

AIR TEST HDPE CONDUITS AND INSTALL MULE TAPE

****From Waterbury IM 089-2(43)(Re-advertised)**

xx. DESCRIPTION. This work shall consist of testing the continuity of all 1¼" HDPE ducts installed, including the preparation of HDPE ducts for an optimal air tight seal between all intermediate locations of HDPE ducts, and installing pull string, or "mule tape", in all 1¼" HDPE ducts installed.

xx. GENERAL REQUIREMENTS. Intermediate locations of HDPE duct include but are not limited to all handholes, splice vaults, and existing innerduct infrastructure. The testing of duct will involve the use of a sealoff kit with a control valve, air gauge, and rope adapter. The Contractor shall use an air gauge to identify the pressure within the HDPE duct. The Contractor shall perform the air test at the manufacturer's recommended pressure rating.

The installation of mule tape shall be completed simultaneously during the air testing of duct. Therefore, if any issues arise with the continuity of duct from point to point, the sequential footage of mule tape will allow the Contractor to identify the area of concern by its footage along the running line. To achieve this, the Contractor shall use a Condux Foam Carrier, Duct Projectile, or the approved equal mandrel. All pull strings installed shall be properly secured at the ends of all ducts and shall not interfere with the installation of duct plugs. The Contractor shall leave a minimum of 25' of spare pull tape at each end of the duct.

xx. MATERIALS. The Contractor is required to submit material specification sheets for all materials used, for approval by the Engineer.

The foam carrier or mandrel used for the testing of duct and simultaneous installation of mule tape shall meet or exceed the following requirements:

- (a) Shall be suitable for duct runs of up to 3500 feet.
- (b) Shall be designed for use in a 1¼" nominal inner diameter duct.
- (c) Shall have a pulling eye to attach the pull string or "mule tape".
- (d) Shall not damage or alter the integrity of duct.
- (e) Shall be designed for the use of high pressure air during testing.
- (f) Shall be capable of pull back in the event of discontinuity.

The pull string or "mule tape" installed shall meet or exceed the following requirements:

- (a) Shall be made of a flat woven polyester.
- (b) Shall be a minimum of .375" in width.

- (c) Shall provide a low coefficient of friction for ease of cable pulling.
- (d) Shall have a minimum break strength of 4,003 N or 900 lbs.
- (e) Shall be marked with sequential footage markings.

xx. METHOD OF MEASUREMENT. The quantity of Special Provision (Air Test HDPE Conduits and Install Mule Tape) to be measured for payment will be the number of feet of duct tested and with mule tape installed in the complete and accepted work.

xx. BASIS OF PAYMENT. The accepted quantity of Special Provision (Air Test HDPE Conduits and Install Mule Tape) will be paid for at the Contract unit price per meter (linear foot). Payment will be full compensation for performing the work specified and for furnishing all materials, labor, tools, equipment, and incidentals necessary to complete the work.

Payment will be made under:

<u>Pay Item</u>	<u>Pay Unit</u>
900.640 Special Provision (Air Test HDPE Conduits and Install Mule Tape)	Meter (Linear Foot)