TYPICAL SECTION AT LIGHT POLE PILASTER FOR

APPROACH SLAB OR BRIDGE DECK THICKNESS LESS THAN 1'-1/4".

PLAN VIEW

(Anchor Plate not shown for clarity)

ELEVATION VIEW
(Bars 4G not shown for clarity)

2010 FDOT Design Standards
Revision 2000
01/01/09
1 of 2

TYPICAL SECTION AT LIGHT POLE PILASTER FOR
APPROACH SLAB OR BRIDGE DECK THICKNESS 1'-1/4" OR GREATER

CROSS REFERENCE: For Detail '4', Anchor Plate Detail and Light Pole Pilaster Notes, see Sheet 2.

NOTE: Anchor Bolt, Nuts, Washers and Anchor Plate are dashed for clarity.
CONVENTIONAL REINFORCING STEEL BENDING DIAGRAMS

REINFORCING STEEL NOTES:

a. When Plaster is attached to Pedestrian/Bicycle Railings – Index No. 820 and the Bridge Deck or Approach Slab thickness is less than 2-1/2", Bars 4F2 shall have leg length and bar length shown in parentheses.

b. The number of bars shown in parentheses is for Bars 4F2 when Plaster is attached to Pedestrian/Bicycle Railings – Index No. 820, and the Bridge Deck or Approach Slab thickness is less than 2-1/2".

c. Lap Splices for Bars 4F1, 4F2, 4F3, 4F4 & 4F5 shall have a minimum of 1'-4". Lap Splices for Bars 4F2 & 4F3 shall have minimum of 1'-8".

d. All other dimensions in the bending diagrams are out of scale.

INSTRUCTIONS TO DESIGNER:

In order to minimize vibration of Light Poles due to traffic, locate plasters near substructure supports.

Locate & Plaster minimum 3'-10" away from & Traffic Railings Open Joint and edge of End Belt Wingwall.

Design of the additional bridge deck reinforcement is based on the minimum transverse top slab reinforcement required by Structural Design Guidelines.

LIGHT POLE PILASTER NOTES

1. Concrete and Reinforcing Steel required for the construction of the Plaster shall meet the same requirements as the Traffic Railings or Pedestrian/Bicycle Railings. The Plaster is attached to. Grout shall comply with Specification Section 936.

2. Light Pole Plaster may be used with the following:
   - Index No. 420 – Traffic Railings (32" F Shape),
   - Index No. 422 – Traffic Railings (12" Vertical Shape),
   - Index No. 423 – Traffic Railings (12" Vertical Shape),
   - Index No. 424 – Traffic Railings (Corrals Shape),
   - Index No. 425 – Traffic Railings (42" F Shape),
   - Index No. 820 – Pedestrian/Bicycle Railings,
   - Index No. 821 – Aluminum Pedestrian/Bicycle Railings for Traffic Railings (32" F Shape), or
   - Index No. 5120 – Traffic Railings (Guard Barrier Bridge).

3. The Plaster and Deck are designed to resist the following Working Loads from the Light Pole applied at the top of the Plaster:
   - Axial/Dead Load = 1,560 kip
   - Wind Load Moment about Transverse Axis = 40.60 kip-ft
   - Wind Load Moment about Longitudinal Axis = 28.30 kip-ft
   - Decked Moment about Longitudinal Axis = 1,695 kip-ft
   - Maximum Shear = 1,850 kip
   - Torsion about Pole Axis = 3,560 kip-ft

4. Materials:
   - Anchor Bolts: ASTM F1554 Grade 55
   - Steel: ASTM A563 Grade A Heavy Hex.
   - Washers: ASTM F436 Type 1.
   - All nuts, bolts and washers shall be galvanized by ASTM F239.

5. For conduit, pull box, expansion/deflection fitting and adjacent reinforcing steel details, see Utility Conduct Detail Sheets.

6. Anchor Bolts must be installed plumb.

7. PAYMENT: The cost of Anchor Bolts, nuts, washers and anchor plates shall be included in the Bid Price for Light Poles. The cost of all labor, concrete and reinforcing steel required for the construction of the plasters, guard plates, pull boxes, and miscellaneous hardware required for the completion of the electrical system shall be included in the Bid Price for Traffic Railings or Pedestrian/Bicycle Railings the Plaster is attached to.

BILL OF REINFORCING STEEL

<table>
<thead>
<tr>
<th>MARK</th>
<th>SIZE</th>
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<th>LENGTH</th>
<th>NOTES</th>
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<tbody>
<tr>
<td>F1</td>
<td>4</td>
<td>16</td>
<td>5'-6&quot;</td>
<td>c</td>
</tr>
<tr>
<td>F2</td>
<td>4</td>
<td>4</td>
<td>4'-8&quot;</td>
<td>c</td>
</tr>
<tr>
<td>F3</td>
<td>4</td>
<td>4</td>
<td>4'-2&quot;</td>
<td>(1-3/16&quot;)</td>
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<td>F4</td>
<td>4</td>
<td>10</td>
<td>8'-5&quot;</td>
<td>b, c</td>
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<tr>
<td>F5</td>
<td>4</td>
<td>4</td>
<td>7'-1&quot;</td>
<td>c</td>
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<tr>
<td>G</td>
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</tr>
<tr>
<td>M</td>
<td>4</td>
<td>2</td>
<td>10'-8&quot;</td>
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ESTIMATED LIGHT POLE PILASTER QUANTITIES PER LIGHT POLE PILASTER

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<tr>
<th>ITEM</th>
<th>UNIT</th>
<th>QUANTITY</th>
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<tr>
<td>Concrete for Plaster Thickness</td>
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<tr>
<td>Reinforcing Steel</td>
<td>t</td>
<td>244.16 (231.16)</td>
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(The Reinforcing Steel quantity shown in parentheses is for a Plaster attached to Pedestrian/Bicycle Railings – Index No. 820 with Bridge Deck or Approach Slab stronger than 2-1/2")