1. Work this Index with the Table of Beam Variables in Structures Plans.
2. All bar bend dimensions are out to out.
3. Concrete cover: 2 inches minimum.
4. Strands N: ≤ 90° Ø minimum, stressed to 10,000 lbs. each.
5. Place one (1) Bar 4K or 5Z at each location. Alternate the direction of the ends for each bar.
6. Tie Bars 4K and 5Z to the fully bonded strands in the bottom or center row (see "STRAND PATTERN" on the Table of Beam Variables sheet in Structures Plans).
7. Place Bars 3D1 in beam END 1, and Bars 3D2 in beam END 2.
8. For beams with vertically beveled end conditions:
   A. Place first row of Bars 3D1, 3D2, 4K, 4Y and 5Z parallel to the end of the beam. Progressively rotate remaining bars within the limits of Bars 5Z until vertical by adjusting the spacing at the top of beam up to a maximum of 1".
   B. For deformed WWR, cut top cross wire and rotate bars as required or reduce end cover at top of the beam to minimum 1".
9. For beams with skewed end conditions:
   A. WWR is not permitted for end reinforcement Bars 3D1, and 3D2 on skewed ends; use bar reinforcement.
   B. Place end reinforcement parallel to the skewed end of the beam. End reinforcement is defined as Bars 3D1, 3D2, 4K, 4Y and 5Z placed within the limits of the spacing for Bars 3D in "ELEVATION AT END OF BEAM".
   C. Beyond the limits of the spacing for Bars 3D, place Bars 4K perpendicular to the longitudinal axis of the beam. For placement see "SKEWED BEAM END DETAILS FOR WIDENING EXISTING BRIDGES" (Sheet 2).
10. Contractor Options:
    A. Deformed WWR may be used in lieu of Bars 3D, 4K, and 5Z as shown on Sheet 4; except at skewed ends (See Note 9).
    B. Bars 3D1 and 3D2 may be fabricated as a two-piece bar with a 1'-0" minimum lap splice of the bottom legs.
    C. For deformed WWR, supplemental transverse #4 bars are permitted to support Pieces K & S under the cross wires on the bottom row of strands or above Strands N.
11. Embedment of Safety Line Anchorage Devices are permitted in the top flange to accommodate fall protection systems. See shop drawings for details and spacing of required anchorage devices.
12. For beams with ends that will not be encased in concrete diaphragms, cut wedges and recess Prestressing Strands at the end of the beam without damaging the surrounding concrete. See "STRAND CUTTING AND PROTECTING DETAIL" on Sheet 2.
13. Holes in the beam web for temporary bracing or shipping devices must be formed prior to casting.
   A. The superstructure environmental classification is slightly or moderately aggressive
   B. Clear cover to adjacent steel reinforcing is 1-0" minimum
   C. Hole inside diameter is 2" maximum
   D. Non-metallic, non-water absorbing forming materials such as PVC, may be left in place permanently.

Details and Notes:
- BEAM NOTES
- SCHEMATIC PLAN VIEWS AT BEAM ENDS
- SCHEMATIC END ELEVATIONS OF BEAMS

Revision:
03/01/18

Description:
AASHTO Type II Beam

FY 2020-21

Standard Plans

Index
450-120

Sheet
1 of 4
Bars 4K spaced perpendicular to end of beam @ 3". Skewed Bars 5Z, placed with Bars 4K *

Bars 4K spaced along @ 3".  Bars 3D1 or 3D2, placed with alternate Bars 4K *

3" Chamfer

Bars 4K (Typ.)

PARTIAL PLAN VIEW (SHOWING TOP FLANGE)
(End 1 Shown, End 2 Similar)
(Bars 5A, 4Y & Strands N not shown for clarity)

* For number of Bars, spacing and placement details see Sheet 3. See Sheet 3 for Conventional Reinforcement, Sheet 4 for WWR.

Bars 4K spaced perpendicular to end of beam @ 3". Skewed Bars 5Z, 3D1 or 3D2 placed with Bars 4K *

Bars 4K spaced along @ 3".  Bars 3D1 or 3D2, placed with alternate Bars 4K *

PARTIAL SECTION THRU WEB (SHOWING BOTTOM FLANGE)
(End 1 Shown, End 2 Similar)
(Bars 4Y & Strands not shown for clarity)

WWR not permitted for Bars 3D1 or 3D2 in this area, for skewed beam ends

Begin WWR Option when applicable, Piece 5-1, see Sheet 4.

TYPICAL SECTION SHOWING CUT STRAND RECESS LIMITS

Epoxy Coating (3/16" minimum thickness) (See Beam Note 12, Sheet 1)

TYPICAL SECTION AFTER PROTECTING