

SECTION 02665

WATER SERVICE CONNECTIONS

PART 1 GENERAL

1.01 SCOPE OF WORK

WORK covered by this Section consists of furnishing all materials and installation of all service connections to the water system.

1.02 RELATED WORK

Section 02660 - Water Distribution System

1.03 REFERENCES

- A. Polyethylene (PE) Pressure Pipe, Tubing, and Fittings, 1/2 inch through 3 inch, for Water (AWWA C901).
- B. "K" Soft Temper Copper Tubing (ASTM B88), if approved by TOWN.
- C. Cole Water Meters – Displacement Type (AWWA C700-90).
- D. Specifications for Gray-Iron Castings (ASTM A-48-74).

PART 2 PRODUCTS

2.01 SERVICE TUBING

- A. Up to 1" diameter shall be copper tubing conforming to ASTM designation B88 for Type "K". Soft temper or AWWA 78-CR Type "K". Tubing may be in 20-foot straight lengths or 60-100 foot coils.
- B. Services greater than 1" diameter may be either copper, as specified in Section A above, or polyethylene conforming to AWWA C901, SDR9, PC160.
- C. Tubing O.D. shall be compatible with accessories specified herein below.

2.02 WATER METERS

Meters shall be NEPTUNE T-10, PROREAD, WITH R900 TR encoder, w/ bronze bottom, 5/8" x 3/4" positive displacement type, magnetic drive, with sealed registers, totalizer, and straight reading dials in gallons, frost-proof design, meeting AWWA Standard C700 unless otherwise specified. Meters shall be compatible with meter yokes specified herein below.

2.03 COPPER SETTERS

Copper Setters shall be Ford 170 Series sized for the appropriate meter with check valve on outlet. For 3/4 inch and smaller use dual checks.

2.04 METER BOXES

- A. Shall be Ford yokebox, 5/8" x 3/4", with angle in and angle out pattern and integral dual check valve and shut off valve with lock wing.
- B. Shall be plastic box, size 18"L x 9 1/2"W x 11" deep, except when installation is in a paved area. When installation is in a paved area, box shall be cast iron.
- C. Cover shall be Brooks cast iron cover, size 16 3/4"L x 11"W with 6 3/4" x 7 1/16" reading flap.
- D. Shall be NEPTUNE T10 compatible.

2.05 ACCESSORIES

- A. Shall be compatible with pipe and service tubing furnished.
- B. Service saddles shall be Ford S90 Brass Saddle for C900 pipe or Ford S70 for standard PVC pipe, 3/4" tap size.
- C. Corporation stop shall be Ford Catalog Number F1000, 3/4-inch size.
- D. Cut-off valve shall be a 3/4" WATTS Series WBV brass ball valve.
- E. Valve box for cut-off valve shall be a FORD Products Century 60.

2.06 COMPOUND METERS

- A. Compound meters shall be NEPTUNE Compound Meters. Compound meters shall consist of a combination of an AWWA Class II turbine meter for measuring high rates of flow and a piston type positive displacement measuring chamber for measuring low rates of flow enclosed in a single bronze housing. A bronze swing action valve shall direct flows through the measuring chamber.
- B. Meter size and model shall be suitable for the proposed flow and pressure application subject to review by the TOWN.
- C. Backflow preventers in accordance with EPD regulations must be supplied and installed with each application. Acceptable manufacturers are Ames and Watts.
- D. Precast vaults for each meter must be supplied and installed. The vault must be sized for each application so as to allow ample working room in the vault. Contractor is to provide shop drawings of the proposed units for approval by TOWN and ENGINEER at the Preconstruction Conference.

PART 3 EXECUTION

3.01 GENERAL

- A. Service connections shall be installed in the same manner as water distribution mains, and in accordance with Section 02660 of these Specifications, except for depth, which shall be 24 inches at the meter box.
- B. Meter boxes shall be placed as shown on the construction drawings or as directed by TOWN REPRESENTATIVE.
- C. Service connections shall be made where directed by the TOWN REPRESENTATIVE.
- D. Jack and bore service tubing under pavement. No pavement cutting will be permitted.
- E. Water meters are to set in Ford 170 series coppersettlers or approved equivalent. Coppersettlers are to be plumb.
- F. Any pipe, solder, or flux used in the installation or repair of water lines must be lead free. Pipes and fittings must not contain more than 8.0% lead, and solders and flux must not contain more than 0.2% lead.
- G. All plastic water pipes and service lines must bear the National Sanitation Foundation (NSF) seal of approval for potable water.
- H. Meters shall be turned over to the TOWN when applying for connection and paying connection fees.

END OF SECTION