

STATE OF ARKANSAS  
STATE HIGHWAY DEPARTMENT

PLAN OF PROPOSED BRIDGES  
ON  
SMACKOVER-CAMDEN ROAD  
OUACHITA COUNTY

TOTAL SHEETS	Job No.	SHEET No.	TOTAL SHEETS
16	7111	1	16

FED. ROAD DIST. No.	STATE	FED. AID PROJ. No.	FED. AID DIST. No.	FED. AID PROJ. No.
5	ARK.	285-B	1	6

Ref. Des. Smackover-Camden Rd. DC 1632

INDEX OF SHEETS

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" " 2	" " 1632	Layout Bridge No. 622
" " 3	" " 1634	Details of Substr. Br. No. 622
" " 4	" " 1635	Std. 3 Gir. R.C.D. Gir. Span 30'
" " 5	" " 1635	80' Steel Span
" " 2	" " 1635	Layout Br. No. 347
" " 3	" " 1636	Details of Substr. Br. No. 347
" " 4	" " 1637	Special R.C.D. Gir. Span
" " 5	" " 1004	Std. 3 Gir. R.C.D. Gir. Span 40'
" " 6	" " 1636-A	Add'l details of Substr. Br. No. 347

ROUTE 167 SEC. 3

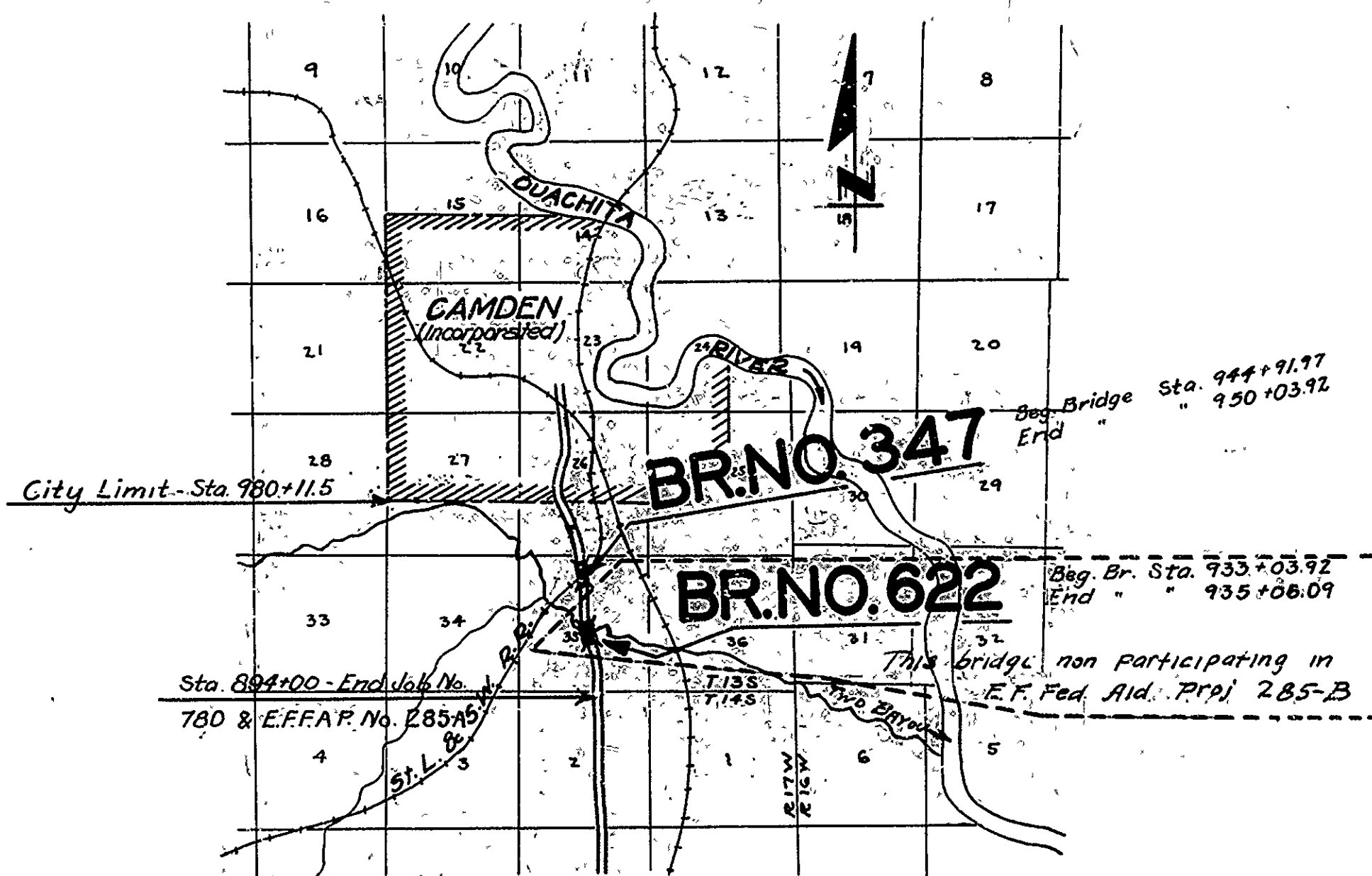
JOB NO 7111

EMERGENCY FINANCIAL FEDERAL AID PROJECT No. 285-B

QUANTITIES

Item No. 13	Dry Excavation for Strucs.	653.91	Cu. Yds.
" " 13	Wet	50.46	" "
" " 17	*Borrow	5492.1	" "
" " 54	Class 'A' Concrete	438.13	" "
" " 54	" 'S'	512.47	" "
" " 55	Reinforcing Steel	179.01	Lbs.
" " 68	Precast Concrete Piling	1152.9	Lin. Ft.
" " 69	Rip-Rap (1'-0" Thick)	155.7	Cu. Yds.
" " 74	Conc. Railing	1037.58	Lin. Ft.
" " S.P.	Conc. Pile Cutoff	111.9	" "

\* Non-participating in Federal Aid



SPECIAL PROVISIONS

Opening Borrow Pits	1	Sheets
Filling Stump Holes	1	" "
Precast Concrete Piling	3	" "
Seal Concrete	2	" "
Bond for B.D. Company	1	" "
Engineer's Field Office	1	" "
Rip Rap	1	" "
Work Order	1	" "
Untreated Timber Piling	12	" "

Specifications approved by Chief, Bureau of Public Roads, September 28, 1925, and adopted by State Highway Commission May 30, 1925, with revisions and Special Provisions as follows:

REVISIONS

Pamphlet A	Revised Sept. 1, 1928	Approved June 1, 1929
" B	" "	" "
" C	" "	" "
" D	July 1, 1928	Nov. 24, 1928
" E	" "	" "
" F	" "	" "
" G	" "	" "
" H	" "	" "
" I	" "	" "
" J	Jan. 1, 1929	June 1, 1929
" K	" "	" "
" L	Jan. 1, 1929	June 1, 1929

LAYOUT

Scale: 1"=1 Mi.

JOB NO. 7111  
 LENGTH OF PROJECT = 890'-0"  
 LENGTH OF BRIDGE = 714'-11"  
 LENGTH OF EMBANKMENT = 175'-10"  
 E.F. F. AID PROJ. No. 285-B  
 GROSS LENGTH OF PROJ. = 511'-11 1/2" = 0.096 MI.  
 NET " " " = 511'-11 1/2" = 0.096 "

Revised E.F.F. No. 5-28-32 DMK

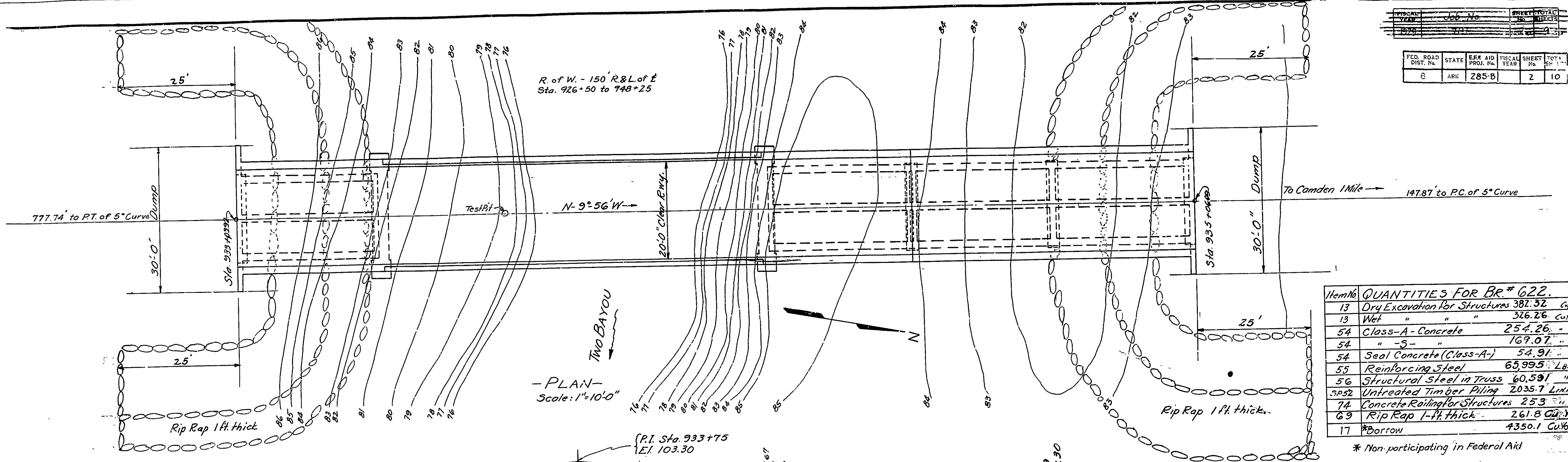
W.B. Lawrence  
BRIDGE ENGINEER

APPROVED  
 COMMISSIONER - STATE LANDS, HIGHWAYS AND IMPROVEMENTS  
 APPROVED  
 STATE HIGHWAY ENGINEER  
 RECOMMENDED FOR APPROVAL  
 DISTRICT ENGINEER - U.S. BUREAU OF PUBLIC ROADS  
 RECOMMENDED FOR APPROVAL  
 CITY ENGINEER - U.S. BUREAU OF PUBLIC ROADS  
 APPROVED  
 DIRECTOR - U.S. BUREAU OF PUBLIC ROADS

BRIDGE No. 622-347 DRAWING No. 1637

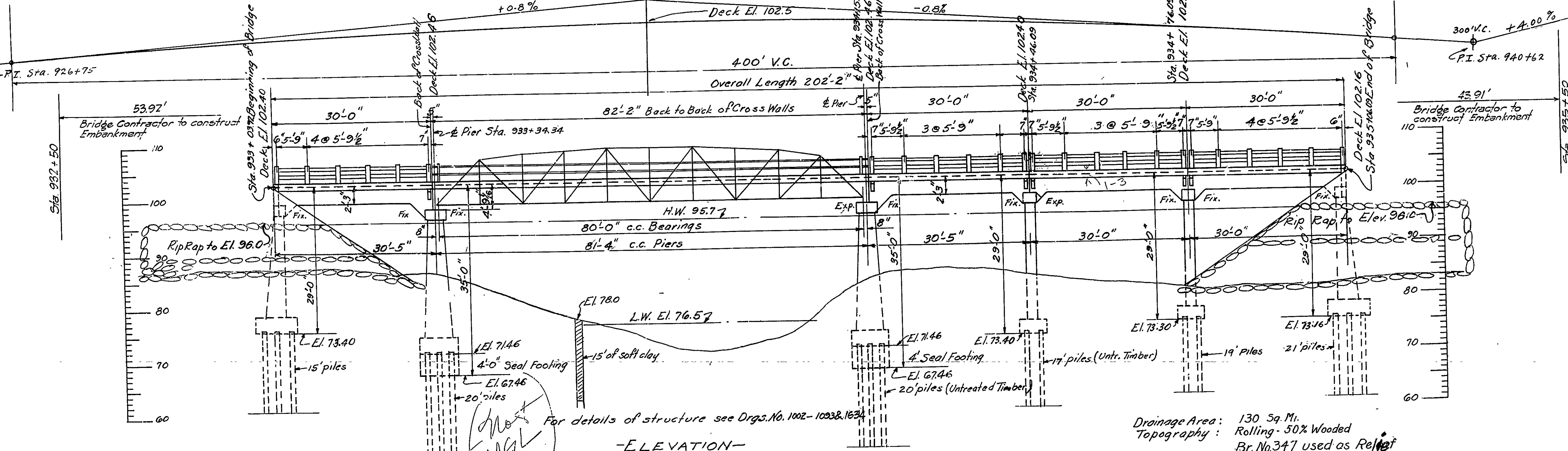
FISCAL YEAR	1979	PROJECT No.	126	SHEET No.	10
DIST. No.	6	STATE	ARK	FISCAL YEAR	285-B
			SHEET No.	2	TOTAL SHEETS
				10	

FED. ROAD DIST. No.	6	STATE	ARK	FISCAL YEAR	285-B	SHEET No.	2	TOTAL SHEETS	10
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Item No.	QUANTITIES FOR BR.# 622.	Units
13	Dry Excavation for Structures	382.32 cu yd
13	Wet " " " "	326.26 cu yd
54	Class-A-Concrete	254.26 cu yd
54	" -3-	169.07 cu yd
54	Seal Concrete (Class-A)	54.91 cu yd
55	Reinforcing Steel	65,995 lbs
56	Structural Steel in Truss	60,591 lbs
5652	Untreated Timber Piling	2035.7 LMF
74	Concrete Railing for Structures	25.3 cu yd
69	Rip Rap 1-ft. thick	261.8 cu yd
17	*Borrow	4350.1 cu yds

\* Non-participating in Federal Aid



B.M. Nail in root of Water Oak 200' Left of Sta. 935+35 Elev. 88.56  
 Note: Lengths of piling shown are assumed for estimating quantities only. Actual lengths to be determined in the field. Bearing capacity 15T.

-ELEVATION-  
 Scale: 1"=10'-0"

Drainage Area: 130 Sq. Mi.  
 Topography: Rolling - 50% Wooded  
 Br. No. 347 used as Relief

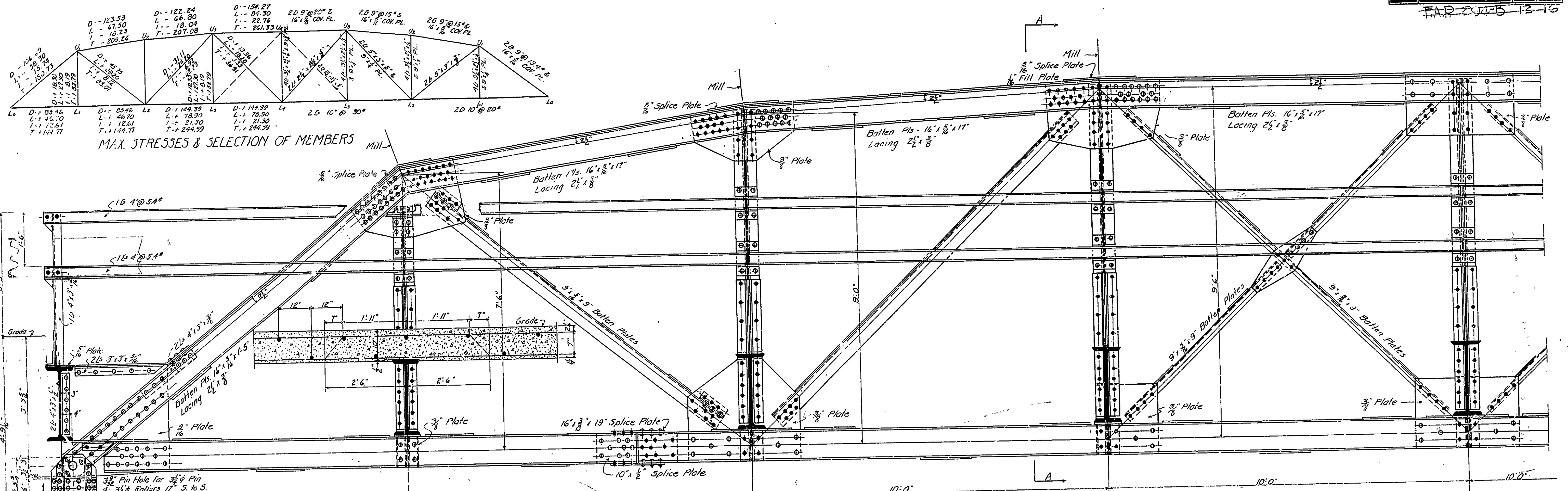
Revised E.A.P. No. S-31-32 SHM

LAYOUT OF  
 BRIDGE OVER TWO BAYOU  
 1 MILE SO. OF CAMDEN, OUACHITA COUNTY,  
 ROUTE 167 SEC. 3  
 ARKANSAS STATE HIGHWAY DEPARTMENT  
 LITTLE ROCK, ARK.

Drawn By: *LLC* Date: 2-1-28  
 Traced By: *LLC* Date: 2-8-28  
 Checked By: \_\_\_\_\_ Date: \_\_\_\_\_  
 BRIDGE NO. 622  
 Scale: 1 in. = 10 ft. (Not To Scale)  
 DRAWING NO. 1633

*N.B. Lane*  
 BRIDGE ENGINEER



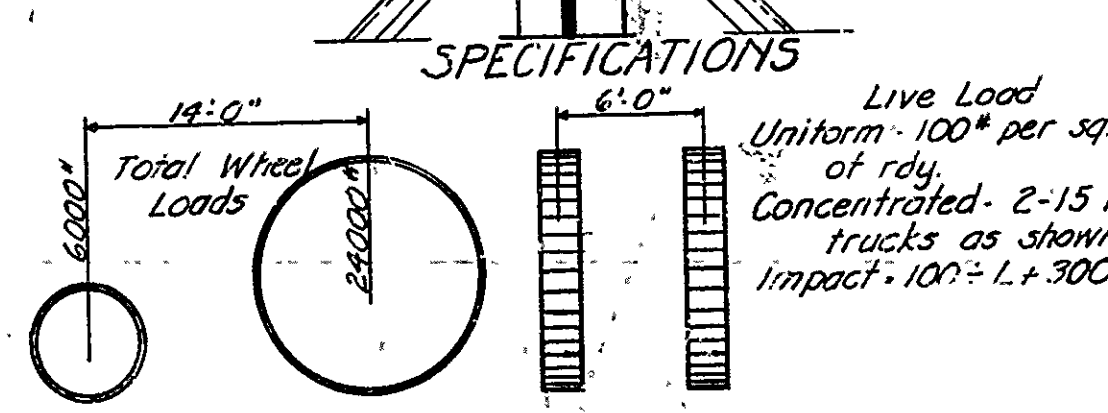
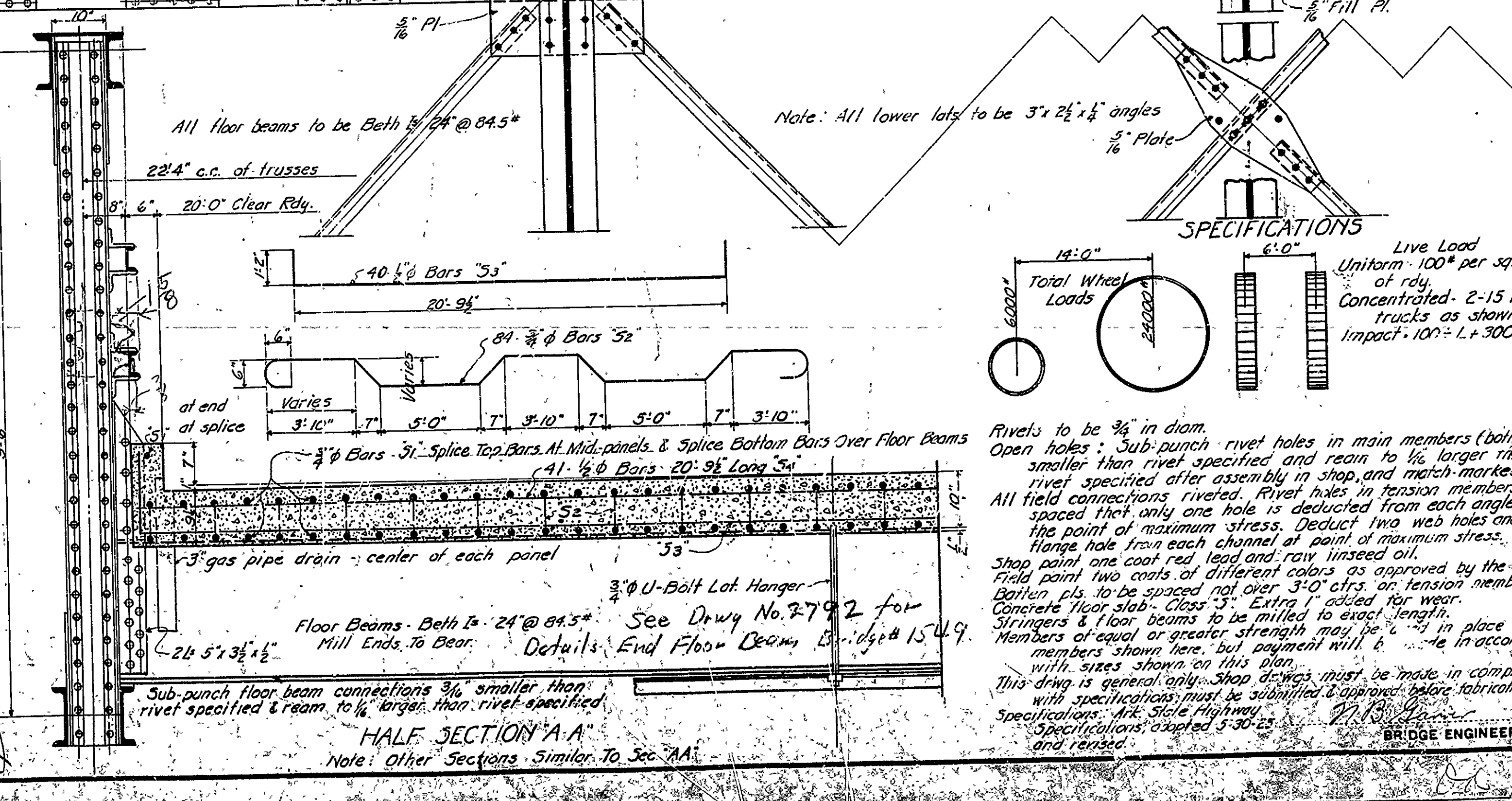
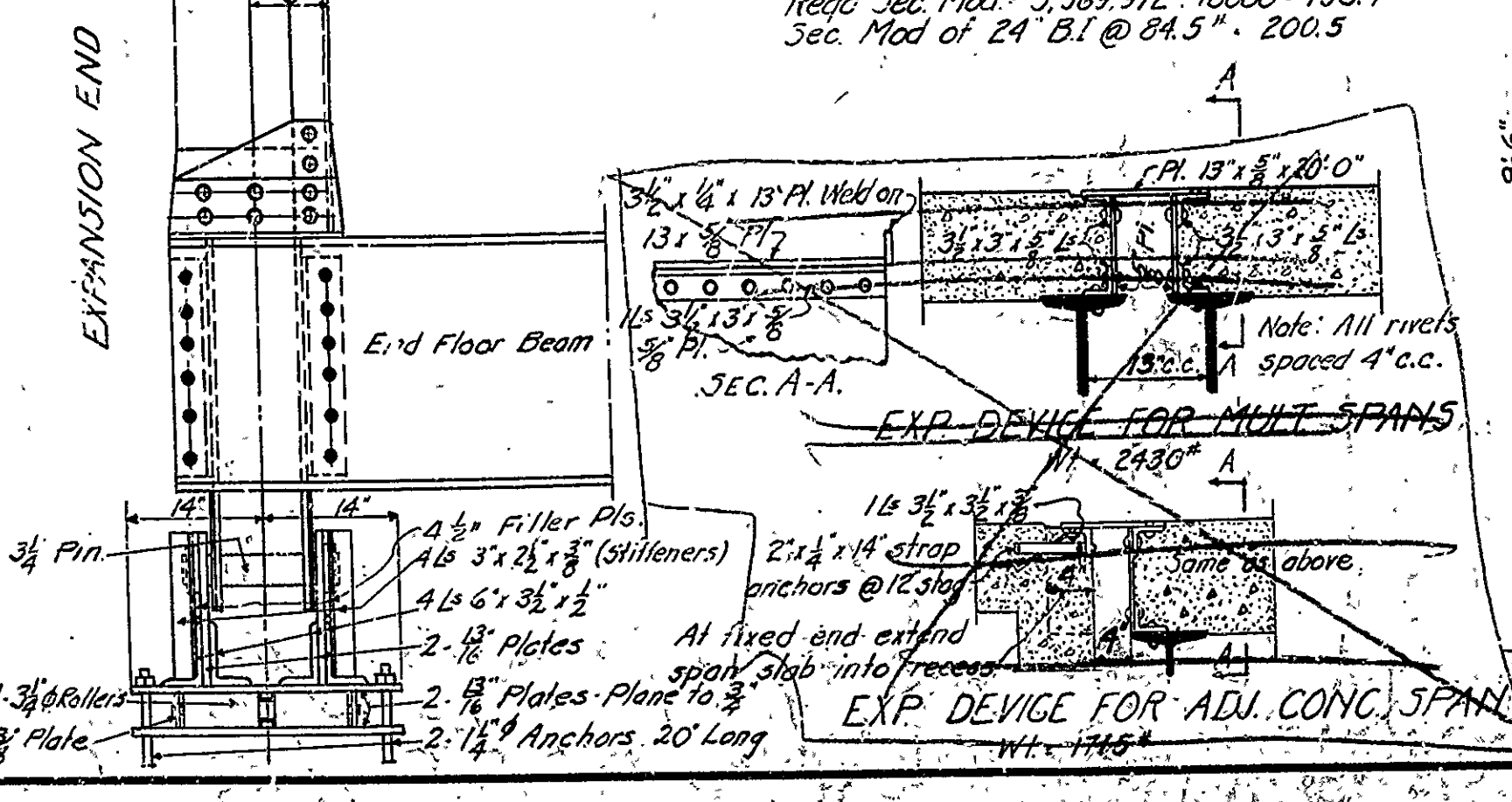


**FLOOR BEAM DATA**

D.L. M.	31,512 x 22.33 x 1.5	1,055,000**
L. L. M.		1,939,592**
Imp. Mom. @ 30'		580,380**
Total Mom.		3,569,972**
Reqd. Sec. Mod.	3,569,972 ÷ 18,000 = 198.4	
Sec. Mod. of 24" B.I. @ 84.5"	200.5	

**ESTIMATED QUANTITIES**

Structural Steel Without Expansion Devices	61,285 Lbs. (Sec. M)
Reinforcing Steel (0.10 O. of End Floor Beams)	10,972 Lbs.
Class 5 Concrete (0.10 O. of End Floor Beams)	54.9 Cu. Yds.



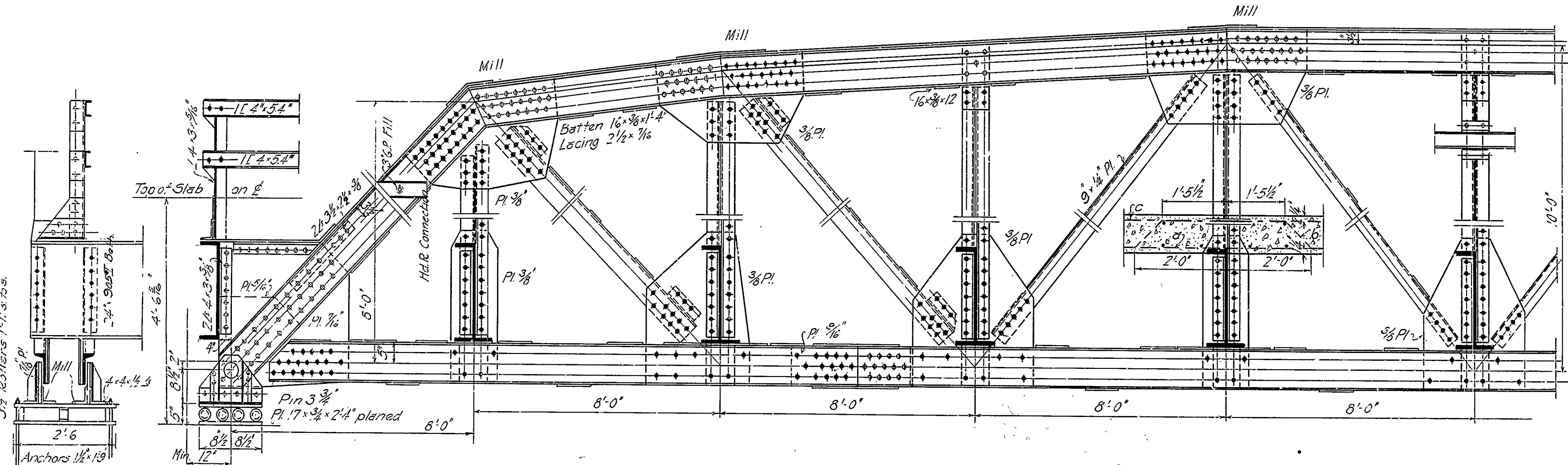
This drawing included in Job 3447 for information only.

**STANDARD PLAN**  
**80' 0" LOW TRUSS SPAN**  
**20' 0" CLEAR ROADWAY**  
**ARKANSAS STATE HIGHWAY DEPARTMENT**  
**LITTLE ROCK, ARK.**

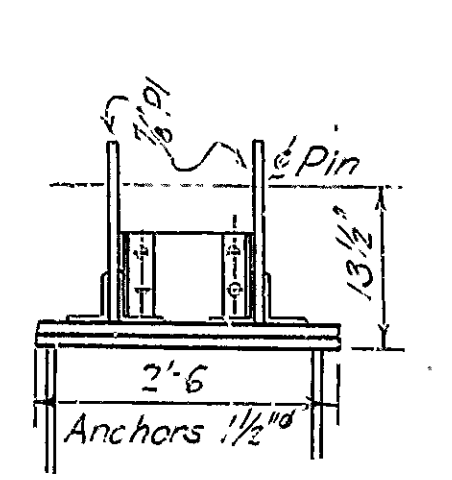
Drawn By: NOE Date: [ ]  
 Traced By: NOE Date: [ ]  
 Checked By: Beck Date: 7-11-26  
 Bridge No. [ ] DRAWING NO. 1093



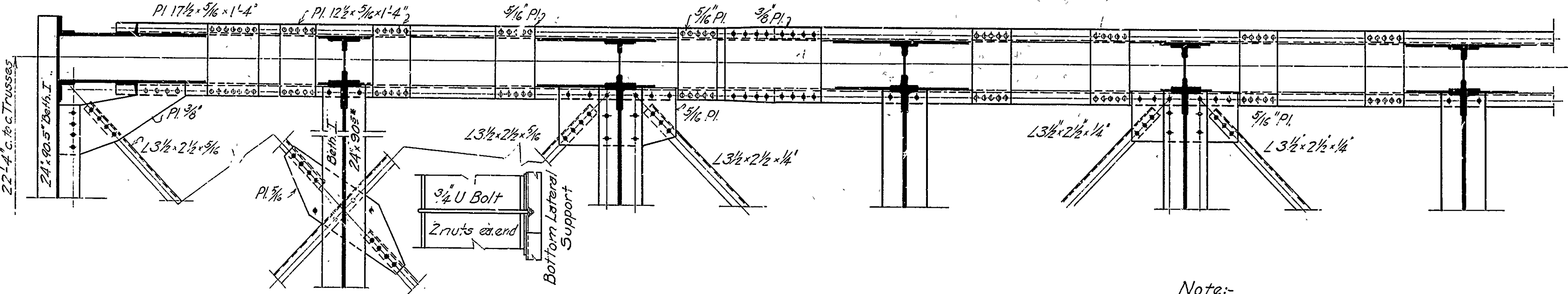
FED. ROAD No.	STATE	FED. AID PROJECT	FISCAL YEAR	SHEET No.	TOTAL SHEETS
6	ARK.				
JOB No. 10532					



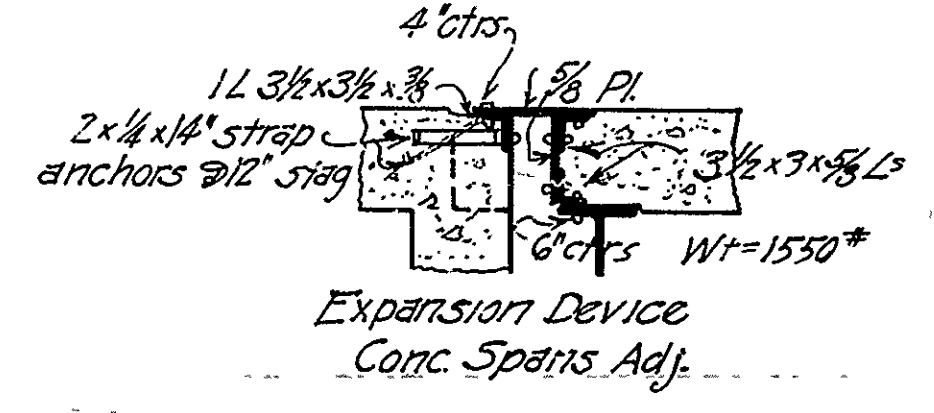
EXPANSION SHOE



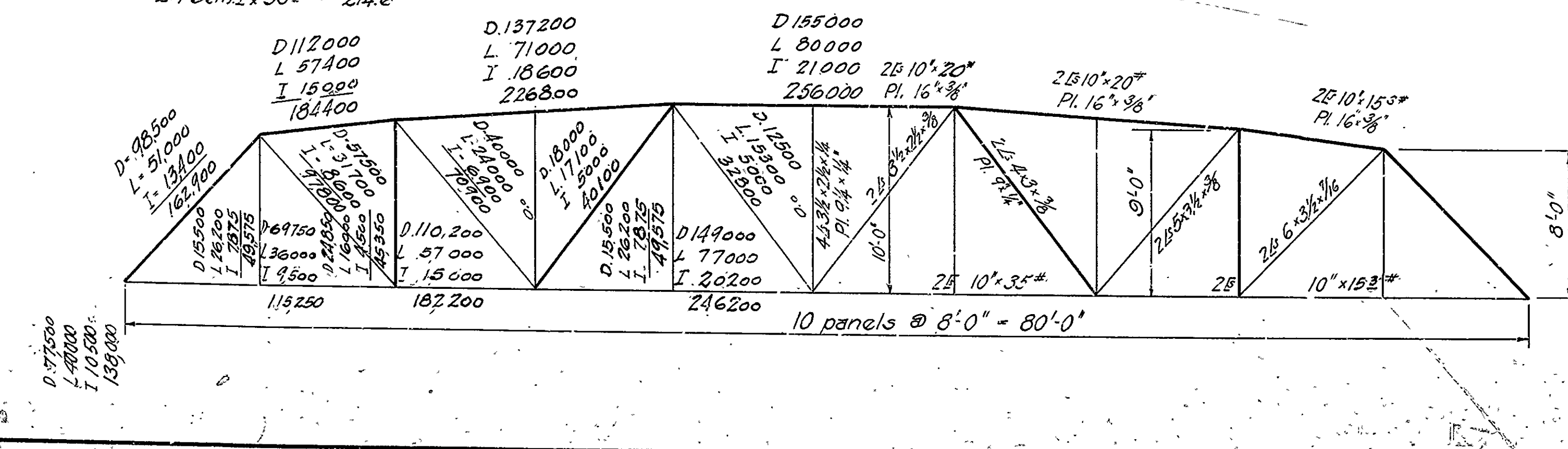
FIXED SHOE



Floor Beams  
 D.L.M. - 68800  
 L.L.M. - 163000  
 I.M. - 48700  
 Total 280500  
 $S = \frac{280,500 \times 12}{16,000} = 210.3$   
 $24' \text{ Beth. I. } \times 90\text{'s} = 214.6$



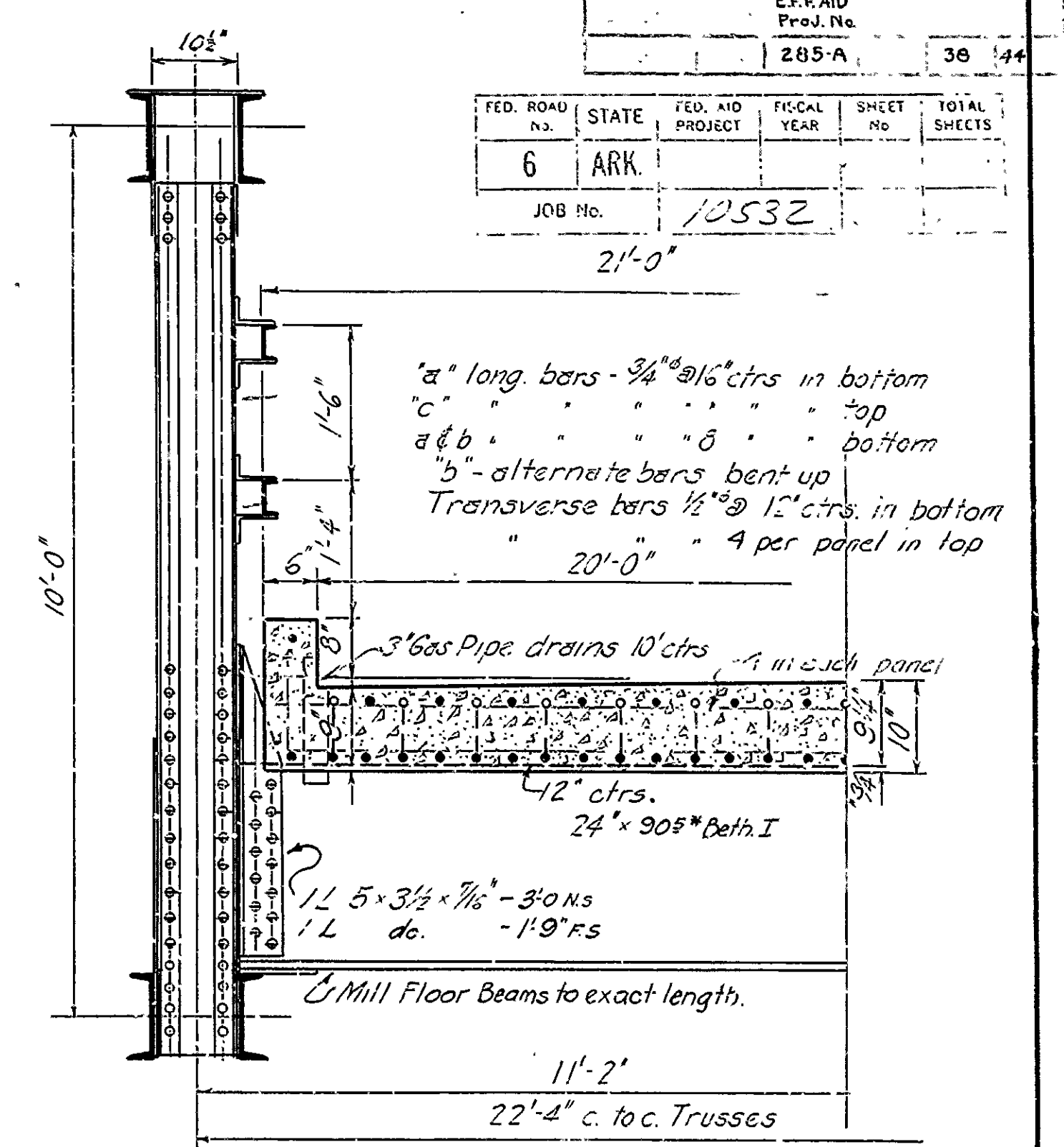
Note:-  
 This drawing is general.  
 Shop drawings must be submitted  
 and approved before fabrication is  
 begun.



QUANTITIES  
 Struct. Steel 20,603# Shop Wt.  
 Rein. Steel 7925#  
 Conc. 'S' (81'6") 534 cu yds.

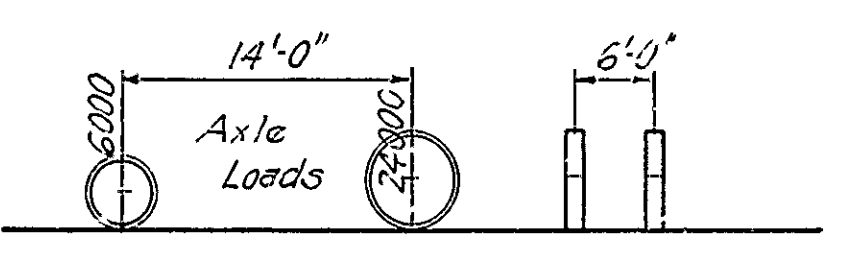
*N.B. Gannett*  
 Bridge Engineer

Revised E.F. A. No. 5-10-32 J.H.K.  
 Sta. 165.



PARTIAL SECTION

SPECIFICATIONS



LIVE LOAD:- Uniform-100lbs per sq. ft. of Roadway  
 Concentrated- 2-15Ton Trucks as shown  
 Impact =  $\frac{100}{L+300}$   
 Unit Stresses:- See Ark. Highway Dept. Specif. 7/30/25  
 Rivets:-  $\frac{3}{4}$ " diameter  
 Open Holes:- Rivet holes in main members punch  $\frac{1}{8}$ " smaller than rivet. During shop assembly ream to  $\frac{1}{16}$ " larger than rivet specified  
 All field connections riveted. Rivet holes in tension members so spaced that only one hole is deducted from each angle at point of maximum stress. Deduct two holes in each channel  
 Shop Paint:- One coat red lead & raw linseed oil.  
 Field Paint:- Two coats of different colors as approved  
 Batten Plates:- Spaced not over 3'-0" centers on tension members  
 Concrete: Floor slab Class 'S' Extra 1" was added for wear

This drawing included in Job No. 10532  
 for general information only.

STANDARD PLAN  
 80'-0" STEEL HIGHWAY TRUSS

20'-0" Roadway Concrete Floor

ARKANSAS HIGHWAY DEPARTMENT  
 LITTLE ROCK, ARK.

Designed By \_\_\_\_\_ Date \_\_\_\_\_  
 Traced By \_\_\_\_\_ Date \_\_\_\_\_  
 Checked By \_\_\_\_\_ Date \_\_\_\_\_



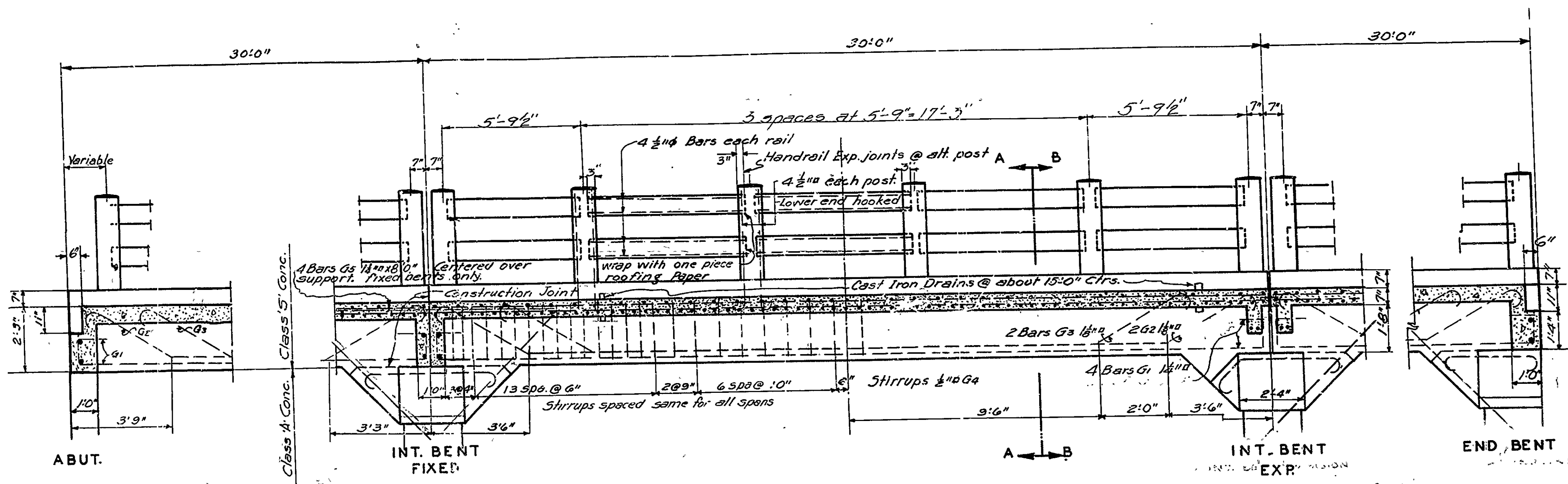
YEAR	NO.	SHEETS
	5	

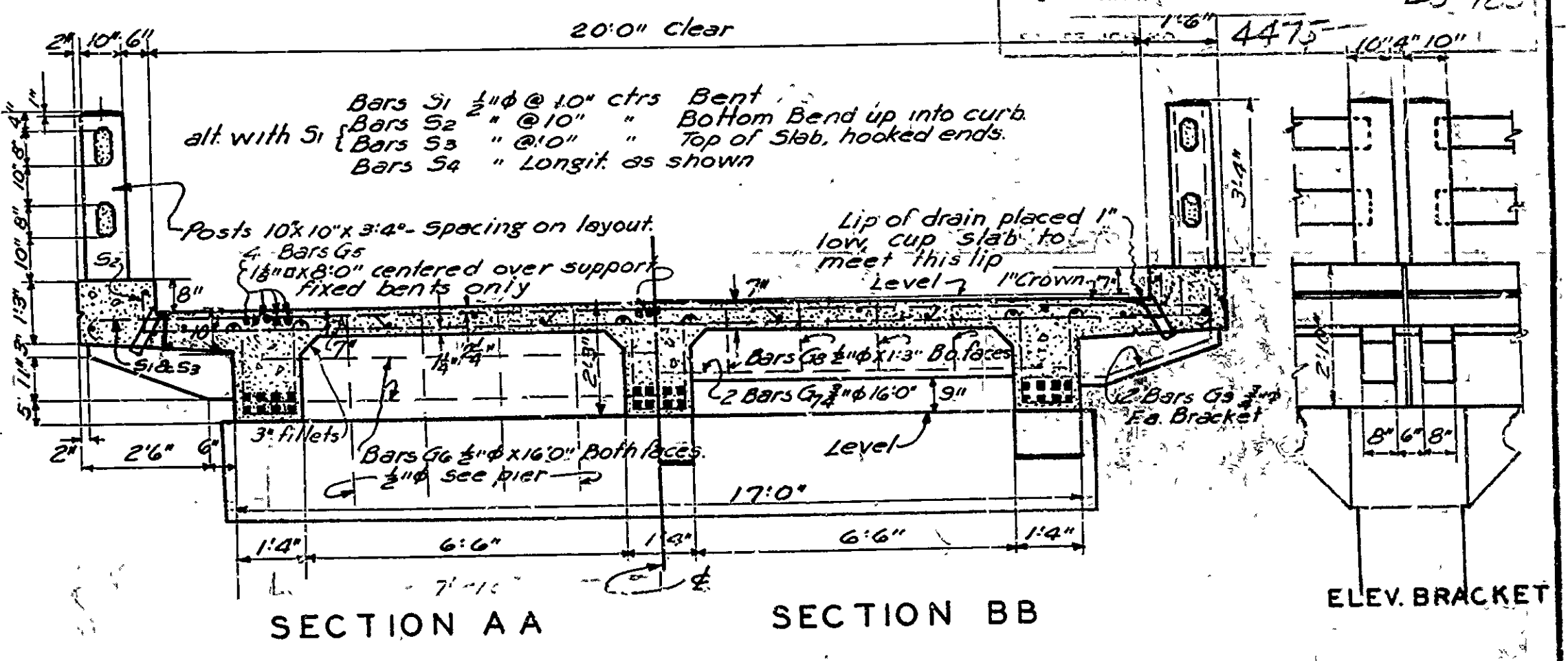
FED. ROAD DIST. No.	STATE	FED. AID PROJ. No.	FISCAL YEAR	DESIGN NO.	SHEET NO.	TOTAL SHEETS
0	ARK.	2400	40	45	185	

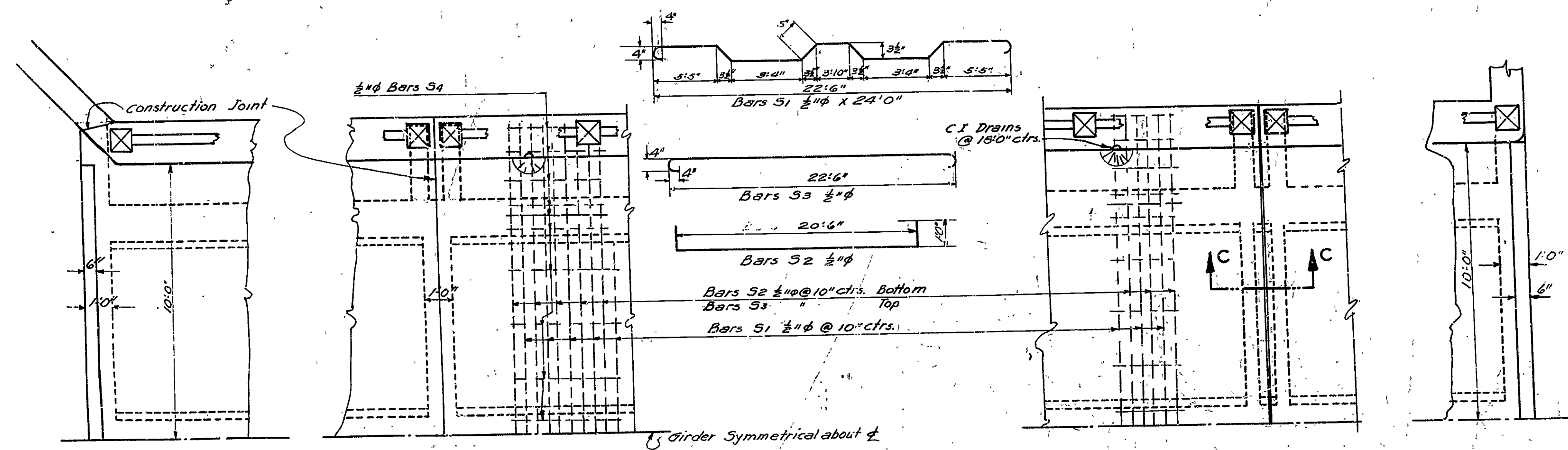
STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
ARK.	4475	45	185



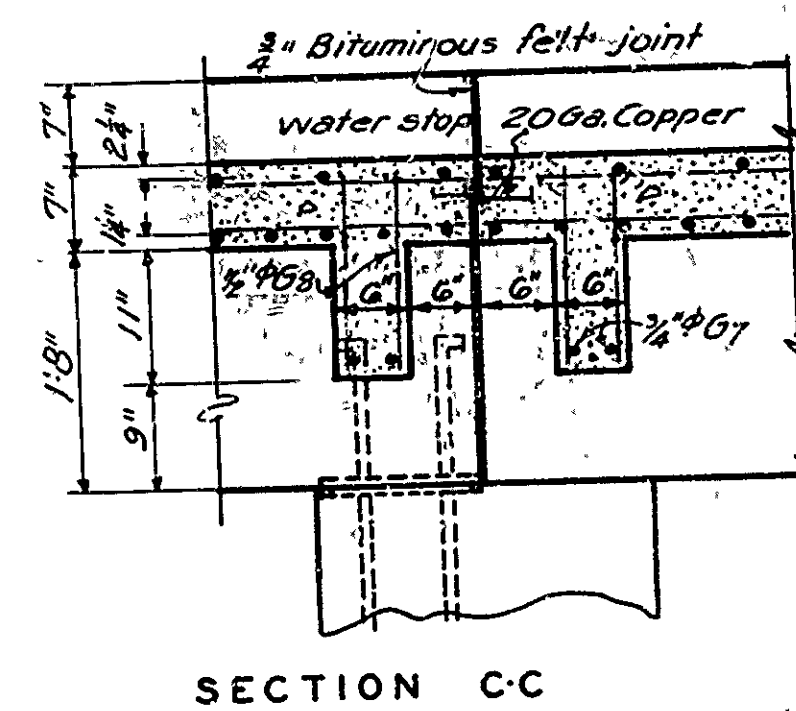
LONGITUDINAL SECTION



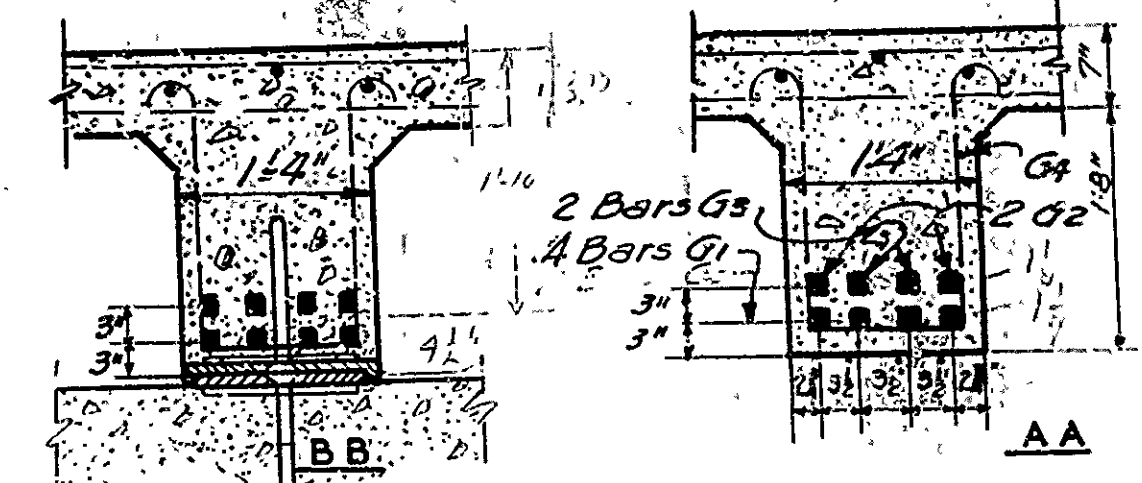
SECTION A A SECTION B B ELEV. BRACKET



TYPICAL PLAN DETAILS



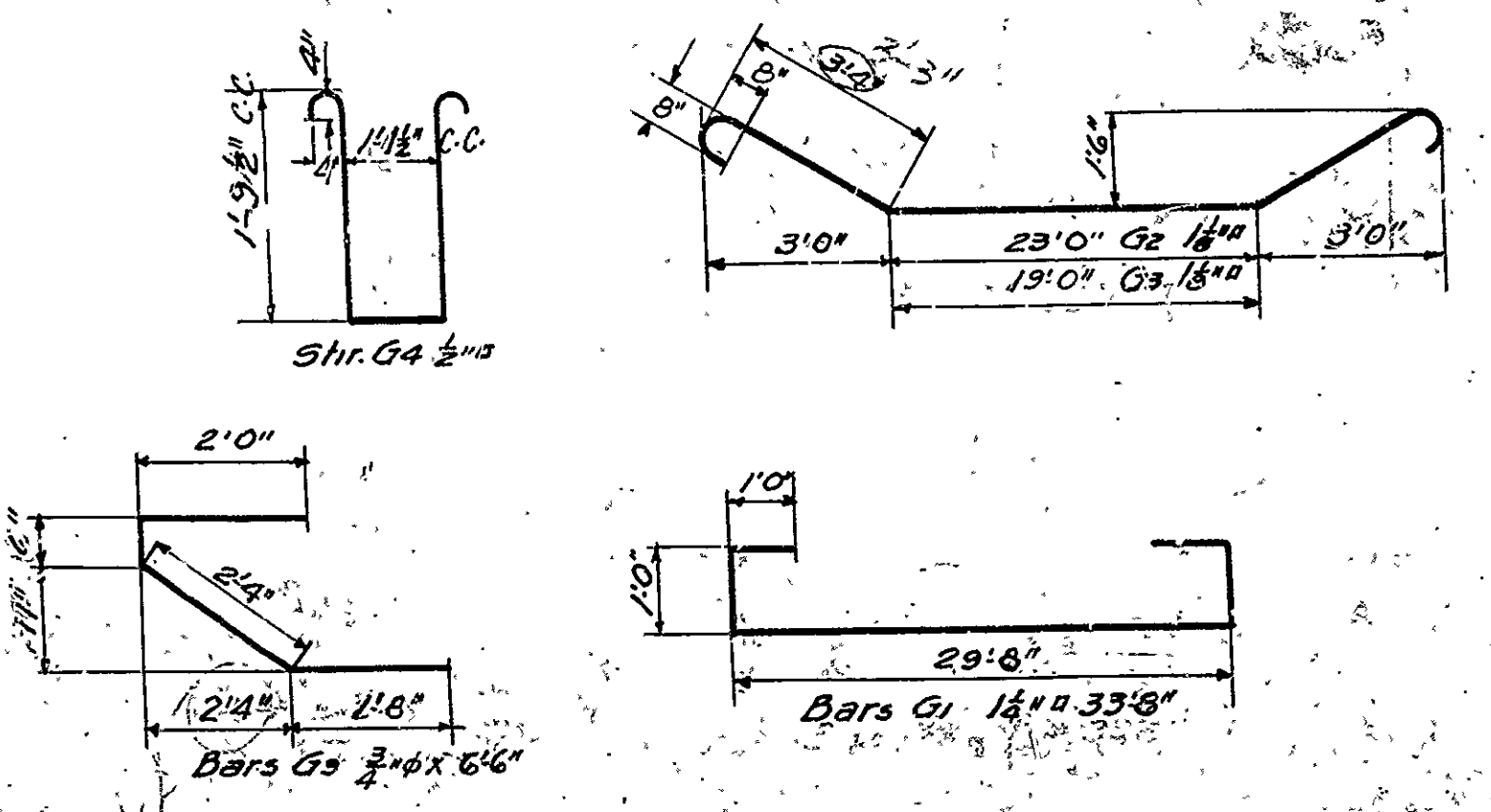
SECTION C C



TYPICAL SECTIONS THRU GIRDERS

**GENERAL NOTES**  
 All exposed corners to have 3/4\"/>

Note: This Drawing included in Job No. 4475 for reference only.



DETAIL OF BRONZE EXPANSION PLATE

Bronze to be of Class C grade. Plates to be placed in direction of movement. 3 pair of plates required for each expansion joint.

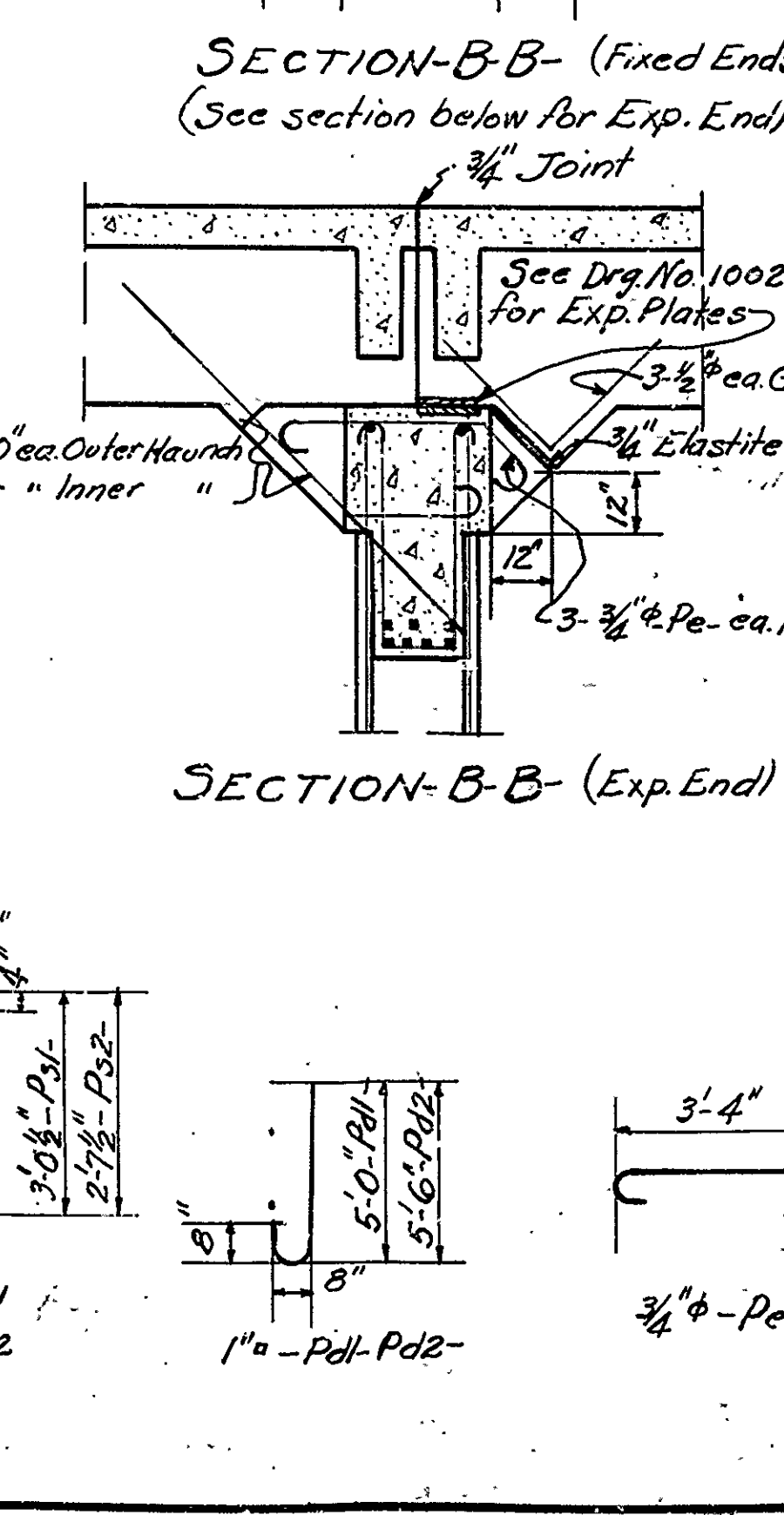
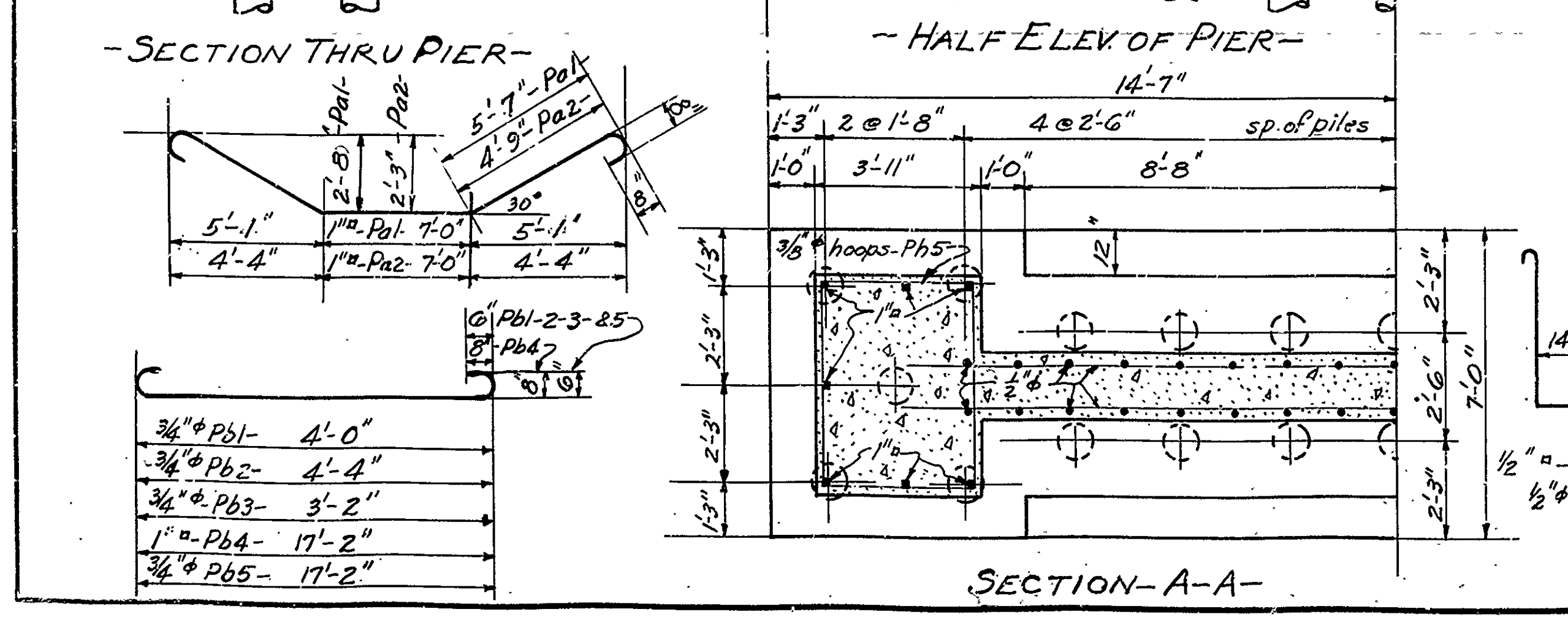
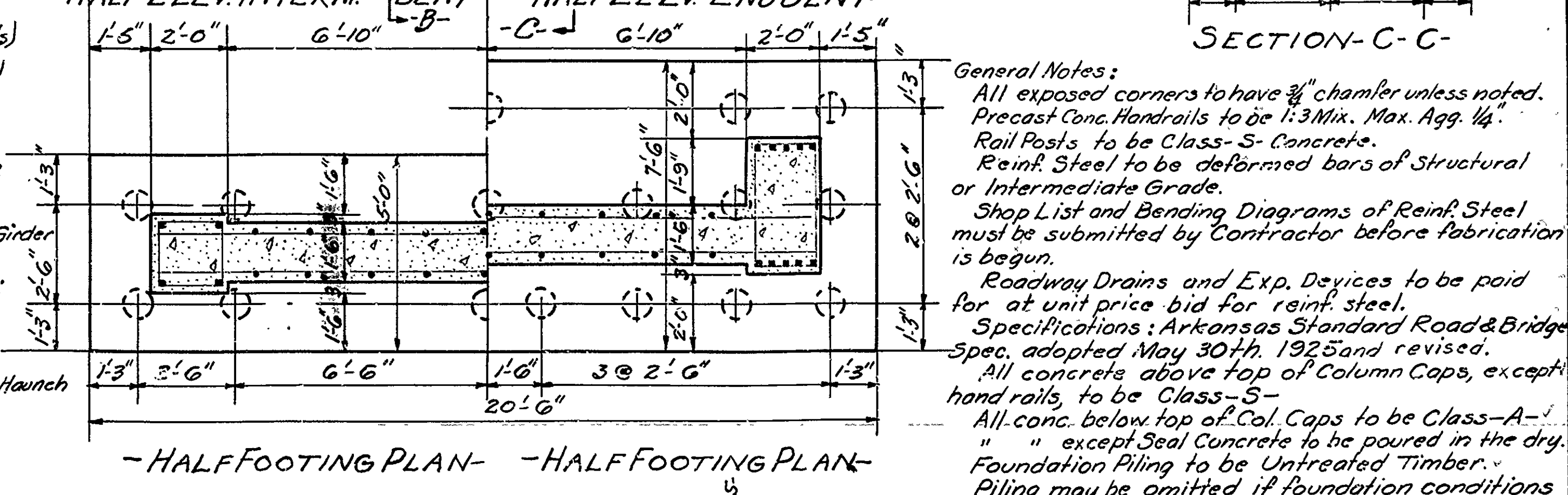
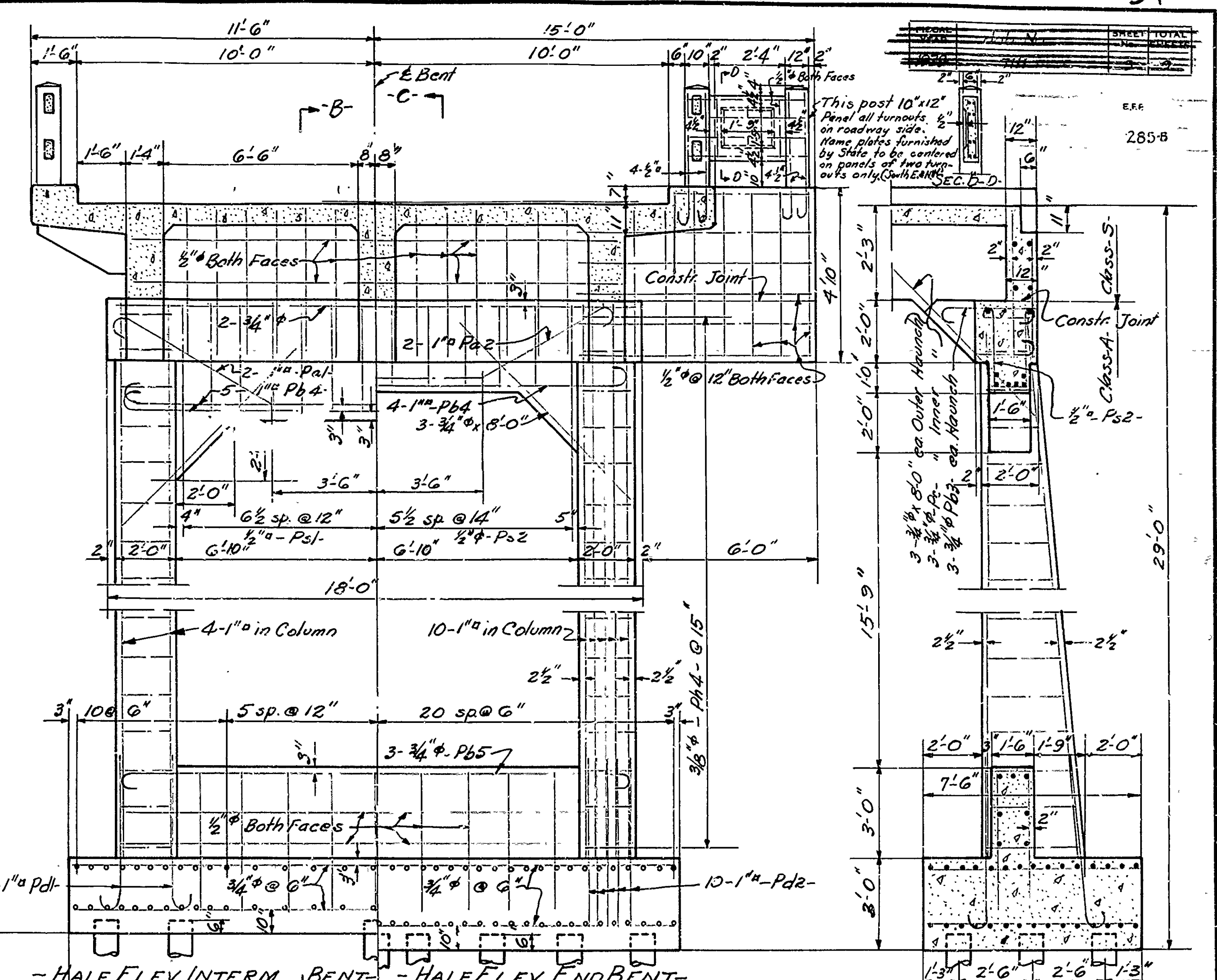
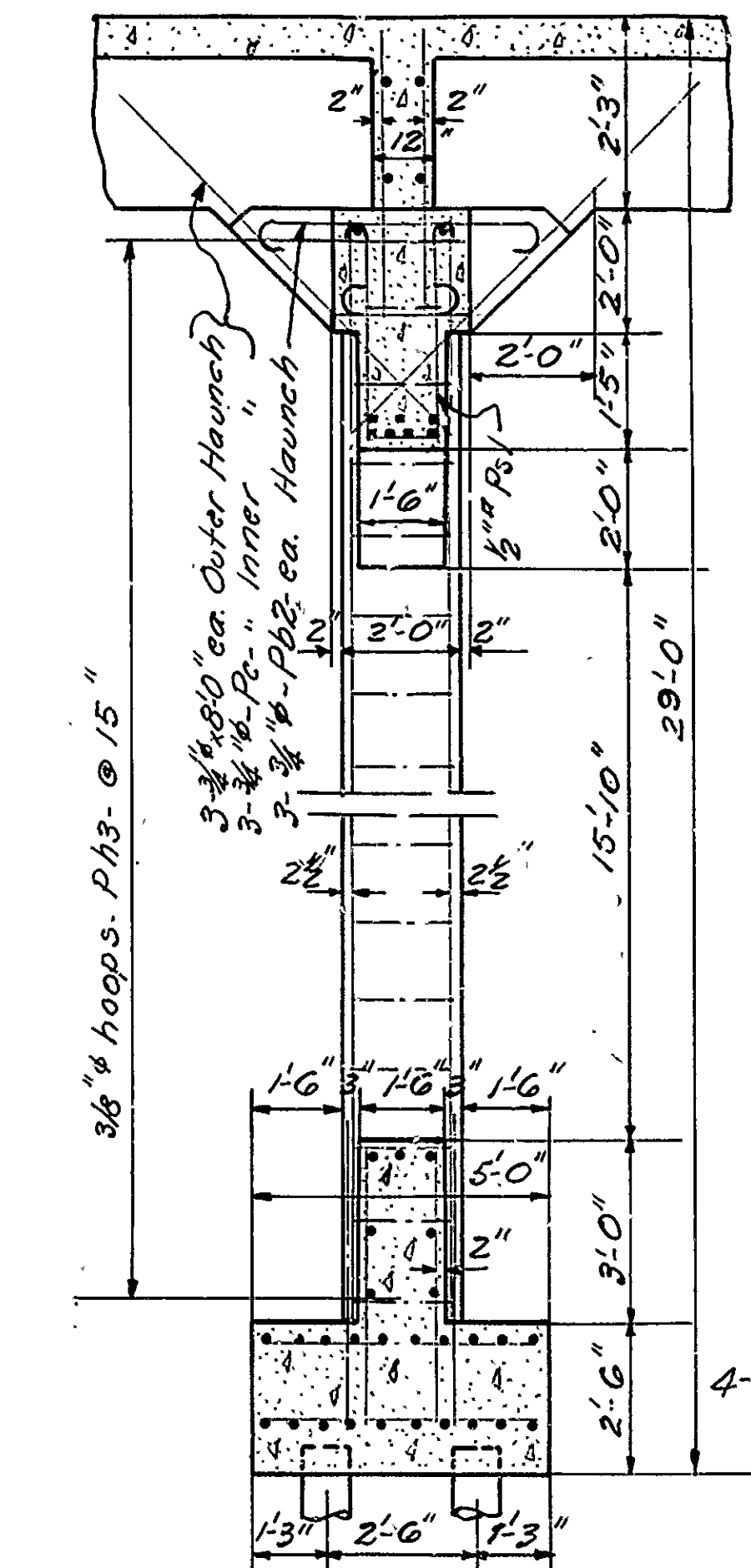
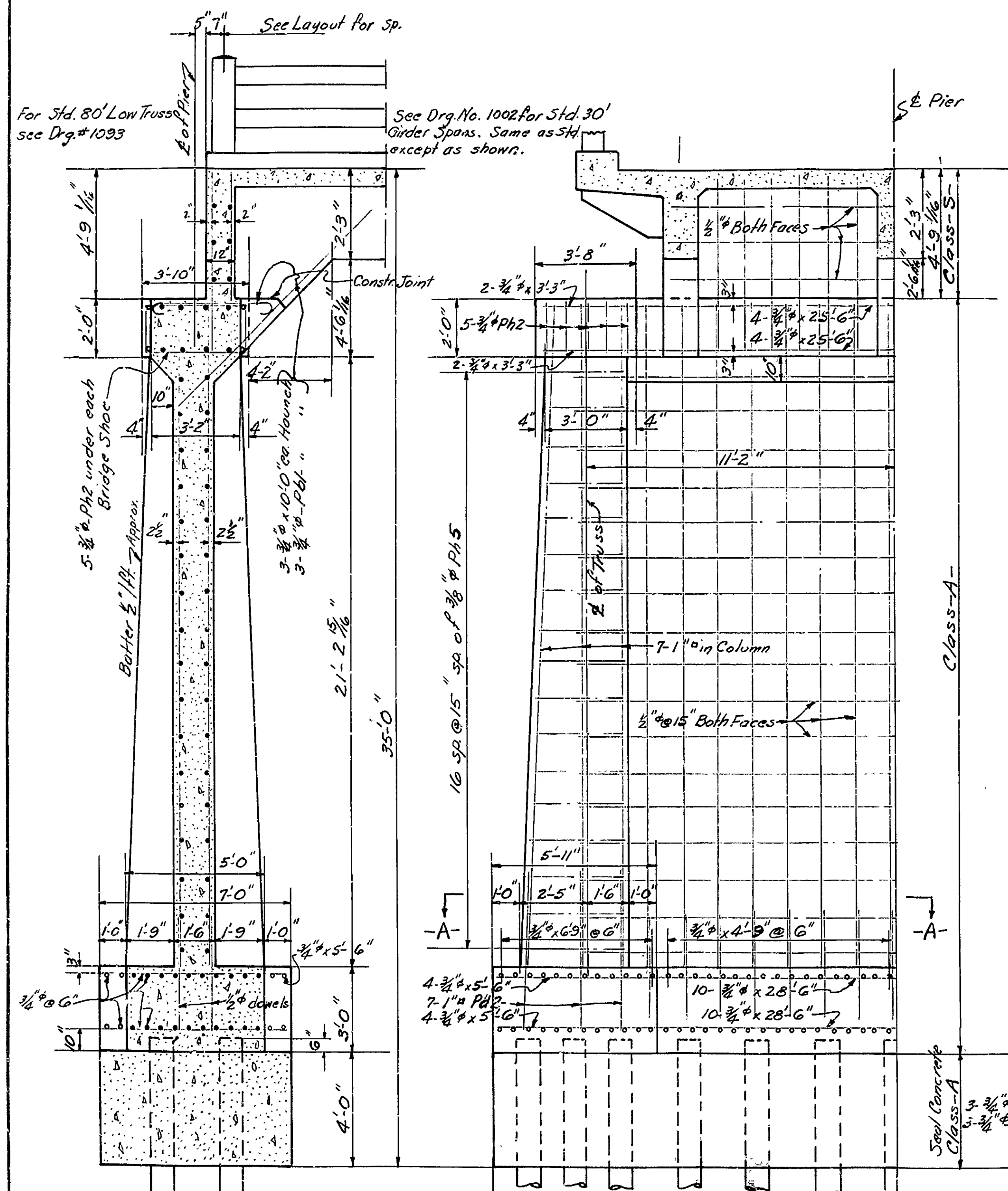
CAST IRON ROADWAY DRAINS

**DETAILS STANDARD**  
**30' R.C. DECK GIRDER**  
 20'0\"/>

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

Drawn By: *[Signature]* Date: May 1933  
 Traced By: *[Signature]* Date: *[Signature]*  
 Checked By: *[Signature]* Date: *[Signature]*  
 BRIDGE NO. *[Signature]* DRAWING NO. 1002





General Notes:

- All exposed corners to have 3/8" chamfer unless noted.
- Precast Conc. Handrails to be 1:3 Mix. Max. Agg. 1/4".
- Rail Posts to be Class-S-5 Concrete.
- Reinf. Steel to be deformed bars of Structural or Intermediate Grade.
- Shop List and Bending Diagrams of Reinf. Steel must be submitted by Contractor before fabrication is begun.
- Roadway Drains and Exp. Devices to be paid for at unit price bid for reinf. steel.
- Specifications: Arkansas Standard Road & Bridge Spec. adopted May 30th, 1925 and revised.
- All concrete above top of Column Caps, except hand rails, to be Class-S-5.
- All conc. below top of Col. Caps to be Class-A-1 except Seal Concrete to be poured in the dry.
- Foundation Piling to be Untreated Timber.
- Piling may be omitted if foundation conditions are found satisfactory to the Engineer.

Revised R.A.P. No. 5-3-35 B.H.K.

**DETAILS OF SUBSTRUCTURE**  
**BRIDGE OVER TWO BAYOU**  
 1 MILE SO. OF CAMDEN, OUACHITA COUNTY,  
 ROUTE 167 SEC. 3  
**ARKANSAS STATE HIGHWAY DEPARTMENT**  
 LITTLE ROCK, ARK.

Drawn By: *P.C.C.* Date: 2-1-28  
 Traced By: *P.C.C.* Date: 2-7-28  
 Checked By: \_\_\_\_\_ Date: \_\_\_\_\_

Scale: 3/8" = 1 ft.

**BRIDGE NO. 622** **DRAWING NO. 1634**

*N.R. Brown*  
 BRIDGE ENGINEER