

**SECTION 1406**  
**LIGHT STANDARD LUMINAIRES**

**1406-1 DESCRIPTION**

Furnish, install and place into satisfactory operation, luminaires on the bracket arm complete with all lamps, ballasts, wiring inside standard from circuit conductors to luminaire, in-line breakaway fuses and ground wiring at the pole on light standards less than 55 ft in height.

**1406-2 MATERIALS**

Use luminaires that are ellipsoidal shaped with a center of gravity not more than 18" from the end of the luminaire support, do not weigh more than 55 lb, and have a maximum effective projected area of 1.2 sq.ft.

Use luminaires that are UL listed and labeled.

Use luminaires that have a lens holder latch on the street side and ballast, plug-in starter and capacitors mounted on a removable door. The removable door shall have a continuous hinge bar to prevent door opening due to vibration. The luminaire shall have a slipfitter for 2 mounting brackets, with a stainless steel shield ring, a 4-bolt adjustable pipe clamp and leveling steps for tilt adjustment. Use luminaires with a replaceable mogul base lamp socket adjustable in both vertical and horizontal directions, capable of producing the specified IES distribution pattern. Third party certification for photometric data shall be provided upon request. Provide a heat resistant tempered flat glass lens and a reflector with a hard glasslike highly reflective corrosion resistant finish. Provide a filter between the lens and reflector tub.

Use luminaires that have an internal high power factor ballast of the regulated type, capable of operating from a multi-wire circuit and energize a high intensity discharge lamp. The luminaire shall have a barrier between the ballast compartment and the reflector tub. Transformer windings shall be covered and protected. Lamps shall operate satisfactorily with a line voltage variation of  $\pm 10\%$ . Provide a ballast pre-wired to the lamp socket and terminal board, requiring only the connection of the power supply leads to the terminal board.

Use luminaires with a wattage rating, voltage rating, lamp type and light distribution as indicated in the plans.

Provide same model lamps from same manufacturer for each respective luminaire type.

**1406-3 CONSTRUCTION METHODS**

Level luminaires using leveling pads on the luminaire enclosure. Adjust any luminaires, as directed, to give optimum illumination distribution.

**1406-4 MEASUREMENT AND PAYMENT**

*Light Standard Luminaires* \_\_\_\_ will be measured and paid as the actual number of luminaires of each appropriate size and style installed and accepted.

Payment will be made under:

| <b>Pay Item</b>                | <b>Pay Unit</b> |
|--------------------------------|-----------------|
| Light Standard Luminaires ____ | Each            |

**SECTION 1407**  
**ELECTRIC SERVICE POLE AND LATERAL**

**1407-1 DESCRIPTION**

Furnish and install wood service poles, wire, conduit, bushings, fittings, connectors, meter base and weatherhead from the service point to a control system.

**Section 1408**

1 **1407-2 MATERIALS**

2 Refer to Division 10.

| <b>Item</b>         | <b>Section</b> |
|---------------------|----------------|
| Wood Poles, Class 4 | 1082           |
| Type USE Wire       | 1091-2, 1400-2 |
| Conduit             | 1091-3         |

3 **1407-3 CONSTRUCTION METHODS**

4 Dig holes large enough to permit the proper use of tampers to the full depth of the hole. Place  
5 backfill in the hole in 6" maximum layers and thoroughly tamp. Place surplus earth around  
6 the pole in a conical shape and pack tightly to drain water away.

7 Set the pole to a depth of at least 5.5 ft unless shown otherwise in the plans. When utility  
8 power is available from outside the right of way, locate the service pole no more than 10 ft  
9 inside the right of way. The utility company will install overhead conductors from their  
10 facilities. Install an underground service lateral from the service pole to the control system.  
11 The proposed service pole will be deleted from the contract if the utility company:

- 12 (A) Provides a pad mount transformer,
- 13 (B) Allows attachment of the riser and weatherhead to their pole, or
- 14 (C) Provides underground service from their pole.

15 Make connections at the service head at the bottom of the drip loop to prevent siphoning of  
16 water through the cable.

17 Provide for a meter in accordance with the requirements of the utility company's condition of  
18 service. A meter base for a self-contained meter may be mounted on the service pole or back  
19 of the control enclosure as indicated in the plans. A current transformer (CT) cabinet and  
20 meter base may be mounted in either location if requested by the utility company.

21 Use stranded copper Type USE conductors installed in rigid galvanized steel conduit sized as  
22 shown in the plans for the service lateral.

23 **1407-4 MEASUREMENT AND PAYMENT**

24 *Electric Service Pole* \_\_\_\_ will be measured and paid as the actual number of the appropriate  
25 length and class electric service poles installed and accepted.

26 *Electric Service Lateral* \_\_\_\_ from service pole to control panel will be measured and paid as  
27 the actual number of linear feet of the appropriate size and type service lateral installed and  
28 accepted. Measurement will be along the longest conductor from electrical terminal to  
29 electrical terminal.

30 Payment will be made under:

| <b>Pay Item</b>               | <b>Pay Unit</b> |
|-------------------------------|-----------------|
| Electric Service Pole ____    | Each            |
| Electric Service Lateral ____ | Linear Foot     |

31 **SECTION 1408**  
32 **LIGHT CONTROL SYSTEM**

33 **1408-1 DESCRIPTION**

34 Furnish and install an entire control system, including enclosure, control panel, photocell,  
35 switches, contactors, breakers, terminal blocks, wiring, concrete foundation and lightning  
36 arrester. The control system will be standard electrical components in a stainless steel  
37 enclosure mounted on a metal pole with a concrete foundation as shown in the contract.