

SECTION 16531

COMMERCIAL / INDUSTRIAL STREET LIGHTING

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Exterior commercial and industrial lighting and accessories.
- B. Poles.

1.02 RELATED SECTIONS

- A. Section 03300 - Cast-in-Place Concrete: Foundations for poles.

1.03 REFERENCES

- A. ANSI C78.379 - Electric Lamps - Incandescent and High-Intensity Discharge Reflector Lamps - Classification of Beam Patterns.
- B. ANSI C82.1 - Ballasts for Fluorescent Lamps-Specifications.
- C. ANSI C82.4 - Ballasts for High-Intensity-Discharge.
- D. IES RP-8 - Recommended Practice for Roadway Lighting.
- E. IES RP-20 - Lighting for Parking Facilities.
- F. NFPA 70 - National Electrical Code.

1.04 SUBMITTALS FOR REVIEW

- A. Shop Drawings: Indicated dimensions and components for each light which is not a standard product outlined in this document.
- B. Product Data: Provide dimensions, ratings, manufacturer, type and performance data.

1.05 COORDINATION

- A. Coordinate with electric contractor.
- B. Coordination with the Heber Light and Power.
- C. Receive approval by Civil Engineer for pole foundation.
- D. Furnish bolt templates and pole mounting accessories to installer / contractor of pole foundations.

PART 2 APPROVED PRODUCTS

2.01 MANUFACTURES

- A. Holophane - Mongoose or Hadco
- B. Hadco - Square

2.02 FIXTURE REQUIREMENTS

- A. Bulb: High Pressure Sodium 150 Watt Max
- B. Fixture Head Type: Full Cutoff
- C. Fixture Style: Mongoose or Square
- D. Voltage: 120 Volt
- E. Head: Glass or Acrylic
- F. Ballast: Toolless replacement and interchangeable
- G. Photocell: Twistlock
- H. Mounting Condition: Provide break-a-way pole and pole mount bracket.
- I. Pole: As required in this schedule.

2.03 POLES

- A. Height: 20 feet
- B. Material: Aluminum
- C. Color: Dark / Black
- D. Shape: Tapered / Round
- E. Base: Concrete / Bolted
- F. Loading Capacity Ratings:
 - 1. 100 Pounds.
 - 2. Steady Wind: 90 MPH minimum.
- G. Installation Conditions: Outdoor Use Only.

PART 3 EXECUTION

3.01 INSTALLATION

- A. Provide concrete bases for lighting poles at intersections and cul-de-sac's or as shown on the plans. All concrete shall be a minimum of 36" below finished grade.
- B. Install poles plumb. Provide shims and double nuts to adjust to plumb.

3.02 FIELD QUALITY CONTROL

- A. Operate each light after installation and connection. Inspect for improper connections and operation.
- B. Test photo-electric cell for operation.

3.03 ADJUSTING

- A. Aim and adjust light to provide illumination levels and distribution as directed.
- B. Test for photo-electric cell operation.

3.04 CLEANING

- A. Clean electrical parts to remove conductive and deleterious materials.
- B. Remove dirt and debris from enclosure.
- C. Clean photo-cell surfaces as recommended by manufacturer.
- D. Clean finishes and touch up damage.

3.05 PROTECTION OF FINISHED WORK

- A. Re-lamp lights which have failed Final Completion.

3.06 LIGHTING LOCATION

- A. 66 foot or 66 foot Right-of-Way
 - 1. Location: In planter strip or, if combination sidewalk, one foot behind sidewalk.
 - 2. Spacing: At each intersection, cul-de-sac, and other critical points as determined by the City Engineer.
- B. 72 foot Right-of-Way
 - 1. Location: In planter strip, if combination sidewalk, one foot behind sidewalk.
 - 2. Spacing: At each intersection, cul-de-sac, and other critical points as determined by the City Engineer.

END OF SECTION