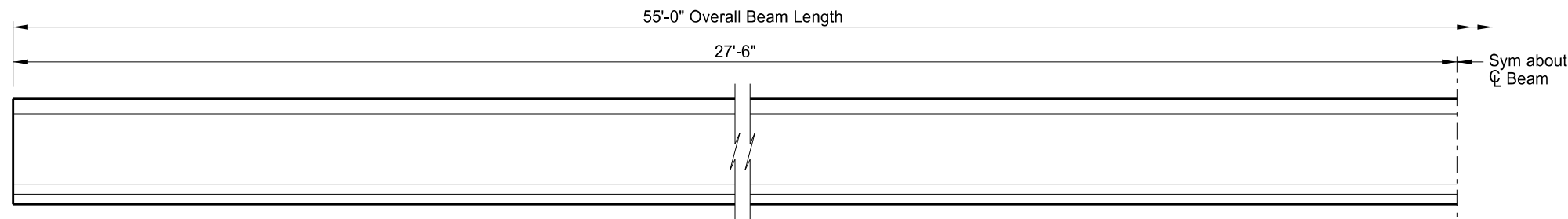
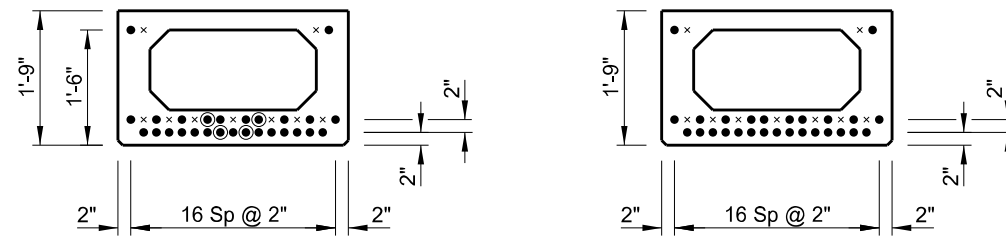


STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	SS-5-085(086)012	170	14

BEAM SECTION DATA			
Beam Weight = 483.3 lbs/ft + 991 lbs			
Beam Length	55	ft	
Total Beam Weight	13.8	tons	
Cross Sectional Area at End	756	in <sup>2</sup>	
Cross Sectional Area at Midspan	449	in <sup>2</sup>	
C.G. from Bottom of Beam at Midspan	9.65	in	
Midspan Moment of Inertia (I)	23,249	in <sup>4</sup>	
Midspan Section Modulus (S <sub>b</sub> )	2,409	in <sup>3</sup>	
MINIMUM CONCRETE COMPRESSIVE STRENGTH			
Detensioning Strength (f' <sub>ci</sub> )	7.0	ksi	
Acceptance Strength (f' <sub>c</sub> )	7.0	ksi	
PRESTRESSING STRAND DATA			
0.6" Diameter Grade 270 Prestressing Strands			
Initial Prestress = 0.75 * f <sub>pu</sub>			
	Number	Y Distance (inches)	
		Midspan	End
Straight Strands	27	3.93	3.93
Draped Strands	0	0.00	0.00
Total Strands	27	3.93	3.93
PRESTRESS LOSSES			
Elastic Shortening Loss	18.00	ksi	
Long Term Losses	26.42	ksi	
Total Losses	44.42	ksi	
PRESTRESS FORCES			
Initial Prestress Force	1,186.4	kips	
Final Prestress Force after Losses	926.2	kips	



BEAM ELEVATION



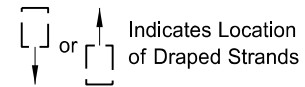
END VIEW

SECTION @ C

PRESTRESSING STRAND LAYOUT

KEY:

- × Vacant Strand Location
- Filled Strand Location (Bonded)
- ⊙ Filled Strand Location (Debonded 4'-0" Each End)



This drawing is preliminary and not for construction or implementation purposes.

SPRING CREEK 4 SOUTH OF JCT US 12  55'-0" BEAM LENGTH PRE-TENSIONED 21" x 36" PRESTRESSED SPREAD BOX BEAM	
DRAWING NO.	85-012.747-14