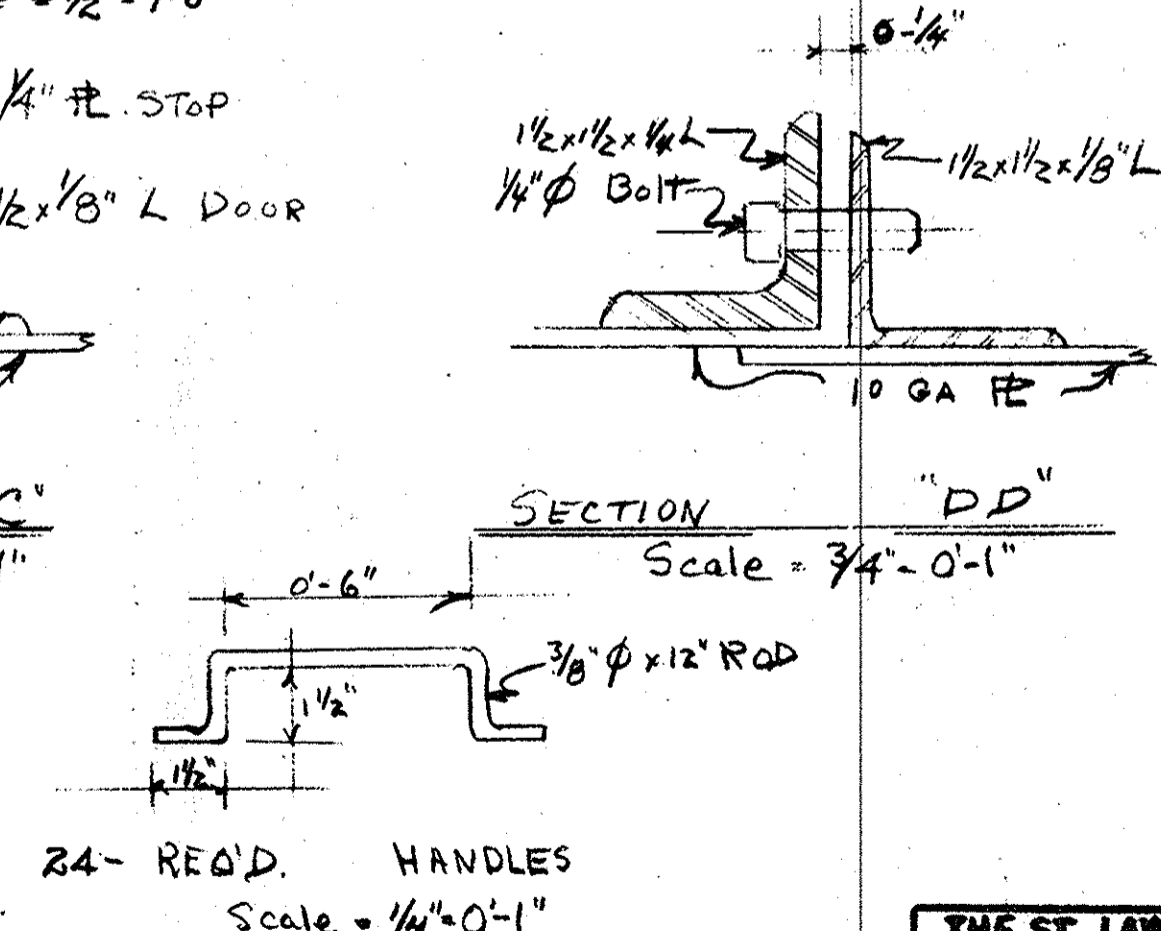
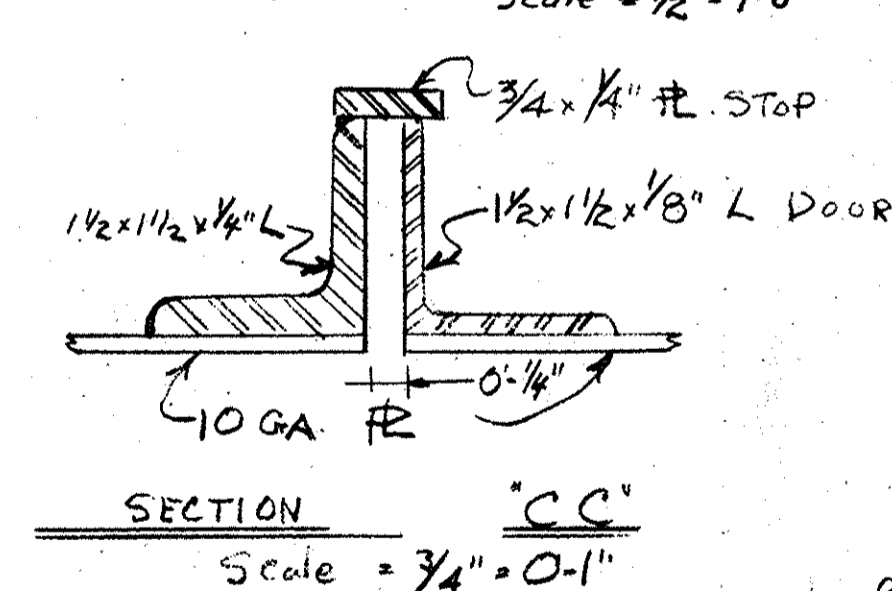
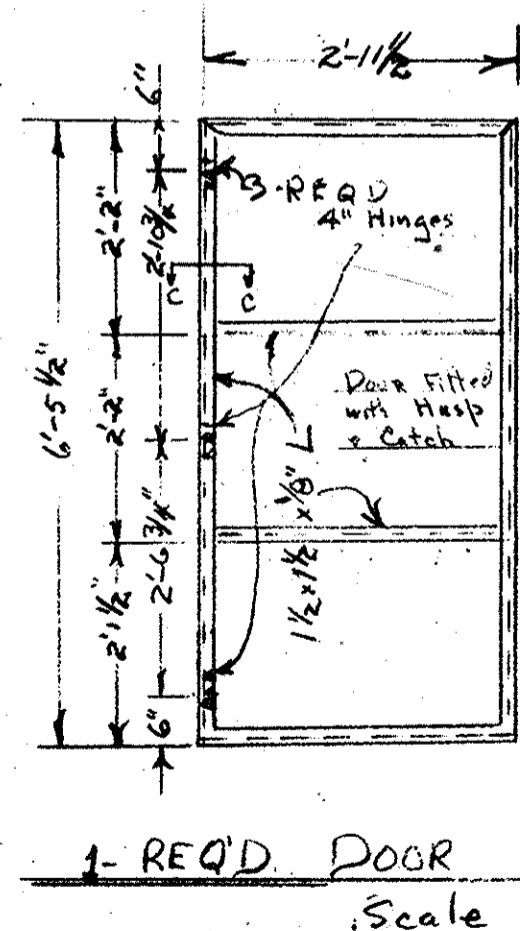
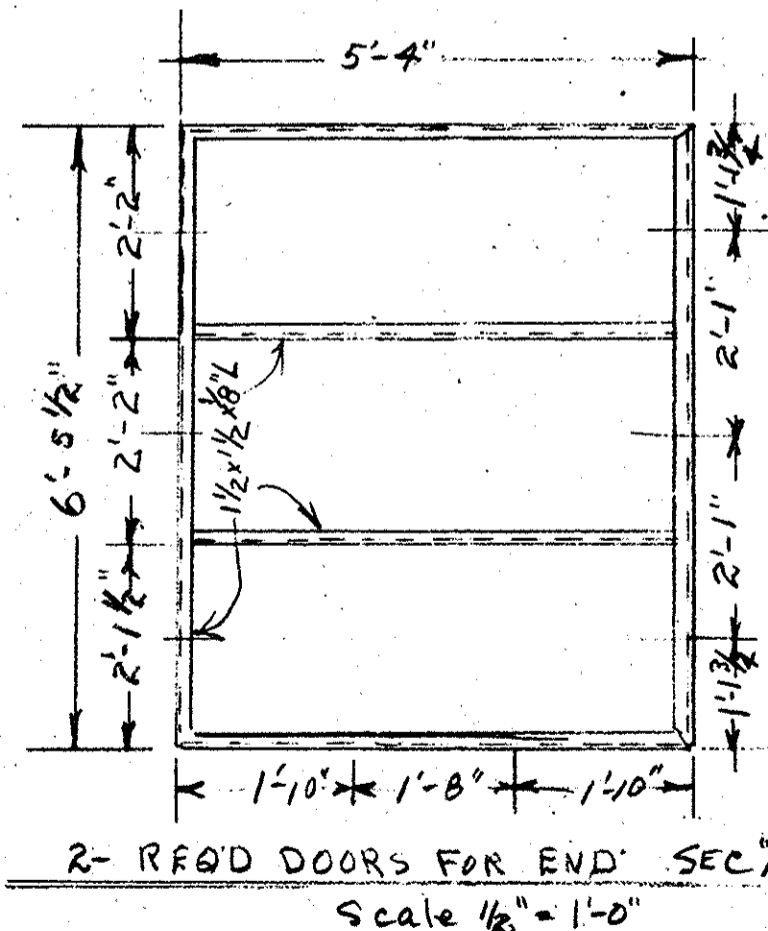
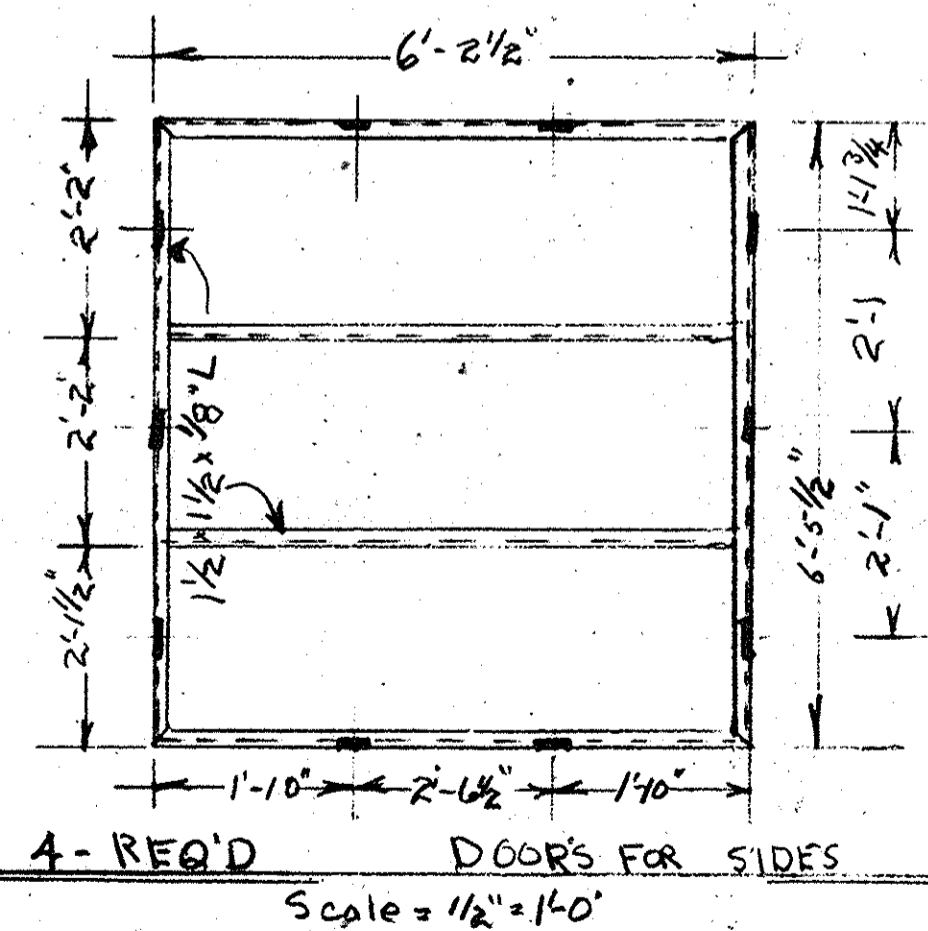
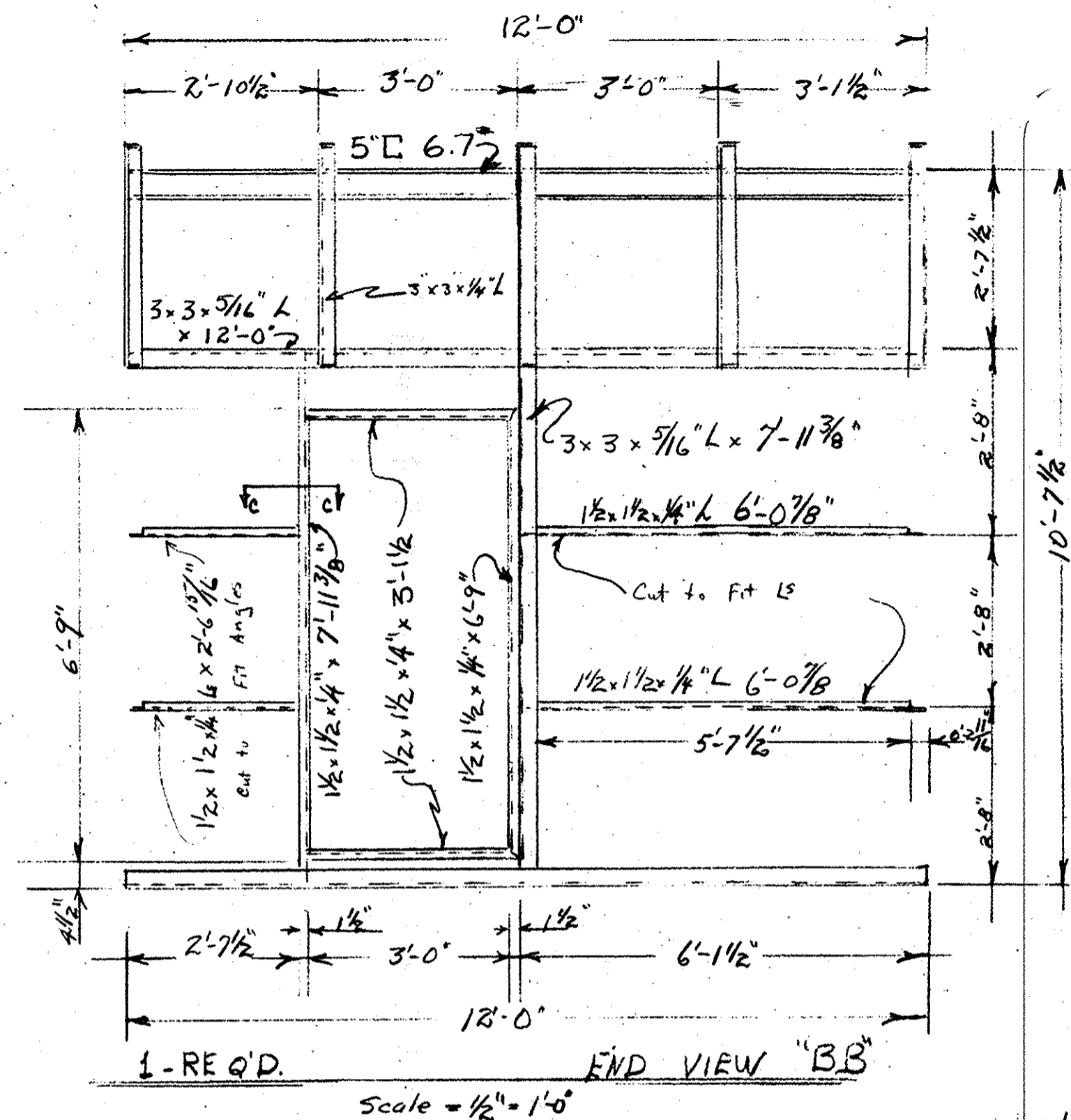
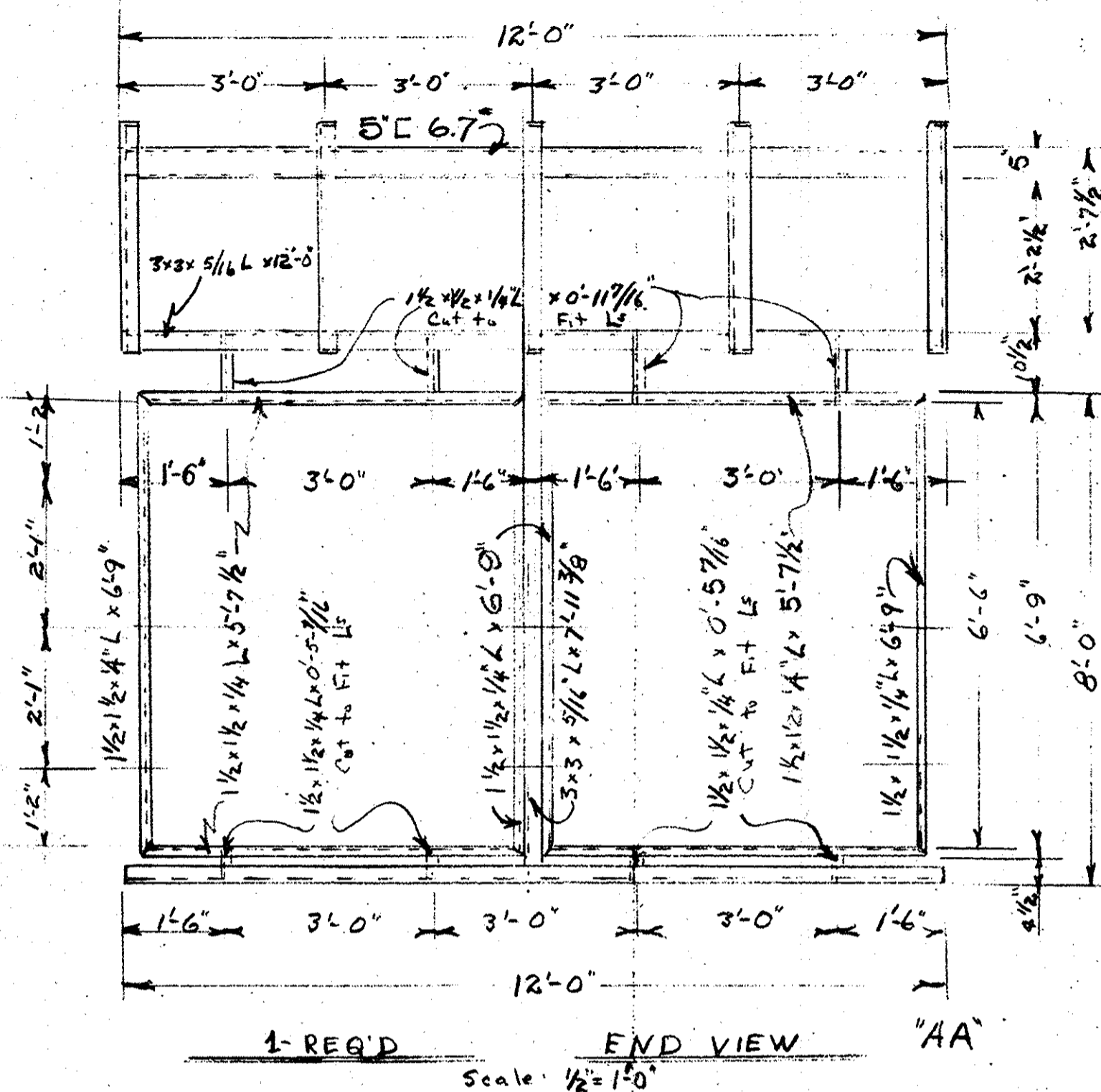
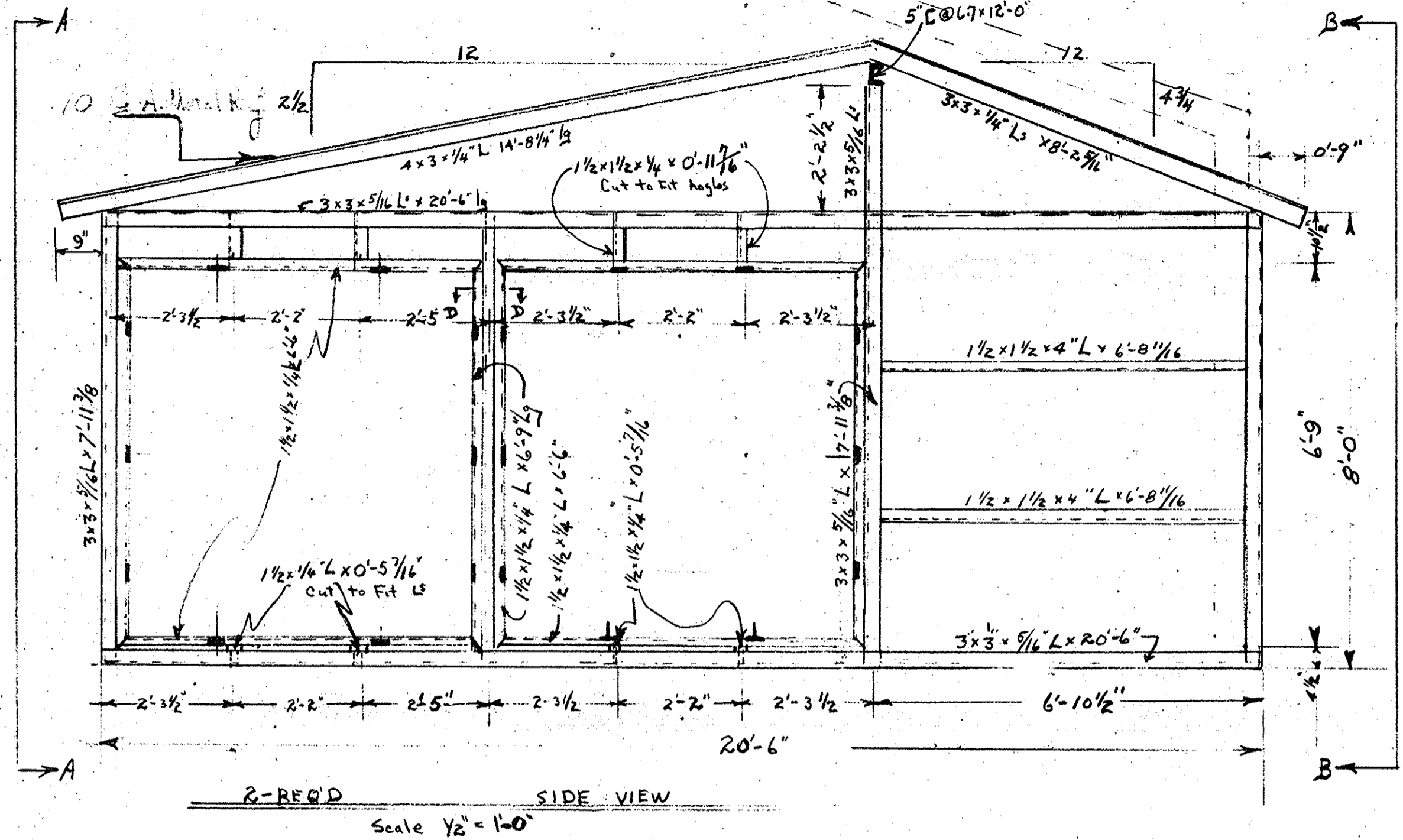


**THE ST. LAWRENCE SEAWAY AUTHORITY**  
 OPERATIONS & MAINTENANCE  
 WESTERN DISTRICT-SAILT STE. MARIE CANAL  
 C.T.C. CONSTRUCTION OF  
 EMERGENCY DAM

DATE	REVISION	CHKD. BY	SCALE 1" = 10'	DATE 25/7/61
			J.P. B. [Signature]	CASE # 50077

IA00 513



Note  
All holes 5/16" & unless otherwise noted.  
+ Handles on all doors except (BB)  
All welded structure to conform to C.S.A. spec. W-47-48 & 59  
All parts to be free of rust & prime ready

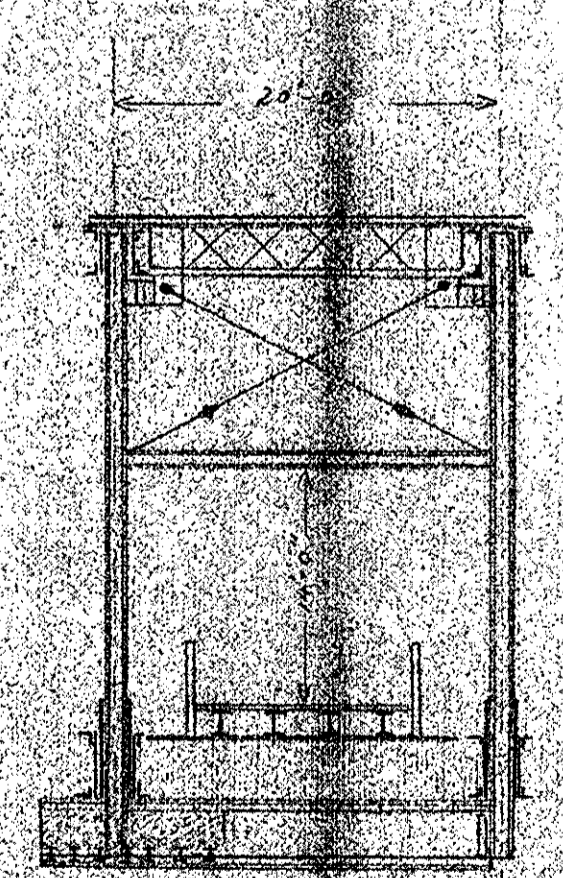
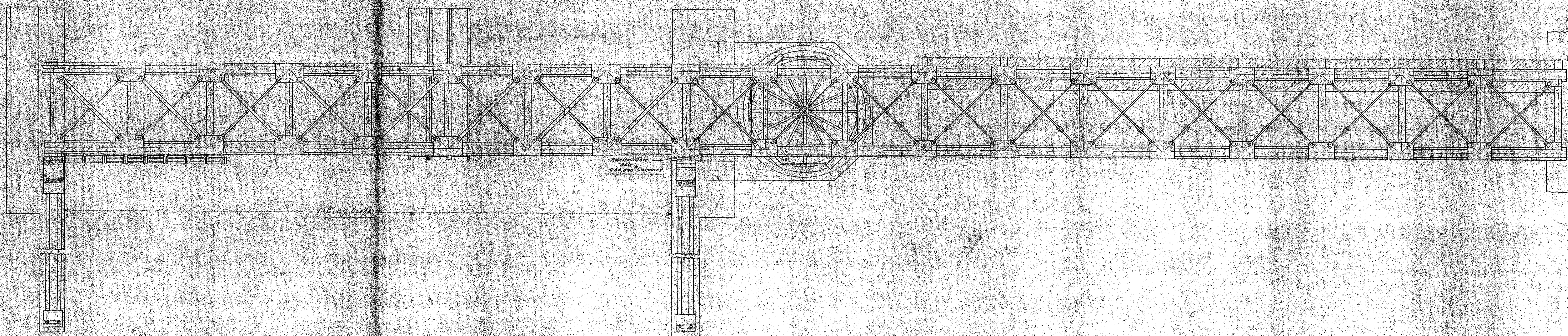
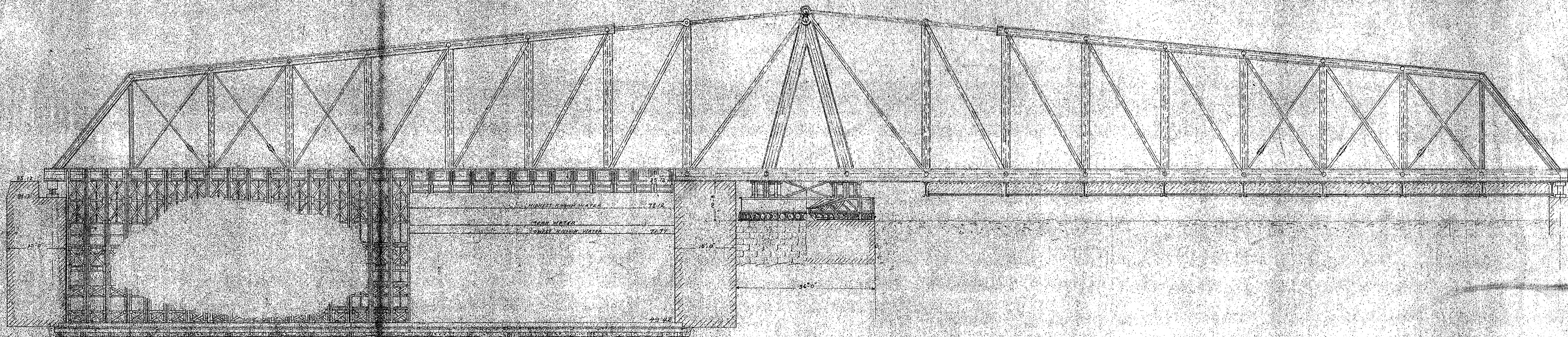
THE ST. LAWRENCE SEAWAY AUTHORITY	
OPERATION & MAINTENANCE	
WESTERN DISTRICT - LAURENCE MARIE CANAL	
Plan of all welded steel cover building	
builder's handling roughness on	
APPROVED	DATE
APPROVED	DATE
CASE A	30090
IA00490	

*Canal St. Marie Canal*  
*Plan of Machinery & Platform*  
*of Portable Dam*

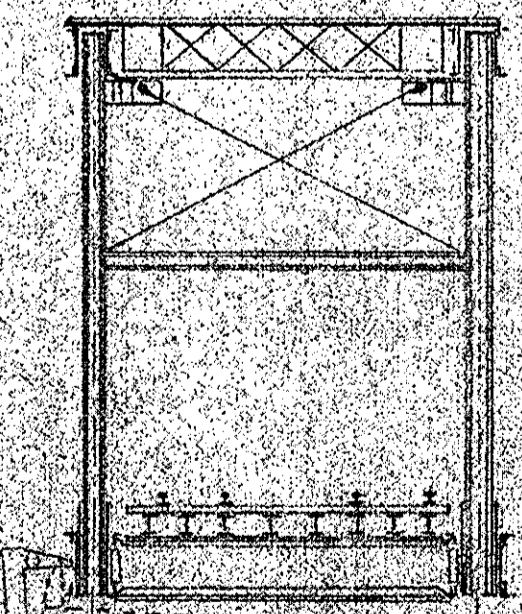
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*1/118571099358133876469961847328884416" = 1'-0"*<




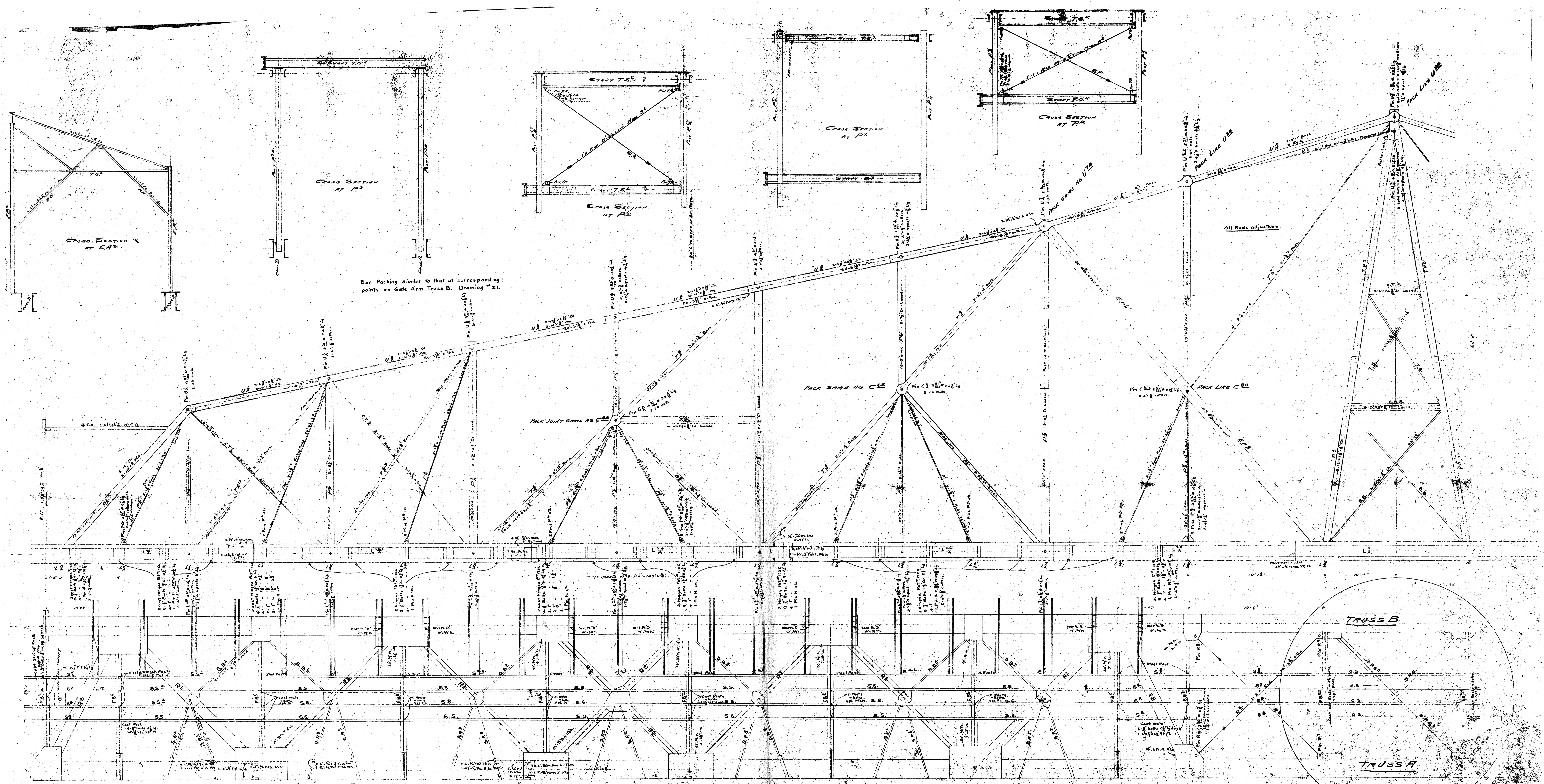




Center of Gravity of Section Located as Shown and with Case Carries its Proper Weight in Position for Leads in its Channel Bed



 <b>THE ST. LAWRENCE SEAWAY AUTHORITY</b> <b>ADMINISTRATION DE LA VOIE MARITIME DU SAINT-LAURENT</b>		
SAULT STE MARIE CANAL OPERATIONS & MAINTENANCE		
<i>Moveable Dam &amp; Swing Bridge over Canal</i>		
DESIGNED CONC'D	SUBMITTED PRESENTE	SCALE ECHANNE
DRAWN DESINE	RECOMMENDED RECOMMANDE	DATE 17 March 1968
CHECKED VERIFIE	APPROVED APPROUVE	Case D
NO. N°	DATE	REVISIONS REVISE
BY PAR	APP'D. APP.	EXAMINED EXAMINE

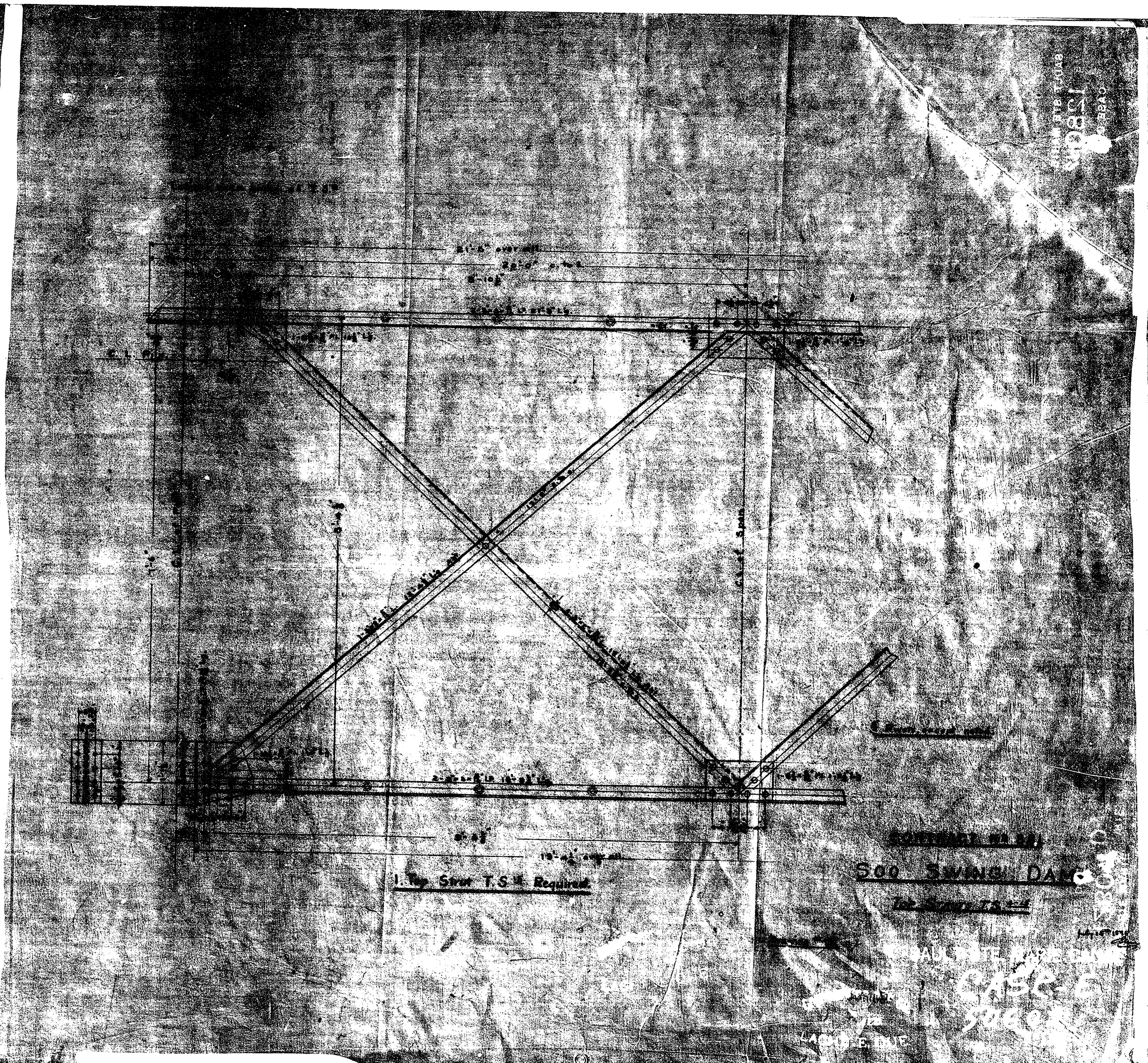
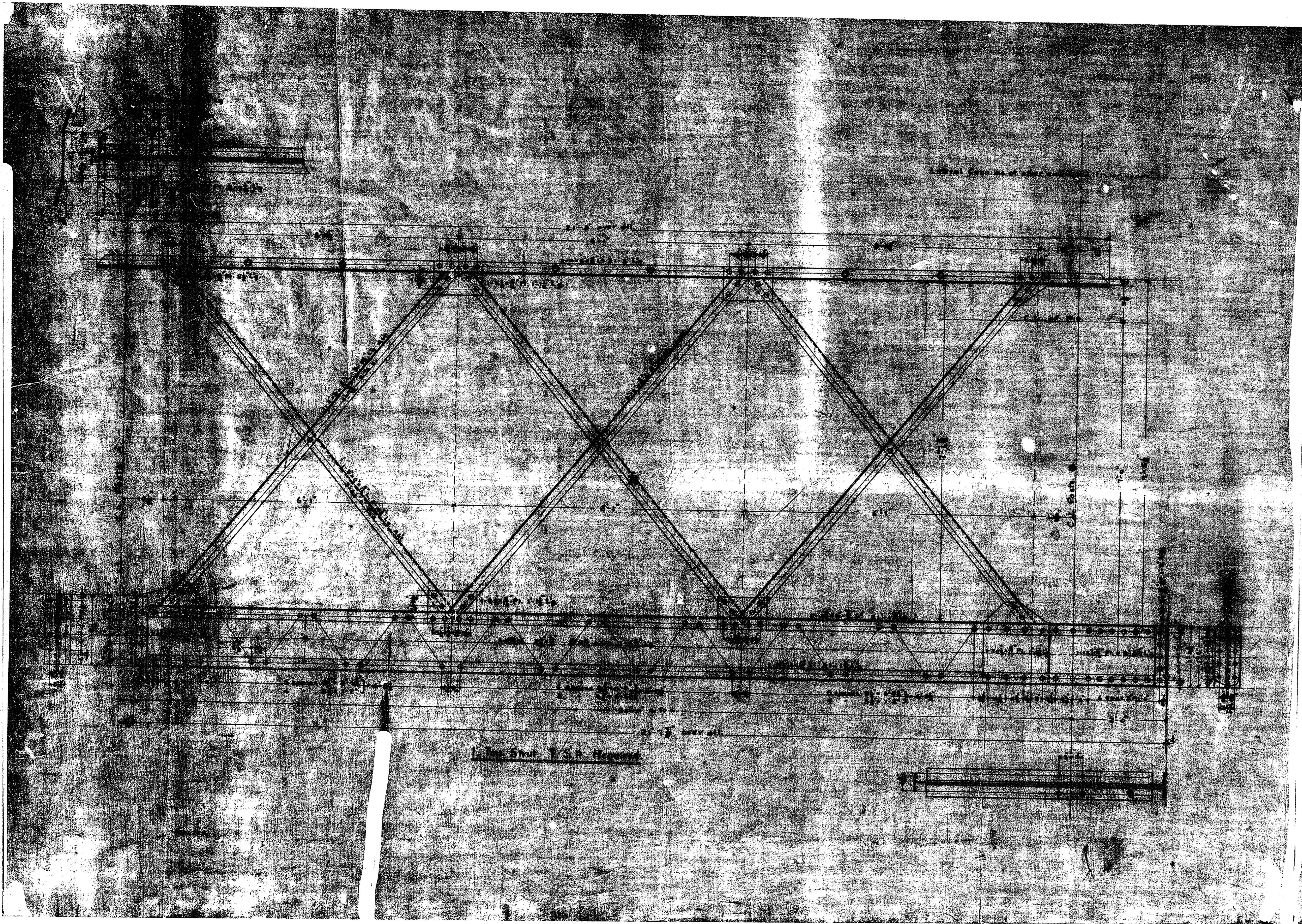


Bar Packing similar to that at corresponding points on Gate Arm Truss B, Drawing #21.

CONTR. #881  
 500 SWING DAM  
 ERECTION DRAWING OF TRUSS A  
 CASE D-1  
 50404  
 2A 00674

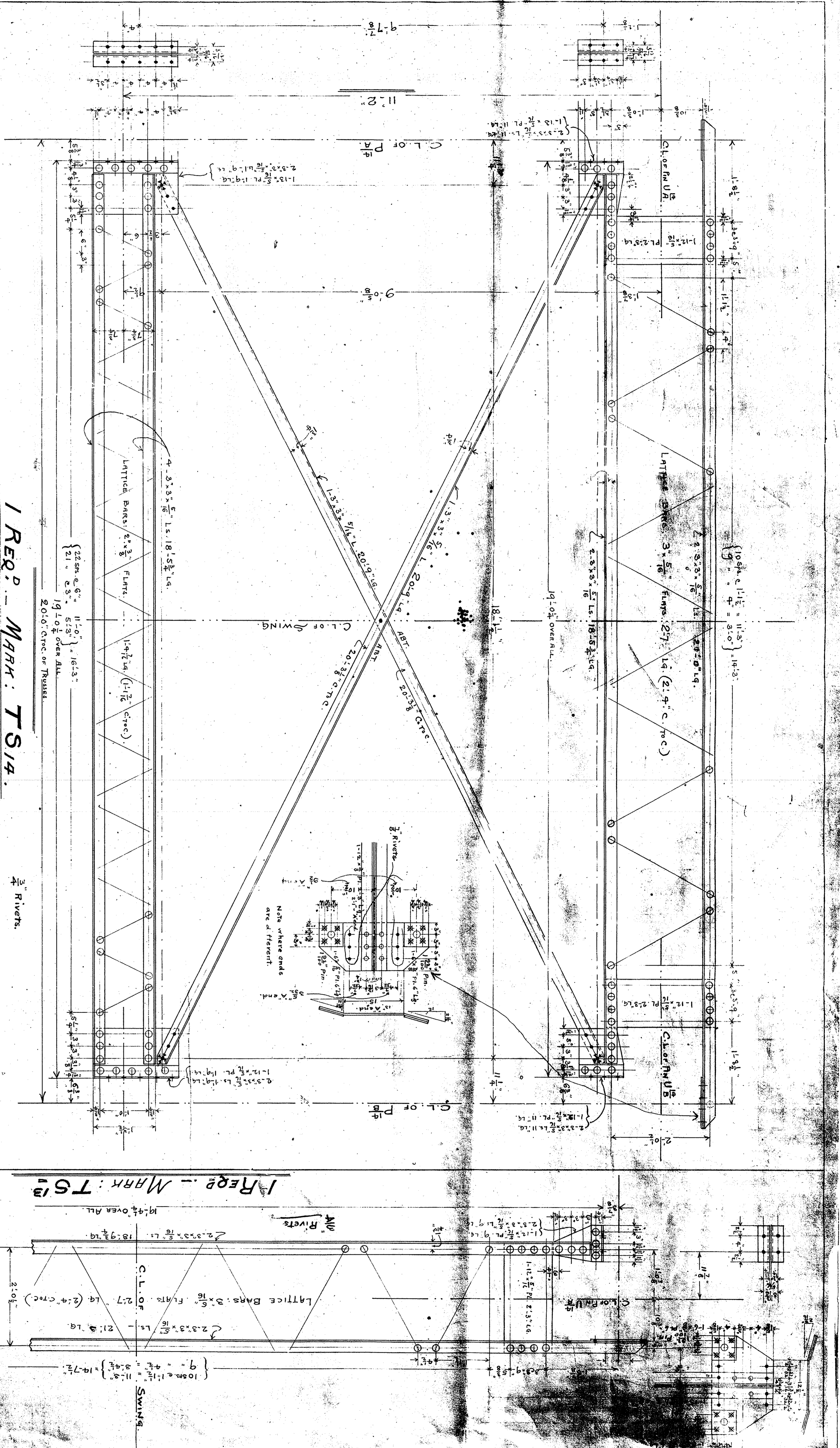
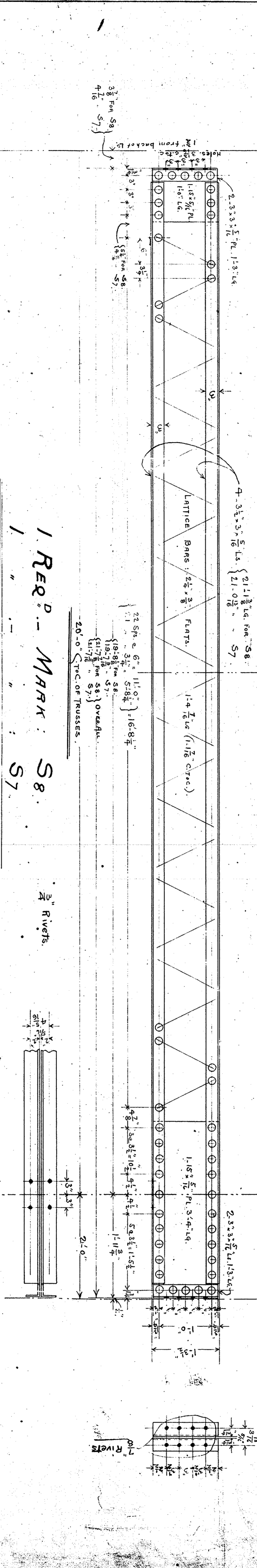
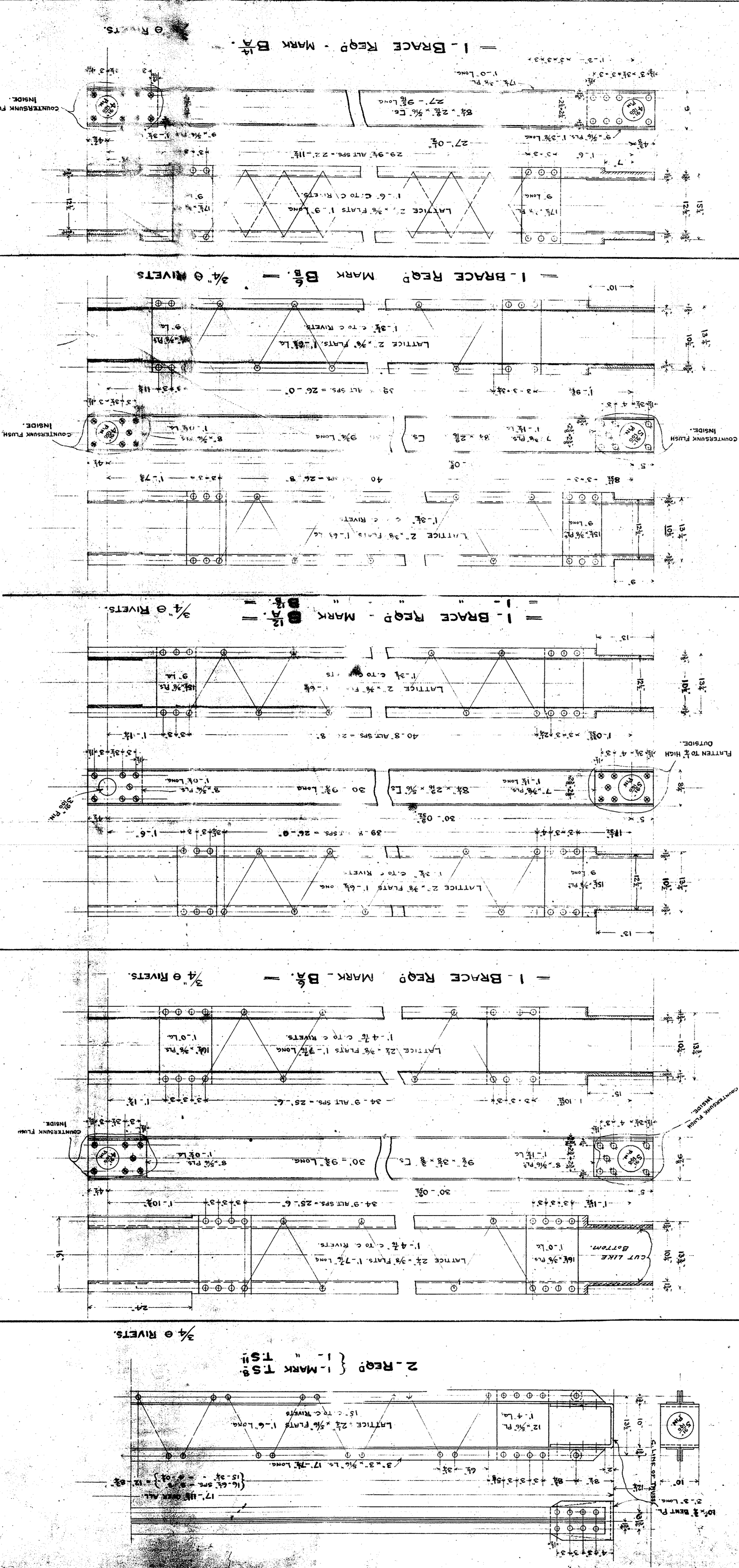
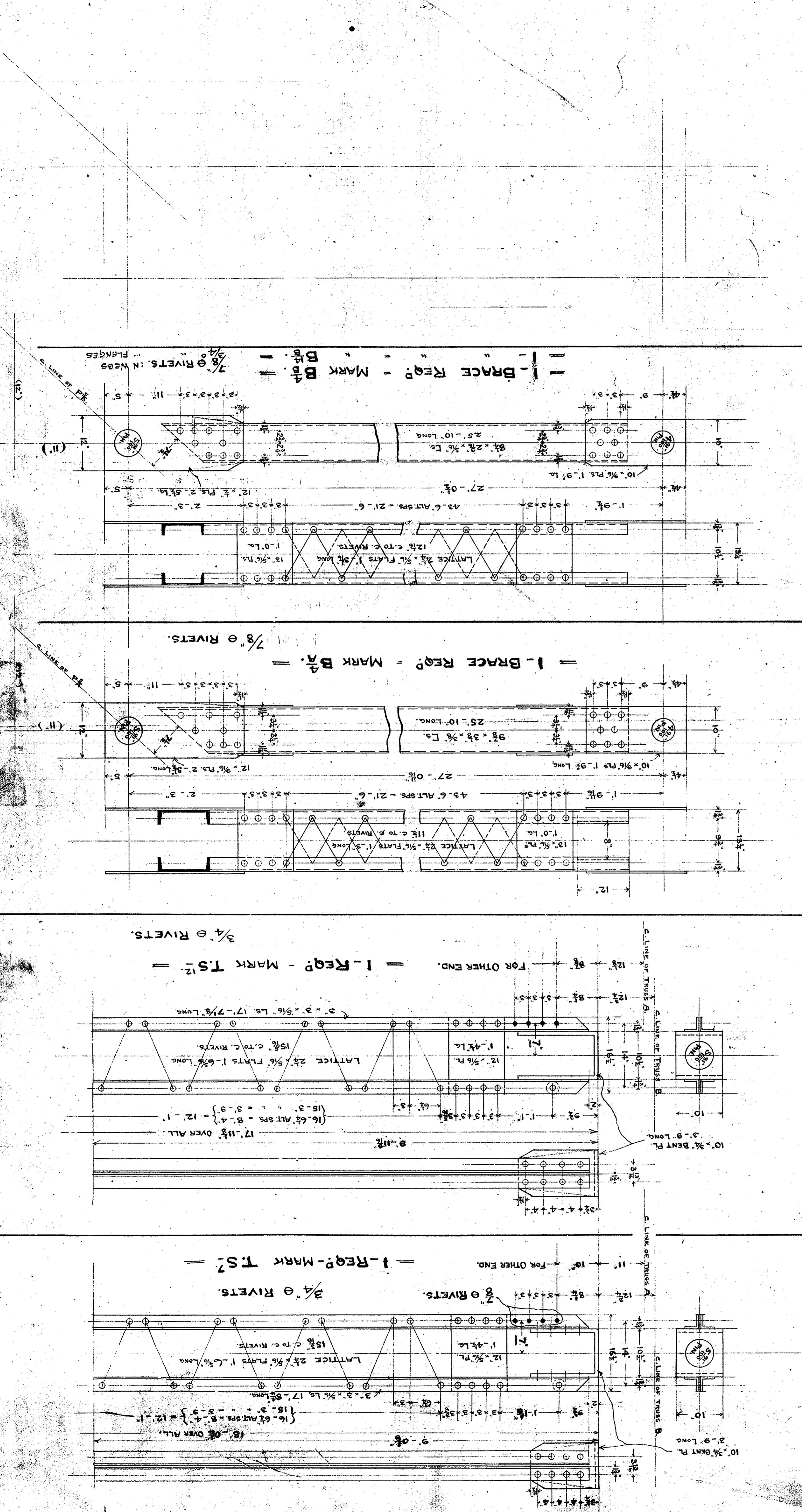


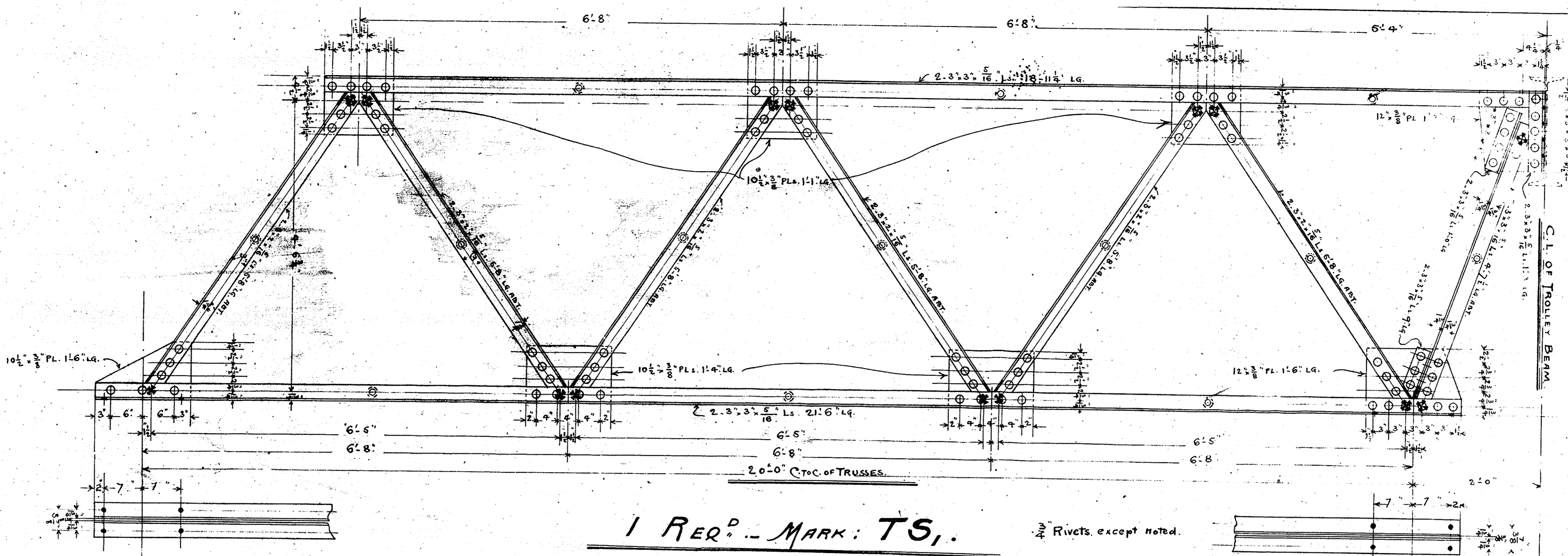




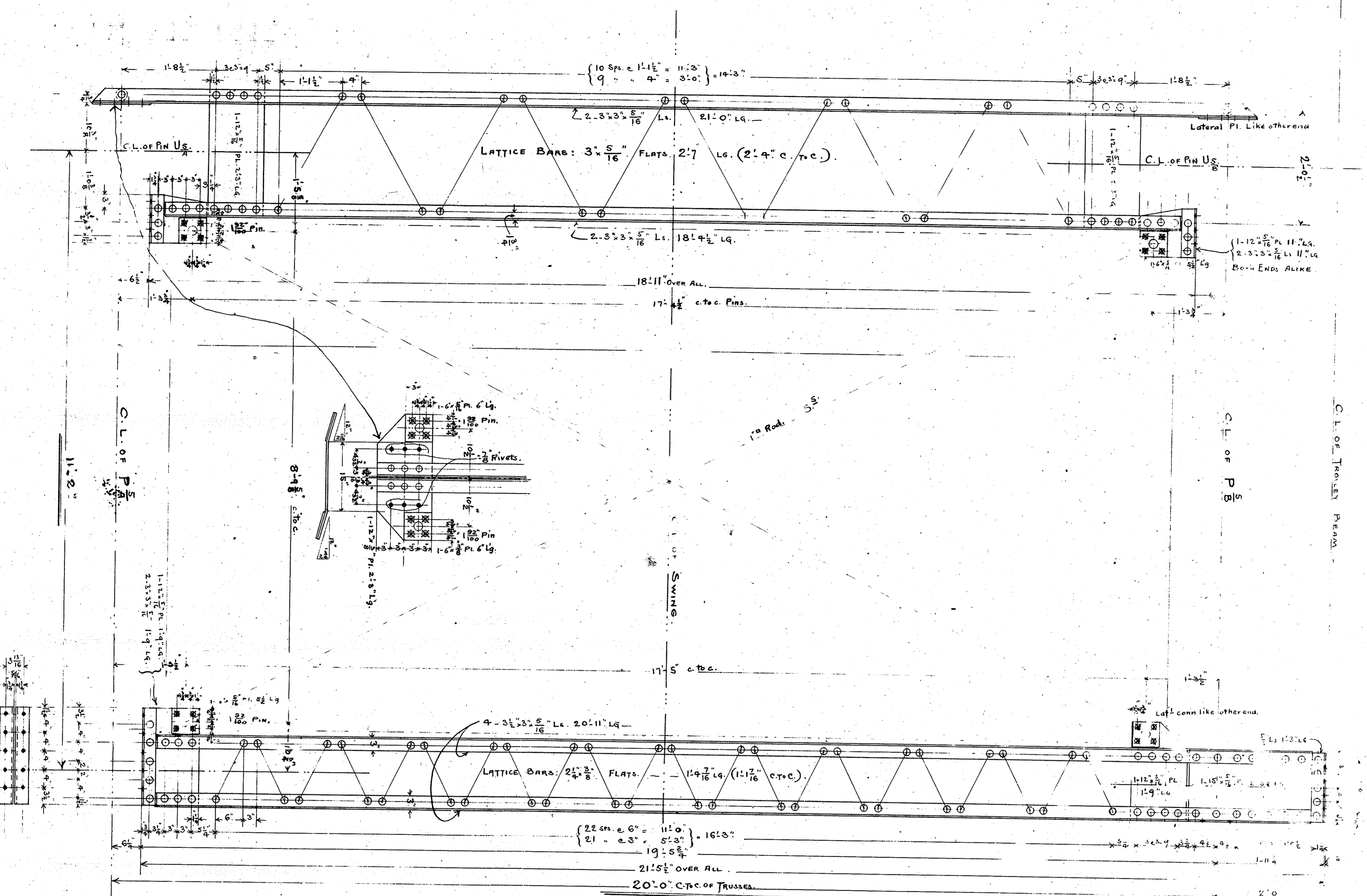


CON - 881  
300 CANAL SWING DAM.  
STRUTS & BRACES.  
DOMINION BRIDGE CO. LTD.  
DRAWING No 18  
JUNE 26/95

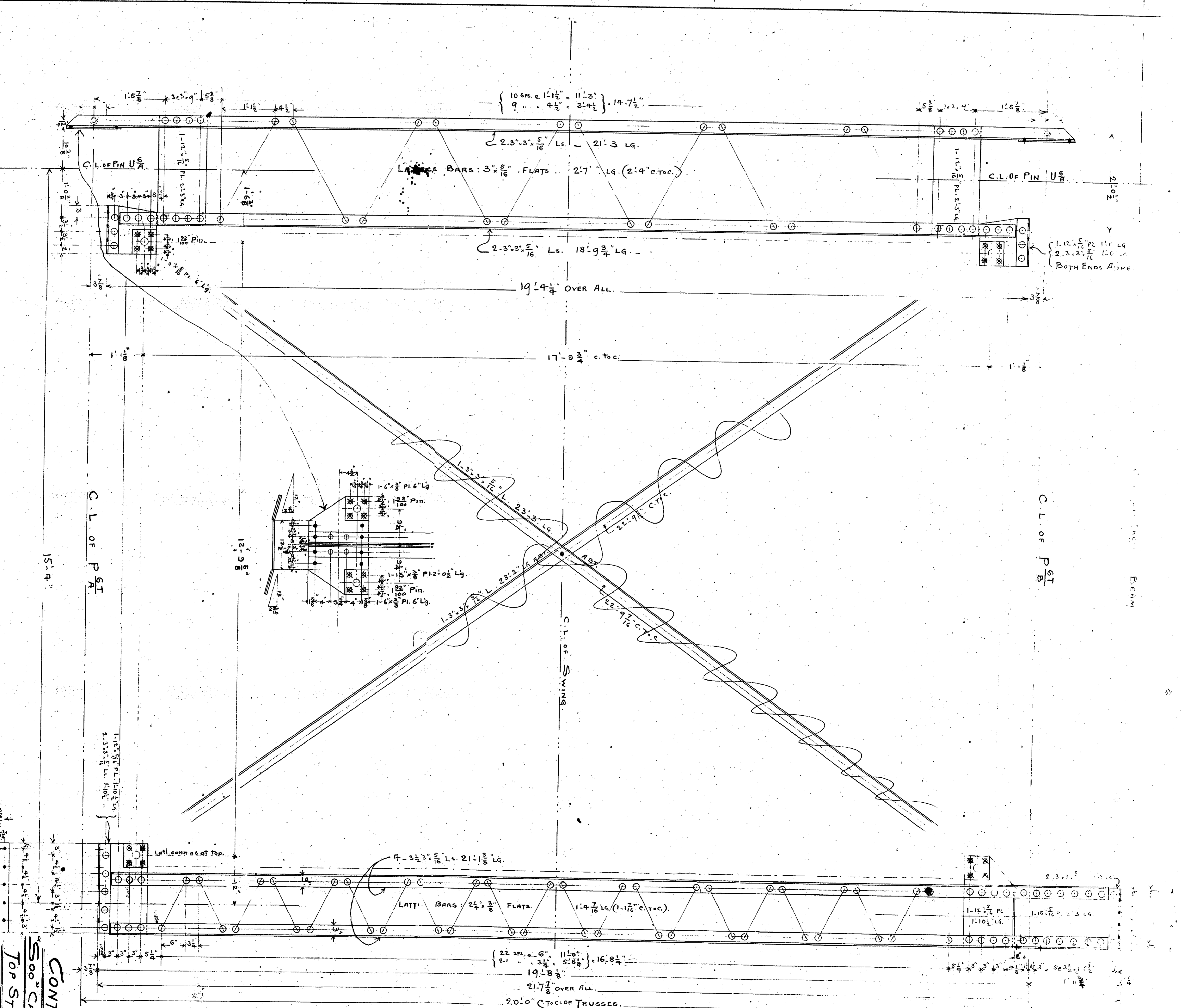




1 REQ<sup>d</sup> - MARK: TS<sub>1</sub>.



1 REQ<sup>d</sup> - MARK: TS<sub>5</sub>.



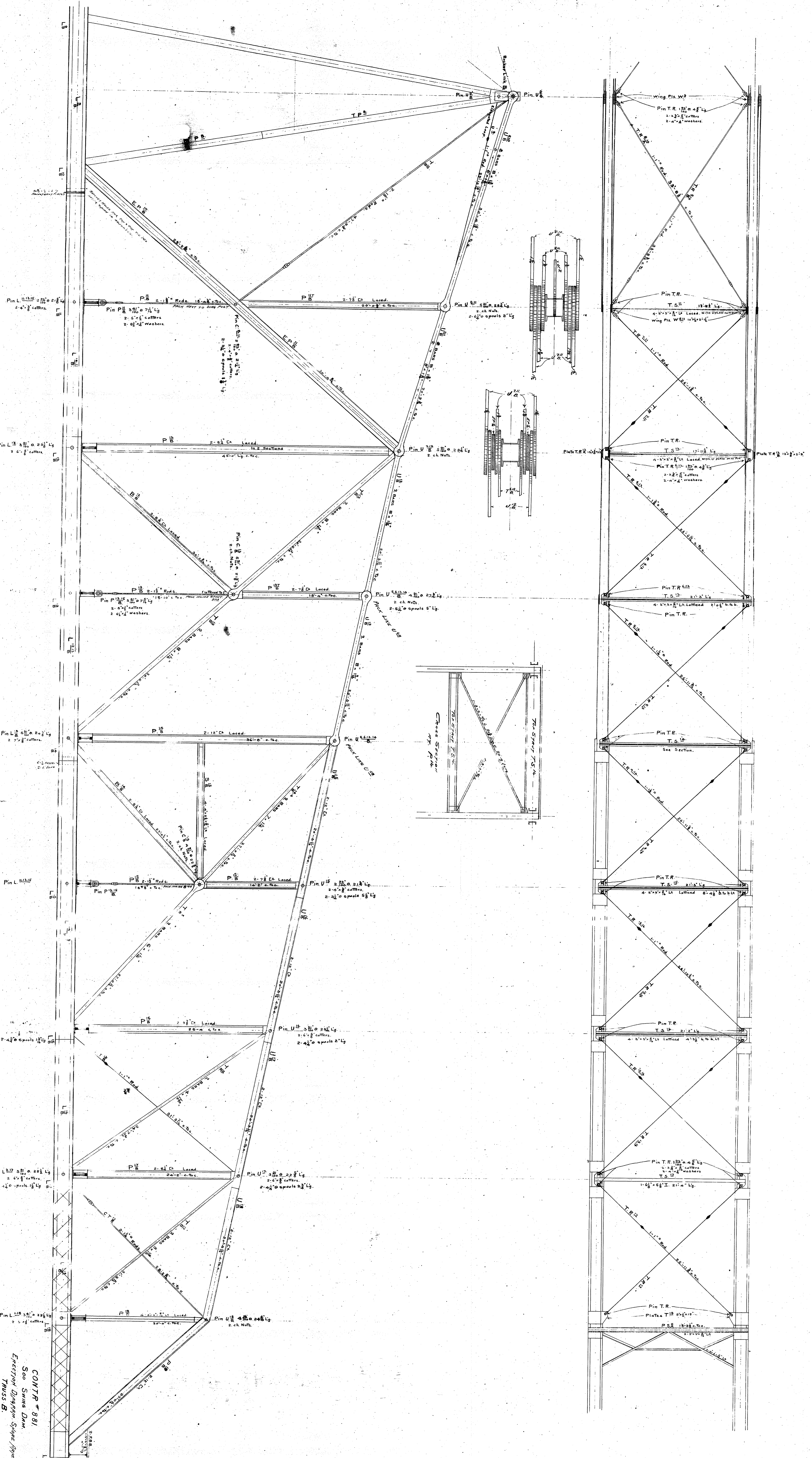
1 REQ<sup>d</sup> - MARK: TS<sub>6</sub>.

CONTRACT # 881.  
500' CANAL SWING DAM.  
TOP STRUTS TS<sub>1</sub>, TS<sub>5</sub>, TS<sub>6</sub>  
DRAW'G NO 99

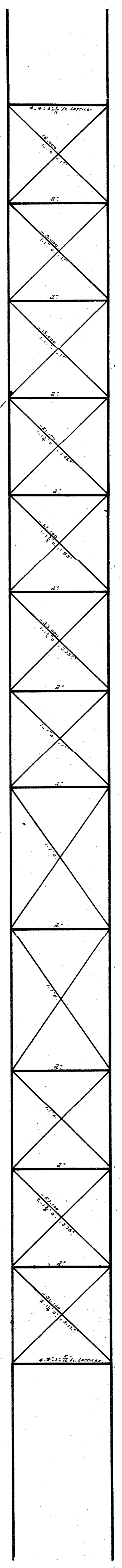
3/4" RIVETS

50605  
2800691





CONTR # 881  
See Same Dam  
Erection Diagram Same Page  
TRUSS B

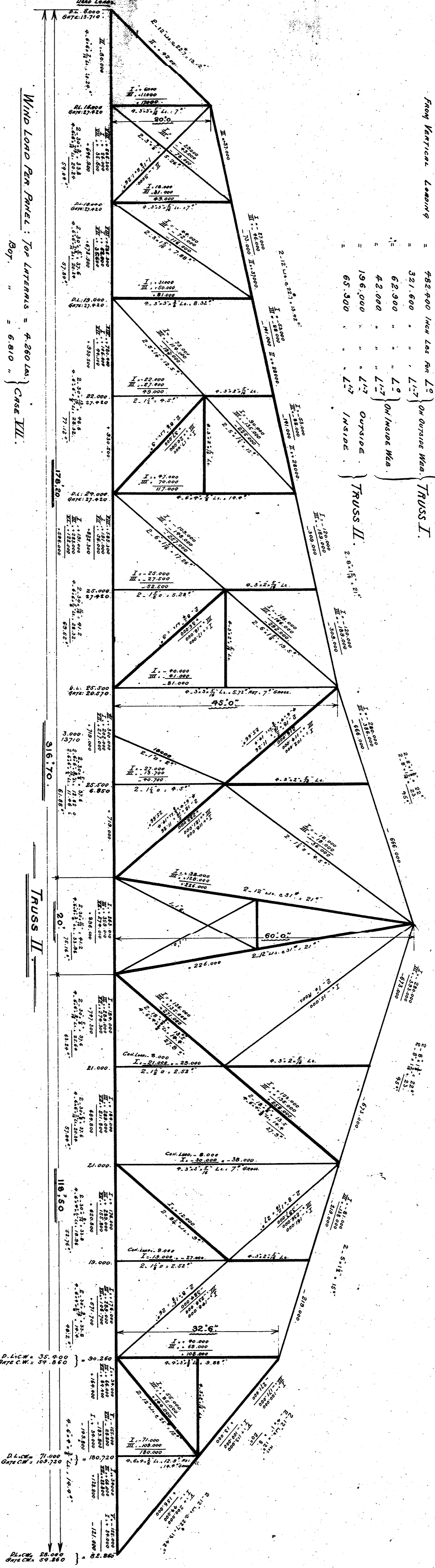


TOP LATERAL BRACING

BENDING IN LOWER CHORDS OF LONG FRAM:

From Horizontal Loading	= 866,000 inch lbs. per L <sub>2</sub>	= 577,500	= L <sub>2</sub>
From Vertical Loading	= 982,000 inch lbs. per L <sub>2</sub>	= 321,600	= L <sub>2</sub>
	= 62,000	= 62,000	= L <sub>2</sub>
	= 2,000	= 2,000	= L <sub>2</sub>
	= 196,000	= 196,000	= L <sub>2</sub>
	= 65,300	= 65,300	= L <sub>2</sub>

TRUSS I. Outside. TRUSS II. Inside.



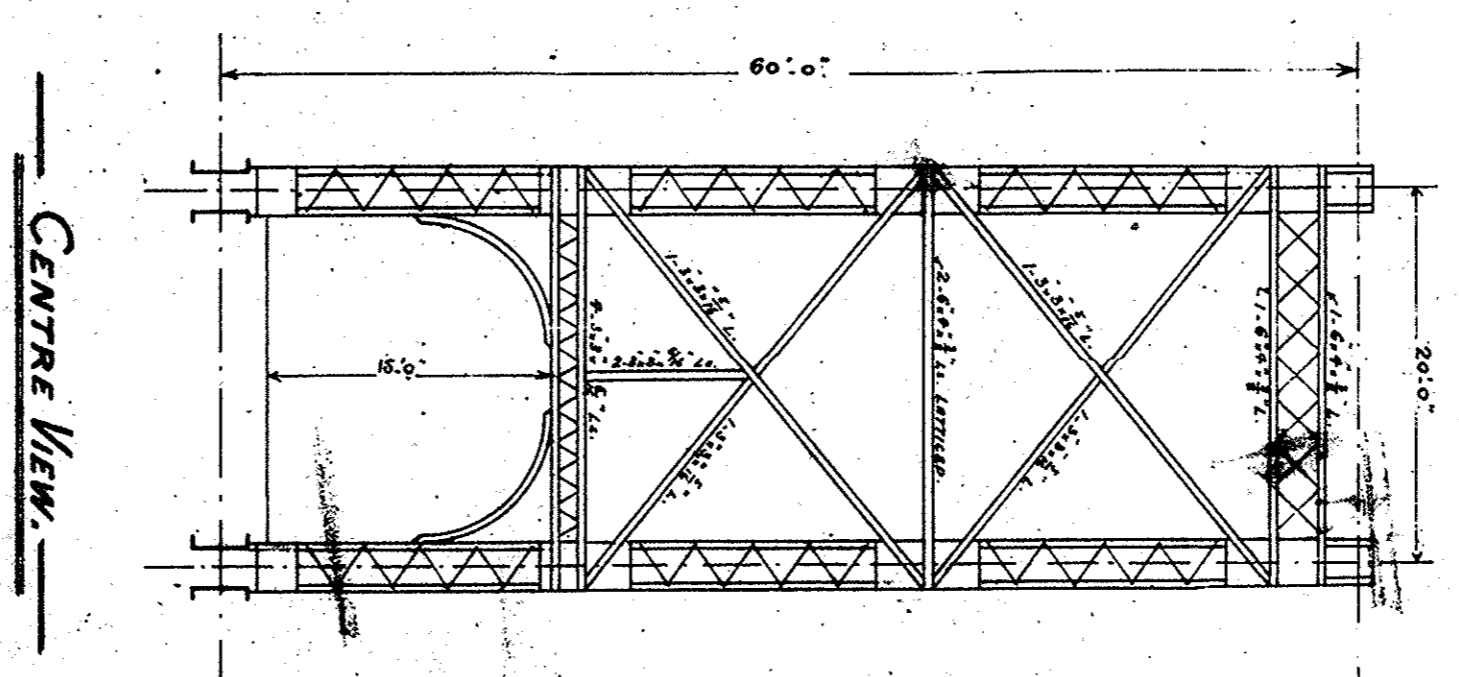
TRUSS I

TRUSS II

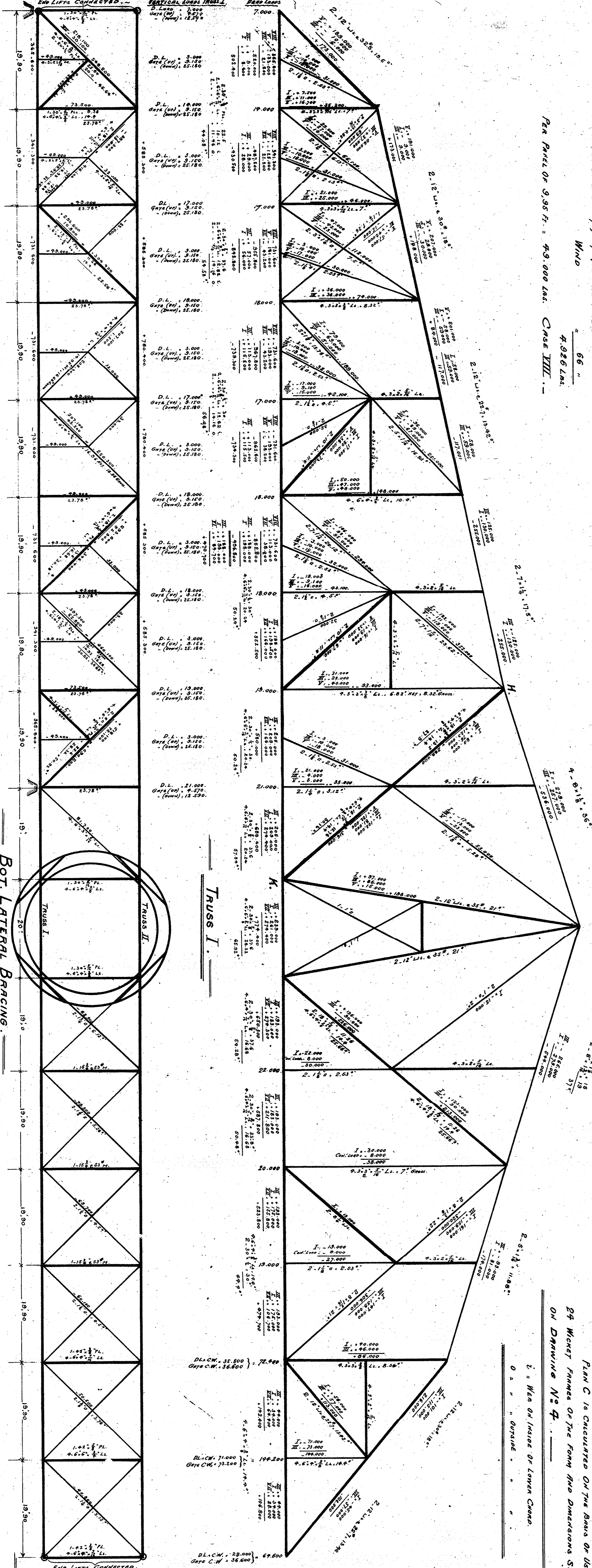
HORIZONTAL TRUSS:

LONG PER LINEAR FOOT, STATIC PRESSURE = 4,800 LB.  
WIND = 66"  
PER PANEL OF 9.95 FT. = 49,000 LB. CASE VIII.

NOTE: PLAN C IS CALCULATED ON THE BASIS OF USING 24 WICKET FRAMES ON THE FORM AND DIMENSIONS SHOWN ON DRAWING N<sup>o</sup> 4.

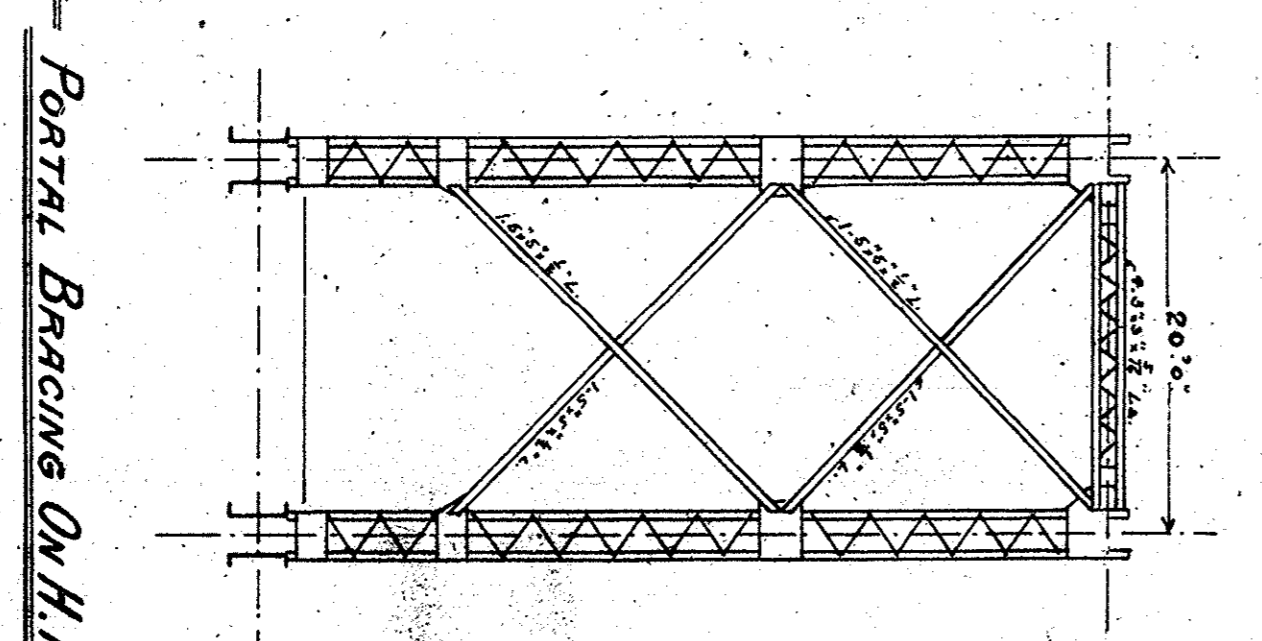


CENTRE VIEW



TRUSS I

TRUSS II



PARTIAL BRACING ON H.K.

NOTE: PLAN C IS CALCULATED ON THE BASIS OF USING 24 WICKET FRAMES ON THE FORM AND DIMENSIONS SHOWN ON DRAWING N<sup>o</sup> 4.

ALL MATERIAL STEEL - [Roughcast from (Steel) Truss for 12000 lbs. per panel]

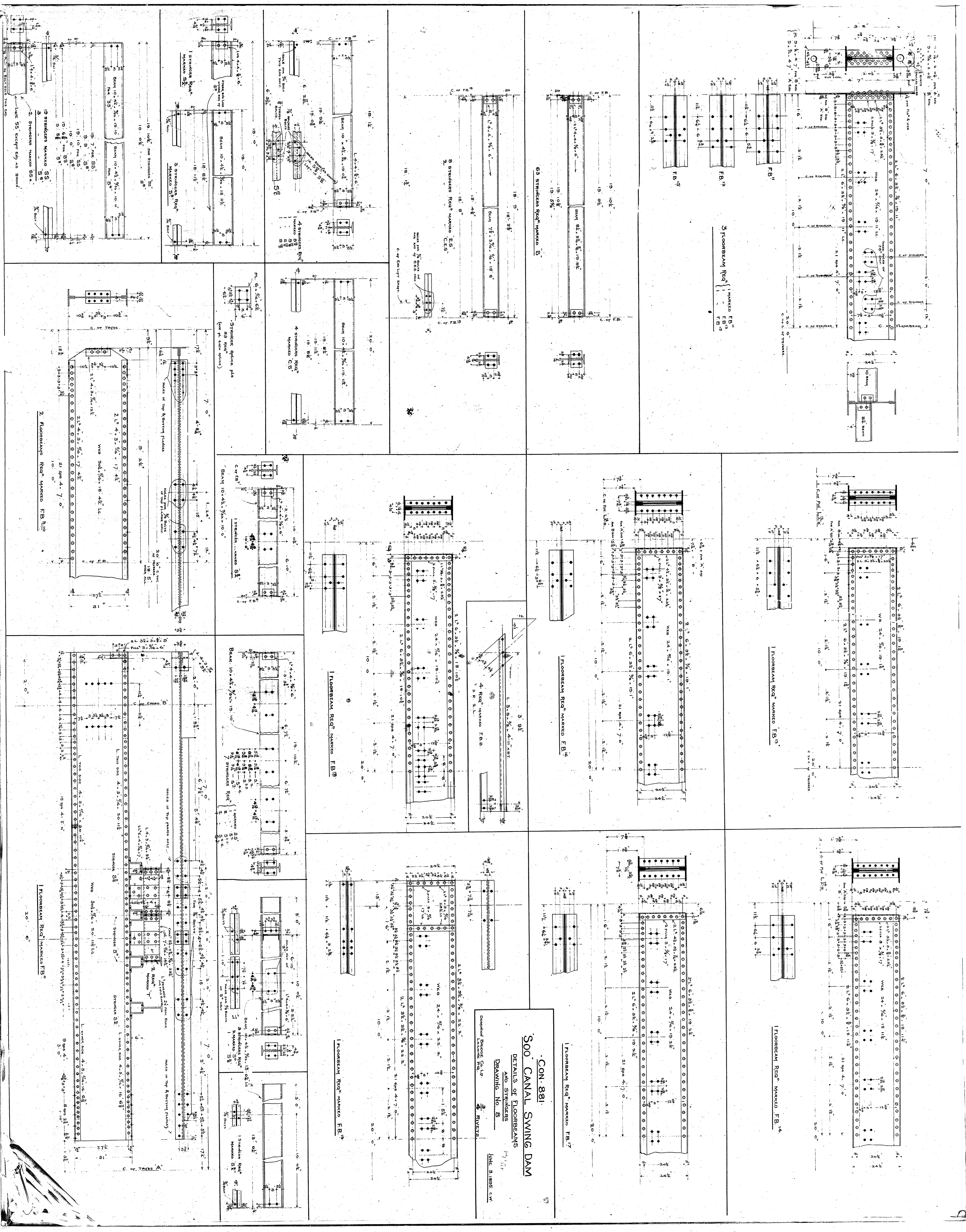
BOT. LATERAL BRACING

MOVABLE DAM

SCALE: 1 inch = 10 feet

DOMINION BRIDGE CO. LIMITED

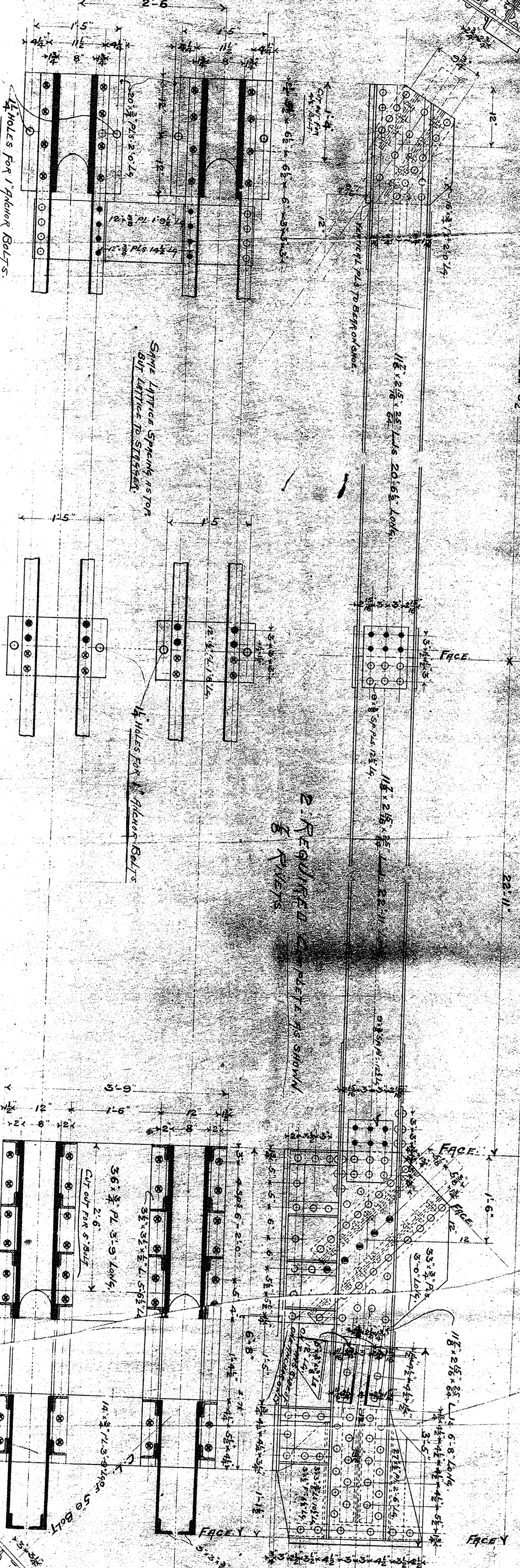
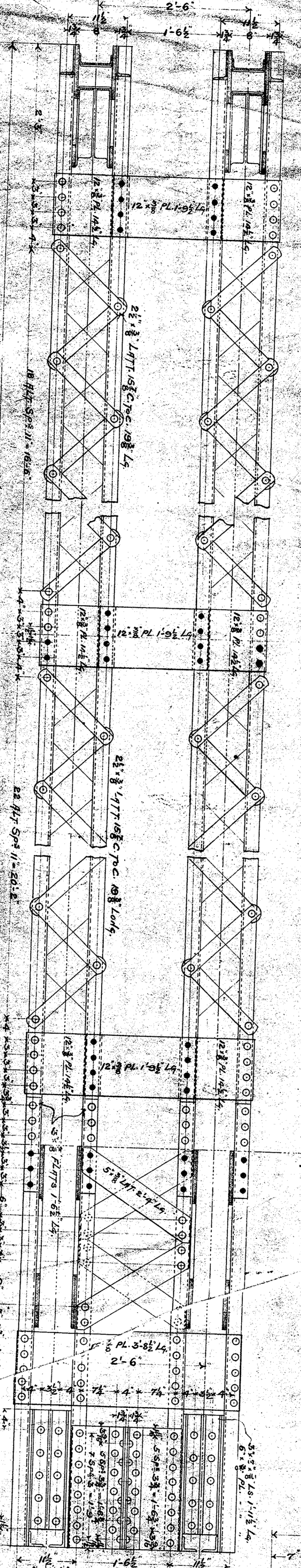
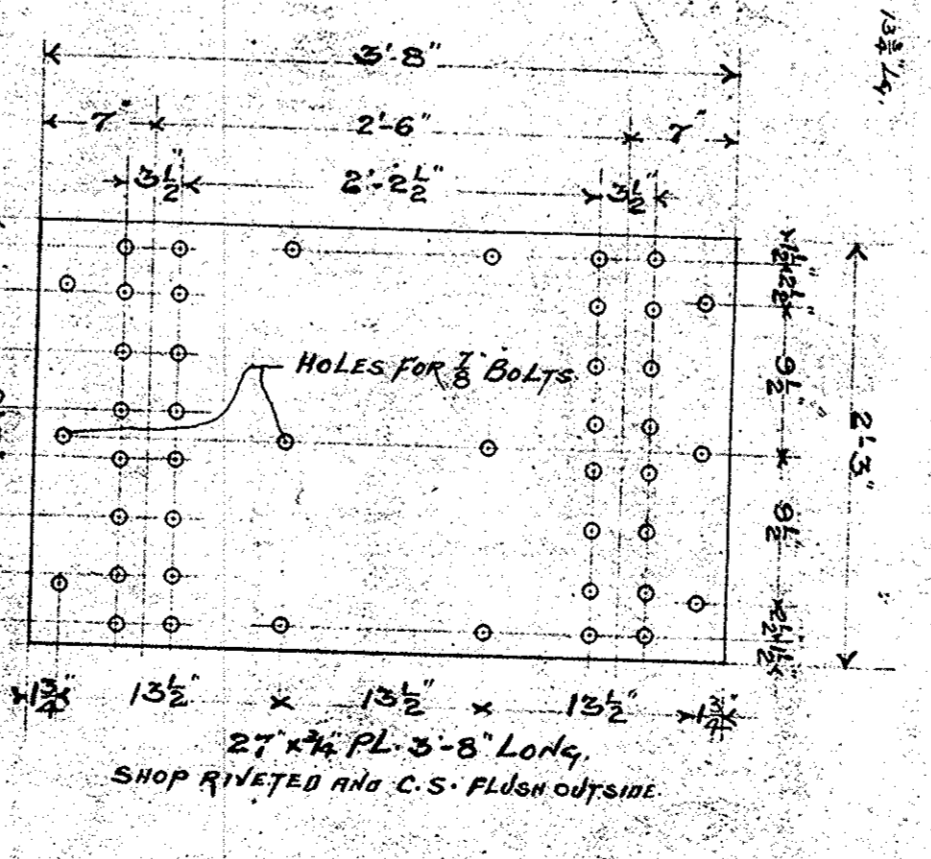
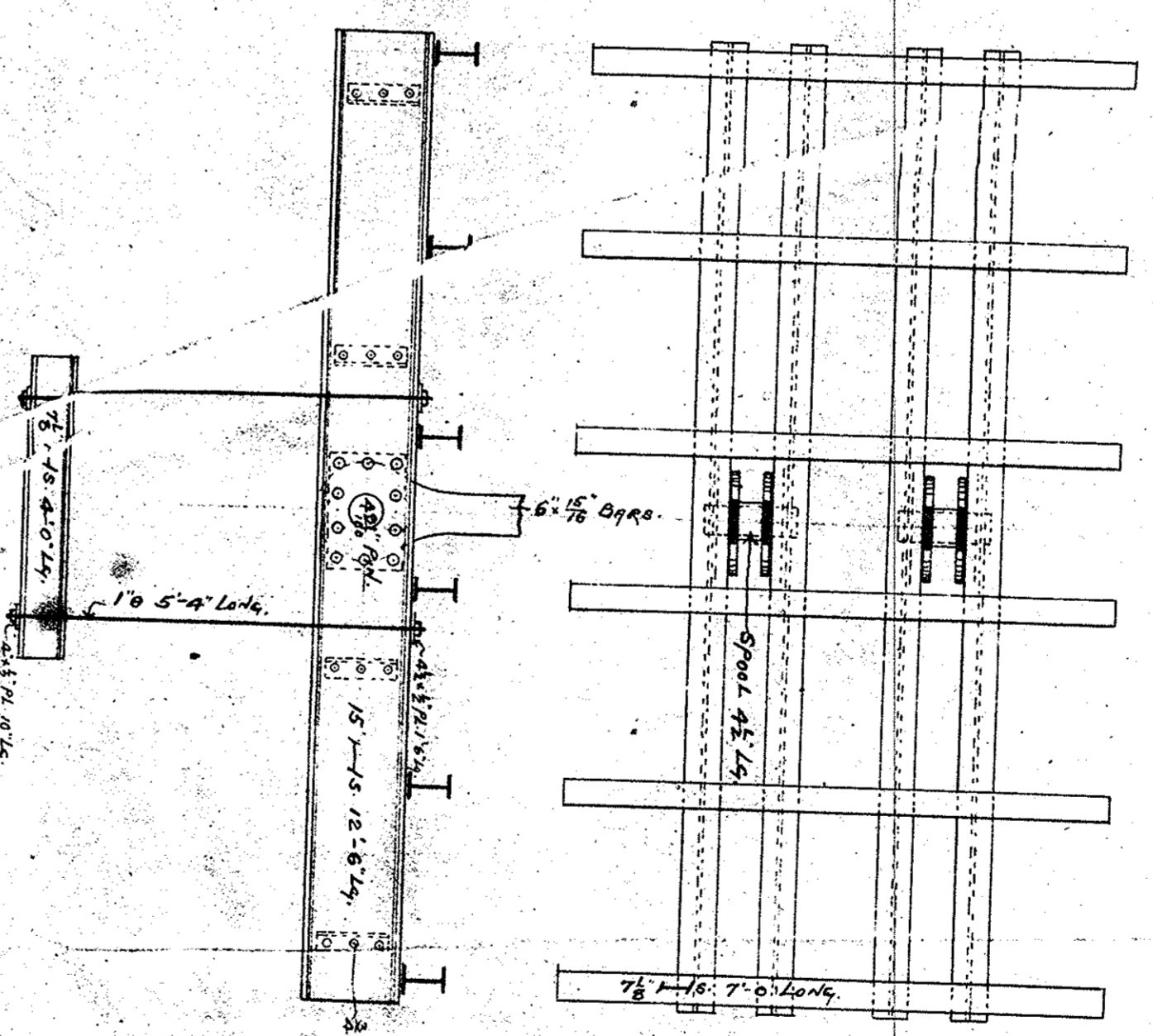
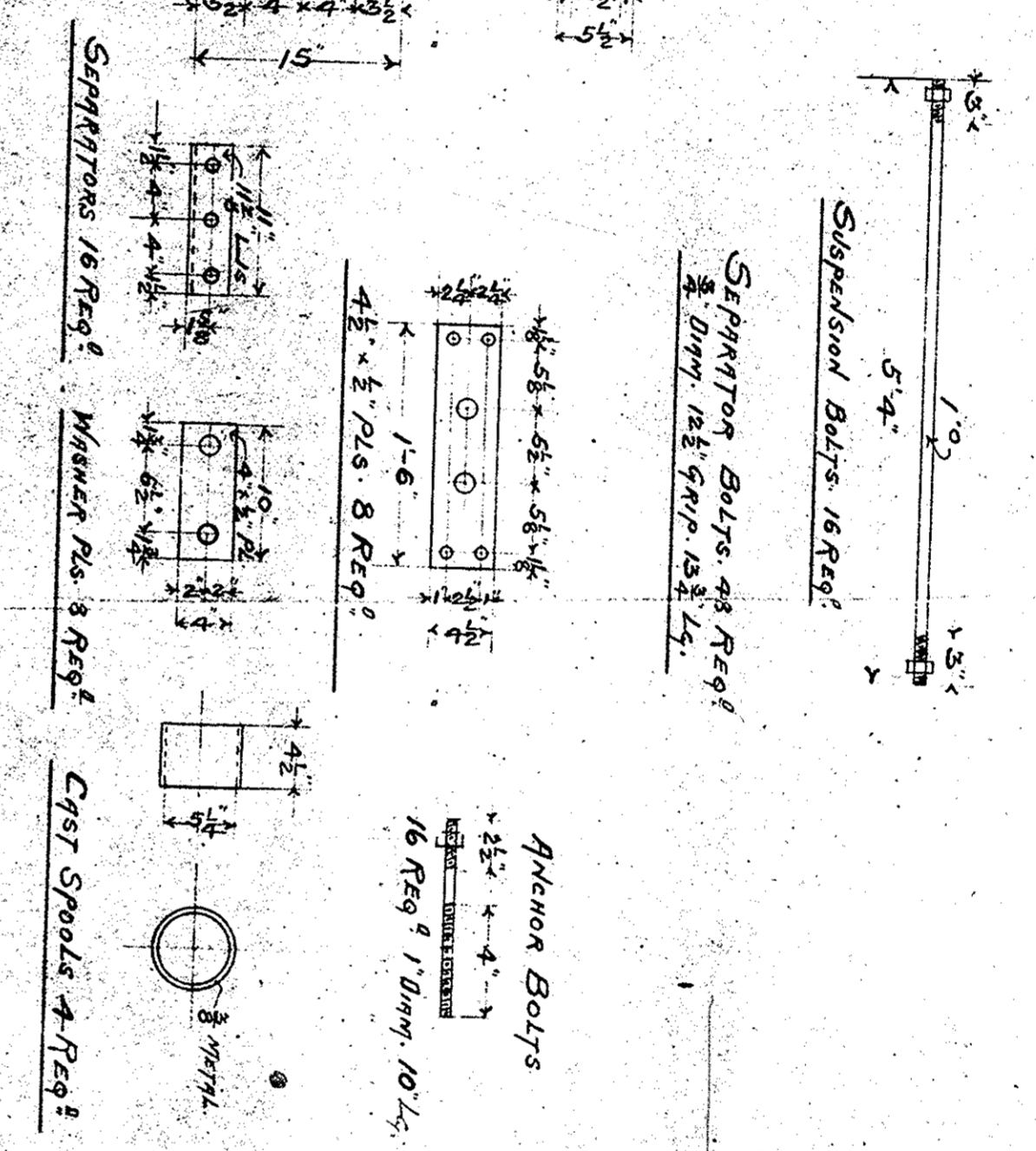
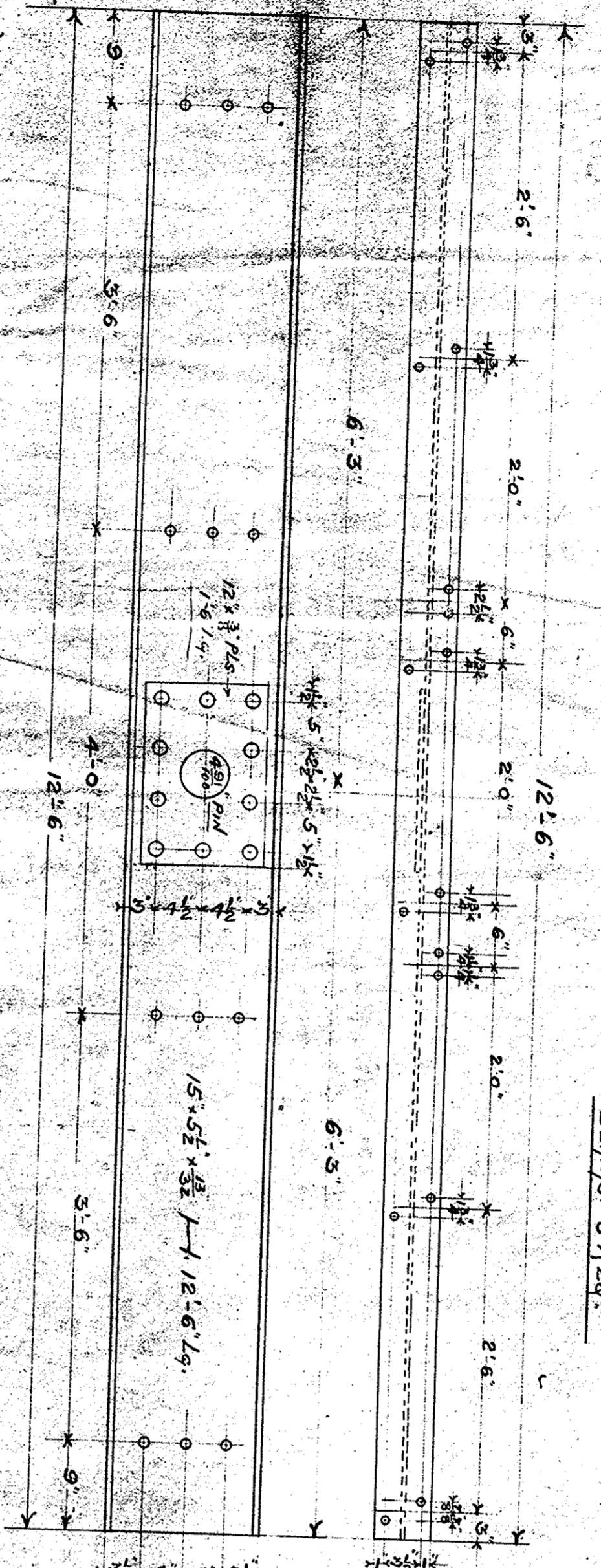
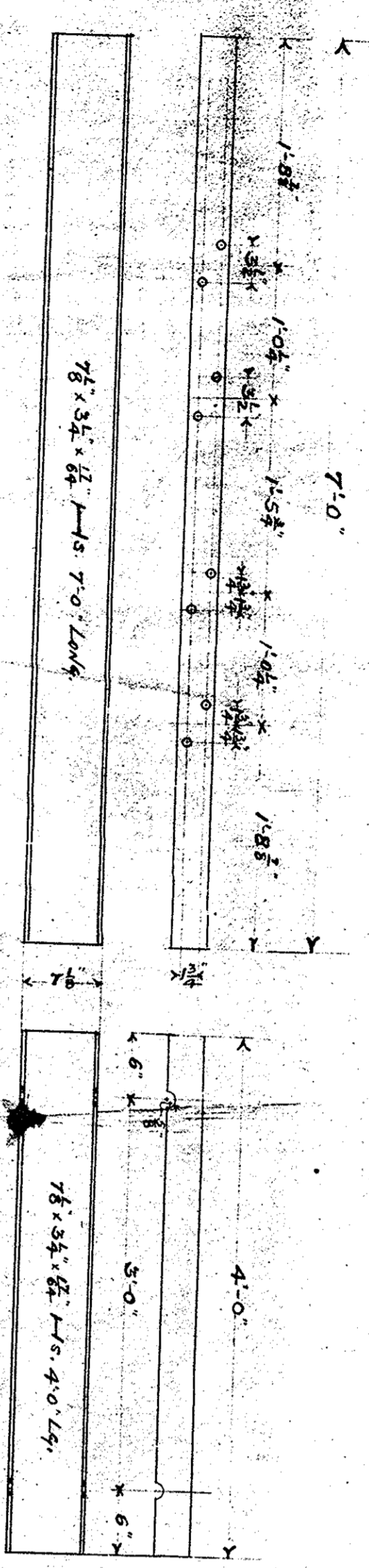
PLAN C STRAIN SHEET DRAWING N<sup>o</sup> 3



CON. 881  
 DETAILS OF FLOORBEAMS  
 AND STRINGERS  
 DRAWING NO. 6  
 LINE 3, 1955 C.M.  
 DOMINION BRIDGE CO. LTD.  
 TORONTO, CANADA

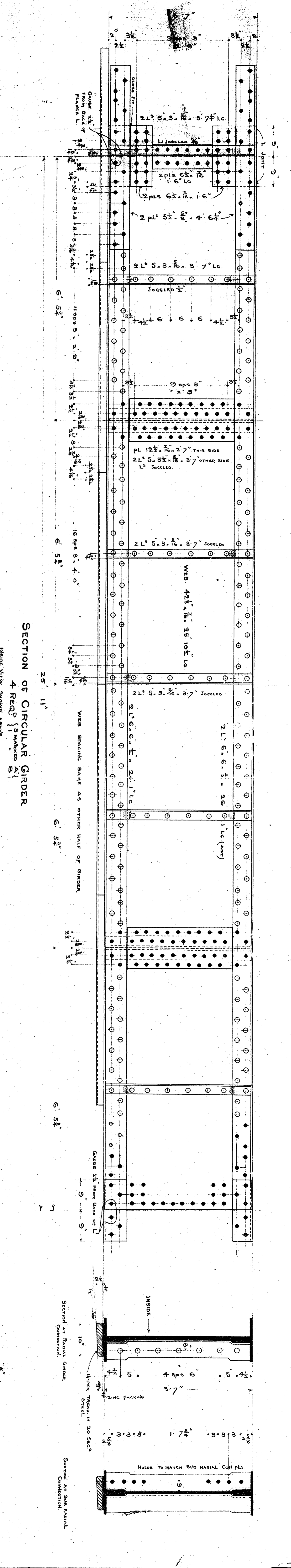
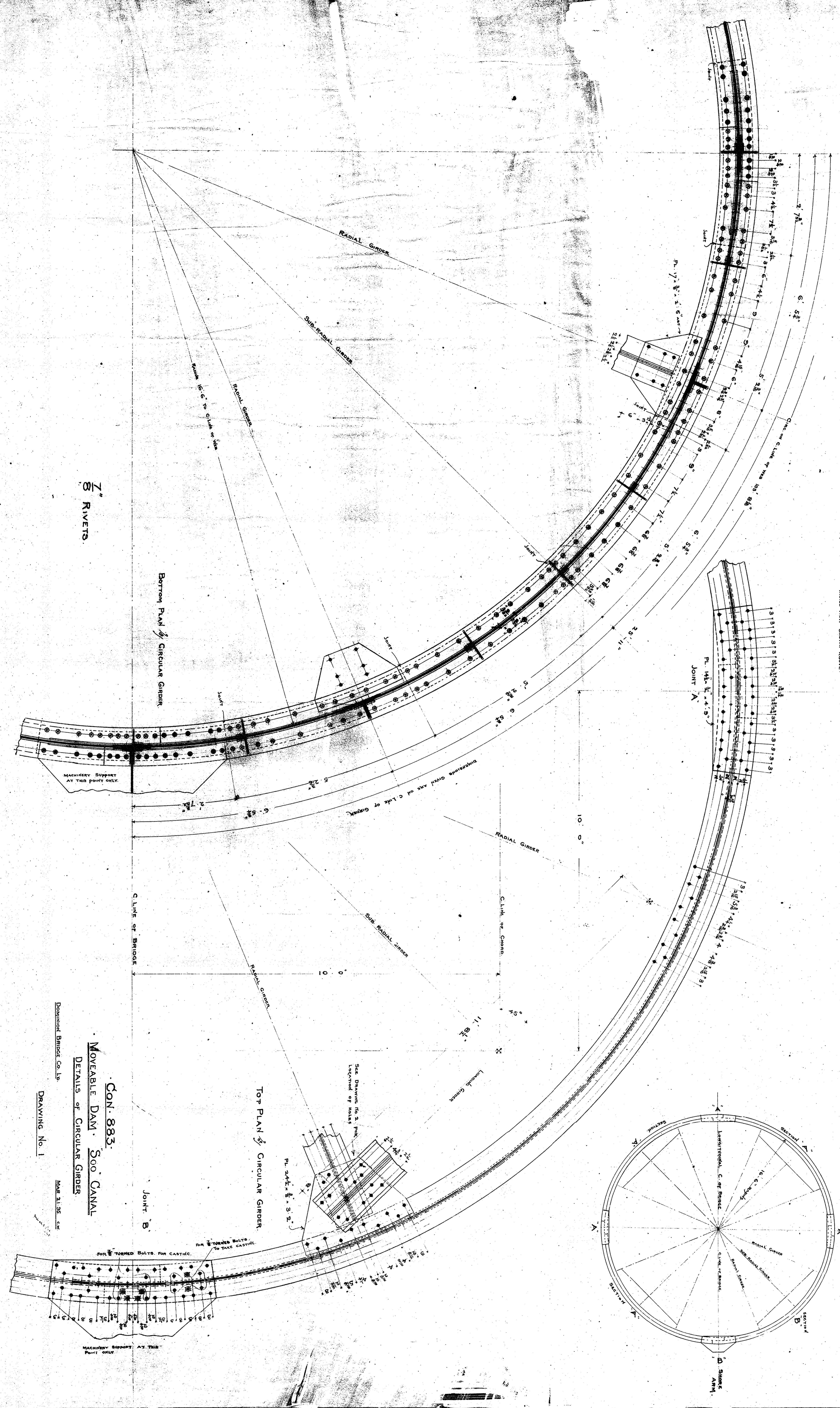
IA00570 50609





CONTRACT 881  
 ANCHORAGE  
 FOR  
 500 KING DAM

DRAWING NO. 13



7" RIVETS

Bottom Plan of Circular Girder

TOP PLAN of CIRCULAR GIRDER

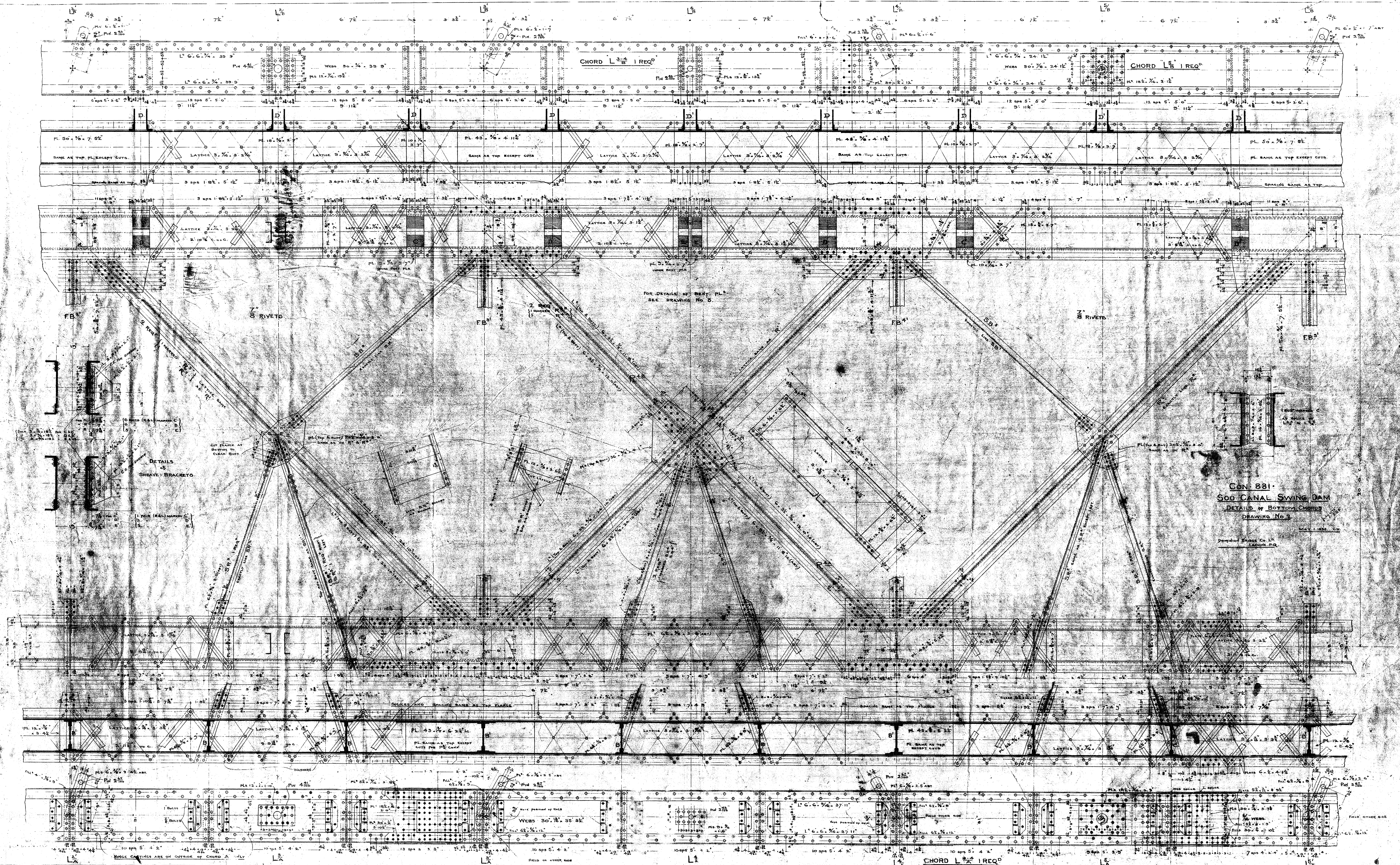
CON. 833.  
 MOVEABLE DAM - 500' CANAL  
 DETAILS of CIRCULAR GIRDER  
 Drawing No. 1  
 MARCH 31, 1905  
 DOMINION BRIDGE CO. LTD.

50611  
1A00572

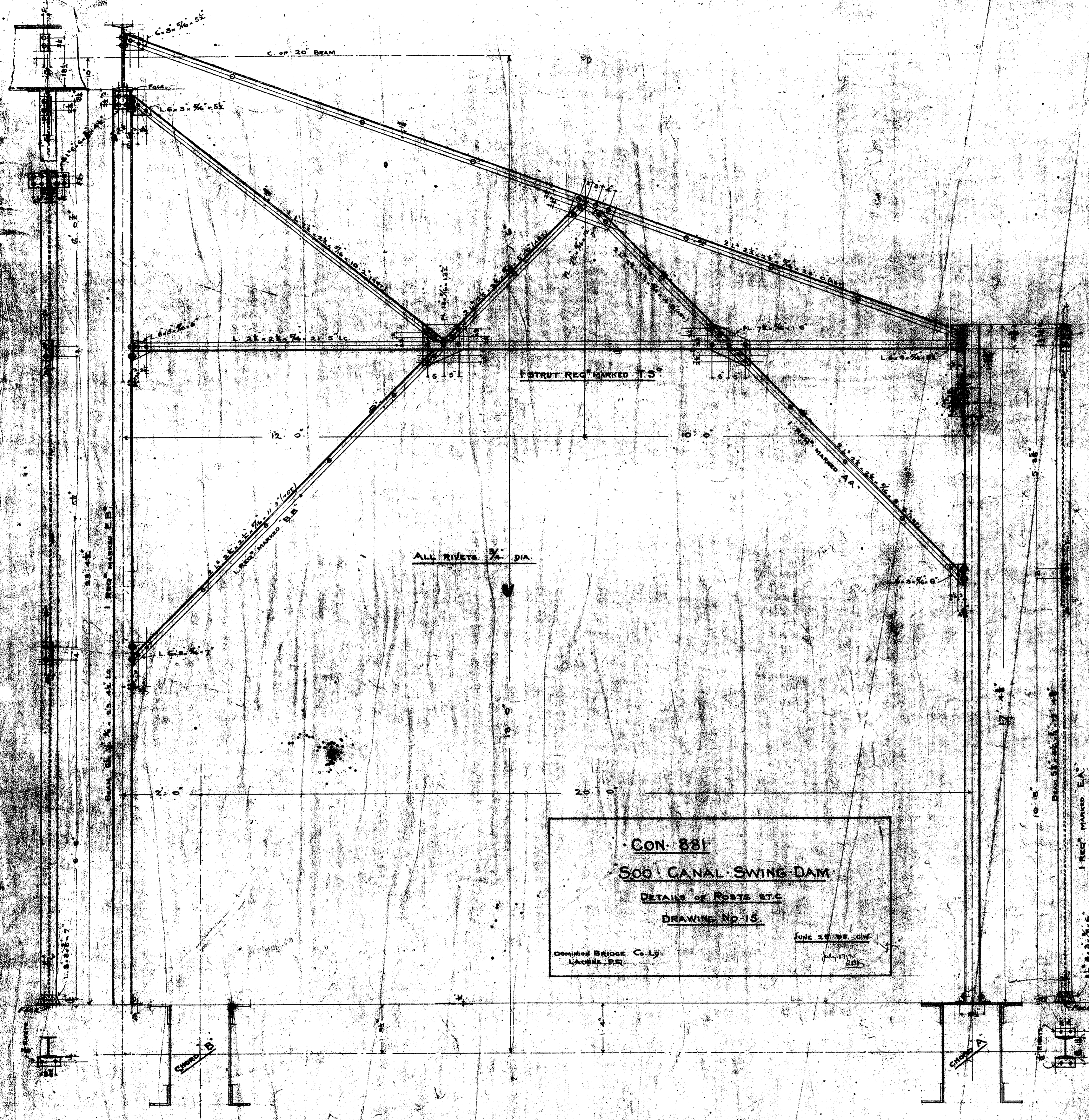




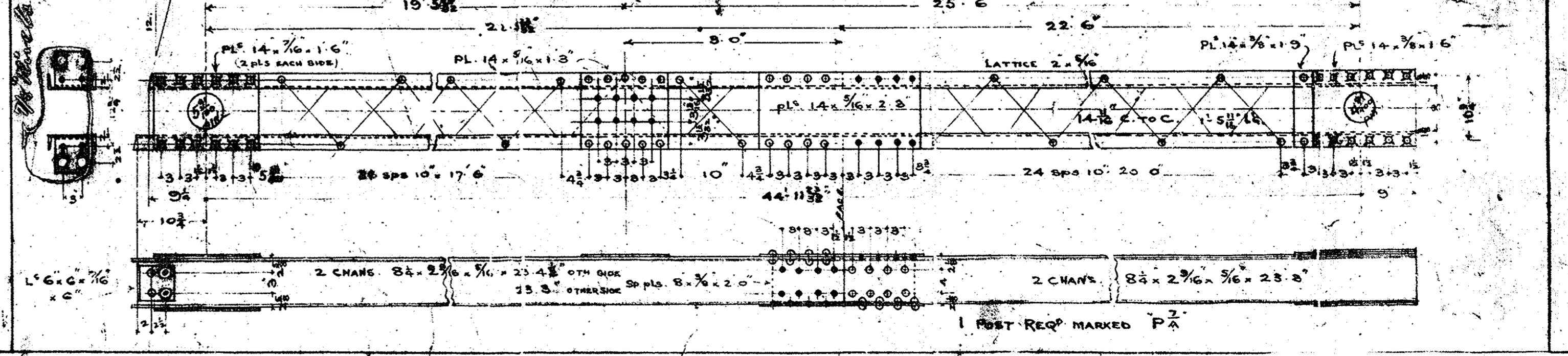
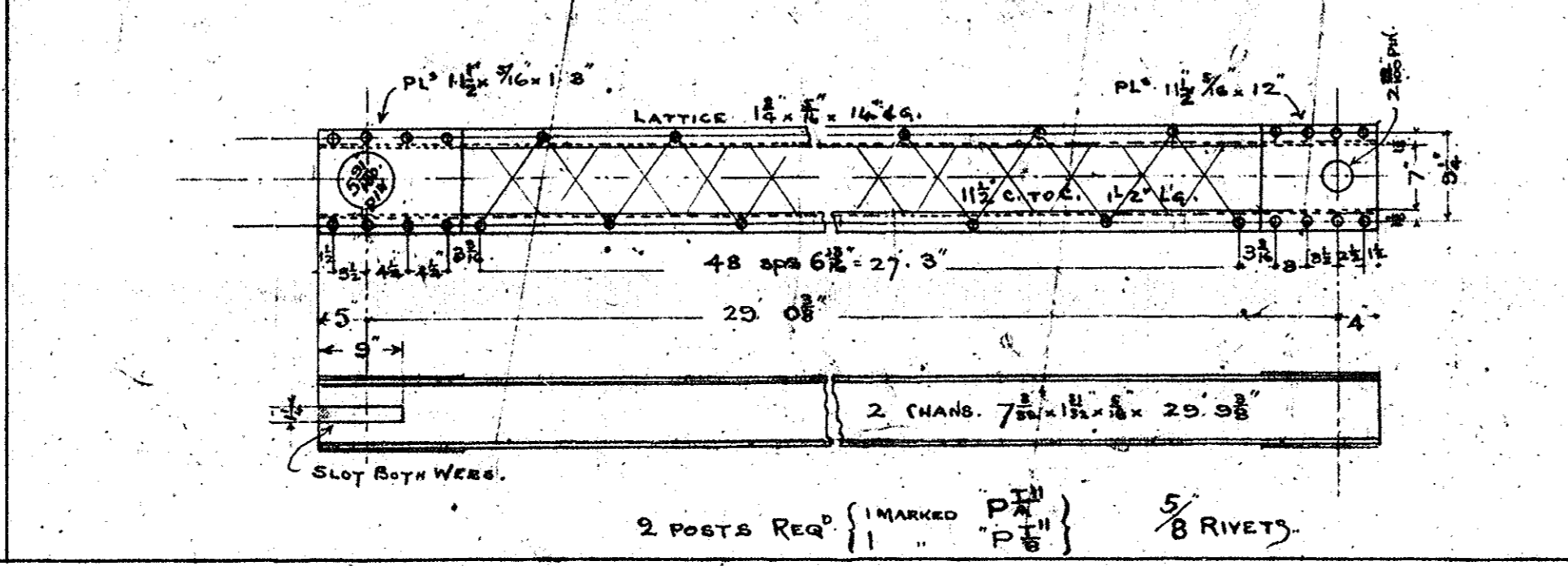
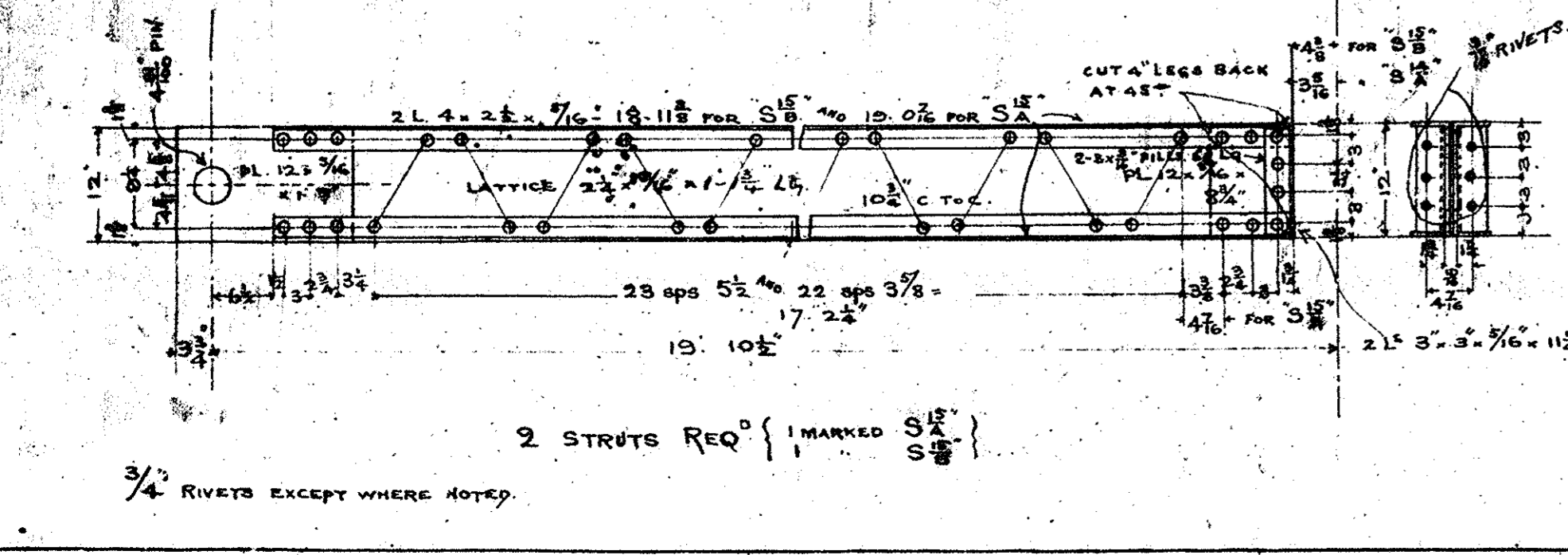
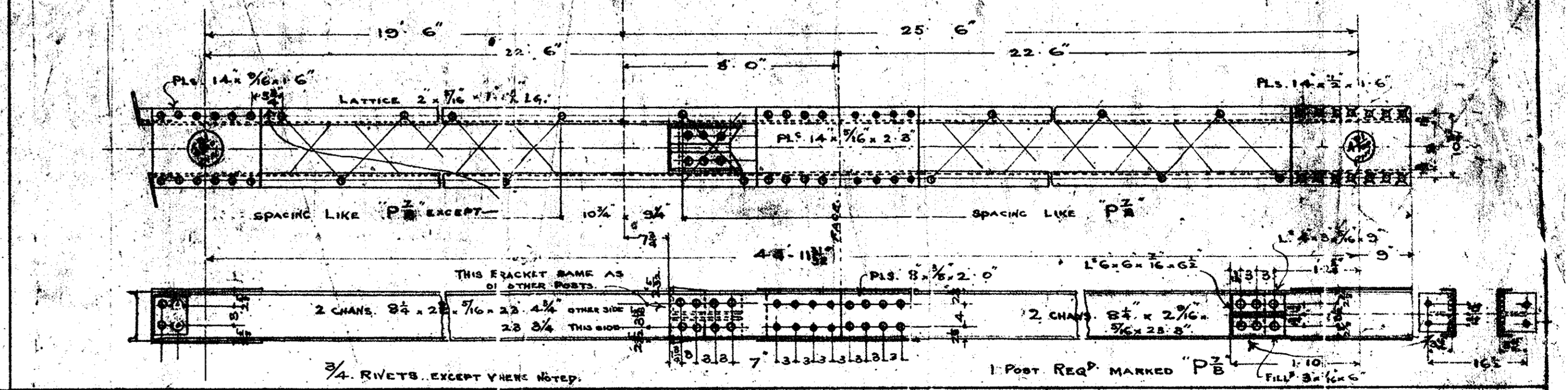
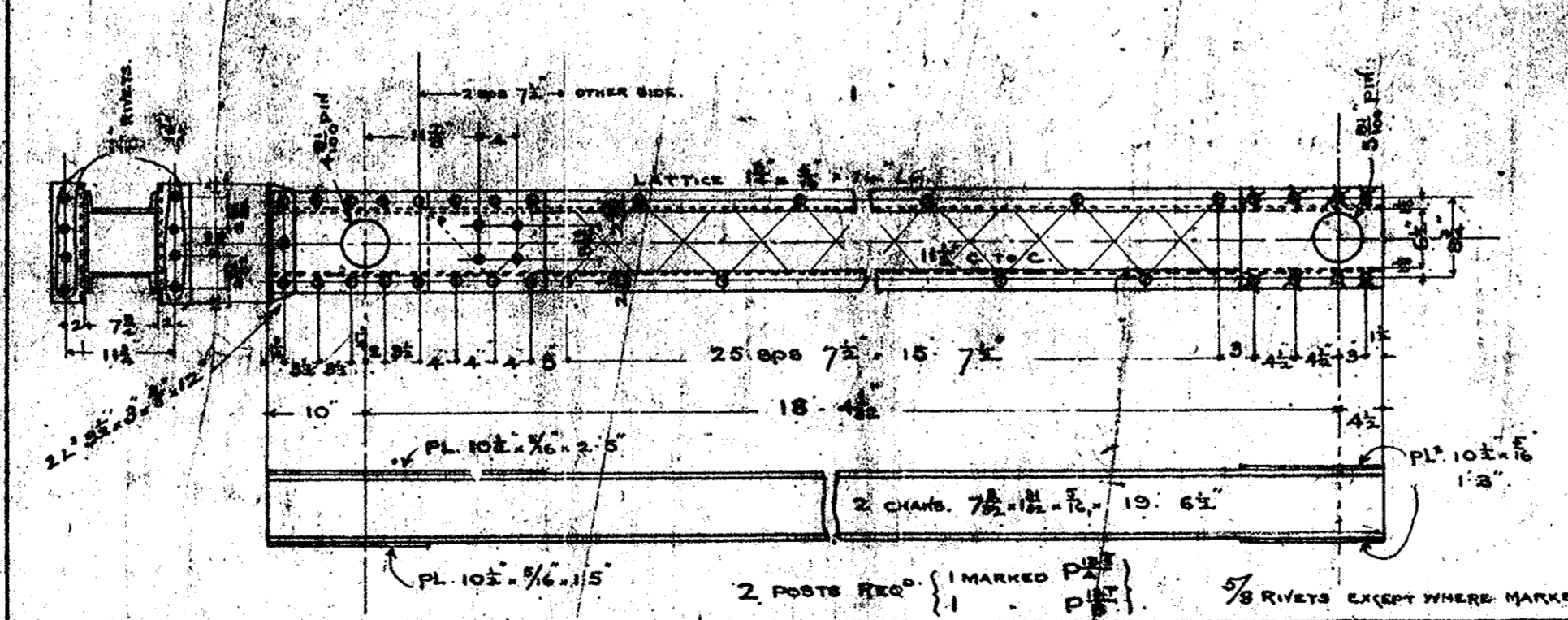
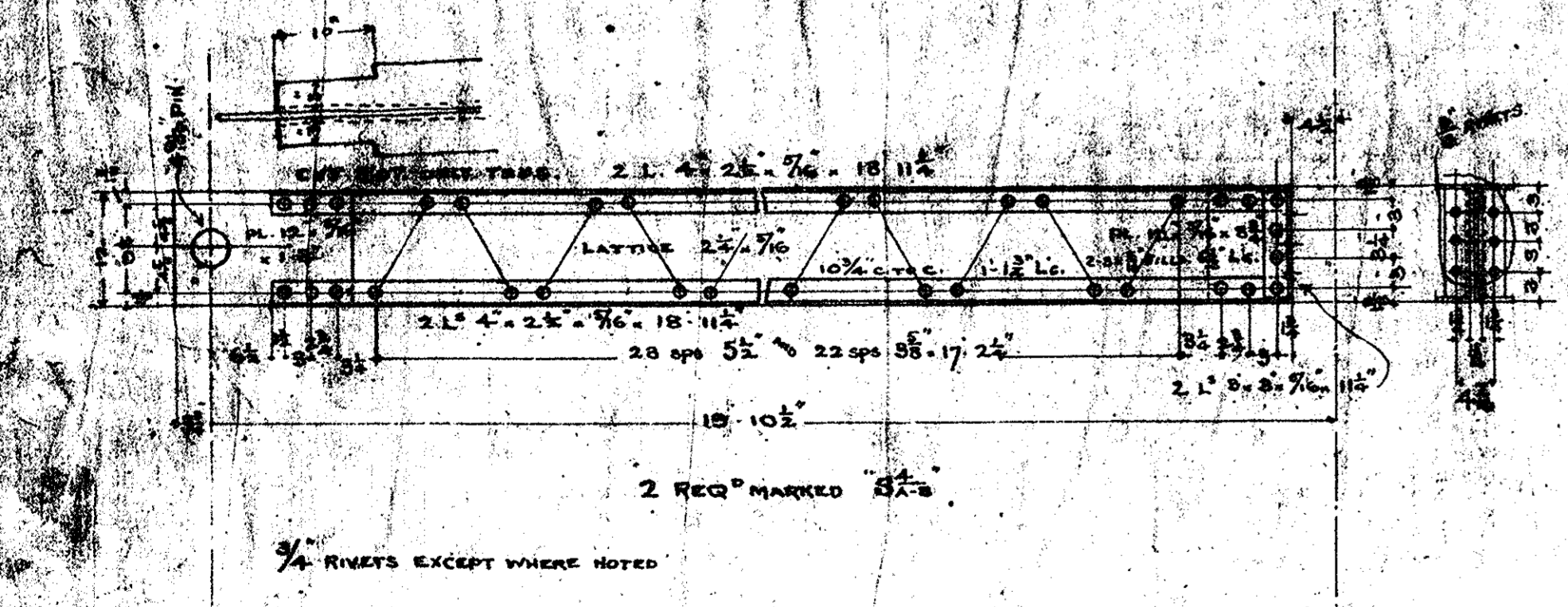
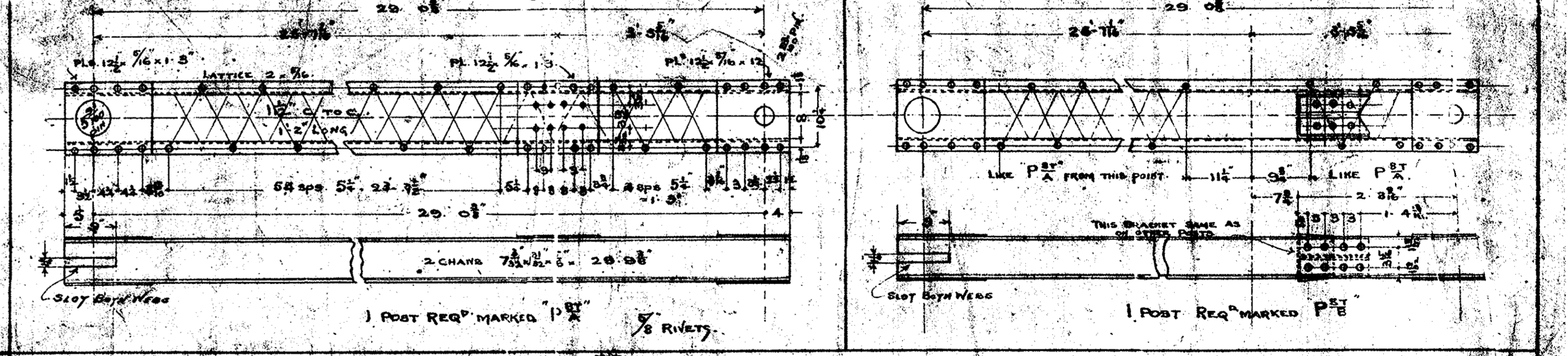
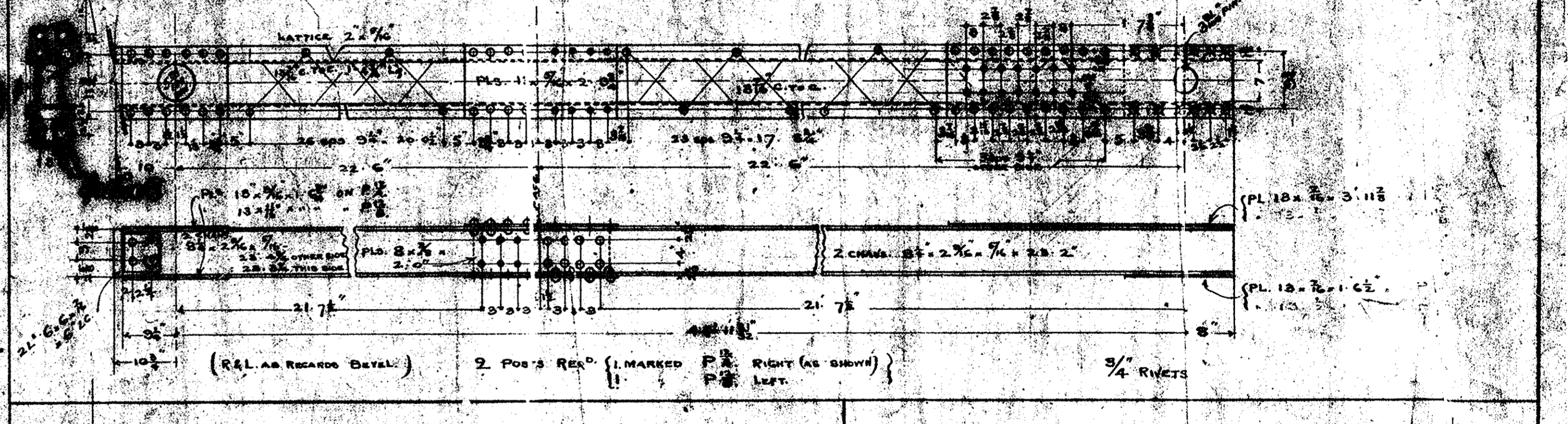
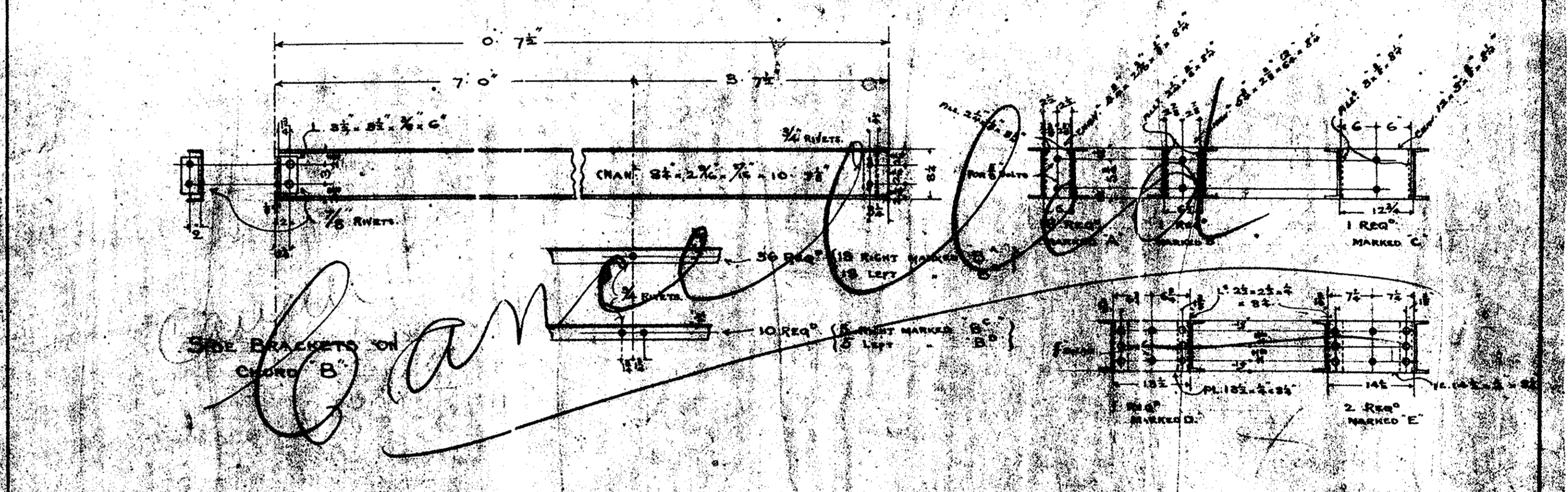
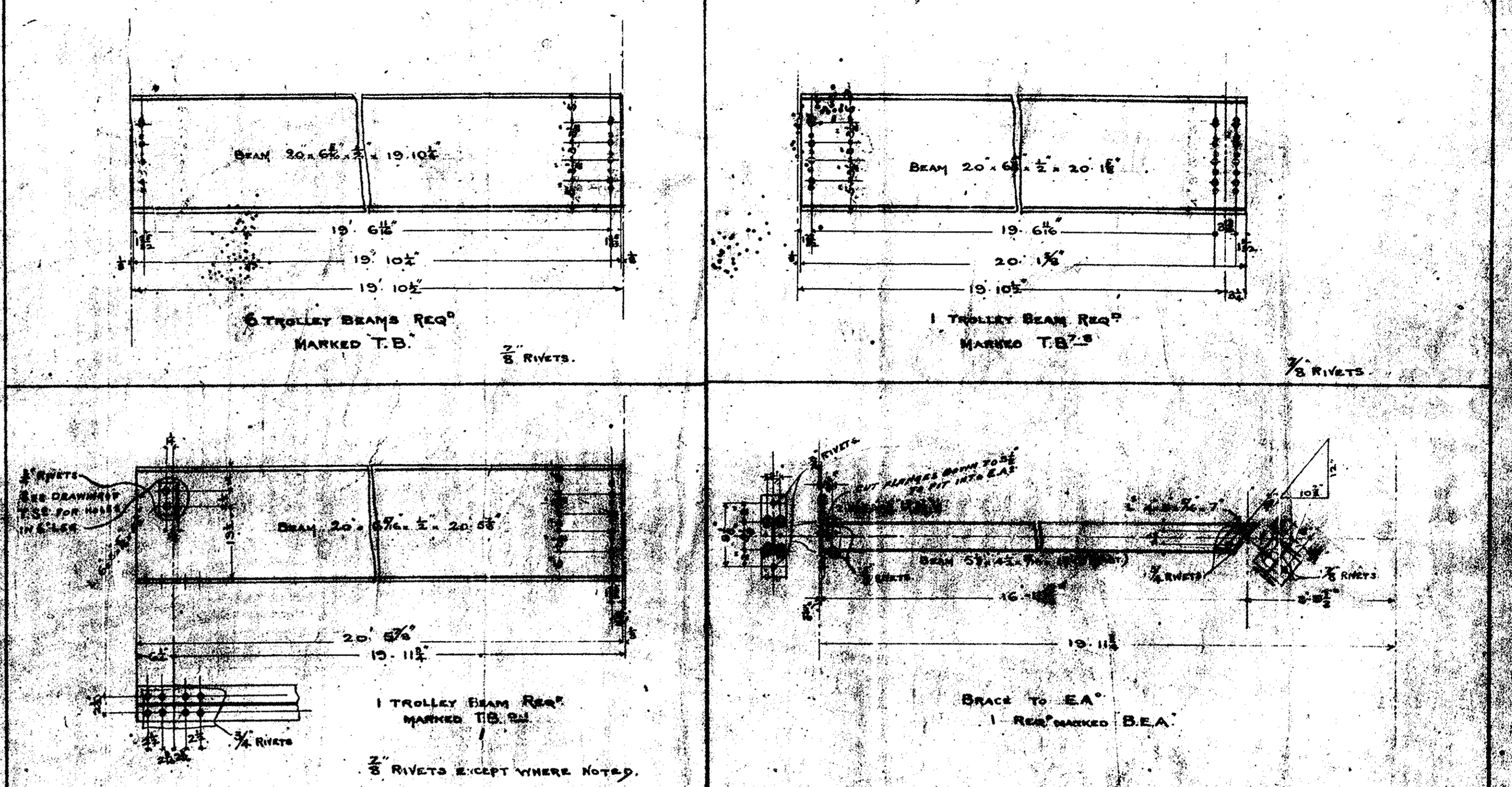


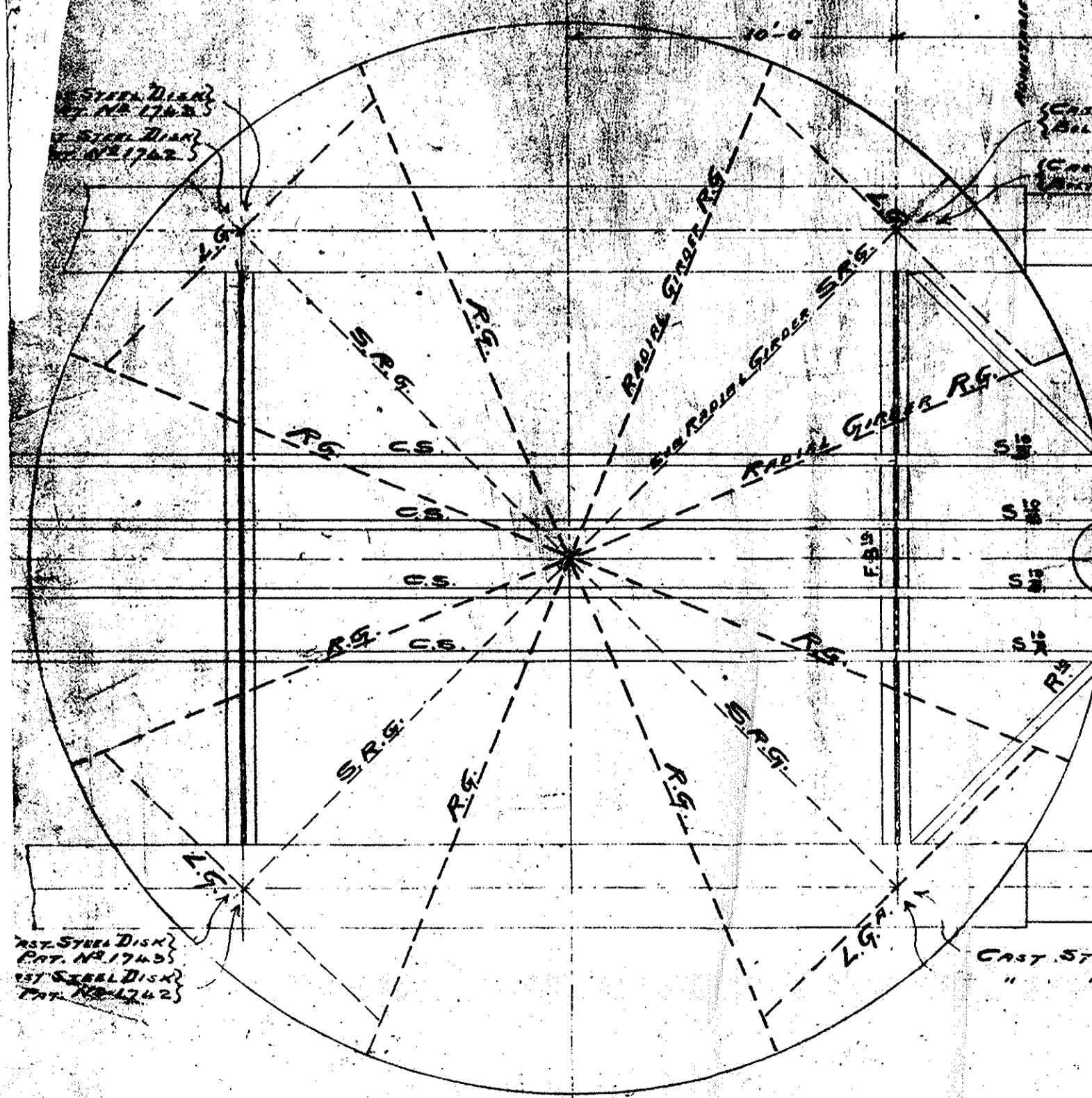
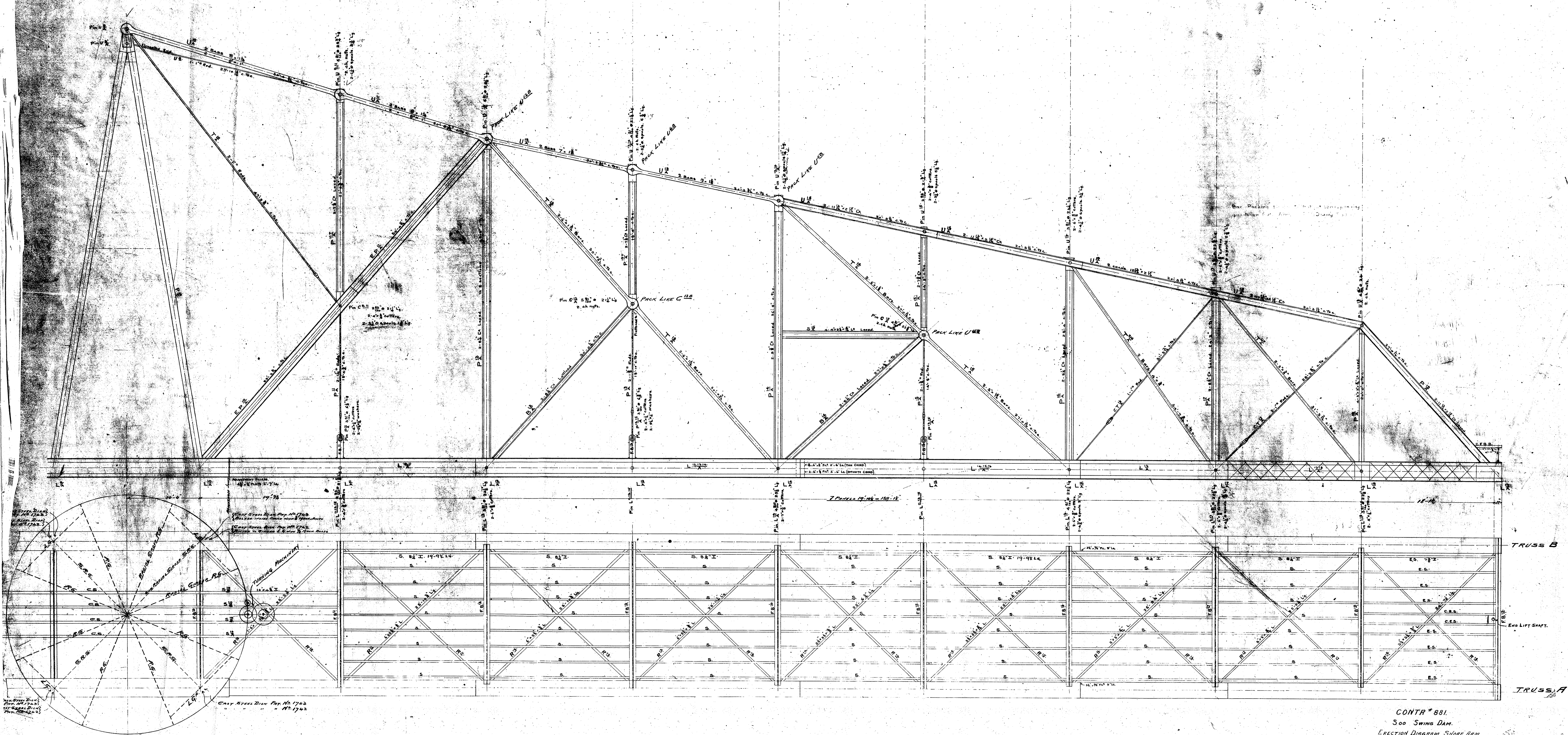


CON. 881  
 SOO CANAL SWING DAM  
 DETAILS OF BOTTOM CHORDS  
 DRAWING No. 3  
 Prepared by  
 THE PORTLAND CEMENT CO. LTD.  
 LONDON, ENGLAND



CON. 881  
 500' CANAL SWING DAM  
 DETAILS OF POSTS ETC.  
 DRAWING No. 15.  
 CONSTRUCTION CO. INC.  
 LACROSSE, WIS.

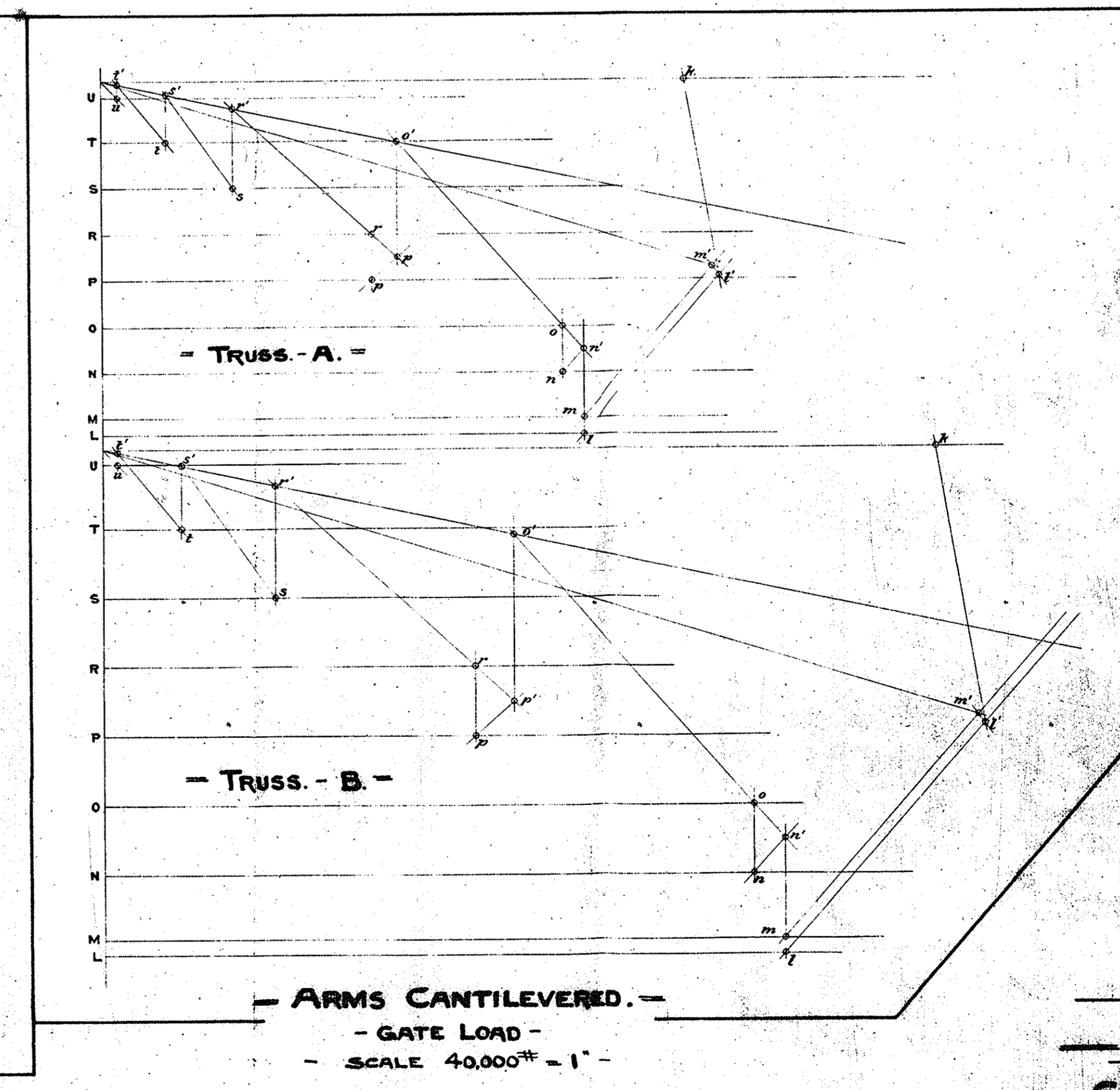
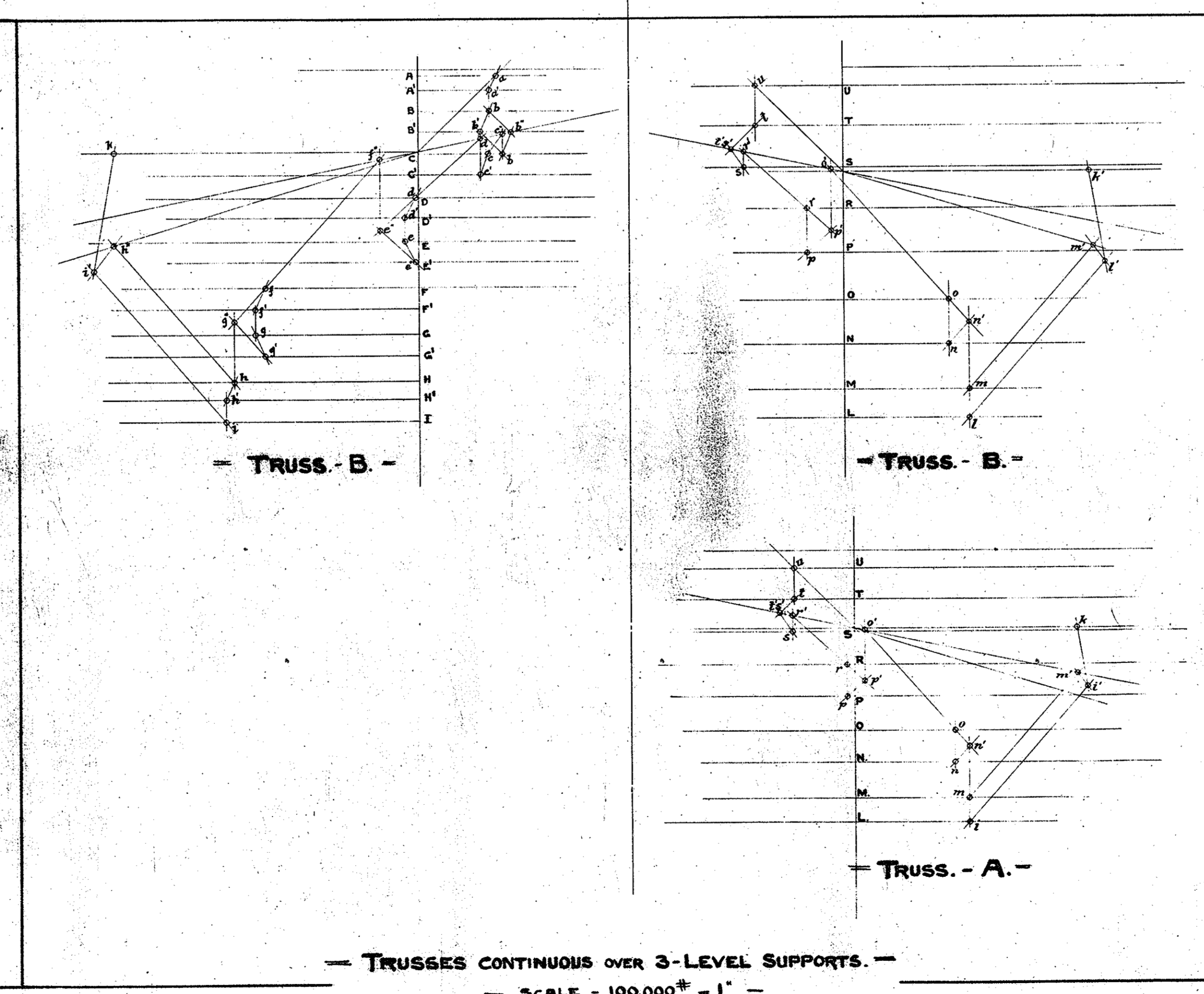
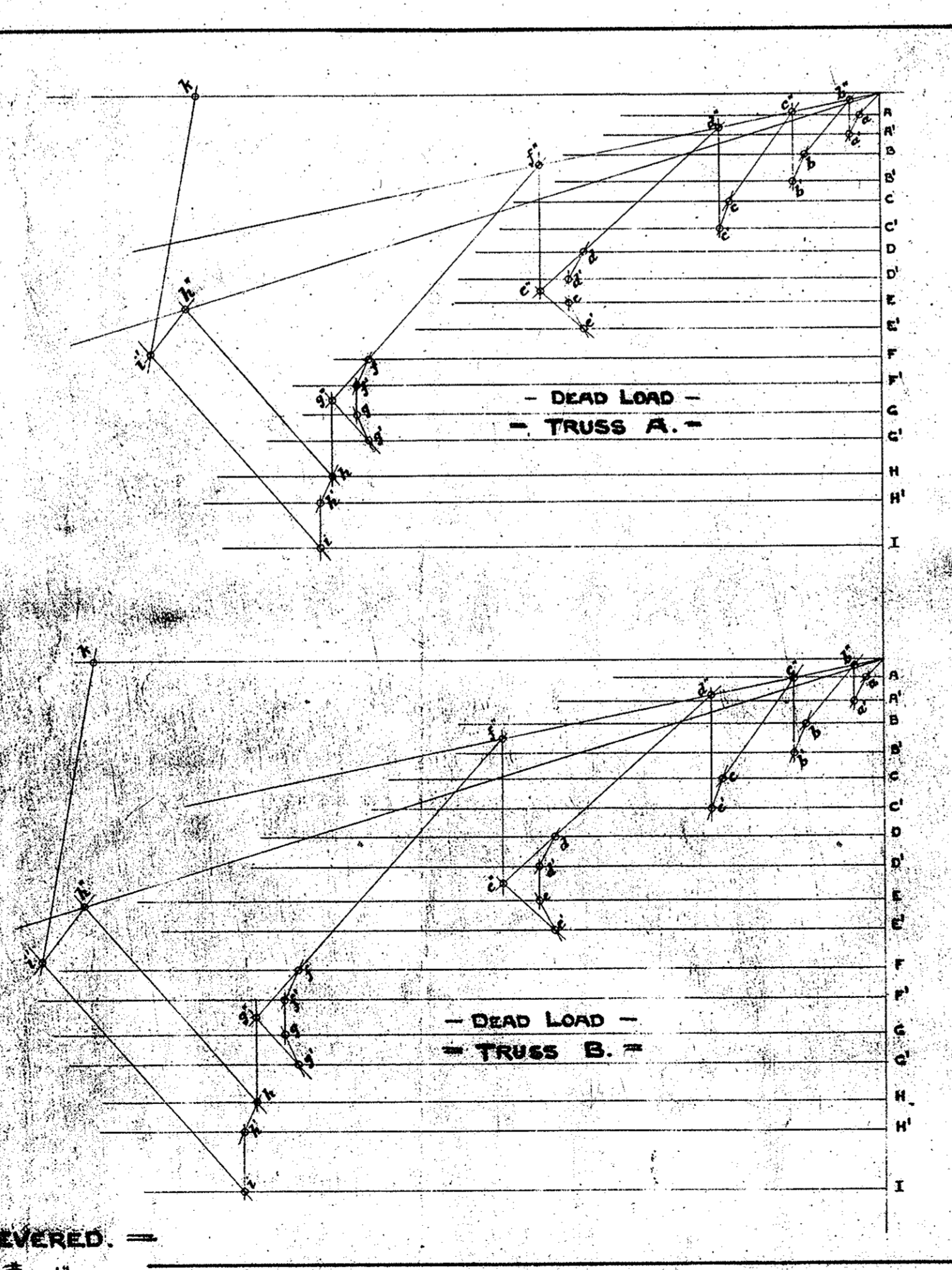
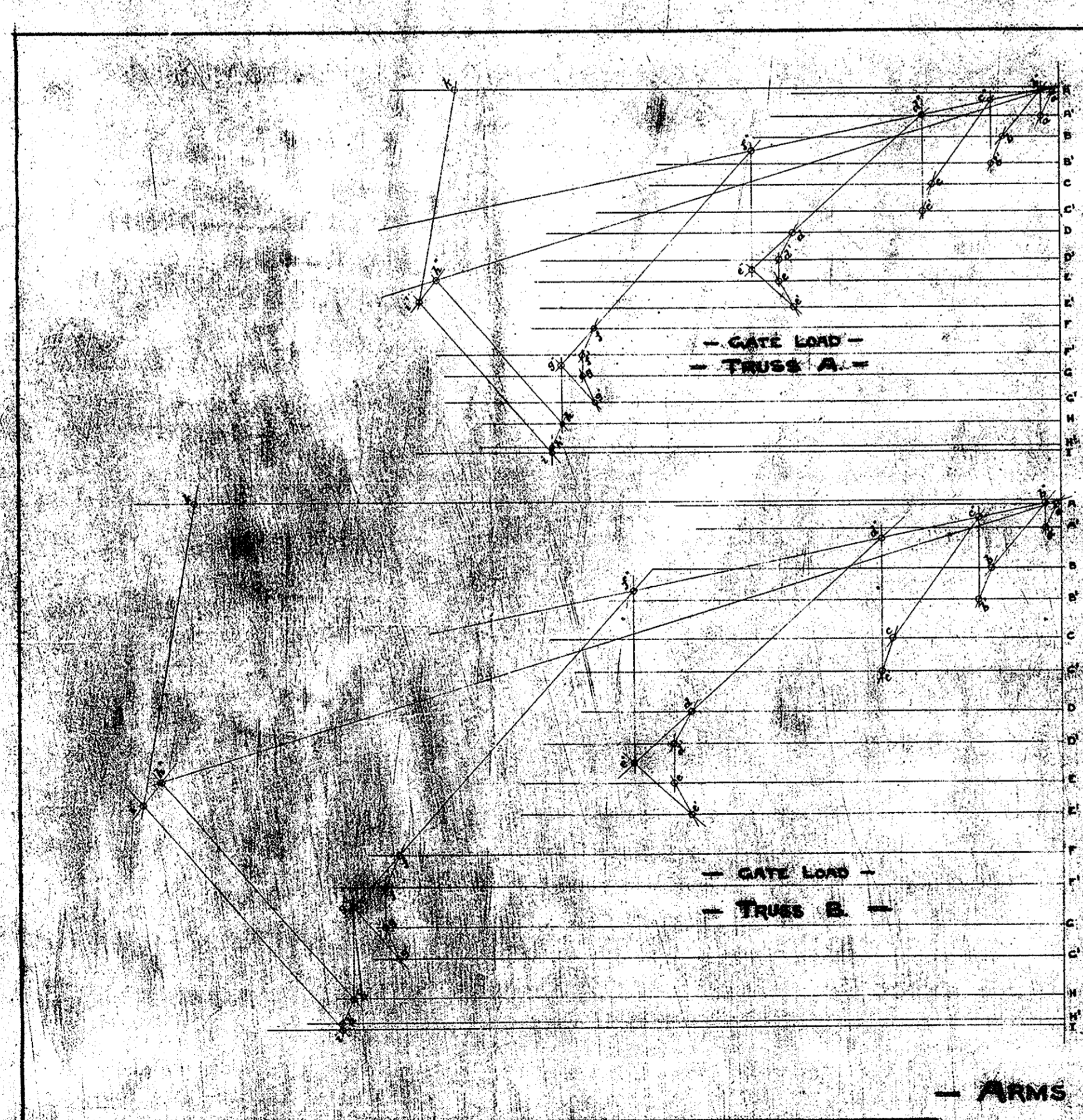
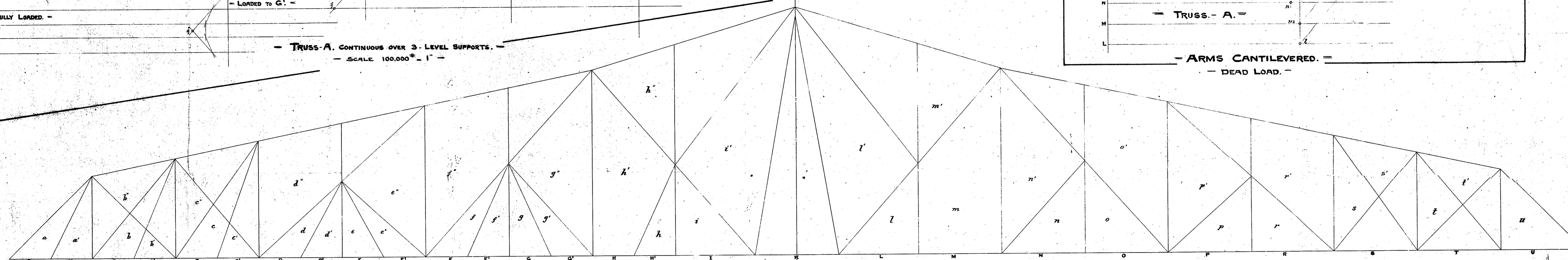
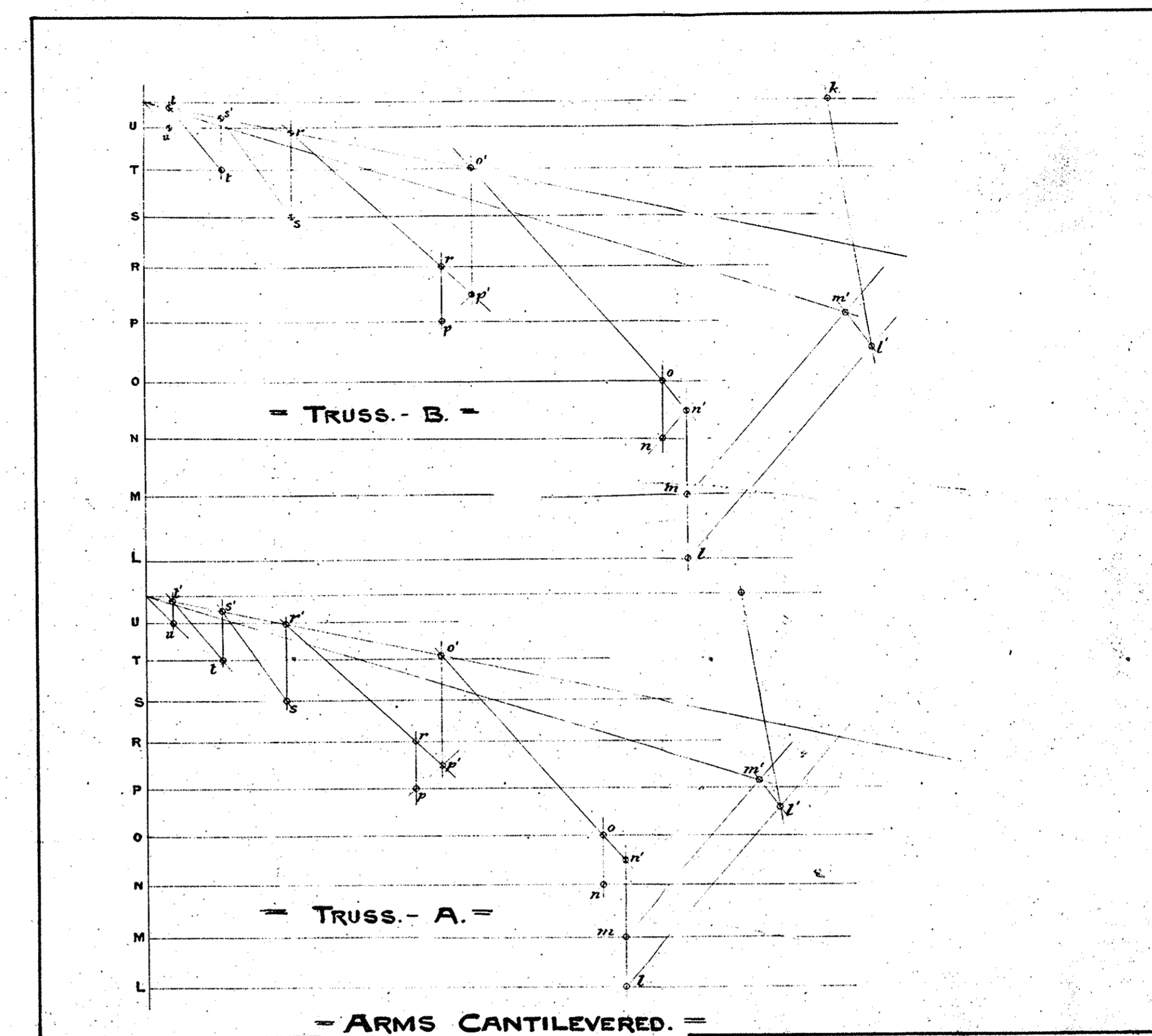
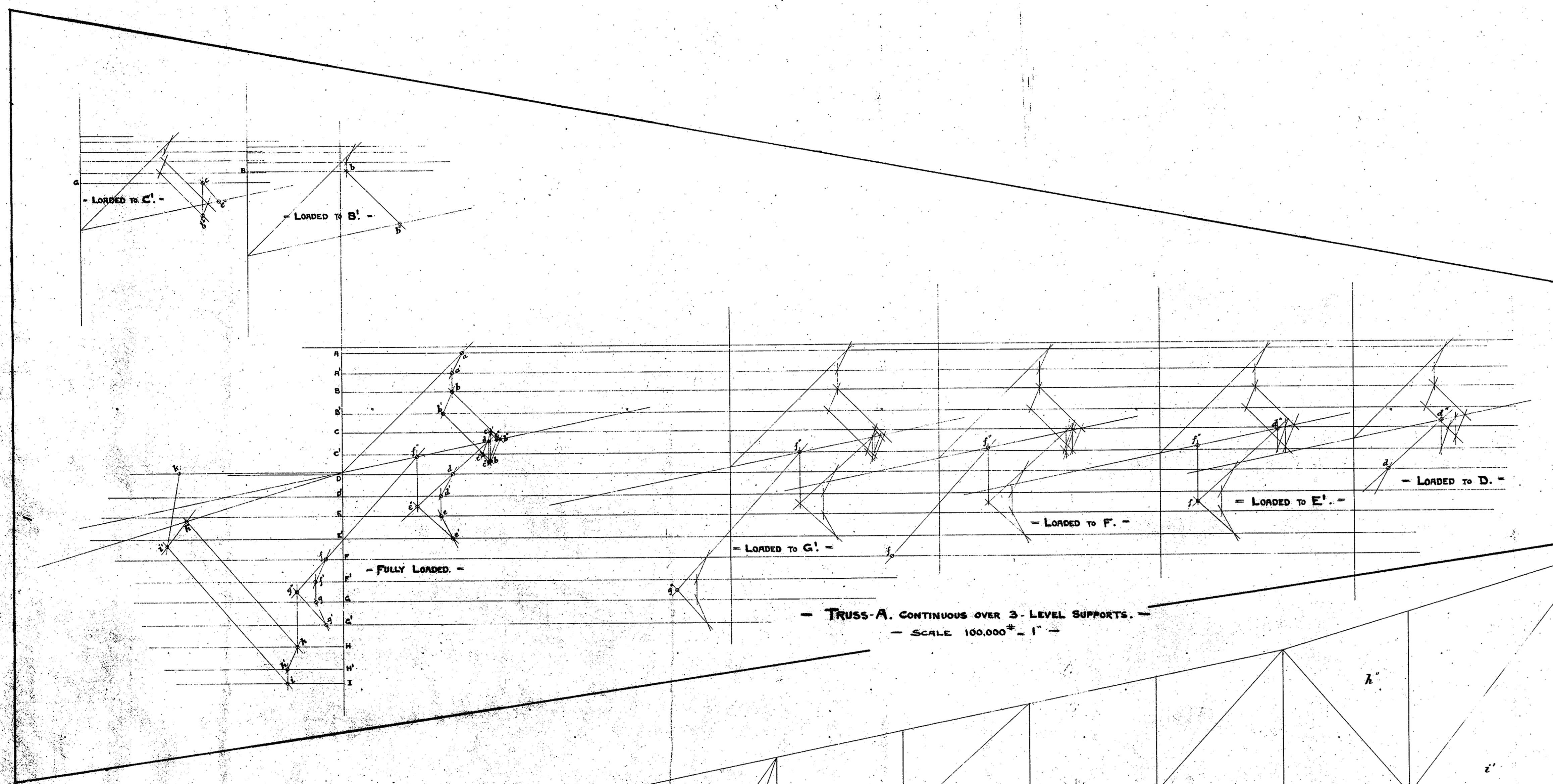




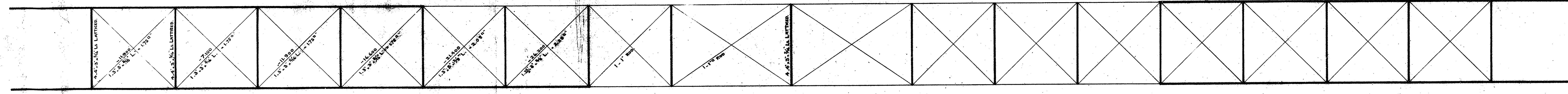
CONTR # 881  
 500 SWING DAM  
 Erection Diagram Slope/APP  
 TRUSS A

Drawing # 24



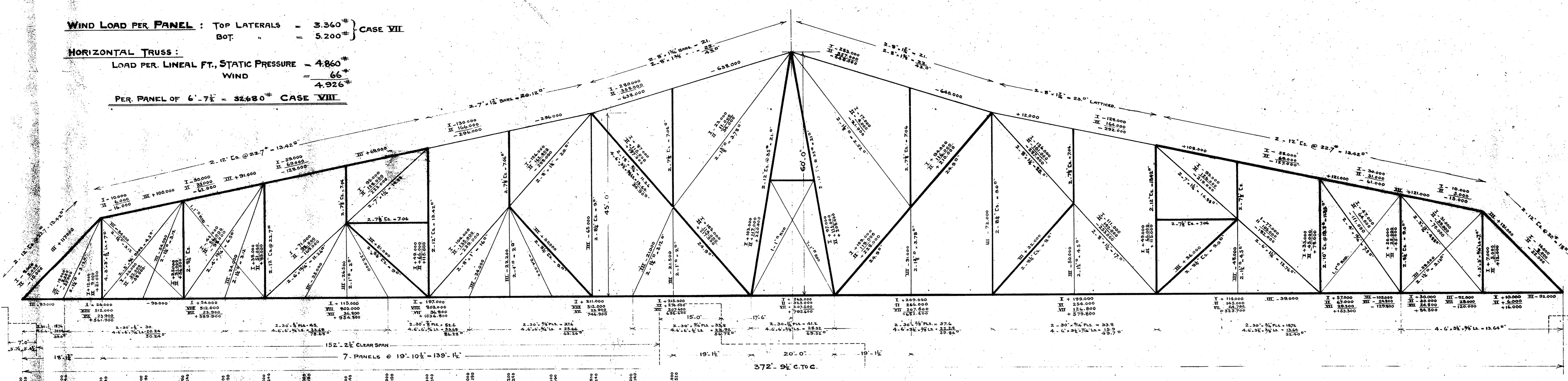


- CONTRACT NO 881 -  
**- STRESS DIAGRAM -**  
**- SWING DAM - 500 CANAL -**  
 - SCALE 1" - 10' -  
 - MAY 20<sup>TH</sup> / 05 -  
 - DOMINION BRIDGE CO. LTD -

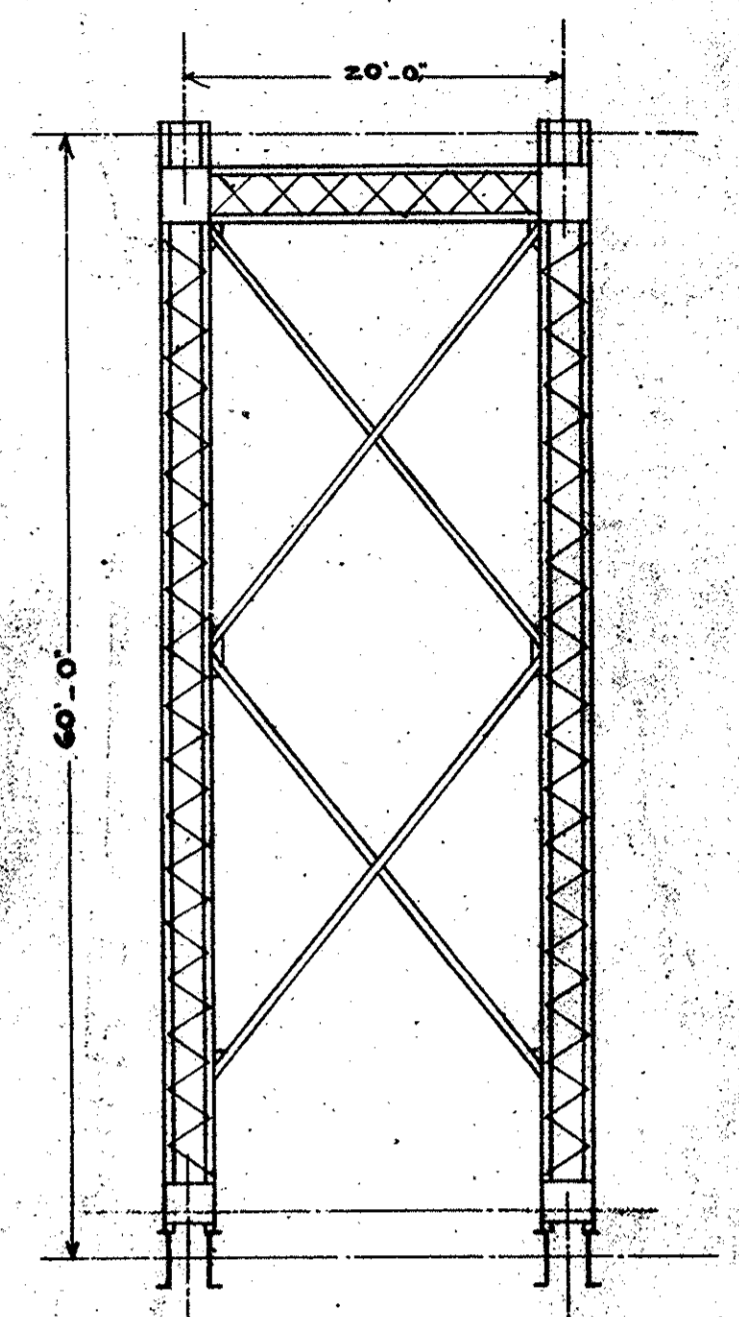


TOP LATERAL BRACING

WIND LOAD PER PANEL : TOP LATERALS = 3.360 } CASE VII  
 Bot. = 5.200 }  
 HORIZONTAL TRUSS :  
 LOAD PER LINEAL FT. STATIC PRESSURE = 4.860 }  
 WIND = 66 }  
 PER. PANEL OF 6'-7 1/2" = 32.680 } CASE VIII



Truss B.

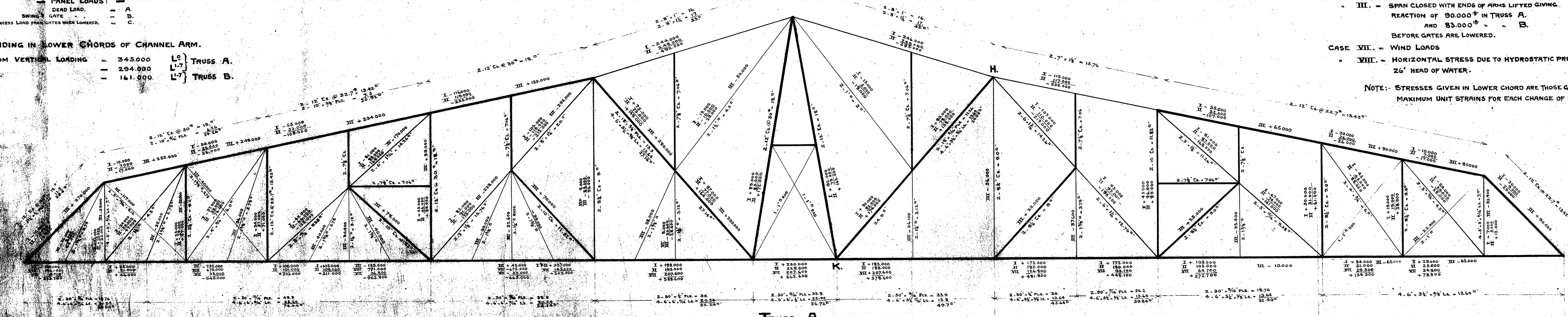


CENTRE VIEW.

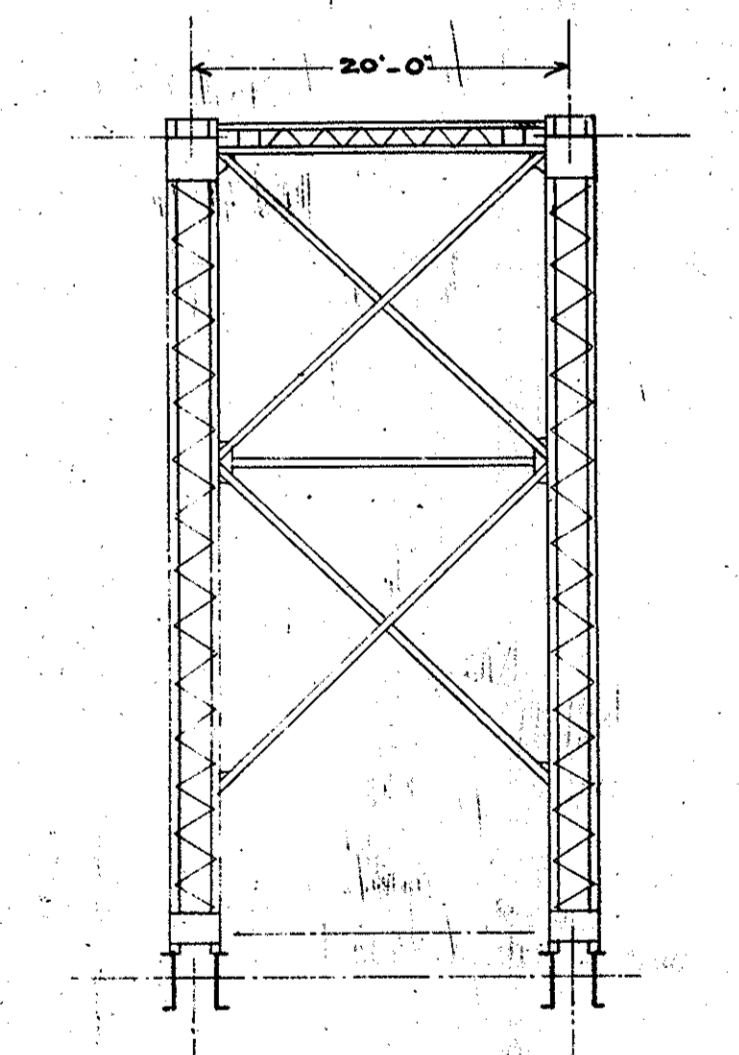
PANEL LOADS :  
 DEAD LOAD. I. A.  
 SWING GATE. II. B.  
 EXCESS LOAD PRESUMED WHEN LOWERED. III. C.

BENDING IN LOWER CHORDS OF CHANNEL ARM.  
 FROM VERTICAL LOADING  
 I. 345,000 L. TRUSS A.  
 II. 294,000 L. TRUSS B.  
 III. 161,000 L. TRUSS B.

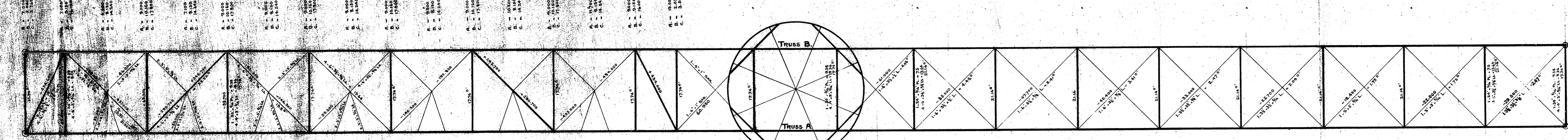
CASE I. = DEAD LOAD SPAN SWINGING.  
 II. = GATE " " "  
 III. = SPAN CLOSED WITH ENDS OF ARMS LIFTED GIVING REACTION OF 90,000# IN TRUSS A. AND 83,000# IN TRUSS B. BEFORE GATES ARE LOWERED.  
 CASE VII. = WIND LOADS  
 VIII. = HORIZONTAL STRESS DUE TO HYDROSTATIC PRESSURE OF 26' HEAD OF WATER.  
 NOTE: STRESSES GIVEN IN LOWER CHORD ARE THOSE GIVING MAXIMUM UNIT STRAINS FOR EACH CHANGE OF SECTION.



Truss A.



PORTAL BRACING ON H.K.



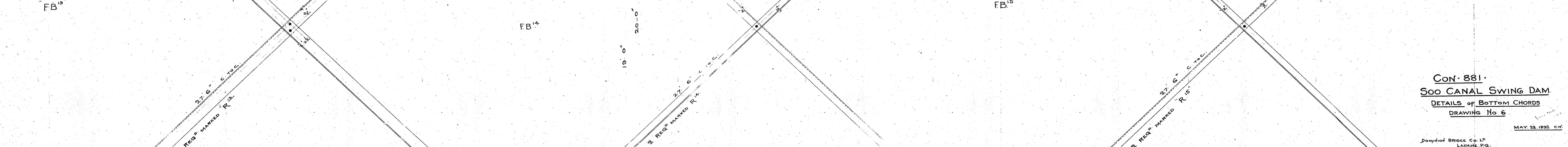
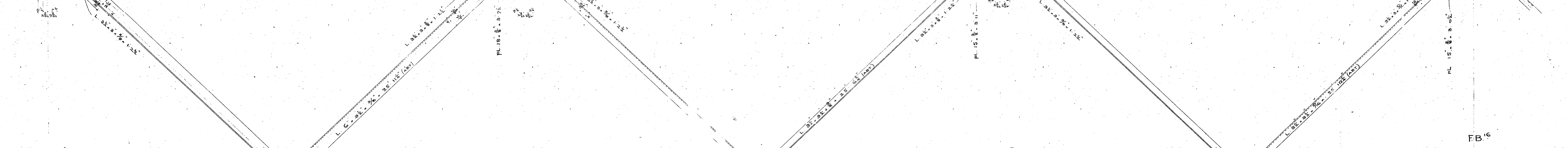
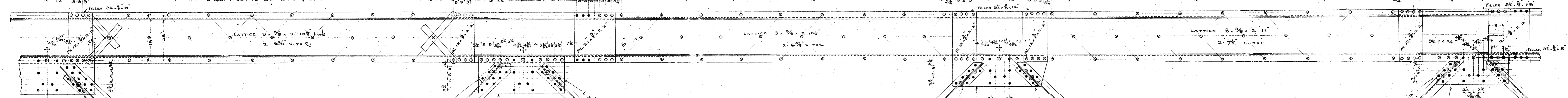
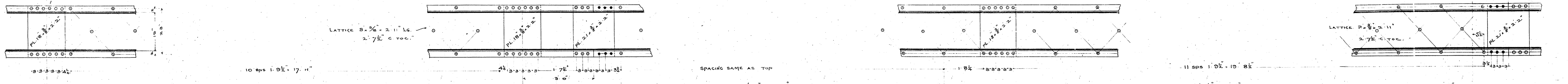
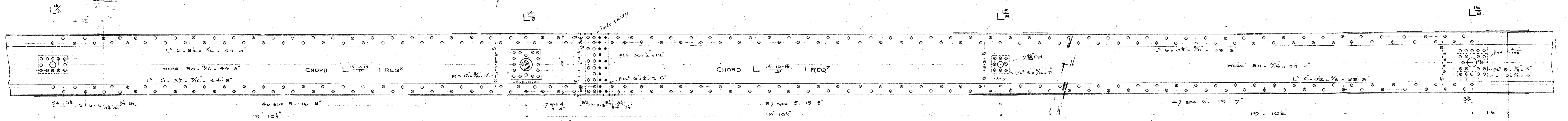
BOT. LATERAL BRACING.

NOTE:  
 THIS PLAN IS CALCULATED ON THE BASIS OF USING  
 23. WICKET FRAMES OF THE FORM AND DIMENSIONS SHOWN  
 ON DRAWING N° 4.

ALL MATERIAL STEEL.

CONTRACT N° 881  
 SWING DAM. - SOO CANAL  
 STRAIN SHEET  
 DRAWING N° 1  
 MAY 10/25

DOMINION BRIDGE CO. LTD.



CON-881  
 SOO CANAL SWING DAM  
 DETAILS OF BOTTOM CHORDS  
 DRAWING No. 6

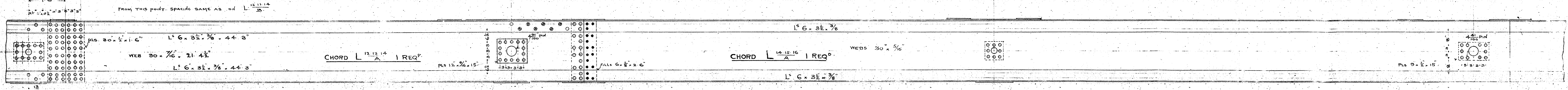
MAY 23 1895 C.W.  
 Dominion Bridge Co. LD.  
 LACHINE, P.Q.

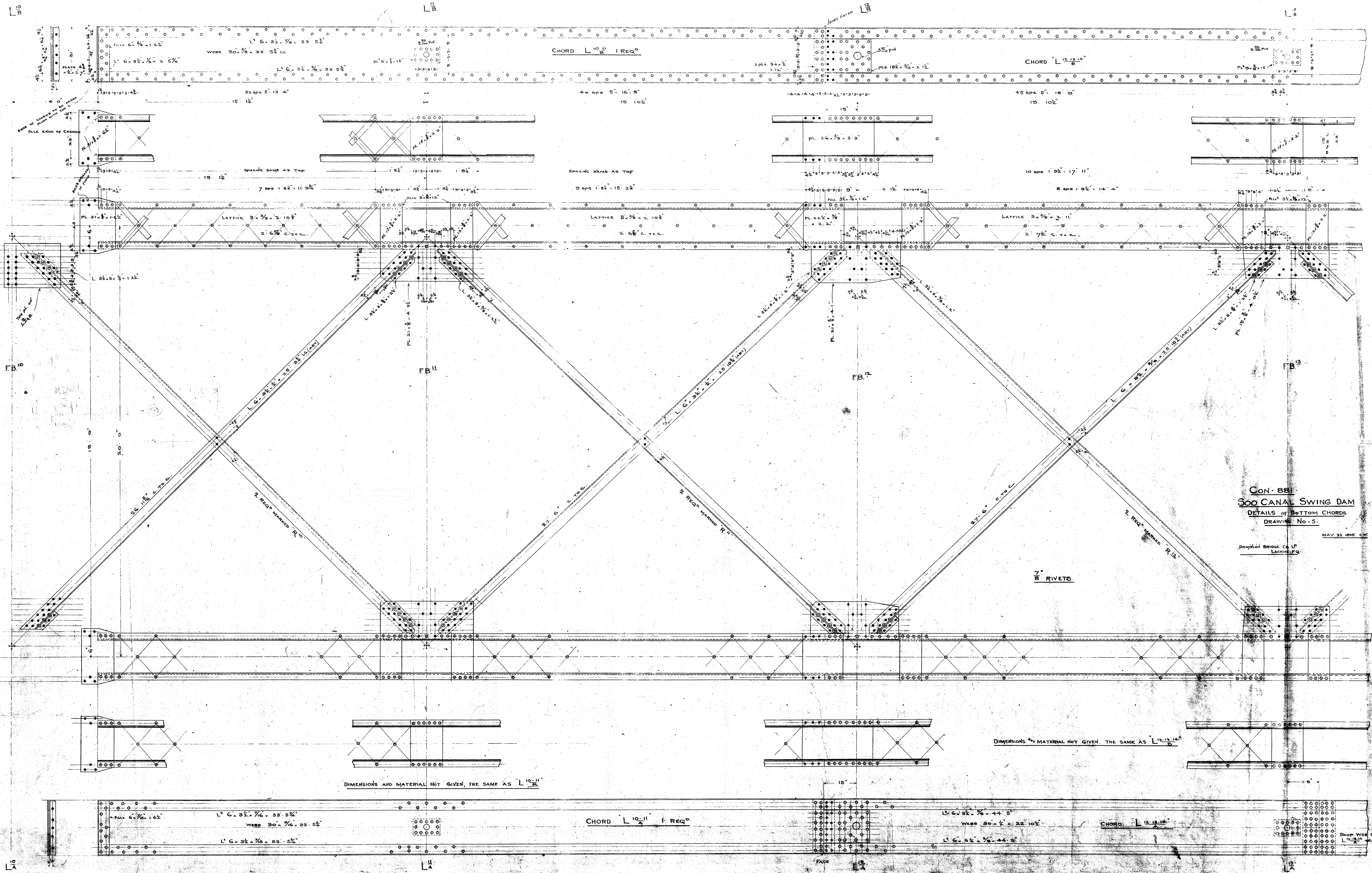
7/8 RIVETS

DIMENSIONS AND MATERIAL NOT GIVEN,  
 THE SAME AS ON L-12 1/2 x 1/4

DIMENSIONS AND MATERIAL NOT GIVEN,  
 THE SAME AS ON L-14 1/2 x 1/4

DIMENSIONS AND MATERIAL NOT GIVEN,  
 THE SAME AS ON L-16 1/2 x 1/4





CON. 881  
 300 CANAL SWING DAM  
 DETAILS OF BOTTOM CHORDS  
 DRAWING No. 5

DONALD BRIDGE CO. INC.  
 LARCHMONT, N.Y.

MAY 22 1895 C.M.

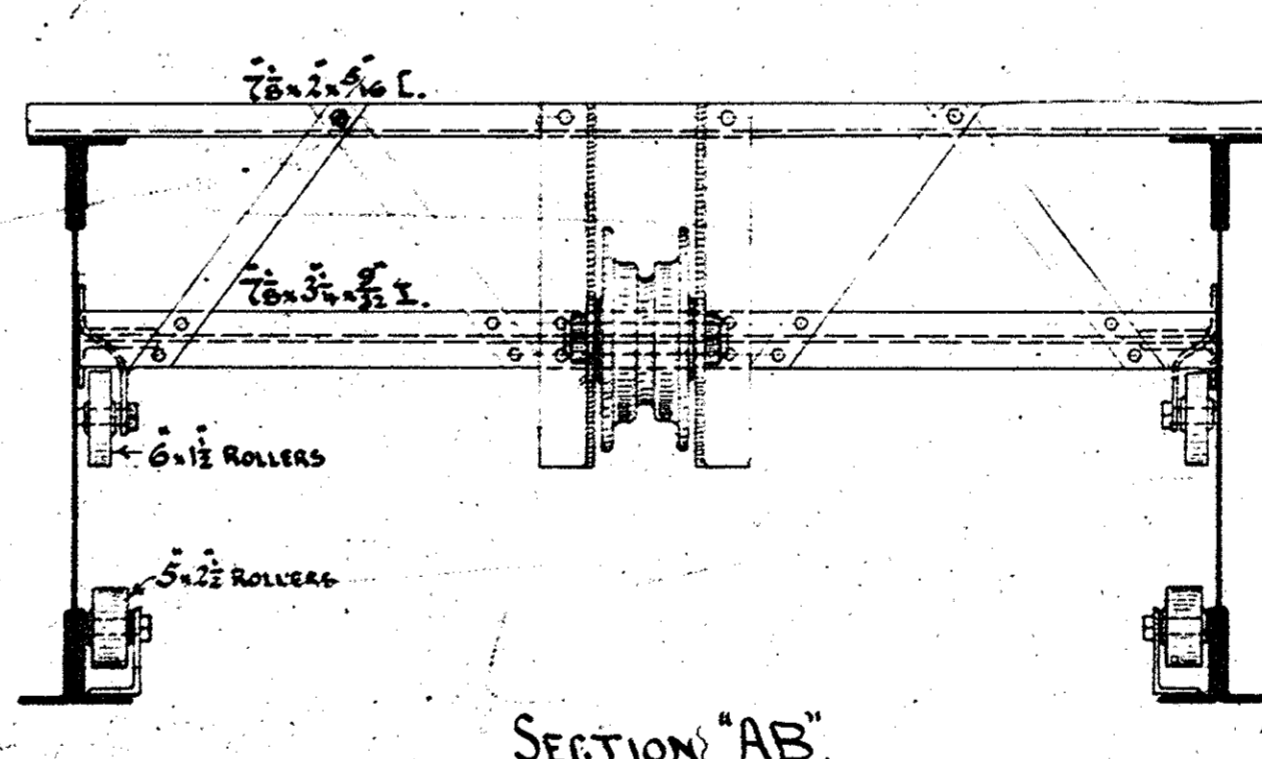
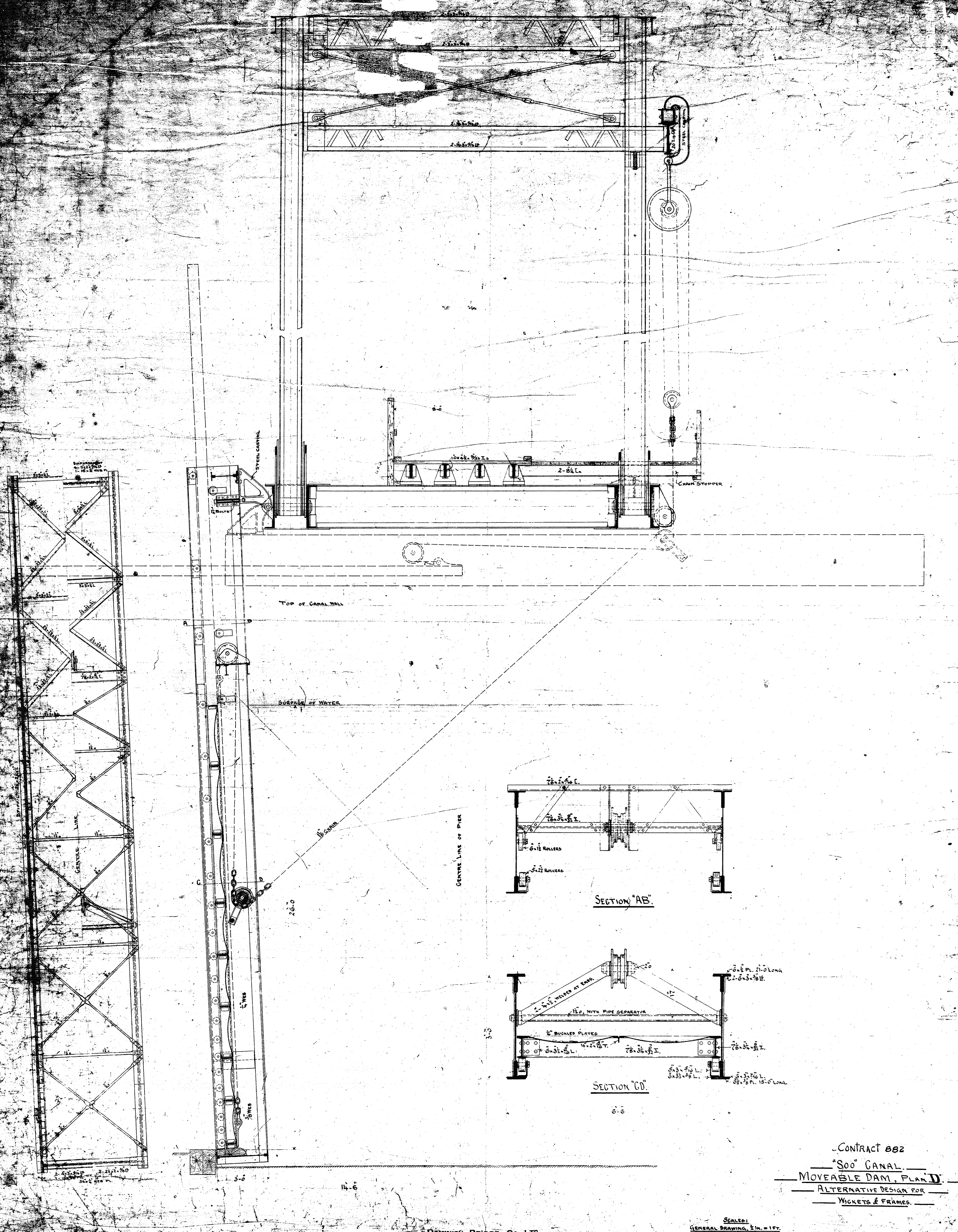
DIMENSIONS AND MATERIAL NOT GIVEN, THE SAME AS L<sup>10-11</sup>

DIMENSIONS AND MATERIAL NOT GIVEN, THE SAME AS L<sup>10-11</sup>

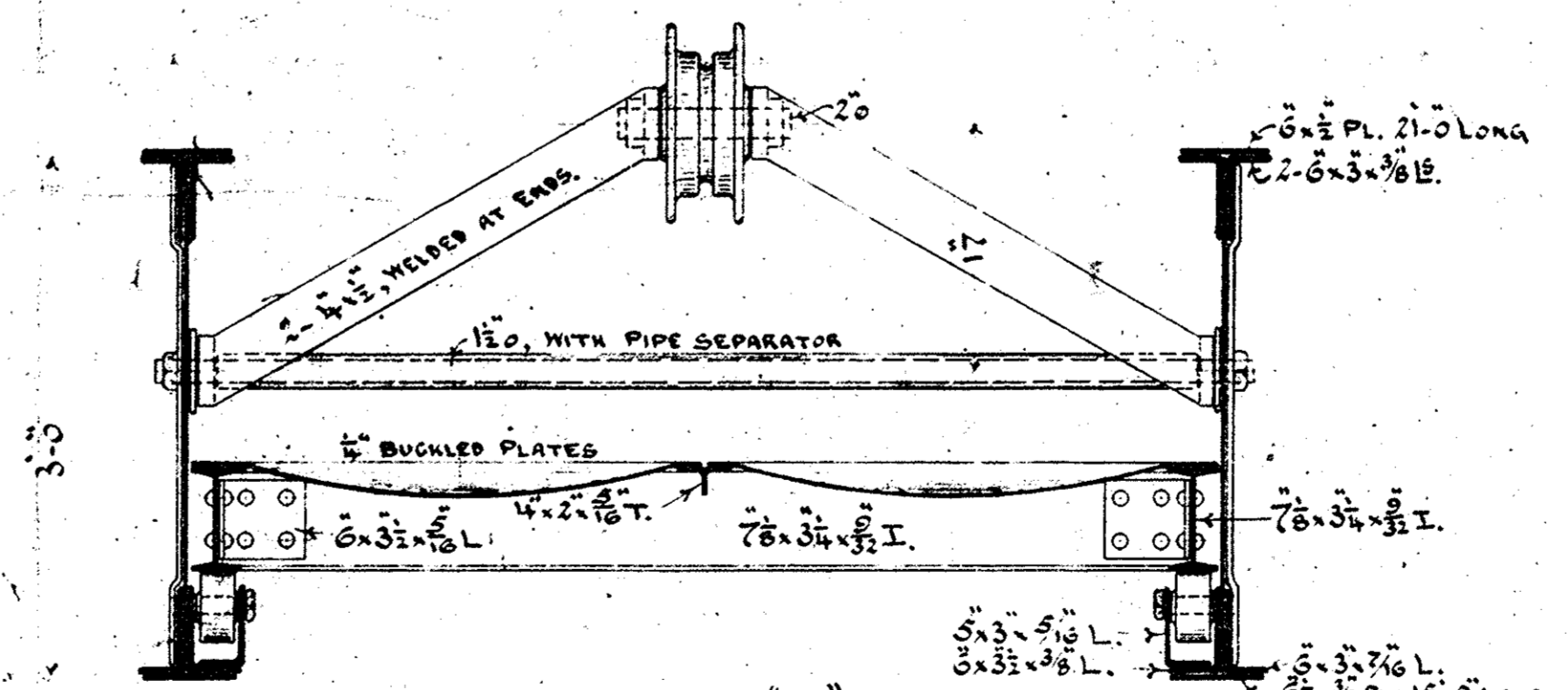








SECTION "AB"



SECTION "CD"

Contract 882  
 "800" CANAL  
 MOVEABLE DAM, PLAN "D"  
 ALTERNATIVE DESIGN FOR  
 WICKETS & FRAMES

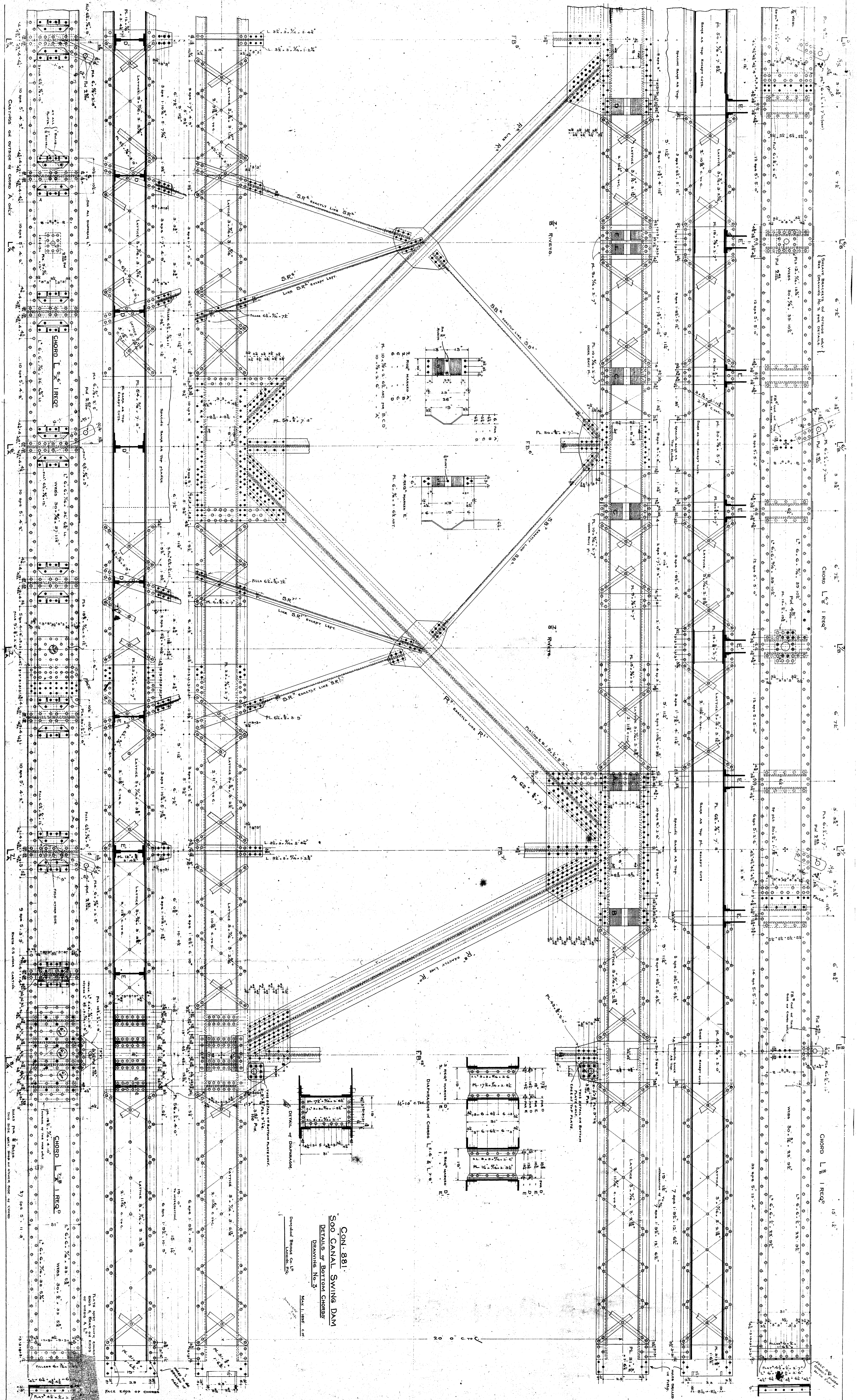
DOMINION BRIDGE CO. LTD.

SCALE:  
 GENERAL DRAWING, 3/4" = 1'-0"  
 DETAILS, 1/4" = 1'-0"

FEB. 7, 1924

17905576 50686





CONT. 881  
 SOO CANAL SWING DAM  
 DETAILS OF BOTTOM CHORDS  
 DRAWING NO. 3

Max. 1:1000 C.W.  
 Detailed Design Co. Inc.  
 1501 Broadway, N.Y.C. 10019

Castings on outside of chord A only

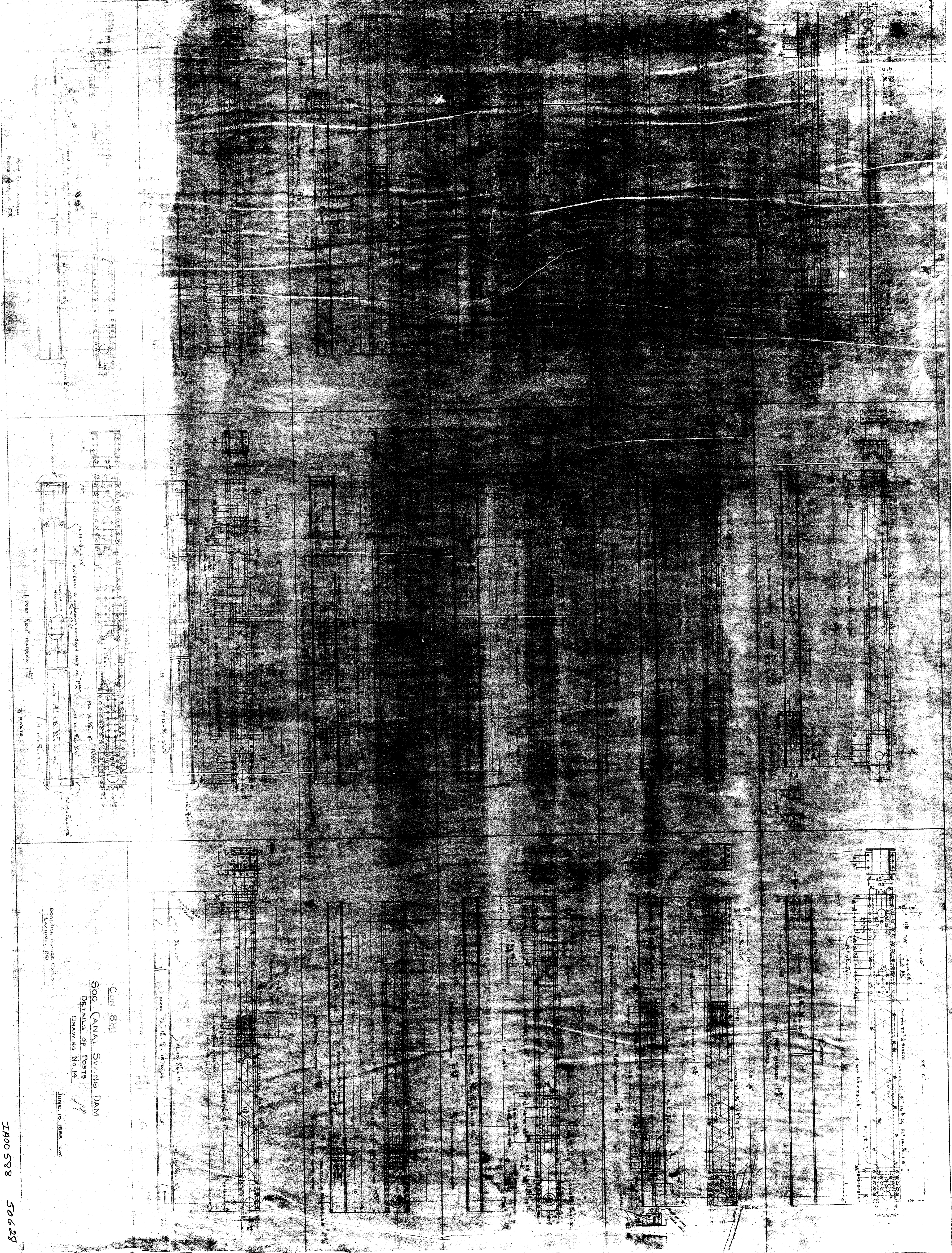
Castings on inside of chord

FACE EDGE OF CHORD

CHORD L 8 1 RECD

CHORD L 8 1 RECD

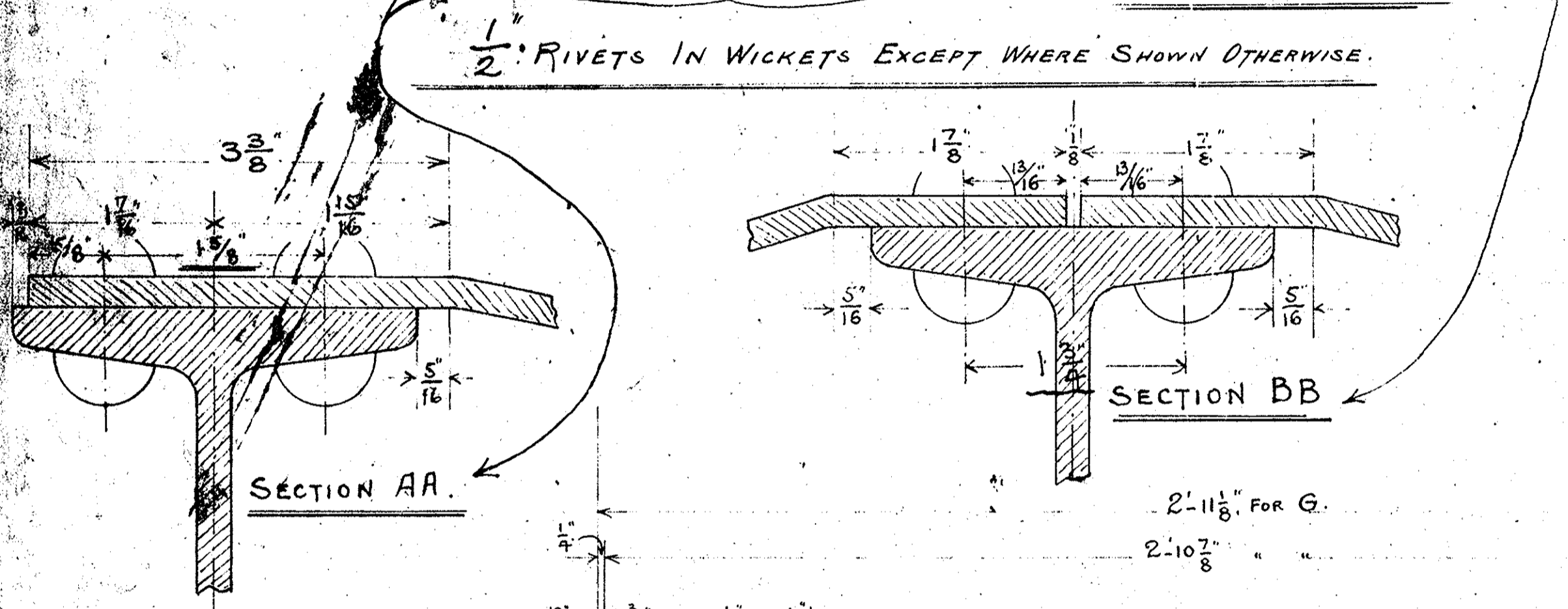
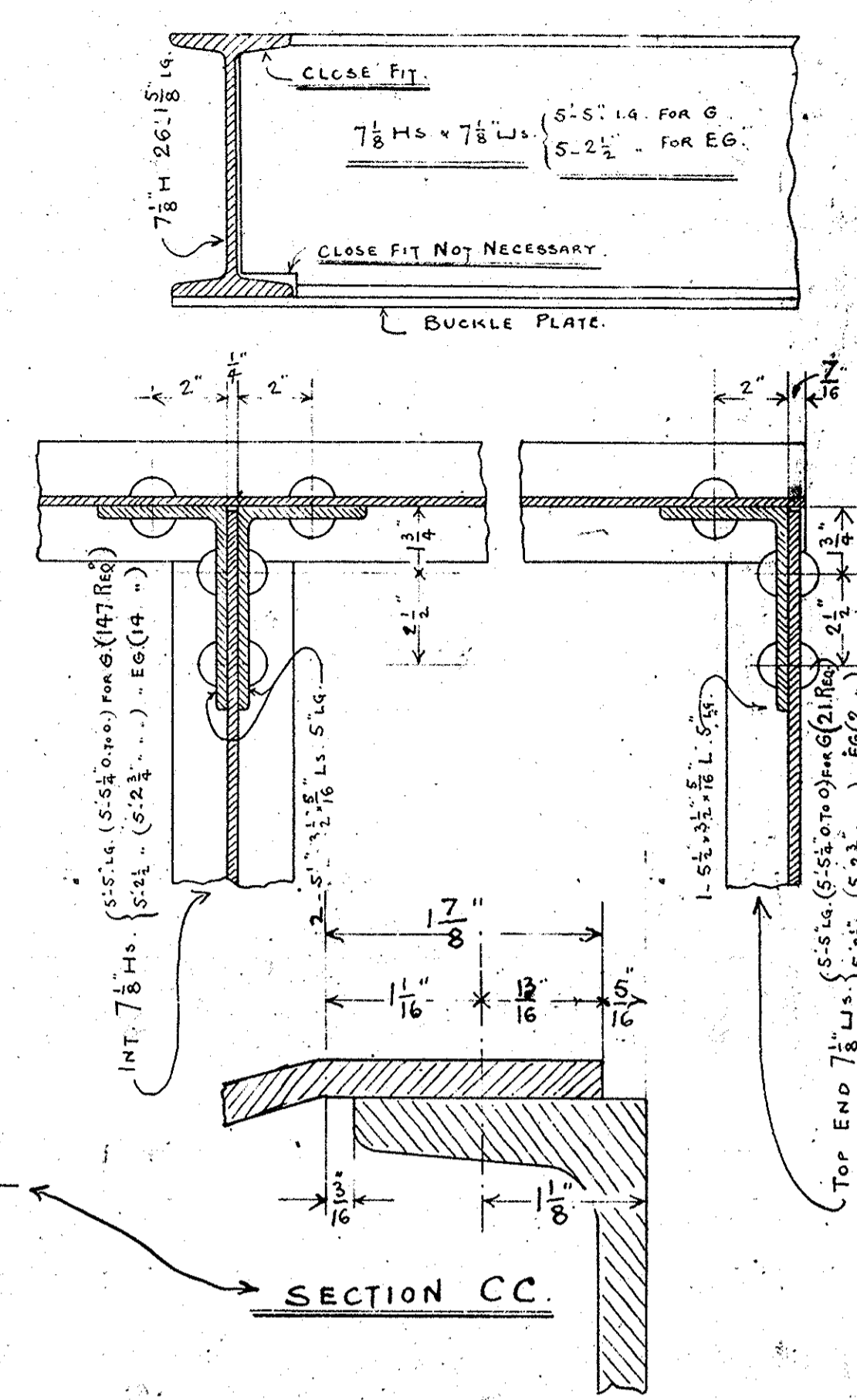
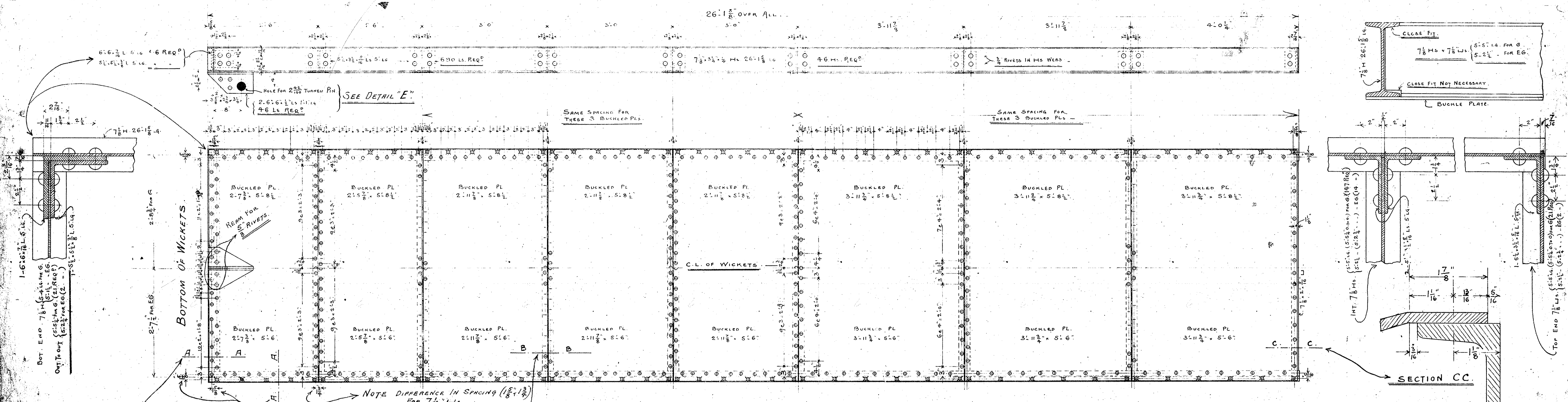
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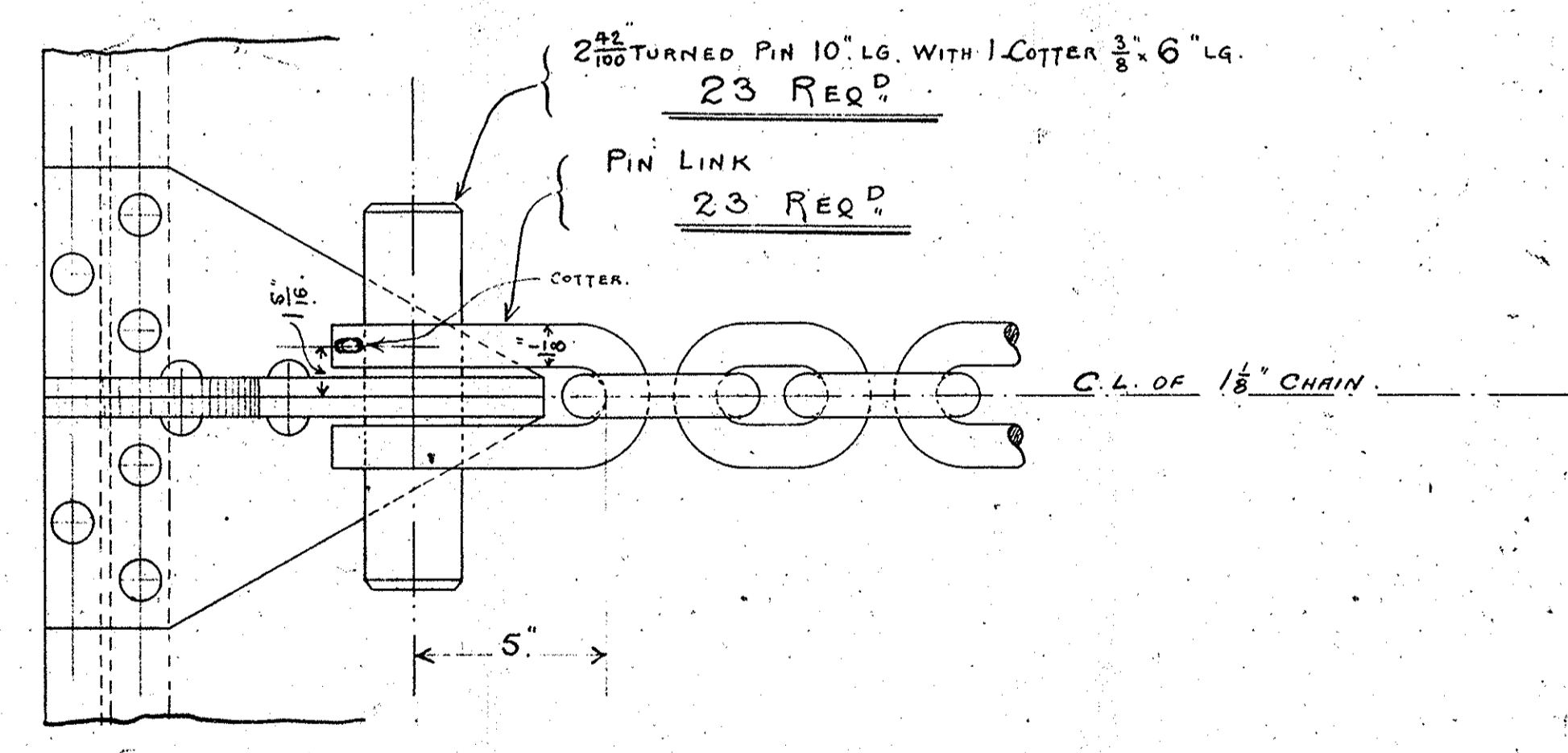
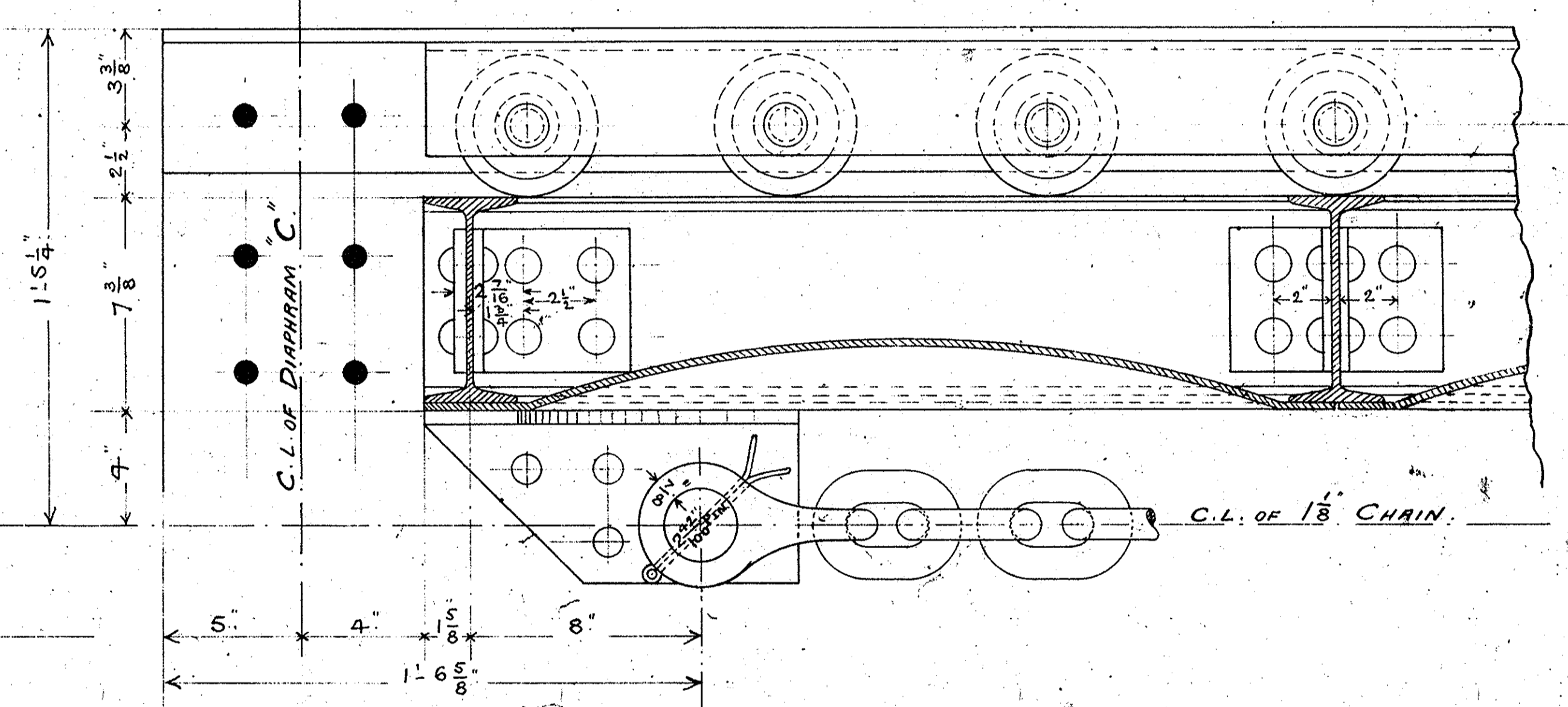
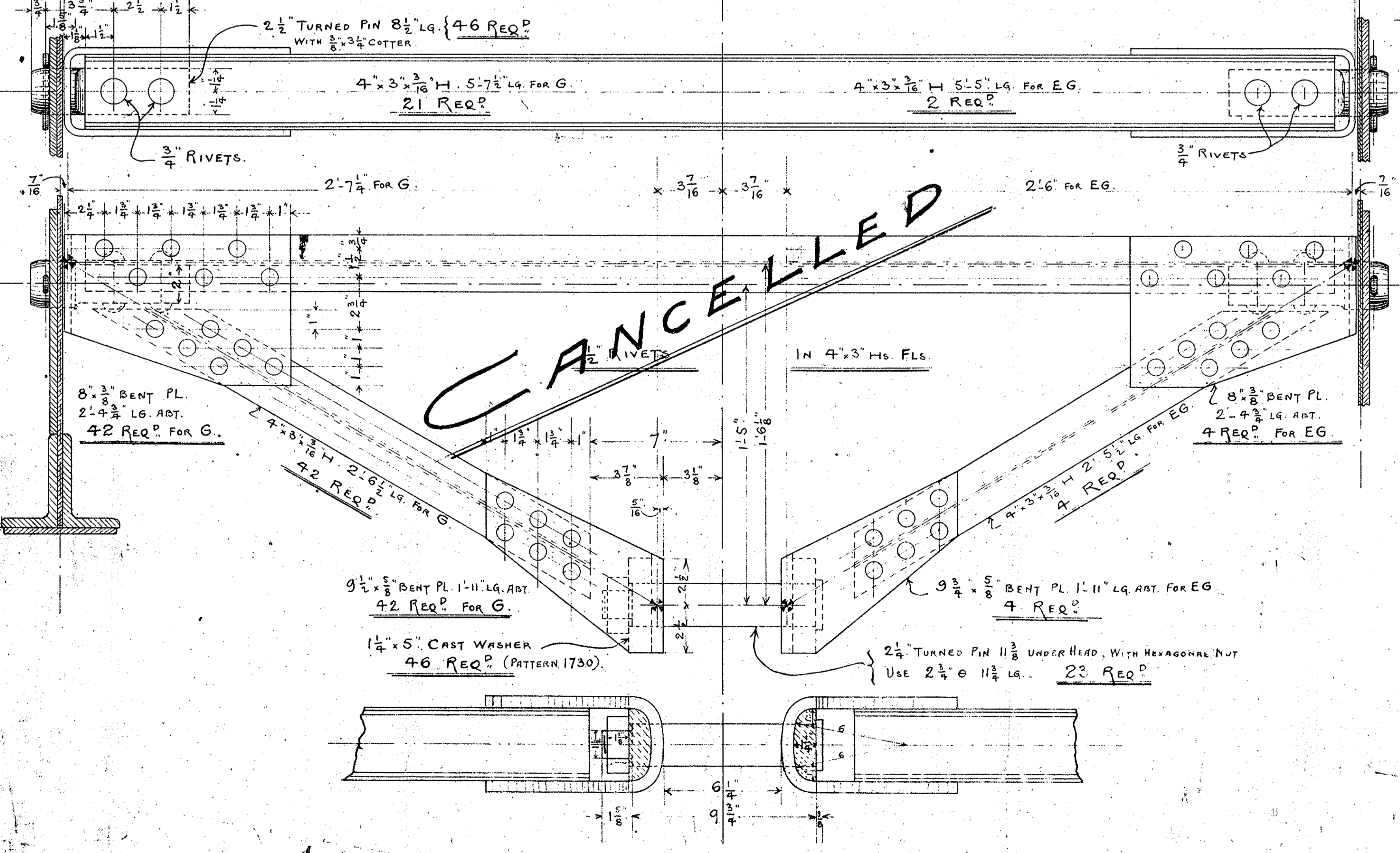
CONCRETE  
 SOG CANAL SWING DAM  
 DETAILS OF POSTS  
 DRAWING NO. 14

JUNE 10 1895

IA00 528 50628



WICKETS : { 21 REQ<sup>d</sup> 5'-5 1/2" C.T.C. WIDE MARK G.  
2 " 5'-3" " " " EG.



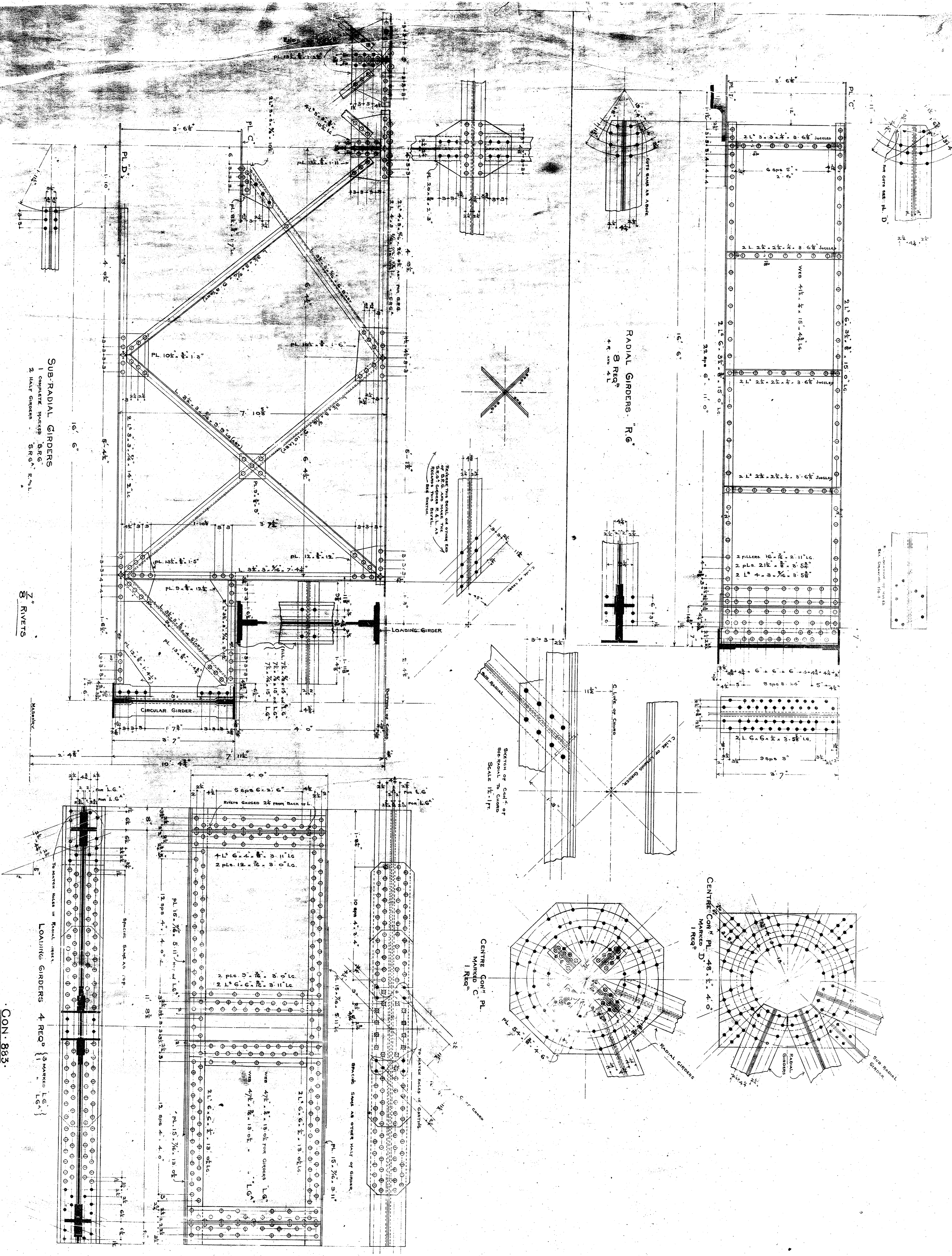
**CANCELLED**

DETAIL "E"

CONTRACT # 882.  
"500" CANAL SWING DAM.  
WICKETS.  
DRAW<sup>g</sup> N<sup>o</sup> 2.

DETAIL "B" (SEE DRAW<sup>g</sup> N<sup>o</sup> 1.)

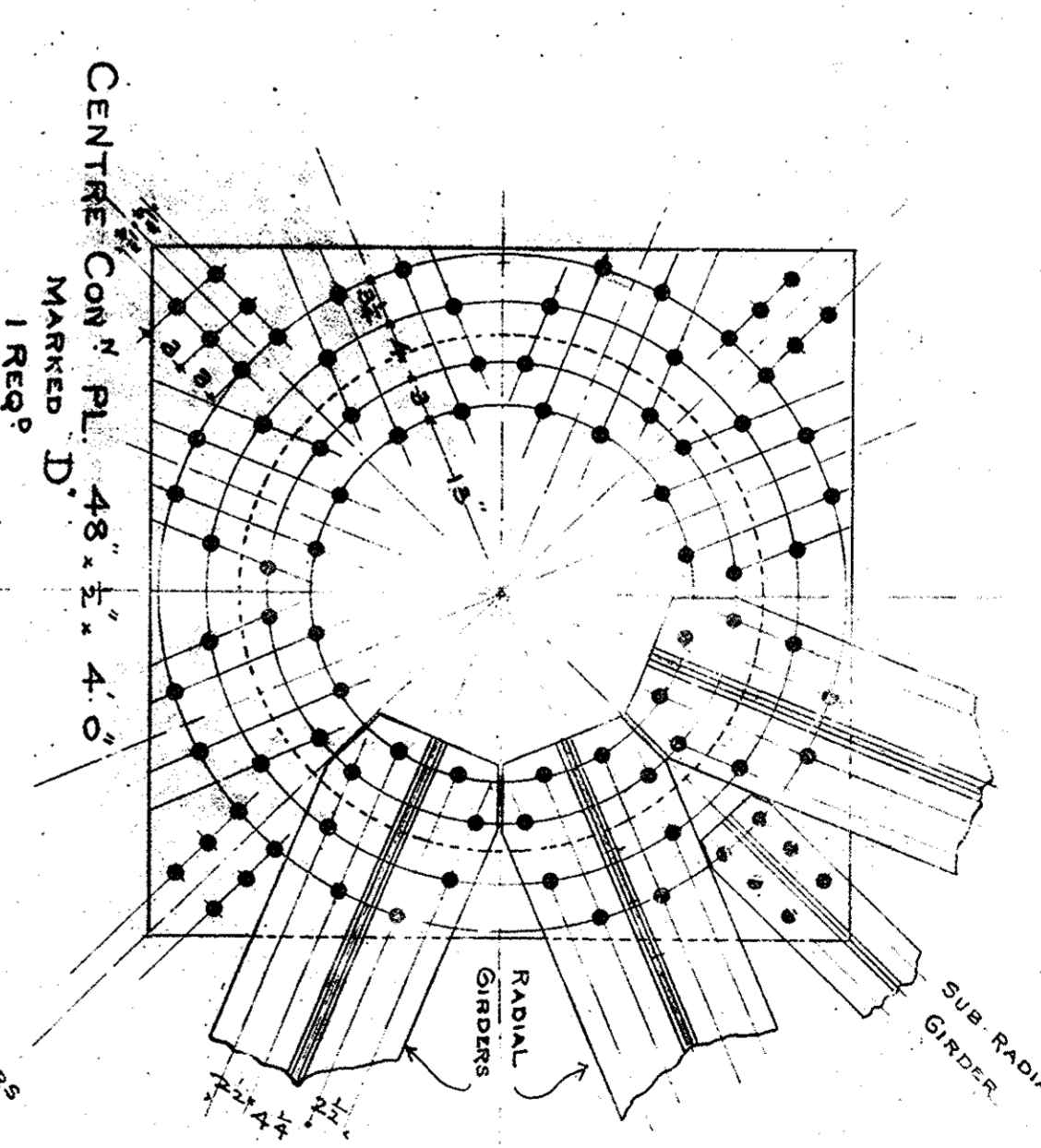
17/195  
G.L.



**SUB-RADIAL GIRDERS**  
 1 COMPLETE PORTS 3 R.G.  
 2 HALF GIRDERS 3 R.G. R. 7/8"  
 7" RIVETS

**RADIAL GIRDERS: R.G.**  
 3 REQ  
 4 R. 10"

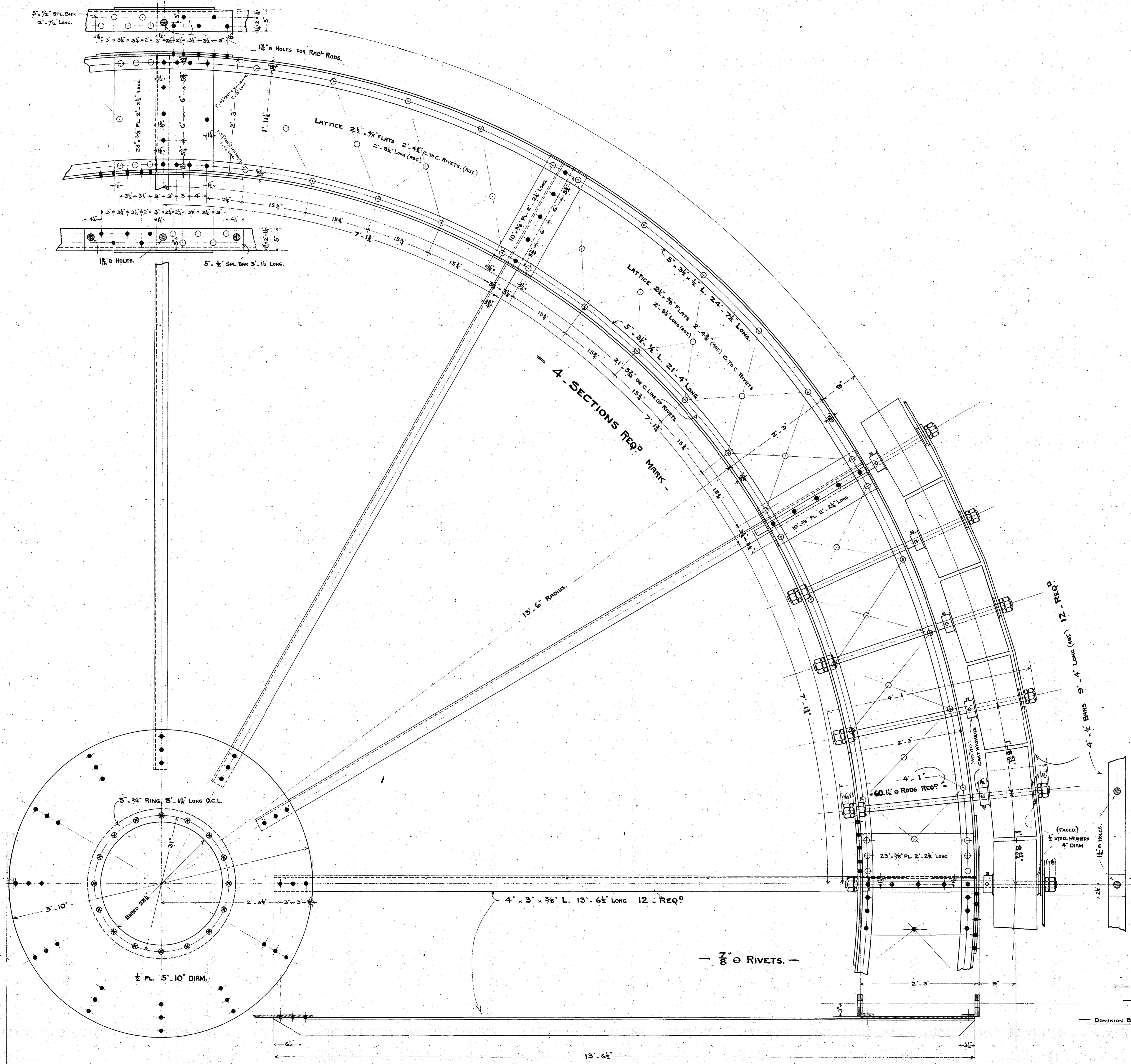
**LOADING GIRDERS 4 REQ** (3 MARKED L.G.)  
 7" RIVETS



**CENTRE CON' PL.**  
 MARKED C' PL.  
 1 REQ

CON. 883.  
 MOVEABLE DAM 300' CANAL  
 RADIAL SUB-RADIAL LOADING GIRDERS  
 DRAWING No 2  
 MAR. 25. 25. C.M.

1700 570  
 504 31

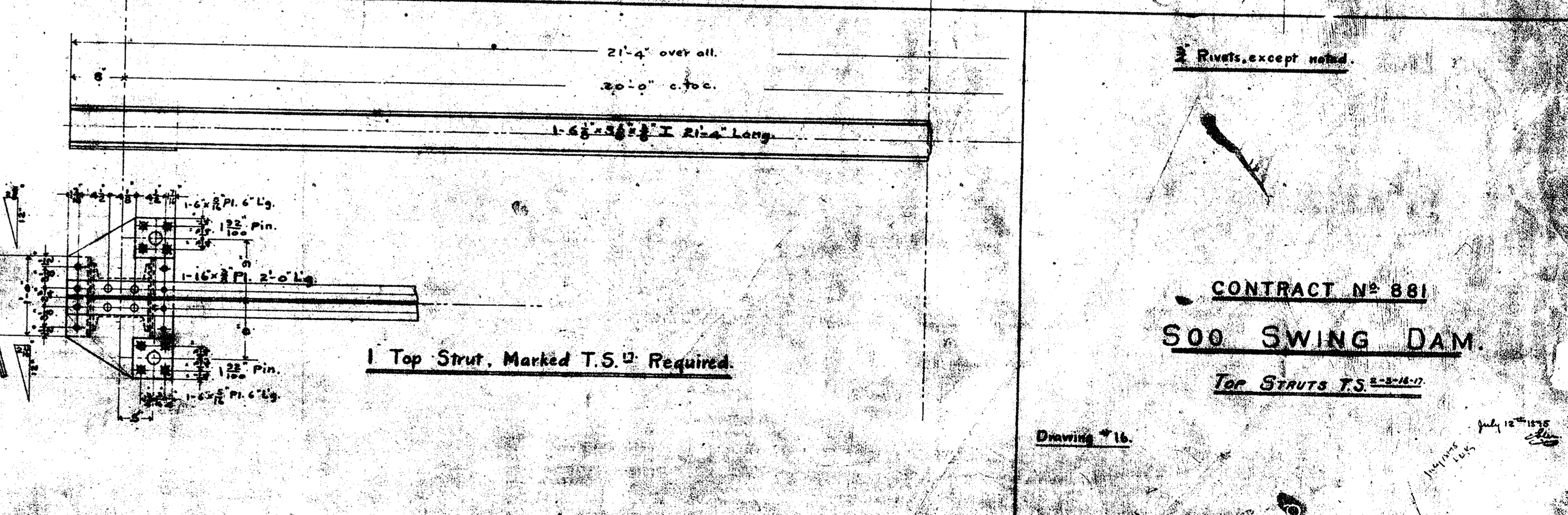
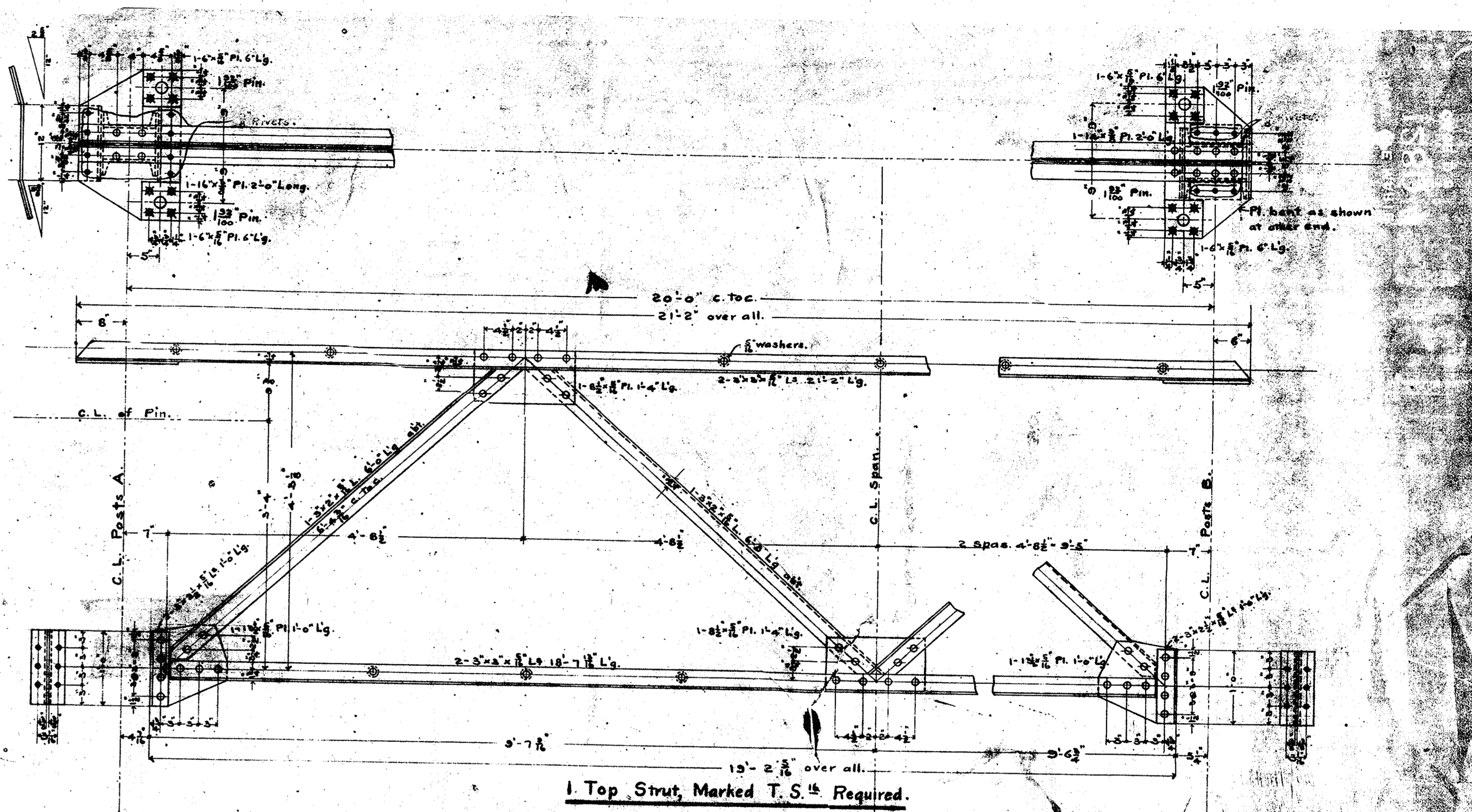
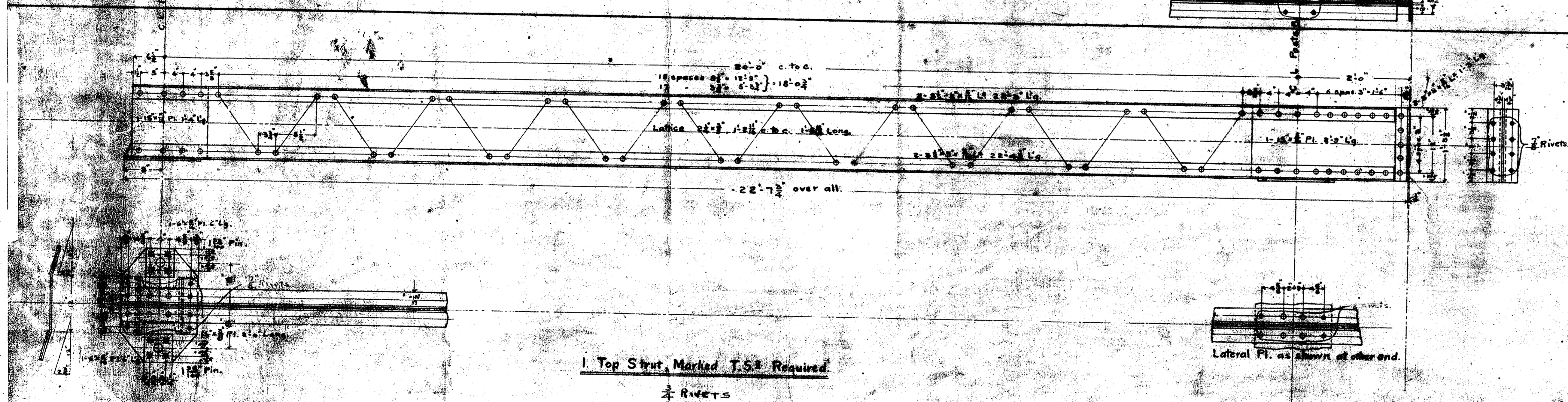
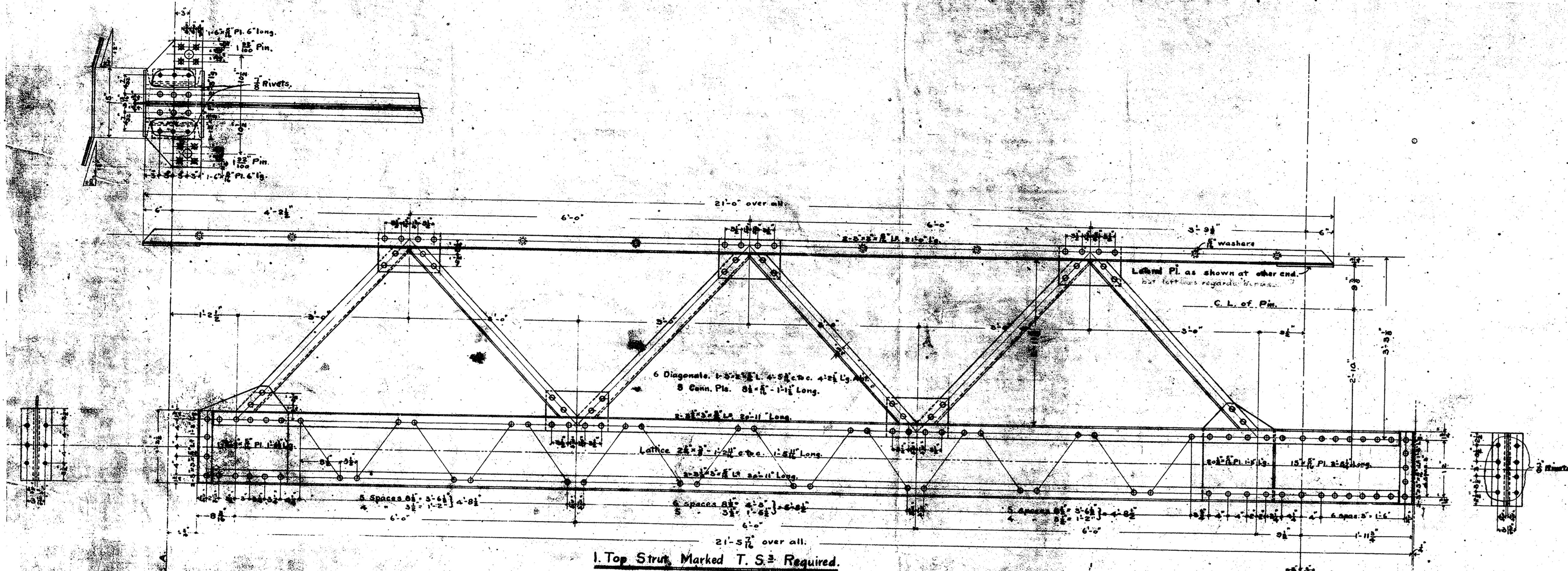


CON. 883.  
 MOVEABLE DAM, SOO CANAL  
 DETAILS OF LIVE CIRCLE, &c.

DOMINION BRIDGE CO. LTD. APRIL 10, 1905  
 DRAWING No. 4.

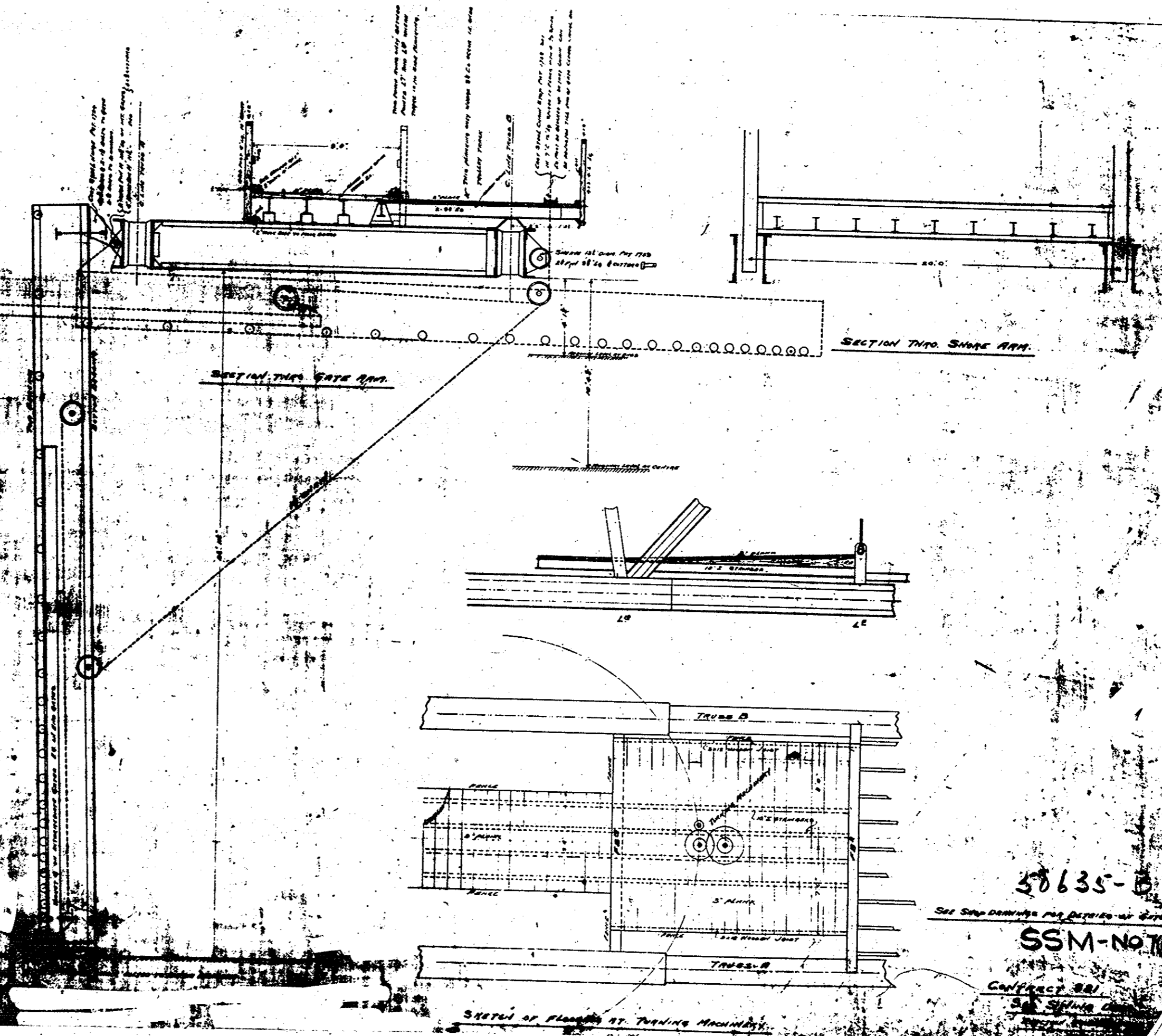
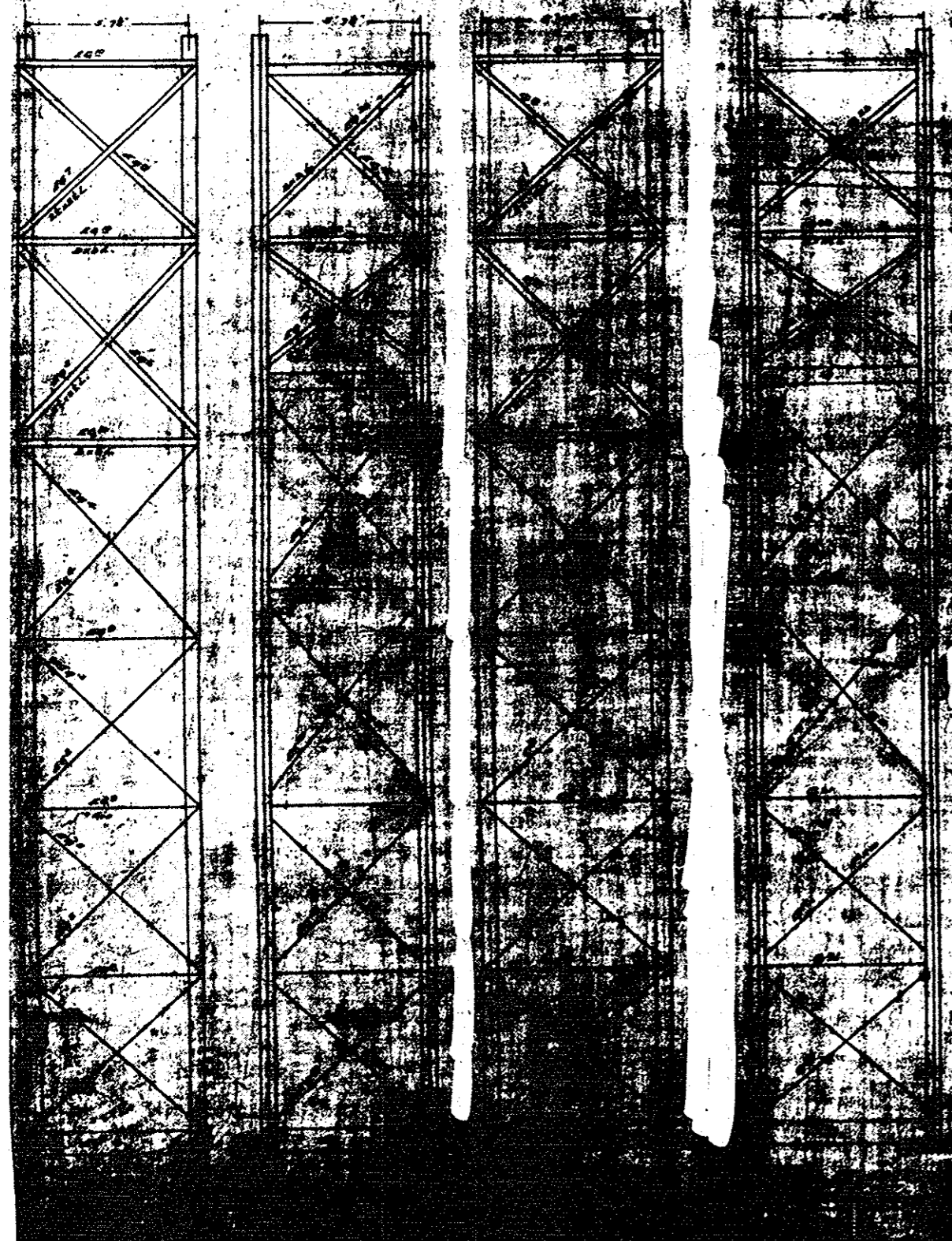
50632  
 IA00591





CONTRACT NO 881  
**500 SWING DAM.**  
 TOP STRUTS T.S.

Drawing # 16.



58635-B

SEE SHOP DRAWINGS FOR DETAILS OF GATE ARM

SSM-NO 101

CONTRACT 581  
SEE SPECIFICATIONS

IA00594



ELEVATION

PLAN

SOUTH ABUTMENT

NORTH ABUTMENT

SAULT S<sup>T</sup>E MARIE CANAL

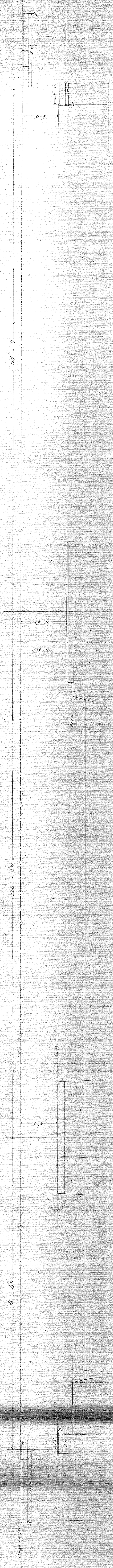
PLAN OF  
SWING BRIDGE MASONRY

Scale Steel on inch

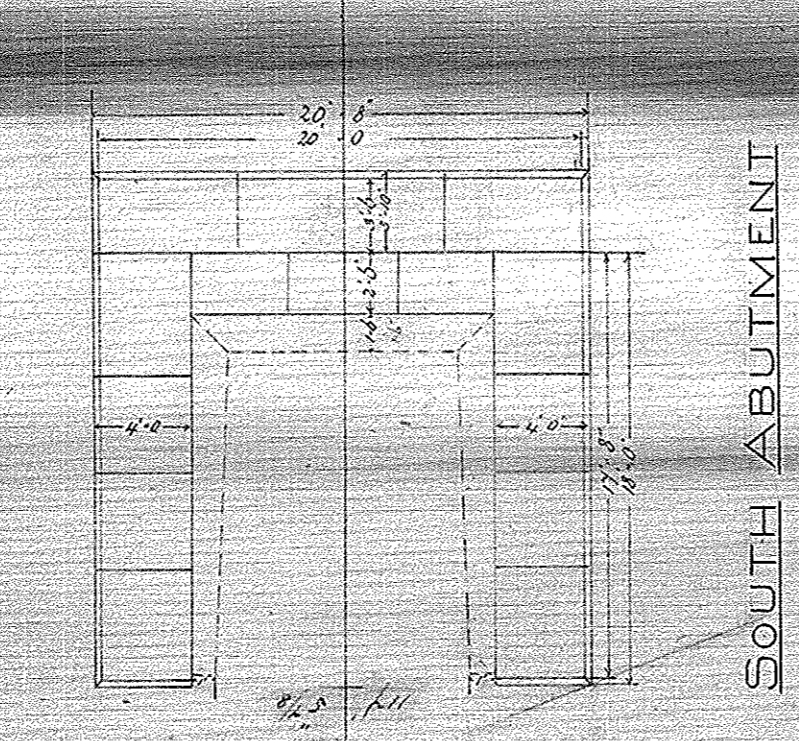
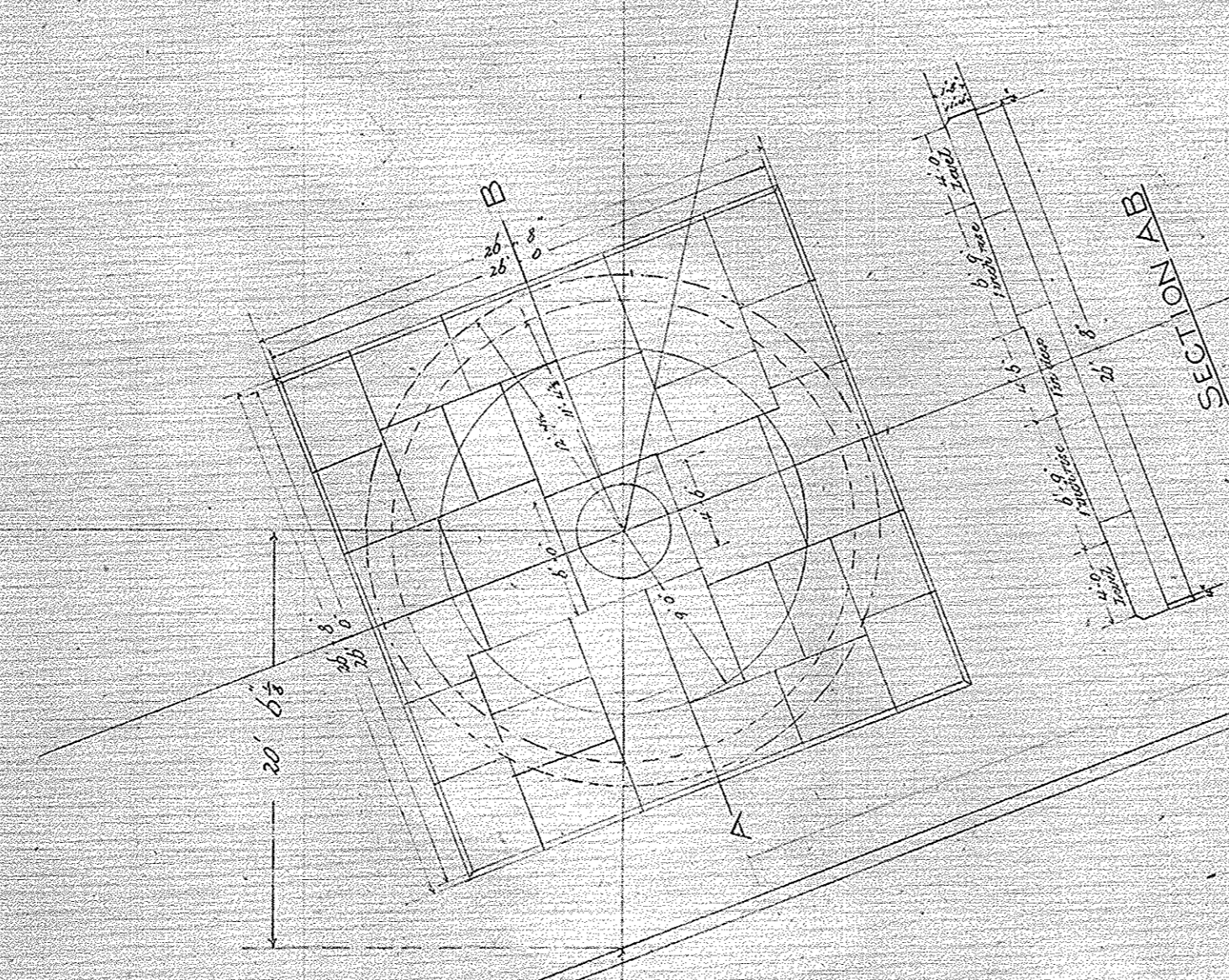
*F. Cantanero April 21, 1893.  
H. Thompson  
Supt. Dept.*

REST PILE

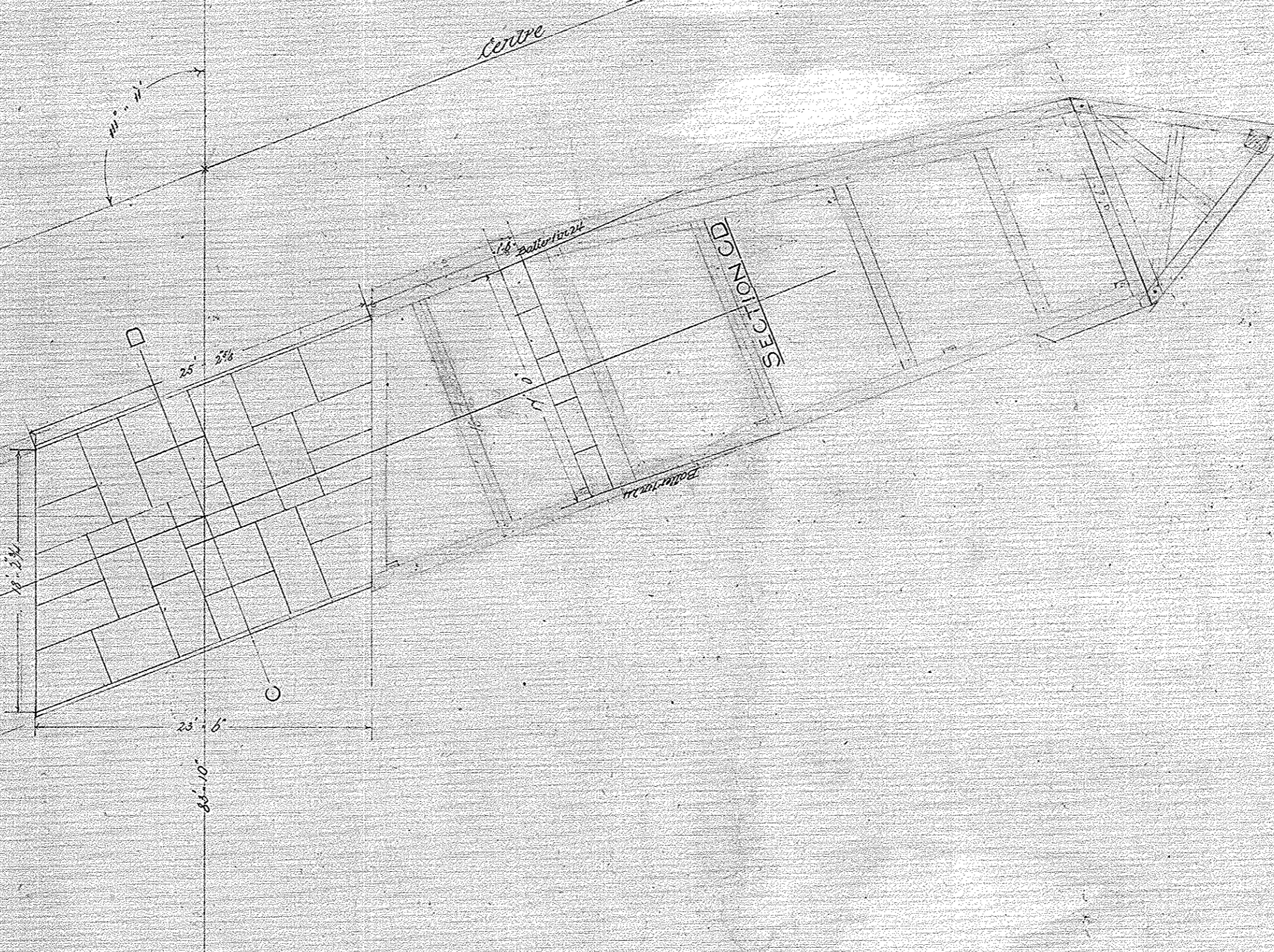
ELEVATION



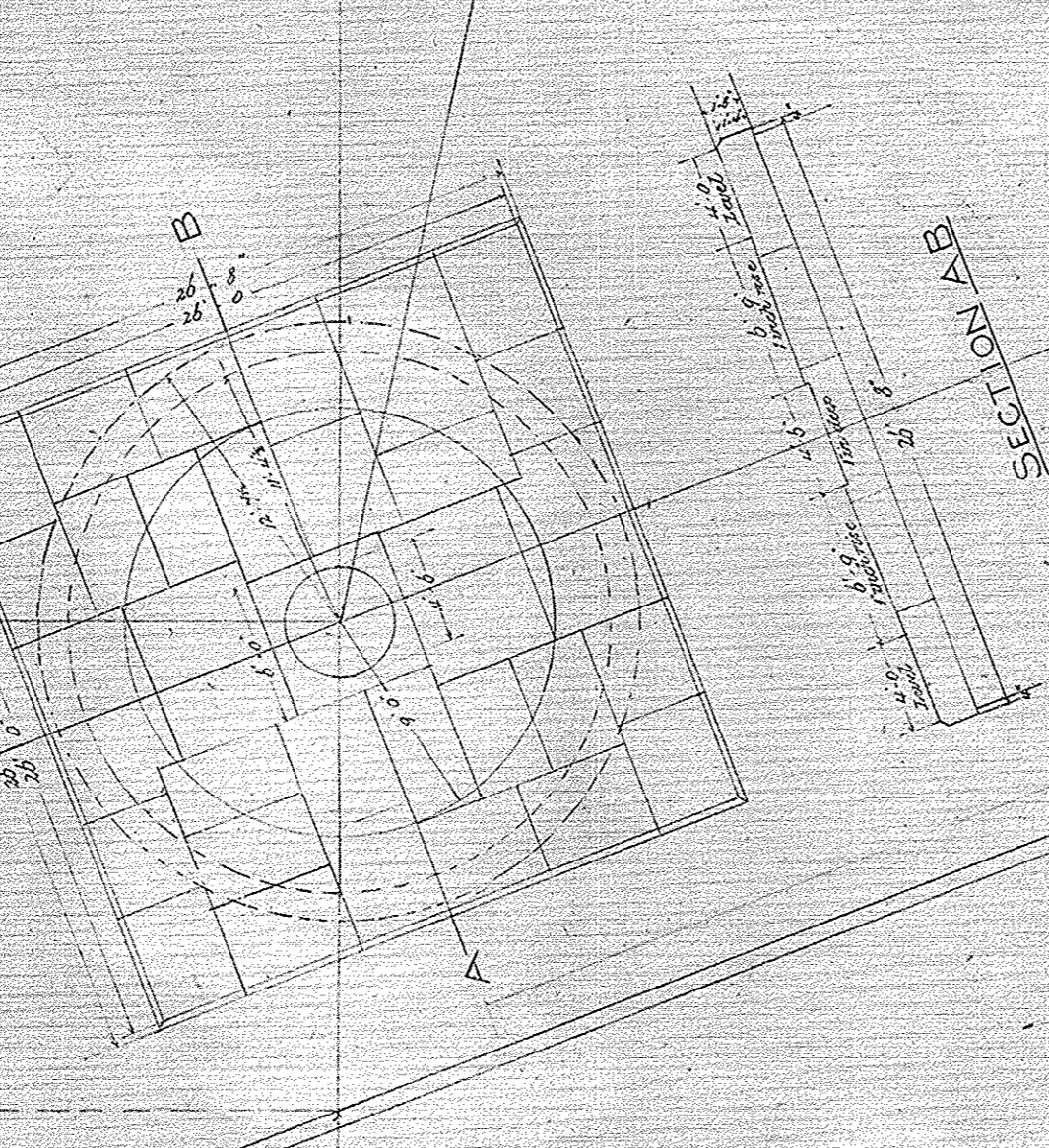
PLAN



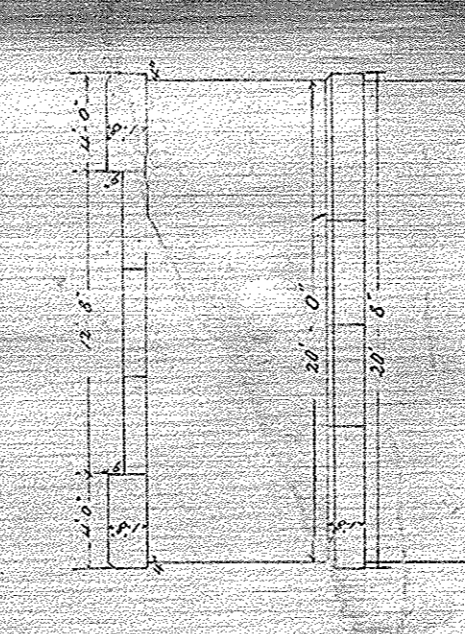
SOUTH ABUTMENT



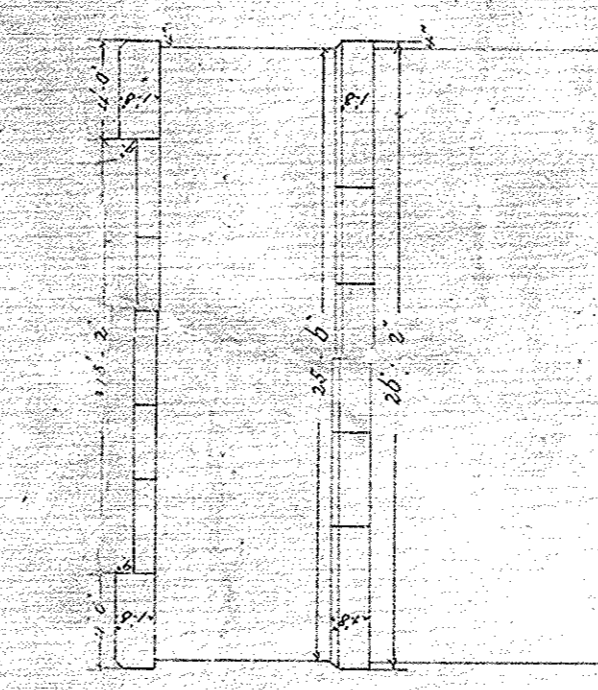
Center Line of Canal



NORTH ABUTMENT



South Elevation



North Elevation

SAULT STE MARIE CANAL

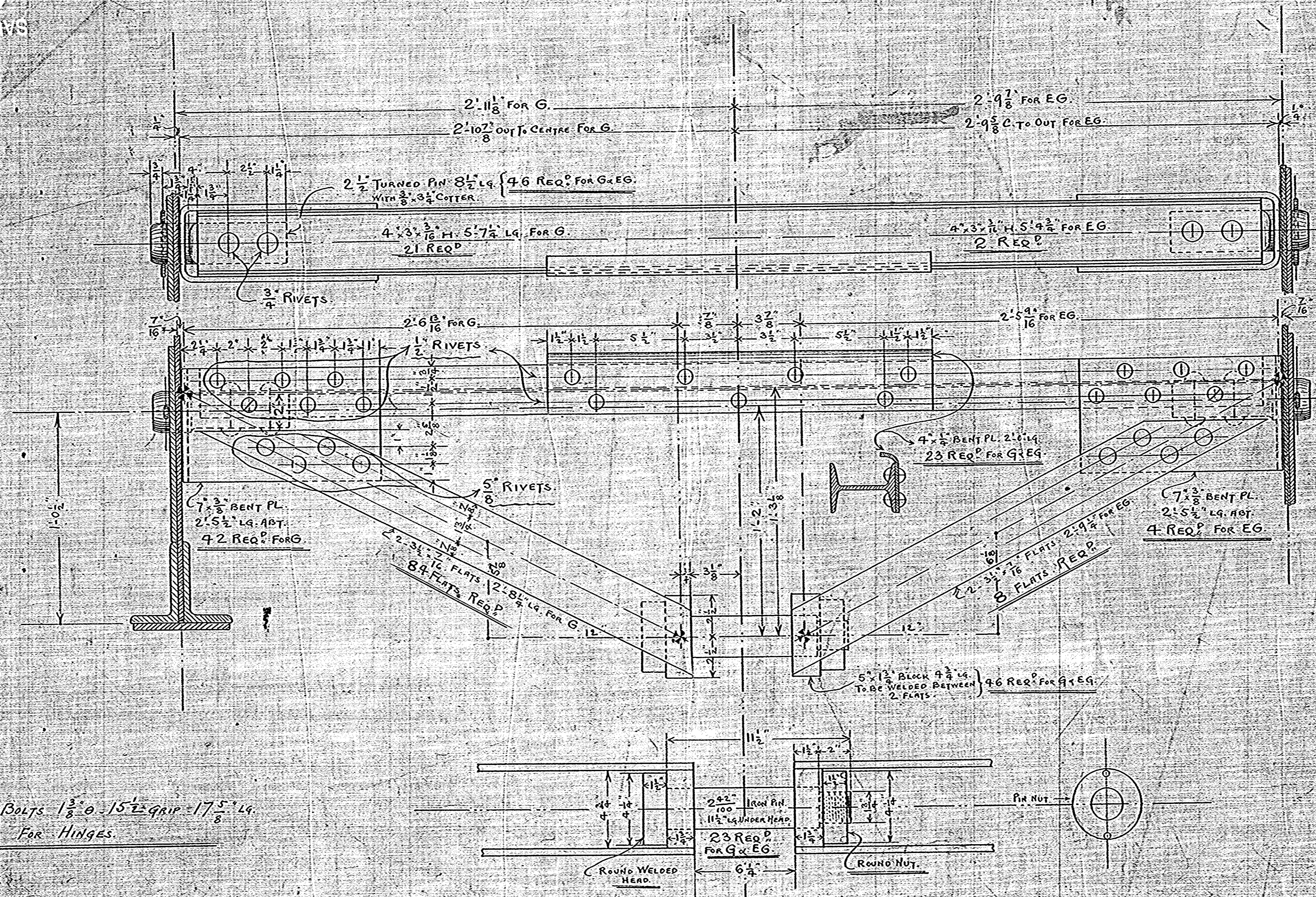
PLAN OF

SWING BRIDGE MASONRY

Scale 3/16" = 1'-0"

*Richardson, Clark & Co. Engineers*  
Sault Ste Marie, Mich. 1878

50637  
 CASE E  
 SAGITT STEEL MARINE GANN



92 - BOLTS 1 3/8" O. 15 1/2" GRIP 17 5/8" LG.  
 FOR HINGES.

DETAIL "B" (SEE DRAW'G NO. 1)

CONTRACT # 882.

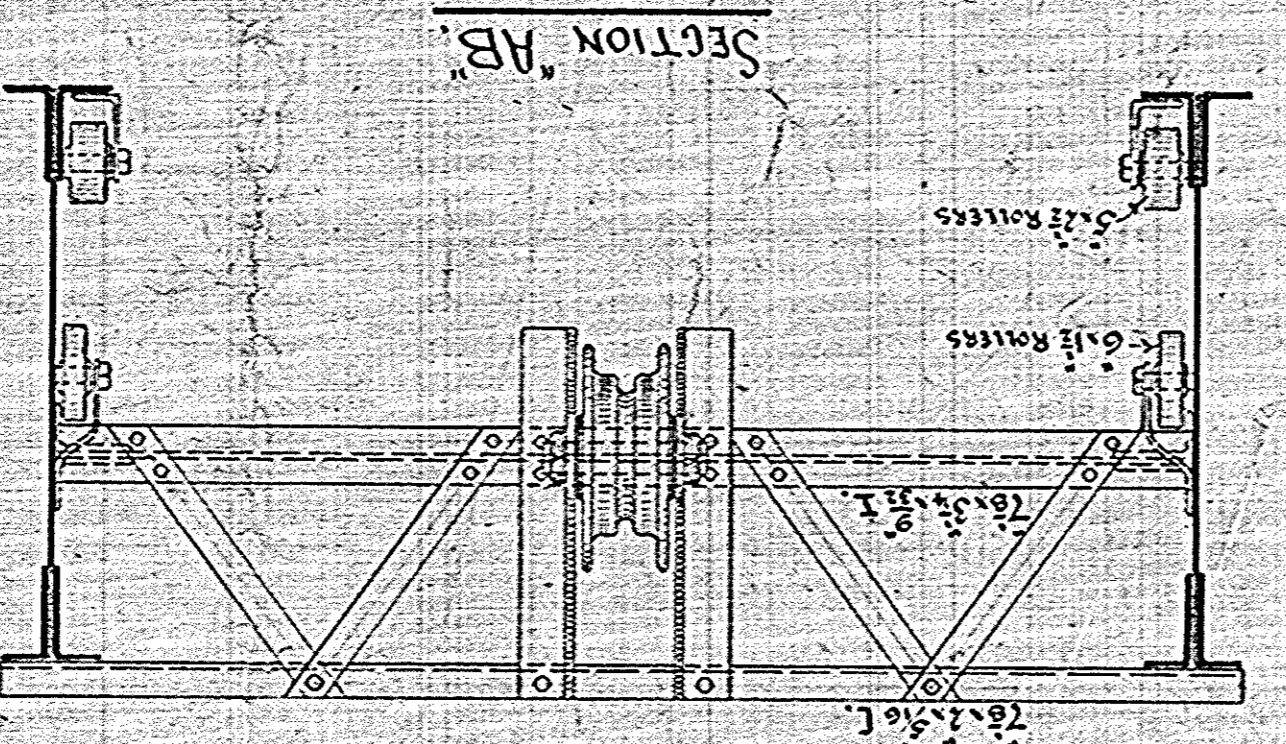
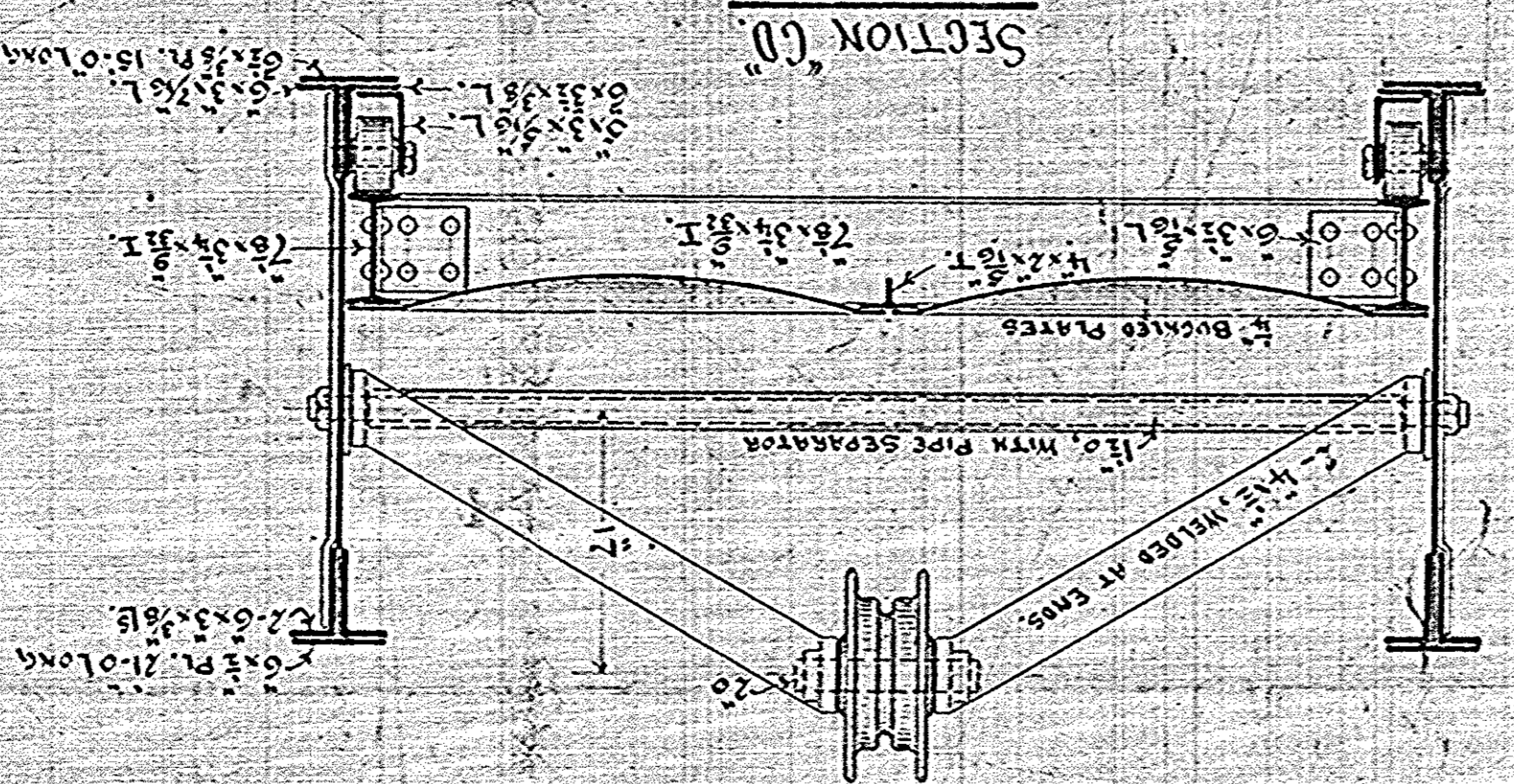
"Soo" CANAL SWING DAM.

GATES.

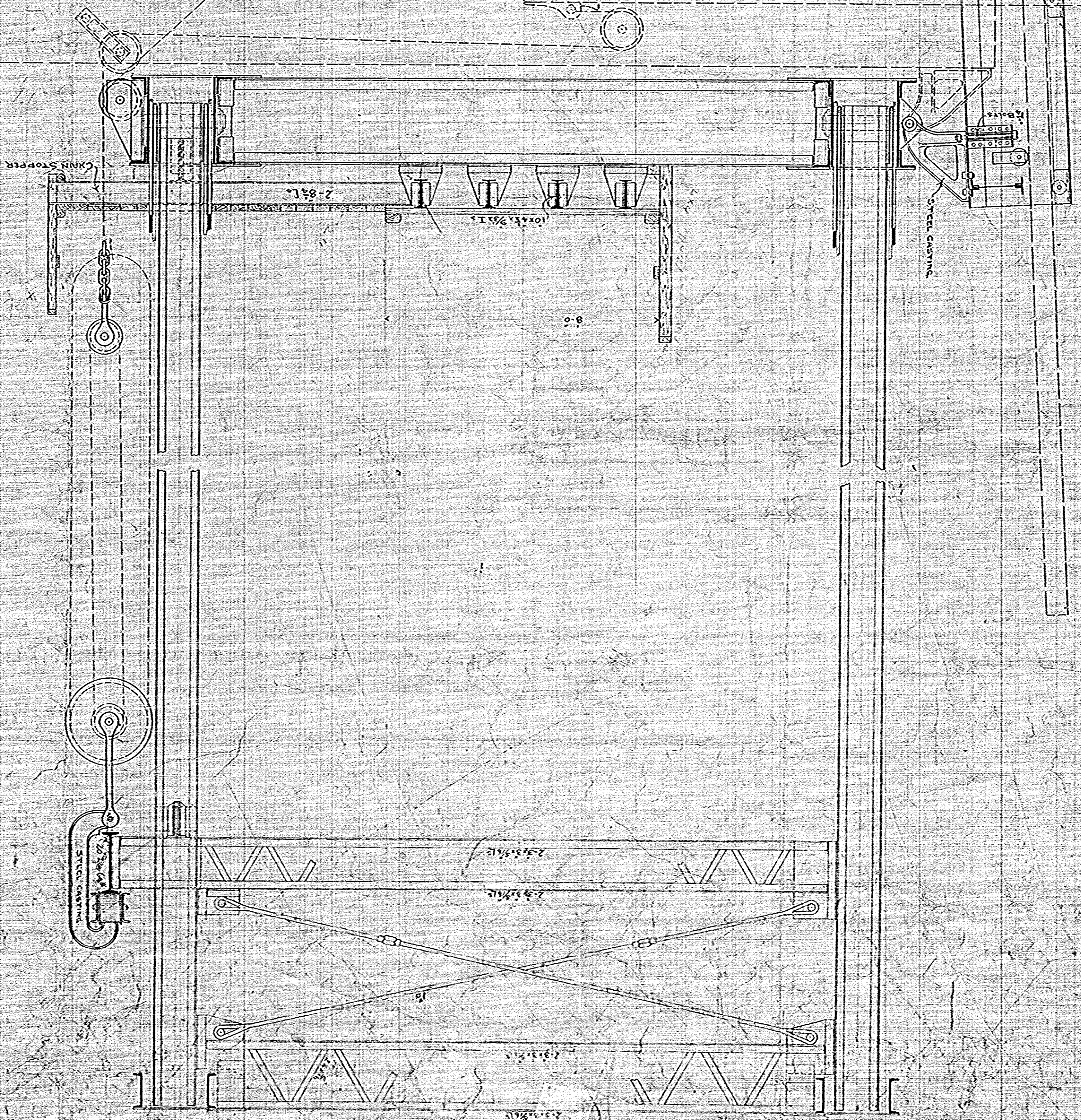
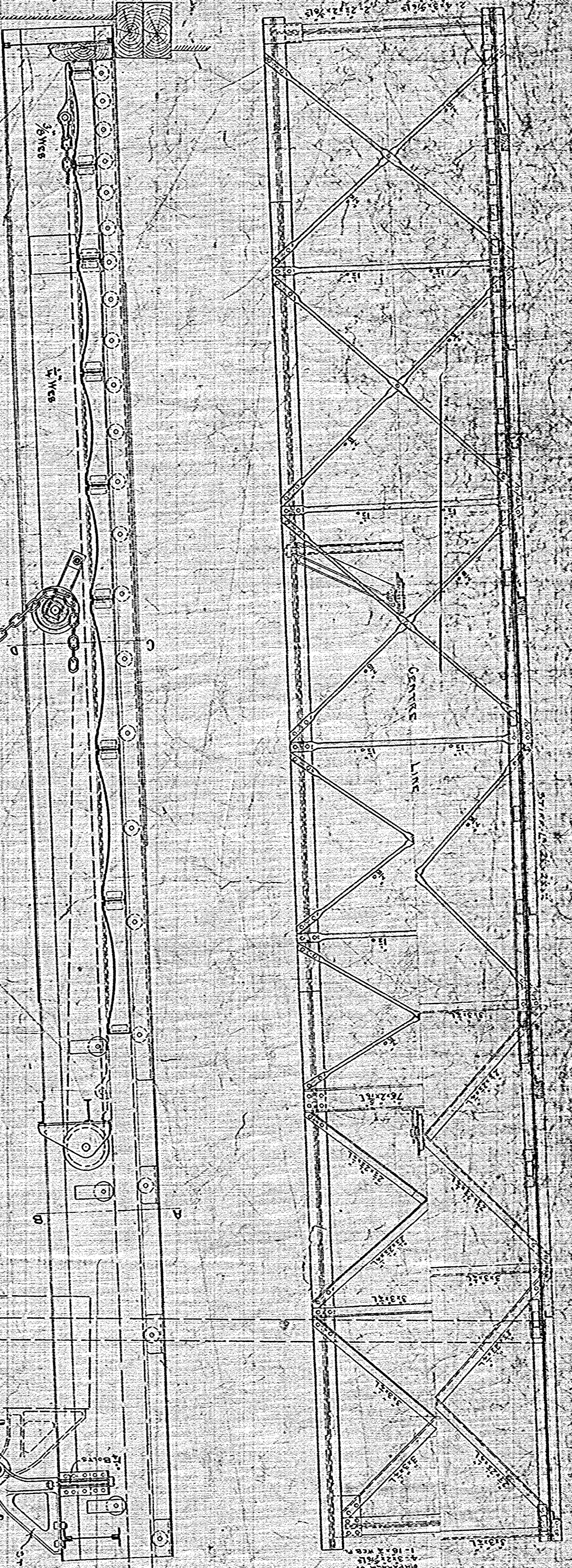
DRAW'G NO. 4.

40146

CONTRACT 882  
Soo CANAL  
MOVABLE DAM, PLAN D  
ALTERNATIVE DESIGN FOR  
WICKERS & FRAMES



CENTRAL LINE OF DAM

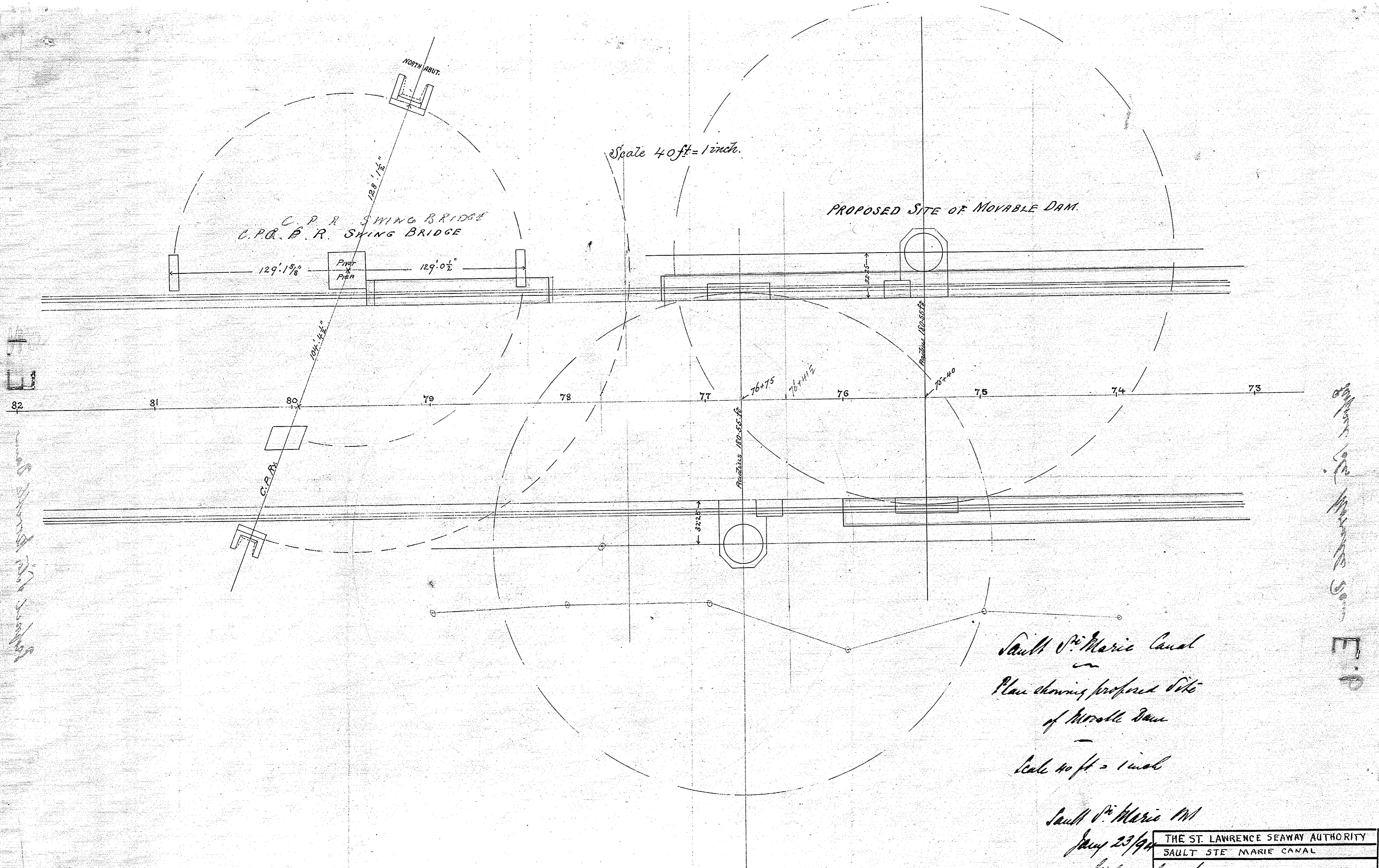


Case 10  
10/10/10









Scale 40 ft = 1 inch.

PROPOSED SITE OF MOVABLE DAM.

Sault Ste. Marie Canal  
 Plan showing proposed site  
 of Movable Dam

Scale 40 ft = 1 inch

Sault Ste. Marie MI

July 23/1911

*William H. ...*

THE ST. LAWRENCE SEAWAY AUTHORITY SAULT STE MARIE CANAL
site of Movable Dam.
Case X 50126

FX. 93.19.124

IA-00190

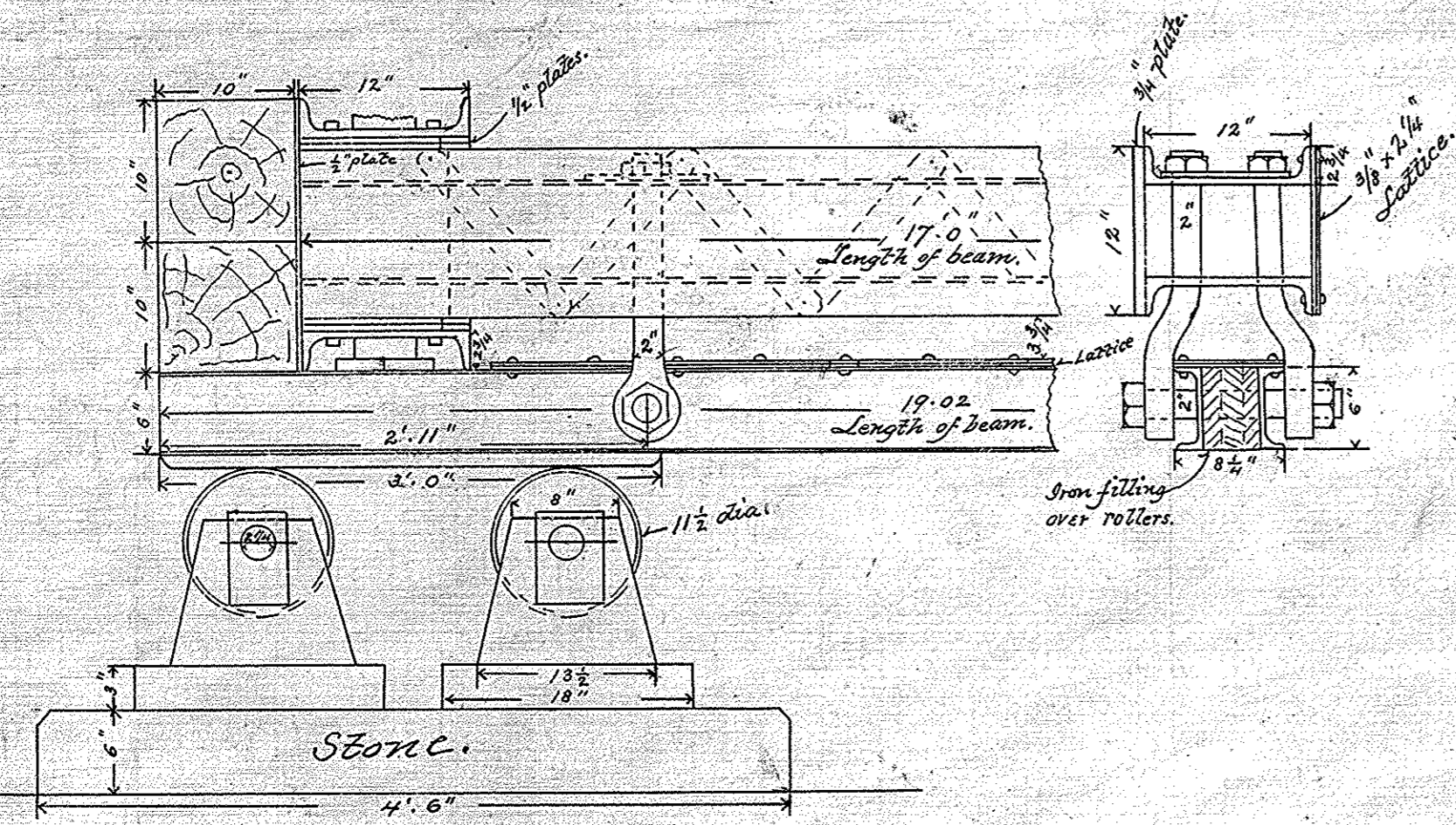
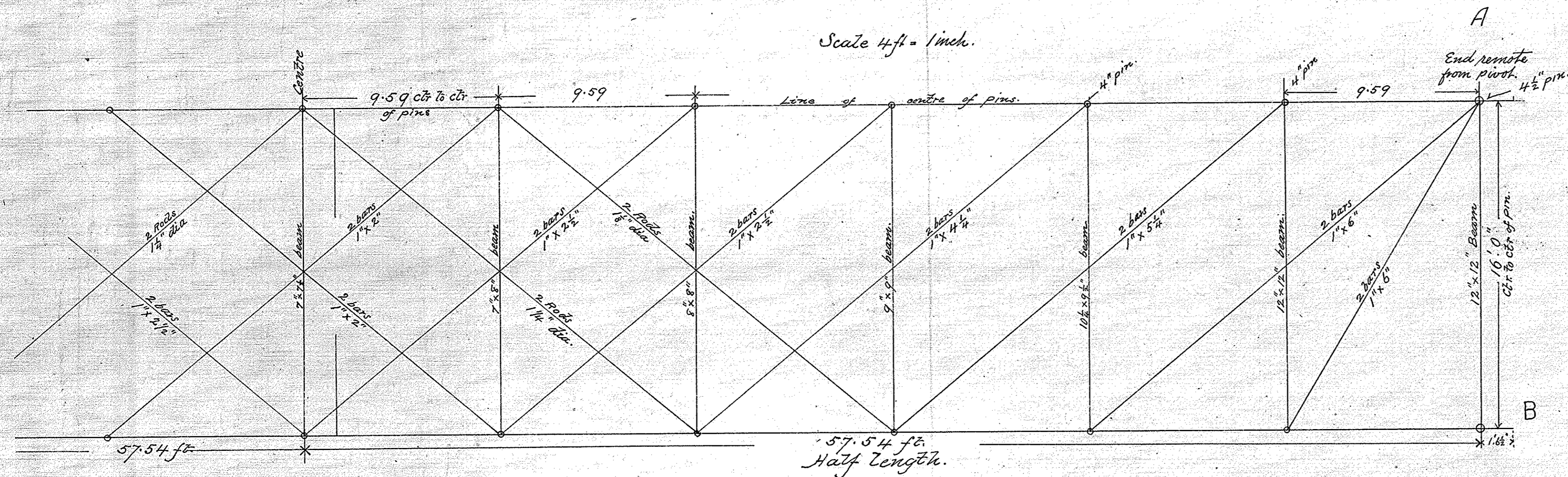
... ..

... .. E.P.

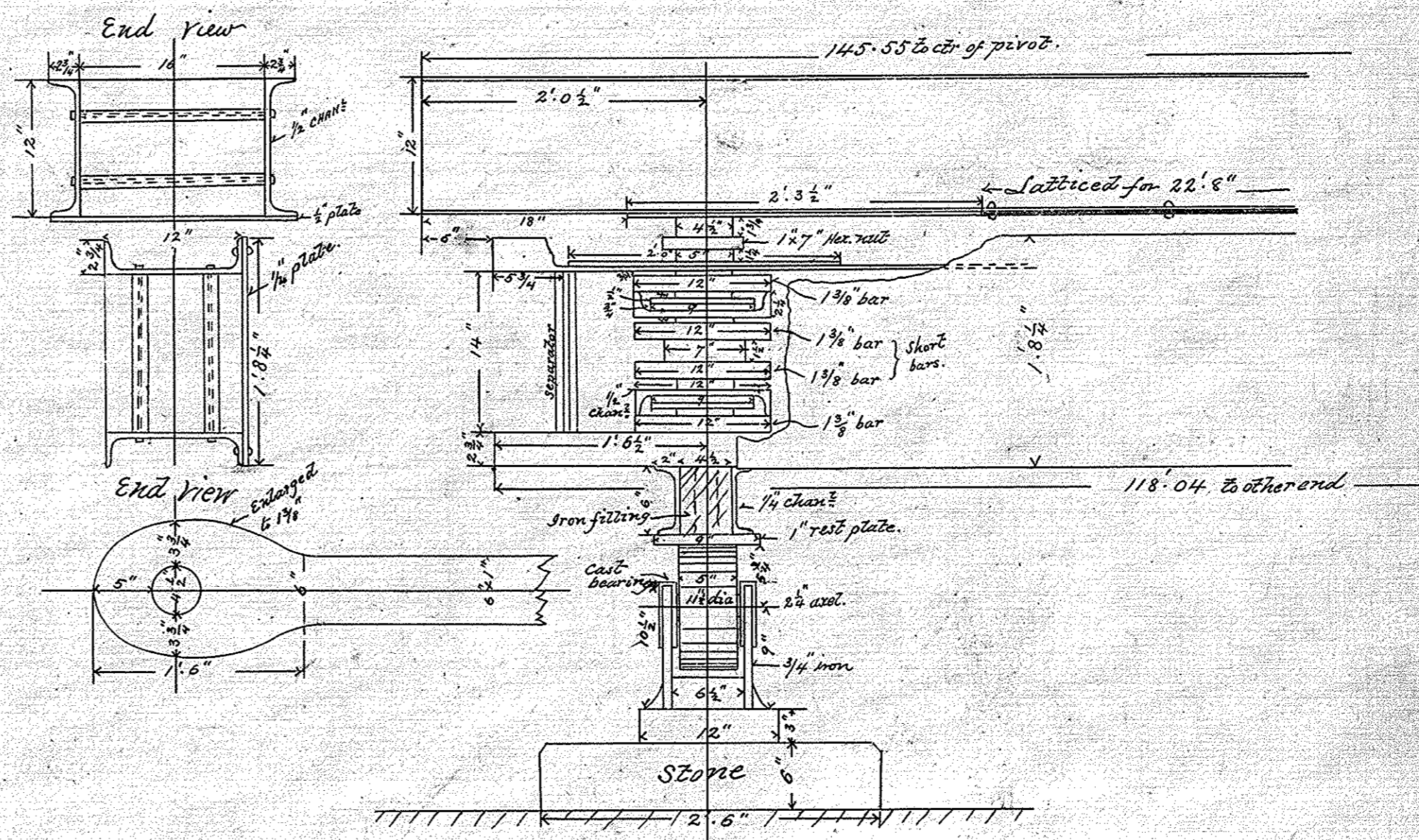


Arrangement of cross beams, bars & rods.  
in Wicket Chord.

Scale 4 ft = 1 in.



View at B.  
scale 1" = 1 ft.



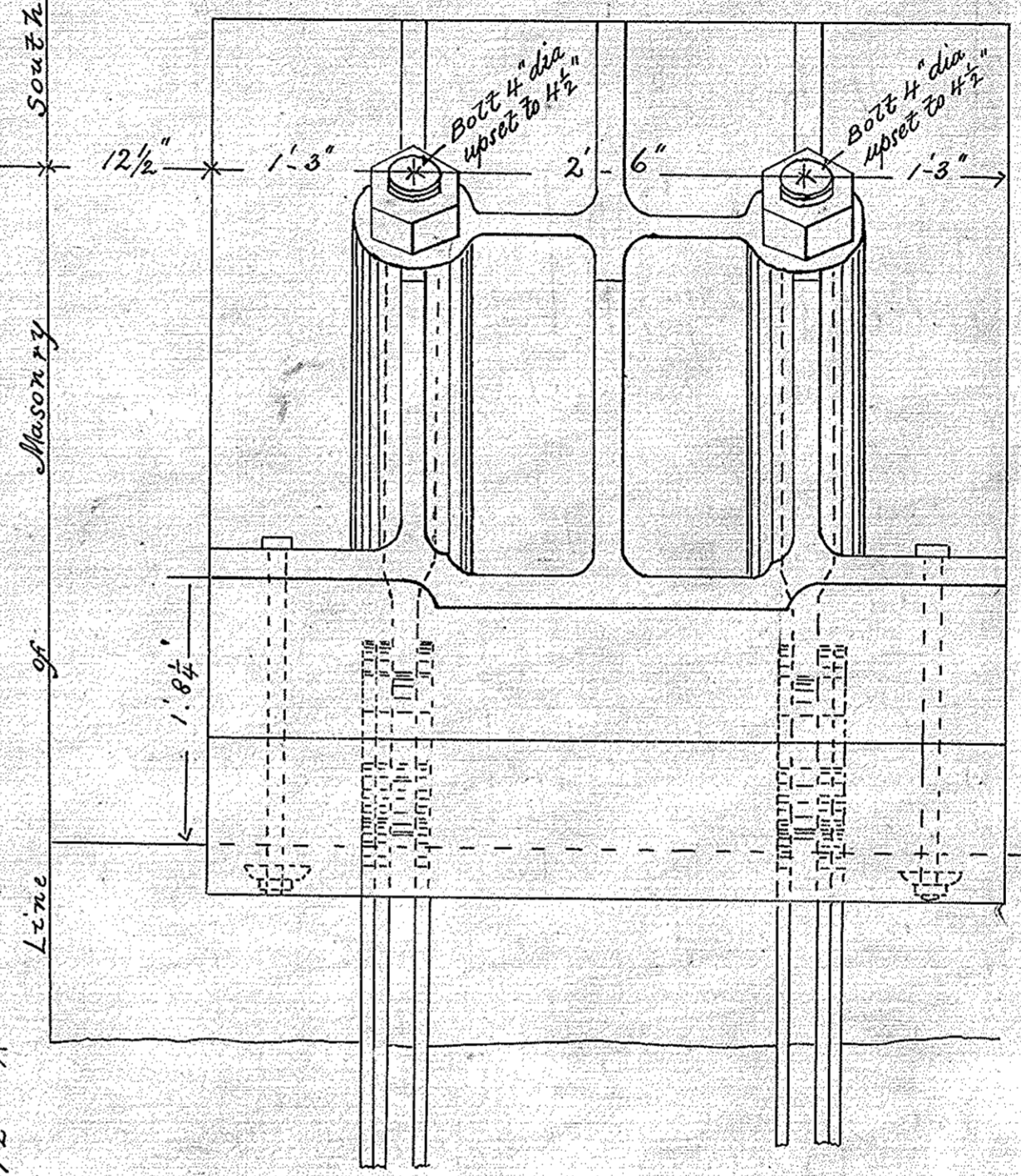
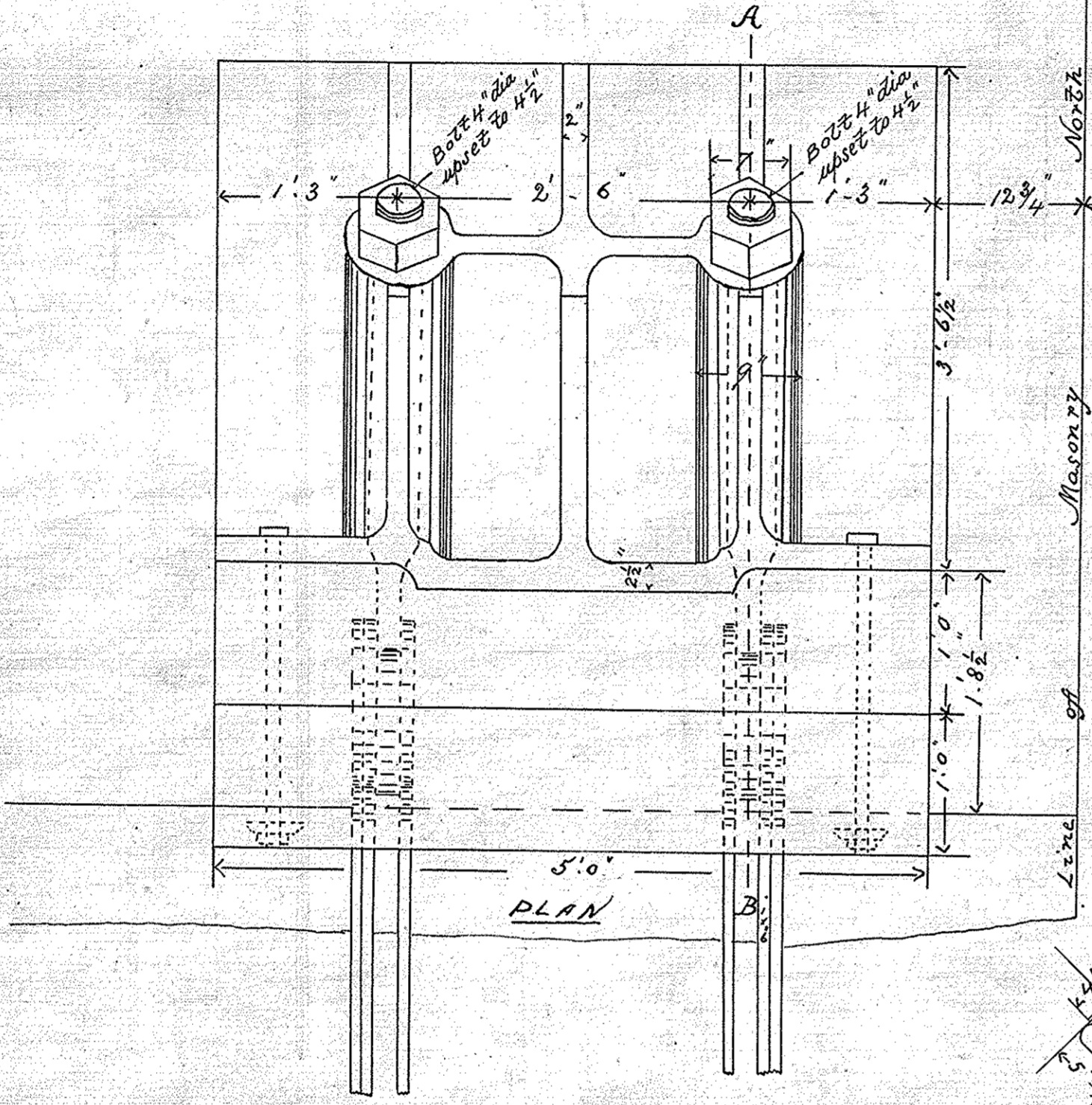
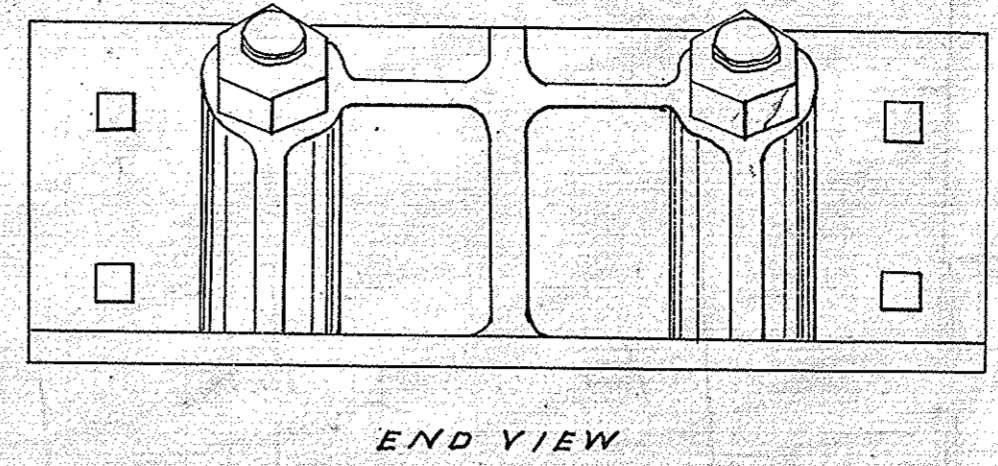
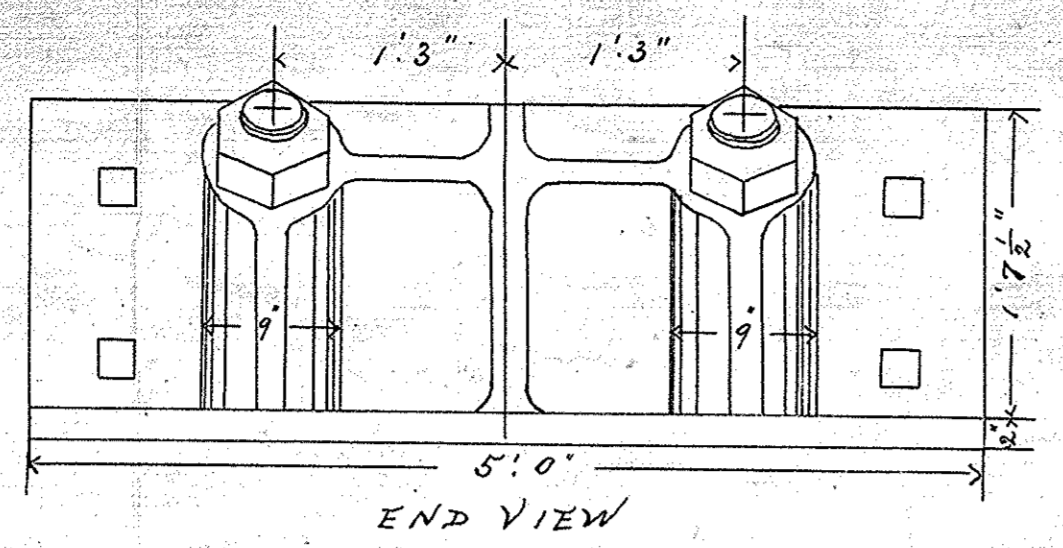
View of corner at A.  
scale 1" = 1 ft.

23

THE ST. LAWRENCE SEAWAY AUTHORITY  
SAULT STE MARIE CANAL  
Detail of Steel in Chord of  
Movable Dam Wicket  
Case X 50127

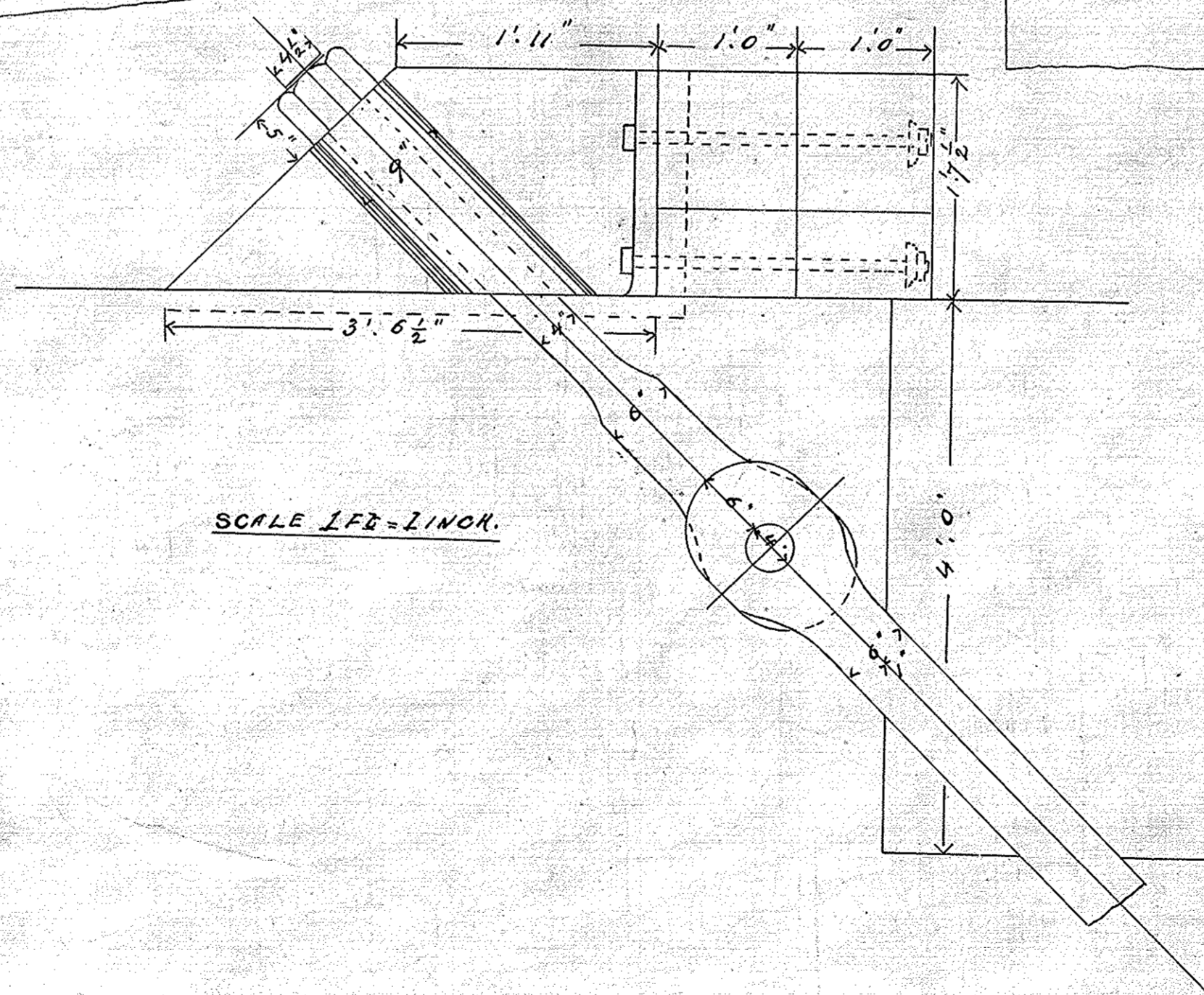


C. E. ...



NORTH SIDE

SOUTH SIDE



THE ST. LAWRENCE SEAWAY AUTHORITY  
SAULT STE MARIE CANAL  
Detail of Movable Dam  
Case X 50129  
IA 00462

Fx. 93.19.127

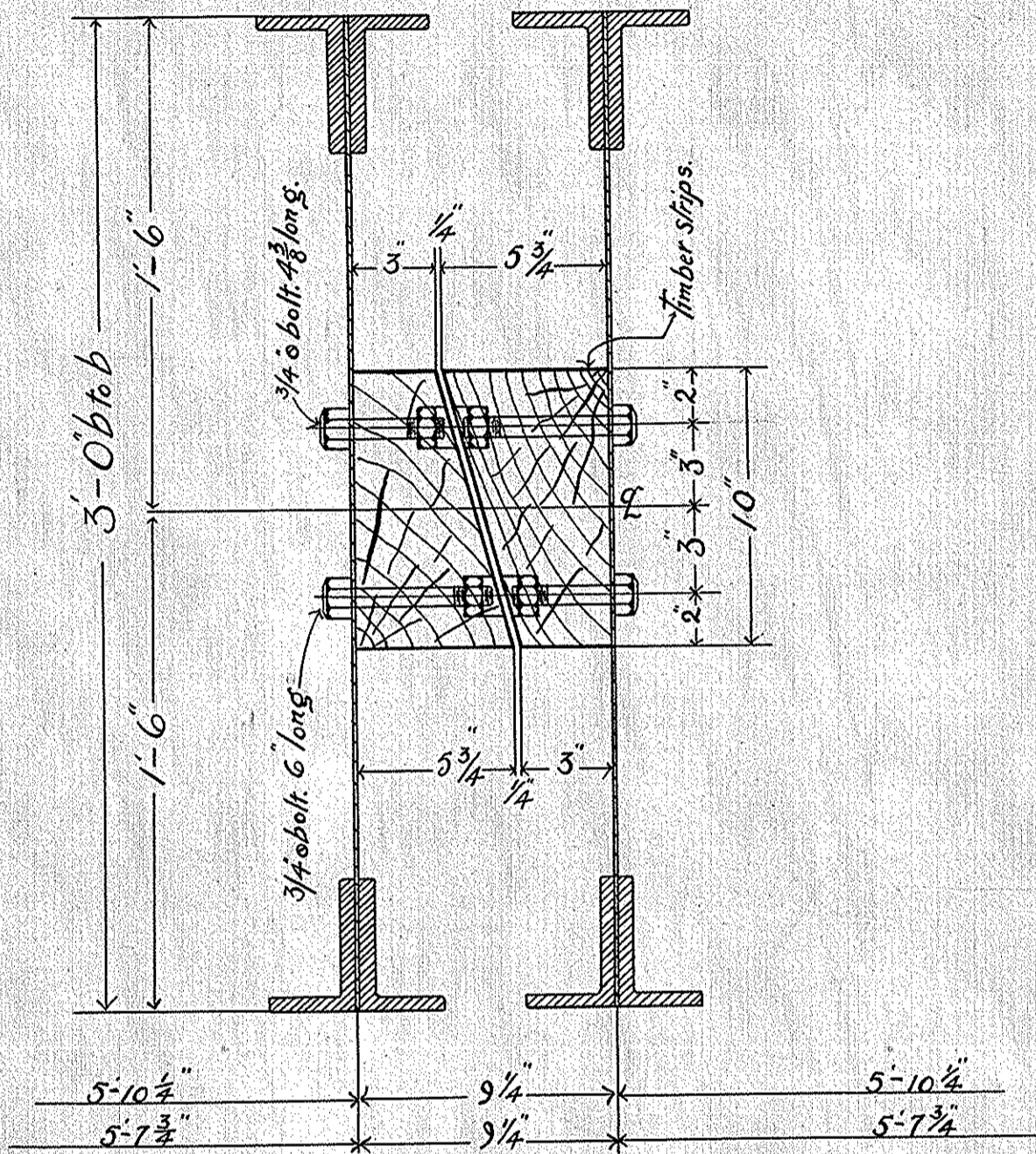
CASE D 8  
030  
SAULT STE MARIE

C. E. ...

CASE D 8  
030

SAULT STE MARIE  
030  
SAULT STE MARIE

CASE X 50173



*500 Canal Movable Dam  
Sketch showing Arrangement of Timbers.*

*Dept. Railways & Canals Ottawa*

*Chief Engineers office*

*Dec 24-10*

**THE ST. LAWRENCE SEAWAY AUTHORITY**

**OPERATIONS & MAINTENANCE**

SAULT STE. MARIE CANAL  
500 CANAL MOVABLE DAM  
Sketch showing Arrangement of Timbers

DES'G'D.	CHECKED	SCALE	DATE
DRAWN	CHECKED	AS SHOWN	December 24, 1910
RECOMMENDED		APPROVED	CASEX 50173

IA 00036  
FX. 93.19.164