



# Item 600 Series – 2024 Specification Book Rewrite



September 19, 2024

## Item 610 – Roadway Illumination Assemblies

- Materials – added note *"Provide punched, drilled or mechanically guided thermal-cut holes in steel parts or members, when allowed, before galvanizing."*



## Item 610 – Roadway Illumination Assemblies, (Cont'd)

- Construction – *"Sampling fixtures for testing in accordance with Tex-1110-T"* was removed.
- Construction: Relocation – added clean optical assembly when reusing
- Construction: Replace Luminaires – added replace conductors and breakaway fuseholders when necessary.





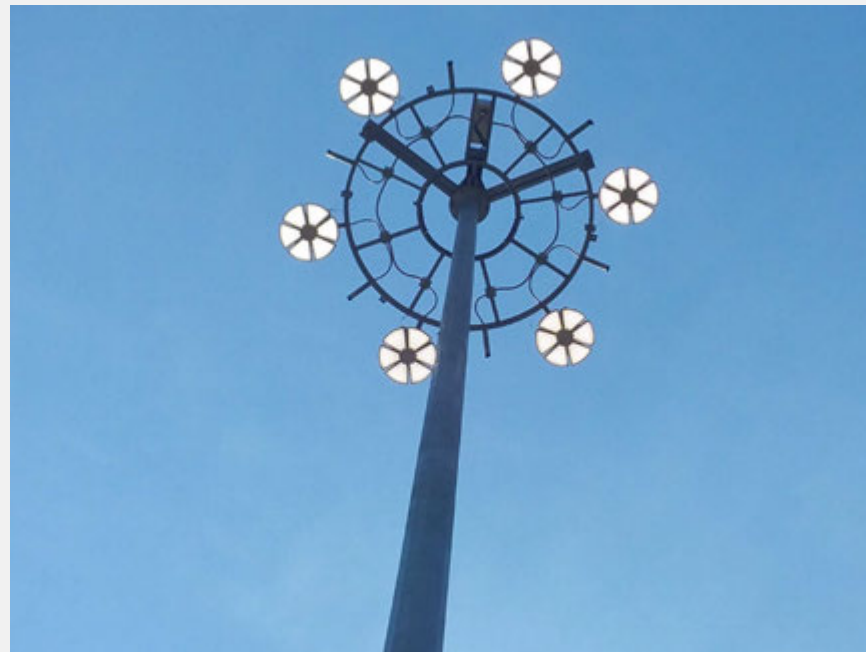
## Item 613 – High Mast Illumination Poles

- Construction: Fabrication
  - Added ultrasonic testing of seam welds
    - added note *"Provide punched, drilled or mechanically guided thermal-cut holes in steel parts or members, when allowed, before galvanizing."*
  - Added *"Preform ultrasonic testing of base plate weld joint after galvanizing ... to determine if any toe cracks are present..."*



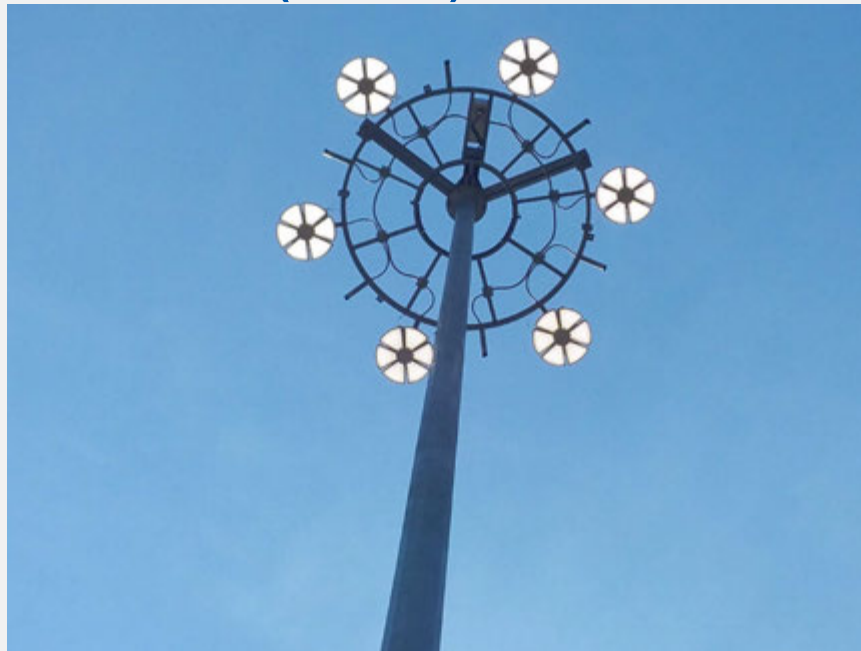
## Item 614 – High Mast Illumination Assemblies

- Description – added new item for Replace Luminaires (Light Fixtures). Remove and replace existing luminaires.
- Materials – added that new light fixtures will be “High Mast **LED** Light Fixtures.”
- Construction: Installation – modified *“assemble the ring halves and support assembly in the shop to ensure proper fit, and match-mark the ring halves and support assembly before shipping.”*



## Item 614 – High Mast Illumination Assemblies, (Cont'd)

- Replace Luminaires – added instructions to Construction, Measurement, and Payment sections for replacement of high mast luminaires.



## Item 616 – Performance Testing of Lighting Systems

- Construction - Removed acceptance of the Contract as a requirement to relieve Contractor of maintenance responsibilities. Contractor only has to pass 14 day performance test before turning maintenance over to Department.



## Item 617 – Temporary Roadway Illumination

- Changed Description, Measurement, and Payment to: Setup and Removal, and Maintain Roadway Illumination.
- Setup and Removal is measured by each Roadway Illumination Assembly installed and removed. A relocation is considered an instance of Setup and Removal.





## Item 617 – Temporary Roadway Illumination, (Cont'd)

- Maintain Roadway Illumination is measured by the Month and covers maintenance of the complete illumination system.
- Payment - Electrical service responsibilities were changed to match Item 681 Temporary Traffic Signals.



## Item 647 – Large Roadside Sign Supports and Assemblies

- Description – added Replacement. Replace existing large roadside sign assemblies.
  
- Construction
  - Deleted text within 3.2 Installation. "At the Contractor's option, sign supports may be cast in the concrete foundation as a unit. However, if installation is made with the upper post section attached, do not expose the support to traffic until the sign panel is properly affixed, unless otherwise approved."
  
  - Deleted text with 3.3 Relocation. Or lengthen – "Reuse the existing supports and shorten **or lengthen** them as ..."

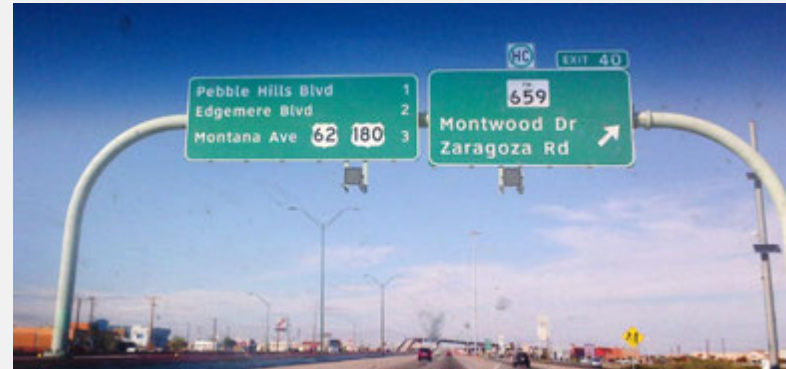
## Item 650 – Overhead Sign Supports

- Materials - Added Item 420, "Concrete Sub Structures"
- Construction: Alternate Design
  - Added wording to require COSS plan and elevation sheets, COSS & OSB-SZ table sheets, and any other sheets needed to support design calculations
  - Changed all instances of "size of pipe" to "pipe diameter and wall thickness"



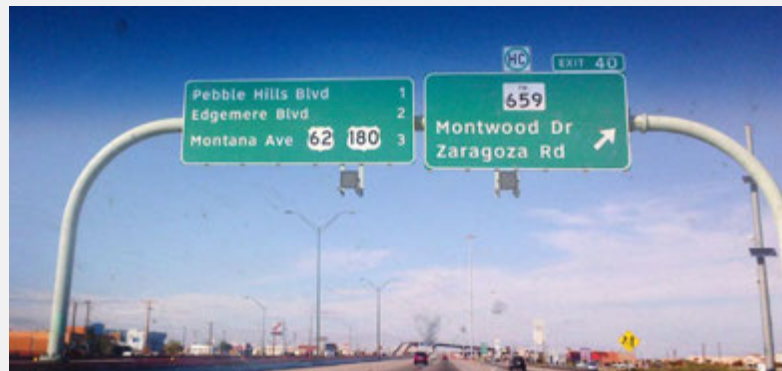
## Item 650 – Overhead Sign Supports, (Cont'd)

- Construction: Alternate Design
  - Added "Tapered columns are permitted if the provided calculations demonstrate that the column is adequate at the level of the truss-to-column connection"
- Construction: Fabrication
  - Added details for monotube-type overhead sign supports
  - Added text about Ultrasonic Testing (UT) and measuring required dimensions
  - Shop assembly of monotube sign supports to ensure compliance for all dimensions and fit



## Item 650 – Overhead Sign Supports, (Cont'd)

- Construction: Galvanizing
  - added note *"Provide punched, drilled or mechanically guided thermal-cut holes in steel parts or members, when allowed, before galvanizing."*





## Item 654 – Sign Walkways

- Construction: Fabrication (new text in bold)
  - Fabricate and weld sign walkways in accordance with Item 441, the requirements of this Item; and AWS D1.1. **Fabrication plants that produce sign walkways must be approved in accordance with DMS-7380, “Steel Non-Bridge Member Fabrication Plant Qualification.”** The Materials and Tests Division maintains a list of approved sign walkway fabrication plants on the Department’s MPL.

## Item 656 – Foundations for Traffic Control Devices

- No major changes

## Item 680 – Highway Traffic Signals

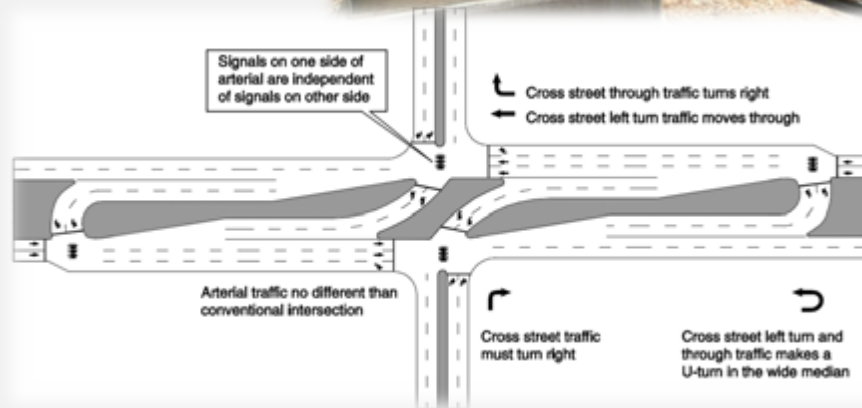
- Updated wiring guidance
  - 14AWG traffic signal cable
  - Cat 6 outer jacket coloring coding
  - Railroad preemption individual conductor color coding
  
- Cabinet
  - Components
  - Facing and railing



Source: Goggle Earth accessed on 12/21/2023

## Item 680 – Highway Traffic Signals (Cont'd)

- Test period response time
- Upgrade
- Payment
  - By Cabinet (e.g. RCUTs)
  - Span wire paid under Item 625
  - Signs paid under Item 636 or SS



Source: FHWA-SA-14-070: Restricted Crossing U-turn Informational Guide.

## Item 681– Temporary Traffic Signals

- Operation and Maintenance
  - Response time (matches Item 680)
  - Remote access (TxDOT provided equipment)
- Payment
  - Added Portable signals



Source: [www.streetSMARTrental.com](http://www.streetSMARTrental.com) accessed on 12/21/2023



## Item 682– Vehicle and Pedestrian Signal Heads

- Added "Removal".
- Updated wiring construction guidance.
  - Install drip loop.
  - Only strip outer jacket at point of termination.
  - Guidance on wiring adjustments when removal is used.



Source: Goggle Earth accessed on 12/21/2023

## Item 685– Roadside Flashing Beacon Assemblies

- Minor changes in language
  - Edits.
  - Removal of extra terms.
- Payment - adding in required wording(batteries and battery box).

- 5.1. **Installation.** This price is full compensation for furnishing, fabricating, galvanizing, assembling, and erecting the roadside flashing beacon assemblies, including poles and bases; solar power flashing controller assemblies, including batteries and battery box (when required); foundations; conduit in the foundation and within 6 in. of the foundation; furnishing and placing anchor bolts, nuts, washers, and templates; controller; and materials, equipment, labor, tools, and incidentals.
- 5.2. **Relocation.** This price is full compensation for removing the roadside flashing beacon assemblies; removing battery box (when required); removing existing foundations; installing new foundations; installing new conduit in the foundation and within 6 in. of the foundation; furnishing, fabricating, and installing any new components as required and replacing the assembly on its new foundations with all manipulations and electrical work; controller; batteries; battery box; salvaging; disposal of unsalvageable materials; loading and hauling; and materials, equipment, labor, tools, and incidentals.



Source: Goggle Earth  
accessed on 12/22/2023

## Item 686– Traffic Signal Pole Assemblies (Steel)

- Added "Removal".
- Expanded language on LMAs



Source: Goggle Earth accessed on 12/21/2023