

APPENDIX C

CONSTRUCTION GUIDELINES RESIDENTIAL & COMMERCIAL

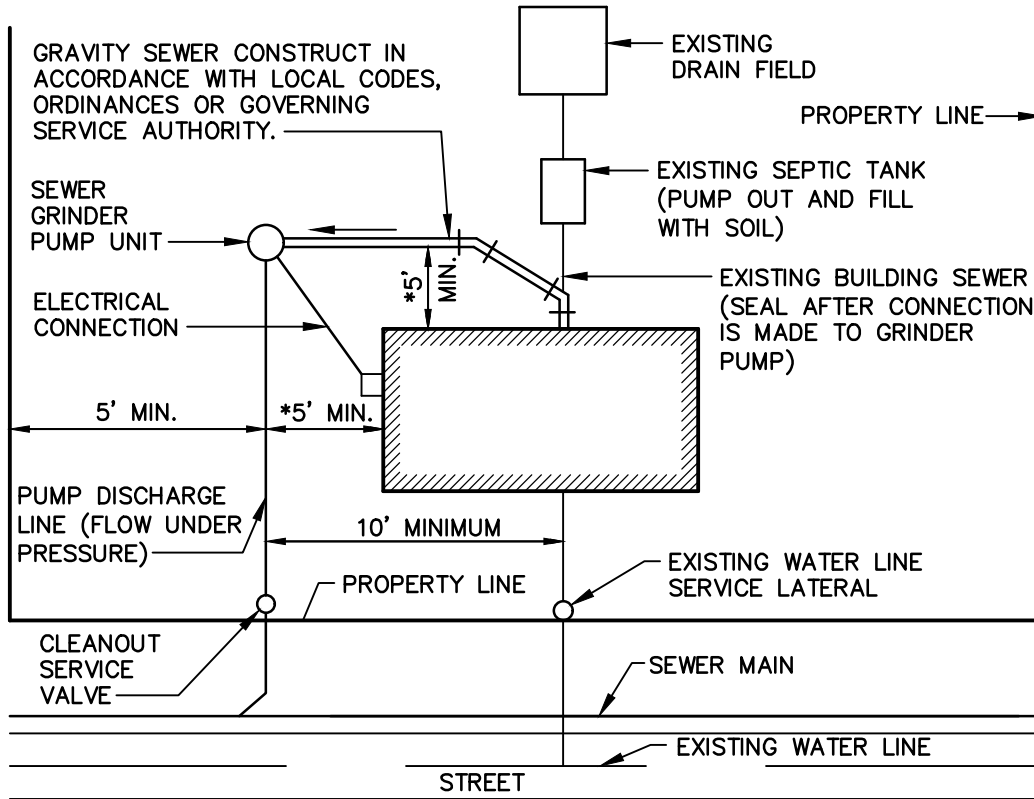
The Scott Township Sewer & Water Authority

Residential Sewer Connection Guide

1038 Montdale Rd
Scott Township, PA 18447
(570) 319-1296 Ext. 4

The intent of this guide is to streamline the process for residential connections to the Authority's system. Steps for establishing your property's connection to the system:

1. Complete the STSWA *Application for Central Sewer Connection* and the LRBSA *Sewer Permit Application* and submit it to the STSWA. **An incomplete application will not be considered.** An Escrow must be established when the application is submitted. See Fee Schedule.
2. Residential Connections via. a Grinder Pump (MOST AREAS):
 - a. Consult with a Contractor to facilitate your grinder pump and lateral installation. The Authority's sewer system is standardized on the EONE DH071 grinder pump series (depth varies – consult with your Contractor). Only EONE grinder pumps will be considered for residential connections.
 - b. See the Authority's "Grinder Pump Schematic" for the required location of the pump and controls. If your Contractor would like to propose any changes to the installation layout, trenching detail or lateral connection specifics, please have them coordinate directly **with the Authority for approval PRIOR to installation.**
 - c. Installation of your sewer service lateral must be in accordance with the Rules and Regulations of the Authority. A copy of which can be viewed or obtained at the Authority's office. A road-cut permit by the Township or Utility Highway Occupancy Permit may be required to make the connection to the Authority's sewer main.
3. Residential Connection that can be made via. a Gravity Lateral (LIMITED AREAS):
 - a. Consult with the Authority Engineer to determine if a gravity lateral can be made at the Premises.
 - b. Consult with a Contractor to facilitate your gravity sewer lateral installation. A road-cut permit by the Township or Utility Highway Occupancy Permit may be required to make the connection to the Authority's sewer main.
 - c. Installation of your sewer service lateral must be in accordance with the Rules and Regulations of the Authority. A copy of which can be viewed or obtained at the Authority's office.
4. **PRIOR** to installing your lateral, the Tapping Fee (see Fee Schedule) will be due to the Authority. An EDU is per single-family home or apartment. All payments should be made to: "Scott Township Sewer and Water Authority" at the above address. **A Sewer Permit from STSWA is required prior to the start of construction.**
5. Make arrangements with the Authority's inspector at (570) 499-3244, ext. 2 **at least 48 hours in advance** of the start of construction of your lateral for observation and inspection.
6. Regular monthly sewer rates will commence at the beginning of the month following your connection to the system.
7. According to the Township Ordinance, the Property Owner is to have the existing septic tank (if applicable) pumped clean and then either crushed and backfilled or filled with clean and proper fill material (ie. sand, stone, dirt, concrete). Owner to obtain a receipt from the septic hauler.



* OR AS REQUIRED BY LOCAL CODES, ORDINANCES OR RULES AND REGULATIONS OF GOVERNING SERVICE AUTHORITY

GRINDER PUMP INSTALLATION DETAIL

NOT TO SCALE

©HRG

PROJECT #: 10194.0427
 DATE: JULY 2024
 SCALE: NTS
 PM: MWS

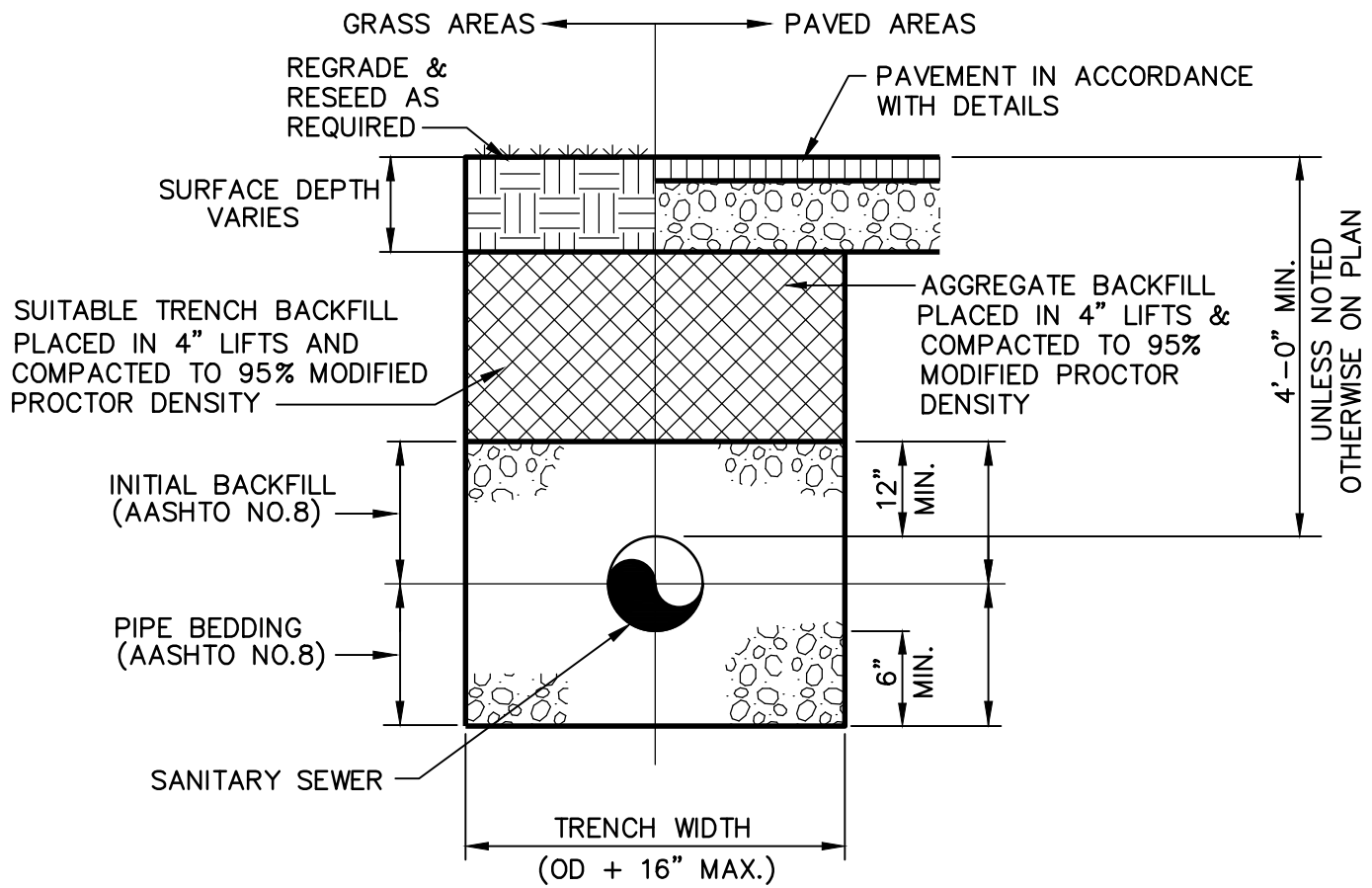
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SCOTT TOWNSHIP SEWER & WATER AUTHORITY SEWER SYSTEM DETAILS

SCOTT TOWNSHIP LACKAWANNA COUNTY PENNSYLVANIA



HERBERT, ROWLAND & GRUBIC, INC.
 P.O. BOX 504
 CLARKS SUMMIT, PA 18411
 570.851.2804 | hrg-inc.com



PIPE TRENCH DETAIL

NOT TO SCALE ©HRG

PROJECT #:	10194.0427
DATE:	JULY 2024
SCALE:	NTS
PM:	MWS

SHEET:	1
D02-24	

SCOTT TOWNSHIP SEWER & WATER AUTHORITY SEWER SYSTEM DETAILS

SCOTT TOWNSHIP LACKAWANNA COUNTY PENNSYLVANIA



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Typical Grinder Pump Electrical Requirements

You will need to provide a power feed to your new grinder pump (exterior) from the home's electrical distribution panel (circuit breaker panel). This power feed includes a circuit breaker, conductors (wires), and a weatherproof junction box (exterior).

The intent of providing the below is for general guidance ONLY! **Your Contractor shall verify specifics prior to installation to make sure the pump manufacturer's recommendations are followed.**

- 240 volt Grinder Pump (**for EONE DH071 series. Verify with your Contractor to installation**)
 - Provide a 2-pole, 30A circuit breaker (240V)
 - Type UF cable including three (3) #10AWG conductors (L1, L2 and N) with a #10AWG ground.

- 120 volt Grinder Pump (**typ. for a 120v grinder pump. Verify with your Contractor prior to installation**)
 - Provide a 1-pole, 30A circuit breaker (120V)
 - Type UF cable including two (2) #10AWG conductors (L1 and N) with a #10 ground.

Provide power feed to a weatherproof junction box mounted to the exterior of the structure located within five (5) feet of the Grinder Pump Control Panel. Pump controls to be per manufacture's recommendations.

All work is to be done in accordance with all applicable local building codes and the National Electric Code.

The Scott Township Sewer & Water Authority

Commercial Sewer Connection Guide

1038 Montdale Rd
Scott Township, PA 18447
(570) 319-1296 Ext. 4

This guide intends to streamline the process for commercial connections to the Authority's system. Steps for establishing your property's connection to the system:

1. Complete the STSWA *Application for Central Sewer Connection* and the LRBSA *Sewer Permit Application* and submit it to the STSWA. **An incomplete application will not be considered.** An Escrow must be established when the application is submitted. See Fee Schedule.
2. Commercial Connections that will require a sanitary sewer pump (Grinder Pump or Non-clog):
 - a. Contact the Authority to receive a copy of the Rules, Regulations, Details and Specifications.
 - b. Consult with an Engineer to facilitate your connection. For smaller uses (< 10,000 gallons per day) the EONE grinder pumps product line may suit your needs. Your Engineer will need to evaluate your flow demand and facilitate the required PA DEP planning approval if flows are greater than 800 gpd OR if the site is outside the Act 537 Study Planning Area.
 - c. Upon submission of your application, the Authority will review the plan/pump specifics for compliance with the rules & regulations and if the pump operating point (*how much pressure it can push*) to establish if the pump will be adequate for your location on the system.
3. The applicant will need to establish an Escrow account with the Authority for plan reviews and inspections. See Fee Schedule.
4. **PRIOR** to installing your lateral ¹⁾plan approval by the Authority will be required, ²⁾a Tapping Fee will be due to the Authority (see Fee Schedule), and ³⁾a Developer's Agreement may be required. All payments should be made to: "Scott Township Sewer & Water Authority" at the above address.
5. For small installations, make arrangements with the Authority's inspector at (570) 499-3244 ext. 2 **at least 48 hours in advance** of the start of construction of your lateral for observation and inspection. **A Sewer Permit from STSWA is required prior to the start of construction.**
6. For LARGE installations, **construction cannot start until** PA DEP planning is approved (3-6 months) and the Authority has approved the connection plans and details (1-2 months). **A Sewer Permit from STSWA is required prior to the start of construction.**
7. Regular monthly sewer rates will commence at the beginning of the month following your connection to the system.
8. According to the Township Ordinance, the Property Owner is to have the existing septic tank pumped clean and then either crushed and backfilled or filled with clean and proper fill material (ie. sand, stone, dirt, concrete). Owner to obtain a receipt from the septic hauler.

APPENDIX A

MATERIALS & CONSTRUCTION STANDARDS

GRAVITY SANITARY SEWERS:

Material:	SDR 35 PVC, ASTM D3034 ASTM F679 or ASTM 794 <15">18"
Size:	Minimum 8"
Bedding:	#8 Stone
Location marking:	6" pipe marking tape "buried sewer line" placed 12" above top of pipe Embedment not required for DIP Location
Testing :	Mandrel Test 30 days after installation Pipe Connection

MANHOLES:

Material:	Precast Concrete
Steps:	Steel Reinforced Polypropylene
Tops:	Eccentric Cone
Frames & Covers:	NEENAH R1643 w/solid self sealing cover
Pipe Entry Gasket: Drop:	Press Wed e II Inside (5' dia. MH)
Invert Drop:	Mm. 0.1' -90° deflection Mm. 0.2' - 90° + deflection unless hydraulic calculations indicate otherwise
Location: Testing	Outside Cart-way Vacuum Test

FORCEMAIN:

Pipe	DIP Cement Lined Class 50 Mm. PVC AWWA C-900 Class 150
Size:	Minimum diameter - 4"
Location:	Outside Cart-way
Location Marking:	6" pipe marking tape "buried sewer line" placed 12" above top of pipe

Air Valves and/or Vacuum Release Valves	Force main high point and localized high point caused by breaks in grade
Testing :	Hydrostatic Test

VALVE VAULTS:

Material:	Precast Concrete
Steps:	Steel Reinforced Polypropylene
Tops:	Eccentric cone or slabs
Frames and Covers:	Neenah 1643 with vented covers
Pipe Entry Gasket: formed entry	Press wedge II - Plant formed entry Link Seal - site

STANDARD CONSTRUCTION SPECIFICATIONS AND DEVELOPERS CHECKLIST OF REQUIREMENTS

1. Any single separate gravity Building Sewer shall be constructed of one of the following two (2) types of pipe with approved fittings not less than four (4) inches in internal diameter for single-family and two family structures unless otherwise directed or approved by the Authority Engineer. For commercial, industrial and multi-family residential connections, the pipe size shall be approved by the Authority Engineer.
 - a. Cast Iron Soil Pipe and fittings shall be extra heavy service grade, single hub conforming to ASTM A74. Joints shall be made with preformed rubber gaskets conforming to ASTM C564. Standard bituminous coating shall be provided on the exterior of all pipes and fittings.
 - b. PVC sewer pipe and fittings shall conform to ASTM D3034 for SDR 35 Pipe. The bell shall consist of an integral wall section with a solid cross-section rubber ring, factory assembled, securely locked in place to prevent displacement during pipe jointing, meeting the requirements of ASTM D3212. Minimum pipe stiffness at 5% deflection shall be 46 PSI for all sizes when tested in accordance with ASTM D2412.

2. Any force mains for house connections shall be constructed of the following type of pipe with approved fittings unless otherwise directed or approved by the Authority Engineer. The size will be as approved by the Authority Engineer.
 - a. Polyethylene Pipe, SDR-9 (160 psi minimum). Couplings or adapters shall be Ford or Muller brass fittings.

3. All pipe types, as a minimum should be bedded with five (5) inches of sand or modified material and backfilled with either sand or modified material to a depth of at least 18" above the top of the pipe.
 - a. Modified material shall conform to ASTM C-33, Size 67, crushed aggregate, Section 703 of the Pennsylvania Department of Transportation Specifications.
 - b. After the pipe has been installed, jointed, inspected, and tested, the trench shall be backfilled. Backfill from the top of the bedding to a depth of eighteen (18) inches over the pipe shall be sand or modified material.
 - c. Backfill material from eighteen (18) inches over the pipe to sub-grade shall be the material removed from the trench and shall be free of organic materials, stones larger than eight (8) inches and frozen, soggy, or wet material. Where such material is not available from the trench excavation, the sewer contractor shall provide satisfactory material as specified under suitable backfill material.
 - d. Final restoration should match or exceed what was existing prior to installation of the Building Sewer.

4. The following requirements shall be applicable for the Building Sewer line and it shall be the responsibility of the owner of the property served to require his plumber or

contractor to adhere to these requirements.

- a. The trench area shall be graded to conform to the existing grade.
 - b. All streets, roads, or highway surfaces that are disrupted or damaged by the owner, or his plumber or contractor shall be properly repaired at the owners cost. (Prior to excavating in Township roads or Penn Dot highways, permits must be obtained.)
 - c. Subsequent settlement of the streets, roads, or highway surface resulting from the improper compaction of the service line trench, or failure to protect the lateral line trench, shall be promptly repaired at the owner's cost.
 - d. If the owner or his plumber or contractor shall fail to comply with any of the requirements of the above-listed subparagraphs, then after reasonable notice to the owner, the Authority may proceed on its own to make any necessary corrections or repairs so that the aforesaid requirements are fulfilled. If the Authority does so repair, then the owner of the property shall be liable to the Authority for the entire cost of such repairs and said costs will be included in the owner's next billing for sewer services.
5. All new materials, as listed above, must be used from the building wall to the service lateral, with the exception that if the existing building sewers are constructed of the materials listed above, they may be accepted only if the property owner(s) uncover all of the existing building sewer for inspection to show that there are no leaks at the joints, or satisfactorily prove to the Authority Inspector that there are no leaks.
6. Basement cellar drains shall not be connected to the building sewer except by special permission of the authority, and if permission is granted by the Authority, the property owners) must assume the risk and expense of having the basement floor drain disconnected at a later date because of ground water entering the building sewer and the sewer system.
7. Construction of the building sewer should start at the service lateral and proceed upgrade toward the building. Correct adapters must be used when changing from plastic pipe to cast iron pipe, etc.
8. Construction of the Building Sewer may not be done prior to the issuance of a STSWA SEWER PERMIT. All pipe for Gravity Building Sewers shall be installed with a minimum slope of one eighth (1/8) inch per foot and a minimum cover of two and one-half (2-1/2) feet outside of all driveways, streets, roads, or highways where the minimum cover shall be four (4) feet unless otherwise approved. All pipe shall be laid to an even grade and straight alignment between changes in grade or-alignment to the public sanitary sewer. All pipe shall be laid with full and even bearing and no block supports will be allowed. Bell holes shall be dug to allow sufficient space to properly make each joint. Backfill shall be tamped uniformly around the pipe. All work shall be done in a workmanlike manner.

All connections to the sewer must be made into the lateral or wye left for that purpose. Where no lateral or wye has been provided, the sewer shall be tapped with an opening to receive a forty-five (45) degree saddle. The saddle shall be securely fastened by stainless steel bolts, with a rubber gasket. The saddle shall be Romac Industries, Inc. Stainless Steel-306 Service Saddle, or equivalent. The pipe and saddle shall be completely encased with four (4) inches of three thousand (3000) psi. concrete. When the opening into the pipe has been cut too large to receive the saddle, that section of pipe must be replaced by a wye branch of the proper size. This construction must be inspected and approved by the Inspector before the balance of the lateral connection may be laid.

Water in the trench shall be removed by pumping or bailing and must be kept away from mortar or concrete work until it has thoroughly set. If water is encountered, no less than six (6) inches of bank run gravel or crushed stone shall be used as foundation for the pipe between impervious trenches plugs which are also suggested when water in the trench is encountered. Proper erosion and sedimentation control measures must be used when dewatering.

Whenever a wye branch has been broken while removing the cap preparatory to making a connection, the protruding branch must be removed and a wye saddle applied as specified in other paragraphs of this section. When an existing lateral stub is broken, the broken end must be cut square and fitted with a duplex coupling or that section of pipe must be replaced.

No spring, storm, pool or surface water of any nature whatsoever shall be allowed to enter the sanitary sewer system.

On gravity lines clean-outs must be installed at all bends greater than 450 and in straight lines over 150 feet. Clean-out caps shall be set at grade.

Each connection must be made to the sewer within the lines of the lot as extended to the sewer or where a written easement has been granted.

9. Grinder Pumps

- a. To the maximum extent possible, all sewer lateral construction shall be of the gravity type. However, when serving basement plumbing or on an otherwise case-by-case basis, individual grinder pumps may be allowed by the Authority. In all cases, the installation shall be subject to approval of the Authority. The grinder pump details and manufacturer's specifications shall be submitted to the Authority Engineer for review and approval prior to installation.
- b. In the event the Authority may install a pressure sewage collection system in portions of the service area, the owner shall install a grinder pump and holding tank meeting the following specifications prior to connection and shall keep and maintain such facilities in good order and repair.
- c. Centrifugal grinder pumps shall be capable of delivering a minimum of 25 GPM at 84 feet of head. The shut off head shall be no less than 105 feet.

Semi-positive displacement pumps shall be capable of delivering 11 GPM at 92 feet of head.

- d. The grinder pump(s) shall be enclosed in a fiberglass tank (minimum of 120 gallons for centrifugal pumps and 60 gallons for semi-positive displacement pumps) and shall have a completely automatic control system which activates and deactivates the pumps) when the sewage reaches pre-set levels. A high and low level alarm system shall be provided with the unit in the event of a power failure or a malfunction of the system. When the sewage level reaches a pre-set level and the pump is not activated, the high level audible alarm will alert the owner that the pump is not working. Additional tank volume shall be provided before the tank is full, after the high level alarm sounds. If the pump fails to shut off when the sewage level drops to a pre-set level, the low level audible alarm will alert the owner that the pump must be deactivated manually.
 - e. Grinder pump units and tanks shall be installed in accordance with manufacturer's recommendations including anti-floatation collar and as approved by the Authority Engineer.
 - f. The Authority Engineer may require a duplex pump set-up if the building being serviced is a multi-family, commercial, or industrial complex.
 - g. Pump discharge piping shall have a ball check and full-port shut off valve supplied and installed with the pump assembly.
 - h. Discharge piping shall include a concentric coupling installed with each pump unit.
 - i.. Trenching for all waste pipes and electrical conduit will be excavated to 6" below the electric and waste hub location on the tank, with the least disturbance to remaining material.
 - j. Trench for the grinder pump shall be excavated large enough to provide ample work space around the tank, and to a depth of 6" below the tank setting.
10. Laying of Pipe:
- a. Inspect all pipe carefully for dents, cracks and other defects, defective pipe will not be laid. If any pipe is found to be broken or defective after being laid, it must be removed and replaced by a sound pipe. The cost will be borne by the Contractor.
 - b. Joint surfaces are to be protected from damage and examined and cleaned before jointing. No damaged joints will be used in the work.
 - c. Take ample precautions to prevent entrance of dirt and debris into the pipe after laying.
 - d. Grade pipe trench carefully to proper elevation. Remove all large stone and rock fragments from trench. Lay pipe on a suitable bedding material as specified herein.
 - e. Immediately after the pipe is placed in its final position, thoroughly secure, properly bed, provide ample support to prevent settlement or disturbances. Do not cover pipe totally at this time, leave exposed for inspection and testing.
 - f. Cutting of pipe for inserting valves, fittings or closure pieces are to be in a neat and workmanlike manner without damage to the pipe and as to leave a

smooth end at right angles to the axis of the pipe. The cut ends of pipe shall be filled smooth to remove sharp edges and protrusions.

- g. Lay plastic pipe in accordance with engineering specifications.
 - h. Backfilling:
 - Trench and Pump Station:
 - i. When inspection and testing is complete and approved, backfill with backfill material to a point of 4" below the top of the unit for outside installations place stone-free topsoil for the remaining 4".
11. Electrical:
- a. All connections shall be made as manufacturer's recommendation and in accordance with the National Electrical Code. THEN wire to be used in conduit.
 - b. Conduit:
 - i. Any bends required in electric conduit must be made with a proper heating device or a pre-manufactured long bend or sweep.
 - ii. Use 1-1/2" P.V.C. Schedule 40 Conduit for all wiring runs underground and through structures. All connections to be cleaned with PVC cleaner and PVC cement used for bonding.
 - iii. A minimum of two (2) feet of cover shall be provided for all underground conduit.
 - c. Power and Alarm Cables:
 - i. Supply one (1) pair additional power cable and one (1) pair additional alarm cable in conduit for emergency backup. Tape end of each and Tag (" Spare Power") ("Spare Alarm") appropriately. Chico-a-seal to be used at junction boxes.
 - d. All connections shall be made in accordance with the National Electrical Code.
12. Grease, oil and sand traps or other pretreatment facilities shall be provided by the Owner of any industrial, commercial or institutional establishment, at his or its sole cost, as required by the Authority, for the proper handling of liquid wastes containing excessive grease, inflammable wastes, sand or other harmful substances.
13. Existing septic tank and cesspool abandonment.
- a. Where a lateral is installed, all existing septic tanks and cesspools shall be abandoned.
 - b. Septic tanks and cesspools to be abandoned shall be done so according to Township requirements and as follows:
 - i. A licensed (septic) hauler shall remove all water and solids in the septic tank or cesspool by pumping into a tank truck for disposal at a State approved site.
 - ii. The Contractor shall abandon the septic tank or cesspool in-place by filling with sand or crushed stone.
 - iii. The Contractor shall permanently remove the vent cap and fill the vent pipe.

- iv. The existing drain field may be abandoned in place with no additional work required.

14. Traps with clean outs are required on all building sewers to prevent the back passage of gases into the house system.

15. Sewer Meters. All commercial and industrial properties shall be equipped with meters to accurately measure the volume of sewage generated. Meters shall be applied by the user. Meters must be available for inspection and reading by the Authority upon request, on a fixed date established by the Authority.

- a. In the event any meter is not properly operating, the user shall replace and/or repair the meter within thirty (30) days of notice. While any meter is not operating properly as aforesaid, the user shall be charged for processing the maximum volume of sewage physically capable of being transmitted through the meter. In the event any such defective meter is not repaired and/or replaced within thirty (30) days, the Authority may discontinue service until the meter is repaired or replaced.
- b. An annual certification of accuracy by a certified testing facility recognized by the Authority must be supplied by the industrial or commercial user, or if a property owner, for every meter.
- c. Upon request, every commercial or industrial user will provide to the Authority meter readings from every water meter measuring the volume of water being provided to the facility.
- d. Multi-family residential users will be billed upon a flat rate per equivalent dwelling unit established by the Authority based upon the equivalent dwelling unit gallonage parameters for the type of dwelling unit as established from time to time by the Department of Environmental Protection. In the event a lower aggregate flow volume is proven by meter readings over a twelve (12) consecutive month period, a multi-family residential user may elect to be charged at a metered rate, in which event the rules and regulations applicable to metered industrial and commercial users shall be applicable.

16. Surplus Capacity. In the event a user purchases such processing capacity and does not make use of that capacity for a period of five (5) years, the Authority shall have the exclusive right to purchase from the user any such unused capacity. The price to be paid therefore by the Authority shall be the lower of the purchase price of the capacity as paid by the user or the current charge by the Authority for sewage processing capacity.

- a. No user may sell or transfer sewage processing capacity except to the Authority without the express written consent of the Authority.
- b. Service Interconnections. Each user shall have its own service. No shared services shall be allowed without the express approval of the Authority, upon the affirmative recommendation of its engineer.
- c. No connection to any main owned by the Authority shall be made unless there has first been an on-site inspection by the Authority or its duly authorized representative.
- d. Not less than ten (10) days notice of the date upon which the proposed

interconnection is to be made shall be given to the Authority. No interconnection shall be made without the express written authorization to proceed from the Authority.

- e. No interconnection shall be made unless all costs and expenses owed to the Authority by the applicant for the use shall have been paid in full.
- f. All interconnections and service lines shall be constructed to such specifications as shall be established and/or approved by the Authority. Deviations from the approved specifications for interconnection shall be allowed only upon written approval of the Authority and the affirmative recommendation of the Authority's engineer.

17. Application for Service and Sewer System Extension

Sewer Service Connection for Individual Properties

Any property owner desiring the introduction of a service connection from the Authorities' main to his or her premises must first make written application on a form furnished by the Authority. The application must be signed by the property owner or his duly authorized attorney.

Any property owner desiring sewage facilities must first make written application, on a form furnished by the Authority, which must be approved by the Authority before facilities are utilized. The part or parties making the application will be considered the customer under this contract and will be responsible for all sewage bills and proper observance of the Rules and Regulation.

No owner or tenant of any premises connected with the sewer lines of this Authority shall permit any other premises to be connected with his service line, except upon written permit from the Authority.

Any violation by the Customer of the Rules and Regulations of the Authority shall render the Contract between the Customer and the Authority void, and service may be discontinued by disconnection of lateral to customer's waste line, after compliance with presently effective Rules and Regulations, remaining so until such time as the Authority is satisfied that the Customer will observe the Rules and Regulations. Service will not be connected until the actual costs of the disconnections and reconnections are paid in full.

A new application must be made to, and approved by the Authority upon any change in the identity of the property owner of a property or in the service as described in the application, the Authority may discontinue the service until such new application has been made and approved.

Developer's Guidelines for Sewer System Extension

1. Introduction

The Authority has prepared these Guidelines to provide for the orderly development and expansion of the Authority's sanitary sewer system within the jurisdiction of the Authority in Westfall Township, Pike County, Pennsylvania. This Guide is intended to assist Developers and their professional advisors in the progression of events required by the Authority for successful and appropriate development. In addition, the Guide will assist Developers and their professional advisors in the preparation of required submissions to the Authority that include plans, specifications, legal agreements and other information.

The Authority has enacted these Rules and Regulations and the Developer must comply with all these Rules and Regulations, as amended. These Developer's Guidelines are in no way to act as a substitute for the Developer's full compliance with these Rules and Regulations, all applicable Westfall Township ordinances and all applicable state and federal laws and regulations. .

This Guide is to serve as a supplement to the established Authority Rules and Regulations regarding sewer system extensions. The provisions set forth in the Authority Rules and Regulations with regard to proposed extensions of the sewer system and any terms and conditions set forth in the Developer's Agreement executed between the Authority and the Developer shall control and supersede these Guidelines. These Guidelines are simply for informational purposes only. In the event of any contradiction between these guidelines and the Authority Rules or a duly executed Developer's Agreement, the Rules and Regulations and the Developer's Agreement shall prevail.

The Guide consists of the following sections:

Subsection 2 - Schedule of Procedures and Required Submissions - Outline the series of steps and required submissions that must be addressed by the Developer.

Subsection 3 - Materials and Construction Standards.

Subsection 4 - Pump Station Construction Standards - Provides a summary of the technical (construction) requirements of the Authority.

Subsection 5 - Developer's Agreement - Provides a prototype agreement that must be executed by both the Developer and the Authority.

2. Schedule of Procedure and Required Submissions

Summary

The successful development of the sanitary sewer system will require the cooperation of both the Developer and the Authority. These Guidelines have been prepared to attempt to outline the necessary events, procedures, standards and submissions. These Guidelines, however, cannot be used as a substitute for sound professional judgment.

As stated in the Preamble, this Developer's Guideline is not to act as a substitute for the Developer's adherence to and compliance with the Authority Rules and Regulations.

The issues that must be addressed are both administrative and technical. The technical issues are more fully addressed in Subsection 3 and Subsection 4 of these Guidelines. The legal agreement to be executed is set forth in Subsection 5 of these Guidelines.

Procedural Steps and Submissions

The following are the procedural steps and the required submissions for the Developer. The sequence of the steps provide the Developer a logical progression for the preparation process, the approval process, the construction process, and, ultimately, the acceptance by the Authority of the extension or development. The events as set forth herein are subject to change, without notice, by the Authority. Each project may require the altering of this schedule and/or the deletion and addition of certain steps. The Authority or its designee will promptly notify the Developer of any alteration necessitated in this schedule.

Preliminary Information: As part of Developer's preparation for submission to the Pennsylvania Department of Environmental Protection (PA DEP) and Westfall Township, the Developer should contact the Authority at this time. The Authority will provide the herein Developer's Guidelines to the Developer and will make available the Authority representatives for preliminary discussions and dialogue.

Postcard Submission or Planning Module: At or before the time that the Developer is attempting to obtain any local governmental approvals, the Developer's Registered Surveyor or Engineer should forward the following information to the Authority, with a copy to be submitted simultaneously to the Authority's Engineer:

- a. Description/nature of the development;
- b. Location of the development;
- c. Size of the development;
- d. Point of anticipated connection to Authority facilities;
- e. Any unusual characteristics (i.e. oil, grease, BOD, TSS, etc.) of sewage to be generated by the development;

- f. Name, address, telephone number of Developer's technical consultant (Engineer or Registered Surveyor);
- g. Name, address, telephone number of Developer's legal consultant (Attorney);
- h. Indication if Authority "sponsored" pump station is required or proposed;
- i. Proposed schedule including estimated sewage flows for completed (i.e. when requested capacity will be utilized) development; and,
- j. Indication if easement acquisition is required as part of the development

After the submission of the postcard or planning module information from the Developer, the execution of the Developer's Agreement, and the submission of the engineering plans, the Authority shall notify the Developer as to whether any additional information is required or whether the information that is submitted needs to be clarified.

Execution of Developer's Agreement: After the receipt of the information set forth in the postcard section, the Authority's Solicitor shall submit a proposed Developer's Agreement to the Developer or the Developer's legal counsel. The Developer's Agreement sets forth the legal requirements of the Developer with regard to the sewer system extension. The execution of the Developer's Agreement is a prerequisite to proceeding forward with the sewer extension and any further steps set forth herein. After any negotiations between the Developer and the Authority with regard to the language set forth in the Developer's Agreement, the Developer's Agreement shall be executed by the Developer and submitted to the Authority at its next regularly scheduled monthly meeting. Authority approval, in the form of the Authority properly executing the negotiated Developer's Agreement, is a prerequisite to moving forward in the process of the development.

Submission of Plans: Within the time set forth in the Developer's Agreement, the Developer is to submit five (5) copies of an engineer prepared and approved plans for the proposed development to the Authority, with a copy to be submitted simultaneously to the Authority's Engineer, that are in accordance with the requirements of the Westfall Township Subdivision and Land Development Ordinance ("SALDO").

Review by Authority's Engineer: Upon the submission of the information set forth under the Postcard/Planning Module section, the execution of the Developer's agreement, and the submission of the Developer's Plan, the Authority's Engineer and Legal Counsel, as applicable, shall commence with the review of the information as submitted by the Developer. The Authority's Engineer will attempt to identify potential problems including the following:

- a. PA DEP imposed restrictions such as extension or connection bans.
- b. Availability of reserve hydraulic and/or organic capacity of the sewage treatment plant.
- c. Availability of reserve hydraulic capacity of conveyance facility.
- d. If applicable, ability of the sewage treatment plant to treat sewage with "unusual" characteristics.
- e. If applicable, ability of conveyance facilities to convey sewage with "unusual" characteristics.

Approval and Permitting Process:

The securing of all approvals and permits, including application fees, required to construct and operate the proposed sewerage facilities shall be the responsibility of the Developer. All applications requiring the approval of, made on behalf of, or requiring the enforcement of the Authority will first require the review and approval of the Authority's Engineer and/or legal counsel. The Authority will work with the Developer in securing required approvals and permits.

To minimize all administrative, engineering, legal, and other costs incurred by the Authority during this process, all submissions requiring review by the Authority must be complete.

The Authority reserves the right to reject any incomplete submissions and will not consider further action on a Developer's project until a complete submission is properly submitted.

Some, but certainly not all, of the permits and/or approvals that might be required as part of the extension of sewage service is as follows:

- a. PA DEP Part II Permit required for sewer extension serving 250 single family residences or more (or the equivalent sewage flow) through Authority sponsored pump stations and forcemains.
- b. PennDOT (Pennsylvania Department of Transportation) Occupancy Permits required for construction activities in PennDOT right of ways.
- c. E&S (Erosion & Sedimentation) Control Plans required for all earthmoving or earth disturbance activities.
- d. NPDES (National Pollutant Discharge Elimination System) Permits required for earthmoving activities disturbing more than 5 acres.

Municipal approvals required for:

- a. Zoning Approval
- b. Subdivision or Land Development
- c. Construction and related activities in its jurisdiction.
- d. Permits and approvals from PA DEP and, if applicable, U.S. Army Corps of Engineers for encroachments (i.e. stream crossings, etc) in regulated waters, wetlands and flood plains.
- e. PHMC (Pennsylvania Historical and Museum Commission) clearance required for any projects or activities that could impact regulated sites.
- f. PNDI (Pennsylvania Natural Diversity Index) clearance required for any projects or activities that could impact protected species

Construction Phase of the Development:

The Developer's Agreement sets forth a schedule with regard to the preconstruction and construction requirements of the Developer and the Authority.

In summary, the Developer's Agreement sets forth the following schedule for the Developer and the Authority for the pre-construction and construction phase:

- a. Developer obtains the required approvals and permits by the applicable Local government unit, State governmental unit, or Federal governmental unit and said permits are to be provided to the Authority prior to construction.
- b. Developer deposits a sum with the Authority in an amount to be determined by the Authority upon the execution of the Developer's Agreement to cover the Authority's engineering fees and legal fees regarding the Development.
- c. The Developer is responsible for funding an escrow account established for the payment of all inspection fees to be incurred by the Authority.
- d. Throughout the construction process, the Developer must provide access to the Authority's Engineer for inspection. In the event that any work performed by the Contractor does not meet the Authority's specifications, the Authority's Engineer shall inform the Developer of such violations and it shall be remedied pursuant to the Developer's Agreement.

Post Construction Activity: The Developer's Agreement contains provisions regarding schedule of events during the post-construction phase. The schedule includes the following:

Developer shall deliver a complete set of as built drawings to the Authority indicating the actual characteristics of the sewer line as finally constructed.

The Authority's Engineer shall issue a Certificate of Substantial Completion for the lines as constructed by the Developer.

The Authority and/or the Developer shall begin testing the sewer lines pursuant to the specifications set forth by the Authority's Engineer.

Connection and Tap Fees:

For any subdivisions, the Developer's Agreement sets forth the requirements for the Tapping fees for structures) comprising the Development and the schedule for payment of same.

The Agreement sets forth the following procedure for connection:

The property owner must obtain a permit for connection from the Authority and present any required permits at the time of the request.

Any monies due the Authority must be remitted by the property owner.

The property owner must construct any lateral that is required.

The property owner must communicate with the Authority to arrange for an engineering inspection prior to connection.

Authority's Acceptance of Sewer System Extension:

The Developer's Agreement sets forth the schedule of events that are prerequisite to the Authority accepting the sewer line extension. The steps are as follows:

- a. The Developer shall cause or permit the sewer line to be tested for a period of time approved by the Authority's Engineer.

- b. The Developer shall execute and deliver a Deed of Dedication/Bill of Sale for all lines and appropriate easements and/or rights-of-way for all property, on a form or forms acceptable to the Authority. Said easements and rights-of way shall be delivered free and clear of all liens and encumbrances.

3. Material and Construction Standards

The Table (Materials & Construction Standards), which is attached hereto as Exhibit "A", is not inclusive and cannot be used as a substitute for sound professional judgment.

4. Pump Station Construction Standards - General

Whenever a pump station proposed as part of a development is to be "sponsored" or accepted by the Authority, it must meet these minimum standards. It is the intent of the Authority to have all of their pump stations to be of the submersible non-clog pump wetwell design with 4" (minimum) DIP or PVC force mains. Header piping to be DIP. Interim submersible type grinder pump stations will be considered on an "interim" basis only if and when design constraints prohibit the immediate utilization of the recommended design. The permanent pump station will be installed and inter-connected to the "interim" pump station allowing for immediate operation when needed. The "interim" pump station will be abandoned at that time at the Developer's expense. A bond equal in value to estimated cost of removal of the "interim" pump station will be provided to the Authority as part of the Developer's Agreement. The Authority will not accept pump stations serving only single homes or a single building.

Administrative

- a. Shop Drawings - shall be submitted to the Authority for approval of all materials, equipment, fixtures, fittings, and supplies.
- b. Operating and Maintenance Manuals - two copies to be provided to the Authority prior to completion.
- c. Construction Drawings - one complete set of as-built construction plans on reproducible material to be provided to Authority upon completion.

Technical

Pump Station (<15 HP Motor):

- a. At a minimum, the pump station shall be of a duplex design with each pump designed to meet the operating conditions;
- b. The pump station shall be of a submersible wet well design;
- c. The submersible pumps shall be manufactured by F. E. Myers Pumps;
- d. The impellers shall be non-clog, capable of passing a 3" diameter solid;
- e. The submersible pump motors shall be 3 phase / 60 Hz / 230 VAC;
- f. The submersible pump motors shall be a maximum of 1800 RPM;
- g. The pump station shall be constructed of concrete;

- h. A Pump Alternator control shall be provided to allow selection of daily or weekly primary: stand-by status;
- i. A Seal protector circuit shall be provided and wired into the control and alarm circuits;
- j. A motor over-temp circuit shall be provided and wired into the control and alarm circuits;
- k. A Quick disconnect assembly shall be provided. Stainless steel pipes guide pipes/rails shall be provided;
- l. An Emergency generator with appropriate switching gear shall be provided;
- m. All controls and alarm circuits shall be enclosed within NEMA 4 enclosures;
- n. The developer shall provide the Authority with one (1) set of Manufacturer Recommended Spare parts;
- o. An Auto-dialer shall be provided;
- p. A hoist capable of removing the submersible pumps shall be provided;
- q. A separate valve pit shall be provided. Isolation and check valves shall be included in the pit;
- r. A Carbon-based odor control system shall be provided. It shall be a vent mounted carbon canister type.

Pump Station (>15 HP Motor):

- a. At a minimum, the pump station shall be of a duplex design with each pump designed to meet the operating conditions;
- b. The pump station shall be of a submersible wet well design;
- c. The submersible pumps shall be manufactured by F. E. Myers Pumps or Flygt, Inc.;
- d. The impellers shall be non-clog, capable of passing a 3" diameter solid;
- e. The submersible pump motors shall be 3 phase / 60 Hz / 230 VAC;
- f. The submersible pump motors shall be a maximum of 1800 RPM;
- g. The pump station shall be constructed of concrete;
- h. A Pump Alternator control shall be provided to allow alternate operation of the system pumps;
- i. A Seal protector circuit shall be provided and wired into the control and alarm circuits;
- j. A motor over-temp circuit shall be provided and wired into the control and alarm circuits;
- k. A Quick disconnect assembly shall be provided. Stainless steel pipes guide pipes/rails shall be provided;
- l. An Emergency generator with appropriate switching gear shall be provided;
- m. A walk-in control building shall be provided to contain all control and alarm circuits;
- n. All controls and alarm circuits shall be enclosed within NEMA 3R enclosures;
- o. The developer shall provide the Authority with one (1) set of Manufacturer Recommended Spare parts;
- p. An Auto-dialer shall be provided;
- q. A hoist capable of removing the submersible pumps shall be provided;
- r. A separate valve pit shall be provided. Isolation and check valves shall be included in the pit;
- s. A Carbon-based odor control system shall be provided. It shall be a vent mounted carbon canister type with fan- assist.

5. Developer's Agreement

The applicable Developer's Agreement to be used by the Authority is kept on file at the Authority office and with the Authority Solicitor. The Agreement is subject to change at the Authority's discretion. A copy of the current Developer's Agreement utilized at the time of the adoption of these amendments is attached hereto in Appendix D.