

# STATE OF OHIO DEPARTMENT OF HIGHWAYS PAU-49-(14.49-14.90) PAULDING COUNTY CARRYALL TOWNSHIP

S-184(1)

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO	S 184(1)	POST-WAR

PAU-49-(14.49-14.90)

1  
31

### CONVENTIONAL SIGNS

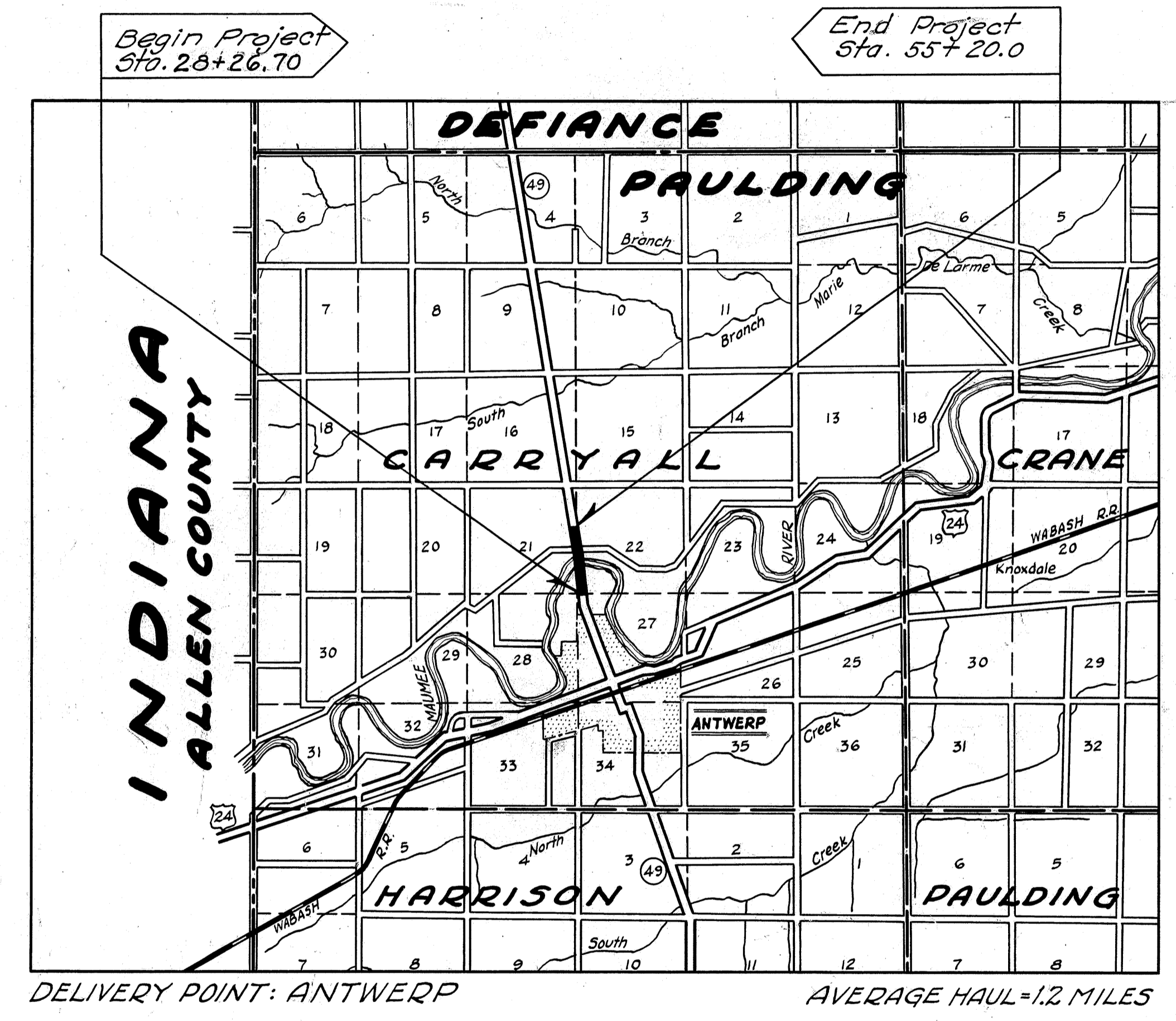
STATE LINE	-----
COUNTY LINE	-----
TOWNSHIP LINE	-----
SECTION LINE	-----
CORPORATION LINE	-----
FENCE LINE	x x x x
CENTER LINE	-----
POLE LINE	⊕ ⊕ ⊕ ⊕
STEAM RAILROAD	-----
GUARD RAIL, PROPOSED	-----
GUARD RAIL, EXISTING	-----
DRAIN PIPE, PROPOSED	-----
DRAIN PIPE, EXISTING	-----
PROPERTY LINE	x P/L x

### INDEX OF SHEETS

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### LINE DATA

BEGIN PROJECT	S-184(1)	STA.	28+26.70	
END PROJECT	S-184(1)	STA.	55+20.00	
NET LENGTH OF PROJECT FAS-184(1) 26 93.30 LIN. FT. OR 0.510 MILE				
BEGIN WORK		STA.	23+00.00	
END WORK AND PROJECT	S-184(1)	STA.	55+20.00	
NET LENGTH OF WORK 3220.00 LIN. FT. OR 0.609 MILE				



### LOCATION PLAN

SCALE 1" = 1 MILE

PORTION TO BE IMPROVED  
STATE HIGHWAYS   
OTHER ROADS

### SCALES

PLAN	1 INCH = 50 FEET
PROFILE (HORIZONTAL)	1 INCH = 50 FEET
PROFILE (VERTICAL)	1 INCH = 5 FEET
CROSS SECTIONS	1 INCH = 5 FEET

SUPPLEMENTAL SPECIFICATIONS					
NUMBER	DATE	NUMBER	DATE	NUMBER	DATE

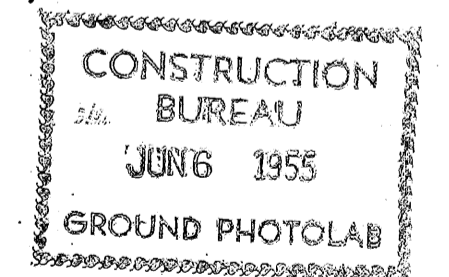
STANDARD DRAWINGS					
DRAWING	DATE	DRAWING	DATE	DRAWING	DATE
G-8.07	2-1-47				
I-1,2,3,4,8,5	2-20-48				
I-8 CB-12-A&B	12-15-41				
L-2	10-1-45	CSB-45	12-5-45		
L-3	2-1-47	AS-44-F	1-18-46		
I-14 G	2-1-47				

The Standard Specifications of the State of Ohio, Department of Highways, including changes and Supplemental Specifications listed in the proposal shall govern this improvement.

The right of way for this improvement will be provided by the State of Ohio.

I hereby approve these plans and declare that the making of this improvement will not require the closing to traffic of the highway and that provisions for the maintenance and safety of traffic will be as set forth on the plans and estimates.

- Approved R.C. McKee  
Date: 9-1-48 Resident Division Deputy Director
- Approved \_\_\_\_\_  
Date: \_\_\_\_\_ Chief Engineer, Bureau of Maintenance
- Approved J. Blague  
Date: 9-17-48 Chief Engineer, Bureau of Bridges & R.R. Crossings
- Approved George J. Thornmyer  
Date: 9-22-48 Chief Engineer, Bureau of Location & Design
- Approved Frank W. Williams  
Date: 9-22-48 First Assistant Director & Chief Engineer
- Approved Earl L. Reeb  
Date: 9-23-48 Director of Highways

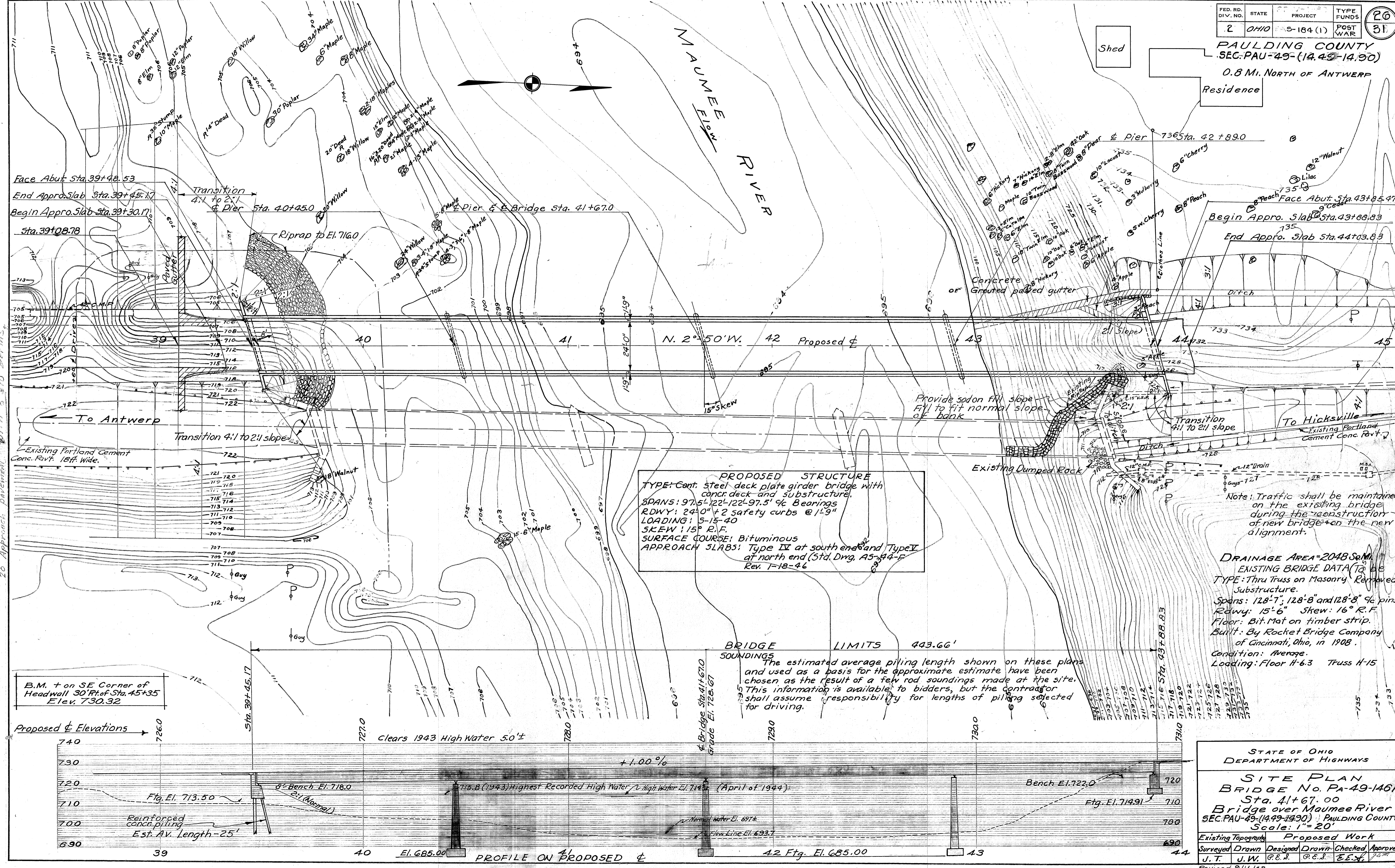


RECOMMENDED FOR APPROVAL	DATE
DISTRICT ENGINEER PUBLIC ROADS ADMINISTRATION FEDERAL WORKS AGENCY	
APPROVED	DATE
DIVISION ENGINEER PUBLIC ROADS ADMINISTRATION FEDERAL WORKS AGENCY	

FILE No.		COUNTY	
SEC.		DATE OF LETTING:	
CONTRACT No.			

JUL 27 1959  
CO485001

PAULDING COUNTY  
SEC. PAU-49-(14.49-14.90)  
0.8 Mi. NORTH OF ANTWERP  
Residence



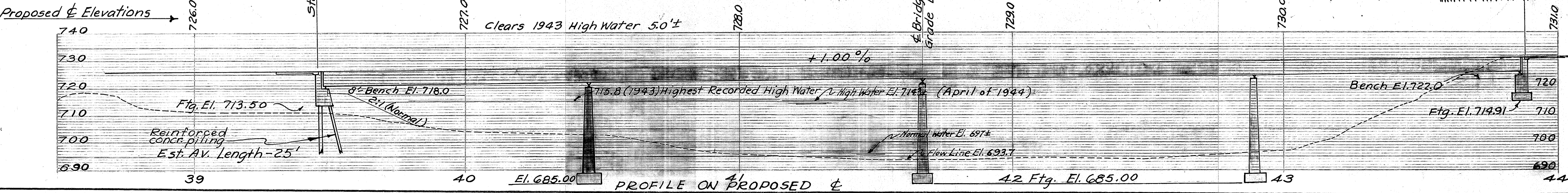
**PROPOSED STRUCTURE**  
 TYPE: Cont. steel deck plate girder bridge with  
 concr. deck and substructure.  
 SPANS: 97.5'-122'-97.5' 4/8 Bearings  
 RDWY: 24'-0" + 2 safety curbs @ 1'-9"  
 LOADING: 5-15-40  
 SKEW: 15° R.F.  
 SURFACE COURSE: Bituminous  
 APPROACH SLABS: Type III at south end and Type IV  
 at north end (Std. Dwg. A5-44-F  
 Rev. T-18-46

Note: Traffic shall be maintained on the existing bridge during the reconstruction of new bridge on the new alignment.

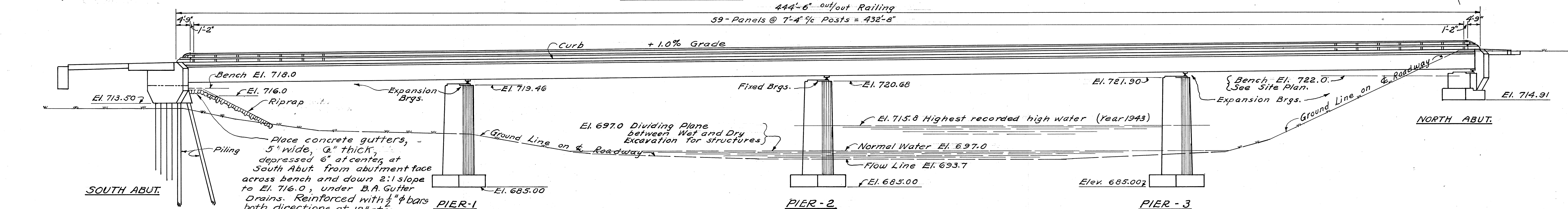
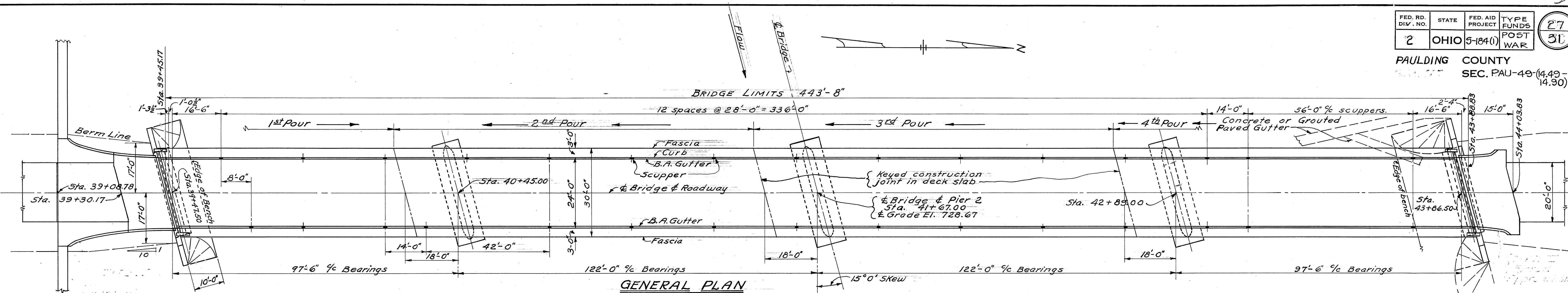
DRAINAGE AREA = 2048 Sq. Mi.  
 EXISTING BRIDGE DATA (To be removed)  
 TYPE: Thru Truss on Masonry (Removed) Substructure.  
 Spans: 128'-7", 128'-8" and 128'-8" 4/8 pins.  
 Rdwy: 15'-6" Skew: 16° R.F.  
 Floor: Bit. Mat on timber strip.  
 Built: By Rocket Bridge Company of Cincinnati, Ohio, in 1908.  
 Condition: Average.  
 Loading: Floor H-6.3 Truss H-15

**BRIDGE LIMITS 443.66'**  
**SOUNDINGS**  
 The estimated average piling length shown on these plans and used as a basis for the approximate estimate have been chosen as the result of a few rod soundings made at the site. This information is available to bidders, but the contractor shall assume responsibility for lengths of piling selected for driving.

B.M. + on SE Corner of Headwall 30' Rt. of Sta. 45+35  
 Elev. 730.32



STATE OF OHIO DEPARTMENT OF HIGHWAYS			
SITE PLAN BRIDGE No. PA-49-146A Sta. 41+67.00 Bridge over Maumee River SEC. PAU-49-(14.49-14.90) PAULDING COUNTY Scale: 1" = 20'			
Existing Topography	Proposed Work		
Surveyed	Drawn	Designed	Checked
J.T.	J.W.	R.E.S.	R.E.S.
		E.E.S.	J.C.M.
Revised 9/16/48			



GENERAL ELEVATION

GENERAL NOTES:-

STANDARD DRAWINGS AND SUPPLEMENTAL SPECIFICATIONS:- Standard Drawings CSB-45 dated 12-5-45 and AS-44-F dated 1-18-46, are a part of these plans.

REMOVAL OF EXISTING BRIDGE:- Existing superstructure shall be dismantled and become the property of the Contractor and removed from the site when no longer needed to maintain traffic.

Existing north abutment shall remain in place. Existing south abutment shall be removed to 1' below proposed finished ground line. Piers shall be removed to Elev. 693.0. Suitable masonry which is removed may be used for riprap.

PILING shall be driven to a minimum bearing capacity of 25 tons.

SLAB DRAINS:- Drains shall be placed through the slabs as per Sec. S-29.07.

WELDING shall be class "A", except bulb angle and scupper field connections and connection of curb end finish to roadway end finish may be Class "B".

STEEL GUTTERS AND SCUPPERS shall be copper-bearing steel instead of galvanized as called for on Std. Dwg. CSB-45.

END FINISH:- A butt joint in end finish, at center line of roadway, will be permitted.

RIVETS shall be 1/2" φ.

UNIT STRESSES:- Maximum unit design stresses for this structure are as follows:-  
 Class "C" concrete,  $f_c = 1200$  p.s.i.  $n = 8$   
 Class "E" concrete,  $f_c = 900$  p.s.i.  $n = 10$   
 $f_s = 18,000$  p.s.i.  
 Structural Steel = 18,000 p.s.i.

ITEM	TOTAL	UNIT	DESCRIPTION	ESTIMATED QUANTITIES					"AS BUILT"		
				SOUTH ABUT.	NORTH ABUT.	PIER 1	PIER 2	PIER 3	SUPERSTR.	GENERAL	Change Order
E-2	Lump	Sum	Cofferdams and pumping							Lump	Lump
E-2	543	Cu. Yd.	Excavation for structures, wet.			203	147	193			543
E-2	360	Cu. Yd.	Excavation for structures, dry.	70	190	100					360
S-1	380	Cu. Yd.	Class "C" concrete, superstructure.					380			380
S-1	430	Cu. Yd.	Class "E" concrete, walls	57	52	103	107	111			430
S-1	183.6	Cu. Yd.	Class "E" concrete, footings		23.7	53.3	53.3	53.3			183.6
S-3	33	Sq. Yd.	Type "B" waterproofing.	16	17						33
S-4	105,150	Lb.	Reinforcing steel	3,100	4,140	3,950	4,100	4,160	85,620	80	105,150
S-7	566,000	Lb.	Structural steel						566,000		566,000
S-8	566,000	Lb.	Field painting of structural steel						566,000		566,000
S-14	889	Lin. Ft.	Bridge railing (steel with concrete end posts)						889		889
S-16	Lump	Sum	First test pile.							Lump	Lump
S-18	375	Lin. Ft.	12" reinf. conc. piling (cast-in-place or pre-cast)	375							375
S-24	Lump	Sum	Removal of existing structure							Lump	Lump
S-3	1156	Sq. Yd.	Type "C" waterproofing						1156		1156
T-35	79	Cu. Yd.	Asphaltic concrete surf. course, Type "A" or "C" (70-80)						79		79
I-10	96	Sq. Yd.	Riprap						96	1,203	299
I-14	30	Lin. Ft.	Reinf. concrete gutter, 6" thick, 5' wide.	30							30

STATE OF OHIO  
DEPARTMENT OF HIGHWAYS  
BUREAU OF BRIDGES

**GENERAL PLAN AND ELEVATION  
NOTES AND ESTIMATED QUANTITIES**  
BRIDGE No. PA-49-146-A  
OVER MAUMEE RIVER

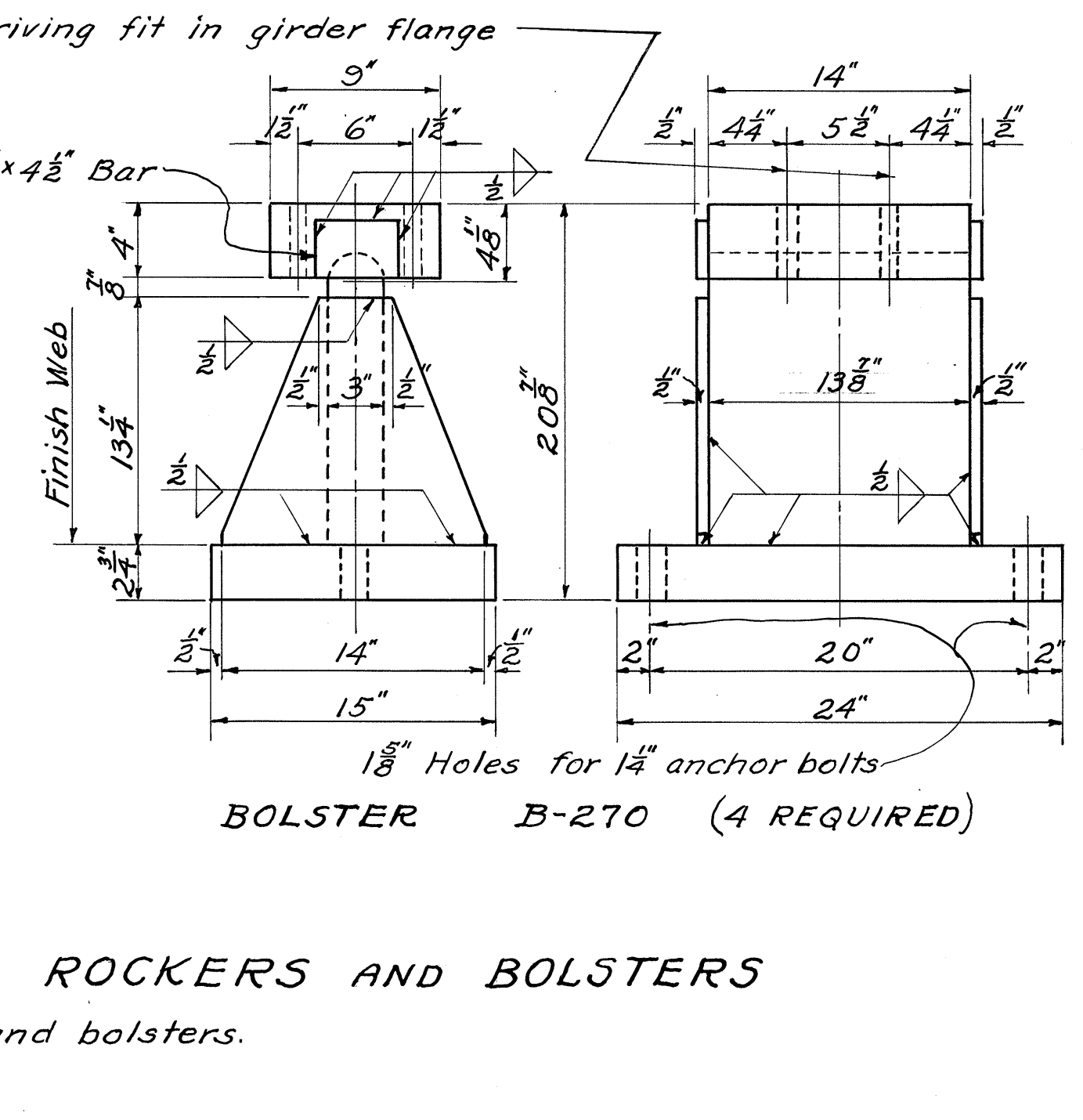
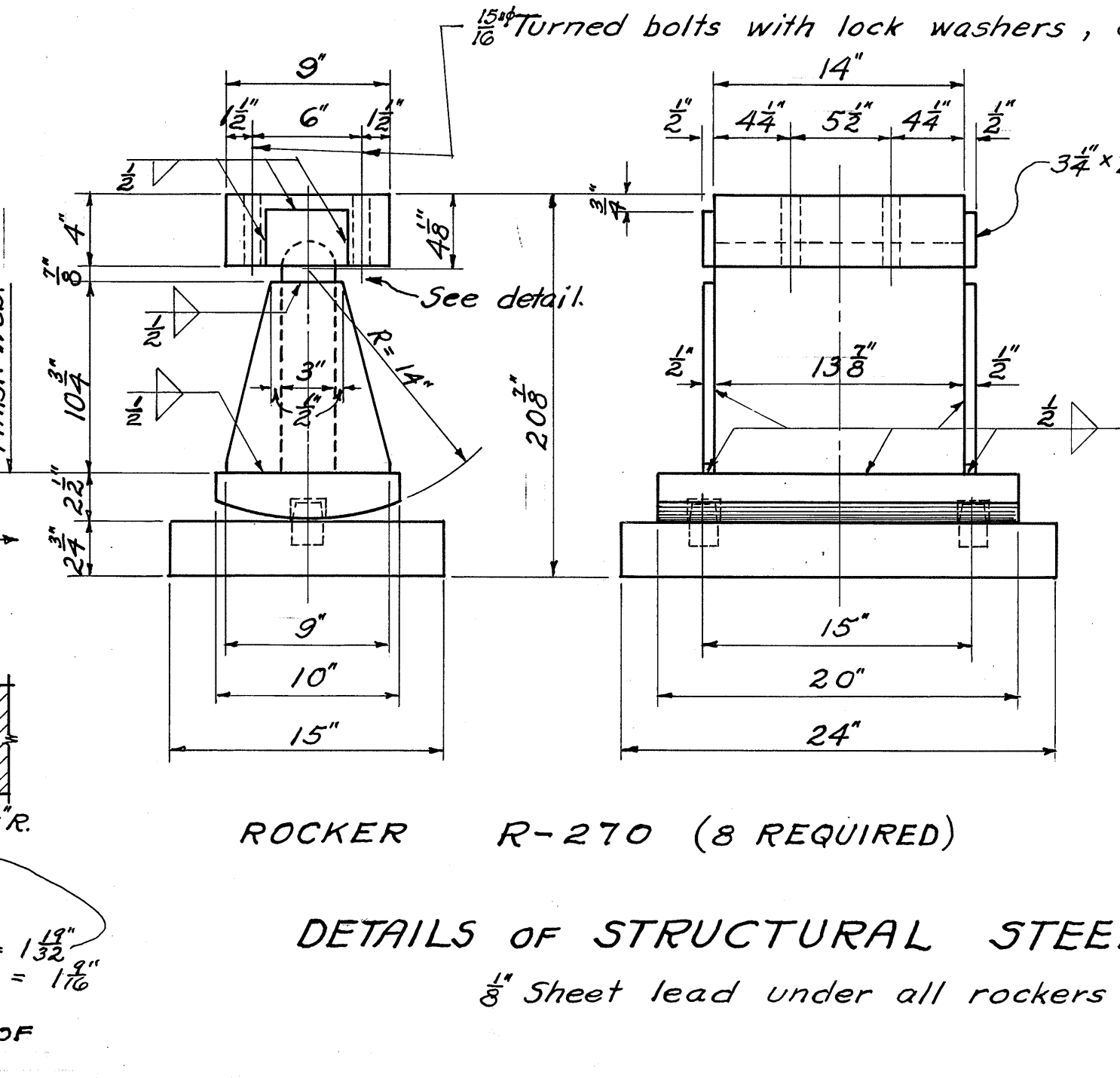
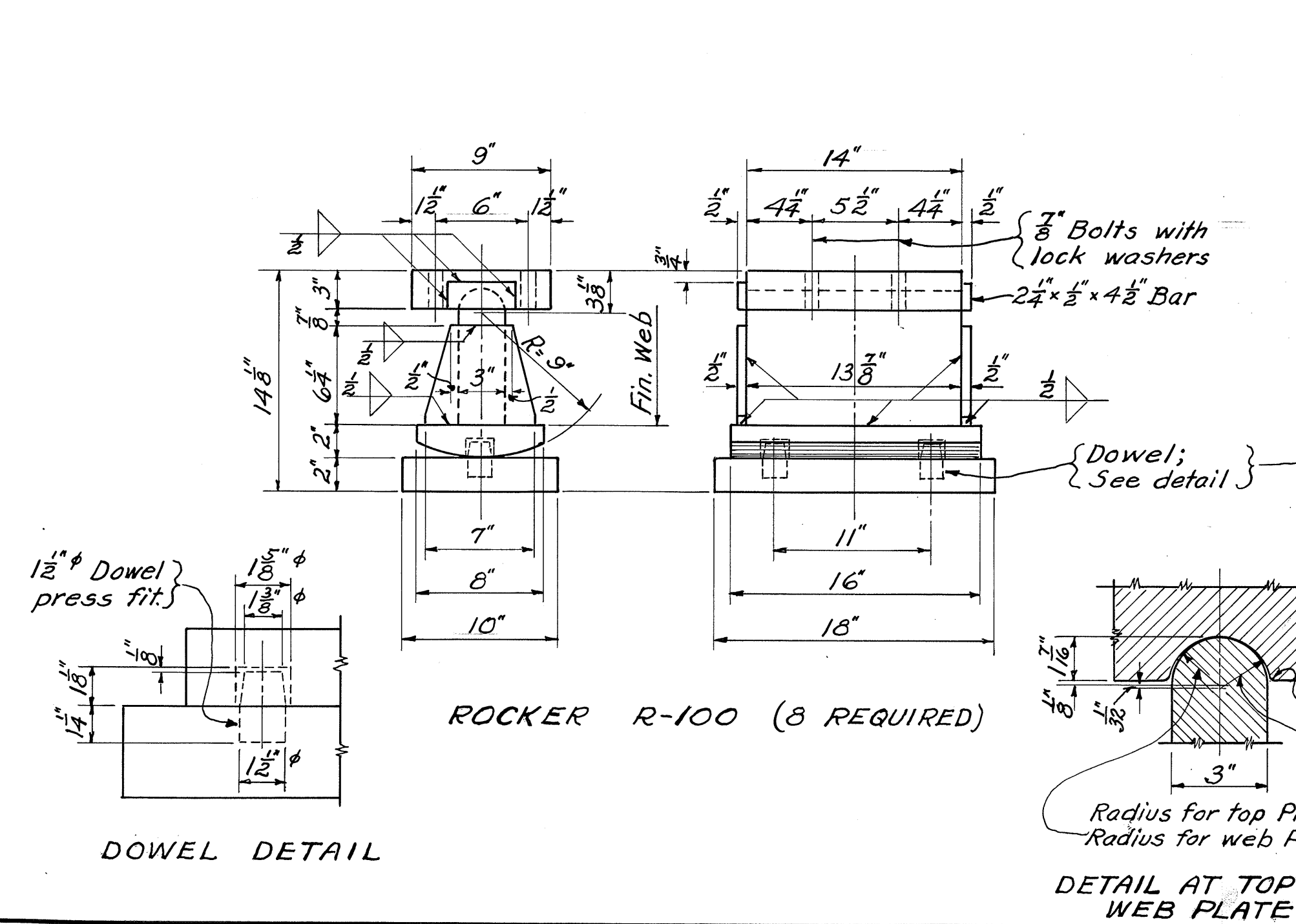
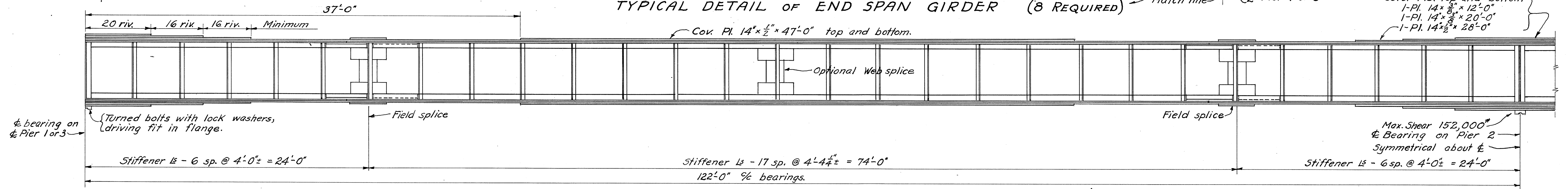
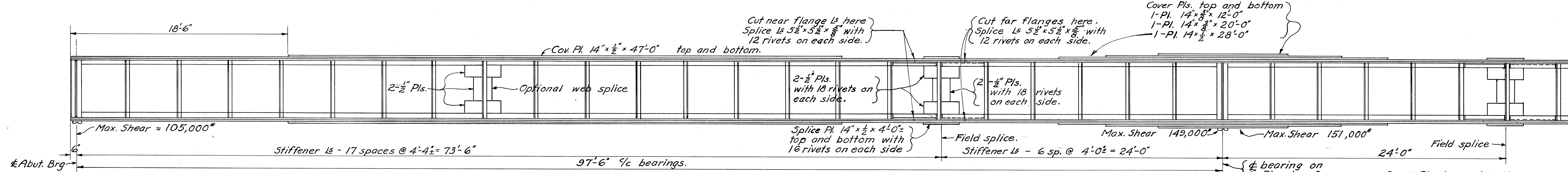
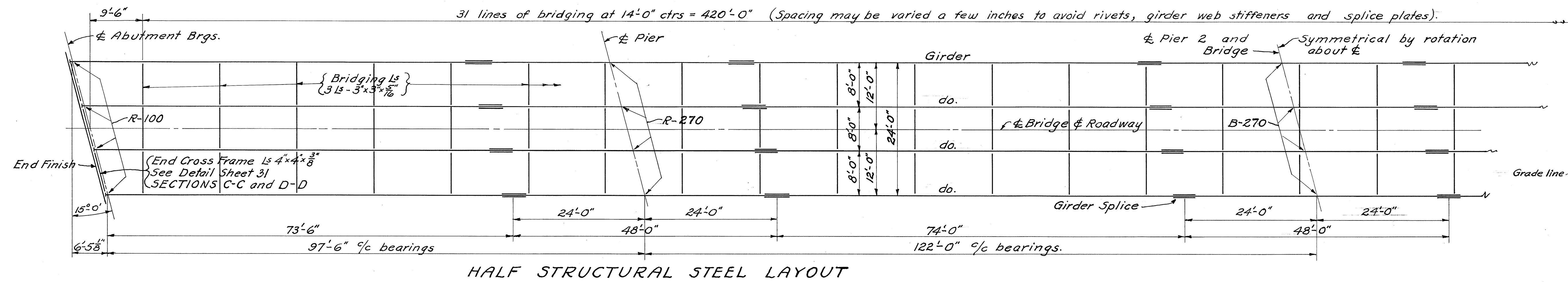
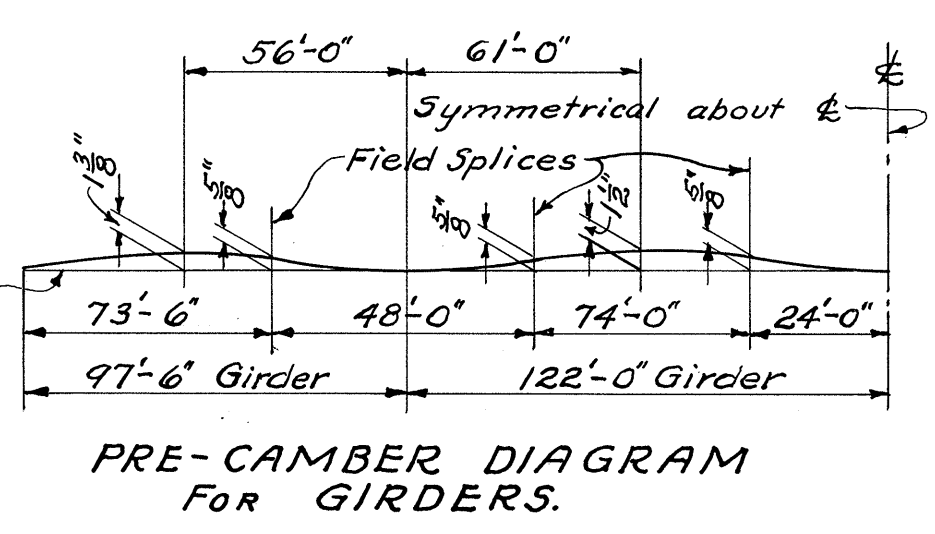
PAULDING COUNTY  
SEC. PAU-49 (14.49-14.90) STA. 41+67.00

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
A.G.D.	K.E.D.	J.W.	C.S.D.	E.P.	4/1/48	9/16/48





PAULDING COUNTY  
SEC. PAU-49-(14.49-14.90)



**GIRDER DATA**

Web Plate 60" x 3/8"

4 Flange Ls 6" x 6" x 1/2"

2 Cover Pls. 14" x 1/2" x 47'-0" for 97'-6" and 122'-0" spans.

back/back Ls = 60"

Additional 14" Cover Plates where shown.

Web stiffeners at abutments - 4 Ls 5" x 3 1/2" x 1/8" on fills.

Web stiffeners at piers - 4 Ls 5" x 3 1/2" x 1/8" on fills.

Intermediate web stiffeners - 2 Ls 5" x 3 1/2" x 1/8" (crimped except at web splices.)

All field splices similar.

**ROADWAY GIRDER LOADING:-**

Dead Load \_\_\_\_\_ 1400 lbs. p.l.f.

Uniform Live Load \_\_\_\_\_ 410 lbs. p.l.f.

Concentrated L.L. for Mom. \_\_\_\_\_ 20,500 lbs.

Concentrated L.L. for shear \_\_\_\_\_ 25,600 lbs.

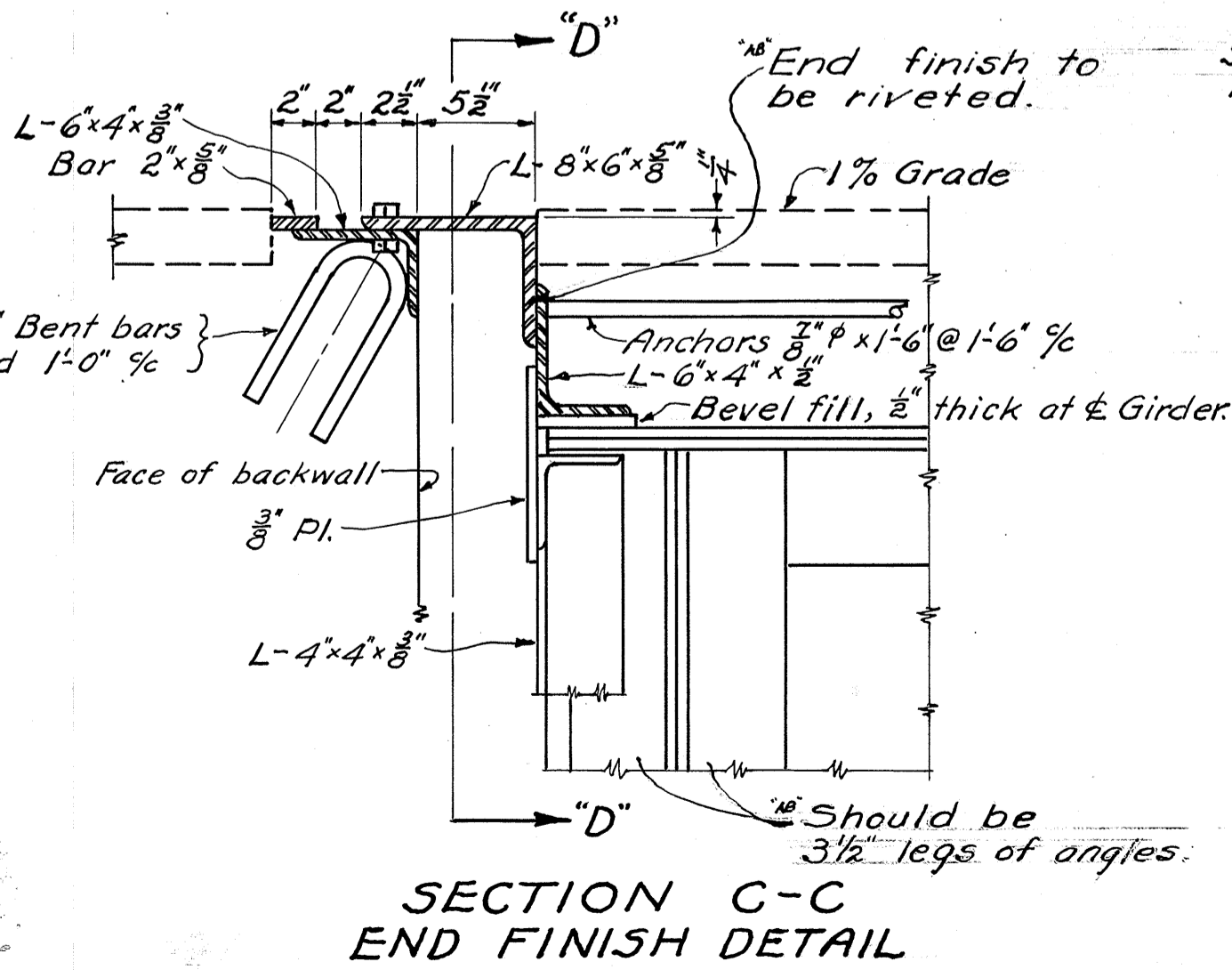
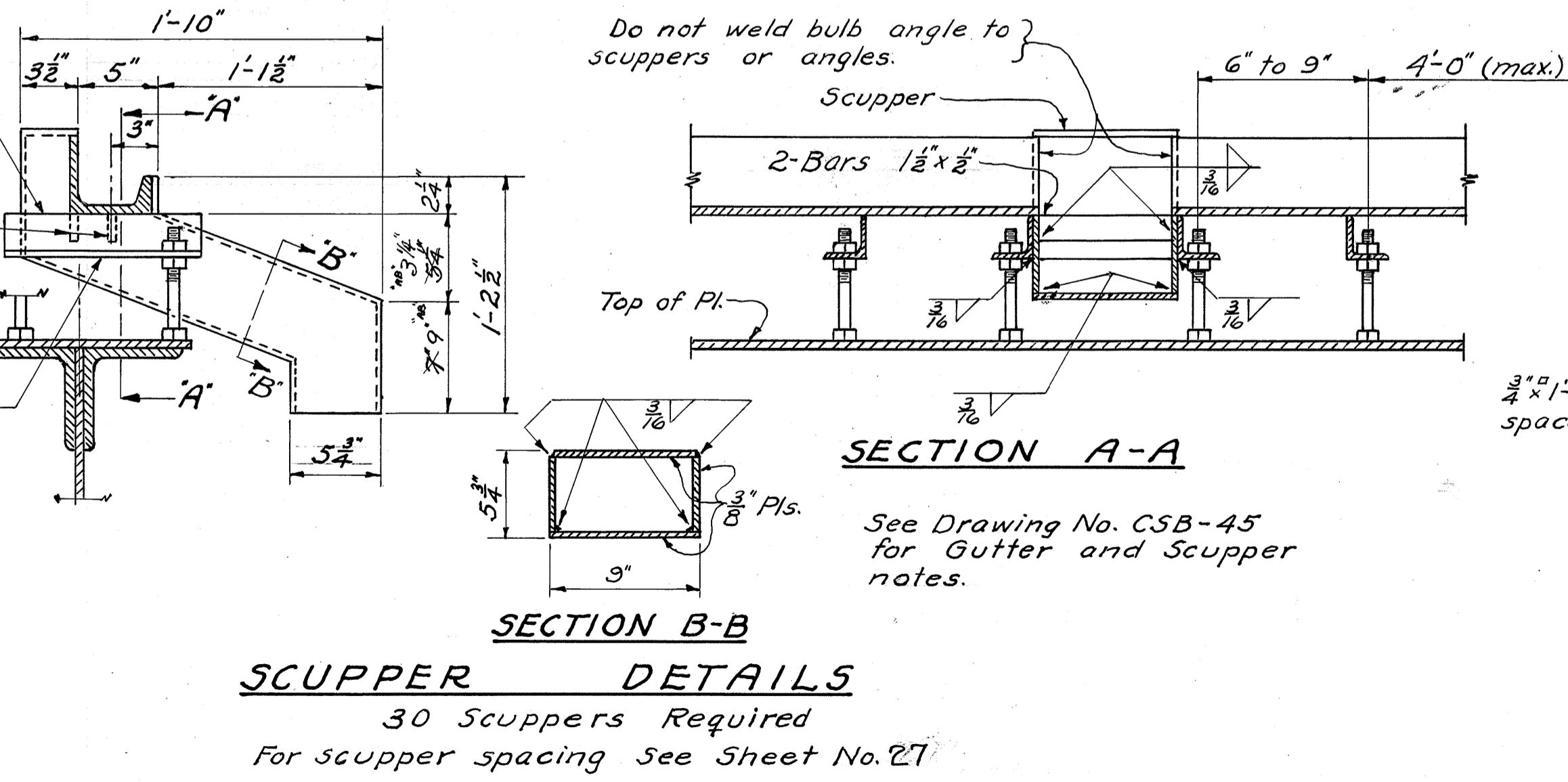
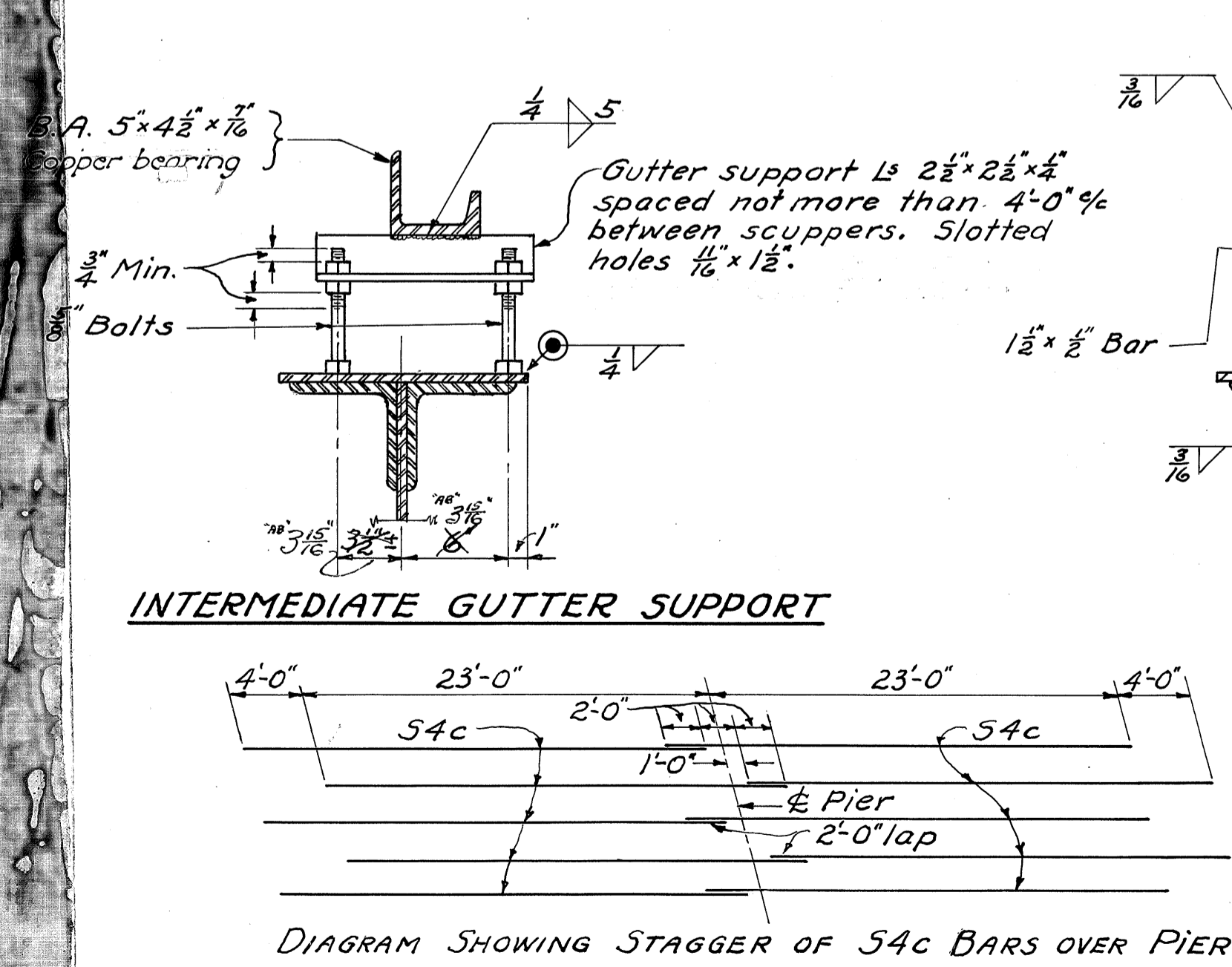
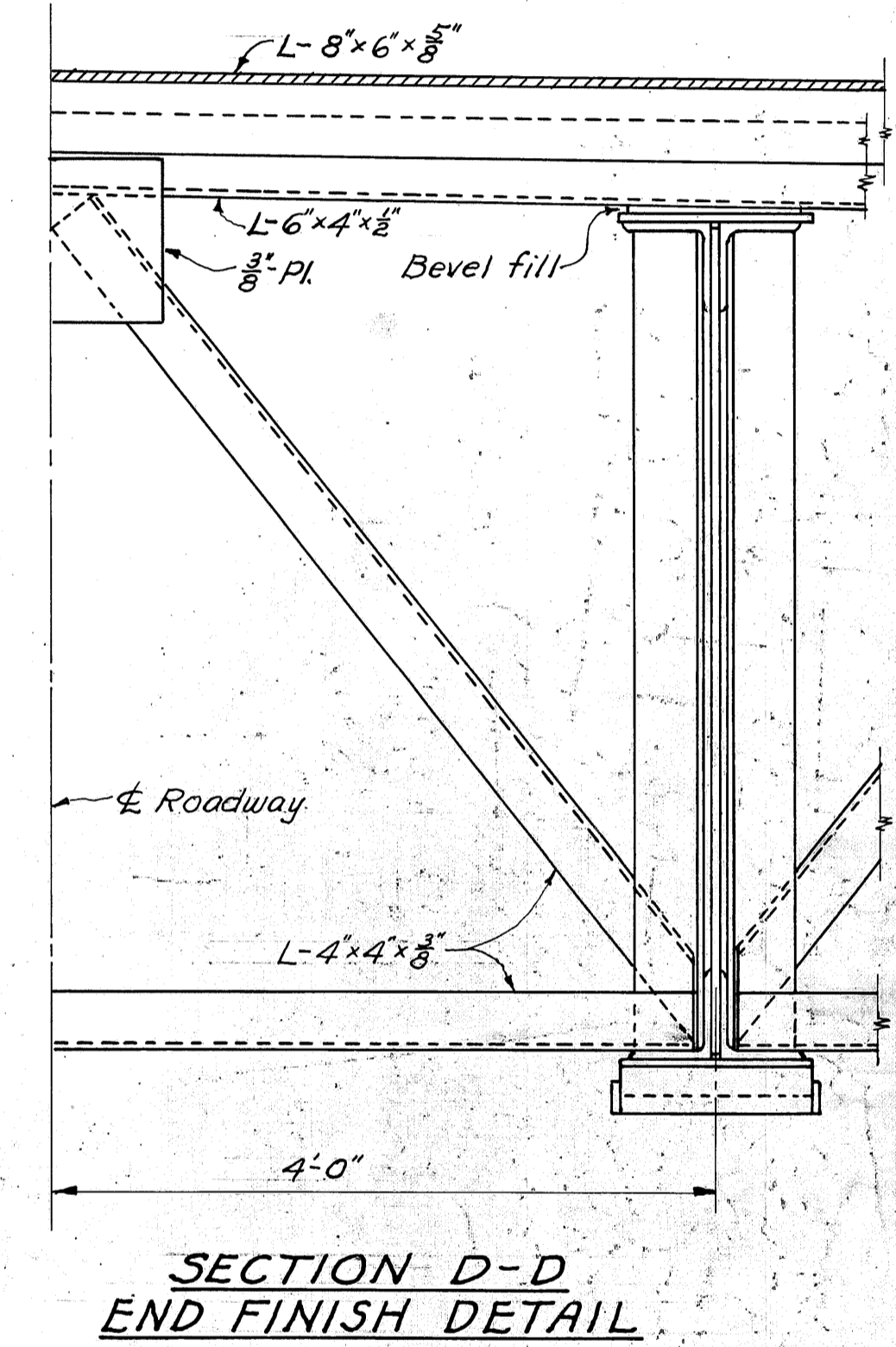
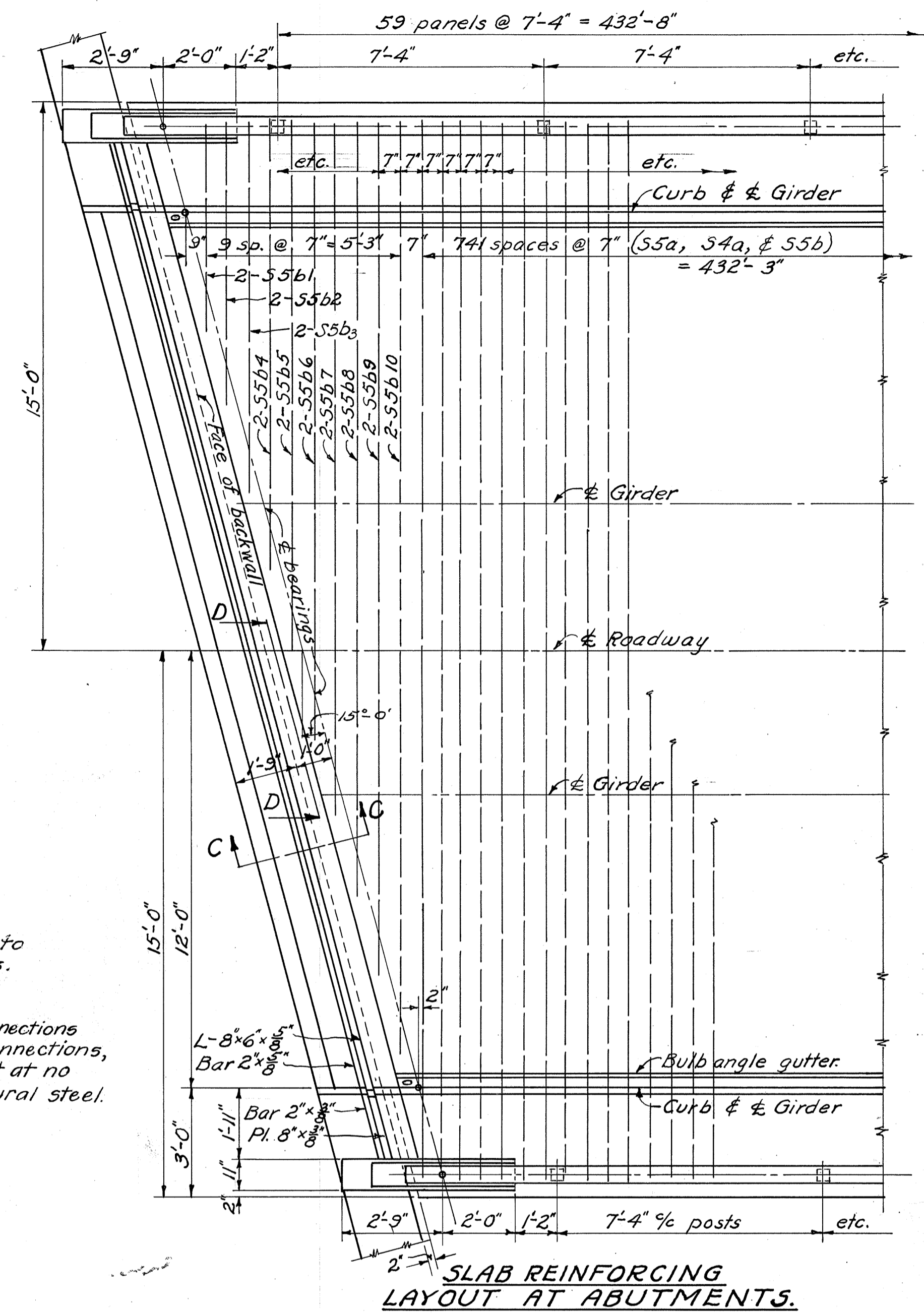
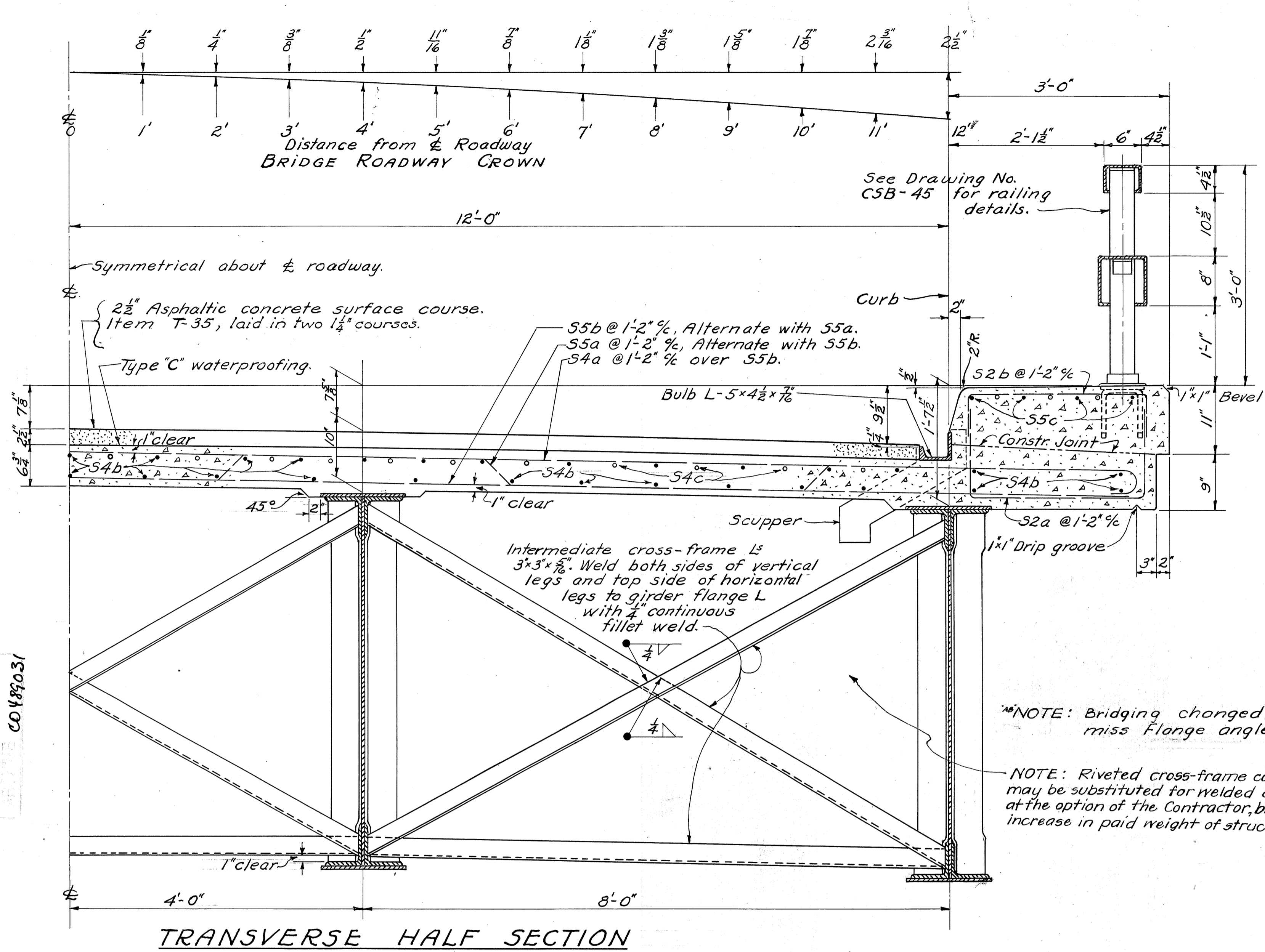
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RIVETS :- 3/8"

STATE OF OHIO DEPARTMENT OF HIGHWAYS BUREAU OF BRIDGES					
<b>GIRDER, ROCKER AND BOLSTER DETAILS</b>					
BRIDGE No. PA-49-146-A OVER MAUMEE RIVER					
PAULDING COUNTY SEC. PAU-49-(14.49-14.90) STA. 41+67.00					
DESIGNED K.E.D.	DRAWN K.E.D.	TRACED JAW	CHECKED L.S.D.	REVIEWED E.P.J.	DATE 4/1/40

JUL 27 1959  
00189030

PAULDING COUNTY  
SEC. PAU-49-(14.49-14.90)



STATE OF OHIO DEPARTMENT OF HIGHWAYS BUREAU OF BRIDGES					
<b>SUPERSTRUCTURE</b>					
BRIDGE No. PA-49-146-A OVER MAUMEE RIVER					
PAULDING COUNTY SEC. PAU-49-(14.49-14.90) STA. 41+67.00					
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE
K.E.D.	K.E.D.	J.W.	B.S.	CRS	4/1/48
					9/10/48