



CITY OF COLUMBIA, MISSOURI

UTILITIES DEPARTMENT
SEWER UTILITY DIVISION

February 4, 2016

Re: Street, Storm Sewer and Sanitary Sewer Specifications and Standards
Addendum #4 Changes

To Whom it May Concern:

The City of Columbia issued Addendum #3 on December 15, 2015, to the Street, Storm Sewer and Sanitary Sewer Specifications and Standards. The third addendum outlined the specifications and standard details for the state mandated tracer wire that is to be installed on all sanitary sewer laterals, effective January 1, 2016. In consideration of feedback from the construction community, the City has revised the specifications and standard details for the required tracer wire to provide a more cost effective option while still complying with state law. This fourth addendum includes the revised specifications and details. These changes will be posted on the City's website:

http://www.gocolumbiamo.com/PublicWorks/Engineering/san_sewer_toc.php

Thank you for helping us make continual improvements to our infrastructure as we strive to provide the best service to the citizens of Columbia.

Sincerely,
UTILITIES DEPARTMENT



David A. Sorrell, P.E.
Assistant Director

CC: Tad Johnsen, Director, City Utilities
Dave Nichols, P.E., Director, Public Works
Shane Creech, P.E., Engineering Manager, Building & Site Development
John D. Glascock, P.E., Deputy City Manager

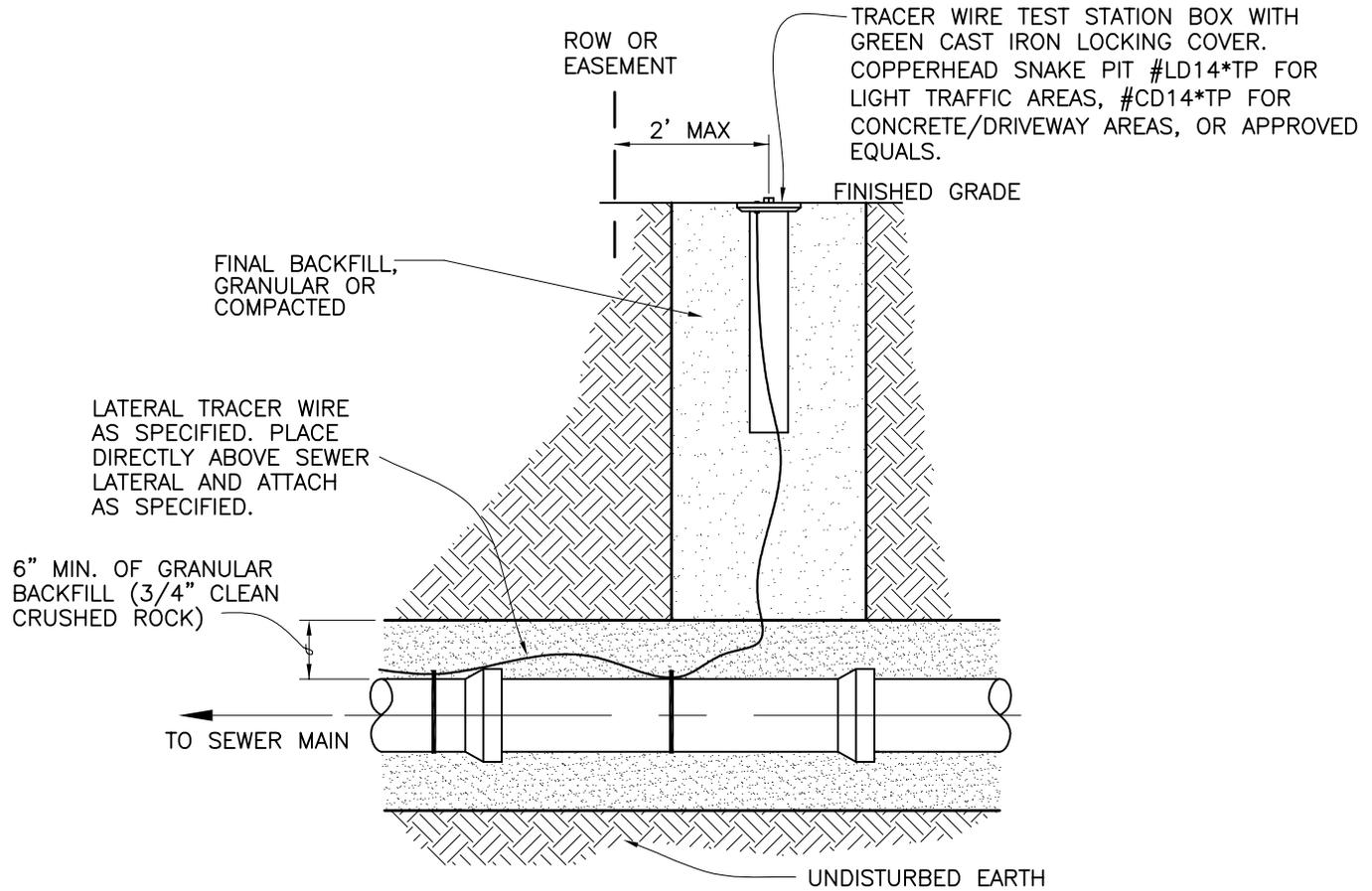
SECTION 506

SEWER LATERAL MARKING

- 506.1. General. When new lateral sewer pipes are installed and connected to an underground facility within the public right-of-way, or if such lateral is fully replaced by excavation within the public right-of-way, the Contractor shall be required to place tracer wire and an access point within a protective enclosure or cleanout for gravity sewer laterals. For sewer laterals operating under pressure or vacuum, the contractor shall be required to place an access point within a protective enclosure and shall not be required to place a cleanout. All protective enclosures and cleanouts shall be extended to grade and installed so that it is easily accessible.
- 506.2. Material
- a. Tracer Wire - A green-coated No. 12 AWG copper clad steel tracer wire intended for direct bury, with minimum 30 mil HDPE insulation thickness, shall be installed the entire length of proposed sewer laterals as per the Standard Detail 12A & 13. For open cut trench, the tracer wire shall have a minimum break load of 450 lb. For boring, the tracer wire shall have a minimum break load of 1,150 lb. Tracer wire shall be terminated at an approved test station box as specified and be accessible from the surface.
 - b. Test Station Box - The tracer wire test station box shall be suitable for underground installation and constructed as per the Standard Detail 12A. Test station boxes shall be appropriately identified with a locking cast iron cover that is color coded green per APWA standards. Tracer wire test station boxes shall be manufactured by Copperhead Industries, LLC or approved equal and installed as per manufacturer's recommendations.
 1. Light Traffic Areas- SnakePit #LD14*TP, or equal
 2. Concrete/Driveway- SnakePit #CD14*TP, or equal
 3. New Construction - SnakePit #LD14*TP-ADJ, or equal
 - c. Grounding - Tracer wire must be properly grounded at all dead ends/stubs. Grounding of tracer wire shall be achieved by use of a grounding anode specifically manufactured for this purpose. The anode shall be ½ lb bare magnesium anode #ANO-1005, as manufactured by Copperhead Industries, LLC or approved equal. The 1.315" diameter anodes shall be connected to the green No. 12 AWG copper clad steel (ccs) wire and buried at the same elevation as the utility.
 - d. Connectors - Connectors shall be designed to seal out moisture and corrosion and be specifically manufactured for use in underground trace wire installation. Non locking friction fit, twist on or taped connectors are prohibited. Connectors shall be manufactured by Copperhead Industries, LLC, or approved equal.

506.3. Installation

- a. The No. 12 insulated wire shall be placed along the top of the sewer lateral and taped in place with electrical tape at base of riser, sewer main, and 6' intervals in between. Caution must be exercised in the initial backfilling not to move or damage the locator wire.
- b. Permanent access points shall be provided through test station boxes or other approved methods located directly above the utility and set to grade.
 - 1 Service Laterals on developed property - Tracer wire must terminate at an approved tracer wire test station box set to existing grade, located a maximum of 2' outside public right-of-way or easement, and out of the roadway.
 - 2 Service Laterals for new construction - Tracer wire must terminate at an approved tracer wire test station box extended 1' above the proposed final grade, located a maximum of 2' outside public right-of-way or easement.
- c. Tracer wire systems must be installed as a single continuous wire, except where using approved connectors. No looping or coiling of wire is allowed. Where splices become necessary outside of access boxes, the splices shall be made using corrosion proof/filled wire connectors.
- d. All tracer wire shall be tested for continuity prior to approval of the lateral by the City. Tracer wire installation shall be performed in such a manner that allows proper access for connection of line tracing equipment, proper locating of wire without loss or deterioration of low frequency (512Hz) signal for distances in excess of 1,000 linear feet, and without distortion of signal caused by multiple wires being installed in close proximity to one another.
- e. Any damage occurring during installation of the tracer wire must be immediately repaired by removing the damaged wire, and installing a new section of wire with approved connectors. Taping and/or spray coating shall not be allowed.



1. TRACER WIRE TEST STATIONS FOR NEW CONSTRUCTION SHALL EXTEND 1' ABOVE THE PROPOSED FINAL GRADE USING SNAKEPIT #LD14*TP-ADJ OR APPROVED EQUAL. UPON COMPLETION OF FINAL GRADING, CONTRACTOR SHALL ADJUST THE TEST STATION BOX TO MEET FINAL GRADE.

	2/3/16
Approved	Date
Revisions	



STANDARD TRACER WIRE TEST STATION

12A