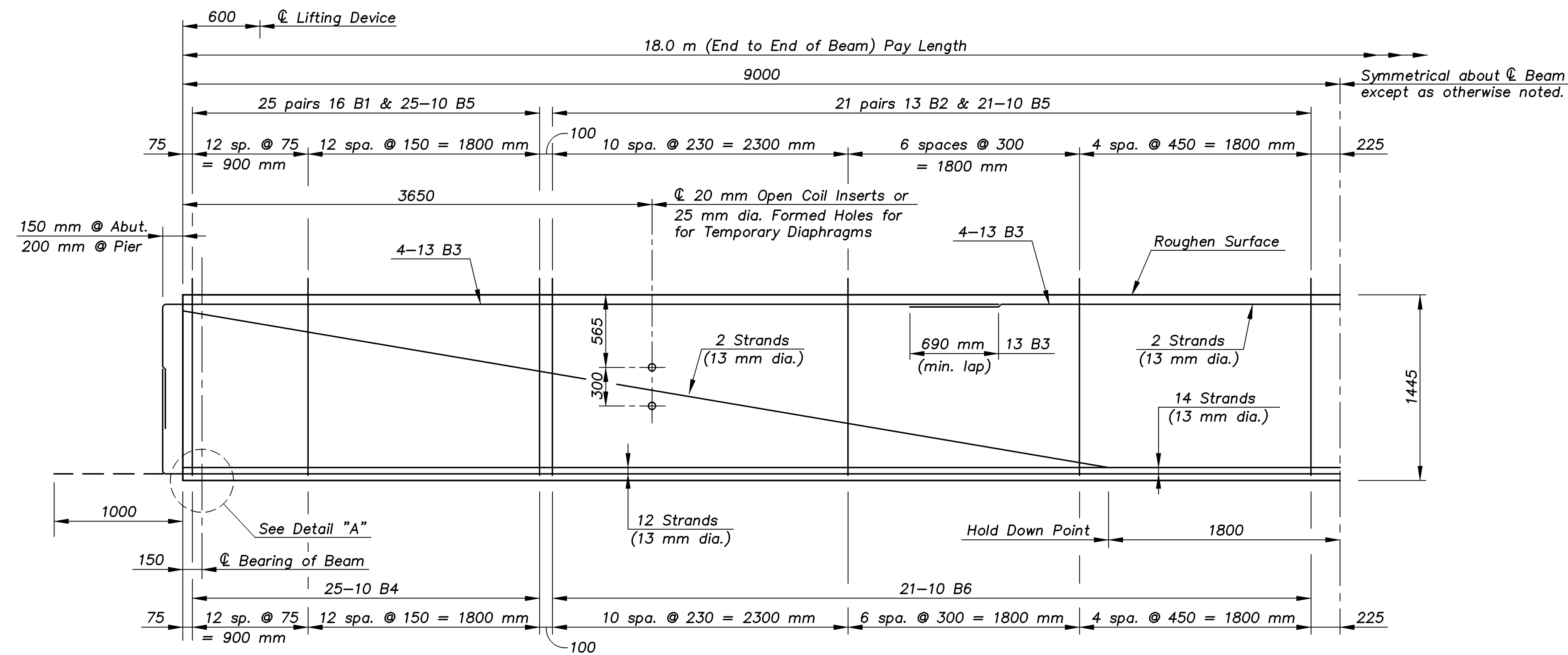


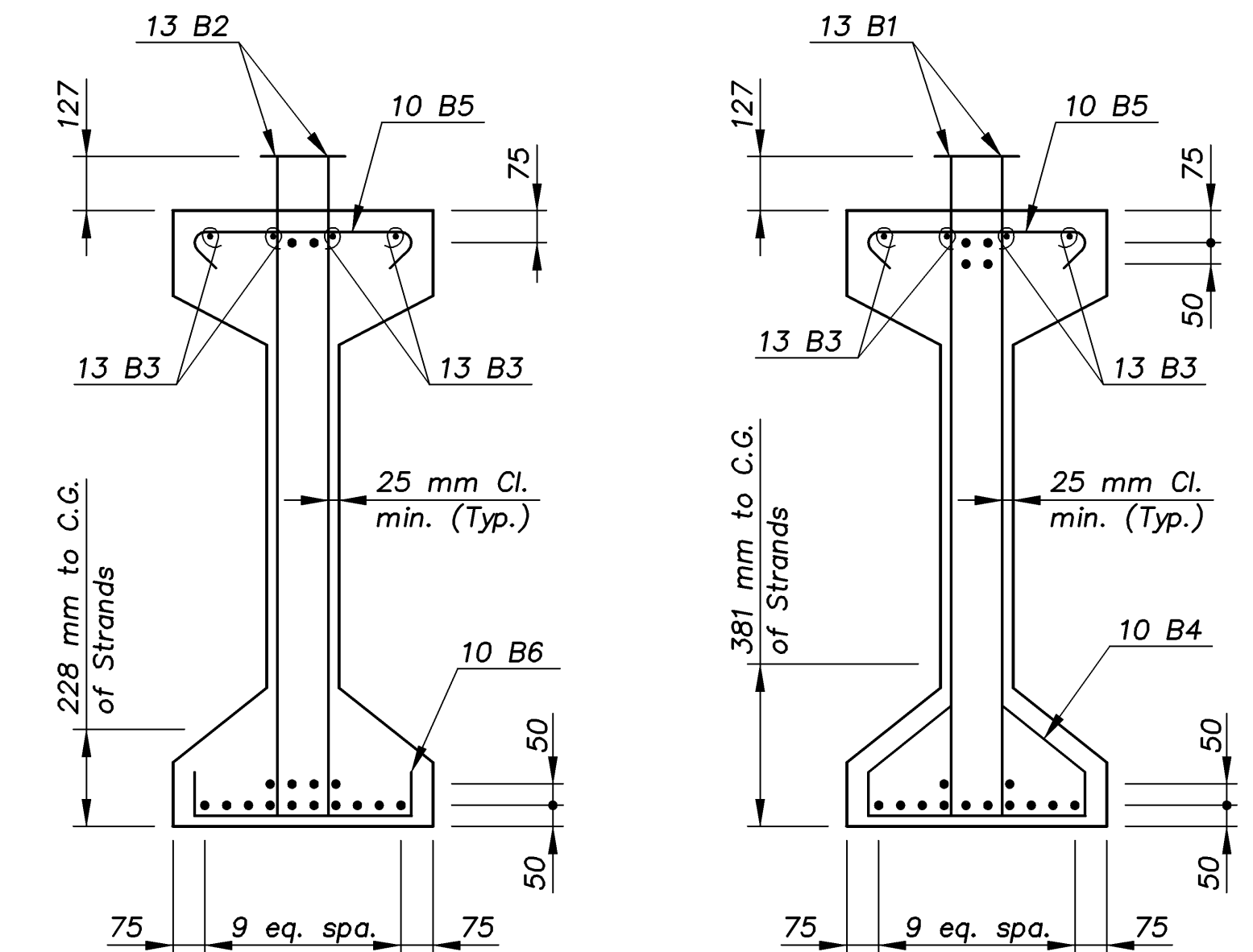
STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS	54-87 K-8258-08	2005	104	223

E.F. INDICATES EACH FACE.
N.F. INDICATES NEAR FACE.
F.F. INDICATES FAR FACE.



TYPICAL BEAM ELEVATION (K4+75 mm)

NOTE: Force per Strand (Vertical Uplift) = 23.38 kN
Total Uplift for 2 Strands = 46.76 kN

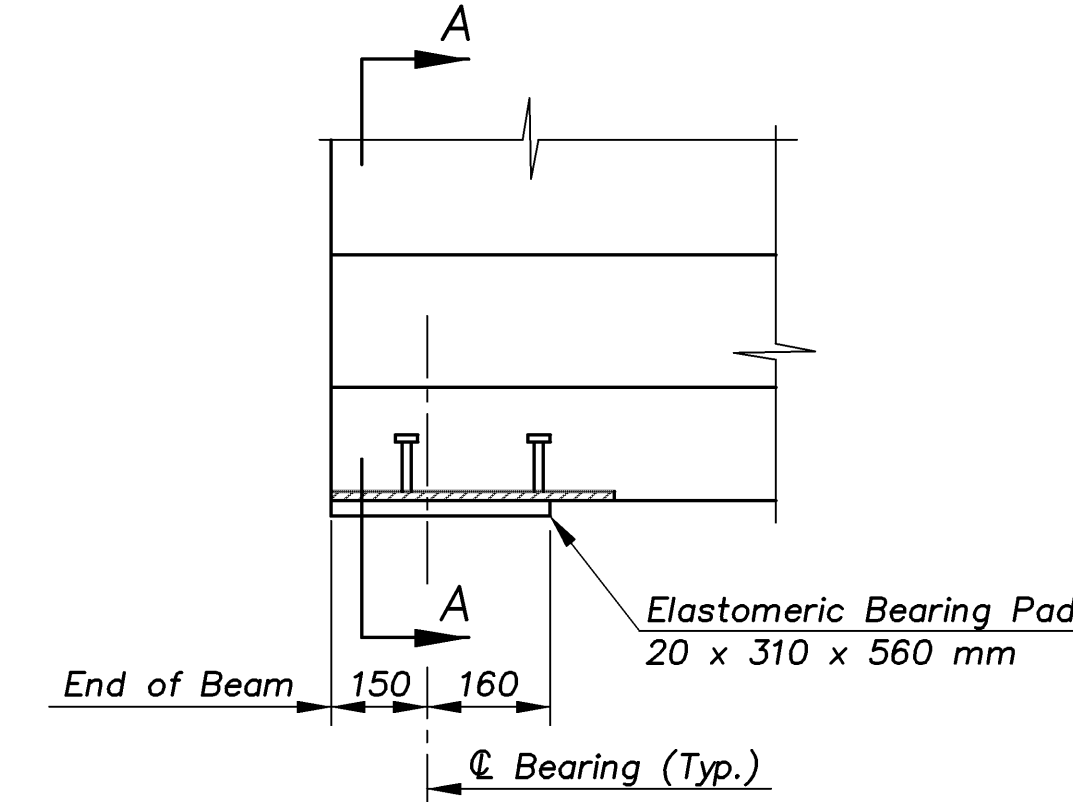
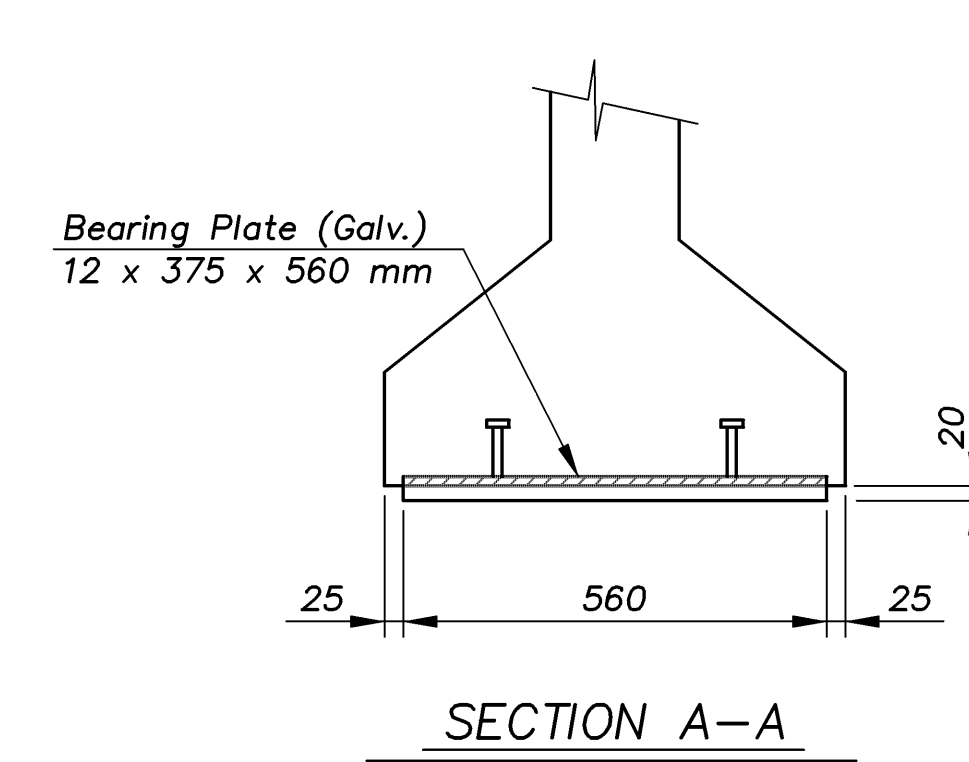


NEAR MID-POINT

AT THE ENDS

BEAM SECTION SHOWING REINFORCEMENT

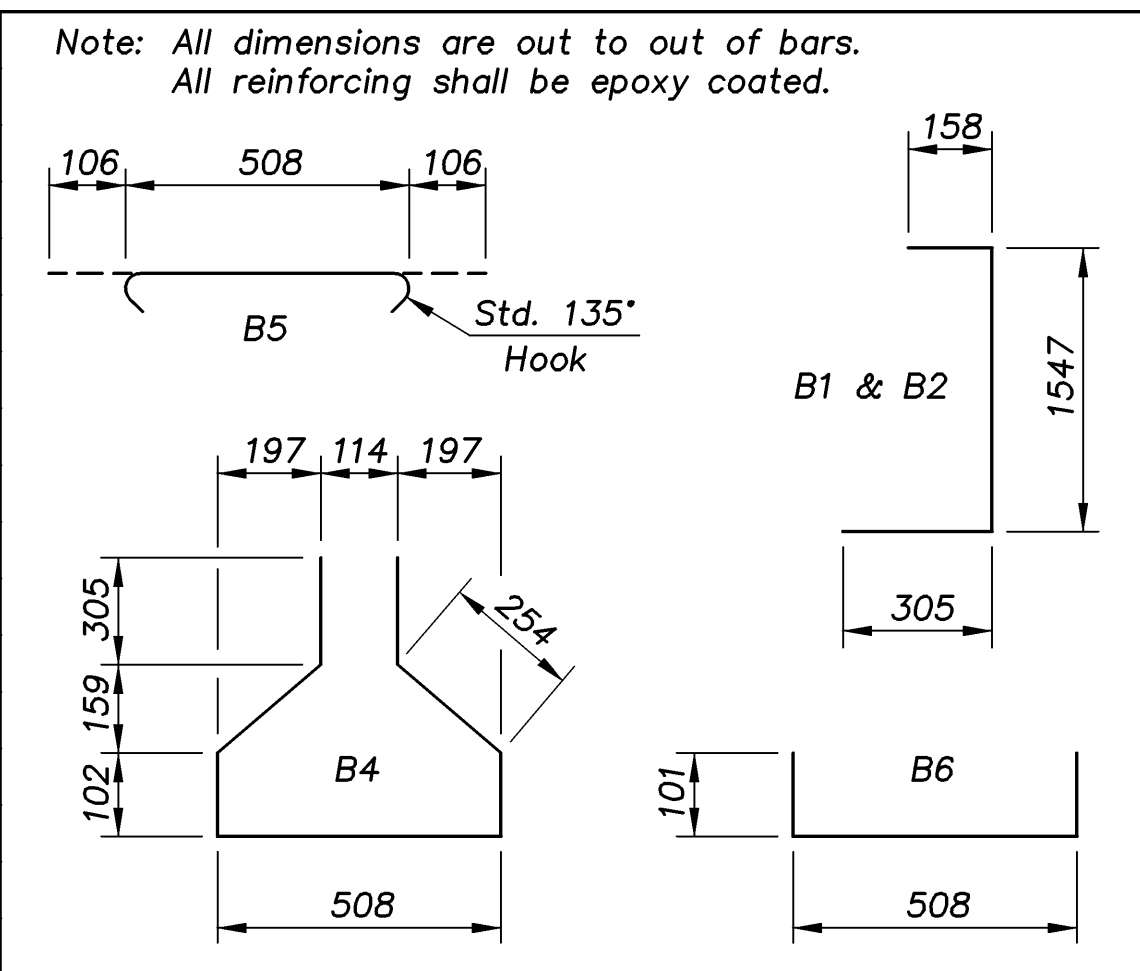
* Denotes strand location.



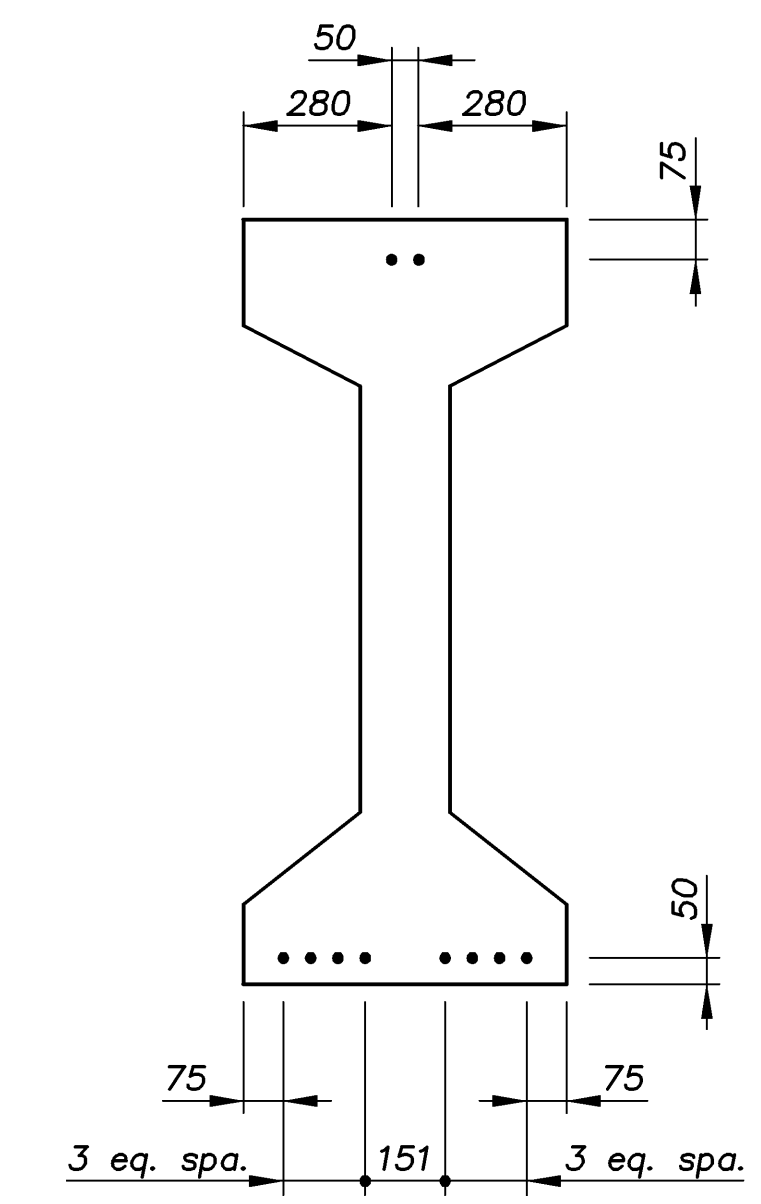
* 4 each exterior beam only.

NOTE: During transportation only, beams may be supported on bearing points a maximum of 1800 mm from the beam ends. The fabricator shall show the proposed support location on the the shop drawings. See General Notes on the "Standard P.C. Beam Details" sheet.

BILL OF REINFORCING STEEL							
18.0 m BEAM (1 Listed-20 Required each Bridge)							
STRAIGHT BARS				BENT BARS			
MARK	SIZE	NO.	LENGTH	MARK	SIZE	NO.	LENGTH
B3	13	12	6460	B1	16	100	2010
				B2	13	84	2010
				B4	10	50	1830
				B5	10	92	720
				B6	10	42	710



BILL OF MATERIAL			
ITEM	UNIT	W.B. Bridge 54-87-31.55(704)	E.B. Bridge 54-87-31.56(705)
18.0 m Prestressed Concrete Beams (K4+75 mm)	m	360.0	360.0
The following quantities are given for information only and shall not be paid for directly but shall be considered subsidiary to the bid item "Prestressed Concrete Beams".			
Beam Concrete ($f'c = 35$ MPa), (per beam)	m^3	8.3	8.3
Approximate weight of beam	kg	20 016	20 016
13 mm nominal diameter Prestressed Strands (1860 MPa low relaxation), (per beam)	m	308.412	308.412
Reinforcing Steel Grade 420 (Epoxy Coated), ($f_y = 420$ MPa), (per beam)	kg	660	660
Elastomeric Bearing Pads (20 x 310 x 560 mm)	Each	40	40
Bearing Plates (12 x 375 x 560 mm)	Each	40	40
20 mm Open Coil Inserts	Each	16 *	16 *
Lifting Devices	Each	40	40



Extend 10 Strands beyond the ends of the Beams as shown. Strands not shown shall be cut flush with the ends of the Beams.

EASTERN/PCB-DETAILS 1:100

KANSAS DEPARTMENT OF TRANSPORTATION

BR. NO. 54-87-31.55(704) W.B. STA. 4+575.138
BR. NO. 54-87-31.56(705) E.B.

18.0 m P.C. BEAM DETAILS

KELLOGG AVENUE OVER EASTERN

Proj. No. 54-87 K-8258-08 SEDGWICK COUNTY

CFS
Cook, Flatt & Strobel
ENGINEERS, P. A.

DESIGNED	R.S.C.	SCALE	Varies
DETAILED	T.R.G.	DATE	
QUANTITIES	T.R.G.	SHEET	26 OF 47