

WASHINGTON COUNTY
SANITARY SERVICE LATERAL
MATERIAL AND INSTALLATION GUIDE

Established By:

THE BOARD OF COUNTY COMMISSIONERS
WASHINGTON COUNTY, OHIO

Commissioners

Mr. Timothy C. Irvine, President
Ms. Cora A. Marshall
Mr. Steven W. Weber

This sanitary Sewer Standard Drawing is established under the authority of Section 6119 of the Ohio Revised Code.

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Washington County
Sanitary Service Lateral
Material and Installation Guide

208 SEWER PIPE:

208.03 Polyvinyl Chloride (PVC)

208.31 Pipe

- a) PVC pipe shall conform to ASTM D 3034 SDR 35.

208.032 Fittings

- a) PVC pipe fittings shall be SDR 265 heavy wall gasketed sewer fittings meeting ASTM D 3034 and ASTM F 1336.

208.04 Adapters for connecting pipes of dissimilar material and size and adapters for connecting broken or cut sewer pipe shall be Ameri-Connect, Fernco, or approved equivalent.

208.05 All sanitary sewer services shall be supplied with a Test cleanout as manufactured by Hubsett Manufacturing, Mueller, or approved equivalent.

305 BACKFILLING:

All trenches and excavations shall be backfilled as specified herein as soon after the sewers, waterline or other structures are completed and the particular type of construction and the circumstances will permit

305.01 The type of backfill shall be:

- Type A: Granular material as specified in Item 310.02, Grade A or Table 703-1, No. 57, 6, 67, 68, 7, 78, 8, aggregate, ODTs
- Type B: Natural earth free from stones larger than two (2) inches in the greatest dimensions, top soil, vegetation, debris, rubbish or frozen material.
- Type C: Natural earth free from stones larger than six (6) inches in the greatest dimension, rubbish or frozen material, provided, however, that occasional boulders or stones not larger than one (1) cubic foot may be deposited at least three (3) feet above the top of the sewer and subject to the Engineer's approval.

412 SERVICE CONNECTION AND LINES:

The requirements for Chapter IV of the Washington County Specifications are modified for service connections and lines as follows and shown on the attached drawing Number Sas-8.

- 412.01 Service or house connections shall not be connected to the lateral or mainline sewers until full approval of said lateral or mainline sewer has been received.
- 412.02 The sewer lines shall be PVC as specified in Section 208 of these specifications, with watertight joints and proper fittings for all changes in alignment or grade. Only adapters approved by the County shall be used to change from one pipe material to another in any sewer line. Sewer service lines shall be no less than four (4) inches in diameter and shall be laid at a minimum slope of one-quarter (1/4) per inch per linear foot. The County may, by special permission in each case, authorize the building sewer to be laid at a minimum slope of one-eighth (1/8) inch per linear foot if it is determined to be necessary. The interior of each length of pipe shall be made perfectly clean and free from offsets, fins, and projections before the next length is connected thereto. The County may require that the water tightness of the sewer service line be demonstrated by using the following testing procedures.

Testing Procedure:

When using the air test the inlet end of the upstream and downstream cleanout shall be closed with an airtight bulkhead. The sewer shall then be put under pressure to 3.5 psig. The minimum time requirements for the 0.5 psig pressure drop from 3.5 psig to 3.0 psig shall not be less than the following:

Pipe Size (inches)	Time
4	1 mm. 53 sec.

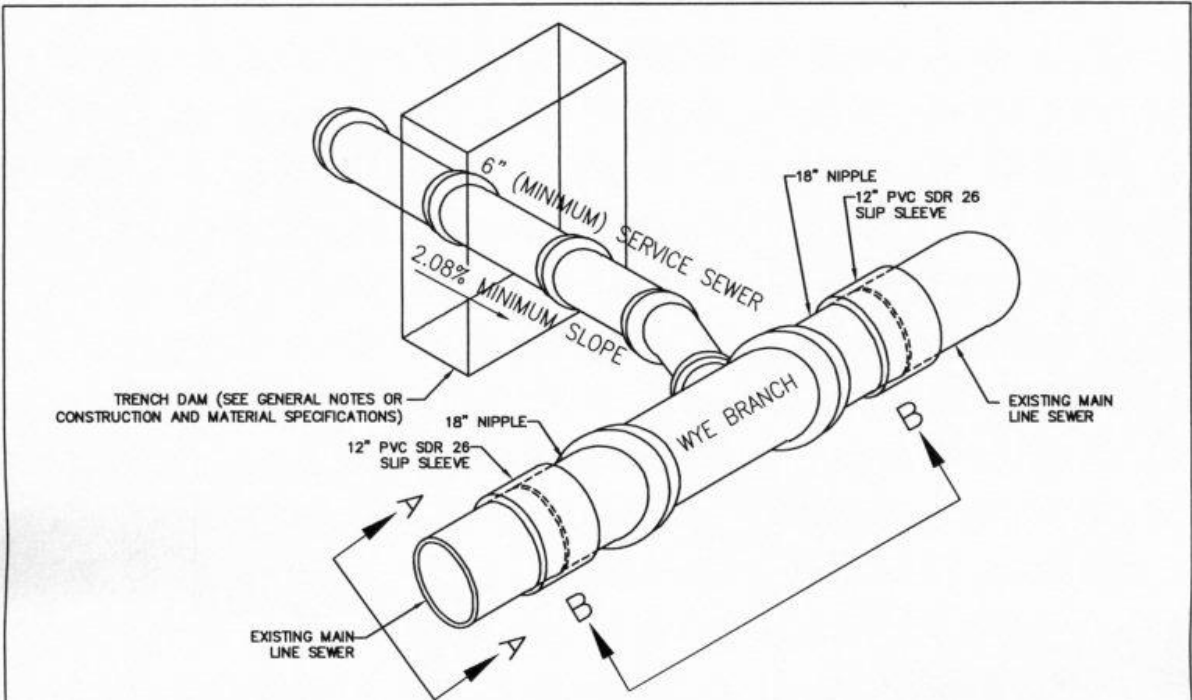
An air pressure correction is required when the prevailing ground water is above the sewer line being tested. Under this condition, the air test pressure must be increased 0.5 psig for each foot the ground water level is above the invert of the pipe.

- 412.03 Existing sewers may be used in connection with new buildings or alterations to existing buildings only when it can be demonstrated that such sewers conform in all respects to the requirements contained herein for new building sewer service. The County may make an exception as to the size of old building sewers provided they are not less than four (4) inches in internal diameter, and otherwise meet the

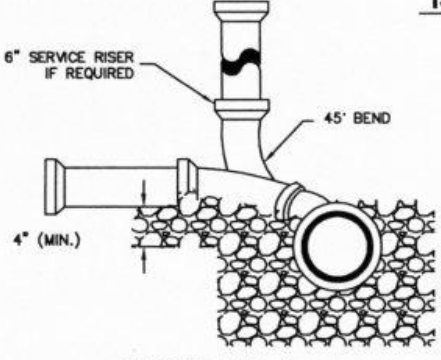
requirements of this section. Sewer service lines constructed parallel to any exterior wall, cellar, basement, or cistern shall be at least three (3) feet away from said structure. Sewer service lines shall have at least two (2) feet of earth or stone cover.

- 412.04 All excavation for sewer lines shall be by open cut from the surface. The sides of the trench shall be vertical, using such sheathing and bracing as necessary to accomplish this result. The bottom of the excavation shall be shaped to fit the lower half of the sewer pipe so that the pipe will have uniform bearing. Adequate bell holes shall be excavated at each joint. In the event the trench is excavated below the required grade of the pipe, the excess space shall be filled with the stone specified for the Class B bedding. The width of the trench at the top of the pipe shall not exceed two (2) feet plus the outside diameter of the pipe nor shall the width be less than one (1) foot, plus the outside diameter of the pipe. When unstable, soft or spongy conditions are encountered at the trench bottom, such material shall be removed and replaced with clean, crushed stone sufficient to stabilize the trench bottom to support the pipe to a true line and grade. **Water, gas, telephone, electric, or cable lines shall not be laid in the same trench as the building sewer.**
- 412.05 The building sewer shall be backfilled to an elevation of at least twelve (12) inches over the top of the pipe by tamping in finely graded soil or granular material in six (6)-inch layers. Soil containing stones larger than two (2) inches in the greatest dimension shall not be used for this portion of the backfill. The balance of the backfill shall be made in accordance with requirements of Type C backfill, Section 305.01 of the Washington County Specifications.
- 412.06 Connection to existing wye branches shall be made carefully to avoid damage to the bell of the branch or to the lateral sewer. Such damage as may occur shall be repaired as directed by the County. Connections to a sewer at a point where no wye branch has been provided shall be made after consultation with the County, no exceptions.
- 412.07 The Contractor shall repair or restore any drains or service lines damaged or disturbed during the construction of the sewer service line.
- 412.08 Surface water, which collects in basement or foundation excavations, shall **not** be discharged at any time into the sewer service line. If the sewer service line is completed before the plumbing is connected thereto, the integrity of the installed HubSett must be maintained through all phases of construction in order to prevent surface or ground water from entering the sanitary sewer system.

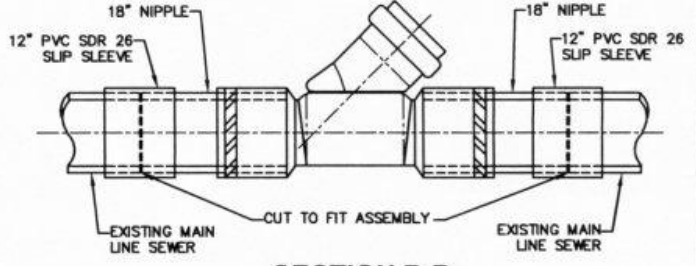
413 Water Connections: No downspouts, surface inlets, foundation drains or any other source of ground or surface water shall be connected either directly or indirectly to or discharged into any part of the sanitary sewer system.



ISOMETRIC VIEW



SECTION A-A



SECTION B-B

NOTES:

1. FOR USE ONLY WITH PVC PIPE. FOR OTHER MATERIALS, USE FITTINGS AND ADAPTERS IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.
2. EXISTING SANITARY SEWER SECTION TO BE CUT AND REMOVED TO FIT SERVICE CONNECTION ASSEMBLY.
3. PUNCHING OR CHIPPING THE HOLE INTO THE PIPE WILL NOT BE PERMITTED.
4. IF CONNECTION TO THE HOUSE IS NOT MADE IMMEDIATELY, A STOPPER SHALL BE PROVIDED.

SERVICE CONNECTION FOR EXISTING
PVC SANITARY SEWER PIPE

WASHINGTON COUNTY	
STANDARD CONSTRUCTION DWG.	
REVISED:	DRAWING NO.
06/24/10	So.S-08