

FED. ROAD DIST. NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	ARK.				
STATE JOB NO. 5285					11

STATE OF ARKANSAS
STATE HIGHWAY COMMISSION

**PLAN OF PROPOSED BRIDGE
OVER CURIA CREEK
BATESVILLE - POWHATAN ROAD
INDEPENDENCE COUNTY
ROUTE 25 SEC. 5
JOB NO 5285**

SPECIFICATIONS: ARKANSAS STATE HIGHWAY COMMISSION
STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION
ADOPTED MARCH 1, 1940 WITH THE SPECIAL PROVISIONS LISTED BELOW

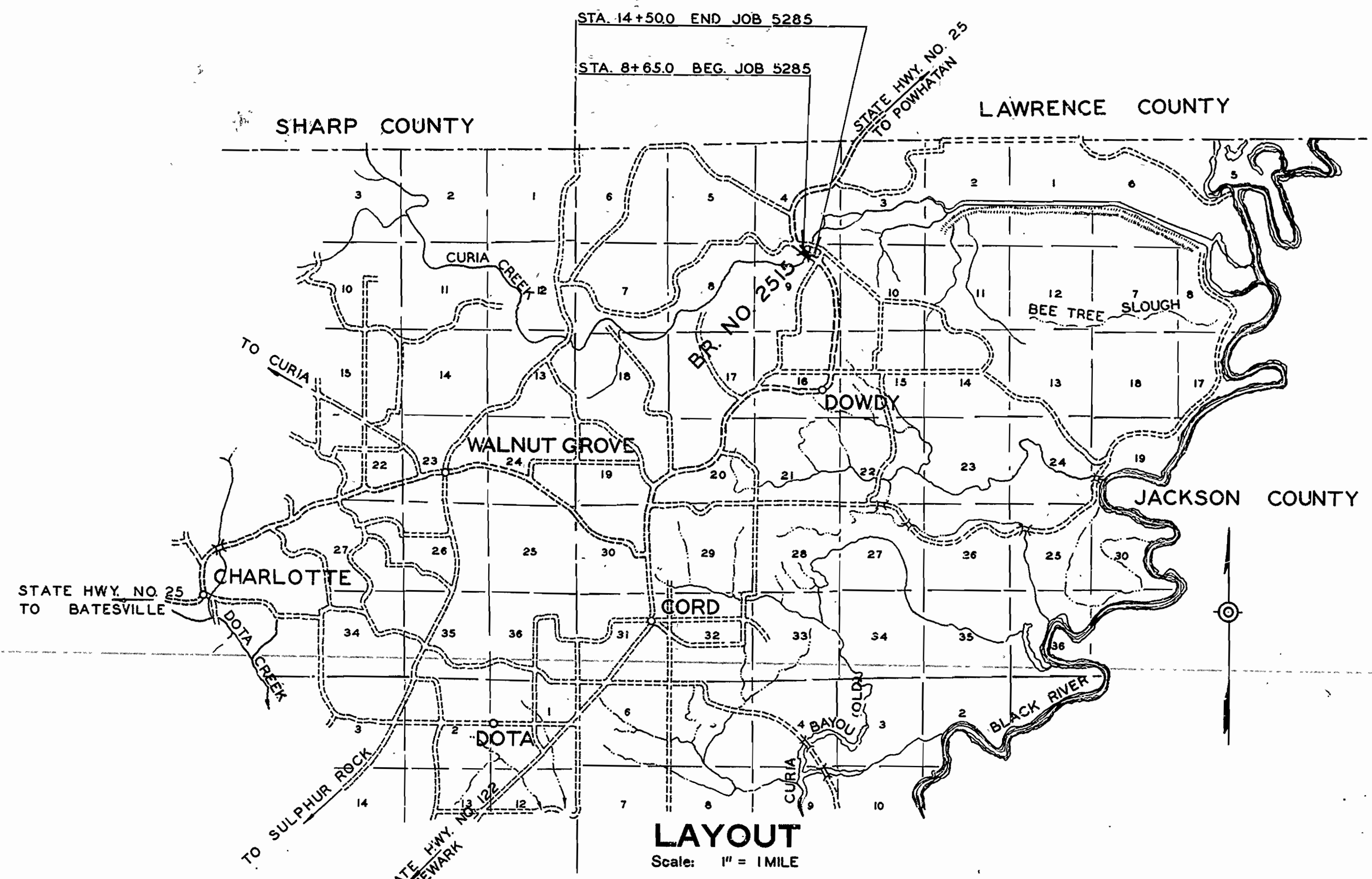
PAMPHLETS

DIVISION	PART
I	
II	1, 4, 8a, 8b, 8c, 9.
III	
IV	

INDEX OF SHEETS

SHEET NO.	DRAWING NO.	TITLE SHEET.
1	6860	TITLE SHEET.
2	6861	SUMMARY SHEET.
3	6862	LAYOUT BRIDGE NO. 2515
4	5269	DETAILS STD. TR. TIMBER BENTS
5	5270	DETAILS STD. 31'-7" I-BEAM SPAN.
6	6863	PLAN & PROFILE.
7 & 8	6864 & 6864-A.	CROSS SECTIONS.
9	1888	BACKFILL FOR STRUCTURES.
10	6862-A	DETAILS OF BENTS 3 & 4
11	6862-B	DETAILS OF SPANS

No.	SPECIAL PROVISIONS TITLE	No. SHEETS
2-1	REV. TO ART. 2-1	2
2-2	EQUIPMENT LIST REQUIRED	2
2-4	STATE LICENSE FOR CONTRACTORS	1
4-1	REV. TO ART. 4-1	1
8-2	EMPLOYMENT OF LABOR	1
9-8	PAYMENT	1
9-8	COMMON CARRIER RATES	1
10-4-27	EMBANKMENT MATERIAL	2
450-3	FURNISHING AND SERVICE GRAVEL	1
450-3	TRAFFIC SERVICE GRAVEL	1
807-4	REV. OF ART. 807.29	1
807-5	REV. OF ART. 807.29(a)	1
807-6	STRUCTURAL STEEL FURNISHED BY STATE	1
809-4	REV. OF ART. 809.22	2
850-1	ENGINEERS FIELD OFFICE	1
853-1	MACHINE MIXING	1
809-1	PRESERVATIVE TREATMENT OF TIMBER	3



LENGTH OF PROJECT= 585 FT. OR 0.110 MI.
 LENGTH OF BRIDGES= 185.67 FT. OR 0.035 MI.
 LENGTH OF EMBANKMENT= 399.33 FT. OR 0.075 MI.
 LENGTH OF JOB= 585 FT. OR 0.110 MI.

Revised 2-27-47

APPROVED

CHIEF ENGINEER-STATE HIGHWAY COMMISSION

APPROVED

CHAIRMAN-STATE HIGHWAY COMMISSION

RECOMMENDED FOR APPROVAL

DISTRICT ENGINEER
PUBLIC ROADS ADMINISTRATION
FEDERAL WORKS AGENCY

APPROVED

COMMISSIONER
PUBLIC ROADS ADMINISTRATION
FEDERAL WORKS AGENCY

M.B. Lawer
PRINCIPAL HIGHWAY ENGINEER (BRIDGE)

3218

FED. ROAD DIST. NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	ARK.			2	11
STATE JOB NO. 5285					

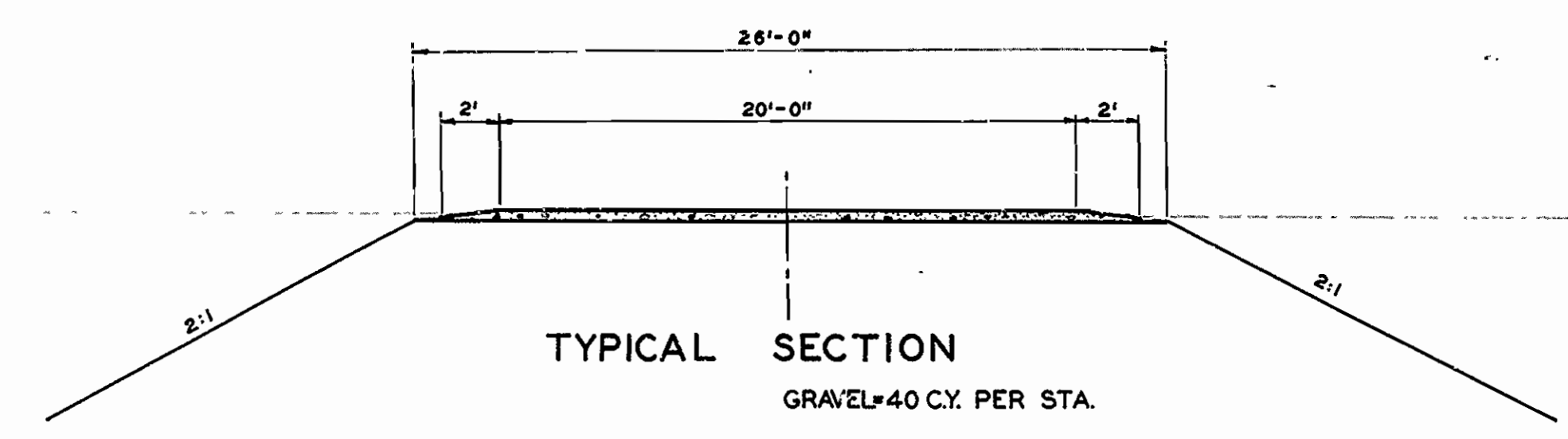
BRIDGE QUANTITIES JOB NO. 5285

ITEM NO.	ITEM	UNIT	QUANTITY									
			BENT NO. 1	BENT NO. 2	BENT NO. 3	BENT NO. 4	BENT NO. 5	SPAN NO. 3	SPANS 1 & 4	SPAN NO. 2	TOTALS	
103	DRY EXCAVATION FOR STRUCTURES	CU. YD.	78	12	10							100
103	WE1 EXCAVATION FOR STRUCTURES	CU. YD.			80							80
103	SOLID ROCK EXCAVATION FOR STRUCTURES	CU. YD.	4	3	5							12
SP & 802	CLASS 'B' CONCRETE FOR BRIDGES	CU. YD.	2.60	1.80								4.40
SP & 802	CLASS 'S' CONCRETE FOR BRIDGES	CU. YD.							41.27	41.70	17.03	100.00
SP & 803	REINFORCING STEEL	LB.			747				16380	5988	2785	25900
805	CONCRETE RAILING	LIN. FT.								12		12
SP & 807	STRUCTURAL STEEL IN ^{AND TRUSS} BEAM SPANS	LB.							16110	394	366	16870
SP & 809	TREATED BRIDGE TIMBER	MFBM.	1.414	1.237	3.948	1.684	0.374			0.346	0.208	9.211
810	TREATED TIMBER PILING	LIN. FT.				560	180					740
909	RIP RAP	CU. YD.	89				88					177
SP & 802	CLASS 'A' CONCRETE FOR BRIDGES	CU. YD.			39.42							39.42
SP. 807-6	STRUCTURAL STEEL FURNISHED BY THE STATE	LB.							60000	22014	10846	92860
925	STEEL PLATE GUARD FENCE	LIN. FT.								131	64	195

ROADWAY QUANTITIES JOB NO. 5285

ITEM NO.	ITEM	UNIT	QUANTITY
102	COMMON EXCAVATION	CU. YD.	* 500
115	FENCE MOVED & RECONSTRUCTED	ROD.	17
SP. 104-27	EMBANKMENT MATERIAL	CU. YD.	2630
404	GRAVEL SURFACE COURSE CL. S _{1,2,3,4,5} OR G.	CU. YD.	170.

*CHANNEL ONLY



Revised 2-27-47

**SUMMARY OF QUANTITIES
CURIA CREEK BRIDGE.
BATESVILLE - POWHATAN ROAD.
INDEPENDENCE COUNTY
ROUTE 25 SEC. 5**

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

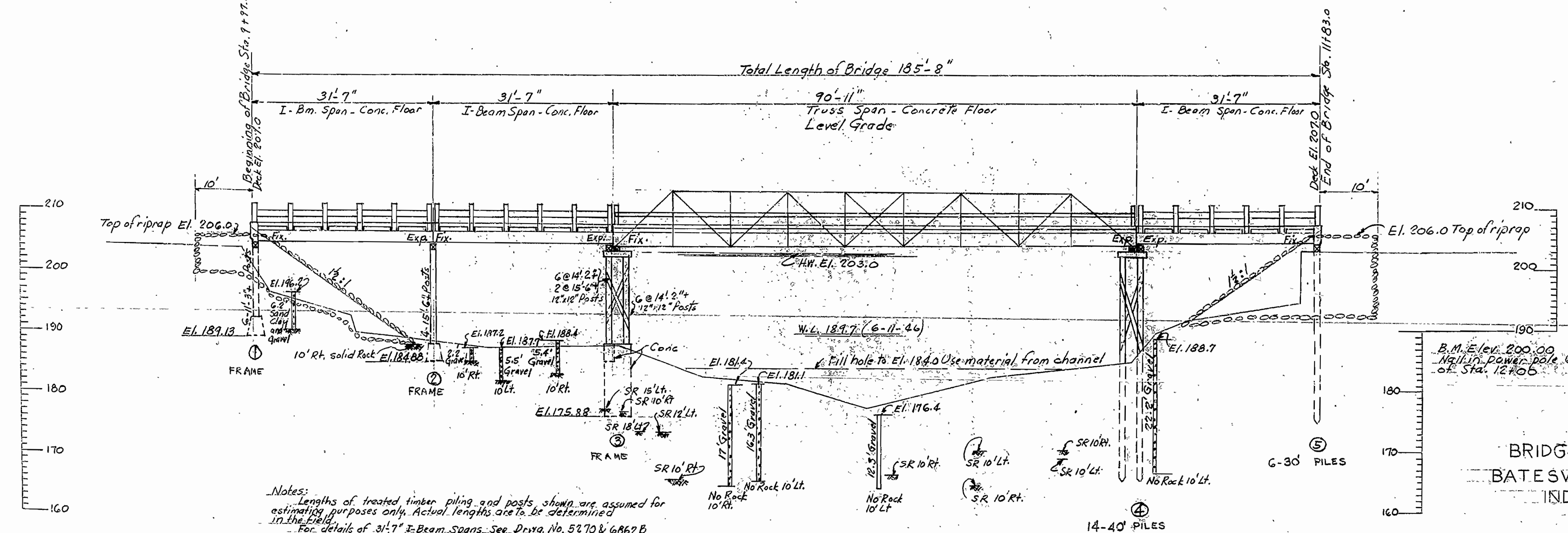
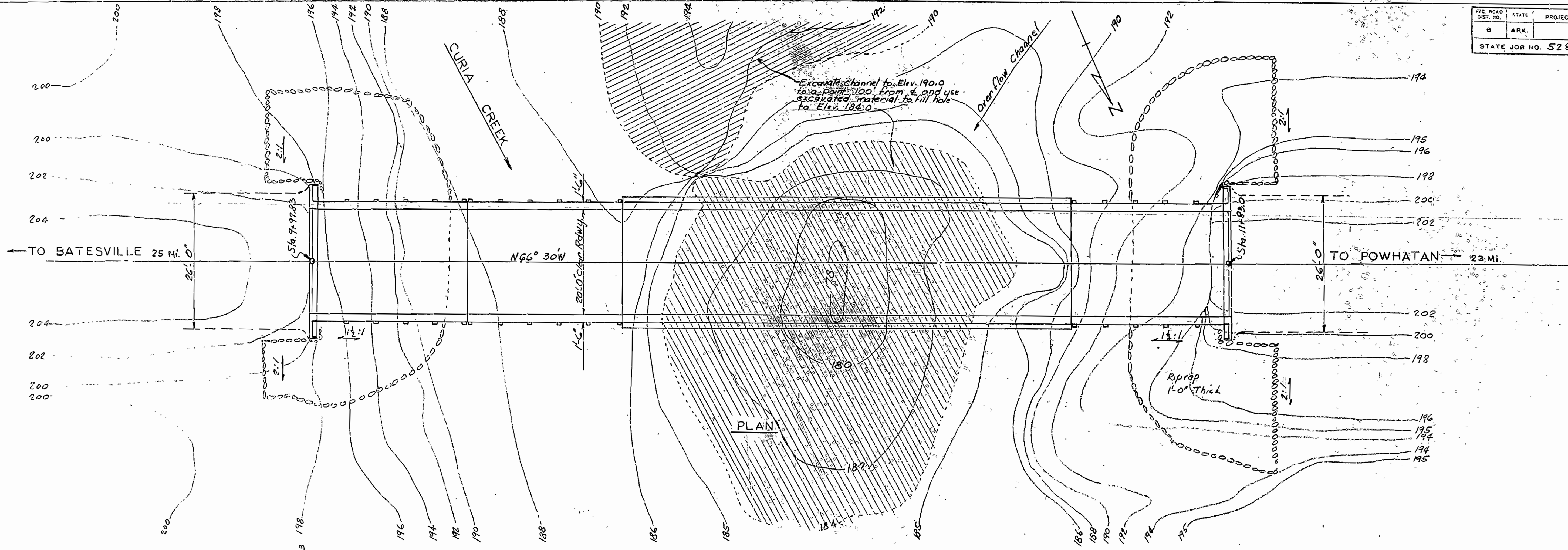
Drawn By: E.A.W. Date: 6-28-46
Traced By: G.W.B. Date: 7-13-46
Checked By: _____ Date: _____

Scale: in. = ft.

H.B. Sawyer
PRINCIPAL HIGHWAY ENGINEER (BRIDGE)

BRIDGE NO. 2515 DRAWING NO. 6861.

PROJECT NO.	STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
6	ARK.			3	11
STATE JOB NO. 5285					



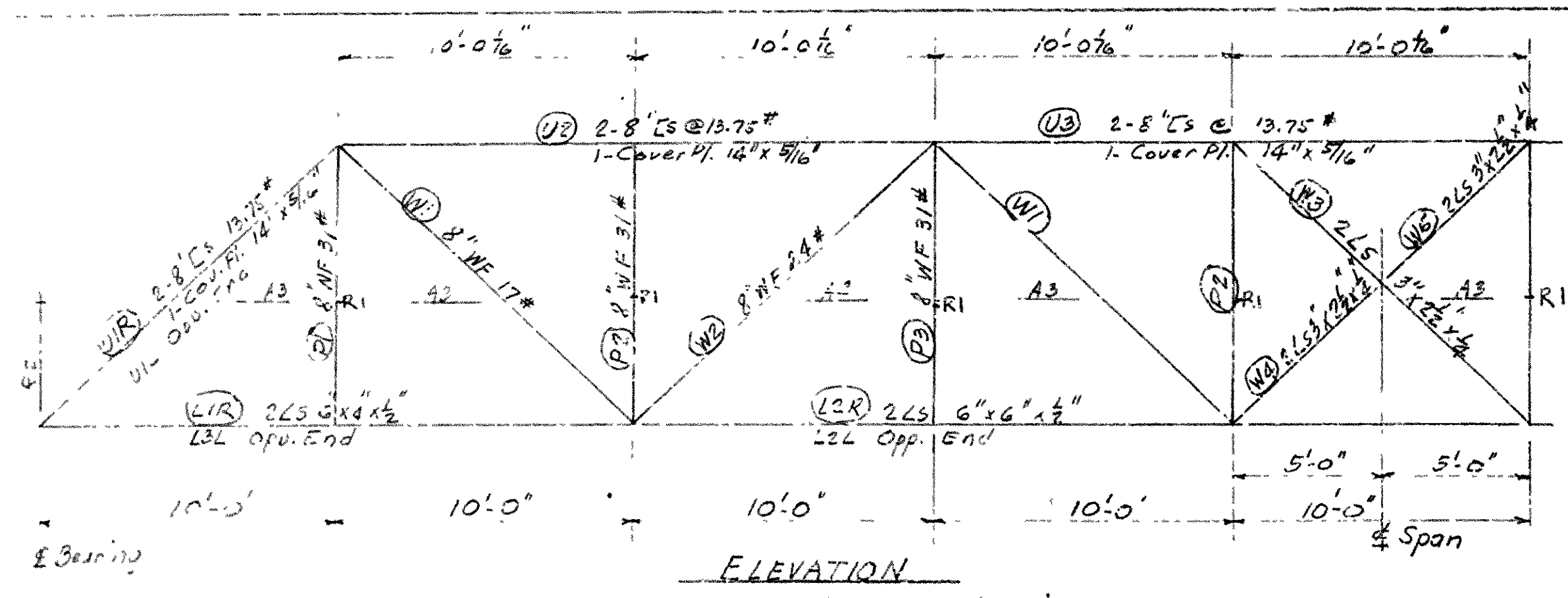
Notes:
 Lengths of treated timber piling and posts shown are assumed for estimating purposes only. Actual lengths are to be determined in the field.
 For details of 31'-7" I-Beam Spans - See Drawg. No. 5270 & 6862 B
 For " 90'-11" Truss Span " " 6862 B
 For " " " " " " 5269
 For " Bent 1, 2, 3, & 4 " " 6862 A

ELEVATION
 D.A. = 45 SQ. MILES C.F. 1.0
 OPENING REQUIRED = 2200 SQ. FT.

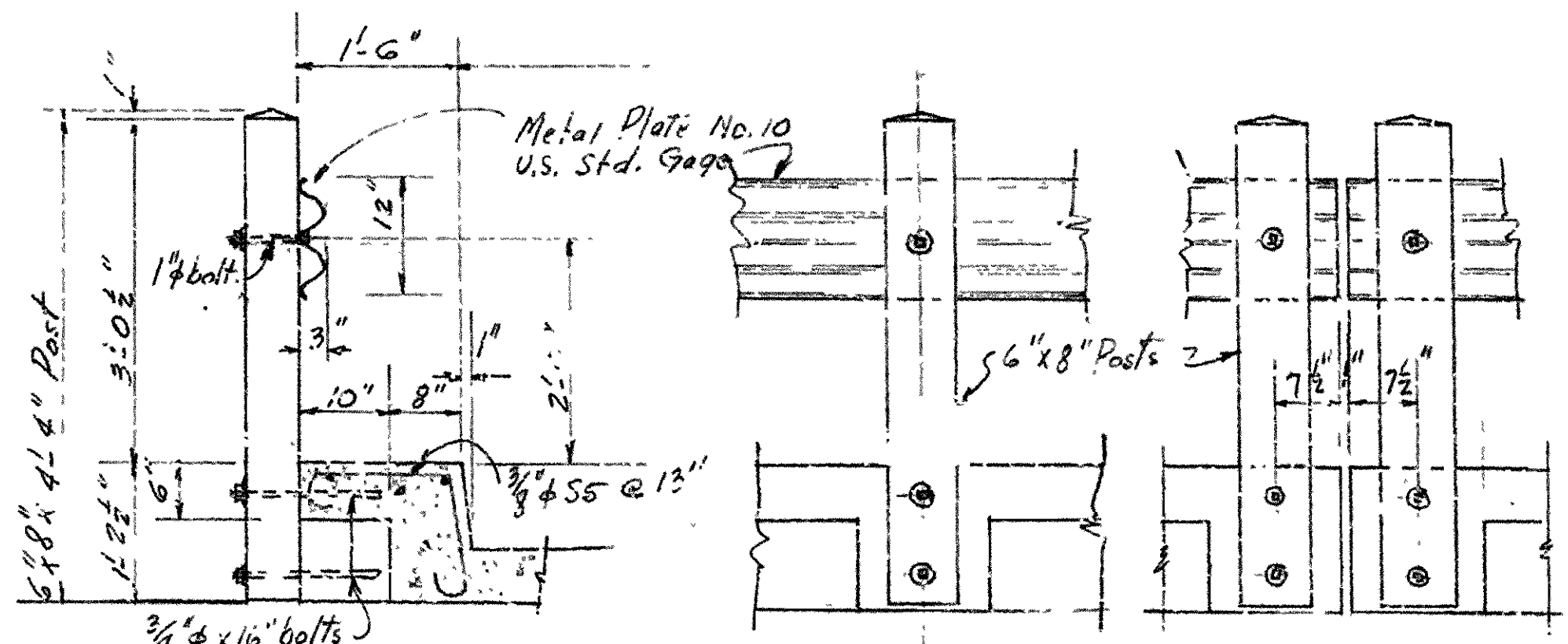
LAYOUT OF
 BRIDGE OVER CURIA CREEK
 BATESVILLE - POWHATAN ROAD
 INDEPENDENCE COUNTY
 ROUTE 25 SEC. 5

ARKANSAS STATE HIGHWAY COMMISSION
 LITTLE ROCK, ARK.
 Re-Drawn By L.P.C. Date: 2-8-47 Scale: 1 in. = 10 ft.

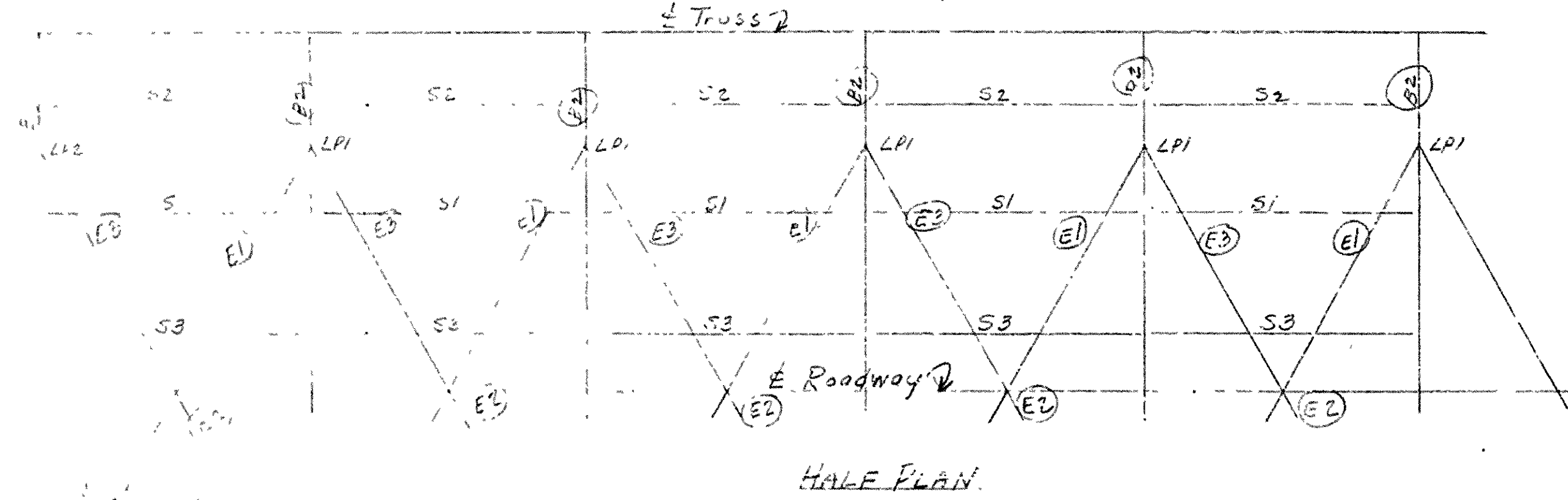
BRIDGE No. 2515 DRAWING No. 6362



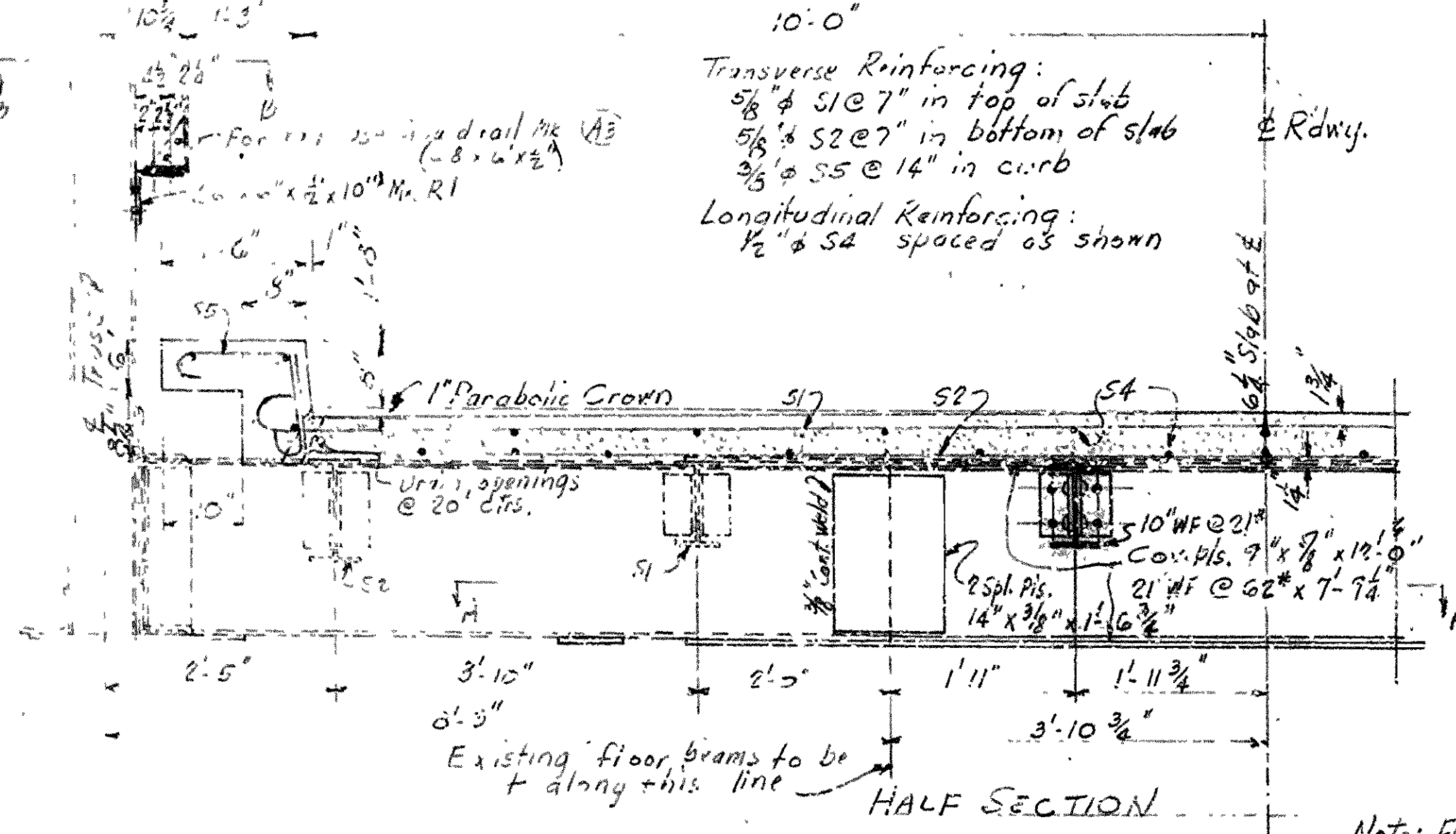
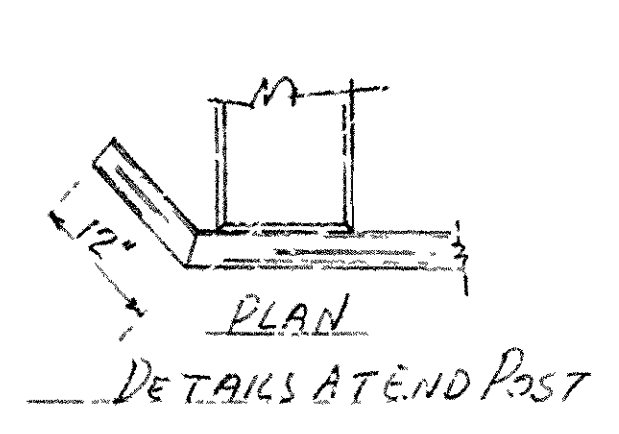
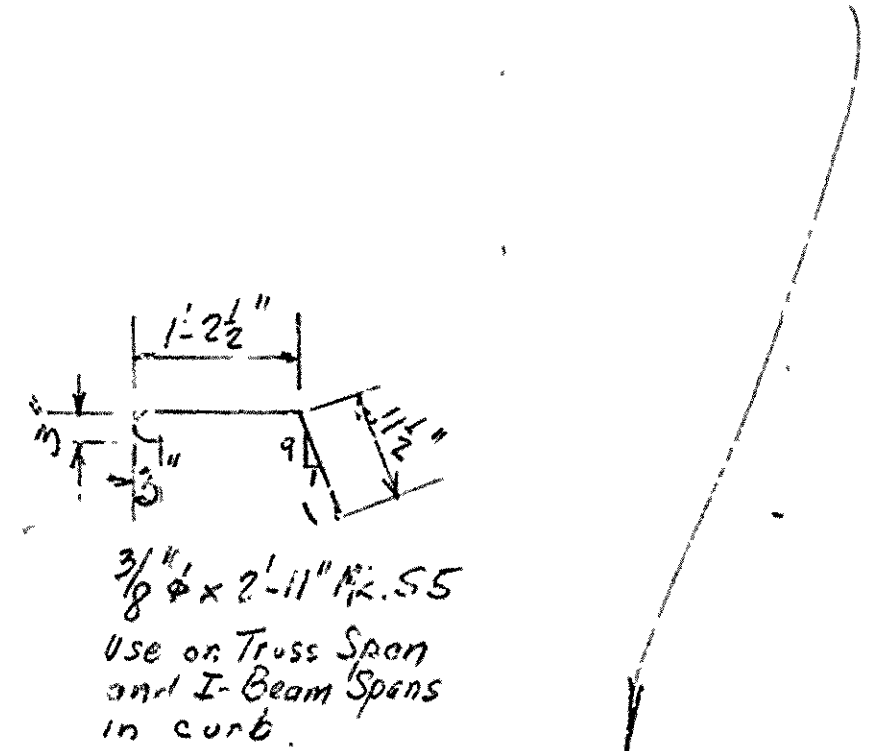
ELEVATION
90'-0" c.c. bearings



SECTION
ELEVATION
POSTS AT END 2
DETAILS OF RAIL ON I-BEAM SPANS



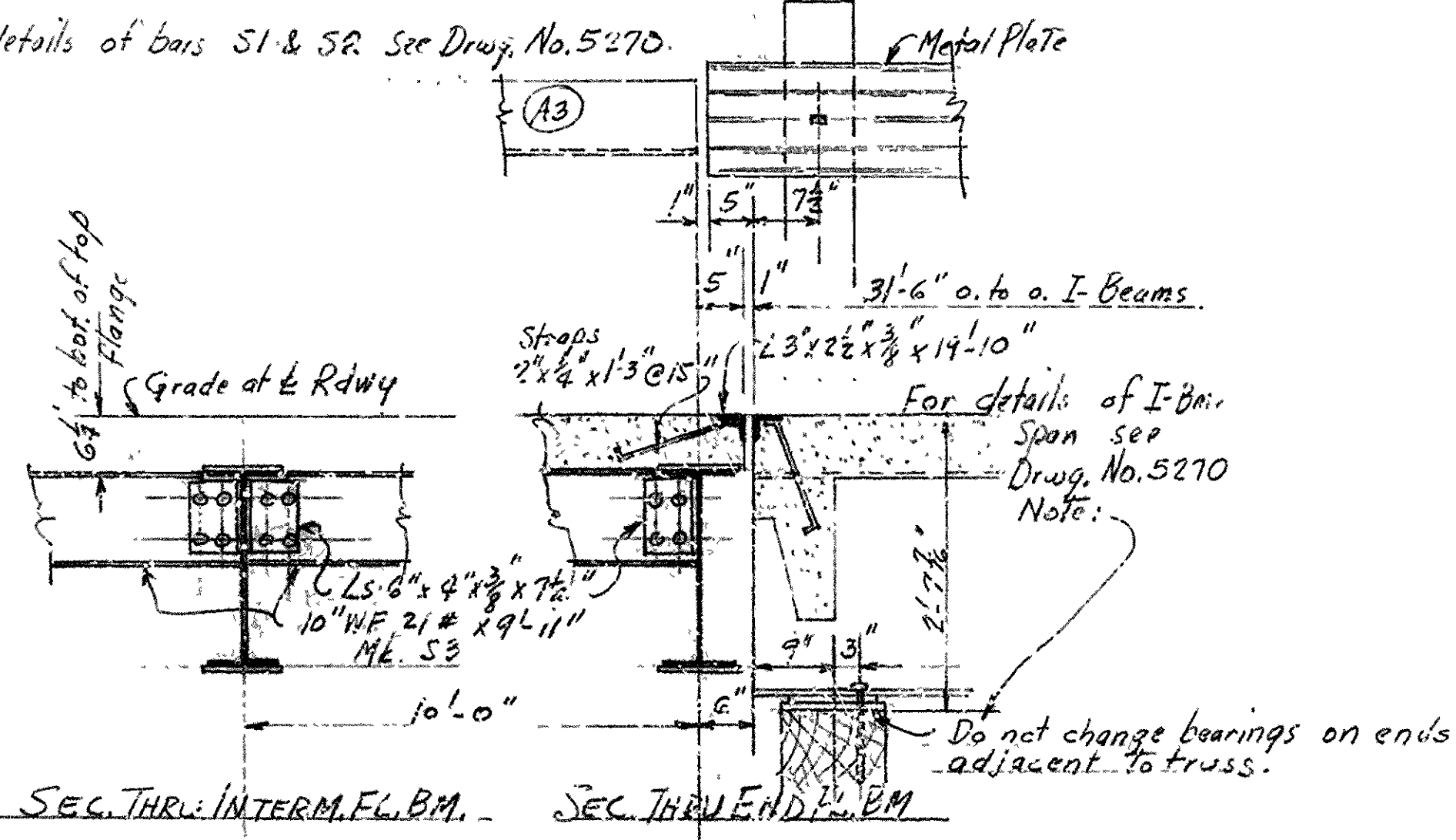
HALF PLAN



Transverse Reinforcing:
 5/8" ϕ S1 @ 7" in top of slab
 5/8" ϕ S2 @ 7" in bottom of slab
 3/8" ϕ S5 @ 14" in curb

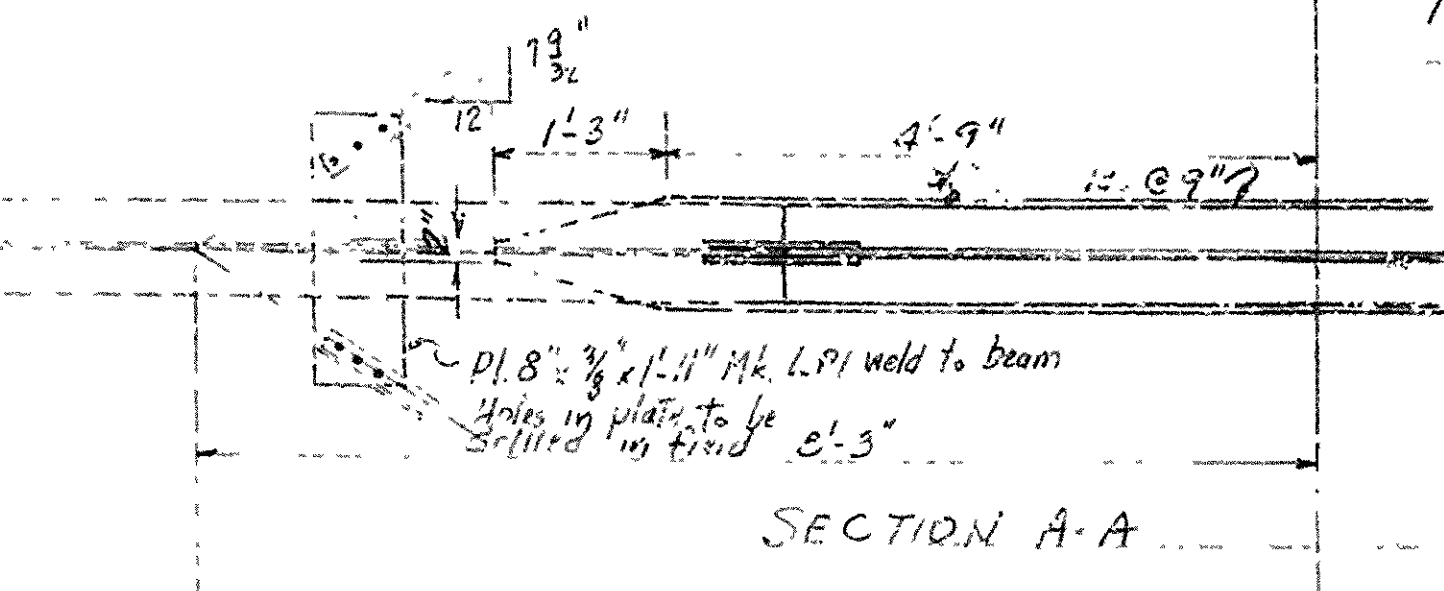
Longitudinal Reinforcing:
 1/2" ϕ S4 spaced as shown

For details of bars S1 & S2 see Drawg. No. 5270.

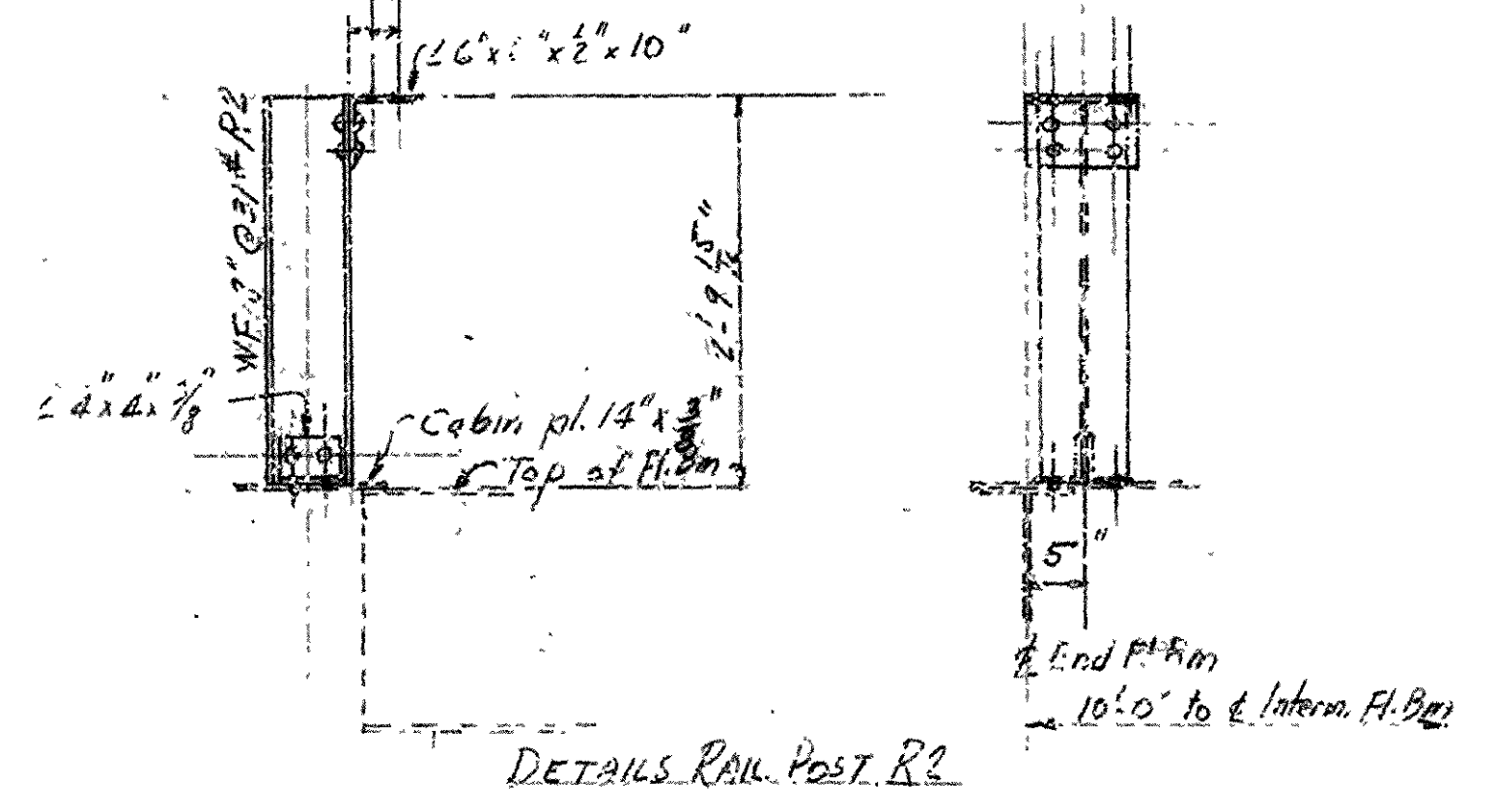


SEC. THRU INTERM. FL. BM. SEC. THRU END FL. BM.

Note: Floor beams to be cut and re-fabricated in a structural steel shop. Connection ends to be held square and true while splicing to insure when erecting span.



SECTION A-A



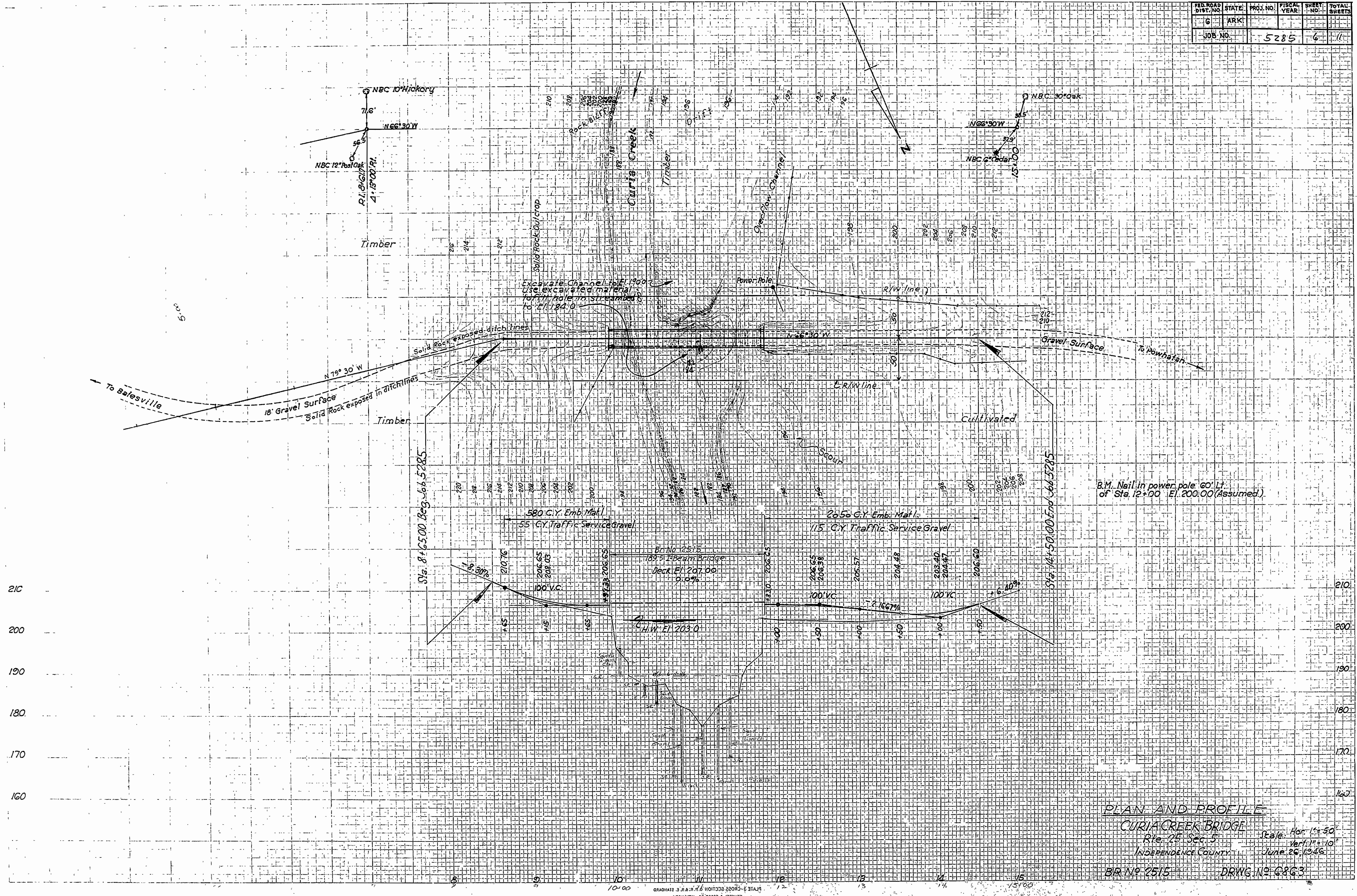
DETAILS RAIL POST, R2

For general notes and details - I-Beam spans see Drawg. No. 5270

DETAILS SPANS
 BRIDGE OVER CURIA CREEK
 BATESVILLE - POWHATAN ROAD
 INDEPENDENCE COUNTY
 ROUTE 25 SEC. 5
 ARKANSAS STATE HIGHWAY COMMISSION
 LITTLE ROCK, ARK.
 Drawn By: L.P.C. Date: 2-24-47 Scale: 3/4" = 1'-0"
 BRIDGE No. 2515 DRAWING NO. G.862-B

Bridge Engineer

DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	ARK			6	11
JOB NO.		5285			



DATE
 DRAWN BY
 CHECKED BY
 APPROVED BY

NO. OF SHEETS
 THIS SHEET
 SHEET NO.
 ORIGINAL

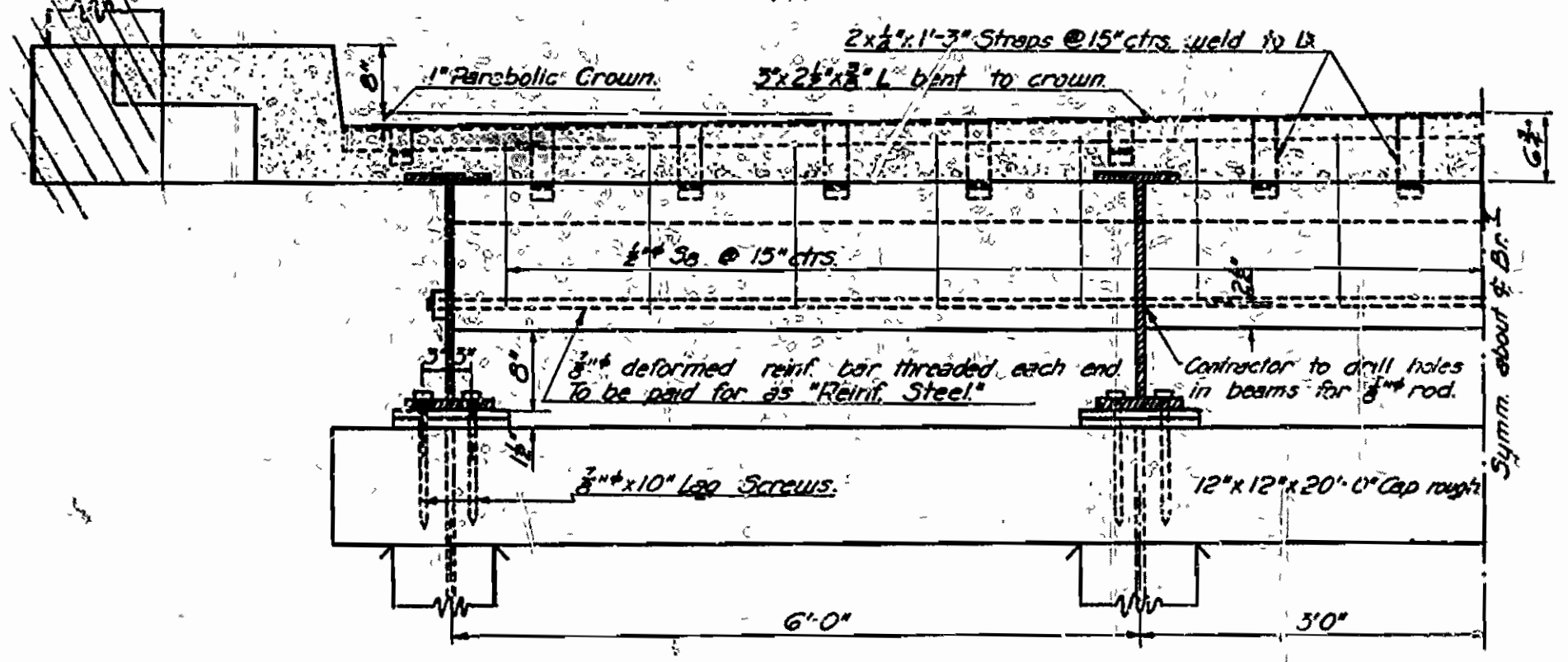
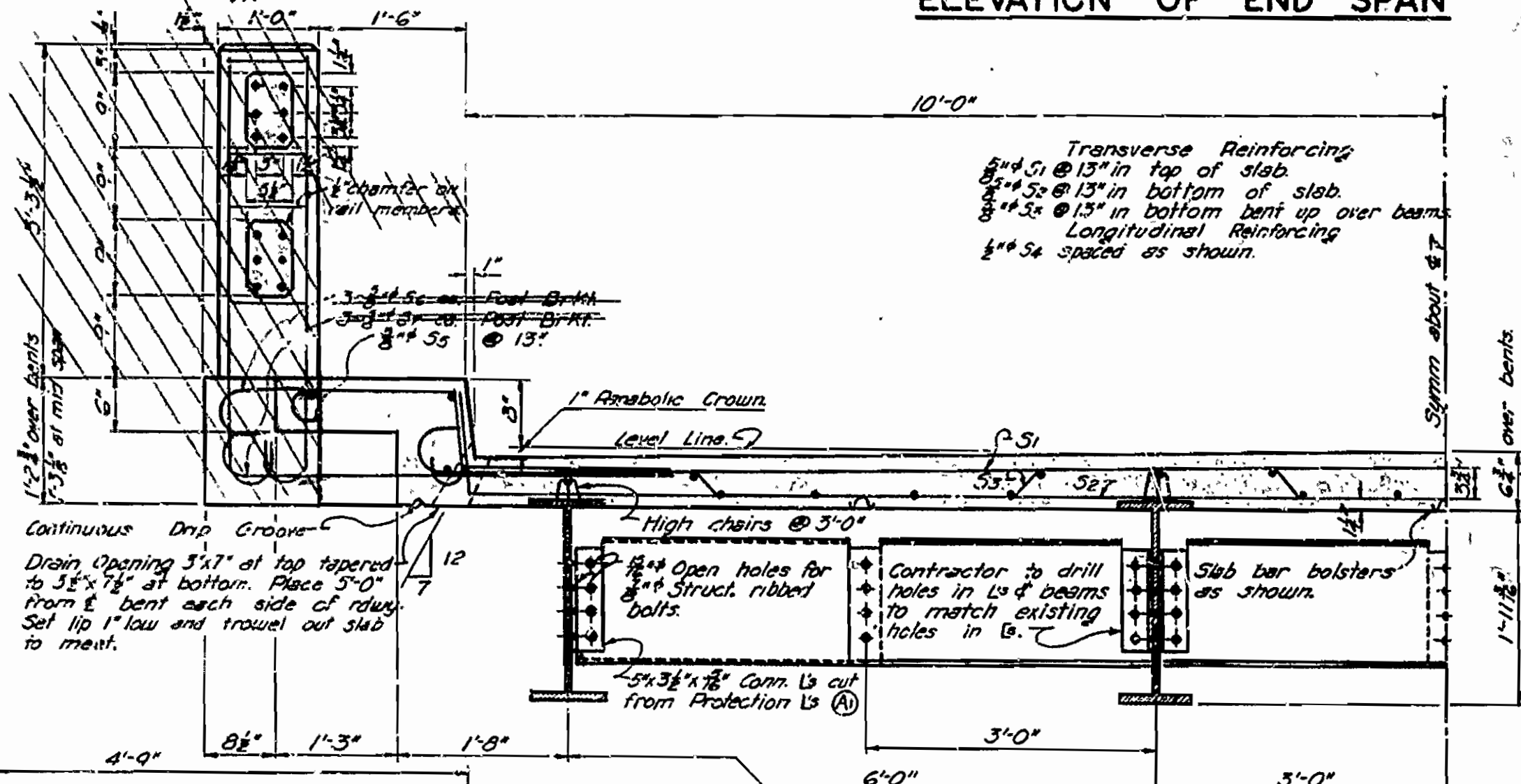
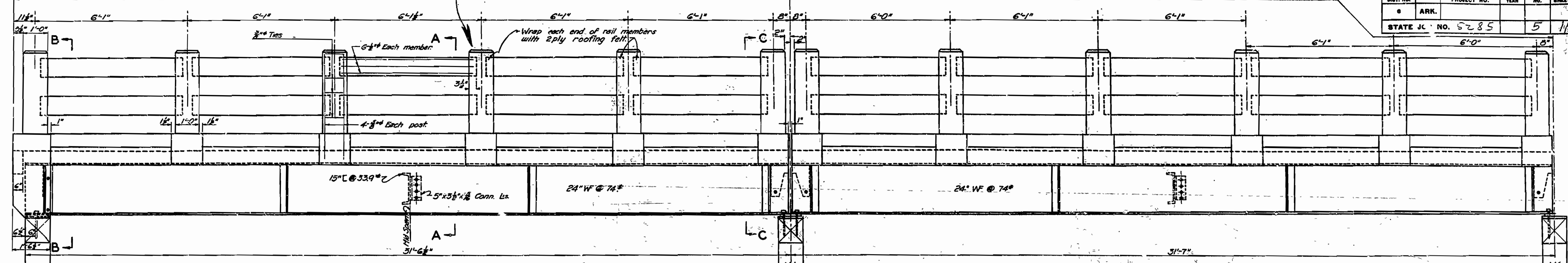
210
200
190
180
170
160

210
200
190
180
170
160

10+00 11 12 13 14 15
 100' 150' 200' 250' 300'

For details of timber posts and metal plate rail, to be used on Job 5285 See Drawg. No. 6862-B 31-7"

FED. ROAD DIST. NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	ARK.			5	11
STATE JC. NO. 5285					



LOADING H-15

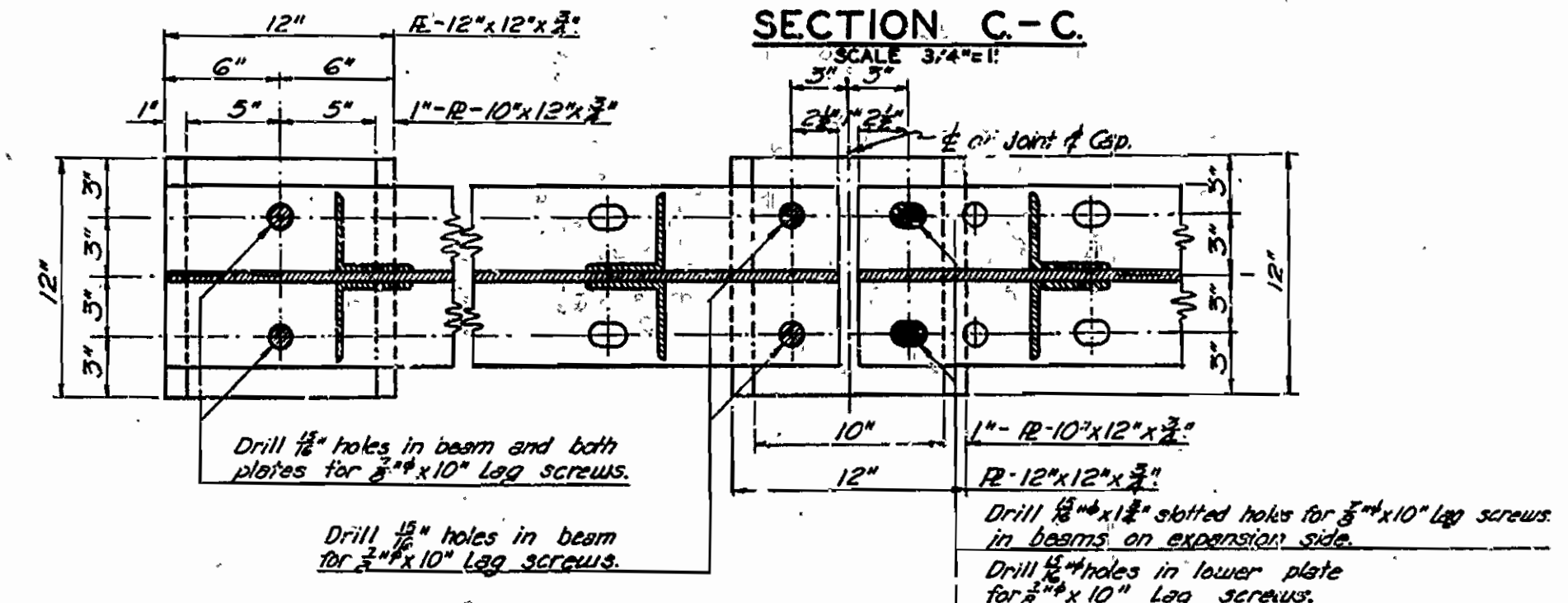
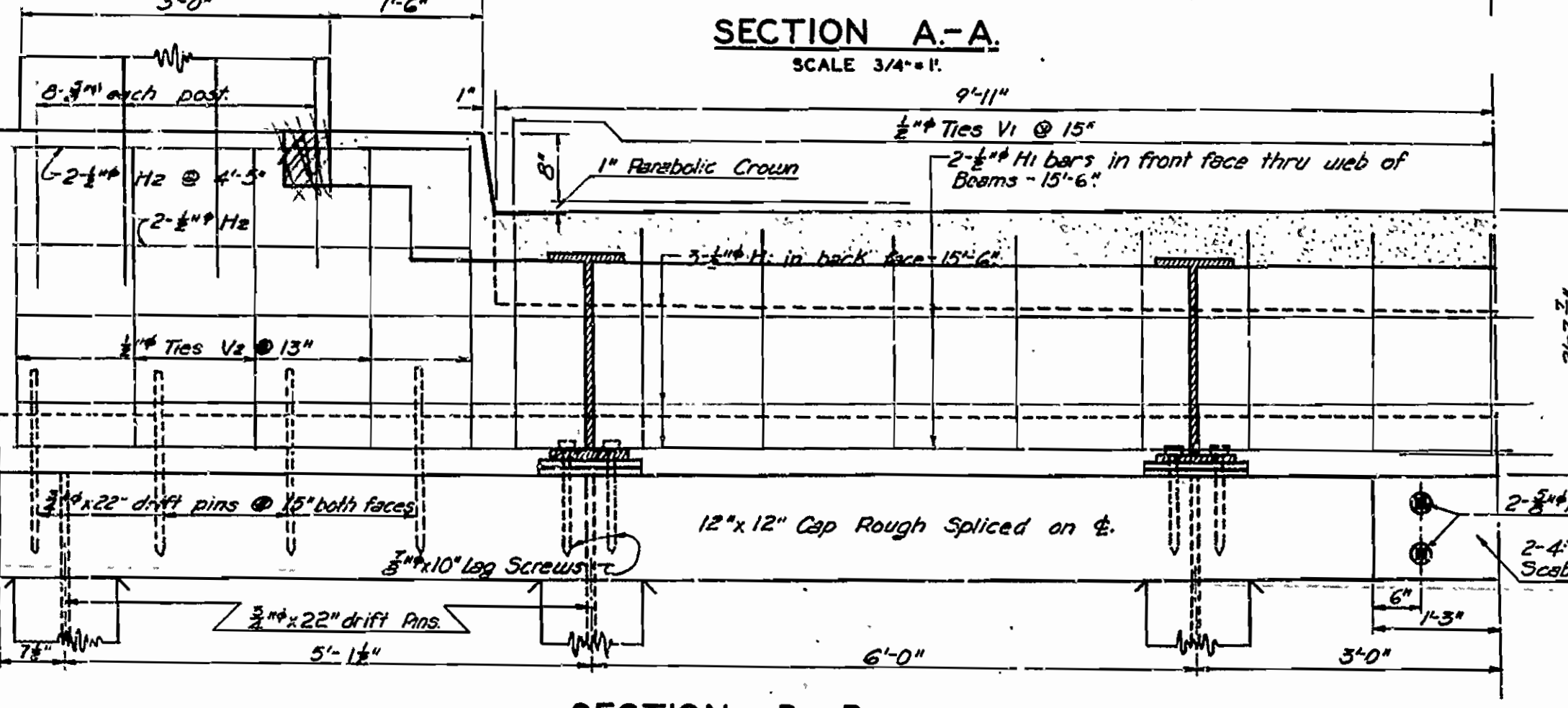
Load Distribution Outside Beams:
 Dead Load Per Foot 1000#
 Live Load Per Foot 196#
 Conc. Live Load { 5500# Mom.
 8000# Shear.
 Truck Live Load = 0.83 Wheel.

Load Distribution Inside Beams:
 Dead Load Per Foot 700#
 Live Load Per Foot 228#
 Conc. Live Load { 8100# Mom.
 11700# Shear.
 Truck Live Load = 1.20 Wheels.

STRESSES
 Structural Steel 18,000 #/sq.
 Reinforcing Steel 18,000 #/sq.
 Concrete (n=10) 1,000 #/sq.

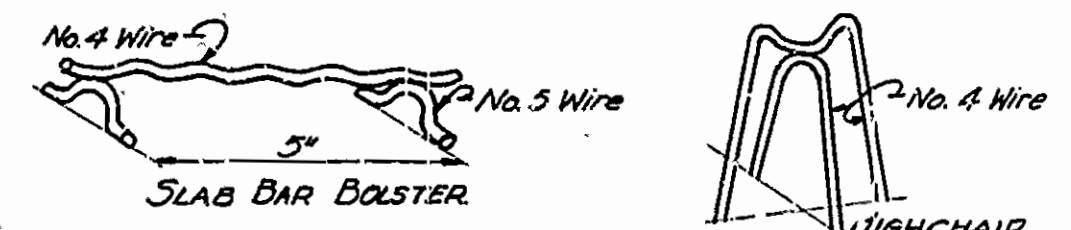
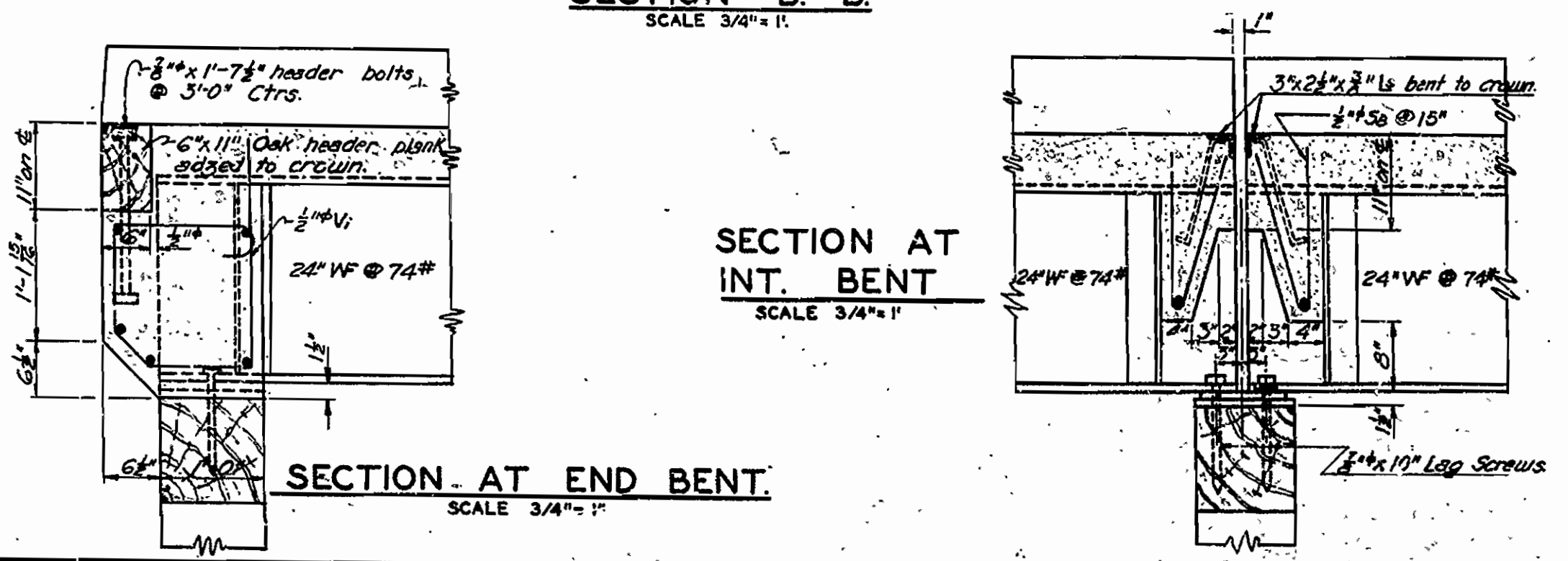
GENERAL NOTES:

All concrete to be Class 'S'. All exposed corners to have 3" chamfer unless otherwise noted.
 Open holes 1/2" except as noted. Bolts 3/8".
 Shop Paint: All new structural steel shall be given one coat of red lead and raw linseed oil before shipment, except surfaces in contact with concrete. All steel furnished by the State is to be spot painted where needed.
 Field Paint: First coat white lead tinted with lamp black. Second coat white lead tinted with lamp black or Numnam paint.
 All roadway expansion devices to be paid for as "Structural Steel in Beam Spans."
 In order to secure a good riding surface it will be required that the floor slab be struck off from curb to curb with a half span length longitudinal strike-off. The strike-off shall be sufficiently stiff so as to have no appreciable vertical deflection.
 Reinforcing steel to be deformed bars of structural or intermediate grade. Shop lists and bending diagrams are to be furnished and approved before fabrication is begun.
 To provide for dead load deflection of steel beams, the slab shall be 3/8" thicker at mid-span and 3/4" thicker at quarter points. See Section A-A.
 All beams and intermediate built up struts, bearing plates, 3/8" ribbed bolts and oak header bolts to be furnished by the State. The remainder of the structural steel to be furnished by the contractor.
 Volume occupied by oak header is included in quantity shown for Class 'S' concrete.
SPECIFICATIONS: Arkansas State Highway Commission Standard Specifications for Road and Bridge Construction, Adopted March 18, 1940.



LIST OF BENT BARS

Mark	Size	Length	A	B	C
S1	3/8"	22'-0"			
S2	3/8"	22'-0"			
S3	3/8"	22'-8 1/2"	2'-9"	3'-0"	2'-4 1/2"
S4	3/8"	3'-4"			
S5	3/8"	5'-3"			
S6	3/8"	5'-0"			
S7	3/8"	5'-0"			
S8	3/8"	3'-0"			
V1	1/2"	6'-2"			
V2	1/2"	8'-5"			



All reinforcing steel shall be accurately located in the forms and firmly held in place by means of steel wire chair supports adequate to prevent displacement during the course of construction and to keep the steel at a proper distance from the forms.
 Bar supports are to be sufficient in number and sufficiently heavy to properly carry the steel they support. Wire sizes shall not be less than shown.
 Wire supports will not be paid for directly but will be considered subsidiary to the item of "Reinforcing Steel".
 Shop lists and diagrams must be submitted for approval.

DETAILS OF STANDARD 31'-7" I-BEAM SPANS 20'-0" CLEAR ROADWAY 1'-6" WALKWAY ARKANSAS STATE HIGHWAY COMMISSION LITTLE ROCK, ARK.

Drawn By: L.A.M. Date: 9-28-46
 Traced By: G.W.B. Date: 7-13-46
 Checked By: _____ Date: _____

Scale: 1/2" = 1' AND AS NOTED.

DRAWING NO. 5270

N.C. Lawer
 PRINCIPAL HIGHWAY ENGINEER (BRIDGES)

* See Drawg No. 6862-B for Job 5285
 ** Not used for