



BRIGHTON TOWNSHIP SEWAGE AUTHORITY

**RULES AND REGULATIONS FOR THE
INSTALLATION OF PRIVATE CONNECTING SEWERS**

**HOUSE LATERAL CONNECTIONS
COMMERCIAL / INSTITUTION CONNECTIONS**

AND

INDIVIDUAL GRINDER PUMP MANAGEMENT PLAN

OCTOBER 2019

TOWNSHIP OF BRIGHTON
BRIGHTON TOWNSHIP SEWAGE AUTHORITY
RULES & REGULATIONS FOR THE
INSTALLATION OF PRIVATE CONNECTING SEWERS
HOUSE LATERAL CONNECTIONS
COMMERCIAL / INSTITUTION CONNECTIONS
AND INDIVIDUAL GRINDER PUMP MANAGEMENT PLAN

The following is required for all sanitary sewer connections:

1. Submit Application and Connection Fee
2. Obtain Permit
3. Inspection required prior to the installation of basement floor slab.
4. Inspection required of sanitary sewer lateral prior to backfilling of trench.
5. Contractor shall be present for all inspections.

GENERAL

1. Every owner of property in the Township of Brighton whose property abuts upon any sanitary sewer line owned by the Brighton Township Sewage Authority shall connect at his own cost, all buildings and/or structures that generate any drainage of domestic sewage to the sanitary sewer lines of the Brighton Township Sewage Authority in accordance with the Brighton Township Code, Chapter 160.
2. Application for connection shall be made to the Brighton Township Sewage Authority upon the application form furnished. Connection fee must be submitted with application. The connection fee will be as follows:
 - a. Domestic Connection Fee shall be as established by the Board of Directors, as amended from time to time.
 - b. Commercial, Industrial or Institutional Fee will be based on anticipated water usage and be determined at the time of application.

No work shall commence before the payment of connection fee and receipt of a permit.

3. Unless written permission is obtained from the Brighton Township Sewage Authority, separate connections and connection fees will be required for each individually occupied housing unit whether constructed as a detached unit or as one of a pair or rows. A single connection may be permitted to serve a permanent multiple unit structure, such as an apartment building, whose individual apartments or units may not be subjected to separate ownership, but individual Connection and Tapping Fees will be assessed in accordance with Authority's adopted fee schedule.
4. Special attention shall be directed to the provisions of the Brighton Township Code, Chapter 160. This ordinance prohibits the discharge of any storm water, surface water, roof runoff, swimming pool wastes, subsurface drainage and cooling water. It also regulates the discharge of all industrial process waters, polluted or unpolluted, into the sewer system. Attention shall also be directed to the Brighton Township Code, Chapter 160: (i) requiring each owner of property accessible to a public sanitary sewer to connect therewith: (ii) providing remedies for an owner's neglect or refusal to connect with establishing certain rules with respect to sewer connections. Copies are available for inspection at the Authority office and from the Township Secretary.
5. Permits for commercial, industrial and multi-family service connections will be reviewed on an individual basis. These permits will be issued only after all proposed plumbing layouts and plans are reviewed and approved by the Authority.

Food preparation establishments and other establishments at the discretion of the Authority shall install grease traps of a style and size acceptable to the Authority. Sink in food preparation areas of these establishments shall also have under-sink grease traps.
6. All inspections shall require a prior day notice. All inspections shall be scheduled to be completed by 3:00 P.M. Monday through Friday.
7. If a re-inspection of any part of the installation is required, there may be an additional fee charged to the contractor.
8. Failure to have the required inspection made shall result in the contractor being required to expose the entire line.

SPECIFICATIONS

1. GENERAL:
 - a. All service lines shall be placed at least 4-foot below grade with a minimum slope of 1/8 inch per foot or an equivalent 1.00% grade.

- (1) Conditions may exist that would prohibit strict adherence to this requirement. Deviation from this requirement would be allowed only by special exception of the Brighton Township Sewage Authority Board or their representative.
- b. Service lines shall have a minimum diameter of four (4) inches and shall not exceed six (6) inches in diameter for single-family dwellings. All commercial installations and multi-family units shall be sized on an individual basis, but shall not be less than 6" in diameter.
- c. It is strongly recommended that the type of pipe used for all service lines be of the same material as constructed by the Authority at the service connection. If a property owner elects to use pipe of a different material than constructed at the service connection, he must supply the proper adapters, clamps, etc., and have these approved by the Authority.

2. MATERIALS OF CONSTRUCTION:

- a. Sewer pipe and/or all fittings and adapters is highly recommended to be of the following Material:
 - (1) PVC – shall conform to the requirements of ASTM D-3034 SDR-35 with ASTM D- 3212 joints, or Schedule 40 conforming to the requirements of ASTM D-2665 with solvent-cemented or compressed gasket type joint.
- b. Each section of sewer pipe or fitting shall be clearly stamped with the manufacturer's specifications.
- c. Whatever combination of pipe, vent, cleanout stack, traps, etc., are used, it is the responsibility of the property owner to supply proper gaskets, clamps or adapters in order to affect a watertight and airtight connection. The adapters, etc. must be approved by the Authority.

3. PROCEDURES AND METHOD OF CONSTRUCTION:

- a. Submit application for permit to construct house lateral. Connection and tapping fee must be submitted with application. Permit will be issued after application is reviewed and approved.
- b. No privy vault, cesspool, septic tank, mine hole or similar receptacle shall be connected to the sanitary sewer system.

- c. All connections to the sanitary sewer system shall be subject to restrictions as to prohibitive wastes, which are described in the Brighton Township Code, Chapter 160.
- d. **NO ROOF DRAIN WATER, STORM WATER, FOUNDATION DRAIN WATER (FRENCH DRAINS), SPRING WATER, OR SURFACE WATER SHALL BE PERMITTED IN THE SANITARY SEWERS OF BRIGHTON TOWNSHIP.**
- e. All water carried wastes normally disposed of in a system of sanitary sewers including laundry water and basement drains shall be discharged into the sewer system.
- f. The Brighton Township Sewage Authority reserves the right to require the testing of all house laterals in any manner it deems necessary to assure that all connections are watertight and airtight. These tests may also be made to assure that only lines transporting domestic sewage are connected to the sewer system.
- g. The Applicant or his representative at the direction and in the presence of the Authority inspector will conduct this test. If corrections are necessary, they will be made by the Applicant and the connection will be retested, prior to final connection to the sanitary sewer.
- h. Request inspection by Authority of exposed piping, in which particular attention will be given to:
 - (1) Installation of suitable traps as specified. See BUILDING LATERAL CONNECTION, Sheet No. LAT1
 - (2) Facilities for conducting roof drainage away from the building and away from the sanitary sewer and the foundation. Facilities for draining the foundation drain away from the building and the sanitary sewer.
 - (3) Connection of prohibited facilities to the sanitary sewer. Included in these facilities are depressed driveway drains, outside cellar stairwell drains outside window wells, downspout, foundation drains, or any facility conducting storm water into the sanitary sewer by any means.
 - (4) The slope of the building sewer, which shall be a minimum of 1/8 inch per foot.
 - (5) Conformance of materials used in the construction of sewers.

(6) Tightness of joints in pipes and use of mortar or other prohibited materials in joints.

- i. The contractor shall be present for all inspections. The inspector has been instructed not to conduct the inspection in absence of contractor or his representative.
- j. The contractor should be aware of all government regulations governing the safety of all employees and workers. All work shall be performed in strict conformance with the regulations of the PA Department of Labor & Industry and the Federal Occupational Safety and Health Act of 1970.
- k. The Applicant shall correct any deficiencies noted by the inspector in accordance with these requirements.

4. **EXISTING STRUCTURES**

- a. Examine the “as built” sewer plans of the Authority to determine the location of (1) the service wye and (2) the end of the service lateral.
- b. Locate and uncover the end of the Authority’s service sewer and the building drain at the foundation wall of the dwelling to be serviced. Prior to excavation between these two points, the elevation of these points and the required grade between them should be determined.
- c. After assuring that the minimum allowable grade can be met, excavation may continue between the points of connection.
- d. Lay pipe from Authority lateral or service wye, upgrade to near the point of connection to the building drain. All pipes shall be installed in strict accordance with the manufacturer’s recommendations and specifications. A four (4) inch aggregate bed shall be provided under the pipe and over the pipe to an elevation of 4” above the pipe. Aggregate may be pea gravel, AASHTO #57 gravel or crushed stone, sand or any other aggregate as may be approved by the Authority or its representative. All pipe, traps, and cleanouts shall be installed with at least 48-inch of depth.
- e. The connection to the sanitary sewer shall be made to the structure at a point within one (1)-foot of where the building sewer leaves the structure. Any deviation from this policy shall be in writing from the Brighton Township Sewage Authority or their authorized agent.
- f. Any basement equipped with a sump pump that has outside foundation drains connected to said pump or any basement with inside foundation drains shall not have any basement floor drains connected said sump

pump. All floor drains and fixtures shall be connected to the sanitary sewer system.

- g. All foundation drains, roof and outside storm drains shall be disconnected from the floor drains and sanitary sewers.

5. NEW STRUCTURES:

- a. Care should be taken to construct the basement of the dwelling at an elevation to allow gravity sewer service to the dwelling.
- b. Examine the “as built” sewer plans of the Authority to determine the location of:
 - (1) the service wye, and
 - (2) the end of the service lateral.
- c. Locate and uncover the end of the Authority’s service sewer and the building drain at the foundation wall of the dwelling to be serviced. Prior to excavation between these two points, the elevation of these points and the required grade between them shall be determined.
- d. After determining the minimum allowable grade can be met, excavation may continue between the points of connection.
- e. In the case of a new structure, the basement slab shall not be placed, and all under-floor facilities must be visible for inspection. If the slab is placed, it shall be removed, and all facilities made visible for inspection. No backfill shall be made on the building sewer, and it shall be visible for inspection. If the trench has been backfilled, the service sewer will be plugged by the Authority until the trench has been re-excavated and the pipe is visible.
- f. Upon completion of a satisfactory inspection, the slab may be placed and backfill of the sanitary sewer may then be completed. When the structure has been completed, and before title has been transferred, or occupancy permitted, the Applicant shall call for a final inspection, at which time tests may be made on all prohibited facilities to determine that they are not connected to the sanitary sewer.

6. RESIDENTIAL SEWAGE PUMP SYSTEMS:

- a. Where gravity service is not feasible, special application may be made to the Authority to allow installation of a residential grinder sewage pump system. The Authority must approve the design of the system, and the Authority reserves the right to prohibit the installation of a residential sewage pump system. When installation of a residential sewage pump system is approved, the following general requirements must be met.
- b. Installation of the sewer grinder pump or ejector pump, electric work, plumbing work, and holding tank, must:
 - (1) For new construction – Grinder Pump System design shall be submitted to Brighton Township with the Building Permit Application. The application shall meet the rules and regulations of the local building code and will be reviewed, and a Building Permit issued by Middle Department Inspection Agency. The permit requires inspection by the building official of electrical and plumbing. The applicant shall pay required permit fees and tapping fees.
 - (2) For work on an existing residence – Grinder Pump System design shall be submitted to Brighton Township Sewage Authority. The design shall comply with local building codes and will be subject to inspection of the electrical and plumbing. The applicant shall pay required permit fees and tapping fees.
 - (3) be inspected by the Brighton Township Sewage Authority.
- c. The discharge line from the building outlet to the sewage pump must be gravity flow.
- d. The pressurized discharge line from the holding tank must be equipped with a check valve as close as possible to the holding tank, followed by a curb stop.
- e. All pressurized discharge lines shall be constructed with heavy duty fittings.

APPENDIX A

BRIGHTON TOWNSHIP SEWAGE AUTHORITY

INDIVIDUAL GRINDER PUMP MANAGEMENT PLAN

The guidance contained herein is the management plan for residential individual grinder pumps and low-pressure sewer systems to be utilized in the Brighton Township Sewage Authority service area. This plan does not apply to non-residential grinder pump installations.

A Low Pressure Sewer Systems

- 1 The use of individual grinder pumps will be reviewed on a case-by-case basis by the Authority. Where gravity sewer systems are deemed feasible by the Authority, low pressure sewer systems will not be approved.
- 2 Where deemed appropriate by the Authority, low pressure sewer systems may be installed by a property owner or developer upon Authority approval.
- 3 When a low-pressure sewer system is proposed by a developer, sufficient information must be submitted to the Authority to permit a thorough evaluation of the proposed system. This information shall include, but not be limited to, the following:
 - a A detailed explanation as to why individual grinder pump units are proposed in lieu of gravity sewers and/or a conventional pumping station.
 - b Plans showing the location of the lots to be served by grinder pump systems.
 - c Detailed plans of the proposed low-pressure sewer system and individual grinder pump systems.
 - d Technical specifications for the proposed grinder pump units and low-pressure sewer system.
 - e Shop drawings must be submitted to the Authority for approval prior to installation of the units.
- 4 Installation of the grinder pump unit shall be in accordance with the Authority's *Rules and Regulations*.
- 5 All low-pressure sewer systems and grinder pump installations must be inspected and approved by the Authority or its authorized agent(s) prior to backfilling.

B Ownership and Maintenance of Facilities

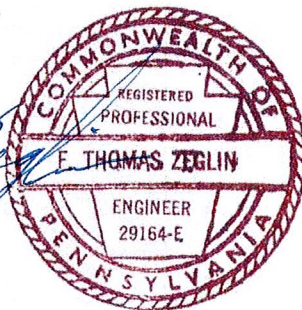
- 1 All low-pressure sewer mains located within public roads and sewer rights-of-way that are Dedicated to and Accepted by the Authority in accordance with the Authority's Rules and Regulations will be maintained by the Authority.
- 2 Maintenance of all low-pressure sewer lateral connections, grinder pumps units and controls located on Private property, within roadway rights-of-way and sanitary sewer easements shall be performed by the Property Owner, regardless of who provides the originally installed equipment.
- 3 All property owners who propose maintenance work located within Township roadway rights-of-way shall first obtain a Road Opening Permit from the Township.
- 4 Operation and Maintenance of everything from and including the lateral assembly to the building is the sole responsibility of the property owner. All charges for operation and maintenance of the grinder pumping system, including, but not limited to electric charges shall be the responsibility of the property owner.
- 5 Should a maintenance problem develop, the property owner should contact a plumber to make the required repairs.
- 6 All control panels for individual grinder pump units shall have visual and audible alarms and shall have a permanently attached phenolic label indicating that "All maintenance costs for grinder pump system are the property owners' responsibility. For service, contact your plumber."

BRIGHTON TOWNSHIP SEWAGE AUTHORITY
RULES AND REGULATIONS FOR THE
INSTALLATION OF PRIVATE CONNECTING SEWERS
HOUSE LATERAL CONNECTIONS
COMMERCIAL / INSTITUTION CONNECTIONS
AND
INDIVIDUAL GRINDER PUMP MANAGEMENT PLAN

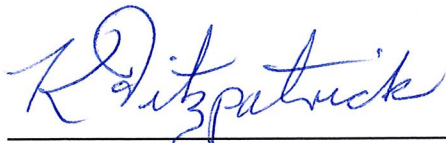
I recommend the Board adopt the RULES AND REGULATIONS FOR THE INSTALLATION OF PRIVATE CONNECTING SEWERS for connections from House Laterals and Commercial / Institution Connections along with the Individual Grinder Pump Management Plan.



F. Thomas Zeglin, P.E.



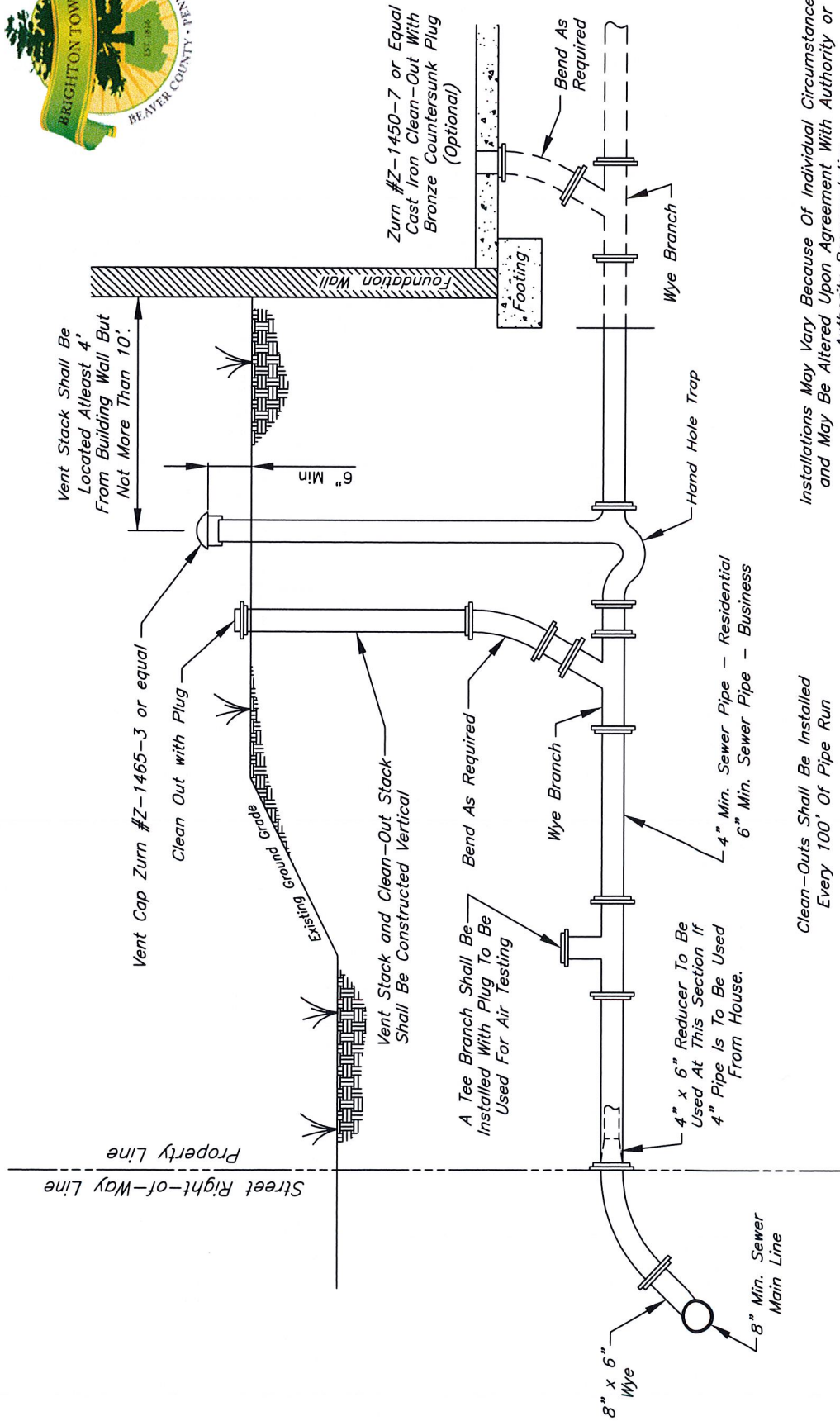
Adopted on this 21st day of October, 2019.



Kerien Fitzpatrick, Secretary



Mark Piccirilli, Chairman



Clean-Outs Shall Be Installed Every 100' Of Pipe Run

Installations May Vary Because Of Individual Circumstances and May Be Altered Upon Agreement With Authority or Authority Representative

LDE
Larson Design Group

Architects Engineers Surveyors
300 South Walnut Lane, Suite 202
Beaver, PA 15009
PHONE 724.680.1504
TOLL FREE 877.323.6603
FAX 724.495.2594
www.larsondesigngroup.com

BUILDING LATERAL CONNECTION
MADE AT THE INSTANCE OF
BRIGHTON TOWNSHIP SEWAGE AUTHORITY
SITUATE IN
TOWNSHIP OF BRIGHTON, COUNTY OF BEAVER
COMMONWEALTH OF PENNSYLVANIA

DATE:	10.16.2019
SHEET NO.:	LAT1
PROJECT NO.:	10166
SCALE:	N.T.S.

BTSA MAINTENANCE

PUBLIC RIGHT-OF-WAY

PRIVATE PROPERTY

PROPERTY OWNER MAINTENANCE

VISUAL AND AUDIBLE
ALARM/DISCONNECT
PANEL, COMPLETE
ADVISOR AND REMOTE
INDOOR ALARM MODULE.

INSTALLED @ PROPERTY LINE/RIGHT OF WAY LINE

LATERAL ASSEMBLY (INCLUDES CHECK VALVE,
CURB STOP, CURB BOX, AND FITTINGS).

GRINDER PUMP STATION

4'-0" (MIN.)

#12 TRACER WIRE

4' MAX.

PEA GRAVEL OR
CRUSHED STONE

1 1/2" SDR 9 HDPE

1 1/2" x 1 1/2" MECHANICAL
COUPLING

CONNECTION TO PRESSURE
SEWER MAIN USING FUSED JOINT.

1 1/4" SDR 9 HDPE

(TAIL PIECE FURNISHED W/PUMP)

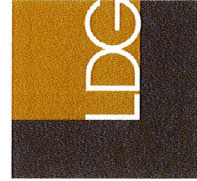
4" SDR 40 PVC W/
COLLAR SOLVENT WELDED
2" FROM END OF PIPE
THAT PASSES THROUGH
THE GRINDER PUMP
GROMMET.

CONCRETE
ANCHOR

6 TO 12 INCH
SETTLING LOOPS

-2% MIN. SLOPE (1/4" PER FT.)

BUILDING
EXTERIOR
WALL



BRIGHTON TOWNSHIP SEWAGE AUTHORITY

BEAVER COUNTY

PENNSYLVANIA

SANITARY SEWAGE SYSTEM PROJECT
TYPICAL SEWER SERVICE LINE CONNECTION
GRINDER PUMP TO PRESSURE SEWER MAIN

LARSON DESIGN GROUP

SCALE N.T.S.	DRAWN BY F.T.Z.	SHEETS IN SET
OCT 2019	APPROVED BY B.K.D.	DRAWING NUMBER 10166-013