

**MUNICIPAL AUTHORITY OF ALLEGHENY TOWNSHIP
SEWER USE RULES AND REGULATIONS**

APPENDIX C

**SPECIFICATIONS FOR THE CONSTRUCTION OF BUILDING LATERAL SANITARY
SEWERS**

Before you Dig - Pennsylvania Act 187, Underground Utility Line Protection Law of 1996
Requires You Call Pennsylvania One Call 1-800-242-1776

1. **General** – Building lateral sanitary sewer shall include connection to the main sanitary sewer, test tee, running trap with fresh air vent, a grease trap where required, and connection to the building drain. Downspouts, rain conductors, driveway drains, area drains, stair well drains or french drains shall not be connected to the building lateral sanitary sewer.
2. **Application and Permit** - Every premises owner desiring to or required to connect to the Authority sewer system shall first complete and submit a "Sewer Connection Permit Application" (application attached to these specifications), along with the established tap-in fee and obtain a permit from the Authority prior to beginning the installation or connections of any sewer pipe to the Authority sewer system.
3. **Size** - Residential - 4" minimum diameter pipe that is installed to a minimum slope of 1/4" per foot. Commercial - 6" minimum diameter pipe that is installed to a minimum slope of 1/8" per foot.
4. **Materials** - All sewers below floors of building and to a maximum of 5 feet outside the building wall and the building lateral sanitary sewer shall be SDR-35 or Schedule 40 PVC. Four (4) inch building lateral sanitary sewers shall be Schedule 40 PVC pipe with solvent weld joints. Six (6) inch building lateral sanitary sewers shall be SDR-35 PVC pipe with rubber O-ring joints. A running trap with a vent pipe and vent cap shall be installed at the end of the drain as shown. All pipe under the floor and passing through the floor shall be a minimum of 4" unless prior approval is granted by the Authority. The pipe as it exits the building wall shall be installed at a minimum depth of 36". From the trap to the building sewer tap connection, the pipe shall be the same as listed above. Vent pipes and clean-outs are not permitted to be located in driveways, cartpaths, walkways or other finished surface areas unless prior approval is granted by the Authority. The vent cap shall be installed 6" above grade to prevent the inflow of water into the sewer line.

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. Sinks in food preparation areas of these establishments shall also have under-sink grease traps.

5. Traps, Clean-Outs, Directional Changes and Inspection Ports – All new building lateral sanitary sewers are required to have an outside trap. Clean-outs, consisting of a wye branch fitting, a curved fitting, riser pipe and a watertight cap are required every 50 feet for residential premises and every 100 feet for commercial premises, or at all directional changes greater than 45 degrees. No 90 degree bends shall be permitted except on an inside vertical end of run. No exceptions. Clean-outs located in lawns, open fields, or other unfinished surface areas, shall be installed 6" above grade and encased in concrete to provide support for the riser pipe. Inspection ports shall be installed in all building lateral sanitary sewer at the property line. The inspection port shall consist of a two way sweeping tee, a riser pipe with a minimum diameter of 6" and a tamper-resistant cap (male end). Traps, clean-outs and inspection ports to be installed as shown on attached detail.
6. Adapters - Approved adapters such as donuts or shielded couplings with stainless steel banding clamps by Fernco, Inc., or approved equivalent, may be used to connect pipe joints, reduce 6" pipe to 4" and connect the building drain to the running trap.
7. Installation - Before digging the trench, the installer should expose the building sewer tap connection and the building drain. Trench width shall be kept to a minimum width and have uniform slope as near as possible at right angles to the street. Excavate all trenches at least 6" below the bottom of the pipe. Place an aggregate backfill consisting of 2B limestone, maximum of 3/4" gravel size, in the trench to grade of the pipe. Install the pipe keeping any gravel, dirt or water from entering the pipe. Place 12" 2B limestone on top of the pipe ensuring uniform bedding to all sides of the pipe. The remainder of the trench may be backfilled with material from the original excavation. Underground detectable marking tape shall be installed a minimum of two (2) feet above the pipe along the alignment of the building lateral sanitary sewer. Marking tape shall be a minimum of three (3) inches wide, vivid green with foil backing and marked "Gravity Sewer Line" at Gravity Sewers or marked "Intermittent Pressure Sewer" at Force Main Sewers. The marking tape for sewer lines shall be green with a foil back. The sewer line trench shall have a minimum 3 feet horizontal separation and 18" vertical separation from other pipelines such as water service lines, gas lines, french drains or storm sewers. An Authority inspector must be present to visually inspect the backfilling of the sewer lateral trench.
8. Inspection - The Authority shall be notified at least 24 hours prior to the inspection of the building drain, building lateral sanitary sewer and related appurtenances. The inspection shall be conducted prior to the connection to the trap, unless the building drain and the building lateral sanitary sewer are to be inspected at the same date, and prior to any backfilling. All lines shall be capped prior to inspection. The inspection shall consist of an air test of 5 lbs. for 15 minutes without any loss of pressure, or a hydrostatic test when no water is lost from a filled building lateral sanitary sewer subjected to a minimum of 10 feet of water head for 15 minutes, a visual inspection of the pipe and the recording of pertinent information relating to the installation of the pipe. Inspection will not be scheduled until all Applications for Service have been submitted. An as-built plumbing plan shall be

submitted to the Authority prior to service being rendered. If the building lateral sanitary sewer does not pass inspection, a fee will be levied and must be paid before re-inspection of the sewer lines will be scheduled.

MAAT Detail Nos. C-1, C-2 and C3 is included in this Appendix and illustrates the installation and testing of the building lateral sanitary sewer.

9. Final Connection - If a completed connection to the building drain is not made at the time of the installation of the building lateral sanitary sewer, a temporary plug shall be solvent welded into the end of the lateral and shall not be removed until such time as the connection is made to the building drain and an Authority Representative is present to visually inspect the final connection and backfilling of the trench.
10. Final Inspection - Prior to the issuance of an Occupancy Permit by Allegheny Township, the Authority will conduct a final inspection of the property to ensure that all sewer facilities located within the property have been installed and maintained in accordance with Authority specifications. The Authority's inspector will complete and sign a Final Inspection Form to be forwarded to Allegheny Township for their subsequent issuance of the Occupancy Permit. Any deficiencies cited during the Final Inspection must be corrected prior to the Authority's release of the Final Inspection Form to Allegheny Township.
11. Connections to Existing Sewer – Connection to both the building drain and the building sewer tap connection shall be with a proper fitting specially manufactured for such use and as specified by the Authority. In the event there is no building sewer tap connection available at the required point of connection to the public sewer, the Authority shall be contacted to provide the saddle connection. The work shall then be scheduled with the Authority and the existing line cored and saddle installed by Authority Staff. No “Break-in” connections will be permitted. The replacement of all wye fittings broken by the property owner or his private contractor shall also only be done by the Authority, with the costs of such replacement being borne by the premises owner.
12. Grinder Pumps - Grinder pumps for individual sewer service to private premises are used only when gravity service is not available or is not a viable option. The installation of the pump and its operation, maintenance, and power costs are not the responsibility of the Authority, but that of the premises owner. The use of grinder pumps will be on a case by case basis.

END OF APPENDIX C

MUNICIPAL AUTHORITY OF ALLEGHENY TOWNSHIP
 SERVICE LINE EXTENSION AND SERVICE LINE CONNECTION
 CONDENSED SANITARY SEWER SYSTEM
 INSTALLATION INSPECTIONS

1. GENERAL INFORMATION:

- A. SERVICE LINES ARE INCLUSIVE OF THE SERVICE SEWER FROM THE SEWER MAIN WYE TO THE BUILDING, RUNNING TRAP WITH FRESH AIR VENT, CLEANOUT(S), VIEW PORT, AND CONNECTION TO BUILDING DRAIN.
- B. NO SURFACE WATER FROM ROOF LEADERS, FOUNDATION DRAINS, AREA DRAINS, OR OTHER PIPES SHALL BE CONNECTED TO THE SANITARY SEWER.
- C. ALL SEWER LINES EXITING A BUILDING SHALL BE PROVIDED WITH A VENTED TRAP AND CLEANOUT ASSEMBLY.
- D. ALL CHANGES IN DIRECTION REQUIRE BENDS. BENDS GREATER THAN 45 DEGREES ARE NOT BE UTILIZED ON ANY SERVICE LINE.
- E. WHERE VIEW PORTS, VENTS, AND /OR CLEANOUTS ARE LOCATED IN AREAS OF VEHICULAR TRAFFIC THEY SHALL BE SET IN CONCRETE A MINIMUM OF SIX INCHES (6") THICK AND EIGHTEEN INCHES (18") SQUARE.

2. BUILDING DRAINS:

- A. ALL BUILDING SEWERS BELOW FLOORS AND 5 FEET OUTSIDE THE BUILDING SHALL BE SCHEDULE 40 OR SDR 35 POLYVINYL CHLORIDE (PVC).
- B. A RUNNING TRAP WITH VENT SHALL BE INSTALLED AT THE END OF EACH BUILDING DRAIN (GREY AND BLACK WATER) AS SHOWN. A CLEANOUT SHALL BE INCLUDED ON THE DOWNSTREAM SIDE OF ALL TRAPS. VENTS MAY NOT BE LOCATED IN DRIVEWAYS.
- C. EXISTING BUILDINGS CURRENTLY UTILIZING MATERIALS OTHER THAN THOSE SPECIFIED HEREIN SHALL UTILIZE APPROVED MATERIALS TO WITHIN 6 FEET FROM THE BUILDING WALL.

3. SIZE:

- A. SERVICE LINES MUST BE EITHER 6 INCHES IN DIAMETER IF LAID AT A MINIMUM SLOPE OF 1/8 INCH PER FOOT, OR 4 INCHES IN DIAMETER IF LAID AT A MINIMUM SLOPE OF 1/4-INCH PER FOOT.
- B. CLEANOUTS SHALL BE PROVIDED AT MINIMUM INTERVALS OF 100 FEET FOR 6 INCHES IN DIAMETER PIPE AND 52 FEET FOR 4 INCHES IN DIAMETER PIPE.

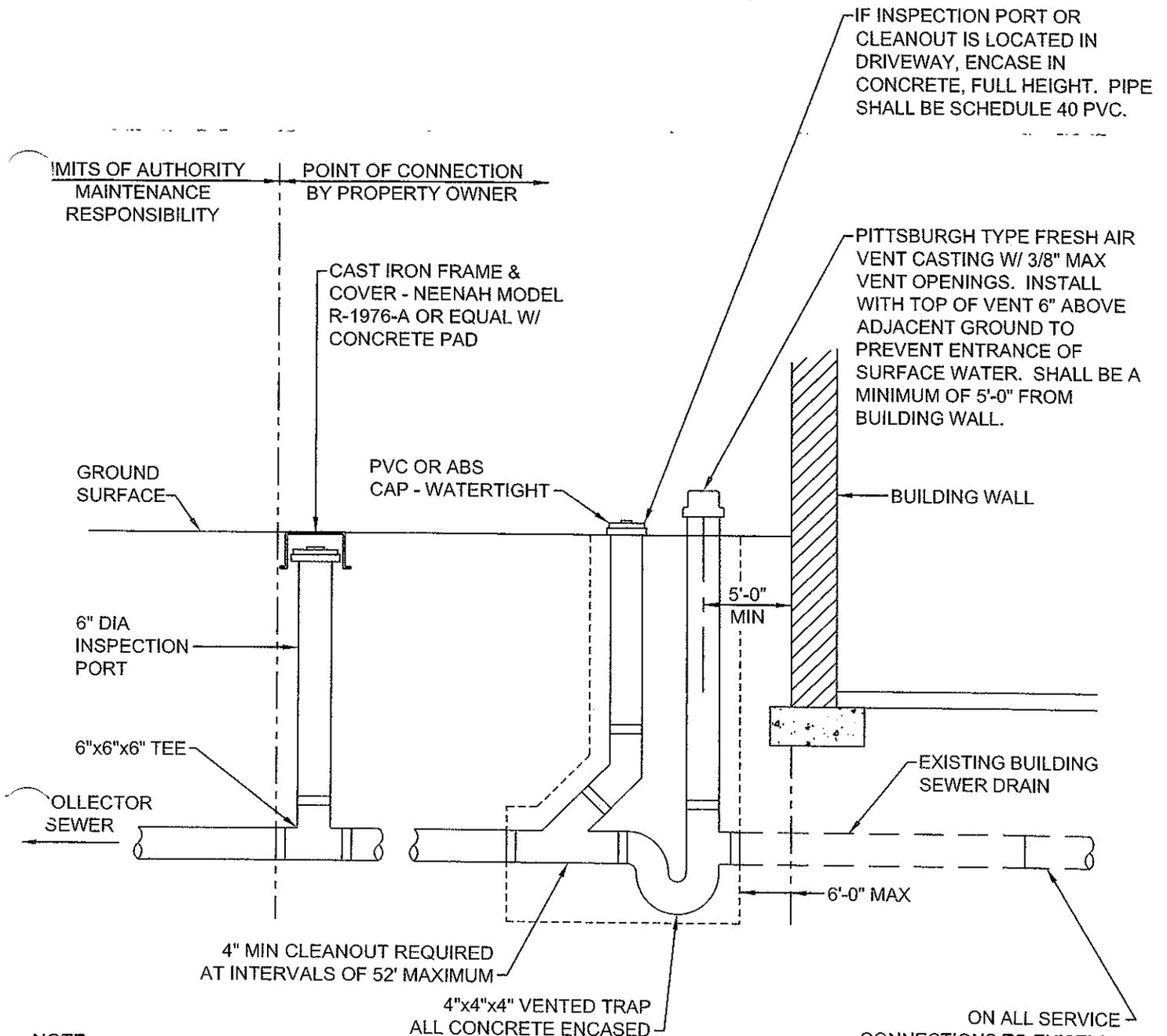
4. CLEANOUTS:

- A. CLEANOUTS SHALL INCLUDE A WYE BRANCH, CURVE (VERTICAL 45 DEGREE BEND), RISER AND WATERTIGHT PLUG.
- B. CLEANOUTS SHALL BE AT SPACED AT THE PREVIOUSLY SPECIFIED INTERVALS AND AT CHANGES IN DIRECTION GREATER THAN 45 DEGREES.
- C. THE WYE BRANCH AND CURVE SHALL BE ENCASED IN 6 INCHES OF CONCRETE.
- D. WHERE CLEANOUTS ARE LOCATED IN AREAS OF VEHICULAR TRAFFIC, THEY SHALL BE ENCASED IN CONCRETE THE ENTIRE DEPTH.

5. VIEW PORT:

- A. A 6 INCH DIAMETER VIEW PORT CONSISTING OF A 6" X 6" X 6" TEE, 6 INCH RISER PIPE WITH CAP, AND CAST IRON FRAME AND COVER SHALL BE INSTALLED AT THE PROPERTY LINE OR EDGE OR RIGHT-OF-WAY AS SHOWN.
- B. THE RISER PIPE AND CAP SHALL BE SET 6 INCHES BELOW THE CAST IRON COVER. THE FRAME SHALL BE SET ON AN ADEQUATE CONCRETE BLOCK FOR SUPPORT AND SHALL NOT BE ATTACHED TO THE RISER PIPE.

MUNICIPAL AUTHORITY OF ALLEGHENY TOWNSHIP		CONDENSED SANITARY SEWER SYSTEM INSTALLATION INSPECTIONS
Not to scale	June 2012	Standard Detail C-3



NOTE:
 ALL PIPE SHALL BE 6" OR 4" SCHEDULE 40 PVC. SLOPE SHALL BE MINIMUM 1/4" PER FOOT FOR 4" LINE AND 1/8" PER FOOT SLOPE FOR 6" LINE.

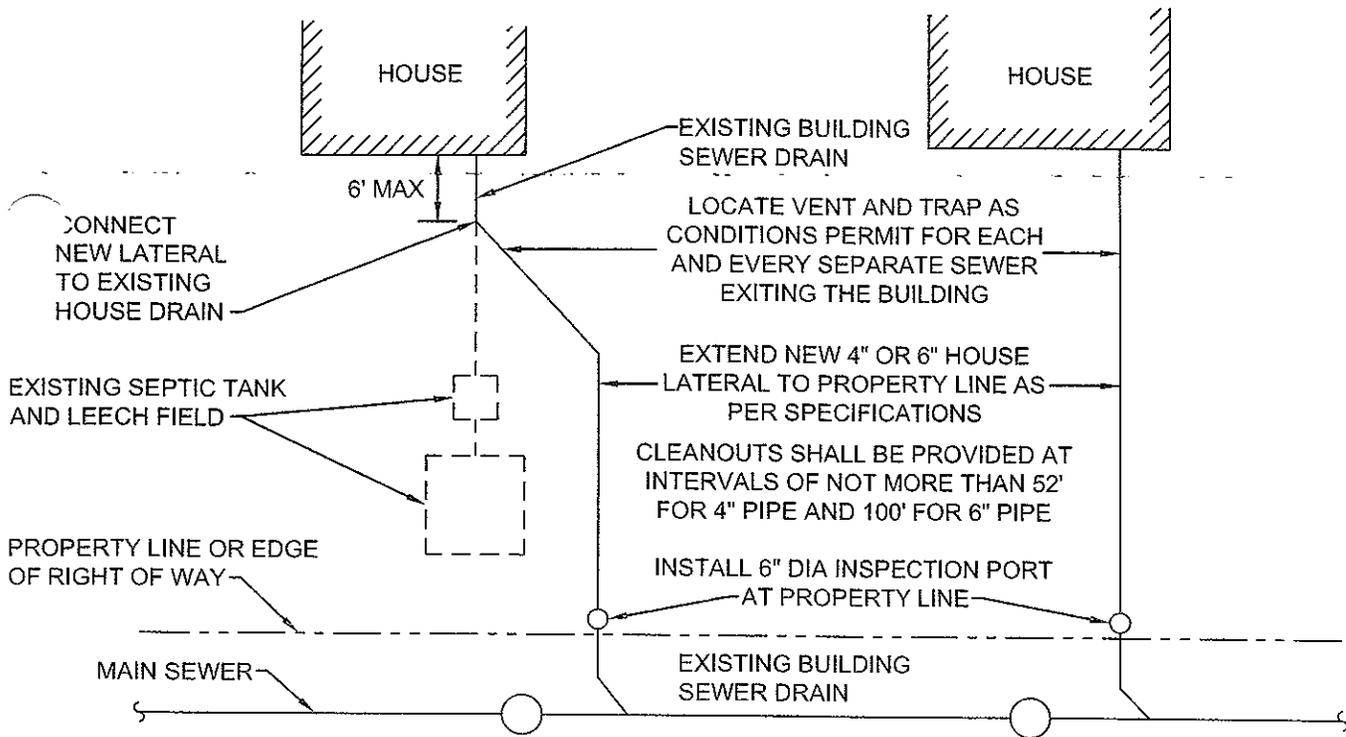
CONDENSED INSTALLATION SPECIFICATIONS

SEWER SERVICE LINE AND SEWER SERVICE CONNECTIONS SHALL BE INSTALLED BY SKILLED WORKMEN AT THE COST OF THE CUSTOMER IN ACCORDANCE WITH RULES AND REGULATIONS AND DETAILED SPECIFICATIONS OF THE AUTHORITY WHICH ARE CONDENSED ON PAGE C-2.

A FITTING MAY BE UTILIZED AT THE POINT OF PROPERTY OWNER CONNECTION TO SERVICE LATERAL TO ALLOW FOR VERTICAL INSTALLATION OF INSPECTION PORT WHILE MAINTAINING REQUIRED MINIMUM GRADE.

ON ALL SERVICE CONNECTIONS TO EXISTING HOMES, THE EXISTING BUILDING SEWER DRAIN MUST BE REPLACED WITH APPROVED PIPE MATERIAL TO A LOCATION THAT IS A MAXIMUM OF 6'-0" AWAY FROM THE BUILDING WALL.

MUNICIPAL AUTHORITY OF ALLEGHENY TOWNSHIP		SANITARY SEWER SERVICE LINE AND SEWER SERVICE CONNECTION
Not to scale	June 2012	Standard Detail C-1



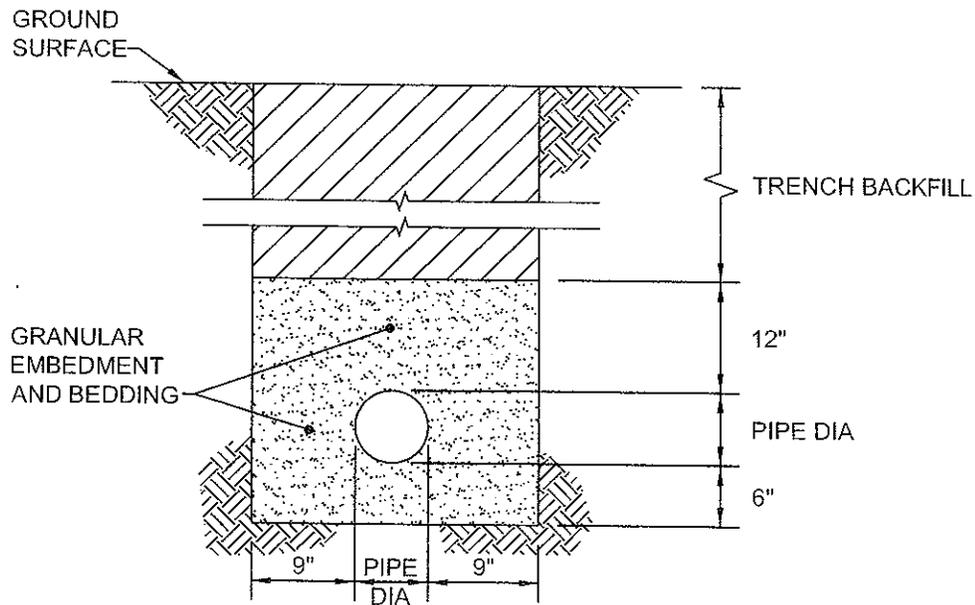
SEPTIC TANK BYPASS PLAN

NOTE:
 ALL PIPE SHALL BE 6" OR 4" SCHEDULE 40 PVC.
 SLOPE SHALL BE MINIMUM 1/4" PER FOOT FOR 4"
 LINE AND 1/8" PER FOOT FOR 6" LINE.

EACH AND EVERY SEWER EXITING A BUILDING
 (GREY & BLACK WATER) SHALL BE PROVIDED
 WITH A SEPARATE VENT AND TRAP ASSEMBLY.

NEW INSTALLATION PLAN

CONDENSED INSTALLATION SPECIFICATIONS:
 SEWER SERVICE LINE AND SEWER SERVICE
 CONNECTIONS SHALL BE INSTALLED BY SKILLED
 WORKMEN AT THE COST OF THE CUSTOMER IN
 ACCORDANCE WITH RULES AND REGULATIONS
 AND DETAILED SPECIFICATIONS OF THE
 AUTHORITY WHICH ARE CONDENSED ON THE
 FOLLOWING PAGE.



SEWER SERVICE LINE TRENCH CROSS SECTION

MUNICIPAL AUTHORITY OF ALLEGHENY TOWNSHIP		SANITARY SEWER SERVICE LINE AND SEWER SERVICE CONNECTION
Not to scale	June 2012	Standard Detail C-2