# Residential Sewer Installation Procedures

Department Application

# **Permit Required**

- A permit is required before beginning installation. An inspection is required before covering the work.
- All plumbing work must be performed by a licensed Plumbing or Sewer Excavating Contractor, or the owner of the property (up to and including a duplex).
- A licensed contractor is recommended unless you have some knowledge or experience in sewer installations.

# **Materials Allowed 4" Only**

- A. A.B.S., Schedule 40 D 2661-94a (Note #1)
- B. PVC, Schedule 40 or ASTM 3034-SDR 35
- C. Cast Iron, "No Hub" or "Bell and Spigot"
- D. Asbestos Cement A.C. ASTM C 428-92
- E. Concrete, ASTM C 14-92
- F. Vitified Clay, ASTM C 700-91

(Glue must be approved for type of pipe used)

#### Grade

Minimum pipe grade should be <sup>1</sup>/<sub>4</sub>-inch to the foot (2%), unless otherwise agreed to by the Plumbing Inspector. Additionally, sewer should be laid with at least 24 inches of cover to protect from freezing and physical damage, unless otherwise approved by the Plumbing Inspector.

# **Clean Outs**

"Clean outs" are to be installed approximately 2 feet outside of the building and at each 135 degrees horizontal change of direction and shall not exceed 100 feet of distance between clean outs.

#### **Direction Change**

90 degree change of direction (horizontal to horizontal) will be accomplished with Wye and 45 degree bend or (2) 45 degree bends with nipple between them.

# Bedding

The pipe must be properly bedded under and around the pipe. Imported bedding material must be used in rocky soil.

#### Test

A 5 PSI Air Test or Water Test to the top of upper cleanout is mandatory.

#### **Septic Tanks**

Metal septic tanks shall be pumped and filled with sand or gravel. Metal access pipes must also be filled or removed.

#### **Scheduling Inspections**

Boise City must inspect all sewer lines before they are covered. Four to 24 hours notice must be given before an inspection can be made. To schedule an inspection, call 384-3802.

# Sanitary Sewer Service Line Connection to Boise City Sewer

This document outlines suggested procedures for connecting structures onto the City's existing sanitary sewer system. Failure to follow these procedures may cause connection to the sewer to be costly and difficult.

- Prior to connecting to sewer, assessments and/or connection fees must be paid to Boise City. These fees provide for capital cost of neighborhood sewers, trunk sewers, and treatment plant capacity. The fees can be determined by calling Sewer Rating at 384-3900. If your property is located in a sewer district, you must contact the district for locations and fees.
- 2. Prior to beginning construction for connection onto the sanitary sewer line, a plumbing permit must be acquired. If your property is located within the Boise City limits, take out a plumbing permit at Planning & Development Services, in City Hall, at 150 N. Capitol Blvd. The phone number is 384-3805.

If your property is outside of the Boise City limits, a plumbing permit must obtained through the State of Idaho Department of Building Safety, Plumbing Division, located at 1090 E. Watertower St, Meridian Idaho, 83642, phone number (208) 334-3442.



www.cityofboise.org/pds City of Boise Planning & Development Services P.O. Box 500 • 150 N. Capitol Blvd • Boise, Idaho 83701-0500 Phone: 208/384-3802 • Fax: 208/384-3867 • TTD/TTY 800/377-3529 The plumbing inspectors for both the City and State will map the location of the service line. These maps will be retained by the City Public Works Department and will be available to property owners for purposes of service line locations. Read the information given out with the permit regarding acceptable pipeline materials, installation procedures and inspection requirements for more information.

- 3. Before beginning excavation for connecting onto the sewer system, contact the Mapping Section at 388-4729 (located on the 2nd floor of Boise City Hall) to get a copy of the record drawing information outlining the approximate location and depth of the existing sewer service stub to your property. If a service stub does not exist, Public Works will advise you on the procedures for tapping the sewer line and extending the service line.
- 4. Utilizing the record drawing information, physically measure in the field to determine the location of the service line stub.
- 5. At least forty-eight (48) hours prior to excavation, contact Digline at (208) 342-1585 to have existing utilities marked in the field to avoid potential damage.
- 6. Excavate at the location established, carefully looking for any evidence of the sewer service line. Typically, the service lines have been marked with a 2' x 4' wooden marker with a metal finder wire. The 2' x 4's will rot out over time, however, the wire should be visible if the excavation procedures are carefully done. We suggest that the excavation proceed to a depth of 2 or 3 feet at a radius of 6 feet surrounding the measured location to try and find evidence of the sewer service connection markers.
- 7. If evidence of the sewer service line is not found, double check the measurements.
- 8. If the measurements are correct, continue excavating to the depth shown on the plans. In high ground or water areas, pumps should be utilized to limit the excavation width and to remove water and mud that may cover the markers or the pipe. *The sewer lines cannot be used for dewatering of the trench. It is illegal to use the sewer pipe for dewatering purposes.*
- 9. If the sewer service stub is still not found, contact Public Works for assistance. Public Works will send personnel to the site, verify that your measurements of the sewer service line are correct, may ask you to do some additional excavation if they believe the

sewer service is in the close proximity, and may send a sewer line television crew to televise the sanitary sewer line to verify that there physically is a sewer line stub as shown on the drawings.

- 10. If the service line still cannot be located, Public Works will initiate a contract to have this service line located. This may take up to 2 weeks time.
- 11. Once the sewer service line is found, we suggest determining the elevation of both the service line and the elevation of the line leaving the house to insure that adequate slope exists for the proper operation of the sewer service line. A 4" service line must have a minimum grade of 2% unless otherwise approved (1/4 inch fall per 1 foot distance). If adequate slope does not exist, contact Boise City Public Works for further assistance.
- 12. If adequate slope exists, we suggest laying the pipe from the downstream end to the upstream end. Do not remove the existing service connection end cap on the service line until proper dewatering of the trench has been satisfactorily accomplished. Failure to do so will make you liable for cleaning rocks and debris which may enter the sewer line and potentially the treatment cost for the estimated flow of ground water entering the line and prosecution and fines in accordance with the Boise City Code. It is recommended that the service line be checked for debris and stoppages after the plug is removed.
- 13. Once the line has been laid and properly bedded under and around the pipe, but not backfilled, contact the applicable plumbing department for inspection.