

SECTION 15205

SERVICE LINES **(Owner Furnished)**

PART 1: GENERAL

1.01 SCOPE

Install Owner supplied service lines originating at the water main and terminating at a curb stop connection in accordance with the Drawings and Section 01011 Specifications Special Conditions. This Specification Section does not include service lines or meter installations beyond the curb stop. Refer to Standard Detail 0201-0601-SD47.

1.02 RELATED WORK

Specification Section 15000 - Piping - General Provisions.

PART 2: PRODUCTS

Service line material shall be furnished by the Owner for installation by the Contractor. Refer to Specification Section SSC-1000.1.03 for material to be furnished by the Owner. All products described below shall meet the requirements of NSF 61. The materials for potable water facilities including solder joints, copper, brass and all other types of material shall meet current Federal, State, and Municipal regulations.

PART 3: EXECUTION

3.01 INSTALLATION OF CORPORATION STOPS

Use experienced craftsmen familiar with installation of water service lines when tapping water mains. Make all taps with a suitable tapping machine (Mueller, Ford, Hays or Dresser type) using the proper combined drill and tap. Hand held drilling equipment is not acceptable.

Before making the tap, inspect corporation stops for cleanliness, damaged threads, and proper operation of the ball valve prior to installation. Do not install corporation stops that fail this inspection.

The main may be tapped along the top half of the pipe as directed by the Engineer or as shown on Standard Detail 0201-0601-SD47. Use a tapping saddle when the water main wall thickness or material (plastic, concrete or A-C pipeline material) make it unsuitable for direct tapping. All taps shall utilize a tapping saddle unless otherwise approved by the engineer. Verify saddle use with Engineer.

In the case of multiple services of small diameter (less than 2" diameter), corporation stops shall be at least 12 inches apart and at least 22-1/2 degrees above or below the location of any adjacent tap(s) and curb stops and boxes shall be at least one foot apart. In the case of large diameter multiple services, tap at least 24 inches apart and at least 22-1/2 degrees above or below the location of any adjacent tap(s).

Install all corporation stops so that between 2 and 3 threads extend beyond the inside wall of the main. Use the procedures outlined in AWWA Standard C600 for installing taps on grey iron or ductile iron mains encased in polyethylene. If necessary, make a test tap with the boring bar marked to the proper depth. The corporation stop, when properly installed, will not be shouldered with the main. Do not use lubricants of any type when installing the corporation stop. Dielectric unions shall be installed to prevent transfer of any electrical stray currents to metallic water main.

Use the procedures outlined in AWWA Standard C600 for installing taps on grey iron or ductile iron mains encased in polyethylene.

3.02 INSTALLATION OF SERVICE LINE AND FITTINGS

Excavate the service line trench in accordance with Division 2 of these Specifications. Where auguring or moling is permitted follow guidelines provided by the equipment manufacturer including making a proper size hole to launch and receive the unit. If moling or auguring, take appropriate precautions to avoid damaging other utilities and disturbing the unexcavated surface.

Install service line between the tap connection and the curb stop (if applicable) location making only gradual changes in grade or alignment as required. Sharp bends (greater than 15 degrees) in any direction are not allowed unless approved by the Engineer. 1-1/2" and 2" service lines may be installed using three (3) 1-inch corporation stops and a 3-branch connection. This is in lieu of installing a 1-1/2" or 2" corporation stop. Installation shall be in accordance with Specification Section 15000 and Standard Detail 0201-0601-SD47 and in accordance with current Federal, State, and Municipal regulations.

Install all services straight and at right angles to the main. If this cannot be accomplished, provide the Owner with accurate as-built dimensions to the tee or corporation stop. The Contractor may be required to install tracer wire in accordance with Section 02558 from the water main to the curb box/meter box.

All Polyethylene service line connections shall use insert stiffeners of the appropriate length and size. All Polyethylene service lines shall be buried with tracer wire in accordance with Section 02558.

3.03 INSTALLATION OF CURB STOPS

Install curb stops with the operating nut in the vertical position and the curb box centered over the nut. Install curb boxes plum and adjusted to be flush with finished grade. Install and lock curb boxes immediately after installation.

After completion of service line installation, but prior to backfilling, open the corporation stop slowly to fill the line. When the line is full and all air has been removed, completely open the corporation and close the curb stop. Visually inspect that all piping, fittings, and taps for leaks. Backfill and restore the surface the service line trench in accordance with Division 2 of these Specifications.

3.04 POLYETHYLENE ENCASEMENT

Install polyethylene encasement, or other protective wrap approved by the Engineer, on all metal service lines and fittings (pile, valves, stops, etc.) when they are made of different materials than the water main. When the polyethylene is applied on the main, it shall extend for a minimum clear distance of three (3) feet away from the main when services are not being renewed or extend from the main connection to and including the curb stop or curb meter setter for all new copper service lines. Encasement material and installation shall be per Specification Section 15131 and AWWA Standard C105.

END OF SECTION