WASHINGTON TOWNSHIP
MUNICIPAL AUTHORITY

PROCEDURE & REQUIREMENTS FOR CONNECTION
TO THE SEWER SYSTEM

Revised November 2009
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Topic</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Procedure for Arranging to Make Connection</td>
<td>3</td>
</tr>
<tr>
<td>Registration of Persons and/or Companies Performing Work on Sewer Facilities to be Connected</td>
<td>3</td>
</tr>
<tr>
<td>Connection Fees</td>
<td>4</td>
</tr>
<tr>
<td>Wastes Excluded (Home &amp; Industrial)</td>
<td>5</td>
</tr>
<tr>
<td>Permits for Connection</td>
<td>5</td>
</tr>
<tr>
<td>Building Sewer General Rules</td>
<td>5</td>
</tr>
<tr>
<td>Inspection of Building Sewer during Installation</td>
<td>6</td>
</tr>
<tr>
<td>Access to Properties for Inspection &amp; Other</td>
<td>6</td>
</tr>
<tr>
<td>Septic Tank &amp; Seepage Pit Abandonment</td>
<td>6</td>
</tr>
<tr>
<td>Requirements to Connect</td>
<td>7</td>
</tr>
<tr>
<td>Roadway Construction</td>
<td>7</td>
</tr>
<tr>
<td>Installation of Building Sewer</td>
<td>7</td>
</tr>
</tbody>
</table>
PROCEDURES AND REQUIREMENTS FOR CONNECTION
TO THE WTMA'S SANITARY SEWER SYSTEM

Procedure for Arranging to Make Connection

1. The property owner shall make his own arrangements for construction of the building sewer line with a plumber registered with the Authority to do sewer line construction.

2. The property owner or his appointed representative shall submit an Application for Connection and a sketch of the proposed sewer line to be reviewed by the Authority, accompanied with a copy of the Building Permit. After review, the Authority shall either approve or deny the application with an explanation of denial. The appropriate fees shall be paid prior to the connection permit being issued to the property owner.

3. The connection permit shall be valid for two (2) years. Failure to meet this requirement will result in the Authority returning all fees collected less 10% Administrative Fees.

4. Such person shall schedule with the Authority at least 2 business days in advance notice of the time when such connection will be made.

Registration of Persons and/or Companies Performing Work on Sewer Facilities to be connected

Persons performing work on facilities to be connected to the sewer system shall be subject to registration as follows:

1. The WTMA shall maintain a list of plumbers who are registered with the Authority and permitted to do work in the Township. Only plumbers or represented companies may install and/or do work on any water or sewer lines that connect between a building/structure and any main or lateral that connects to the Authority’s system.

2. Prior to being certified, plumbers must make application to the WTMA to be placed on the list and pay a registration fee of $25.00. All applicants must take, and successfully pass a test administered by the WTMA covering applicable rules, regulations and specifications.

3. All applicants who successfully pass the exam must also present the WTMA with a current blanket payment and/or performance bond, or proof of current liability insurance.

4. Successful applicants will then be presented to the WTMA Board of Directors for acceptance.

5. Following acceptance, all registered plumbers must provide the WTMA with updated proof of insurance annually. Failure to provide this information will result in the removal from
the Registered Plumbers List. Companies who register one or more employees must also verify that the registered employee is still employed by them.

6. All work done within the Township must be done to the current specifications of the Washington Township Municipal Authority.

7. A company is only required to have one registered plumber, however, all work done by that company is done under that person’s certification, and the certified individual will be held liable for any and all work done by the company’s employees.

8. Although the registered plumber is not required to be on site during all of the construction, they are required to be on site during the final inspection by the WTMA, which will be coordinated with at least 2 business day’s notice.

9. A copy of a current, valid certification must be kept on the job site or otherwise available to be presented to an authorized representative of the WTMA upon request.

10. All registered plumbers are required to re-register with the Authority every three (3) years. If there have been no changes in the specifications, no additional testing will be required at that time.

11. Failure to abide by these rules and procedures will result in removal from the list. Once removed, individuals and companies must re-register and begin the process from the start.

Property owners may personally install sewer service laterals onto their own dwelling without being registered or maintaining general liability insurance. This waiver is only for registration and insurance requirements for work on private property by its owner. It does not waive materials and construction specifications. All work within a public right-of-way or utility easement must be done by or under the direct supervision of a registered plumber having the required registration and insurance.

**Connection Fees**

There is hereby imposed upon each owner of a residential property connecting to the sewer system, a Tapping Fee of two thousand six hundred and twenty six ($2,626.00) dollars for each Equivalent Dwelling Unit (EDU). A seventy ($70.00) inspection fee shall also be imposed, entitling the owner two (2) inspections of the service line installation. Any additional inspections shall be charged at the WTMA’s hourly rate, with a minimum of one (1) hour per visit. All fees must be paid in full prior to any inspection or subsequent approval of the service line.

The fees for commercial customers to connect to the WTMA Sanitary Sewer system shall be in accordance with the provisions of Washington Township Municipal Authority Resolution 09-5 (as it may be amended).
Wastes Excluded (Home and Industrial)

No person shall discharge into the sewer system any roof water, surface or underground drainage water (including sump pumps), storm water, any exhaust steam, any fats or oils, tar, grease, gasoline or other combustible gases or liquids, offal, insoluble solids, garbage that has-not been ground by a household type garbage grinder, or other dangerous or harmful substances which would adversely affect the functioning of the sewer system or the processes of sewage treatment.

This Authority reserves the right to refuse permission to connect to the sewer system, to compel discontinuance of use of the sewer system, or to require pretreatment of Industrial or Commercial wastes, in order to prevent discharges deemed harmful or that may have a deleterious effect upon any sewer, the sewer collection system, or the wastewater treatment plant. All automotive service, repair and cleaning facilities shall be required to install some method of collection of waste from floor drains or other devices which would allow the above mentioned items to enter the sewer system. The location, construction, operation, and maintenance of said collection system shall be deemed satisfactory by the Authority and shall be recorded with the Authority.

Plans, specifications and other pertinent information relating to proposed facilities for preliminary treatment and handling of wastes shall be submitted to the Authority for approval; no construction of any such facility shall be commenced until approval thereof first shall have been obtained, in writing, from the Authority, and until approval thereof first shall have been obtained from any governmental body having jurisdiction.

Whenever facilities for preliminary treatment and handling of wastes shall have been installed, such facilities shall be continuously maintained at the expense of the owner, in satisfactory operating condition, and the Authority shall have access to such facilities at reasonable times for purposes of inspection and testing. Nothing contained in these Rules and Regulations shall be construed as prohibiting any special agreement or arrangement between the Authority and any person whereby Industrial and Commercial Wastes of unusual strength or character may be admitted into the sewer system by this Authority, either before or after preliminary treatment.

Permits for Connection

No person shall uncover, connect with, make any opening into or use, alter or disturb in any manner, any portion of the sewer system without first making application for and securing a permit, in writing, from the Authority. Application for a permit shall be made by the owner of the Improved Property to be served or by his duly authorized agent.

Building Sewer General Rules

All costs and expenses of construction of a building sewer and all costs and expenses of connection of a building sewer to the Authority's sewerage system shall be borne by the owner of the Improved Property to be connected; and such owner shall indemnify and save harmless the Township and the Authority, from all loss or damage that may be occasioned, directly or indirectly, as a result of construction of a building sewer or of connection of a building sewer to a sewer.
Every building sewer of any Improved Property shall be maintained in a sanitary and safe operating condition by the owner of such Improved Property. The sewer must be water-tight and not admit ground water to the sewer system.

If any person shall fail or refuse, upon receipt of a notice of the Authority, in writing, to remedy any unsatisfactory condition with respect to a building sewer, within 60 days of receipt of such notice, the Authority may refuse to permit such person to discharge sanitary sewage and industrial or commercial wastes into the sewer system until such unsatisfactory condition shall have been remedied to the satisfaction of the Authority or at its option it may make such repairs at the expense of the property owner.

**Inspection of Building Sewer during Installation**

Building sewers shall be subject at all times to the inspection and approval of the Authority or its duly authorized representative, who shall have supervision and control over same. The owner shall provide the Authority's Assistant Project Supervisor with safe access for the inspection.

Such person shall have given the Authority at least 2 business days notice of the time when connection will be made, so that the Authority may supervise and inspect all the work of connection and necessary testing.

No building sewer shall be covered until it has been inspected and approved by the Authority. If any part of a building sewer is covered before being inspected and approved, it shall be uncovered for inspection at the cost and expense of the owner of the Improved Property to be connected to a sewer.

Upon completion of each Service Installation, the Authority's Assistant Project Supervisor is to be notified and an appointment made for Inspection. All pipes and pipe joints must be visible and accessible for this inspection.

**Access to Properties for Inspection and Other Functions**

This Authority, or its authorized representative, shall have the right to access at reasonable time to any part of the Improved Property served by the sewer system as shall be required for purposes of inspection, measurement, sampling and testing, and for performance of other functions relating to service rendered by the Authority through the sewer system.

**Septic Tank and Seepage Pit Abandonment**

Upon connection to the sewer system, any septic tank and/or seepage pit shall be abandoned, disconnected from use, and rendered inoperable.
Requirements to Connect

In accordance with Washington Township Ordinance No. 54, the owner of any property which is accessible to, and whose principal building is within 150 feet of, the sewer system shall, at their own expense, connect such building with the sewer system within sixty (60) days after written notice to such persons from the Authority.

The Authority shall, when a homeowner refuses to connect, tap the sewer main and extend the building sewer lateral to the edge of the right-of-way, at the owner’s expense.

Procedure When Connection is Not Made in Time:

After expiration of the particular periods specified above, if any owner of an occupied building on property in the Township shall have failed to connect such property with the sewer system as required above, the WTMA shall refer the property owner to the Washington Township Supervisors for enforcement of Ordinance No. 54 and Ordinance No. 128 and the penalty sections therein, which include fines and penalties of not less than fifty ($50.00) dollars and not more than three hundred ($300.00) dollars per day.

Roadway Construction

No work shall occur in a Township roadway until after a Permit is obtained from the Washington Township Supervisors. All work in a Township roadway shall be in accordance with Washington Township road restoration requirements.

Work in a PennDOT Right-of-Way requires a PennDOT Highway Occupancy Permit (HOP) and that all work is done in accordance with PennDOT’s requirements governing such work. The application for a PennDOT HOP to work on an Authority sewer line shall be prepared by the owner of the property, in the name of the Washington Township Municipal Authority and delivered to the WTMA with the required Bonding.

The WTMA requires a Construction Bond/Letter of Credit or other Surety acceptable to the Authority for all work done within a roadway. The Construction Bond/Letter of Credit shall be for one (1) year, and equal to one hundred and ten (110%) percent of the construction cost estimate presented by the property owner and approved by the Authority. The Construction Cost Estimate and Construction Bond/Letter of Credit shall include all work in the PennDOT Right-of-Way for the construction, temporary road restoration, and final restoration.

Installation of Building Sewer

Definitions

Service Lateral – That part of the sewer pipe extending from the sewer main to a point near the end of right-of-way. Laterals shall be six (6) inches in diameter or greater for all connections.

Building Sewer – That part of the sewer pipe that extends from the building to the right-of-way.
WTMA requires this pipe to be at least four (4) inches in diameter.

The service connection - is the point between the service lateral and the building sewer pipes. This connection is typically at the right-of-way line and a cleanout separates the sewer lateral and the building sewer. Older service connections may not have a cleanout at the property right of way line; when the property owner performs work on the service connection near the property line the owner shall be required to install a right of way clean out at the owner's cost.

Quality Assurance

Piping and specials specified herein shall be essentially the standard products of manufacturers who have been regularly engaged in the successful production of high quality materials of this type for at least 10 years, have supplied such materials for at least 5 years of the 10-year period, and have at least 5 installations in successful operation for at least 5 years.

Pipe Acceptance Tests

1. General

Laterals shall be tested for leakage between test tees after lateral installation has been completed. The allowable leakage rate shall be zero.

All laterals shall be inspected prior to air testing. All visible or detectable leaks shall be repaired before air testing begins. The line acceptance tests shall be made after backfilling has been completed.

The Contractor shall repair all visible and detectable leaks or defects of any nature.

Cleaning (Performed by Contractor) - No debris, silt or other material shall enter the lateral. It shall be the responsibility of the Contractor to have the pipe cleaned at the time of air testing. If required, the pipe shall be cleaned by hydro flushing with water or by passing through the pipe a full gauge squeegee in a manner approved by the Authority.

2. Air Testing Procedure

All wyes, tees, sweeping tees or end of lateral and/or building sewer placed for future connection shall be plugged with flexible caps, or acceptable alternate, securely fastened to withstand the internal test pressure. Plugs or caps shall be readily removable.

Testing of any sewer may not be conducted until the entire line has been completed. Each pipe section shall be tested with low pressure air at five (5) psi for a total of five (5) minutes.

Repair and retest sections of lateral not meeting test requirements.

Air testing shall be performed utilizing test equipment consisting of an air compressor and storage tank of adequate capacity; an air control panel equipped with all necessary piping,
valves and pressure gauges to control the rate at which the air flows to the test section and to monitor the air pressure inside the test section; and all required plugs. The pressure gauge for measuring internal pipe pressure shall be an oil-filled gauge measuring from zero to 20 psi, in one-pound increments. To prevent overloading the test section with the full pressure of the compressor, the test equipment must be provided with an approved pressure relief device set to blow out at 10 psi. The air testing equipment and all accessories shall be subject to approval by Authority.

Minimum Testing Requirements

Contractor shall take care to securely fasten and brace all line plugs in the pipe section being tested so that none of the plugs are suddenly released when the compressed air is applied to the pipe section.

Contractor shall be responsible for any damages caused by the internal pressurizing of the sewer line.

All gauges, air piping manifolds and valves of the air testing equipment shall be located above ground at the top of the trench.

Special care shall be exercised during removal of plugs. The pressure in the piping of the test section shall be completely relieved before any plug shall be removed.

Submittals

Submit shop drawings or catalog cuts, as appropriate, for materials listed under Article 14.06 of this Section. Submit only those materials that are actually to be used in the Work. These materials generally include the following:

Pipe and Fittings

Cleanout caps

Cast Iron Protection Castings

Gaskets, couplings, adapters and other appurtenances

Make submittals to Authority prior to start of construction.

Delivery, Storage, and Handling

Deliver, store and handle piping, fittings and appurtenances in accordance with manufacturer's recommendations, and in such manner as to protect the materials from damage.

Pipe and related materials shall be loaded and unloaded by lifting with hoists or skidding so as to avoid shock or damage. Under no circumstances shall such material be dropped or skidded against
pipe already on the ground.

Pipe and related materials shall at all times be handled with care to avoid damage. The interior shall be kept free from dirt and foreign matter. All pipe and appurtenances shall be carefully lowered or raised into place with suitable equipment in a manner that will prevent damage to the material. Under no circumstances shall pipe or accessories be dropped or dumped.

All lumps, blisters and excess coating shall be removed from the ends of each pipe. The joints shall be wire brushed and wiped clean and dry, and free from oil and grease before the pipe is installed.

**Materials**

The building sewer shall be constructed of any one of the following materials:

- Schedule 40 Polyvinyl Chloride (PVC) pipe and fittings conforming to ASTM standards, latest revision. All joints shall be chemically bonded in accordance with the manufacturer's recommendations.

- SDR 35 Polyvinyl Chloride (PVC) pipe and fittings conforming to ASTM standards, latest revision. All pipe and fittings shall utilize rubber gasket joints.

- Extra-heavy cast-iron soil pipe and fittings conforming to ASTM standards, latest revision, together with neoprene gaskets. The gaskets must be made to be used with the particular brand of pipe being used and conform to ASTM standards, latest revision. All joints shall be made in accordance with the pipe manufacturer's recommendations.

PVC pipe (4, 6 or 8 inch Diameter) Schedule 40 PVC with Solvent Weld Joints:

1. **Pipe**

   Unplasticized polyvinyl chloride (PVC) gravity sewer pipe and fittings shall conform to ASTM D1785 and ASTM D 2466 respectively. Jointing shall conform to ASTM D2672.

   Pipe joints shall be made in accordance with ASTM D2855. Cement shall be in accordance with ASTM D2564.

   All joints shall have a minimum set time prior to backfilling. Minimum set times are as follows.

   - 30 minutes min. @ 60 to 100 degrees F
   - 1 hour min. @ 40 to 60 degrees F
   - 2 hours min. @ 20 to 40 degrees F
   - 4 hours min @ 0 to 20 degrees F
2. Fittings

Unplasticized polyvinyl chloride (PVC) gravity sewer pipe and fittings with integral bell and spigot joints meeting ASTM D3034 specification for Type PSM PVC Sewer Pipe and Fittings, Standard Dimension Ratio (SDR) 35, or ASTM F 789 (For gasket joints only).

The pipe shall be joined with an integral bell, bell-and-spigot type rubber gasketed joint. Rubber gasket shall conform to ASTM F 477. The rubber gasket shall be compressed radially on the pipe spigot to form a watertight seal in accordance with ASTM D3212.

Fittings shall be made of PVC having a cell classification of 12454B or 12454C (only) as defined in ASTM D1784.

Pipe stiffness at 5 percent deflection shall be 46 psi for all pipe diameters when tested in accordance with ASTM D2412.

3. Saddles

Approval for the use of a saddle must be obtained from the Authority prior to installation. The use of saddles will be on a case by case basis.

All holes cut into the mainline shall be cored by using a coring machine.

Gasketed PVC bell inlet connection with stainless steel bands, clamps, bolts and fittings.

PVC material shall conform to ASTM D3034, SDR 45.

All tee saddles shall bear the manufacturer’s identifying mark and size.

Approved products and manufacturers.

“Sealtite” by General Engineering Company, Frederick, MD
Engineer Approved Equal.

4. Schedule 40 pipe shall be used to repair existing schedule 40 pipe.

PVC pipe (4, 6 or 8 inch Diameter) Schedule SDR 35

1. Pipe

Unplasticized polyvinyl chloride (PVC) gravity sewer pipe and fittings with integral wall bell and spigot joints meeting ASTM D3034 specification for Type PSM PVC Sewer Pipe and Fittings, Standard Dimension Ratio (SDR) 35, or ASTM F 789 (For gasket joints only).

The pipe shall be joined with an integral bell, bell-and-spigot type rubber gasketed joint. Rubber gasket shall conform to ASTM F 477. The rubber gasket shall be compressed
radially on the pipe spigot to form a watertight seal in accordance with ASTM D3212.

Fittings shall be made of PVC having a cell classification of 12454B or 12454C (only) as defined in ASTM D1784.

Pipe stiffness at 5 percent deflection shall be 46 psi for all pipe diameters when tested in accordance with ASTM D2412.

2. Saddles

Approval from the Authority for the use of a saddle must be obtained prior to installation. The use of saddles will be on a case by case basis.

All holes cut into the mainline shall be cored by using a coring machine.

Gasketed PVC bell inlet connection with stainless steel bands, clamps, bolts and fittings.

PVC material shall conform to ASTM D3034, SDR 45.

All tee saddles shall bear the manufacturer’s identifying mark and size.

Approved products and manufacturers:

“Sealtite” by General Engineering Company, Frederick, MD
Engineer Approved Equal.

Cast Iron Pipe (4 and 6 Inch Diameter).

1. Pipe

Cast iron gravity sewer pipe and fittings of either “Service Weight” or “Extra Heavy” with integral wall bell and spigot joints meeting ASTM A74 specification for cast iron gravity sewer pipe and fittings.

2. Fittings

Pipe shall be joined with an integral bell, bell-and-spigot type rubber gasket joint conforming to ASTM C564. Rubber gasket shall be compressed radially on the pipe spigot to form a watertight seal.

Fittings shall be made of either “Service Weight” or “Extra Heavy” cast iron and shall be of the bell-and-spigot type having a rubber gasket, which meets ASTM A74, and creating a watertight seal.
Rigid Pipe Coupling

SDR 35 PVC in-line rigid pipe couplings with rubber gaskets.

Fittings manufactured in accordance with ASTM D3034 and D1784.

Rubber gaskets for fitting shall conform to ASTM F477.

Approved manufacturers

GPK Products, Inc., Fargo, ND.
Approved Equal

Flexible Pipe Couplings with Anti-Shear Stainless Steel Collar

Provide flexible pipe couplings with anti-shear stainless steel collar designed for differing pipe material connection; and for transition/reducing conditions of differing pipe material connections. Flexible rubber couplings without an anti-shear stainless steel collar are NOT permitted. Flexible rubber couplings are not permitted for use in re-connecting SDR 35 PVC pipe to SDR 35 PVC pipe.

Coupling Construction: Virgin PVC material which meets the performance requirements of Commercial Standard Specification CS 226-59 Couplings designed for pipe outside diameter coupling shall incorporate recesses to contain the stainless steel bands. Couplings provided with pre-assembled type 305 stainless steel bands.

Acceptable Manufacturers:

FERNCO Inc., Distributed by the General Engineering Company
Approved Equal

Cleanouts

Construction shall be in accordance with latest International Plumbing Code (2000) requirements/state-wide building code.

Test tees/cleanouts shall be installed as indicated on the Building Sewer Detail and the appropriate Service Lateral Detail, located at the road/sewer main right of way.

Cleanouts shall be installed at all changes in vertical and horizontal directions greater than 22 1/2 degrees. Two 22 1/2 degree bends may be put together to form a 45 degree bend without a clean out requirement. Where changes in direction are less than 45 degrees cleanouts shall be located every fifty (50) feet. On straight pipe runs cleanouts may be placed up to eighty (80) feet apart.

On new service lateral construction and/or lateral replacement, test tees shall be installed as
indicated on the Detail Drawings.

All cleanout piping (vertical stack piping) shall be the same pipe size as the service lateral or building sewer.

Cleanouts shall have a threaded cap. The cap must be installed so that the square notch is on the outside of the cleanout to allow WTMA personnel access.

All cleanouts located in a paved area shall have a cast iron cleanout box and cover plate over it if it.

**Laying Pipe**

Separation of Water Lines and Sewer Lines

**Horizontal Separation**

Whenever possible, sewer pipes should be laid at least 10 feet horizontally from any existing or proposed water lines. Should local conditions prevent a horizontal separation of 10 feet, a sewer may be laid closer to a water main if:

- It is laid in a separate trench

- It is laid in the same trench, with the water line located at one side on a bench of undisturbed earth; and if

- In either case, the crown of the sewer is at least eighteen inches (18") below the invert of the water line.

**Vertical Separation**

Sewers crossing under water mains should be constructed so that the sewer joints will be equidistant and as far as possible from the water main joints.

Where a water main must cross under a sewer, adequate structural support shall be provided for the sewer to prevent damage to the water main.

In either case, the crown of the “above” line is at least eighteen inches (18") below the invert of the “below” line.

Service Laterals shall be installed a minimum of ten (10) feet from any street tree or street light.

Where a building sewer penetrates a foundation wall, a wall sleeve 2 times the diameter of the building sewer shall be used. The gap between the wall sleeve and building sewer shall then be made watertight.

Pipe to pipe connections shall be made in accordance with Pipe Reconnection Detail.
Following trench excavation, pipe laying shall proceed upgrade with pipe laid carefully, hubs upgrade, spigot ends fully centered into adjacent hubs, and true lines to grades given.

Provide test tees as indicated on Detail Drawings.

Each Section of pipe shall rest upon the pipe bed for the full length of its barrel, with recessed excavated to accommodate bells and joints. Each pipe shall be firmly held in position so that the invert forms a continuous grade with the invert of the pipe previously placed.

Building sewer pipe having an inside diameter of 4 inches shall be laid at a grade not less than ¼ inch per foot.

Building sewer pipe having an inside diameter of 6 inches shall be laid at a grade not less than 1/8 inch per foot. Pipe laid at 1/8 shall be laid with a transit and verified to the inspector’s satisfaction.

Building sewer pipe having inside diameter greater than 6 inches shall be laid at a grade not less than 1% slope.

Under no conditions shall pipe be laid in water, on sub grade containing frost and/or when trench conditions are unsuitable for such work. In all cases, water shall be kept out of the trench until concrete cradles, supports, encasements or saddles, where used, and materials in the joints, have hardened.

Any pipe that has its grade or joint disturbed after laying shall be taken up and re-laid. Any section of pipe already laid and found to be defective shall be taken up and replaced with new pipe.

Walking or working on top of the completed pipeline, except as may be necessary in backfilling or tamping, shall not be permitted until the trench has been backfilled to a height of at least 2 feet over the top of the pipeline.

Maintain pipelines free and clear of debris during the progress of the work.

At time when pipe laying is not in progress, the open ends of the pipe shall be closed by watertight plug.

Inspect pipe and fittings for defects or damage prior to lowering in the trench.

Install pipe and fittings in accordance with manufacturer’s written instructions.

All sewer pipes (mains, laterals, services...) must be bedded in IB stones (no. 8). IIB stone (No. 57) will not be acceptable. The bedding is to be six inches (6") below and on either side of the pipe, creating a cradle. Twelve inches (12") of stone should then be placed on top of the pipe. If the work is performed in the right of way, six inch (6") metallic detection/location tape should be placed atop the stone for future location of the pipe.
Use of a hydro-hammer for compaction shall not be permitted within a minimum of 4 feet of the top of the pipe.

Install pipe couplings and adapters in accordance with manufacturer’s written instructions.

Connection of New service Lateral to Existing Main

Connection of the service lateral to the sewer main shall be made by removing a section of the sewer main and replacing it with an SDR 35 PVC wye branch connection or sanitary tee and then reconnecting this to the sewer main with rigid PVC gasketed couplings. When directed by the WTMA the mainline may be cored by using a coring machine.

Pipe to pipe connections shall be made in accordance with Pipe Reconnection Detail.

Test tees for air testing the service lateral and/or building sewer shall be installed at the service connection between the building sewer and the service lateral or at the right-of-way line for all residential properties.

At the right of way line on all commercial and industrial properties, a test manhole must be installed for future sampling needs. The design of the test manhole must be approved by the Authority prior to installation. A manhole vacuum test must be passed prior acceptance by the WTMA.

All sewer laterals, gravity and force, shall pass an air test before Authority acceptance.

Cleanouts

All building sewers shall have cleanouts located not more than:

On a 4” service: up to 50 feet apart on runs having pipe bends greater than $22\frac{1}{2}^\circ$, otherwise 80 feet maximum distance apart.

On a 6” service: 80 feet apart

Larger than 6” service: 100 feet apart

Cleanouts shall be placed at each bend greater than $22\frac{1}{2}^\circ$. Note that two $22\frac{1}{2}^\circ$ bends may be used together to create a $45^\circ$ bend without a cleanout.

Change in Direction: cleanouts shall be installed in accordance with the International Plumbing Code (2000) requirements. Access shall be provided to all cleanouts.

All cleanouts located in a paved area shall have a cast iron cleanout box and cover plate over it if it.

$90^\circ$ bends shall utilize a long sweeping radius elbow and a cleanout. In most circumstances two $45^\circ$
bends shall be joined together for 90° bends.

**Grinder Pumps**

When gravity flow from a structure to a sewer main is unable to be achieved, a submersible grinder pump station may be installed.

The WTMA’s policy requires that all grinder pumps installed in its wastewater system have a repair or maintenance facility located within a 20 mile radius of Waynesboro, Pennsylvania.

Grinder pump stations shall be installed in a fiberglass reinforced polyester basin for outdoor installation only. Indoor installation will not be permitted.

A plumber registered with the WTMA is required to install a submersible grinder pump station. WTMA sewer operators are not responsible for the installation of grinder pumps for individual property owners.

Complete specifications for submersible grinder pump stations may be viewed in section 20, page 109 of the *Standard Construction and Material Specifications* for WTMA. This may be found at the Authority’s website, [www.wtma.us](http://www.wtma.us), or by purchasing a copy at the WTMA office.

**Cleaning**

No debris, silt or other material shall be allowed in the lateral. If required, the pipe shall be cleaned by hydro flushing with water or by passing through the pipe a full gauge squeegee in a manner approved by the Authority.

**Cleanup**

Removal of debris, which may have been stored within the public rights-of-way, including the road, cart way or sidewalk, shall be removed within 24 hours of completion of the building sewer work.

Any concrete sidewalk or curb removed for making a sewer connection must be temporarily restored within 48 hours and permanent replacement must be completed within 30 days from the time installation has been approved.
LIMITS OF SERVICE LATERAL
(BY OWNER/DEVELOPER)
SEE DETAIL LAT-1 OR LAT-2

LIMITS OF BUILDING SEWER
(BY PLUMBER/HOMEOWNER)

ELEVATION

NOTES:
1. PIPE SIZES AND MATERIALS TO BE IN ACCORDANCE WITH AUTHORITY REQUIREMENTS.
2. FOR 4" BUILDING SEWER, USE ECCENTRIC 4"x6" ADAPTER FITTING FOR TRANSITION TO TEST TEE (4"x6" FLEXIBLE COUPLING NOT ALLOWED).
3. CLEANOUT/TEST TEE SPACING IS 80' MAXIMUM.
4. WALL SLEEVE TO BE 2" GREATER THAN DIAMETER OF BUILDING SEWER PIPE AND SEALED WATER TIGHT.
5. ANY PIPE LESS THAN 3 FEET OF COVER SHALL BE CAST IRON OR DUCTILE IRON PIPE.
6. THERE SHALL BE A 10 FOOT HORIZONTAL SEPARATION BETWEEN WATER SERVICE AND SERVICE LATERAL/BUILDING SEWER.
7. INSTALL TEST PLUGS AS REQUIRED FOR ACCEPTANCE AIR TESTING.
8. PROTECTION CASTING REQUIRED IN PAVED AREAS ONLY. OTHERWISE, TOP OF CLEANOUT CAPS SHALL BE 6" ABOVE FINAL GRADE.
9. BACKFLOW VALVES MAY BE REQUIRED BY THE ENGINEER OR TOWNSHIP BUILDING CODE OFFICIAL.
10. FOR EXISTING BUILDINGS FORMERLY SERVED BY ON-LOT SEWAGE DISPOSAL SYSTEMS, INSTALL CLEANOUT/TRAP/VENT ON BUILDING SEWER IN ACCORDANCE WITH DETAIL LAT-5.
NOTES:

1. CLEANOUT/TRAP/VENT TO BE USED FOR EXISTING BUILDINGS FORMERLY SERVED BY ON-LOT SEWAGE DISPOSAL SYSTEMS OR FOR NEW CONSTRUCTION, AS DIRECTED BY AUTHORITY.

2. PIPE SIZES AND MATERIALS TO BE ACCORDANCE WITH AUTHORITY REQUIREMENTS.

3. FOR 4" BUILDING SEWER, USE ECCENTRIC 4"X6" ADAPTER FITTING FOR TRANSITION TO SWEEPING TEE (4"X6" FLEXIBLE COUPLING NOT ALLOWED).

4. ANY PIPE LESS THAN 3 FEET OF COVER, SHALL BE CAST IRON OR DUCTILE IRON.

5. SEE DETAIL LAT-4 FOR OTHER REQUIREMENTS RELATED TO BUILDING SEWER CONSTRUCTION.