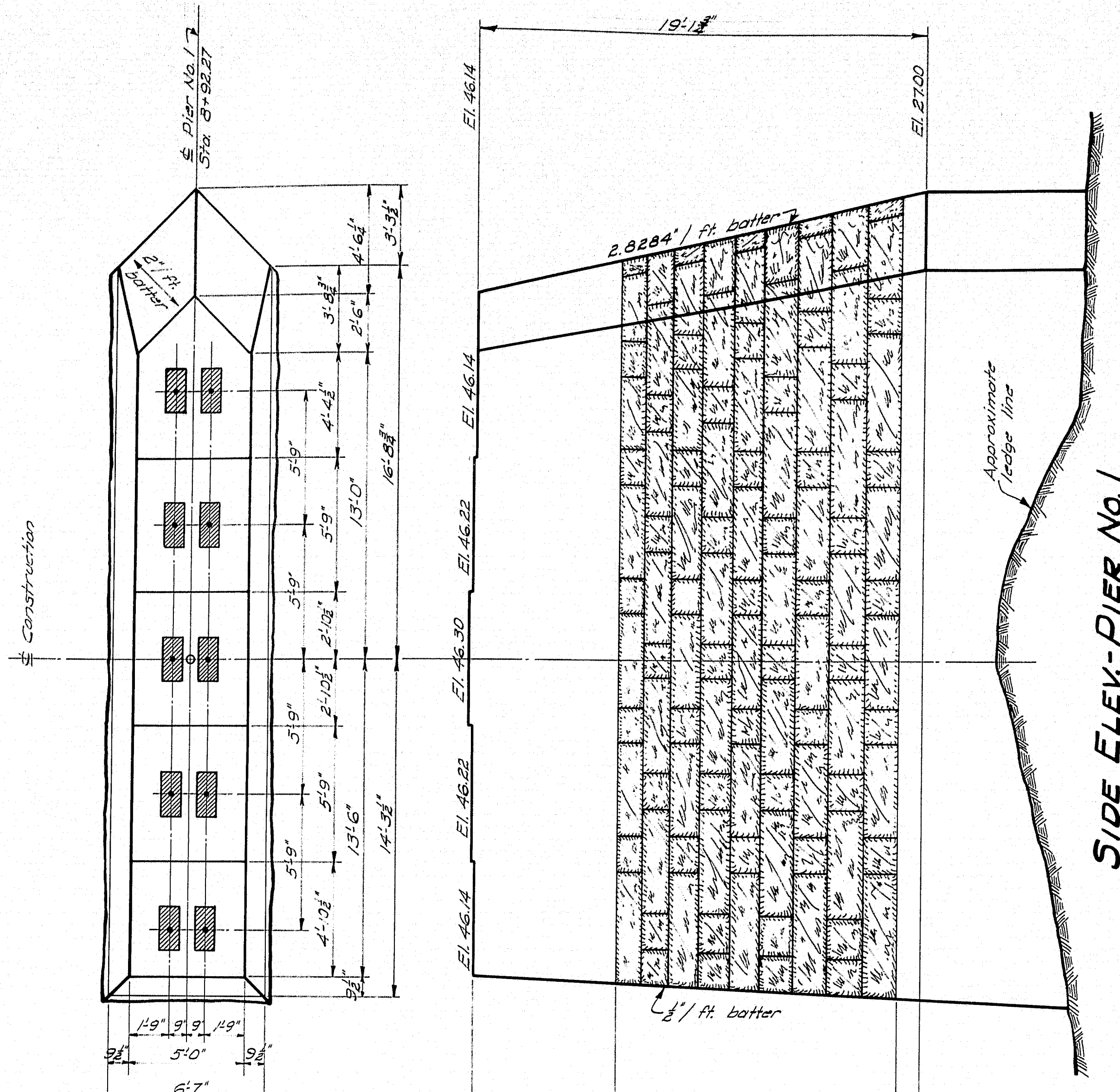
SECT. B-B

DESIGN - HAMILTON
 TRACE - CLARK
 CHECK - L. V. B.
 BRIDGE - 5278
 STATE HIGHWAY COMMISSION
 BRIDGE DIVISION
STAPLES POINT BRIDGE
 OVER
PRESUMSCOT RIVER
 IN THE TOWN OF
CUMBERLAND COUNTY
 ABUTMENTS

SHEET 3 OF 8 AUGUSTA, MAINE JAN. 1950

49-22

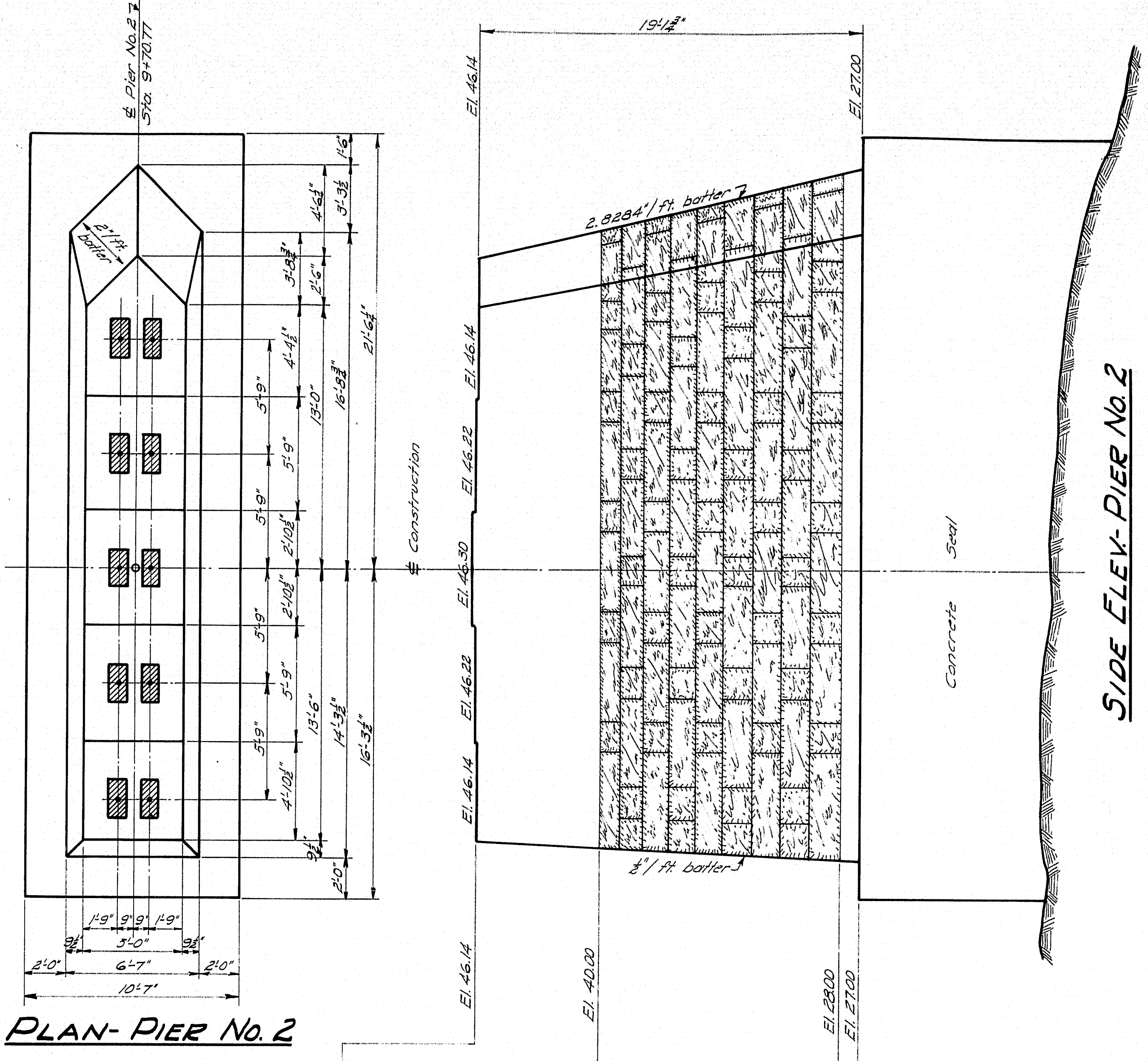




PLAN-PIER No. 1

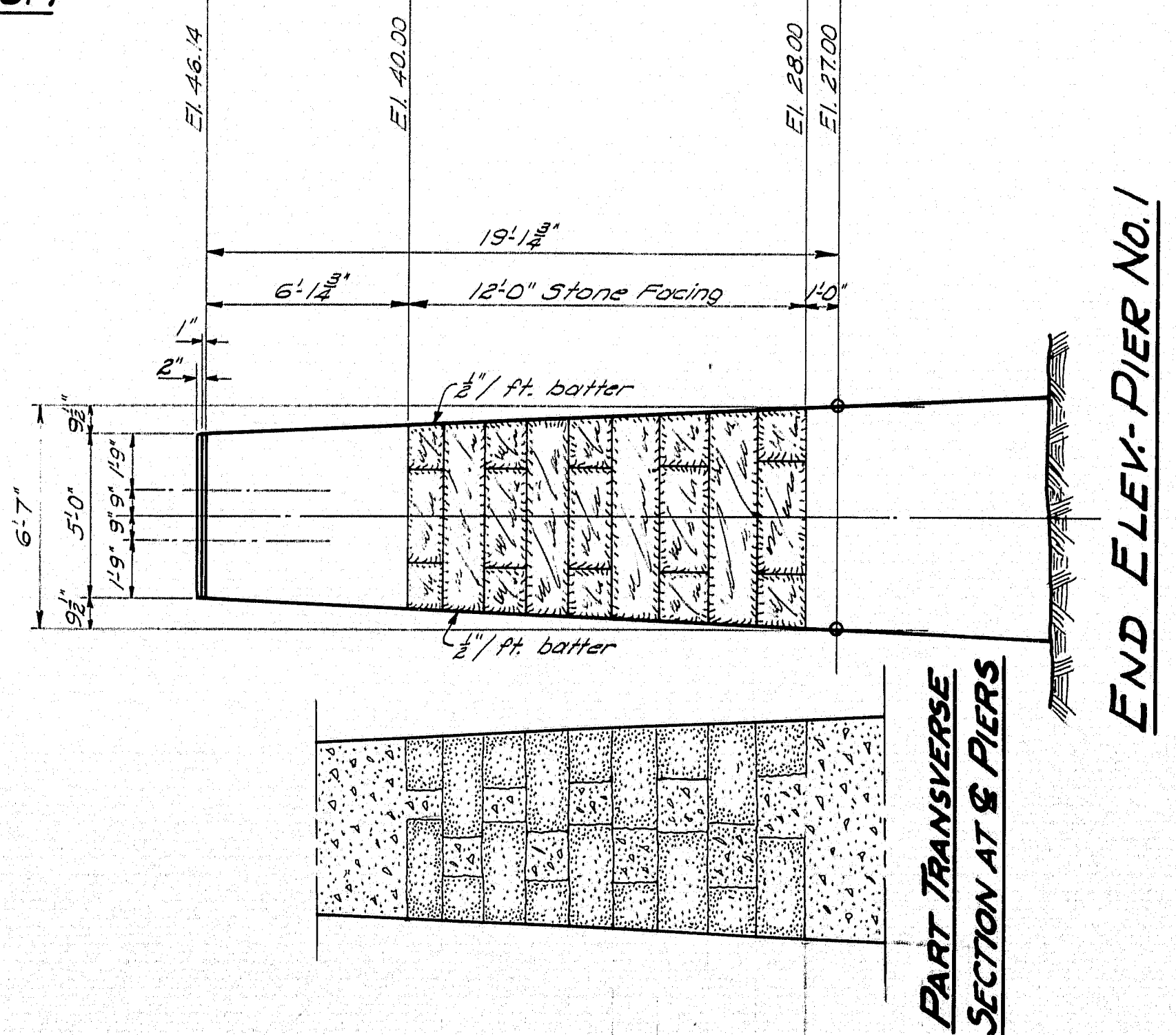
SIDE ELEV-PIER No. 1

Flow

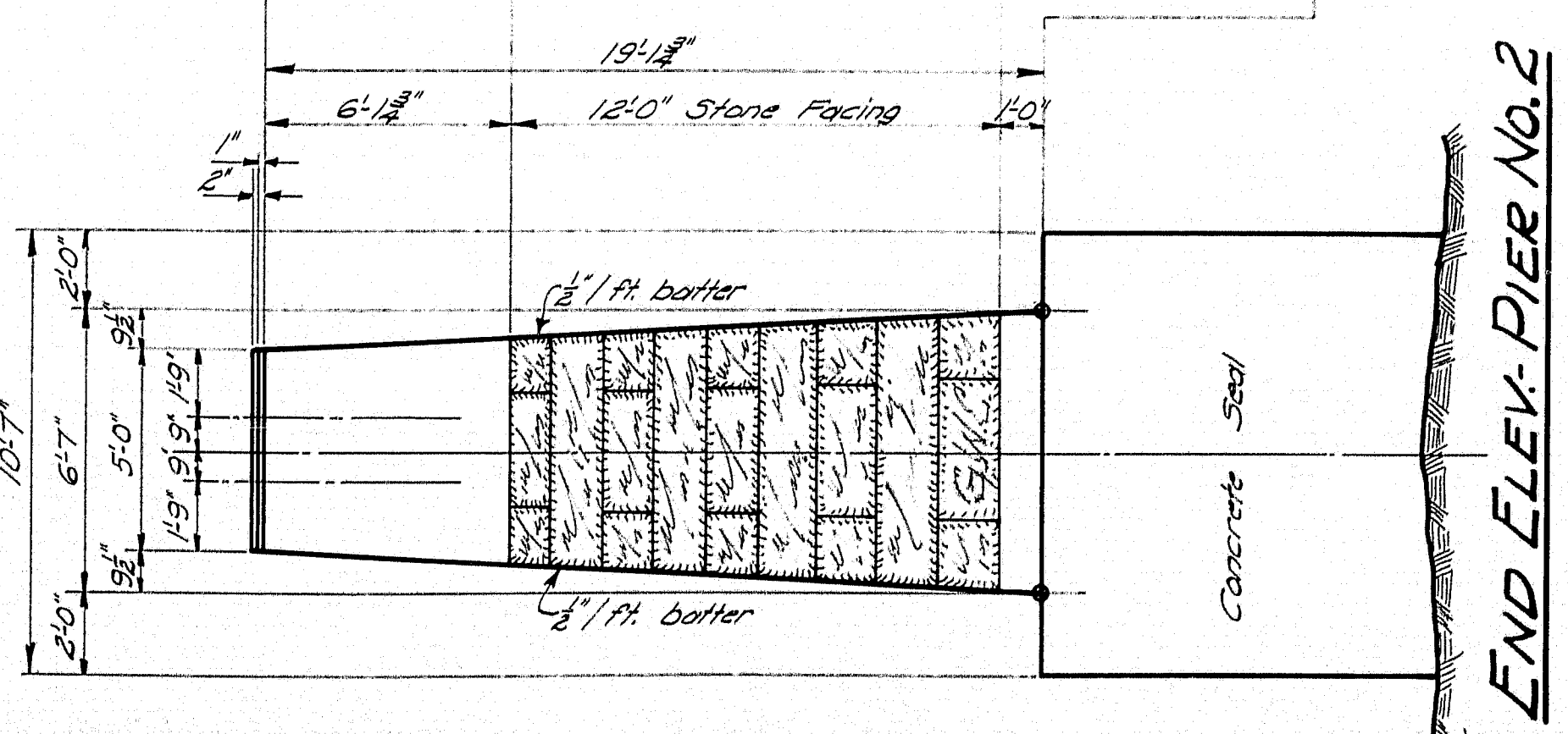


PLAN-PIER No. 2

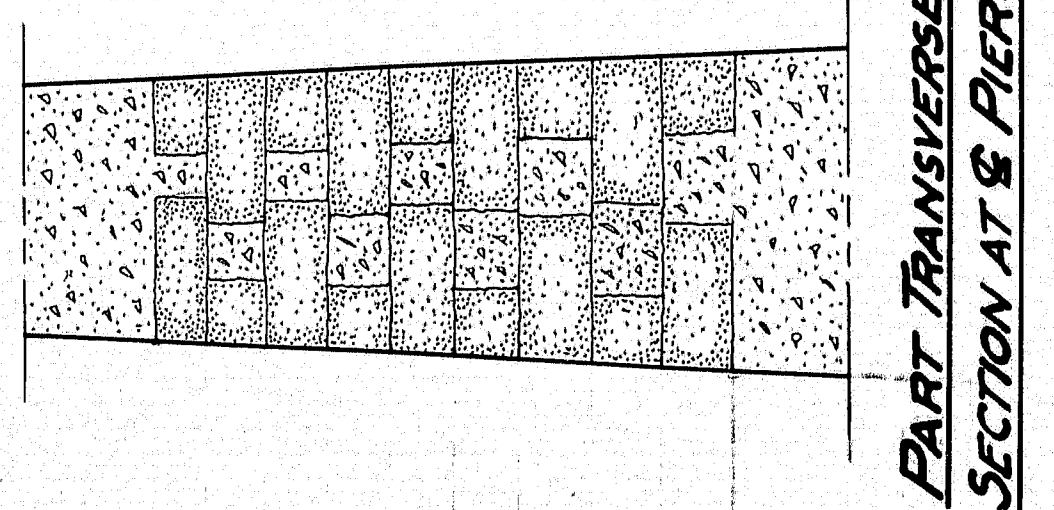
SIDE ELEV-PIER No. 2



END ELEV-PIER No. 1



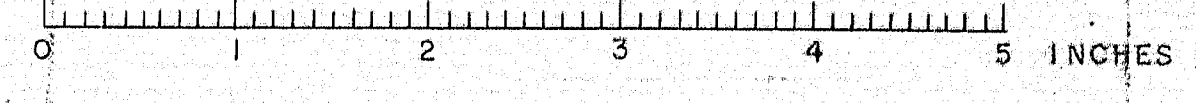
END ELEV-PIER No. 2

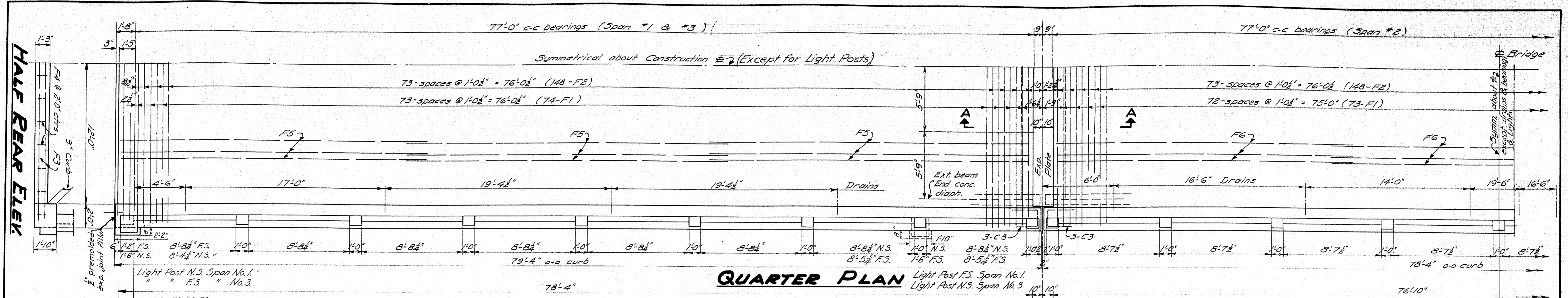


PART TRANSVERSE SECTION AT PIER

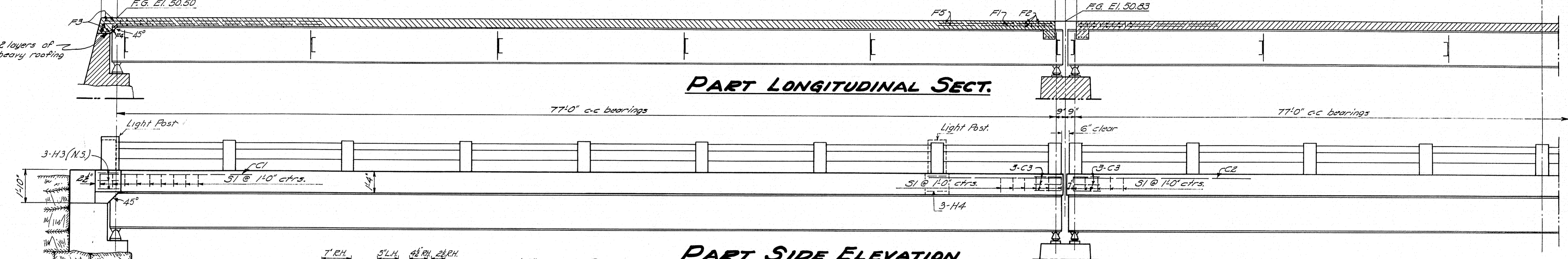
GENERAL NOTES
 Dress shaded bearing areas 1" larger all around than size of bearing plates to exact elevations shown.
 Suitable stones from the existing pier may be used for the stone facing in the new piers after being reshaped as necessary.
 Piers are alike above elevation 27.00. Bottom dimensions based on plane of elevation 27.00.

DESIGN - HAMILTON	BRIDGE - 5278
TRACE - CLARK	STATE HIGHWAY COMMISSION
CHECK - [Signature]	BRIDGE DIVISION
STAPLES POINT BRIDGE	
OVER	
PRESUMPCOT RIVER	
IN THE TOWN OF	
FALMOUTH	
CUMBERLAND COUNTY	
PIERS	
SHEET 4 OF 8 AUGUSTA, MAINE JAN. 1950	

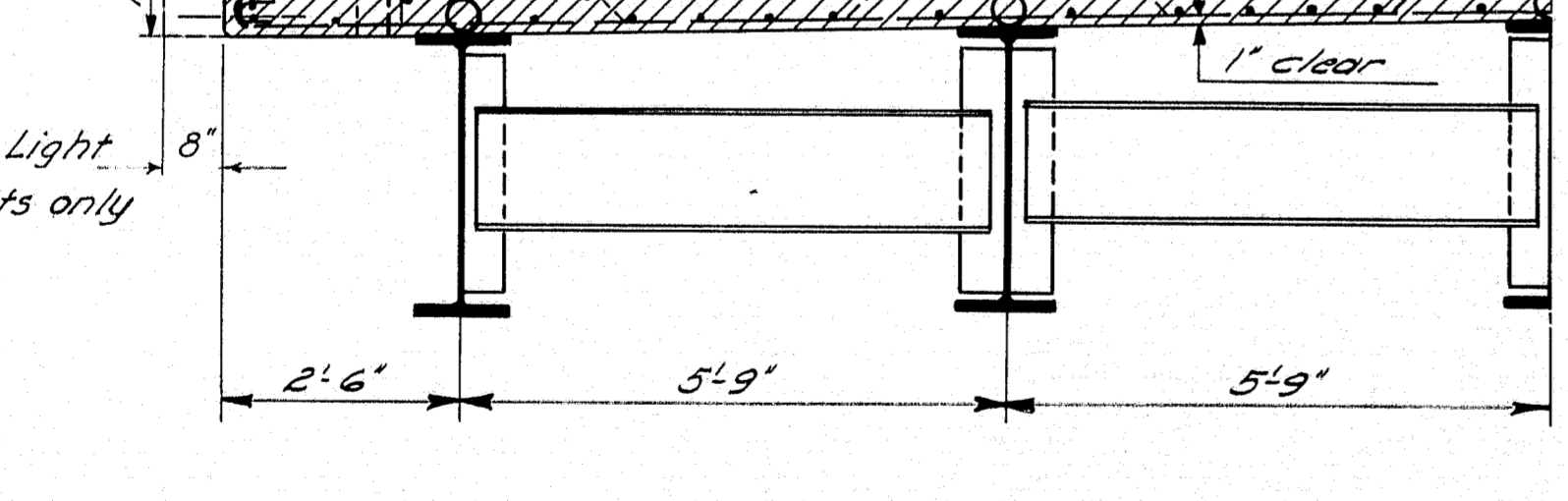
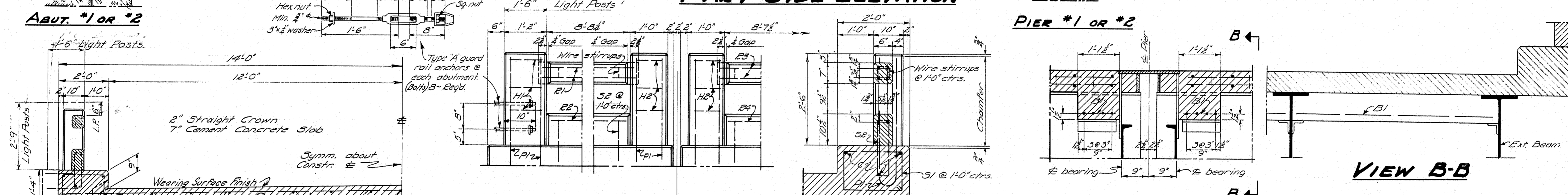




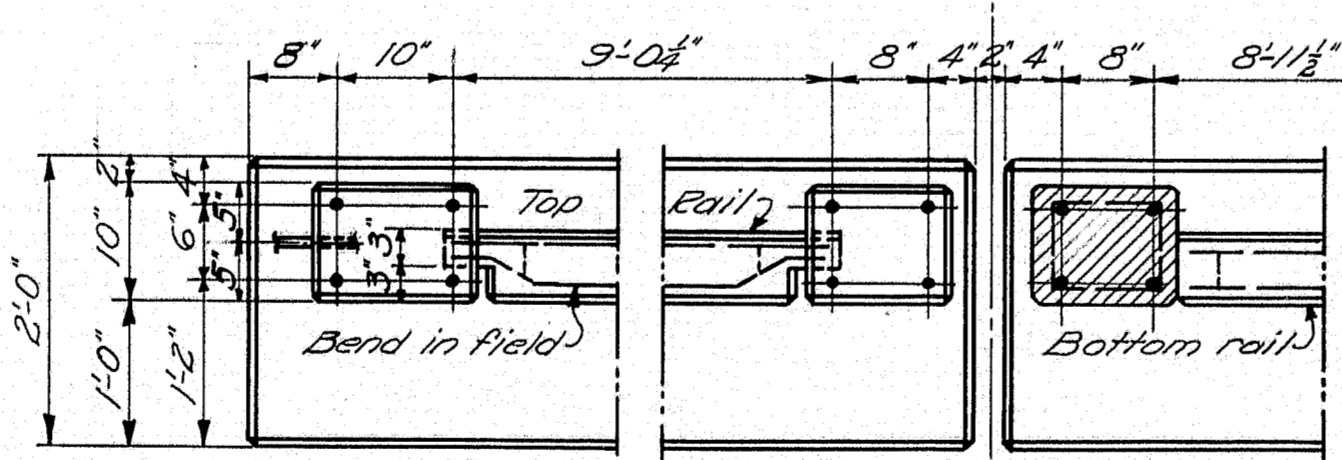
PART LONGITUDINAL SECT.



PART SIDE ELEVATION



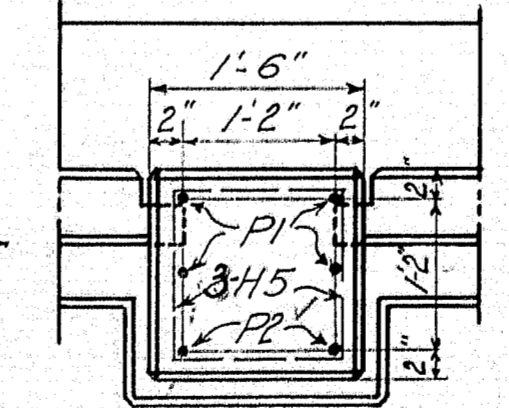
HALF TRANSV. SECT.



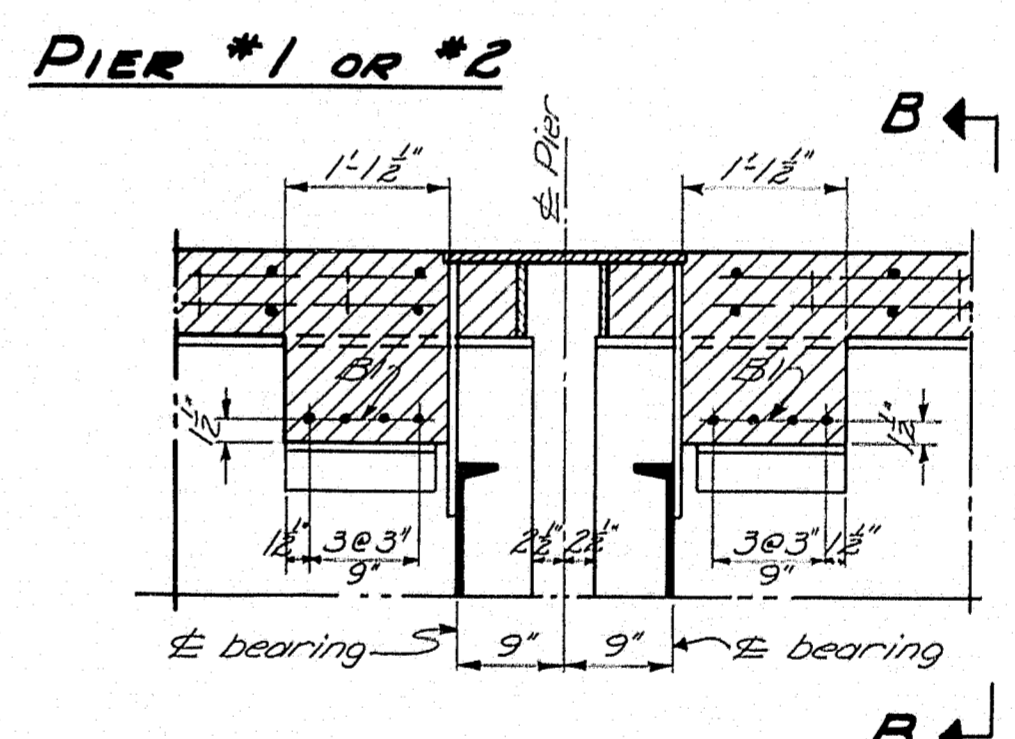
RAIL DETAILS

Curb to be cast with slab. Steel for posts and lower rail bar to be set before concrete is placed. The lower rail bar is to be cast in place. The top rail bar is to be precast and set in position so that the ends project into post forms 2 1/2". Wrap the tongue ends with two layers of heavy roofing.
All exposed edges of concrete to be chamfered 1/8" unless otherwise indicated.

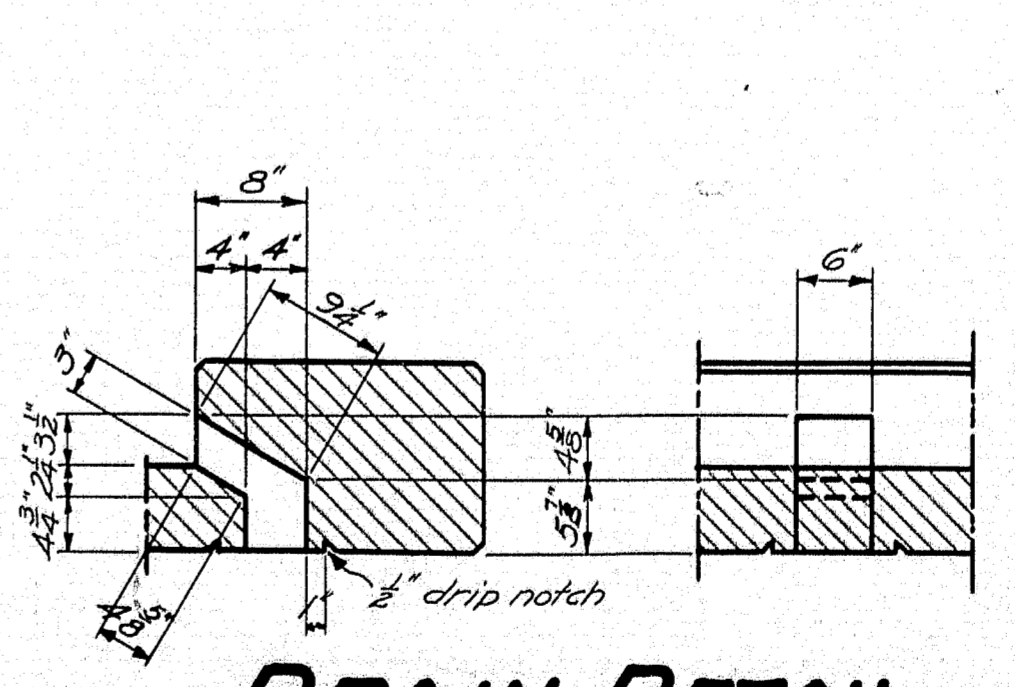
NOTE: Wire stirrups for top rail bar shall be constructed in the field from a single strand of #9 annealed wire. In forming the stirrups make a complete turn around each reinf. bar.



PLAN LIGHT POSTS
Note: Cut rail bar steel to fit at light posts.



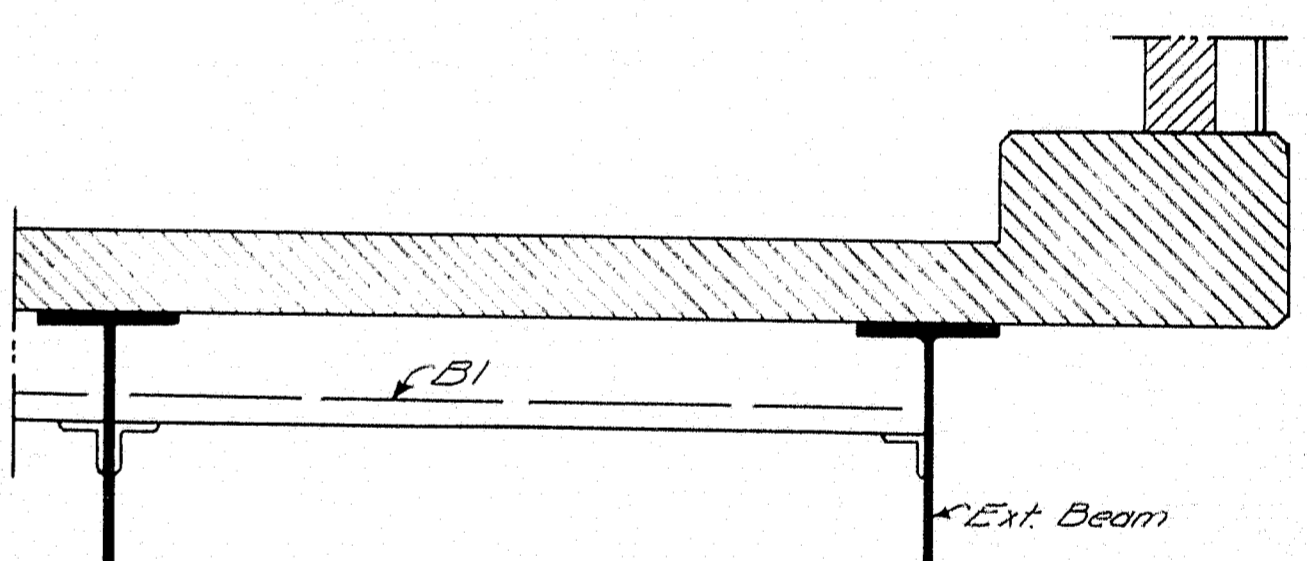
SECT. A-A



DRAIN DETAIL

Drain Forms, # 24 Ga. Galv. Iron
26" Dept.
(See Sh #8a for Lighting Details)

VIEW B-B



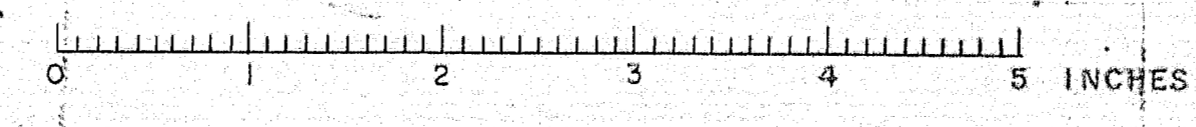
DESIGN

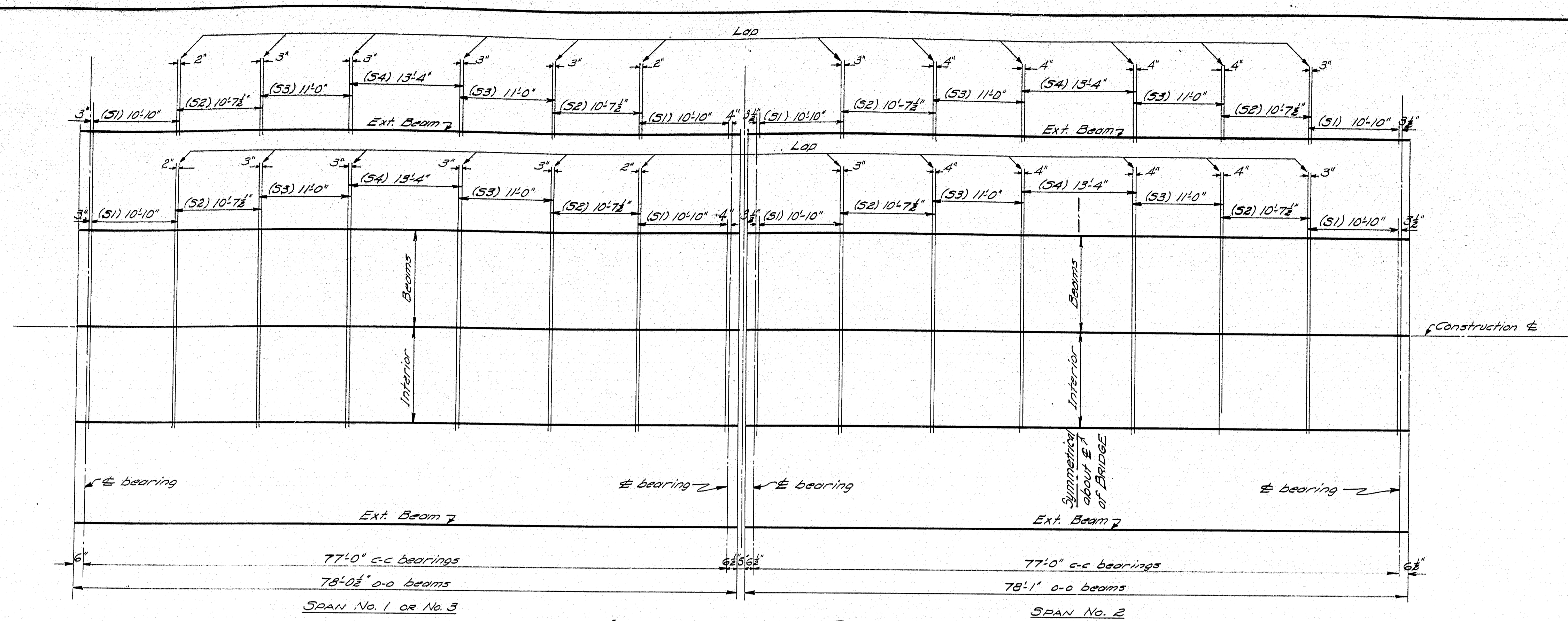
Loading - H 20-44
Fs = 18,000 psi
Fc = 3,000 psi
n = 10

DESIGN - HAMILTON	BRIDGE - 5278
TRACE - CLARK	STATE HIGHWAY COMMISSION
CHECK - L.W.B.	BRIDGE DIVISION
STAPLES POINT BRIDGE	
OVER	
PRESUMPCOT RIVER	
IN THE TOWN OF	
FALMOUTH	
CUMBERLAND COUNTY	
SUPERSTRUCTURE	
SHEET 5 OF 8 AUGUSTA, MAINE JAN. 1950	

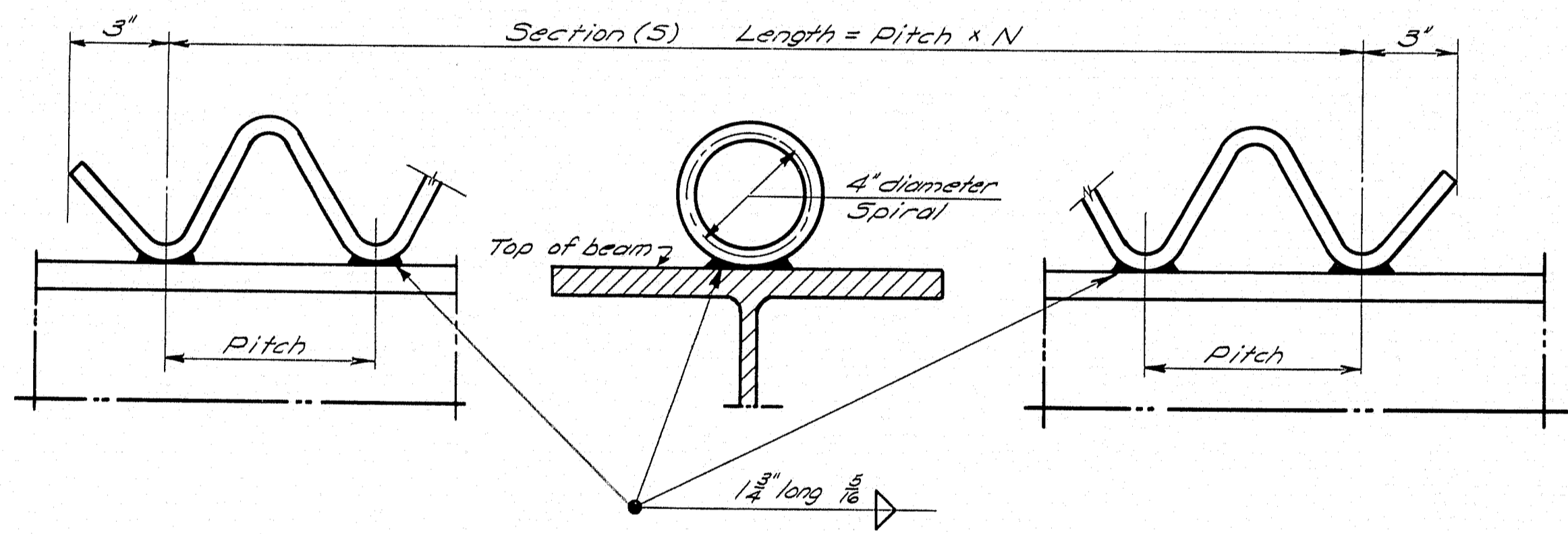
- ~ CONCRETE CLASSIFICATION ~**
- Class B - Abutment underpinning.
 - Class A - Abutment bridge seats, backwalls and superstructure slab.
 - Class X - Concrete in piers, placed in unwatered forms.
 - Class S - Concrete piers placed under water.
 - Class Y - Concrete rail.

Revised for Lights - Aug. 30, 1950 - Hamilton C.A.B.





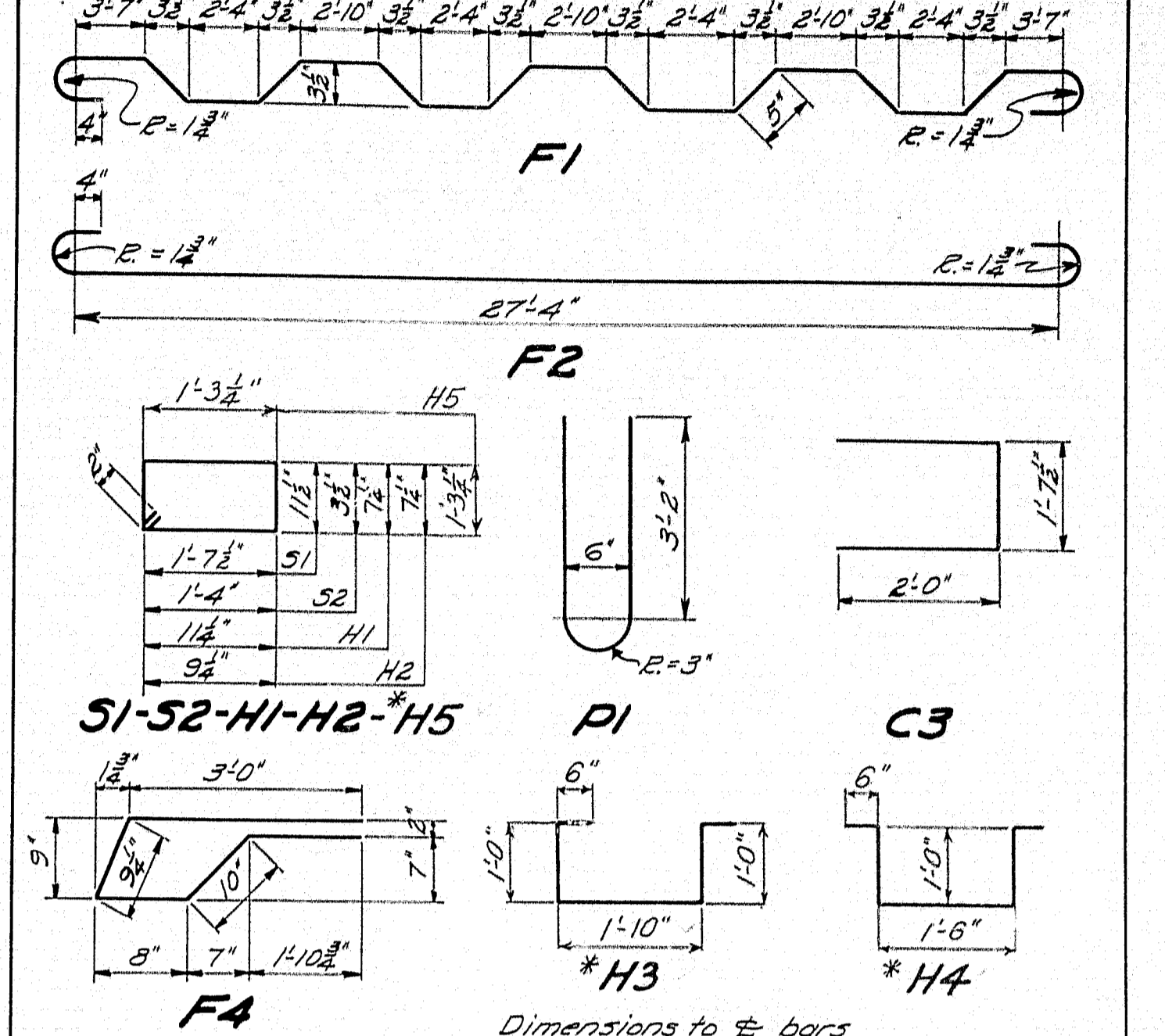
LOCATION OF SPIRALS



SPIRAL DETAILS

SPIRAL DATA						
Section	Bar Size	No.	Diameter	Pitch	N	Length
S1	3/8"	30	4"	6 1/2"	20	10'-10"
S2	"	30	"	8 1/2"	15	10'-7 1/2"
S3	"	30	"	12"	11	11'-0"
S4	"	15	"	16"	10	13'-4"

REINFORCING STEEL
BENT BARS



Mark	Size	No.	Length	Location
F1	3/8"	221	29'-11"	Superstructure Slab
F2	3/8"	444	28'-11"	"
S1	3/8"	470	5'-6"	Curb
S2	3/8"	432	3'-7"	Bottom rail bar and Curb
H1	3/8"	12	3'-5"	End rail posts
H2	3/8"	150	3'-1"	Int. " "
P1	3/8"	108	7'-1"	All " "
C3	3/8"	24	5'-7"	Curbs at Piers
F4	3/8"	28	7'-2"	End of slabs at abutments
* H3	3/8"	6	4'-10"	Curb at end light posts
* H4	3/8"	6	4'-6"	" " Int. " "
* H5	3/8"	12	5'-5"	Light Posts.

STRAIGHT BARS									
Mark	Size	No.	Length	Location	Mark	Size	No.	Length	Location
F3	3/8"	10	27'-6"	Slab @ ends	A1	3/8"	20	27'-6"	Abutts.
F5	3/8"	264	27'-4"	Slab @ ends	A2	3/8"	36	3'-0"	"
F6	3/8"	132	26'-9"	Slab - Span #2	A3	3/8"	36	4'-0"	"
B1	3/8"	64	5'-7"	Diaphragms	A4	3/8"	10	27'-6"	"
C1	3/8"	36	27'-6"	Curbs	A5	3/8"	12	5'-0"	"
C2	3/8"	18	26'-9"	"	K	3/8"	20	4'-0"	"
E1	3/8"	128	9'-0"	Top rail bar spans #1, #2, #3	* P2	3/8"	8	3'-8"	Light Posts
E2	3/8"	64	8'-6"	Bottom rail bar spans #1, #2, #3					
E3	3/8"	64	8'-11 1/2"	Top rail bar span #2					
E4	3/8"	32	8'-5 1/2"	Bottom rail bar span #2					

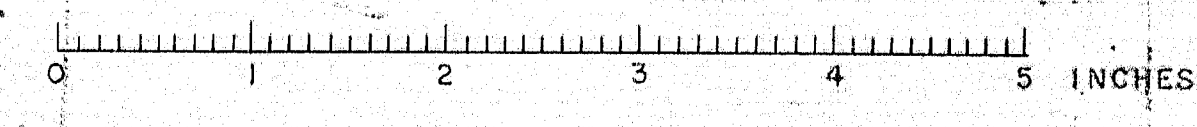
* Added due to revisions for Light Posts.

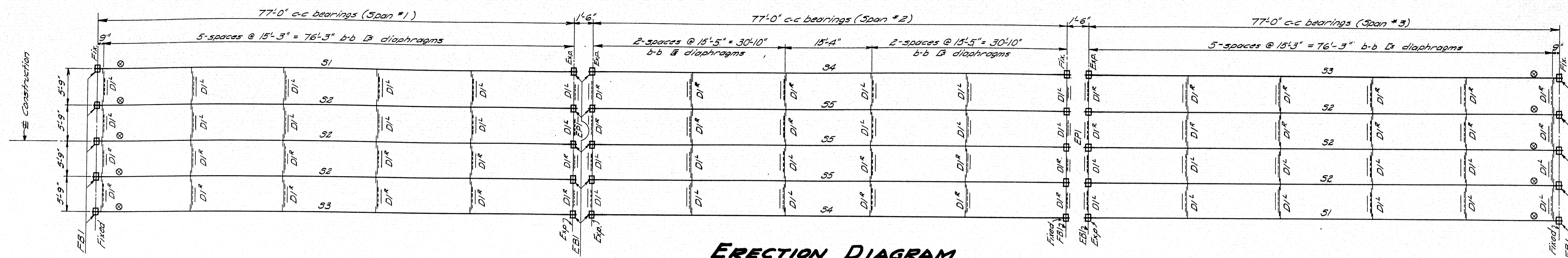
DESIGN - HAMILTON
TRACE - CLARK
CHECK - L.V.B.

BRIDGE - 5278

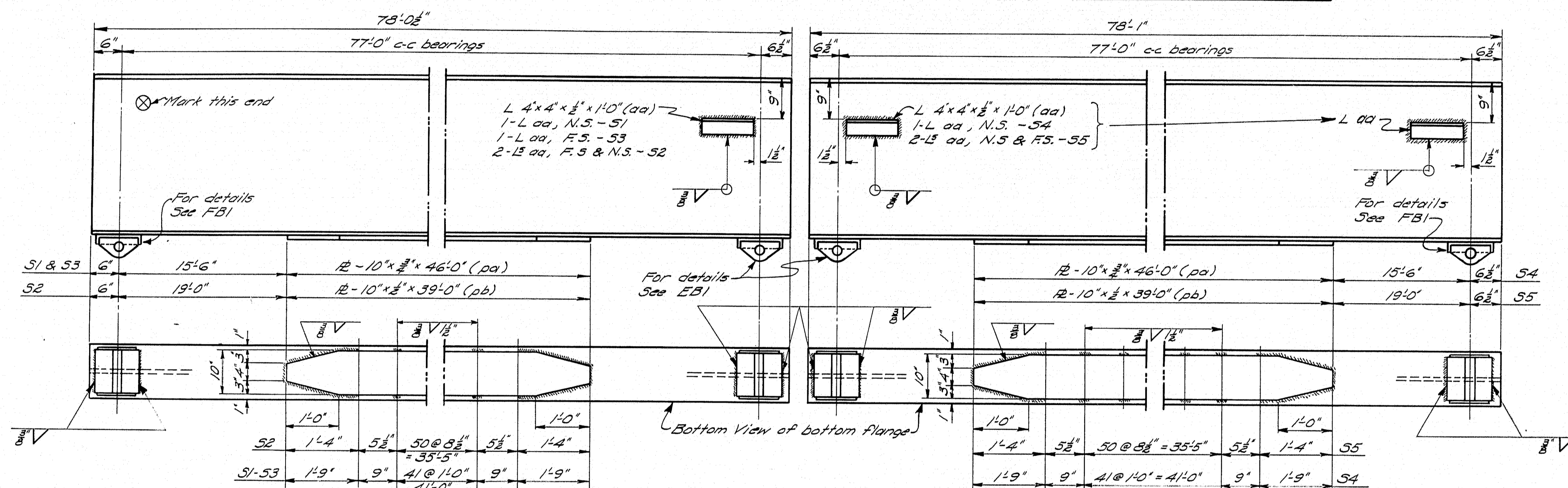
STATE HIGHWAY COMMISSION
BRIDGE DIVISION

STAPLES POINT BRIDGE
OVER
PRESUMPCOT RIVER
IN THE TOWN OF
FALMOUTH
CUMBERLAND COUNTY
REINFORCING STEEL & SPIRAL DETAIL
SHEET 6 OF 8 AUGUSTA, MAINE JAN. 1950





ERECTOR DIAGRAM



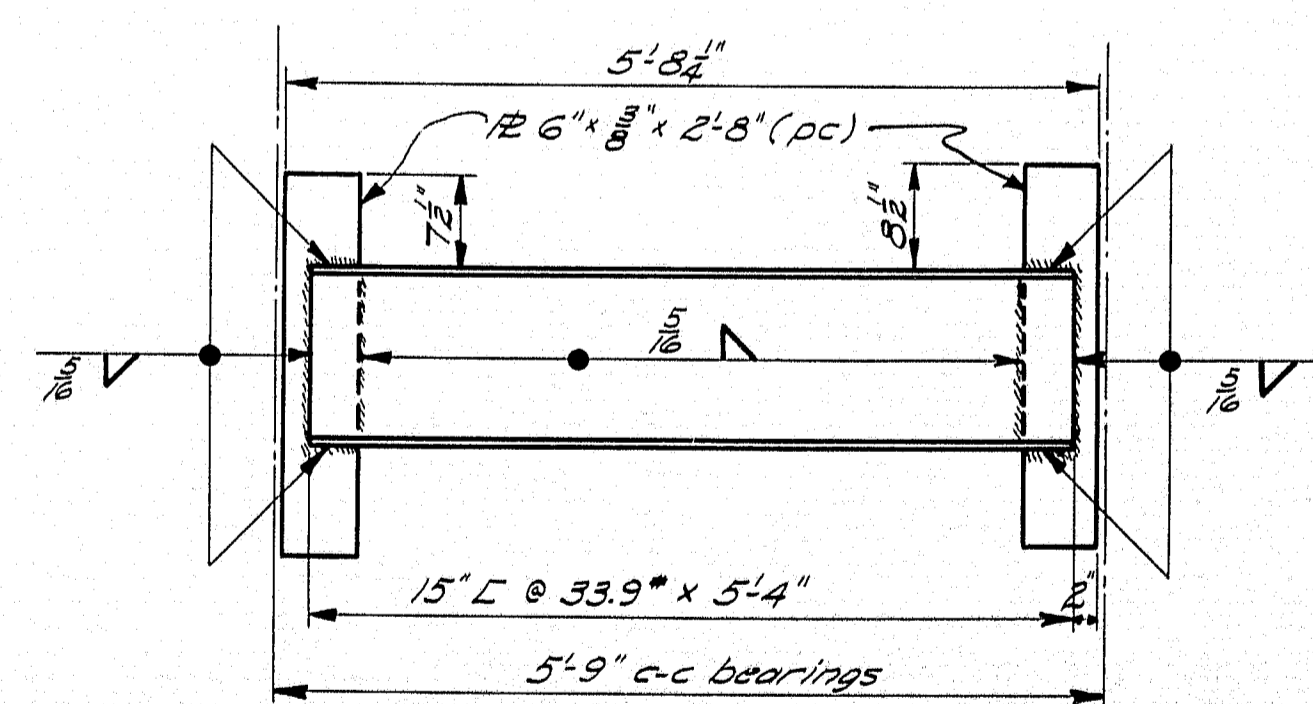
S1 - 36" WF @ 150" x 78'-0 1/2" - 2 reqd. - 3" Camber
 S2 - 36" WF @ 150" x 78'-0 1/2" - 6 reqd. - 3" Camber
 S3 - 36" WF @ 150" x 78'-0 1/2" - 2 reqd. - 3" Camber

S4 - 36" WF @ 150" x 78'-1" - 2 reqd. - 3" Camber
 S5 - 36" WF @ 150" x 78'-1" - 3 reqd. - 3" Camber

Mark	No.	Description
S1	2	36" WF @ 150" x 78'-0 1/2"
S2	6	36" WF @ 150" x 78'-0 1/2"
S3	2	36" WF @ 150" x 78'-0 1/2"
S4	2	36" WF @ 150" x 78'-1"
S5	3	36" WF @ 150" x 78'-1"
D1 ^R	36	15" L @ 33.9" x 5'-4"
D1 ^L	36	15" L @ 33.9" x 5'-4"
FBI	10	Fixed Bearing
EBI	20	Expansion Bearings
EPI	2	Expansion Plate

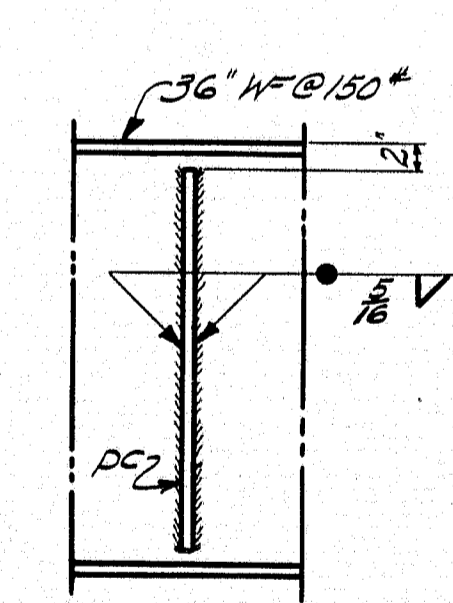
SPECIFICATIONS

Maine State Highway Commission, Bridge Division, Specifications for Steel Highway Bridges, Nov. 1945. Paint one shop coat of red lead and all, except as noted and on the contact surfaces.

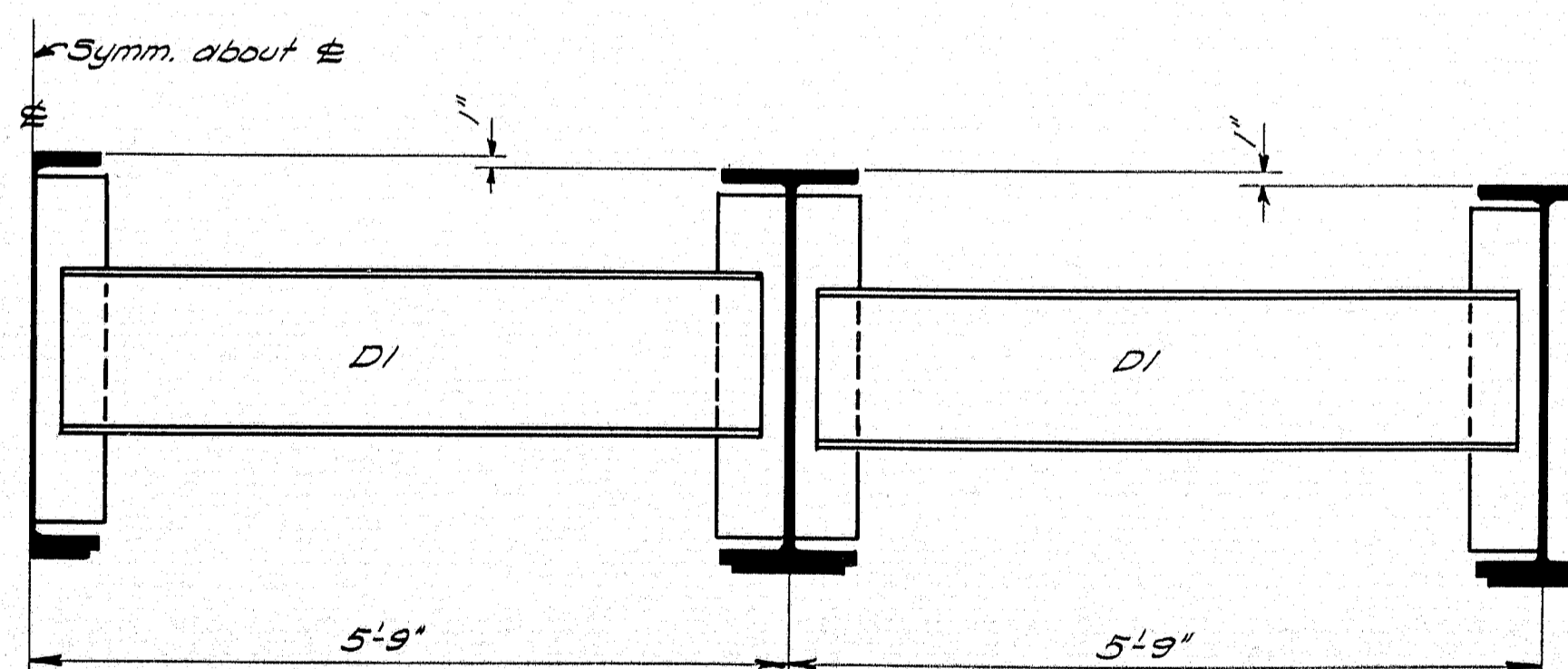


DIAPHRAGM-DI

D1^R as shown - 36 required
 D1^L app. hand - 36 required



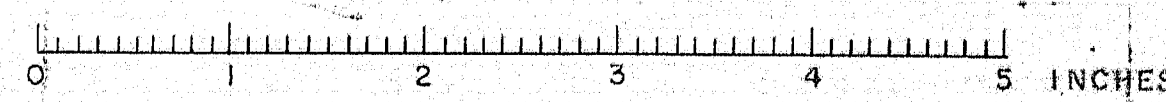
DIAPHRAGMS TO BEAMS

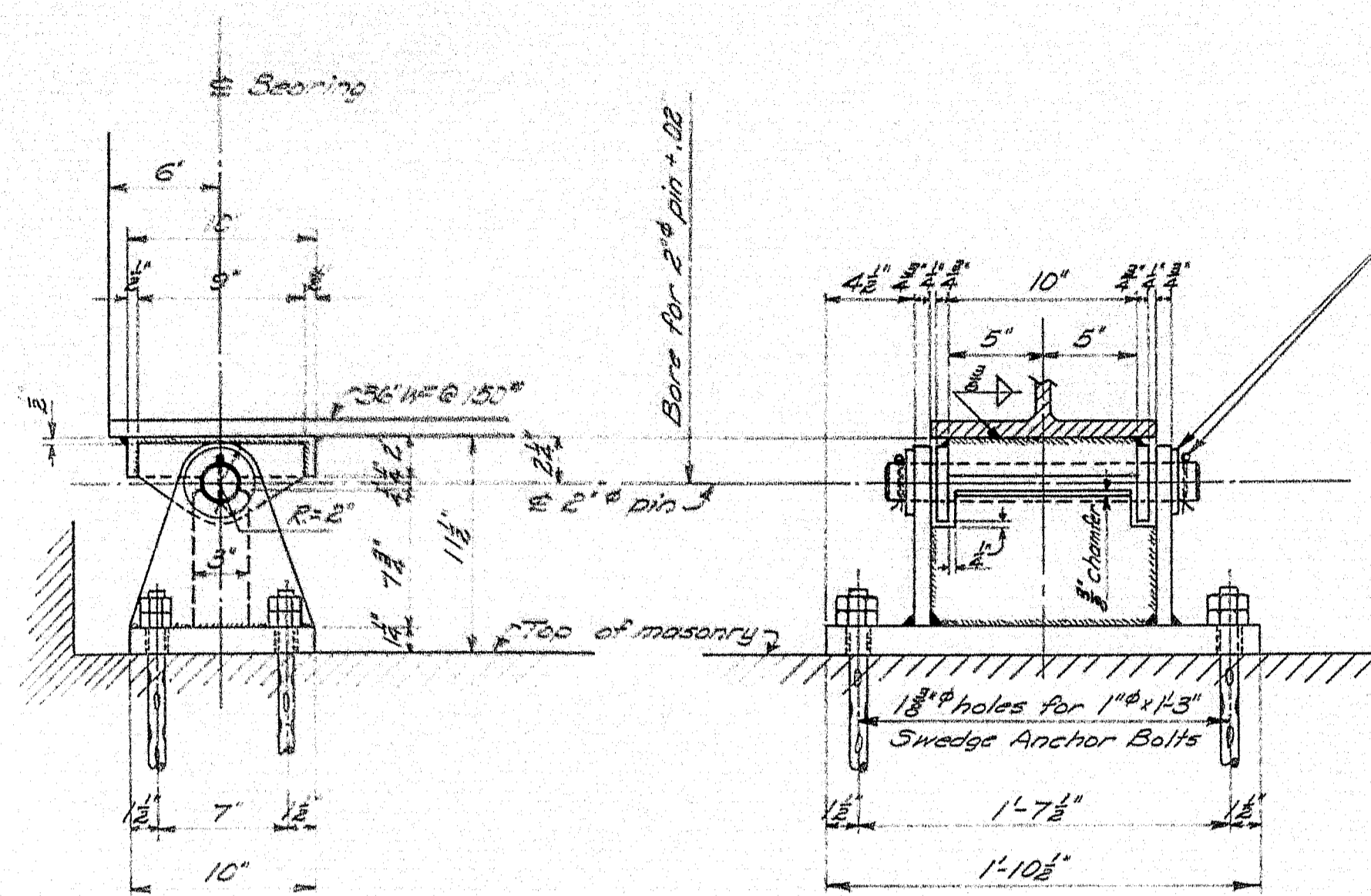


HALF TRANSV. SECTION

Work this sheet with sheet # 8

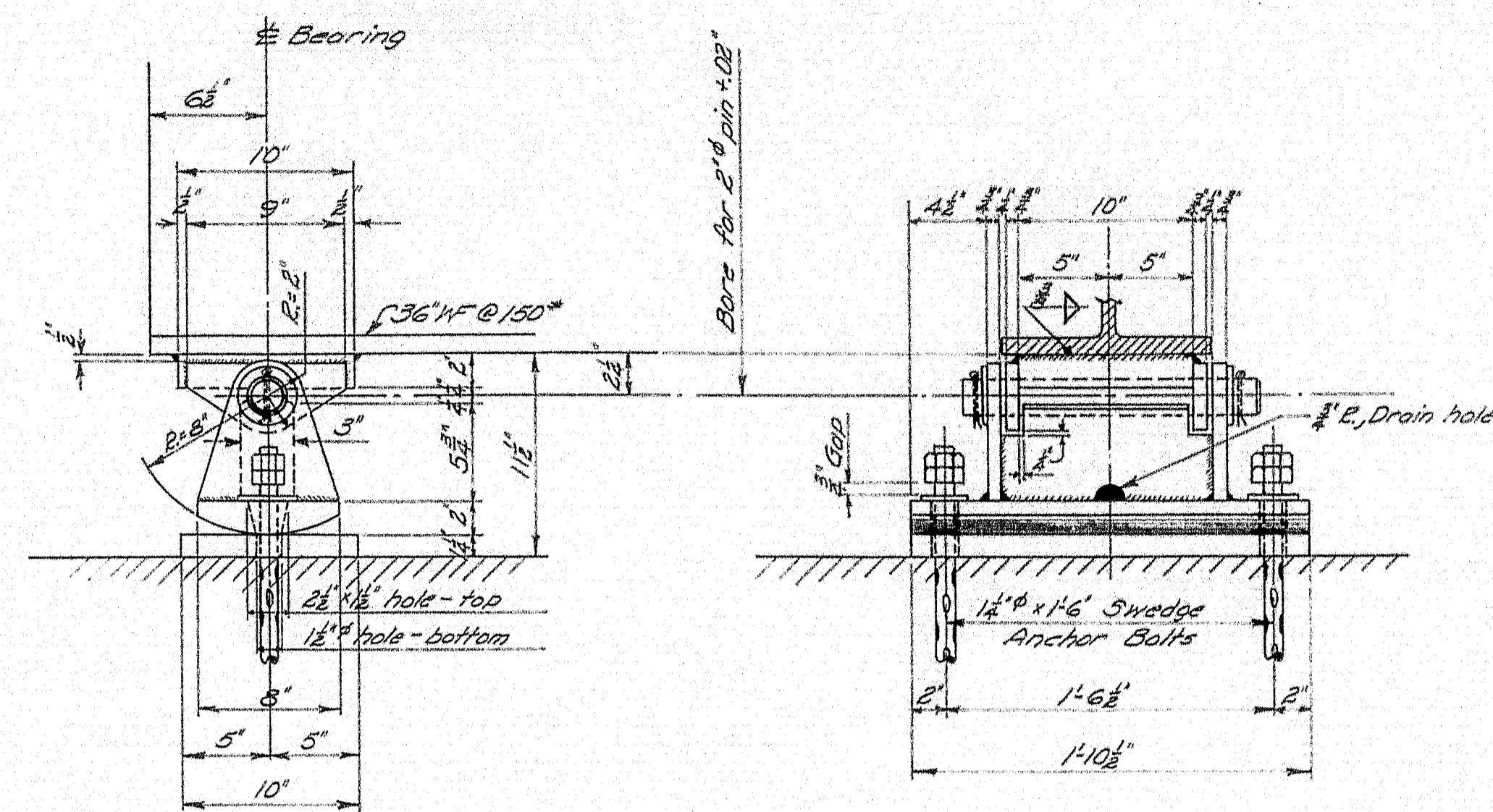
DESIGN - HAMILTON	BRIDGE - 5278
TRACE - OLARK	
CHECK - L.J.B.	
STATE HIGHWAY COMMISSION BRIDGE DIVISION	
STAPLES POINT BRIDGE	
OVER	
PRESUMSCOT RIVER	
IN THE TOWN OF	
FALMOUTH	
CUMBERLAND COUNTY	
STRUCTURAL STEEL	
SHEET 7 OF 8 AUGUSTA, MAINE JAN. 1950	





FIXED BEARING-FBI

15-Eng'd.

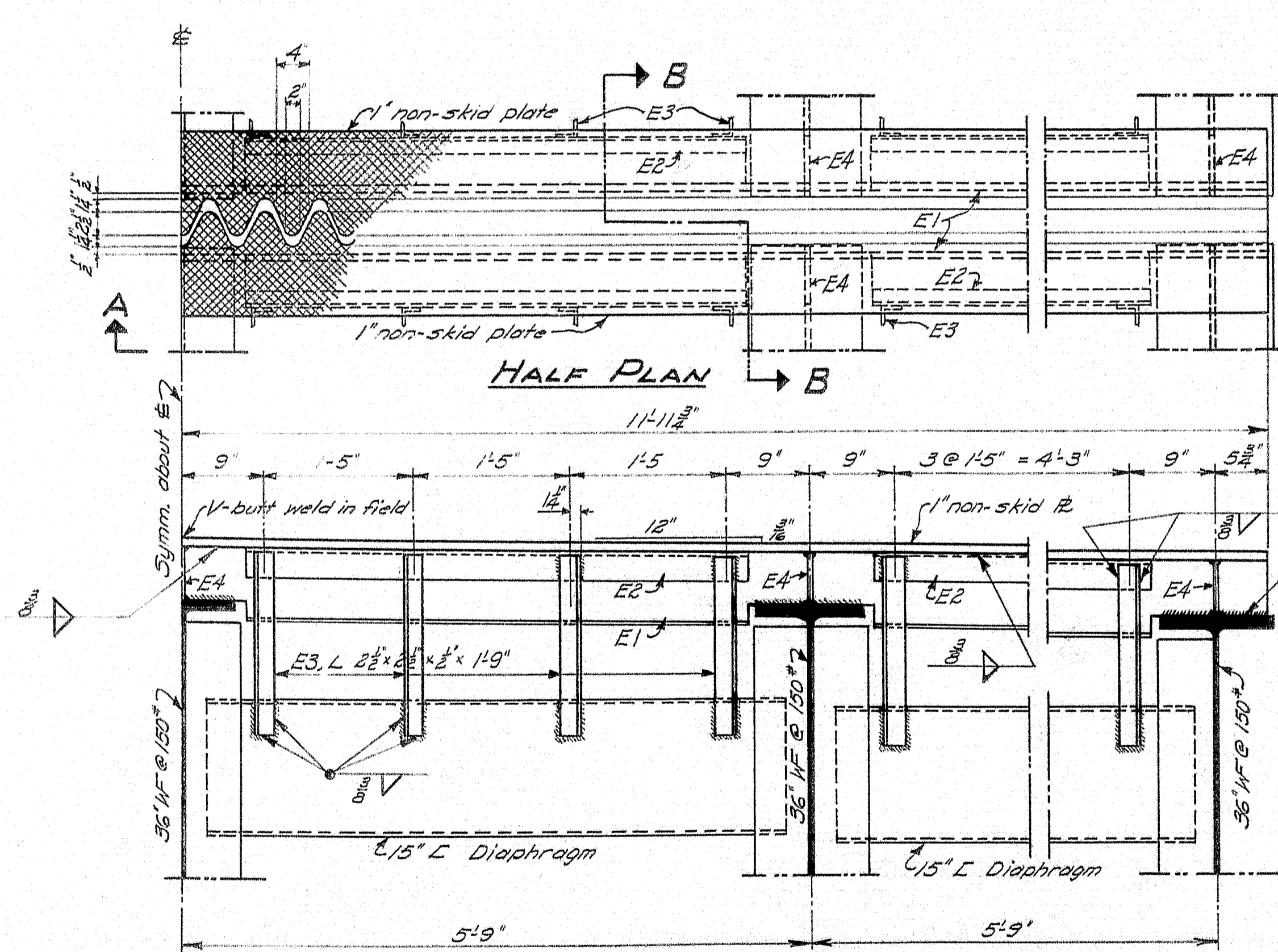


EXPANSION BEARING-EBI

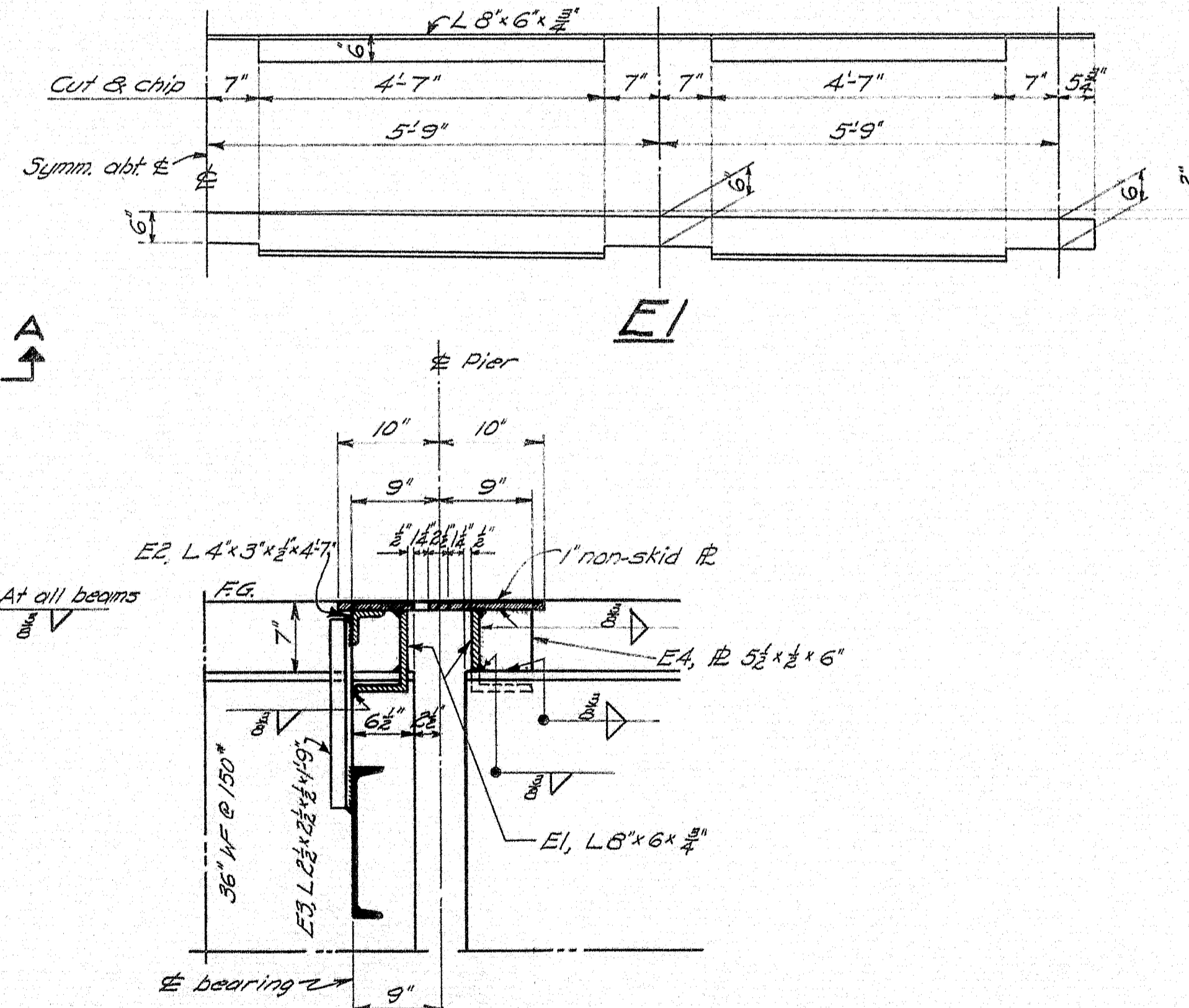
15-Eng'd.

NOTE

1/2" Fillet Welds, unless otherwise noted.
Paint one shop coat red lead and oil, except contact surfaces.
Machine finished surfaces to be painted one coat of hot mixture white lead and tallow.



SECTION A-A



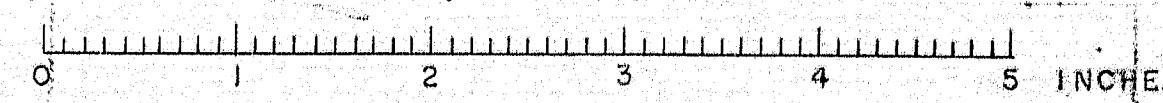
SECTION B-B

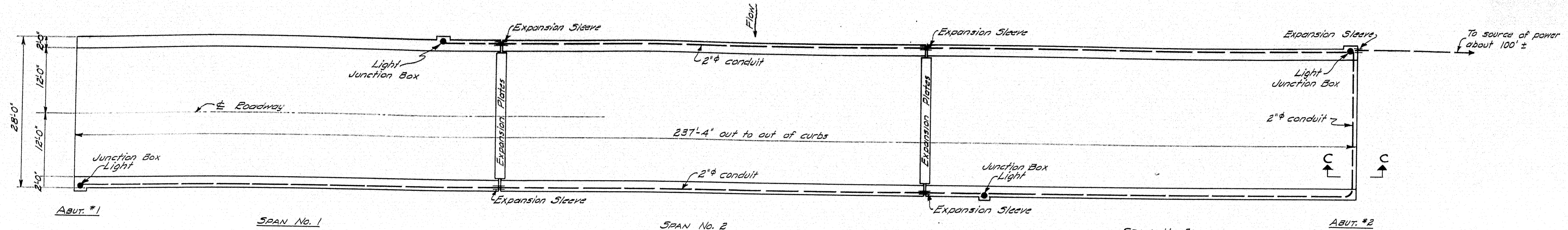
EXPANSION PLATE DETAILS-EPI

2- Required
Paint one shop coat red lead and oil unless otherwise noted.
Complete shop details of the expansion plates shall be furnished by the contractor, for approval by the Engineer, before fabrication is begun.

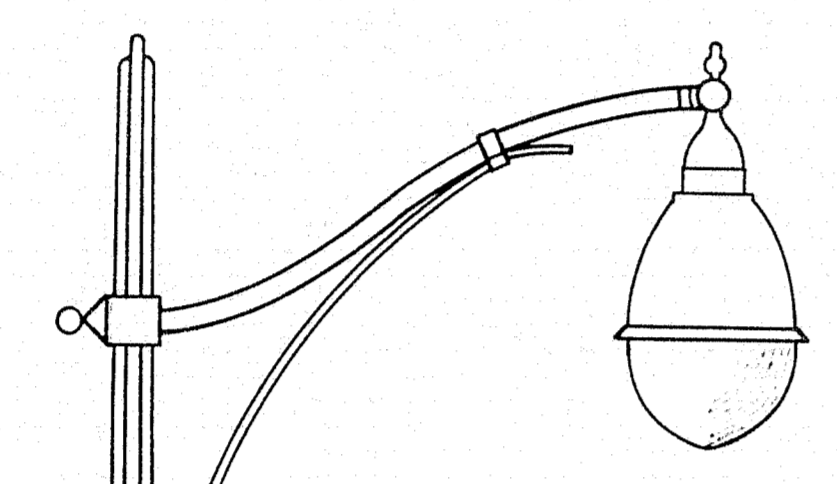
Work this sheet with sizes 97

DESIGN - HAMILTON	BRIDGE - 5278
TRACE - CLARK	
CHECK - L.V.E.	
STATE HIGHWAY COMMISSION BRIDGE DIVISION	
STAPLES POINT BRIDGE OVER PRESUMPCOT RIVER IN THE TOWN OF FALMOUTH CUMBERLAND COUNTY	
STRUCTURAL STEEL SHEET 3 OF 5 AUGUSTA, MAINE JAN. 1950	





GENERAL PLAN



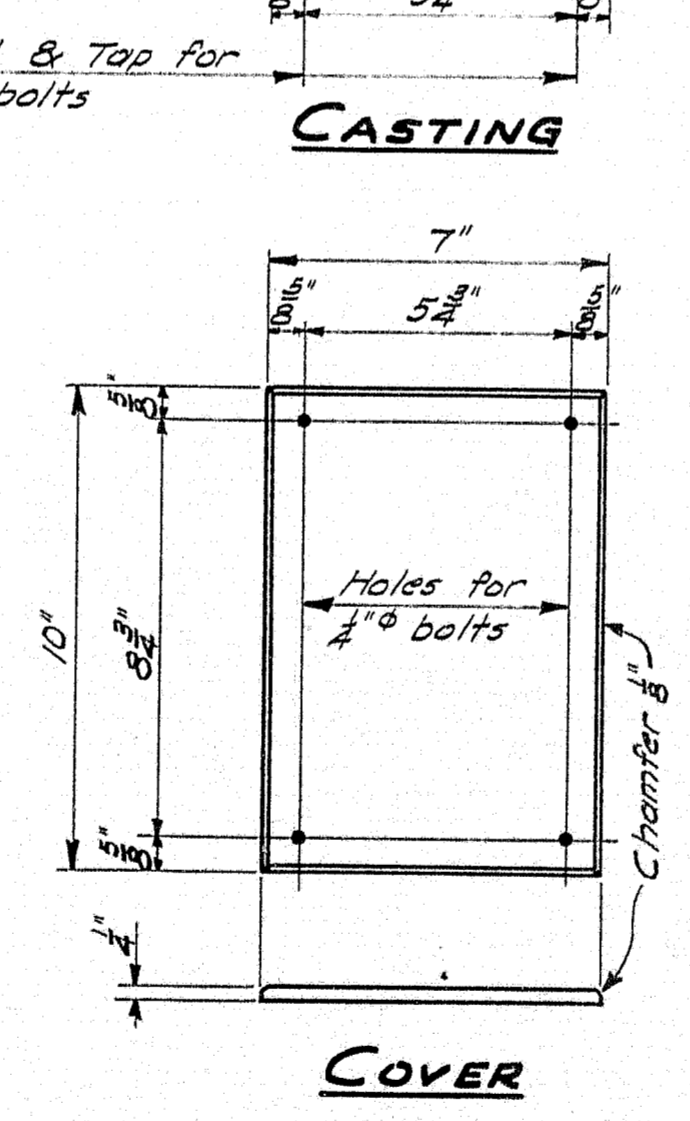
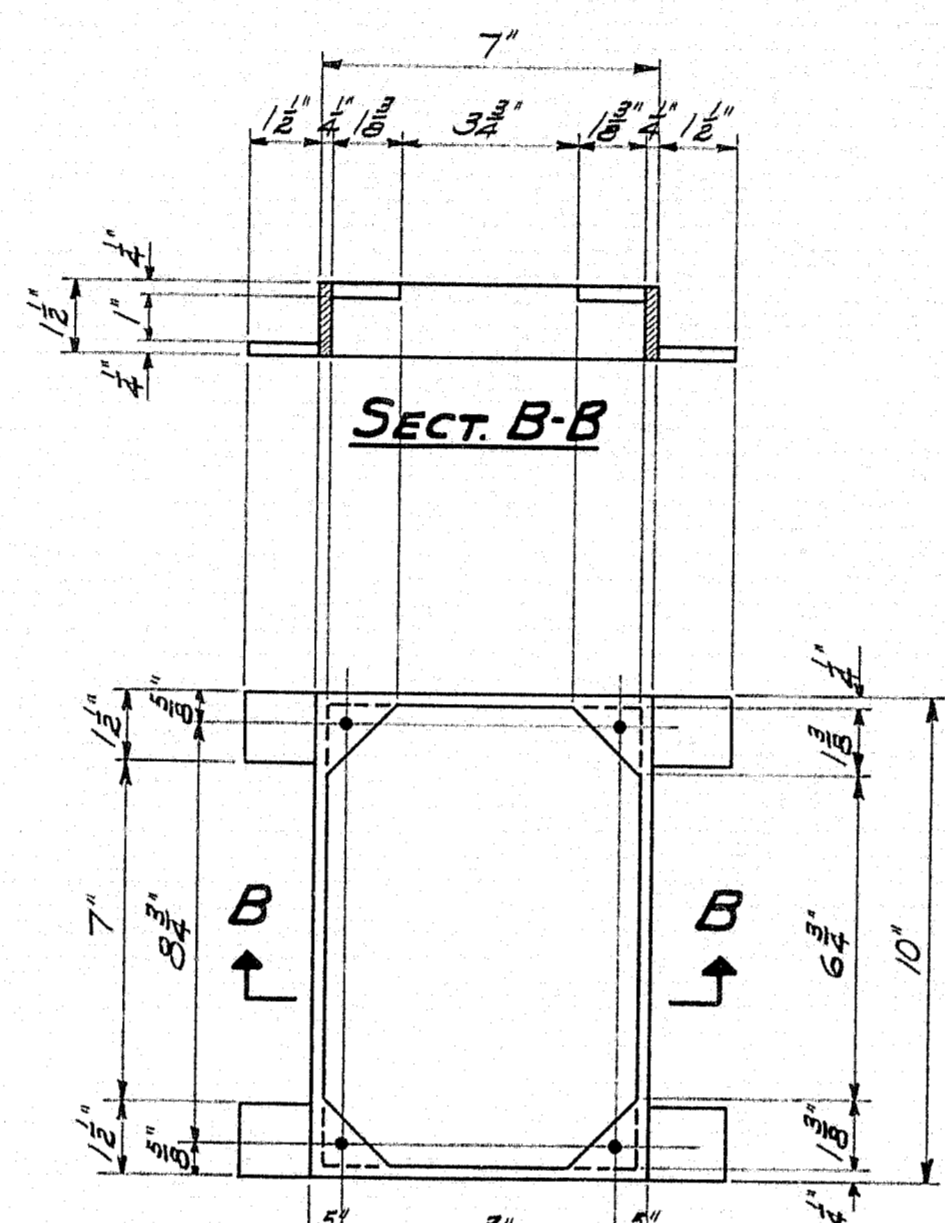
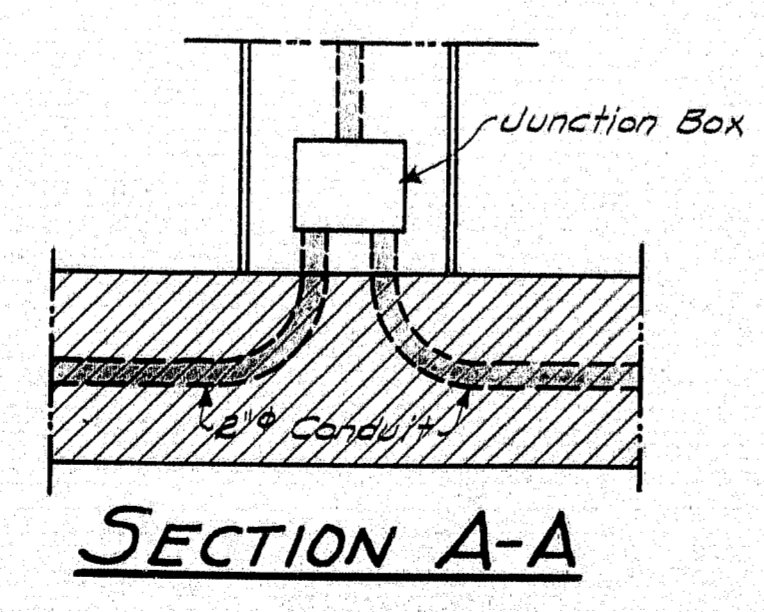
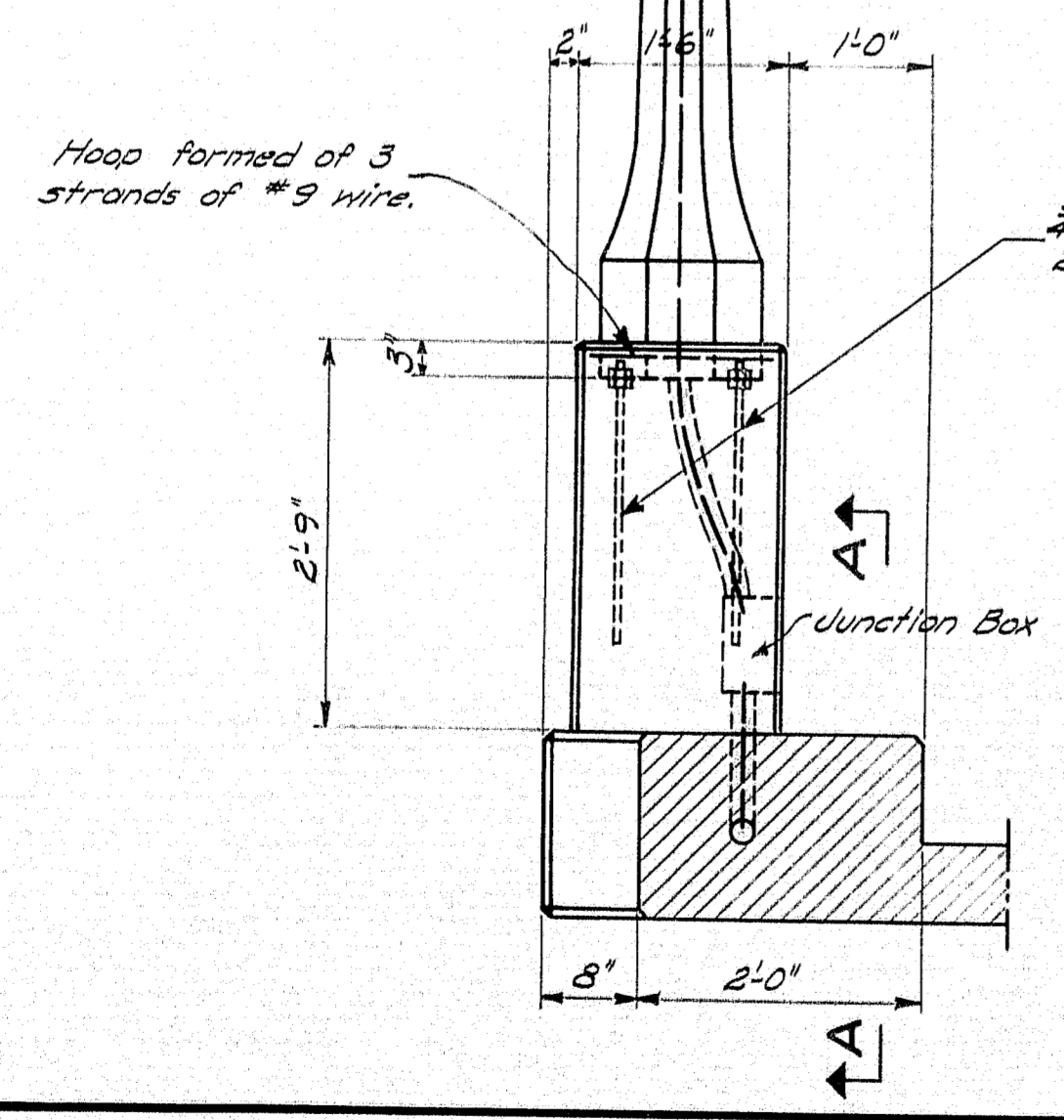
LIGHTING SYSTEM

Four (4) Light Units required. General Electric material listed.
 Standards with brackets Hy-Lite design No. 610-A433. (Incandescent fixtures to be furnished by others.)
 Equivalent standards and brackets may be substituted for those listed, if approved by the Engineer.
 All conduit 2".
 Location shown in "GENERAL PLAN" above.

LEGEND

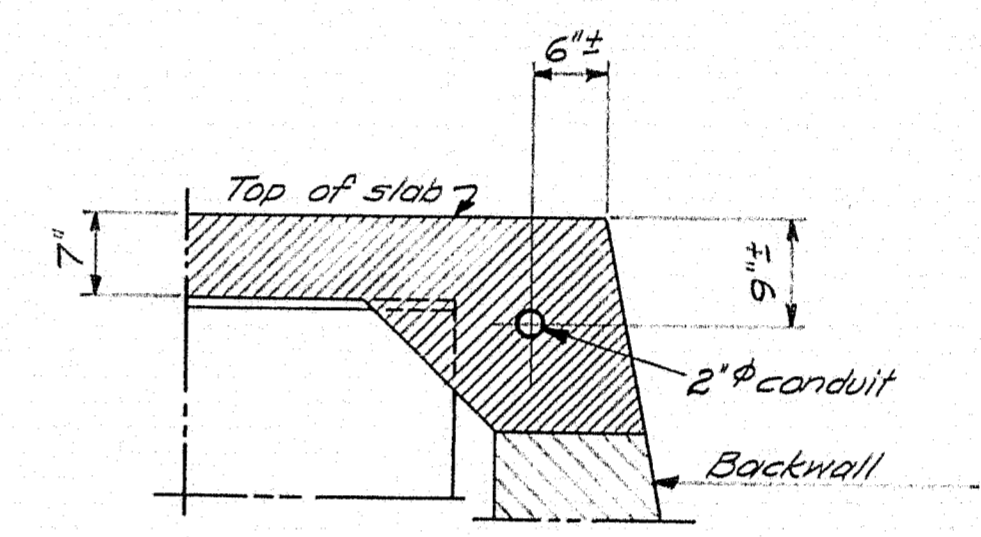
— Lights
 - - - 2" Conduit

Note: Wiring cable, not part of this contract.

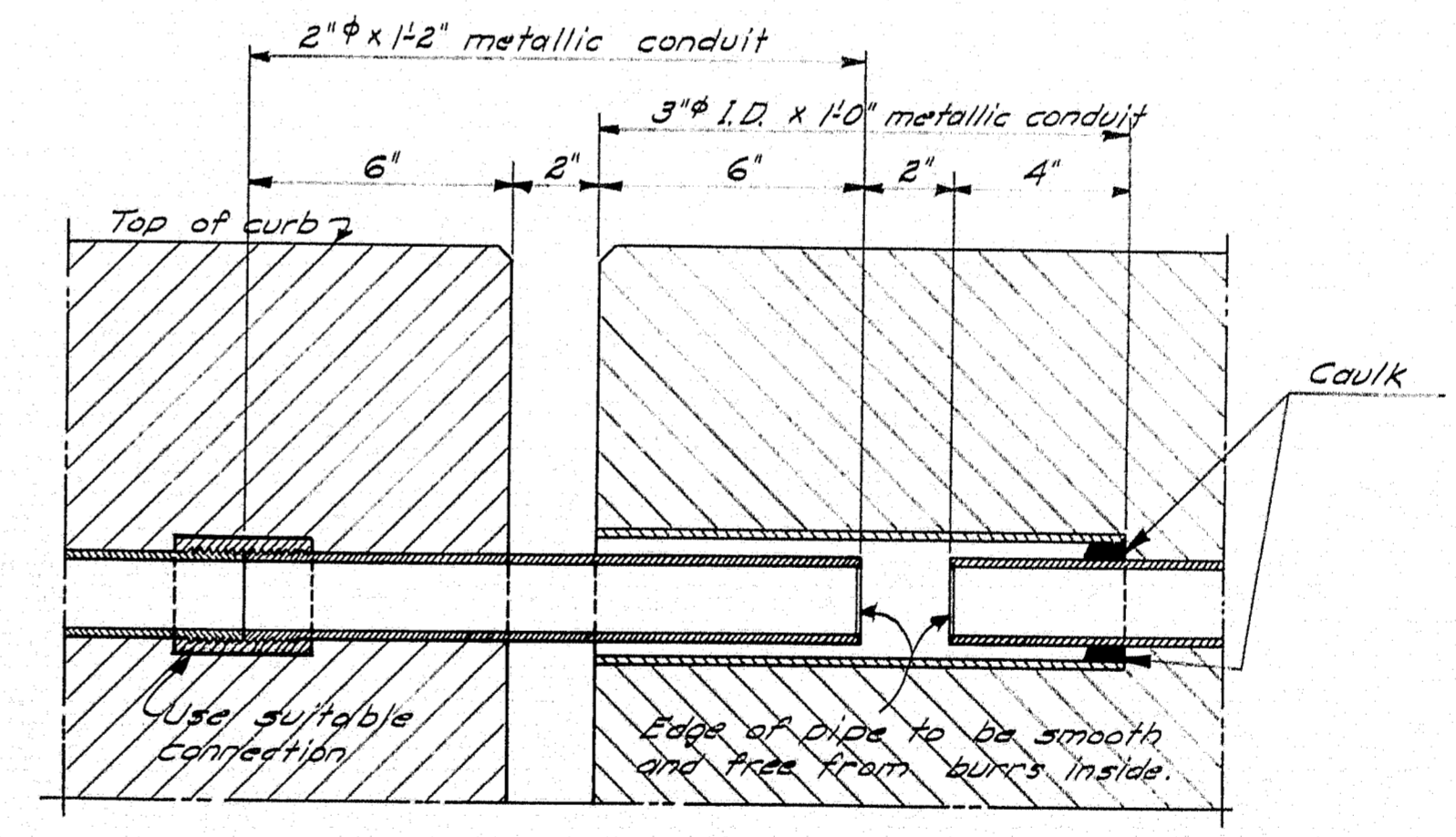


JUNCTION BOX DETAILS

4 Castings required (Zinc)
 4 Covers required (Zinc)
 16 Bolts 1/4" x 5/8" required (Brass)
 Other type junction boxes of non-corrosive material may be used, if approved by the Engineer.



SECTION C-C



EXPANSION SLEEVE DETAIL

Detail shown is at pier, use same sleeve at abutment #2
 5 - Required.

DESIGN - HAMILTON
 TRACE - CLARK
 CHECK - C.A.B.

STATE HIGHWAY COMMISSION
 BRIDGE DIVISION

BRIDGE - 5278

STAPLES POINT BRIDGE
 OVER
PRESUMPCOT RIVER
 IN THE TOWN OF
FALMOUTH
CUMBERLAND COUNTY

LIGHTING DETAILS
 SHEET 8a OF 8 AUGUSTA, MAINE AUG. 1950

