

Special Specification 6133

Drum Sign Assembly



1. DESCRIPTION

Remove and relocate existing drum sign assembly.

2. MATERIALS

Furnish new materials in accordance with the following Items and with details shown on the plans:

- Item 445, "Galvanizing"
- Item 449, "Anchor Bolts"
- Item 656, "Foundations for Traffic Control Devices"
- Item 687, "Pedestal Pole Assemblies"

3. CONSTRUCTION

3.1. **Galvanizing.** Repair galvanizing for any damaged steel part or any steel part welded after galvanizing, in accordance with Section 445.3.5., "Repairs."

3.2. **Relocation.** Before the existing drum sign is to be removed, verify that the drum sign is being powered using the solar power system. Verify that the radio and communication equipment is operational. Verify operation and communication of the drum sign with TransVista in the presence of a TxDOT Engineer or Inspector with documented test results.

The existing solar components must be removed so that proposed AC power is used. Solar components to be removed include: fuse block & fuses, solar panel(s), batteries solar controller and the solar regulator/charger, all solar components are to be returned to the District or as directed by the Engineer. Ensure that batteries and solar panel(s) are disconnected and that the drum sign cabinet breaker is turned off before removing.

Disconnect and isolate the electrical power supply prior to removal of the drum sign. Remove existing drum sign as directed. Unless otherwise directed, salvage existing components such as signs, heads, buttons, pole, and base. Repair or replacement of lost or damaged components will be the responsibility of the Contractor or as directed by the Engineer.

Install foundations and drill shafts in accordance with Item 656, "Foundations for Traffic Control Devices." Installation of drill shafts will be subsidiary to this Item.

Relocate existing drum sign to the location shown on the plans or as directed. Install existing drum sign on new foundations in accordance with Section 687.3.2, "Installation." Remove existing foundations in accordance with Section 687.3.4., "Removal," shown below. Accept ownership of unsalvageable materials (as determined by the Engineer) and dispose of in accordance with federal, state, and local laws and regulations.

Add 100W DC power supply in the drum sign cabinet, subsidiary to this Item. This should convert 120V AC input power to 12V DC output power and should be rated for external environment.

Route electrical power from existing, proposed or relocated electrical service. Each drum sign will require a new circuit with a 1P/20A branch breaker at the electrical service, subsidiary to this Item.

Test and verify operation and communication of the relocated drum sign with TransVista in the presence of the Engineer or Inspector with documented test results.

- 3.3. **Removal.** Disconnect and isolate existing electrical power supplies prior to removal of the assembly. Remove existing sign panel, beacons, pole, and base from existing assembly. Store items to be reused or salvaged without damaging. Store sign panels above the ground in a vertical position at locations shown on the plans or as directed. Accept ownership of unsalvageable materials and dispose of in accordance with federal, state, and local regulations.

Disconnect and remove conductors from abandoned circuits. Remove abandoned conduit and ducts to a point 6 in. below final grade. Destroy existing transformer bases to prevent reuse.

Unless otherwise shown on the plans, remove abandoned foundations, battery ground box and drill shafts, including steel, to 2 ft. below the finished grade. Backfill with material equal in composition and density to the surrounding area, and replace any surfacing, such as asphalt pavement or concrete riprap, with like material to equivalent condition.

4. MEASUREMENT

This Item will be measured by each relocated or removed drum sign assembly.

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 "Remove and Relocate Drum Sign Assembly."

- 5.1. **Relocation.** This price is full compensation for removing the drum sign assembly; removing existing foundations; installing new foundations; furnishing, fabricating, and installing any new components as required and replacing the assembly on its new foundations with all manipulations and electrical work; controller; salvaging; disposal of unsalvageable material; loading and hauling; and equipment, material, labor, tools, and incidentals.
- 5.2. **Removal.** This price is full compensation for removing the various drum sign assembly components; removing the foundations; storing the components to be reused or salvaged; disposal of unsalvageable material; backfilling and surface placement; loading and hauling; and equipment, materials, tools, labor, and incidentals.
- 5.3. **Galvanizing.** Galvanizing will not be paid for directly but will be subsidiary to pertinent items.