

SECTION 65

WATER SERVICE LINE INSTALLATION

PART 1 - GENERAL

1.01 SCOPE

A. Water Service Lines - Existing & New

This section shall include the replacement of existing substandard water services and the installation of new services where directed by the Engineer, or shown on the contract Drawings. It shall include excavating, backfilling, furnishing all material, providing temporary service lines where necessary, and providing all labor and work necessary for the construction of the sizes and types of water service lines as listed in the Contract Documents.

The following type of connections are as follows:

1. Connection of an existing service line in good condition to a new water line.
2. Connection of a new service line to a new water line or an existing water line.
3. Connection of a new service line to an existing service line in good condition.
4. Connection of an approved service line to a curb stop in a new meter box (prestub) and/ or connection to an existing meter in an existing meter box.

1.02 TYPES OF WATER SERVICE LINES TO BE REPLACED

Existing service lines are to be replaced where they are smaller than 3/4 inch in size, or where they are galvanized iron lines, or lead lines. Existing copper service lines, PVC lines, and polyethylene lines in good condition, that are 3/4 inch or larger will not be replaced, unless directed by the Engineer.

1.03 METER BOXES

Below are the conditions where meter boxes shall be installed, replaced or relocated:

1. New water meter boxes shall be installed when they are required for a proposed meter set as shown on the contract Drawings or directed by the Engineer.

2. Meter boxes requiring relocation, or any existing water meter box that, in the opinion of the the Engineer is substandard, shall be relocated or replaced at the Owners expense.
3. Any meter box relocated or disturbed by the Contractor in his construction operations shall be considered "incidental to construction". The costs of such relocation or replacement shall be borne by the Contractor.

1.04 GUARANTEE

The Contractor shall provide a guarantee against defective equipment and workmanship in accordance with the requirements of the section entitled "Guarantees and Warranties" of these Specifications.

Part 2 - PRODUCTS

2.01 WATER SERVICE LINES, FITTINGS AND METER BOXES

- A. The Contractor shall furnish all service line pipe and fittings conforming to the following:
 1. Pipe - 3/4 inch minimum - Copper Type K. Soft Annealed conforming to ASTM B88 47.
 2. Corporation Stop - Size as required for service - 3/4 inch minimum. Conforming to AWWA Standard C800-66-Tapered CC Pipe Threads, Ford F1000, or equal.
 3. Meter Stop - Ford Lockwing Angle Valve with compression joint, KV43-332W, or equal.
 4. Fittings - Compression fittings approved by Cleveland Utilities.

B. METER BOXES

The Contractor shall furnish polyethylene meter boxes as manufactured by Southeastern Distributors, Franklin, North Carolina (MB-1) or approved equal. An aluminum or cast iron cover may be used or equal. All meter boxes and frames and covers shall be approved by the Engineer.

PART 3 - EXECUTION

3.01 INSTALLATION OF SERVICE LINES AND METER BOXES

- A. A complete service line shall be installed at all new connections to the water distribution systems. Service lines shall be installed between the water main and the property line. Where road crossings are required, service lines shall be installed by boring and jacking wherever feasible.
- B. Each water service line shall be connected to the water main through a brass corporation stop. The water main shall be tapped and the corporation stop inserted at a 45⁰ angle from the top of the water main under pressure. Service clamps or saddles must be used when connecting water service lines to PVC water mains.
- C. The water service line shall be laid to a depth of at least (18) inches below finished grade of the traveled area from the water main to the meter box.
- D. The excavation, bedding and backfilling for service lines shall be the same as required for "Polyvinyl Chloride (PVC) Water Pressure Pipe", Section 60 of these specifications.
- E. Each new water service or replacement of existing substandard service shall include a meter stop. The meter stop shall be at the end of the service and within the meter box.
- F. Metallic detection tape (WATER LINE) will be installed along and over the water service line according to the specifications for PVC water lines entitled "Polyvinyl Chloride (PVC) Water Pressure Pipe", Section 60.
- G. Meter boxes shall be set at the property line and connected to the new service line. The exact field location of the meter box shall be determined by the Engineer and shall be located to provide easy access to the meter reader and serviceman, be not a hazard to the customer or public, be reasonably well protected against frost, mechanical damage and tampering.

** END OF SECTION **