#### SECTION 09 03 12

# CONDUCTIVE TRACE WIRE FOR WATER PIPE AND SEWER FORCE MAIN INSTALLATION

(Sentences and/or paragraphs that are double underlined indicate revisions that were made from the 2009 specification.)

#### PART 1 - GENERAL

#### 1.1 DESCRIPTION

A. Install electrically continuous trace wire with access points as described herein to be used for locating pipe with an electronic pipe locator after installation.

# 1.2 MEASUREMENT

A. There is no separate payment for the supply and installation of tracer wire on any construction or installation of water main <u>and/or sewer force main</u> by the Contractor. The Contractor shall consider the supply and installation of the tracer wire incidental to all construction of water main <u>and/or sewer force main</u>.

# 1.3 SUBMITTALS

- A. Submit manufacturer's data on materials furnished that indicate compliance with the specifications regarding materials used.
- B. Indicate on plans location of each trace wire test station.

#### PART 2 – PRODUCTS

#### 2.1 MATERIALS

A. Trace wire to be fourteen (14) gauge minimum solid copper with thermoplastic insulation recommended for direct burial. Each trace wire access point to be composed of one Copperhead® SnakePit® Magnetized Tracer Box, <u>Traffic Rated</u>, Test and Monitoring Station or pre-approved equal installed in each proposed 24"x24"x6" concrete <u>pad</u>.

# 2.2 TESTING REQUIREMENTS

A. Contractor shall perform a continuity test on all trace wire in the presence of the Engineer or the Engineers' representative. If the trace wire is found to be not continuous after testing, Contractor shall repair or replace the failed segment of the wire.

# PART 3 – EXECUTION

A. Trace wire shall be installed on all water mains <u>and/or sewer force mains</u>. The wire shall be installed in such a manner as to be able to properly trace all water mains <u>and/or sewer force mains</u> without loss or deterioration of signal or without the transmitted signal migrating off the tracer wire.

- B. Trace wire shall be installed in the same trench and inside bored holes and casing with pipe during pipe installation. It shall be secured to the pipe as required to insure that the wire remains adjacent to the pipe.
- C. Trace wire access points shall in general be no more than five-hundred (500) feet and at every proposed 24" x 24" x 6" concrete valve box collar. Concentrations of multiple proposed valves near pipe intersections, i.e. tees or crosses, may require more than one access point assembly in each concrete valve box collar. Trace wire access points shall be within public right-of-way or public utility easements.
- D. Tracer wire shall be laid flat. The wire shall be protected from damage during the execution of the works. No breaks or cuts in the tracer wire or tracer wire insulation shall be permitted. At water service saddles, the tracer wire shall not be allowed to be placed between the saddle and the water main.

**END OF SECTION**