GENERAL NOTES:

1. Poles are designed to support the following:
   A. Luminaire Effective Projected Area (EPA): 1.55 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
   - B. Bars, Plates, Stiffeners and Backer Ring: ASTM B221, Alloy 6063-T6
   - C. Caps and Covers: ASTM 0-26, Alloy 319-F
   - D. Steel Bearing Plates: ASTM A709 or ASTM A36 Grade 36
   - E. Aluminum Wind Material: ER 4043
   - G. Bolts, Nuts, and Washers: ASTM A325, Grade A325, Type 1
   - H. Bars: ASTM F439 Type 1
   - I. Anchor Bolts, Nuts, and Washers:
     - a. Anchor Bolts: ASTM F439, Grade 55
     - b. Nuts: ASTM A563 Grade A Heavy-Hex
     - c. Washer: ASTM A297
   - J. Stainless Steel Fasteners: ASTM F1554 Grade 55
   - K. Concrete: Class 1
   - L. Reinforcing Steel: Specification Section 415

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. Upright Splices: Not Allowed. Transverse welds are only allowed at the base.
   - 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. 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.
   - G. Perform all welding in accordance with AWS D1.2.
   - H. Embeds Junction Box (EJB): Install EJBs per Note 4 and in accordance with Specification Section 635, as shown on the following sheets.
   - I. Coatings/Finish:
     - a. Pole and Arm Finish: 50 grit satin rubbed.
     - b. Galvanize Steel Bolts, Screws, Nuts and Washers: ASTM F2129
     - c. Hot Dip Galvanize EJB and other steel items including poles: ASTM A123

5. Construction:
   - A. Foundation: Specification Section 455, 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 load capacity.
     - b. Provide the clamp conforming to the current FHWA required ASHTO Frangibility Requirements, tested under NCHRP Report 350 Guidelines (e.g. Akron Foundry TB1-17).
   - C. Do not erect pole without clamp attached.

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

7. Wind Speed by County:
   - A. 120 MPH:
   - B. 140 MPH:
   - C. 160 MPH:
   - D. 180 MPH:
     - Calhoun, Charlotte, Collier, Escambia, Indian River, Lee, Martin, Miami-Dade, Monroe, Palm Beach, Sarasota and St. Johns Counties.

8. Wind Speed by County:
   - A. 120 MPH:
   - B. 140 MPH:
   - C. 160 MPH:
   - D. 180 MPH:
     - Calhoun, Charlotte, Collier, Escambia, Indian River, Lee, Martin, Miami-Dade, Monroe, Palm Beach, Sarasota and St. Johns Counties.
ARM CONNECTION DETAIL

Upper Arm

Press on or Welded Cap At Lower Arm

4 Min Radius at Bend

Upper Arm & Lower Arm Screw, or Other Acceptable Connection

Outside Diameter

SECTION A-A

(Fixture Arm Length - 3-'0")/4

Fixture Arm Length = 8', 10', 12' or 15'

3-'0" x 3" Bar Each Side of Arms, Extruded Welded Cap

Provide 7/8" Wiring Hole in Connection Extrusion at Base of Upper Arm Only

Connection Extrusion Supplied by Vendor

Wire Diameter (Nominal)

ARM TABLE

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* Increase Member Wall Thickness as Necessary to Meet Minimum Requirements of the Welding Code For The Connection Weld Sizes Shown in the Arm and Pole Tables.

ARM & DAMPER DETAILS

VIBRATION DAMPER ELEVATION

STANDARD ALUMINUM LIGHTING

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FY 2018-19 STANDARD PLANS

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STANDARD PLANS

FAFOALIGHTING

FAFOALIGHTING
POLE AND BASE DETAILS FOR ROADWAY ALUMINUM LIGHT POLE

Foundation Table W/Arm

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<th>Total Depth (FT)</th>
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<td>8</td>
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Foundation Table W/Top Mount

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<td>160</td>
<td>45 &amp; 50</td>
<td>8</td>
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</table>

NOTE:
- Pole wall thicknesses shown in the POLE TABLE are nominal and shall be within the Aluminum Association Tolerances. Thicker walls are permitted and tapered walls may be used provided the minimum aluminum association thicknesses are not violated.
- **Depths shown in table are for grades flatter than 1:4, for grades up to 1:2 and 2:6 in foundation depths shown in table.

POLE BASE ELEVATION

- Cast Aluminum
- Base Shoe seen in General Notes on Sheet 1
- Base Shoe with Nut and Washer
- Anchor Bolt and Nut Required by Approved Breakaway Transformer Base Manufacture (Typ.)
- #6 AWC Bare Ground Wire Cast into Concrete or Placed in Conduit
- Class I Concrete may be cast-in-place or prestressed with Flowable Fill Backfill
- Tie Bars @ 12" centers (max.) or D10 (or W10) spiral @ 6" pitch, 3 flat turns top and 1 flat turn bottom
- Tie Bars * Equally Spaced
- Anchor Bolt, See Note in Pole Base Elevation
- 1" Chamfer
- Minimum Penetration
- Double Nuts (Typ.)

POLE TABLE WITH ARM

<table>
<thead>
<tr>
<th>Wind Speed (mph)</th>
<th>Design Mounting Height (ft)</th>
<th>Pole wall (in)</th>
<th>Upper Weld (in)</th>
<th>Lower Weld (in)</th>
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<td>30 &amp; 35</td>
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</tr>
<tr>
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<tr>
<td>160</td>
<td>45 &amp; 50</td>
<td>0.125</td>
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STIFFENER PLATE DETAIL

NOTE:
Pole wall thicknesses shown in the POLE TABLE are nominals and shall be within the Aluminum Association tolerances. Thicker walls are permitted and tapered walls may be used provided the minimum Aluminum Association thicknesses are not violated.

POLE TABLE

<table>
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<th>WIND SPEED (MPH)</th>
<th>ARM LENGTH (FT)</th>
<th>BEARING MOUNTING HEIGHT (FT)</th>
<th>POLE WALL (IN)</th>
<th>FILL HEIGHT (FT)</th>
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<td>0.25</td>
<td>Up to 70</td>
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<tr>
<td>160</td>
<td>8, 10, 12</td>
<td>40</td>
<td>0.313</td>
<td>Up to 70</td>
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</table>

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.

BASE PLATE PLAN

BASE PLATE ELEVATION

BASE PLATE DETAILS FOR MEDIAN BARRIER MOUNTED ALUMINUM LIGHT POLE

INDEX 715-002

DESCRIPTION: FY 2018-19 STANDARD PLANS

STANDARD ALUMINUM LIGHTING

LAST REVISION 01/01/17
PLAN

ELEVATION

END VIEW

EMBEDDED JUNCTION BOX DETAILS

SPREAD FOOTING DETAILS FOR MEDIAN BARRIER MOUNTED ALUMINUM LIGHT POLE

NOTE 1: Optional Construction Joint (See Note 2)

NOTE 2: For connections to adjacent Median Barrier, use the Doweled Joint detail per Index 521-001. Alternatively, a continuous concrete pour or a construction joint may be substituted; these alternatives require the Median Barrier's longitudinal steel to lap a minimum of 2'-0" with the longitudinal steel shown herein.

INDEX REFERENCE:

STANDARD ALUMINUM LIGHTING

FY 2018-19

STANDARD PLANS

INDEX SHEET

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View B-B
(Anchor Bolts and Barrier Longitudinal Steel & Stirrups Not Shown)

Section C-C

Cylindrical Foundation Details for Median Barrier Mounted Aluminum Light Pole
**Detailed Description:**

1. **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.

**Notes:**

- **Shift horizontally to avoid Anchor Bolts**
- Optional Const. Joint

For reinforcing steel position, see Index 521-426

**For Bars and Anchor Bolts**

**For Bars and Anchor Bolts**

**SECTION D-D**

(Longitudinal and transverse deck reinforcing steel not shown)