

FISCAL YEAR	JOB NO.	SHEET NO.	TOTAL SHEETS
1931	9126	1	26

STATE OF ARKANSAS
STATE HIGHWAY COMMISSION

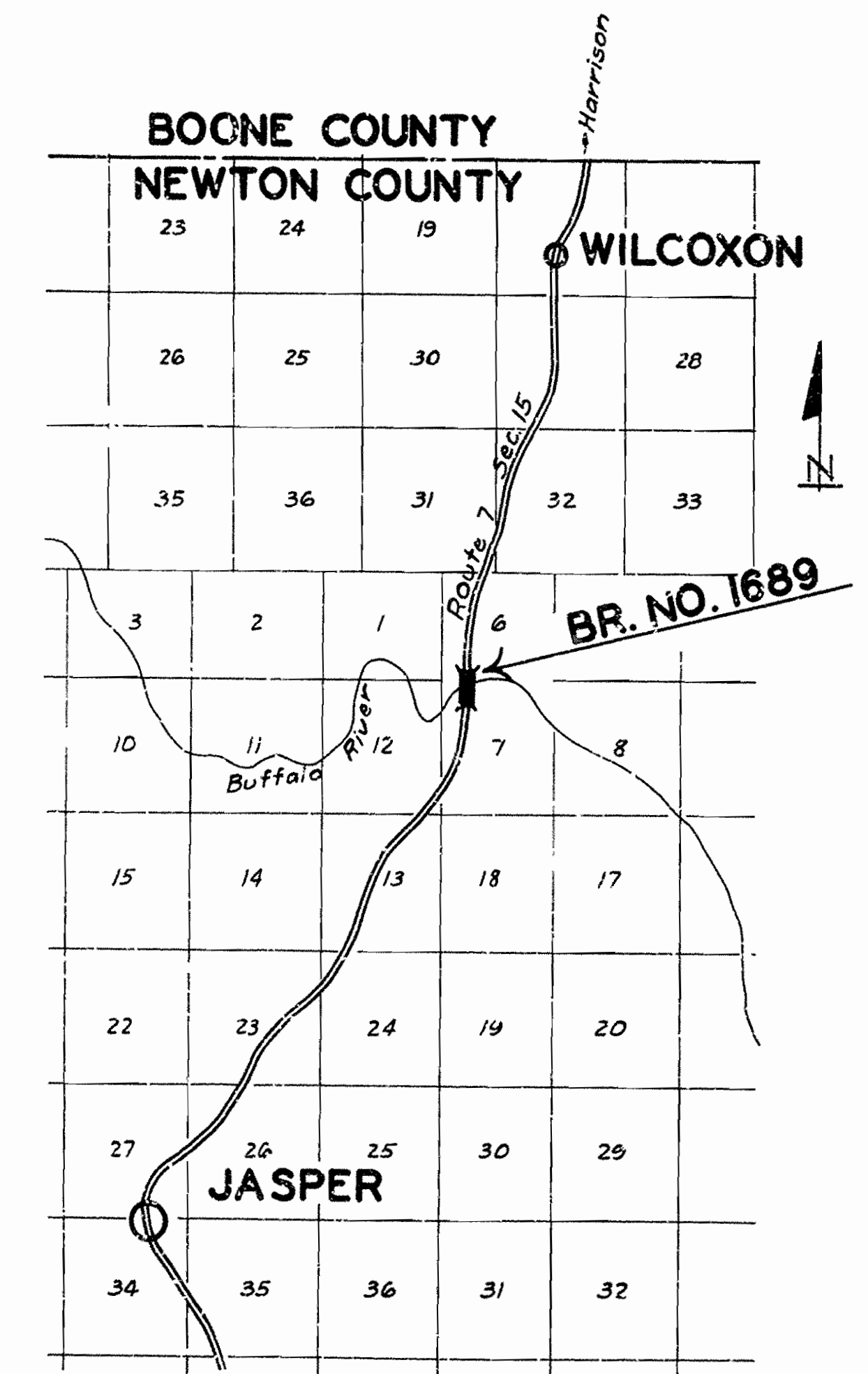
INDEX OF SHEETS

Sheet No.	Drawg No.	Sheet
1	3217	Title Sheet
2	3218	Layout Bridge 1689
3	3219	Details Abutment 1 and Pier 1
4	3220	Details Piers 2 and 3
5	3221	Details Abutment 2
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PLAN OF PROPOSED BRIDGE
OVER BUFFALO RIVER
JASPER-HARRISON ROAD
NEWTON COUNTY
ROUTE 7 SEC. 15
JOB N^o 9126

QUANTITIES

Item No.	Item No.	Quantity	Unit
11	Clearing	3	Acres
11	Grubbing	1	Acres
S.P. & 12	Common Excavation	19,627	Cu. Yds.
S.P. & 12	Solid Rock Excavation	6,134	Cu. Yds.
13	Dry Excavation for Structures	442	Cu. Yd.
13	Wet Excavation for Structures	404	Cu. Yd.
13	Solid Rock Excavation for Structures	473	Cu. Yds.
54	Class #4 Concrete	742.20	Cu. Yds.
54	Class #5 Concrete	260.72	Cu. Yds.
55	Reinforcing Steel	124,024	Lbs.
56	Structural Steel (Truss Bridges)	5,176.6	Lbs.
S.P. & 69	Rip Rap (1 1/2" Thick)	170	Cu. Yds.
74	Concrete Railing for Structures	170	Lin. Ft.
S.P.	Removal of Existing Structures	-	Lump Sum
19	Overhaul	8892	Sq. Yds.



LAYOUT

Scale: 1" = 1 Mile

LENGTH OF PROJECT = 2794.9 ft. = 0.438 mi
LENGTH OF BRIDGES = 315'-4 3/4"
LENGTH OF EMBANKMENT = 2419.51 ft.

The Specifications adopted by the State Highway Commission, May 30th, 1925 apply with subsequent revisions and Special Provisions noted apply to this Project.

Pamphlet	Revised	Date
A	Sept. 1st, 1928	
B	July 1st, 1930	
C	July 1st, 1930	
D	July 1st, 1928	
E	Jan. 1st, 1930	
F	Aug. 1st, 1930	
G	June 1st, 1929	
H	Oct. 1st, 1928	
I	May 30th, 1925	
J	Jan. 1st, 1929	
K	May 30th, 1925	
L	Jan. 1st, 1929	
M	Mar. 1st, 1931	

SPECIAL PROVISIONS

Item	No. of Sheets
Pamphlet M	51
Earth Excavation	3
Concrete Aggregate	2
Rip Rap	1
Field Engineers Office	1
Aluminum Paint	1
Section 8.2	1
Structural Steel	1
Removal of Existing Structure	1
Contractor to Furnish All Material	1

APPROVED
[Signature]
CHAIRMAN - STATE HIGHWAY COMMISSION

APPROVED
[Signature]
STATE HIGHWAY ENGINEER

[Signature]
BRIDGE ENGINEER

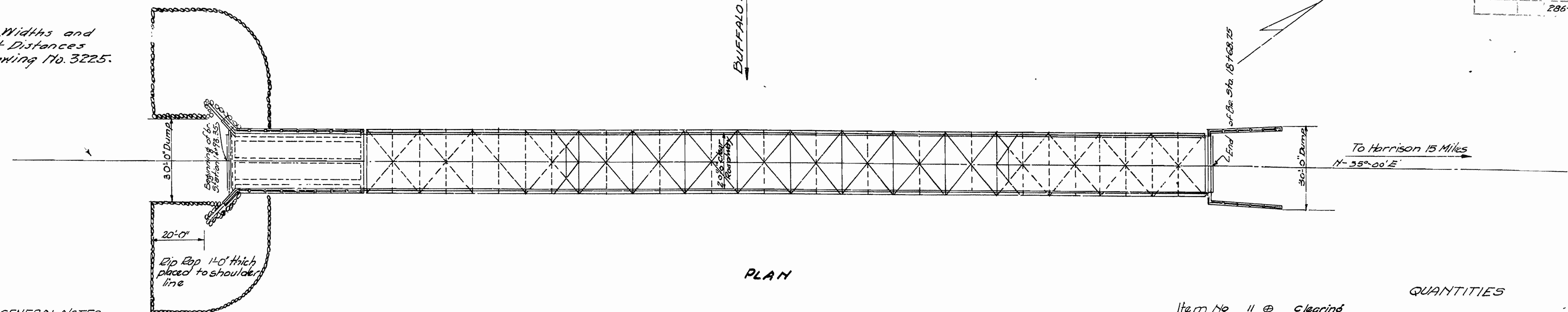
BRIDGES NO. 1689

DRAWING NO. 3217

FISCAL YEAR	Job No.	SHEET TOTAL
1931	9126	2 26

286-A	11	19
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For R. of W. Widths and Tangent Distances See Drawing No. 3225.



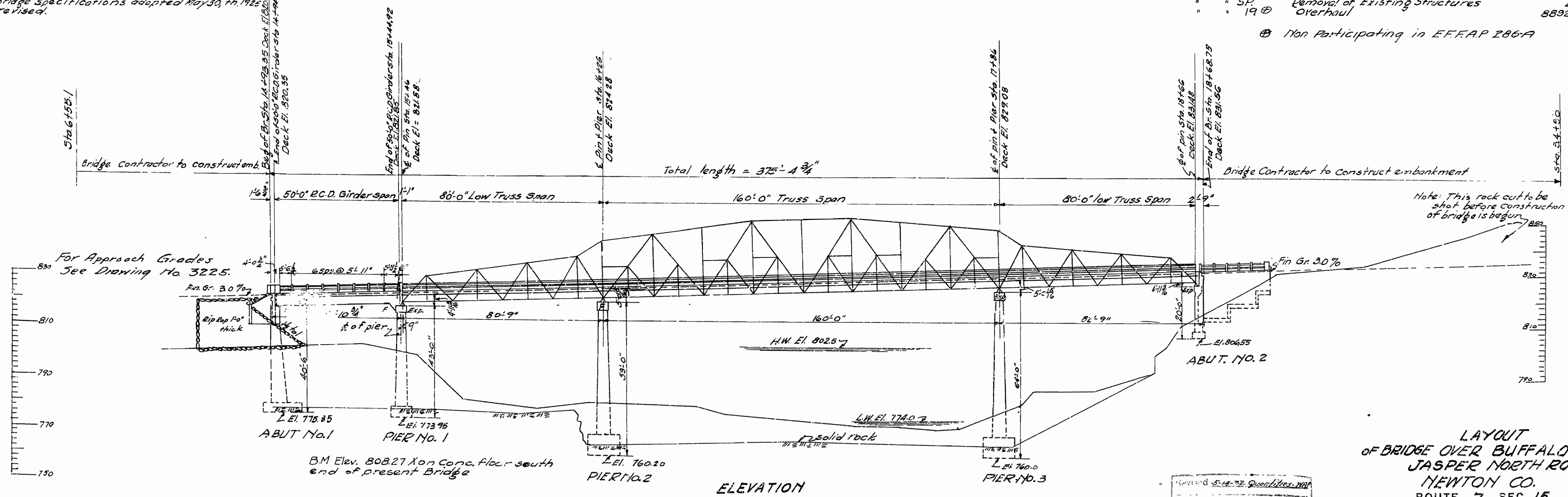
PLAN

GENERAL NOTES
 All concrete to be placed in the dry.
 All concrete in substructure to be Class "A" unless otherwise noted.
 For general notes on concrete and steel see superstructure detail sheets.
 Structural steel to be given two field coats of aluminum paint (see special provisions).
 Expansion joints to be constructed as shown on layout sheet.
 For details of substructure see Drawing No. 3219, 3220 + 3221.
 For details of steel Truss see Drawing Nos. 3222, 3223, + 3224.
 For details of 50' or Concrete span see Drawing No. 2279.
 Bridge Contractor to construct embankment between Sta. 6+55.1 and Sta. 34+50.
 Specifications: Arkansas Standard Road and Bridge specifications adopted May 30, 1925 and revised.

QUANTITIES

Item No	Quantity	Description	Unit
11	3	clearing	acres
11	1	Grubbing	acre
54 1/2	15627	Common Excavation	cu. Yds.
54 1/2	6134	Solid Rock Excavation	" "
13	71969	Dry Excavation for structures	" "
13	372.12	Wet Excavation for structures	" "
S.P.	184.08	Solid Rock Excavation for structures	" "
54	728.40	Class "A" Concrete	" "
54	260.92	Class "S" Concrete	" "
55	126,670	Reinforcing Steel	Lbs.
56	319,745	Structural Steel (Truss Bridges)	Lbs.
69	102	Rip Rap 14" thick	cu. Yds.
74	170	Concrete railing for structures	lin. ft.
SP	8892	Removal of Existing Structures	Lump Sum
19		Overhaul	Sta. Yds.

⊕ Non Participating in E.F.F.A.P. 286-A



ELEVATION

**LAYOUT OF BRIDGE OVER BUFFALO RIVER
 JASPER NORTH ROAD
 NEWTON CO.
 ROUTE 7 SEC. 15**

**ARKANSAS STATE HIGHWAY COMMISSION
 LITTLE ROCK, ARK.**

Drawn By: H.B. Date: 5-15-31
 Traced By: M.H.W. Date: 5-21-31
 Checked By: B. Date: 6-10-31

Scale: 1 in. = 20 ft.

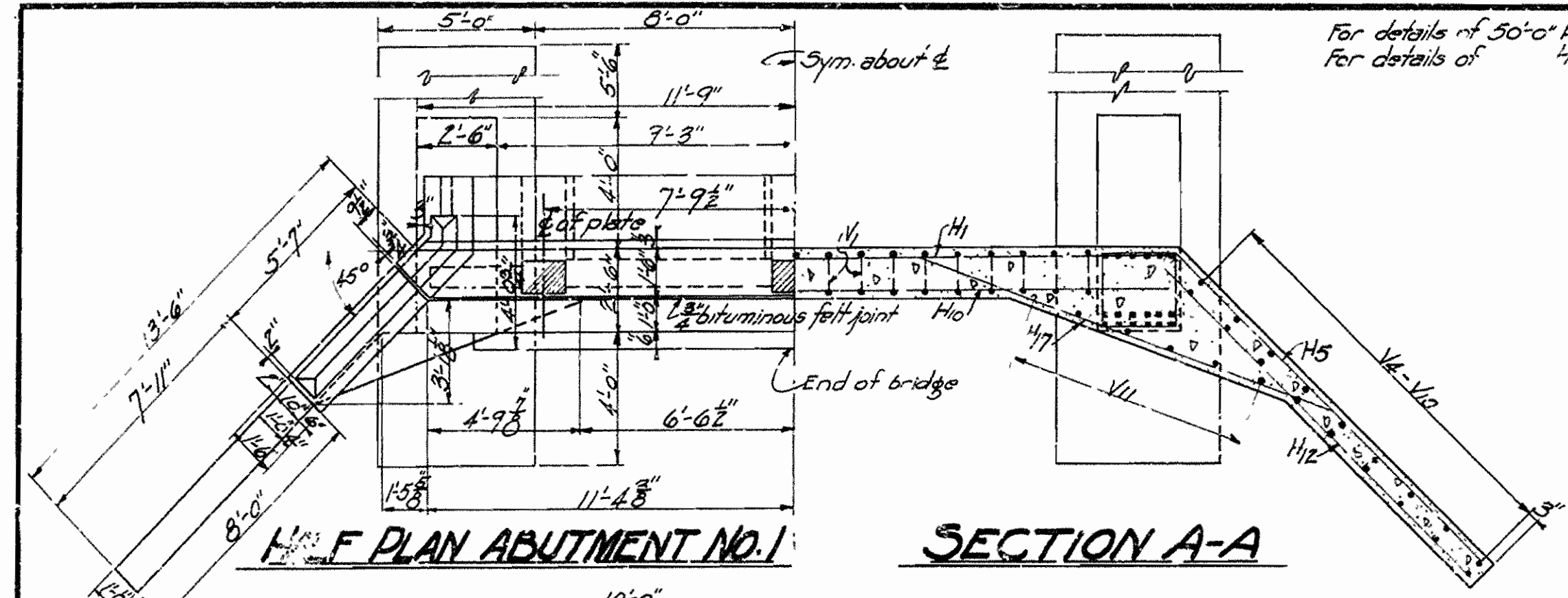
BRIDGE NO. 1689 DRAWING NO. 3218

H.B. Jones
 BRIDGE ENGINEER

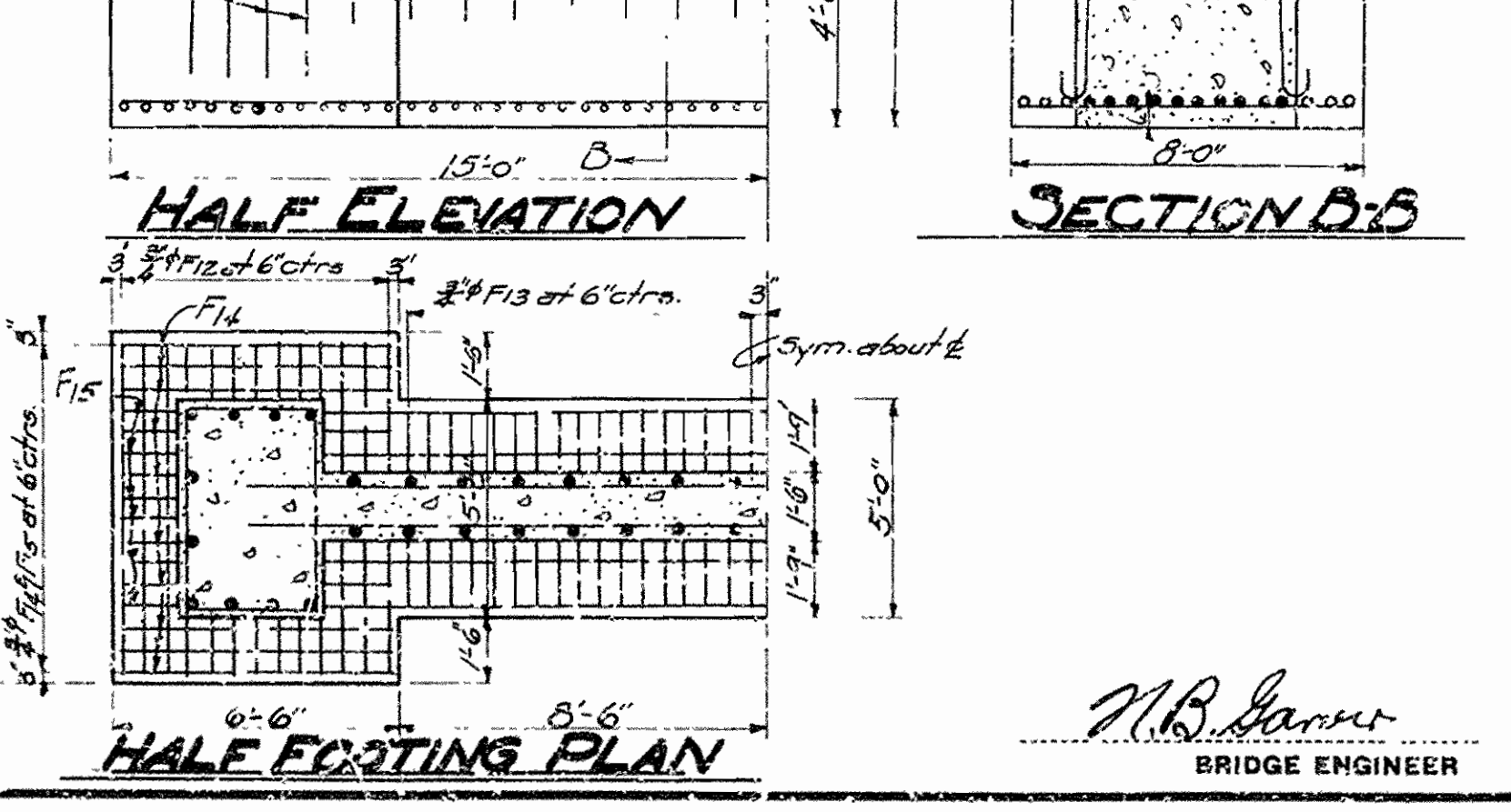
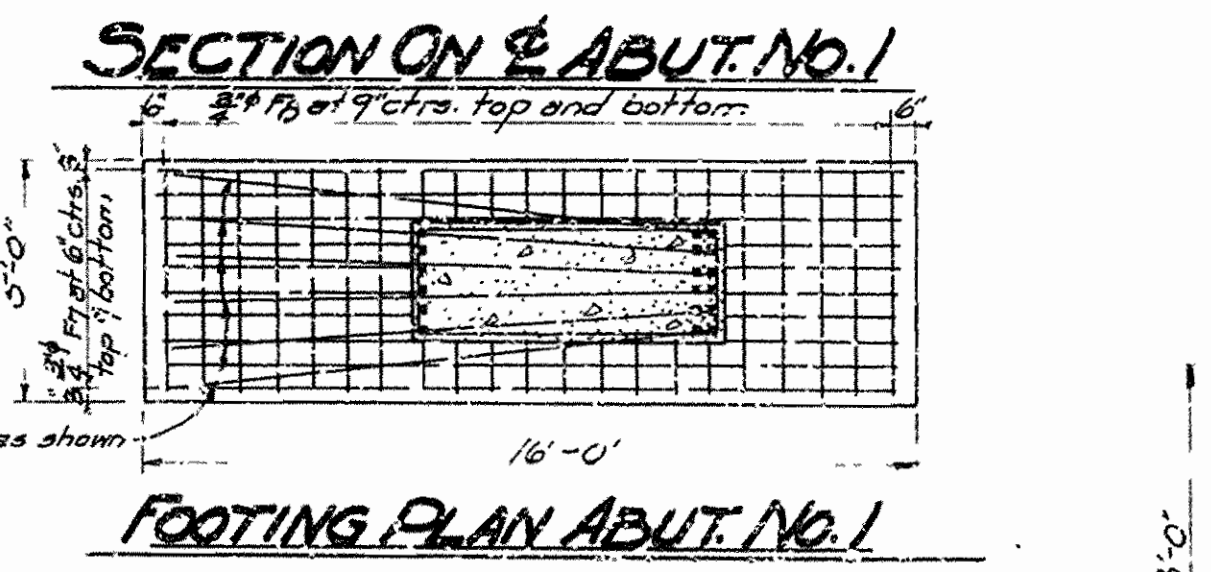
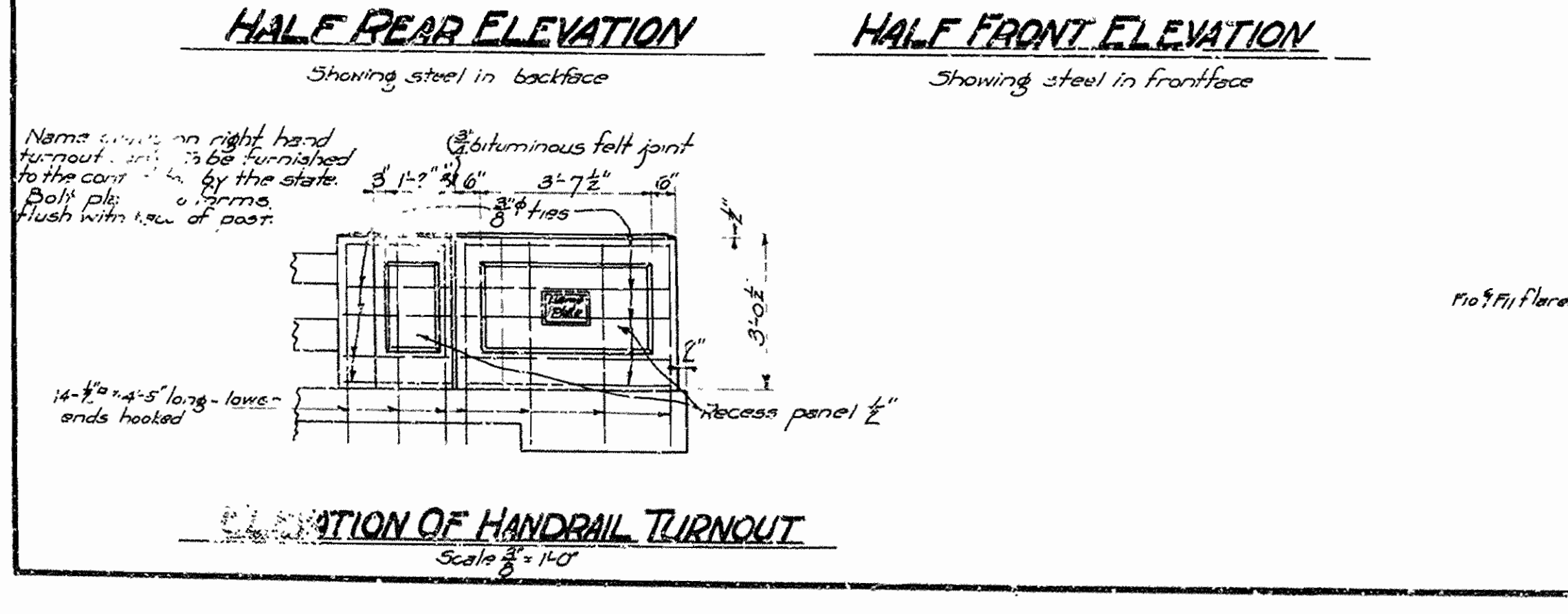
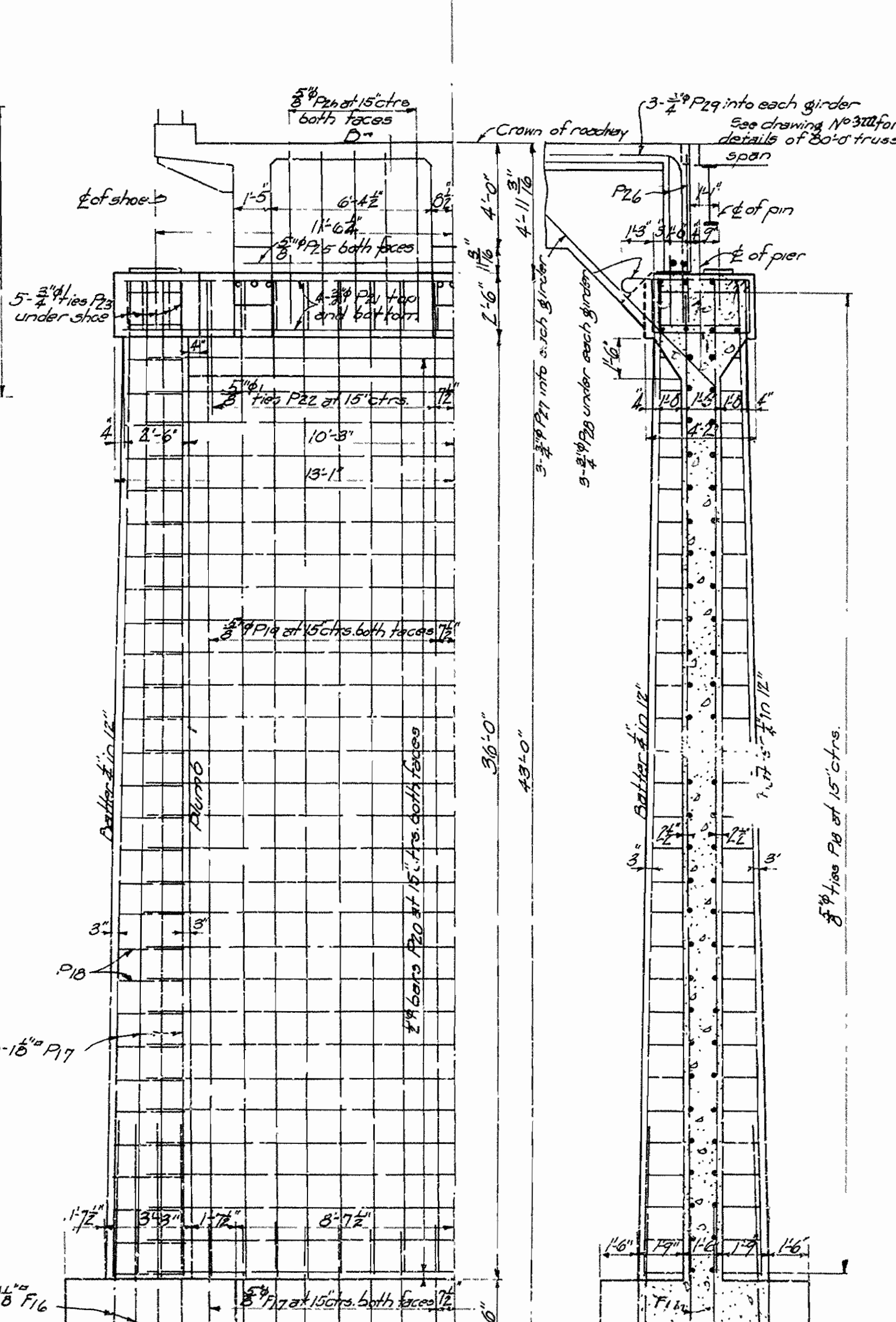
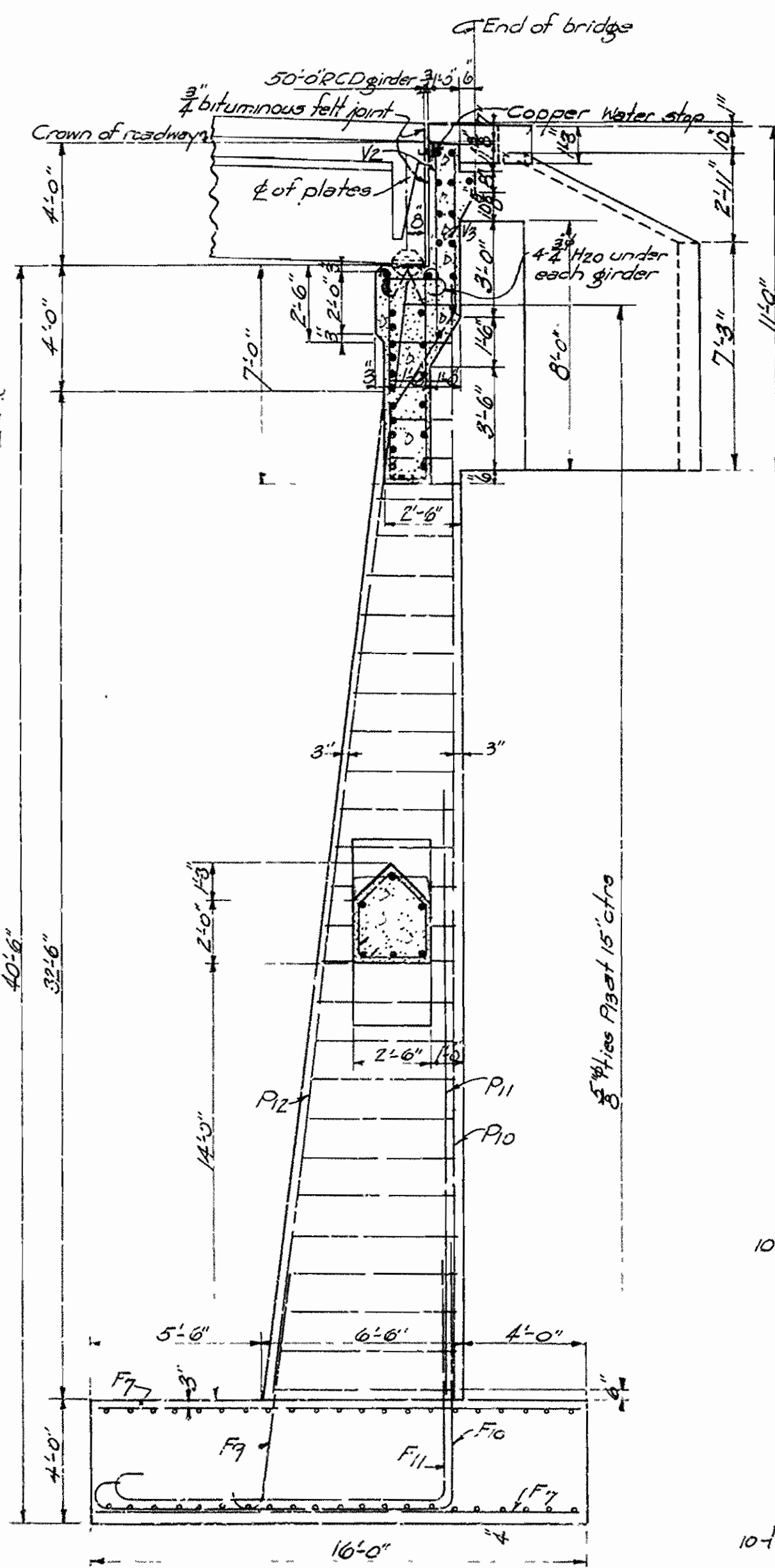
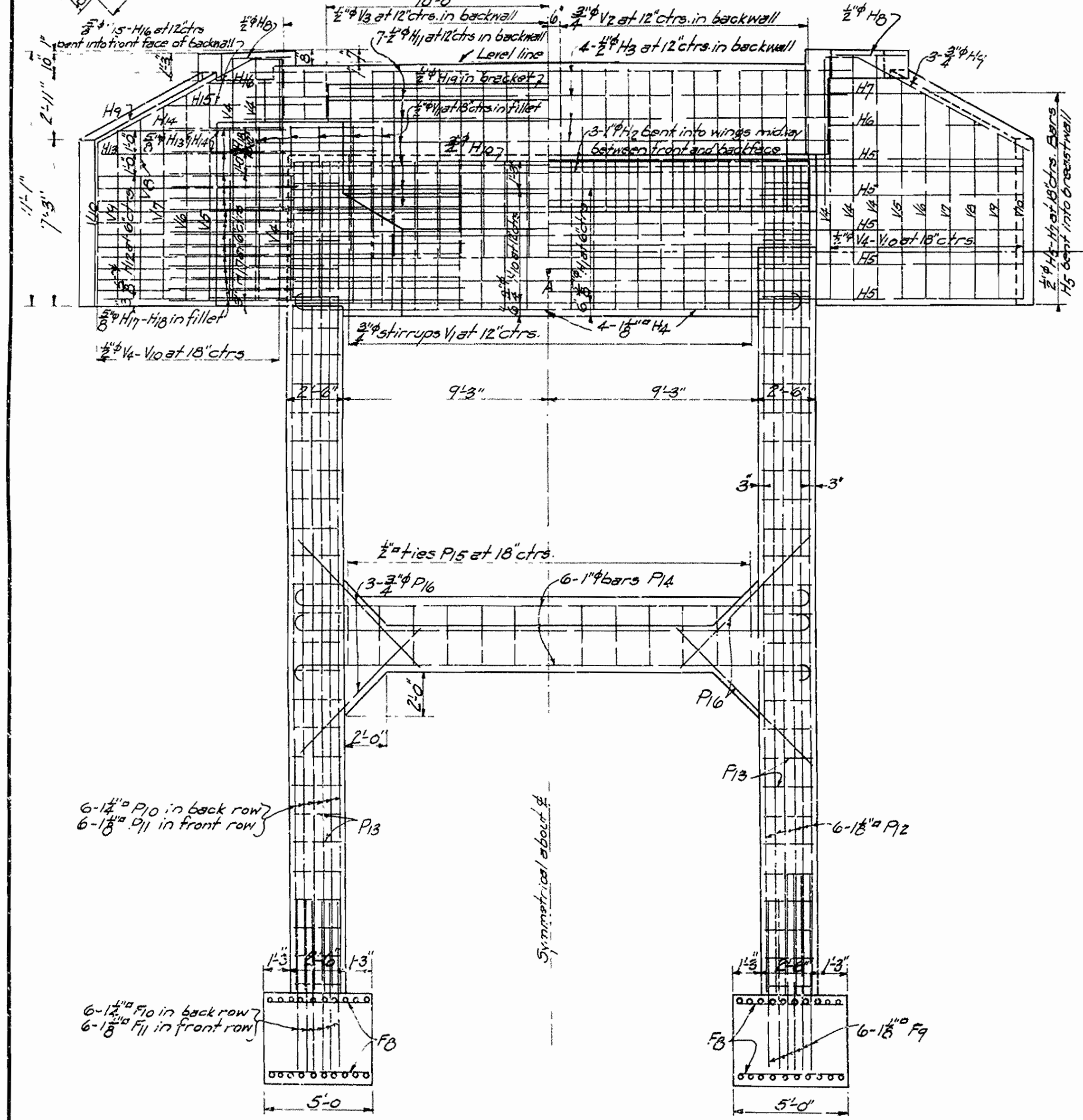
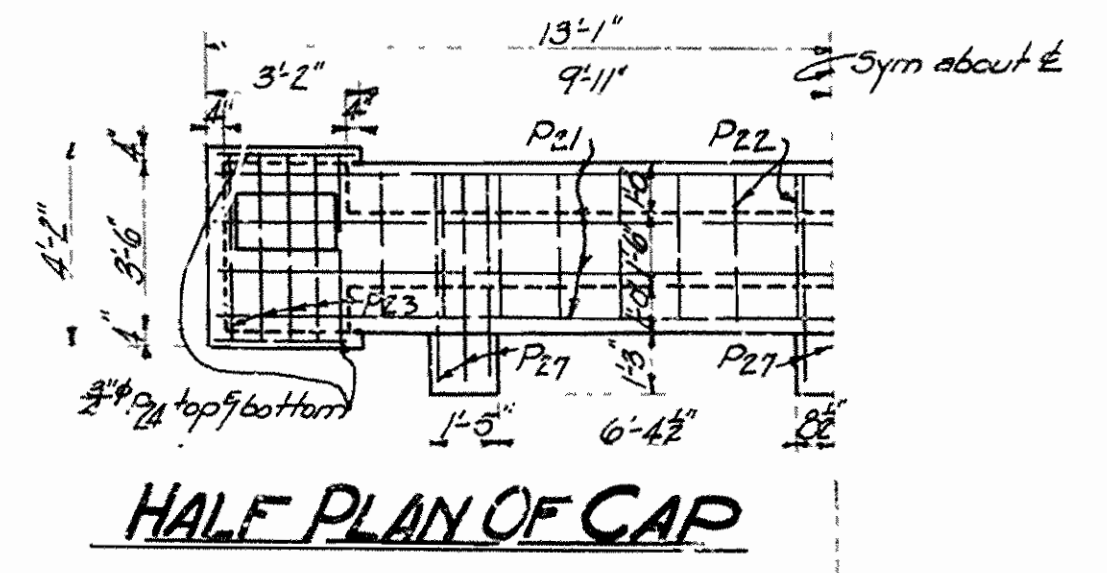
Drainage Area: 185 Square Miles Mountainous

Revised 5-14-32 Quantities 1931

YEAR	Job No.	SHEET TOTAL
1931	1126	3 26
286 A		12 13



For details of 50" O.C.D. girder see drawing No. 2279
 For details of truss span see drawing No. 3222-3223-3224

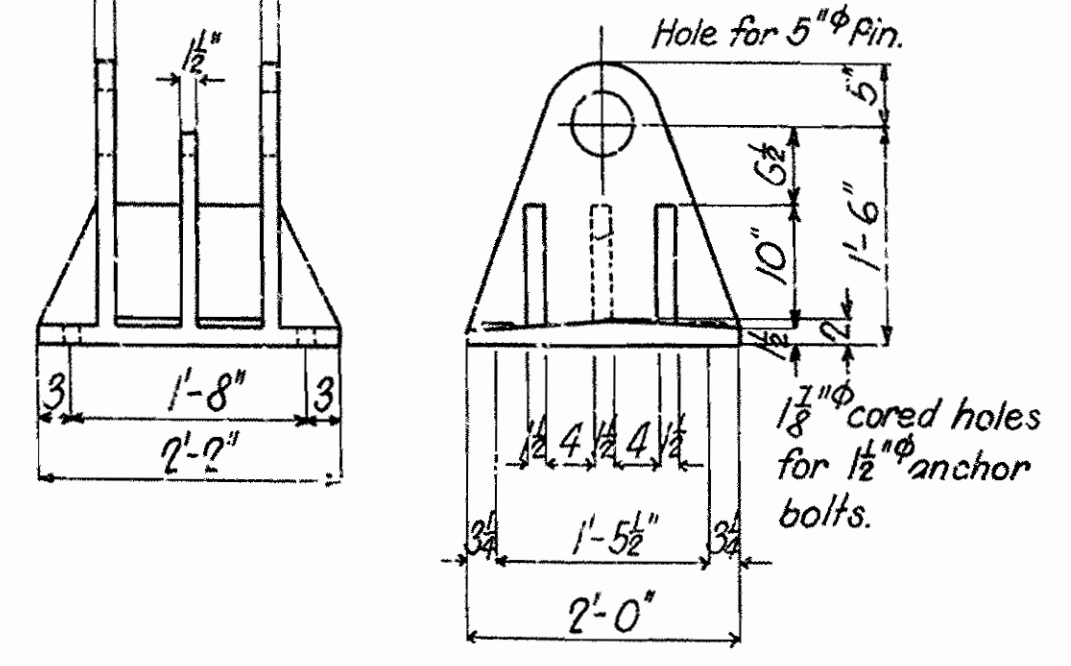
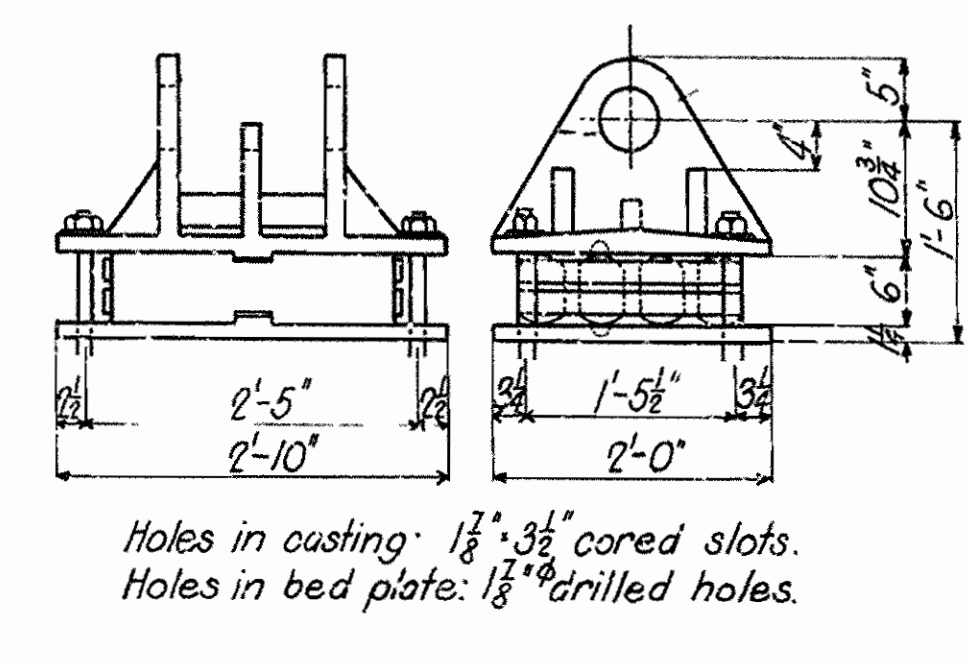
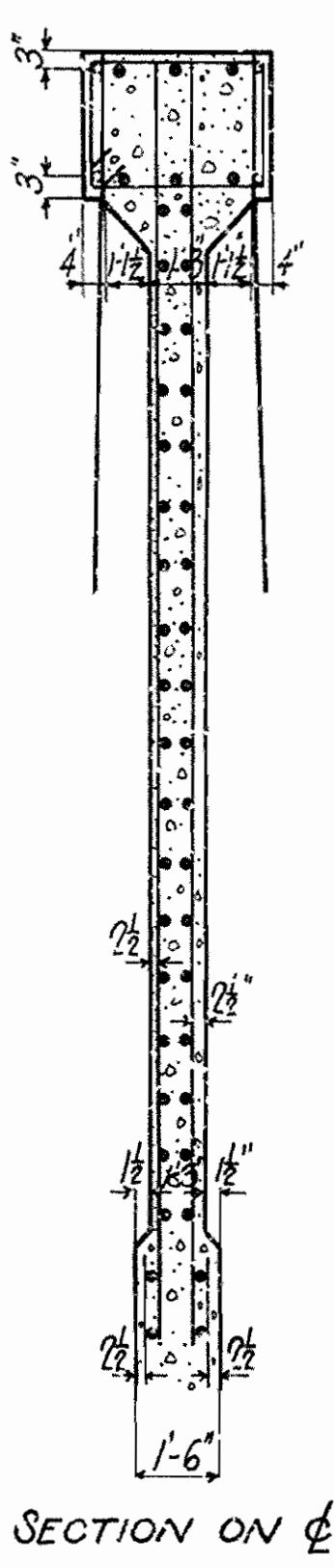
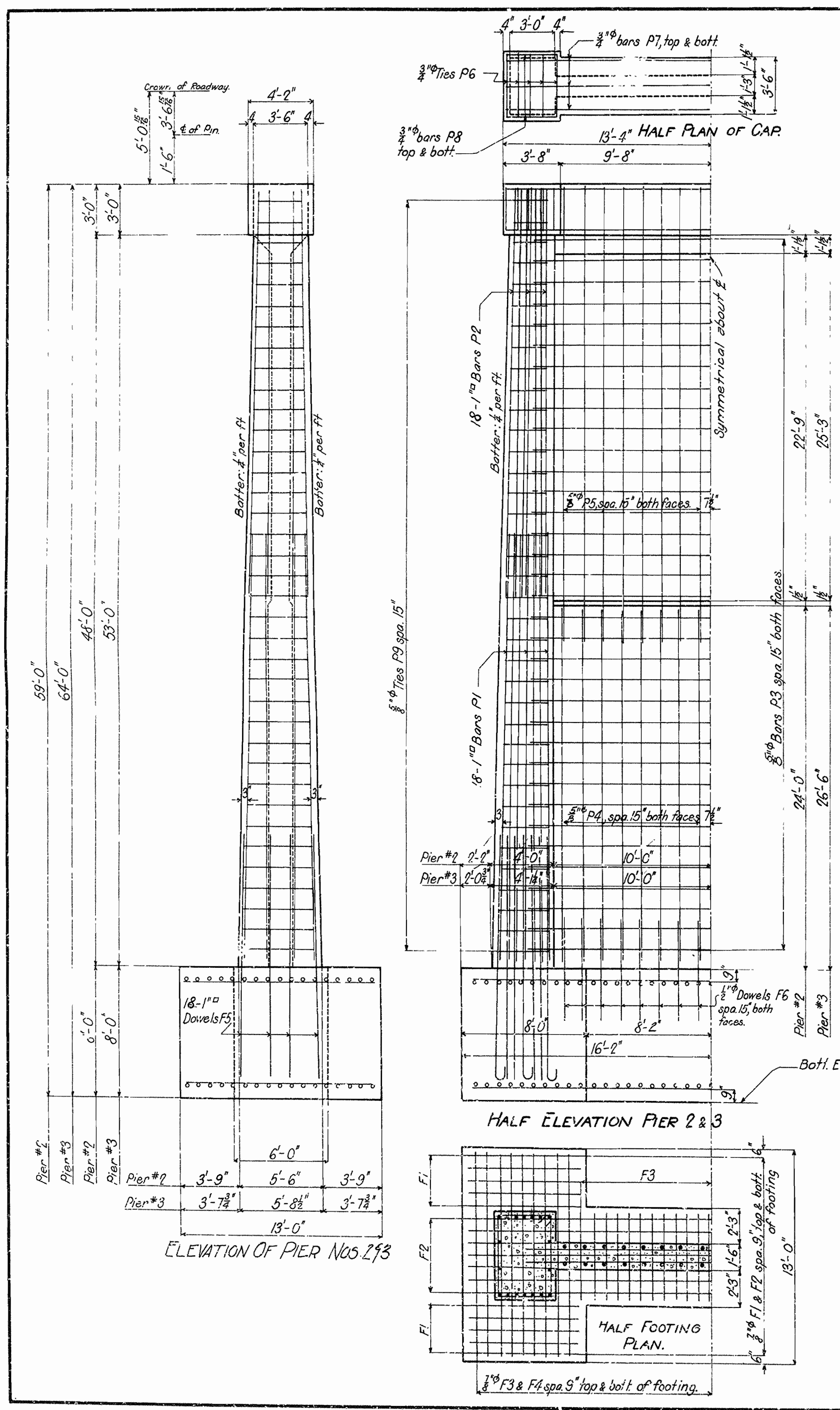


Mark	Size	Length	Banding diagram		
F9	1 1/2"	8'-9"	A		
F16	1 1/2"	11'-0"	A		
F10	1 1/2"	21'-0"	A	B	
F11	1 1/2"	19'-3"	11'-0"	8'-0"	
P13	5/8"	Varies	See drawing No. 3224 for details of 80'-0" truss span		
P15	5/8"	Varies	See drawing No. 3224 for details of 80'-0" truss span		
P22	5/8"	11'-5"	3'-0"	2'-1/2"	
P23	5/8"	12'-9"	3'-10"	2'-1/2"	
P4	1"	25'-0"	23'-0"	8"	
H4	1 1/2"	25'-0"	23'-0"	8"	
H20	5/8"	3'-10"	2'-4"	6"	
P28	5/8"	6'-3"	4'-9"	6"	
P15	5/8"	9'-0"	See drawing No. 3224 for details of 80'-0" truss span		
V1	5/8"	15'-10"	See drawing No. 3224 for details of 80'-0" truss span		
H5	5/8"	15'-3"	13'-3"	2'-0"	12'-5"
H15	"	9'-0"	7'-0"	2'-0"	12'-5"
H16	"	6'-3"	4'-3"	2'-0"	12'-5"
H17	5/8"	15'-3"	13'-3"	2'-0"	10"
H18	5/8"	14'-0"	9'-0"	2'-0"	10"
V3	5/8"	8'-5"	5'-2"	3'-6"	14'-11"
H2	1"	19'-0"	See drawing No. 3224 for details of 80'-0" truss span		
H9	5/8"	19'-7"	See drawing No. 3224 for details of 80'-0" truss span		
P29	5/8"	12'-7"	See drawing No. 3224 for details of 80'-0" truss span		

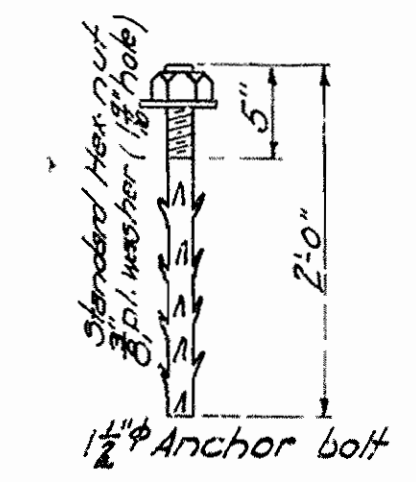
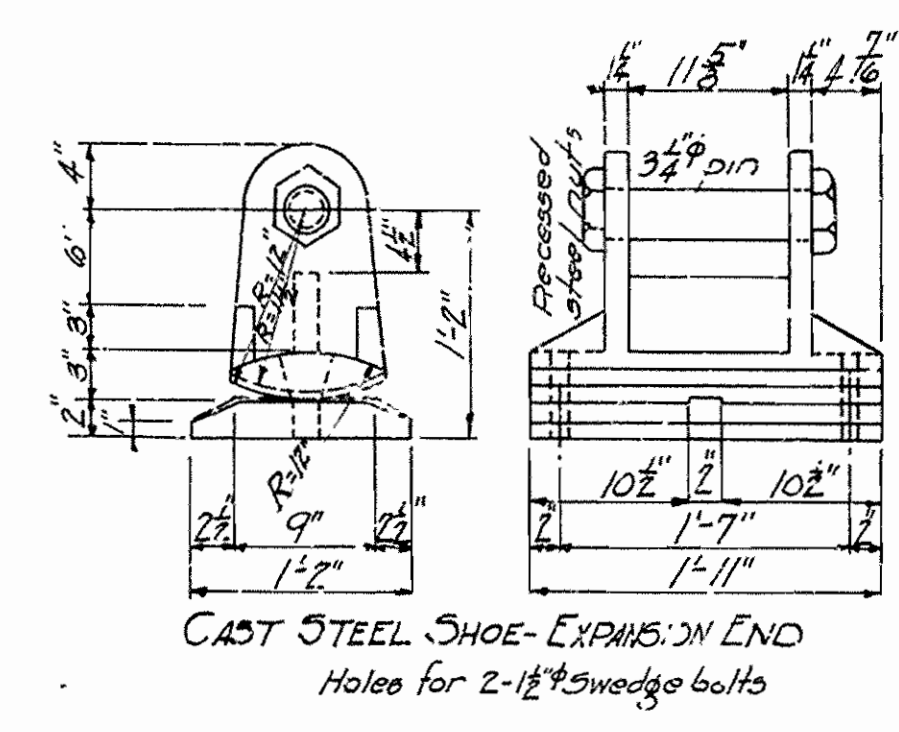
DETAILS OF ABUTMENT NO. 1 & PIER NO. 1
 FOR BRIDGE OVER BUFFALO RIVER
 JASPER-NORTH ROAD
 NEWTON COUNTY
 ROUTE 7 SEC. 17
 ARKANSAS STATE HIGHWAY COMMISSION
 LITTLE ROCK, ARK.
 Drawn By: G.S. Date: 5/23/31
 Traced By: J.S. Date: 6/23/31
 Checked By: J.S. Date: 6/23/31
 Bridge No. 1589 DRAWING NO. 3219

J.B. Janner
 BRIDGE ENGINEER

PIER NO.	308 No.	SHEET NO.	TOTAL SHEETS
YEAR	1931	3126	4 26
		286-A	13 19



Mark.	Size.	Length.	Location.	Bending Diagram.									
F5	1" ^{sq}	15'-9"	Pier #2 #3										
P6	$\frac{3}{4}"$ ϕ	13'-5"	Pier #2 #3										
P9	$\frac{5}{8}"$ ϕ	14'-11" average	Pier #2										
P9	$\frac{5}{8}"$ ϕ	15'-3" average	Pier #3	<table border="1"> <tr> <td></td> <td>Pier #2</td> <td>Pier #3</td> </tr> <tr> <td>A</td> <td>3'-8" to 5'-1"</td> <td>3'-8" to 5'-3 1/2"</td> </tr> <tr> <td>B</td> <td>2'-7" to 3'-7 1/2"</td> <td>2'-7" to 3'-0 1/2"</td> </tr> </table>		Pier #2	Pier #3	A	3'-8" to 5'-1"	3'-8" to 5'-3 1/2"	B	2'-7" to 3'-7 1/2"	2'-7" to 3'-0 1/2"
	Pier #2	Pier #3											
A	3'-8" to 5'-1"	3'-8" to 5'-3 1/2"											
B	2'-7" to 3'-7 1/2"	2'-7" to 3'-0 1/2"											



PIERS 2 & 3
BUFFALO RIVER BRIDGE
NEWTON COUNTY
 ROUTE 7 SEC. 15
ARKANSAS STATE HIGHWAY COMMISSION
 LITTLE ROCK, ARK.

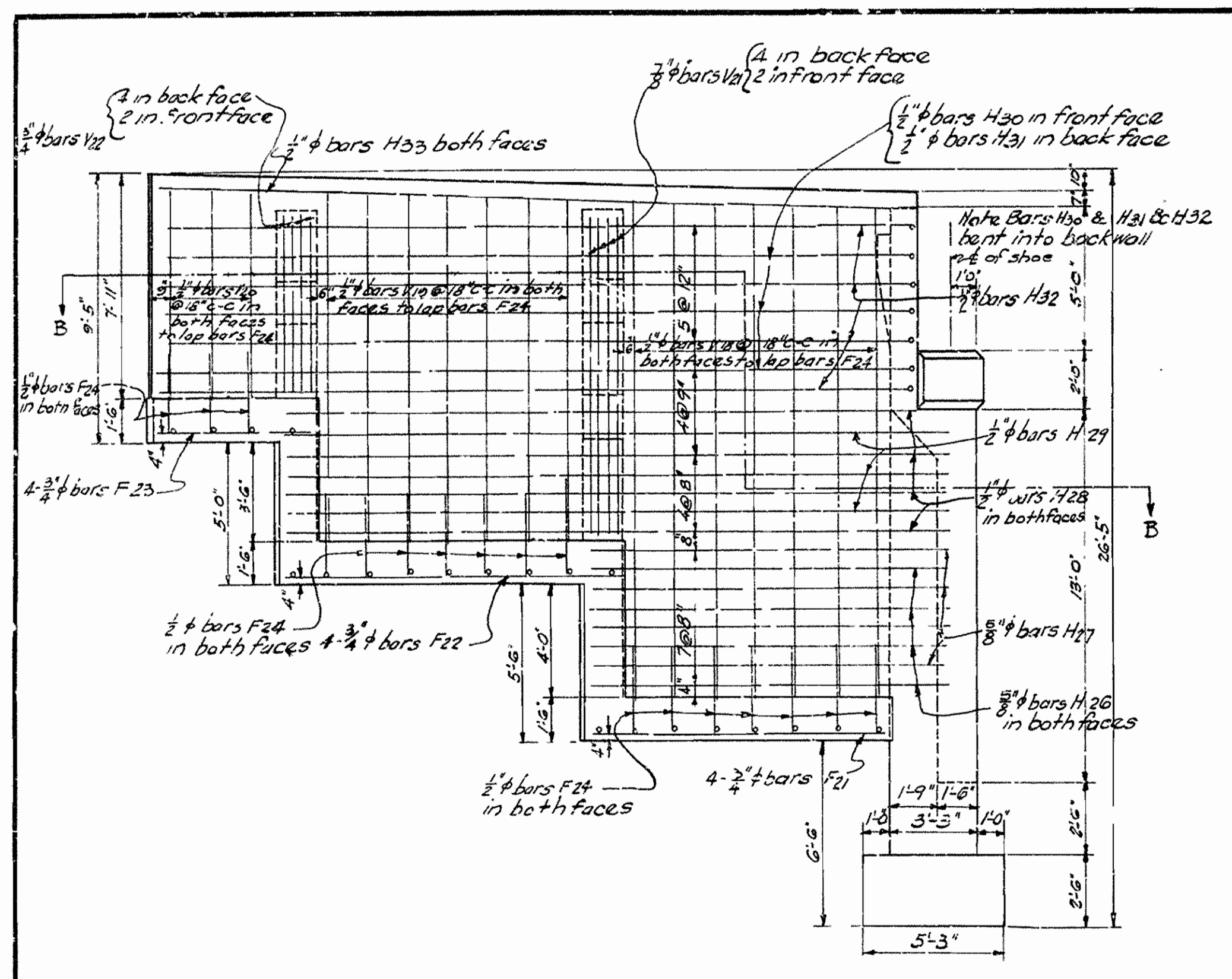
Drawn By: *[Signature]* Date: *[Date]*
 Traced By: *[Signature]* Date: *May 15 1931*
 Checked By: *[Signature]* Date: *6/21 1931*

BRIDGE ENGINEER
 BRIDGE NO. 1689 DRAWING NO. 3220

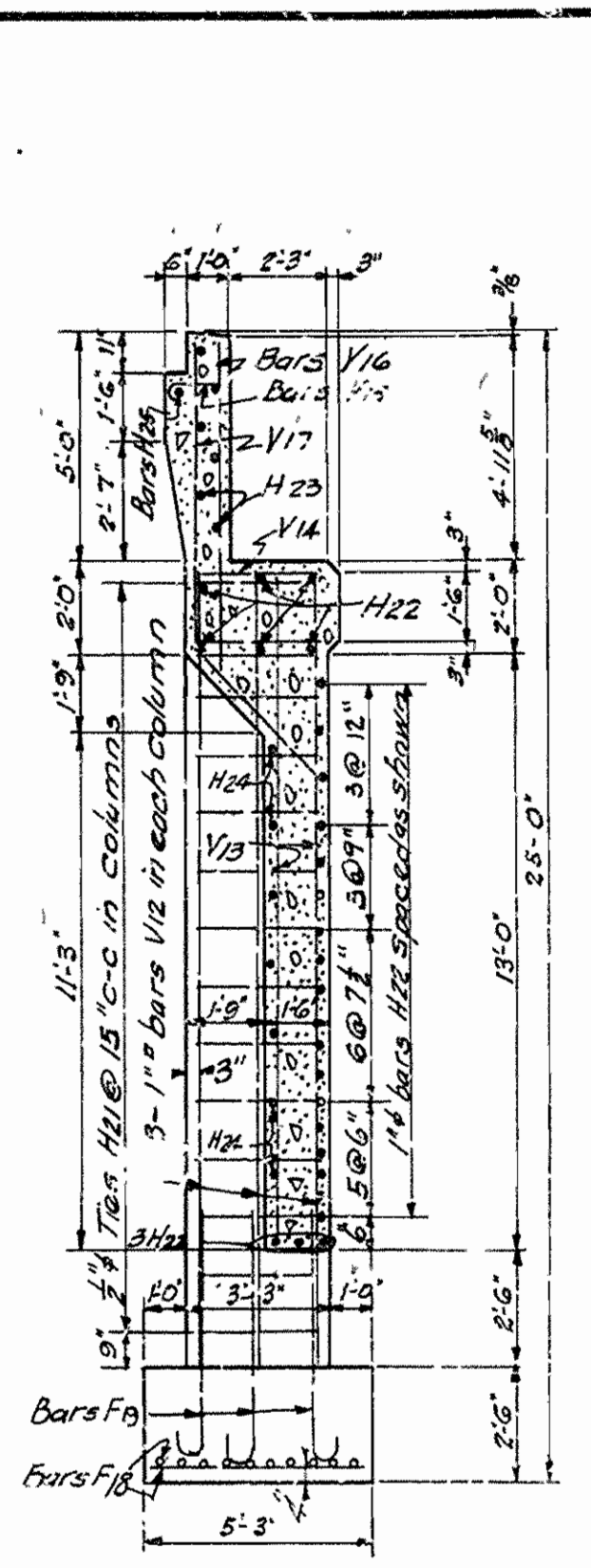
Scale: $\frac{1}{4}$ in. = 1 ft.

PRINTED ON
 IMPERIAL TRADING CO.
 S.F. CALIF.

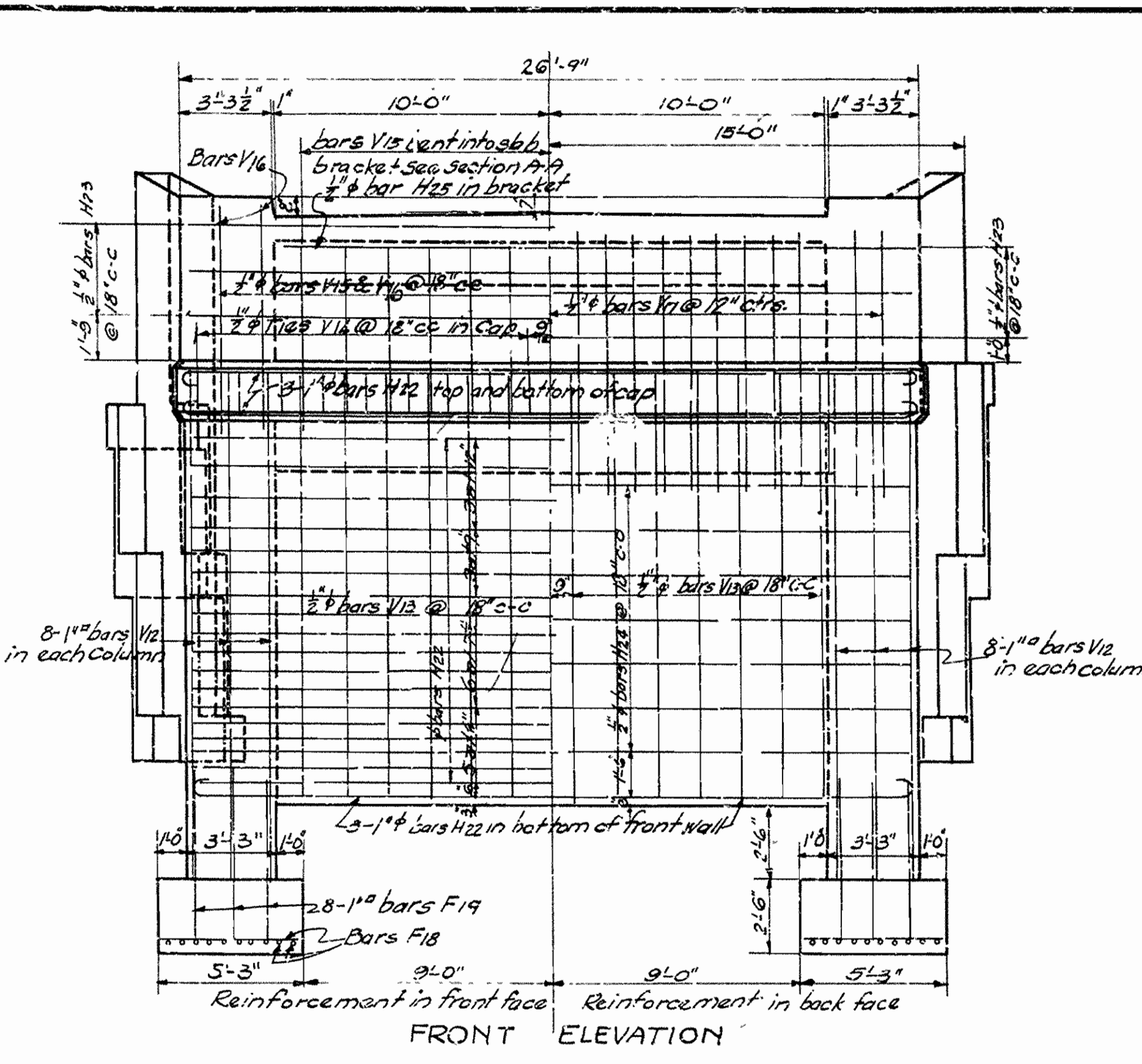
FIGURE NO.	102 NO	SHEET TOTAL	26
YEAR	1931	NO.	26



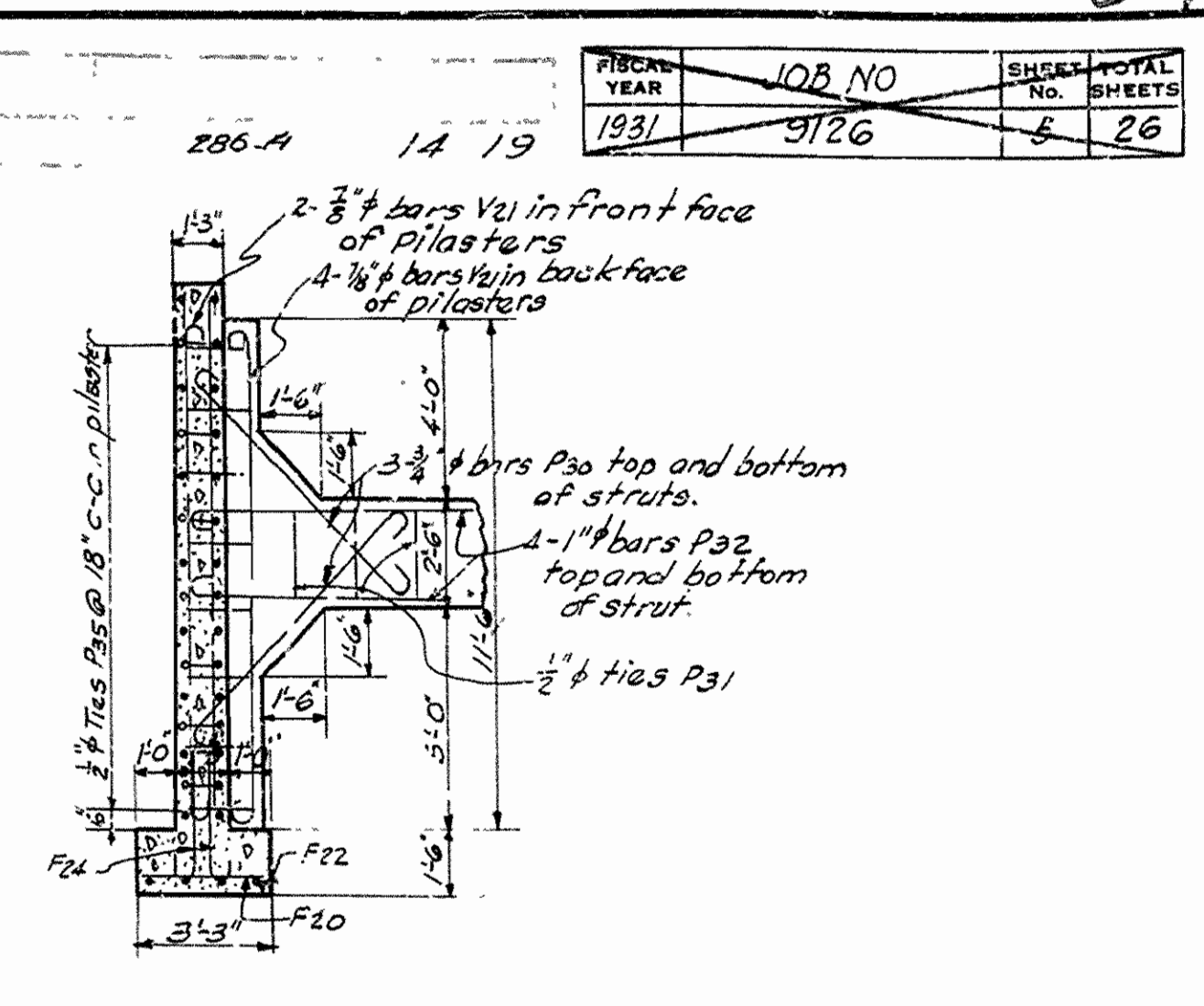
SIDE ELEVATION OF ABUTMENT showing reinforcement in wings



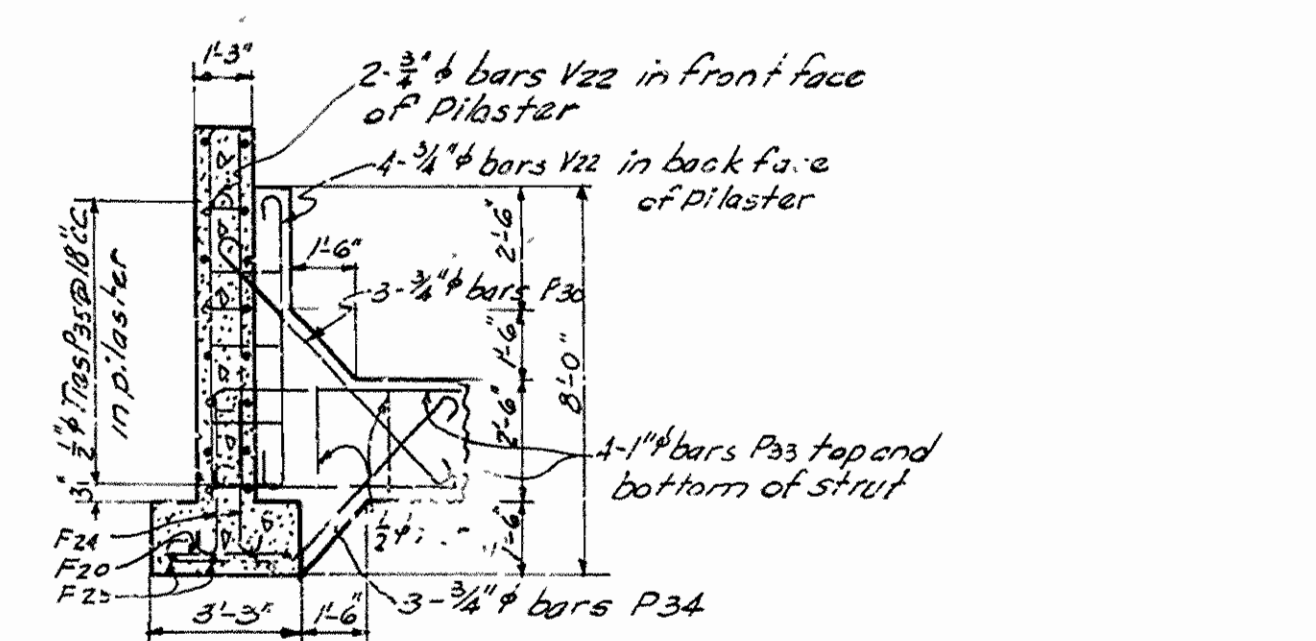
SECTION A-A



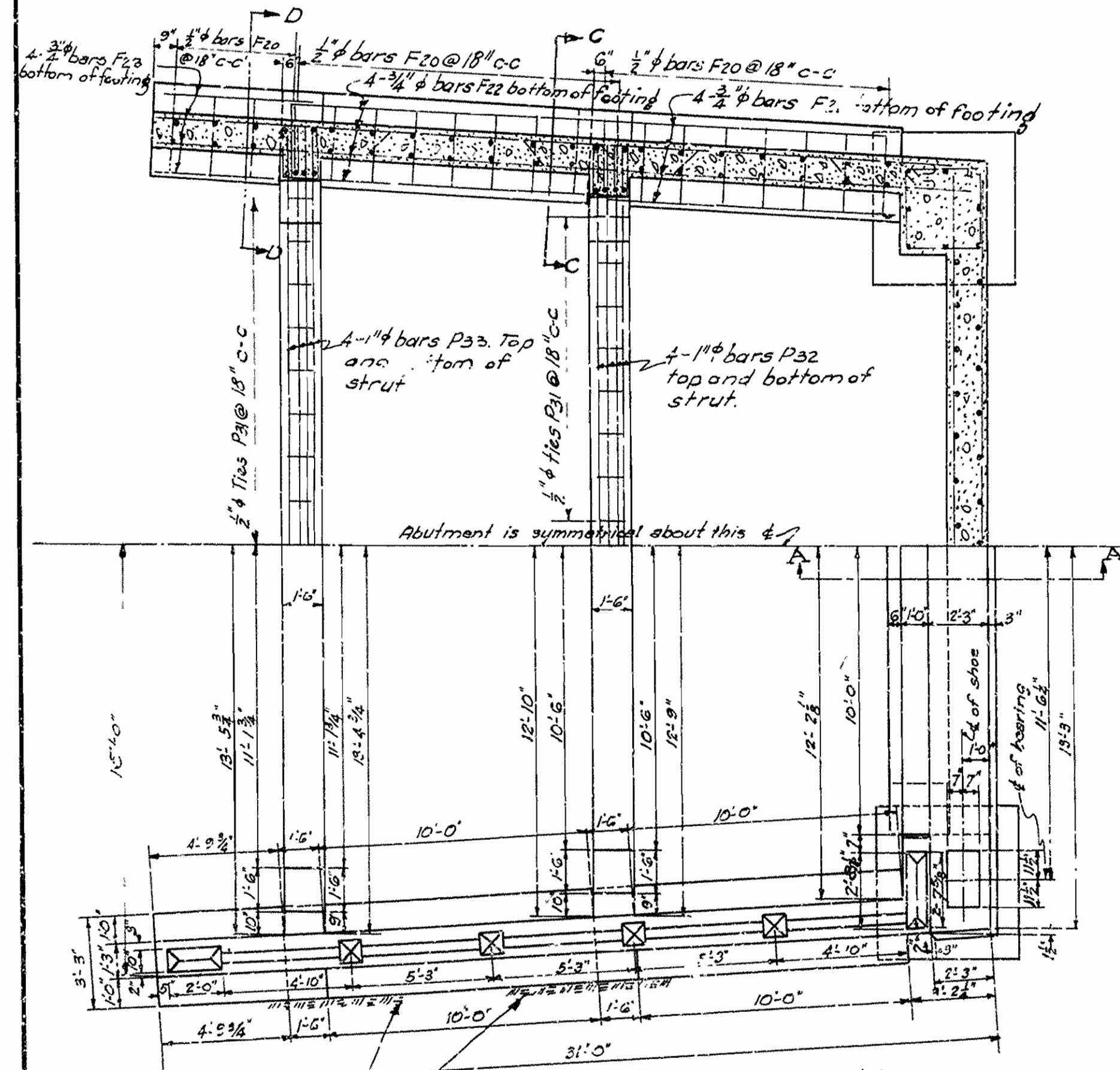
FRONT ELEVATION



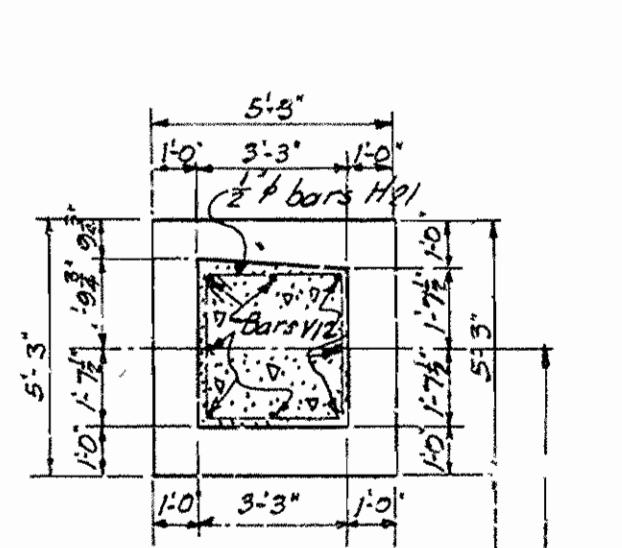
SECTION C-C



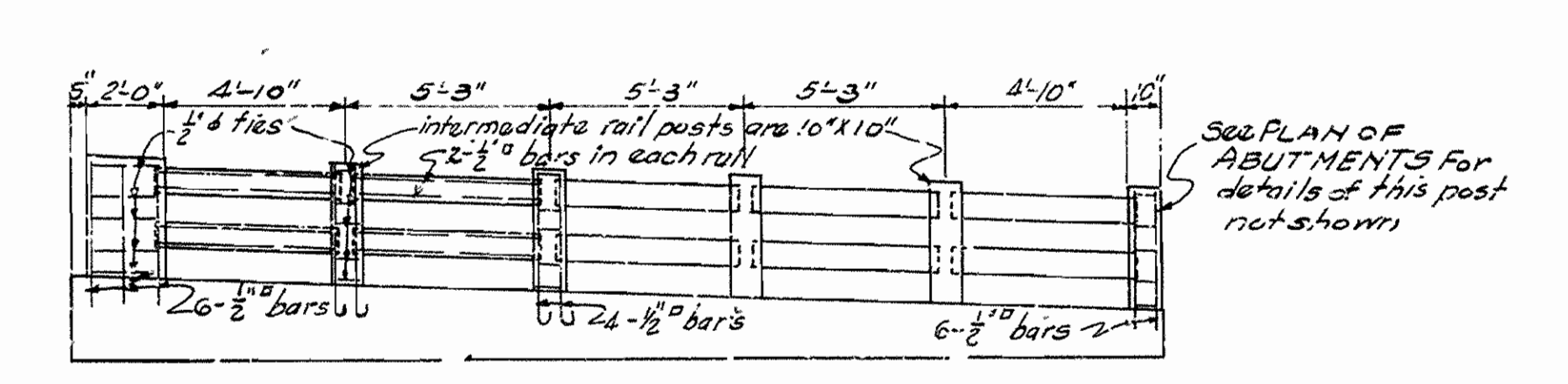
SECTION D-D



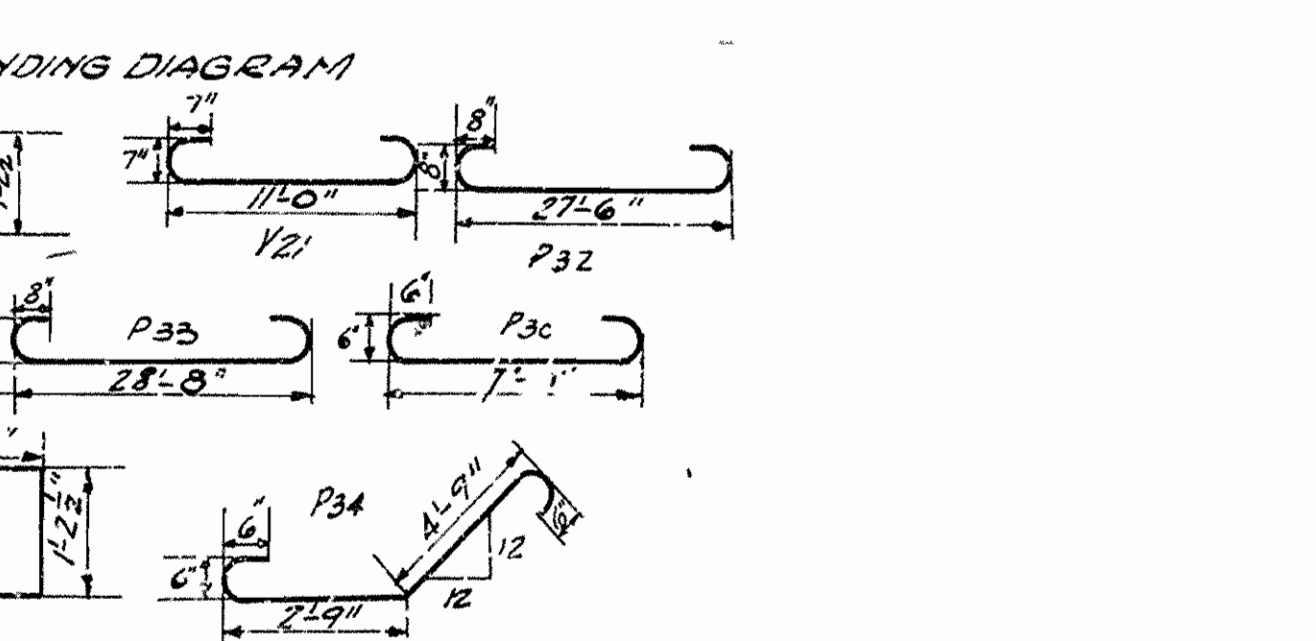
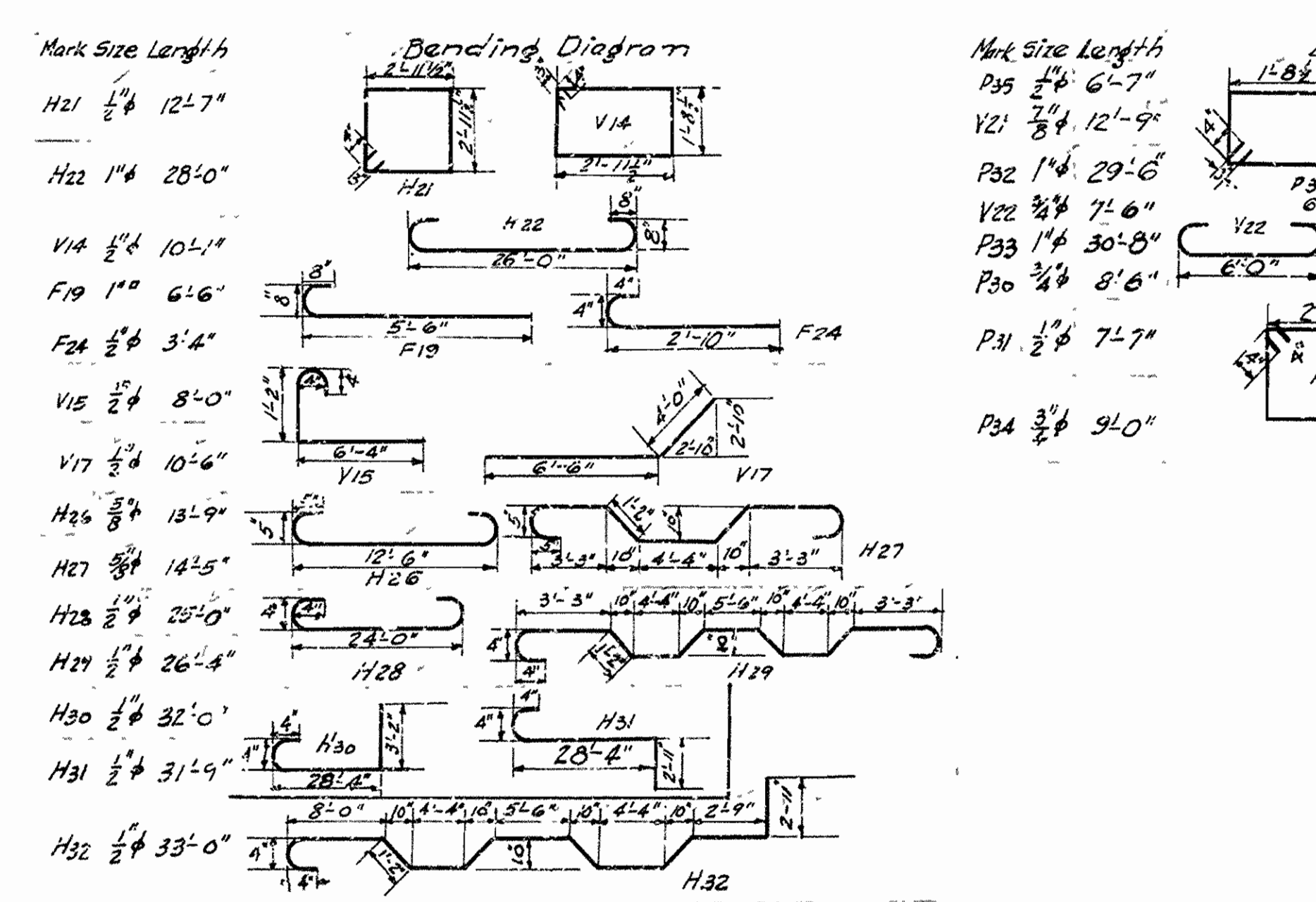
HALF PLAN OF ABUTMENT AND HALF SECTION B-B



FOOTING PLAN



PART ELEVATION SHOWING HANDRAIL For details of handrail not shown on this sheet See Drawing No. 22 77



DETAILS OF ABUTMENT NO. 2 FOR BRIDGE OVER BUFFALO RIVER JASPER-NORTH ROAD NEWTON COUNTY ROUTE 7 SEC. 15

ARKANSAS STATE HIGHWAY COMMISSION

LITTLE ROCK, ARK.

Drawn By: WOD Date: 5-23-31 Traced By: MDD Date: 5-23-31 Checked By: [Signature] Date: 5-23-31

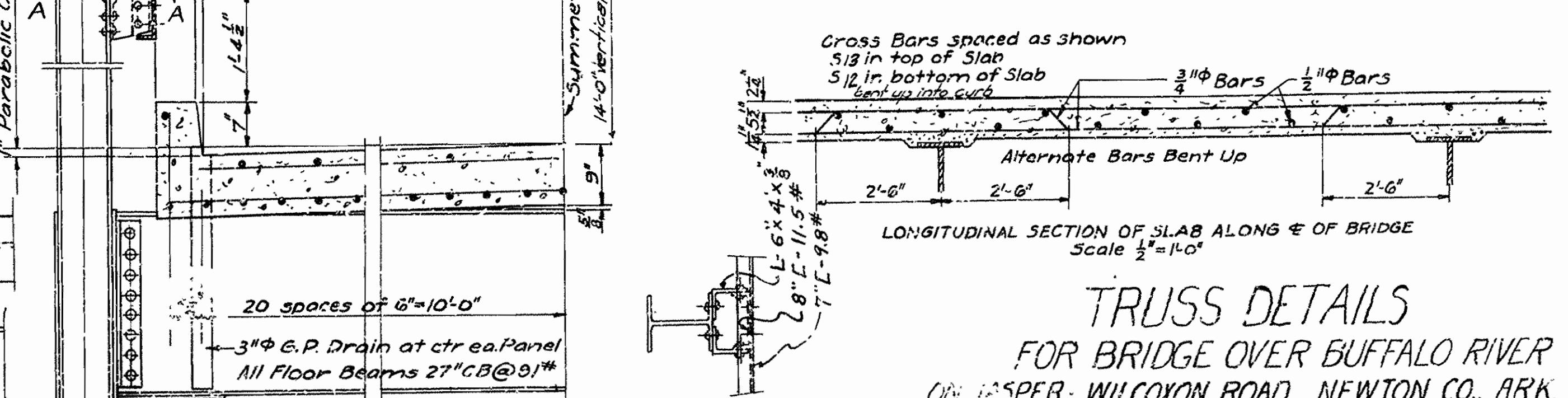
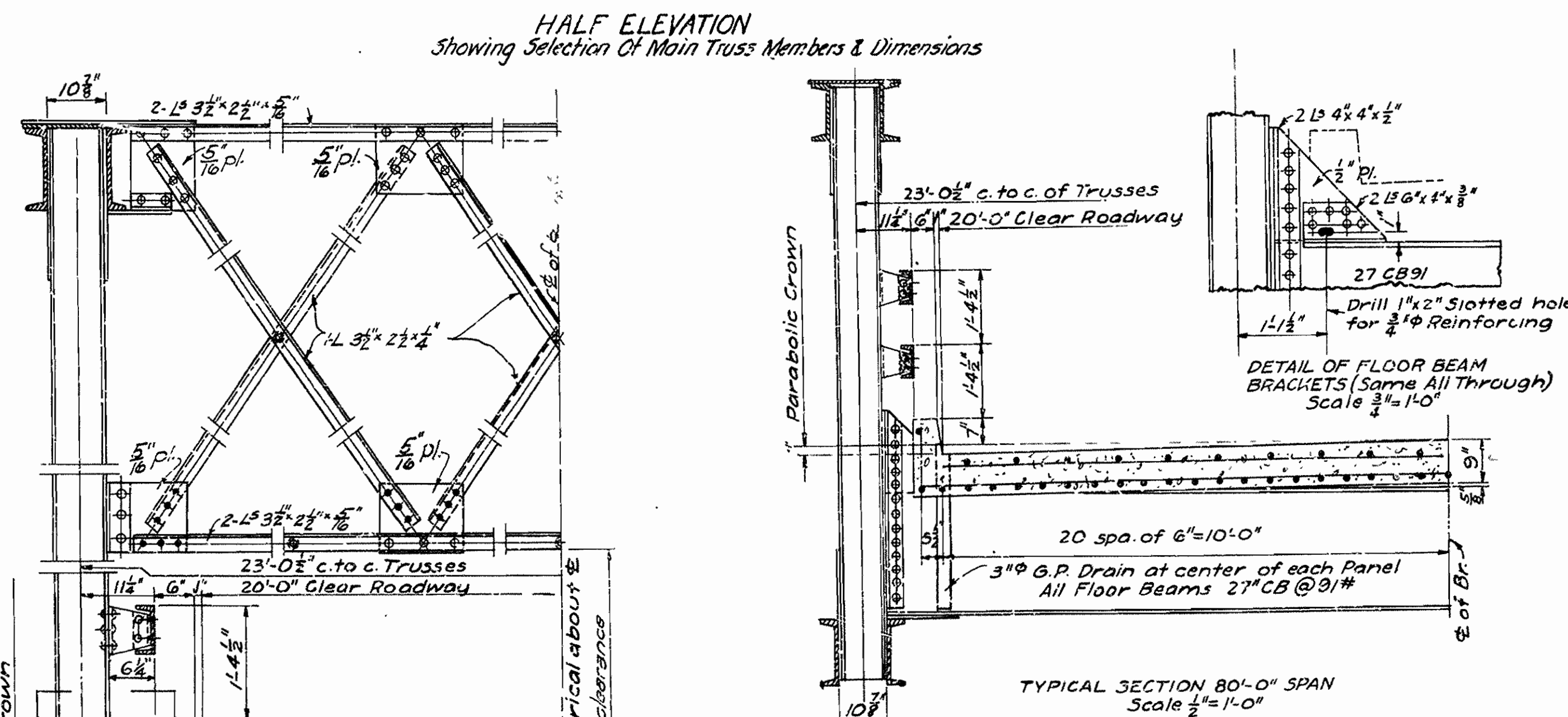
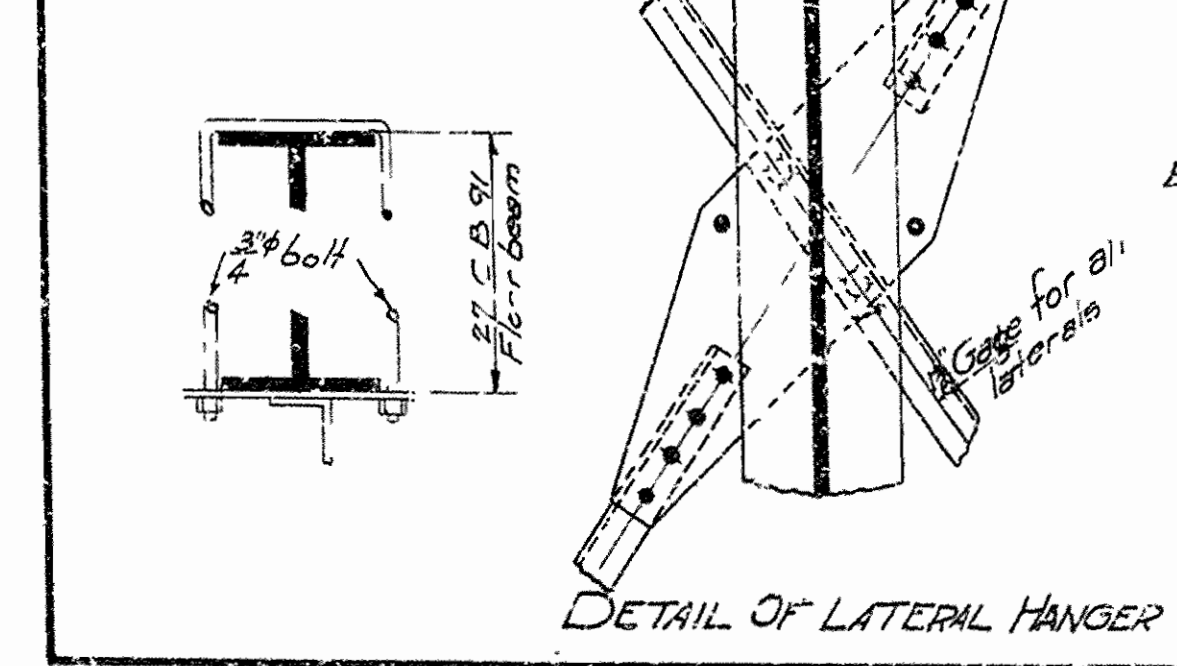
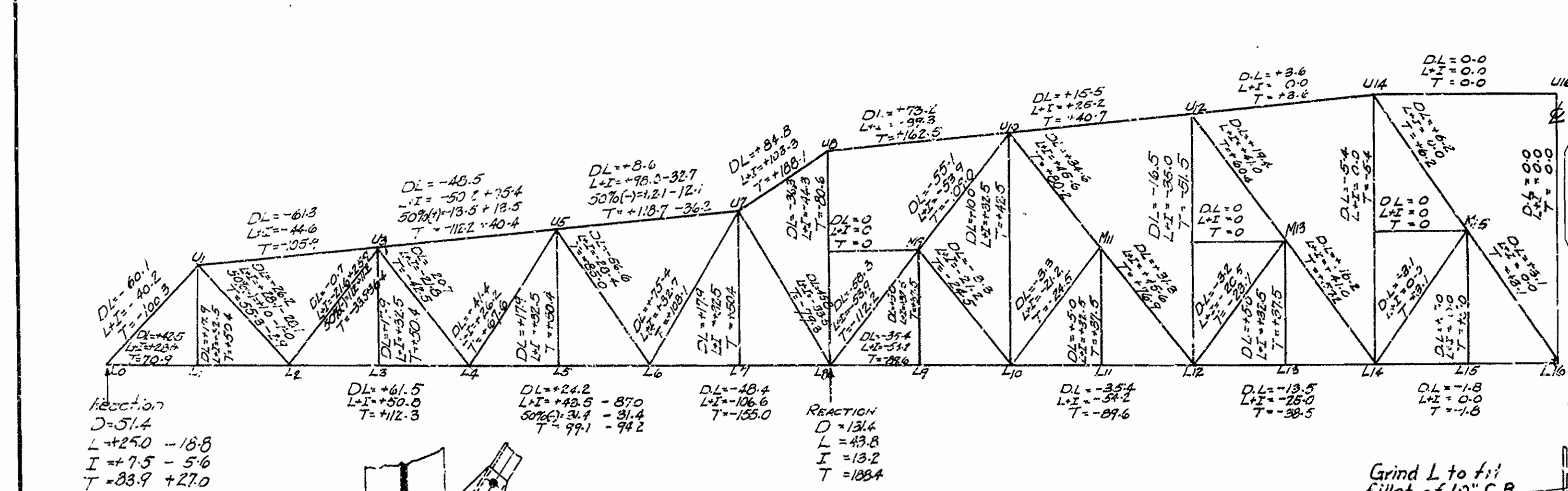
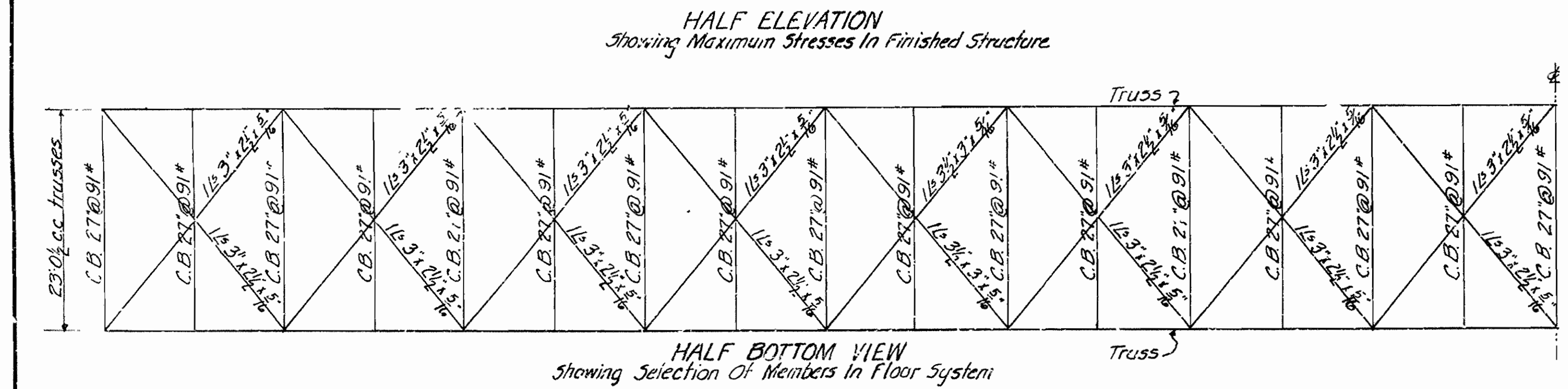
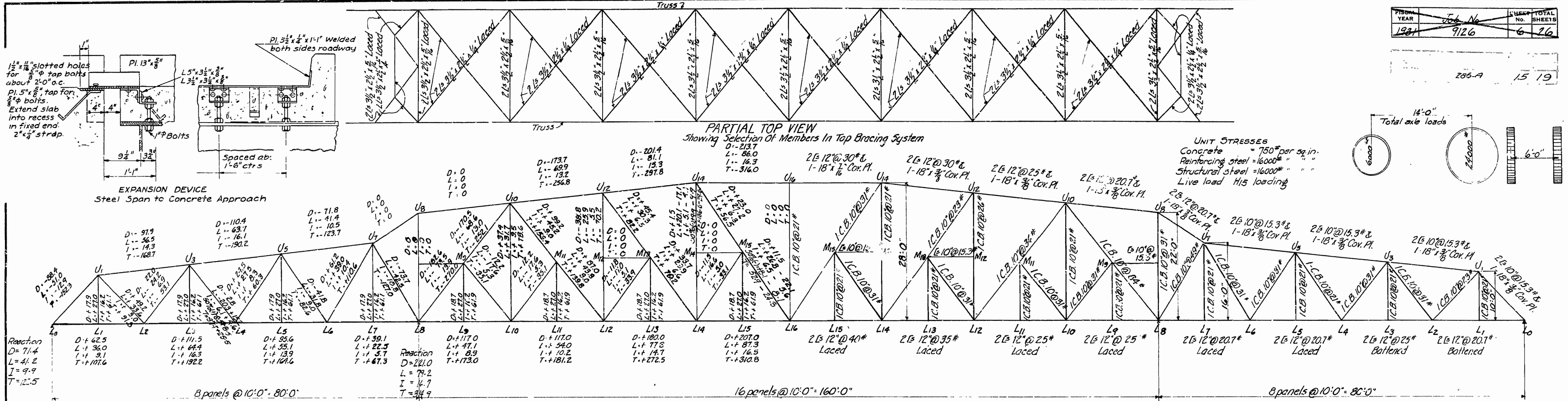
BRIDGE NO. 1689 DRAWING NO. 3271

N.B. Garner
BRIDGE ENGINEER

Scale: 1/2" = 1'

PROJECT YEAR	706 No	SHEET TOTAL
1931	9126	6 26

236-A 15 19



TRUSS DETAILS FOR BRIDGE OVER BUFFALO RIVER
ON SPER WILCOX ROAD, NEWTON CO., ARK.

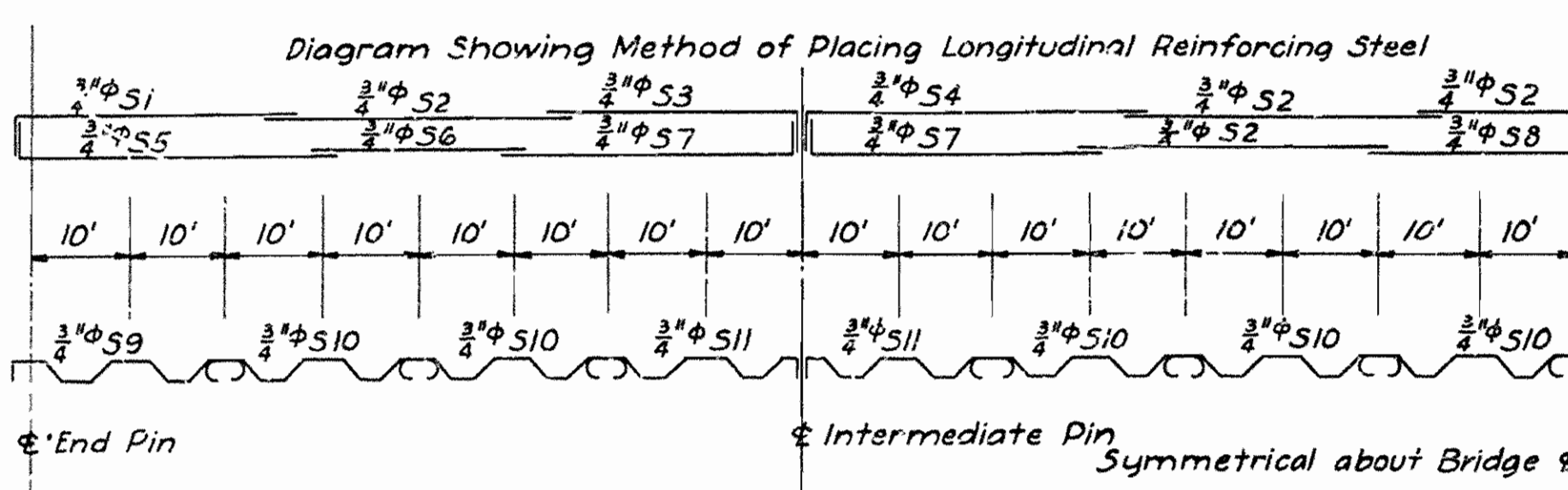
ROUTE 7 SEC. 15
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

Drawn By: NQE Date: 5-15-31
Traced By: NQE Date: 5-15-31
Checked By: LB Date: 6-3-31

BRIDGE NO. 1689 DRAWING NO. 3222

SECTION "A-A" Scale 3/4" = 1'-0"
SECTION AT L16 U16 Scale 3/4" = 1'-0"
SECTION L10 U10 similar except for every spacing; Section L14 U14 similar except for connection at L16.

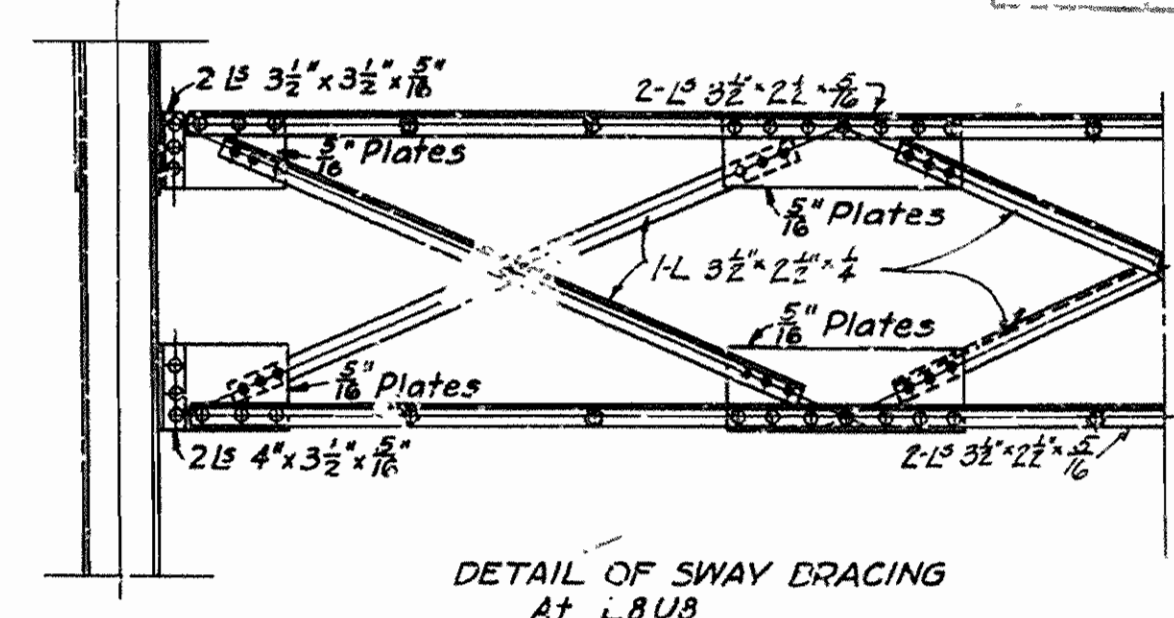
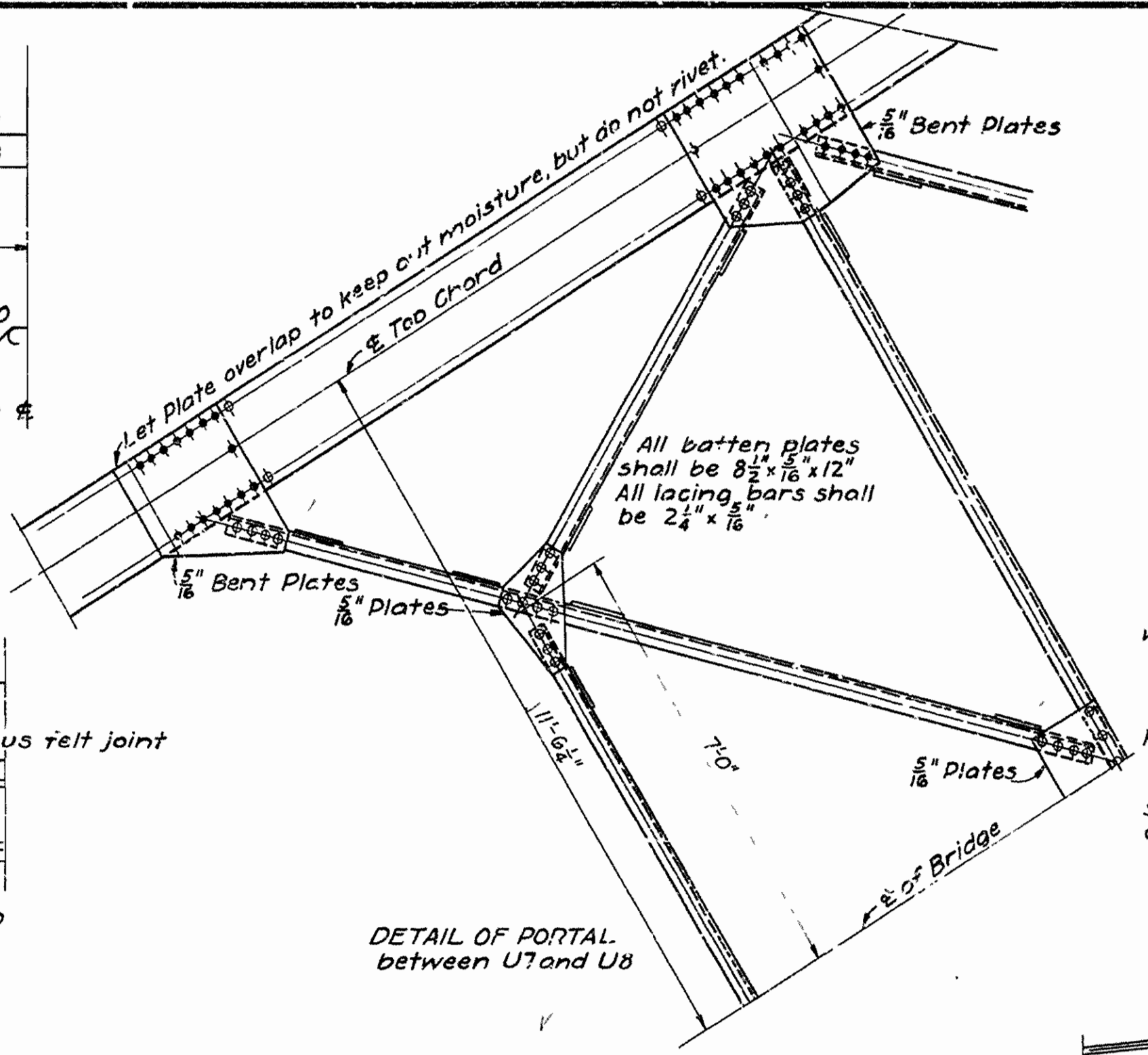
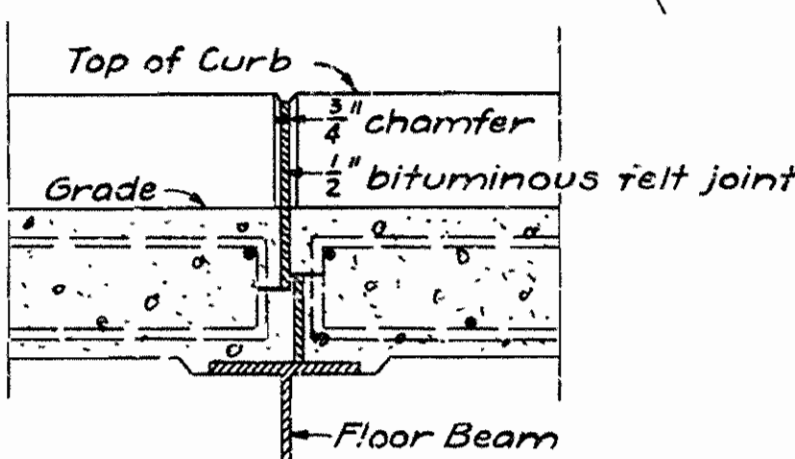
BRIDGE ENGINEER



Bending Diagrams

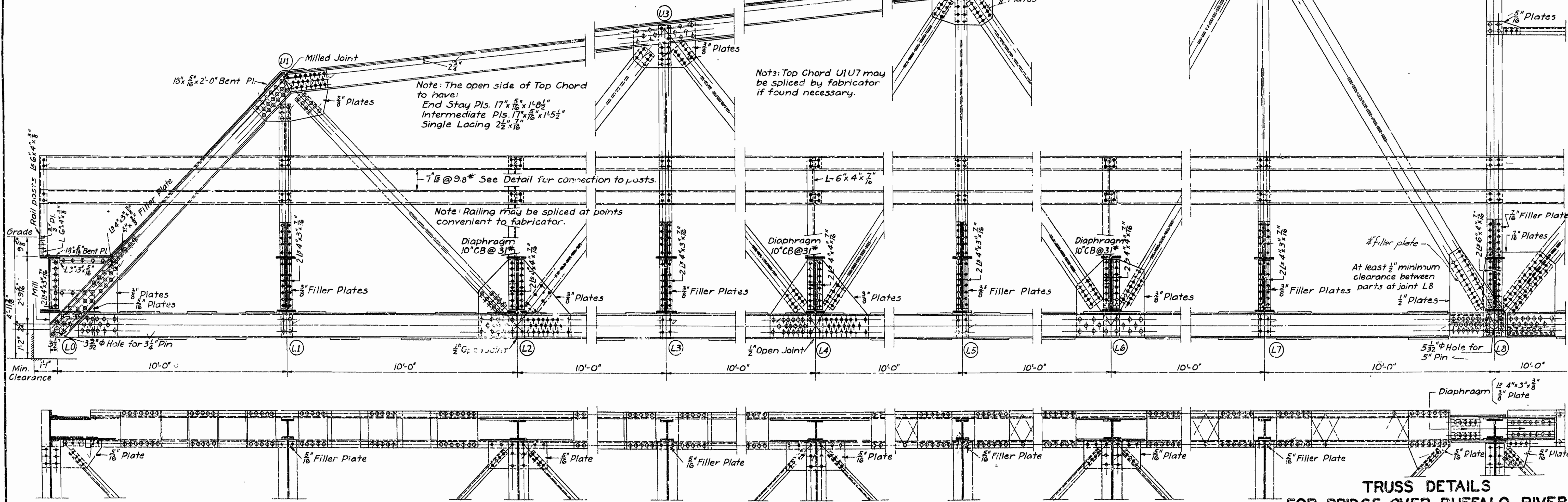
Bar Size	Length	Bending Diagram
S1	27'-3"	26'-10" S1
S3	26'-6"	26'-1 1/2" S3
S4	36'-6"	36'-1 1/2" S4
S5	32'-3"	31'-10" S5
S7	31'-6"	31'-1 1/2" S7

Bar Size	Length	Bending Diagram
S9	24'-6 1/2"	27 1/2" 5'-0" 5 1/2" 4'-1" 5 1/2" 5'-0" 5 1/2" 4'-1" 5 1/2"
S11	23'-10"	12'
S10	26'-4"	4 1/2" 5 1/2" 5'-0" 5 1/2" 4'-1" 5 1/2" 5'-0" 5 1/2" 4'-1" 5 1/2"
S12	23'-3"	20'-11"



Floor slab concrete to be Class "S" One inch has been added for wear.
All floor beams to be milled to exact length after framing angles have been riveted.
Shapes of equal or greater strength may be substituted for structural shapes shown; payment, however, will be made in accordance with sizes given on this plan.
This drawing shows general features of design only. Shop drawings shall be made in compliance with specifications and be approved before fabrication is begun.
Specifications: Arkansas Standard Road and Bridge Specifications, adopted May 30th, 1925 (U8) Milled Joint and as revised.

Notes
Rivets $\frac{3}{4}$ " open holes $\frac{13}{16}$ "
All holes in truss connections to be sub-punched $\frac{9}{16}$ " and reamed to size while truss is assembled; this applies to both field and shop rivets.
Floor beam connections to be sub-punched $\frac{9}{16}$ " and reamed to a metal template.
All field connections shall be riveted.
Shop paint: After being completely assembled and shop work finished, all pieces shall be given one coat of red lead and raw linseed oil before shipment.
Field paint: Apply two coats of aluminum paint.
All field rivet heads and marred places of shop paint are to be spot painted with red lead and raw linseed oil before first field coat is applied.
(Notes continued above)



TRUSS DETAILS
FOR BRIDGE OVER BUFFALO RIVER
JASPER-WILCOXON ROAD
NEWTON COUNTY
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

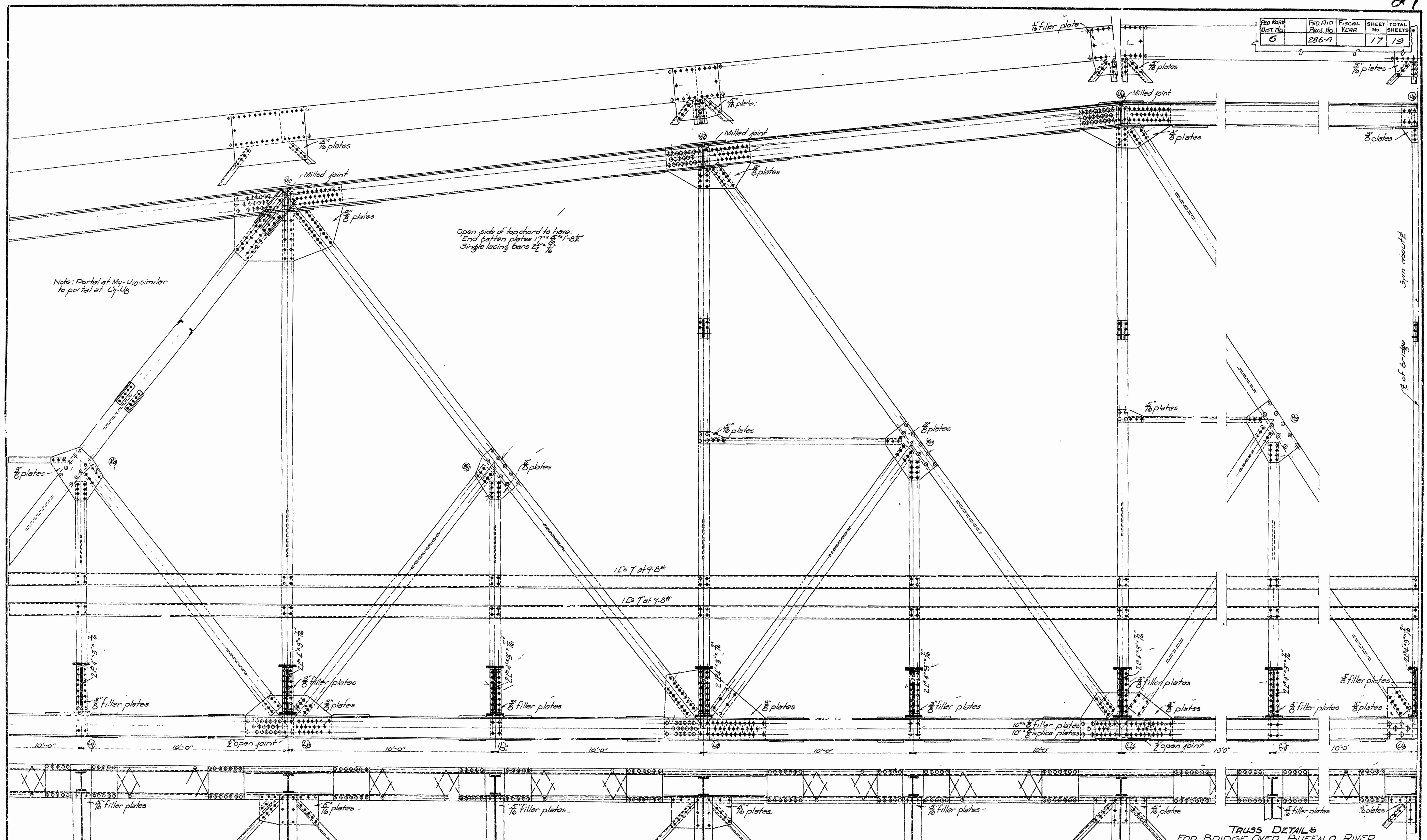
Drawn By: Noe Date: 5-21-31
Traced By: Noe Date: 5-28-31
Checked By: Noe Date: 6-2-31

BRIDGE NO. 1689 DRAWING NO. 3223

Scale: $\frac{1}{2}$ in. = 1 ft.

W. B. Lawrence
BRIDGE ENGINEER

FED. ROAD DIST. NO.	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	286-A	19	17	19



TRUSS DETAILS
 FOR BRIDGE OVER BUFFALO RIVER
 ON JASPER-WILCOX ROAD
 NEWTON COUNTY
 ROUTE 7 SE 5.15

ARKANSAS STATE HIGHWAY COMMISSION
 LITTLE ROCK, ARK.

Drawn By: *N.B. Lerner* Date: 5-23-31
 Traced By: *W.C. Lerner* Date: 5-23-31
 Checked By: *W.C. Lerner* Date: 5-23-31

BRIDGE NO. 1689 Scale: $\frac{1}{2}$ " = 1'-0"
 DRAWING NO. 3224

N.B. Lerner
 BRIDGE ENGINEER