BEAM NOTES

1. All bar dimensions are out-to-out.
2. Please use one (1) Bar 4K or 5K or 57 at each location as shown and also at the end of the beam. The minimum concrete cover for reinforcing steel shall be 2".
3. Bars 4K, 5K, 57, 60, 70, and 80 shall be placed parallel to the ends of the beam.
4. Caution should be used with Bars 4K, 5K, and 57 to minimize the beam portion of the beam in order to place the bars in a manner that will result in a beam with reinforcement at the ends of the beam.
5. Where otherwise noted, the minimum concrete cover for reinforcing steel shall be 2".
6. On all bars except as noted, the minimum concrete cover for reinforcing steel shall be 2".
7. All of the reinforcement welded to the beam shall be placed parallel to the ends of the beam. Where otherwise noted, the minimum concrete cover for reinforcing steel shall be 2".
8. Install Safety Sleeves 1/2"-1" from ends of beam and spaced on 8"-12" (Max.) centers. Shift Bars 4K or 5K locally to allow placement, safety sleeves shall be 1/2" NPS x 9" Sch. 40 PVC pipe with Cap for Type III, IV, V, VI, VII, and VII Beams. 1/2" NPS x 5" Sch. 40 PVC pipe with Cap for Type II Beams.
9. Install clips to allow for placement of reinforcement at the ends of the beam. Safety Sleeves shall be steel or equivalent. The minimum concrete cover for reinforcing steel shall be 2".
10. For beams with skew and conditions, the end reinforcement shall be placed parallel to the ends of the beam. Where otherwise noted, the minimum concrete cover for reinforcing steel shall be 2".
11. The beam is supported on 24"-30" (Max.) centers. The minimum concrete cover for reinforcing steel shall be 2".
12. Welded deformed wire fabric shall not be used for the end reinforcement (Bars 4K, 5K, 57, and 60) where the minimum concrete cover for reinforcing steel shall be 2".
13. In the case of a beam where the ends of the beam are not supported on 24"-30" (Max.) centers, the minimum concrete cover for reinforcing steel shall be 2".
14. All of the reinforcement welded to the beam shall be placed parallel to the ends of the beam. Where otherwise noted, the minimum concrete cover for reinforcing steel shall be 2".
15. The minimum concrete cover for reinforcing steel shall be 2".

INSTRUCTIONS TO DESIGNER:

To limit bursting forces the maximum prestress force at the beam ends from fully bonded strands must be limited to the following:

<table>
<thead>
<tr>
<th>Beam Type</th>
<th>Max. Bonded Prestress Force</th>
</tr>
</thead>
<tbody>
<tr>
<td>A4470 Type III</td>
<td>1100 Kips</td>
</tr>
<tr>
<td>A4470 Type IV</td>
<td>1470 Kips</td>
</tr>
<tr>
<td>A4470 Type V</td>
<td>1610 Kips</td>
</tr>
<tr>
<td>Florida Bul-T</td>
<td>1470 Kips</td>
</tr>
<tr>
<td>Florida Bul-T</td>
<td>1730 Kips</td>
</tr>
</tbody>
</table>

No loss shall be applied when calculating the Bonded Prestress Force.

1. The reinforcing in the ends of the beam must be modified without the approval of the State Structures Design Engineer.

TYPICAL AASHTO AND BUL-B T BEAM DETAILS AND NOTES

SECTION THROUGH BEAM WEB AT INSERT FOR DIAPHRAGM REINFORCING (When Intermediate Diaphragms are Required for Design)