

SECTION 16530 SITE LIGHTING

PART 1 - GENERAL

1.1 SECTION INCLUDES

- A. Exterior luminaires and accessories.
- B. Poles.
- C. Exterior Lighting Controls.

1.2 RELATED SECTIONS

- A. Section 16111 - Conduit.
- B. Section 16510 - Lighting Fixture Schedule.

1.3 REFERENCES

- A. ANSI C82.4 - Ballasts for High-Intensity-Discharge and Low-Pressure Sodium lamps (Multiple-Supply Type).
- B. NEMA ICS 2 - Industrial Control Devices, Controllers, and Assemblies.
- C. ANSI/NFPA 70 - National Electrical Code.

1.4 AREA LIGHTING

- A. Included in this scope of work are lighting poles, bracket arms and pole base covers.
- B. The Contractor shall provide all necessary underground conduit, wiring, conductors and utility pole riser conduits for new area lights.

1.5 SUBMITTALS

- A. Submit under provisions of Division 1 and Section 16010.
- B. Shop Drawings: Indicate dimensions and components for each luminaire that is not a standard product of the manufacturer.
- C. Product Data: Provide dimensions, ratings, and performance data.

1.6 PROJECT RECORD DOCUMENTS

- A. Submit under provisions of Division 1 and Section 16010.
- B. Accurately record actual locations of each luminaire.

1.7 OPERATION AND MAINTENANCE DATA

- A. Submit under provisions of Division 1 and Section 16010.
- B. Maintenance Data: Include instructions for maintaining luminaires.

1.8 REGULATORY REQUIREMENTS

- A. Conform to requirements of ANSI/NFPA 70.
- B. Furnish products listed and classified by Underwriters Laboratories, Inc. as suitable for purpose specified and shown.

1.9 COORDINATION

- A. Furnish bolt templates and pole anchor bolts for concrete base foundations to the Contractor for the Site Contract for installation under the Site Contract project.

PART 2 - PRODUCTS

2.1 LUMINAIRES

- A. Furnish products as specified in the Lighting Fixture Schedule attached to Section 16510, and according to details on the Contract Drawings.

2.2 BALLASTS

- A. High Intensity Discharge (HID) Ballast:
 - 1. Description: ANSI C82.4, metal halide and high-pressure sodium lamp ballasts.
 - 2. Provide ballast suitable for lamp specified.
 - 3. Voltage: 120 or 240 volts as indicated in the Lighting Fixture Schedule.

2.3 LAMPS

- A. Provide lamp type specified for luminaire.

2.4 POLES

- A. Furnish products as specified in the Lighting Fixture Schedule attached to Section 16510, and according to details on the Contract Drawings.
- B. Accessories:
 - 1. Ground Lug.
 - 2. Wire Hand Hold at base.
- C. Loading Capacity Ratings:
 - 1. Steady Wind: 90 miles per hour minimum.
 - 2. Gust Factor: 1.3

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine each luminaire to determine suitability of ballast voltage.
- B. Examine each luminaire to determine suitability for lamps specified.

3.2 EXTERIOR LIGHTING INSTALLATION

- A. Install exterior lighting in accordance with manufacturers' instructions.
- B. Install lighting fixtures and poles at locations indicated.
- C. Install poles plumb.
- D. Install lamps in each luminaire.
- E. Bond luminaires and metal poles to branch circuit equipment grounding conductor.

3.3 WIRING

- A. Extend underground conduit installed as required to enter new electrical service rooms.
- B. Provide branch circuit wiring for all exterior lighting.

3.4 FIELD QUALITY CONTROL

- A. Operate each luminaire after installation and connection. Inspect for improper connections and operation.

3.5 CLEANING

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

END OF SECTION