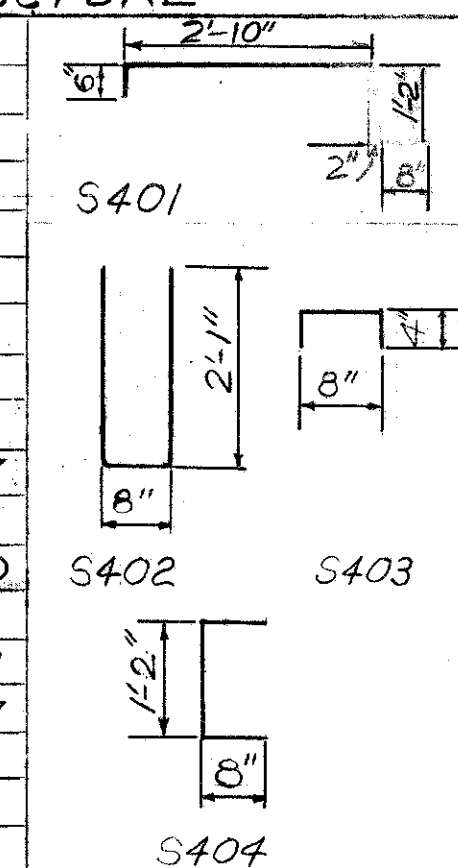


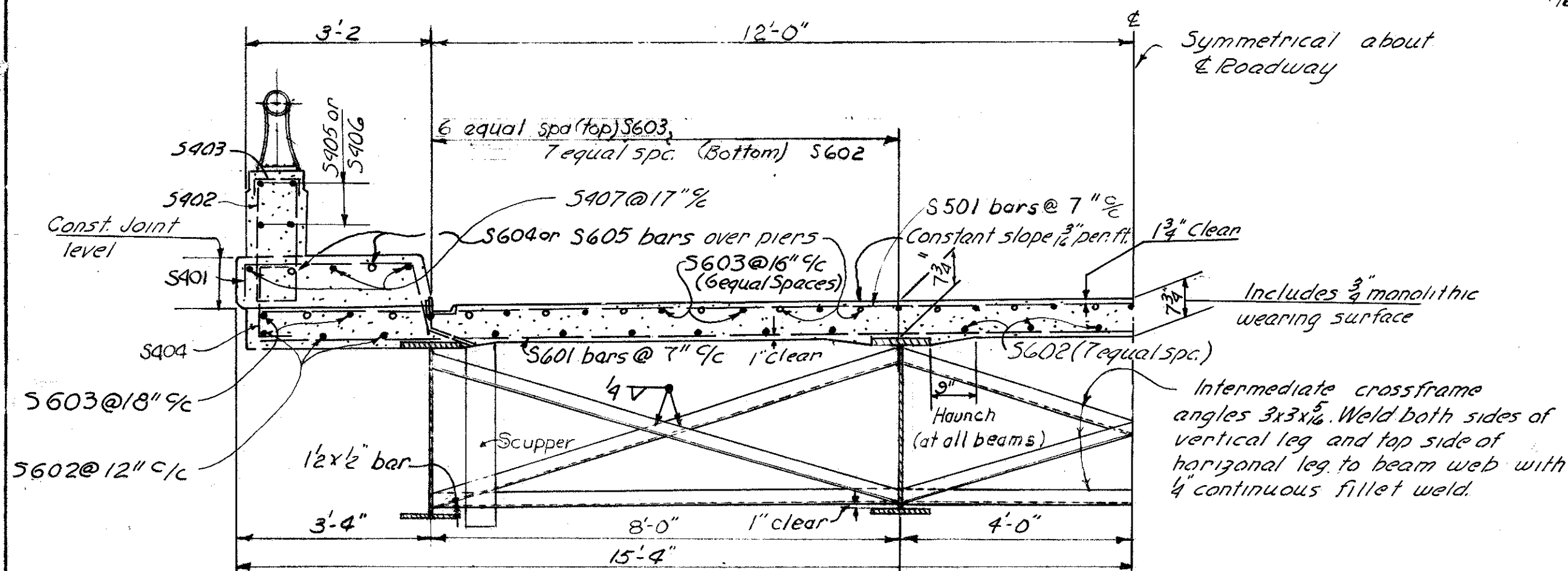
LAKE COUNTY  
LAK-1-26.51  
ASHTABULA COUNTY  
ATB-1-0.00

**REINFORCING STEEL LIST**  
**SUPER STRUCTURE**

Mark	Length	Shape	No.	Weight
S401	5'-2"	Bent	514	1774
S402	4'-10"	Bent	600	1937
S403	1'-4"	Bent	600	534
S404	2'-6"	Bent	514	858
S405	16'-8"	Str.	128	1425
S406	13'-5"	Str.	16	143
S407	34'-5"	Str.	54	1241
S501	30'-5"	Str.	512	16,243
S601	30'-5"	Str.	513	23,937
S602	35'-1"	Str.	216	11,381
S603	29'-1"	Str.	253	11,050
S604	37'-0"	Str.	52	2890
S605	38'-0"	Str.	26	1,484
			<b>Total</b>	<b>74,397</b>

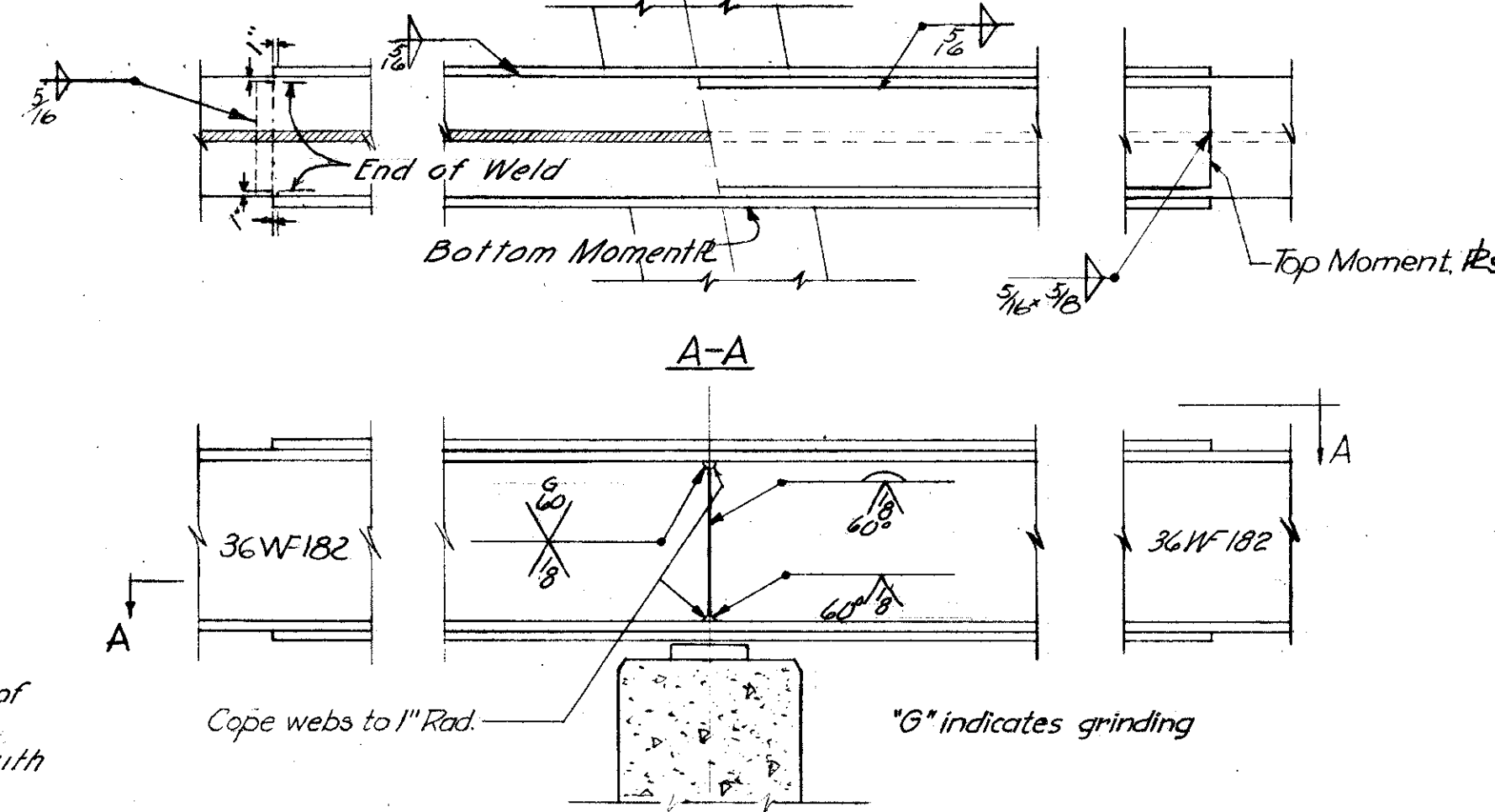


Parapet concrete included with 5-14 for payment.

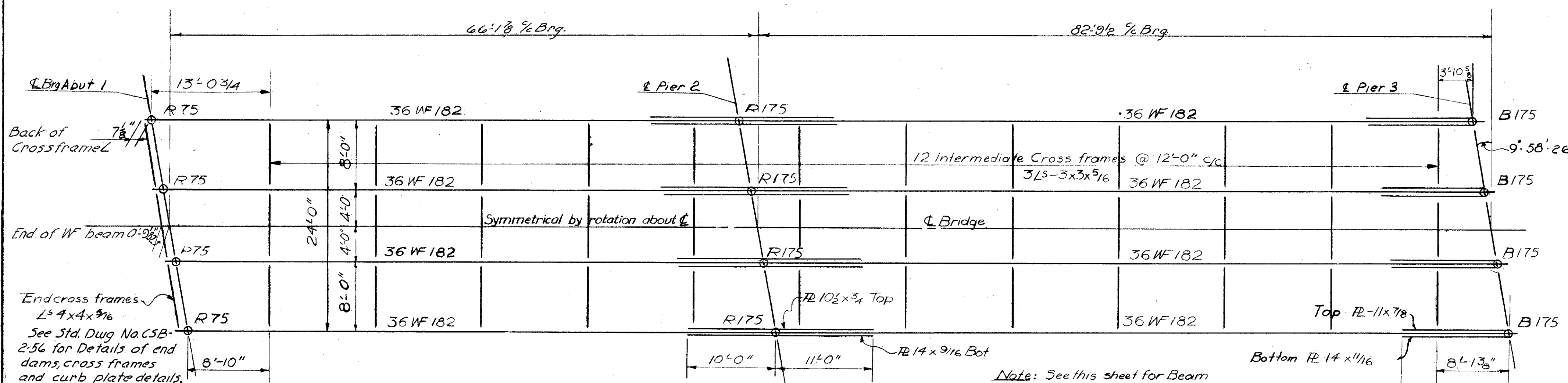


**HALF CROSS SECTION**

Note: All S401 and S404 bars spaced @ 14"



**ELEVATION BEAM SPLICE DETAIL**

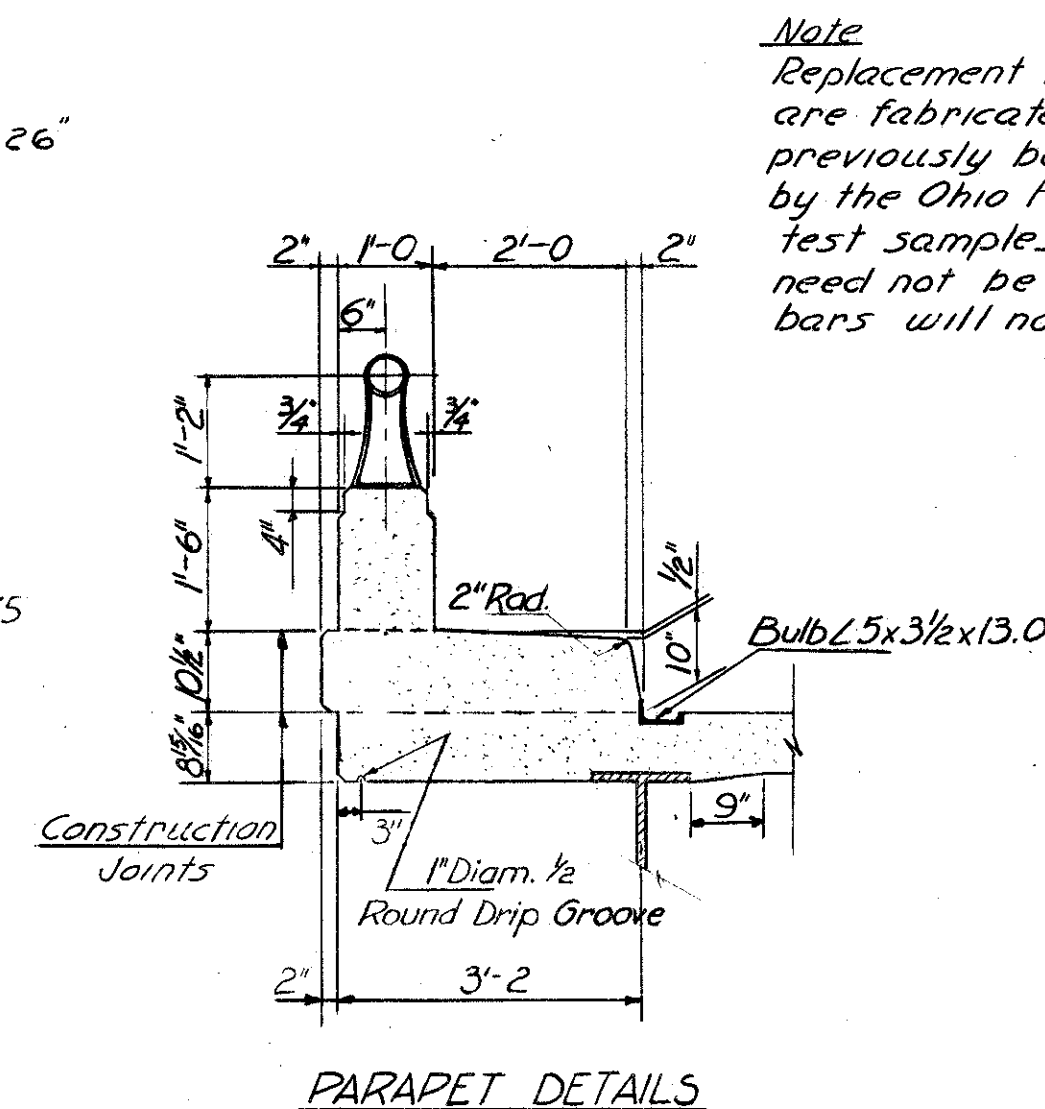


**HALF FRAMING PLAN**

End cross frames L<sup>5</sup> 4x4x 5/16 See Std. Dwg. No. CSB-2-56 for details of end dams, cross frames and curb plate details.

Note: See this sheet for Beam Splice Details

Note: Rockers and Bolsters included in "Structural Steel" for payment. See Std. Dwg. RB-1-55 for Rocker & Bolster details.



**PARAPET DETAILS**

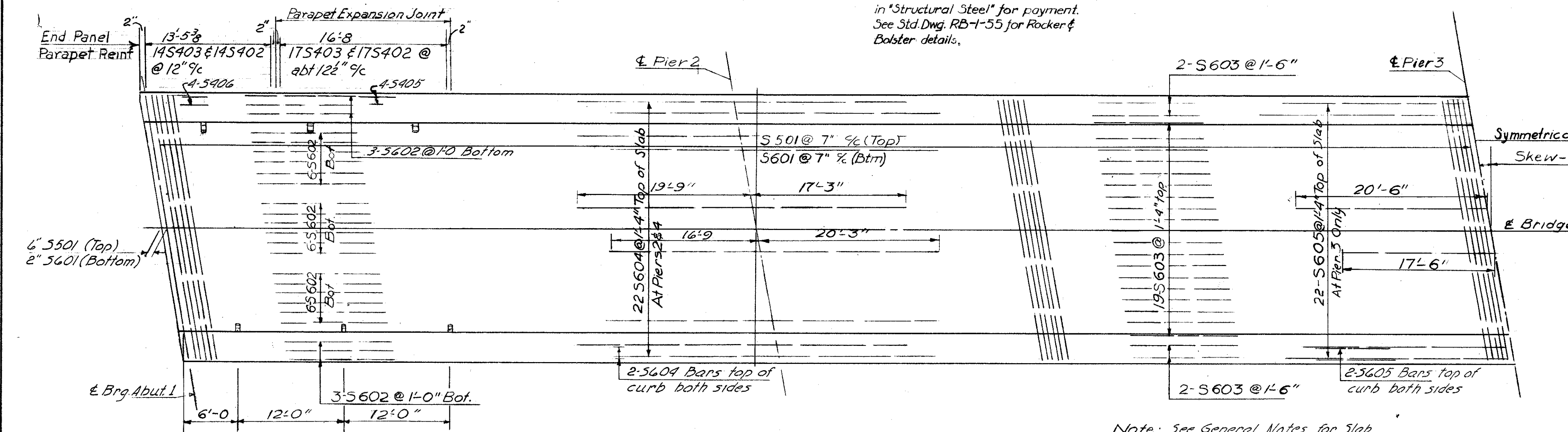
Note: Replacement Bars: If reinforcing bars are fabricated from stock which has previously been tested and approved by the Ohio Highway Testing Laboratory, test samples as provided in Sec. 5-402 need not be furnished and replacement bars will not be required.

MARK	LENGTH	SHAPE	NO.
RB401	5-3	Str.	1
RB501	5-7	Str.	2
RB601	5-11	Str.	3
RB701	6-3	Str.	1
RB901	6-10	Str.	1
RB1001	7-3	Str.	1
RB1101	7-7	Str.	1

**DEFLECTIONS and CAMBERS**

LOCATION	OUTSIDE BEAM				INSIDE BEAM			
	SPAN 1	SPAN 2	SPAN 3	SPAN 4	SPAN 1	SPAN 2	SPAN 3	SPAN 4
DEFLECTION DUE TO WEIGHT OF STEEL	3/32	1/8	1/8	3/32	3/32	1/8	1/8	3/32
DEFLECTION DUE TO REMAINING DEAD LOAD	8/32	1/2	1/2	27/32	1/2	23/32	1/2	1/2
CONVEXITY REQUIRED FOR VERTICAL CURVE	0	0	1/16	3/8	0	0	1/16	3/8
SUM OF DEFLECTION AND CONVEXITY	1/16	1/16	2/16	1/16	3/32	27/32	2	1/8
REQUIRED CAMBER	1	1/2	2 1/2	1/4	0	1	2	1/8

Where No Camber is required the Beams shall be so fabricated that any curved Beam will be placed with Convex Flange up.



**HALF SLAB PLAN**

NOTE: Gutters & Scuppers included in Structural steel for payment. See Std. Dwg. No. CSB-2-56 for details.

Note: See General Notes for Slab Pouring Sequence.

**BEAM SPLICE WELDING PROCEDURE**

- Erect Span 2 & 3 Beams first.
- Raise the Pier No. 2 end of Span No. 2 Beams 4'.
- Butt Weld the Beam Flanges and Webs at Pier No. 3, Using the following sequence: Make one pass on each Flange, then one on the Web, repeat until welds are complete.
- Weld the Bottom and Top Moment R<sub>s</sub>.
- Lower the Pier No. 2 end of Span No. 2 to the final position.
- Raise the abutment end of Span No. 1 3/8'.
- Repeat steps 3 and 4 at Pier No. 2.
- Lower abutment end of Span No. 1 to final position.
- Repeat steps 3, 4, 6, & 8 at Pier 4 and abutment 5.

CHARLES L. BARBER AND ASSOCIATES  
HARRY BALKER ENGINEERS  
TOLEDO, OHIO

**SUPERSTRUCTURE DETAILS**

BRIDGE N° LAK-1-2641  
SR1 UNDER COUNTY LINE RD.  
LAKE CO. SR1  
STA 119+07.39

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
R.G.E.	W.H.		R.G.E.	A.C.A.	8/28/57	