



420 West Main Street Saxonburg, PA 16056 (724) 352-1400 - Phone (724) 352-8820 - Fax www.the-saa.org

## <u>Specifications For Sanitary Sewer Service Line</u> <u>And Grinder Pump Installation</u>

PA One-Call must be contacted at 1-800-242-1776 prior to excavation beginning

## General SAA Sanitary Service Guidelines:

- 1. All applications must be completed, signed and any applicable fees paid prior to new service being approved an original sealed survey is required for a tap servicing a newly constructed structure.
- 2. Only property owners may apply for new service which requires a tap to be constructed.
- 3. Multi-Unit Residential & Non-Residential applicants are required to meet with the Authority Engineer prior to service approval.
- 4. All sanitary waste lines including but not limited to toilets, laundry facilities, sinks, dishwashers and any other source of gray water shall be connected into the public wastewater system.
- 5. No storm water, roof conductors, foundation (French) drains, driveway drains, sump pumps, nor any source of ground or surface water whatsoever is permitted to enter the sewage service line.
- 6. The Authority will not make a connection from the tap to a service line.
- 7. Service lines are to be constructed only on the property of the residence or structure being serviced.
- 8. The grinder pump and all relevant equipment must be Authority-approved. The pump shall be a DH071 model grinder pump manufactured by Environmental One. Relevant equipment includes, but is not limited to, an Environmental One alarm panel and an Environmental One Lateral Kit, consisting of a lateral valve, a curb box, and the relevant 1.5" compression fittings.
- 9. The purchase, installation, set-up, and maintenance of the pump and all relevant equipment shall be solely the responsibility of the property owner, and shall adhere to the specifications and guidelines laid forth by the manufacturer and vendor of the pump.
- 10. All work is to be done in compliance with the Saxonburg Area Authority **Rules and Regulations** and any other local, State or Federal laws.

## Technical SAA Sanitary Service Specifications:

- 1. A newly constructed service line shall be required from the exterior building wall to the grinder pump unit, and then from the grinder pump unit outlet to the 6" SDR35 gravity tapin connection (unless otherwise specified) provided. An inspection by an Authority representative will be performed for each portion. The Authority reserves the right to grant partial waivers of this requirement under exceptional conditions or circumstances.
- 2. The entire installation, including both gravity and pressurized service lines, requires a visual inspection by a representative of the Authority. Initial inspection fee is included in the tap-in fee. Any additional inspections shall be charged according to the Authority Fee Resolution.
- 3. The pressurized service line must pass a pressure test in the presence of an Authority representative. The installer must ensure that all pressure test specifications are met for Authority approval. NOTE; when pressurizing the service line, the pipe must not be connected to the grinder pump and may require a cap. Please refer to the SAA Specifications for Pressure Test of Pressurized Service Line from Grinder Pump Unit to Shut-Off Valve detail sheet.
- 4. No service line is to be covered until visually inspected from the exterior wall of the building to the tap-in connection with the appropriate depth of limestone bedding underneath the service line installed, but no backfill covering the pipe. After the inspection has been approved by a representative of Saxonburg Area Authority, the remainder of the 2B crushed limestone shall be backfilled in the pipe zone and above the pipe. **NOTE;** The installer may backfill the excavation at any point after the visual inspection has been passed; however, should the pressurized service line fail the pressure test, it is the responsibility of the installer to re-excavate and correct all deficiencies. Additionally, other agencies may require inspections of their own please contact your municipality for more information before backfilling.
- 5. A standard 6" SDR35 gravity tap (unless otherwise specified) will be installed by the Authority for the property. A combination of solid-sleeve reducing couplings must be used to connect the one and one half (1.5) inch pressurized service line to the six (6) inch SDR35 tap. This combination shall consist of one 6" SDR35 to 4" PVC reducer and one 4" PVC to 1.5" PVC reducer. The shut-off valve and cleanout must be installed at the Right-of-Way line. All specifications set forth by the manufacturer shall be adhered to during installation. NOTE; due to the design of the shut-off valve and cleanout, extra care must be taken to ensure an effective seal during installation. No line will be approved without a pressure-tight seal where connected to the shut-off valve and cleanout.
- 6. Gravity service lines are to be four (4) inches in diameter at minimum and designed to maintain a minimum one-eighth (1/8) unit vertical to twelve (12) unit horizontal.
- 7. Pressurized service lines are to be one-and-one-half (1.5) inches in diameter, and all pipes and fittings used in construction are to be rated for high pressure.
- 8. The gravity service line pipe shall not be reduced in size in the direction of flow between the house and the pump. Likewise, the pressurized service line pipe shall not be reduced in size in the direction of flow between the pump and the shut-off valve.
- 9. A house trap and vent stack are required within three (3) feet outside of the building wall. The vent stack shall be capped with an Oatey Mushroom Vent Cap Model 43805 or approved equivalent. The line from the exterior wall up to and including the trap is to be constructed of Schedule 40 pipe and fittings.
- 10. A shielded flexible coupling may be used in some cases when the use of a solid coupling or adapter is impossible to connect the existing sanitary house drain line to the newly

constructed service line. The use of flexible couplers is prohibited when constructing the remainder of the service line. See attached drawing for acceptable fittings at various connection points.

- 11. A cleanout shall be installed at no greater than one hundred (100) foot increments apart on the gravity service line (starting measurement from the exterior vent stack which will be accepted as a cleanout) and at each fitting with a change of direction greater than 45 degrees. For the installation of Schedule 40 or SDR 11 low pressure service lines, a minimum of one (1) cleanout must be installed for runs of two hundred (200) feet or less. When constructing a run of greater than two hundred (200) feet, a cleanout will be required within two hundred (200) feet of the pump unit's connection point, and then at a maximum of every two hundred (200) feet thereafter. Additionally, a cleanout will be required at each and every fitting with a change of direction greater than 45 degrees. In addition, the installer shall install thrust blocks as necessary to ensure lateral forces are minimized in the trench. When constructing a low-pressure service line from SDR 11 pipe, appropriate, high pressure compression-style fittings must be utilized to convert from the primary SDR 11 to pressure-rated Schedule 40 PVC to construct the necessary cleanouts.
- 12. No single fitting greater than a 45 degree elbow is permitted at any point on the service line except in the construction of the house trap. Change in direction greater than 45 degrees are to be accomplished with the use of two fittings and a minimum 12" section of pipe between.
- 13. New service lines and fittings from the house trap to the grinder pump unit shall be constructed using SDR-35 pipe with an elastometric gasket or Schedule 40 PVC / ABS DWV pipe. All joints shall be tightly fitted to prevent infiltration and installed in accordance with manufacturer's specifications.
- 14. All pressurized service lines and fittings from the grinder pump unit to the shut-off valve connection point shall be constructed using Schedule 40 PVC pipe or SDR 11 polyethylene pipe. All fittings shall be rated for pressure. Solid, solvent weld fittings must be utilized for Scheduel 40 PVC installations; appropriate compression type fittings must be utilized for SDR 11 pipe.
- 15. The gravity service line shall be installed with six (6) inches of 2B crushed limestone as bedding under the pipe, four (4) inches of 2B crushed limestone in the pipe zone and six (6) inches of 2B crushed limestone as backfill above the pipe to provide support and protection. The low-pressure service line shall be installed with four (4) inches of 2B crushed limestone as bedding under the pipe, one and one half (1.5) inches of 2B crushed limestone in the pipe zone, and four (4) inches of 2B crushed limestone as backfill above the pipe to provide support and protection. Slag, pea gravel or modified materials are not considered suitable bedding or backfill. Excavated materials can be used for remaining backfill provided that no large chunks of earth, construction debris or large rocks are placed in the trench.

These guidelines are intended to represent the specifications of the Saxonburg Area Authority. You may be required to meet additional Municipal or State requirements. Please contact your local municipality for more information.



