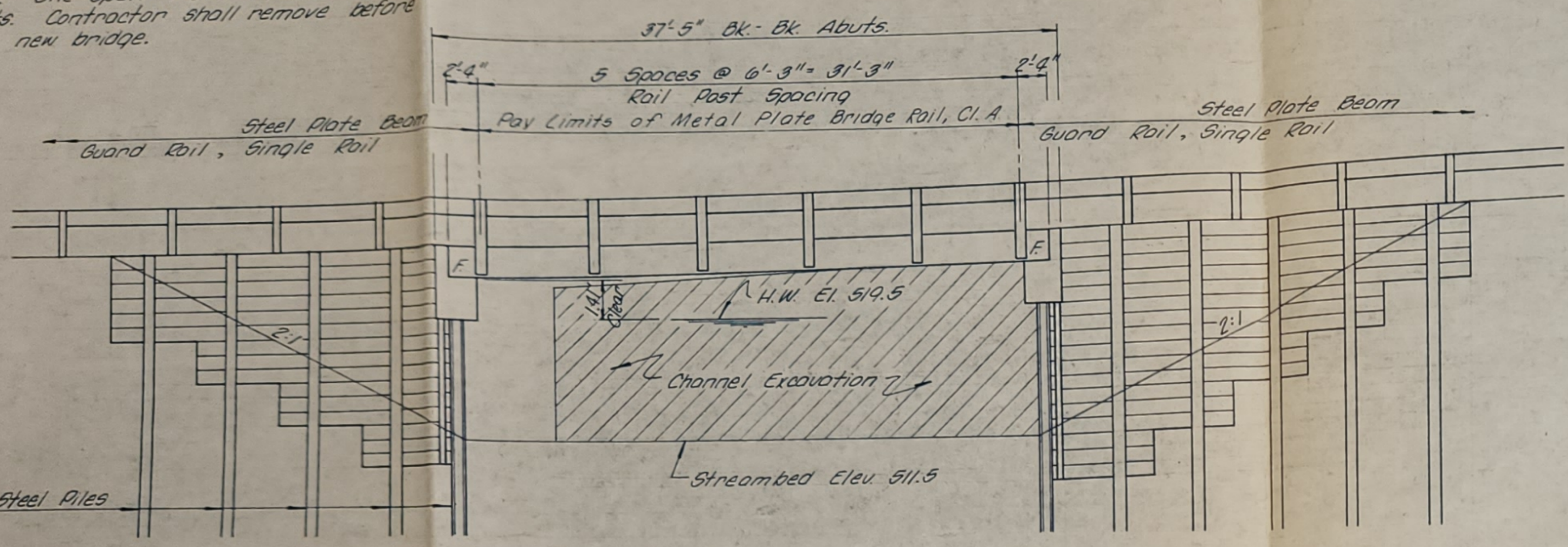


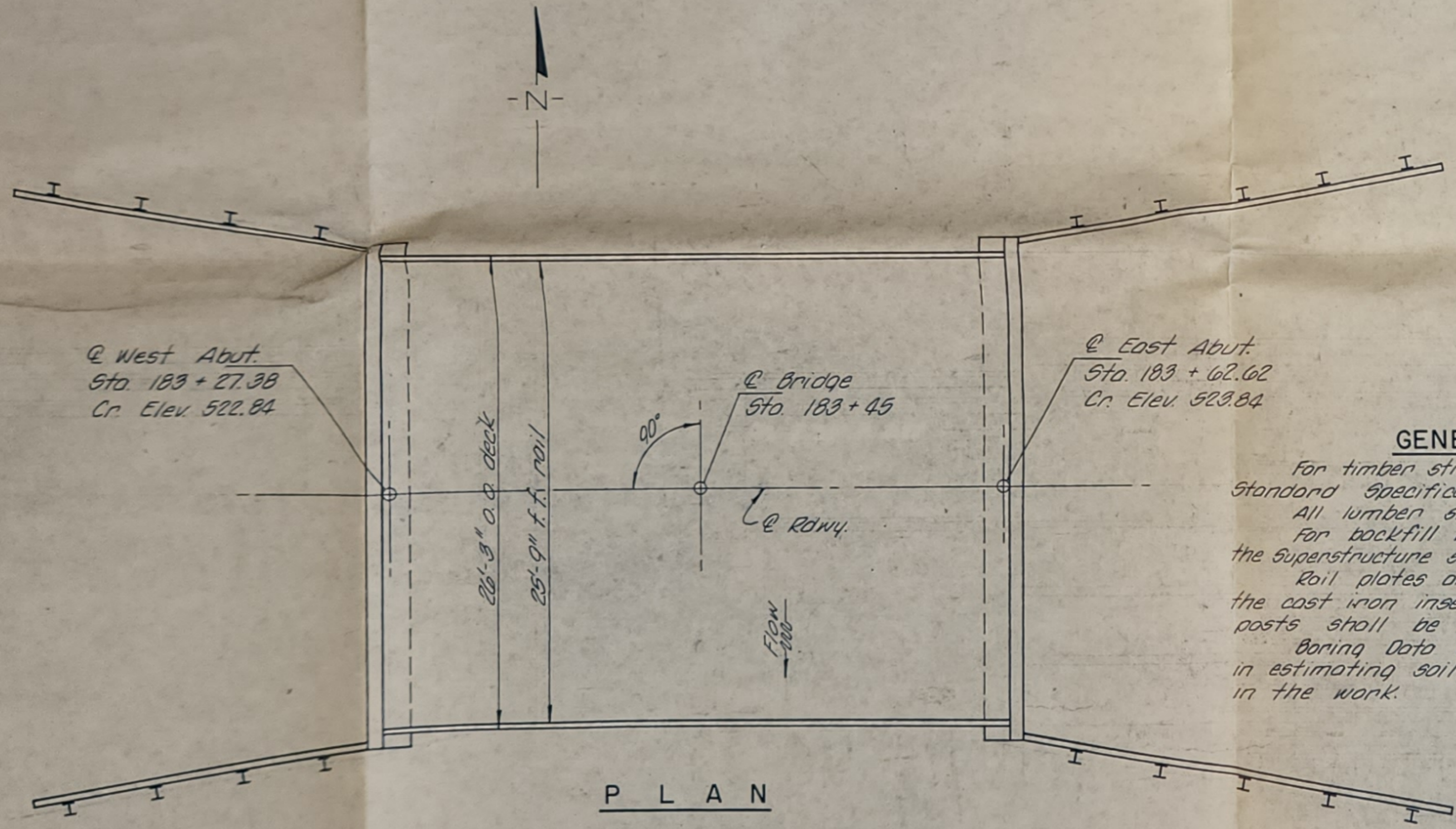
DIETZGEN 1934 ADEPROOF

ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
C.H. 8	RELOC.	JASPER	46	41
FED. ROAD DIST. NO. 7		ILLINOIS PROJECT		
SHEET 1 OF 3				

B.M. #18 N & W Root 24" Oak  
 Lt Sta 187+30 Elev 541.74  
 Exist Structure - One span I-beam w/ conc floor,  
 wings & abuts. Contractor shall remove before  
 constructing new bridge.



ELEVATION

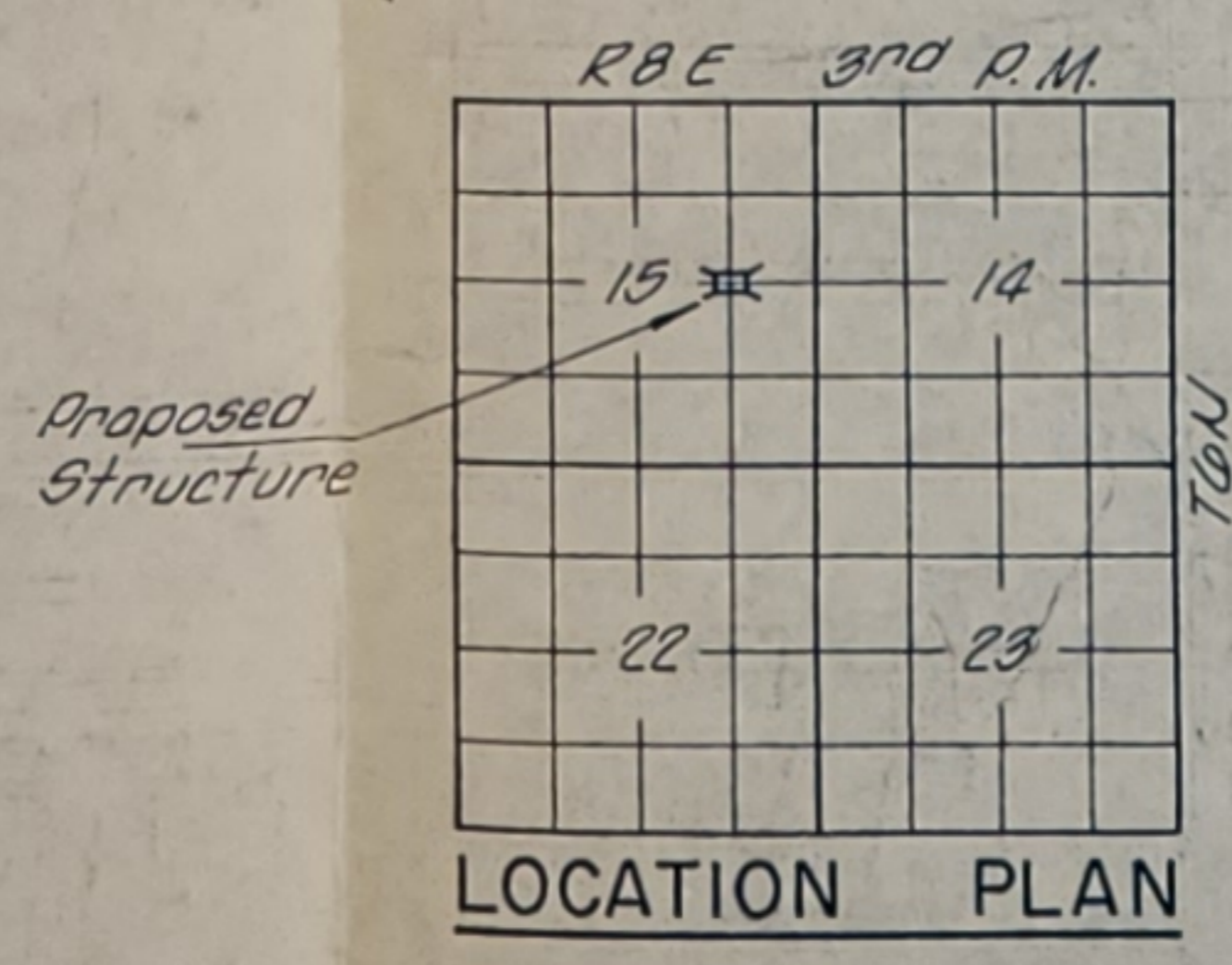


PLAN

**WATERWAY DATA**

Drainage Area	4.956 Acres
Req'd. Opening (20 Yrs)	270 Sq. Ft
Present Opening	198 Sq. Ft
Proposed Opening	270 Sq. Ft
Computed Discharge	1,615 c.f.s.

STATION 183+45  
 SANDY CREEK  
 BUILT 197 BY  
 JASPER COUNTY  
 C.H. 8 RELOCATION  
 LOADING H515  
**LETTERING FOR NAME PLATE**  
 See Std. 2113-1



N	Q <sub>u</sub>	W
515	5 0.5	17.2
510	5 0.6	23.5
505	5 0.4	23.7
500	5	16.7
495	45 1.7	13.7
490	51 9.4	12.1
485	45 8.7	12.5
480	42 8.8	13.3
	46 6.8	12.7
	56 9.0	12.9
	68 9.8	12.8
	67 3.4	13.1
	64 9.5	12.8
	62 5.5	11.7
	71 4.7	12.9

Gravel mixed with clay  
 Dark brown very moist, firm, silty clay loam  
 Dark gray very moist, firm, silty clay  
 Gray very moist, firm, silty clay, sandy layers  
 Gray very moist, firm, silty clay loam  
 Mottled gray very moist, firm, silty clay  
 Light gray moist, dense, silty loam  
 Gray moist, hard, silty clay, trace of small gravel, glacial till  
 Gray moist, hard, silty clay, trace of small gravel, glacial till  
 Gray moist, hard, silty clay, trace of small gravel, silt seams, glacial till

BORING NO. #1  
 11' Rt. Sta. 183+00

**BORING DATA**

N - Standard Penetration Test - Blows per foot to drive 2" O.D. Split Spoon Sampler 12" with 140# hammer falling 30"  
 Q<sub>u</sub> - Unconfined Compressive Strength - Tons per Square Foot  
 W - Water Content - Percentage of oven dry weight

N	Q <sub>u</sub>	W
520		
6	15.2	
7	23.3	
5	18.5	
5		
7	0.3	23.9
49	5.4	13.9
42	1.9	14.0
44	8.0	13.4
43		13.4
45		11.6
40	1.9	14.2
42		12.5
37	2.8	16.5
41	7.0	12.2
40	8.1	12.7
48	10.4	12.7

BORING NO. 2  
 21' Rt. Sta. 183+30

Gravel over silty clay  
 Light brown moist, firm, clay  
 Light brown very moist, firm, clay loam  
 Brown wet, loose, sandy loam  
 Gray wet, firm, silty clay  
 Gray moist, hard, silty clay, trace of small gravel, glacial till  
 Gray moist, hard, silty clay, trace of small gravel, glacial till  
 Gray moist, hard, silty clay, trace of small gravel, a few silt & sand seams, glacial till

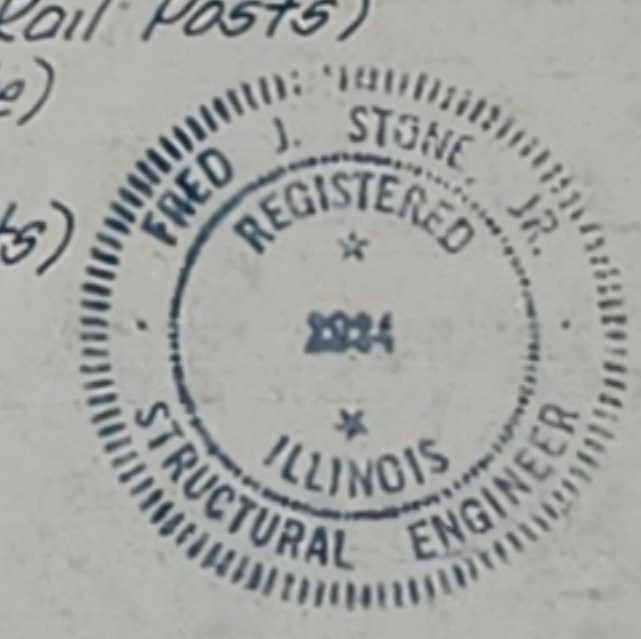
**GENERAL NOTES**  
 For timber structures see Section 510 of the Standard Specifications.  
 All lumber shall be creosoted.  
 For backfill behind abutments held at the top by the superstructure see Art. 502.11 of the Standard Specifications.  
 Rail plates and all other rail components except the cast iron inserts shall be galvanized. All rail posts shall be vertical.  
 Boring data is shown only as a guide to bidders in estimating soil conditions which may be encountered in the work.

**TOTAL BILL OF MATERIAL**

ITEM	UNIT	SUPER	SUB	TOTAL
Precast Concrete Bridge Slab	Sq. Ft.	943		943
Class X Concrete	Cu. Yd.		14.5	14.5
Reinforcement Bars	Pound		1,440	1,440
Steel Piles (HP 8 x 36)	Lin. Ft.		840	840
Treated Timber	F.B.M.		4,225	4,225
Hardware	Pound		1,620	1,620
Metal Plate Bridge Rail, Class A	Lin. Ft.	63		63
Name Plates	Each			1
Removal of Existing Structures	Each			1

**DESIGN STRESSES**

f<sub>c</sub> = 1,800 p.s.i. (Precast Slab & Rail Posts)  
 f<sub>c</sub> = 1,400 p.s.i. (Class X Concrete)  
 f<sub>s</sub> = 20,000 p.s.i. (Reinf.)  
 n = 8 (Precast Slab & Rail Posts)  
 n = 10 (Class X Concrete)  
 f = 1,600 (Structural Timber)

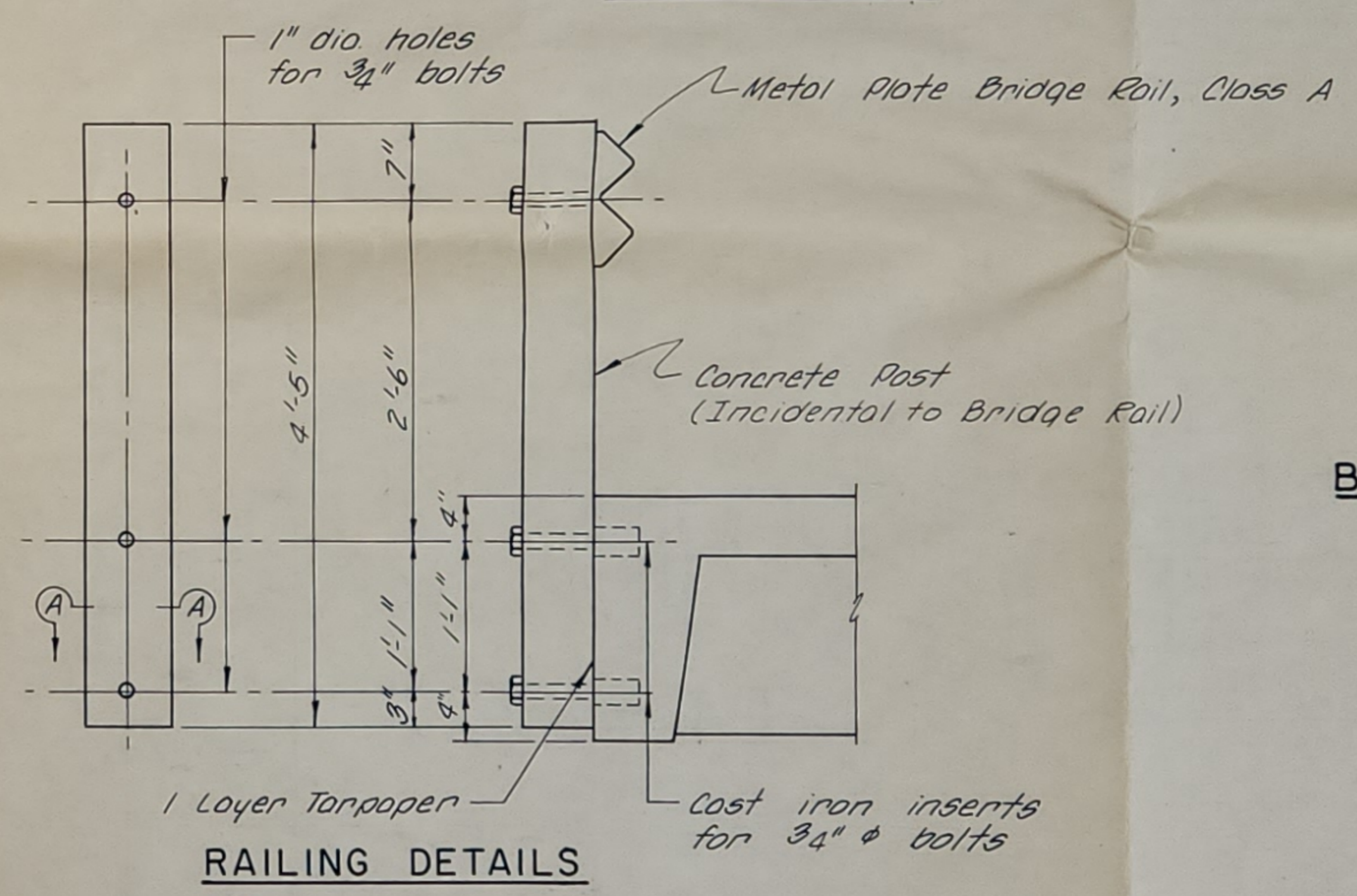
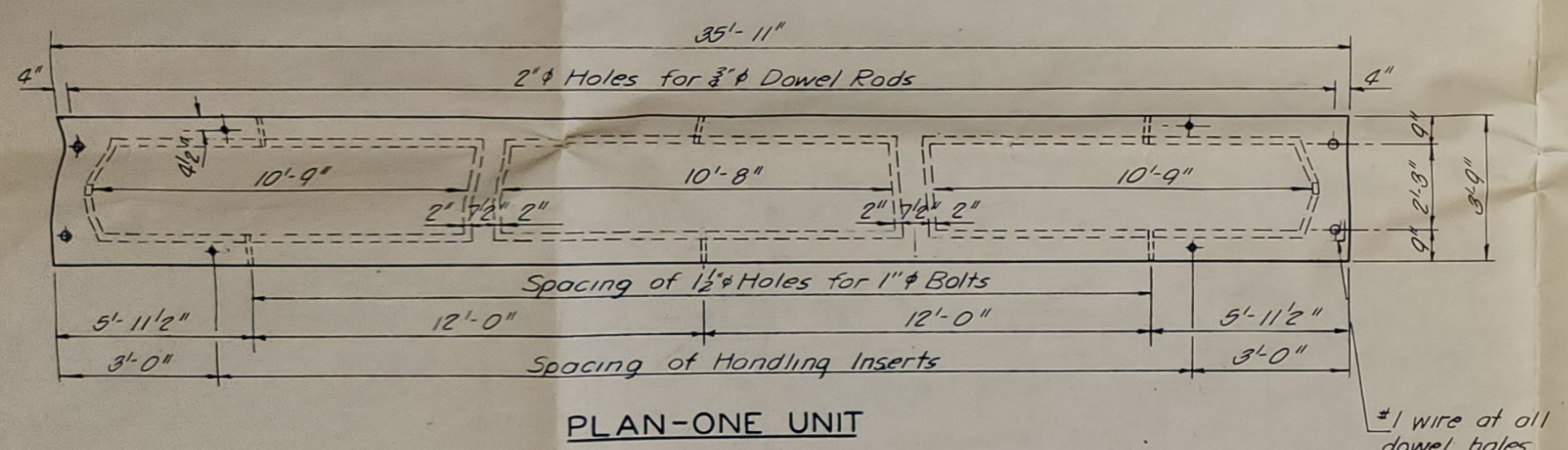
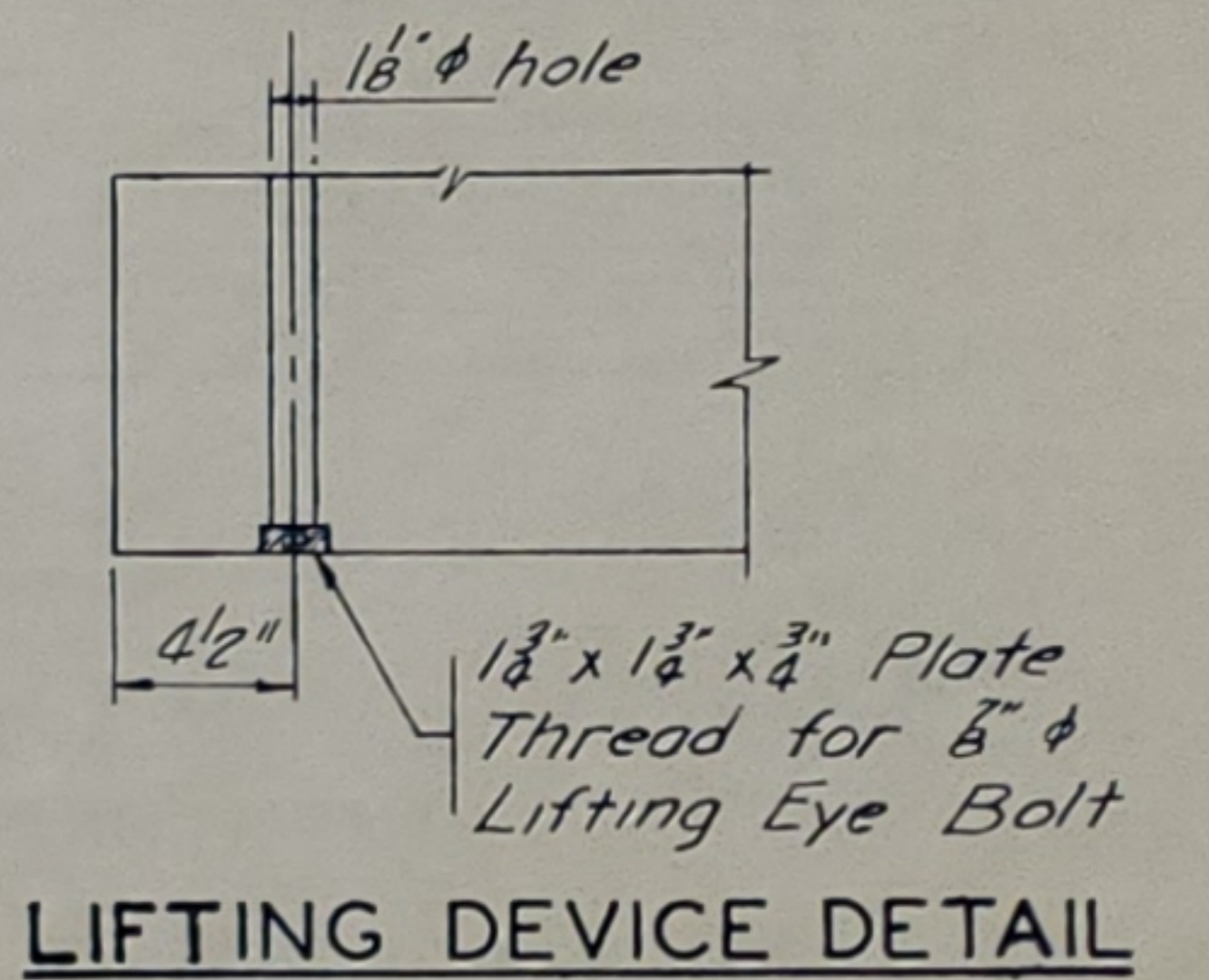
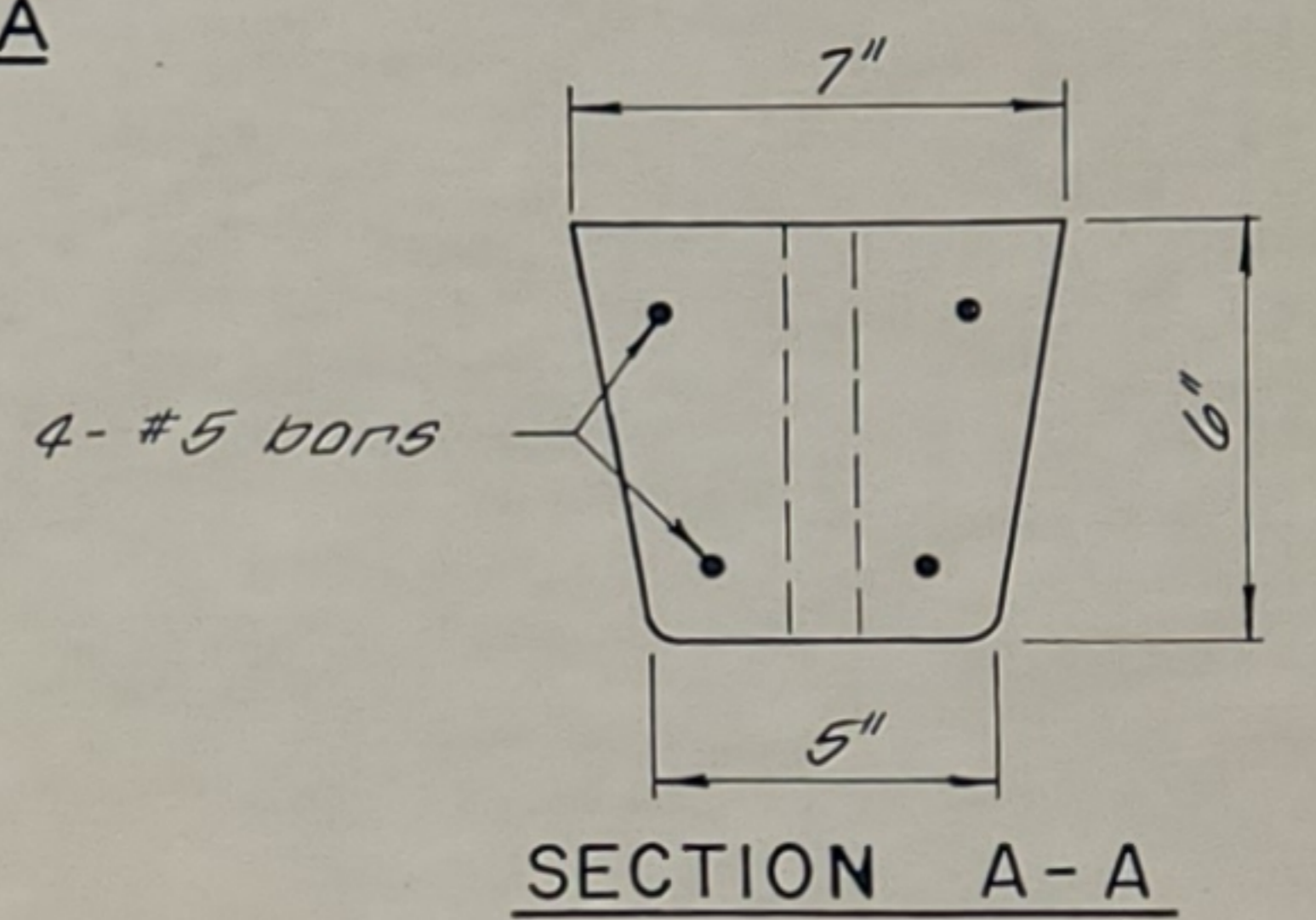
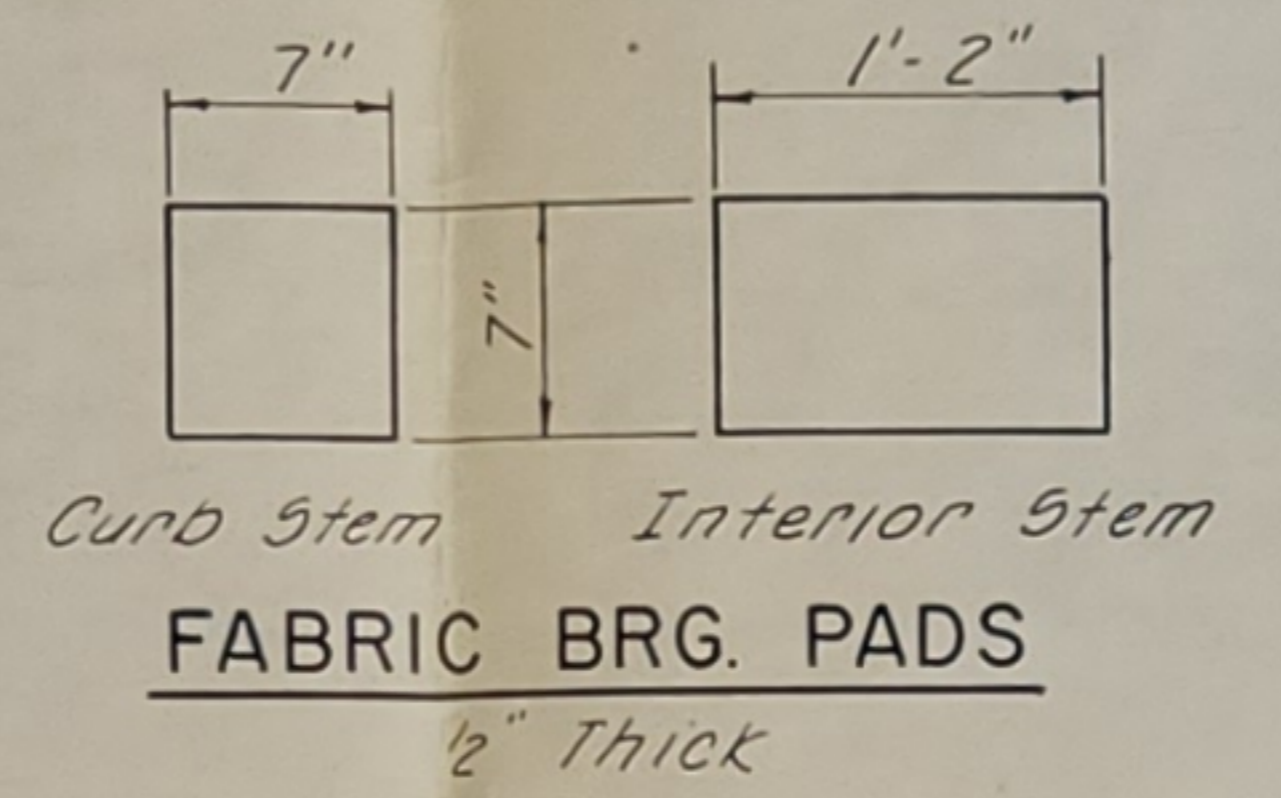
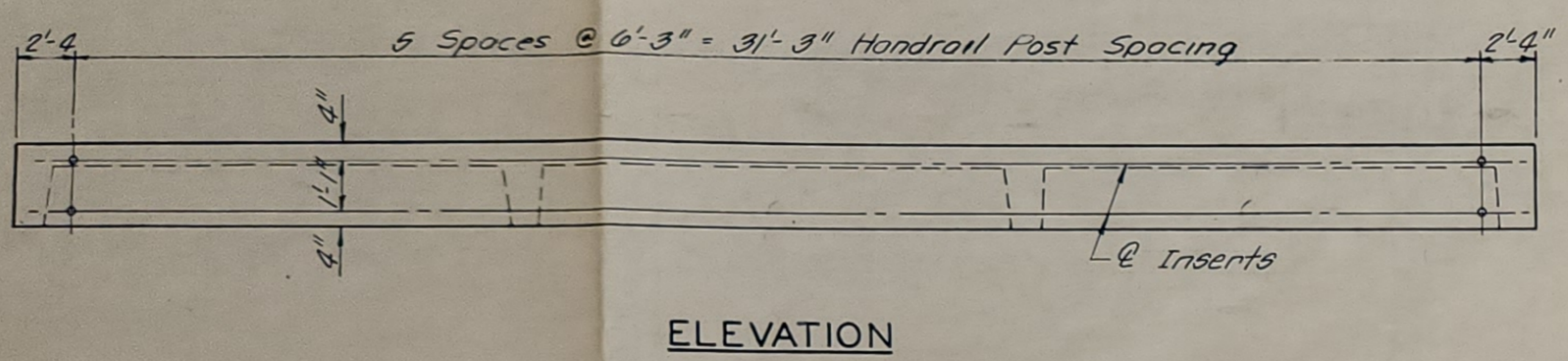
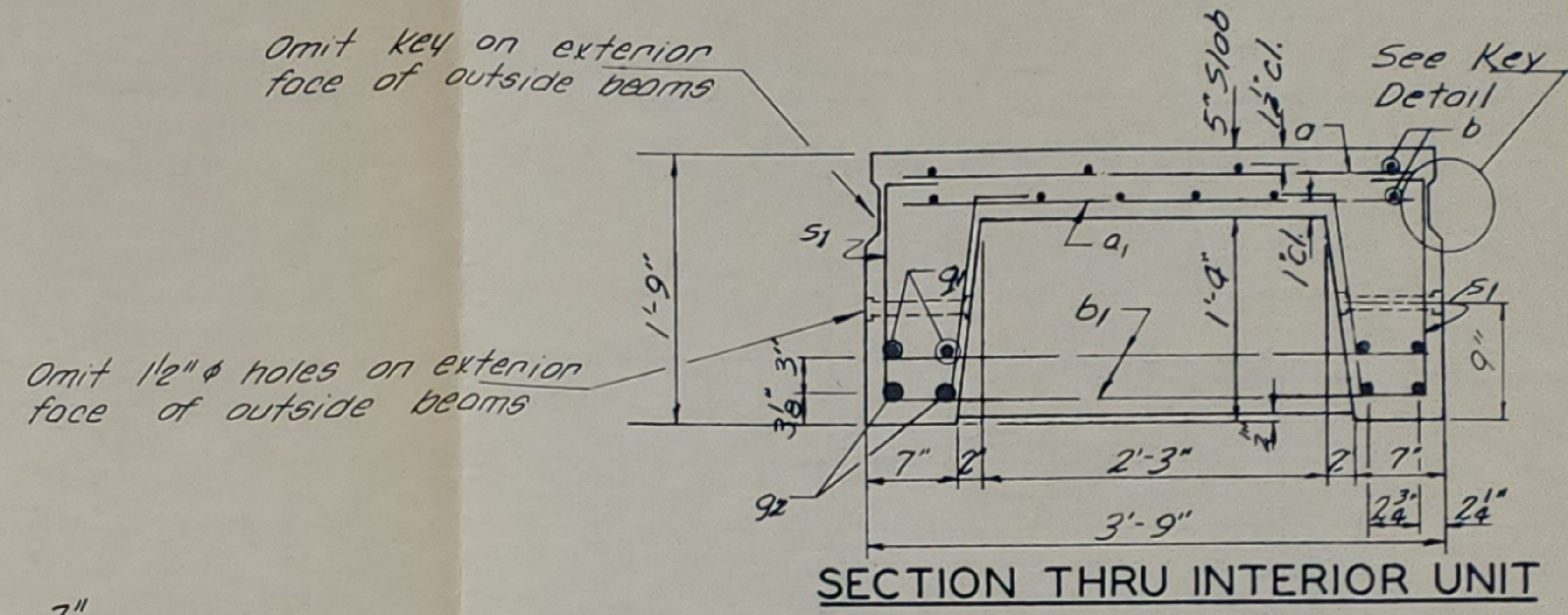
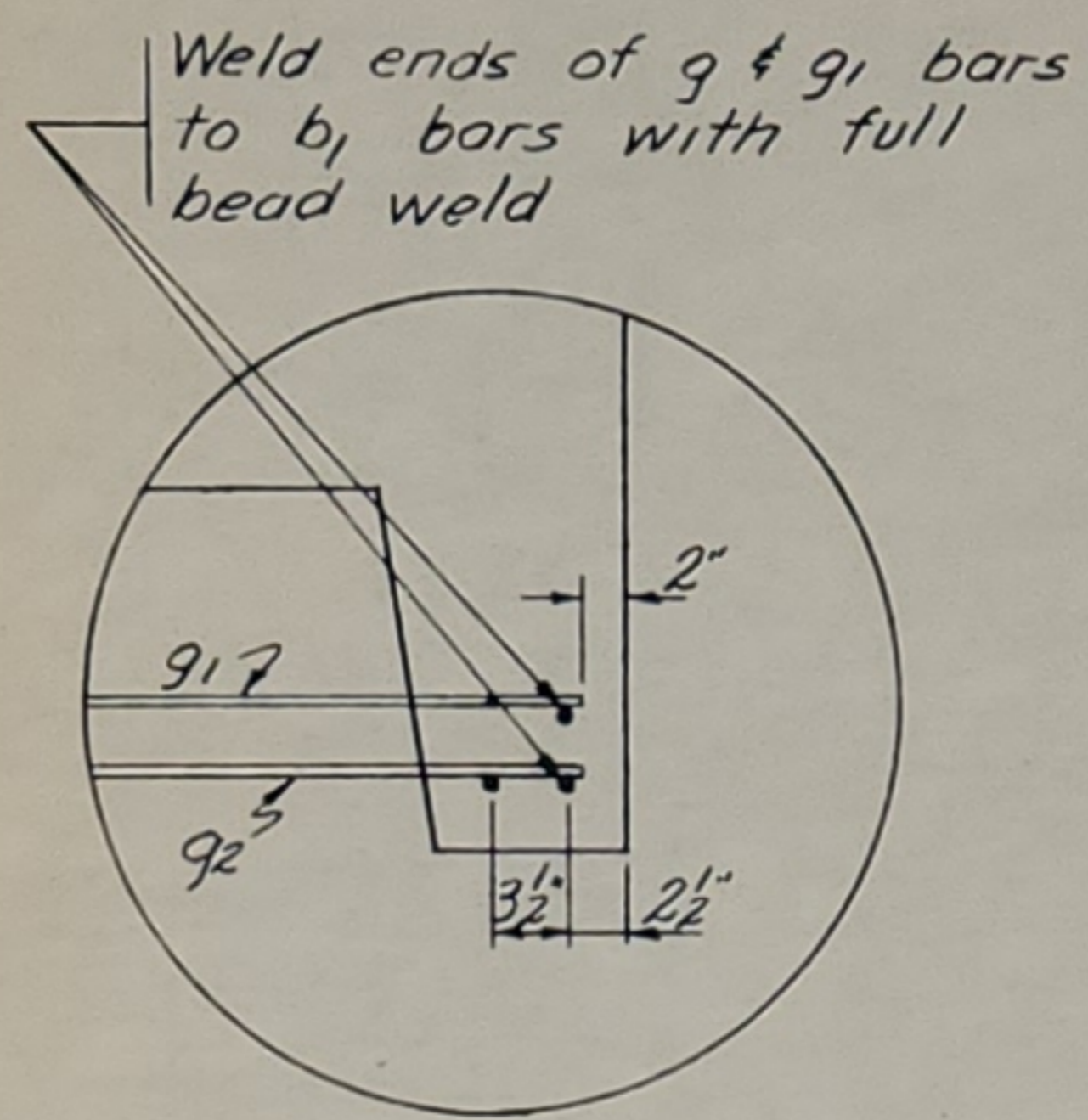
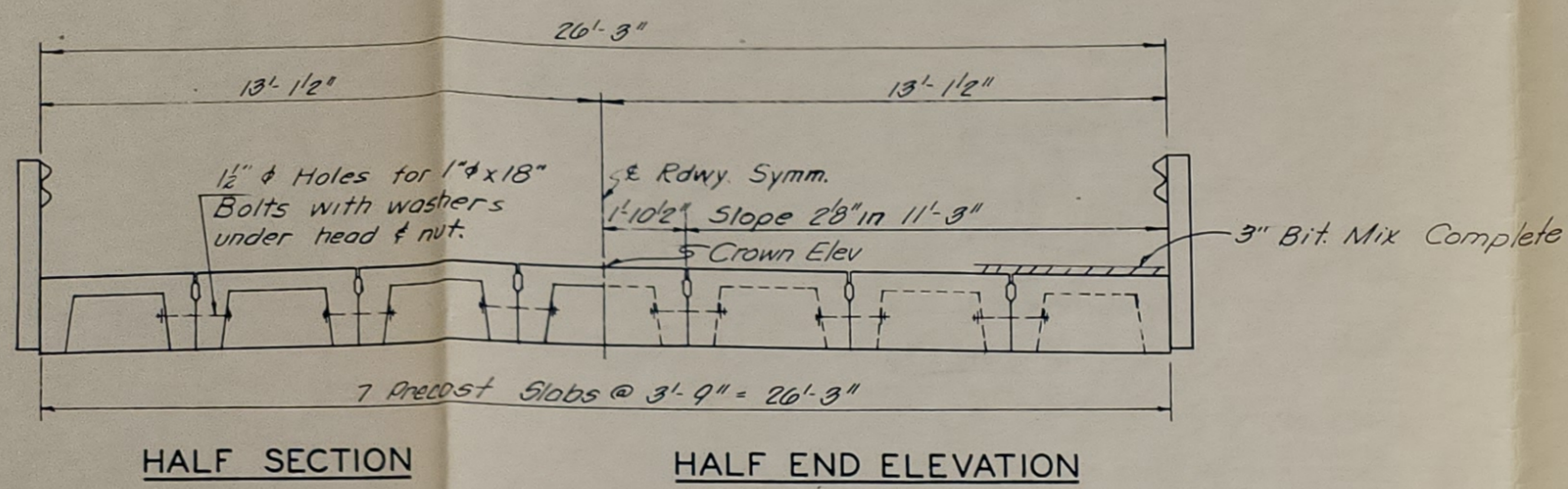


LOADING H515-44  
 Fred J. Stone Jr.  
 Illinois Structural No. 2084

**GENERAL PLAN & ELEVATION**

C.H. 8 RELOCATION  
 JASPER COUNTY  
 STATION 183+45

DESIGNED F.S.  
 DRAWN A.D.  
 CHECKED M.B.  
 DATE 5-25-73 No. 889

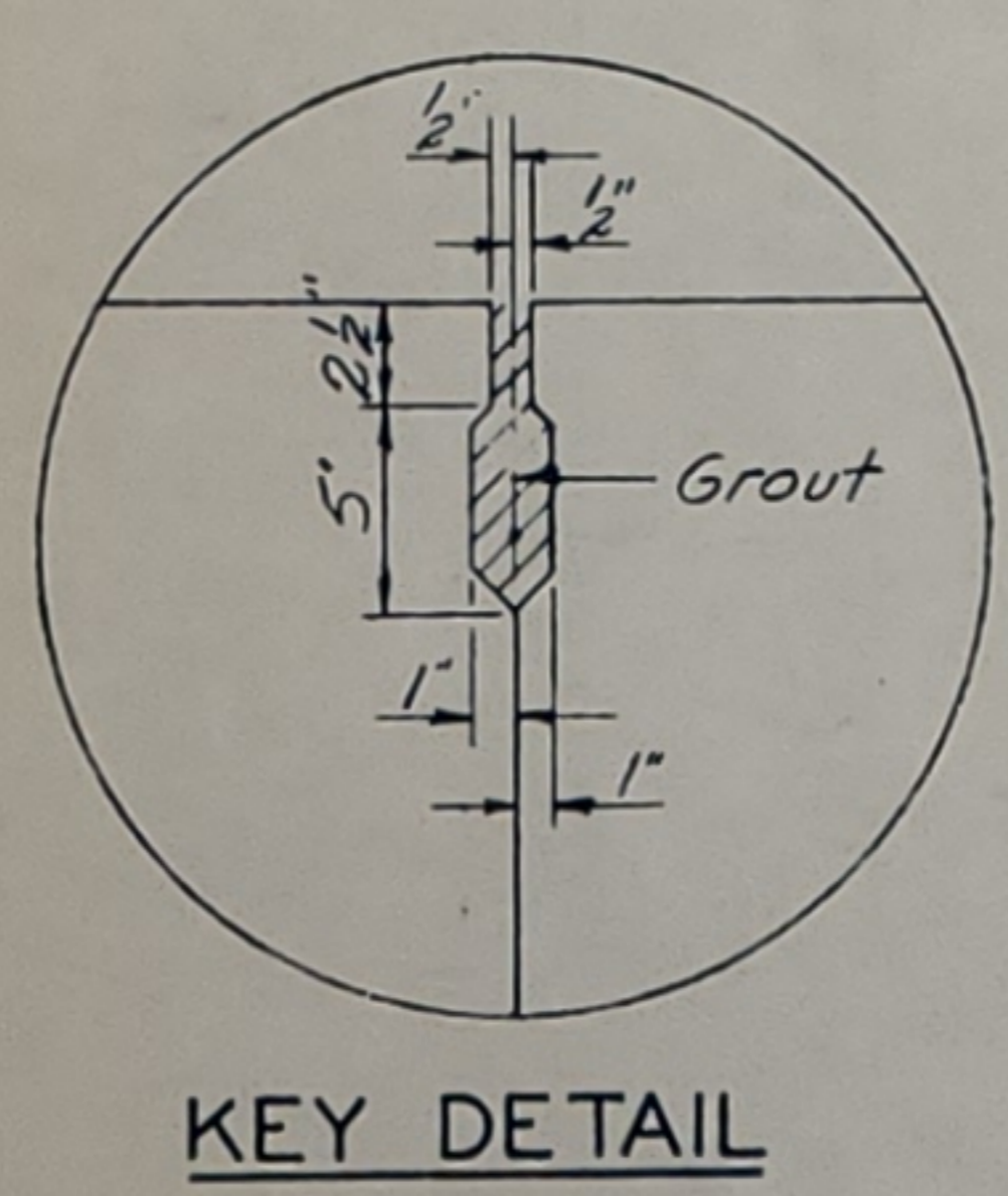
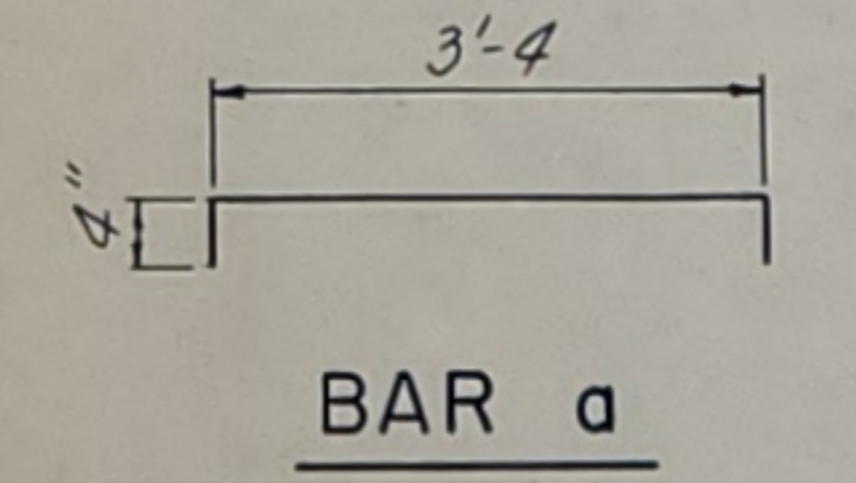
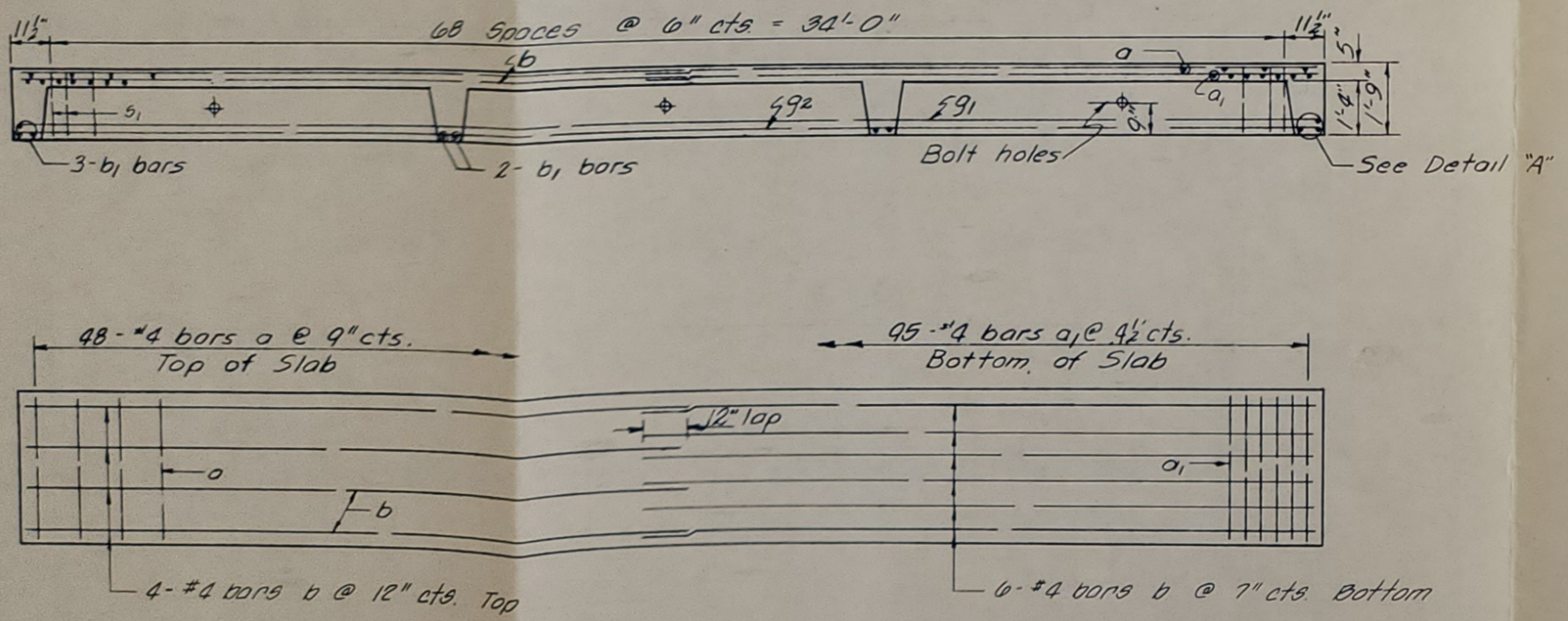


**\*ESTIMATED QUANTITIES**

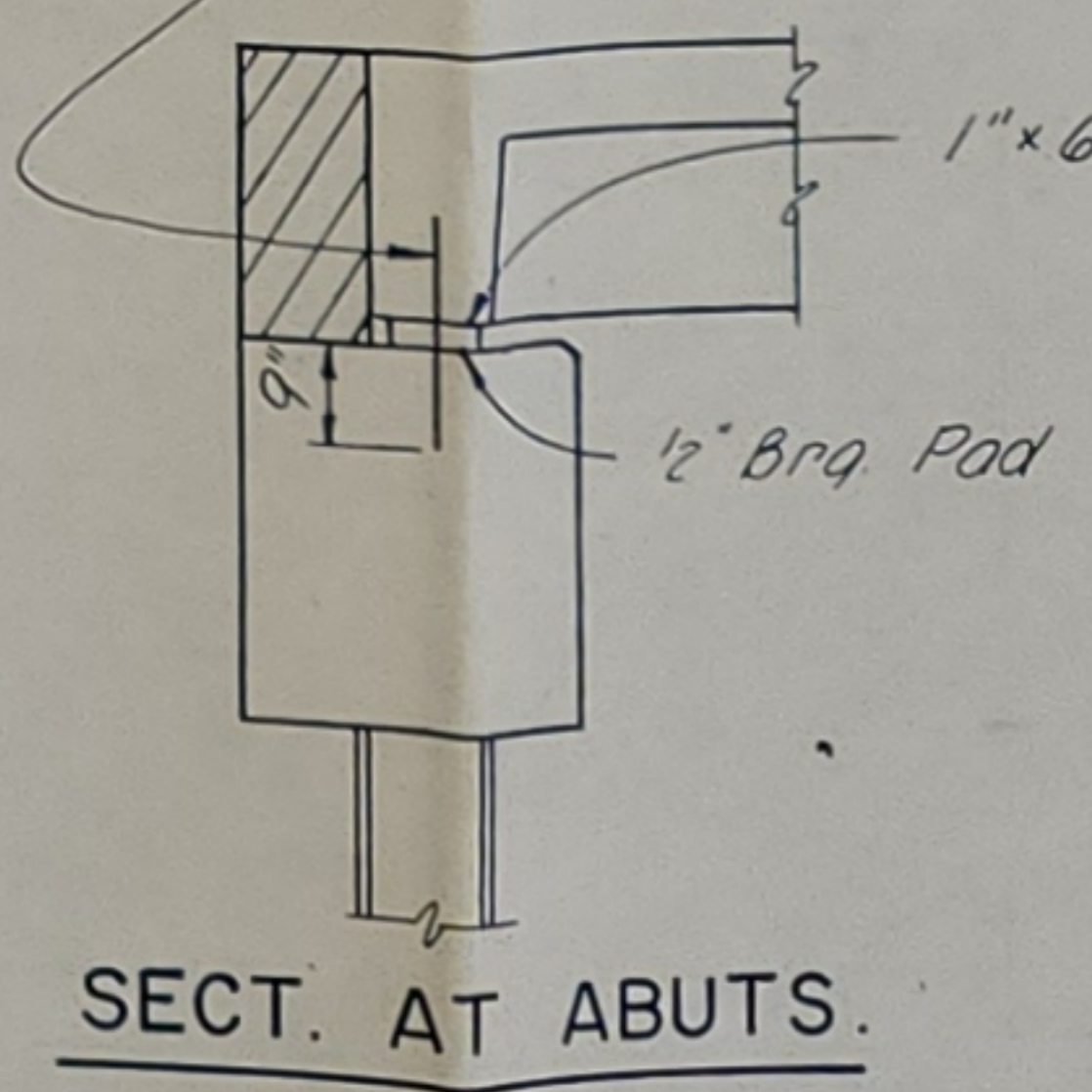
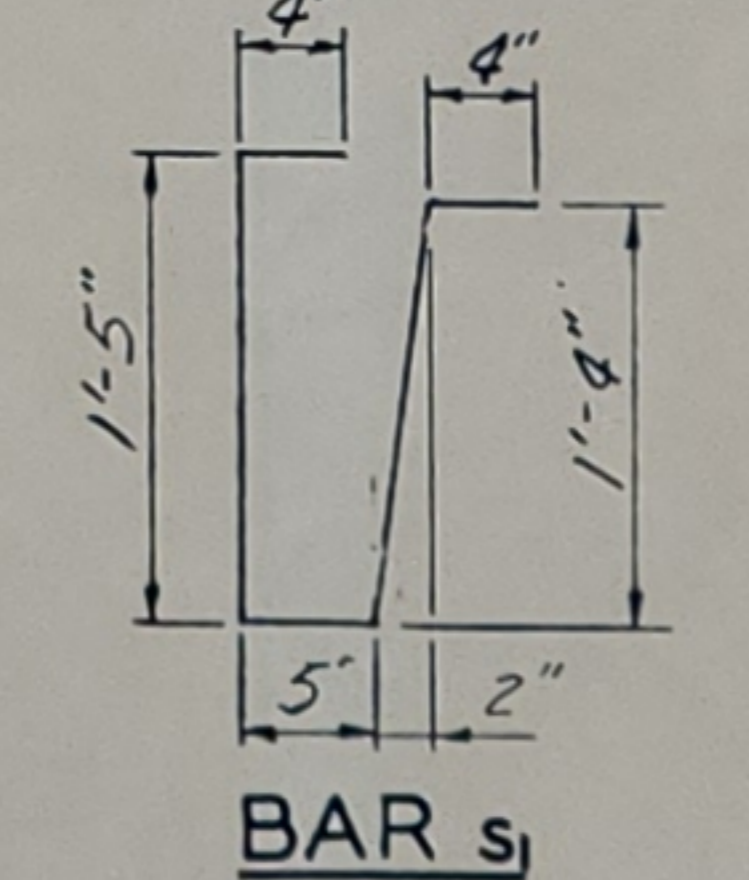
	Concrete Cu. Yds.	Reinf. Bars Lbs.
One Int. Unit	4.9	2,314

**BILL OF MATERIAL - SUPERSTRUCTURE**

Material	Quantity
Precast Concrete Bridge Slab	Sq. Ft. 943
Metal Plate Bridge Rail, Class A	Lin. Ft. 63



3/4" x 1-6" dowel bars, after slab is in place, drill holes into cap and grout bars into cap & slab. (Incidental)



**REINF. BARS - ONE UNIT**

Bar	Size	Interior Unit No.	Length
a	#4	48	4'-0"
a1	#4	95	3'-3"
b	#4	20	18'-4"
b1	#4	10	3'-6"
q1	#11	4	35'-7"
q2	#11	4	35'-7"
s1	#3	138	3'-10"

**SUPERSTRUCTURE**  
C.H. 8 RELOCATION  
JASPER COUNTY  
STATION 183 + 45

**PLAN**  
Showing Slab Reinforcement  
Tack welding of stirrups to the bottom longitudinal reinforcement bars will not be permitted except as otherwise authorized in writing by the Engineer.

