

## SECTION 26 56 00: EXTERIOR LIGHTING

### 1. GENERAL

- A. This section details the basis of design for exterior site lighting.
- B. For large site lighting and parking poles (over 15 feet), provide supplementary ground rod and connection at each pole.
- C. All underground lighting circuits for site lighting will contain a dedicated ground copper wire.
- D. Poles to have separate, unswitched 120 volt 20 amp GFI type convenience receptacle.
- E. Poles to include breakaway style inline fuses in their base.
- F. Avoid the use of step lights cast-in-place into stairs and retaining walls.
- G. Bollards and in-ground fixtures are not allowed.
- H. Do not use low-pressure sodium or mercury vapor lamps.
- I. Fixtures and lamps will be selected based on the following performance criteria:
  - 1. Minimize light pollution using cut-off style fixtures
  - 2. Durable, corrosion-resistant fixtures; very long life lamps
  - 3. Minimize the number of different lamp types utilized and required to be stocked by Operations
  - 4. Ready access for fixture lamp and ballast replacement
- J. Fixtures:
  - 1. Commercially available, commercial-grade, standard models
  - 2. UL-listed as an assembly and approved for use in the application which they are specified
  - 3. Labeled with:
    - Manufacturer, model number and lamp type
    - Their source panel, circuit number and voltage
- K. Lamp Types:
  - 1. Metal halide (avoid using on emergency circuits)
  - 2. Light Emitting Diode (LED)
  - 3. Compact fluorescent
  - 4. Induction
  - 5. Do not use low-pressure sodium or mercury vapor lamps
- L. Lamp color temperature to be consistent to match existing area lighting, in the range of 3500K to 4500K color temperature.

- M. Switching & Controls:
  - 1. Control system primary control is to be via photocell, with back-up astronomic time of day control, and incorporating automatic daylight-saving time adjustment. Provide manual on/off override controls for each lighting zone.
  - 2. Locate control stations and contactor cabinets in readily accessible, floor-level locations, such as in electrical closets; installation above suspended ceilings is not considered an accessible location.
  - 3. Contactors, where used with lighting controls, to be mechanically held, electrically operated type.
  - 4. When installed within a building, exterior lighting to be controlled by building master lighting control system or JCI brand BAS.
- N. Controls Manufacturers:
  - 1. Tork
  - 2. Paragon
- O. Provide spare lamps and ballasts in quantities equal to 5% of the amount used on the project with no less than one of each type.
- P. As-built drawings of lighting and control systems must include locations of all controllers.