BEAM NOTES

1. Allow dimensions are cut-to-cut.
2. Place two (2) bars S2 at each end, and then one (1) bar 4K each location as detailed alternating the direction on the ends for each bar uses ELEVATION AT END (OF BEAM).
3. Bar 4K shall be bent prior to the beam leaving the prestressing yard. Bars 4K shall be bent parallel to the ends of the beam.
4. Caution should be used with Bars 4K in the ends of exterior beams to assure the bent portion of the bar is properly oriented so that the bar will be embedded in the diaphragm concrete.
5. Strand N shall be either ASTM A416, Grade 250 or Grade 270, seven-wire strands 3/8" or larger, stressed to 10,000 lbs.
6. Unless otherwise noted, the minimum concrete cover for reinforcing shall be 2".
7. At either end of the Contractor, welded deformed wire fabric may be used in lieu of bars 30S, 4K and 4L, except as noted below for skewed end conditions. The wire sizes and spacing shall be those shown on the Standard Beam Details sheet for these bars. In this version, bars 4K may be fabricated with the omission of the lower outer leg provided that two longitudinal wires are placed (welded) at the lower end of the beam. The first lower wire shall be located 1" from the end of bars 4K and the second wire 2" minimum from the first wire, but no less than 1/4 of the beam depth from mid-depth of the beam. Welded wire fabric shall conform to ASTM A416. When welded deformed wire fabric is used, the end bars S2 shall remain conventional mild reinforcing.
8. For beams with skewed end conditions, welded deformed wire fabric shall not be used in the ends of beams within the limits of bars S2. The end reinforcement, defined as bars 30S, 30S, 4K and 4L placed within the limits of the spacing for bars S2 (approximately 1 1/2 times the overall beam depth) in ELEVATION AT END (OF BEAM), shall be placed parallel to the skewed end of the beam. Bars 4K located beyond the limits of bars S2 shall be placed perpendicular to the longitudinal axis of the beam. Placement of bars 30S and 30S correspond to the end of beam ELEVATION. For bars 30S and 30S, dimension B and the dimension adjusted to fit the width of the bottom flange may be changed without the approval of the State Structures Design Engineer.
9. Bars 30S shall be bent around a 1" diameter pin.
10. For Bearing and Framing Details, see Structures Plans.
11. For Camber and Build-up Details, see Structures Plans.
12. For referenced Dimensions, Angles and Case Numbers see Inverted-T Beam - Table of Beam Variables in Structures Plans.
13. For thickened decks beneath Traffic Railings and Parapets increase Optional Deck Forming Notch to provide the deck thickness shown in the Structures Plans.

INSTRUCTIONS TO DESIGNER:

To limit bursting forces, the maximum prestress force at beam ends from fully bonded strands is limited to 300 kips. No losts shall be applied when calculating the Bonded Prestress Force. The reinforcing in the ends of the beams shall not be modified without the approval of the State Structures Design Engineer.