Item 614
High Mast Illumination Assemblies

1. DESCRIPTION

Furnish and install high mast illumination assemblies.

2. MATERIALS

Provide new materials that comply with the details shown on the plans, the requirements of this Item, and the pertinent requirements of the following Items:

- Item 441, “Steel Structures”
- Item 442, “Metal for Structures”
- Item 445, “Galvanizing”
- Item 616, “Performance Testing of Lighting Systems”
- Item 620, “Electrical Conductors”

Fabrication plants that produce high mast rings and support assemblies must be approved in accordance with DMS-7380, “Steel Non-Bridge Member Fabrication Plant Qualification.” The Department maintains an MPL of approved high mast ring and support assembly fabrication plants.

Furnish light fixtures from new materials that are in accordance with DMS-11020, “High Mast Light Fixtures.”

Furnish other high mast components from new material that are in accordance with DMS-11021, “High Mast Illumination Assembly Kits.”

Provide prequalified high mast illumination assembly kits and light fixtures from the Department’s MPL. When required by the Engineer, notify the Department in writing of selected materials from the MPL intended for use on each project.

Do not provide shop drawings for high mast ring and support assemblies fabricated in accordance with this Item and the details on the plans. For proposed deviations that do not affect the basic structural behavior of the high mast ring and support assembly, electronically submit shop drawings in accordance with Item 441, “Steel Structures.” The submission of shop drawings is only required the first time each proposed non-structural deviation is used. Structural deviations from the approved drawings are not permitted.

3. CONSTRUCTION

Perform work in accordance with the details shown on the plans and the requirements of this Item. Permanently mark each high mast ring and support assembly with the insignia or trademark of the fabrication plant. Place the mark at an approved location. Galvanize the ring assemblies, assemble the ring halves in the shop to ensure proper fit, and match-mark the ring halves before shipping. Prevent scarring or marring of the ring assemblies. Replace damaged components.

Repair damaged galvanized areas of the ring assembly in accordance with Section 445.3.5., “Repairs.”

Before installation, sample and test fixtures in accordance with Tex-1110-T. Test installed fixtures in accordance with Item 616, “Performance Testing of Lighting Systems.”
4. **MEASUREMENT**

This Item will be measured as each high mast illumination assembly installed.

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5. **PAYMENT**

The work performed and materials furnished in accordance with this Item and measured as provided under "Measurement" will be paid for at the unit price bid for "High Mast Illumination Assemblies" of the types specified. This price is full compensation for furnishing, installing and testing light fixtures, ballasts, lamps, wire rope, rings and ring support assemblies; aiming light fixtures; furnishing and installing obstruction lights, hoisting assemblies, power drive assemblies, transformers, conductors on the load side of the high mast pole’s disconnect, electrical equipment, electrical cord, junction boxes and enclosures; conducting system performance testing; and materials, equipment, labor, tools, and incidentals.

New poles for high mast illumination assemblies will be paid for under Item 613, “High Mast Illumination Poles.” New electrical services will be paid for under Item 628, “Electrical Services.” The Department will pay for electrical energy consumed by the lighting system.