

**BROOK FOREST WATER DISTRICT**  
**303-674-8194 OR 800-544-9903**  
**SERVICE LINE SPECIFICATIONS**  
**EFFECTIVE DATE: APRIL 2004**

**GENERAL:**

All interior and exterior items listed below must be inspected and approved before water will be turned on to the house. Additionally, it is highly recommended that all materials and construction procedures be inspected and reviewed by the District prior to installation to prevent rejection of the work.

A 24-hour notice is required for all inspections.

Contractor making the tap is required to have a BFWD license – call office for application.

Licensing requires: Completed application form, general liability insurance certificate of \$500,000 or greater, proof of Workman's Comp., as needed, and a payment of the \$50 application fee payable to BFWD.

Winter moratorium on taps is November 1 through April 15; no new taps into system during this time. Last day to tap – last working day (M-F) prior to November 1.

Connection fee must be paid in full prior to receiving authorization to tap (Connection fee for 2020 is \$17,000).

**EXTERIOR:**

**TRENCH**

Minimum 7 feet deep, rock free main to foundation, perpendicular to main (tap to curb box), inspected and approved prior to backfilling.

**SERVICE LINE**

250 feet maximum length, ¾ inch diameter K copper, flared connections (no solder joints below the ground), pressure tested to 150 psi or the working pressure of the system.

**INSULATION**

2'x8'x2" Styrofoam blue board above service line, main to foundation.

**MAIN TAP**

By license contractor only. Used Ford style 202B double strap brass saddle (¾ inch tap). Contact the maintenance office for the correct water main diameter. Corporation stop must be Ford F60-3, ¾ inch, AWWA/CC taper inlet thread by flared copper outlet thread. District has 6 inch saddles and corporation stops available for sale. Call for details.

**CURB STOP**

Use ¾ inch Ford inverted key style with stop and waste feature, number Z22-333SW.

**CURB BOX**

Minimum 8 feet long (fully extended) McDonald “Arch” pattern box (number 5601) with number 5601L lid, set within 5 feet of street lot line. A minimum of one foot of stickup above the finished grade is required.

**THAW WIRE**

Must use #4 solid copper wire from the water main to the top of the curb box plus 12 inches. Approved clamping devices on the saddle include either a ground rod clamp or a second brass nut.

**INTERIOR:**

**SHUT OFF VALVES (BALL VALVES ONLY)**

Install the first valve a maximum of 6 inches above the finished floor, and the second shut off valve immediately after the backflow preventor, insulate pipe from lower shut off valve to floor.

**DRAIN**

Drain capability directly above the lower shut off valve.

**PRV**

Must be ¾ inch Watts #U5B with threaded unions on both ends, 50 psi maximum.

**BACKFLOW PREVENTOR**

Must use ¾ inch cartridge style dual check valve, number HHC11-333.

**HOSE CONNCTION**

One allowed for fire protection (NO OUTSIDE WATER USE ALLOWED).

**BROOK FOREST WATER DISTRICT  
SERVICE LINE INSPECTION FORM**

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**Owner:** \_\_\_\_\_

**Legal Address:** \_\_\_\_\_ **Account No.** \_\_\_\_\_

**Builder:** \_\_\_\_\_

**Excavator:** \_\_\_\_\_

**Plumber:** \_\_\_\_\_

**Schematics**

**Exterior Locations**

**Interior Plumbing**

**Notes/Comments:**

**Diameter of Main:** \_\_\_\_\_

**Date exterior approved:** \_\_\_\_\_

**Inspected by:** \_\_\_\_\_

**Date interior approved:** \_\_\_\_\_

**Inspected by:** \_\_\_\_\_

## **ARTICLE IX - TECHNICAL SPECIFICATIONS FOR CONSTRUCTION OF WATER LINES, SERVICE LINES AND WATER METERS**

**NOTE:** All construction and installation of waterlines or service lines within the District shall be in conformance with the Standards and Specifications for Water System Construction for the Brook Forest Water District, dated March, 1984, portions of which are summarized in this Article.

**Section 9.01. Water Service Line.** Service lines shall meet those specifications as set forth by the State Board of Health of the State of Colorado and all regulations imposed by any governmental authority relating to waterline construction and, in addition, such further and additional restrictions as may from time to time be imposed by the Board of Directors.

**A.** All construction of service lines from the stop box to the main line must be done by a contractor licensed by the District. It is not required that a licensed contractor install the service line from the stop box to the structure.

**B.** The water service line shall be soft type K copper and any joint or connection which will be covered over must be a flared connection. No soldered connections underground shall be permitted within the District. The copper line must extend to within five feet (5') of the property line where a stop box will be located. Except upon written consent of the District, **no service line may be more than two hundred fifty (250) feet in length from the property line to the point of connection to the structure.** All copper lines must be insulated with 8'x2'x2" Styrofoam R10 boards (DOW BLUE BOARDS). A Watts No. USPRV (pressure regulator valve) of the same size as the service line must be installed and set at a pressure of no more than fifty (50) PSI. The PRV should be installed immediately downstream from the main shut off valve inside the building and have a second shut off valve immediately after it to facilitate cleaning of the filter. Plumbing inside the structure must have a fifty (50) pound pressure reducing valve and shut off valve installed by a licensed plumber and plumbing must be designed so as to avoid freezing of pipes. Specifications for the service line between the property line and main line shall consist, among other things, of a corporation cock, stop box, insulation, copper tubing and thaw wire. [Amended 8/5/92]

**C.** The water service line shall be brought to the building at a depth of **seven (7) feet below ground surface.** No service shall be laid parallel to or within three (3) feet of any bearing wall which might thereby be weakened. The water service line shall be laid at uniform grade, in a straight alignment, and perpendicular to the main.

**D.** All excavations required for the installation of water service shall be open trench work, unless otherwise approved by the inspector. Pipe laying and backfill shall be performed in accordance with the following standard specifications as follows:

(1) **Any trench for any waterline must be a minimum of seven (7) feet deep from finished grade and extend from the building to the property line where a stop box will be located.**

(2) Any line on the user's property must be installed, inspected and approved before main line tapping can be performed and permitted.

(3) Galvanized pipe is prohibited underground in any section of the District.

(4) **No taps shall be permitted within three (3) feet of any fitting or connection of the main waterline.**

(5) All lines must be tested and proven watertight under pressure not less than one hundred fifty (150) pounds or the working pressure under which it is to be used.

(6) No waterline shall be backfilled or covered until all work is approved by the District's engineer or his designee.

(7) **The rules and regulations for backfilling are as follows: (a) the first two (2) feet of backfill must consist of a fine material with particles of not over one (1) inch in size ( Structural Fill ) ; (b) no backfilling will be done until all work is inspected, approved and tested by the District; and (c) all main line trenches are to be tamped with a compaction machine, including the line to the property stop box from the main line.**

(8) Any problems arising that are not covered by these specifications and the rules and regulations of the District will be settled by the District's engineer and his decision shall be final.

**Section 9.03. Curb Stop Box.** The stop box shall be of the "arch pattern" McDonald type or any other make that has a positive attachment of stationary rod to the curb stop extending upwards inside the curb stop box. **Maintenance of the stop box is the responsibility of the owner.**

A. The stop box valve shall be **a stop and waste type** with a positive stop at full open and full closed.

**Section 9.04. Inspection of Stop Box.** Inspections shall be made on all connections, valves, meters and meter boxes of service lines prior to commencement of service and trenches shall not be filled until such inspections are made and approval obtained.

**Section 9.05. Thaw Wire.** A thaw wire of four (4) gauge copper line shall be connected at corporation cock and extend to stop box.