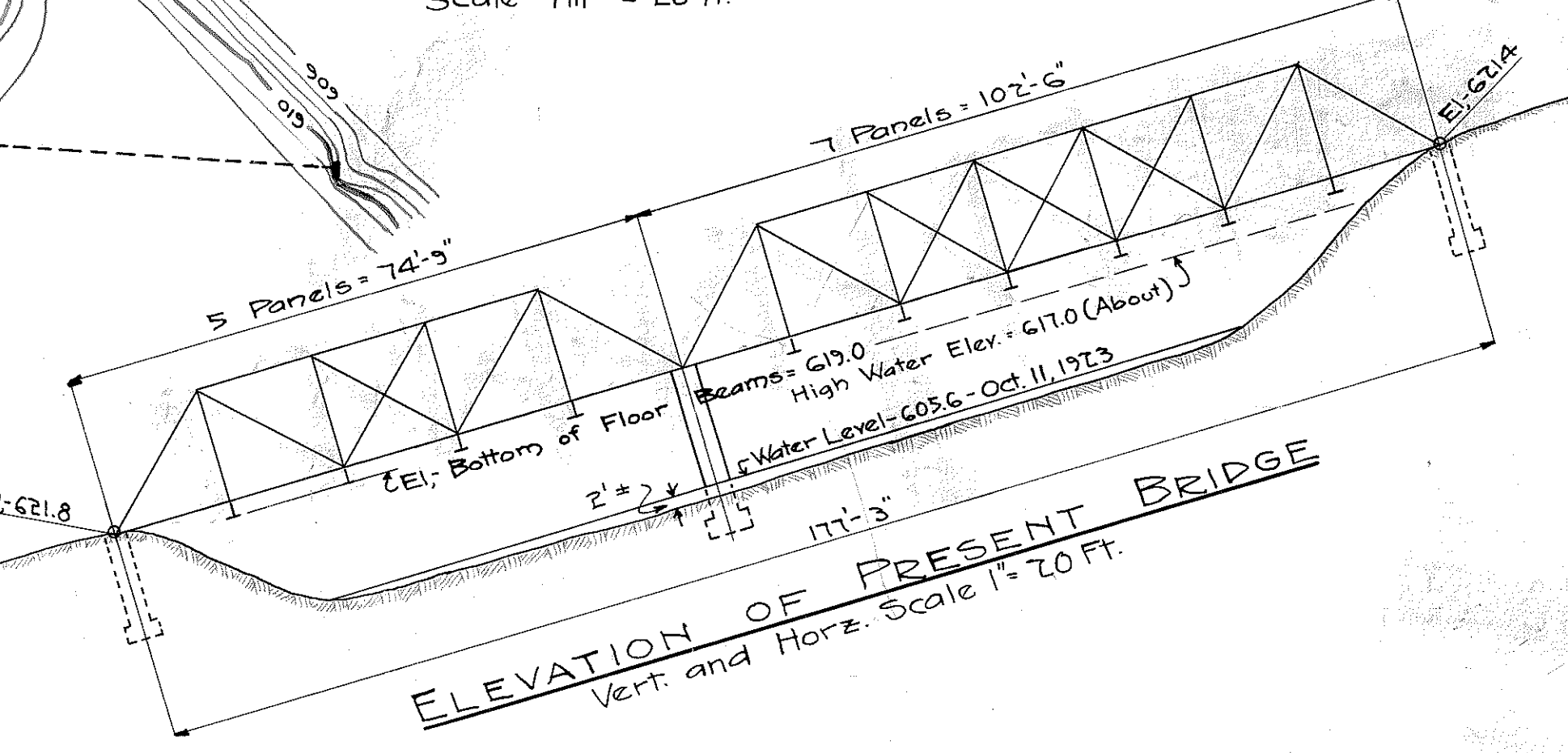
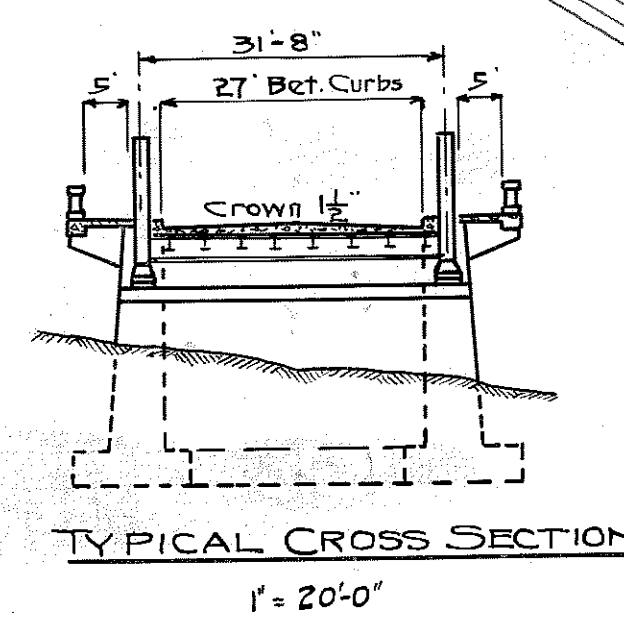


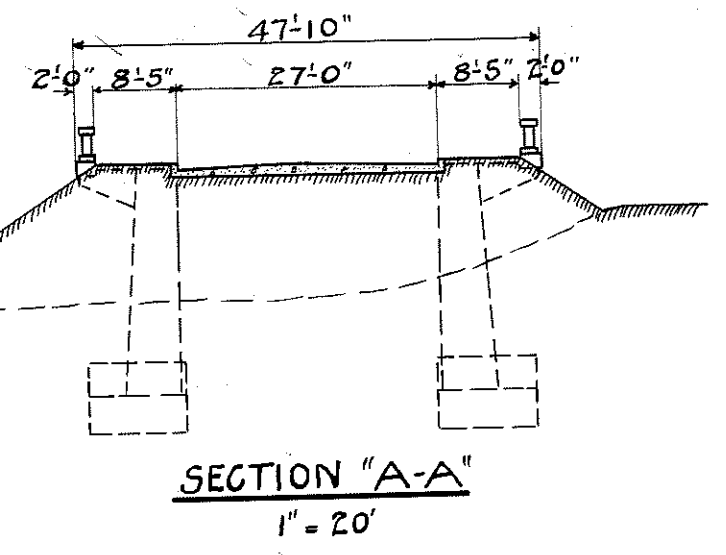
PLAN
Scale 1 in. = 20 ft.



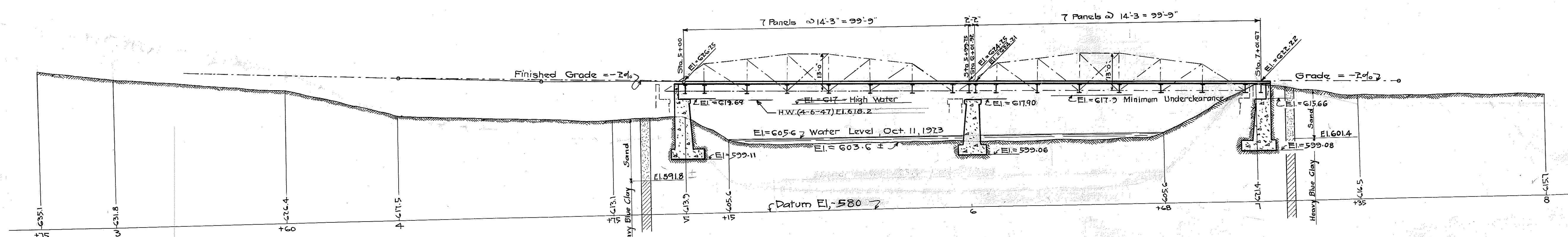
ELEVATION OF PRESENT BRIDGE
Vert. and Horz. Scale 1" = 20 Ft.



TYPICAL CROSS SECTION
1" = 20'-0"



SECTION "A-A"
1" = 20'



PROFILE
Horz. Scale 1" = 20 Ft.
Vert. Scale 1" = 20 Ft.

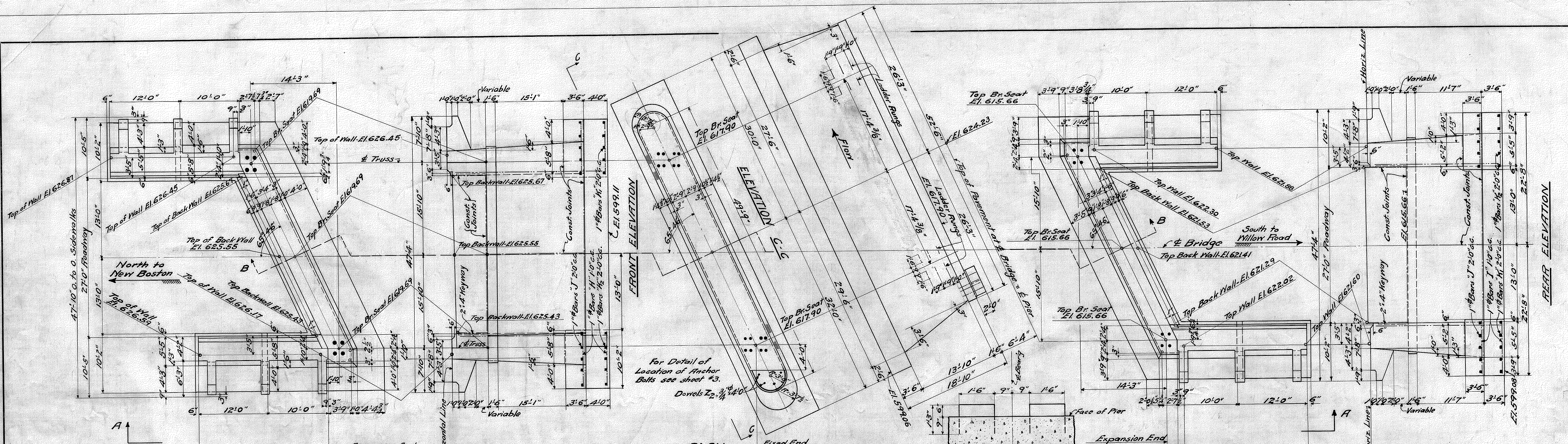
Field Notes from Bridge Dept Field Book #27-P32

BOARD OF WAYNE COUNTY ROAD COMMISSIONERS
DETROIT, MICHIGAN
EDWARD N. HINES, CHAIRMAN
JOHN S. HAGGERTY, COMMISSIONER
WILLIAM F. BUTLER, COMMISSIONER

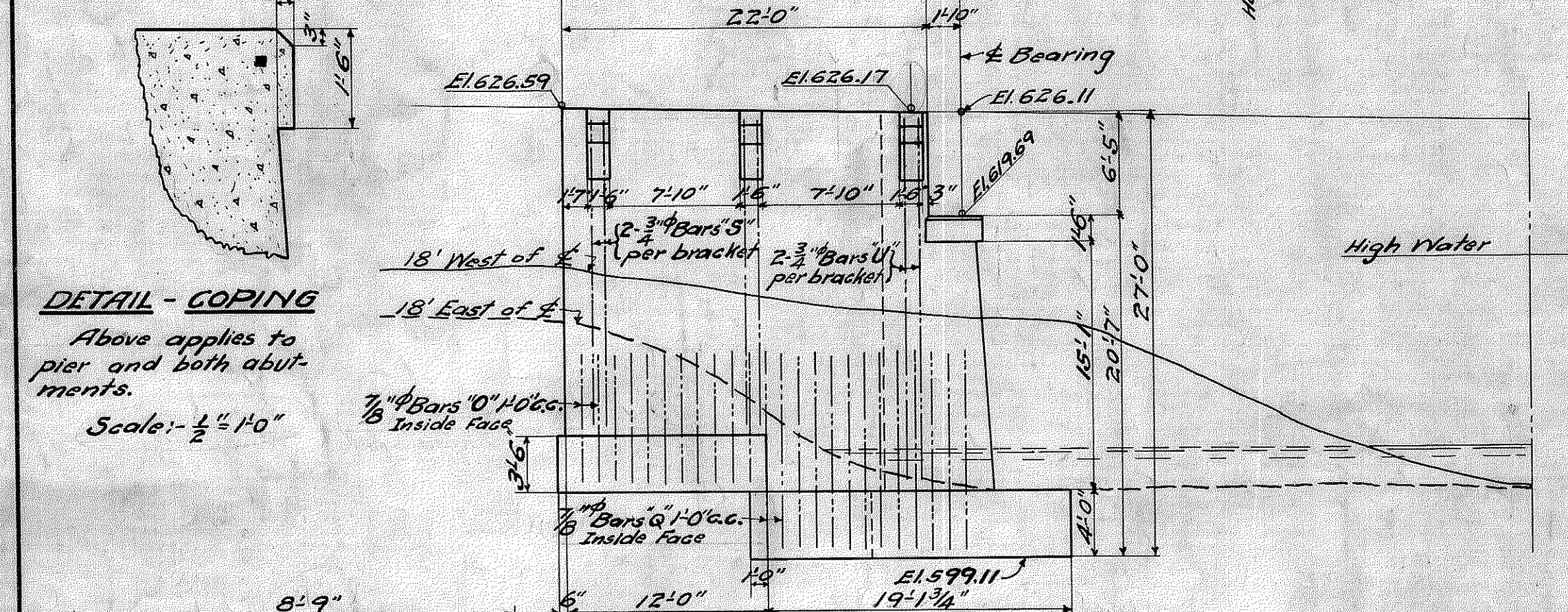
LOCATION PLAN AND PROFILE WALTZ ROAD—MILE: 0.2 BR. # 821004

DRAWN BY *E.A. Chynoweth* SCALE As Shown DATE 11/1/23
CORRECTED BY *H.A. Shupline* BRIDGE ENGINEER
APPROVED: _____ REG. CIV. ENG. CHECKED BY *SHAEV* ENGINEER MANAGER REG. CIV. ENG.

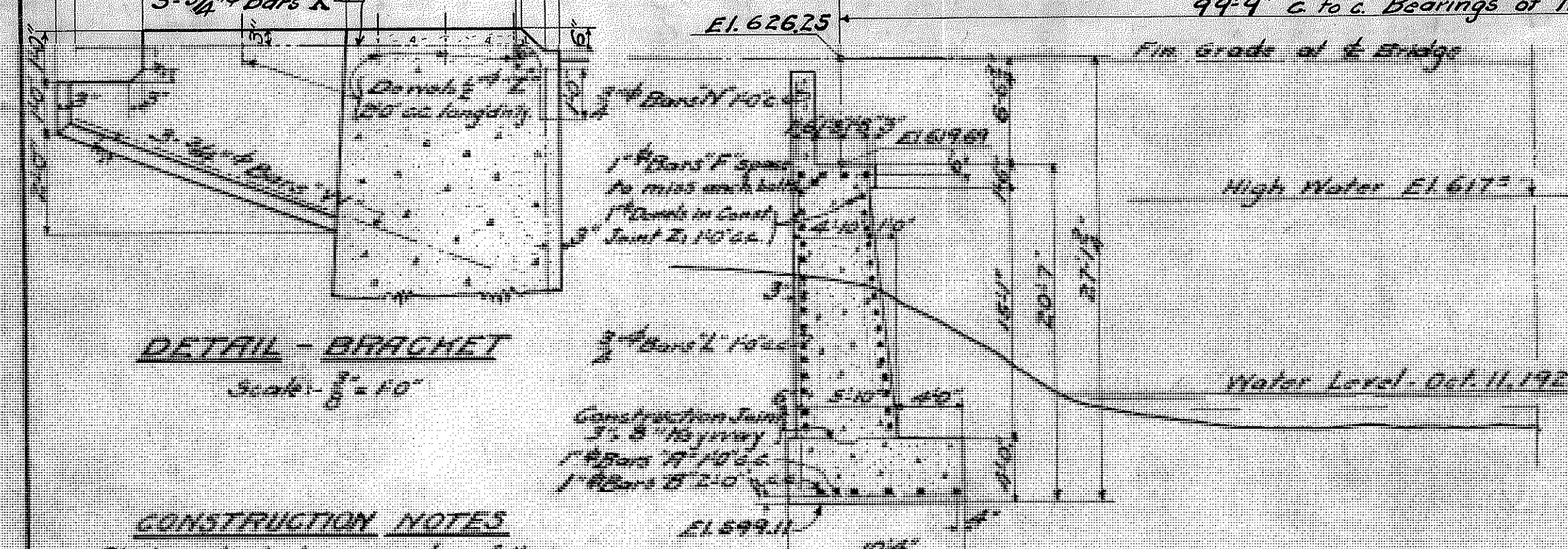
MICROFILMED JOB #3727



PLAN

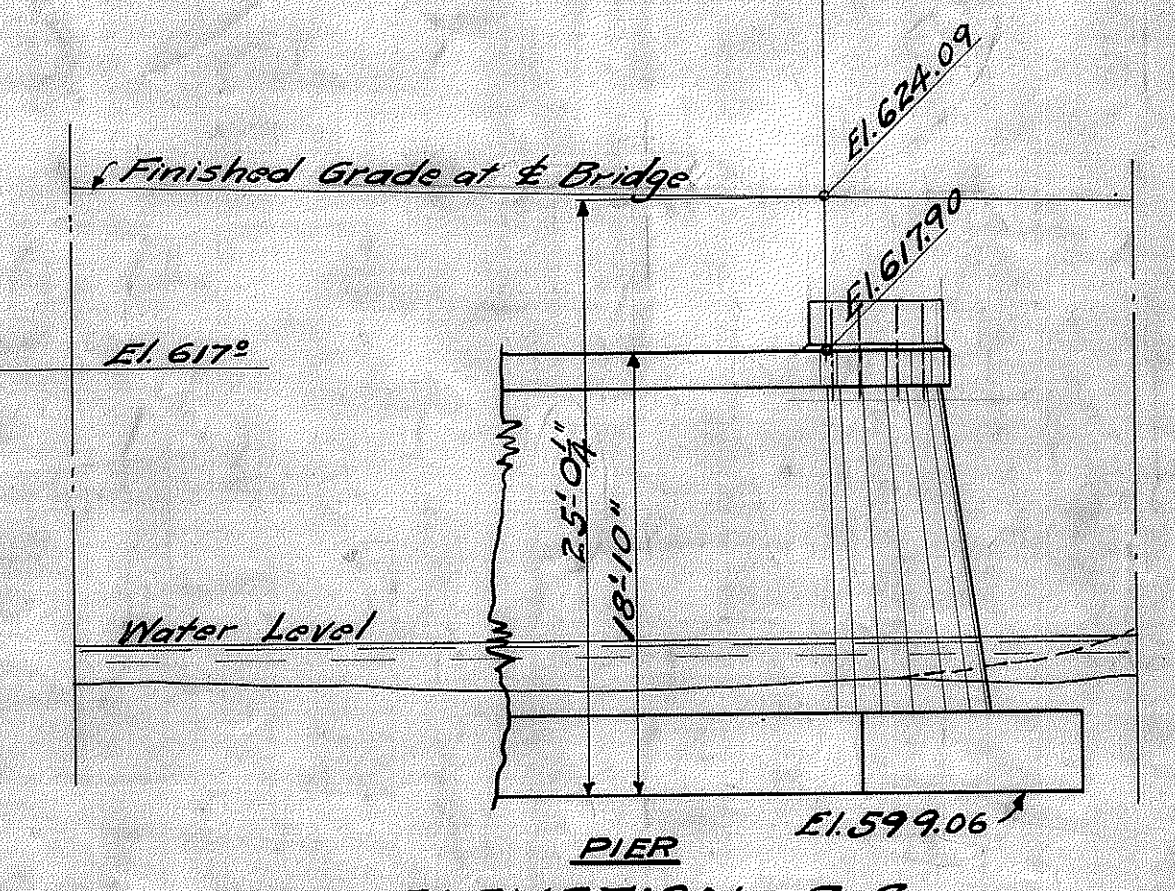


DETAIL - COPING

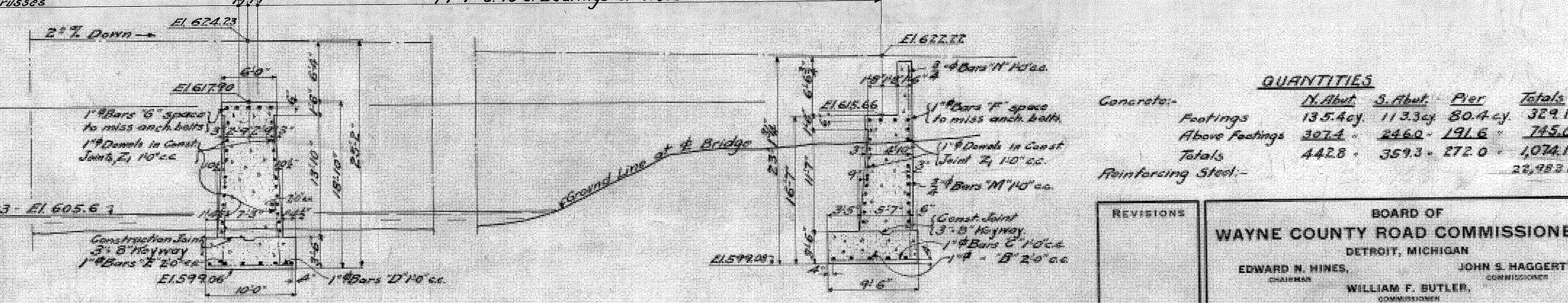


DETAIL - BRACKET

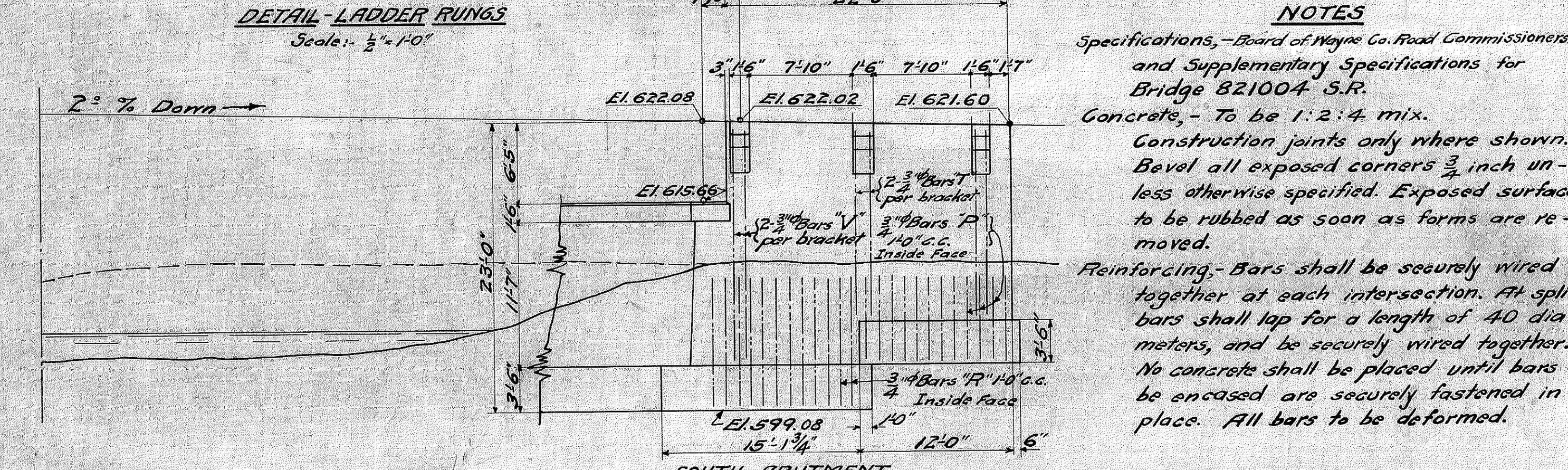
CONSTRUCTION NOTES
 Abutments to be poured as follows:
 1 Footings.
 2 Main Abutment Section from footing to top of coping and wings and brackets above footings. (To be made in two pours with vertical construction joint on $\frac{1}{2}$ of bridge).
 3 Backwall between wings.



PIER ELEVATION A-A



SECTION B-B



DETAIL - LADDER RINGS

NOTES
 Specifications - Board of Wayne Co. Road Commissioners and Supplementary Specifications for Bridge 821004 S.R.
 Concrete - To be 1:2:4 mix.
 Construction joints only where shown. Bevel all exposed corners $\frac{3}{8}$ inch unless otherwise specified. Exposed surfaces to be rubbed as soon as forms are removed.
 Reinforcing - Bars shall be securely wired together at each intersection. At splices bars shall lap for a length of 40 diameters, and be securely wired together. No concrete shall be placed until bars to be encased are securely fastened in place. All bars to be deformed.

QUANTITIES

	N. Abut.	S. Abut.	Pier	Totals
Concrete:				
Footings	135.4cy	113.3cy	80.4cy	329.1cy
Above Footings	307.4	246.0	191.6	745.0
Totals	442.8	359.3	272.0	1074.1
Reinforcing Steel:				25,982 lbs.

BILL OF REINFORCING BARS. (All Bars must be securely tagged)

Mark No.	Size	Length	Remarks	Mark No.	Size	Length	Remarks	Mark No.	Size	Length	Remarks			
A	35	1"	9'9"	X-wise in footings N. Abut.	H	46	1"	9'9"	X-wise in footings N. Abut. wings	N	64	3/4"	8'0"	Vertical in Abut. backwalls
B	20	"	26'0"	Lengthwise " N.S. "	I	46	"	9'0"	" " S. "	O	22	3/4"	8'0"	" " N. Abut. wings
C	35	"	9'0"	X-wise " S. "	J	20	"	12'0"	Lengthwise " both "	P	22	3/4"	6'0"	" " S. "
D	62	"	4'6"	" Pier	K	10	"	15'6"	" " "	Q	24	3/4"	12'0"	" " " "
E	12	"	33'0"	Lengthwise " "	L	10	"	19'0"	" " "	R	28	3/4"	10'0"	" " S. "
F	16	"	22'0"	" in copings N.S. Abut.	M	32	3/4"	14'0"	Vertical in N. Abut.	S	8	"	18'0"	" " Brackets N. Abut.
G	10	"	26'0"	" Pier	N	32	"	10'0"	" " S. "	T	8	"	14'0"	" " S. "
										U	4	24"	22'0"	Vertical in Brackets N. Abut.
										V	4	"	18'0"	" " S. "
										W	36	"	10'0"	Bottom of " both Abuts
										X	36	"	10'6"	Horizontal in " (both)
										Y	12	"	4'0"	Ladder Rings in Pier
										Z	156	1/2"	1'0"	Dovels for sidewalks
										Z1	134	1"	7'0"	" in Abuts & Pier
										Z2	A	3/4"	4'0"	" in Ice Guard on Pier

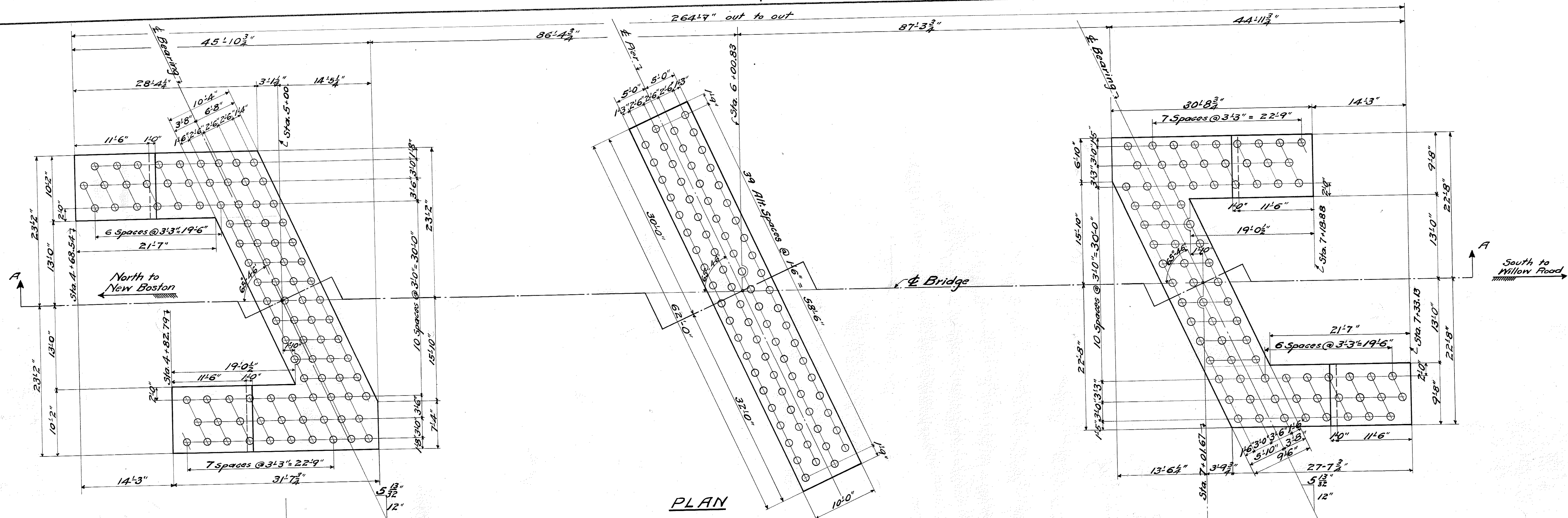
REVISIONS

BOARD OF WAYNE COUNTY ROAD COMMISSIONERS
 DETROIT, MICHIGAN
 EDWARD N. HINES, CHAIRMAN
 JOHN S. HAGGERTY, COMMISSIONER
 WILLIAM F. BUTLER, COMMISSIONER

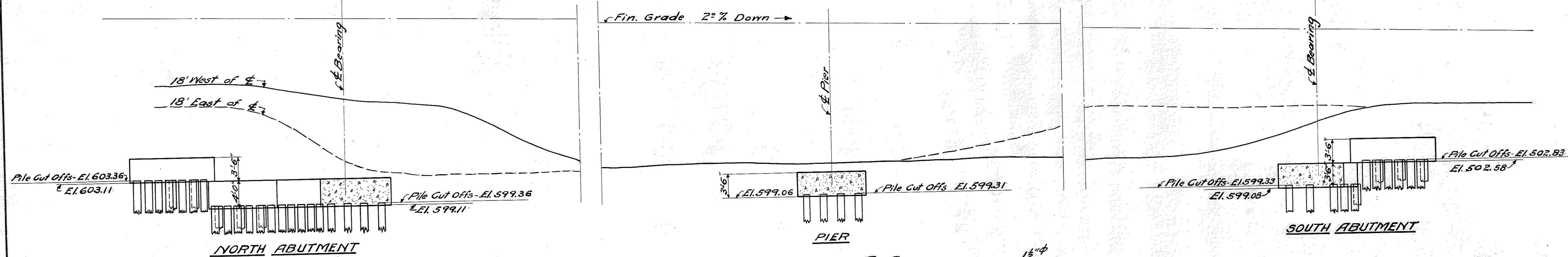
DETAILS - PIER AND ABUTMENTS
 WALTZ ROAD - MILE: 0.2
 BR. # 821004

DESIGNED BY: E.L.L. E.H.G. DRAWN BY: A.H.G. CHECKED BY: H.P.J.
 DATE: 4/9/24 SCALE: 1/8" = 1'-0" x 3/4" sheets

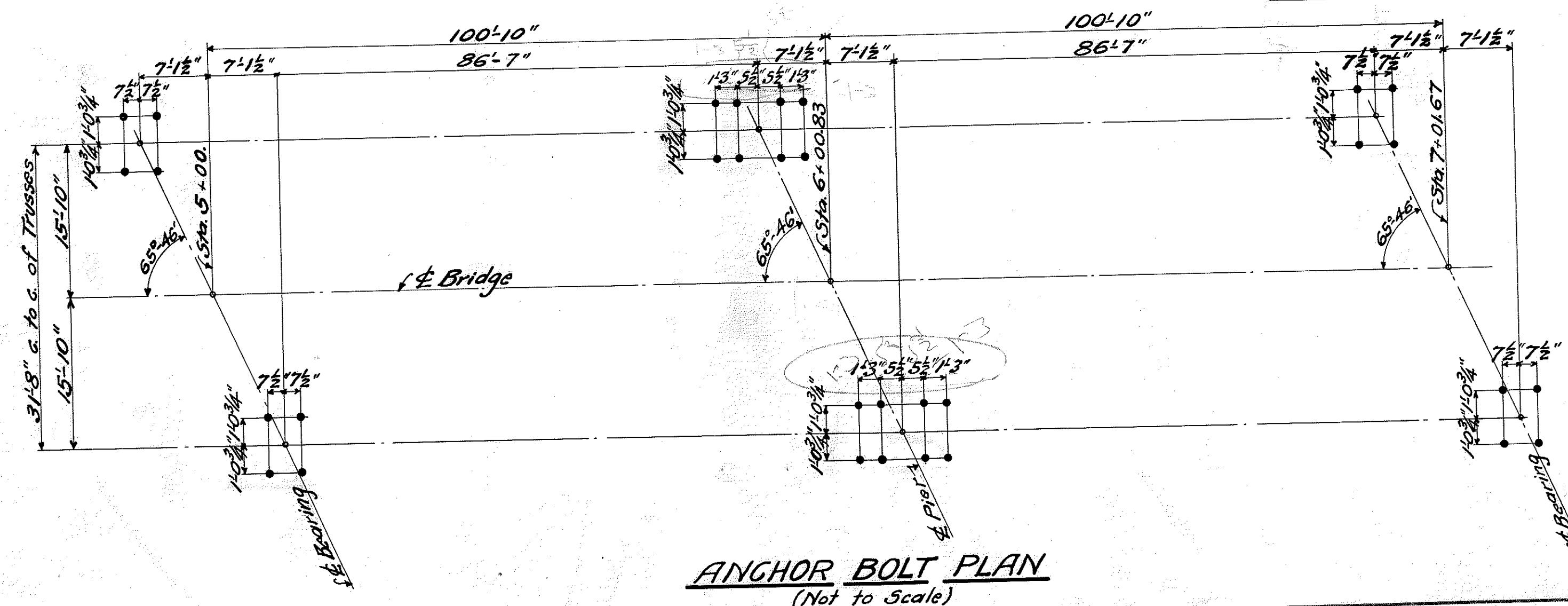
APPROVED: [Signature] TRAINER: [Signature]



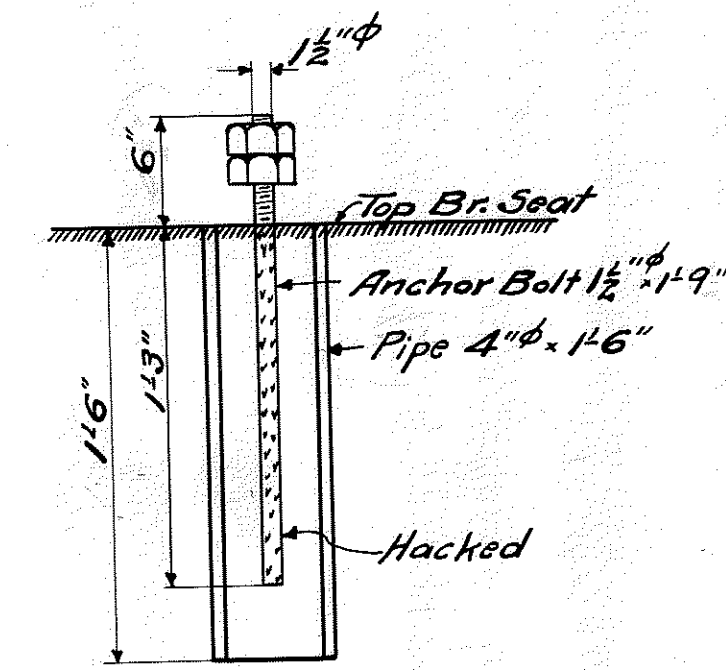
PLAN



SECTION A-A



ANCHOR BOLT PLAN
(Not to Scale)



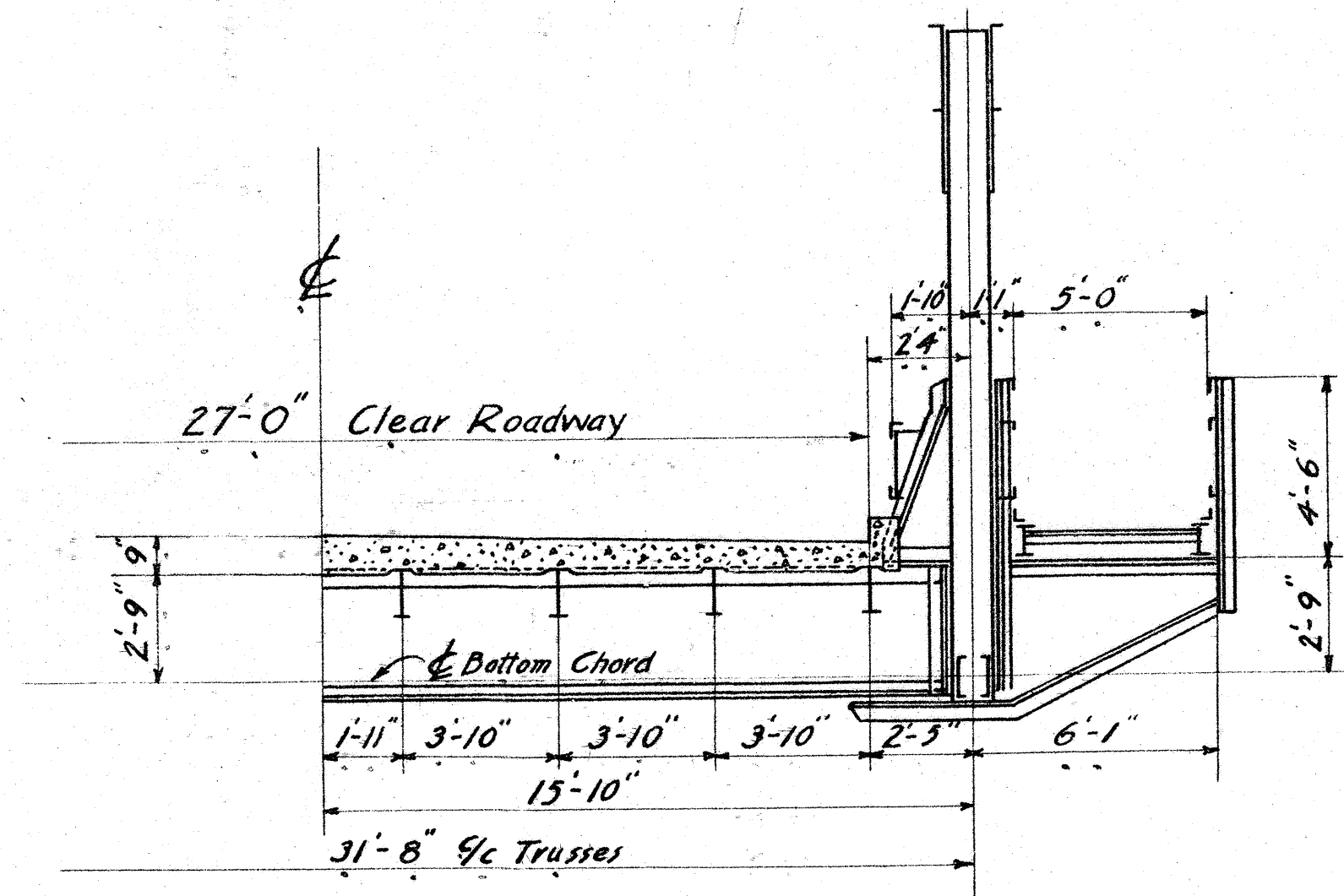
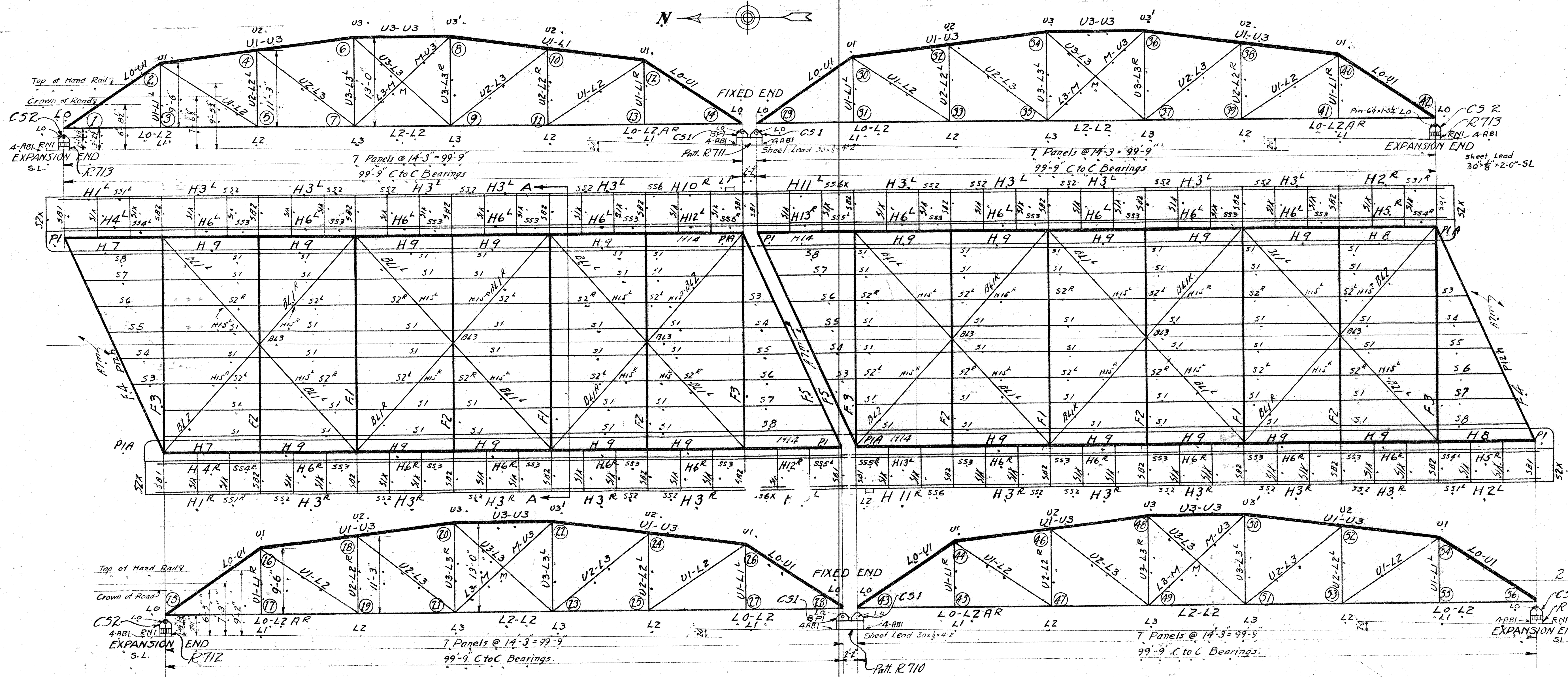
DETAIL - ANCHOR BOLT LOCATION

Contractor for Substructure shall place pipe for anchor bolts.
Contractor for Superstructure shall furnish and set anchor bolts.

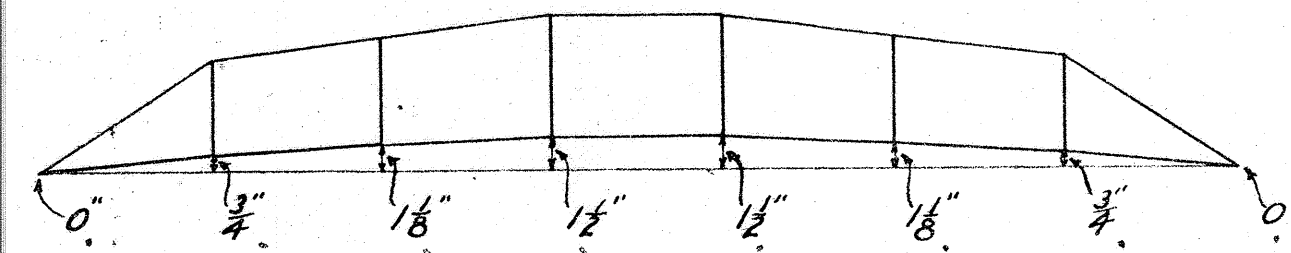
NOTES

- Specifications: - Board of Wayne Co. Road Commissioners and supplementary specifications for substructure of Bridge 821004 S.R.
- Concrete: - To be 1 part Cement, 2 parts sand, 4 parts Stone.
- No construction joints to be made in footings.
- Reinforcing: - No concrete shall be placed until bars to be encased are securely fastened in place.
- Piling: - Piles according to this diagram if piles are considered necessary by the Engineer.
- Total Estimated Length of Piles = 253 @ 30' = 7,590 lin.ft.

REVISIONS	BOARD OF WAYNE COUNTY ROAD COMMISSIONERS DETROIT, MICHIGAN	
	EDWARD N. HINES, CHAIRMAN	JOHN S. HAGGERTY, COMMISSIONER
	WILLIAM F. BUTLER, COMMISSIONER	
	PILING, FOOTINGS AND ANCHORAGE WALTZ ROAD—MILE: 0.2. BR.# 821004.	
DESIGNED BY F.H.G.	DRAWN BY F.H.G.	CHECKED BY [Signature]
DATE 4/12/24	SCALE 1/8" = 1'-0"	
CORRECT [Signature]	Reg. Civ. Eng.	
APPROVED [Signature]	Engineer Manager	SHEET No. 3



Section A-A.



Camber Diagram

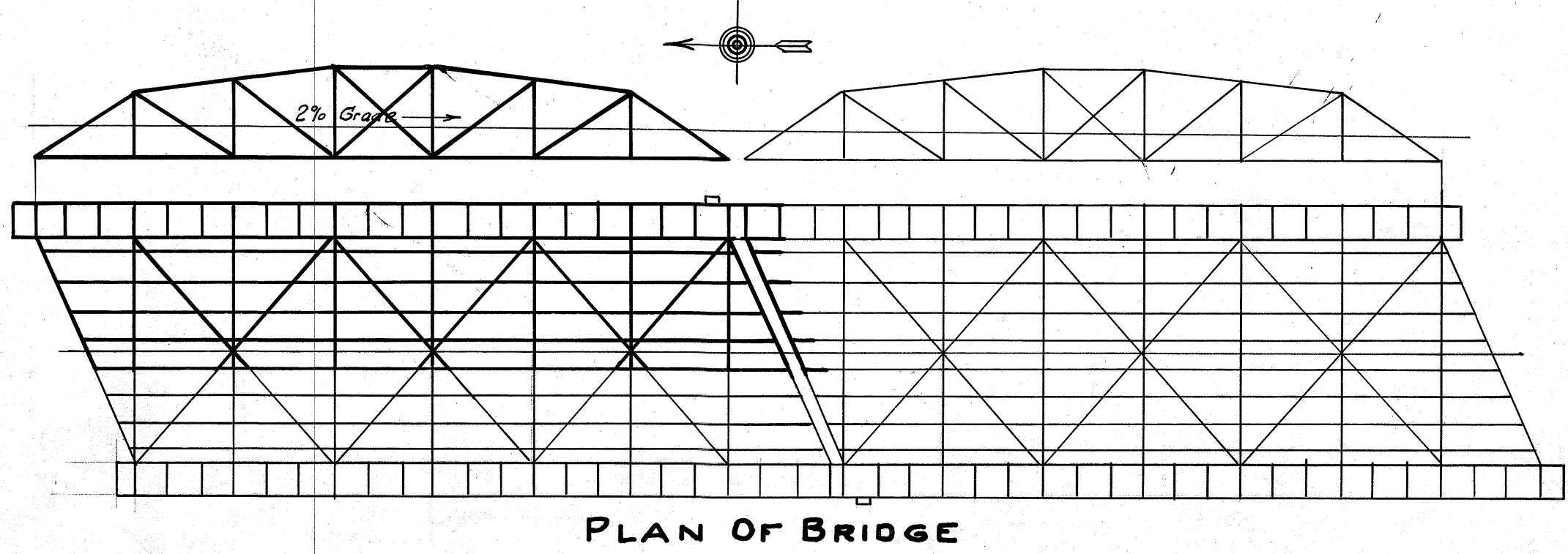
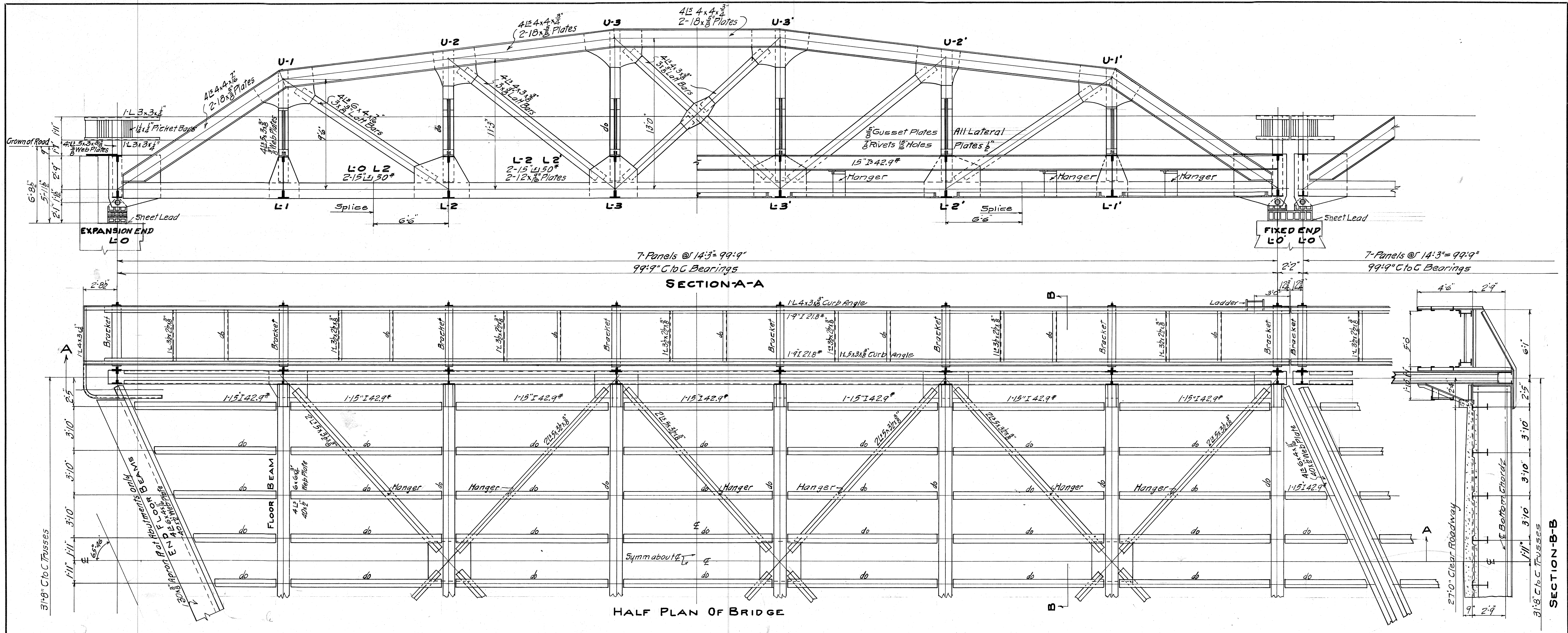
List of Drawings	
Sheet	Description
E1	Erection Plan
1	Bottom Chord
2	do.
3	End Post
4	Top Chord
5	do and Diagonals
6	Posts
7	Floor Beams Stringers
8	Brackets-Sidewalk Stringers
9	Hand Railing do.
10	Hand Railing
11	Bottom Laterals-Posts
12	Floor Beams
A4a	Castings
A5	Roller Nest
A6	Anchors
A7	Pins

MATERIAL	A.H. Structural Steel
SPECIFICATIONS	A.R.E.A. 1920
SHOP INSPECTION BY	R.T.L.
SHOP PAINT	One Coat of Red Lead & Oil (100% Pure Red Lead to 4 Gal's Pure Boiled Linseed Oil and Npl to Exceed 3qt. Turpentine Japan Drier)
FIELD PAINT	Others:
PIVETS	7/8 Unless Noted
HOLES PUNCHED	7/8 Reamed 1/8 Unless Noted
HEAVING	All Field Holes except in Bracing and Railings Reamed to Metal Template or while Temporarily assembled and parts match-marked, as shown above
FIELD CONNECTIONS	Rivets
ERECTED BY	The Mt. Vernon Bridge Co.

WALTZ ROAD - MILE 02 BRIDGE #821004 OVER HURON RIVER
WAYNE COUNTY MICHIGAN
ERECTOR: THE MT. VERNON BRIDGE CO.
MT. VERNON, O.

IN CHARGE OF: _____
MADE BY: CMS 10/10/24 CHECKED BY: WJW 10/20/24

CONT. NO. 4828 SHEET E1



Notes

Name Plates. Steel Contractor shall attach his own Name Plate all others to be furnished by the Wayne County Road Commissioners.
 Specifications A-R-E-A Spec 1920 for Steel Railway Bridges for workmanship and material and supplementary spec for superstructure for this Bridge
 Planing. Ends of floor stringers to be planed to bring them to correct length
 Reaming all holes except in bracing and railings shall be subpunched $\frac{1}{16}$ " and reamed to $\frac{1}{16}$ " or may be drilled from the solid. Holes for field conns shall be reamed after assembling in the shop
 Camber to be not less than $\frac{1}{400}$ of Span

Loading

Trusses | 25#^{sq} on Road + 25% impact
 | 80#^{sq} on Walk + % impact

Floor | Road 24 Ton Trucks + 25% impact
 | Walk 100#^{sq} + % impact

Scale weight shall not vary from the estimated weights from shop Dwg.s by more than 2% for individual pieces or more than 1% for total structure
 These Plans subject to minor changes and corrections

Notes

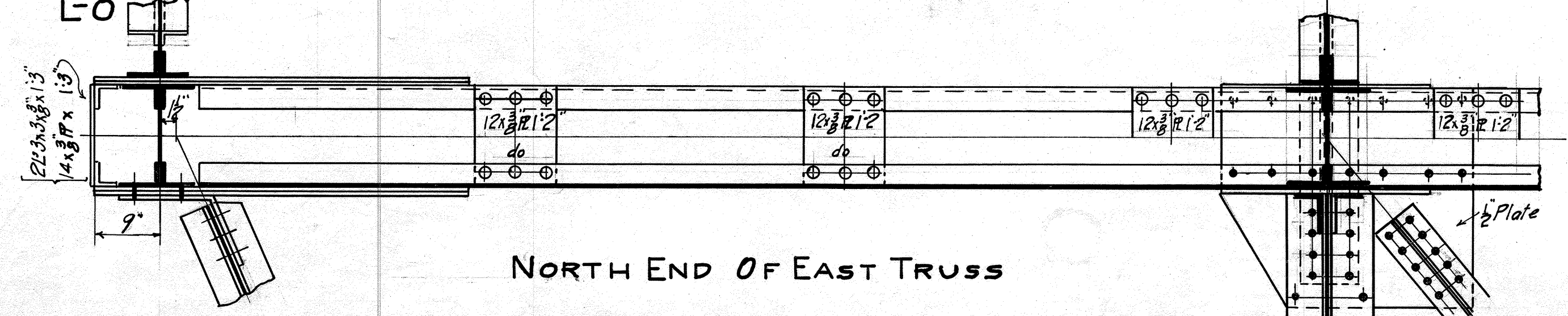
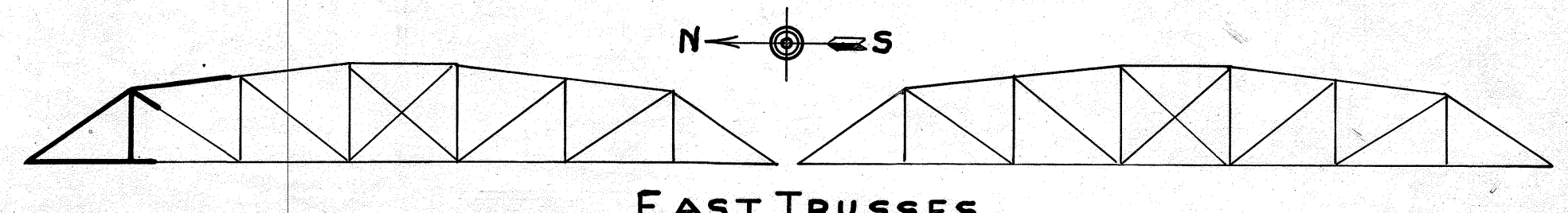
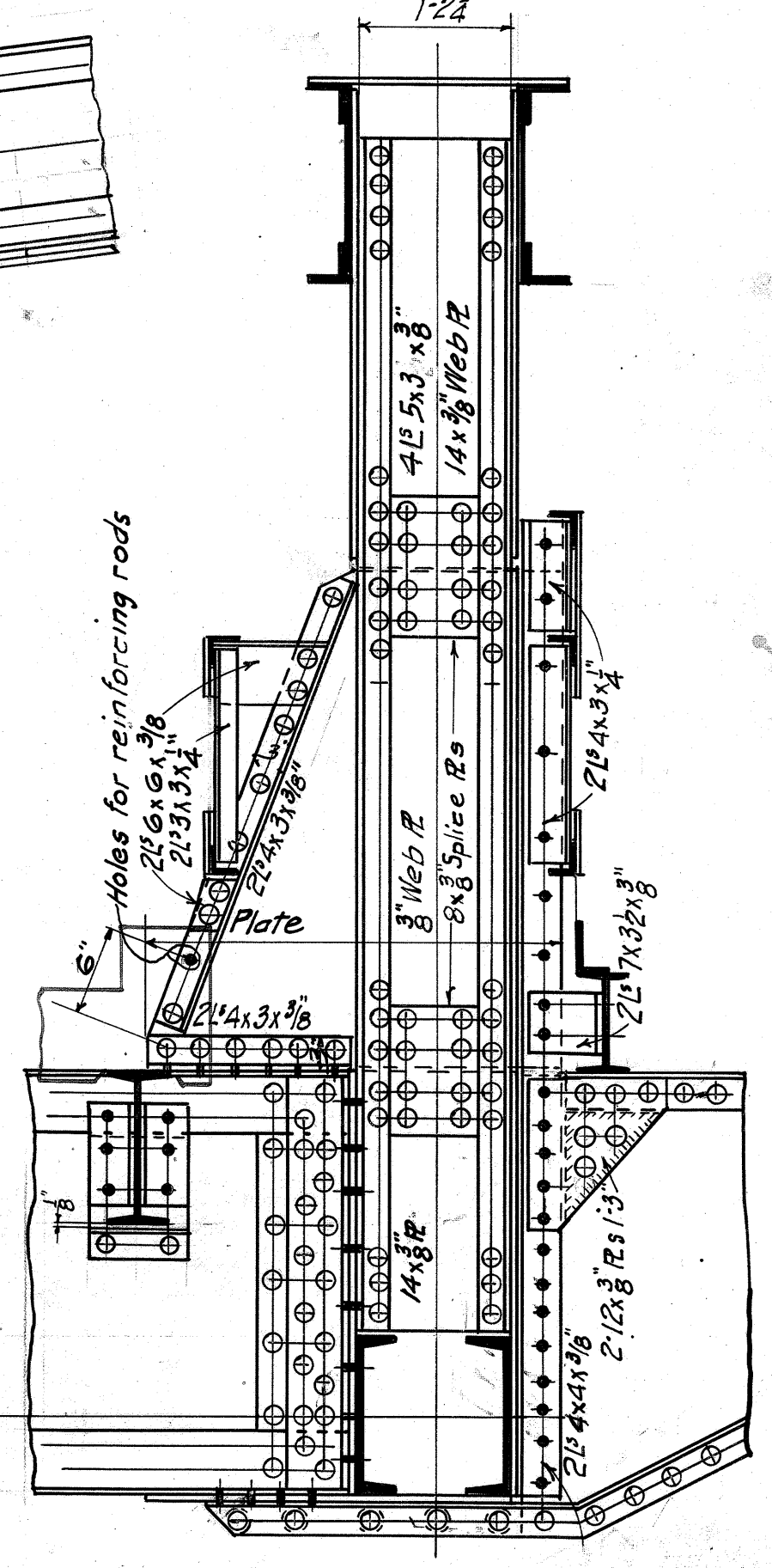
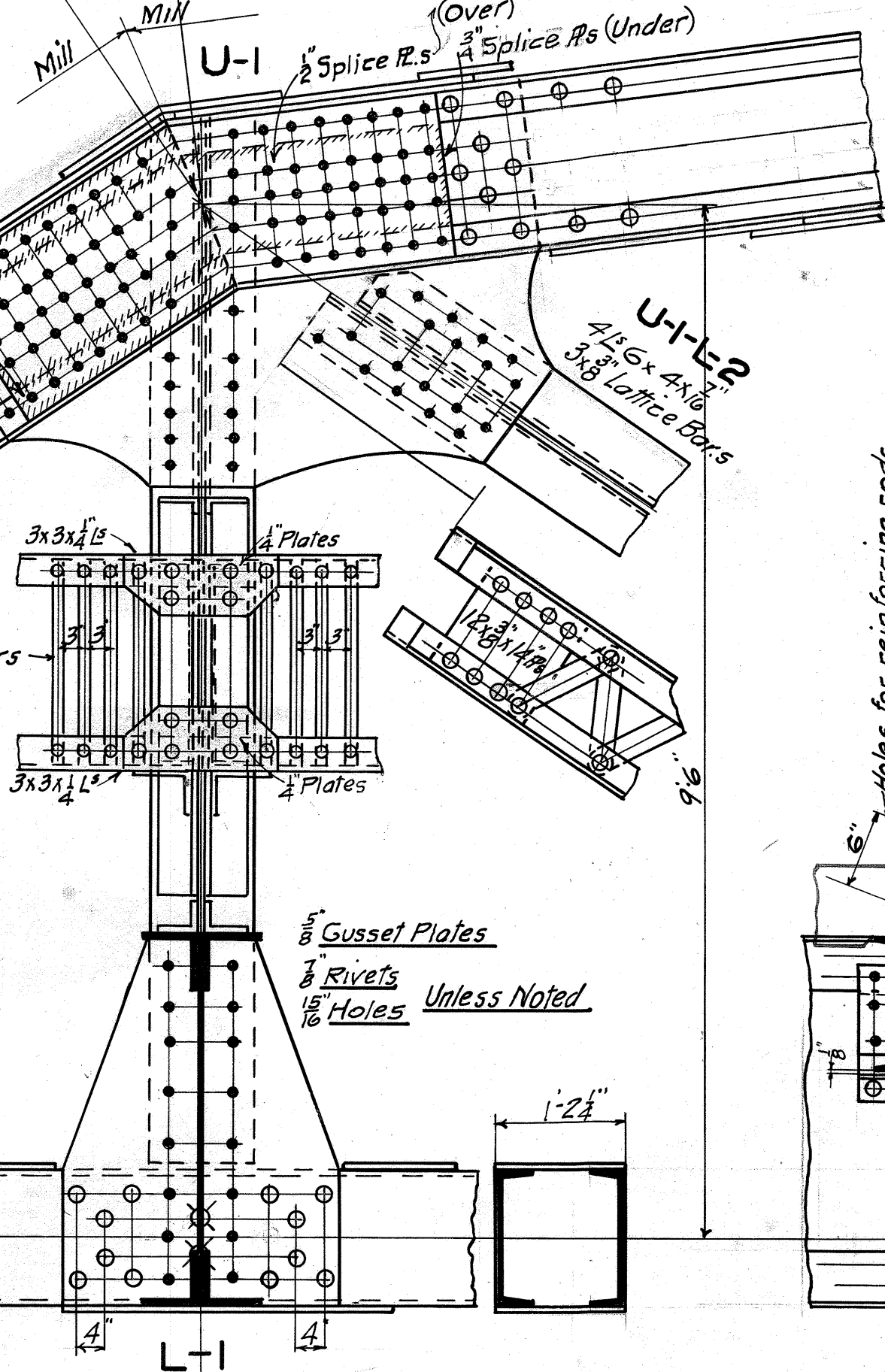
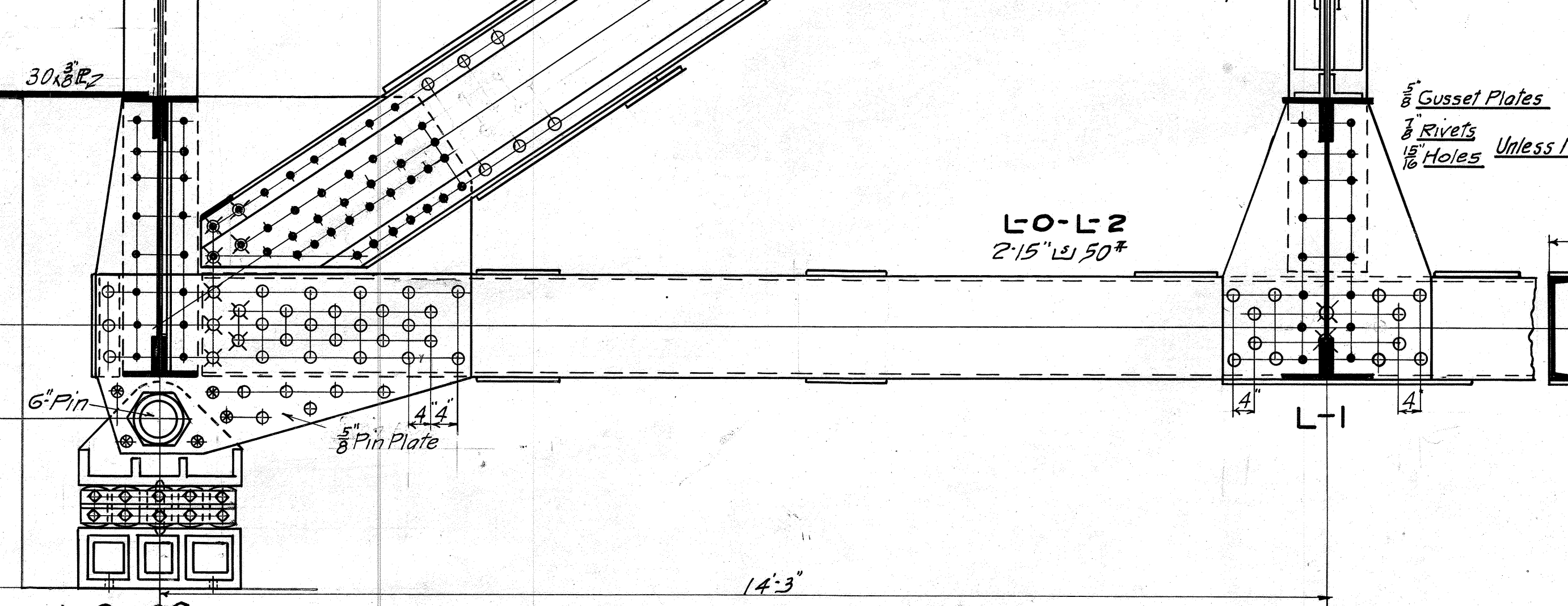
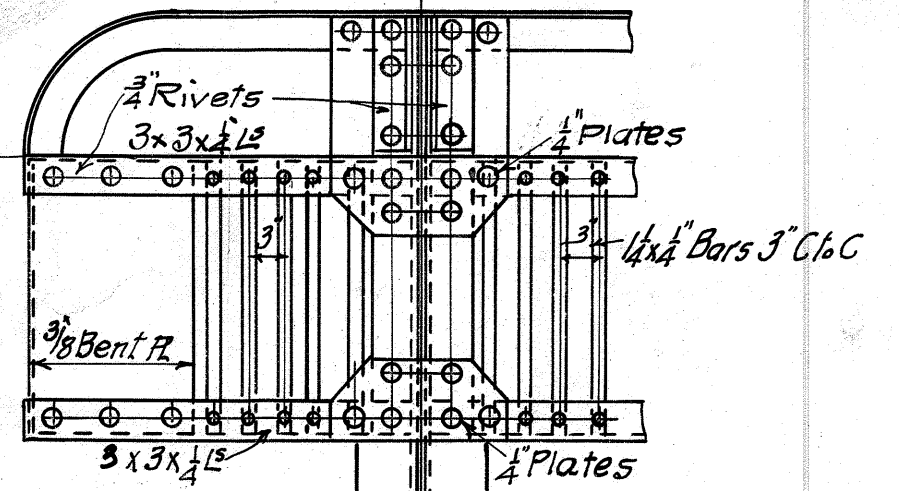
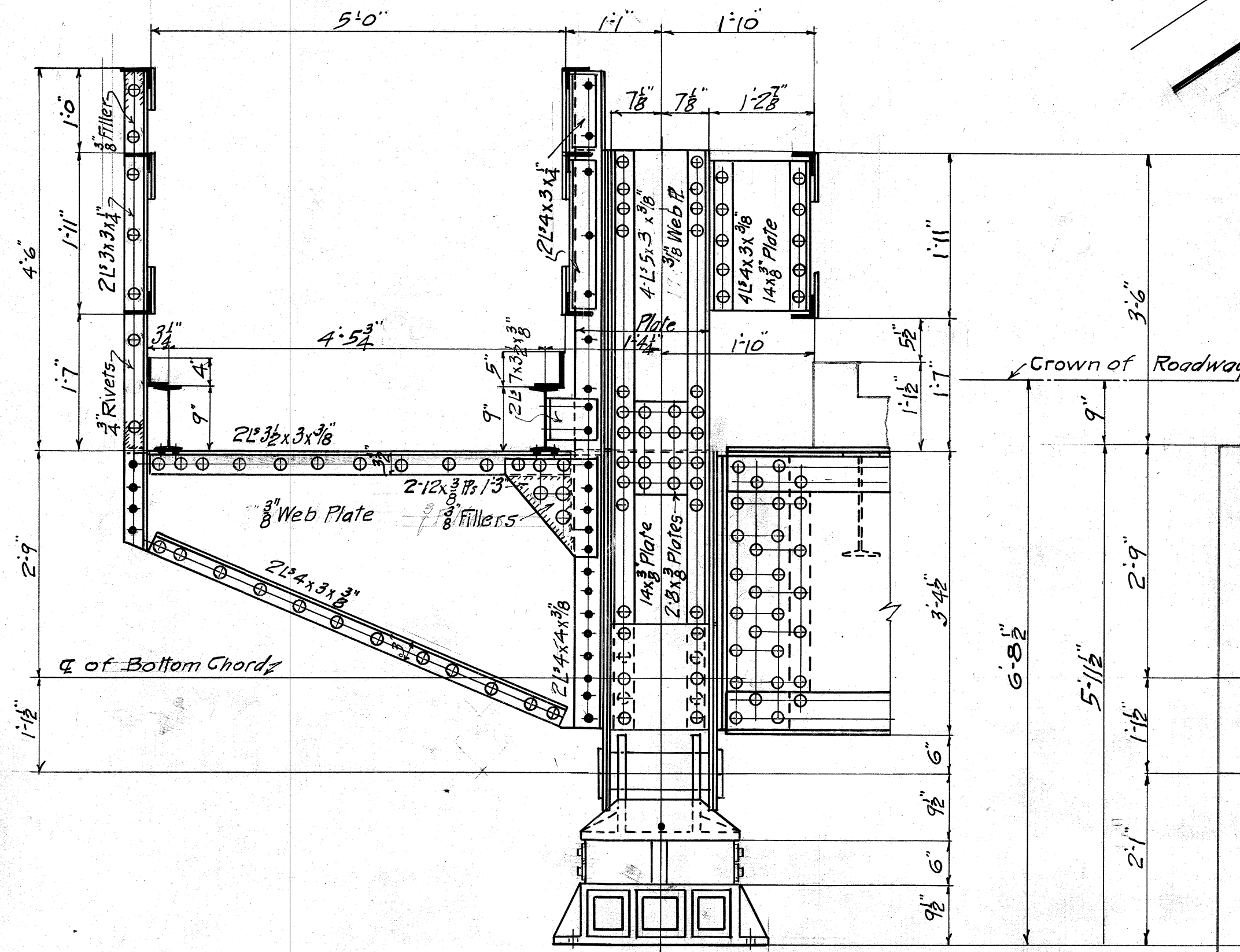
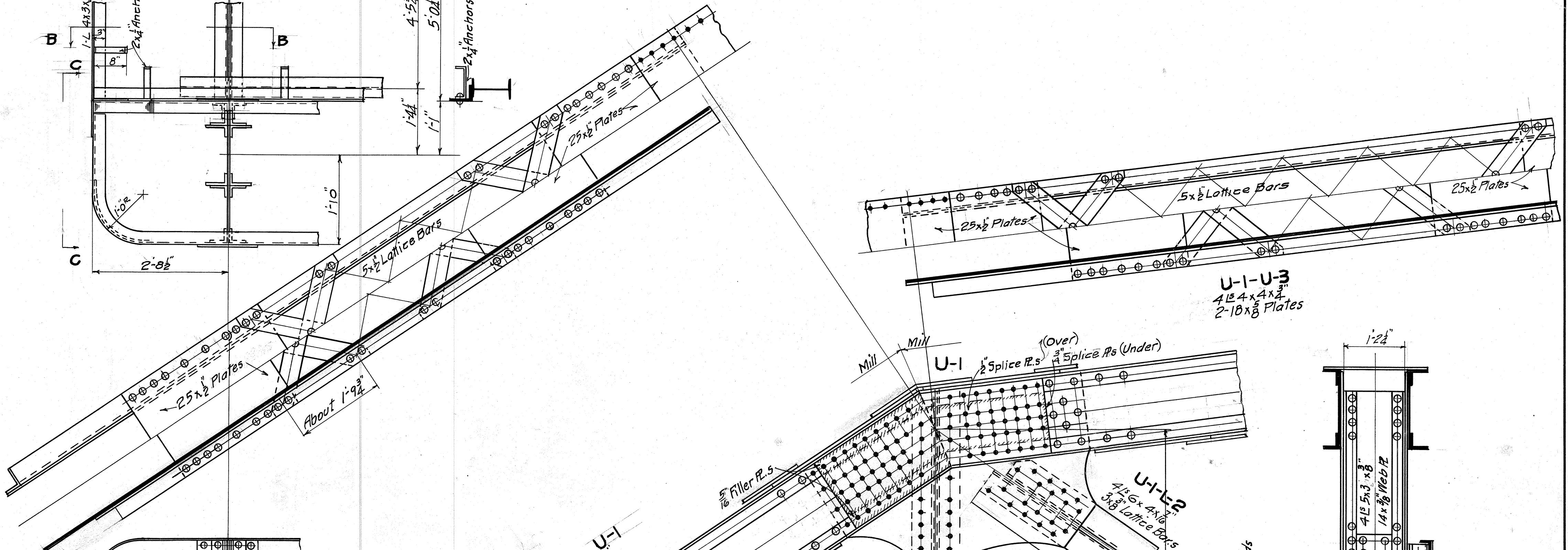
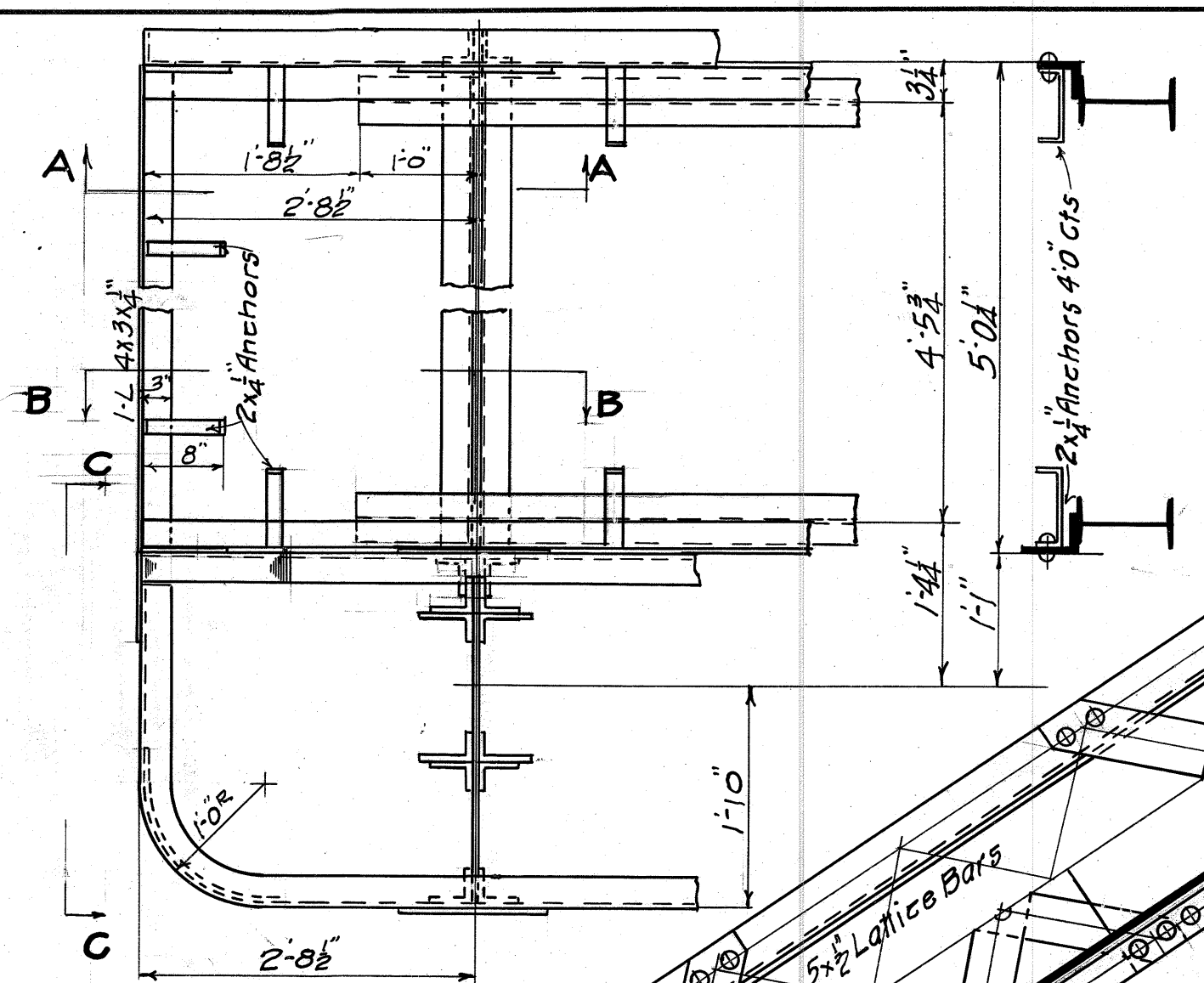
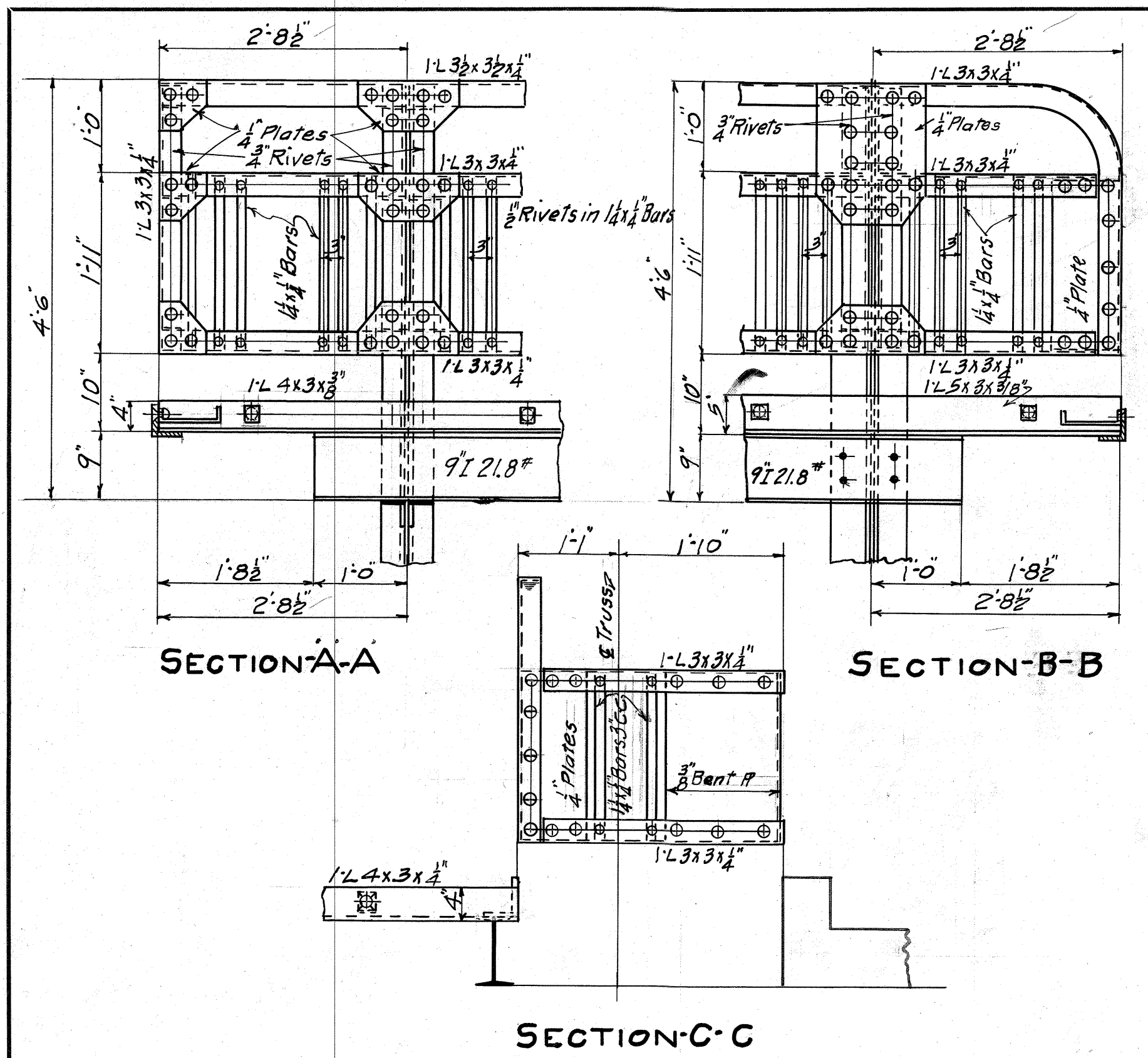
Rivets & Holes $\frac{1}{16}$ ". Except as noted
 Paint. Shop Paint according to Specifications
 Field Paint, 1st Coat. Detroit Graphite Cos #301 or equal
 " 2nd " " " " 308 " " "

Estimated Weight of Structural Steel 508,000#

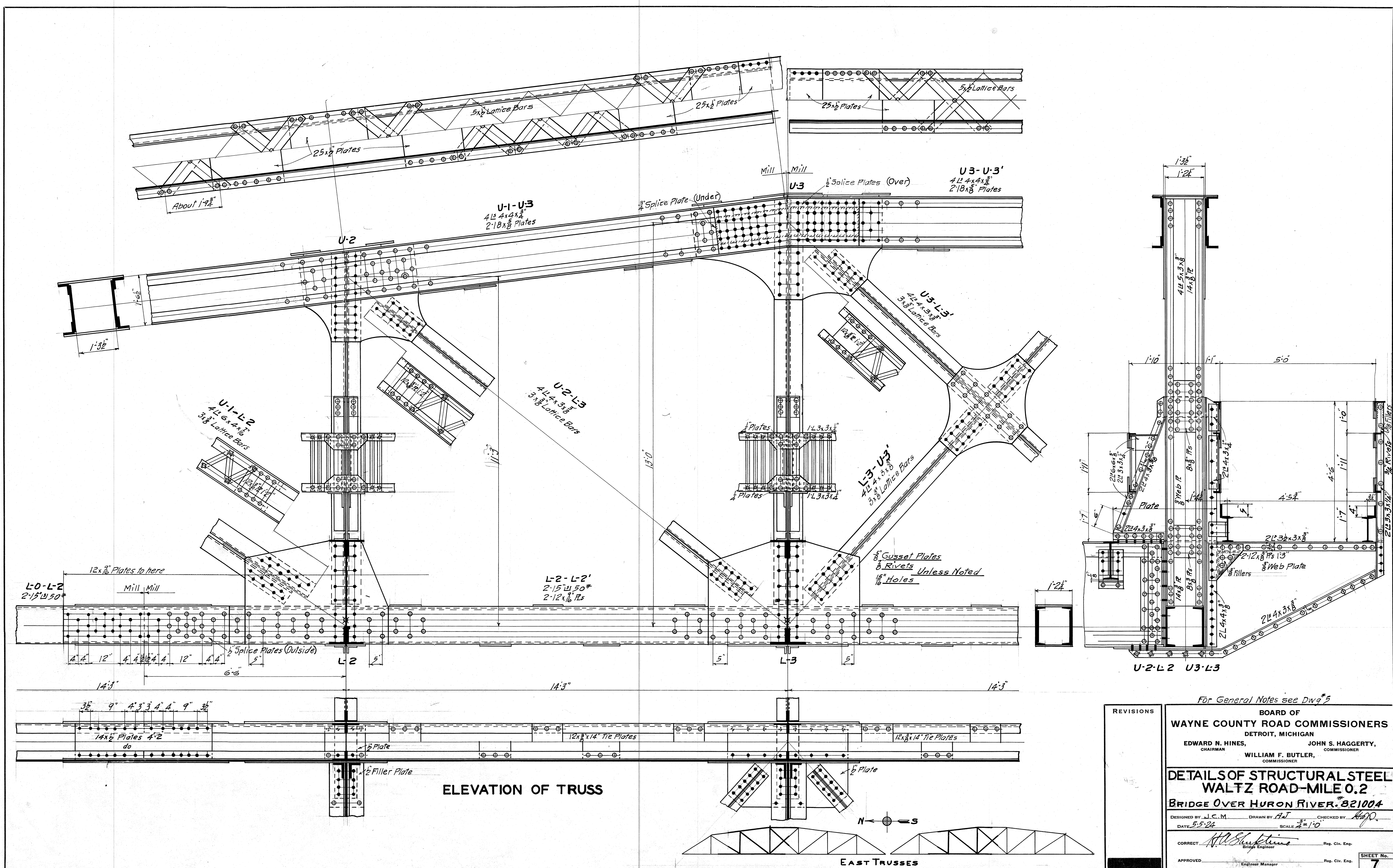
Scale Weight 569,518#
 From M.P. Specs. Shipping Bills

Note Field Painting not in this Contract

REVISIONS		BOARD OF WAYNE COUNTY ROAD COMMISSIONERS	
		DETROIT, MICHIGAN	
		EDWARD N. HINES, CHAIRMAN	JOHN S. HAGGERTY, COMMISSIONER
		WILLIAM F. BUTLER, COMMISSIONER	
GENERAL PLAN STRUCTURAL STEEL			
WALTZ ROAD—MILE 0.2			
BRIDGE OVER HURON RIVER #821004			
DESIGNED BY J.S.M.	DRAWN BY A.D.	CHECKED BY	
DATE 5-19-24		SCALE 1/4" = 1'-0"	
CORRECT	<i>A.C. Shuptrine</i>	Reg. Civ. Eng.	
APPROVED	<i>A.C. Shuptrine</i>	Reg. Civ. Eng.	SHEET No. 5



REVISIONS	For General Notes see DWG # 5		
	BOARD OF WAYNE COUNTY ROAD COMMISSIONERS DETROIT, MICHIGAN		
	EDWARD N. HINES, CHAIRMAN	JOHN S. HAGGERTY, COMMISSIONER	
	WILLIAM F. BUTLER, COMMISSIONER		
END OF TRUSS STRUCTURAL STEEL			
WALTZ ROAD—MILE 0.2			
BRIDGE OVER HURON RIVER. # 821004			
DESIGNED BY J.C.M.		DRAWN BY <i>PLU</i>	
DATE 4-30-24		CHECKED BY <i>Kepp</i>	
CORRECT <i>H.A. Shipton</i>		SCALE 1/4" = 1'-0"	
APPROVED _____		SHEET No. 6	



For General Notes see Dwg #5

REVISIONS

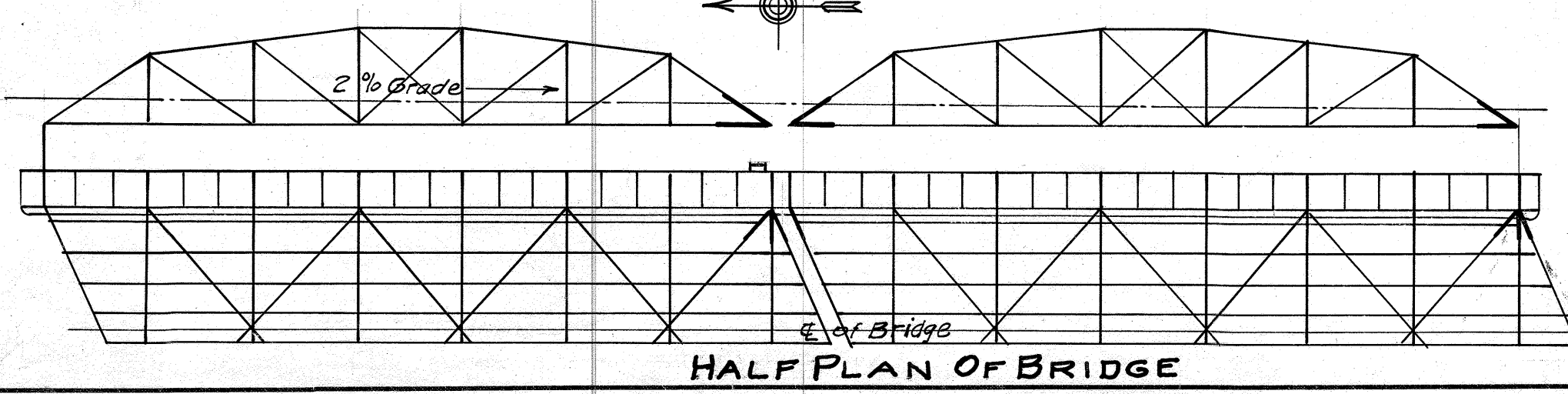
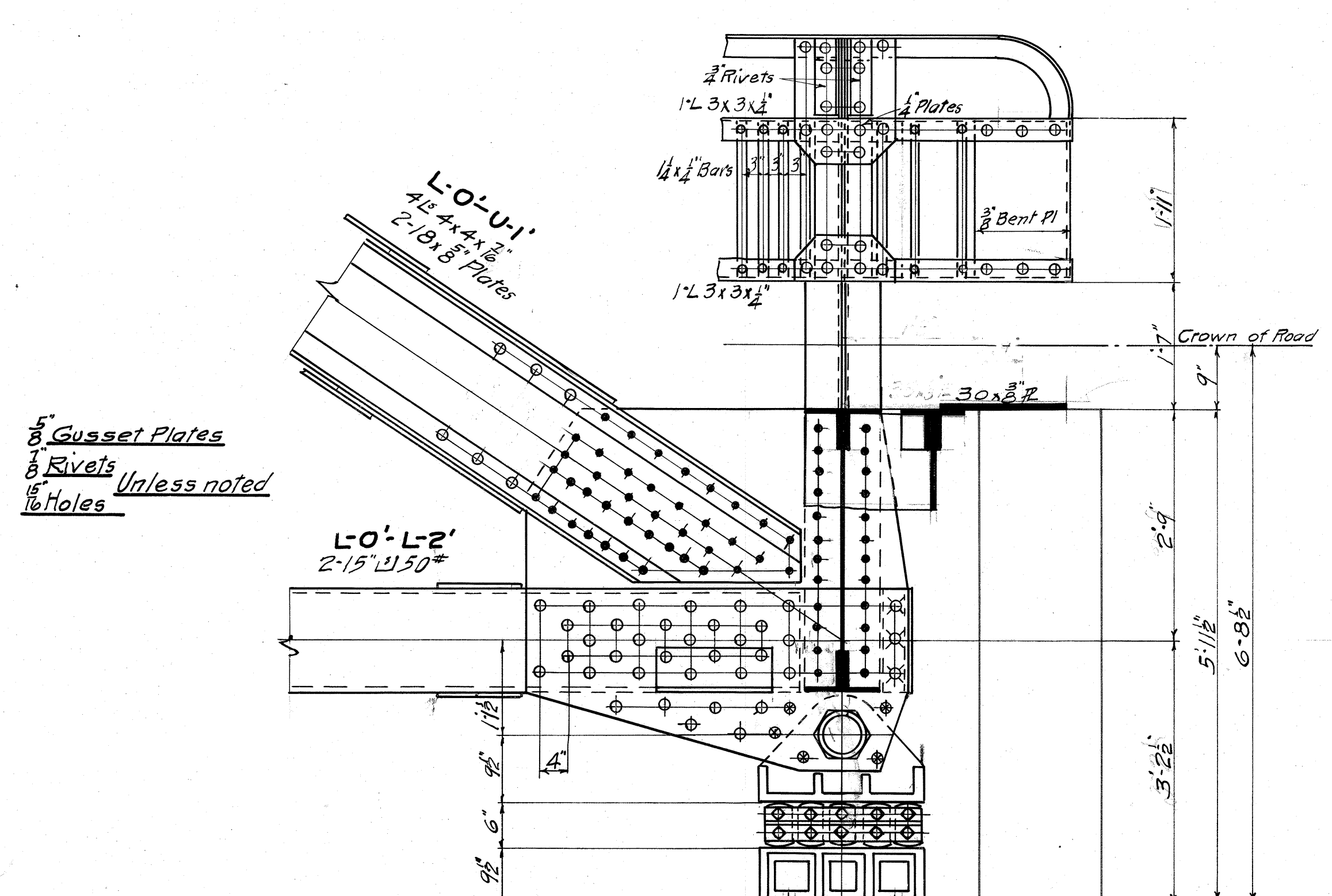
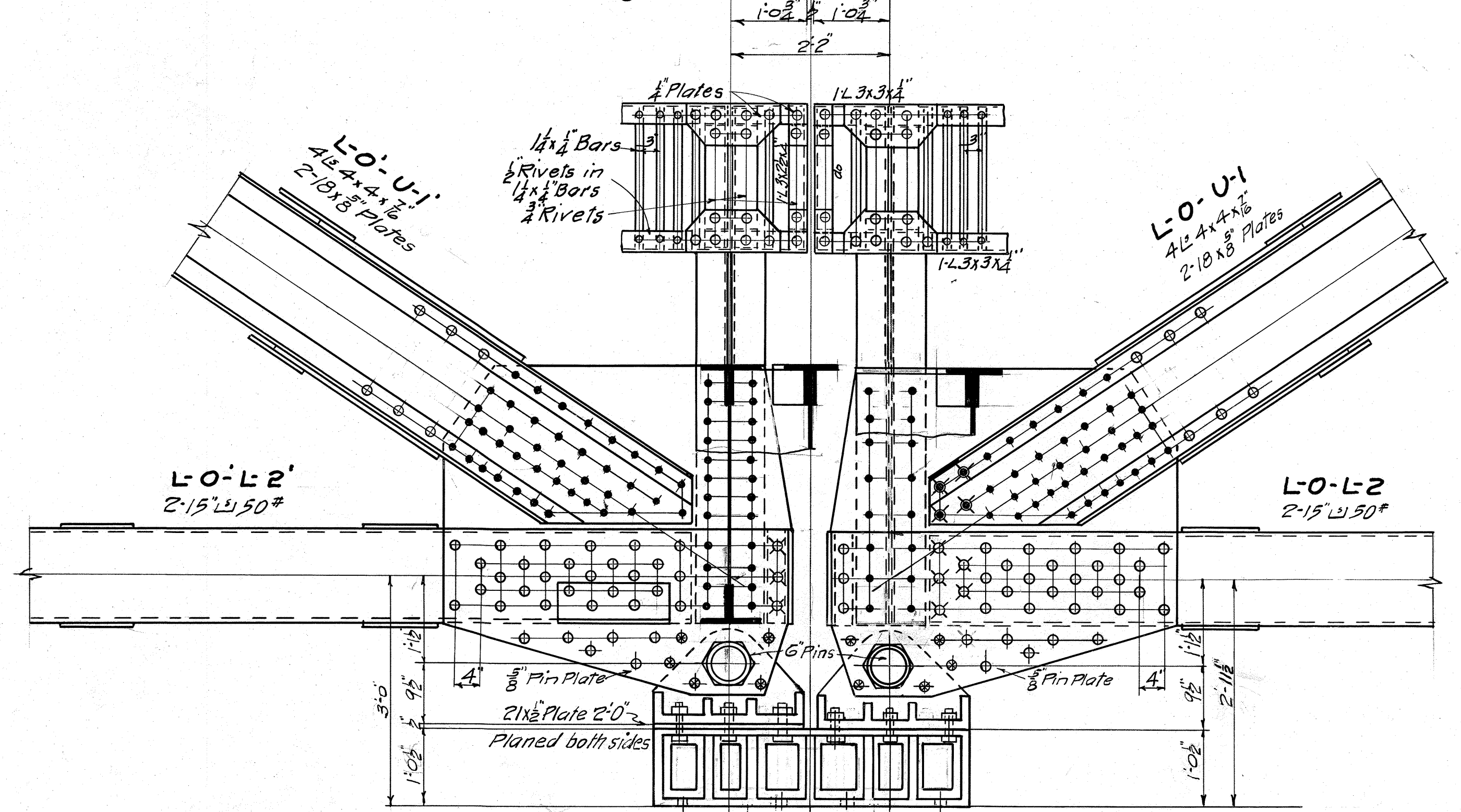
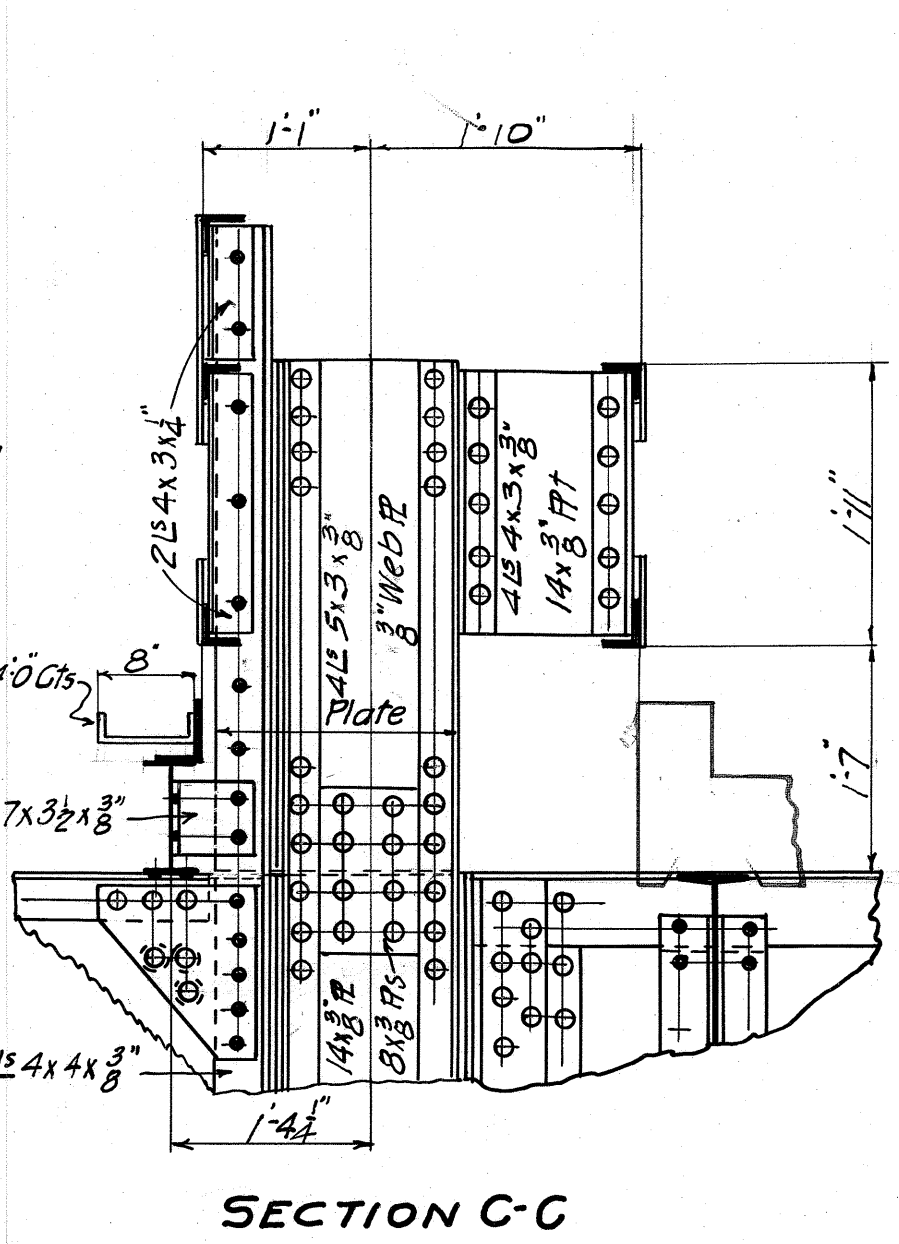
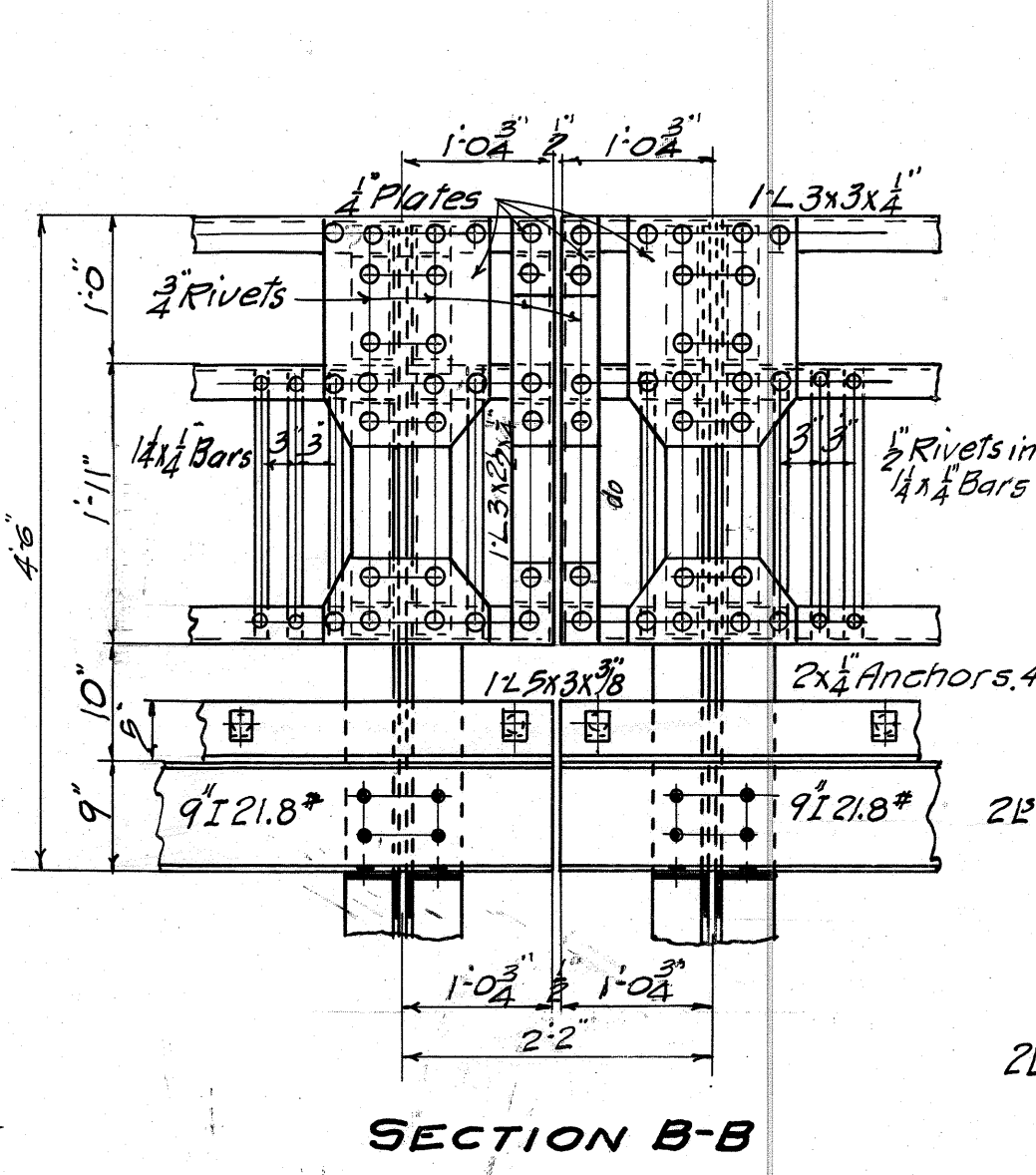
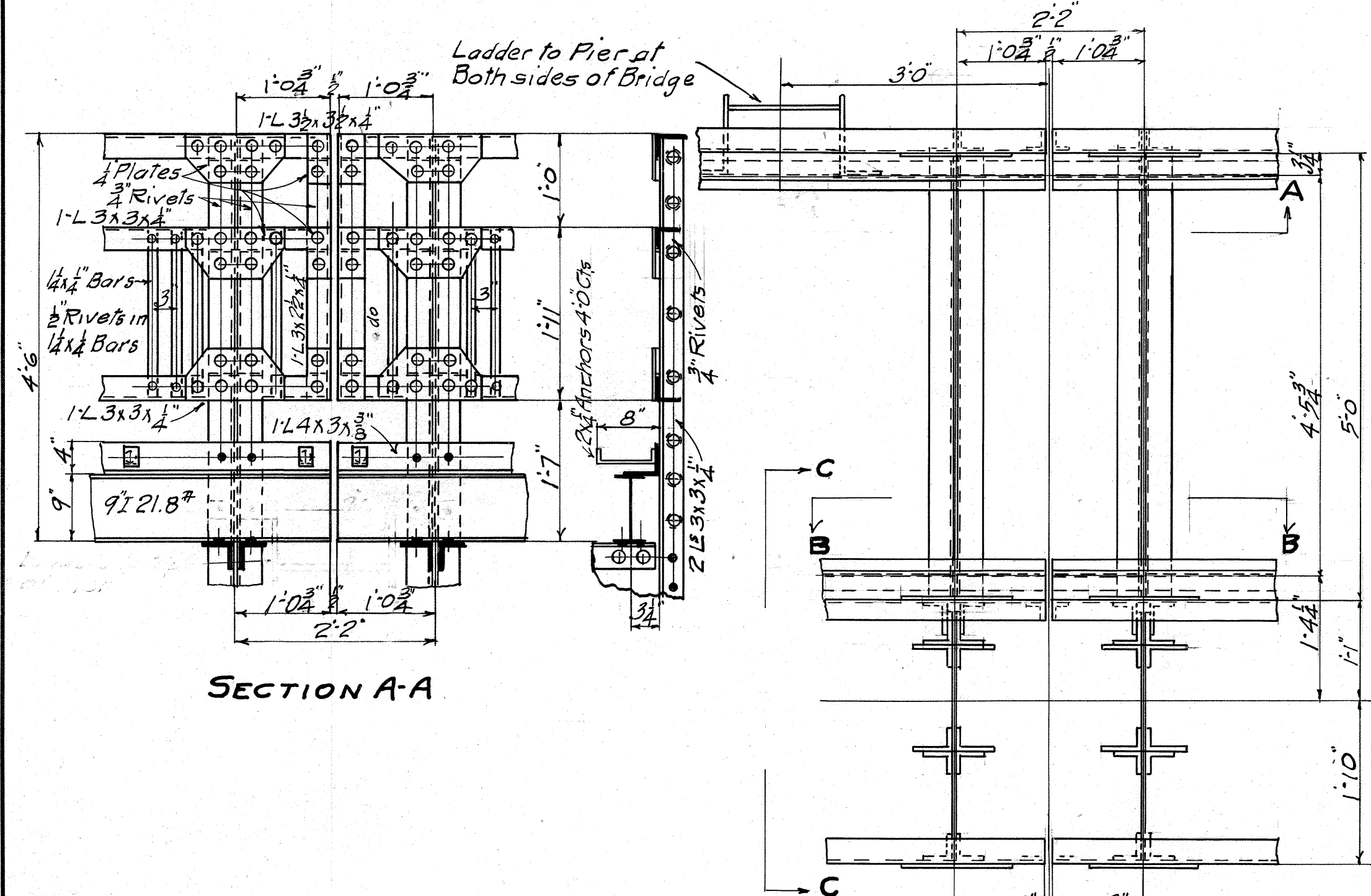
BOARD OF WAYNE COUNTY ROAD COMMISSIONERS
DETROIT, MICHIGAN
EDWARD N. HINES, CHAIRMAN
JOHN S. HAGGERTY, COMMISSIONER
WILLIAM F. BUTLER, COMMISSIONER

DETAILS OF STRUCTURAL STEEL
WALTZ ROAD-MILE 0.2
BRIDGE OVER HURON RIVER # 821004

DESIGNED BY J.C.M. DRAWN BY B.J. CHECKED BY [Signature]
DATE 5-5-24 SCALE 1/2"=1'-0"

CORRECT [Signature] Bridge Engineer Reg. Civ. Eng.
APPROVED [Signature] Engineer Manager Reg. Civ. Eng.

SHEET No. 7



5" Gusset Plates
 8 Rivets Unless noted
 16 Holes

REVISIONS

For General Notes see Dwg #5

BOARD OF
 WAYNE COUNTY ROAD COMMISSIONERS
 DETROIT, MICHIGAN

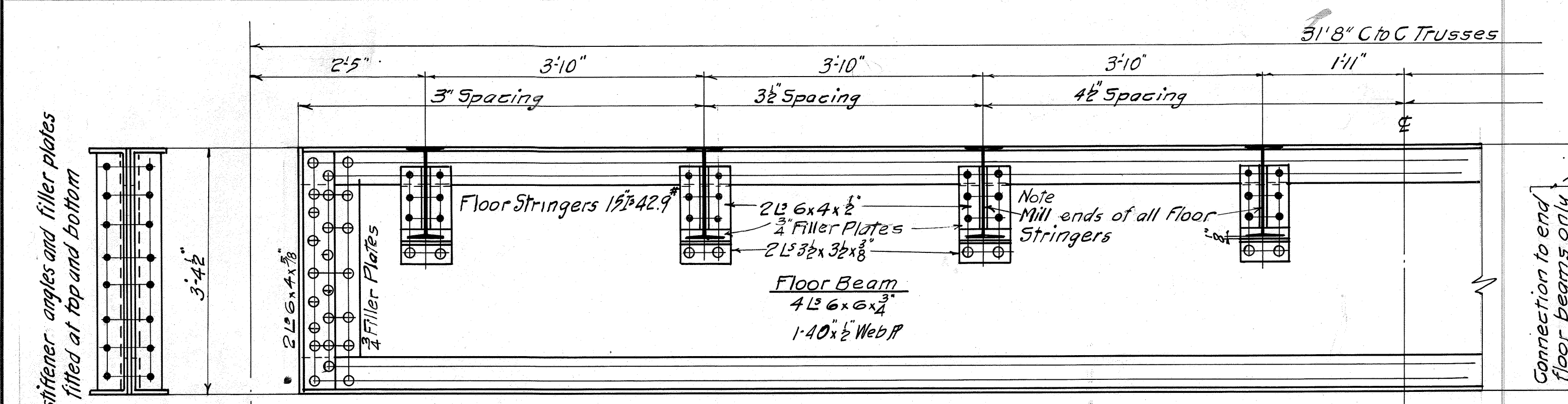
EDWARD N. HINES, CHAIRMAN JOHN S. HAGGERTY, COMMISSIONER
 WILLIAM F. BUTLER, COMMISSIONER

DETAILS OF STRUCTURAL STEEL
WALTZ ROAD—MILE 0 2
BRIDGE OVER HURON RIVER. #821004

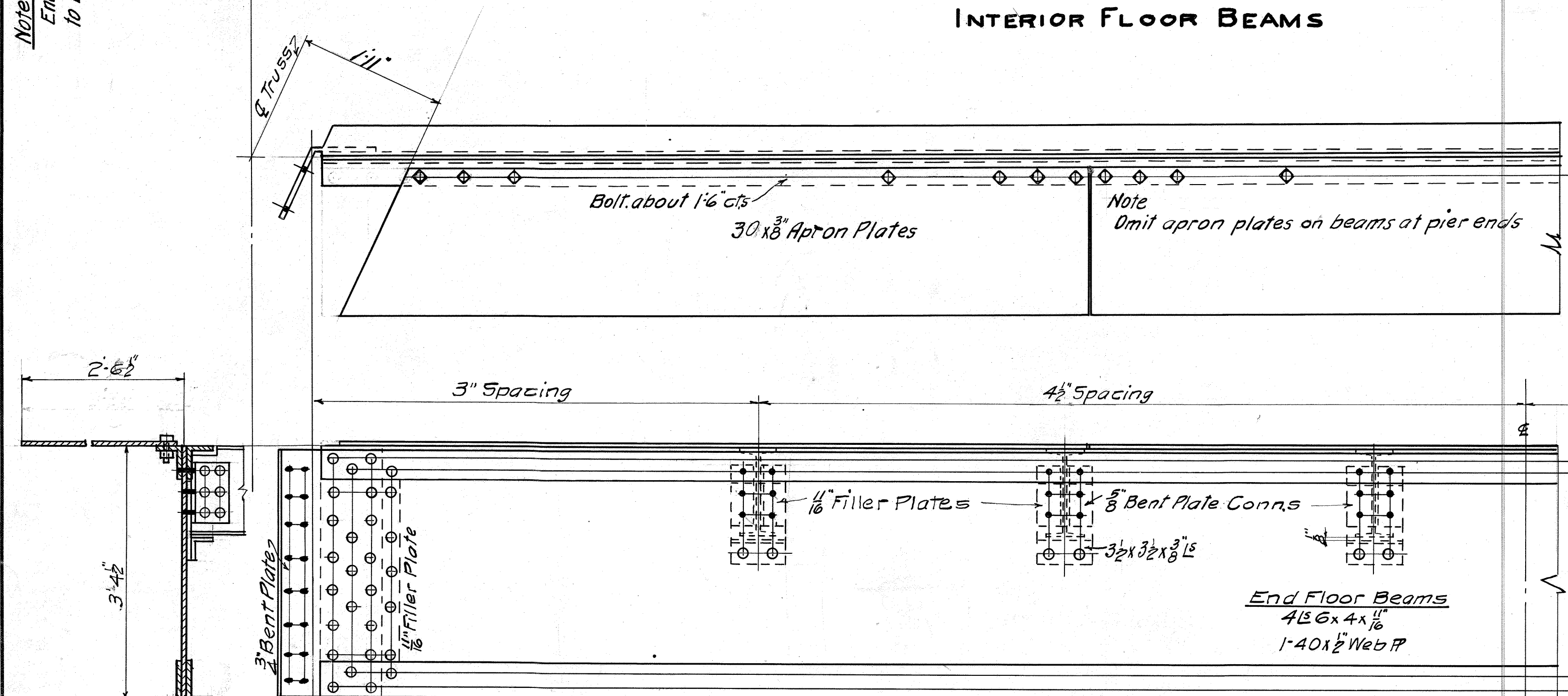
DESIGNED BY J.C.M. DRAWN BY P.S. CHECKED BY R.P.P.
 DATE 5-9-24 SCALE 1/2"=1'-0"

CORRECT *H.R. Shults* Bridge Engineer Reg. Civ. Eng.
 APPROVED _____ Engineer Manager Reg. Civ. Eng.

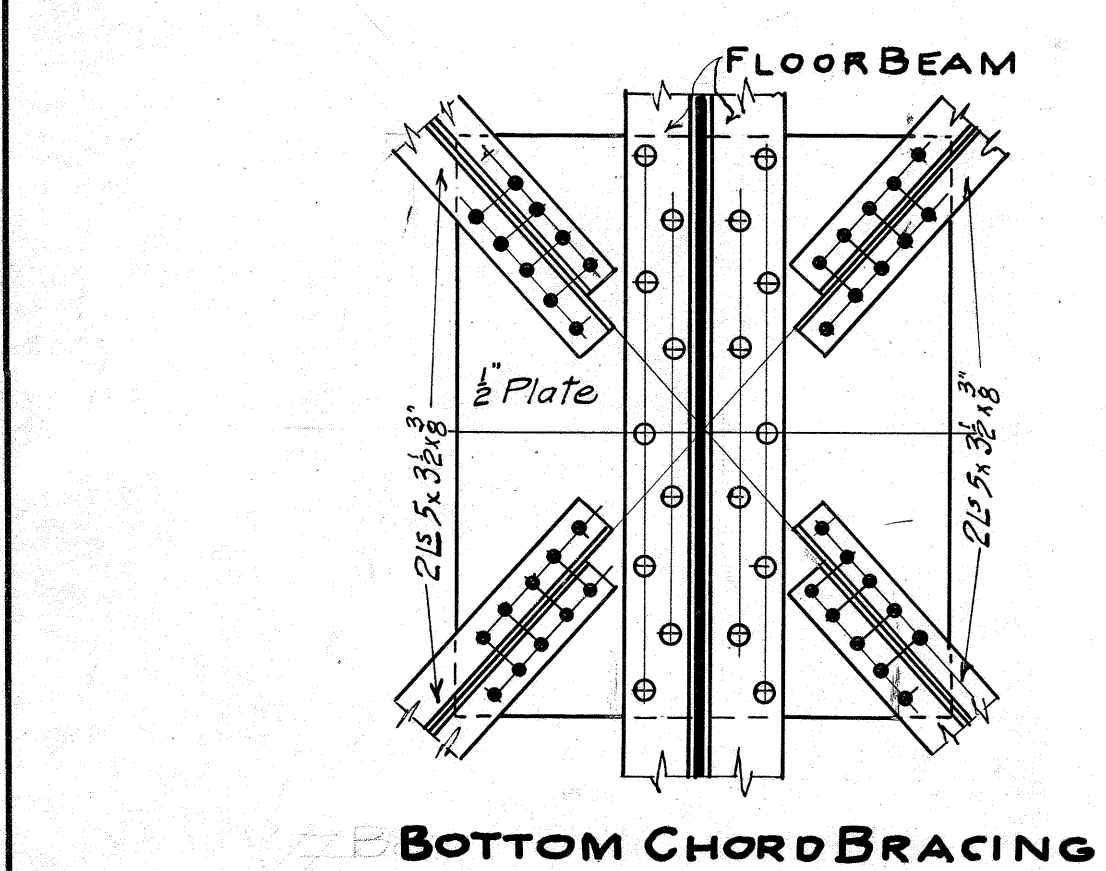
SHEET No. 8



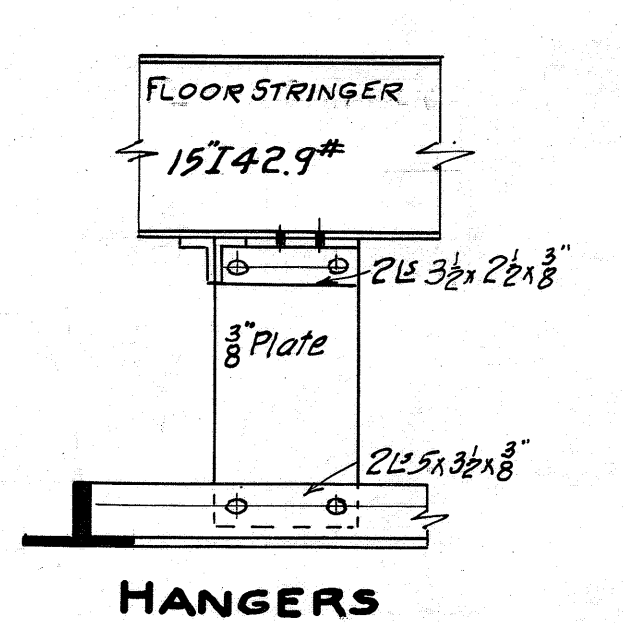
INTERIOR FLOOR BEAMS



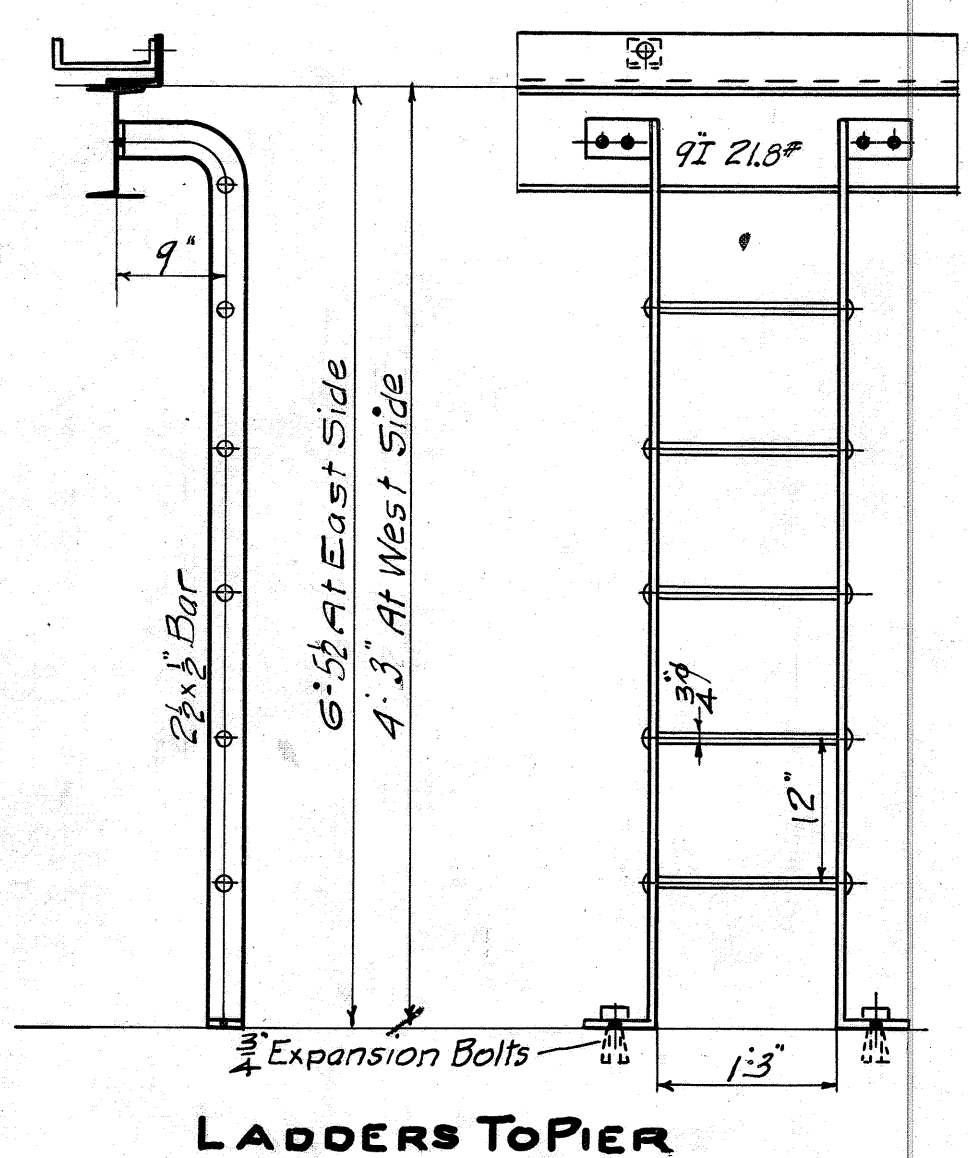
END FLOOR BEAMS
North End Beam Shown



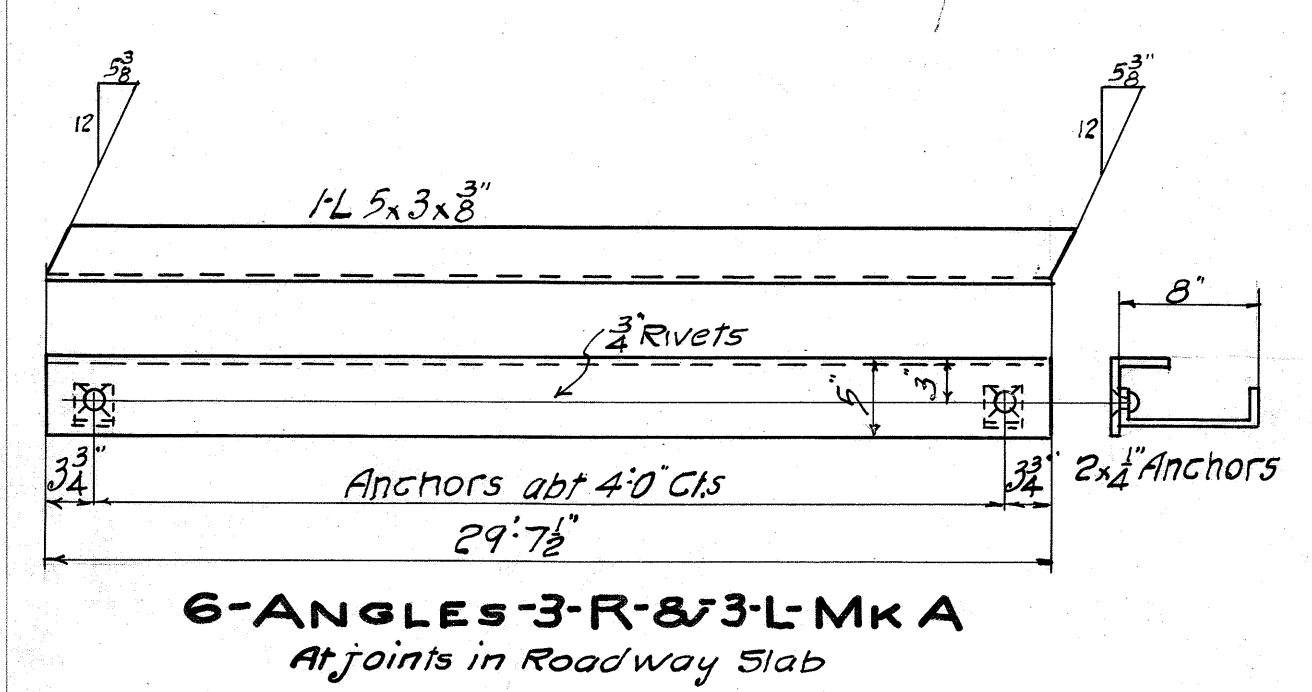
BOTTOM CHORD BRACING



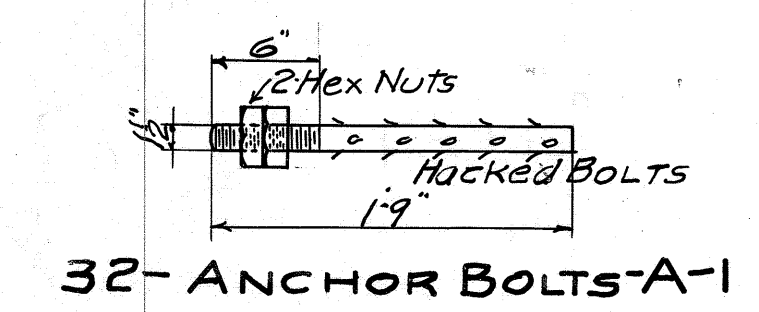
HANGERS



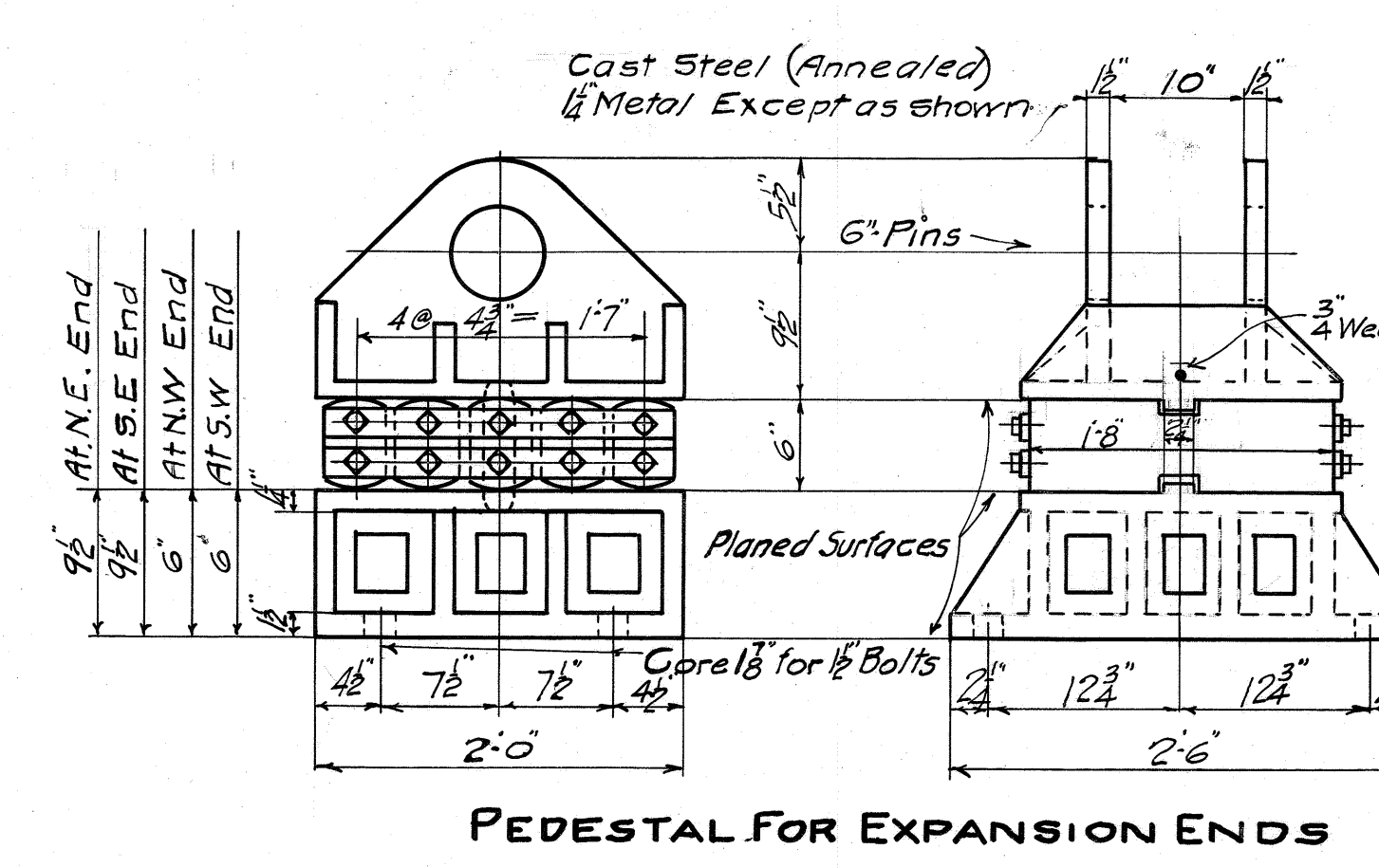
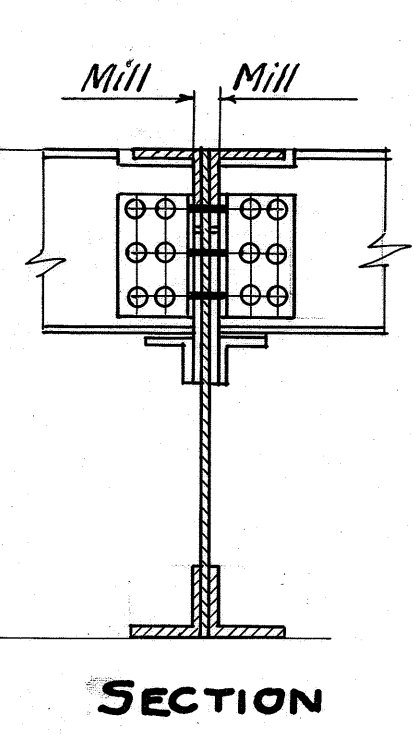
LADDERS TO PIER



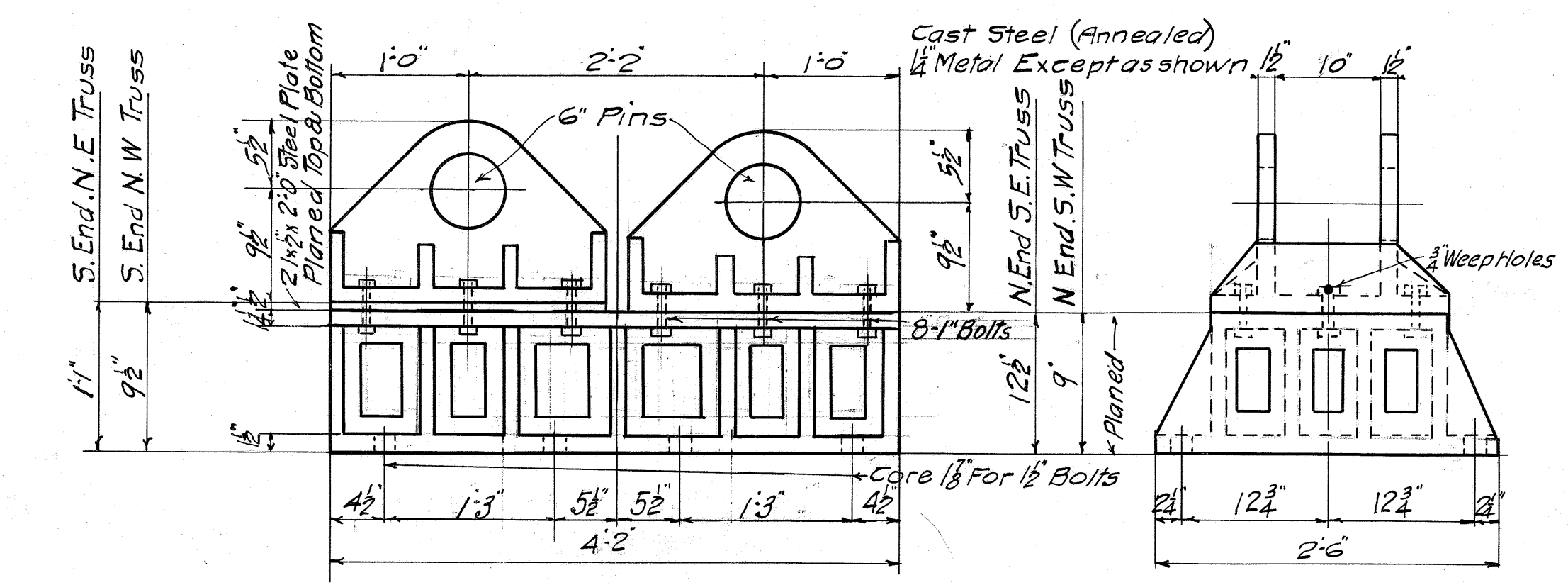
ANGLES TO SIDEWALK STRINGERS



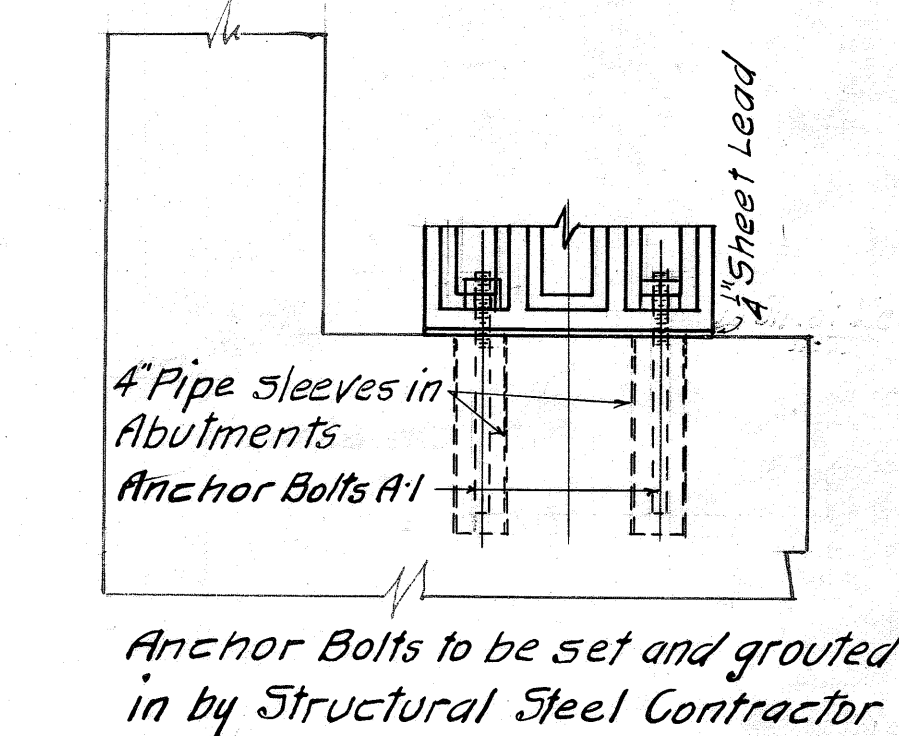
32- ANCHOR BOLTS A-1



PEDESTAL FOR EXPANSION ENDS



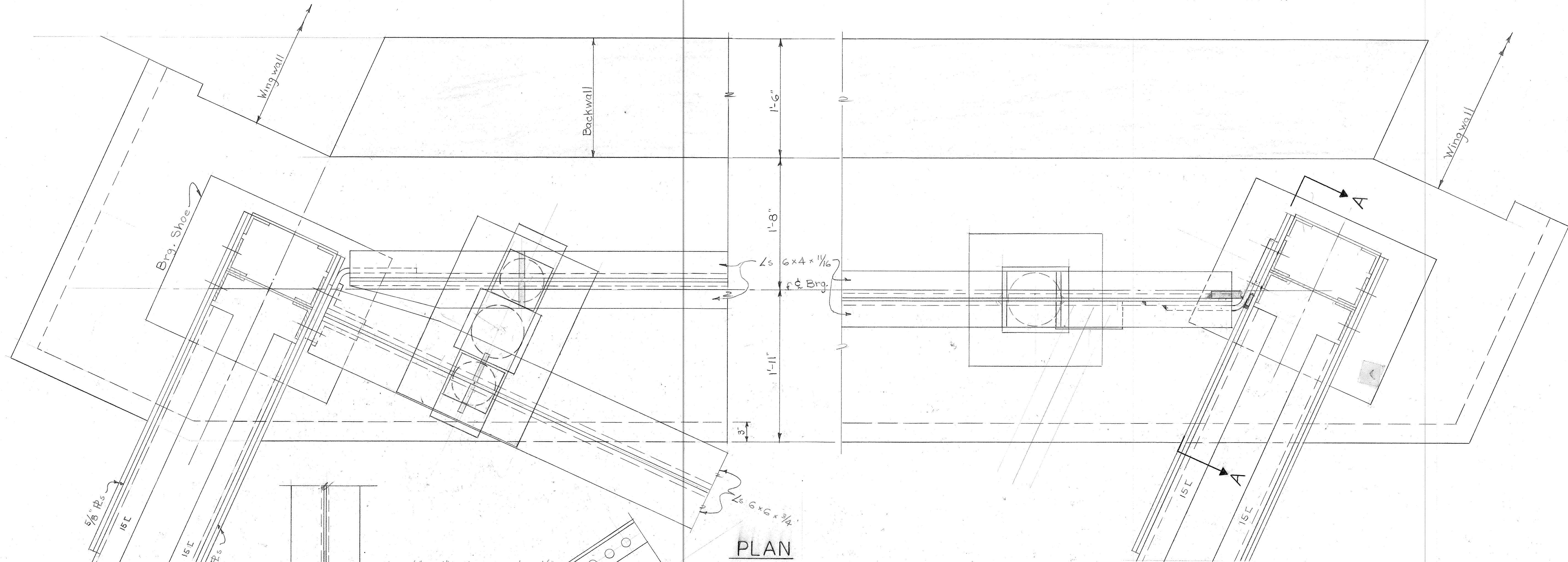
PEDESTAL FIXED ENDS



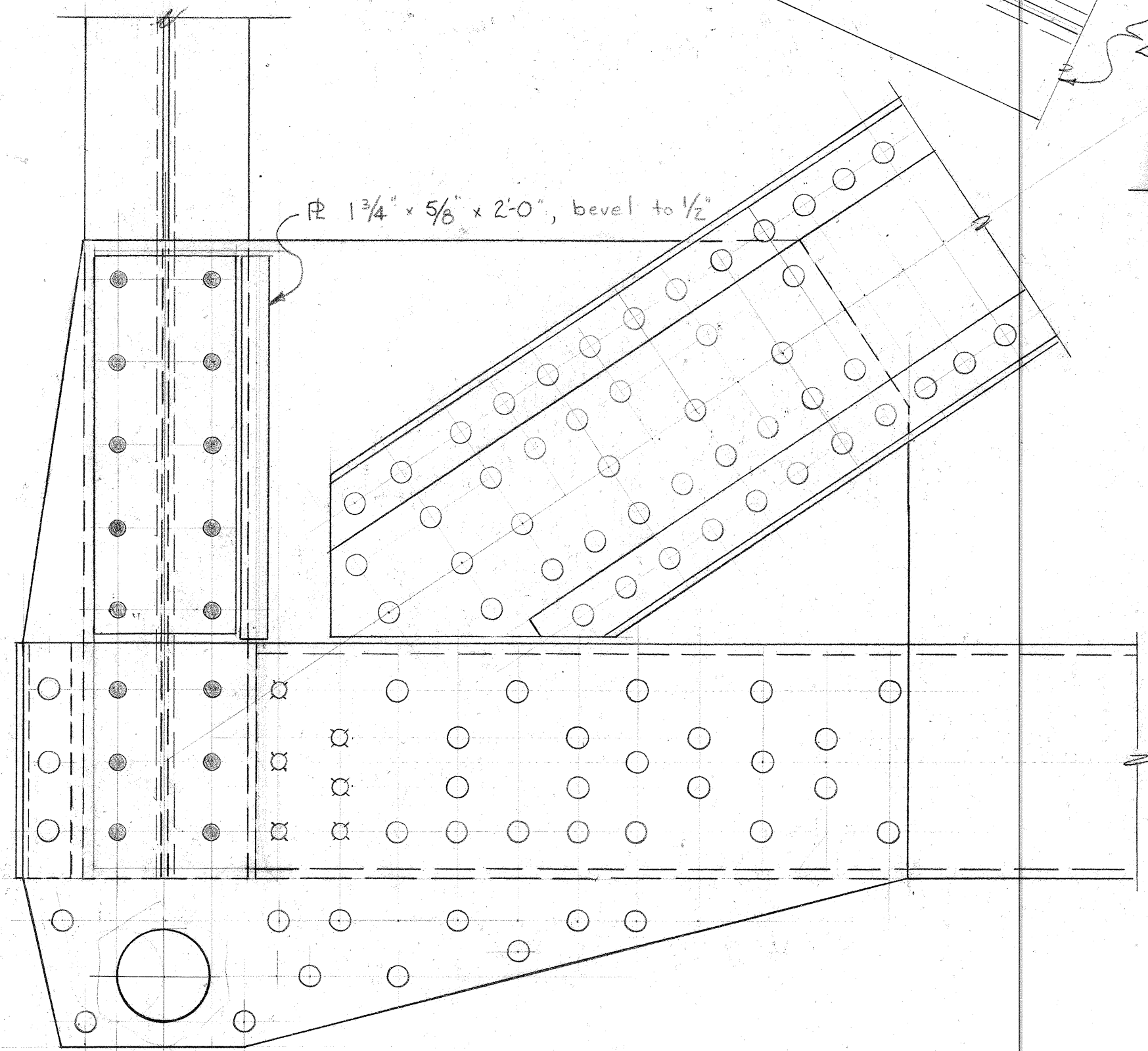
1/2" Holes Unless noted
3/8" Rivets

REVISIONS	For General Notes see DWG #2 BOARD OF WAYNE COUNTY ROAD COMMISSIONERS DETROIT, MICHIGAN EDWARD N. HINES, CHAIRMAN JOHN S. HAGGERTY, COMMISSIONER WILLIAM F. BUTLER, COMMISSIONER	
DETAILS OF STRUCTURAL STEEL WALTZ ROAD-MILE 0.2 BRIDGE OVER HURON RIVER #21004		
DESIGNED BY J.C.M.	DRAWN BY [Signature]	CHECKED BY [Signature]
DATE 5-14-24	SCALE 3/8" = 1'-0"	
CORRECT [Signature]	Reg. Civ. Eng.	
APPROVED [Signature]	Engineer Manager	Reg. Civ. Eng.
		SHEET No. 9

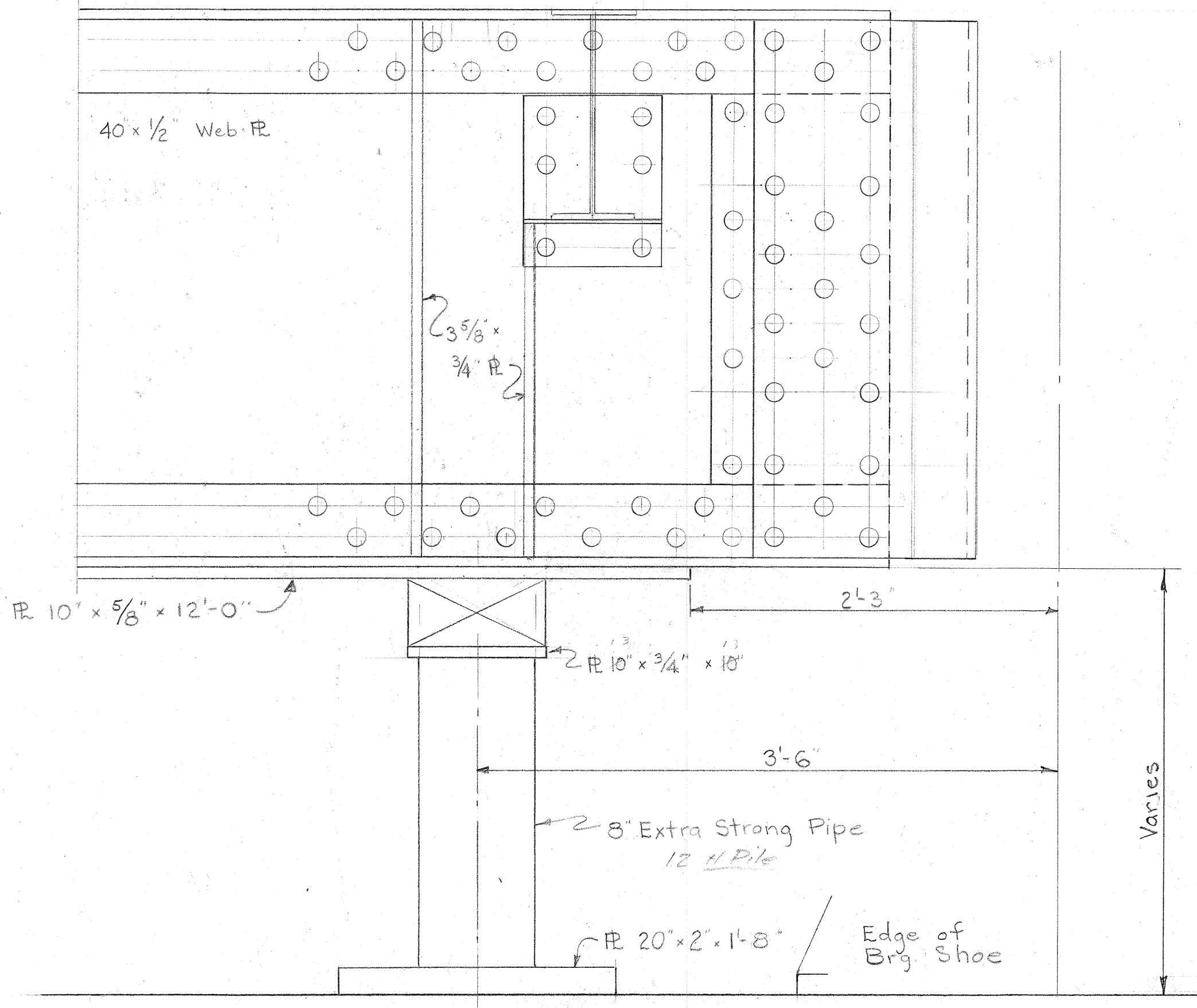
Sidewalk Brackets on outside of truss not shown.



PLAN



SECTION A-A



ELEVATION

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

REVISIONS			

SQUAD LEADER			
DRAWN BY J. L. Hamilton	CHECKED BY	DATE 4-6-21	
TRACED BY	CHECKED BY	DATE	
CORRECT			
ENGINEER OF DESIGN, STRUCTURES AND EXPRESSWAYS			

APPROVED	
ENGINEER OF STRUCTURES AND EXPRESSWAYS	
APPROVED	
COUNTY HIGHWAY ENGINEER	

WAYNE COUNTY ROAD COMMISSIONERS

BOARD OF
DETROIT, MICHIGAN

MICHAEL J. O'BRIEN WILLIAM E. KREGER CHARLES L. WILSON

WALTZ ROAD OVER HURON RIVER
BRIDGE SEAT REPAIRS
DETAILS AT TRUSS BEARINGS

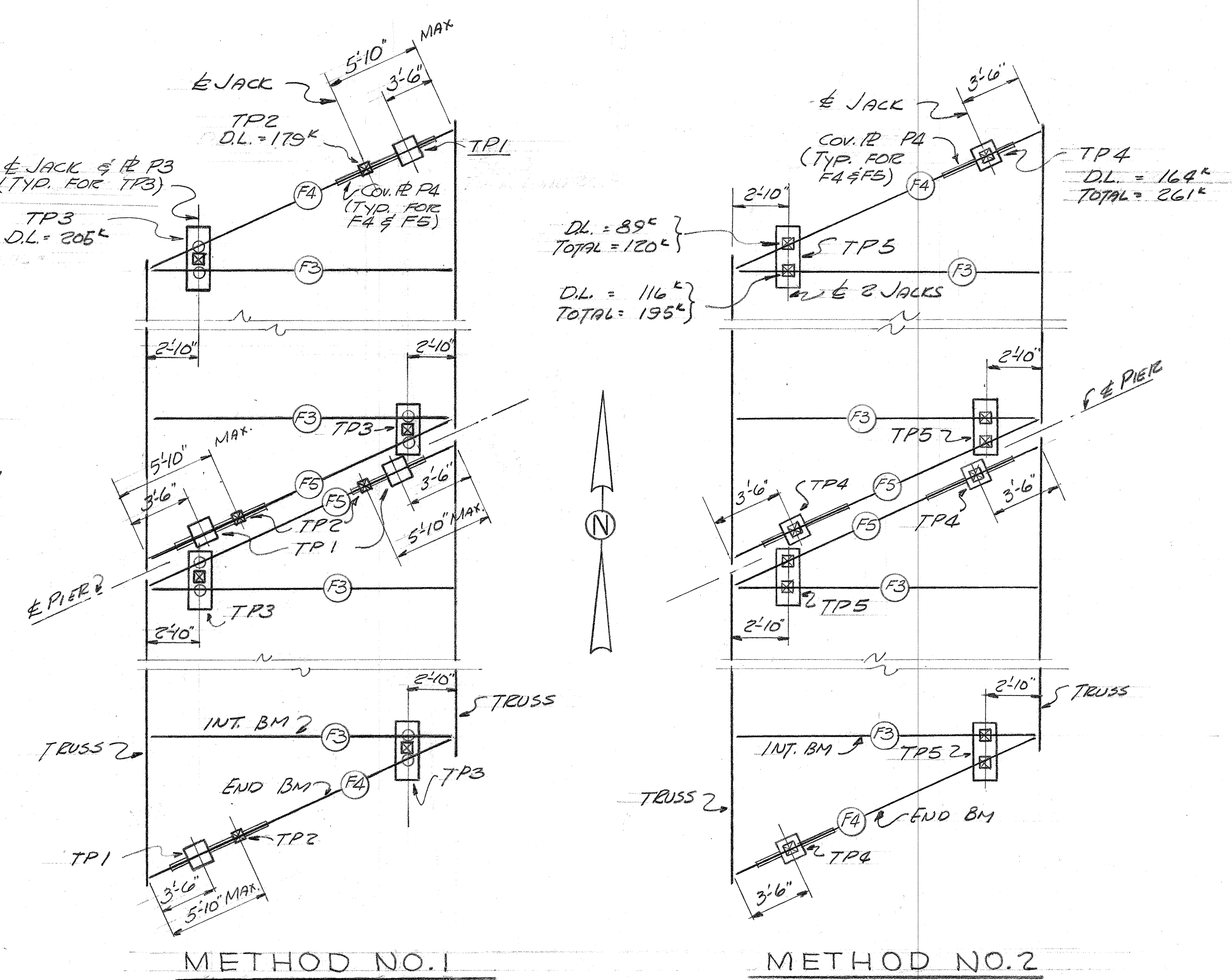
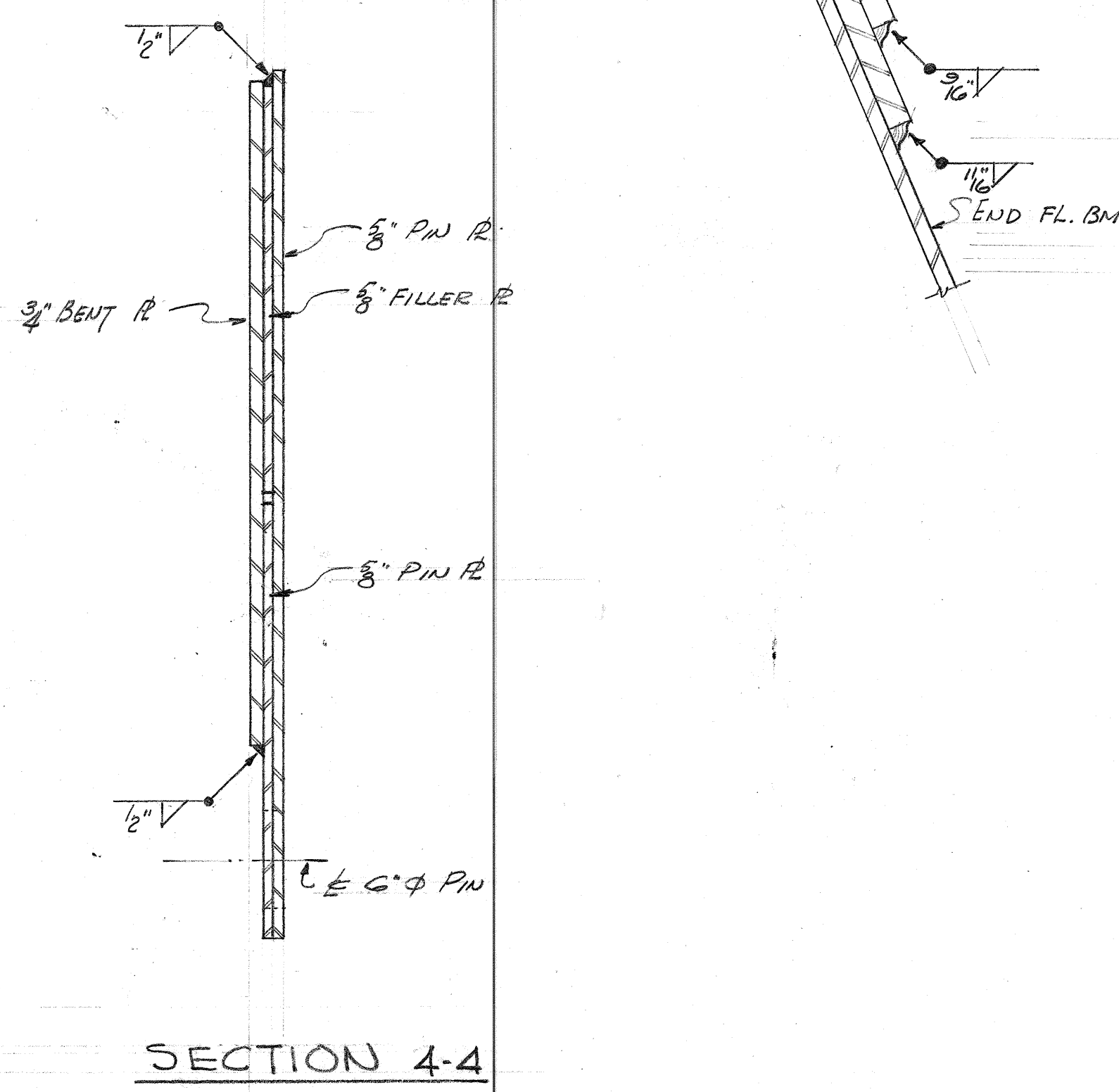
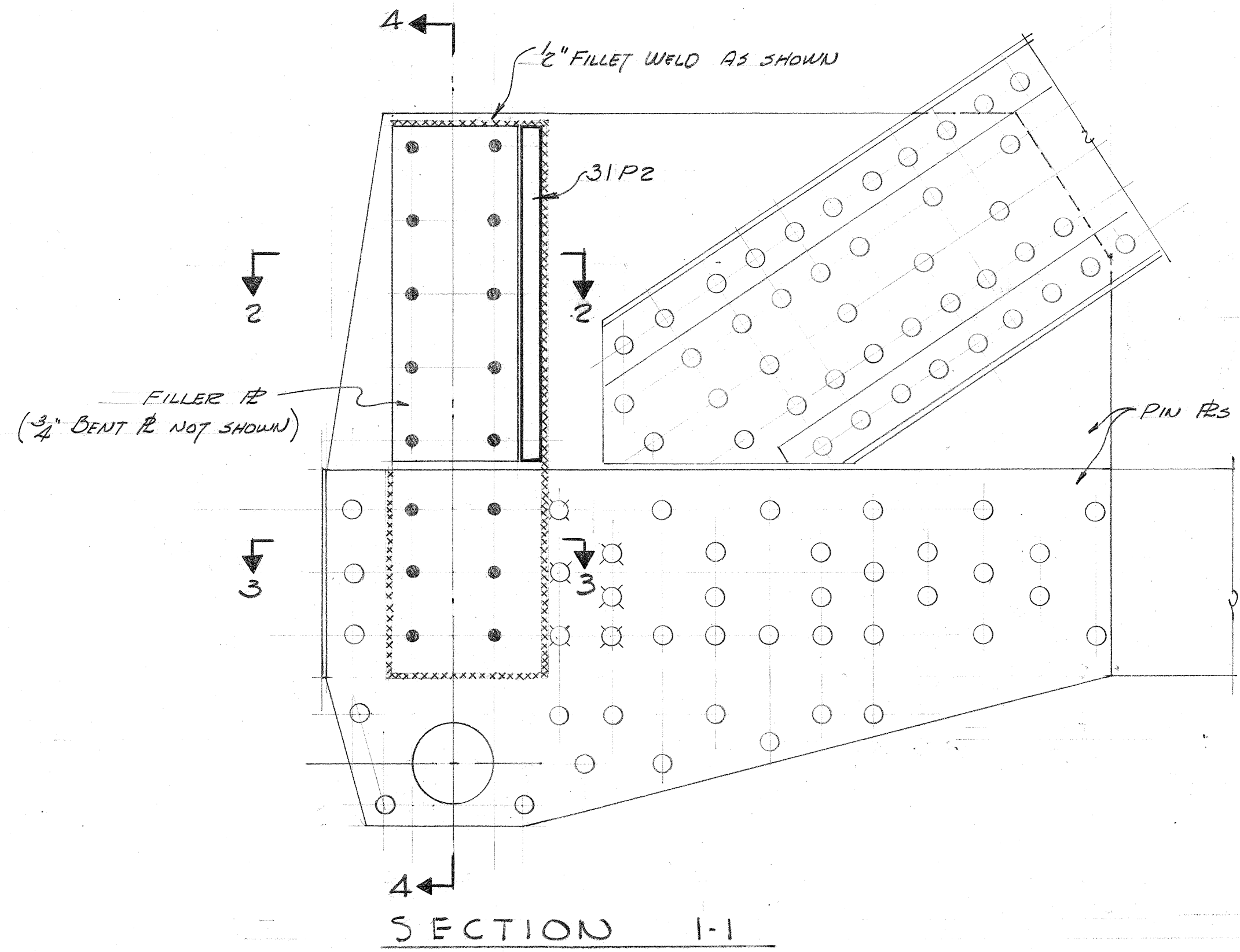
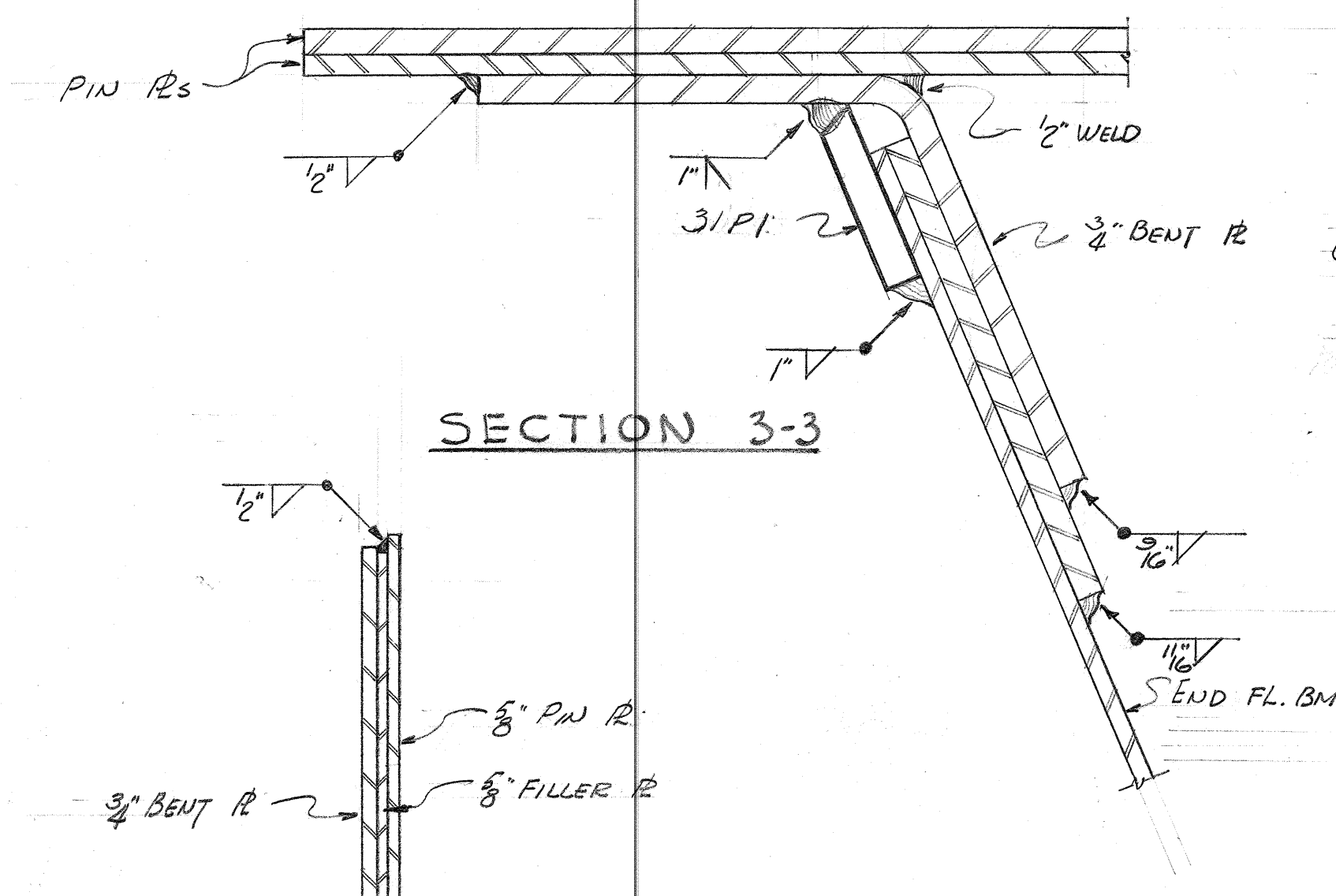
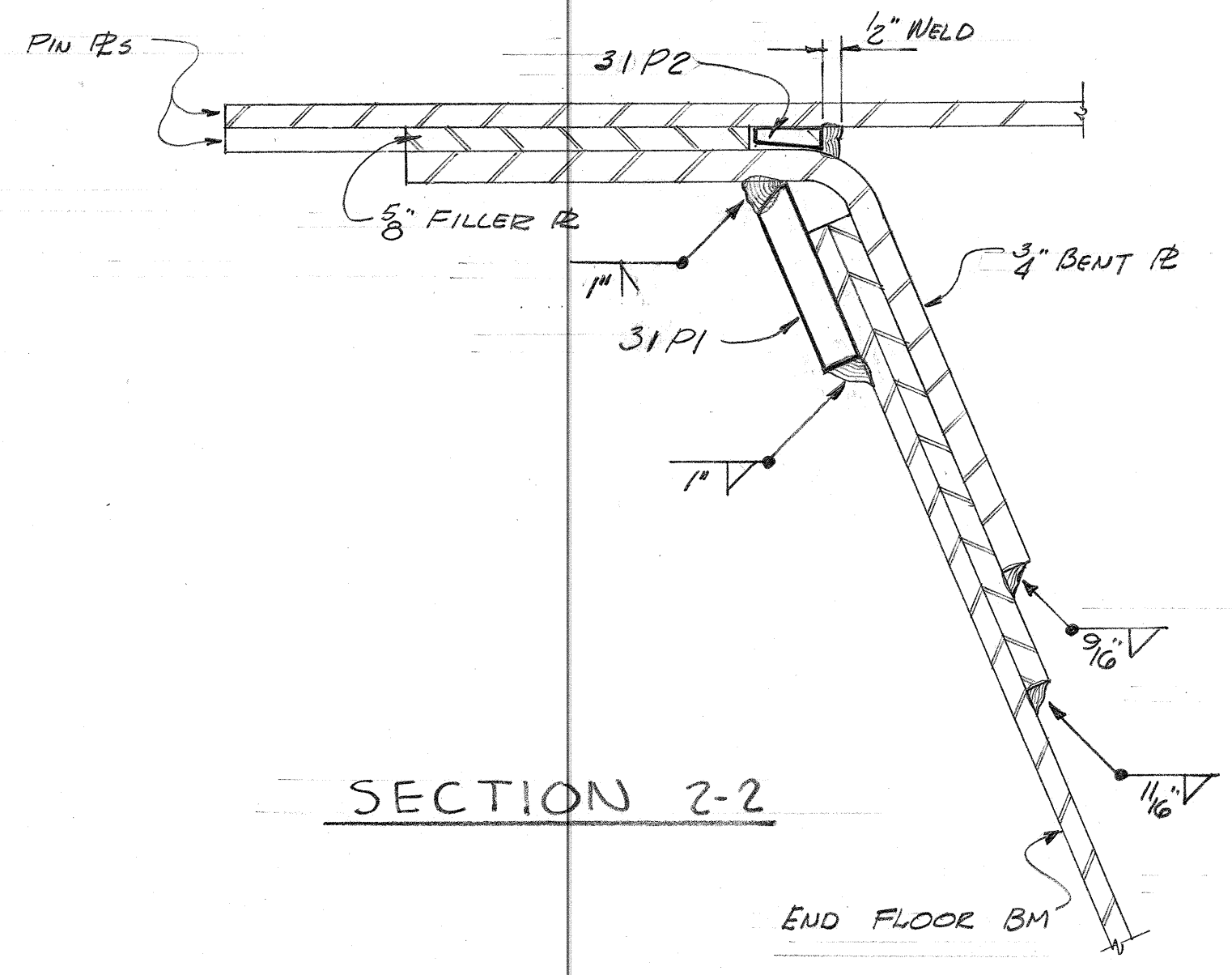
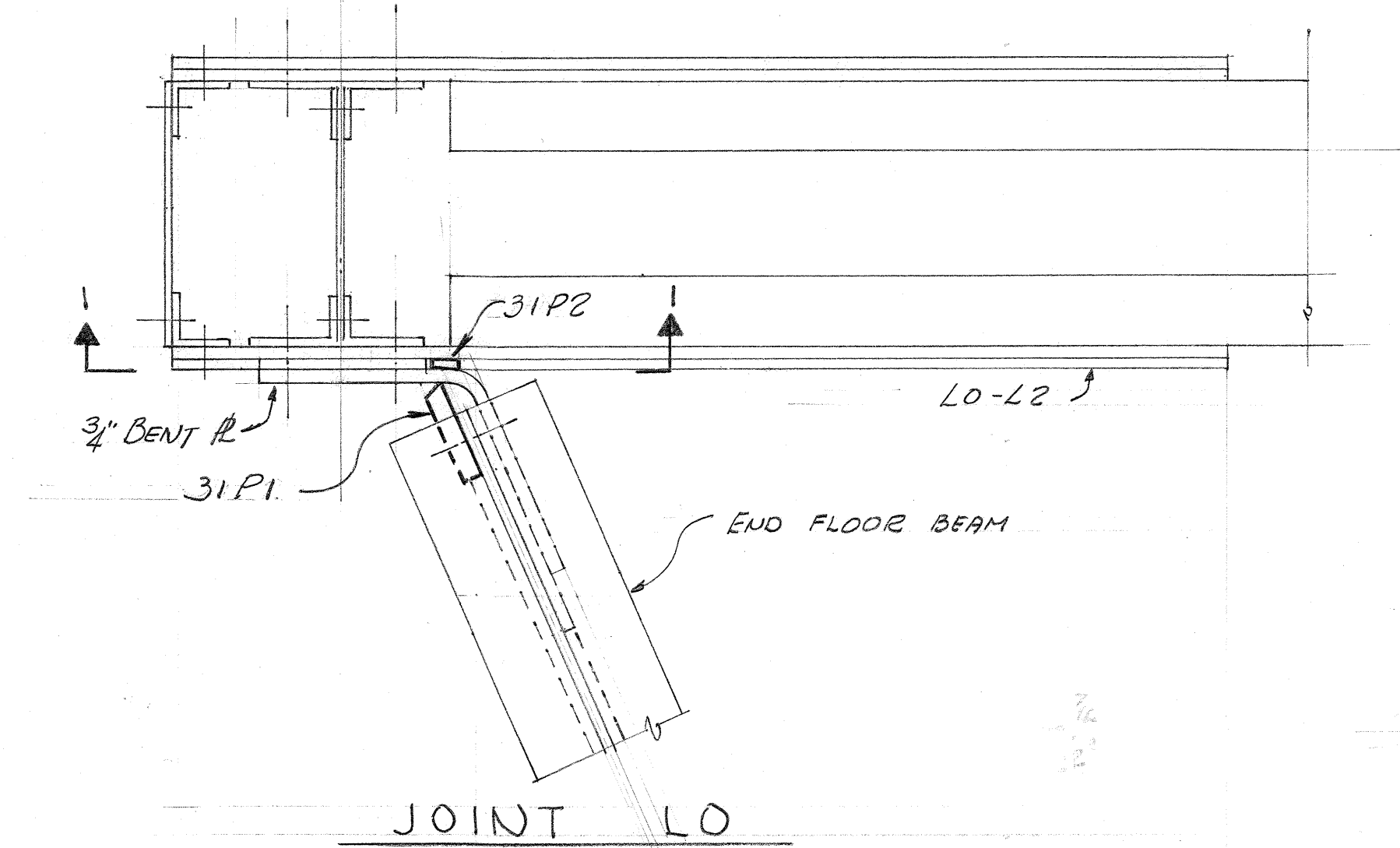
STATE PROJECT	COUNTY JOB
	372
ISSUE NO.	SHEET NO.
DATE	

GENERAL NOTES

SPECIFICATIONS: WAYNE COUNTY ROAD COMMISSION'S GENERAL SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, 1951 EDITION.
 DESIGN: AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES, 1957 EDITION.
 LOADING: H 20-516-64 AND SPECIAL MILITARY LOADING.

PROCEDURE FOR REHABILITATING EXISTING BRIDGE SEATS.

1. Strengthen end floor beams (F4, F5) and their connections by welding and by the addition of plates, as shown on plans.
2. By separate operations, each bearing is to be relieved of its load and the faulted portions under the bearing details are to be removed and replaced by Grade A (60) Concrete.
 - a. Method No. 1 - Jack the end floor beam adjacent to the bearing detail and support the full reaction on temporary pedestals.
 - b. Method No. 2 - Jack the end floor beam adjacent to the bearing detail and support the full reaction on the Jacks.



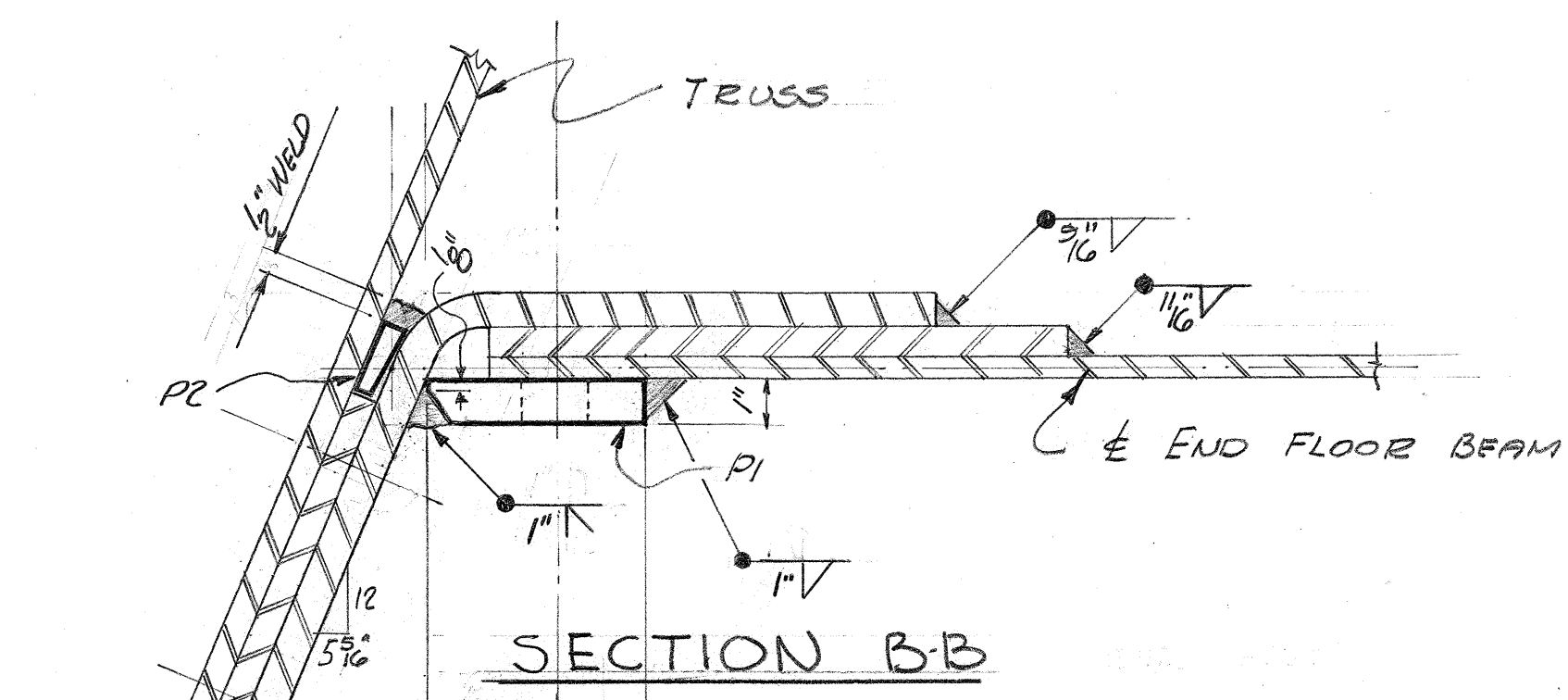
METHODS OF SUPPORT

NOTES:
 LOADS SHOWN ARE TYPICAL FOR EACH SIMILAR BEARING DETAIL.
 "D.L." DENOTES DEAD LOAD.
 "TOTAL" DENOTES DEAD LOAD + LIVE LOAD + IMPACT.

REVISIONS		SQUAD LEADER ROBERT J. BECKLEY	APPROVED
		DRAWN BY M. J. FRANK	ENGINEER OF STRUCTURES AND EXPRESSWAYS
		CHECKED BY J. L. HAMILTON	
		DATE 6-27-61	
		CORRECT A. W. JOHNSON	
		ENGINEER OF DESIGN, STRUCTURES AND EXPRESSWAYS	APPROVED S. S. SIFT
			CHIEF ENGINEER

WAYNE COUNTY ROAD COMMISSIONERS
 BOARD OF ROAD COMMISSIONERS
 DETROIT, MICHIGAN
 MICHAEL J. O'BRIEN
 WILLIAM E. KREGER
 CHARLES L. WILSON

STATE PROJECT	COUNTY JOB
ISSUE NO. 1	SHEET NO.
DATE 5-5-61	30



SECTION B-B

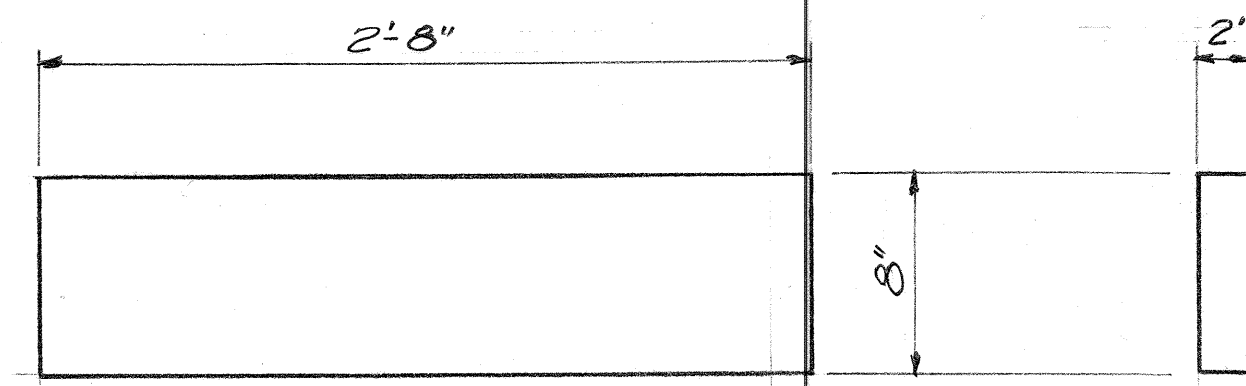
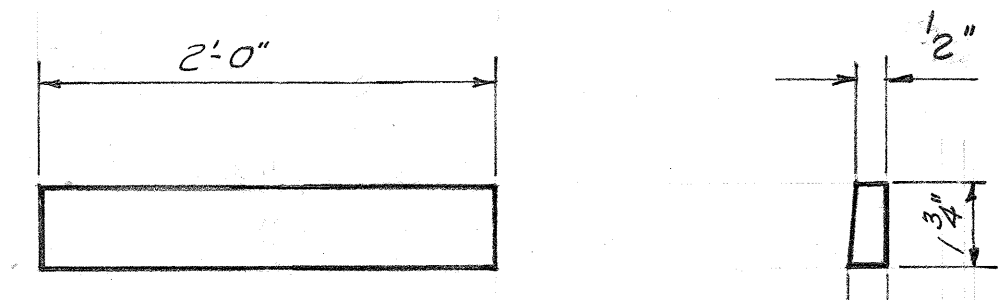


PLATE P3 - 8" x 2' x 2'8"
4 REQUIRED
(IF METHOD #1 IS USED)



FILLER R P2 - 1/4" x 1'6" x 2'-0"
4 REQUIRED

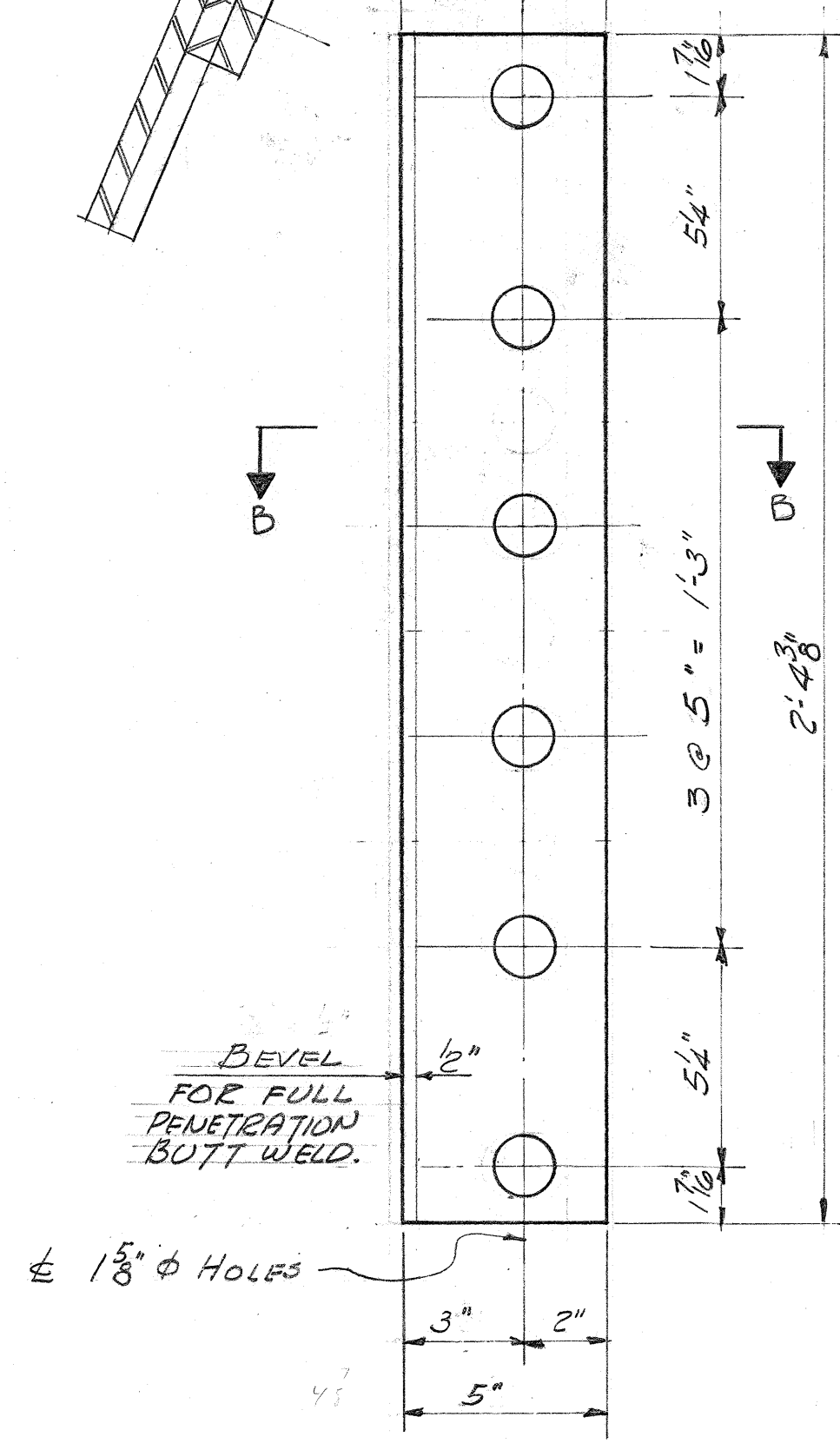
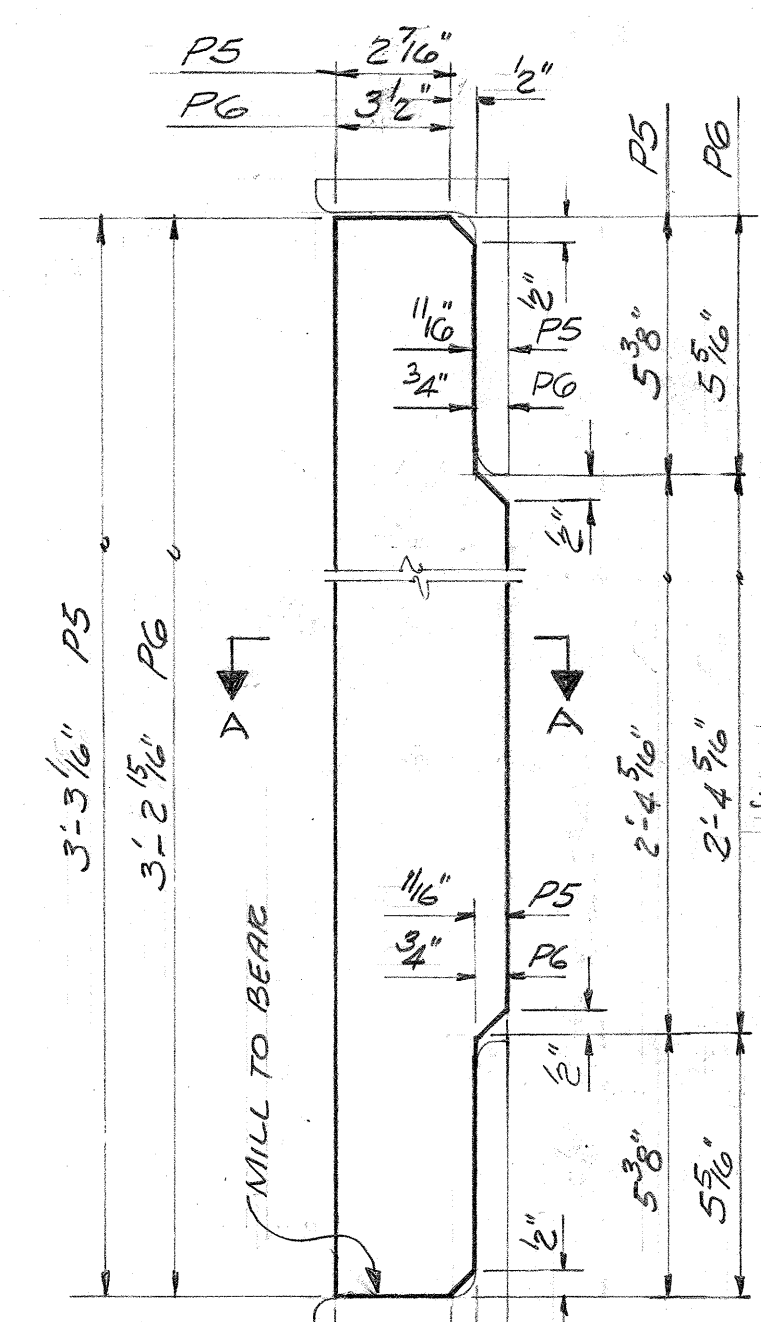
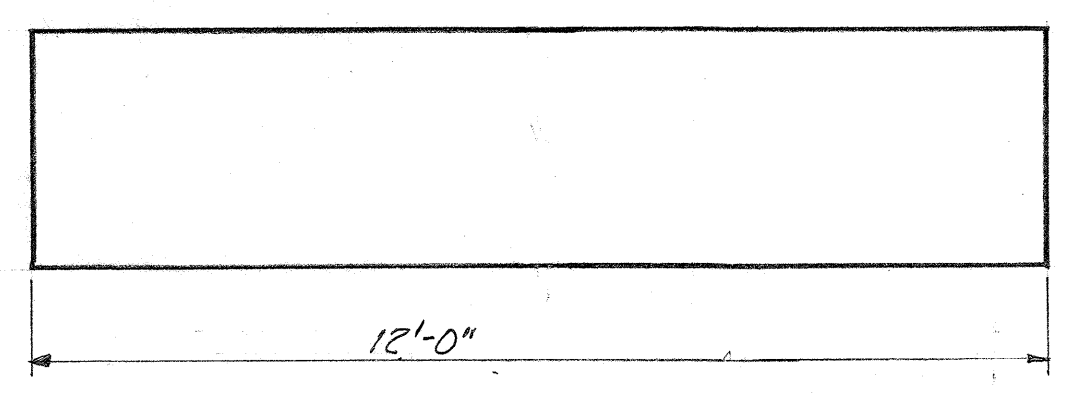


PLATE P1 - 5" x 1" x 2'-4 3/8"
4 REQUIRED



SECTION A-A

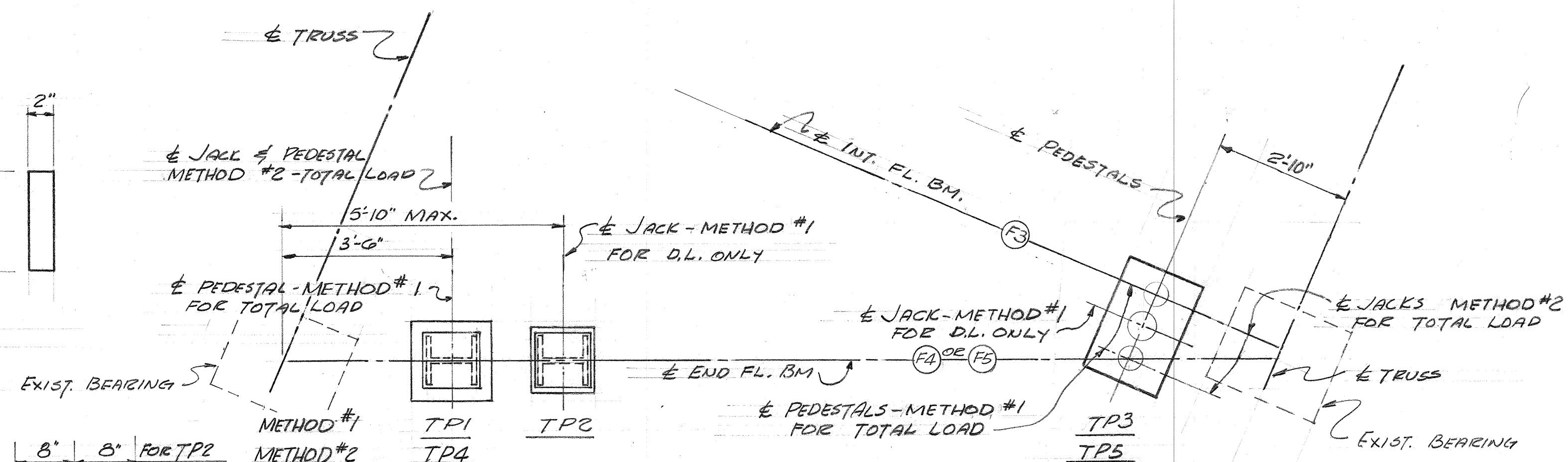
STIFFENER R P5 - 3 3/8" x 3/4" x 3'-3 1/8" - 24 REQ'D
STIFFENER R P6 - 4 3/4" x 3/4" x 3'-2 15/16" - 8 REQ'D



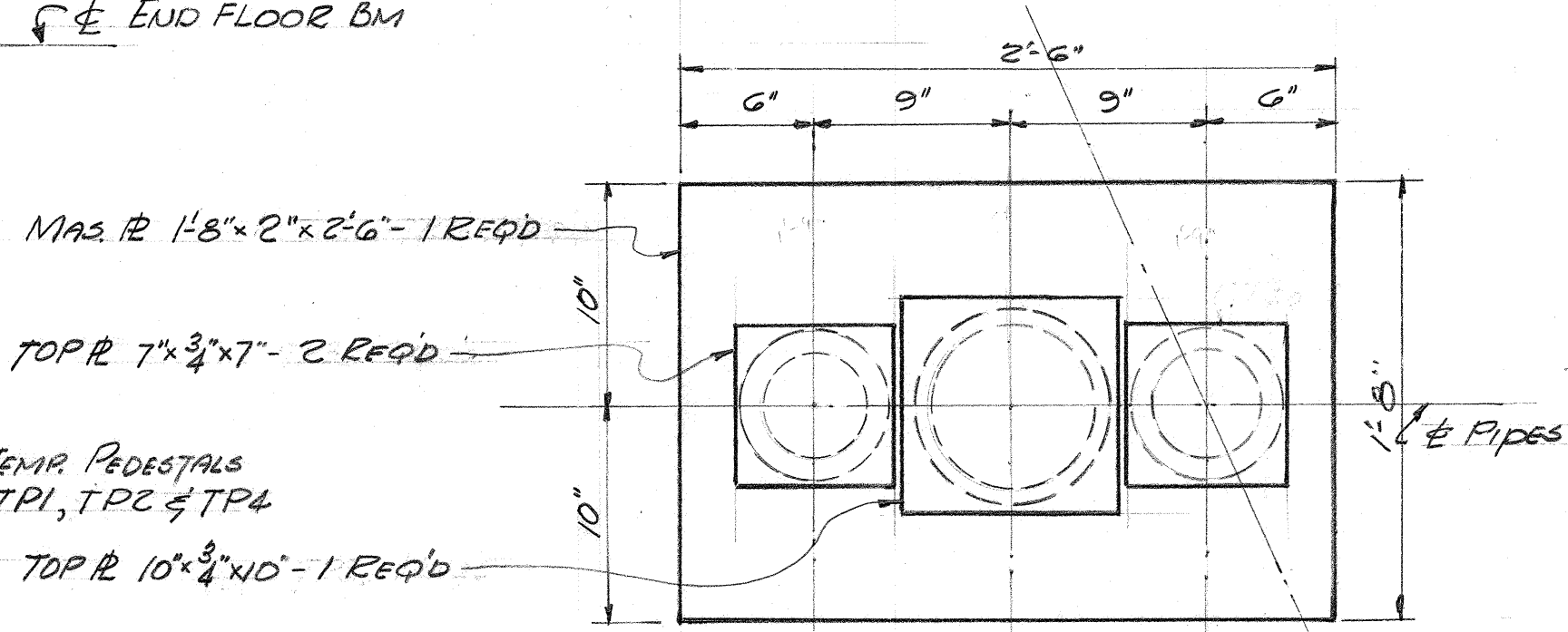
COVER PLATE P4 - 10" x 5/8" x 12'-0"
4 REQUIRED

STRUCTURAL STEEL BILL OF MATERIAL				
ITEM	QUANTITY	WEIGHT	QUANTITY	WEIGHT
R P1	4	140	4	140
R P2	4	28	4	28
R P3	4	580		
R P4	4	1022	4	1022
R P5	24	678	24	678
R P6	8	298	8	298
TOTALS =		2746#		2166#
TP1	1	301		
TP2	1	149		
TP3	1	572		
TP4			1	244
TP5			1	416

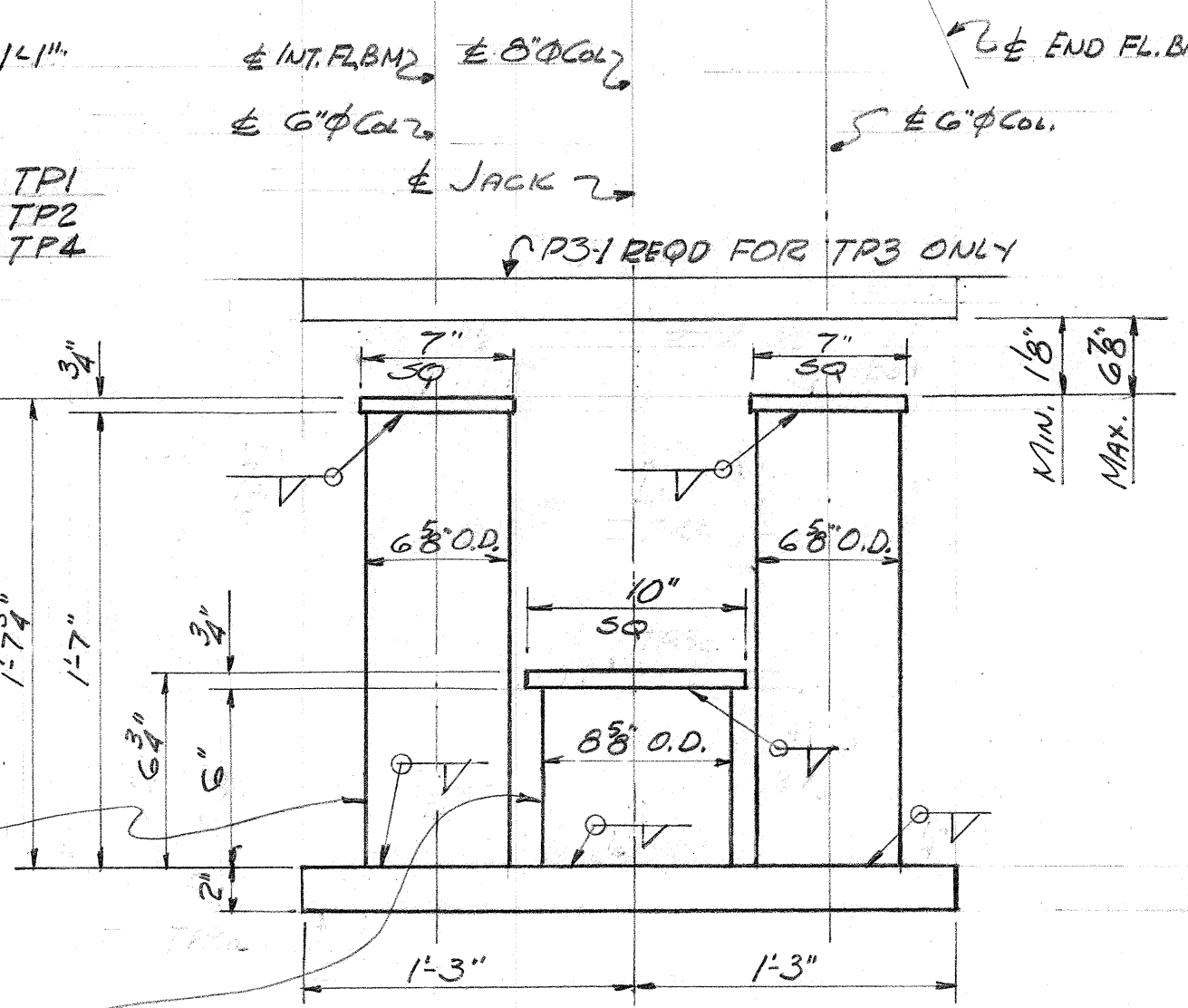
Note: Bill of material lists total weight of structural steel required to be welded to existing structure. Pedestals are listed separately for minimum quantities required. Engineer shall account for total quantity of pedestals used and compute total weight of materials.



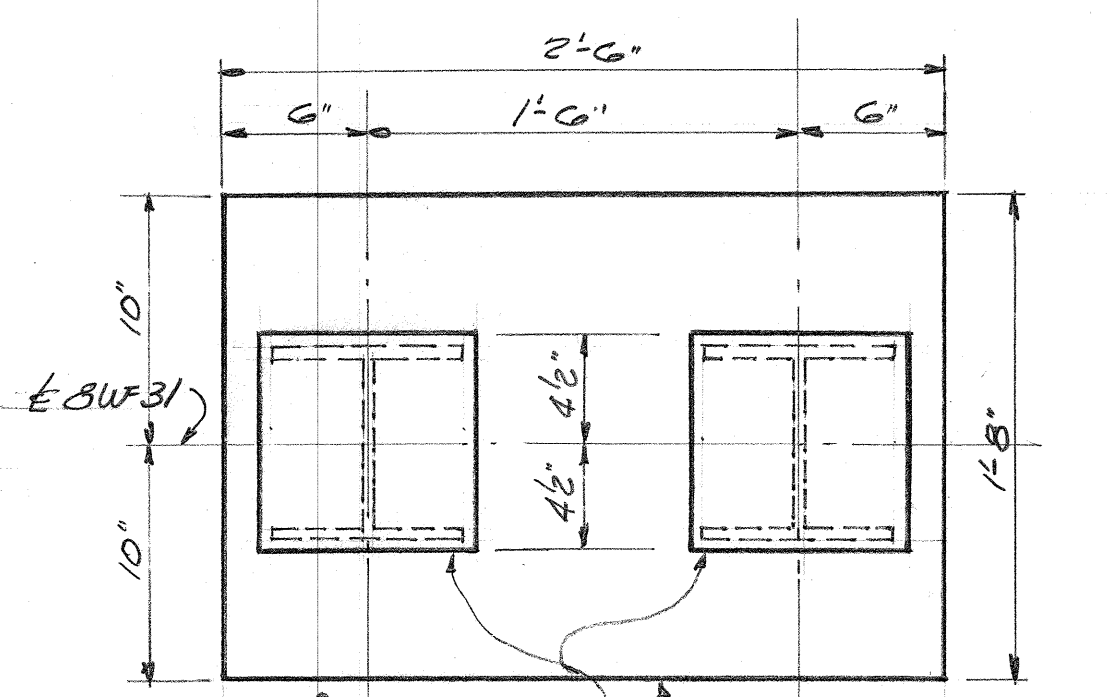
TEMPORARY PEDESTAL LOCATIONS
METHOD #1 - JACK FOR D.L. ONLY
METHOD #2 - JACK FOR TOTAL LOAD



TP1, TP2 - 1 EA. REQ'D - METHOD #1
TP4 - 1 REQ'D - METHOD #2



TP3 - 1 REQUIRED
METHOD #1



TP5 - 1 REQUIRED
METHOD #2

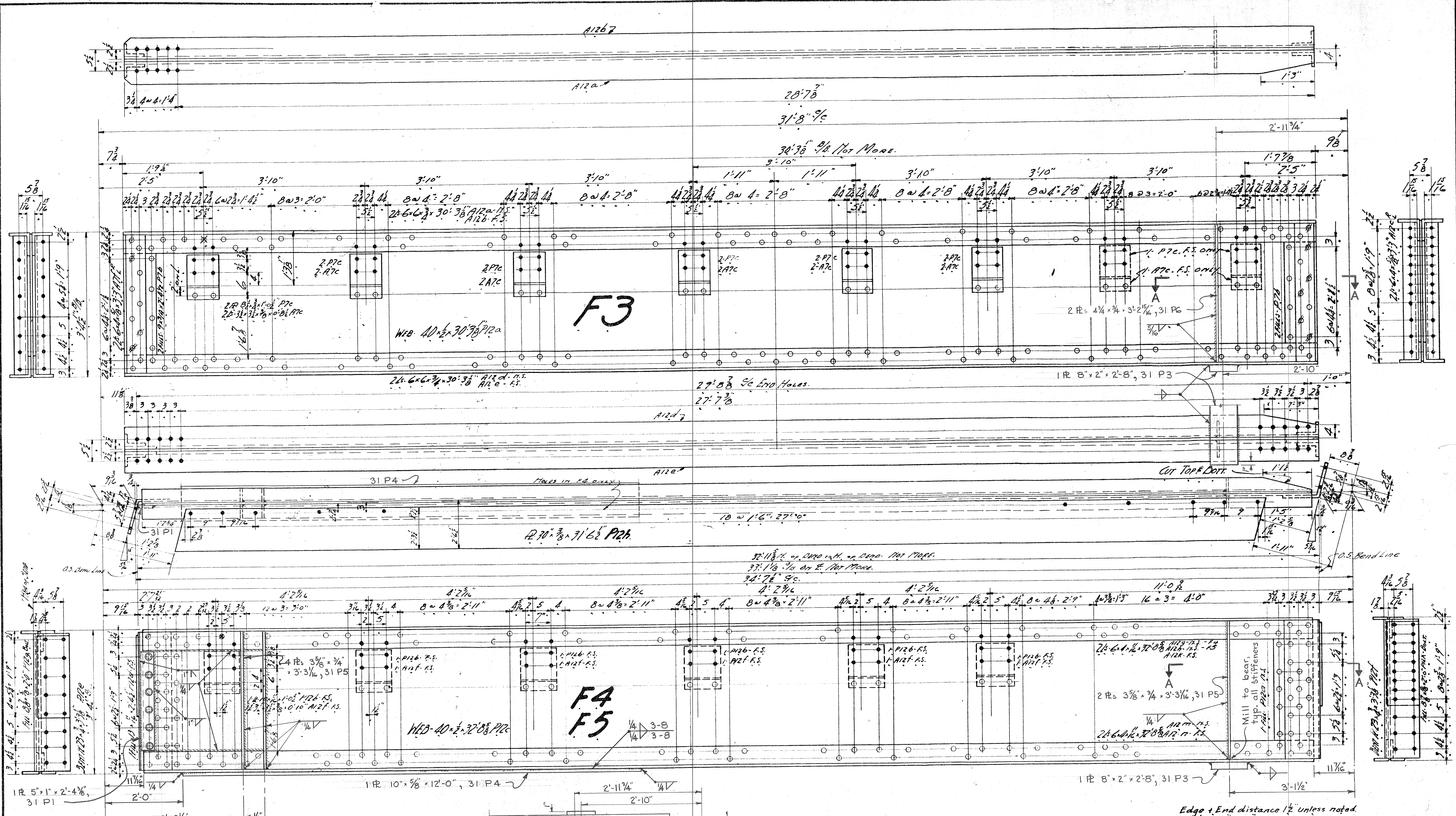
NOTE: Fillet welds shown without size are not stress connections; weld size and lengths are to be determined by the engineer.

REVISIONS	SQUAD LEADER	APPROVED
	ROBERT J. BECKLEY	
	DRAWN BY M. J. O'BRIEN	ENGINEER OF STRUCTURES AND EXPRESSWAYS
	CHECKED BY J. E. BECKLEY	APPROVED
	DATE 4-27-61	S. Lipit
	CORRECTED	CHIEF ENGINEER

BOARD OF WAYNE COUNTY ROAD COMMISSIONERS
DETROIT, MICHIGAN

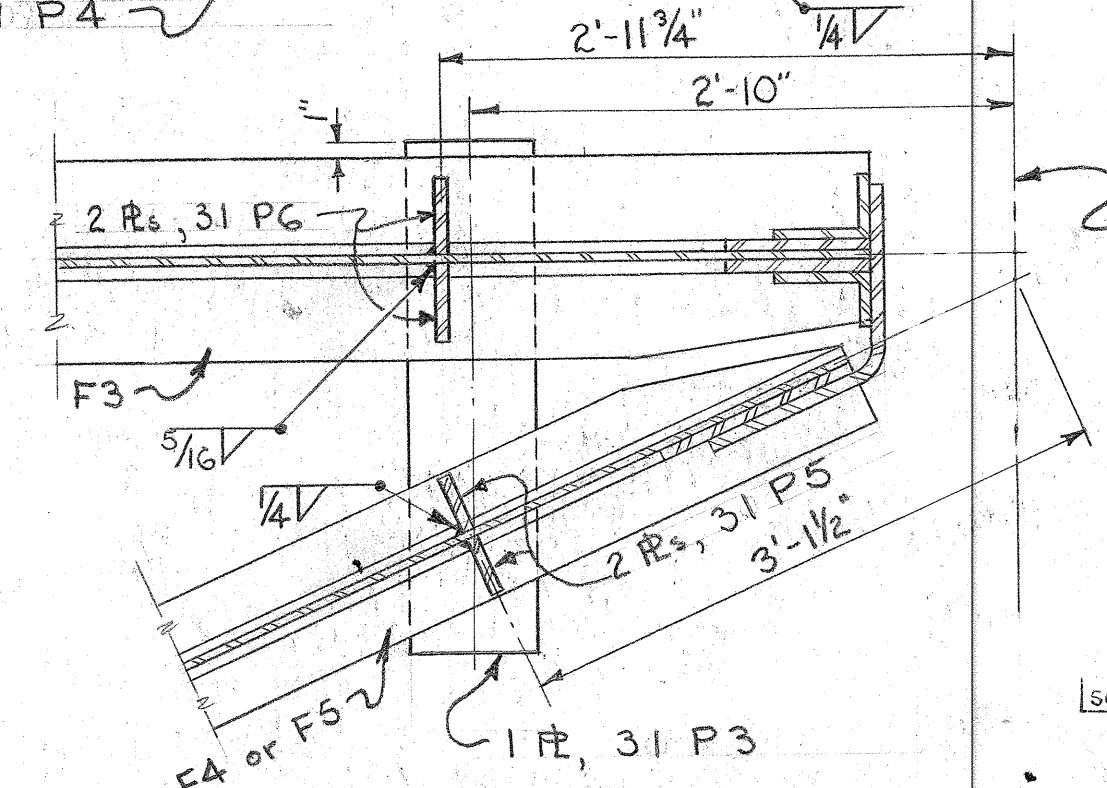
MICHAEL J. O'BRIEN
WILLIAM E. KREGER
CHARLES L. WILSON

STATE PROJECT	COUNTY JOB
WALTZ ROAD OVER HURON RIVER	372
1961 REPAIRS	
FABRICATION DETAILS	
ISSUE NO.	SHEET NO.
1	31
DATE	5-5-61



Note: For details of connections at this end of floor beam see Sh. # 30.

Stiffeners & flange angles on far side of web are welded same as on near side.



SECTION A-A
Scale: 1" = 1'-0"

SQUAD LEADER ROBERT J. BECKLEY

Revised by J.L. Hamilton
for 1961 Repairs 4-29-61
V.M.J. Penn

NO.	REQUIRED.	MARK.	MATERIAL
4.	FLOOR BEAMS.	F3.	STRUCTURAL STEEL
2.	" "	F5.	ARSA 1920
2.	Flg. Bolt to F5.	P129	SHOP INSPECTION BY P.T.E.
2.	FLOOR BEAMS.	P129	1 Coat Zinc Red Lead & Oil
2.	Flg. Bolt to F4.	P129	100% Pure Red Lead to 6 Gal. Pure Baked
2.	IR.	P129	1/4" MIN. SEE ON AND NOT TO EXCEED 1/2"
2.	Flg. Bolt to F4.	P12X	TURPENTINE Japan Drier
2.	" " " F5.	P12X	FIELD PAINT OTHERS.
			RIVETS 3/8" HOLES PUNCHED 1/4" REMAIN TO 3/8"
			HEAMING SEE SHEET E1
			FIELD CONNECTIONS RIVETS
			ERECTED BY THE MT. VERNON BRIDGE CO.

Edge & End distance 1 1/2" unless noted.

WALTZ ROAD-MILL CR
BRIDGE # 821004 OWN
TUPON RIVER
WAYNE COUNTY MICHIGAN
DETAILS OF FLOOR BEAMS
THE MT. VERNON BRIDGE CO.
MT. VERNON, O.

IN CHARGE OF
MADE BY 10-20-64
CHECKED BY [Signature]

CONT. NO. 4878 SHEET 12