### GENERAL NOTES:

1. All work, materials, and services not shown on the plans which may be necessary for complete and proper construction shall be furnished and installed by the contractor. Facility locations or design limitations or in any material, equipment or installation will be considered justification for rejections. Where manufacturers provide warranties or guarantees of products that are not customary trade practices, furnish to the Department such warranties or guarantees.

2. The selection of poles and fixtures are diagrammatic only and may or may be varied by the Engineer to accommodate local conditions. Insert or remove poles and luminaires located near overhead electrical lines using established industry and utility safety practices and in accordance with laws governing such work. Consult with the appropriate utility company prior to beginning such work.

3. Standard Steel Pole Designs. Steel poles fabricated in accordance with the details and dimensions shown herein, shall be considered standard designs. Submission of shop drawings and design calculations for standard designs is not required.

4. Optional Steel Pole Designs. Multi-sided steel poles may be allowed as optional designs, if steel poles are used or permitted or required, pending approval by the Department as outlined below.

5. Aluminum Pole Designs. Aluminum pole designs may be allowed, if aluminum poles are permitted or required, pending approval by the Department as outlined below.

6. Structural Support Design for Luminaires. Lighting support structures shall be designed for a 25-year design life in accordance with the ASME Standard Specifications for Highway Signs, Luminaires and Traffic Signals, 6th edition and Interim Revisions thereof. All poles shall be designed for 10 mph wind gusts plus snow loads. The following design load factors, F, shall be applied as per the ASME Specifications causing a 25-year design life:

7. Sodium; LED - LED luminaire

8. First number denotes length of mast arm in feet. Use of second mast arm is indicated by second dashed number which denotes length in feet.

9. Last letters indicate light source (S - High Pressure Sodium; LED - LED luminaire)

10. Next letter denotes type of base, (S - Pole Cap; T - Transformer Base; L - Pole Arm)

11. Use of second mast arm varies with length in feet.

12. Notes

### SHIPPIING PARTS LIST - POLES AND LUMINAIRE ARMS

<table>
<thead>
<tr>
<th>Pole</th>
<th>Designation</th>
<th>Mounting Ht.</th>
<th>Quantity</th>
</tr>
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<tbody>
<tr>
<td>Type</td>
<td>Designation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Type SA 40 T - 8 - 8</td>
<td>(Type SP 38 S - 8 - 8)</td>
<td>1200W EQ LED</td>
<td>10</td>
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<tr>
<td>Type SA 40 T - 8 - 4</td>
<td>(Type SP 38 S - 4 - 4)</td>
<td>1200W EQ LED</td>
<td>10</td>
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<tr>
<td>Type SA 40 T - 6 - 6</td>
<td>(Type SP 38 S - 6 - 6)</td>
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<tr>
<td>Type SA 40 T - 4 - 4</td>
<td>(Type SP 38 S - 4 - 4)</td>
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<td>Type SA 20 T - 4 - 4</td>
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<tr>
<td>Type SA 10 T - 4 - 4</td>
<td>(Type SP 38 S - 4 - 4)</td>
<td>1200W EQ LED</td>
<td>10</td>
</tr>
</tbody>
</table>

### EXPLANATION OF ROADWAY ILLUMINATION ASSEMBLY DESIGNATIONS

- **SA** - Steel cap
- **SP** - Steel pole
- **T** - Transformer base
- **L** - Pole arm
- **LED** - LED luminaire
- **EQ** - Equivalence

**Notes**

- All pole and arm combinations are shown in the plans.
- All transformers shall be designed for 110 mph 3-second gust wind speeds.
- The Gust Factor, G, and Wind Importance Factor, Ir, shall be applied as per the AASHTO Specifications assuming a 25-year design life. The Department may elect to pre-approve some shop drawings for optionally designed poles. Submission of shop drawings and design calculations for optionally designed poles is not required.

**Pole Cap:***


**Mast Arm Fitting:**

- ASTM B209 Alloy 6061-T6 or ASTM B221 Alloy 6005-T5.

**Base Fitting:**

- ASTM B251 alloy 356.0-T6 or ASTM B210 alloy 356.0-T6 (field strength test required.

**Reinforcement:**


**Bolts:**

- Stainless Steels AISI 300 series. Bolts threading into aluminum members shall be threaded with stainless steel screws.

**Cement:**

- Never-use Compound, Perimeter 13k or equal.

**Special Designs:**

- Poles with archetectural treatments required to be shown in the plans.