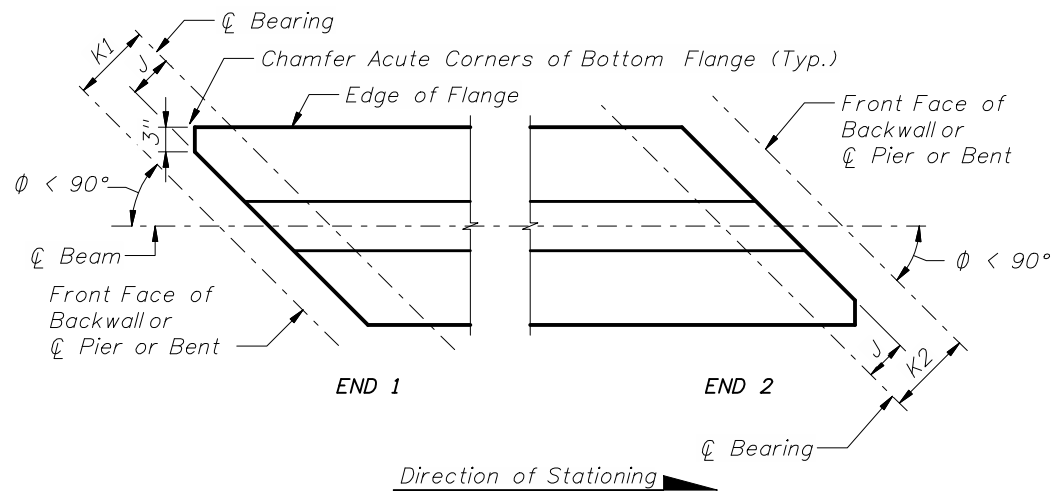
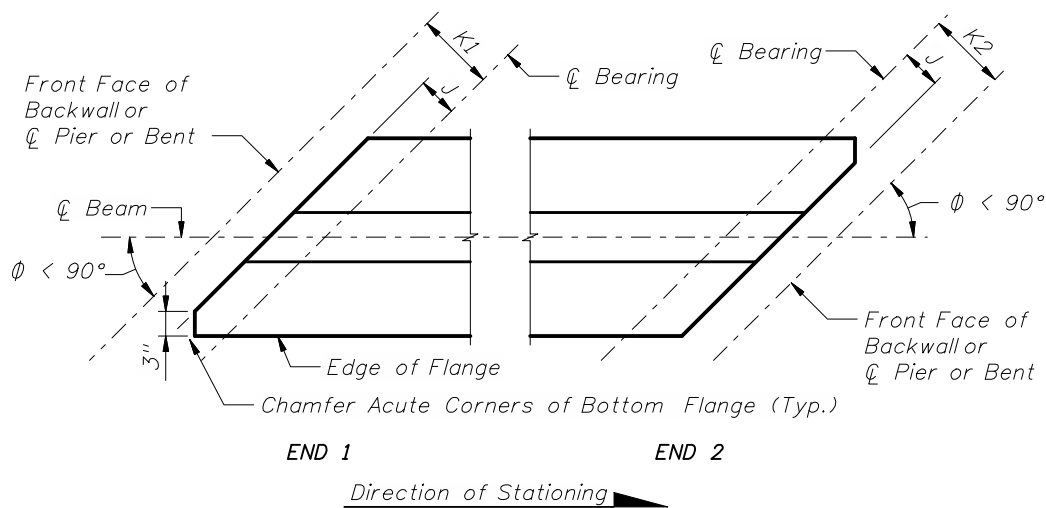


CASE 1



CASE 2



CASE 3

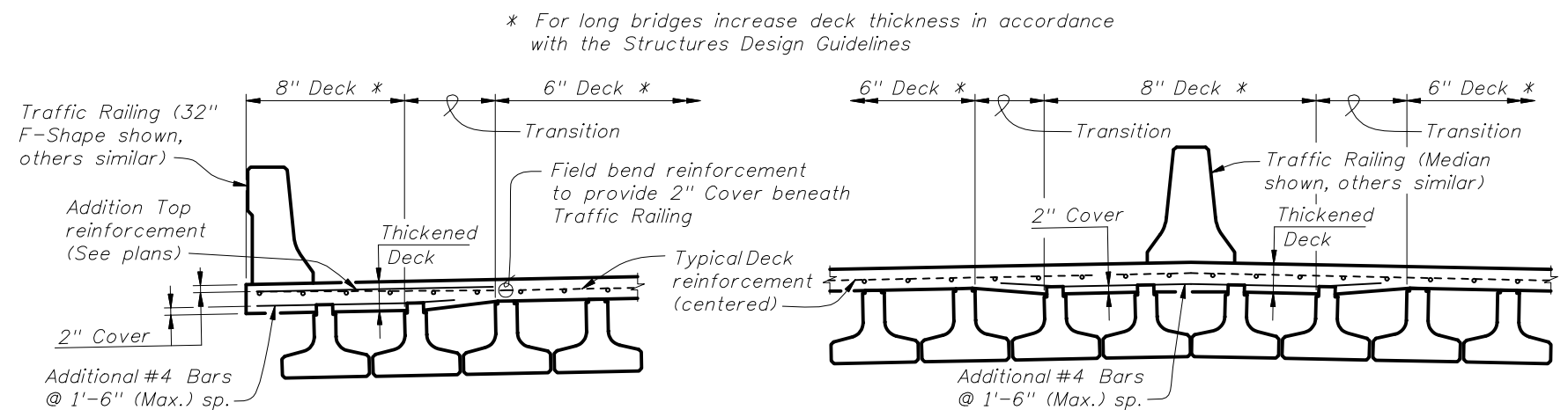
SCHEMATIC PLAN VIEWS AT BEAM ENDS

BEAM NOTES

1. All bar dimensions are out-to-out.
2. Place two (2) Bars 5Z at each end, and then one (1) Bar 4K each location as detailed alternating the direction of the ends for each bar (see "ELEVATION AT END OF BEAM").
3. Bars 4L shall be bent prior to the beam leaving the prestressing yard. Bars 4L shall be bent parallel to the ends of the beams.
4. Caution should be used with Bars 4L 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  $\frac{3}{8}$ "  $\phi$  or larger, stressed to 10,000 lbs.
6. Unless otherwise noted, the minimum concrete cover for reinforcing steel shall be 2".
7. At option of the Contractor, welded deformed wire reinforcement may be used in lieu of Bars 3D, 4K and 4L except as noted below for skewed end conditions. The wire sizes and spacing shall match those shown on the Standard Beam Details sheet for these bars. In this event, Bars 4K may be fabricated with the omission of the lower outstanding leg provided that two longitudinal wires are placed (welded) at the lower end of the bar. 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  $\frac{1}{4}$  of the beam depth from mid-depth of the beam. Welded wire reinforcement shall conform to ASTM A497. When welded deformed wire reinforcement is used, the end Bars 5Z shall remain conventional mild reinforcing.
8. For beams with skewed end conditions, welded deformed wire reinforcement shall not be used in the ends of beams within the limits of Bars 3D. The end reinforcement, defined as Bars 3D1, 3D2, 4K and 5Z placed within the limits of the spacing for Bars 3D (approximately 1.5 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 3D shall be placed perpendicular to the longitudinal axis of the beam. Placement of Bars 3D1 and 3D2 correspond to END 1 and END 2 respectively, as shown in the beam "ELEVATION". For Bars 3D1 and 3D2, Dimension B and the overall length shall be adjusted to fit the width of the bottom flange measured parallel to the skew.
9. Bars 4K and 5Z shall be placed and tied to the fully bonded strands (see "STRAND PATTERN").
10. Bars 3D shall be bent around a 1" diameter pin.
11. For Bearing and Framing Details, see Structures Plans.
12. For Camber and Build-up Details, see Structures Plans.
13. For referenced Dimensions, Angles and Case Numbers see Inverted-T Beam - Table of Beam Variables in Structures Plans.
14. 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 vertical splitting forces in the webs of beams, the maximum prestress force at beam ends from fully bonded strands is limited to 310 Kips. No losses shall be applied when calculating the Bonded Prestress Force. The reinforcing in the ends of the beams must not be modified without the approval of the State Structures Design Engineer.



EXTERIOR TRAFFIC RAILING

INTERIOR TRAFFIC RAILING

SCHEMATIC SECTIONS FOR DECK THICKENING BENEATH TRAFFIC RAILINGS



2010 FDOT Design Standards

TYPICAL INVERTED-T BEAM DETAILS AND NOTES

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