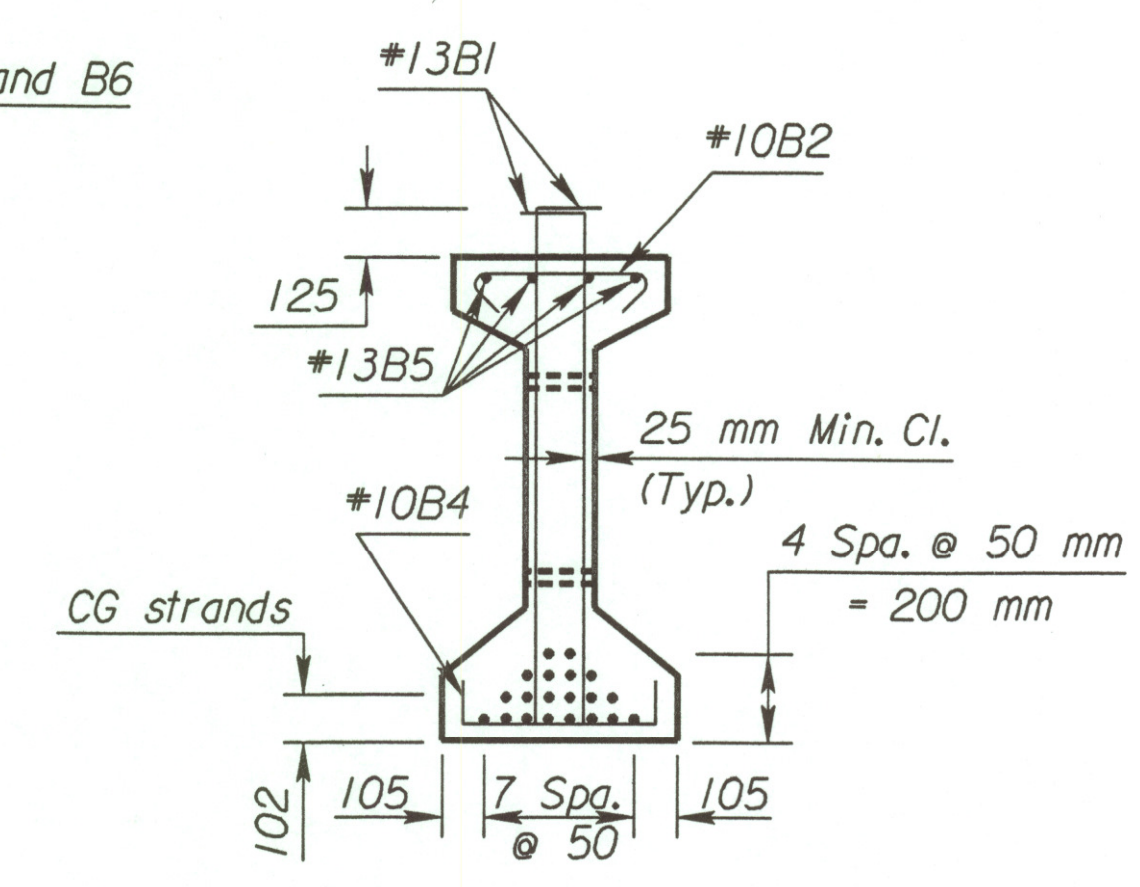
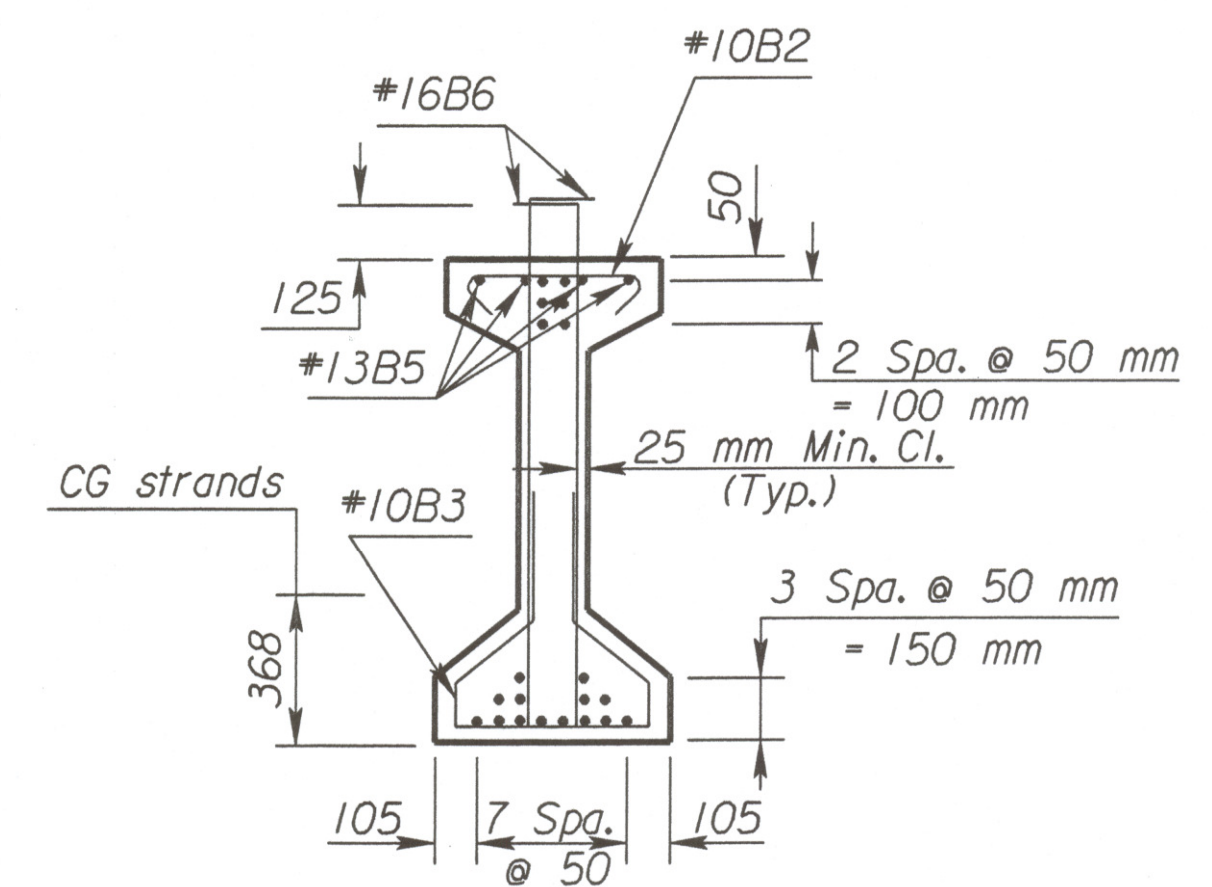


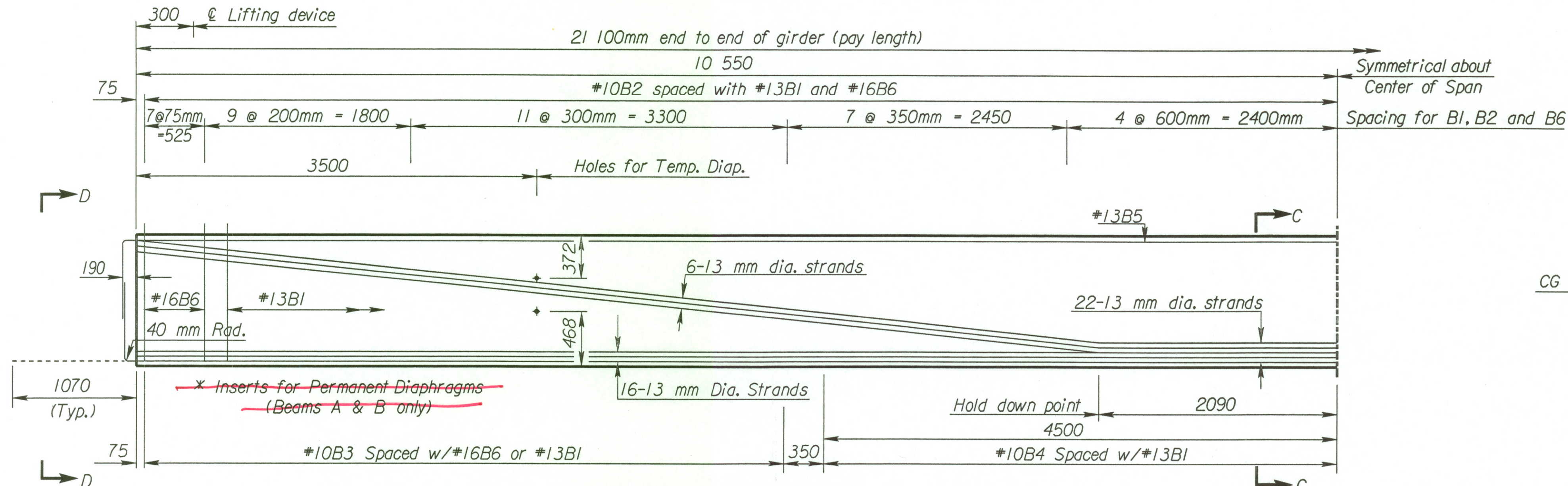
TYPICAL GIRDER ELEVATION TYPE K3 GIRDER SPANS 2, 3 AND 4



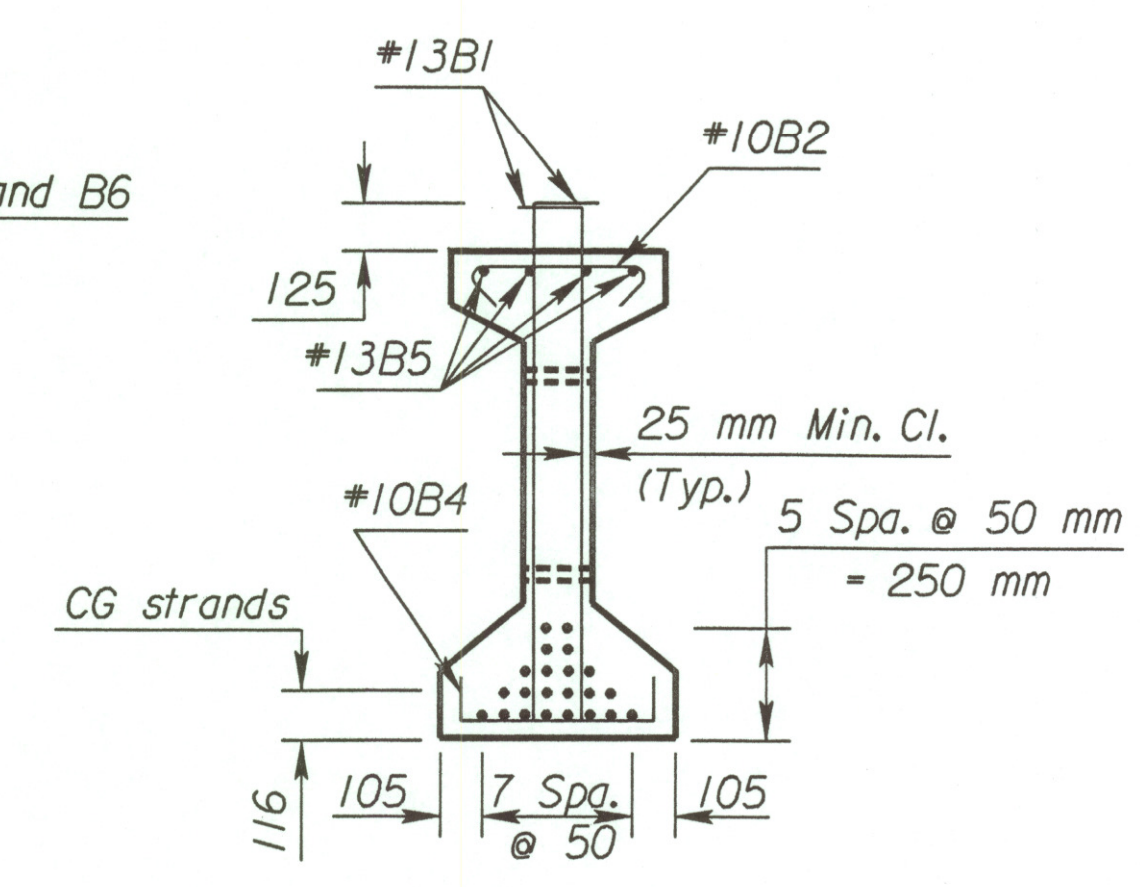
SECTION A-A



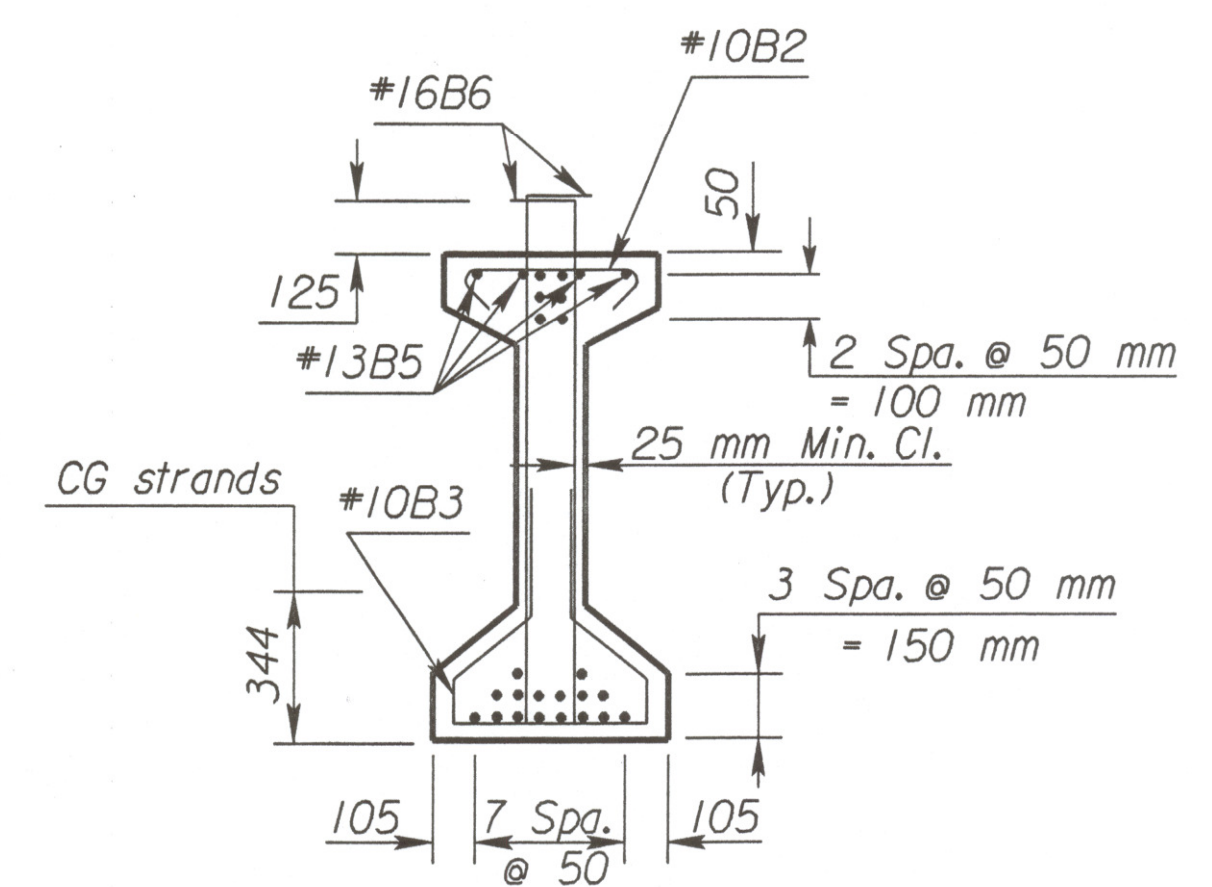
SECTION B-B



TYPICAL GIRDER ELEVATION TYPE K3 GIRDER SPANS 1 AND 5



SECTION C-C

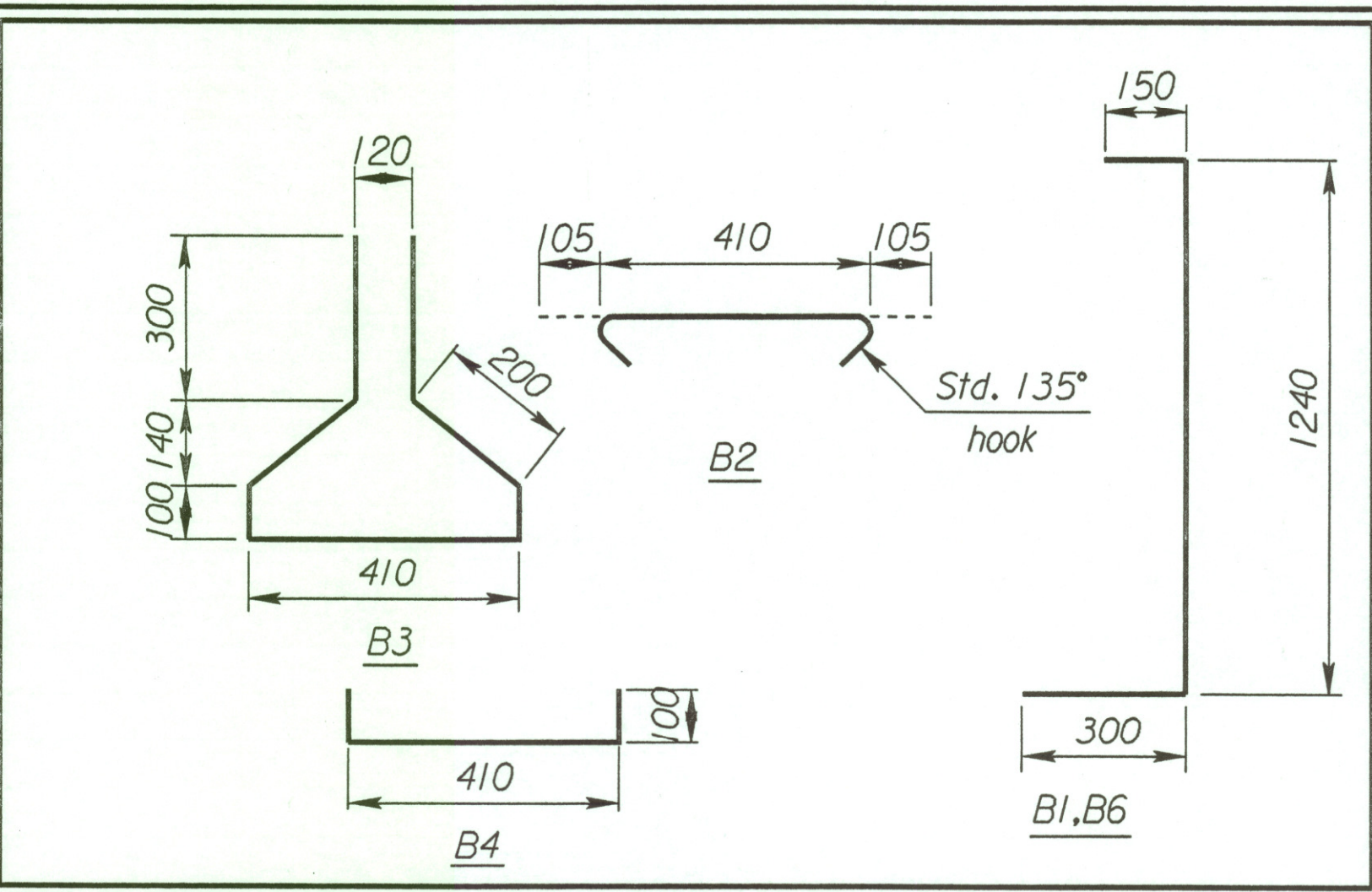


SECTION D-D

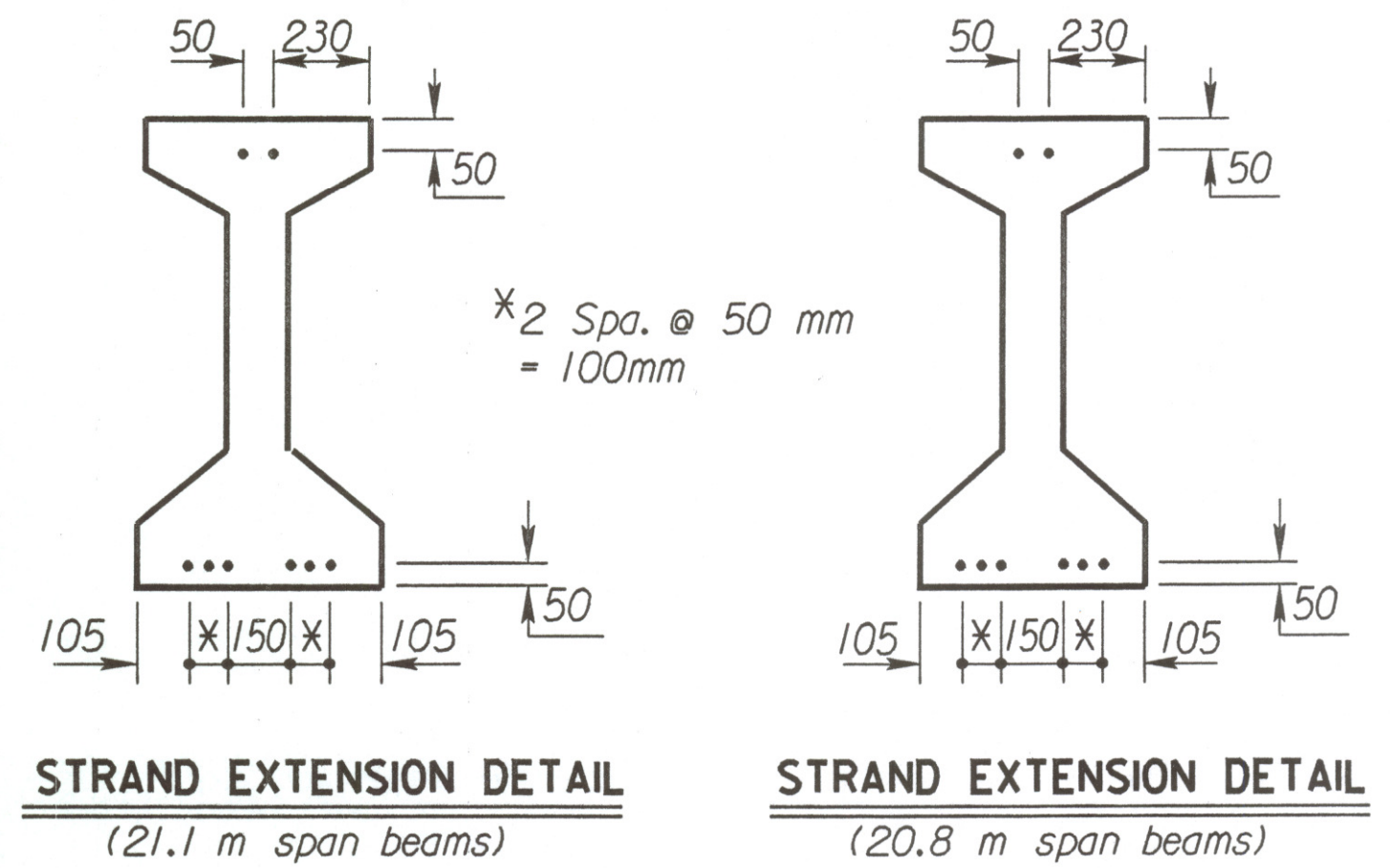
NOTE: During transportation and construction only, support beams on bearing points a maximum of 1750 mm from the beam end for Interior Span, and 1200 mm for Exterior Span. The Fabricator shall show the proposed support locations on the shop drawings.  
 NOTE: The hold down force at the harp points for 6 strands at 14.82 kN per strand = 88.9 kN total.  
 NOTE: Epoxy coat all bars.

NOTE: Extend 8 strands 1070 mm beyond the end of the beam. Strands not shown shall be cut flush with the end of the beam. See "Strand Extension Details".

BILL OF REINFORCING STEEL							
21.1 m Girder (1 Listed-16 Reqd.) (End spans)							
Straight bars				Bent bars			
Mark	No.	Size	Length	Mark	No.	Size	Length
B5	8	#13	10750	B2	77	#10	620
				B3	54	#10	1610
				B4	23	#10	610
				B1	122	#13	1690
				B6	32	#16	1690
20.8 m Girder (1 Listed-22 Reqd.) (Interior spans)							
Straight bars				Bent bars			
Mark	No.	Size	Length	Mark	No.	Size	Length
B5	8	#13	10600	B2	77	#10	620
				B3	56	#10	1610
				B4	21	#10	610
				B1	122	#13	1690
				B6	32	#16	1690



BILL OF MATERIAL		
Item	Unit	Quantity
Prestressed concrete beams (K3) End spans (16)	m	337.6
Prestressed concrete beams (K3) Interior spans (22)	m	457.6
The following quantities are given for information only and shall not be paid for directly but shall be made subsidiary to the bid item "Prestressed Concrete Beams"		
Beam concrete (f'c = 35 MPa)(f'g = 30 MPa)(per end span beam)	m <sup>3</sup>	7.15
Beam concrete (f'c = 35 MPa)(f'g = 30 MPa)(per interior span beam)	m <sup>3</sup>	7.05
Approximate mass per 20 800 beam	t	16.4
Approximate mass per 21 100 beam	t	16.6
13 mm Ø Prestressing strand (Gr. 1860 low relaxation)	m	17 250
Epoxy reinforcing steel (Gr 420)	kg	17 389
Elastomeric bearing pads (20 mm x 200 mm x 560 mm)	Each	76
20 mm Dia. Coil tie inserts (NC Thread)	Each	—
20 mm Dia. x 450 mm Threaded coil rods	Each	—
Lifting devices	Each	76
Bearing plates (12 mm x 375 mm x 560 mm)	Each	76



STRAND EXTENSION DETAIL (21.1 m span beams)

STRAND EXTENSION DETAIL (20.8 m span beams)

3				
2				
1	4-18-99	Current release		
NO.	DATE	REVISIONS	BY	APP'D
<b>CITY OF WICHITA</b>				
Br. No. 54-87-19.29(492) F.E.B.S+a. 16+005.740				
K3 PRESTRESSED CONCRETE BEAM DETAILS EASTBOUND FRONTAGE ROAD				
Sedgwick Co.				
SHEET NO.	OF	DATE	APP'D	
DESIGNED		DETAILED	QUANTITIES	CADD
DESIGN CK.		DETAIL CK.	QUAN. CK.	CADD CK.

Plotted By : snb  
 Plot File : i:\1997\97362\001\bridge\cawstn\EASTBOUND\K3beamfcb  
 Plot Date : 3-27-2002  
 Std. Base File : /usr2/stand/si/br302bsi.dgn  
 Server File : /usr  
 Server : witch  
 View= PLOT1