

Special Specification 6146

Bluetooth Reader



1. DESCRIPTION

Transport, install and test Department-furnished Bluetooth Readers in designated enclosures as shown on the plans, as detailed in this Item, and as directed.

2. MATERIALS

Provide all materials not supplied by the Department necessary for the Bluetooth Reader installation. All materials provided by the Contractor must be new. Provide a minimum of 30-day's notice to the Department for pick-up of Department-furnished materials. Unless otherwise shown on the plans, Bluetooth Readers will be stored by the Department for pick up at location identified by the Engineer. Designate in writing, persons authorized to pick up Bluetooth readers units.

Upon completion of work and prior to final payment, return any unused or removed material deemed salvageable to the Department as directed.

Furnish, assemble, fabricate, and install materials under this Item in strict accordance with the details shown on the plans and in the specifications. All materials provided by the Contractor must be new and resistant to corrosion, moisture deterioration, and ultraviolet rays.

Ensure that all materials and construction methods necessary to complete the installation conform to the requirements of this Item, the plans and the pertinent requirements of the following Items:

- Item 618, "Conduit,"
- Item 620, "Electrical Conductors", and
- Special Specification 6005, Testing, "Training, Documentation, Final Acceptance and Warranty"

3. CONSTRUCTION

3.1. **Installation.** Install and make operational, the Bluetooth reader, antenna, and all associated components in equipment cabinets as shown on the plans.

3.2. **Working Drawings.** Prior to fabrication, submit for approval 5 prints of the working drawings for attachment of each Bluetooth Reader. Show the details of any additional brackets, connections, and methods of attachment.

3.3. **Testing.** Conduct testing in accordance with the Special Specification 6005, "Testing, Training, Documentation, Final Acceptance and Warranty." Furnish readers meeting the requirements included in the specifications when subjected to the following test procedures:

- 10 Trial Vehicle Runs;
- Sites connected to AWAM host software server to verify recordings;
- Vehicles used for testing will have 2 Bluetooth devices with discovery mode enabled. Record MAC addresses at the host software server before starting the test.
- Compute passing percentage using the following formula to find a weighted average percentage:
- $((\text{Total Positive Readings from the Antenna Runs } (n)) / \text{Total Runs } (T)) \times 100.$

4. MEASUREMENT

This Item will be measured as each Bluetooth Reader installed, tested and made operational.

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 "Installation of Bluetooth Reader". This price is full compensation for installation of Bluetooth Reader; furnishing and installing any new mounting hardware; testing the Bluetooth Reader; replacement or repair of damaged components; disposal of unsalvageable material; and for all manipulations, labor, tools, working drawings, equipment and incidentals.