JUNCTION SLAB NOTES:
1. When a 42" F-Shape Traffic Railing is used with precast copings, provide Bars 3D @ 8" spacing between Bars 5C within 6'-0" of Expansion Joints.
2. Construct the Junction Slab level transversely and expansion joints plumb; do not construct the junction slab or C-I-P coping perpendicular to the roadway surface. Slip forming of Coping and/or junction slab is not permitted.
3. Provide Class II concrete for slightly aggressive environments or Class IV for moderate or extremely aggressive environments.
4. Dowel Load Transfer Devices will be ASTM A36 smooth round bar and hot-dip galvanized in accordance with Specification Section 962. Install Dowel Load Transfer Devices in accordance with Specification Section 932.
5. Provide and install Preformed Expansion Joint Filler in accordance with Specification Section 932.
6. Provide and install Preformed Expansion Joint Filler in accordance with Specification Section 932.
7. Construct 1/2 V-Groove Joints in junction slabs and C-I-P copings plumb and perpendicular to the Gutter Line. Provide at 90'-0" maximum intervals as shown. Provide 3" x 3" Mortar plugs in open joints at the base of Traffic railings to contain runoff.
8. Provide and install Preformed Expansion Joint Filler in accordance with Specification Section 932.
9. Construct 1/2 V-Groove Spacing in junction slabs and C-I-P copings plumb and perpendicular to the Gutter Line. Provide at 90'-0" maximum intervals as shown. Provide 3" x 3" Mortar plugs in open joints at the base of Traffic railings to contain runoff.
10. On MSE Walls provide, Dowel Bars 4D and extend to 7'-3" above the top of retaining wall panel. Field cut as necessary to maintain 2" minimum cover to the top of the buildup concrete. See Wall Company Drawings for number and spacing of Dowel Bars 4D.
11. Work this Index with the following:
   - Index No. 425 - Traffic Railing - (42" F-Shape)
   - Index No. 420 - Traffic Railing - (32" F-Shape)
12. The following Indexes contain details of the intersection of the retaining wall at approach slabs:
   - Index No. 20910 - Approach Slabs (Rigid Pavement Approaches)
   - Index No. 20900 - Approach Slabs (Flexible Pavement Approaches)

PARTIAL PLAN VIEW FOR F-SHAPE TRAFFIC RAILING
(Precast Coping Shown, C-I-P Coping Similar) (Traffic Railing not Shown for Clarity)

PARTIAL ELEVATION VIEW
(Precast Coping and Junction Slab Reinforcing not Shown for Clarity)
(Precast Coping Shown, C-I-P Coping Similar)

F-SHAPE TRAFFIC RAILINGS

DESIGN STANDARDS

WALL COPING WITH TRAFFIC RAILING/JUNCTION SLAB

INDEX NO. 6110
SHEET NO. 1 of 6
# ESTIMATED QUANTITIES FOR PRECAST COPING

<table>
<thead>
<tr>
<th>ITEM</th>
<th>UNIT</th>
<th>QUANTITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Concrete (Precast Coping Only)</td>
<td>CY/LF</td>
<td>0.083</td>
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<tr>
<td>Concrete (Precast Barrier &amp; Coping)</td>
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<tr>
<td>Concrete (C-I-P Junction Slab)</td>
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<td>0.185</td>
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<tr>
<td>Reinforcing Steel (Precast Coping &amp; Traffic Railing)</td>
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<td>Reinforcing Steel (C-I-P Junction Slab)</td>
<td>LB/LF</td>
<td>12.52</td>
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<tr>
<td>Additional Rein @ Expansion Joints (Dowels)</td>
<td>LB</td>
<td>21.36</td>
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(The above concrete quantities are based on a max. superelevation of 6.25% and a 32" F-Shape Traffic Railing.)

---

**NOTES:**

1. Match Cross Slope of Travel Lane or Shoulder.  
2. The 32" dimension corresponds to a maximum superelevation of 6.25%. For steeper superelevations increase this dimension to match roadway superelevation.  
3. For Rigid Pavement (Concrete), Junction Slab may be thickened to match finish grade.  
4. Minimum length of Junction Slab between expansion joints is 30'-0".  
5. At the Contractor's option, mechanical couplers may be used to splice reinforcing. Complete details, including reinforcement lengths are required in the Shop Drawings. Also provide mechanical couplers in accordance with Specification Section 415. Mechanical couplers shall develop 125% of the bar yield strength.  
6. Contractor to maintain stability of precast coping/traffic railing prior to junction slab completion. In the Shop Drawings, show reinforcement for optional extension required for stability, shipping and handling. Maintain 2" minimum concrete cover.  
7. When the air gap between the precast coping extension and retaining wall exceeds 2", fill gap with full depth Expanded Polystyrene to provide a maximum 2" air gap.  
8. Angle varies - 0° min., 20° max.

---

**TYPICAL SECTION THRU PRECAST* 32" F-SHAPE TRAFFIC RAILING AND COPING WITH C-I-P JUNCTION SLAB**

* C-I-P Traffic Railing and Coping Sections using precast dimensions and reinforcement are permitted at End Sections. Drainage Inlets and Light Pole Pedestals if slip forming is not used.

**NOTES:**

1. Match Cross Slope of Travel Lane or Shoulder.  
2. The 32" dimension corresponds to a maximum superelevation of 6.25%. For steeper superelevations increase this dimension to match roadway superelevation.  
3. For Rigid Pavement (Concrete), Junction Slab may be thickened to match finish grade.  
4. Minimum length of Junction Slab between expansion joints is 30'-0".  
5. At the Contractor's option, mechanical couplers may be used to splice reinforcing. Complete details, including reinforcement lengths are required in the Shop Drawings. Also provide mechanical couplers in accordance with Specification Section 415. Mechanical couplers shall develop 125% of the bar yield strength.  
6. Contractor to maintain stability of precast coping/traffic railing prior to junction slab completion. In the Shop Drawings, show reinforcement for optional extension required for stability, shipping and handling. Maintain 2" minimum concrete cover.  
7. When the air gap between the precast coping extension and retaining wall exceeds 2", fill gap with full depth Expanded Polystyrene to provide a maximum 2" air gap.  
8. Angle varies - 0° min., 20° max.
**REINFORCING STEEL BILL OF MATERIALS**

**BILL OF REINFORCING STEEL**

<table>
<thead>
<tr>
<th>MARK</th>
<th>SIZE</th>
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<tbody>
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<td>A</td>
<td>4</td>
<td>5'7&quot;</td>
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<tr>
<td>B1</td>
<td>5</td>
<td>11'-6&quot;</td>
</tr>
<tr>
<td>B2</td>
<td>5</td>
<td>AS REG.</td>
</tr>
<tr>
<td>C</td>
<td>5</td>
<td>6'-8&quot;</td>
</tr>
<tr>
<td>D</td>
<td>5</td>
<td>4'-8&quot;</td>
</tr>
<tr>
<td>L</td>
<td>4</td>
<td>4'-8&quot;</td>
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<tr>
<td>N</td>
<td>4</td>
<td>2'-6&quot;</td>
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<tr>
<td>P</td>
<td>5</td>
<td>9'-6&quot;</td>
</tr>
<tr>
<td>S</td>
<td>5</td>
<td>11'-6&quot;</td>
</tr>
<tr>
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<td>S5</td>
<td>5</td>
<td>N/A</td>
</tr>
<tr>
<td>V2</td>
<td>5</td>
<td>9'-10&quot;</td>
</tr>
<tr>
<td>V3</td>
<td>5</td>
<td>9'-10&quot;</td>
</tr>
</tbody>
</table>

**Auto Fill Bar Dimensions**: Out to out.

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**NOTES**

1. Match Cross Slope of Travel Lane or Shoulder.
2. The 3/8" dimension corresponds to a maximum super-elevation of 6.25%. For steeper super-elevations, increase this dimension to match roadway super-elevation.
3. For Rapid Pavement (Concrete), Junction Slab may be thickened to match finish grade.
4. Minimum length of Junction Slab between expansion joints is 30'-0" for 32" F-Shape or 60'-0" for 42" F-Shape.
5. See Index No. 403-4.425 for additional Traffic Railing Details.
6. Contractor to maintain stability of precast coping prior to junction slab completion. In the shop drawings, show reinforcement for transfer devices at expansion joints (Typ).
7. When the air gap between the precast coping extension and retaining wall exceeds 2", fill gap with full depth Expanded Polystyrene to provide a maximum 1/2" air gap.
8. Angle varies - 0' min, 20' max.

---

**TYPICAL SECTION THRU C-I-P TRAFFIC RAILING WITH C-I-P JUNCTION SLAB AND C-I-P COPING (PRECAST COPING SIMILAR WITH C-I-P BUIIDUP)**

**ESTIMATED QUANTITIES FOR C-I-P COPING**

<table>
<thead>
<tr>
<th>ITEM</th>
<th>UNIT</th>
<th>QUANTITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Concrete (Traffic railing not included)</td>
<td>CY/LF</td>
<td>0.266</td>
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<tr>
<td>Reinforcing Steel (Typical) excluding Bars S8 and S5 (Typ)</td>
<td>LB/LF</td>
<td>30.89</td>
</tr>
<tr>
<td>Additional Rein. @ Expansion Joint (Dowels)</td>
<td>LB/LF</td>
<td>21.15</td>
</tr>
</tbody>
</table>

(All these concrete quantities are based on a max. super-elevation of 6.25%, beneath a 32" F-Shape Traffic Railing on an MSE Wall.)
CORRAL SHAPE TRAFFIC RAILINGS

NOTES:
1. See Sheets 2 & 3 for Junction Slab and additional Coping details.
3. Actual width varies depending on type of Retaining Wall used.
4. See Index No. 424 for Traffic Railing details and Bars 7P1, 4P5, 4S3 & 4V1. Bars 5S2 and 5U are not required in Retaining Wall Coping.

Gutter Line
Index No. 424 Traffic Railing - (Corral Shape)
Bars 7P1 (See Note 4)
Bars 4P5 (See Note 4)
Bars 4S3
Bars 4V1 (See Note 4)
Bars 5S2 (Typ.)
Bars 5B2 (Typ.)
See Sheet 2 or 3 for Junction Slab and C.I.P. Coping Details

Coping
1'-2"
6" Embed.

SECTION A-A
(TYPICAL SECTION C.I.P. COPING WITHOUT CURB)
(Precast Coping shown, C.I.P. Coping similar)

C.I.P. Coping Details
for Junction Slab and C.I.P. Coping Details
See Sheet 3

SECTION C-C
(TYPICAL SECTION TRANSITION COPING)
(Precast Coping shown, C.I.P. Coping similar)

SECTION B-B
(TYPICAL SECTION WITH CURB)
(Precast Coping shown, C.I.P. Coping similar)

CURB JOINT SEALANT DETAIL

Top of Curb
Low Modulus Silicone Sealant (Type A)

% Preformed Expansion Joint Filler (See Detail "A" Sheet 2)
1'-2"
6" Precast or C.I.P. Curb
6" Curb
Curb 4PS (See Note 4)
Bars 4V1 (See Note 4)
Bars 5B2 (Typ.)
Bars 5S2 (Typ.)
See Sheet 2 or 3 for Junction Slab and Coping Details

End View D-D
(TYPICAL SECTION TRANSITION COPING)
(Precast Coping shown, C.I.P. Coping similar)

NOTES:
1. See Sheets 2 & 3 for Junction Slab and additional Coping details.
3. Actual width varies depending on type of Retaining Wall used.
4. See Index No. 424 for Traffic Railing details and Bars 7P1, 4P5, 4S3 & 4V1. Bars 5S2 and 5U are not required in Retaining Wall Coping.

Gutter Line
Index No. 424 Traffic Railing - (Corral Shape)
Bars 7P1 (See Note 4)
Bars 4P5 (See Note 4)
Bars 4S3
Bars 4V1 (See Note 4)
Bars 5S2 (Typ.)
Bars 5B2 (Typ.)
See Sheet 2 or 3 for Junction Slab and C.I.P. Coping Details

C.I.P. ONLY
Bars 4A
Bars 5C
Bars 7P1 (See Note 4)
See Sheet 2 or 3 for Junction Slab and Coping Details

WALL COPING WITH TRAFFIC RAILING/JUNCTION SLAB
FDOT 2014
DESIGN STANDARDS
INDEX NO. 6110
SHEET NO. 6 of 6

LAST REVISION
01/01/12
DESCRIPTION:
PRECAST COPING VALUES

REVISION

PRECAST COPING VALUES

PRECAST COPING VALUES

PRECAST COPING VALUES

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