

**WEST HILLS AREA WATER POLLUTION CONTROL AUTHORITY
257 LINDE ROAD
KITANNING, PENNSYLVANIA 16201**

APPENDIX A

RULES AND REGULATIONS FOR THE
CONSTRUCTION OF CONNECTING SEWER

1. PROCEDURE: The general procedure required in the installation of private connection sewers is summarized as follows:
 - (a) On the form provided by the Authority, examine the sketch to determine the location of the service wye for the property to be served. If the sketch is not clear or additional data is needed, visit the Authority office to examine the as-built sewer drawings. Discuss with the Manager and/or Inspector any particular conditions of the proposed construction that requires special attention.
 - (b) Make application, get plans approved and secure permit as specified in Article VIII.
 - (c) Before any excavation is started place a One-Call 1-800-242-1776 to determine the locations of electric, gas, water, telephone, cable and any other underground utilities in the area proposed for excavation, as required under State law.
 - (d) Locate and uncover the end of the Authority's service sewer and the building drain at the point connections are proposed prior to any further excavation, determine the elevation of and the required grade between the two points, to assure that the minimum allowed grade can be met.
 - (e) Proceed with further excavation between these two points.
 - (f) Lay pipe beginning at the lateral or service wye, or if none exists, from an approved service connection. Horizontal pipe shall be placed with printed information (manufacturer, size, material, etc) visible and facing upward such that it can be read from ground level prior to placement of any material over the pipe. Piping shall be installed upgrade to near the point of connection to the building drain. Piping shall include an inspection stack near the property line and shall also include a vent and other appurtenances as shown on the drawings. The inspector shall be notified of the scheduled connection to the Authority's sewer at least twenty-four hours in advance. Do not connect to the Authority's sewer without the Authority's inspector observing. The inspection stack shall be constructed with glued watertight joints. A cleanout plug with cast iron frame and cover which shall be removable for visual inspection of the building sewer, shall be installed over the top of the inspection stack. Care shall be taken to keep the stack vertical so that visual inspection may be completed.

For new construction, the basement slab shall not be poured prior to inspection.

For both new and existing buildings no backfill shall be made on the service sewer, and it shall be visible for inspection .If the trench has been backfilled, the service sewer will be plugged by the Authority until the trench has been re-excavated and the pipe is visible.

- (g) Request inspection by Authority of exposed piping (24 hour notice required), in which particular attention will be given to:
- (1) The type, size, materials, etc. of pipe and fittings used in the installation.
 - (2) Connection to the existing building sewer shall be made at the building as shown on the drawings.
 - (3) Installation of a suitable trap or traps on the building facilities. A vented trap must be installed within five feet (5') of the building connection.
 - (4) Installation of cleanouts and inspection stacks as shown on the drawings.
 - (5) Facilities for conducting roof drainage away from the building and away from the sanitary sewer and the foundation.
 - (6) Facilities for draining the foundation drain away from the building and the sanitary sewer.
 - (7) Connection of prohibited facilities to the sanitary sewer. Included in these facilities are depressed driveway drains, outside cellar stairwell drains, outside window wells, downspouts, foundation drains, illegal sump pumps or any facility conducting storm water into the sanitary sewer by any means.
 - (8) The slope of the building sewer to the tee at the inspection stack shall be as shown on the drawings.
 - (9) Conformance of materials used in the construction of sewers with the "Rules and Regulations for the Construction of Service Sewers".
 - (10) Tightness of joints in pipes.
 - (11) Use of mortar or other prohibited materials in joints
 - (12) Bedding and backfill under, around and above the pipe. The type and dimensions of bedding and backfill materials shall be as shown on the drawings. Pea gravel shall not be used for pipe bedding.

The Applicant shall correct any deficiencies noted by the inspector in accordance

with these requirements.

- (h) Upon inspection and approval by Authority, make final connection to building drain, this work being accomplished in presence of the inspector.
- (i) Special conditions and requirements apply if a grinder pump is to be installed between the building and the public sewer. Contact the Authority for installation requirements for grinder pumps.

2. TYPE AND STRENGTH OF PIPE:

- (a) Preferred Construction: Except as specified below, all pipe installed shall be constructed of ASTM D-3034 SDR 35 PVC plastic solid wall pipe and ASTM D-3034 Schedule 40 PVC plastic solid wall pipe, as shown on the drawings. Glued joints shall be used on all Schedule 40 PVC plastic pipe and fittings and all SDR-35 PVC plastic riser pipes and fittings for vents, cleanouts and inspection stacks. Horizontal runs of SDR-35 PVC shall be gasketed joints, except the double cleanout tees for inspection stacks and cleanouts shall be glued joints. On filled ground, or on ground which is not firm, ductile cast iron pipe shall be used. Ductile iron pipe (DIP) and fittings shall comply with ISO 2531. Ductile Iron pipe and fittings shall be polyethylene encased, cement lined and gasketed and meet all meet the requirements of ANSI/AWWA C150/A21 and ASTM A746. All joints for the ductile cast iron soil pipe shall have elastomeric gaskets. Joints for the ductile cast iron soil pipe shall not be made with jute and lead. Cast Iron soil pipe within the building shall meet the requirements of ASTM specifications A 74, A 888, A 564, A 574, and A 1277. Iron riser pipes shall have restrained joints. Each section of all pipe shall be stamped with the manufacturer's name and certification.

Proper construction and installation methods must be strictly followed. Bedding and side support shall be AASHTO 57 graded aggregate.

- (b) Alternate Materials/Methods (provided existing host pipe is in conducive condition)
 - (1) Cured-In-Place-Pipe relining – Maxliner system designed and installed per manufacturer's recommendations and specifications or approved equal. Pipe shall be four (4) inch minimum.
 - (2) High Density Polyethylene (HDPE) pipe liner – Charter Plastics PE 3408/3608 designed and installed per manufacturer's recommendations and specifications or approved equal. Pipe shall be four (4) inch minimum.

3. MINIMUM PIPE SLOPE: Minimum pipe slope shall be as shown on the drawings.

4. CLEANOUTS AND TRAPS: The installation of outside traps on the new service lines is required. Installation of cleanouts on the new service line is recommended for buildings which do not have a cleanout on the existing plumbing. Cleanouts are permitted for special conditions of alignment, as may be desired by the property owner. All cleanouts must extend to the finished ground surface and must have a threaded plug and cast iron

frame and cover, as shown on the drawings, to keep out leaves, debris and animals.

The use of grease traps on all establishments which discharge grease or oil, such as restaurants is required. Such facilities must have two or more grease and oil traps installed in series. The grease and oil traps must be approved in writing by the Authority before installation.

The use of sediment and grit traps is required on all establishments which discharge sediment, including but not limited to car wash and other heavy cleaning facilities. The sediment and grit traps must be approved in writing by the Authority before installation.

5. PIPE LAYING AND BACKFILLING: Following the trench preparation, pipe laying shall proceed up grade with the pipes laid carefully, hubs up-grade, spigot ends fully entered into adjacent hubs and true to line and grade. Each section of pipe shall rest upon the pipe bedding for the full length of its barrel with recesses excavated to accommodate bells or couplings. Each pipe shall be firmly held in position so that the invert forms a continuous grade with the invert of the pipe previously placed. The interior of all pipe and the inside of the bell and outside of the spigot shall be thoroughly cleaned of all foreign matter before being lowered into the trench and shall be kept clean during laying operations by means of plugs or other approved devices. Under no conditions, shall pipe be laid in water or on subgrade containing frost, and no pipe shall be laid when trench conditions are unsuitable for such work. After the pipe has been installed, inspected and approved, and proper connections made, the area around the pipe shall be carefully covered with bedding material as shown on the drawings and then backfilled with clean earth by shovel and tamped with hand equipment to a depth of two feet above the top of the pipe. Tamping of additional backfill above that point is recommended but is at the discretion of the property owner.

6. CONNECTION TO EXISTING SEWER:

(a) Connection to both the house plumbing and the end of the service connection shall be with a proper fitting specially manufactured for such use. Under no conditions is it permitted to make a direct connection to the main sewer. In the event there is no service connection available at the required point of connection to the public sewer, the Authority Manager must be notified and will provide the proper connection requirements. Replacement of all wye fittings broken by the property owners or their private contractors shall also only be by the Authority with the costs of such replacement being borne by the property owner.

(b) Entry of a connecting sewer into a manhole must be approved in advance before a permit will be issued. Such connections will require a smooth core drilled opening with a flexible boot and grout.

(c) If it is necessary for the property owner (builder) to connect to the Authority's existing sewer, the connection must be made with a wye fitting, sized for the sewer pipe being tapped, cut into the existing sewer, and connected at both ends with non-shear elastomeric (e.g. Fernco) connectors, sized for the sewer pipe being tapped. Cutting of existing sewer pipe for installation of the wye will be

performed by Authority or other approved personnel only. The property owner (builder) will be responsible for excavation prior to cutting of the existing sewer for the wye and for installation of the wye after the existing sewer is cut. The property owner must contact the Authority office prior to excavation to confirm that the above procedure is understood. The phone number of the Authority is 724-545-9126.

7. USE OF EXISTING BUILDING SEWER: Any existing building sewers can only be used if it can be demonstrated to the Authority Inspector that the existing sewer is of proper construction and is watertight. Inspector may require video inspection or exfiltration, air pressure, or smoke testing on existing sewers, at property owners' expense, to determine pipe soundness.
8. PROHIBITION OF SURFACE AND GROUNDWATER CONNECTIONS: Connection of roof downspouts, exterior foundation drains, areaway drains, illegal sump pumps, or other sources of surface runoff or ground-water to a building sewer or building drain which in turn is connected directly or indirectly to the public sewer is strictly prohibited.
9. SWIMMING POOLS: Swimming pools can be connected to the public sewer, subject to the requirement that the pools be drained only on a controlled and a scheduled basis as determined and authorized by the Authority Manager. Special prior permission of the Manager is required each and every time the pool is to be drained.
10. PROTECTION OF CONSTRUCTION: All excavations for building sewer installation shall be adequately guarded to protect the public from hazard.
11. TIMING: Where a new building is to be constructed and connected to the Authority's system, the connecting sewer must be suitably plugged until the permanent sewer connection is made to preclude any excavation drainage, mud, or debris from entering the Authority's system. The Authority must be notified at least 24 hours in advance of construction.
12. SPECIAL CONNECTIONS: In the event an unusual or difficult type of sewer connection is proposed, Property Owner/Developer shall submit to the Authority for their approval, a detailed sketch showing type of connection and method of construction. Such connection shall not be made prior to its approval by the Authority or its designated representative.
13. BACKWATER VALVES: In cases where the next upstream manhole on the public sewer is at an elevation above the lowest floor drain or other overflow point in the private sewer, a backwater valve shall be installed at the interior or exterior of the building. The backwater valve must be accessible at all times for inspection, cleaning, and maintenance by the Property Owner.
14. RIGHTS OF WAY: The Property Owner is responsible to acquire any Rights of Way needed across private property of others to provide sewer service to the building. All service by Rights of Way across property owned by others is only allowed after written

request by the Property Owner (Developer) and approval by the Authority.

15. **EXISTING SEPTIC TANKS:** The Property Owner is responsible for contacting the local municipality and complying with all requirements regarding cleaning and removal or abandonment of existing septic tanks.
16. **PERMITS:** The Property Owner is responsible for all costs associated with obtaining all permits, approvals and clearances required by local, State or federal rules, regulations and laws.
17. **STANDARDS:** All work and materials required for the installation and testing of sanitary sewer laterals, connections to building sewers, and all other appurtenances shall meet the requirements of the 2003 International Plumbing Code (IPC) or most recent adopted version.
18. **TESTING:** Tests and inspections shall be performed on new and existing sanitary sewer piping as described below. All tests shall conform to the requirements of the most recent International Plumbing Code.
 - 18.1 **NEW LATERALS:** The Property Owner is responsible for the construction and integrity of the lateral from the point of connection with the Authority's facilities to the point of connection with the building sewer. All new lateral piping and appurtenances shall be water tested in accordance with IPC Section 312.2. The cost of water testing shall be paid by the Property Owner.

After installation of the lateral piping and appurtenances the Authority may, at its discretion, perform video inspection of laterals.

All lateral deficiencies or items not in conformance with the specifications and drawings found by the testing or inspections shall be corrected by and the costs paid by the Property Owner.

- 18.2 **EXISTING BUILDING SEWERS:** The Property Owner is responsible for the construction and integrity of the building sewer to the point of connection with the lateral. Prior to connection of the building sewer to the lateral the Authority will conduct an initial assessment of the building sewer material, age, condition, and other pertinent considerations such as local topography, drainage patterns, soil conditions, groundwater, the presence or absence of springs and other factors that could indicate existing or potential infiltration into the building sewer.

Depending on the findings of the initial assessment the Authority may:

1. At its discretion, require water testing of all building sewers, in accordance with IPC Section 312.2, prior to connection to the lateral piping.
2. Require video inspection of all building sewers prior to connection to the lateral piping.

All building sewer deficiencies or items not in conformance with the specifications and drawings found by the testing or inspections shall be corrected by and the costs paid by the Property Owner.

End of Appendix A - Rules and Regulations for the
Construction of Connecting Sewers