

STATE OF ARKANSAS  
STATE HIGHWAY COMMISSION

FED. DIST. NO.	STATE	U.S. PUBLIC WORKS PROJECT YEAR	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	ARK.	NRS-312-B	1934	1	11

JOB NO. 7-177

INDEX OF SHEETS

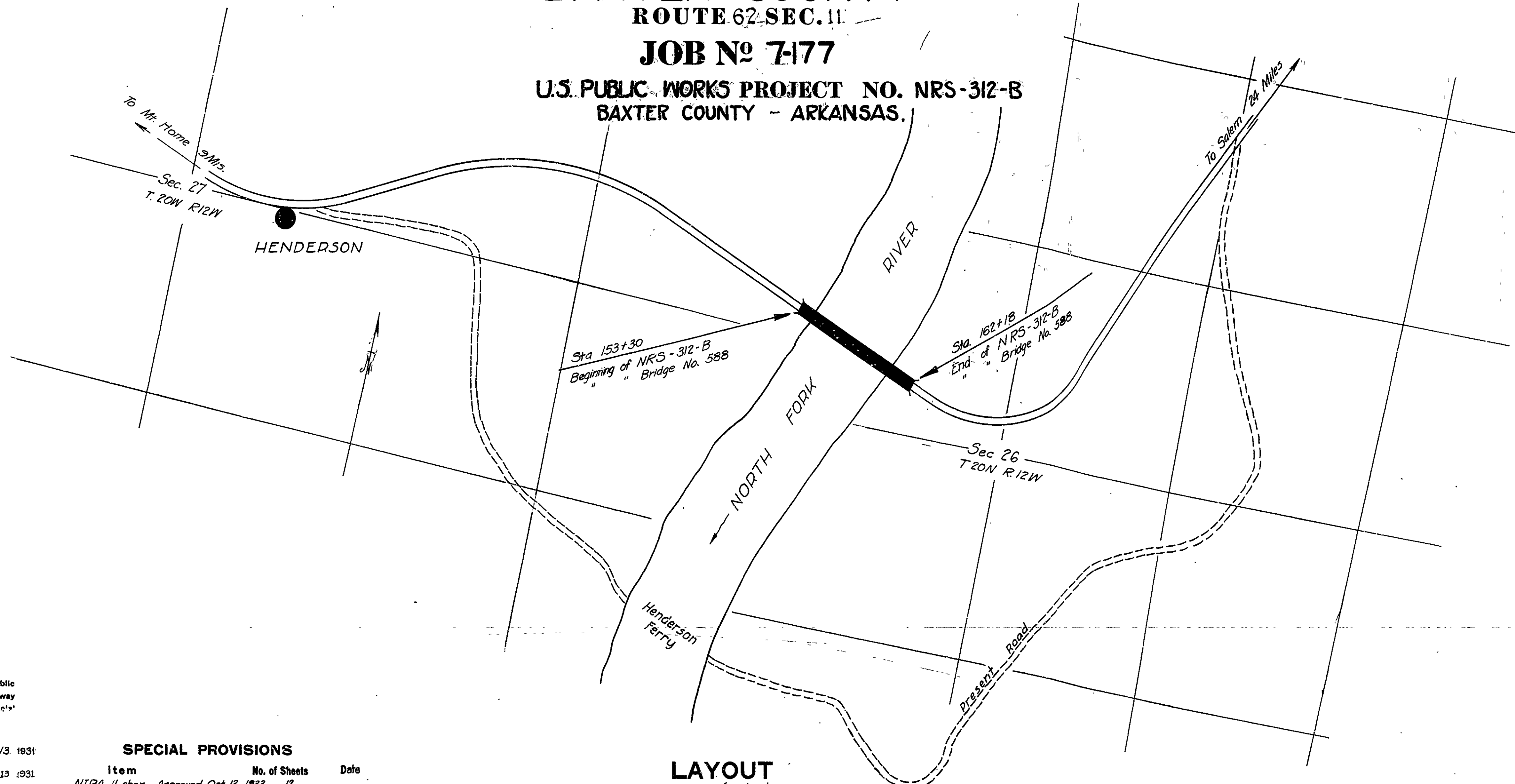
Sheet No.	Drawg. No.	Title Sheet
" 2	" 3583	Schedule of Quantities
" 3	" 3585	General Layout of Bridge No. 588
" 4	" 3586	Details of Abutment End of 155'-0" Arch Spans Nos. 1 & 5
" 5	" 3587	Details of Pier End of 155'-0" Arch Spans Nos. 1 & 5
" 6	" 3588	Details of 175'-0" Arch Spans Nos. 2, 3 & 4
" 7	" 3589	Details of Abutment No. 1
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QUANTITIES

Item No.	Item	Quantity	Unit
13	Dry Excavation for Structures	1081	Cu. Yds.
13	Wet Excavation for Structures	358	Cu. Yds.
13	Solid Rock Excavation for Structures	637	Cu. Yds.
91	Class "A" Concrete for Bridges	1880.3	Cu. Yds.
91	Class "B" Concrete for Bridges	604.4	Cu. Yds.
91	Class "S" Concrete for Bridges	2142.1	Cu. Yds.
92	Reinforcing Steel for Bridges	548255	Lbs.
94	Concrete Handrail for Bridges	1801	Lin. Ft.
3P	Sand Fill for Piers	119.6	Cu. Yds.
92 & 5P	Bronze Expansion Devices	6377	Lbs.
92 & 5P	Cast Iron and Cast Steel	2584	Lbs.
92 & 5P	Bronze State Bridge Name Plates	2	Each
92 & 5P	Bronze Project Marker Plates	2	Each
95	Rip Rap	220	Cu. Yds.

PLAN OF PROPOSED BRIDGE  
OVER  
NORTH FORK RIVER  
MOUNTAIN HOME-SALEM ROAD  
BAXTER COUNTY  
ROUTE 62-SEC. 11

JOB No 7-177  
U.S. PUBLIC WORKS PROJECT NO. NRS-312-B  
BAXTER COUNTY - ARKANSAS.



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	Date	Approved
Pamphlet A Revised	Mar. 1st, 1931	Approved June 1/3, 1931
" B Revised	Feb. 10, 1933	
" M "	Mar. 1st, 1931	" 13, 1931
" N Revised	Oct. 1st, 1933	

SPECIAL PROVISIONS

Item	No. of Sheets	Date
NIRA Labor	Approved Oct 13, 1933	12
Minimum Wage Scale		1
Engineer's Field Office		1
Sand and gravel fill in Piers & Abuts		8-23-33
Bronze Project Marker Plates and Bronze State Bridge Name Plates		12-1-33
Bronze Expansion Devices		8-10-33
Cast Steel and Cast Iron		8-15-33
Labor Preference		12-5-33
Beginning and Prosecution of Work		1

LAYOUT

Scale: 1" = 400'

LENGTH OF PROJECT	=	888'-0" = 0.168 Mi.
LENGTH OF BRIDGES	=	888'-0" = 0.168 Mi.
LENGTH OF EMBANKMENT	=	0'-0" = 0.00 Mi.
LENGTH OF JOB	=	888'-0" = 0.168 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

*M. R. ...*  
BRIDGE ENGINEER

BRIDGES NO. 588

DRAWING NO. 3583

**RIGHT OF WAY DATA**

From Sta	To Sta	R	L	Total
151+00	154+00	100'	100'	200'
154+00	168+00	40'	40'	80'
168+00	172+00	100'	100'	200'

**TANGENT DISTANCE**

To beginning of bridge	1114.2'
From end of bridge	186.4'
Eq. Sta. 169+38.3 7° Curve Left	

Equation- Sta. 162+36.1 = 167+70.0

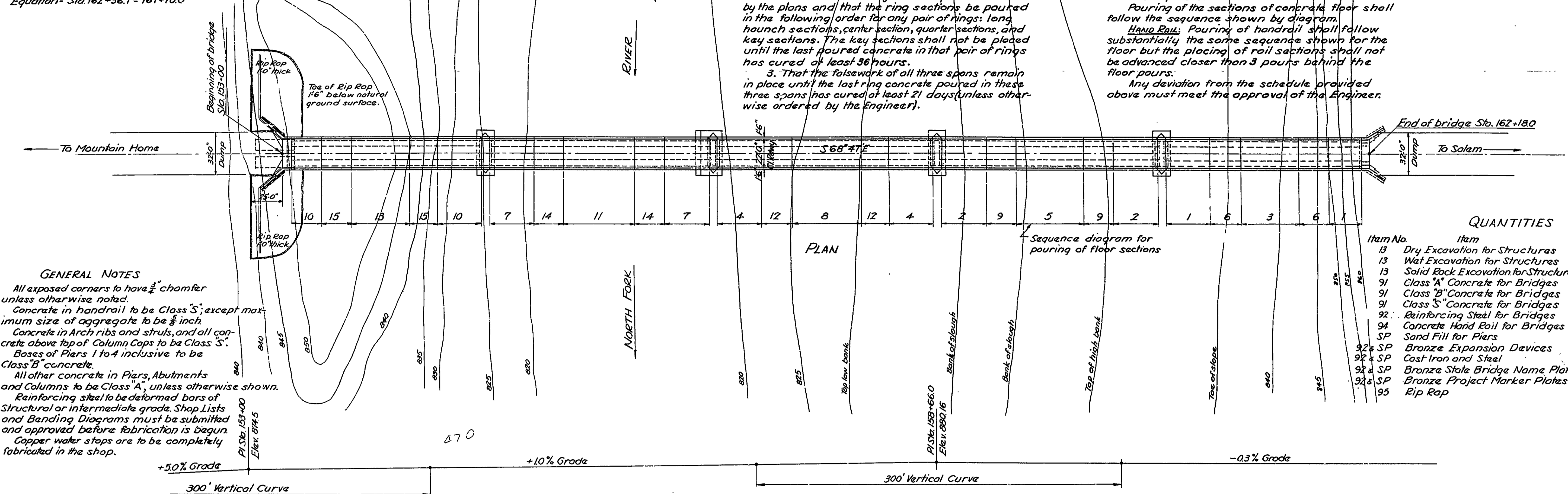
Note: Grouted Rip Rap Gutters 1'0" deep and about 1'0" wide shall be placed at the end of wingwalls as shown and as directed by the Engineer. Full payment for these gutters shall be included in the unit price bid for Rip Rap. Excavation for Rip Rap toe below the natural ground surface shall be paid for as Dry Excavation for Structures, except only that portion of trench in excess of 18" depth shall be included in quantity for payment. Lines of excavation shall be to neat lines of Rip Rpp.

**ORDER OF POURING SUPERSTRUCTURE**  
**ARCH RINGS:** Pier 2 is designed to take thrust from the right (or East) arch rings without any counteracting thrust from the left (or West). The three spans of arch rings to the right (or East) of Pier 2 may be poured in any sequence elected by the contractor provided:  
 1. That in pouring any pair of rings the loading of the falsework is kept symmetrical about the center of that span.  
 2. That construction joints are placed as shown by the plans and that the ring sections be poured in the following order for any pair of rings: long haunch sections, center section, quarter sections, and key sections. The key sections shall not be placed until the last poured concrete in that pair of rings has cured for least 36 hours.  
 3. That the falsework of all three spans remain in place until the last ring concrete poured in these three spans has cured at least 21 days (unless otherwise ordered by the Engineer).

The two spans of arch rings to the left (or West) of Pier 2 may then be poured in any sequence elected by the contractor, subject to the stipulations 1, 2 and 3 set forth above where same are applicable.  
**SPANDREL COLUMNS AND FLOOR:** Spandrel columns may be poured at any time, subject to the approval of the Engineer, except they shall not be placed on the span immediately to the right of Pier 2 until the concrete rings immediately to the left of Pier 2 have been placed.  
 Pouring of the sections of concrete floor shall follow the sequence shown by diagram.  
**HAND RAIL:** Pouring of handrail shall follow substantially the same sequence shown for the floor but the placing of rail sections shall not be advanced closer than 3 pouts behind the floor pours.  
 Any deviation from the schedule provided above must meet the approval of the Engineer.

FED. ROAD DIST. NO.	STATE	U.S. PUBLIC WORKS PROJ.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	ARK.	N.E.S. 812-B	1934	3	11

Job No. 7-177



**GENERAL NOTES**  
 All exposed corners to have 3/8" chamfer unless otherwise noted.  
 Concrete in handrail to be Class S, except maximum size of aggregate to be 3/8" inch.  
 Concrete in Arch ribs and struts, and all concrete above top of Column Caps to be Class S.  
 Bases of Piers 1 to 4 inclusive to be Class B concrete.  
 All other concrete in Piers, Abutments and Columns to be Class A, unless otherwise shown.  
 Reinforcing steel to be deformed bars of Structural or intermediate grade. Shop Lists and Banding Diagrams must be submitted and approved before fabrication is begun.  
 Copper water stops are to be completely fabricated in the shop.

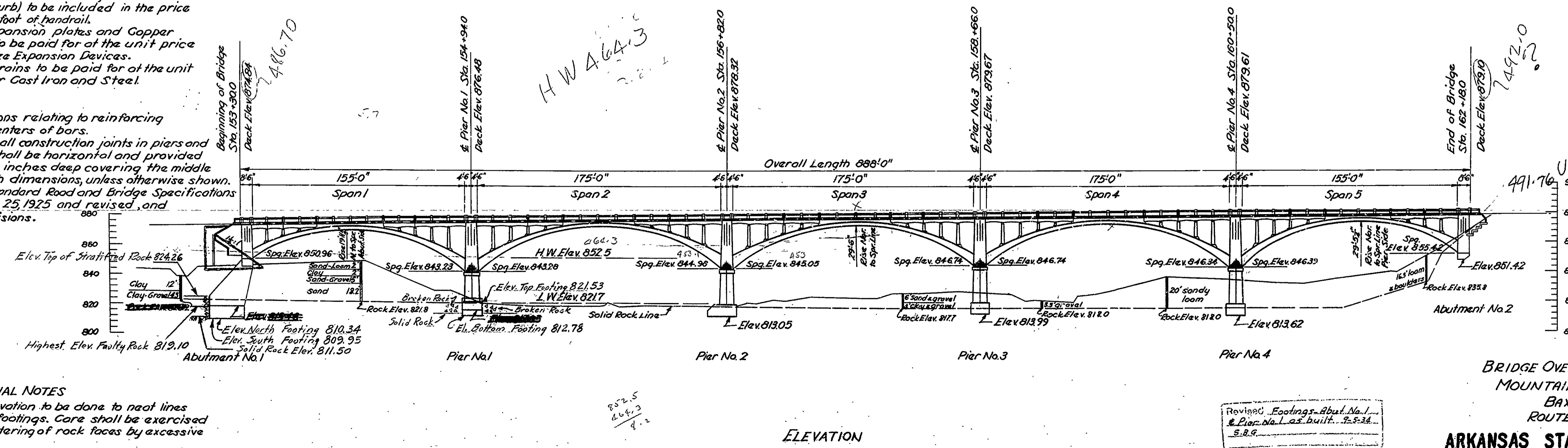
**QUANTITIES**

Item No.	Item	Unit
13	Dry Excavation for Structures	1081 Cu. Yds
13	Wat. Excavation for Structures	358 Cu. Yds
13	Solid Rock Excavation for Structures	637 Cu. Yds
91	Class "A" Concrete for Bridges	1880.3 Cu. Yds
91	Class "B" Concrete for Bridges	604.4 Cu. Yds
91	Class "S" Concrete for Bridges	2142.1 Cu. Yds
92	Reinforcing Steel for Bridges	548,255 LBS.
94	Concrete Hand Rail for Bridges	1,801 Lin. Ft.
SP	Sand Fill for Piers	119.6 Cu. Yds
92 1/2 SP	Bronze Expansion Devices	6377 LBS.
92 1/2 SP	Cast Iron and Steel	2,584 LBS.
92 1/2 SP	Bronze Stake Bridge Name Plates	2 EACH
92 1/2 SP	Bronze Project Marker Plates	2 EACH
95	Rip Rap	220 Cu. Yds

Bituminous felt and reinforcing steel in handrail (above top of curb) to be included in the price bid per linear foot of handrail.  
 Bronze Expansion plates and Copper Water-stops to be paid for at the unit price bid for Bronze Expansion Devices.  
 Cast iron drains to be paid for at the unit price bid for Cast Iron and Steel.

All dimensions relating to reinforcing steel are to centers of bars.  
 In general all construction joints in piers and abutments shall be horizontal and provided with keys six inches deep covering the middle third of both dimensions, unless otherwise shown.  
 Arkansas Standard Road and Bridge Specifications adopted May 25, 1925 and revised, and Special Provisions.

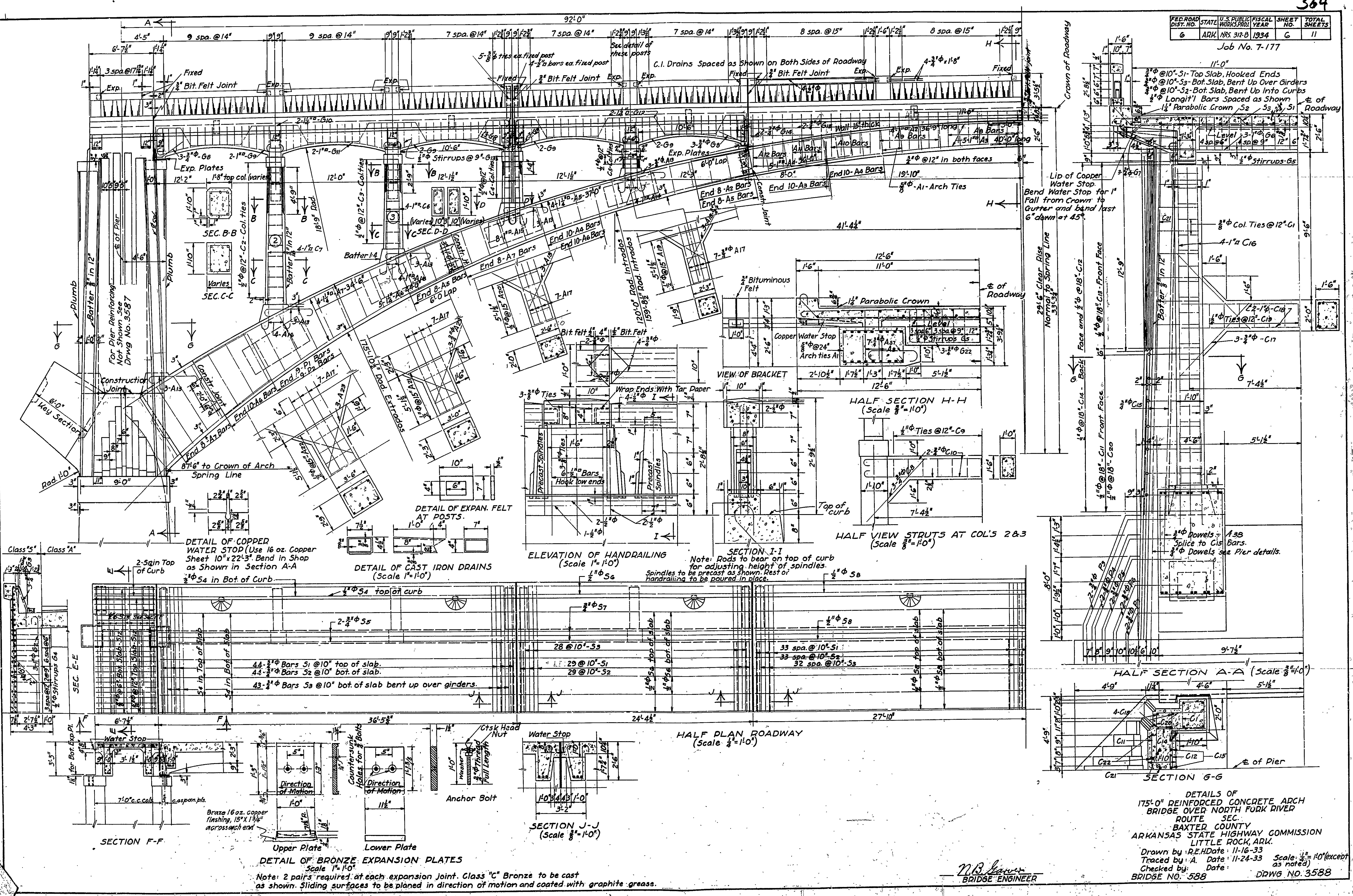
**SPECIAL NOTES**  
 Rock excavation to be done to neat lines of concrete footings. Care shall be exercised to avoid shattering of rock faces by excessive blasting.  
 The Contractor must submit details of falsework to the Arkansas State Highway Department for approval before construction is started.



ARKANSAS STATE HIGHWAY COMMISSION  
 LITTLE ROCK, ARK.  
 Drawn By: E.B.S. Date: 11-27-1933  
 Traced By: Date: 11-29-1933  
 Checked By: Date:  
 Bridge Engineer  
 BRIDGE NO. 588  
 DRAWING NO. 3585  
 Scale: 1"=40' 0"

FED. ROAD DIST. NO.	STATE	U.S. PUBLIC WORKS PROJ. YEAR	SHEET NO.	TOTAL SHEETS
6	ARK.	NRS. 312-B	1934	6

Job No. 7-177



DETAILS OF  
175'-0" REINFORCED CONCRETE ARCH  
BRIDGE OVER NORTH FORK RIVER  
ROUTE SEC.  
BAXTER COUNTY  
ARKANSAS STATE HIGHWAY COMMISSION  
LITTLE ROCK, ARK.  
Drawn by: R.E.H. Date: 11-16-33 Scale: 1/4" = 10' (except  
as noted)  
Traced by: A. Date: 11-24-33  
Checked by: Date:  
BRIDGE NO. 588 DRWG. NO. 3588

*N.B. Lawler*  
BRIDGE ENGINEER

DETAIL OF BRONZE EXPANSION PLATES  
Scale 1" = 10"  
Note: 2 pairs required at each expansion joint. Class "C" Bronze to be cast as shown. Sliding surfaces to be planed in direction of motion and coated with graphite grease.

HALF PLAN ROADWAY  
Scale 1/4" = 10'

SECTION J-J  
Scale 3/8" = 10'

HALF SECTION A-A  
Scale 3/8" = 10'

HALF SECTION H-H  
Scale 3/8" = 10'

ELEVATION OF HANDRAILING  
Scale 1" = 10'

DETAIL OF CAST IRON DRAINS  
Scale 1" = 10'

DETAIL OF COPPER WATER STOP  
Scale 1" = 10'

SECTION F-F

SECTION G-G

SECTION I-I  
Scale 3/8" = 10'

VIEW OF BRACKET

Class "A"

Class "B"

Class "C"

Class "D"

Class "E"

Class "F"

Class "G"

Class "H"

Class "I"

Class "J"

Class "K"

Class "L"

Class "M"

Class "N"

Class "O"

Class "P"

Class "Q"

Class "R"

Class "S"

Class "T"

Class "U"

Class "V"

Class "W"

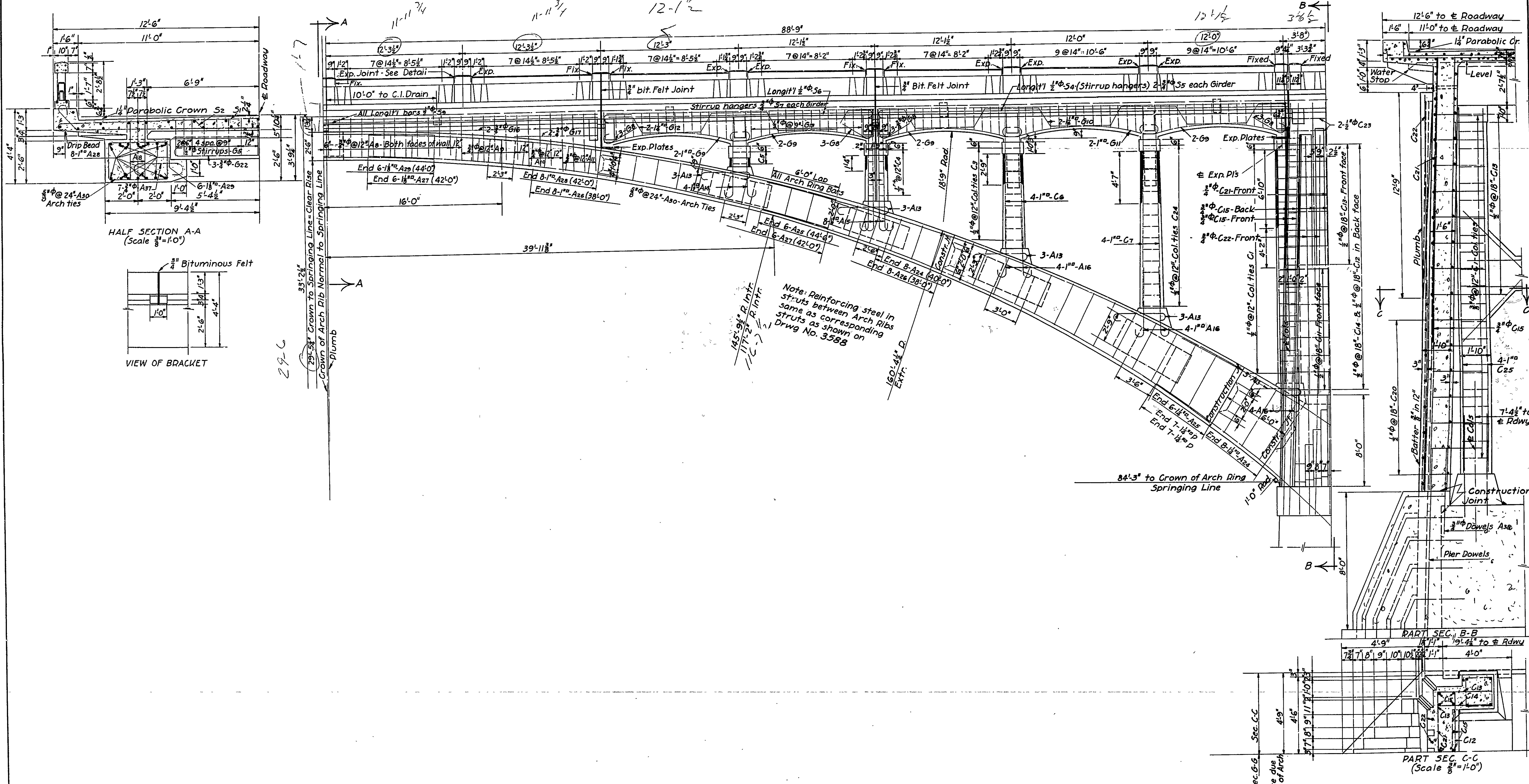
Class "X"

Class "Y"

Class "Z"

FED. ROAD DIST. NO.	STATE	U.S. PUBLIC WORKS PROJ.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	ARK.	N.R.S. 312-B	1934	5	11

JOB NO. 7-177



DETAILS OF  
 PIER END OF SPAN 1 & 5  
 BRIDGE OVER NORTH FORK RIVER  
 BAXTER COUNTY  
 ROUTE 62 SEC. 12  
 ARKANSAS STATE HIGHWAY COMMISSION  
 LITTLE ROCK, ARK.

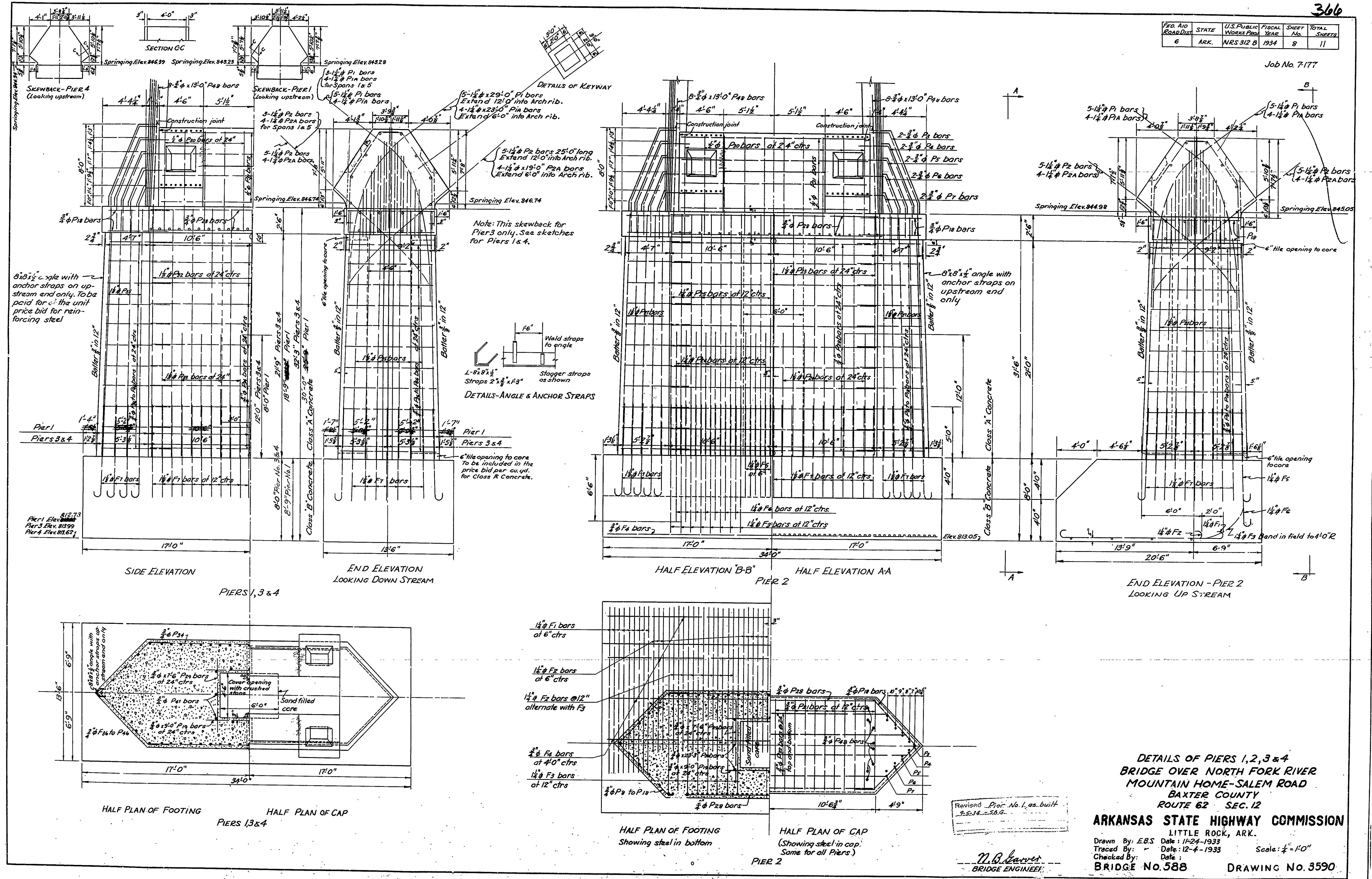
Drawn by: R.E.H. Date: 11-22-33  
 Traced by: A. Date: 12-1-33 Scale: 1/4" = 1'-0"  
 Checked by: Date: (except as noted)  
 BRIDGE NO. 588 DRWG NO. 3587

*M.B. Sawyer*  
 BRIDGE ENGINEER



FED. AID ROAD DIST.	STATE	U.S. PUBLIC WORKS PROJ. YEAR	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	ARK.	NRS 312 B	1934	8	11

Job No. 7-177



DETAILS OF PIERS 1, 2, 3 & 4  
 BRIDGE OVER NORTH FORK RIVER  
 MOUNTAIN HOME-SALEM ROAD  
 BAXTER COUNTY  
 ROUTE 62 SEC. 12  
**ARKANSAS STATE HIGHWAY COMMISSION**  
 LITTLE ROCK, ARK.  
 Drawn By: E.B.S. Date: 11-24-1933  
 Traced By: Date: 12-4-1933  
 Checked By: Date:  
**BRIDGE No. 588**      **DRAWING No. 3590**

Revised Pier No. 1, as built  
 9-5-34 - 58.9

*N.B. Barrett*  
 BRIDGE ENGINEER



FED. ROAD DIST. NO.	STATE	U.S. PUBLIC WORKS PROJ.	FISCAL YEAR	SHEET NO.	TOTAL YEAR
6	ARK.	N.R. 312-B	1934	2	11

Job No. 7-177

SCHEDULE OF QUANTITIES  
 JOB No. 7-177 U.S. PUBLIC WORKS PROJECT N.R.S. 312-B

UNIT OF BRIDGE \ ITEM	ITEM NO. 13 DRY EXCAVATION FOR STRUCTURES CU. YDS.	ITEM NO. 13 WET EXCAVATION FOR STRUCTURES CU. YDS.	ITEM NO. 13 SOLID ROCK EXCAV. FOR STRUC. CU. YDS.	ITEM NO. 91 CLASS "B" CONC. FOR BRIDGES CU. YDS.	ITEM NO. 91 CLASS "A" CONC. FOR BRIDGES CU. YDS.	ITEM NO. 91 CLASS "S" CONC. FOR BRIDGES CU. YDS.	ITEM NO. 92 REINFORCING STEEL LBS.	ITEM NO. 94 CONC. RAILING FOR BRIDGES LIN. FT.	ITEM NO. S.P. SAND & GRAVEL FILL FOR PIERS CU. YDS.	ITEM NO. S.P. BRONZE EXP. DEVICES LBS.	ITEM NO. S.P. CAST IRON & STEEL LBS.	ITEM NO. S.P. BRONZE STATE BR. NAME PLATES EACH	ITEM NO. S.P. BRONZE PROJ. MARKED PLATES EACH	ITEM NO. 95 RIP RAP CU. YDS.
Abutment No. 1	555	85	61		538.0		25142	10.5	19.4					220
Abutment No. 2	30		184		133.6		9695	14.5	20.3					
Pier No. 1	33	38	75	136.0	191.5		13930		15.3					
Pier No. 2			167	196.4	243.1		27378		21.0					
Pier No. 3	124	113	75	136.0	250.3		16659		21.8					
Pier No. 4	339	122	75	136.0	251.2		16085		21.8					
2-155' Arch Spans					74.2	774.3	152884	672		2551	952	2	2	
3-175' Arch Spans					198.4	1367.8	286512	1104		3826	1632			
TOTALS	1081	358	637	604.4	1880.3	2142.1	548255	1801	119.6	6377	2584	2	2	220

SCHEDULE OF QUANTITIES  
 FOR  
 BRIDGE OVER NORTH FORK RIVER  
 BAXTER COUNTY  
 ROUTE 62 SEC. 12  
 ARKANSAS STATE HIGHWAY COMMISSION  
 LITTLE ROCK, ARK.  
 Drawn by: A. Date: 12-4-33  
 Traced by: A. Date: 12-4-33  
 Checked by: Date:  
 BRIDGE NO. 588

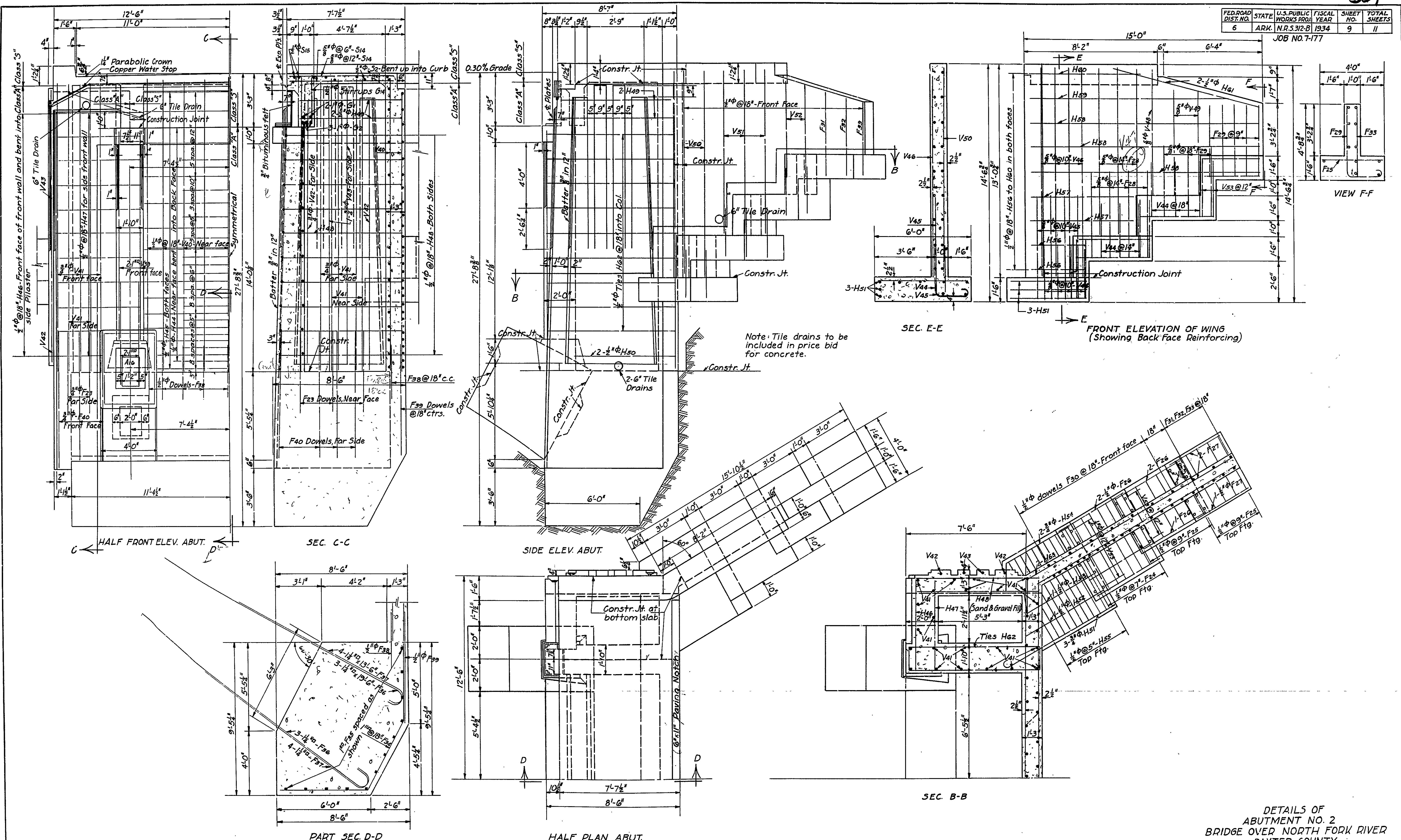
*M. B. Weaver*  
 BRIDGE ENGINEER

DRWG NO. 3584



FED. ROAD DIST. NO.	STATE	U.S. PUBLIC WORKS PROJ.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	ARK.	N.R. 3.312-B	1934	9	11

JOB NO. 7-177



DETAILS OF  
 ABUTMENT NO. 2  
 BRIDGE OVER NORTH FORK RIVER  
 BAXTER COUNTY  
 ROUTE 62 SEC. 12  
 ARKANSAS STATE HIGHWAY COMMISSION  
 LITTLE ROCK, ARK.  
 Drawn by: R.E.H. Date: 11-29-33  
 Traced by: A. Date: 12-4-33 Scale: 3/8"=1'-0"  
 Checked by: \_\_\_\_\_  
 BRIDGE NO. 588

*N.B. Lanier*  
 BRIDGE ENGINEER

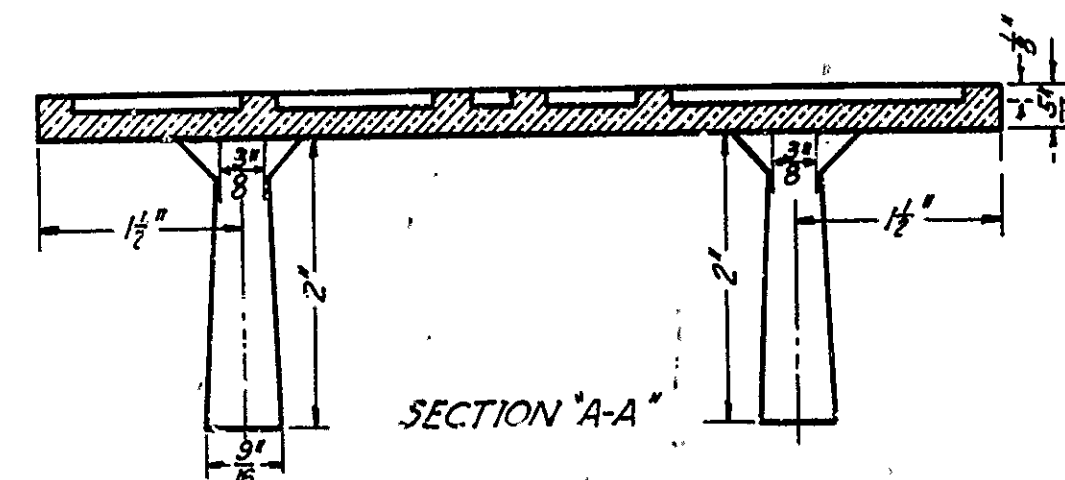
DRWG. NO. 3591



DETAIL OF BRONZE PLATE - TYPE AL-1  
FOR FEDERAL AID PROJECTS  
Type AR-1 plate to conform in every respect to type AL-1  
except that directional arrow shall be reversed.



DETAIL OF BRONZE PLATE - TYPE AL-2  
FOR FOREST HIGHWAY PROJECTS  
Type AR-2 plate to conform in every respect to type  
AL-2 except that directional arrow shall be reversed.  
Note: Dimensions to be same  
as for Federal Aid Marker plates.



SPECIFICATIONS FOR BRONZE PLATE  
Body 1/2" Thick  
Tapering Cone Lugs 3/4" to 1" long  
Weight - Approx. 3.5 Lbs. for one plate  
Plates to be made in accordance with U.S. Government  
Specifications for Statuary Bronze.

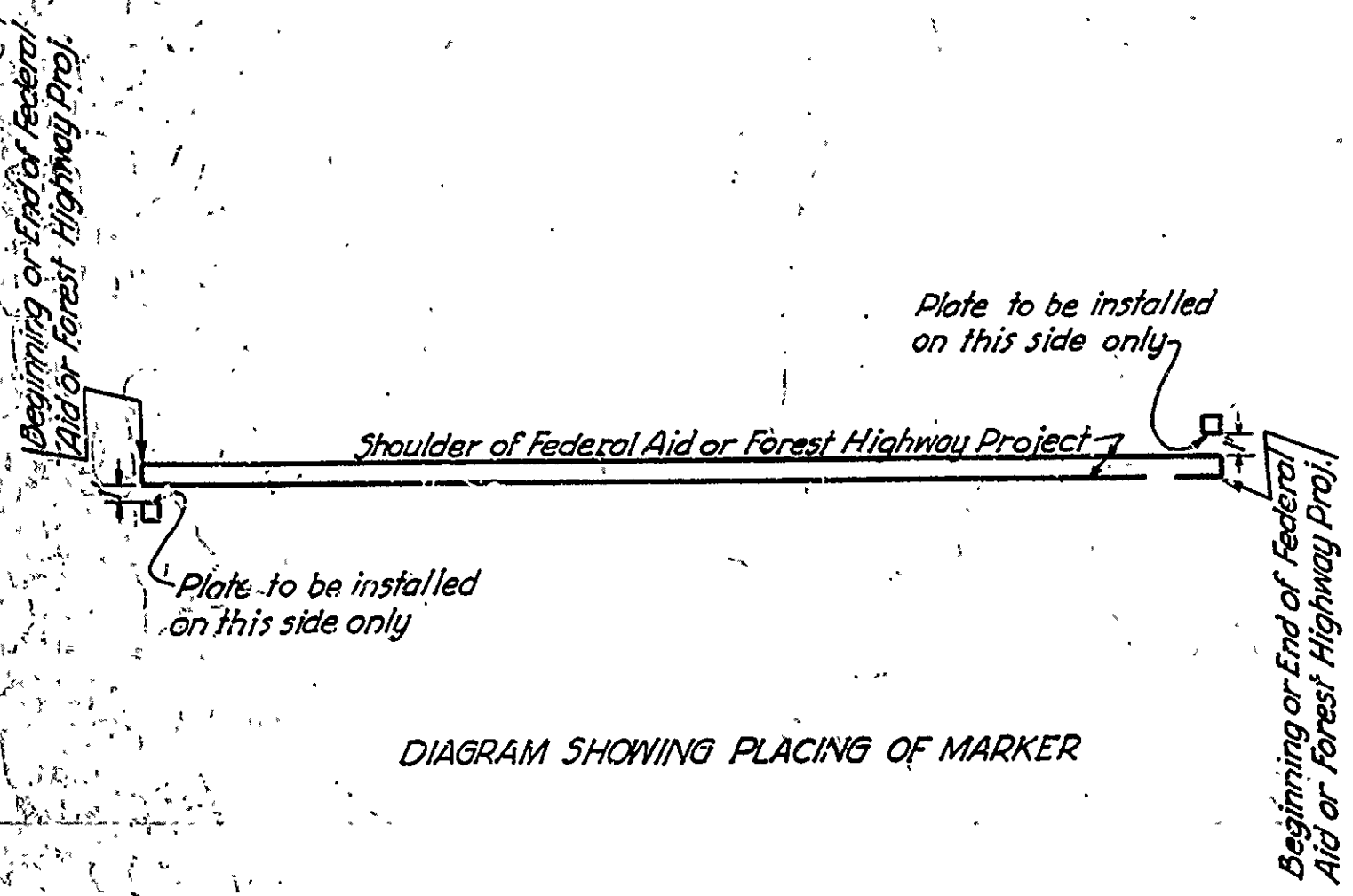
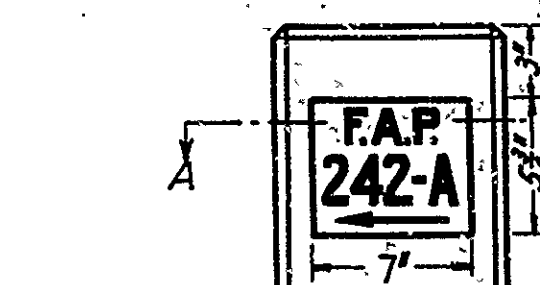
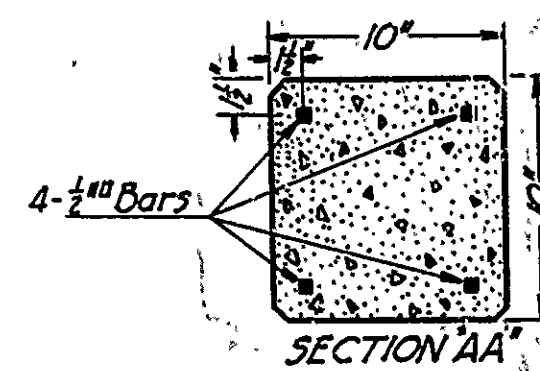
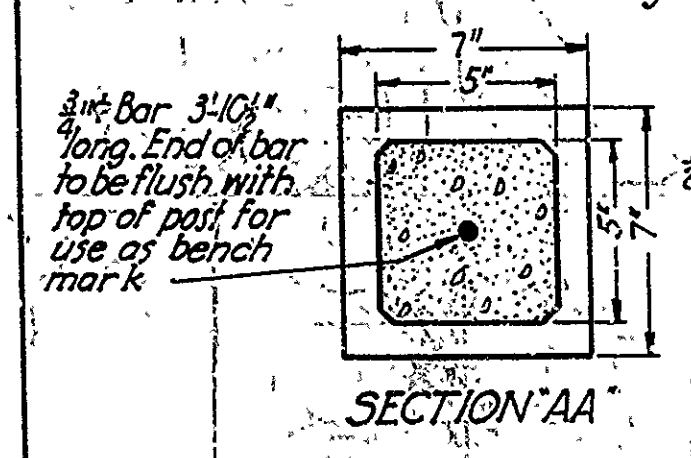


DIAGRAM SHOWING PLACING OF MARKER

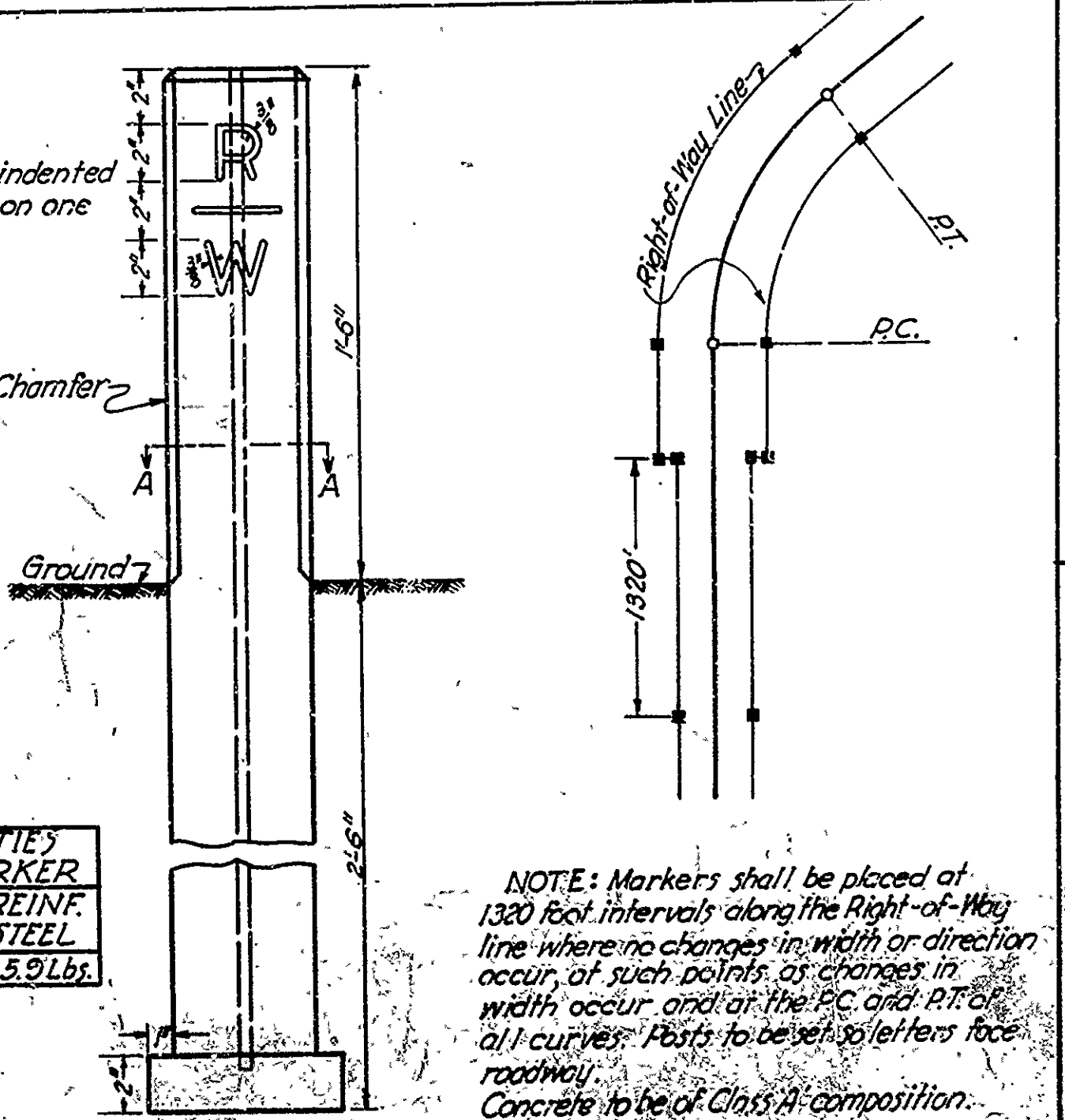
**INSTRUCTIONS FOR PLACING MARKERS ON FEDERAL AID OR FOREST HIGHWAY PROJECTS**  
One marker will be placed at each end of each Federal Aid or Forest Highway Project, or section thereof, except bridge projects without graded approaches. Markers will be placed on the right hand side of the road with respect to the direction of travel and with the arrow on the marker plate indicating in which direction the project or section lies. Where two projects adjoin, the marker plates for both may be placed on the same post.  
Where a bridge or several bridges, without graded approaches, form a projection or section, one marker plate will be placed on either end of each bridge as follows:  
In the end rail post on bridges having concrete railing.  
In the face of the abutment near the shoe on bridges not having concrete railing.  
Where the continuity of a project or section is broken thru the introduction of an exception other than a bridge without graded approaches, a marker will be placed at each point where the project or section is stopped and where returned.

QUANTITIES PER MARKER	
CLASS "A" CONCRETE	REINFORCING STEEL
0.13 Cu. yds.	15 Lbs.

NOTE: Concrete to be of 1:2:4 mix. Numerals shown are to be the number of the project on which the marker is placed.



SECTION AA



RIGHT OF WAY MARKERS  
Do not scale

NOTE: Markers shall be placed at 1320 foot intervals along the Right-of-Way line where no changes in width or direction occur, at such points of changes in width occur and at the P.C. and P.T.C. of all curves. Posts to be set so letters face roadway. Concrete to be of Class A composition.

OUACHITA RIVER  
ARKANSAS BRIDGE & STEEL CO.  
CONTRACTOR.

ARKANSAS  
STATE HIGHWAY COMMISSION  
JAS. R. RHYNE, DIRECTOR  
N. B. GARVER, BRIDGE ENGINEER

1934

BRIDGE NO. [REDACTED]

SPECIFICATIONS FOR BRONZE PLATES  
Body 1/2" thick.  
Tapering cone lugs 3/4" to 1" long.  
Plates to be made in accordance with U.S. Government Specifications for Statuary Bronze.  
The border and all lettering to be raised 1/8" above face of plate and the top surfaces of the raised border and lettering to be polished.  
All lettering to be plain Gothic, square cut and not tapered.  
Two (2) Plates required at each bridge. Place as shown on Plans.  
Name of stream and name of contractor to be varied to suit each bridge. Other lettering will be the same for all bridges.

BRIDGE NAME PLATES  
Full Size

FEDERAL AID AND FOREST HIGHWAY  
PROJECT MARKERS  
RIGHT OF WAY MARKERS  
BRIDGE NAME PLATES

ARKANSAS STATE HIGHWAY COMMISSION  
LITTLE ROCK, ARK.

FEDERAL AID AND FOREST HIGHWAY PROJECT MARKERS  
Do not scale

DRAWING NO. 236