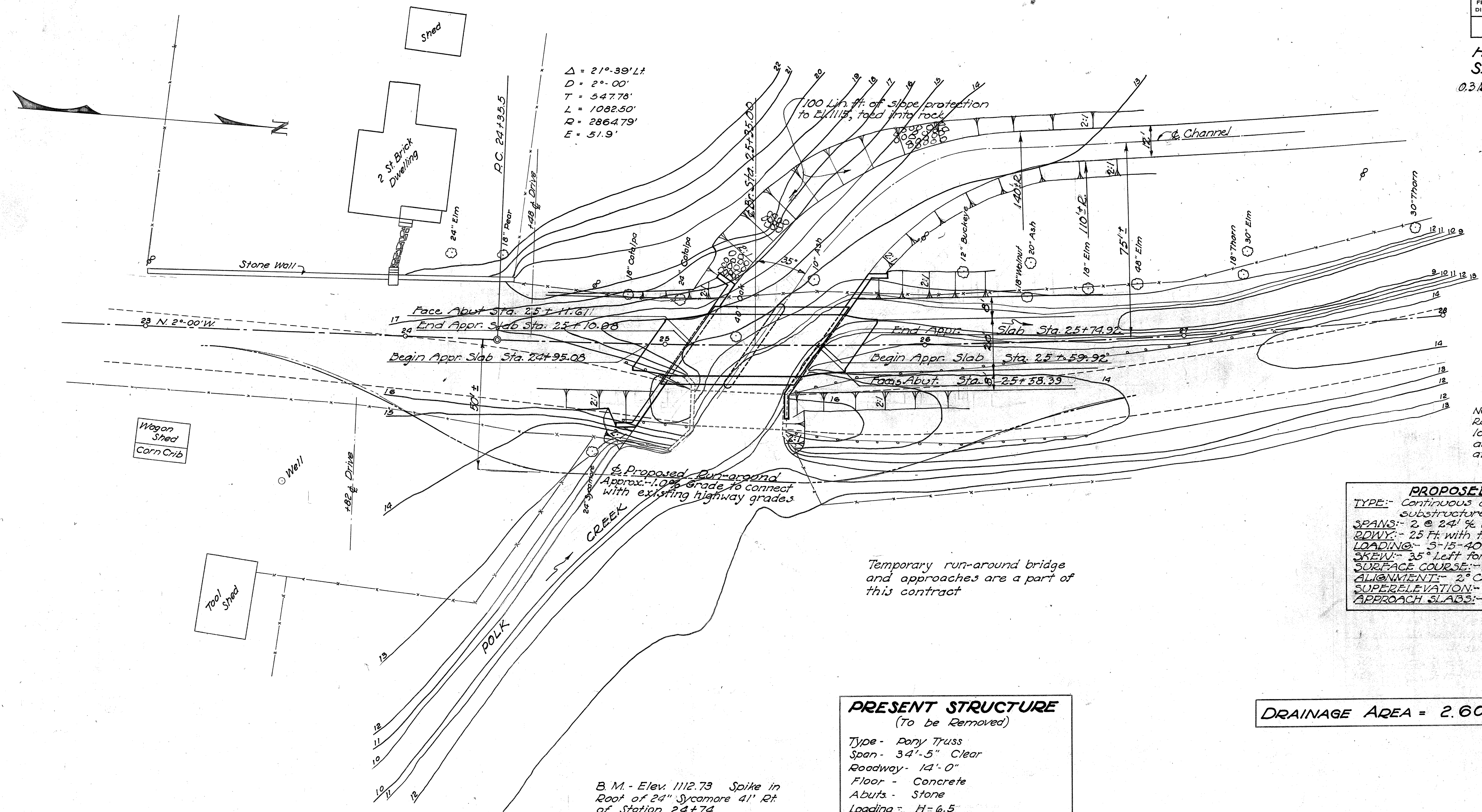


FED. RD. DIV. NO.	STATE	PROJECT	FISCAL YEAR	(29 34)
2	OHIO	STATE	1945	

HIGHLAND COUNTY  
S. H. 254 SEC. C (Pt.)  
0.3 Miles S.E. of New Vienna

End Approach { Sta. 25+09.16 -  
 Earliwork { Sta. 25+60.84 -  
 Approach R.H. T-32 at 20'-0" wide. 8' & 10' Berms

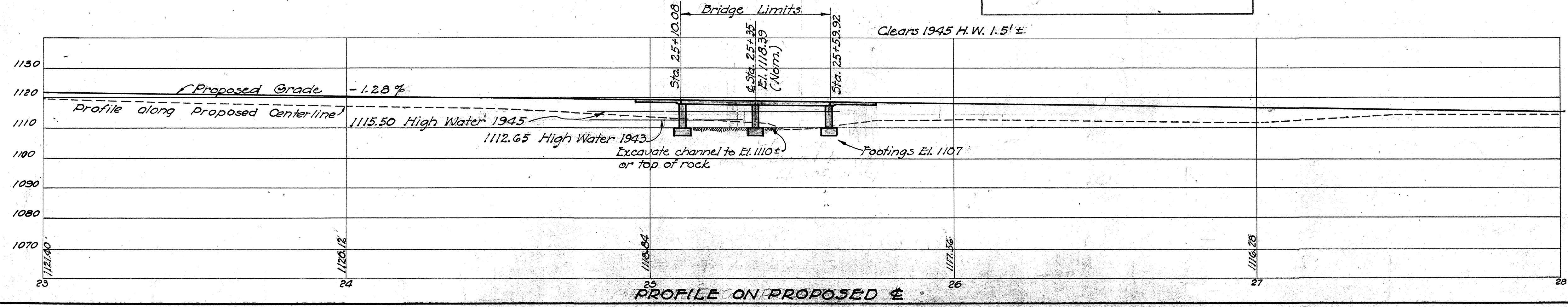


NOTE:  
Rod soundings taken at location of proposed abutments indicate rock at footing elevations.

**PROPOSED STRUCTURE**  
 TYPE: - Continuous concrete slab with concrete substructure.  
 SPANS: - 2 @ 24' 9" Brgs.  
 RDWY: - 25 Ft with two 1'-9" safety curbs.  
 LOADING: - 5-15-40.  
 SKEW: - 35° Left forward.  
 SURFACE COURSE: - Bituminous.  
 ALIGNMENT: - 2° Curve Left.  
 SUPERELEVATION: - .042 H/F.  
 APPROACH SLABS: - 15' Long (A5-41-F).

**PRESENT STRUCTURE**  
 (To be Removed)  
 Type - Pony Truss  
 Span - 34'-5" Clear  
 Roadway - 14'-0"  
 Floor - Concrete  
 Abuts - Stone  
 Loading - H = 6.5

DRAINAGE AREA = 2.60 SQ. MI.



<b>SITE PLAN</b>			
<b>BRIDGE No. HI-73-03A</b>			
OVER POLK CREEK S. H. 254 SEC. C (Pt.) Highland County State of Ohio			
Scale: 1" = 20' Station 25+			
Revised Type, Size, & Location 8-25-45 J.W.R.	Present Topog. Survey E.R.D.	Proposed Work Design J.J.H.	Checked C.D.B.

**GENERAL NOTES**

**STANDARD DRAWINGS AND SUPPLEMENTAL SPECIFICATIONS:-**  
For details not shown on these drawings, reference shall be made to Standard Drawing: A5-41-F, dated 3-31-41 and Supplemental Specifications 5-203 dated 4-6-45

**REMOVAL OF EXISTING BRIDGE:-** Existing superstructure to be dismantled and piled for disposal by the State Forces when no longer needed to maintain traffic.  
Existing substructure to be removed to proposed ground line. Suitable material may be used for riprap.

**WELDING:-** All welding shall be Class "A".

**PAINT FOR RAILING:-** Railing sleeve angles, if painted, shall have one shop coat and three field coats as per Sec. 5-8. First field coat shall be applied at least five days before placing concrete posts. Shop coat and first field coat shall cover entire surface of angles.  
Field paint for sleeve and railing angles shall be aluminum paint as per Sec. M-9, 12.

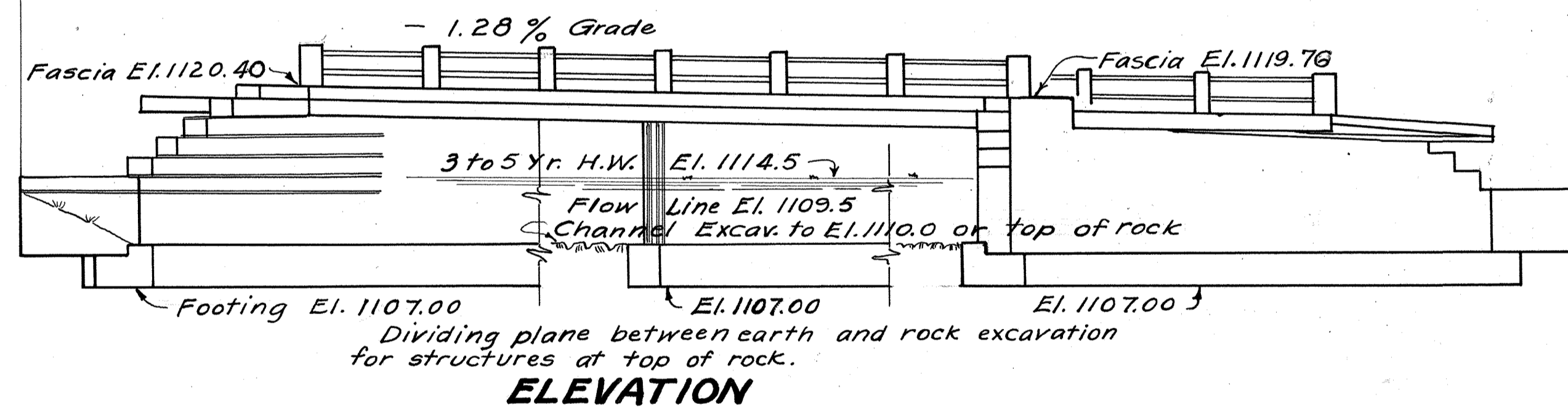
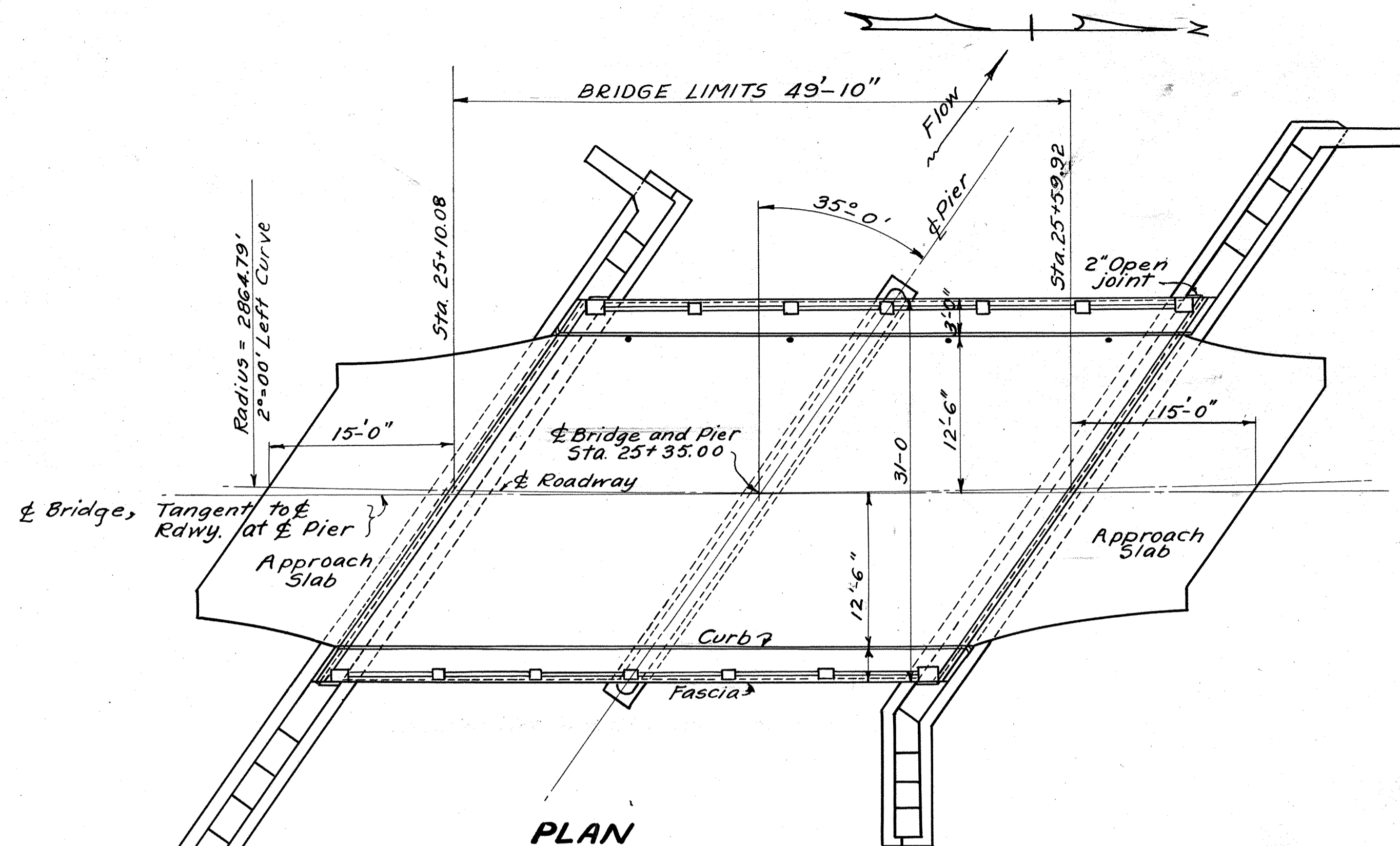
**UNIT STRESSES:-** Maximum unit design stresses for this structure are as follows:-  
f<sub>s</sub> = 18,000 p.s.i., f<sub>c</sub> = 1200, n = 8 for Class "C" concrete,  
f<sub>s</sub> = 18,000 p.s.i., f<sub>c</sub> = 900, n = 10 for Class "E" concrete.

**RAILING:-** Railing panels shall be so constructed that horizontal elements are parallel with finished center line grade, and all vertical elements are truly vertical.

**MAINTENANCE OF TRAFFIC:-** Two-way traffic shall be maintained at all times.

**FOOTINGS:-** shall extend a minimum of 2'-6" into solid rock.

**FALSEWORK PLANS:-** Not less than fifteen days prior to beginning construction of the falsework, the contractor shall submit three blue prints of false work plans to the Director for approval by the Bureau of Bridges.



ESTIMATED QUANTITIES									
ITEM	TOTAL	UNIT	DESCRIPTION	S. ABUT.	N. ABUT.	PIER	SUPERSTR.	GENERAL	
E-2	Lump Sum		Cofferdams and pumping					Lump	Lump
E-2	36	cu. yd.	Excavation for structures, Unclassified	21	15				36
E-2	73.5	cu. yd.	Excavation for structures, rock	31	31	11.5			73.5
J-1	71	cu. yd.	Class "C" concrete, superstructure				71		71
J-1	105	cu. yd.	Class "E" concrete, walls	48	40	17			105
J-1	64	cu. yd.	Class "E" concrete, footings	26.3	26.4	11.3			64
J-203	140	sq. yd.	Type "C" waterproofing for bridge deck				140		140
S-4	20,510	lb.	Reinforcing steel	1780	1380	950	16,314	86	20,510
S-7	3,700	lb.	Structural steel				3,700		3,700
S-9	135	sq. ft.	1/2" Premolded expansion joint filler				132	3	135
S-9	670	lb.	1/2" Cast leaded bronze sliding plates				670		670
S-14	97.6	lin. ft.	Bridge railing (Steel with concrete posts)				97.6		97.6
S-24	Lump Sum		Removal of existing structure					Lump	Lump
S-29	50	cu. yd.	Porous backfill	27	23				50
S-29	4	units	Scuppers (4" x 1 1/2" Std. C. I. Pipe)				4		4
S-15	Lump Sum		Temporary Run-around Bridge and Approaches					Lump	Lump
S-3	6	sq. yd.	Type "B" waterproofing	3	3				6
S-8	3700	lb.	Field painting of structural steel				3700		3700
T-35	9.5	cu. yd.	Asphaltic Concrete, Type A				9.5	C-2 (see notes) C-3, -214	736

T-35, 70-80 used

Revised As-Built c.m.k.  
Note: T-35, 70-80, used

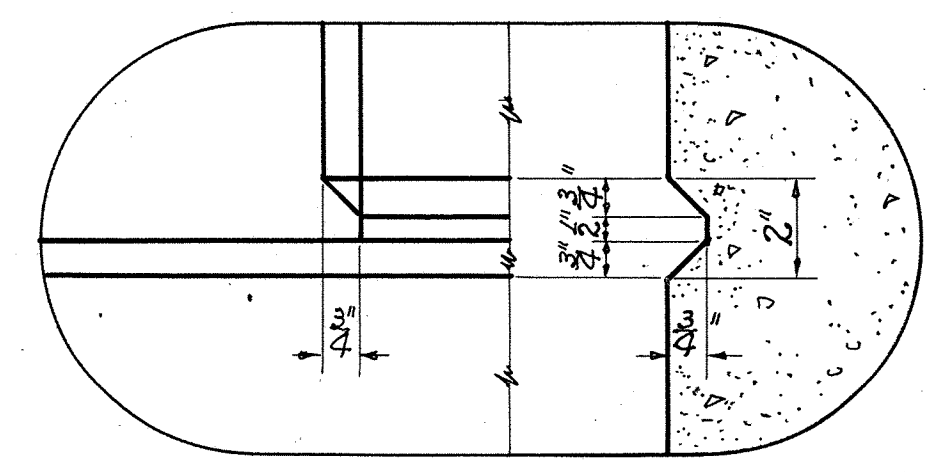
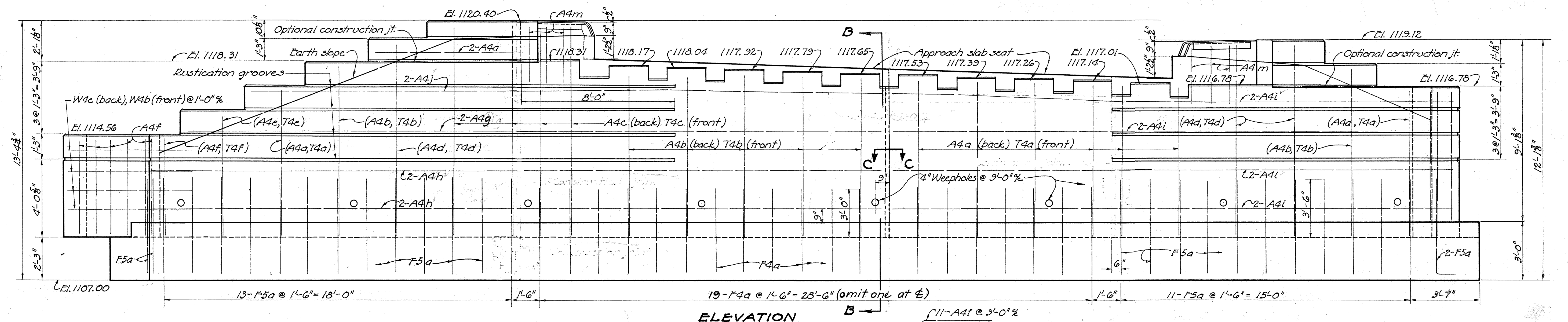
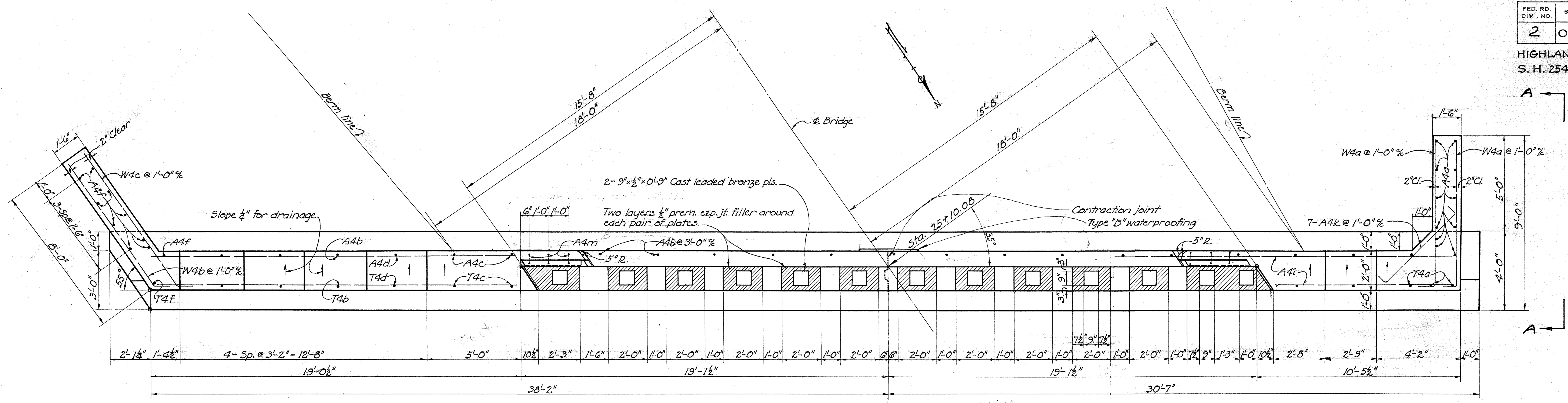
STATE OF OHIO  
DEPARTMENT OF HIGHWAYS  
BUREAU OF BRIDGES

**GENERAL PLAN & ELEVATION  
NOTES & ESTIMATED QUANTITIES**

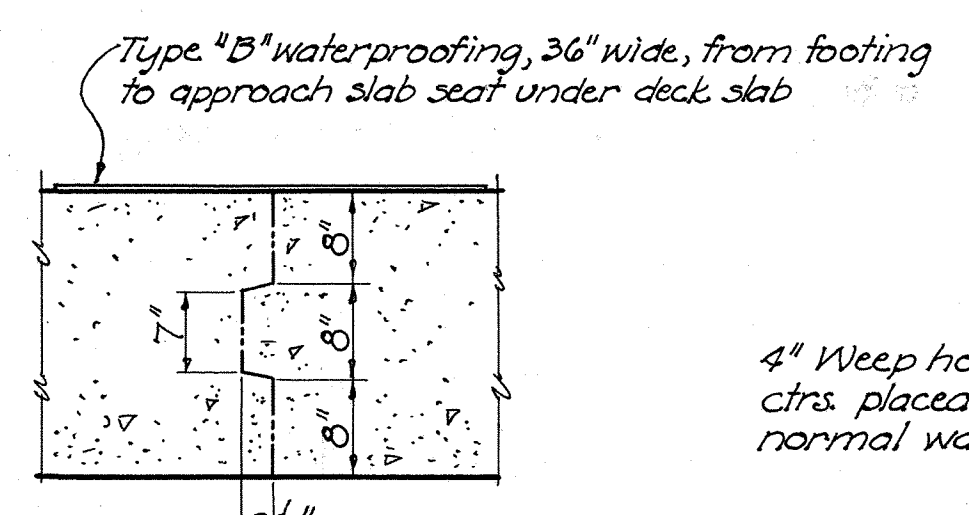
BRIDGE NO. HI-73-03A  
OVER POLK CREEK

HIGHLAND COUNTY S.H. 254  
SEC. C (PT.) STA. 25+35.00

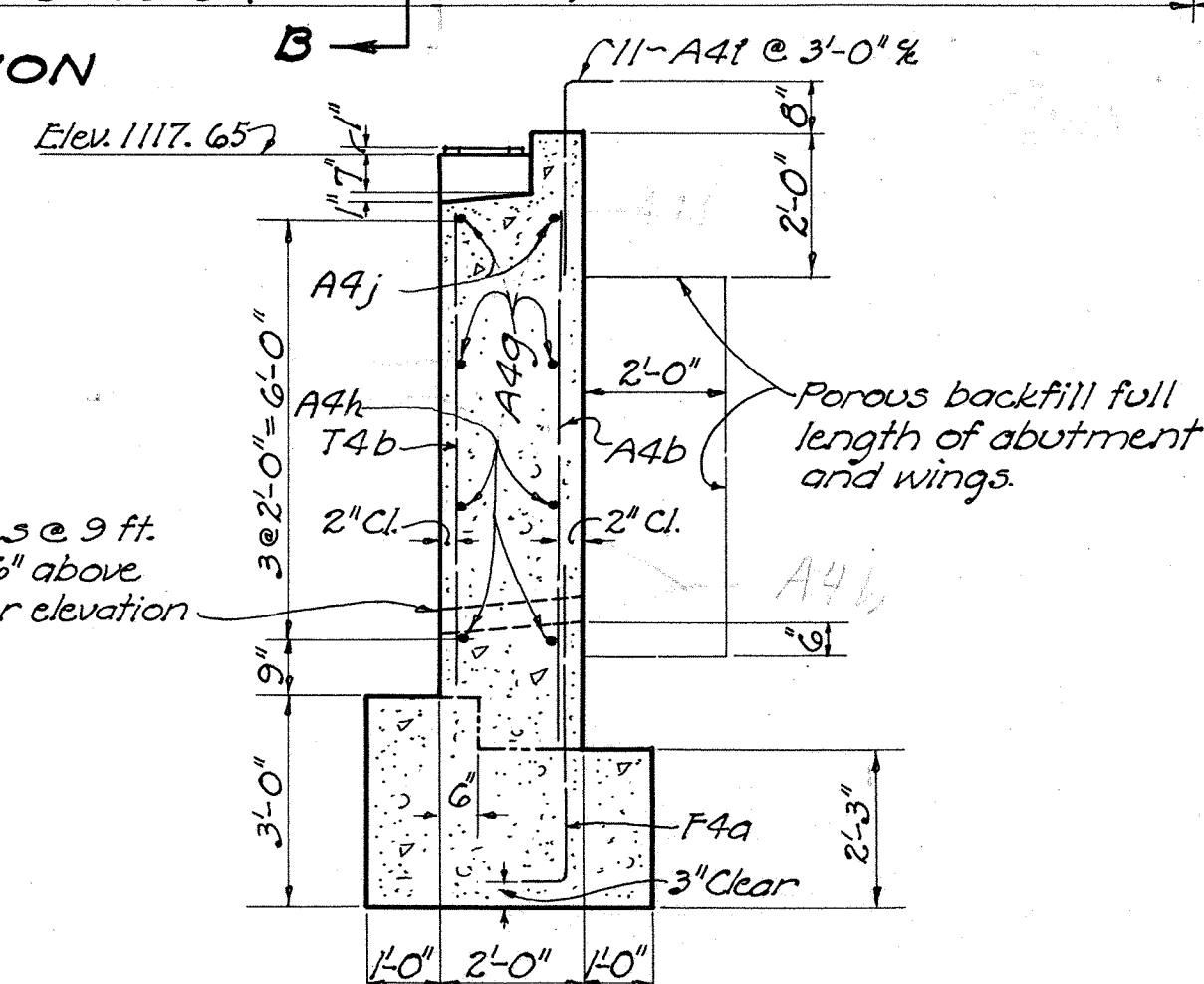
DESIGNED K.E.B.	DRAWN K.E.B.	TRACED K.E.T.	CHECKED FHS	REVIEWED BFG R.A.D.	DATE 11-15-45	REVISED 6-5-46
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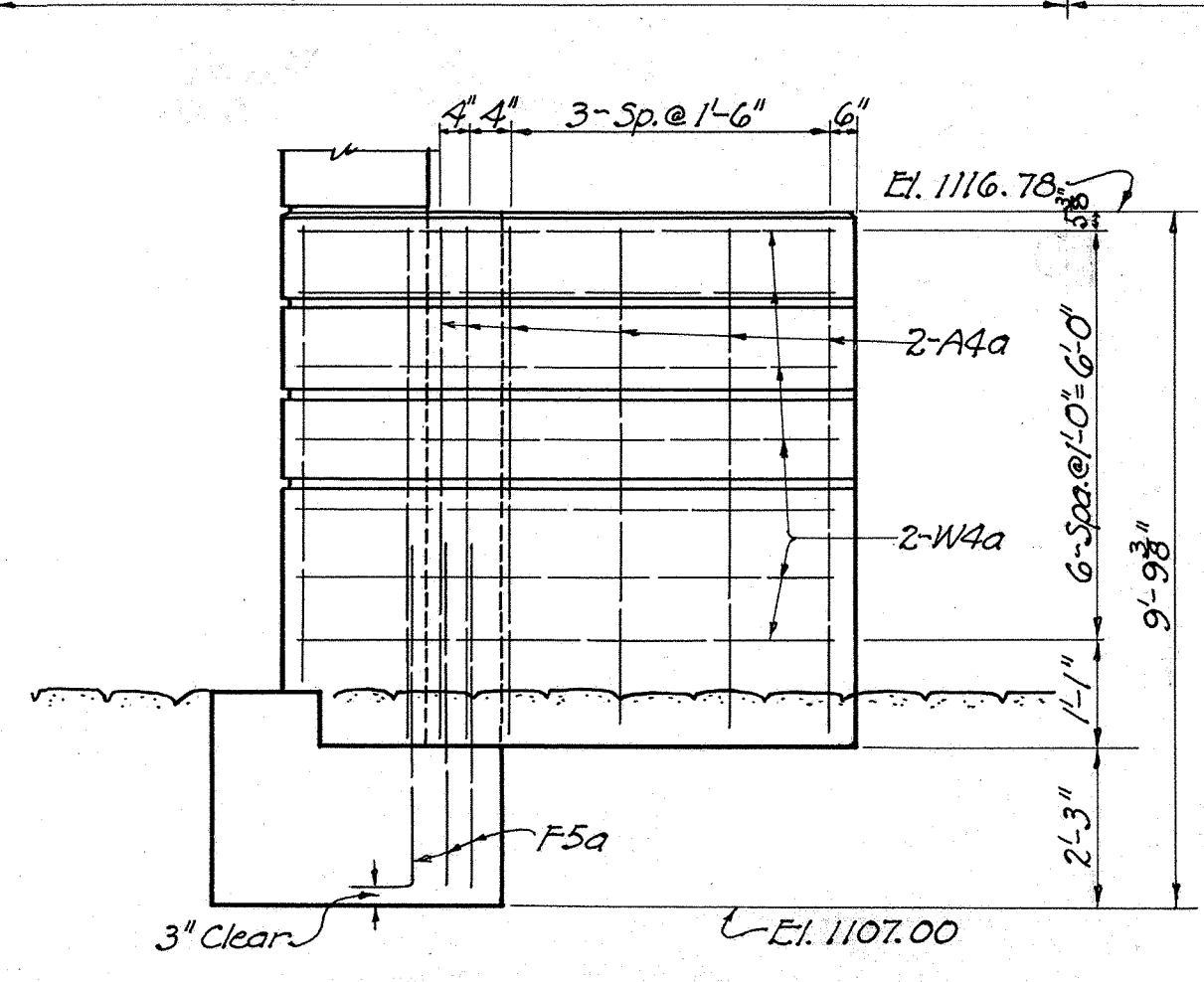
RUSTICATION DETAIL



CONTRACTION JOINT SECTION C-C

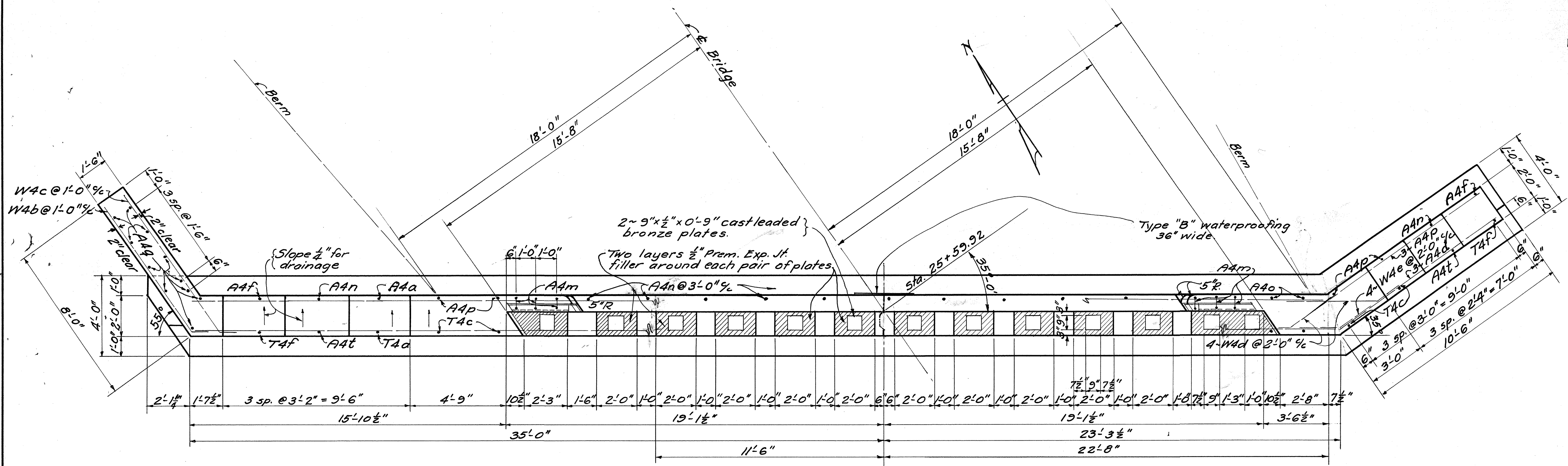


SECTION B-B

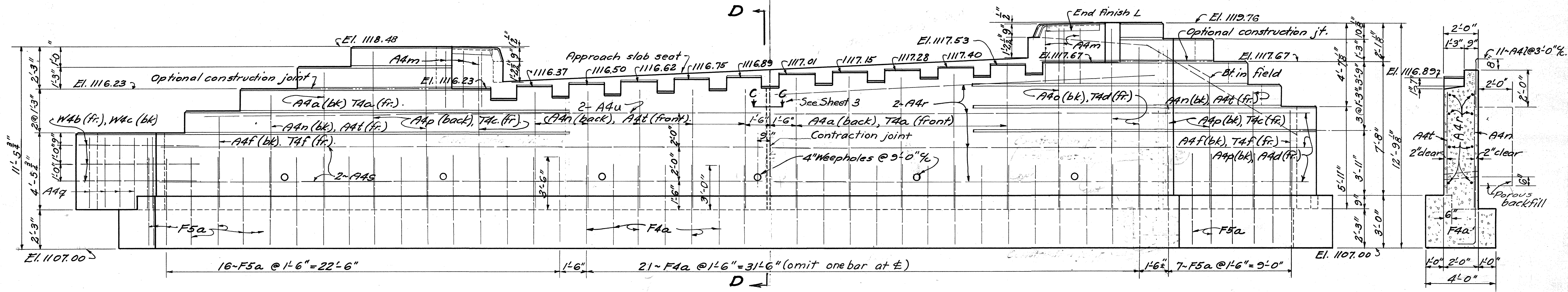


VIEW A-A

STATE OF OHIO DEPARTMENT OF HIGHWAYS BUREAU OF BRIDGES						
<b>SOUTH ABUTMENT</b>						
BRIDGE NO. H1-73-03A OVER POLK CREEK						
HIGHLAND COUNTY SECTION C (PT.)					S. H. 254 STA. 25+35.00	
DESIGNED K.F.B.	DRAWN K.F.B.	TRACED J.P.P.	CHECKED F.H.S.	REVIEWED B.F.C. 10/10	DATE 11-15-45	REVISED 6-5-46



PLAN



ELEVATION

SECTION D-D

STATE OF OHIO  
DEPARTMENT OF HIGHWAYS  
BUREAU OF BRIDGES

**NORTH ABUTMENT**  
BRIDGE No. HI-73-03 A  
OVER POLK CREEK  
HIGHLAND COUNTY S.H. 254  
SECTION C (Pr) STA. 25+35.00

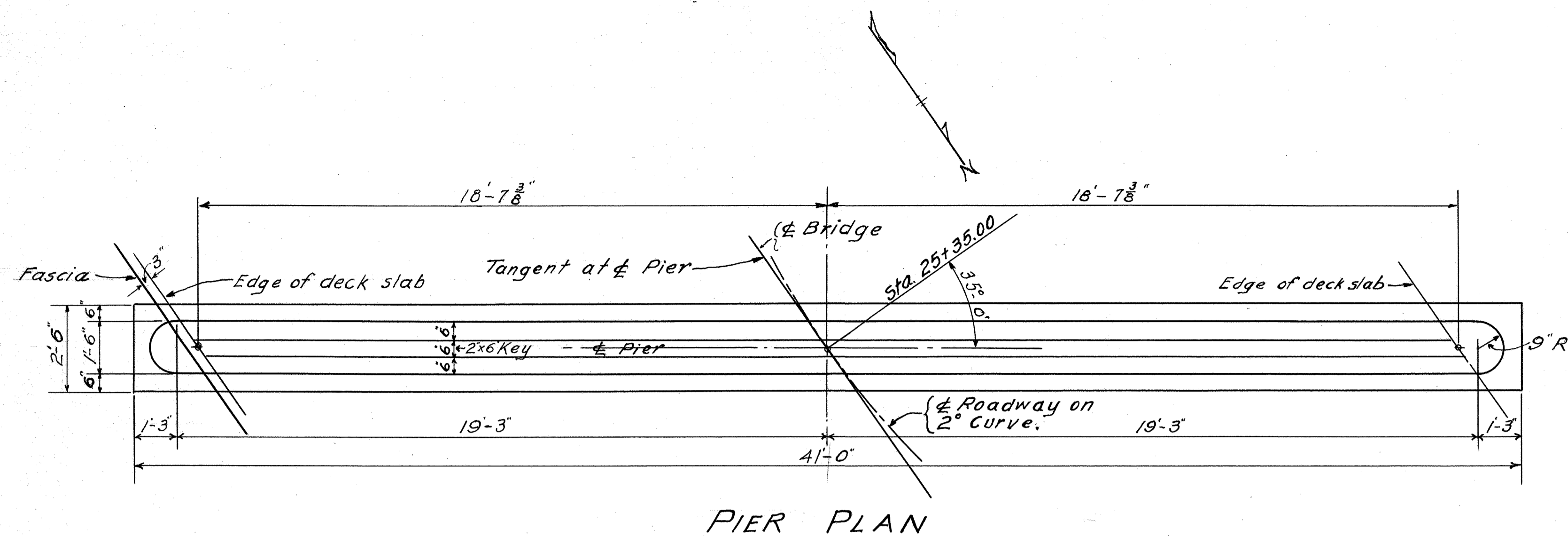
DESIGNED K.E.B.	DRAWN K.E.B.	TRACED K.E.B.	CHECKED F.H.S.	REVIEWED B.F.G. A.A.O.	DATE 11-15-45	REVISED 6-5-46
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STEEL LISTS

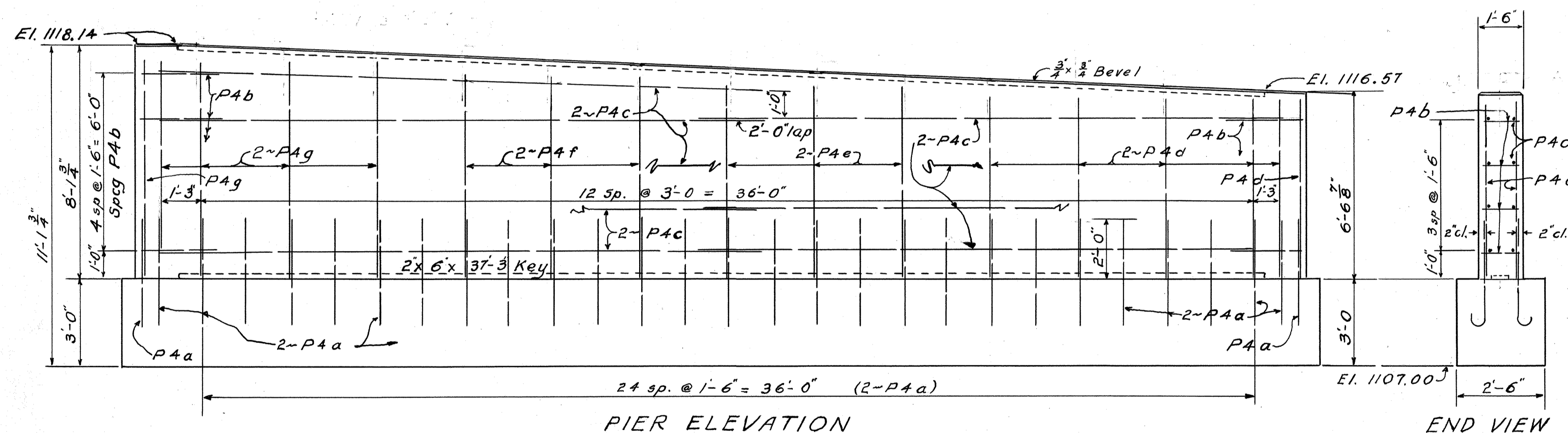
ABUTMENTS

Mark	Size	No	Length	Weight	Shape
F5a	3/4"	53	6'-0"	479	B
F4a	5/8"	40	5'-6"	228	B
A4a	5/8"	27	7'-3"	204	S
A4b	5/8"	7	8'-3"	60	S
A4c	5/8"	4	11'-0"	46	S
A4d	5/8"	6	9'-9"	61	S
A4e	5/8"	1	6'-3"	7	S
A4f	5/8"	12	5'-0"	63	S
A4g	5/8"	2	36'-0"	75	S
A4h	5/8"	4	34'-6"	156	S
A4i	5/8"	8	29'-0"	241	S
A4j	5/8"	2	32'-9"	68	S
A4k	5/8"	7	6'-0"	44	B
A4l	5/8"	22	3'-0"	69	B
A4m	5/8"	12	6'-3"	78	B
A4n	5/8"	7	6'-9"	49	S
A4o	5/8"	3	10'-3"	32	S
A4p	5/8"	8	8'-9"	73	S
A4q	5/8"	11	4'-0"	46	S
A4r	5/8"	10	22'-3"	186	S
A4s	5/8"	4	34'-6"	144	S
A4t	5/8"	7	6'-0"	44	S
A4u	5/8"	2	33'-0"	68	S
T4a	5/8"	15	6'-6"	102	S
T4b	5/8"	7	7'-6"	55	S
T4c	5/8"	9	8'-0"	75	S
T4d	5/8"	6	9'-0"	56	S
T4e	5/8"	1	5'-6"	6	S
T4f	5/8"	3	4'-3"	13	S
W4a	5/8"	14	9'-3"	135	B
W4b	5/8"	7	8'-3"	60	B
W4c	5/8"	7	9'-0"	66	B
W4d	5/8"	8	6'-6"	54	B
W4e	5/8"	4	4'-0"	17	B

Mark	Size	No	Length	Weight	Shape
SUPERSTRUCTURE					
S8a	1"	39	34'-9"	4607	B
S8b	1"	52	27'-3"	4818	B
S9a	1 1/2"	28	22'-0"	2651	S
S4a	5/8"	48	16'-0"	801	S
S4b	5/8"	82	19'-6"	1668	S
S4c	5/8"	50	5'-9"	300	B
S4d	5/8"	50	3'-9"	196	B
S4e	5/8"	56	3'-9"	219	B
S2a	1/2"	82	19'-3"	1054	S
PIER					
P4a	5/8"	56	4'-3"	248	B
P4b	5/8"	9	6'-6"	61	B
P4c	5/8"	18	20'-0"	372	S
P4d	5/8"	11	6'-3"	72	S
P4e	5/8"	6	6'-9"	42	S
P4f	5/8"	6	7'-0"	44	S
P4g	5/8"	9	7'-6"	70	S
P4i	5/8"	13	3'-0"	41	B
REPLACEMENT BARS					
RE9	1 1/8"	1	8'-6"	37	S
RE8	1"	1	8'-0"	27	S
RE5	3/4"	1	7'-0"	11	S
RE4	5/8"	1	6'-6"	7	S
RE2	1/2"	1	6'-0"	4	S



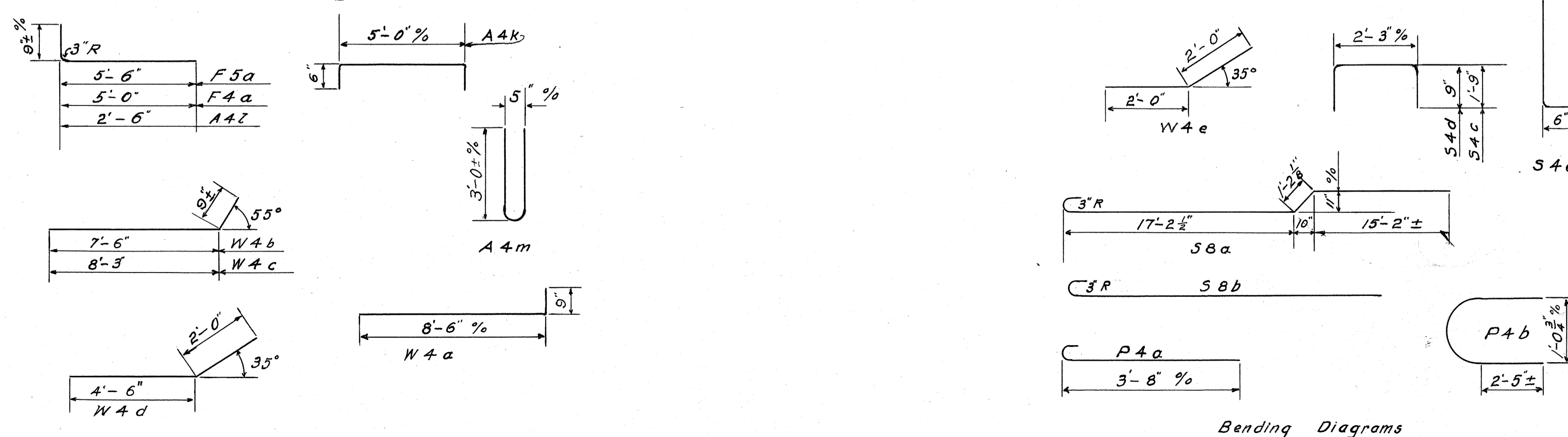
PIER PLAN



PIER ELEVATION

END VIEW

Bending Diagrams



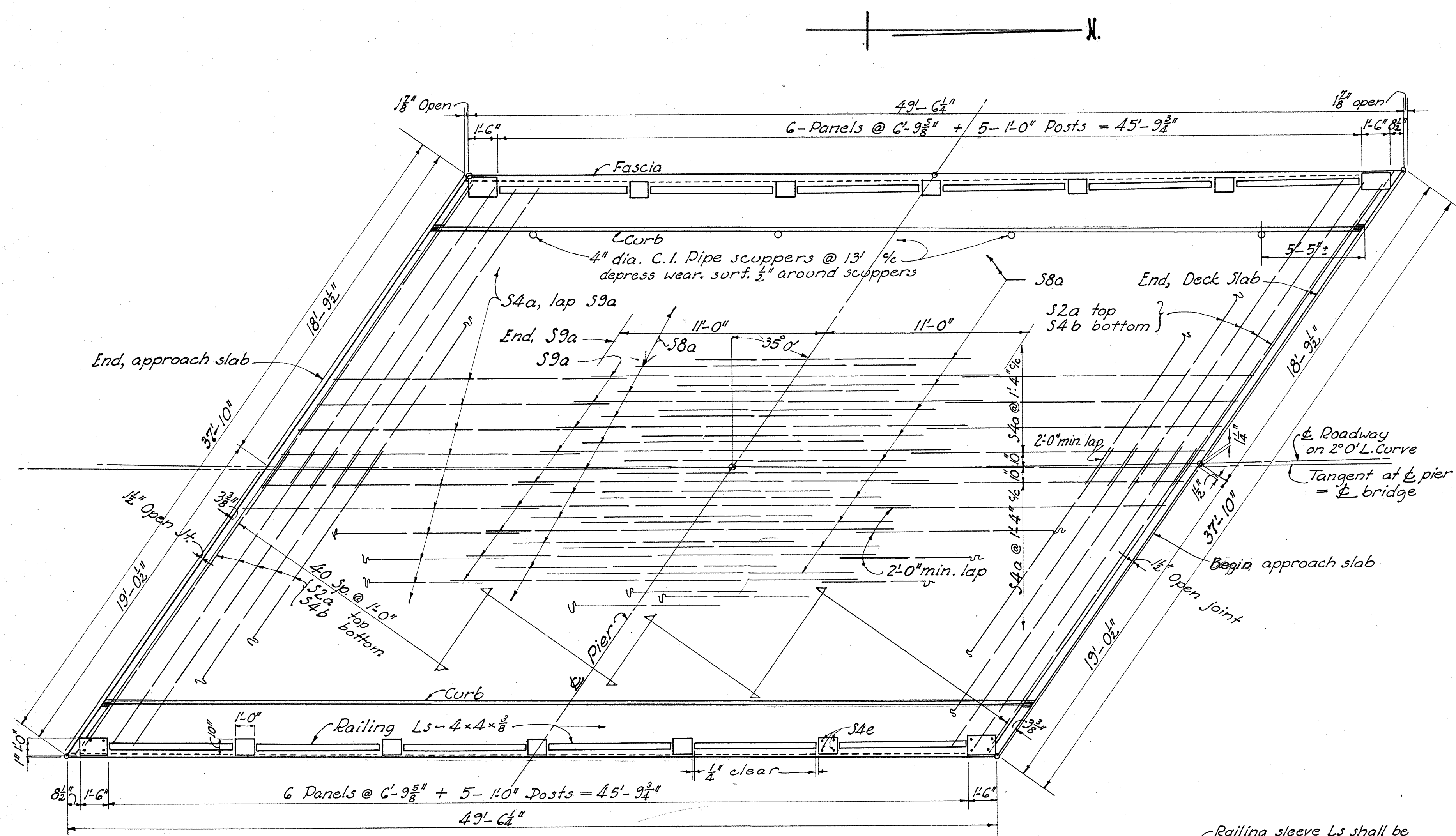
Bending Diagrams

STATE OF OHIO  
DEPARTMENT OF HIGHWAYS  
BUREAU OF BRIDGES

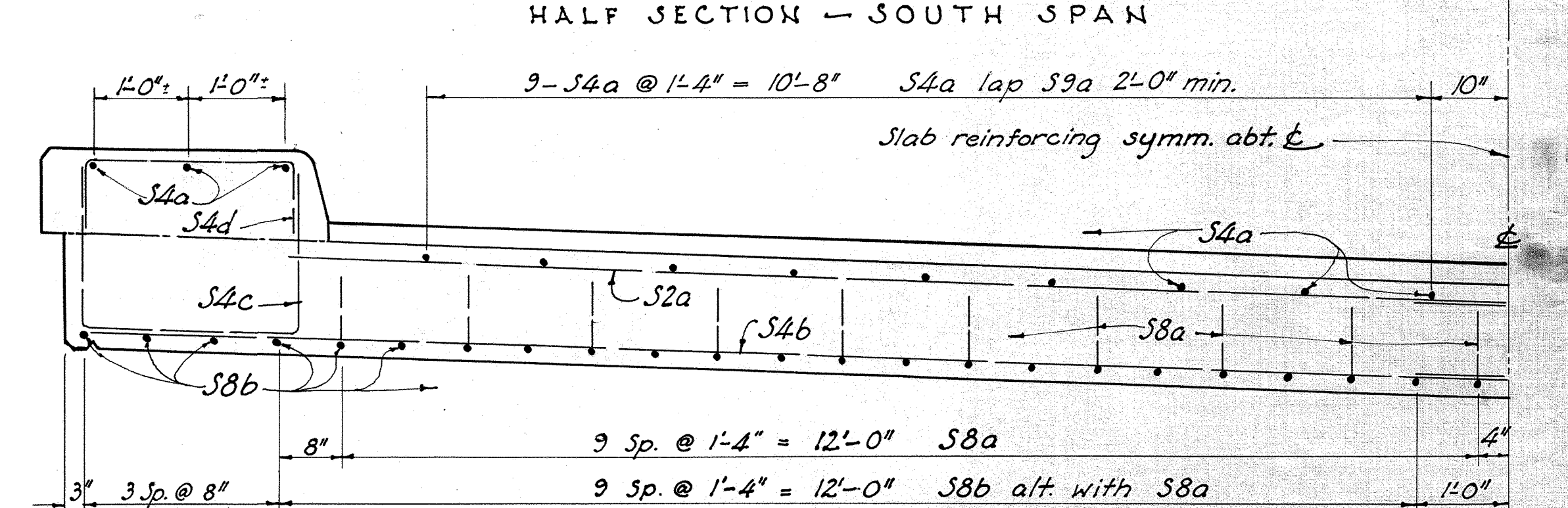
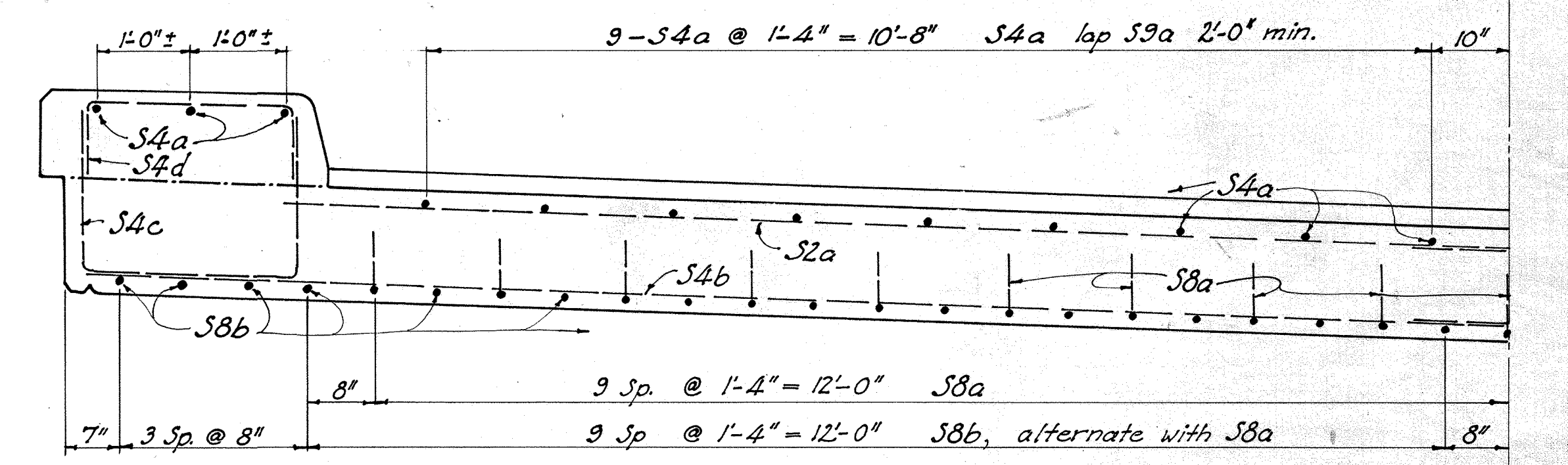
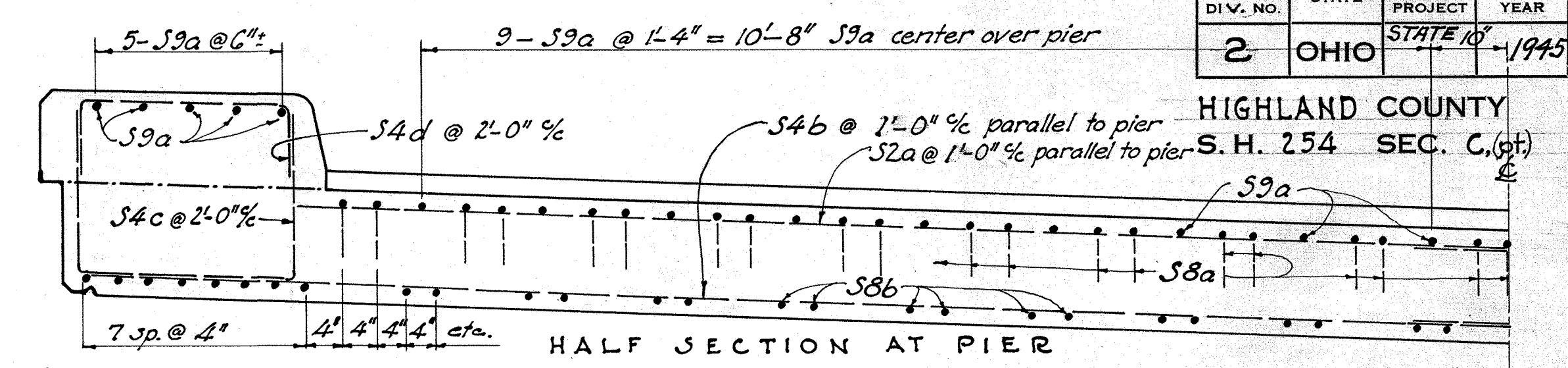
**PIER DETAILS AND REINFORCING STEEL LISTS**  
BRIDGE NO HI-73-03A  
OVER POLK CREEK  
HIGHLAND COUNTY S.H. 254  
SECTION 'C' (PT) STA 25+35.00

DESIGNED K.E.B.	DRAWN K.E.B.	TRACED W.S.	CHECKED F.H.S.	REVIEWED B.F.S. 10/20/45	DATE 11-15-45	REVISED 6-5-46
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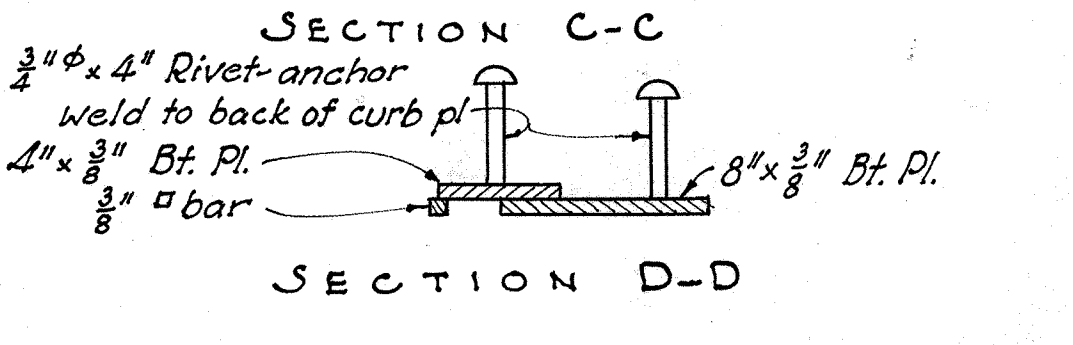
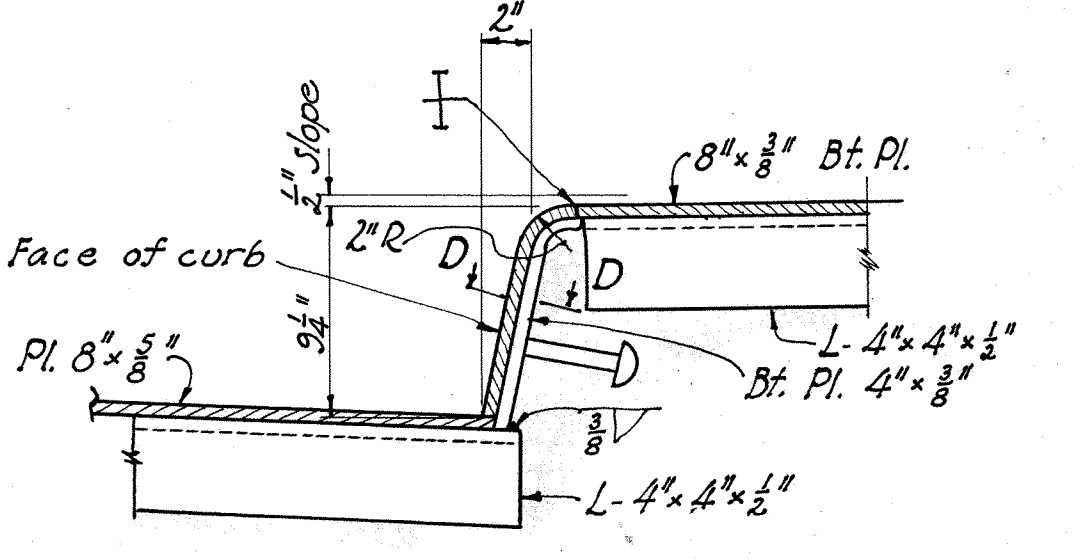
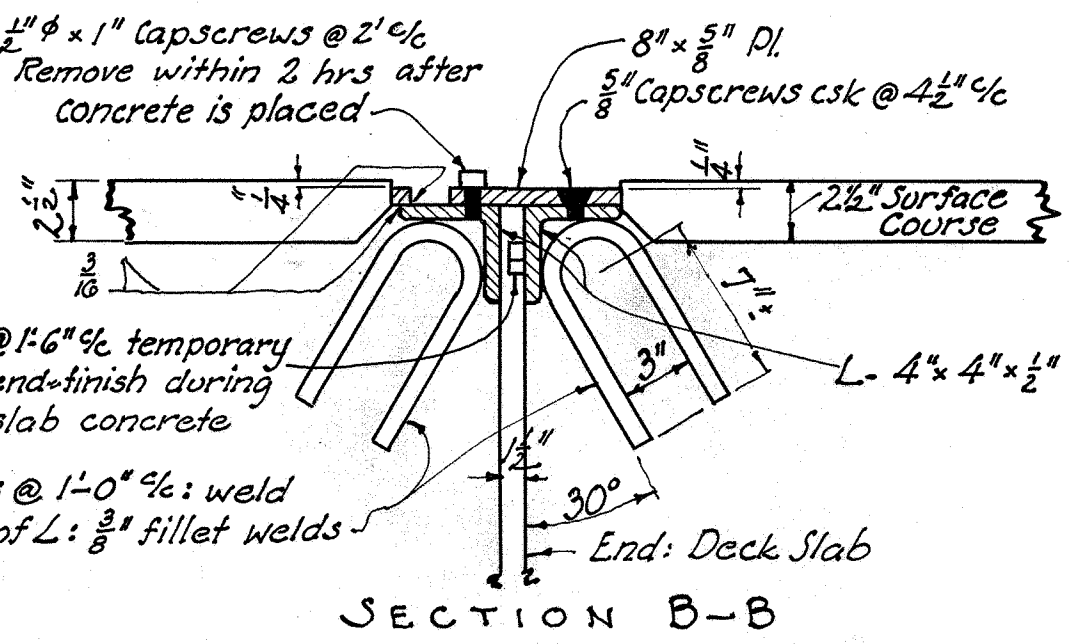
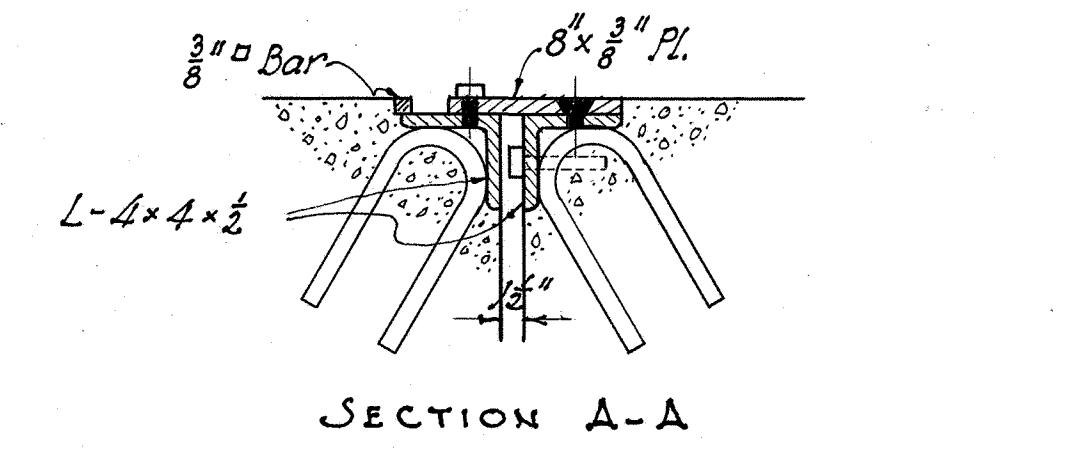
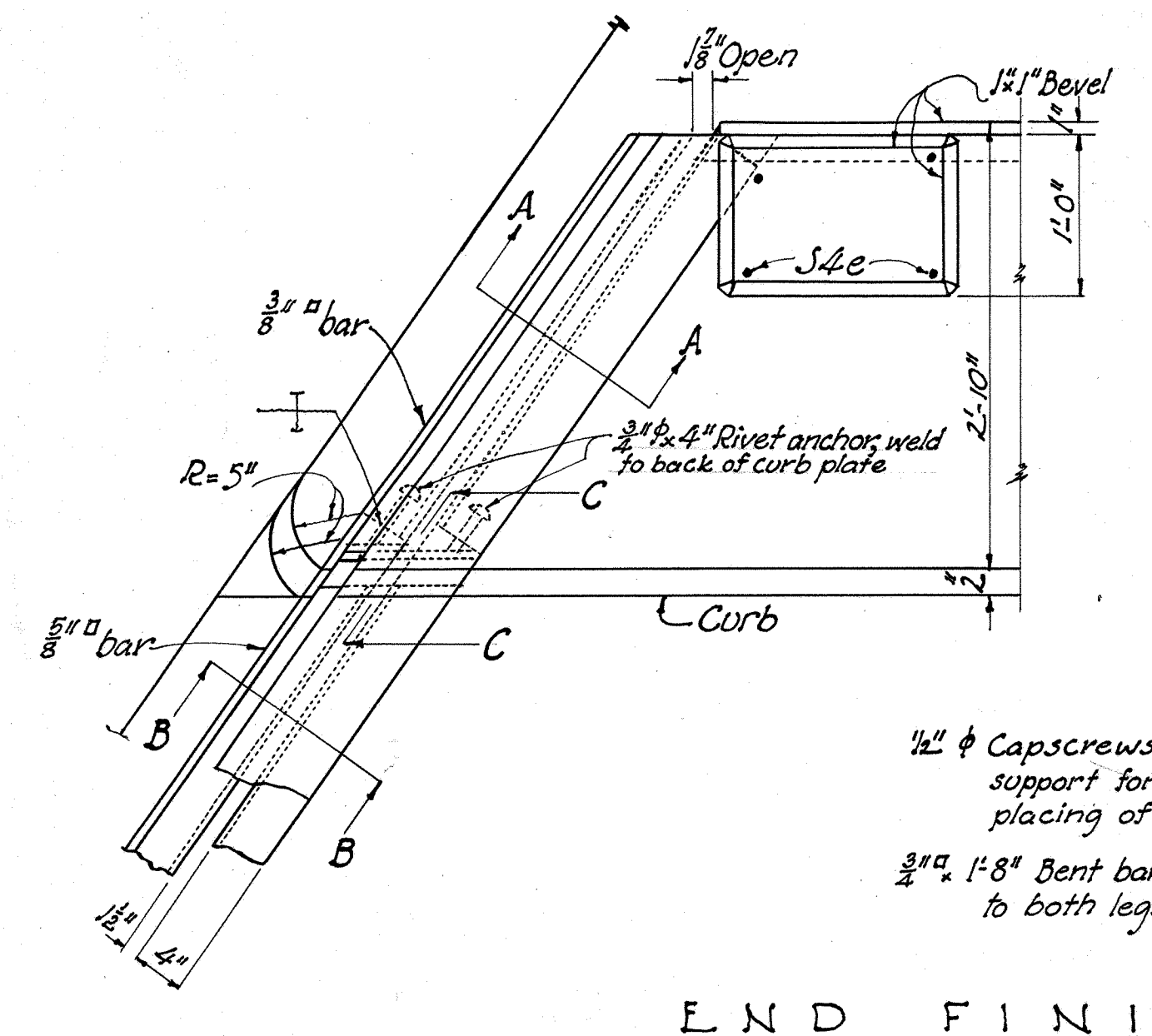
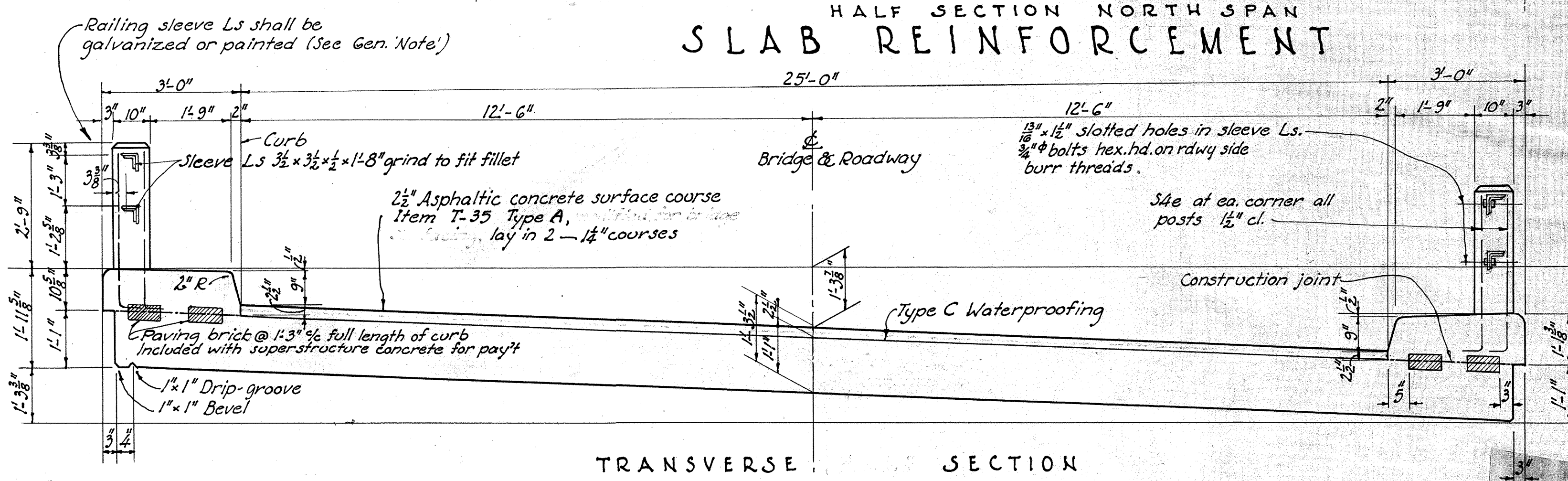
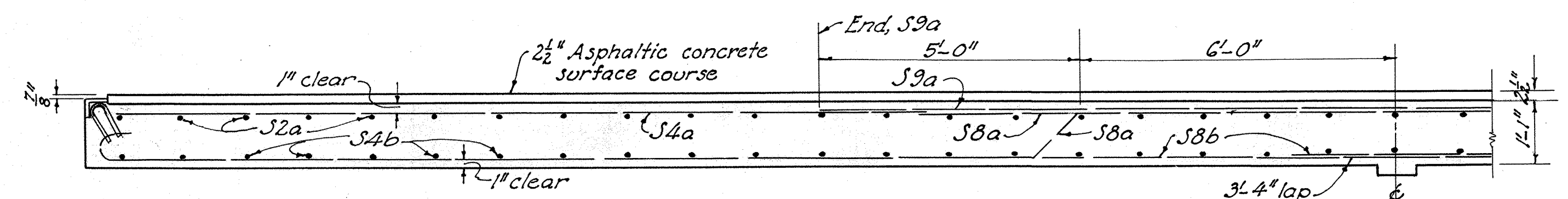
HIGHLAND COUNTY  
S. H. 254 SEC. C (PT)



PLAN, DECK SLAB



SLAB REINFORCEMENT



STATE OF OHIO DEPARTMENT OF HIGHWAYS BUREAU OF BRIDGES						
<b>SUPERSTRUCTURE</b>						
BRIDGE No. HI-73-03A POLK CREEK						
HIGHLAND CO.					S. H. 254	
SEC. C (PT)					STA. 25+35	
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
K.E.B.	K.C.D.	M.S.	F.H.S.	B.F.G.	11-15-45	6-5-46

H16-73-0.35

