

FED. RD. DIVISION	STATE	FED. AID PROJECT	FISCAL YEAR	150
2	OHIO	1-1103 (15)		176

LAKE COUNTY
LAK-1-26.51
ASHTABULA COUNTY
ATB-1-000

REINFORCING STEEL LIST

Superstructure				
Mark	Length	Shape	No.	Weight
S401	5'-2"	Bent	526	1815
S402	4'-10"	Bent	532	1718
S403	1'-4"	Bent	532	474
S404	2'-6"	Bent	526	878
S405	16'-6"	Str.	112	1234
S406	13'-2"	Str.	16	141
S407	30'-4"	Str.	54	1094
S501	30'-0"	Str.	393	12,297
S601	30'-0"	Str.	394	17,754
S602	28'-0"	Str.	240	10,093
S603	30'-11"	Str.	207	9,612
S604	27'-0"	Str.	52	2,109
S605	35'-6"	Str.	26	1,386
			Total	60,605

REPLACEMENT BARS

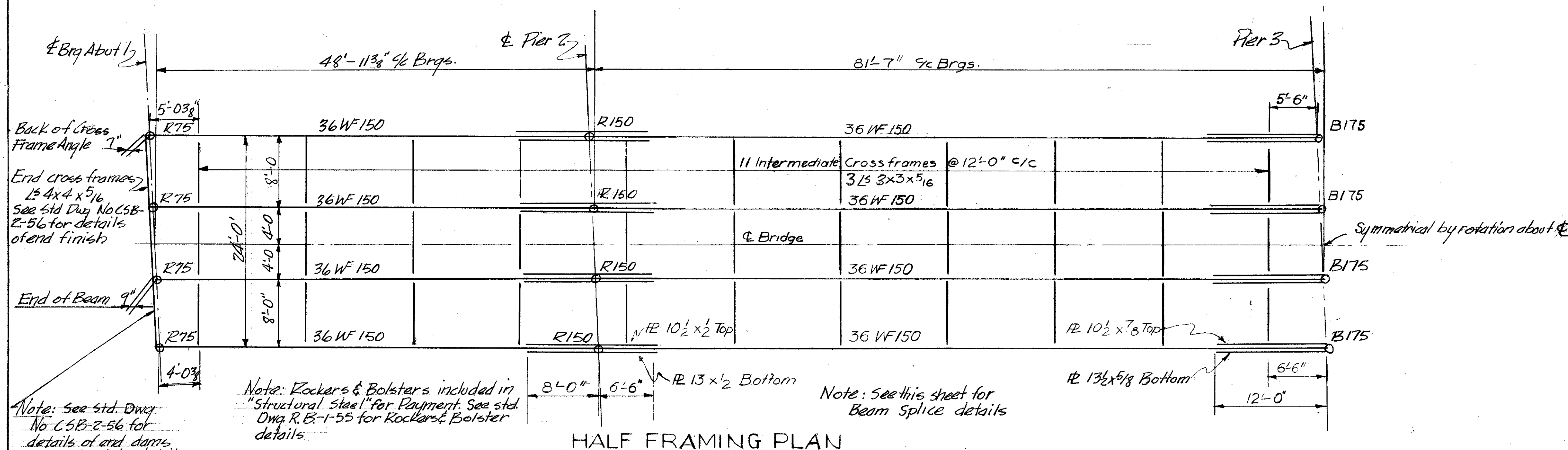
Mark	Length	Shape	No.
RB401	5'-3"	Str.	1
RB501	5'-7"	Str.	1
RB601	5'-11"	Str.	3
RB701	6'-3"	Str.	1
RB801	6'-6"	Str.	1
RB901	6'-10"	Str.	1
RB1101	7'-7"	Str.	1

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. 5-4.02 need not be furnished and replacement bars will not be required.

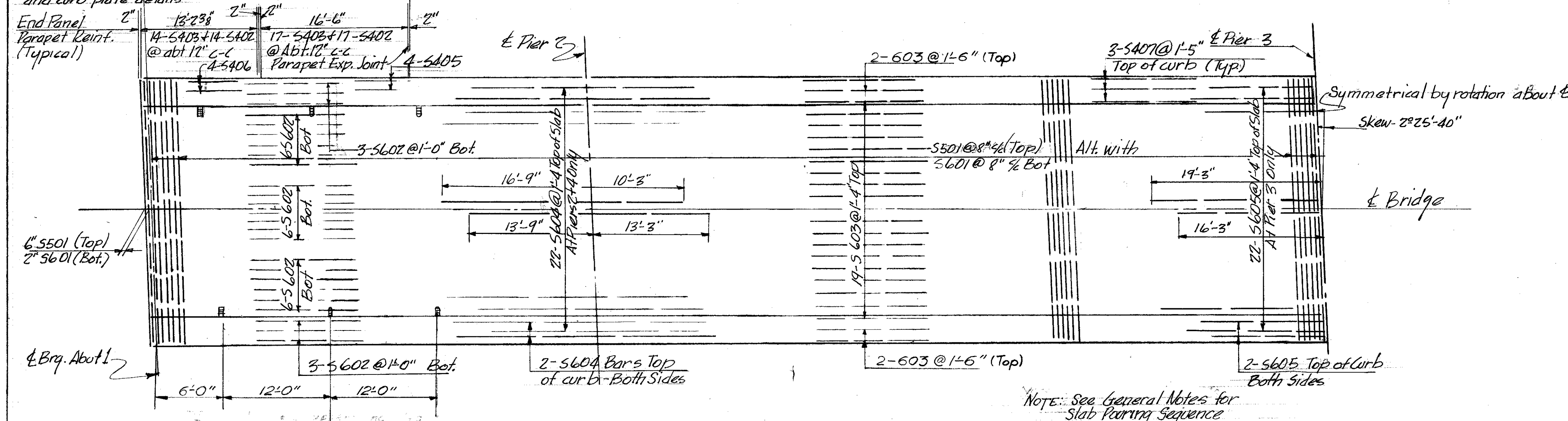
DEFLECTION AND CAMBER

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	0	1/8	1/8	0	0	1/8	1/8	0
Deflection due to remaining dead load	1/16	1/16	1/16	1/16	0	1/2	1/2	0
Convexity required for vertical curve	7/16	13/16	13/16	7/16	7/16	13/16	13/16	7/16
Sum of deflection and convexity	1/2	23/8	23/8	1/2	7/16	13/16	13/16	7/16
Required camber	0	23/8	23/8	0	0	13/16	13/16	0

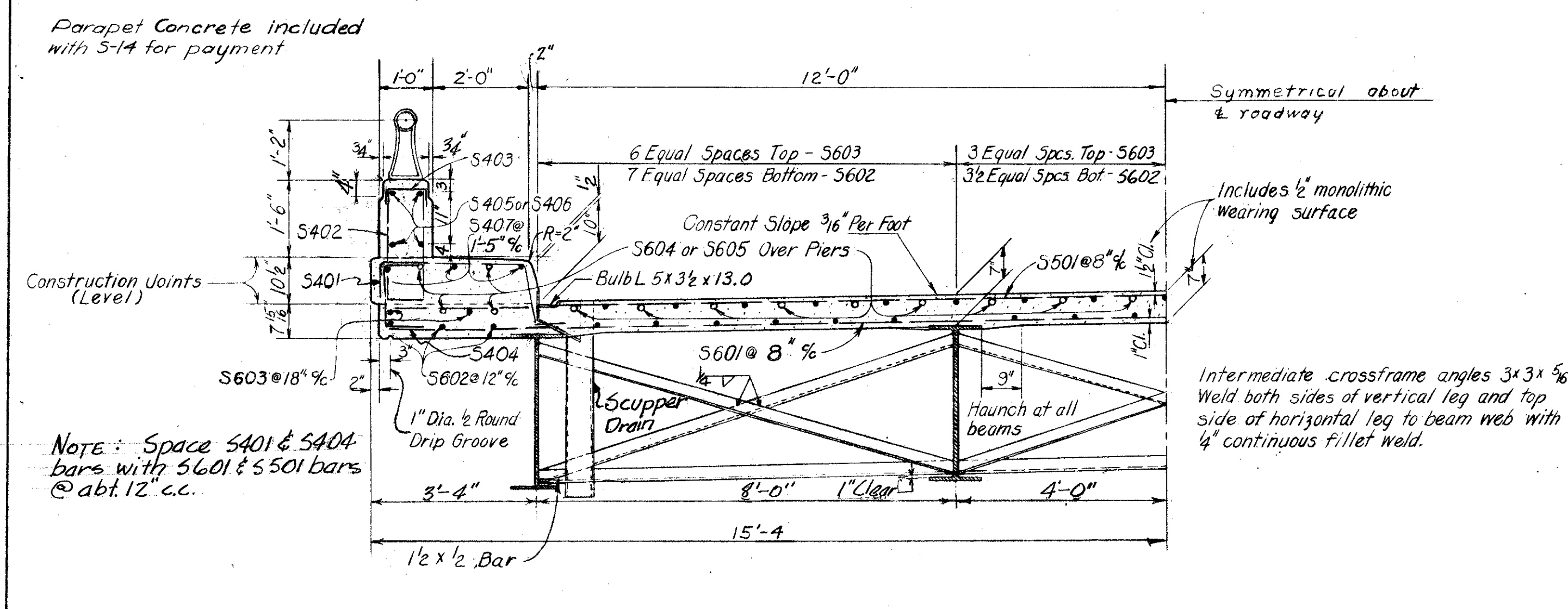
Where no camber is required, the beams shall be so fabricated that any curved beam will be placed with convex flange up.



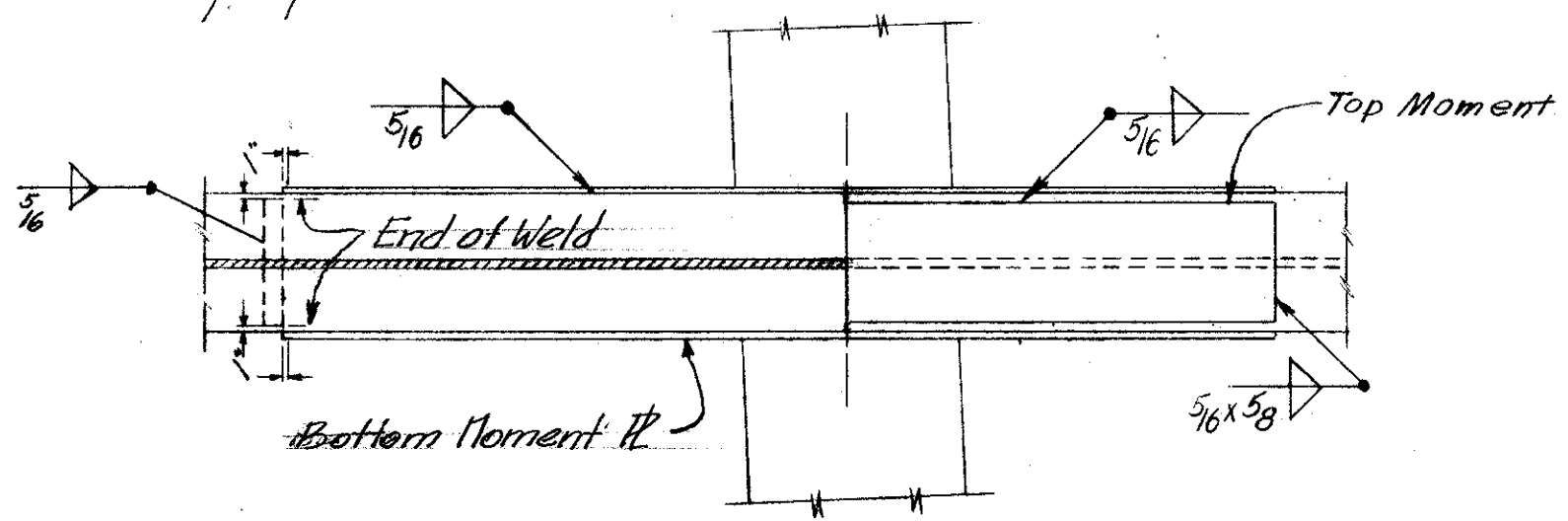
HALF FRAMING PLAN



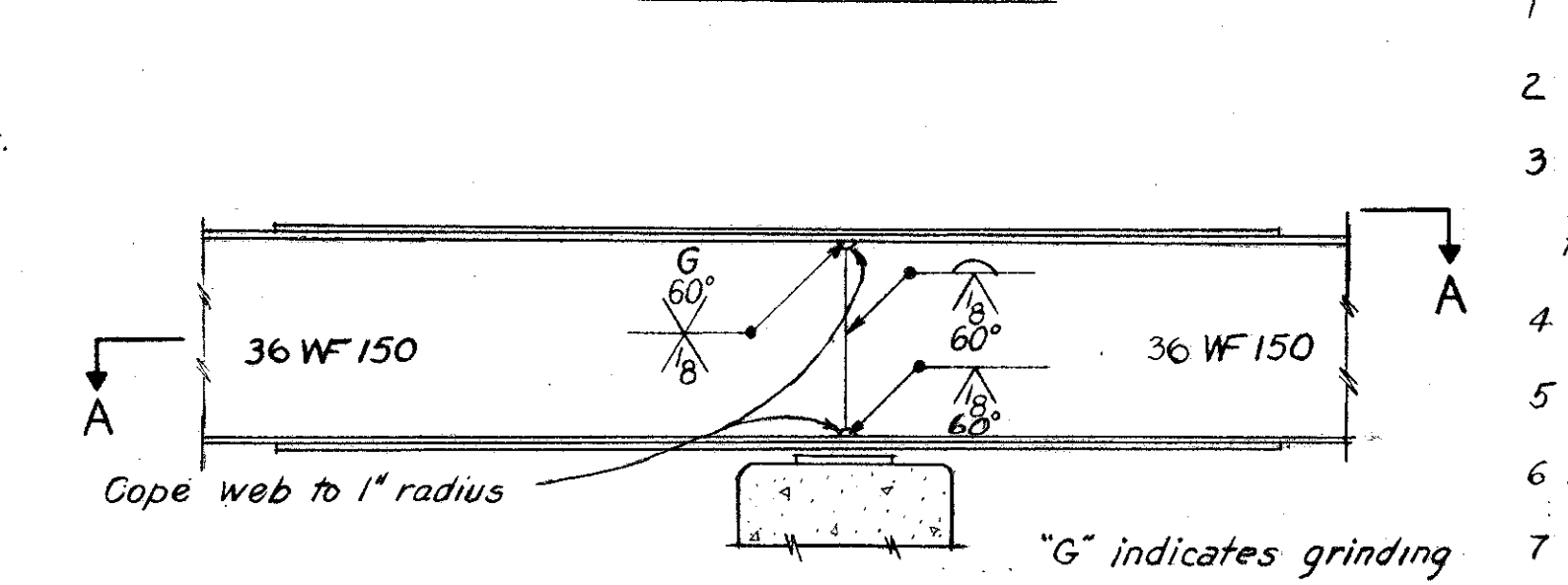
HALF SLAB PLAN



HALF CROSS SECTION



SECTION A-A



BEAM SPLICE DETAIL

BEAM SPLICE WELDING PROCEDURE

- Erect span 2 and 3 beams first.
- Raise the pier no. 2 end of span no. 2 beams 3 3/4".
- 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 plates.
- Lower the pier no. 2 end of span no. 2 to the final position.
- Raise the abutment end of span no. 1 3/4".
- 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 no. 4 and abutment no. 5.

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

SUPERSTRUCTURE DETAILS

BRIDGE NO. ATB-1-0138
SR 1 UNDER VAN PELT RD
ASHTABULA CO. SR 1
STA. 73+04.80

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
CTL	JB		RGE	ACA	8/28/57	