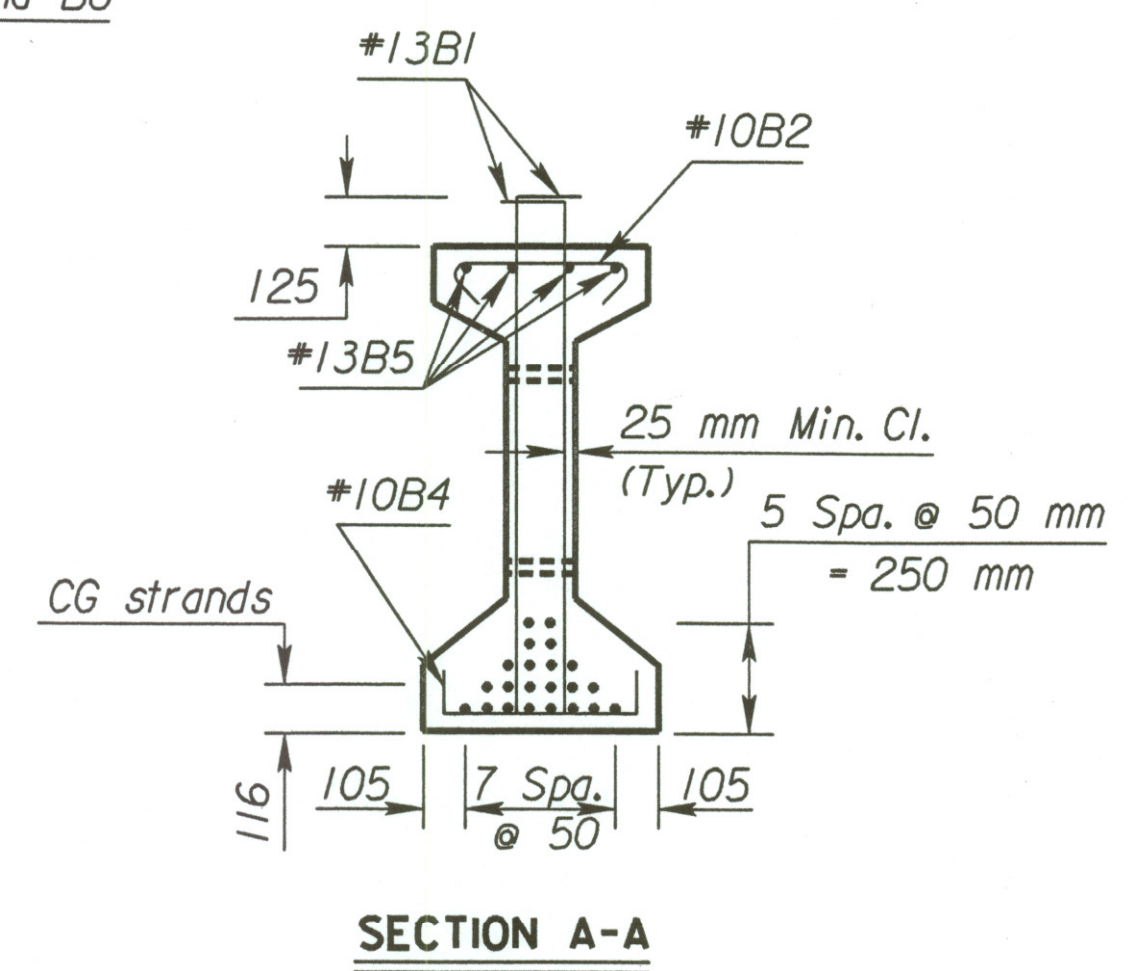
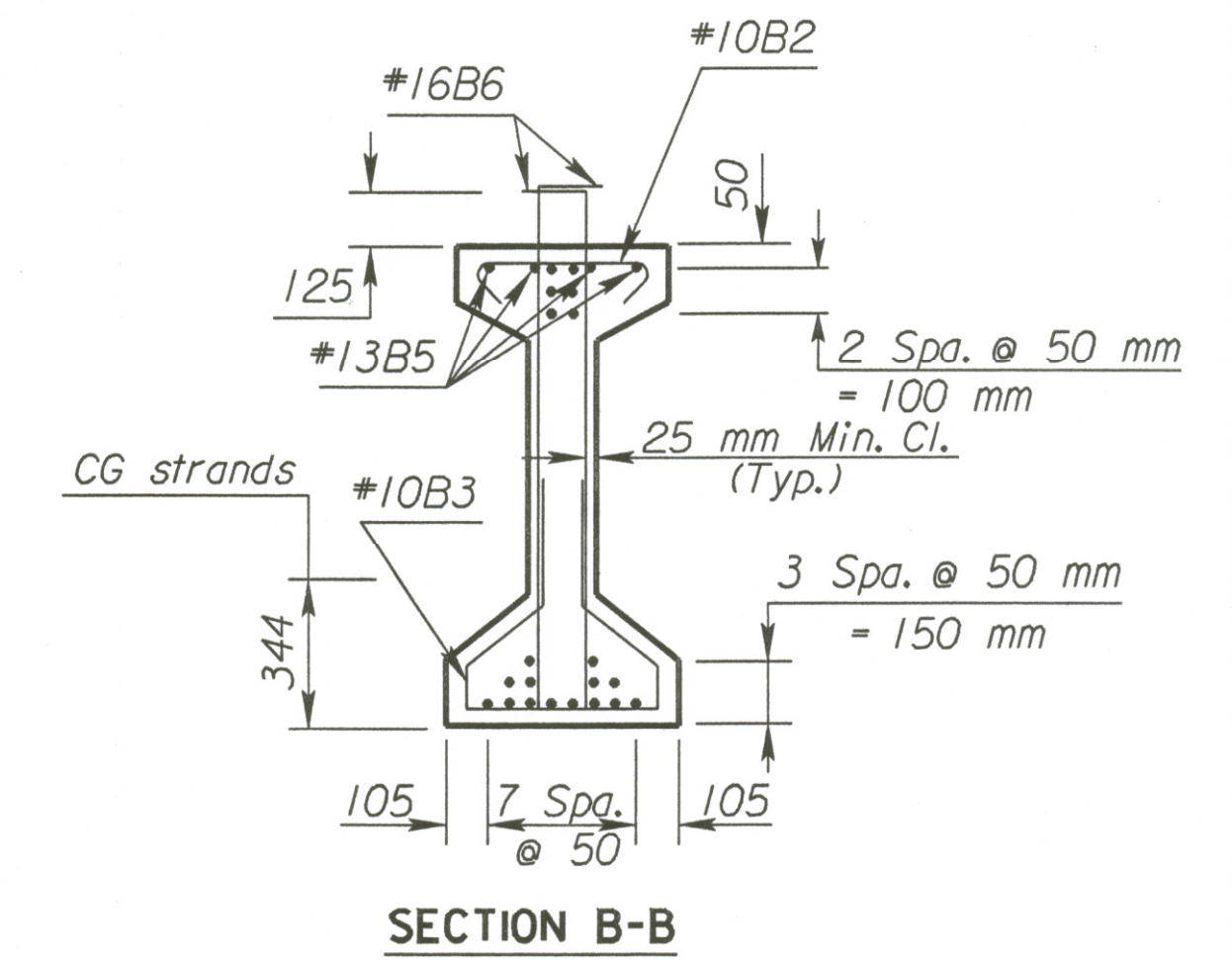


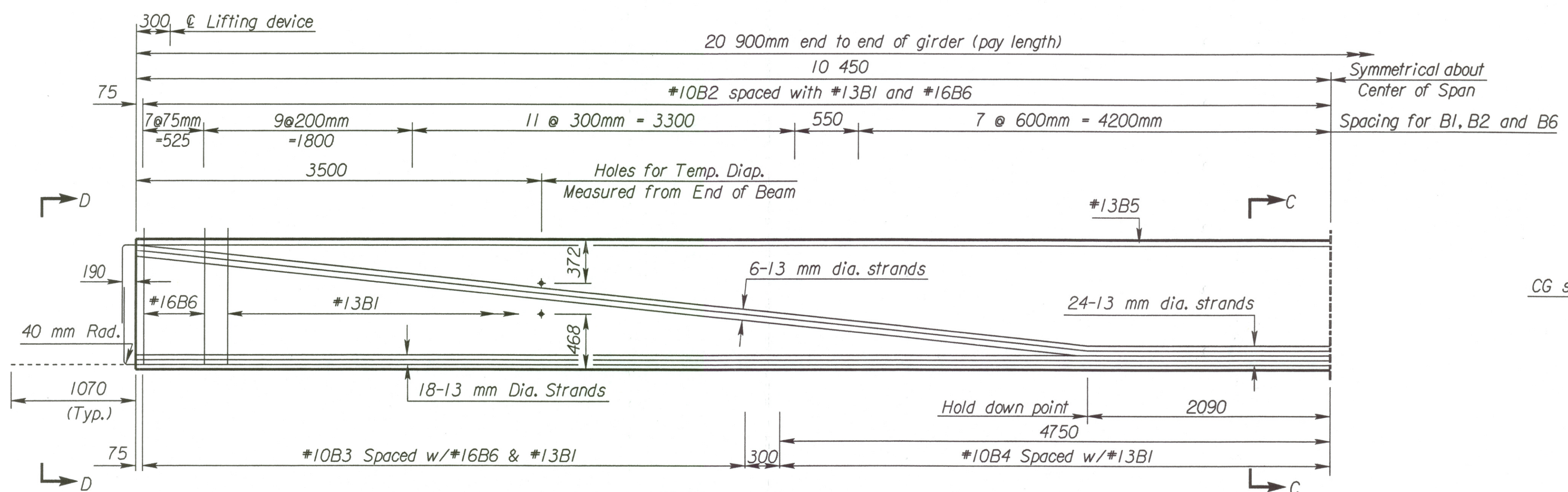
TYPICAL GIRDER ELEVATION TYPE K3 GIRDER SPANS 2, 3 AND 4



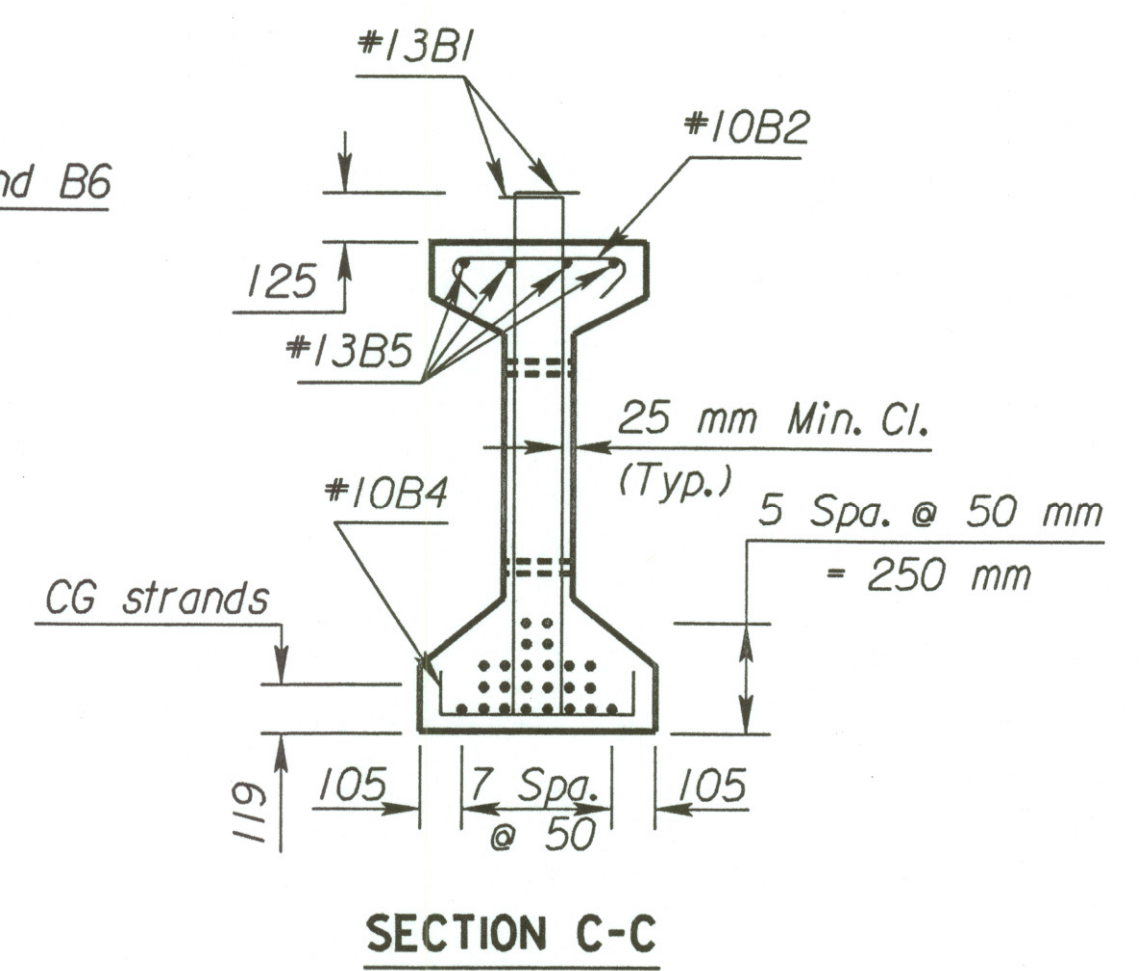
SECTION A-A



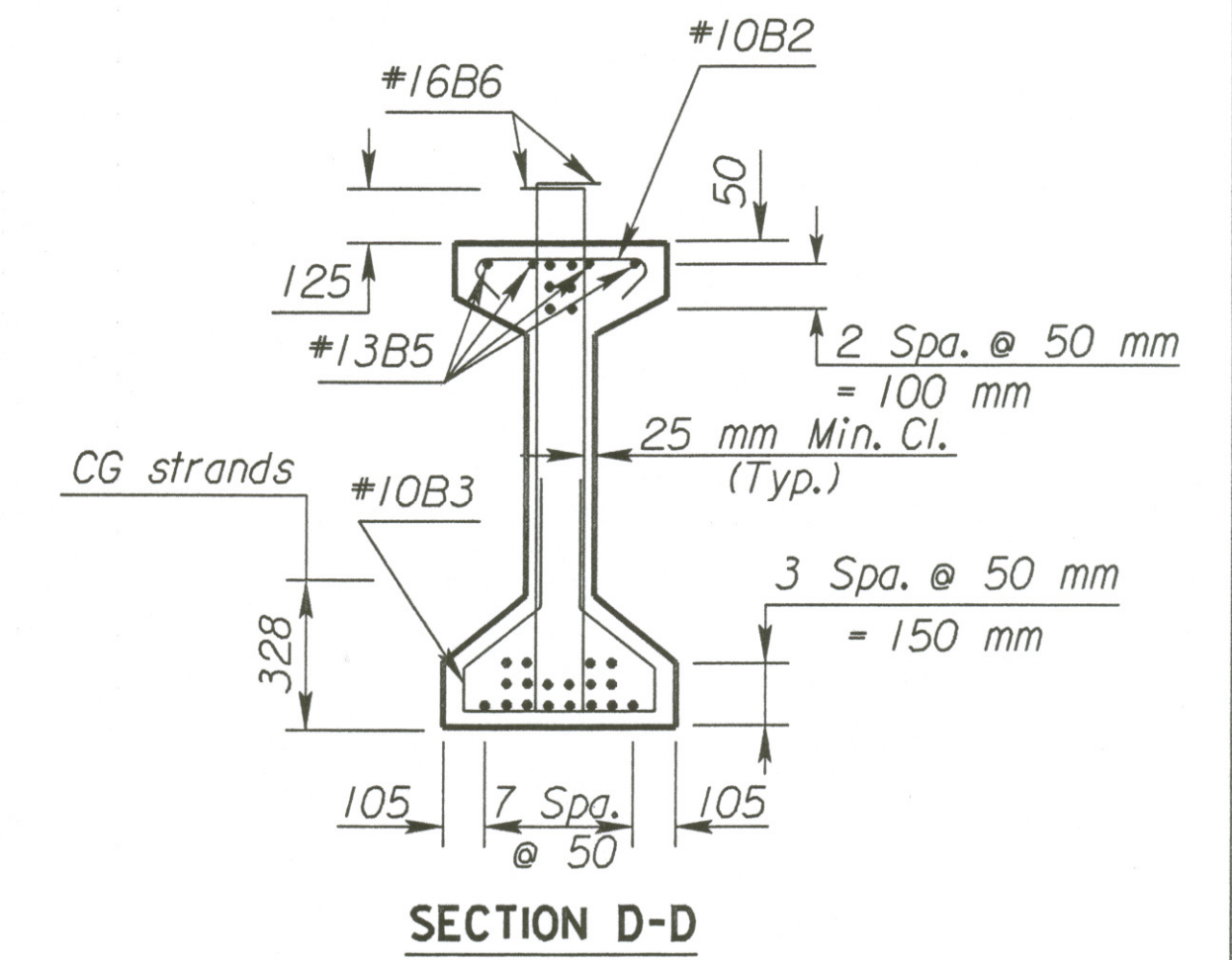
SECTION B-B



TYPICAL GIRDER ELEVATION TYPE K3 GIRDER SPANS 1 AND 5



SECTION C-C

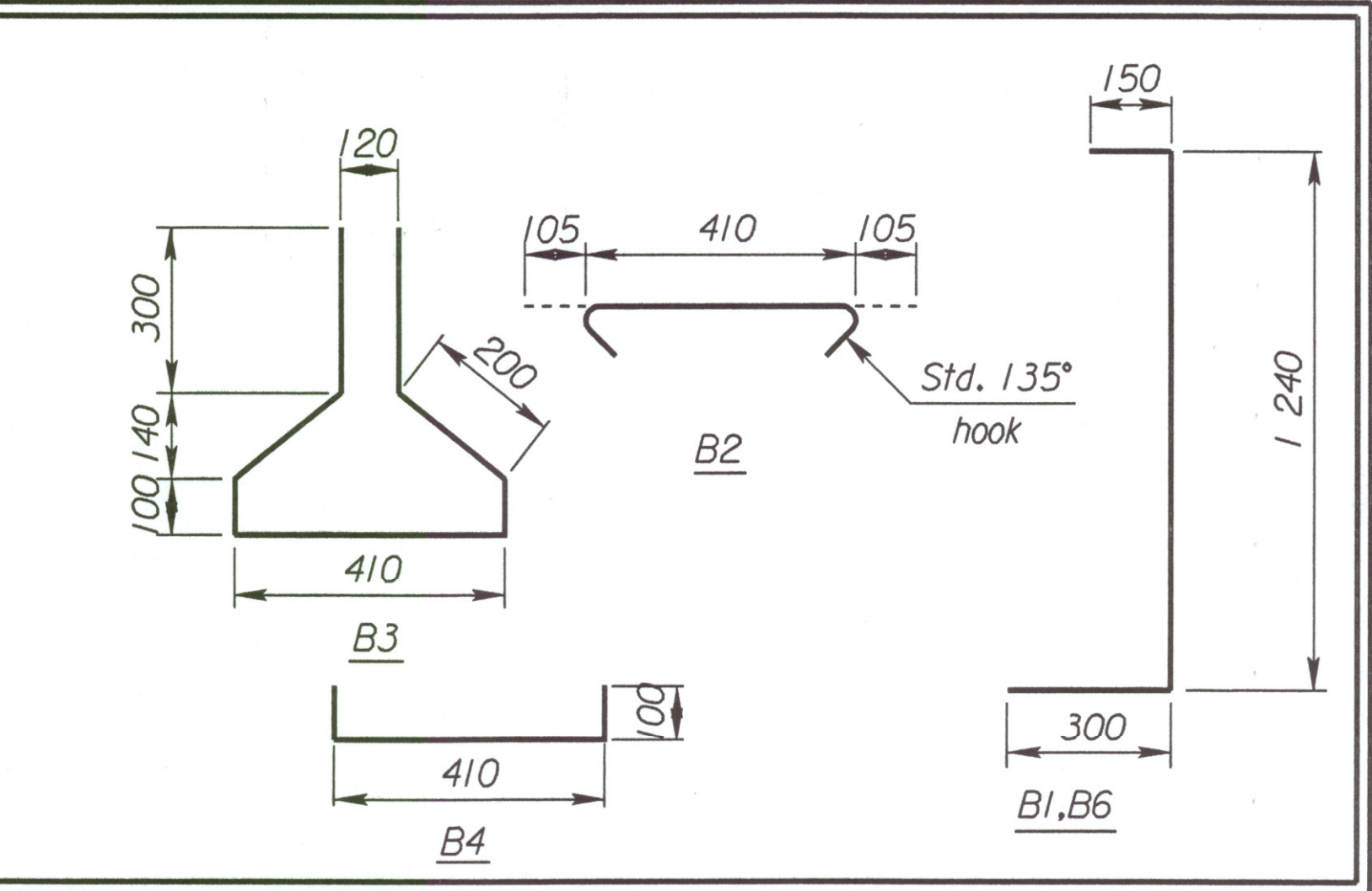


SECTION D-D

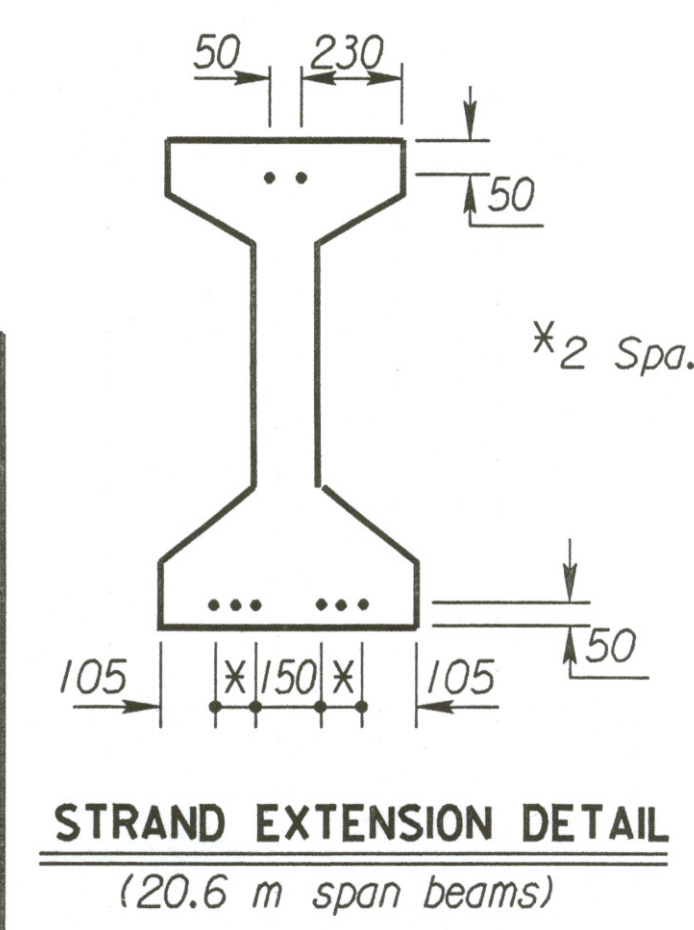
NOTE: During transportation and construction only, support beams on bearing points a maximum of 1520 mm from the beam end. The Fabricator shall show the proposed support locations on the shop drawings.  
 NOTE: The hold down force at the harp points for 6 strands at 13.98 kN per strand = 83.9 kN total.  
 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".

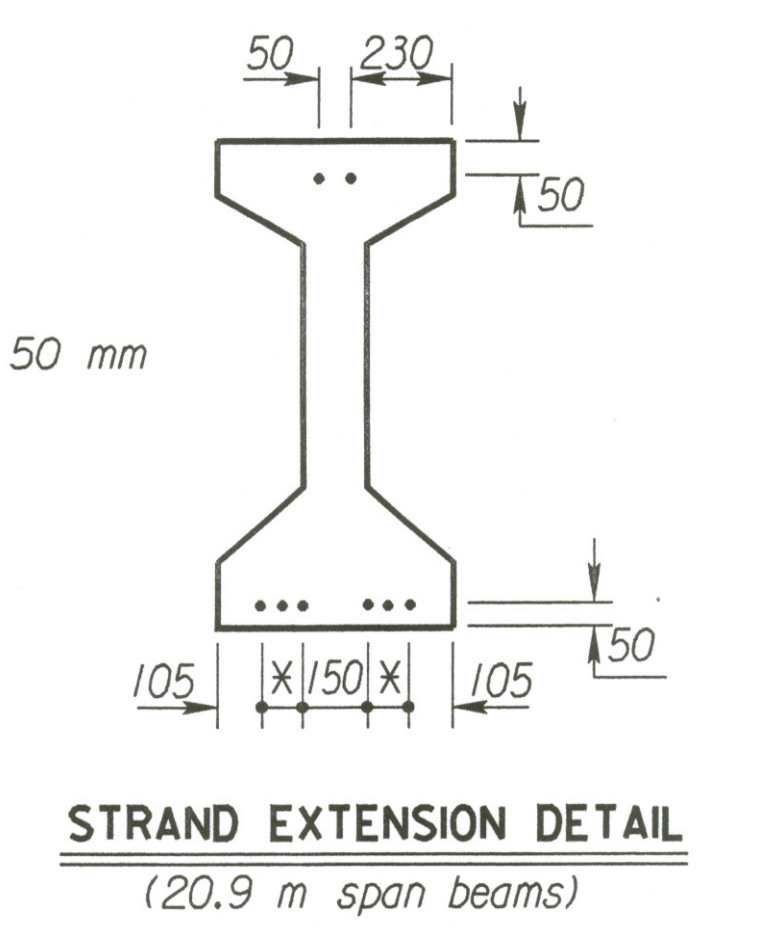
BILL OF REINFORCING STEEL							
20.9 m Girder (1 Listed-16 Req.) (End spans)							
Straight bars			Bent bars				
Mark	No.	Size	Length	Mark	No.	Size	Length
B5	8	#13	10 650	B2	71	#10	620
				B3	54	#10	1 610
				B4	17	#10	610
				B1	110	#13	1 690
				B6	32	#16	1 690
20.6 m Girder (1 Listed-24 Req.) (Interior spans)							
Straight bars			Bent bars				
Mark	No.	Size	Length	Mark	No.	Size	Length
B5	8	#13	10 500	B2	71	#10	620
				B3	54	#10	1 610
				B4	17	#10	610
				B1	110	#13	1 690
				B6	32	#16	1 690



BILL OF MATERIAL		
Item	Unit	Quantity
Prestressed concrete beams (K3) End spans (16)	m	334.4
Prestressed concrete beams (K3) Interior spans (24)	m	494.4
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 = 40 MPa)(f'g = 30 MPa)(per end span beam)	m <sup>3</sup>	7.08
Beam concrete (f'c = 40 MPa)(f'g = 30 MPa)(per interior span beam)	m <sup>3</sup>	6.98
Approximate mass per 20 600 beam	t	16.2
Approximate mass per 20 900 beam	t	16.4
13 mm Ø Prestressing strand (Gr. 1860 low relaxation)	m	19 608
Epoxy reinforcing steel (Gr 420)	kg	17 274
Elastomeric bearing pads (20 mm x 200 mm x 560 mm)	Each	80
20 mm Dia. Coil tie inserts (NC Thread)	Each	—
20 mm Dia. x 450 mm Threaded coil rods	Each	—
Lifting devices	Each	80
Bearing plates (12 mm x 375 mm x 560 mm)	Each	80



STRAND EXTENSION DETAIL (20.6 m span beams)



STRAND EXTENSION DETAIL (20.9 m span beams)

3				
2				
1	4-18-99	Current release		
NO.	DATE	REVISIONS	BY	APP'D
<b>CITY OF WICHITA</b>				
Br. No. 54-87-19.3(494) W.B. Sta. 16+011.650				
K3 PRESTRESSED CONCRETE BEAM DETAILS WESTBOUND KELLOGG (US-54)				
Sedgwick Co.				
SHEET NO.	OF	DATE	APP'D	
DESIGNED		DETAILED	QUANTITIES	CADD
DESIGN CK.		DETAIL CK.	QUAN. CK.	CADD CK.

Plotted By : drp  
 Plot File : i:\1997\97362\1001\bridge\cawstin\MAINLINE\k3beammb  
 Server File : /usr  
 Server : witch  
 View : PLOT1  
 Std. Base File : /usr2/stand/si/br302bsi.dgn  
 Plot Date : 3-25-2002