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:
         a. Manufacturer, model number and lamp type
         b. 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.