FLORIDA-U 72 BEAM - STANDARD DETAILS

**TYPICAL SECTION**

- **Bars 3D1** lap with Bars 3D2 and 5K as shown (Typ.)
- **1½ Chamfer** (Typ. bottom of top flange only)

**NOTES:**
- **Bars A** are shown as (•)
- Omit these Bars 4A2 only as required when strands are provided at or above their locations (Typ.)

- **Intermediate Diaphragms shall be provided:**
  1. At midspan.
  2. At 30'-0' Max. from midspan when beam length (L) exceeds 80 Ft.

**ELEVATION AT END OF BEAM**

- **End Face** (Typ.)
- **Void Face** (Typ.)
- **2'-0' End Diaphragm** (Typ.)

**Bar Spacing and Location**

- **Bars 4M** (Typ.) tied to Bars 5K, not shown
- **Bars 4F** (Typ.)
- **Bars 3D1** and 3D2 ~ 18 sp. @ 6" sp. with Bars 5K as shown
- **Bars 4C** place 9" ± b11 (Typ.)
- **Bars 5K** as shown (Typ.)

**Bar Locations**

- **Bars 4M** lap with Bars 5L (Symmetrical about ℄ Beam for Sections A-A and B-B)
- **Bars 5K** (Typ.) (See Note 9)
- **Strand N Blockout**

**Beam Variables**

- **Spacing Bars 4M** (In Pairs) 6 sp. @ 3'
- **Spacing Bars 5K** (In Pairs) 31 sp. @ 3" ± b11 (Typ.)
- **Spacing Bars 4F** 2" C (Typ.)

**Design Variables**

- **Dimension L** = Casting Length (Overall Length of Beam along Beam including length increase as required for beam placed on grade and Dim. R to compensate for elastic and time dependent shortening effects)

- **Direction of Stationing**
  - **End 1**
  - **End 2**

**Design Standards**

- **FDOT 2014**
- **REVISION 07/01/12**
- **DESCRIPTION: FDOT 2014 DESIGN STANDARDS**
- **INDEX NO: 20272**
- **SHEET NO: 1 of 3**
**FLORIDA-U 72 BEAM - STANDARD DETAILS**

**FDOT 2014 DESIGN STANDARDS**

**INDEX NO.** 20272  **SHEET NO.** 2 of 3

**DESCRIPTION:**

**REV IS IO N**

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**NO.**

**SHEET NO.**

**INDEX**

**DESCRIPTION:**

End View at End Diaphragm

End View at End Diaphragm

**NOTES:**

1. Drains shall be placed adjacent to each web at each beam end (four drains per beam). Drain Pipe shall be 2" Nominal Pipe Size, Schedule 80 PVC. Provide removable pipe plugs to prevent concrete entrance during beam casting. Plugs to be removed from the outside after casting. Galvanized screen wire shall cover the end of the pipe and bent down around the sides of the pipe, a minimum of 1' and secured prior to casting.

2. Concrete face may be sloped with a maximum 1:24 draft to facilitate formwork removal.

**END VIEW AT END DIAPHRAGM**

**SECTION C-C**

**TOP VIEW OF END DIAPHRAGM**

(Bars 3D1 And 3D2 Not Shown For Clarity)

**TOP VIEW OF SKewed END DIAPHRAGM AND STIRRUP TRANSITION ZONE**

(Bars 3D2 Not Shown For Clarity)
### DESIGN STANDARDS

**CONVENTIONAL REINFORCING STEEL BENDING DIAGRAMS**

**BILL OF REINFORCING STEEL FOR ONE BEAM ONLY**

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<td>4</td>
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</tr>
<tr>
<td>A2</td>
<td>4</td>
<td>14</td>
<td>Dim 1 - 4&quot;</td>
</tr>
<tr>
<td>B</td>
<td>5</td>
<td>12</td>
<td>6'-1&quot;</td>
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<tr>
<td>C</td>
<td>4</td>
<td>28</td>
<td>5'-7&quot;</td>
</tr>
<tr>
<td>D3</td>
<td>3</td>
<td>22B</td>
<td>7'-6&quot;</td>
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<tr>
<td>C2</td>
<td>3</td>
<td>38</td>
<td>4'-6&quot;</td>
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<td>5</td>
<td>24</td>
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<tr>
<td>N</td>
<td>3&quot; Ø Strand</td>
<td>2</td>
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</table>

### NOTES:

1. Drains shall be placed adjacent to each web at each intermediate diaphragm (two drains per intermediate diaphragm). Drain pipe shall be Schedule 80 PVC. Provide removable pipe plugs to prevent concrete entrance during beam casting. Plugs to be removed from the inside after casting.

2. Concrete face may be sloped with a maximum 1:24 draft to facilitate formwork removal.

3. Intermediate diaphragms must be cast and concrete release strength obtained prior to removing beam from casting bed.