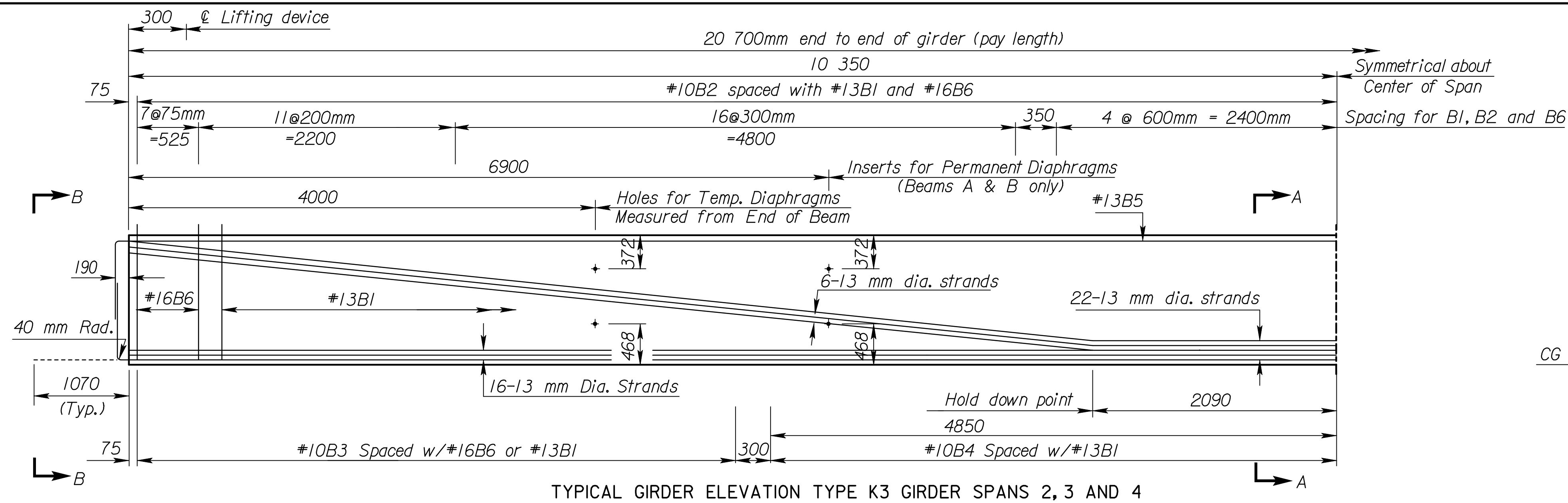
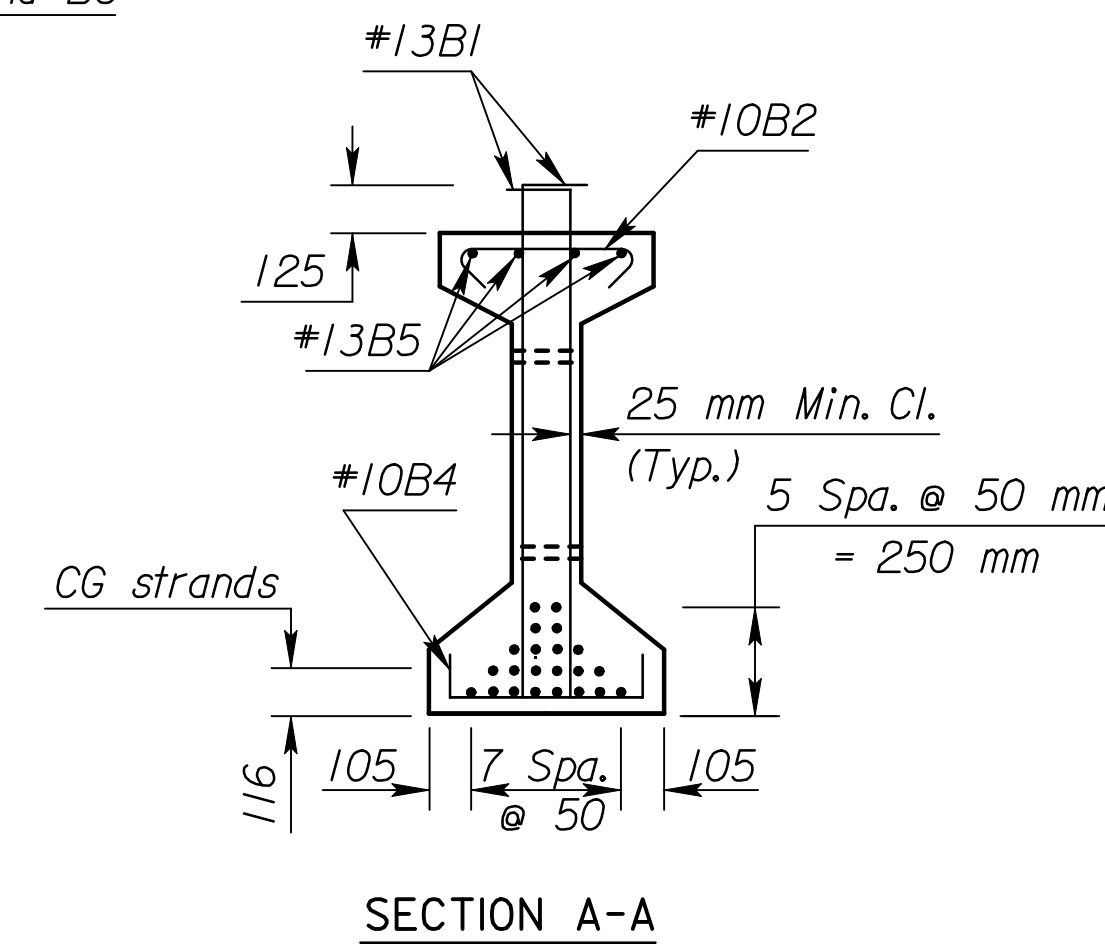


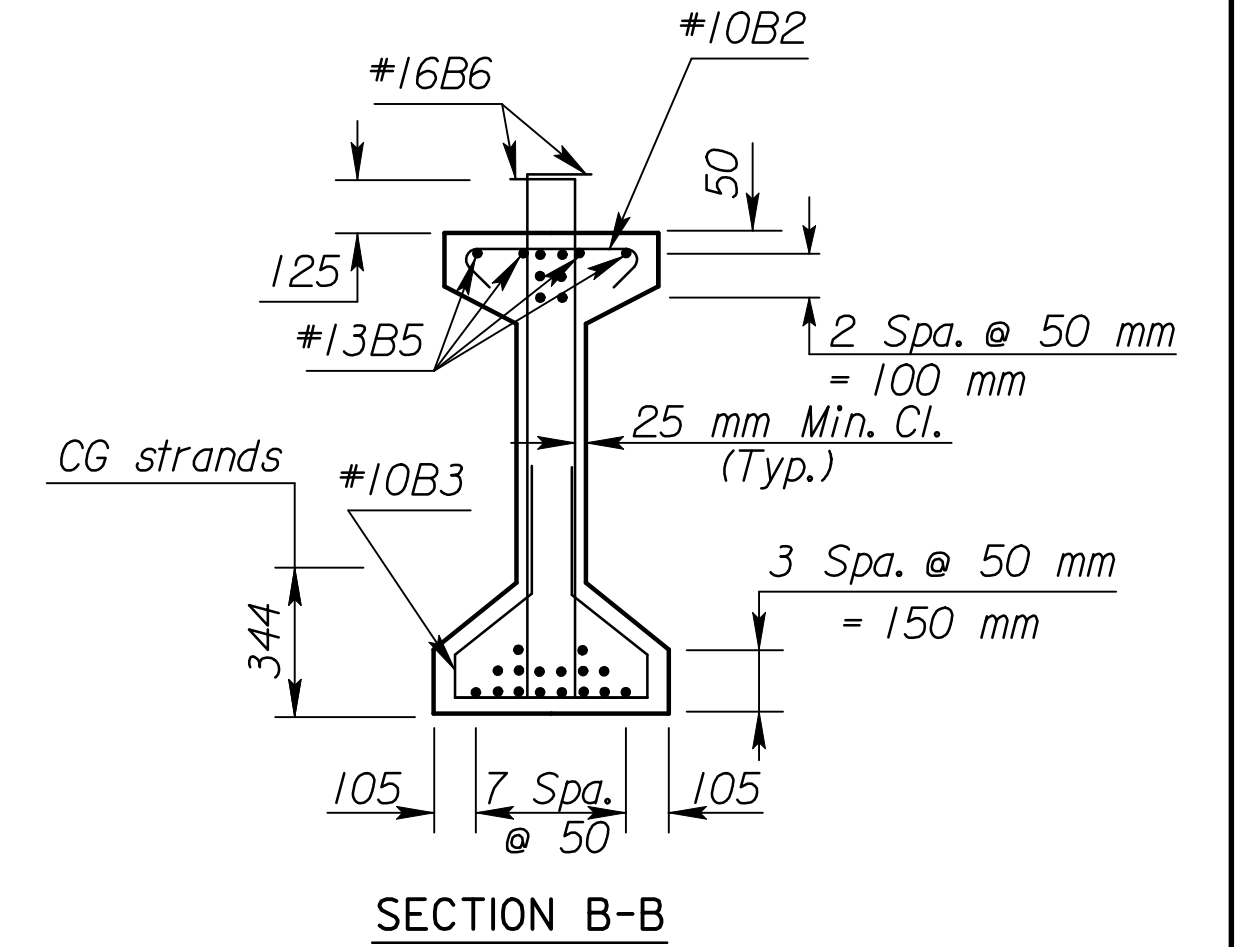
STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS	54-87 K-6657-01	2002	488	1122



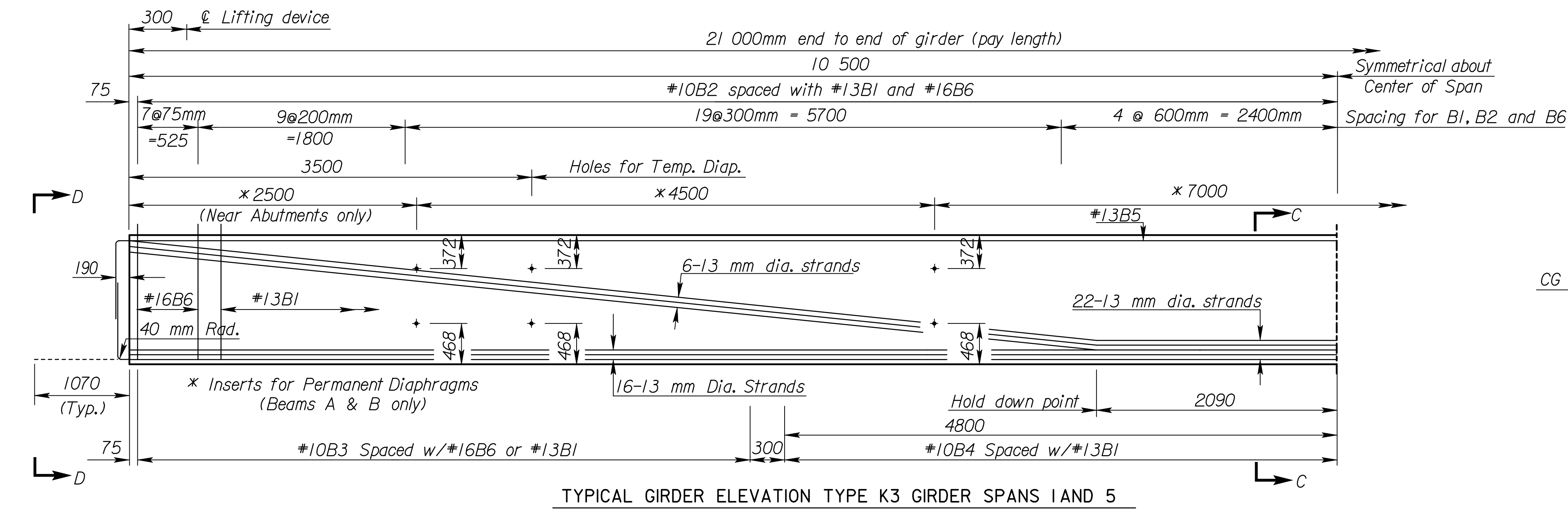
TYPICAL GIRDER ELEVATION TYPE K3 GIRDER SPANS 2, 3 AND 4



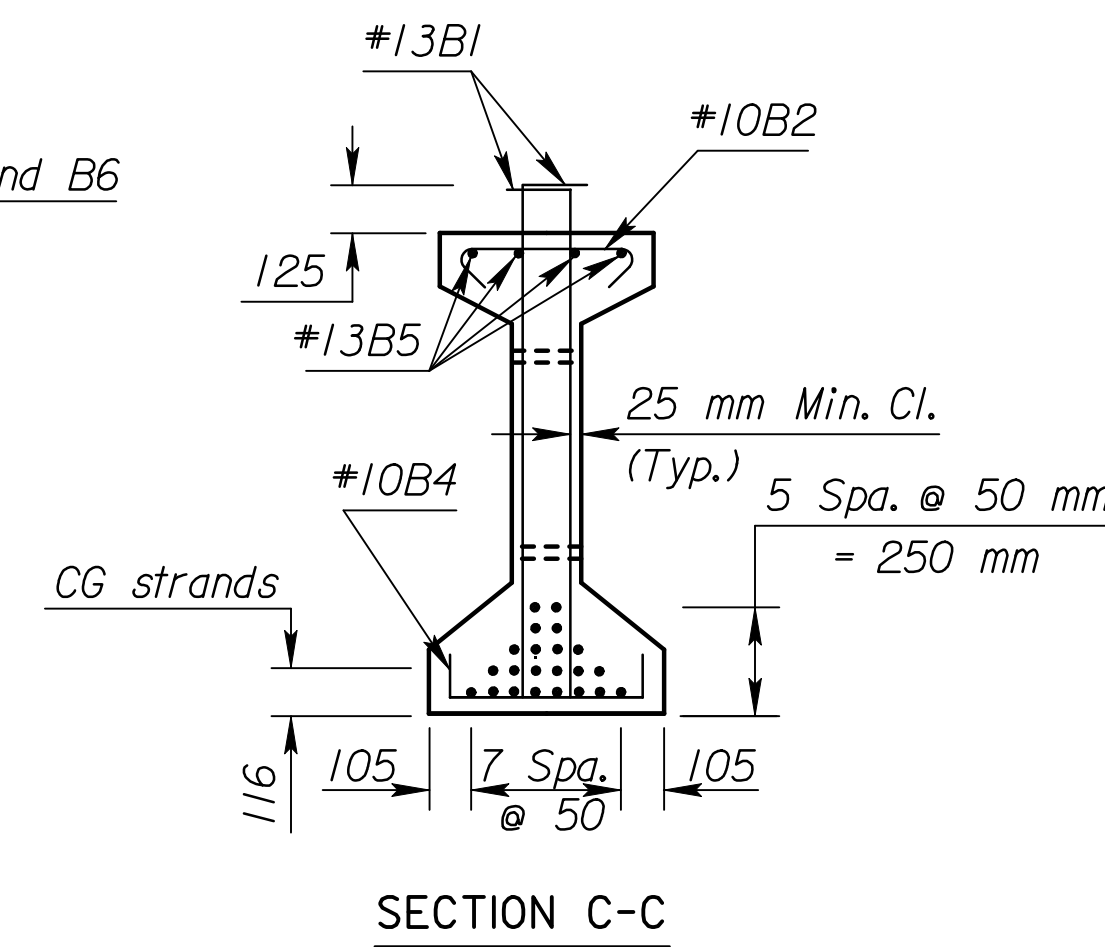
SECTION A-A



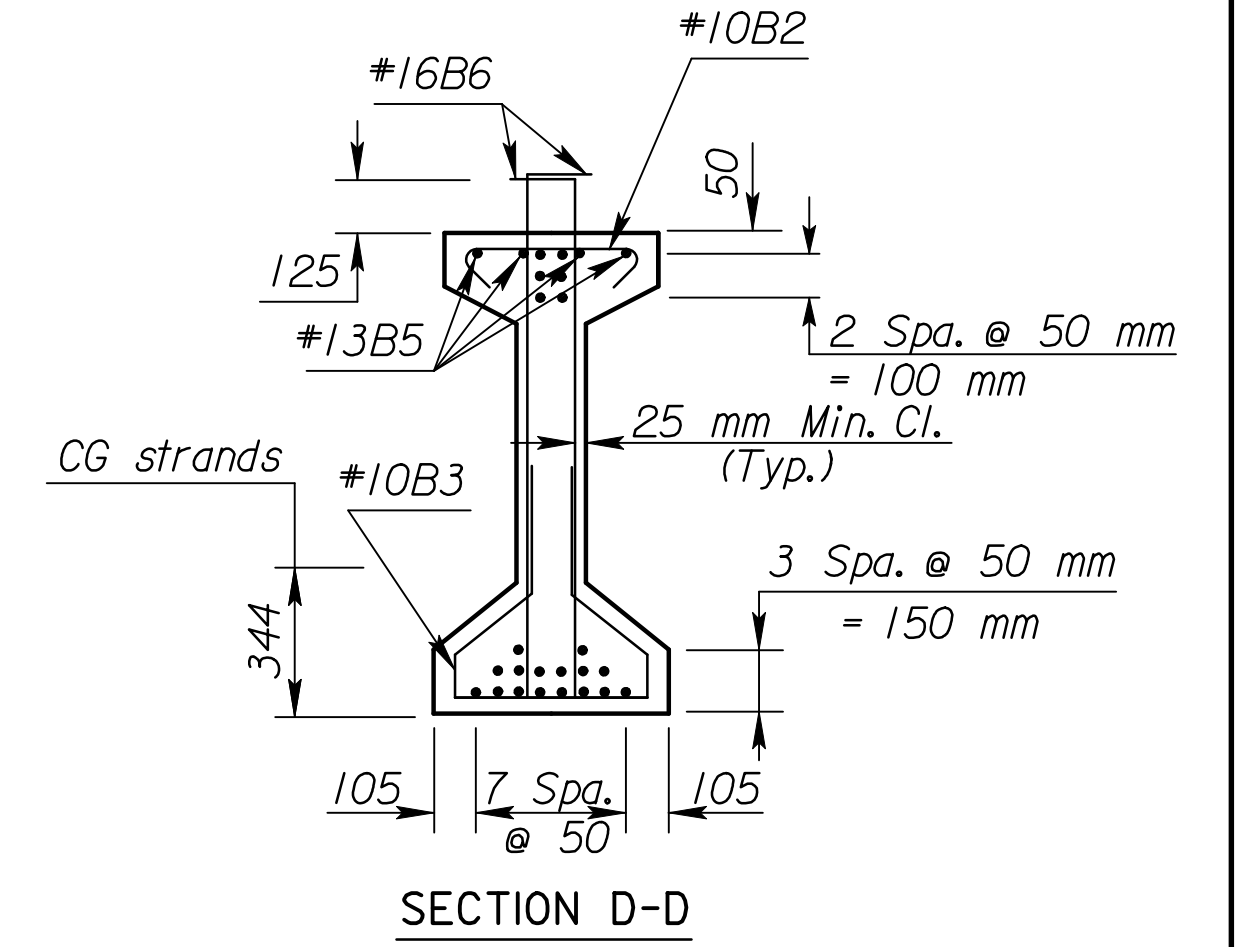
SECTION B-B



TYPICAL GIRDER ELEVATION TYPE K3 GIRDER SPANS 1 AND 5



SECTION C-C

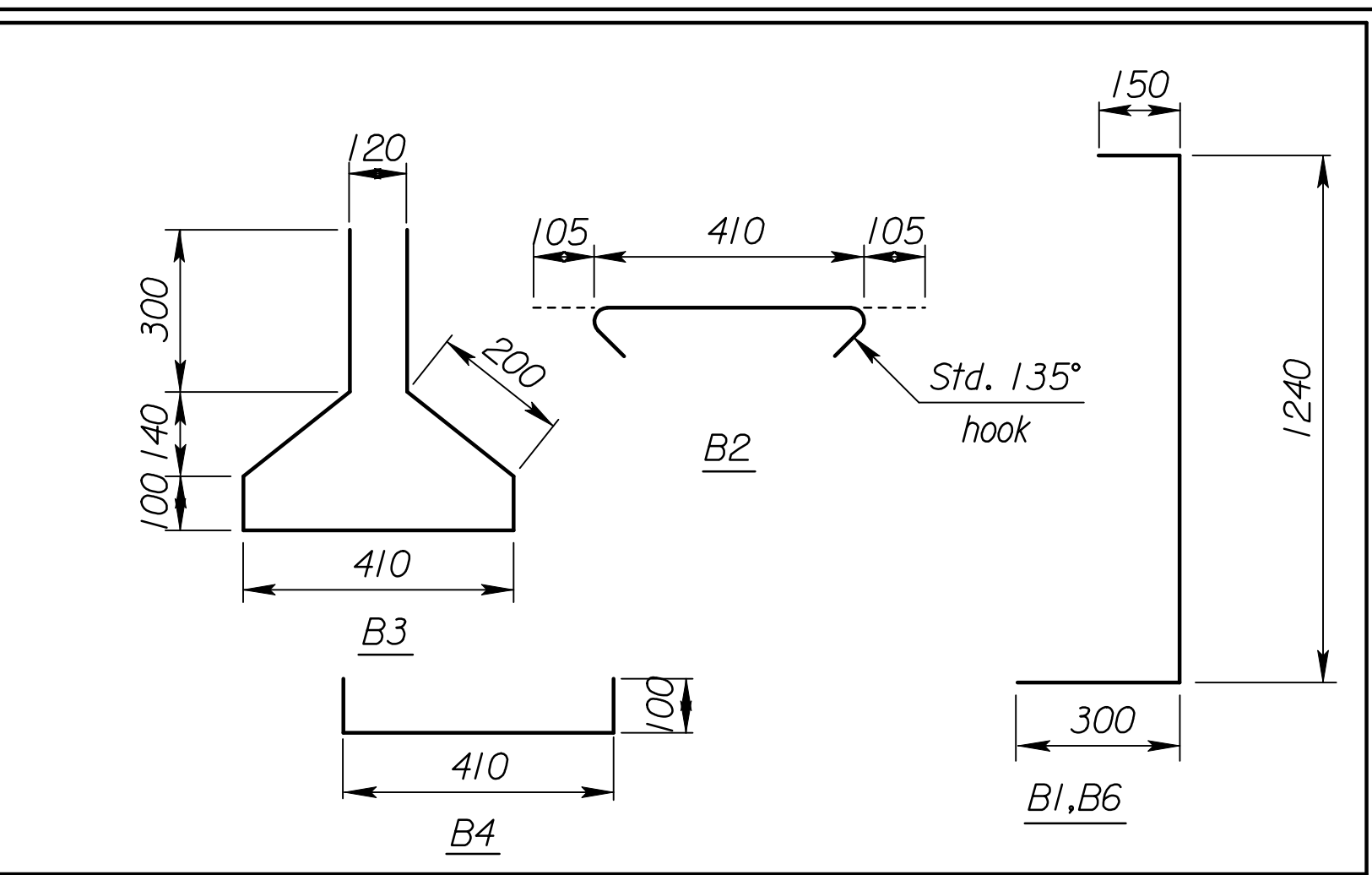


SECTION D-D

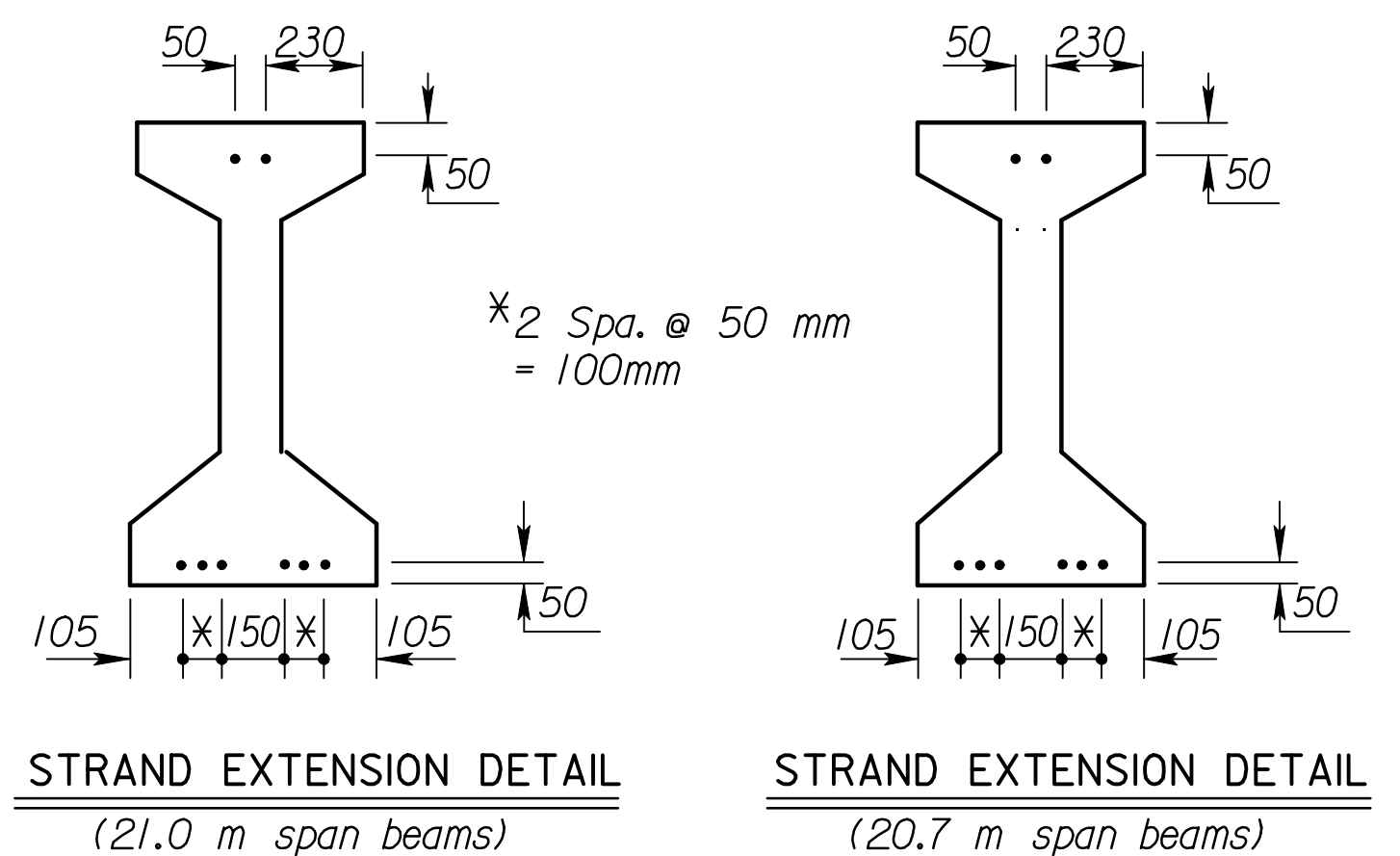
NOTE: During transportation and construction only, support beams on bearing points a maximum of 900 mm from the beam end for Interior Span, and 1200 mm for Exterior Span. The Fabricator shall show the proposed support locations on the shop drawings.
 NOTE: The hold down force at the harp points for 6 strands at 13.98 kN per strand = 83.88 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											
21.0 m Girder (1 Listed-12 Req'd.) (End spans)											
Straight bars				Bent bars							
Mark	No.	Size	Length	Mark	No.	Size	Length	Mark	No.	Size	Length
B5	8	#13	10700	B2	79	#10	620	B3	54	#10	1610
				B4	25	#10	610	B1	126	#13	1690
				B6	32	#16	1690				
20.7 m Girder (1 Listed-18 Req'd.) (Interior spans)											
Straight bars				Bent bars							
Mark	No.	Size	Length	Mark	No.	Size	Length	Mark	No.	Size	Length
B5	8	#13	10550	B2	79	#10	620	B3	54	#10	1610
				B4	25	#10	610	B1	126	#13	1690
				B6	32	#16	1690				



BILL OF MATERIAL		
Item	Unit	Quantity
Prestressed concrete beams (K3) End spans (12)	m	252.0
Prestressed concrete beams (K3) Interior spans (18)	m	372.6
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'c = 30 MPa)(per end span beam)	m ³	7.11
Beam concrete (f'c = 35 MPa)(f'c = 30 MPa)(per interior span beam)	m ³	7.01
Approximate mass per 20 700 beam	t	16.3
Approximate mass per 21 000 beam	t	16.5
13 mm Ø Prestressing strand (Gr. 1860 low relaxation)	m	14 271
Epoxy reinforcing steel (Gr 420)	kg	13 939
Elastomeric bearing pads (20 mm x 200 mm x 560 mm)	Each	60
20 mm Dia. Coil tie inserts (NC Thread)	Each	48
20 mm Dia. x 450 mm Threaded coil rods	Each	—
Lifting devices	Each	60
Bearing plates (12 mm x 375 mm x 560 mm)	Each	60



STRAND EXTENSION DETAIL (21.0 m span beams)

STRAND EXTENSION DETAIL (20.7 m span beams)

3				
2				
1	4-18-99	Current release		
NO.	DATE	REVISIONS	BY	APP'D
CITY OF WICHITA				
Br. No. 54-87-19.32(495) F.W.B.S+α. 16+016.230				
K3 PRESTRESSED CONCRETE BEAM DETAILS				
WESTBOUND FRONTAGE ROAD				
Sedgwick Co.				
SHEET NO.	OF	DATE	APP'D	
DESIGNED		DETAILED	QUANTITIES	CADD
DESIGN CK.		DETAIL CK.	QUAN. CK.	CADD CK.

RECORD DRAWING

Plotted By : drp
 Plot File : I:\1997\19362\As-Builts\dgrs\Vol.3\Sh.488-K00T_STD-K3beamfwd.dgn Last Rev: 9-4-07 Br. gdr
 Plot Date : 2-27-2002