Item 658
Delineator and Object Marker Assemblies

1. DESCRIPTION
   - Installation. Install delineator or object maker assembly.
   - Removal. Remove delineator or object marker assembly.

2. MATERIALS

   Furnish only new materials in accordance with details shown on the plans unless otherwise directed. The Engineer will sample in accordance with Tex-725-I or Tex-737-I.

   2.1. Delineator and Object Marker Assemblies. Fabricate in accordance with the following:
       - DMS-8600, "Delineators, Object Markers, and Barrier Reflectors."
       - DMS-4400, "Flexible Delineator and Object Marker Posts (Embedded and Surface-Mount Types)."

   2.2. Wing Channel Post. Furnish material of the size shown on the plans. Supply a notarized original of the Form D-9-USA-1 (Department Form 1818) with supporting mill test report certifying that the base metal is in accordance with the following:
       - ASTM A1011, SS Grade 50.
       - ASTM A499.

       Galvanize material in accordance with Item 445, "Galvanizing."

3. CONSTRUCTION

   3.1. Installation. Locate delineators and object markers as shown on the plans or as directed.

       Locate barrier reflectors as shown on the plans or as directed, and install in accordance with manufacturers recommendations.

       Install winged channel post and flexible delineator posts to allow the reflector units and reflectorized panels to be installed at the specified height and orientation. Align post as shown or as directed.

       Drive post plumb using a driving cap to prevent visible cross-section dimension distortion. Drill or drive a pilot hole when post cannot be driven without visibly distorting the cross-section dimension. Backfill pilot holes thoroughly by tamping in 6-in. lifts to grade.

       Install surface-mount and other types of delineators and object markers in accordance with details shown on the plans.

       Repair damaged galvanizing in accordance with Section 445.3.5., “Repairs.” Install reflector units on wing channel posts after the posts have been erected.

   3.2. Removal. Remove post assemblies without damaging materials and salvage when indicated on the plans.

       Remove post to a minimum of 6 in. below finish grade. Stockpile salvaged materials at the location shown on the plans or as directed. Accept ownership of unsalvageable materials and dispose of in accordance with federal, state, and local requirements.
4. **MEASUREMENT**

Installation will be measured by each delineator or object marker assembly installed. When removal is specified on the plans to be a pay item, it will be measured by each delineator or object marker assembly removed.

This is a plans quantity measurement item. The quantity to be paid for is shown in the proposal unless modified by Article 9.2., “Plans Quantity Measurement.” Additional measurements or calculations will be made if adjustments of quantities are required.

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 “Install Delineator Assemblies” or “Install Object Marker Assemblies” of the types and colors specified and for “Remove Delineator or Object Marker Assemblies.”

5.1. **Installation.** This price is full compensation for furnishing and fabricating when required, and installing and mounting the delineator or object marker assemblies including posts, adhesive or pads for surface mount assemblies, back plates, reflector units, fastening plates, brackets, bolts, nuts, and washers; and materials, equipment, labor, tools, and incidentals.

5.2. **Removal.** Unless otherwise shown on the plans, removal will not be paid for directly but is subsidiary to bid items of the Contract.

When removal is shown on the plans as a bid item, this price is full compensation for removal and disposal of delineator and object marker assemblies and for materials, equipment, labor, tools, and incidentals.