

EMS LOCATOR DEVICE

****From Hartford-Sharon FITS(503)**

- xx. DESCRIPTION. This work shall consist of supplying to VTrans three Electronic Marker System (EMS) locator devices.
- xx. GENERAL REQUIREMENTS. The EMS locator devices will be used to locate the buried slack cable and splice handholes on the Hartford to Sharon fiber route. The Contractor is responsible for supplying these EMS locator devices prior to the installation of any handholes on this project. These devices will need to be used during construction inspection services for functional verification of compatibility, as well as for verification of programming information.
- xx. MATERIALS. The Contractor is required to submit material specification sheets for all materials used, for approval by the Engineer.

Unless otherwise specified, the EMS units shall be Dynatel Model 2273M-ID with GPS interface as manufactured by 3M, or an approved equal. Units shall be complete with all necessary ancillary parts and carrying cases. The unit must have audio and visual indicators and be capable of being programmed to indicate the identification and depth of cover of the marker. The locator shall be capable of finding nearsurface, mid-range, and full range depth electronic markers. Additionally, the locator shall have the ability to:

- (a) Pin-point the location and estimate the depth of all existing models of properly installed underground passive EMS markers.
- (b) Direct depth reading of ID markers.
- (c) Locate two different marker frequencies simultaneously.
- (d) Trace a cable path while simultaneously finding buried markers along the way.
- (e) Locate cable and pipe path.
- (f) Measure cable or Sonde depth with the push of a button.
- (g) Measure signal current in the cable.
- (h) Pin-point conductor or sheath (earth return) faults and cable breaks.
- (i) Discriminate between light and heavy faults.
- (j) Identify cable and cable pairs.
- (k) Tone shorts and grounds in aerial cable.
- (l) Identify cable pairs through wet sections.
- (m) Locate energized power cable.

1/27/2011

xx. METHOD OF MEASUREMENT. The quantity of Special Provision (EMS Locator Devices) to be measured for payment will be on a lump sum basis in the complete and accepted work.

xx. BASIS OF PAYMENT. The accepted quantity of Special Provision (EMS Locator Devices) will be paid for at the Contract lump sum price. Payment will be full compensation for a one time delivery of three complete new EMS locator devices to VTrans. Payment will be made under:

<u>Pay Item</u>	<u>Pay Unit</u>
900.645 Special Provision (EMS Locator Devices)	Lump Sum