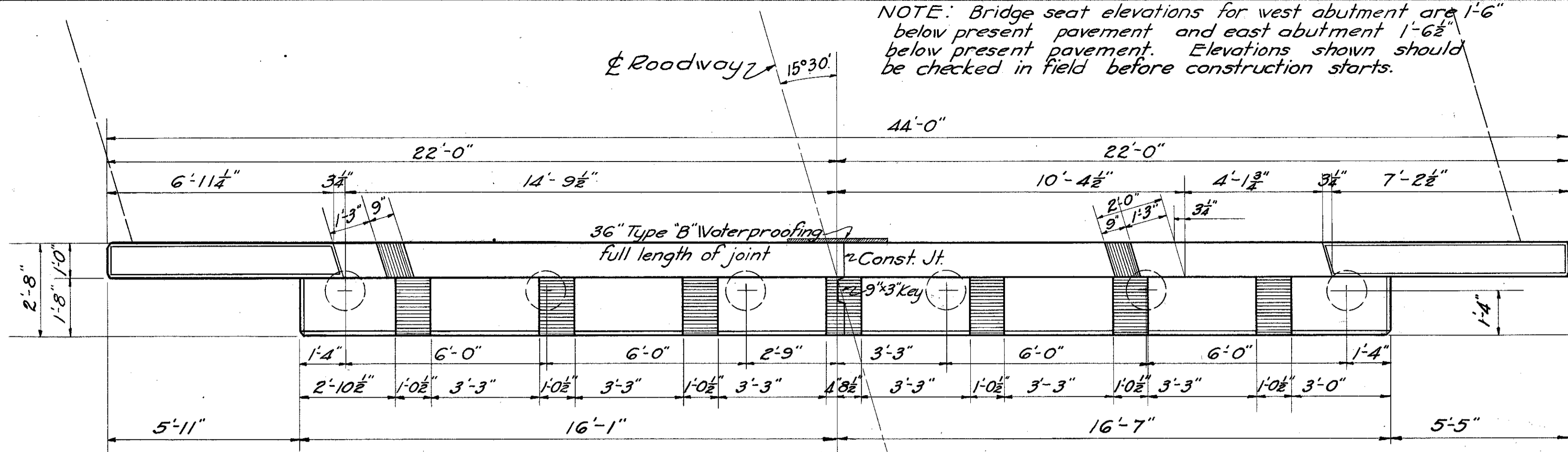
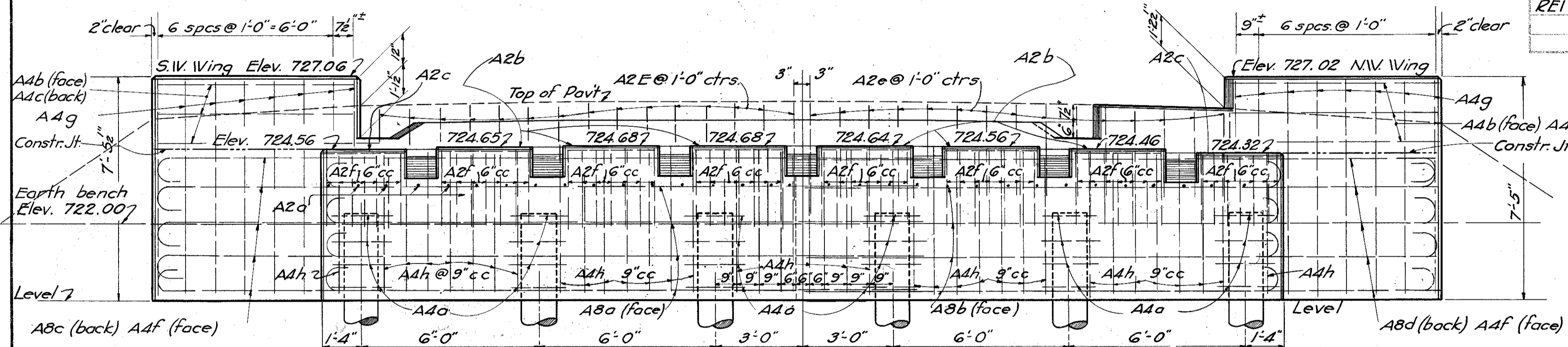


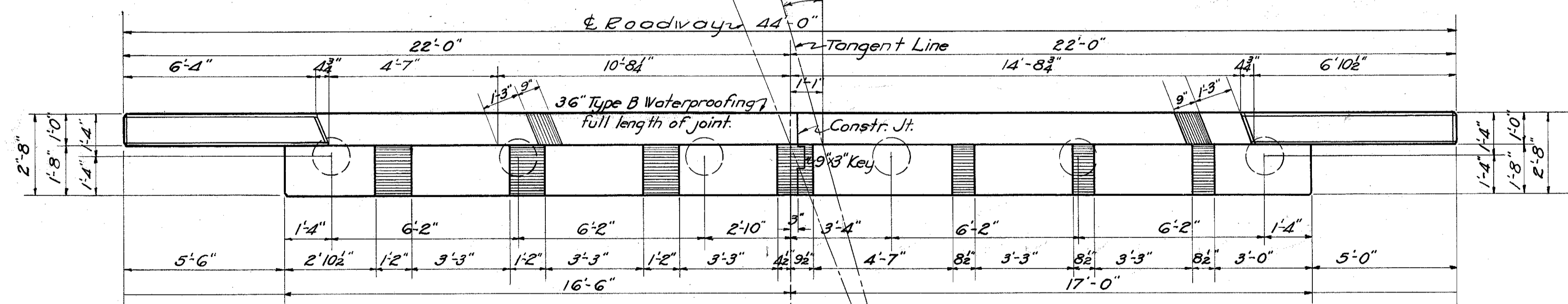
NOTE: Bridge seat elevations for west abutment are 1'-6" below present pavement and east abutment 1'-6 1/2" below present pavement. Elevations shown should be checked in field before construction starts.



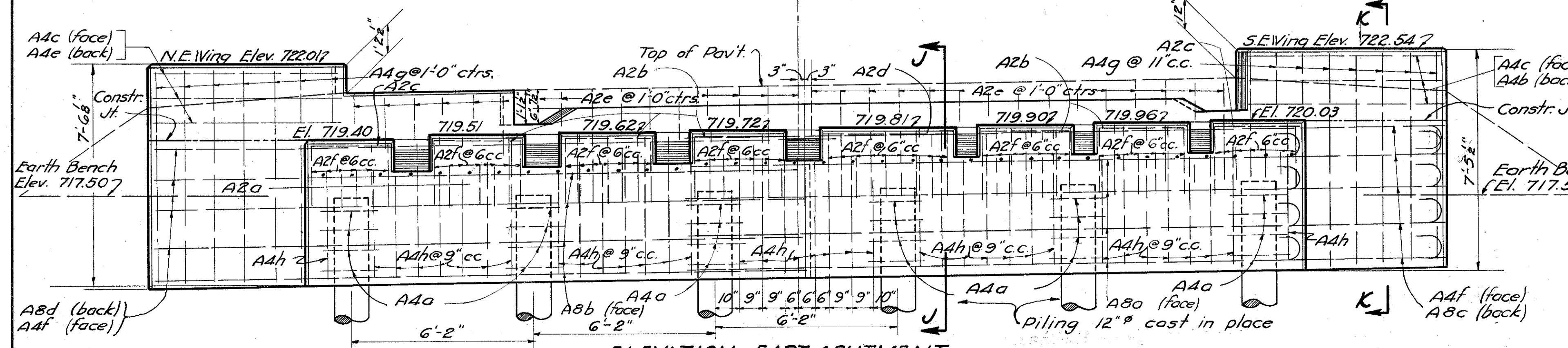
- PLAN - WEST ABUTMENT -



- ELEVATION - WEST ABUTMENT -  
Looking West



PLAN EAST ABUTMENT



ELEVATION - EAST ABUTMENT  
Looking East

**REINFORCING STEEL LIST**

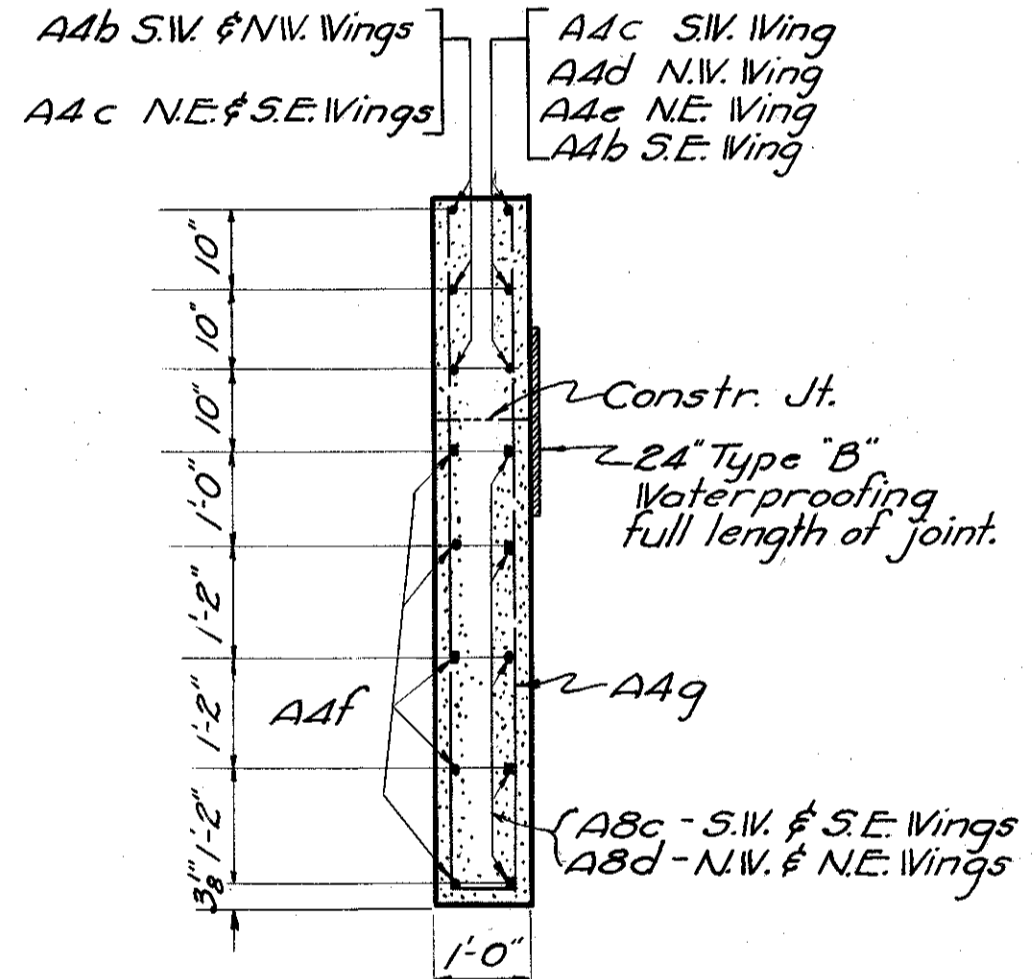
Mark	Size	No	Length	Weight	Shape	BENDING DIAGRAM
<b>APPROACH SLAB</b>						
S5a	3/8"	4	13'-6"		Bt.	55a 12'-7 1/4" % 55b 15'-2 1/4" % 55c 7'-5 1/2" %
S5b	3/8"	4	16'-0"		Bt.	
S5c	3/8"	78	8'-6"		Bt.	
<b>REPLACEMENT BARS</b>						
RE8	1"	1	8'-0"	30	Str.	
RE6	7/8"	1	7'-6"	20	Str.	
RE5	3/4"	1	7'-0"	10	Str.	
RE4	3/4"	1	6'-6"	10	Str.	
RE2	2"	1	6'-0"		Str.	
RE1	3/8"	1	5'-6"		Str.	
Total				70		

**REINFORCING STEEL LIST**

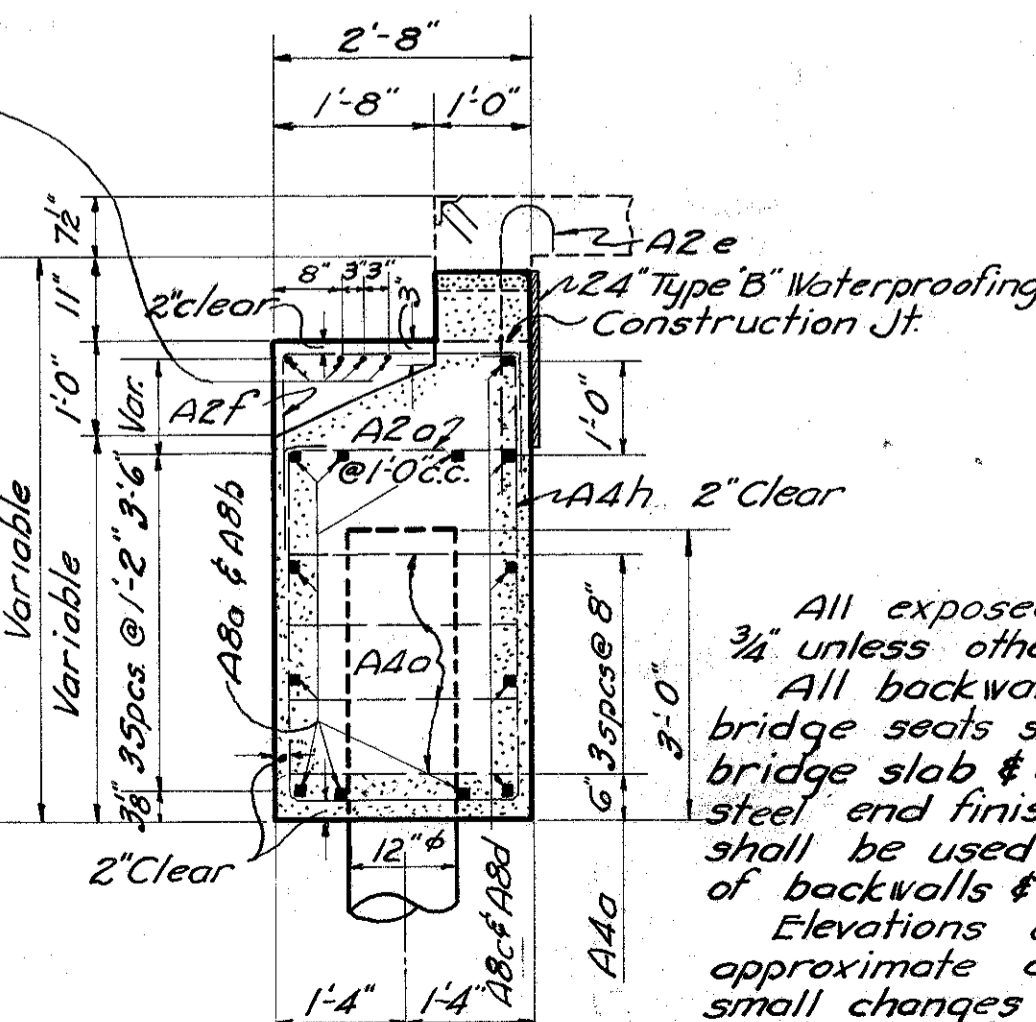
Mark	Size	No	Length	Weight	Shape	BENDING DIAGRAM
<b>ABUTMENTS &amp; PIERS</b>						
A8a	1"	16	21'-6"	1170	Bt.	
A8b	1"	16	17'-0"	930	Bt.	
A8c	1"	10	26'-7"	900	Bt.	
A8d	1"	10	22'-11"	780	Bt.	
A4a	5/8"	64	9'-9"	650	Bt.	
A4b	5/8"	9	7'-0"	70	Str.	
A4c	5/8"	9	6'-8"	60	Str.	
A4d	5/8"	3	7'-3"	20	Str.	
A4e	5/8"	3	6'-2"	20	Str.	
A4f	5/8"	20	8'-0"	170	Str.	
A4g	5/8"	31	14'-9"	480	Bt.	
A4h	5/8"	76	11'-0"	870	Bt.	
A2a	1/2"	100	3'-0"	200	Bt.	
A2b	1/2"	44	3'-1"	90	Str.	
A2c	1/2"	16	2'-9"	30	Str.	
A2d	1/2"	4	4'-5"	10	Str.	
A2e	1/2"	61	4'-0"	160	Bt.	
A2f	1/2"	114	5'-0"	380	Bt.	
P5a	3/8"	8	17'-3"	210	Bt.	
P5b	3/8"	8	20'-6"	250	Bt.	
P5c	3/8"	2	16'-2"	50	Str.	
P5d	3/8"	2	19'-6"	60	Str.	
P4a	5/8"	30	10'-10"	340	Bt.	
Total				7900		

**SUPERSTRUCTURE**

S8a	1"	57	37'-9"	7330	Bt.
S8b	1"	57	24'-6"	4750	Bt.
S6a	3/8"	29	31'-0"	1840	Bt.
S6b	3/8"	28	17'-10"	1030	Bt.
S4a	5/8"	79	18'-0"	1490	Str.
S4b	5/8"	52	15'-9"	860	Str.
S4c	5/8"	28	16'-9"	490	Str.
S4d	5/8"	42	18'-3"	800	Str.
S4e	5/8"	11	22'-4"	260	Str.
S4f	5/8"	11	15'-6"	180	Str.
S4g	5/8"	4	29'-0"	120	Str.
S4h	5/8"	4	23'-0"	100	Str.
S4j	5/8"	65	3'-9"	250	Bt.
S4k	5/8"	4	21'-9"	90	Str.
S4l	5/8"	27	16'-6"	470	Str.
S4m	5/8"	14	17'-9"	260	Str.
S4n	5/8"	11	22'-6"	260	Str.
S2a	1/2"	36	6'-4"	150	Bt.
S2b	1/2"	36	6'-9"	160	Bt.
D5a	3/8"	44	4'-6"	300	Bt.
D4a	5/8"	48	10'-6"	530	Bt.
D4b	5/8"	16	5'-3"	90	Str.
R1a	3/8"	96	3'-9"	140	Bt.
R1b	3/8"	20	6'-0"	50	Bt.
R2a	1/2"	216	7'-0"	1010	Str.
R2pec	1/2"	468	2'-0"	90	Bt.
Total				23,100	



TYPICAL WING SECTION  
SEC. KK



SEC. JJ  
Typical for both abutments.

All exposed corners chamfered 3/4" unless otherwise shown.  
All backwalls & wings above bridge seats shall be poured after bridge slab & curbs are placed. The steel end finish of the bridge slab shall be used as a template for top of backwalls & approach slabs.  
Elevations on this sheet are approximate and will be subject to small changes in the field at the direction of the Engineer.

STATE OF OHIO  
DEPARTMENT OF HIGHWAYS  
BUREAU OF BRIDGES

**STRUCTURAL DETAILS-ABUTMENTS & STEEL LIST**  
**BRIDGE NO LA-84-169 OVER B.O.R.R. AT PAINESVILLE**  
LAKE COUNTY S.H. 563  
SEC. D (PT.) STA. 531+72.56

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
E.S.C.	E.S.C.				11/16/39	5-7-40