GREATER HAZLETON JOINT SEWER AUTHORITY

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PROCEDURE AND REQUIREMENTS FOR CONNECTION TO THE SANITARY SEWER SYSTEM

CITY OF HAZLETON AND WEST HAZLETON BOROUGH LUZERNE COUNTY, PA

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TABLE OF CONTENTS

SECTION TITLE	PAGES
Procedure for Arranging to Make Connection	1
Connection Fees	2
Wastes Excluded (Home & Industrial)	3
Permits for Connection	3
Building Sewer General Rules	3
Inspection of Building Sewer During Installation	4
Access to Properties for Inspection & Other Functions	4
Septic Tank & Seepage Pit Abandonment	4
Requirements to Connect	4
Roadway Construction	5
Installation of Building Sewer	5 – 10
Connection of New Service Lateral to Existing Main	10 – 11

PROCEDURES AND REQUIREMENTS FOR CONNECTION TO THE GHJSA SANITARY SEWER SYSTEM (HAZLETON & WEST HAZLETON)

Procedures for Arranging to Make Connection

- 1. The property owner shall make his own arrangements for construction of the building sewer line and service lateral with a plumber licensed with the Commonwealth of Pennsylvania 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 one (1) year. Failure to meet this requirement will result in the Authority rescinding the EDU allocation and permit application.
- 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.

Connection Fees

There is hereby imposed upon each owner of a Hazleton City or West Hazleton Borough residential, commercial, or industrial property connecting to the sewer system, a Tapping Fee of \$1750.00 dollars for each Equivalent Dwelling Unit (EDU). A \$100.00 inspection fee shall also be imposed, entitling the owner two (2) inspections of the lateral line installation. Any additional inspections shall be charged at the GHJSA 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 lateral line.

The fees for customers to connect to the GHJSA Sanitary Sewer system shall be in accordance with the provisions of the Greater Hazleton Joint Sewer Authority Resolution No.001 of 2015 (as 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, gas benzene 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 constructed 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 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 sewage system shall be borne by the owner of the Improved Property to be connected; and such owner shall indemnify and save harmless 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 appointment made for Inspection. All 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 Hazleton City Ordinance No. 2012-39 and West Hazleton Borough Ordinance No.2012-13, 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 period specified above, if any owner of an occupied building on property in Hazleton City or West Hazleton Borough shall have failed to connect such property with the sewer system as required above, the GHJSA shall refer the property owner to the Hazleton City for enforcement of Ordinance No. 2012-39, or West Hazleton Borough for enforcement of Ordinance No. 2012-13 and the penalty sections therein, which include fines and penalties of not less than (\$50.00) dollars and not more than (\$500.00) dollars per day.

Roadway Construction

No work shall occur in a Hazleton City or West Hazleton Borough roadway until after a Permit is obtained from Hazleton City or West Hazleton Borough. All work in a City or Borough roadway shall be in accordance with Hazleton City and West Hazleton Borough road restoration requirements.

Work in a PennDot Right-of-Way requires a PennDOT Highway Occupancy Permit (HOP) and that all such 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 GHJSA and delivered to the Greater Hazleton Joint Sewer Authority with the required Bonding.

The GHJSA 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

<u>Service Lateral</u>- That part of the sewer pipe extending from the sewer main to a point near the end of the road right-of-way. Laterals shall be four (4) inches minimum 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.

GHJSA 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; and 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. 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.

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

1. Pipe

Unplasticized polyvinyl chloride (PVC) gravity sewer pipe and fitting with integral wall bell and spigot joints meetings 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 jointed 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. Fittings

Unplasticized polyvinyl chloride (PVC) gravity sewer pipe and fitting with integral wall bell and spigot joints meetings 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 jointed 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 D0334, 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.
- B. Ductile 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 belt 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 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 ate NOT permitted. Flexible rubber couplings without an anti-shear stainless steel collars 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 Coupling 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

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 ½ degrees. Two 22 ½ degree bends may be put together to form a 45 degree bend without a clean out requirements. 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 GHJSA personnel access.

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

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 if ten (10) feet from any street free 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 and 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 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 defect 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 1B stone (No. 8), 2B 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 later 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 GHJSA 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 GHJSA

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

Cleanouts

All building sewers shall have cleanout located not more than:

On a 4" service: up to 50 feet apart on runs having pipe bends greater than 22½", 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 22½". Note that two 22½" bends may be used together to create a 45° 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.

90° bends shall utilize a long radius elbow cleanout. In most circumstances two 45° 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 GHJSA'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 Hazleton, 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 GHJSA is required to install a submersible grinder pump station. GHJSA is not responsible for the installation of the grinder pumps for individual property owners.

Complete specifications for submersible grinder pump stations may be reviewed in the Standard Construction and Material Specifications for GHJSA. This may be found at the Authority's website, www.ghjsa.org, or by purchasing a copy at the GHJSA 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 marking 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.