

STATE OF ARKANSAS  
STATE HIGHWAY COMMISSION

FISCAL YEAR	JOB NO.	SHEET NO.	TOTAL SHEETS	FED. DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
1930	9117	1	8	6	ARK.	272-B	1930	1	8

INDEX OF SHEETS

Sh. No. 1	Drawg. No. 2754	Title Sheet
" No. 2	" No. 2755	Layout of Bridge over King's River.
" No. 3	" No. 2756	Details of Abutment No. 1
" No. 4	" No. 2757	Details of Piers Nos. 1 & 2
" No. 5	" No. 2758	Details of Right Half Arch Spans No. 3 and Abt. No. 2
" No. 6	" No. 2759	Details of Bents Nos. 1 & 2 and Bending Diagrams.
" No. 7	" No. 2760	Details of Typical 130' R.C. Arch.
" No. 8	" No. 2775	Details of Std. 38' R.C.D. Girder, 20' Clear Rofy, 2 Gir. Type

**PLAN OF PROPOSED BRIDGE**  
ON  
**BERRYVILLE-EUREKA SPRINGS ROAD**  
CARROLL COUNTY

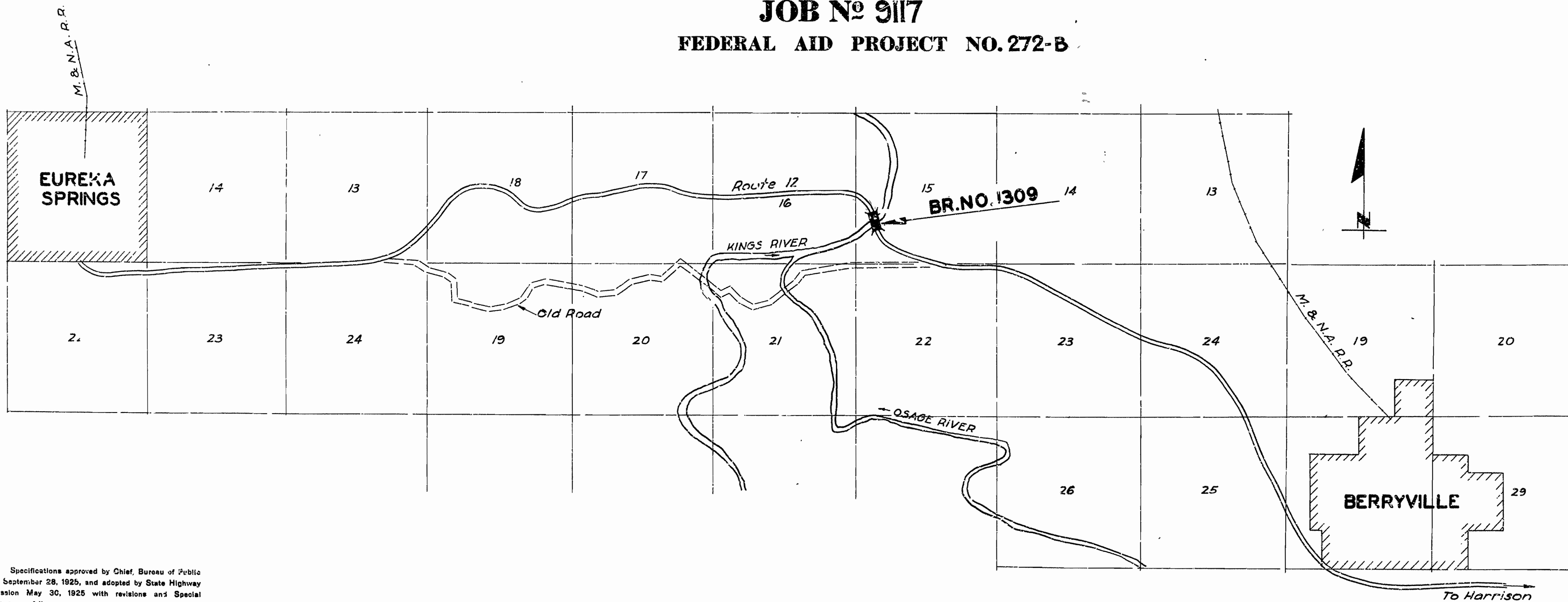
QUANTITIES

Item No. 13	Dry Excavation for Structures	415 Cu.Yds.
" No. 13	Wet " " "	253 Cu.Yds.
" No. 13	Solid Rock " " "	281 Cu.Yds.
" No. 54	Class "A" Concrete	766.03 Cu.Yds.
" No. 54	" "B" "	158.63 Cu.Yds.
" No. 54	" "S" "	340.58 Cu.Yds.
" No. 55	Reinforcing Steel	234,362 Lbs.
" No. 57	Dry Rubble Masonry	10 Cu.Yds.
" No. 58	SP#63 Rip Rep	170 Cu.Yds.
" No. 74	Concrete Railing	950 Lin.Ft.

ROUTE 12 SEC. 5 A

JOB No 9117

FEDERAL AID PROJECT NO. 272-B



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. 1st, 1928	Approved June 1st, 1929
" B	Revised Nov. 1st, 1928	
" C		
" D	Revised July 1st, 1928	Approved Nov. 24th, 1928
" E	Revised Jan. 1st, 1929	
" F	Revised Aug. 1st, 1929	
" G	Revised June 1st, 1929	
" H	Revised Jan. 1st, 1930	
" I		
" J	Revised Jan. 1st, 1929	Approved June 1st, 1929
" K		
" L	Revised Jan. 1st, 1929	Approved June 1st, 1929

SPECIAL PROVISIONS

Item	No. of Sheets
Pamphlet Z	51
Field Engineer's Office	1
Rip Rap	1

LAYOUT

Scale: 1" = 2000'

LENGTH OF PROJECT	=	491'-7 $\frac{3}{8}$ " = 0.0931 mi.
LENGTH OF BRIDGES	=	491'-7 $\frac{3}{8}$ " =
LENGTH OF EMBANKMENT	=	0
LENGTH OF JOB	=	491'-7 $\frac{3}{8}$ " = 0.0931 mi.

APPROVED  
CHIEF ENGINEER - U. S. BUREAU OF PUBLIC ROADS

APPROVED  
DISTRICT ENGINEER - U. S. BUREAU OF PUBLIC ROADS

APPROVED  
CHIEF - U. S. BUREAU OF PUBLIC ROADS

APPROVED  
CHAIRMAN - STATE HIGHWAY COMMISSION

APPROVED  
STATE HIGHWAY ENGINEER

*N. B. Lewis*  
BRIDGE ENGINEER

BRIDGES NO. 1309

DRAWING NO. 2754



FISCAL YEAR	Job No.	SHEET No.	TOTAL SHEETS
1930	9117	2	8

**QUANTITIES**

Item No. 13	Dry Excavation for Strs.	415 CuYds.
" " 13	Wet " " "	253 " "
" " 13	Solid Rock " " "	281 " "
" " 54	Class "A" Concrete	762.03 " "
" " 54	" "B" "	158.63 " "
" " 54	" "S" "	940.58 " "
" " 55	Reinforcing Steel	234,362 Lbs.
" " 57	Dry Rubble Masonry	10 CuYds.
" " S.P. 60	Rip Rap	170 " "
" " 74	Concrete Railing	930 Lin.Ft.

**GENERAL NOTES:**

All exposed corners to have  $\frac{3}{8}$ " Chamfer unless otherwise noted.

Precast concrete Handrail spindles to be 1:1:2 Mix. Maximum Aggregate  $\frac{5}{8}$ ".

Concrete above Caps of Approach, above Skewbacks of Piers and Abutment No. 2 and above construction joint at Cal. cap of Abutment No. 1 to be Class "S".

All other Concrete except in Pier Bases to be Class "A". Concrete in Pier Bases to be Class "B".

All Concrete to be poured in the dry.

All Reinforcing Steel to be deformed bars of Structural or Intermediate Grade. Shop List and Bending Diagrams must be submitted by the Contractor and Approved before Fabrication is begun.

Roadway Drains and Expansion Devices to be paid for at the Unit Price bid for Reinforcing Steel.

Concrete Handrail to be paid for at the Unit Price bid per ft. which shall include reinforcing steel.

Specifications: Arkansas Standard Road and Bridge Specifications adopted May 30th, 1925 and Revised.

Unit Stresses  $f_s = 16,000 \text{ psi}$ ,  $f_c = 750 \text{ psi}$ ,  $n = 15$  Loading H 15

**SPECIAL NOTES:**

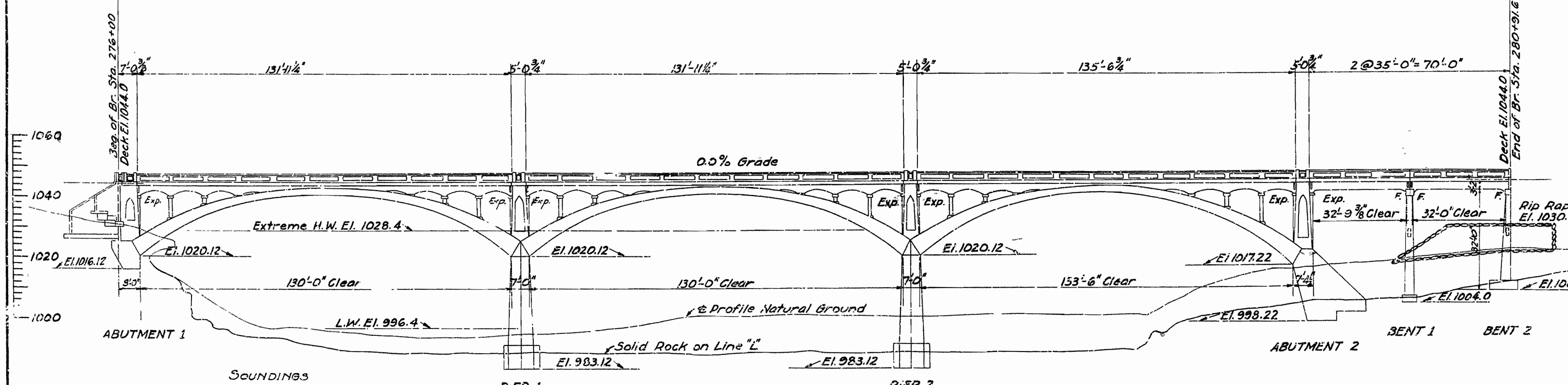
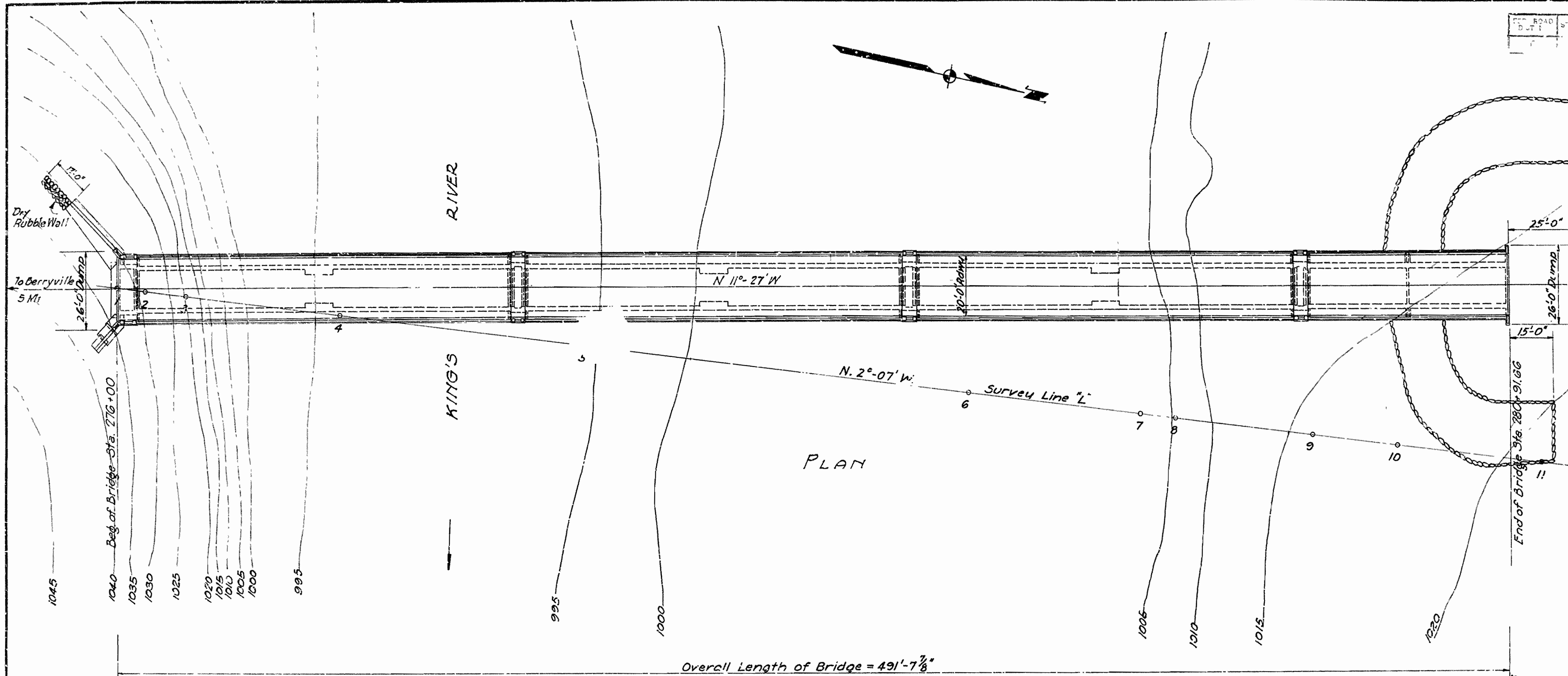
All footings to be carried to Rock. Arch Abutment and Pier footings to be carried 4 ft. into sound undisturbed rock. Excavation to be done in such a manner as to avoid shattering the rock faces.

Details of falsework and the proposed order of concreting the Arches must be submitted by the Contractor and approved before construction is begun.

It will be necessary for the falsework to remain under all three Arch Spans until the concrete of the last span poured has set up sufficiently to carry its own weight at which time the centering under all spans shall be lowered simultaneously.

For Details of 35' R.C.D. Gir. Spans See Drawg. 2775  
For Other Details See Drawgs. 2756, 2757, 2758, 2759, 2760.

Revised Change of Alignment and Contours  
W.O.D. 8-19-30



**SOUNDINGS**

Hole No.	Rock Elev.
1	1030.0
2	1019.0
3	1007.6
4	989.3
5	989.3
6	988.2
7	990.1
8	998.3
9	1004.6
10	1004.7
11	1012.7

**ELEVATION**  
D.A. 370 3/4 Mi. Mountainous

**LAYOUT OF  
BRIDGE OVER KING'S RIVER**  
CARROLL COUNTY  
ROUTE 262 SEC. 54

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

Drawn By: G.S.V. Date: 6-14-30  
Traced By: G.A. Date: 6-16-30  
Checked By: \_\_\_\_\_ Date: \_\_\_\_\_

Scale: 1 in. = 20 ft.

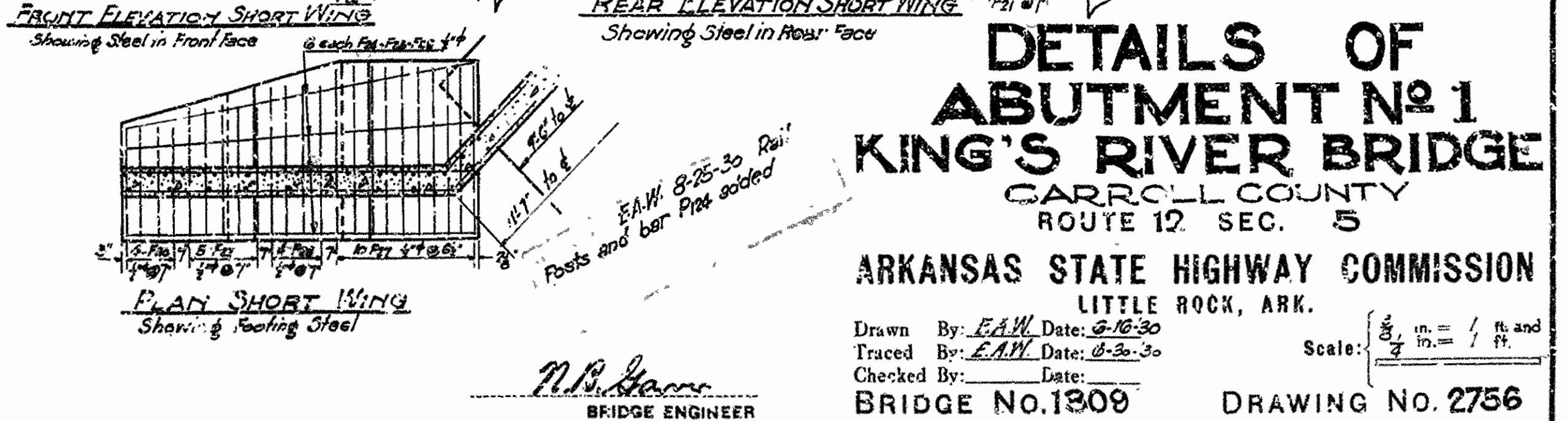
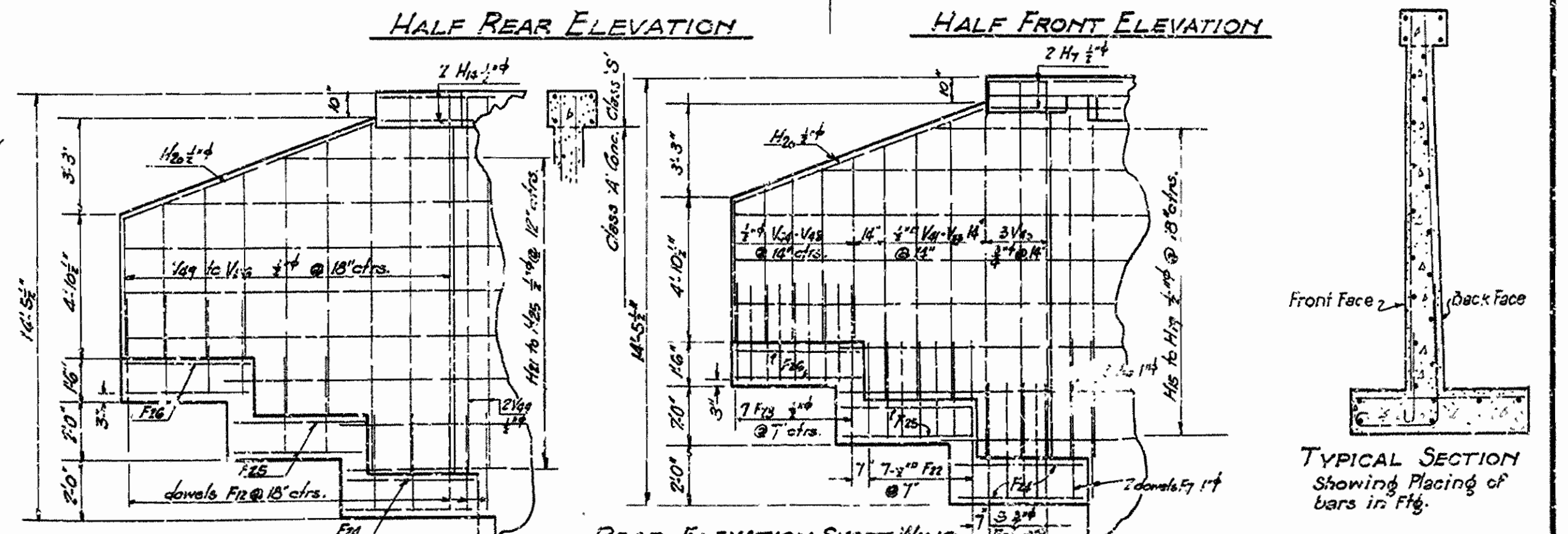
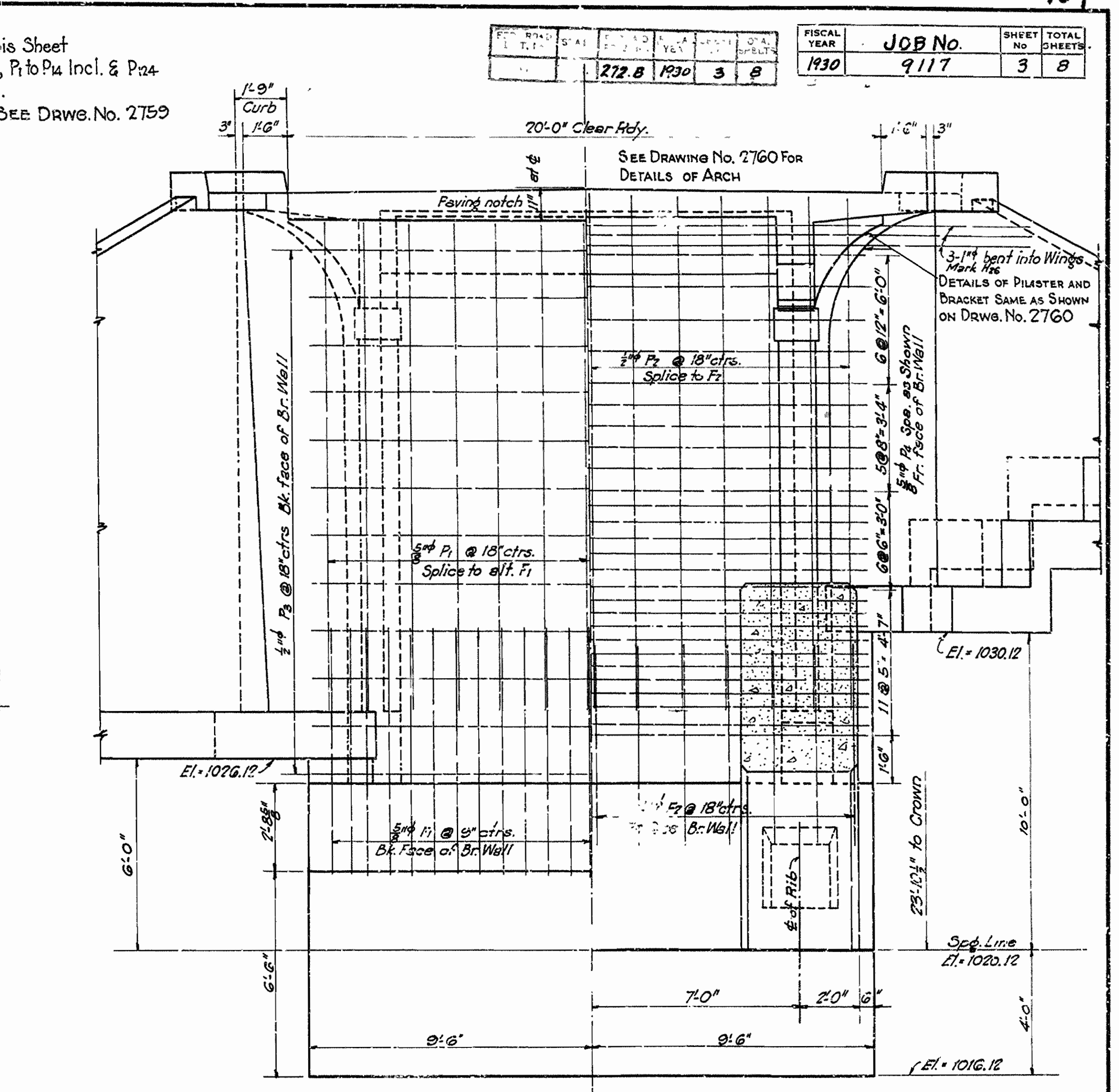
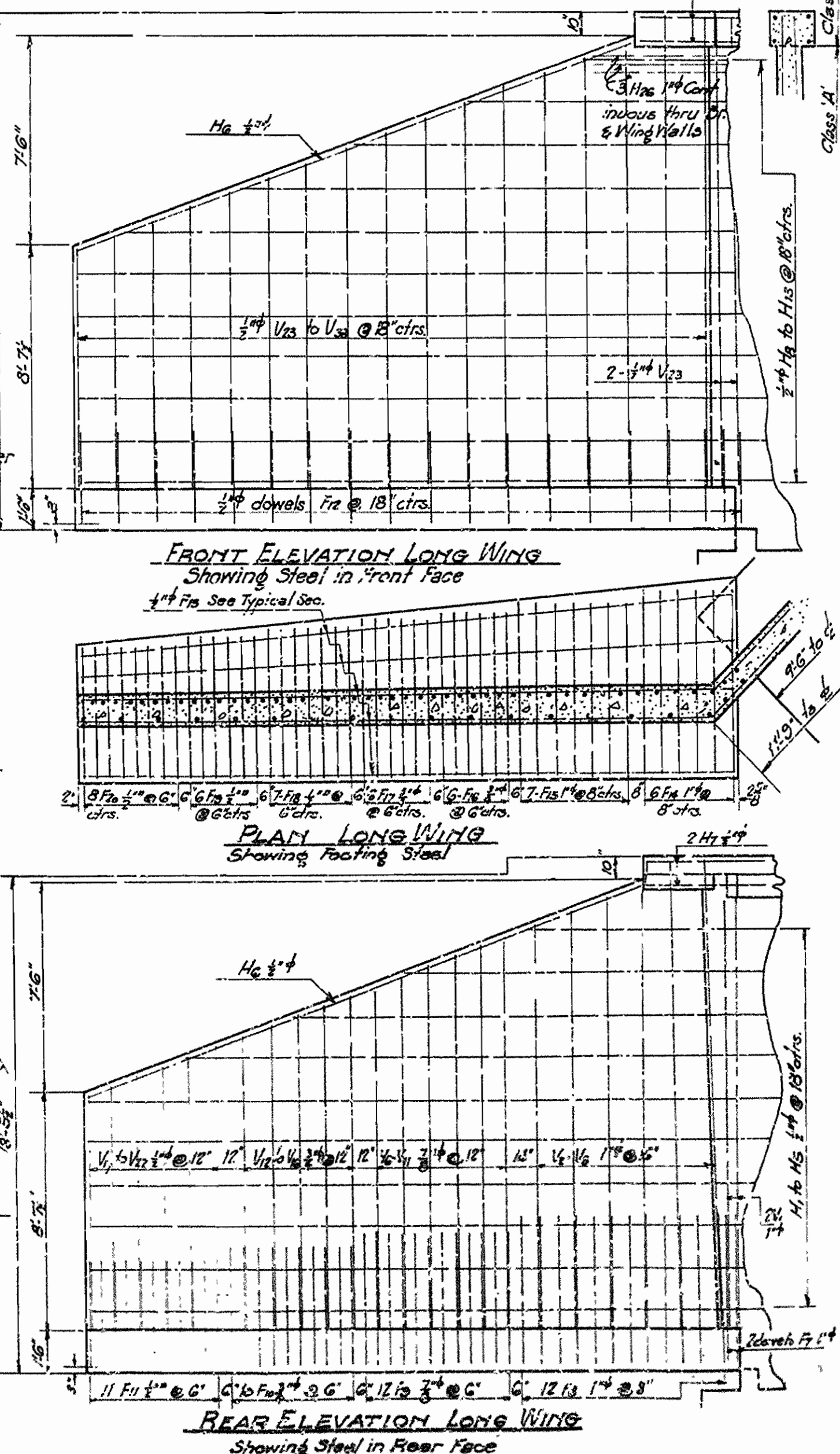
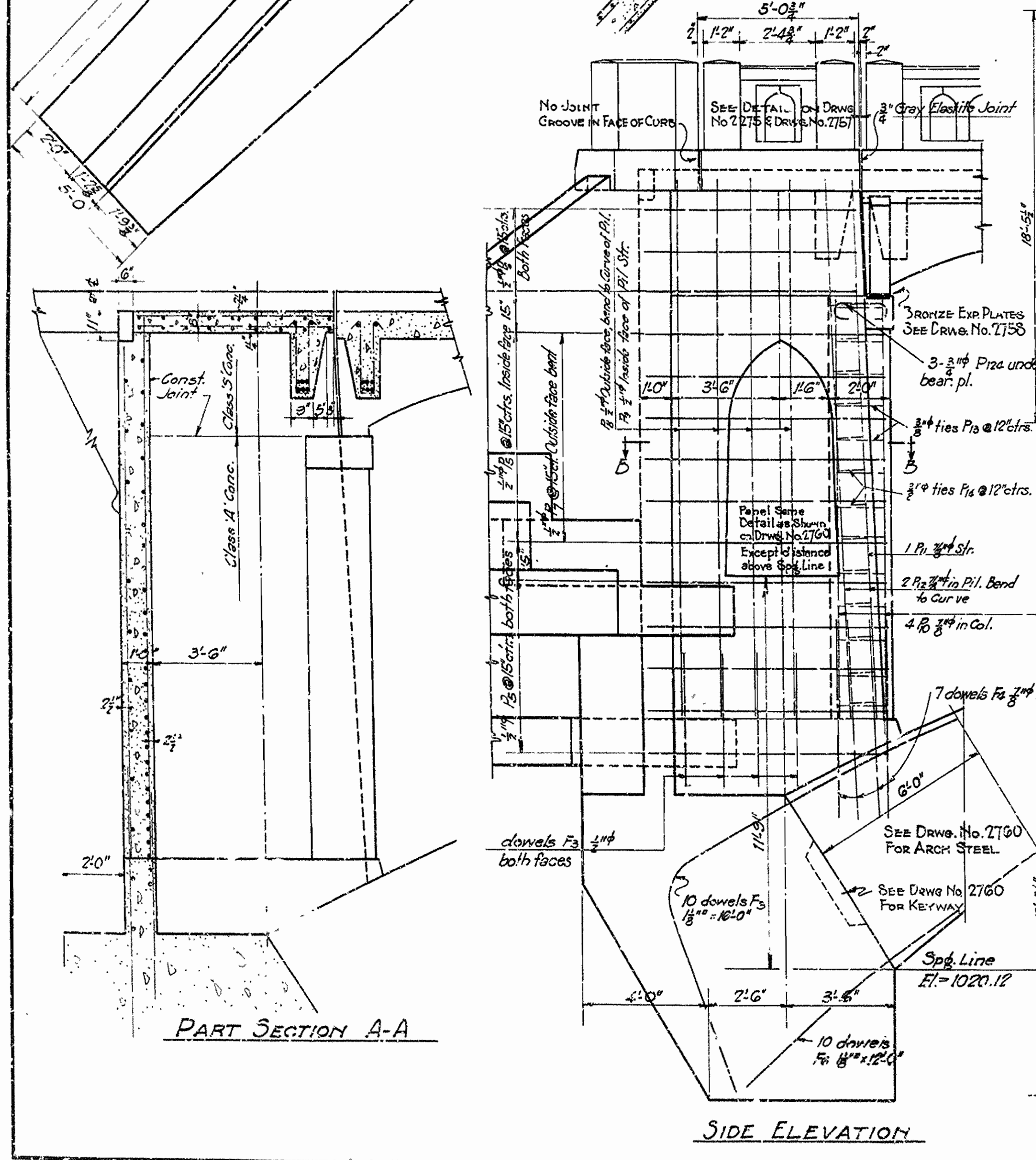
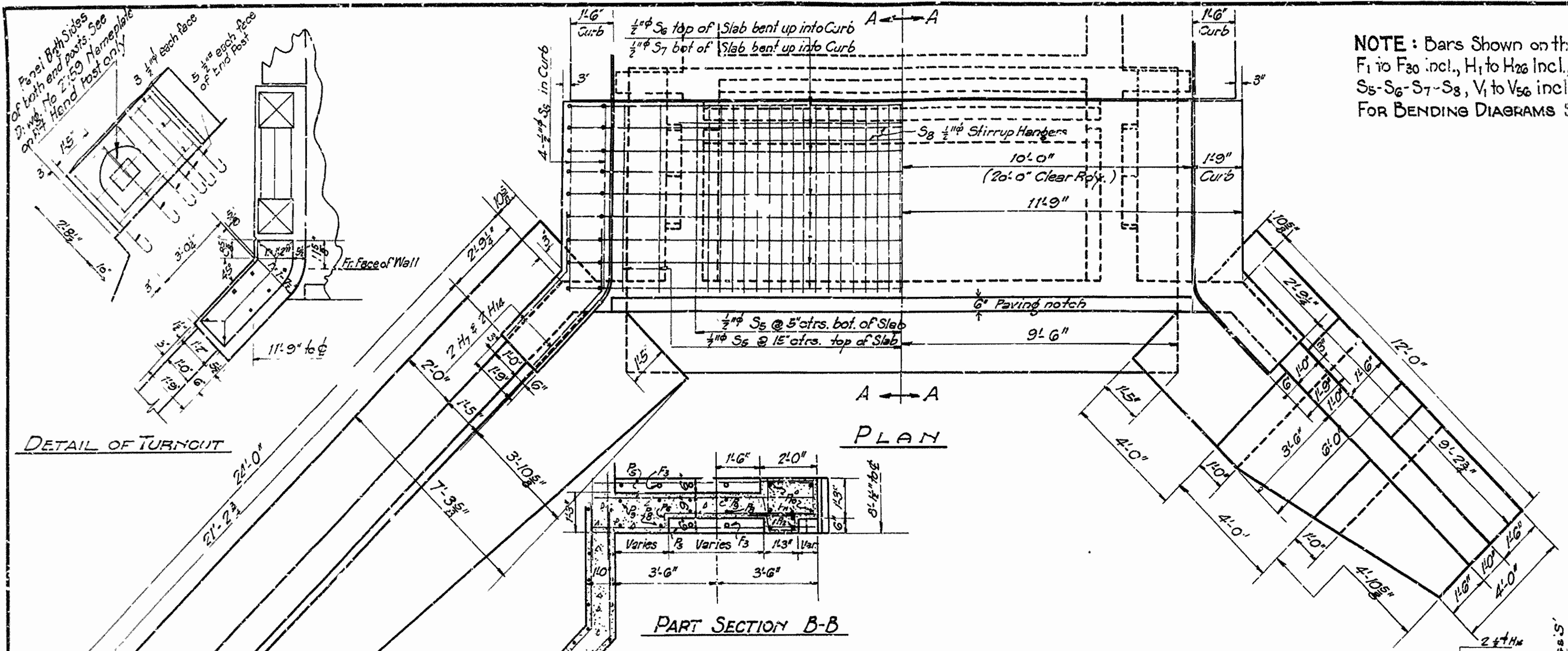
BRIDGE NO. 1309 DRAWING NO. 2755

*G.S.V.*  
BRIDGE ENGINEER



BRIDGE NO.	2756	DATE	8-25-30	SCALE	1/2" = 1' - 0"
FISCAL YEAR	1930	JOB No.	9117	SHEET No.	3
			TOTAL SHEETS	8	

NOTE: Bars Shown on this Sheet  
 F<sub>1</sub> to F<sub>30</sub> incl., H<sub>1</sub> to H<sub>26</sub> incl., P<sub>1</sub> to P<sub>24</sub> incl. & P<sub>24</sub>  
 S<sub>5</sub>-S<sub>6</sub>-S<sub>7</sub>-S<sub>8</sub>, V<sub>1</sub> to V<sub>56</sub> incl.  
 FOR BENDING DIAGRAMS SEE DRWG. No. 2759



**DETAILS OF ABUTMENT No 1 KING'S RIVER BRIDGE**  
 CARROLL COUNTY ROUTE 12 SEC. 5  
 ARKANSAS STATE HIGHWAY COMMISSION  
 LITTLE ROCK, ARK.

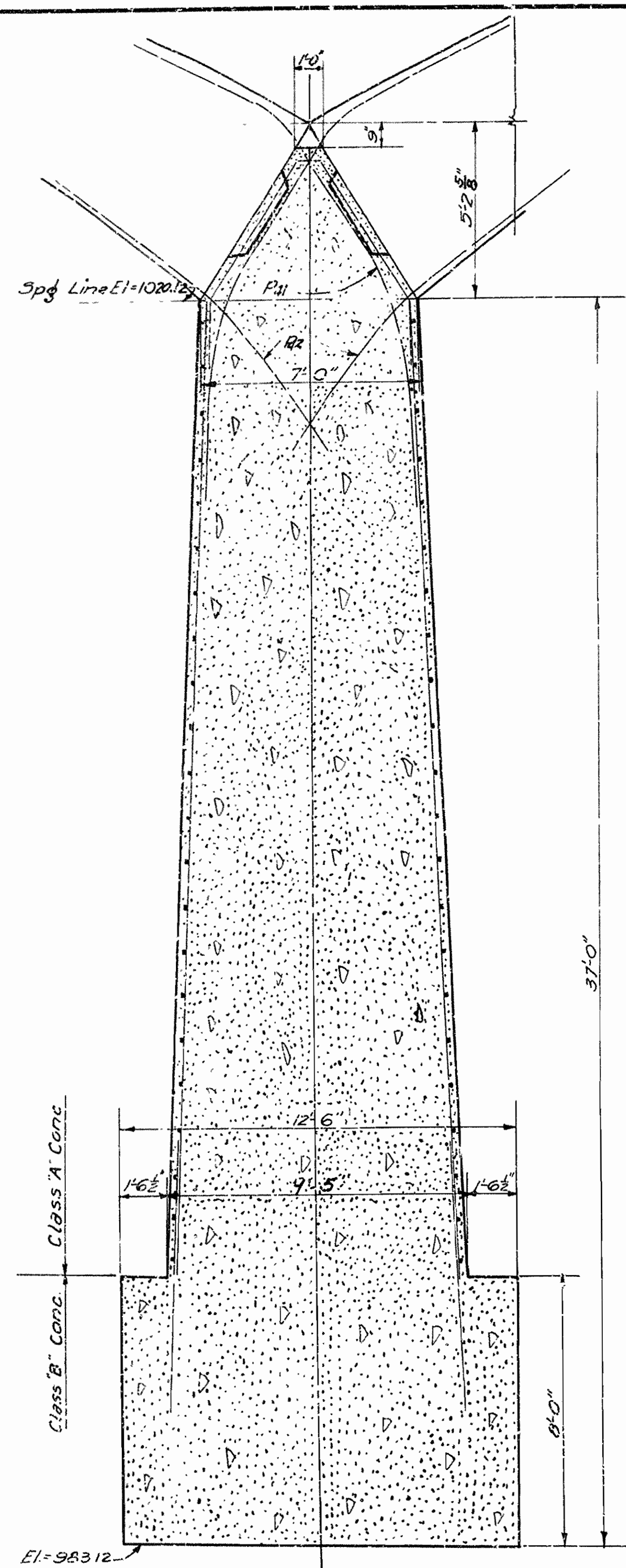
Drawn By: E.A.W. Date: 8-25-30  
 Traced By: E.A.W. Date: 8-25-30  
 Checked By: Date: \_\_\_\_\_

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

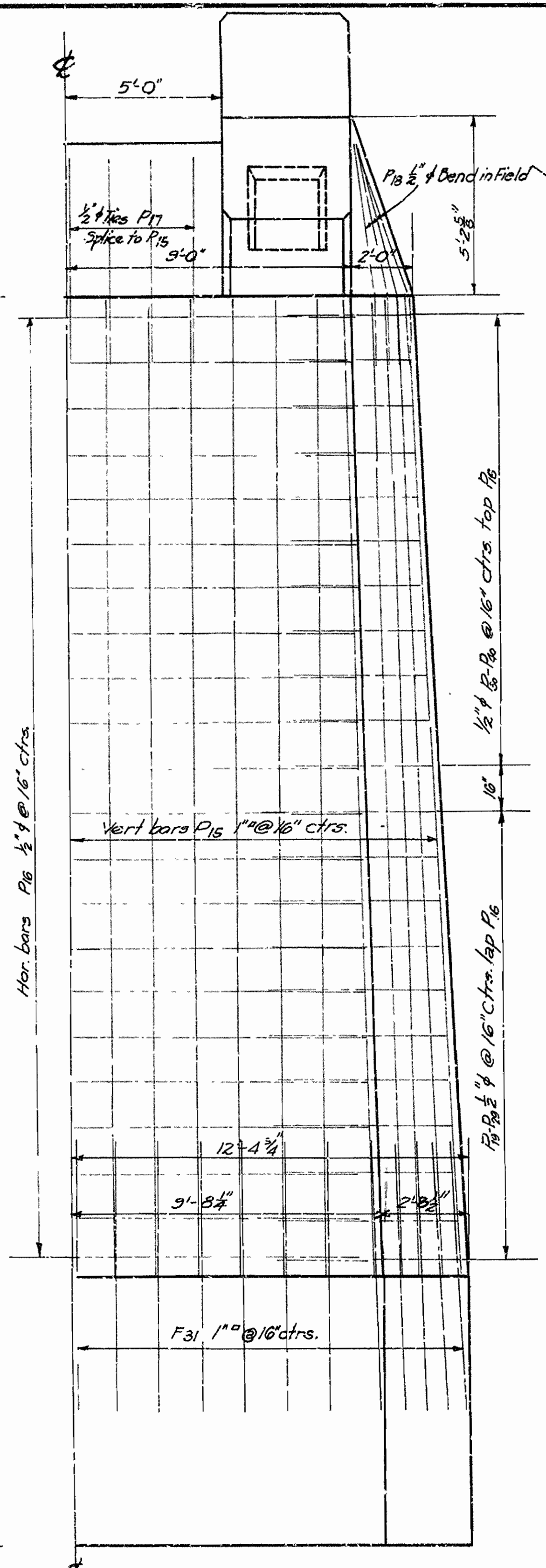
BRIDGE ENGINEER  
 BRIDGE NO. 1309 DRAWING NO. 2756



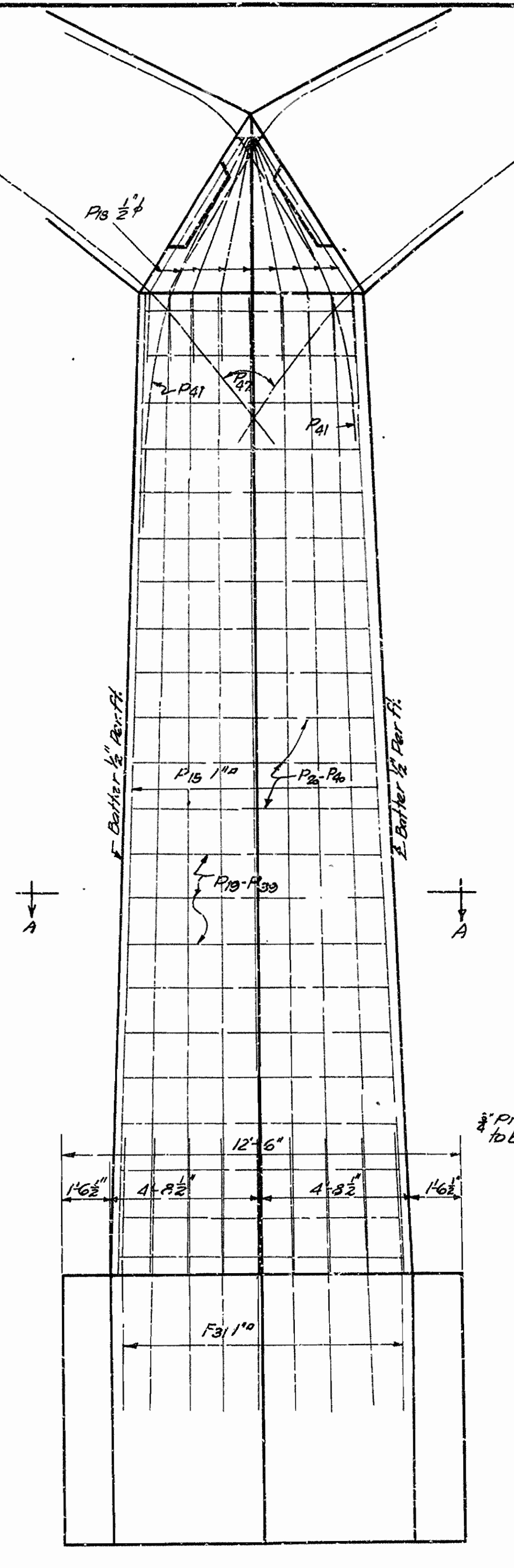
PC. ROAD DIST.:	STATE:	FED. AID PROJ. NO.:	F.S.A. YEAR:	SHEET NO.:	TOTAL SHEETS:	FISCAL YEAR:	JOB NO.:	SHEET NO.:	TOTAL SHEETS:
G	ARK.	272-B	1930	4	8	1930	9117	4	8



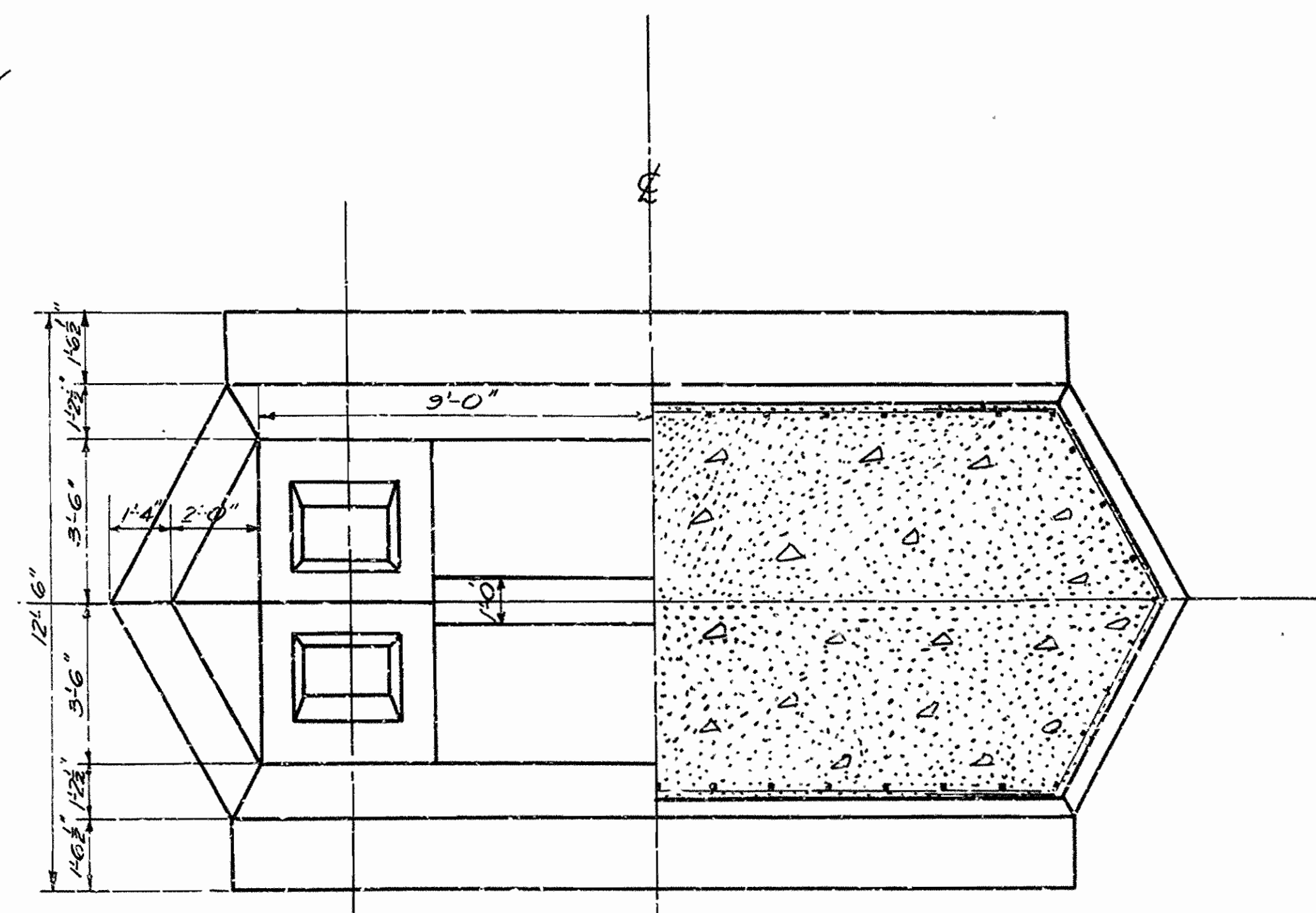
SECTION ON E



HALF ELEVATION

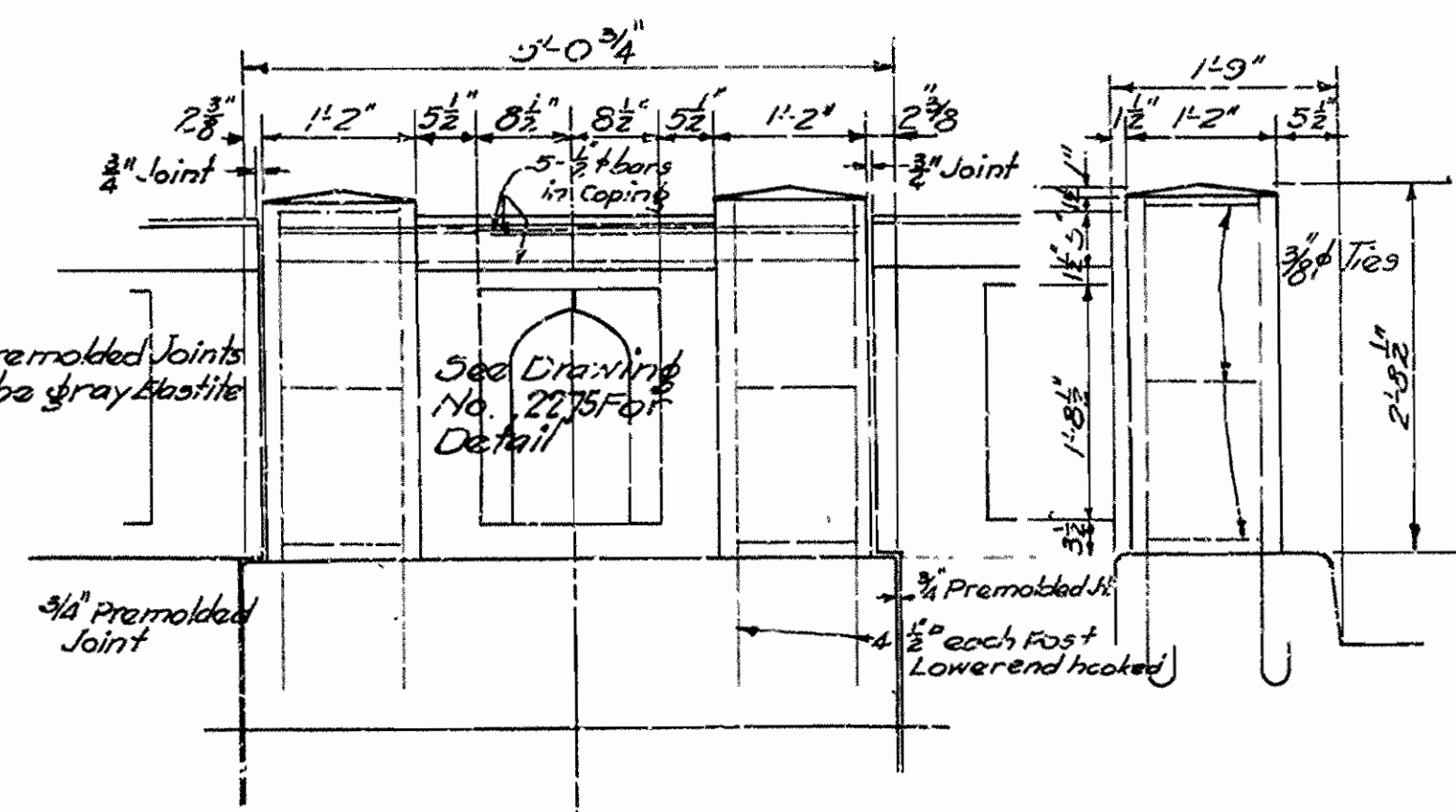


END VIEW



HALF PLAN

HALF SECTION A-A



DETAIL OF RAIL AT PIERS

NOTE:  
Bars on this sheet  
F31 - P15 + P16 - P17 to P42 incl.  
For Banding Diagrams  
See Drwg No. 2759

**DETAILS OF  
PIERS No 162  
KING'S RIVER BRIDGE  
CARROLL COUNTY**

E.A.W. 8-25-30  
Rail Posts

ROUTE 12 SEC. 5  
ARKANSAS STATE HIGHWAY COMMISSION  
LITTLE ROCK, ARK.

*E.A.W.*  
BRIDGE ENGINEER

Drawn By: E.A.W. Date: 6-18-30  
Traced By: M.K.W. Date: 6-21-30  
Checked By: \_\_\_\_\_ Date: \_\_\_\_\_  
Scale: 3/8" = 1'-0"  
BRIDGE NO. 1309 DRAWING NO. 2757



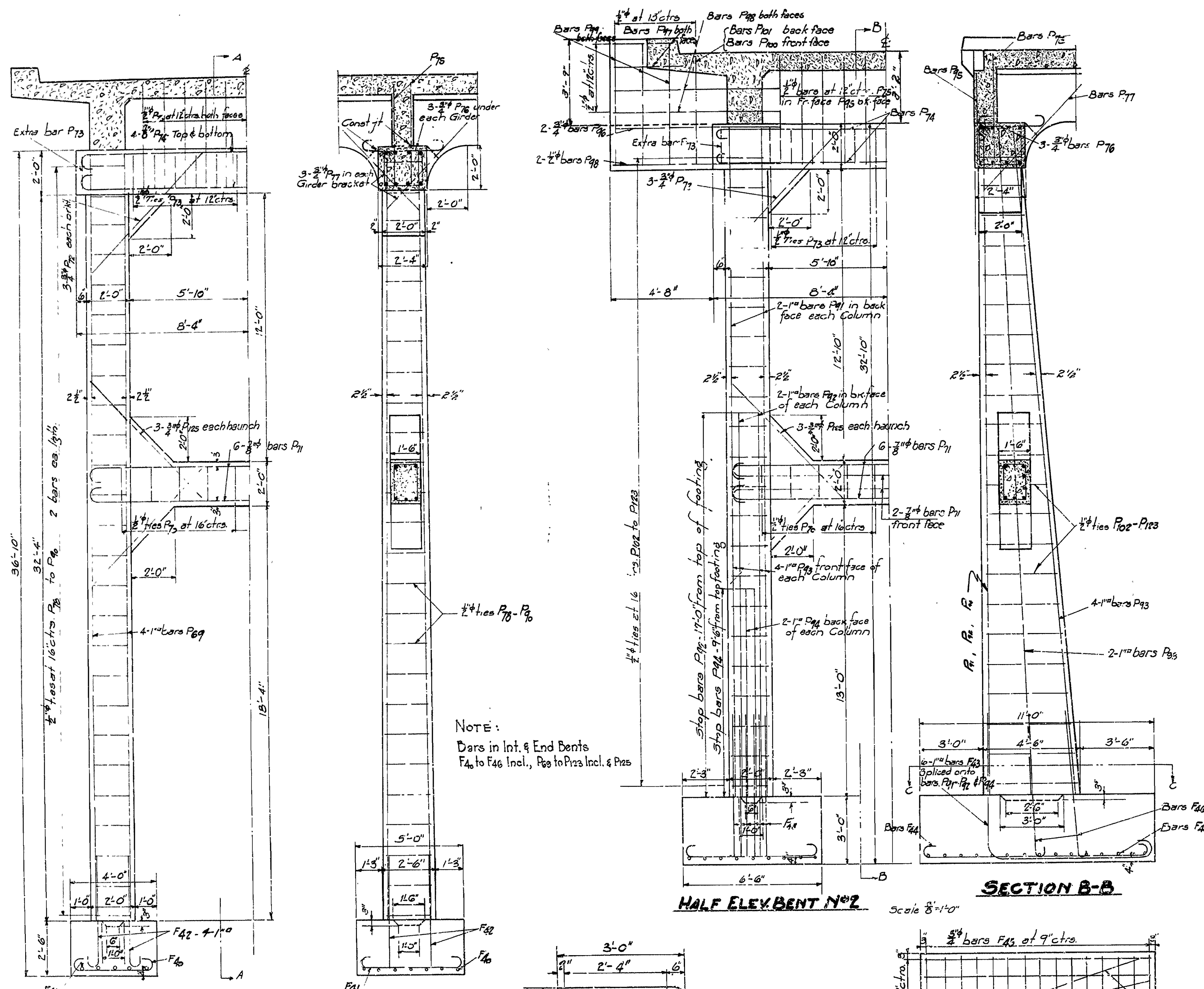




FISCAL YEAR	1930	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940
DATE											
PROJECT NO.	272-B										
SHEET NO.	6										
TOTAL SHEETS	6										

LIST OF BENT BARS & BENDING DIAGRAMS

Location	Mark	Size	Lgth.	DIAGRAM			Location	Mark	Size	Length	DIAGRAM		
				a	b	c					a	b	
Rib	A38	1/2"	15'-0"	A'	Var.	3'-7 1/2"	Bents	F40	3/4"	5'-0"	3'-0"	6'	
Strut	A47	1/2"	8'-0"	A'	Var.	2'-7 1/2"	"	F41	3/4"	6'-0"	4'-0"	6'	
"	A48	1/2"	6'-8"	A'	Var.	1'-7 1/2"	"	F42	3/4"	12'-0"	10'-0"	6'	
"	A49	1/2"	5'-8"	A'	Var.	1'-4 1/2"	"	F45	3/4"	7'-0"	6'-0"	6'	
Rib	A88	1/2"	10'-0"	A'	Var.	3'-7 1/2"	"	P77	1/2"	17'-0"	15'-2"	7'	
Col.	P3	3/4"	5'-10"	A'	Var.	1'-8"	"	P78	1/2"	18'-0"	16'-2"	7'	
Pil.	P4	3/4"	4'-1"	B'	Var.	7"	"	P79	1/2"	5'-0"	3'-6"	6'	
Col.	P43	3/4"	7'-0"	C'	Var.	1'-4"	"	Piers	P77	1/2"	10'-3"		
Sp. Col.	P41	3/4"	4'-4"	A'	Var.	11"	"	"	P80	1/2"	15'-10"		
Pil.	F38	1/2"	16'-8"	A'	Var.	1'-4 1/2"	"	"	P80	1/2"	12'-4"		
Bent	F76	1/2"	6'-8"	A'	Var.	1'-8 1/2"	"	Pilester	F7	1/2"	8'-0"		
"	P73	1/2"	8'-2"	A'	Var.	1'-8 1/2"	"	"	F46	1/2"	7'-0"		
"	P80	1/2"	7'-10"	A'	Var.	1'-8 1/2"	"	"	P80	1/2"	7'-0"		
Sp. Brn.	G19 to G23	1/2"	6'-6"	A'	Var.	1'-8 1/2"	"	Wing Wall	H1	1/2"	28'-0"	23'-6"	4'-6"
X Brn.	G77	1/2"	5'-9"	A'	Var.	2'-3 1/2"	"	"	H2	1/2"	28'-3"	19'-9"	4'-6"
Chks.	P80 to P82	1/2"	3'-10"	A'	Var.	4"	"	"	H3	1/2"	26'-0"	15'-6"	4'-6"
Wing	F7	1/2"	6'-3"	A'	Var.	5'-3"	"	"	H4	1/2"	15'-9"	11'-3"	4'-6"
"	F12	1/2"	3'-9"	A'	Var.	3'-3"	"	"	H5	1/2"	11'-3"	6'-0"	4'-6"
Spaldomals	A54	1/2"	7'-0"	A'	Var.	6'-3"	"	Curb	H7	1/2"	5'-0"	3'-6"	2'-0"
Bent	F42	1/2"	6'-0"	A'	Var.	5'-6"	"	Wing Wall	H9	1/2"	28'-6"	24'-0"	4'-6"
"	F44	1/2"	7'-0"	A'	Var.	6'-0"	"	"	H9	1/2"	26'-9"	22'-3"	4'-6"
Wing Flg.	F8	1/2"	9'-0"	A'	Var.	5'-3"	"	"	H10	1/2"	22'-3"	17'-9"	4'-6"
"	F9	1/2"	8'-6"	A'	Var.	4'-9"	"	"	H11	1/2"	18'-0"	13'-6"	4'-6"
"	F10	1/2"	7'-9"	A'	Var.	4'-3"	"	"	H12	1/2"	13'-6"	9'-0"	4'-6"
"	F11	1/2"	6'-9"	A'	Var.	3'-9"	"	"	H13	1/2"	9'-3"	4'-9"	4'-6"
"	F21	1/2"	6'-5"	A'	Var.	3'-9"	"	Curb	H14	1/2"	5'-0"	3'-"	2'-0"
"	F22	1/2"	5'-8"	A'	Var.	3'-3"	"	Wing Wall	H15	1/2"	8'-0"		
"	F23	1/2"	5'-8"	A'	Var.	3'-3"	"	"	H16	1/2"	12'-0"		
Bent	F43	1/2"	14'-2"	A'	Var.	6'-0"	"	"	H17	1/2"	16'-0"	11'-6"	4'-6"
Abt. Flg.	F57	1/2"	8'-3"	A'	Var.	6'-9"	"	"	H18	1/2"	12'-9"	8'-3"	4'-6"
" #2 "	F58	1/2"	8'-0"	B'	Var.	5'-3"	"	"	H19	1/2"	8'-9"	4'-3"	4'-6"
Sp. Brn.	G12	1/2"	11'-3"	A'	Var.	11'-3"	"	"	H21	1/2"	3'-3"	3'-9"	4'-6"
"	G14	1/2"	11'-8"	A'	Var.	11'-8"	"	"	H22	1/2"	12'-6"	8'-0"	4'-6"
Sp. Brn.	G16	1/2"	55'-3"	A'	Var.	55'-3"	"	"	H23	1/2"	16'-3"	11'-9"	4'-6"
"	G18	1/2"	11'-8"	A'	Var.	11'-8"	"	"	H24	1/2"	15'-3"	10'-9"	4'-6"
"	G19	1/2"	11'-8"	A'	Var.	11'-8"	"	"	H25	1/2"	10'-9"	6'-3"	4'-6"
"	G20	1/2"	11'-8"	A'	Var.	11'-8"	"	"	H26	1/2"	32'-3"	23'-3"	4'-6"
X Brn.	G26	3/4"	26'-2"	A'	Var.	4'-7"	"	BENT BARS ADDED AUG. 26, 1930					
"	G28	3/4"	28'-2"	A'	Var.	6'-1"	"	F44	1/2"	3'-4"	1'-0"	6"	
Slab	S3	3/4"	23'-7"	A'	Var.	6'-1"	"	F45	1/2"	2'-8"	1'-2"	6"	
"	S1	3/4"	22'-4"	A'	Var.	22'-4"	"						
"	S2	3/4"	23'-8"	A'	Var.	23'-8"	"						
"	S4	1/2"	24'-2"	A'	Var.	24'-2"	"						
"	S5	1/2"	22'-10"	A'	Var.	22'-10"	"						



For General Notes See Dwg. No 2755

DETAILS OF  
BENTS NO 1 AND NO 2  
KINGS RIVER BRIDGE  
CARROLL COUNTY  
ROUTE 12 SEC. 5

ARKANSAS STATE HIGHWAY COMMISSION  
LITTLE ROCK, ARK.

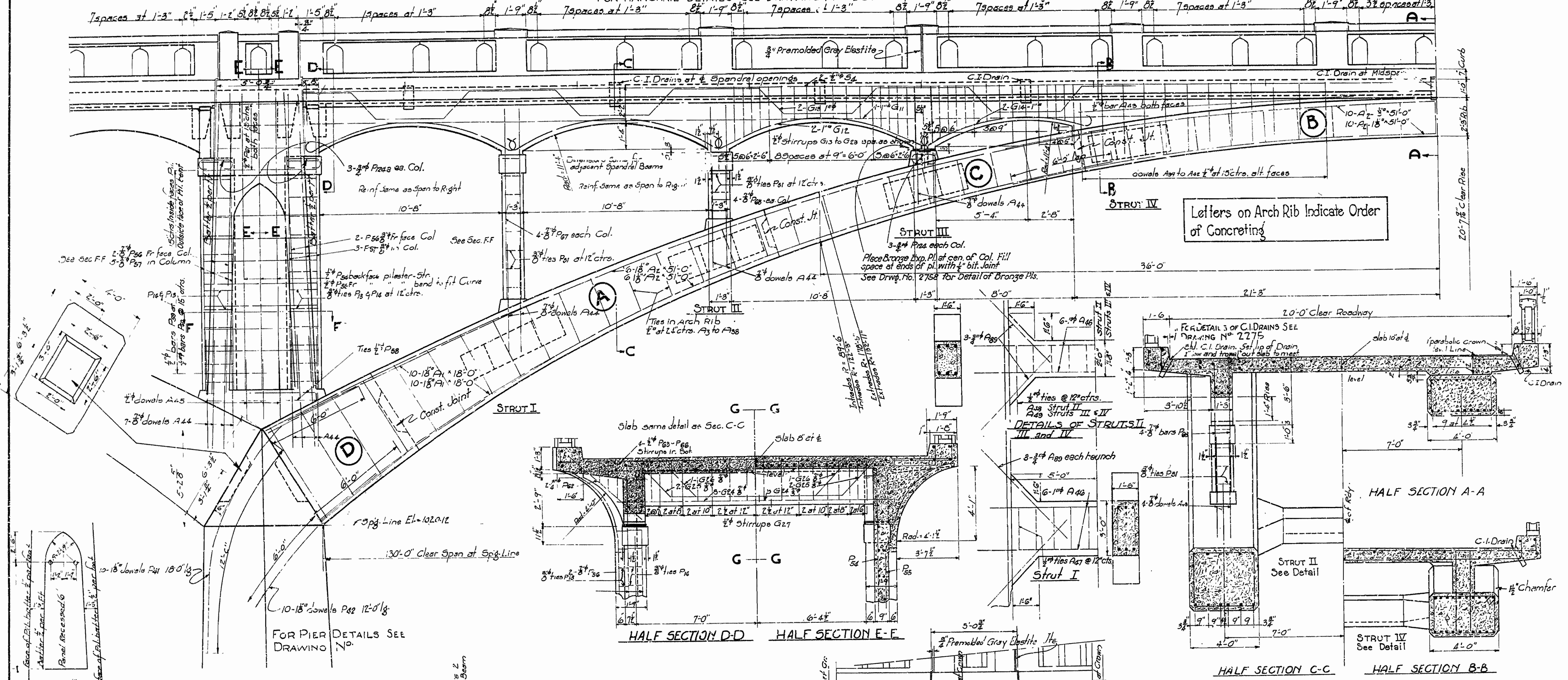
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 Traced By: *W.L.S.* Date: *8-25-30*  
 Checked By: *W.L.S.* Date: *8-25-30*  
 BRIDGE NO. 1305 DRAWING NO. 2759

W.L.S.  
BRIDGE ENGINEER



FISCAL YEAR	JOB No	SHEET No	TOTAL SHEETS
1930	9117	7	8

FOR HANDRAIL DETAILS SEE DRAWING No 2275 For Subpost Details See Drwg. No. 2750



Letters on Arch Rib Indicate Order of Concreting

NOTE: BARS SHOWN ON THIS SHEET - A<sub>1</sub> to A<sub>10</sub> incl. & A<sub>89</sub>, P<sub>54</sub> & P<sub>61</sub>, P<sub>54</sub>-P<sub>68</sub> incl. P<sub>62</sub> & P<sub>63</sub>, G<sub>11</sub> to G<sub>27</sub> incl. S<sub>1</sub>-S<sub>4</sub> incl. & S<sub>5</sub>-S<sub>9</sub> incl. FOR BENDING DIAGRAMS SEE DRAWING No 2759

# DETAILS OF 130'-0" CLEAR SPAN ARCH 20'-0" CLEAR ROADWAY KING'S RIVER BRIDGE

CARROLL COUNTY  
ROUTE 12 SEC. 5

ARKANSAS STATE HIGHWAY COMMISSION  
LITTLE ROCK, ARK.

Drawn By: E.A.W. Date: 6-2-30  
Traced By: J.A.S. Date: 7-2-30  
Checked By: \_\_\_\_\_ Date: \_\_\_\_\_  
Scale: 3/8" = 1'-0"  
BRIDGE NO. 1309 DRAWING NO. 2760

E.A.W. 8-26-30  
Struct. Subpost - bars added  
M.A. BARR  
BRIDGE ENGINEER

