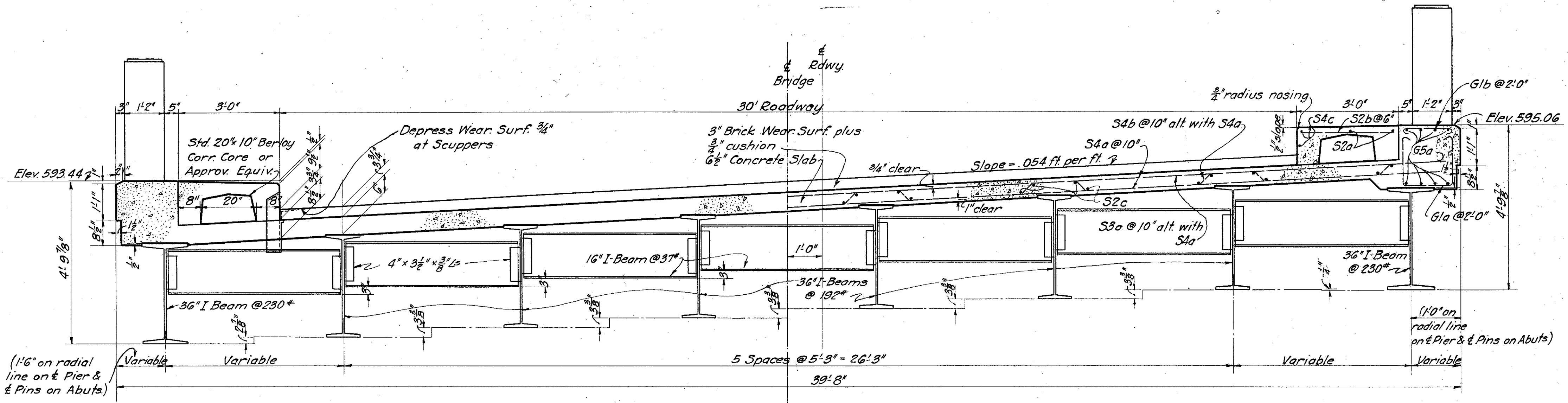


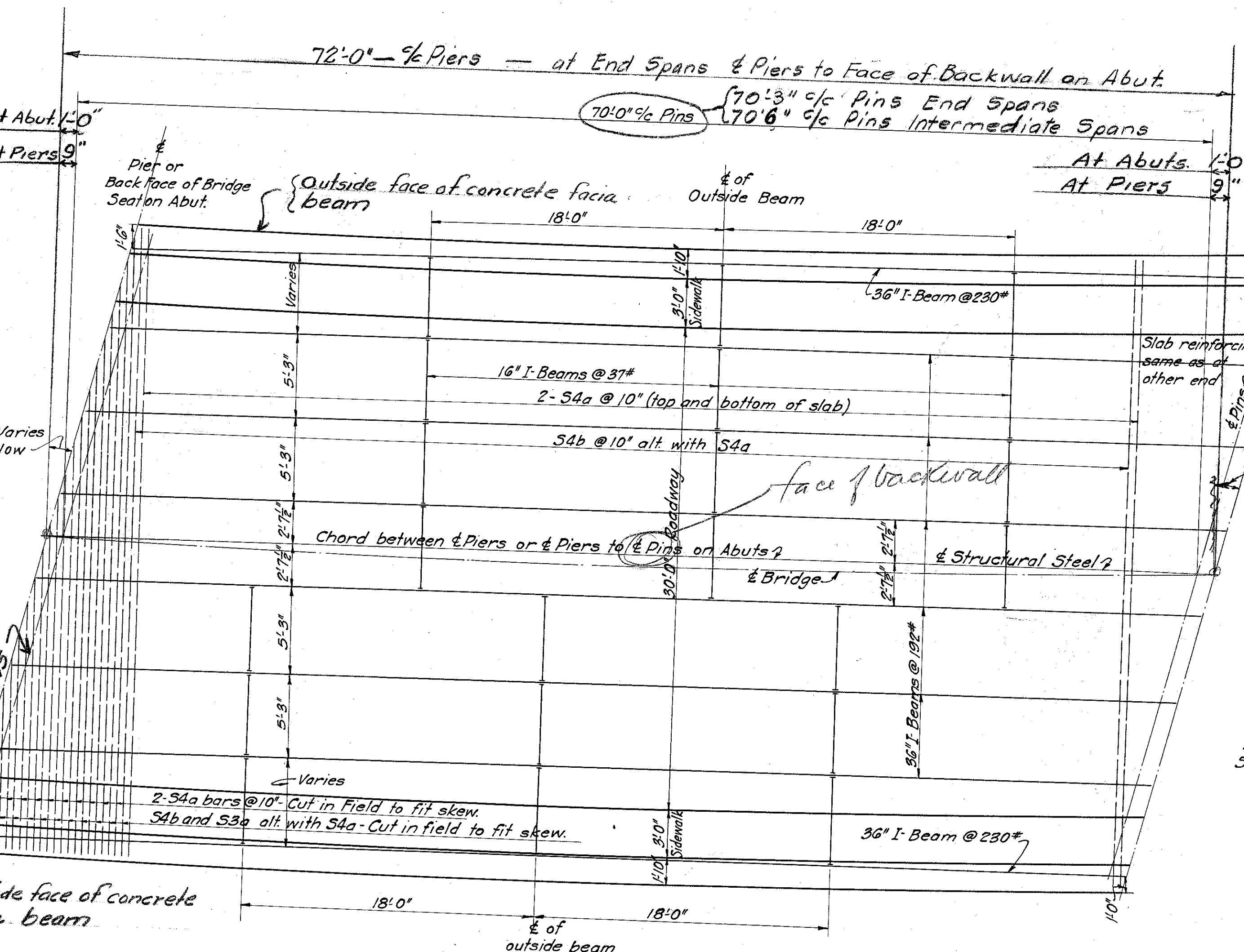
LAKE COUNTY  
S.H. 520 SEC. B & C BR5



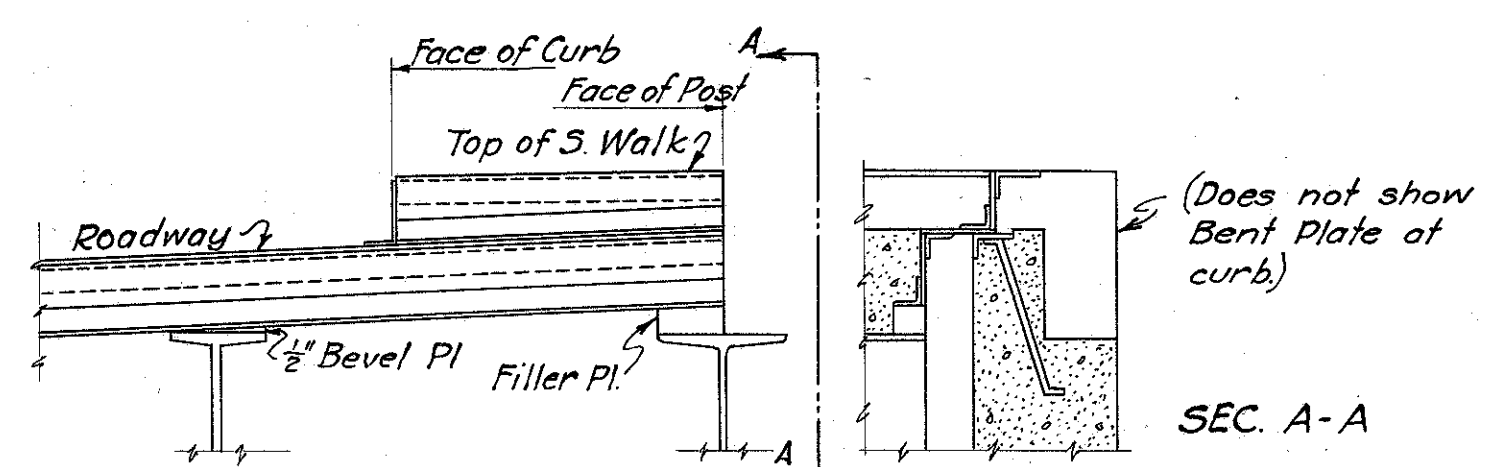
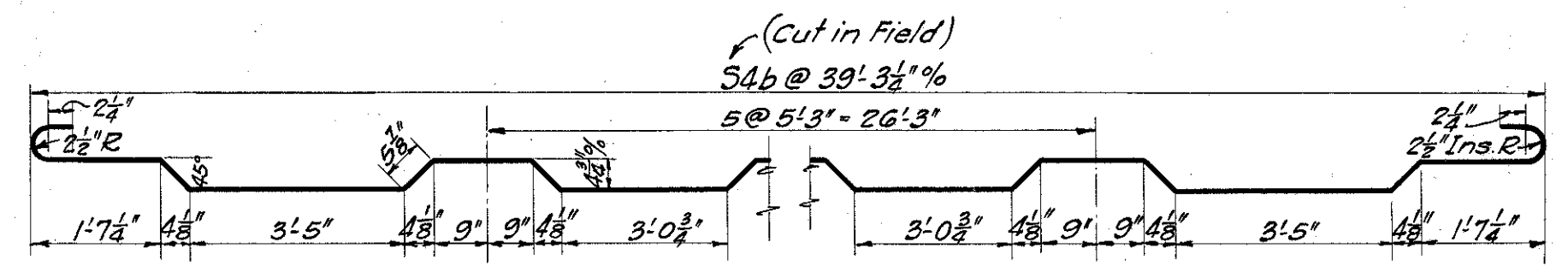
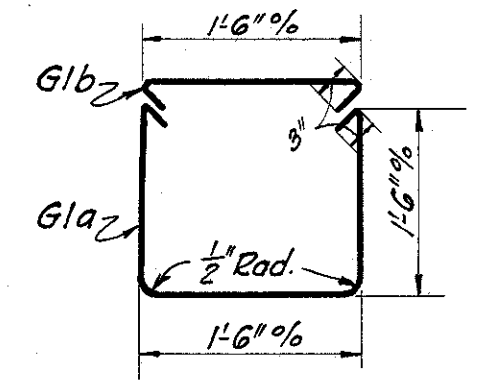
TRANVERSE SECTION

Mark	Size	Shape	Length	No. of Bars	Weight
S2a	1/2"	Str't	38'-0"	32	812
S2b	1/2"	Str't	2'-0"	1160	2,131
S2c	1/2"	Str't	38'-0"	224	5686
S3a	1/2"	Str't	39'-3"	348	11,620
S4a	1/2"	Str't	39'-3"	626	28,520
S4b	1/2"	Bent	42'-6"	348	15,441
S4c	1/2"	Str't	38'-0"	48	1,904
G1a	3/8"	Bent	5'-0"	296	556
G1b	3/8"	Bent	2'-0"	296	223
G5a	3/8"	Str't	38'-0"	128	7,311
G5b	3/8"	Str't	23'-0"	80	2,766
Total					76,970

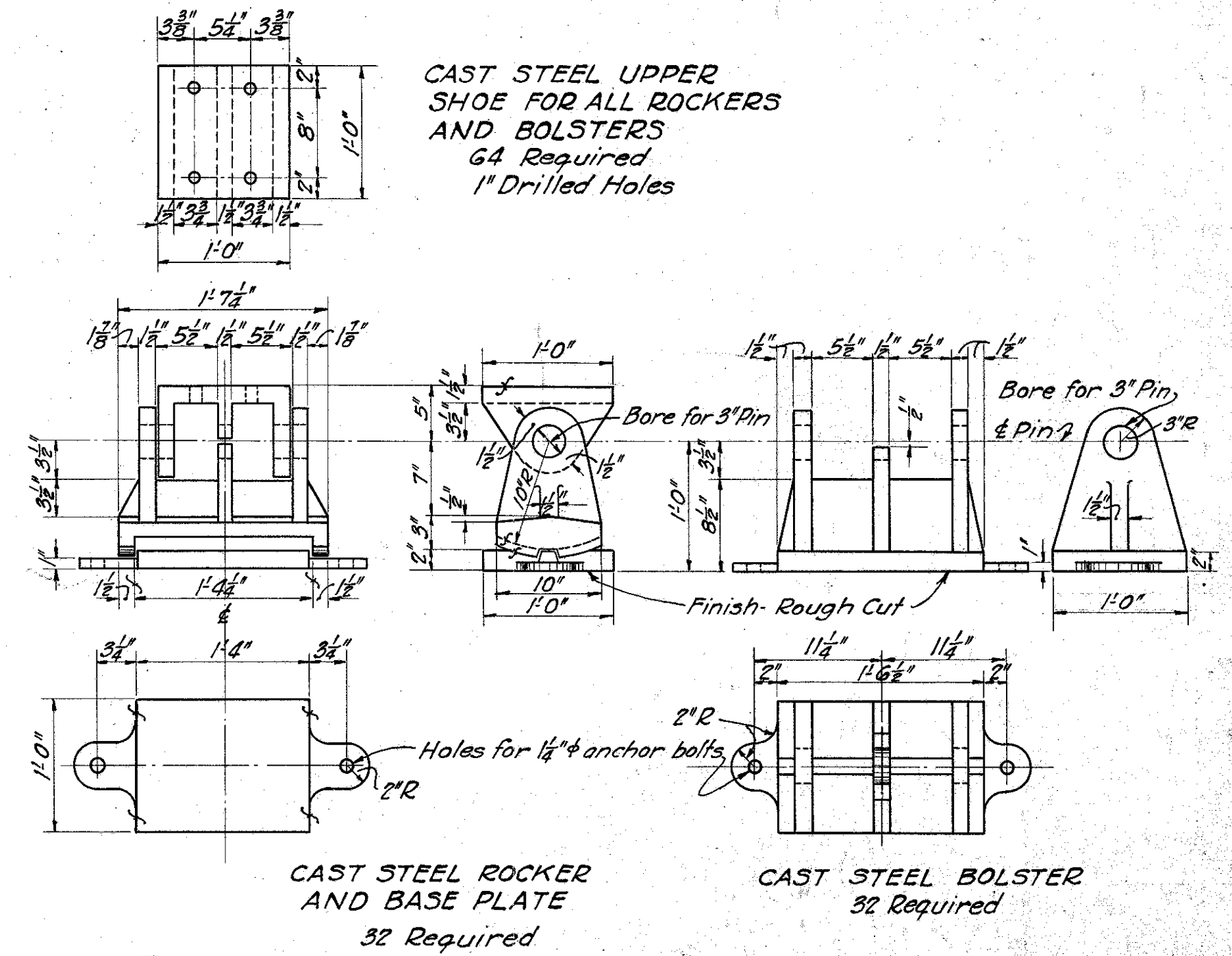
Note! These bars cut in field to fit skew where necessary.



STRUCTURAL STEEL LAYOUT

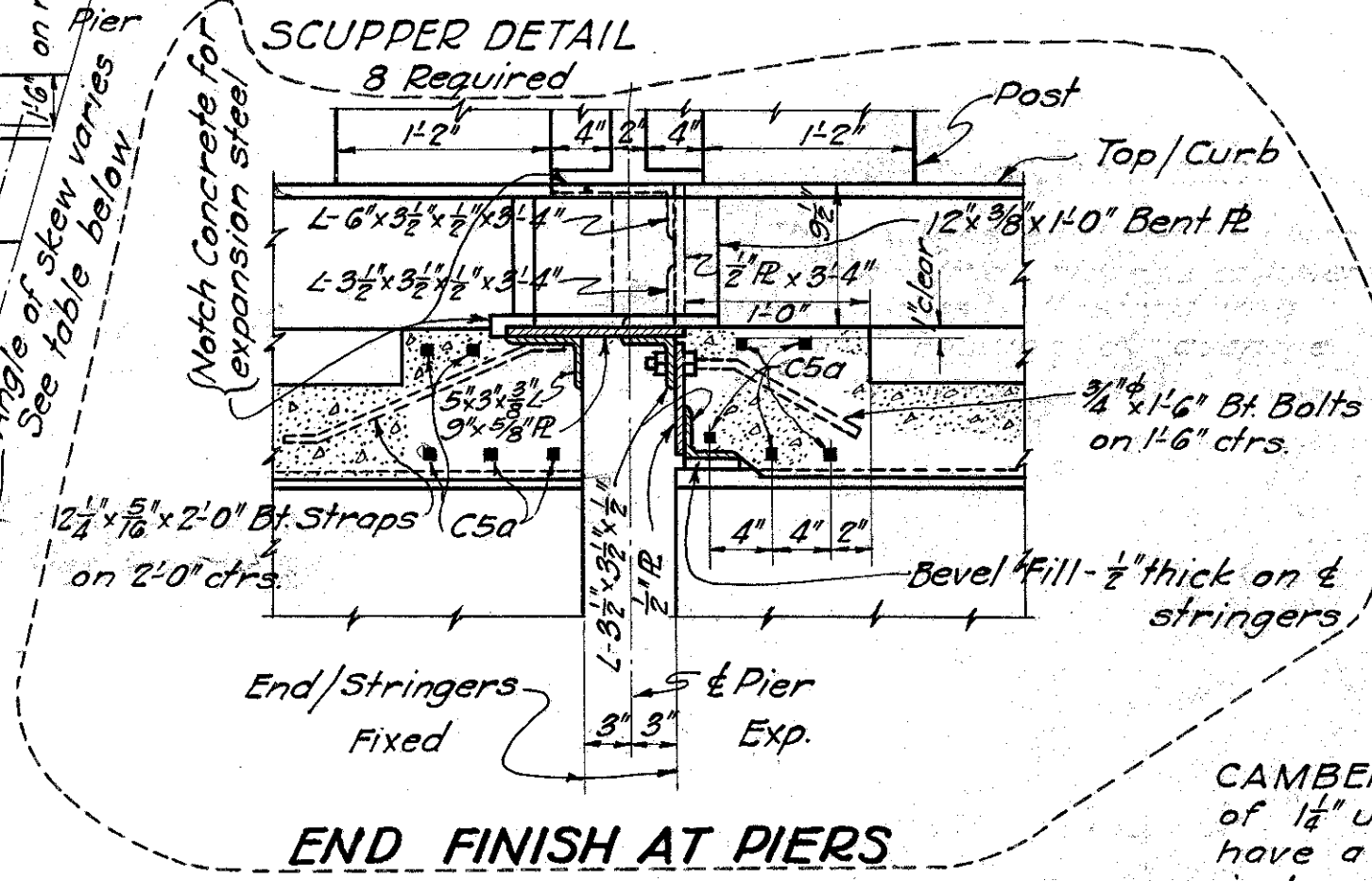


SEC. A-A

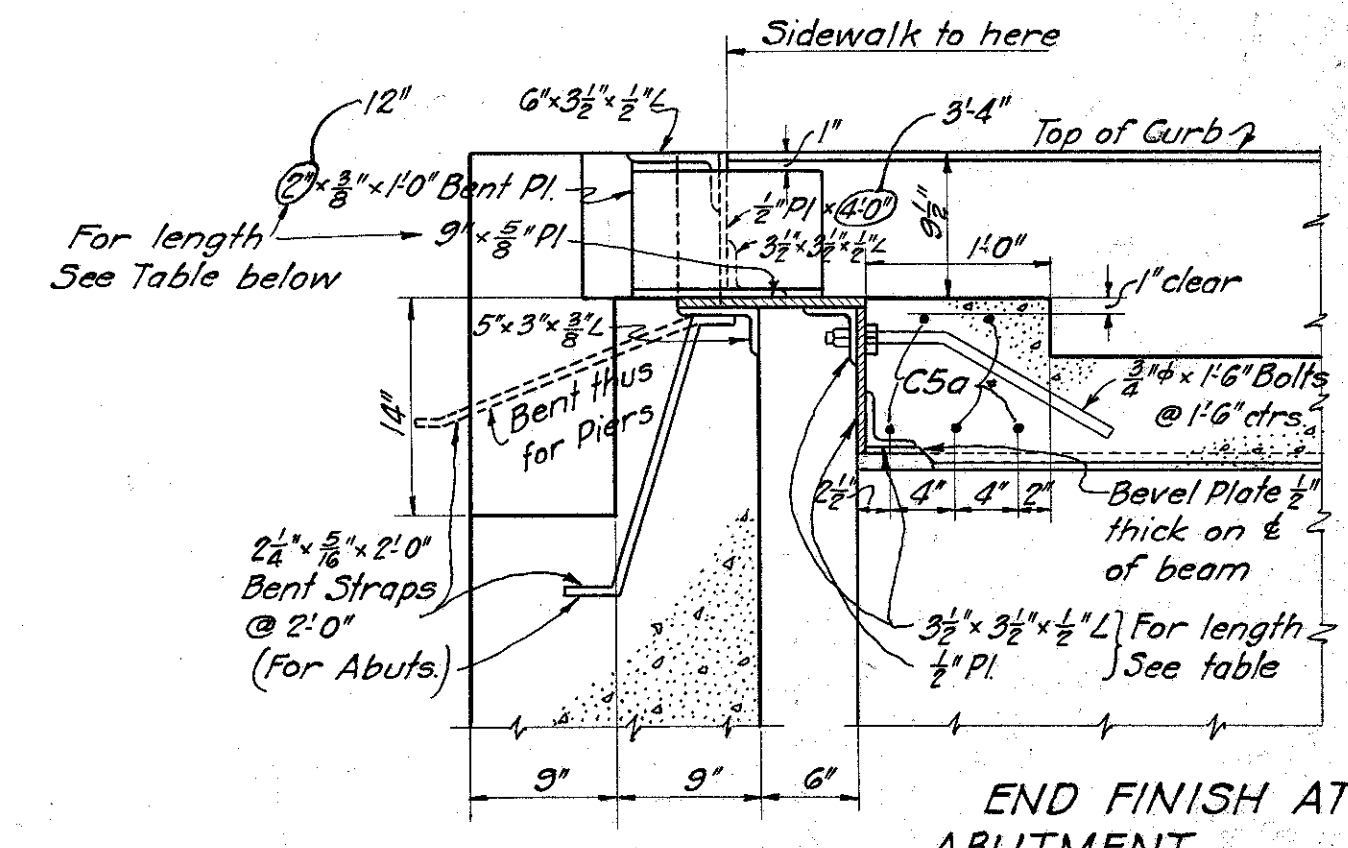


CAST STEEL ROCKER AND BASE PLATE  
32 Required

CAST STEEL BOLSTER  
32 Required



END FINISH AT PIERS



END FINISH AT ABUTMENT

TABLE SHOWING LENGTHS OF ANGLES AND PLATES

Location	Length	Skew
N. Abut.	39'-9"	22° 12'
Pier #3	38'-10"	18° 36'
Pier #2	38'-1 1/2"	15°
Pier #1	37'-7"	11° 24'
S. Abut.	37'-7"	7° 43'

**SETTING ROCKERS**  
The rockers shall be so placed, that when the bridge is completed, the rockers will stand in a vertical position at average temperature.

**CAMBER.** All 192" I-Beams (interior beams) shall have a camber of 1/2" under no load; all 230" I-Beams (outside beams) shall have a camber of 2" under no load, the purpose of which is to offset deflection.

**PAYMENT.** 1/2" sheet lead, cast iron and cast steel shall be included with structural steel for payment.

**PAINT.** Structural steel shall be given one shop coat of red lead or sublimed blue and two field coats of aluminum according to Construction and Material Specifications. Contact surfaces to be given one shop coat before assembly.

**RIVETS.** All rivets shall be 3/8" diameter.

**SHEET LEAD.** Place an 1/8" thickness of sheet lead under each bolster and rocker base plate on bridge seat.

**END FINISH** shall be used as template for top of backwall on abutments. Backwall shall be built after the structural steel has been erected.

**ANCHOR BOLTS.** special care shall be used in placing reinforcing steel to allow sufficient space for anchor bolts without cutting the bars. Anchor bolt holes shall not be drilled until girders are in place. Anchor Bolts shall be 1/2" diameter set 1'-0" in masonry.

STATE OF OHIO  
DEPARTMENT OF HIGHWAYS  
BUREAU OF BRIDGES

**SUPERSTRUCTURE DETAILS**  
BRIDGE NO. LA-283-47  
BRIDGE OVER CHAGRIN RIVER  
S.H. 520 LAKE COUNTY  
SECTION B & C BR5. STA. 175 + 70.0

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
0670	0670	0670	0670	0670	12-31-31	3-28-32

Structural Steel Layout - 3-30-32  
End Finishes revised 3-28-32