GENERAL NOTES:

1. Poles are designed to support the following:
   A. Luminaire Effective Projected Area (LEPA): 155 SF
   B. Weight: 75 lb.

2. Shop Drawings: This Index is considered fully detailed, only submit shop drawings for minor modifications not included in the Plans.

3. Materials:
   A. Pole, Pole Connection Extrusions and Arm Extrusions: ASTM B221, Alloy 6063-T6 or Alloy 6061-T6
   B. Bars, Rods, Studs and Backer Ring: ASTM B221, Alloy 6063-T6
   C. Caps and Covers: ASTM B20, Alloy 319-F
   D. Steel Bearing Plate: ASTM A709 or ASTM A36 Grade 36
   E. Aluminum Weld Material: ER 4043
   F. Transformer and Transformer Base Materials: ASTM B26 or ASTM B108, Alloy 357-T6
   G. Bolts, Nuts and Washers: ASTM F593, Grade A35, Type 1
   H. Nuts: ASTM F593 Grade A35, Type 1
   I. Stainless Steel Fasteners: ASTM F593, Grade A35, Type 1
   J. Identification Tag: (Submit details for approval.)

4. Fabrication:
   A. Weld Arm and Pole (Alloy 6063) in the T4 temper using 4043 filler. Age the Arm and Pole artificially to the T6 temper after welding.
   B. Median Barrier Mounted Light Pole Taper: Taper as required to provide a 6" O.D. round top with an 11" x 7" O.D. oblong base. Portions of the pole near the base shoe and at the arm connections may be held constant at 10" and 6" respectively to simplify fabrication.
   C. Roadway Light Pole Taper: Taper as required to provide a round top O.D. of 6" and a base O.D. of 10". Portions of the pole near the base shoe and at the arm connections may be held constant at 10" and 6" respectively to simplify fabrication.
   D. Median Barrier Mounted Light Pole Taper: Taper as required to provide a 6" O.D. round top with an 11" x 7" O.D. oblong base. Portions of the pole near the base and at the arm connections may be held constant at 11" x 7" oblong and 6" round respectively to simplify fabrication.
   E. Median Barrier Mounted Light Pole Taper: Taper as required to provide a 6" O.D. round top with an 11" x 7" O.D. oblong base. Portions of the pole near the base and at the arm connections may be held constant at 11" x 7" oblong and 6" round respectively to simplify fabrication.
   F. Transformer and Frangible Base Materials: ASTM B26 or ASTM B108, Alloy 357-T6
   G. Bolts, Nuts and Washers: ASTM F593, Grade A35, Type 1
   H. Nuts: ASTM F593 Grade A35, Type 1
   I. Stainless Steel Fasteners: ASTM F593, Grade A35, Type 1
   J. Identification Tag: (Submit details for approval.)

5. Coatings/Finish:
   A. Pole and Arm Finish: 50 grit satin rubbed.
   B. Galvanize Steel Bolts, Screws, Nuts and Washers: ASTM A123
   C. Hot Dip Galvanize EJB and other steel items including poles and plate washers: ASTM A123

6. Construction:
   A. Foundation: Specification 635, except payment for the foundation is included in the cost of the pole.
   B. Frangible Base, Base Shoe, and Clamp:
      a. Certify that the Clamp, Frangible Transformer Base, and Base Shoe Design are capable of providing the required 2900 psi.
      b. Certify that the Base conforms to the current FHWA required AASHTO Frangibility Requirements, tested under NCHRP Report 350 Guidelines (e.g. Akron Foundry T81-1/7).
      c. Do not erect pole without clamp/bracket attached.

7. Embedded Junction Box (EJB): Install EJBs per Note 4 and in accordance with Specification 635, as shown on the following Sheets.

8. Wind Speed by County:
   - 120 MPH
   - 140 MPH
   - 160 MPH
     Brevard, Broward, Charlotte, Collier, Escambia, Indian River, Lee, Martin, Miami-Dade, Monroe, Palm Beach, Sarasota and St. Lucie Counties.

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STANDARD ALUMINUM LIGHTING
INDEX 715-002

REVISION 12/15/18

DESCRIPTION:

FY 2019-20

STANDARD PLANS

1 of 8
At the pole connections, provide arm tube extrusions with dimensions as shown, uniformly transition elliptical section to a cylindrical section at the arm connection.

The fabricator may substitute elliptical cross sections other than those tabulated, provided the section properties about the vertical axis and the area of the section equal or exceed that of the required section, and provide minimum wall thickness of 3/8 nominal and within the Aluminum Association tolerances.

The outside diameter about the minor axis should be held at 25/8" nominal and within the Association tolerances. The outside diameter about the minor axis should be held at 21/8" nominal and within the Association tolerances.
ARM-POLE TABLE

<table>
<thead>
<tr>
<th>Wind Speed (mph)</th>
<th>120</th>
<th>140</th>
<th>160</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arm Lengths (ft)</td>
<td>8, 10, 12, 15</td>
<td>8, 10, 12</td>
<td>15</td>
</tr>
</tbody>
</table>

- **120 mph**: 8, 10, 12, 15 ft
- **140 mph**: 8, 10, 12 ft
- **160 mph**: 15 ft

**Foundation Notes**:
- Depths shown are for slopes flatter than 1:4; for slopes 1:2 or flatter, and 2'-6" to foundation depths shown.
- Foundation Tie Bars: #4 Tie Bars @ 12" centers (max.) or #10 (or #12) spiral @ 6" pitch, 3 flat turns top and 1 flat turn bottom.

**POLE TABLE**

<table>
<thead>
<tr>
<th>Pole Wall Thickness</th>
<th>Top of Base Shoe Weld</th>
<th>Inside of Base Shoe Weld</th>
</tr>
</thead>
<tbody>
<tr>
<td>P1</td>
<td>0.126</td>
<td>0.16</td>
</tr>
<tr>
<td>P2</td>
<td>0.250</td>
<td>0.28</td>
</tr>
<tr>
<td>P3</td>
<td>0.313</td>
<td>0.35</td>
</tr>
</tbody>
</table>

**POLE NOTES**:
- Pole wall thicknesses shown are nominal and must be within the Aluminum Association tolerances.
- Thicker walls are permitted and tapered walls may be used in accordance with the minimum Aluminum Association thicknesses.

**TOP MOUNT POLE TABLE**

<table>
<thead>
<tr>
<th>Pole</th>
<th>Pole Wall Thickness</th>
<th>Top of Base Shoe Weld</th>
<th>Inside of Base Shoe Weld</th>
</tr>
</thead>
<tbody>
<tr>
<td>P1</td>
<td>0.126</td>
<td>0.16</td>
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<td>P2</td>
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</tr>
<tr>
<td>P3</td>
<td>0.313</td>
<td>0.35</td>
<td>0.35</td>
</tr>
</tbody>
</table>

**Top Mount Notes**:
- See ARM SECTION detail on Sheet 3 for all A1 and A2 Values.
- See Pole Table for all P1, P2, and P3 values.
- For Median Barrier Mounted Pole, use Arm A1.
NOTE:
1. For locations of Bearing Plates, Base Plates and Detail 'A' see Sheets 6 & 7.
2. Double Nuts: The bottom hex nut may be substituted by a half-height 'jam' nut.
3. Provide individual nut covers (not shown) for each bolt.
4. Pole wall thicknesses shown are nominal and shall be within the Aluminum Association Tolerances. Thicker walls are permitted and tapered walls may be used in accordance with the minimum Aluminum Association thicknesses.
REVISION
DESCRIPTION:
11/01/17
STANDARD PLANS
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STANDARD ALUMINUM LIGHTING
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6 of 8
**DESCRIPTION:**

**REVISION LAST REVIEWED:**

**STANDARD PLANS FY 2019-20 SHEET INDEX**

**STANDARD ALUMINUM LIGHTING**

**NOTES:**

1. For Base Plate Details, Bearing Plate Details, and Detail 'A', see Sheet 5.
2. See Index 521-426 for details of adjacent Traffic Railing (Median 36" Single-Slope) and for angles 'A' and 'B'.
3. See Index 630-010 for Conduit, EJB and supplemental reinforcing details.

**ELEVATION**

'-6'' Suplemental #5 Bar**

**SECTION D-D**

(Longitudinal and transverse deck reinforcing steel not shown)

**DETAILS FOR TRAFFIC RAILING (MEDIAN 36" SINGLE-SLOPE) MOUNTED ALUMINUM LIGHT POLE**